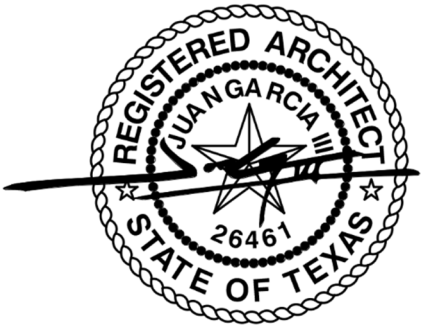
bld. architects
P.O. Box 2243
Lubbock, Tx. 79408

Addendum Number One



Issue Date:
1/23/2025

Project:
Hale County
Juvenile Justice Alternative Education Program
Building Conversion & Multi-Purpose Building

The following are additions and changes to the Specifications and Drawings and shall become a part of the Contract Documents. Where items in the Specifications or Drawings are supplemented below, all original requirements shall remain in effect.

General

Item #1G: Refer to the attached Pre-Bid Sign in Sheet.

Item #2G: Refer to the attached Geotechnical Report provided by W.C. Hamilton and dated November 13th, 2024.

Item #3G: Refer to the attached Addendum provided by Chambers Engineering dated 01.23.2025.

Item #4G: Refer to the attached Addendum sheets S0.00, S1.00, S3.00, S3.01 provided by Robertson Structural dated 01.23.2025.

Clarifications

Item #1C: This project will consider the Davis Bacon Wage rates, refer to the specifications.

Specifications

Item #1S: (ITB) Invitation to Bid; Replace the ITB in its entirety with the modified version attached.

Item #2S: Bid Form; Replace the BID FORM in its entirety with the modified version attached.

Item #3S: Replace SECTION 012300 ALTERNATES with the updated Section 012300.

Item #4S: Replace SECTION 075400 THERMOPLASTIC MEMBRANE ROOFING with the updated Section 075400.

Drawings

Item #1D: Replace Sheet G-001 – LIFE SAFETY PLANS with the revised sheet attached.

Item #2D: Replace Sheet A-101.1 - OVERALL FLOOR PLAN & ENLARGED PLANS - BLDG. 'A' with the revised sheet attached.

Item #3D: Replace Sheet A-102 - REFLECTED CEILING PLAN- BLDG. 'A' with the revised sheet attached.

Item #4D: Replace Sheet A-103 – OVERALL ROOF PLAN - BLDG. 'A' with the revised sheet attached.

Item #5D: Replace Sheet A-104 - FINISHES FLOOR PLANS - BLDG. 'A' & BLDG. 'B' with the revised sheet attached.

Item #6D: Replace Sheet A-601 – SCHEDULES, with the revised sheet attached.

Hale County Annex 3
JJAEP Building Conversion & Multi-Purpose bldg.

Pre-Bid Sign In Sheet
January 21, 2025

Name	Company	E-mail Address	Phone Number
John Garcia III,AIA	bld.architects	j.garcia@bldarch.net	806-252-7719
Stephenie Robinson	A-1 Flooring	srobinson@a-1floors.com	806-640-7268
Josh Searsy	Henthorn	josh@henthorncommercial.com	806-500-6929
Zach Adams	ABF roofing	zach@abfroofinglubbock.com	806-496-5655
Jaden Gaddis	JC Roberts Construction	estimating@jcrobertsconstruction.com	432-580-6161
Bart Barlay	TriState GC	bart@tristategc.com	806-654-6884
Kasey Baker	TriState GC	kbaker@tristategc.com	806-567-8292
Randy Downey	Rhynehart Roofing Inc.	rdowney62@yahoo.com	806-367-0853
Coby Cator	ABF Roofing	coby@abfroofinglubbock.com	806778-9096
Brantly Sells	Sells Roofing & Remodeling	sellsroofing@hotmail.com	806-292-4515
Max West	Fauntera Construction	ira@fcdelrio.com	830-313-6803
Jonathan Klein	TK Construction	jklein@tkleinconst.com	806-438-3384
Shad Hartman	TK Construction	shartman@Tkleinconst.com	806-252-1305
Ricky Mason	City Electric	rickym@cityelectricpv.com	806-292-1801
Jim Tirey (HC, County Attorney)			
Jesse Mendoza (HC, Special Projects)			
Jayson Robinson	WRConstruction	jayson@wrgencon-inc.com	806-687-1915
Brandon Madrid		brandonco1@gmail.com	806-401-9151
County Judge 242, Kregg Hukill			
Dale Williams	Quality Air	heatacmech@hotmail.com	806-293-9094

Hale COUNTY, TEXAS
INVITATION TO BID

NOTICE:
Notice is herby given that Hale County Commissioners Court will receive sealed competitive bids upto but no later than 2:00PM, Thursday February 13, 2025 at which time bids will be opened and read aloud in the Commissioner Courtroom on the first floor of the Hale County Courthouse for the following project:

ITB: 001224
Hale County Juvenile Justice Alternative Education Program Annex 3 – Building Conversion & Multi-purpose Building

INSTRUCTIONS:
Offerors may submit one original bid along with supporting documents of your submittal in a sealed envelope or container plainly labeled "***ITB 001224: HALE COUNTY JUVENILE JUSTICE ALTERNATIVE EDUCATION PROGRAM ANNEX 3 – BUILDING CONVERSION & MULTI-PURPOSE BUILDING"*** along with the vendor's name and address on the outside of the envelope or container to the office of the County Attorney; Jim Tirey:

PHYSICAL / MAILING:
HALE COUNTY, TEXAS
Attn: COUNTY ATTORNEY, JIM TIREY
500 BROADWAY, SUITE 340
PLAINVIEW, TEXAS 79072

This Invitation to Bid is for your convenience in submitting an offer for the referenced services to Hale County. In the event of inclement weather and County Offices are officially closed on an ITB opening day, ITBs will be received until 2:00 p.m. of the next business day, at which time said ITBs will be publicly opened.

A complete Proposal shall include the following (each fully completed, as applicable):

It is the bidder's responsibility to be thoroughly familiar with all requirements and specifications. Be sure you understand the requirements before you return your bid/offer package.
FAILURE TO RETURN THE FOLLOWING FORMS MAY DEEM YOUR BID AS NON- RESPONSIVE.

1. Bid Form
2. Bid Bond
3. Non-Collusive Bidding Certificate
4. Cooperative Purchasing Agreement
5. Vendor Acknowledgement (Acknowledge EACH Addendum(s) on form)
6. Certification Regarding Lobbying
7. Certificate Regarding Energy Companies and Firearm Entities or Firearm Trade Associations Acknowledgement

PRE-BID CONFERENCE:
For the purpose of familiarizing bidders with the requirements, answering questions, and issuing addenda as needed for the clarification of the Invitation to Bid documents, a non-mandatory Pre-Bid Conference at the project site will be held on *Tuesday January 21, 2025, at 3:00 PM*, located at 305 Broadway Ave, Plainview Texas 79072. All persons attending the meeting will be asked to identify themselves and the prospective proposer they represent.

It is the proposer's responsibility to attend the pre-bid meeting though the meeting is not mandatory. Hale County will not be responsible for providing information discussed. Vendors are responsible for any information obtained during the pre-bid conference, including those individuals not in attendance.

IT IS UNDERSTOOD THAT:
Hale County, reserves the right to accept or reject any and/or all bids as it shall deem to be in the best interest of Hale County. Receipt of any bids shall under no circumstances obligate Hale County to accept the lowest bid. The award shall be made to the responsible bidder(s) whose bid(s) is determined to be the best value bid(s) and highest ranked. Hale County reserves the right to waive any minor irregularities in a response. Hale County reserves the right to request clarification of irregularities submitted and/or to request additional information from any firm and the right to eliminate any firm from consideration if it is determined the firm cannot perform services specified in their response.

BIDS SHALL:
include all required documents. Each paper submittal shall be placed in a sealed envelope, manually signed in ink by a person having authority to bind the firm in a contract and marked clearly on the outside.

INFORMATION/QUESTIONS:
All requests for additional information or clarification concerning this ITB must be submitted through email (j.garcia@bldarch.net) or in writing, no later than five (7) business days prior to the bid opening date and addressed to:

bld.architects
P.O. Box 2243
Lubbock Texas, 79408

ADDENDA:
Addenda are written changes, additions, alterations, corrections or revisions to specifications which change the scope of work. Any addenda issued during the time allowed for the preparation of bids shall be covered in the bid and, in executing the contract; they shall become a part thereof.

Each addenda must be acknowledged on the Vendor Acknowledgement Form.
All addenda, amendments and interpretations of this solicitation shall be in writing. Hale County shall not be legally bound by any amendment or interpretation that is not in writing. Only information supplied by the County in writing or in this ITB should be used in preparing bid responses. All contact that a Bidder may have had before or after receipt of this ITB with any individuals, employees or representatives of the County, and any information that may have been read in any news media or seen or heard in any communication regarding this Bid should be disregarded in preparing Bid responses.

By submitting a response to this ITB, each firm unequivocally acknowledges that they have read and fully understands this ITB, and has asked questions and received satisfactory answers from Hale County regarding any provisions of this ITB to which clarification was desired.

We strongly suggest that you check for any addenda a minimum of forty-eight hours in advance of the response deadline. BUSINESSES WITHOUT INTERNET ACCESS may use computers available at most public libraries.

LATE BIDS:
Bids received after submission deadline shall be returned unopened and will be considered void and unacceptable. Hale County is not responsible for lateness of mail, carrier, etc., and time/date stamp clock in Office shall be the official time of receipt.

ALTERING BIDS:
Any interlineation, alteration, or erasure made before receiving time must be initialed by the signer of the proposal, guaranteeing authenticity.

WITHDRAWAL OF BIDS:
A bid may not be withdrawn or cancelled by the bidder for a period of sixty (60) days following the date designated for the receipt of bids, and bidder so agrees upon submittal of their bid.

BIDS WILL BE:
Received and publicly acknowledged at the location, date, and time stated above. Bidders, their representatives and interested persons may be present. Bids shall be received and acknowledged only so as to avoid disclosure of the contents to competing bidders and kept secret during the negotiation/evaluation process. Bids will be sent to participating bidders after bids have been evaluated and awarded in Commissioner's Court. Bid prices will not be communicated by telephone or e-mail prior to the Commissioner's Court. Interested bidders are encouraged to attend the bid opening should they desire bid prices. Bidders Ranking criteria is listed below:

Criteria	Weight
Proposer's Experience on commercial and/ or public entity projects of similar type and complexity.	40 Points
Proposer's Project Superintendents Management Experience on commercial and/ or public entity projects of similar type and complexity.	25 Points
The Proposers past performance, relationship and references with Hale County and or local public entity.	15 Points
Proposer's Record of Scheduling and Completing Work as Scheduled	10 Points
Proposer's proximity to the project site at hand	5 Points
Proposer's completion of bid form and project required documents	5 Points
Maximum possible score	100

SUBMITTAL OF CONFIDENTIAL MATERIAL:
The Owner considers all Bid information, documentation and supporting materials submitted in response to this Invitation to Bid to be non-confidential and/or non-proprietary in nature, and therefore, shall be subject to public disclosure under the Texas Public Information Act (*Texas Government Code*, Sec. 552.001, et seq.) after the award of the contract except for trade secrets and confidential information which the Offeror identifies as proprietary. Any material that is to be considered as CONFIDENTIAL/PROPRIETARY in nature must be clearly marked on each applicable page as such by the proposer. Marking your entire proposal CONFIDENTIAL/Proprietary is not in conformance with the Texas Public Information Act (*Texas Government Code*, Sec. 552.001, et seq.).

The requirements of Subchapter J, Chapter 552, Government Code, may apply to this bid and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter. This provision is mandatory and may not be altered or deleted, as required by Sec. 552.372(b) of the Texas Government Code.

Hale County, Texas assumes no responsibility for asserting legal arguments on behalf of Bidders. Bidders are advised to consult with their legal counsel concerning disclosure issues resulting from this proposal process and to take precautions to safeguard trade secrets and other proprietary information.
DISCLOSURE OF CERTAIN RELATIONSHIPS: Chapter 176 of the Texas Local Government Code requires that any proposer or person considering doing business with a local government entity disclose in the Questionnaire Form CIQ, the proposer or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of Hale County no later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed as defined in 176.006, Local Government Code. A person commits an offense if the person violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. A copy of the law is available at: https://statutes.capitol.texas.gov/Docs/LG/htm/LG.176.htm. The forms for reporting are available at: https://www.ethics.state.tx.us/data/forms/conflict/CIQ.pdf.

By submitting a response to this request, the proposer represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code.

DISCLOSURE OF INTERESTED PARTIES: The law states that a governmental entity may not enter into certain contracts with a nonexempt business entity unless the business entity submits a disclosure of interested parties to the governmental entity. By submitting a Bid in response to this solicitation, the Bidder agrees to comply with HB 1295, Government Code 2252.908. Bidder agrees to provide Hale County the "Certificate of Interested Parties," Form 1295 as required, within ten (10) business days from notification of pending award, renewal, amended or extended contract. The on-line form is available at https://www.ethics.state.tx.us/filinginfo/1295/.

*NOTE: Publicly Traded business entities do not require a Form 1295.
PROHIBITION OF CONTRACT WITH CERTAIN COMPANIES: Vendors/Contractors/Providers must be in compliance with the provisions of §2252.152 and §2252.153 of the Texas Government Code, which states in part, contracts with companies engaged in business with Iran, Sudan, or Foreign Terrorist Organizations are prohibited. A governmental entity may not enter into a contract with any company listed on the Comptroller of the State of Texas website identified under Section 806.051 or Section 2252.152, which do business with Iran, Sudan or any Foreign Terrorist Organization. By submitting a signed response to this solicitation, contractor verified to Hale County that it is not on any such list. The term "foreign terrorist organization" means an organization designated as a foreign terrorist organization by the United States Secretary of State as authorized by 8 U.S.C. Section 1189.

CHAPTER 2271 VERIFICATION (Effective September 1, 2019): Hale County is legally prohibited from contracting for goods and services unless the contract contains written verification from the contractor that it does not, and will not during the term of the contract boycott Israel as described in Texas Government Code §808.001(1). By submitting a response to this solicitation, the respondent is affirming compliance with Chapter 2271.002 of the Texas Government Code.

DEBARMENT: Vendor certifies that at the time of submission of its bid, Vendor was not on the federal government's list of suspended, ineligible or debarred contractors and that Vendor has not been placed on this list between the time of bid submission and the time of execution of the Contract. If Vendor is placed on this list during the term of the contract, Vendor shall notify the Hale County. False certification or failure to notify may result in termination of the contract for default.

NO COMMITMENT BY HALE COUNTY:
This invitation to bid does not commit Hale County to award any costs or pay any costs, or to award any contract, or to pay any costs associated with or incurred in the preparation of an invitation to bid in response to this request for Proposals and does not commit Hale County to procure or contract for services or supplies.

PROVISIONS CONCERNING ESCALATION CLAUSES:
Bids submitted containing any conditions which provide for changes in the stated bid price due to increases or decreases in the cost of materials, labor or other items required for the project will be rejected and returned to the proposer without being considered.

BID SUBMITTAL:
Bid prices must be firm for a minimum period of the project. Bids subject to price increases will not be considered.Bids must be submitted on the Bid Form. The price or prices for the work shall include full compensation for all taxes, permits, etc. that the bidder is or may be required to pay.
All bids, responses, inquiries or correspondence relating to or in reference to this ITB, and all reports, charts and other documentation submitted by bidders shall become the property of Hale County when received.

BIDDER/PROPOSER RESPONSIBILITY:
It is the responsibility of each bidder/proposer before submitting a bid/proposal:

1. To examine thoroughly the contract documents and other related data identified in the proposal documents, to visit the site to become familiar with and satisfy proposer as to the general, local, and site conditions that may affect cost, progress, performance, etc.
2. To consider federal, state, and local laws and regulations that may affect costs, progress, performance or furnishing of the work.
3. To study and carefully correlate proposer's knowledge and observations with the contract documents and such other related data.
4. To promptly notify the County of all conflicts, errors, ambiguities, or discrepancies which proposer has discovered in or between the contract documents and such other related documents.

PAYMENT:
Payment will be made upon receipt from the approved payment application from the Architect and acceptance by the County of completed services and/or products ordered and receipt of a valid invoice, in accordance with the Texas Government Code, Chapter 2251. Successful bidder is required to pay subcontractors within ten (10) days.

SALES TAX:
Hale County is by statute exempt from the State Sales Tax and Federal Excise Tax; therefore, the proposal price shall not include taxes.

DEBT:
Hale County reserves the right to reject any proposal submitted by a Bidder who owes a debt to the County. Debt includes delinquent taxes, fines, fees and delinquencies arising from written agreements with the County.

DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:
Hale County hereby notifies all Proposers that in regard to any contract entered into pursuant to this ITB, Disadvantaged Business Enterprises (DBE's) will be afforded equal opportunities to submit Bids and will not be discriminated against on the grounds of race, color, sex, disability, or national origin in consideration of an award.

CERTIFICATION REGARDING LOBBYING:
Qualifier certifies that:
(a.) No Federal appropriated funds have been paid or will be paid, by or on behalf of the bidder, to any person for influencing or attempting to influence a department or employee of an agency, a member of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
(b.) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence a department or employee of any agency, a member of Congress, a department or employee of congress, or an employee of a member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the bidder shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
(c.) Qualifier shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The truthful and fully completed and executed original of the Certification Regarding Lobbying (included with bid packet) must be included with the submission of qualifier's response and is a mandatory requirement of this invitation to bid. Qualifier's failure to include the fully completed and executed or original of this Certification shall be considered non-compliant with the requirements of this invitation to bid and grounds for the rejection of the qualifier's response. Submission of the certification is a prerequisite for making or entering into a contract with qualifier and is imposed by Section 1352, Title 31, United States Code. Further, any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

MERGERS, ACQUISITIONS:
The Qualifier shall be required to notify the County of any potential for merger or acquisition of which there is knowledge at the time that a qualifications is submitted. If subsequent to the award of any contract resulting from this request for qualifications the Qualifier shall merge or be acquired by another firm, the following documents must be submitted to the County:
Corporate resolutions prepared by the awarded Bidder and the new entity ratifying acceptance of the original contract, terms, conditions and prices;
New entity's Federal Identification Number (FEIN);
New entity's proposed operating plans;
New entity's proof of registration in SAM;
New entity's certification regarding debarment;
New entity's certification regarding lobbying; and
W-9 Form for new entity.
Moreover, qualifier is required to provide the County with notice of any anticipated merger or acquisition as soon as qualifier has actual knowledge of the anticipated merger or acquisition. The New Qualifier's proposed plan of operation must be submitted prior to merger to allow time for submission of such plan to the Commissioners' Court for its approval.

INSURANCE:
Before commencing work, the successful party shall be required, at his own expense, to furnish Hale County within ten (10) days of notification of award with evidence showing the following insurance coverage to be in force throughout the term of the contract:

Types of Coverage	Minimum Limits of Liability
1. Worker's Compensation/Employer's Liability	
Worker's Compensation Employer's Liability	Statutory Requirement $1,000,000
2. Commercial General Liability:	
a. BodilyInjury/Personal Injury/Property Damage	$1,000,000 per occurrence/$2,000,000 aggregate
3. Auto Liability	
a. Combined Single Liability	$1,000,000 per occurrence

Each insurance policy to be furnished by the successful party shall include, by endorsement of the policy, a statement that a notice shall be given to Hale County by certified mail thirty (30) days prior to cancellation or upon any material change in coverage. Said coverage shall be written by an insurer acceptable to the COUNTY and shall be in the form acceptable to the COUNTY.
When required, payment bonds and performance bonds shall be issued by a solvent surety company authorized to do business in the State of Texas, and shall meet any other requirements established by law or by County pursuant to applicable law.

PERFORMANCE AND PAYMENT BONDS:
Successful qualifier, before beginning work, shall execute a performance bond and a payment bond as required under the Special Provisions or the resultant contract if such is required.

Bid Bond - All bids must be accompanied by a cashier's check or certified check, made payable to the County of Hale, Texas, or an acceptable bid guaranty in an amount not less than five percent (5%) of the total bid issued by a solvent surety company authorized to do business in the State of Texas, and shall meet any other requirements established by law or by County pursuant to applicable law.

Performance / Payment Bond - If the contract amount is $100,000.00 or more, Contractor shall furnish County a performance bond in the amount of one hundred percent (100%) of the contract amount. Bond shall be delivered to County prior to the execution of the contract resulting from award of the bid. If the contract amount is over $25,000.00, Contractor shall furnish County a payment bond in the amount of one hundred percent (100%) of the contract amount. Bond shall be delivered to County prior to the execution of the contract resulting from award of the bid.

When required, payment bonds and performance bonds shall be issued by a solvent surety company authorized to do business in the State of Texas, and shall meet any other requirements established by law or by County pursuant to applicable law.

BIDS/PROPOSERS MUST COMPLY WITH:
All federal, state, county and local laws governing or covering this type of service. Vendors are required to have and maintain, at no cost to Hale County, insurance of the types and amounts as required by law and/or the bid specifications.

LICENSES, PERMITS, TAXES:
The price or prices for the work shall include full compensation for all taxes, permits, etc. that the proposer is or may be required to pay.

APPLICABLE GOVERNING LAWS AND REGULATIONS:
In accordance with the Instructions to Bidders, all bidders must comply with State Labor Laws concerning wage rates.

CONTRACTOR'S REPRESENTATIVE:
The successful bidder shall be required to have a responsible local representative available *at all times while the work is in progress under this contract.* The successful bidder shall be required to furnish the name, address and telephone number where such local representative may be reached during the time that the work contemplated by this contract is in progress.

CONTRACT:
Any contract made, or purchase order issued, as a result of this ITB shall be entered into in the State of Texas and under the laws of the State of Texas. In connection with the performance of work, the bidder agrees to comply with the Fair Labor Standard Act, Equal Opportunity Employment Act, and all other applicable Federal, State and local laws, regulations and executive orders to the extent that the same may be applicable.

PREVAILING WAGE RATES:
Contractors, Sub-subcontractors and/or any entity providing labor on Hale County Public Works or designee projects shall pay all workers not less than the general prevailing rate of per diem wages for work of a similar character where the Project is located, as detailed in the current Minimum Wage Schedule. Wages listed are minimum rates only. However, no claims for additional compensation above the Contract Sum shall be considered by the Owner because of payments of wage rates in excess of the applicable rate provided herein. Texas Government Code § 2258.001.et seq.

Contractor shall forfeit, as a penalty to the Owner, $60 for each laborer, worker or mechanic employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the Contract Documents.
Hale County or designee reserves the right to receive and review payroll records, payment records, and earning statements of employees of Contractor, and of Contractors Subcontractors and Sub-subcontractors of sub-contractors.
In executing the Work under the Contract Documents, Contractor shall comply with all applicable state and federal laws, including but not limited to, laws concerned with labor, equal employment opportunity, safety and minimum wages.

Prevailing wage rates:
See Minimum Wage Schedule attached. If a Minimum Wage Schedule is not attached, then the parties shall use the wage rate determined by the US Department of Labor in accordance with the Davis-Bacon Act, 40 U.S.C. § 276a, which can be accessed on the internet at https://sam.gov/content/wagedeterminations.

Davis-Bacon Act as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 must include a provision for compliance with the Davis-Bacon Act as supplemented by the Department of Labor regulations (29 C.F.R. Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractor must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity (the County) must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be condition upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contract must also include a provision for compliance with the Copeland Anti-Kickback Act (40 U.S.C. § 3145) as supplemented by the Department of Labor regulations (29 C.F.R. Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").

Specifications:

1. Any catalog, brand name or manufacturer's reference in the specifications is descriptive and NOT restrictive, and is used to indicate type and quality level desired. Bids on brands of like nature and quality may be considered unless specifically excluded.
2. If bidding on other than the reference or specifications, bid must show manufacturer, brand, trade name, catalog and/or lot number, etc. on article offered and certify article offered is equivalent to specifications. If other than the specified brand of items are offered, specifications, catalog sheets, illustrations and complete descriptive literature must be submitted with the bid.
3. Minor deviations from written specifications shall not necessarily disqualify a vendor's bid. The County specification committee will be the sole determiner of what constitutes a minor deviation.
4. When specifications call for samples to be submitted, the bidder, at bidder's expense, shall deliver samples five days prior to the opening of bids. Each sample shall be clearly tagged to show bidder's name and address and item number.

ITB 001224
Hale County Juvenile Justice Alternative Education Program Annex 3 – Building Conversion & Multi-purpose Building

NON-COLLUSIVE BIDDING CERTIFICATE

By submission of this bid or proposal, the bidder certifies that:

1. This bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor;

2. This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids, or bids for this project, to any other bidder, competitor, or potential competitor;

3. No attempt has been made or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal; and

4. The person signing this bid or proposal regarding the accuracy of the statements contained in this certification, and under the penalties being applicable to the bidder as well as to the person signing in its behalf.

Vendor Name:

Authorized Signiture:

Printed Name:

Title:

Date:

ITB 001224
Hale County Juvenile Justice Alternative Education Program Annex 3 – Building Conversion & Multi-purpose Building

The undersigned hereby certifies that he/she understands the specifications and any addendums, has read the document in its entirety and the prices submitted in this bid/proposal have been carefully reviewed and are submitted as correct and final. If Bid/Proposal is accepted, proposer further certifies and agrees to furnish any or all products/services upon which prices are extended at the price offered, and upon conditions in the specifications of the Invitation for Bid/Proposal.

The undersigned hereby certifies the foregoing proposal submitted by the company listed below hereinafter called "Bidder" is the duly authorized agent of said company and the person signing said proposal has been duly authorized to execute the same. Bidder affirms that they are duly authorized to execute this contract; this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other Bidder; and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.

Company Name	
Address of Principal Place of Business	
City, State, Zip	
Remittance Address	
City, State, Zip	
Phone of Principal Place of Business	
Fax of Principal Place of Business	
E-mail Address of Representative	
Active SAM Registration	Y N
Acknowledgement of Addenda (Please circle EACH acknowledged Addendum(s))	#1 #2 #3 #4 #5
Authorized Representative Name	
Authorized Representative Title	
Authorized Signature	
Date	

HALE COUNTY
CERTIFICATION REGARDING ENERGY COMPANIES AND FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS ACKNOWLEDGMENT

VENDOR IS EXEMPT FROM CERTIFICATION REGARDING ENERGY COMPANIES AND FIREARM ENTITIES OR FIREARM TRADE ASSOCIATIONS:

Vendor is a sole proprietorship OR is a non-profit entity OR Vendor is a company that does NOT have 10 or more full-time employees AND/OR this contract does NOT have a value of $100,000.00 or more that is to be paid wholly or partly paid from public funds of the governmental entity.
If the Vendor Cannot Certify that it is EXEMPT as Above, Vendor Must Certify as Follows: Vendor is NOT EXEMPT and Certifies as follows:

Boycott of Energy Companies Prohibited. In compliance with Section 2274.002 of the Texas Government Code (added by 87th Legislature S. B. 13), Vendor verifies that it does not boycott energy companies and will not boycott energy companies during the term of the above-described contract. “Boycott energy company” is defined in Section 809.001(1) (added by 87th Legislature, S. B. 13) and means, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company: (A) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; or (B) does business with a company described by subsection (A).

Discrimination against Firearm Entities or Firearm Trade Associations Prohibited.

In compliance with Section 2274.002 of the Texas Governmental Code (added by 87th Legislature, S. B. 19), Vendor verifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and will not discriminate during the term of the above-described contract] against a firearm entity or firearm trade association. “Discriminate against a firearm entity or firearm trade association” is defined in Section 2274.001(3) (added by 87th Legislature, S. B. 19) and means, with respect to the entity or association, to (i) refuse to engage in the trade of any goods or services with the entity or association based solely on its status as a firearm entity or firearm trade association; (ii) refrain from continuing an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; or (iii) terminate an existing business relationship with the entity or association based solely on its status as a firearm entity or firearm trade association; the term does not include: (i) the established policies of a merchant, retail seller, or platform that restrict or prohibit the listing or selling of ammunition, firearms, or firearm accessories; and (ii) a company’s refusal to engage in the trade of any goods or services, decision to refrain from continuing an existing business relationship, or decision to terminate an existing business relationship: (aa) to comply with federal, state, or local law, policy, or regulations or a directive by a regulatory agency; or (bb) for any traditional business reason that is specific to the customer or potential customer and not based solely on an entity’s or association’s status as a firearm entity or firearm trade association.

Vendor Hereby Certifies (Mark Applicable Certification):

_____ Vendor is EXEMPT from Certification as set out above.

_____ Vendor is NOT EXEMPT from Certification as set out above, and Vendor Certifies that it does not and will not Boycott Energy Companies and that it does not and will not engage in prohibited Discrimination against Firearm Entities or Firearm Trade Associations.

Signature _____
THIS FORM MUST BE SIGNED.

CERTIFICATION REGARDING LOBBYING
(31 U.S.C.A. § 1352)
This Certification must be completed, signed, dated and
returned to the Hale County Attorney

Procurement Number and Description: **ITB 001224**
Hale County Juvenile Justice Alternative Education Program Annex 3 – Building Conversion & Multi-purpose Building

Proposer **CERTIFIES,** to the best of its knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the proposer, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the proposer shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

3. Proposer shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Name of Organization/Corporation: _____

Address:
_____

City: _____ State: _____ Zip Code: _____

Signature of Authorized Date

Signatory for Proposer: _____ Signed: _____

Title of Authorized Signatory of Proposer: _____

ITB 001224
HALE COUNTY JUVENILE JUSTICE ALTERNATIVE EDUCATION PROGRAM ANNEX 3 – BUILDING CONVERSION & MULTI-PURPOSE BUILDING

BID FORM

DATE: _____

Bidder's Company Name

_____

1.01 OFFER

A. Having examined the Place of The Work and all matters referred to in the Instructions to Bidders and the Bid Documents prepared by **bld. architects** for the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

_____ dollars

($_____), in lawful money of the United States of America

B. Alternate Offer:
   1. Add Alternate One: As described in the project documents

_____ dollars

($_____), in lawful money of the United States of America

C. Alternate Offer:
   1. Add Alternate Two: As described in the project documents

_____ dollars

($_____), in lawful money of the United States of America

PROPOSED LIST OF MAJOR SUBCONTRACTORS:

CONCRETE	
MASONRY	
MPE	
STEEL ERECTION	

D. We have included the following required documents by the Instruction to Bidders.
   1. Bid form
   2. Non-Collusive Bidding Certificate
   3. Vendor Acknowledgement
   4. Certificate Regarding Energy Companies and Fire Entities to Firearm Trade Associations Acknowledgement
   5. Certificate Regarding Lobbying
   6. Bid Bond

1.02 ACCEPTANCE

A. This offer should be open to acceptance and is irrevocable for **sixty days** from the bid closing date.

B. Liquidated Damages: Subject to the other terms and conditions herein, if Substantial Completion is not achieved by the date specified above or by such a date to which the Contract Time may be extended, the Contract Sum shall be reduced by Five Hundred Dollars **($500.00)** per calendar day as liquidated damages and not as a penalty, until the date of Substantial Completion.

C. The contractor shall acknowledge that the Project is required to be substantially complete on or before **July 01, 2026.**

D. If this bid is accepted by Owner within the time period stated above, we will:
   1. Execute the Agreement within seven days of receipt of Notice of Award.
   2. Furnish the required bonds within seven days of receipt of Notice of Award.
   3. Commence work within seven days after written Notice to Proceed of this bid.

E. If this bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bond(s), the bid bond shall be forfeited as damages to Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

F. In the event our bid is not accepted within the time stated above, the required bid bond shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders, unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

1.03 CONTRACT TIME

A. If this Bid is accepted, we will:

   Complete the Work in _____ calendar days from Notice to Proceed.

1.04 ADDENDA

A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
   1. Addendum _____ Dated _____.
   2. Addendum _____ Dated _____.
   3. Addendum _____ Dated _____.

1.05 BID FORM SUPPLEMENTS

A. We agree to submit the following Supplements to Bid Forms within **24 hours** after submission of this bid for additional bid information:
   1. Final list of sub-contractors- List must remain valid throughout the duration of the project. Alternate subs will not be accepted unless approved by the owner beforehand.
   2. Subcontractor's qualifications statement as required by the project specifications.
   3. Proposed Project Manager & Superintendent – Provide company profile, project experiences and list of past projects.

HALE COUNTY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL QUALIFIED BIDS.

1.06 BID FORM SIGNATURE(S)

A. The Corporate Seal of

_____
(Bidder - print the full name of your firm)

B. was hereunto affixed in the presence of:

_____
(Authorized signing officer, Title)

C. (Corporation Seal)

_____
(Authorized signing officer, Title)

IF THE BID IS A JOINT VENTURE OR PARTNERSHIP, ADD ADDITIONAL FORMS OF EXECUTION FOR EACH MEMBER OF THE JOINT VENTURE IN THE APPROPRIATE FORM OR FORMS AS ABOVE.

SECTION 012300
ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Description of Alternates.

B. Procedures for pricing Alternates.

C. Documentation of changes to Contract Price and Contract Time.

1.02 ACCEPTANCE OF ALTERNATES

A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.

B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.03 SCHEDULE OF ALTERNATES

A. Alternate No. One :
   1. Base Bid Item: Section 075700 and Drawing number A-103.
   2. Alternate Item: Section 075400 and Drawing number A-103.

B. Alternate No. [Two] :
   1. Section 230900 – instrumentation and control for HVAC

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 075400
THERMOPLASTIC MEMBRANE ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Adhered system with thermoplastic roofing membrane.

B. Insulation, flat and tapered.

C. Cover boards.

D. Flashings.

E. Roofing stack boots and walkway pads.

1.02 RELATED REQUIREMENTS

A. Section 061000 - Rough Carpentry: Wood cant strips.

1.03 REFERENCE STANDARDS

A. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.

B. ASTM C177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus; 2019, with Editorial Revision (2023).

C. ASTM C578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation; 2023.

D. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.

E. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023a.

F. ASTM D6878/D6878M - Standard Specification for Thermoplastic Polyolefin-Based Sheet Roofing; 2021.

G. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.

H. NRCA (RM) - The NRCA Roofing Manual; 2024.

I. NRCA (WM) - The NRCA Waterproofing Manual; 2021.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene one week before starting work of this section.
   1. Review preparation and installation procedures and coordinating and scheduling required with related work.

1.05 SUBMITTALS

A. See Section 013000 - Administrative Requirements for submittal procedures.

B. Product Data: Provide data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.

C. Shop Drawings: Submit drawings that indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.

D. Samples for Verification: Submit two samples in size illustrating insulation, colored coating, and thickness.

E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

F. Manufacturer's Installation Instructions: Indicate membrane seaming precautions and perimeter conditions requiring special attention.

G. Manufacturer's qualification statement.

H. Installer's qualification statement from Manufacturer.
   1. Acceptable to roof material manufacturer for the manufacturer's warranty requirements.
   2. Five (5) years successful experience on projects similar in size and scope.
   3. Experienced in the type of roofing work required.
   4. Successfully completed previous projects warranted by the manufacturer.

I. Testing firm's qualification statement.

J. Warranty Documentation:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
   2. Submit installer's written verification that installation complies with warranty conditions for waterproof membrane.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum Fifteen years of documented experience.

B. Installer Qualifications: Company specializing in performing work of this section with at least Five years of documented experience.
   1. Currently certified or an approved applicator that is in good standing with the manufacturer.
   2. Installer must be an experienced single firm specializing in the type of roofing repair and/or removal and replacement work required, employing only experienced workers for the class of work in which they are employed, having at least five (5) years successful experience on projects similar in size and scope and acceptable as applicators by the Project Manager.
   3. Contractor must have successfully completed previous projects warranted by the manufacturer.

C. Testing Firm Qualifications: Company specializing in performing work of the type specified and approved by manufacturer.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's original containers, dry and undamaged, with seals and labels intact, unless otherwise indicated.

B. Store materials in weather protected environment, clear of ground and moisture.

C. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.

D. Protect foam insulation from direct exposure to sunlight.

1.08 FIELD CONDITIONS

A. Do not apply roofing membrane during unsuitable weather.

B. Do not apply roofing membrane when ambient temperature is below 40 degrees F (5 degrees C) or above 110 degrees F (43 degrees C).

C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

E. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

1.09 WARRANTY

A. See Section 017800 - Closeout Submittals for additional warranty requirements.

B. System Warranty: The complete roofing system (from top of deck/substrate up) shall be guaranteed for a minimum of twenty (20) years from the date of Substantial Completion.

C. Material Warranty: Project shall be installed in such a manner that the roofing material manufacturer will furnish a written Twenty (20) Year NDL with no exclusion for 2" hail occurrence.
   1. Warranty Term: 20 years.
   2. For repair and replacement include costs of both material and labor in warranty.

D. **Installer's Two Year Guarantee:** Within ten (10) days of completion of the roof installation, submit four (4) copies of a special "Certificate of Guarantee" signed and dated on Contractor's letterhead.The letter should state the following: (word by word) a. The roofing contractor guarantees all materials and workmanship applied by
   1. The roofing contractor guarantees all materials and workmanship applied by this firm in the roofing installation on the subject project for a period of Two (2) years from the date of acceptance by the Owner.
   2. this firm in the roofing installation on the subject project for a period of Two (2) years from the date of acceptance by the Owner.
   3. This guarantee shall include replacing or repairing any defect caused by defective work or materials resulting in leaks, failure to stay in place, splitting, separating from underlayment, alligatoring, blistering, buckling, or tearing.
   4. Contractor shall be required to make temporary repairs within forty-eight hours and permanent repairs within ten (10) days.
   5. It is understood and agreed to that this guarantee shall not be made to apply to leaks or defects caused by fire, excessive winds, excessive hail storms, or other acts of God over which the Contractor has no control over.
   6. It is agreed to that this guarantee does not include responsibility for defects or leaks due to abuse or vandalism at no fault of the Contractor.
   7. It is understood that the Owner shall keep the roof clean, keep drain outlets open, eliminate unnecessary traffic, and not permit any additional work to the roof without notifying the Contractor.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Thermoplastic Polyolefin (TPO) Membrane Roofing Materials:
   1. Carlisle SynTec Systems; Sure-Weld TPO: www.carlisle-syntec.com/#sle.
   2. GAF 60 mil: www.gaf.com/#sle.
   3. Johns Manville; JM TPO - 60 mil: www.jm.com/#sle.
   4. Substitutions: See Section 016000 - Product Requirements.

B. Insulation:
   1. Carlisle SynTec Systems: www.carlisle-syntec.com/#sle.
   2. GAF: www.gaf.com/#sle.
   3. Johns Manville: www.jm.com/#sle.
   4. Substitutions: See Section 016000 - Product Requirements.

C. Cover Boards:
   1. Johns Manville; SeparatoR CGF: www.jm.com/#sle.
   2. Carlisle SynTec Systems; Securock Cover Board: www.carlisle-syntec.com/#sle..
   3. Substitutions: See Section 016000 - Product Requirements.

2.02 MEMBRANE ROOFING AND ASSOCIATED MATERIALS

A. Membrane Roofing Materials:

1. TPO: Thermoplastic polyolefin (TPO) complying with ASTM D6878/D6878M, sheet contains reinforcing fabrics or scrims.
   a. Thickness: 60 mil, 0.060 inch (1.5 mm), minimum.
2. Sheet Width:
   a. Adhered Application: Limit width to 120 inches (3,048 mm), maximum, when ambient temperatures are less than 40 degrees F (4.4 degress C) for extended period of time during installation.
3. Solar Reflectance: 0.75, minimum, initial, and 0.65, minimum, 3-year, certified by Cool Roof Rating Council.
4. Color: White.

B. Seaming Materials: As recommended by membrane manufacturer.

C. Vapor Retarder / Base Membrane: Material approved by roof manufacturer; compatible with roofing and insulation materials.
1. Vapor Permeability: , measured in accordance with ASTM E96/E96M.
2. Products:
   a. GAF: www.gaf.com/#sle.
   b. Carlisle SynTec Systems; VapAir Seal MD.
   c. Substitutions: See Section 016000 - Product Requirements.

D. Flexible Flashing Material: Same material as membrane.

2.03 COVER BOARDS

A. Cover Boards: Glass-mat faced gypsum panels complying with ASTM C1177/C1177M.
1. Thickness: 1/2 inch (12.7 mm)
2. Products:
   a. Georgia-Pacific; DensDeck: www.densdeck.com/#sle.
   b. Carlisle SynTec System.
   c. Substitutions: See Section 016000 - Product Requirements.

2.04 INSULATION

A. Expanded Polystyrene (EPS) Board Insulation: Comply with ASTM C578, with drainage channels on one face.
1. Board Size: 48 by 96 inches (1220 by 2440 mm).
2. Tapered Board: Slope as indicated; minimum thickness 1/2 inch (12.7 mm); fabricate of fewest layers possible.
3. Board Edges: Square.
4. Type and Board Density: Type XI, 0.70 lb per cu ft (12 kg/cu m), minimum.
5. Type and Compressive Resistance: Type XI, 5 psi (35 kPa), minimum.
6. Type and Thermal Resistance, R-value (RSI-value): Type XI, 3.1 (0.55), minimum, per 1 inch (25.4 mm) thickness at 75 degrees F (24 degrees C).

B. Polyisocyanurate (ISO) Board Insulation: Rigid cellular foam, complying with ASTM C1289.
1. Classifications:
   a. Type II: Faced with either cellulosic facers or glass fiber mat facers on both major surfaces of the core foam.
      1) Class 1 - Faced with glass fiber reinforced cellulosic facers on both major surfaces of the core foam.
      2) Compressive Strength: Classes 1-2-3, Grade 1, 16 psi (110 kPa), minimum.
      3) Thermal Resistance, R-value 30 (RSI): At 2 inches (38 mm) thick; Class 1, Grades 1-2-3, 8.4 (1.48), minimum, at 75 degrees F (24 degrees C).
2. Board Size: 48 by 96 inches (1220 by 2440 mm).
3. Board Thickness: 3.0 inches (76 mm).

4. Tapered Board: Slope as indicated; minimum thickness ; fabricate of fewest layers possible.
5. Board Edges: Square.
6. Products:
   a. DuPont de Nemours, Inc: building.dupont.com/#sle.
   b. GAF; : www.gaf.com/#sle.
   c. Johns Manville: www.jm.com/#sle.
   d. Versico Roofing Systems: www.versico.com/#sle.
   e. Substitutions: See Section 016000 - Product Requirements.

2.05 ROUGH LUMBER

A. All wood nailers, structural cants, curbs, and other miscellaneous rough carpentry, shall be lumber as recommended by NRCA, and Underwriters Laboratory guidelines.

B. Lumber in direct contact wth Masonry or Concrete shal be treated and installed.

2.06 LOW RISE FOAM ADHESIVE

A. Shall be a dual component, moisture-cured polyurethane adhesive, free of conventional solvents; Poly Set CR-20® as manufactured by Polyset or approved equal.

2.07 ACCESSORIES

A. Stack Boots: Prefabricated flexible boot and collar for pipe stacks through membrane; same material as membrane.

B. Insulation Joint Tape: Glass fiber reinforced type as recommended by insulation manufacturer, compatible with roofing materials; 6 inches (152 mm) wide; self adhering.

C. Membrane Adhesive: As recommended by membrane manufacturer.

D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.

E. Thinners and Cleaners: As recommended by adhesive manufacturer, compatible with membrane.

F. Aluminum Metal Termination Bars: Membrane manufacturer's standard extruded aluminum bars, approximately 1 inches wide by .1 inches thick, pre-punched every 6 inches on center. Use pre-fabricated mitered inside and outside corners where walls intersect.

G. Insulation Adhesive: As recommended by insulation manufacturer.

H. Sealants: As recommended by membrane manufacturer.

I. Drain Inserts: Manufacturer's standard PVC coated, heavy duty aluminum drain insert which mechanically seals to the drainpipe interior.

J. The trim strip shall have the following minimum properties, Shall be Supplied by the membrane manufacturer.
   1. Six inch (6") wide non-reinforced 45 mil thermoplastic used for capping butted ends of rolls.
   2. The trim strip is seamed with the use of hot-air welding.

K. Pipe Support Stands: Refer Drawings
   1. High-Type, Single-Pipe Stand:
      a. Description: Assembly of base, vertical and horizontal members, and pipe support, for roof installation without membrane penetration.
      b. Base: Plastic.
      c. Vertical Members: Two or more cadmium-plated-steel or stainless-steel, continuous-thread rods.
      d. Horizontal Member: Cadmium-plated-steel or stainless-steel rod with plastic or stainless-steel, roller-type pipe support.
   2. High-Type, Multiple-Pipe Stand:

a. Description: Assembly of bases, vertical and horizontal members, and pipe supports, for roof installation without membrane penetration.
b. Bases: One or more; plastic.
c. Vertical Members: Two or more protective-coated-steel channels.
d. Horizontal Members: Protective-coated-steel channel.
e. Pipe Supports: Galvanized-steel, clevis-type pipe hangers.

L. Walkway Pads: Suitable for maintenance traffic, contrasting color or otherwise visually distinctive from roof membrane.
1. Composition: Roofing membrane manufacturer's standard.
2. Size: As indicated on drawings.
3. Surface Color: White.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work.

B. Verify deck is supported and secure.

C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.

D. Verify deck surfaces are dry and free of snow or ice.

E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

3.02 PREPARATION - GYPSUM DECK

A. Verify adjacent roof members do not vary more than 1/4 inch (6 mm) in height. Verify grout keys are filled flush.

B. Repair damaged or deteriorated gypsum deck with Pyrofil Gypsum-Concrete Patch

3.03 INSTALLATION, GENERAL

A. Perform work in accordance with manufacturer's instructions, NRCA (RM), and NRCA (WM) applicable requirements.

B. Do not apply roofing membrane during cold or wet weather conditions.

C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.

D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.

E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

F. Coordinate this work with installation of associated counterflashings installed by other sections as the work of this section proceeds.

G. Wrinkles, buckles, kinks, and fishmouths are not acceptable when laying membrane.

H. Provide a water test of each roof section prior to substantial completion. The test should simulate rainfall of one inch (1") per hour minimum.

3.04 INSTALLATION - INSULATION, UNDER MEMBRANE

A. Install vented base to deck surface in accordance with manufacturer's instructions.

B. Attachment of Insulation: Embed each layer of insulation in adhesive in full contact, in accordance with roofing and insulation manufacturers' instructions.

C. Cover Boards: Fully Adhere cover boards in accordance with roofing manufacturer's instructions.

D. Lay subsequent layers of insulation with joints staggered minimum 6 inches (152 mm) from joints of preceding layer.

E. Place tapered insulation to the required slope pattern in accordance with manufacturer's instructions.

F. Lay boards with edges in moderate contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.

G. Tape joints of insulation in accordance with roofing and insulation manufacturers' instructions.

H. At roof drains, use factory-tapered boards to slope down to roof drains over a distance of 18 inches (457 mm).

I. Do not install more insulation than can be covered with membrane in same day.

3.05 INSTALLATION - MEMBRANE

A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.

B. Shingle joints on sloped substrate in direction of drainage.

C. Fully Adhered Application: Fully embed membrane in adhesive except in areas directly over or within 3 inches (76 mm) of expansion joints. Fully adhere one roll before proceeding to adjacent rolls.

D. Overlap edges and ends and seal seams by contact adhesive, minimum 3 inches (76 mm). Seal permanently waterproof. Apply uniform bead of sealant to joint edge.

E. At intersections with vertical surfaces:
   1. Extend membrane over and up rise walls a minimum of 4 inches (102 mm) onto vertical surfaces.
   2. Fully adhere flexible flashing over membrane and up to nailing strips.
   3. Secure flashing to nailing strips at 6 inches (153 mm) on center.

F. At gravel stops, extend membrane under gravel stop and to the outside face of the wall, 2" minimum. At Parapets, extend membrane up ad over the nailer face, 2" minimum, mechanically fasten 12" o.c Max.

G. Around roof penetrations, seal flanges and flashings with flexible flashing.

H. Coordinate installation of roof drains and sumps and related flashings.
   1. Base flashings shall be installed using the flashing membrane, with length of run not to exceed twenty linear feet (20').

3.06 FIELD QUALITY CONTROL

A. See Section 014000 - Quality Requirements for additional requirements.

B. Owner will provide testing services, and Contractor to provide temporary construction and materials for testing in accordance with requirements.

C. Provide daily on-site attendance of roofing and insulation manufacturer's representative during installation of this work.

3.07 SEAM INSTALLATION

A. All seams shall be hot air welded in strict accordance with manufacturer's latest published requirements and written instructions.

B. Air welding equipment shall be approved by the membrane manufacturer.

C. All membrane to be welded shall be clean and dry.

D. Repair tears, voids, and lapped seams in roofing that does not meet manufacturer's requirements.

3.08 FLASHING INSTALLATION

A. All flashing shall be installed in strict accordance with membrane manufacturer's written instructions.

B. Flashings shall be installed concurrently with the roof membrane as the job progresses.

C. Adhere membrane to wall and equipment curb substrates with adhesive according to membrane manufacturer's and adhesive manufacturer's written instructions.

3.09 WALKWAY INSTALLATION

A. Adhere walkway pads to the roof membrane using approved adhesive and in strict accordance with membrane manufacturer's written instructions.

B. Unless otherwise indicated, install walkway pads in the following locations:
   1. On three accessible sides of all roof hatches.
   2. In front of all roof access doors.
   3. At the top and bottom landings of all roof ladders.
   4. Continuously around all sides of all rooftop serviceable equipment.

3.10 PIPE SUPPORT INSTALLATION

A. Pipe Stand Installation:
   1. Pipe Stand Types: Assemble components and mount on smooth roof surface. Provide roofing pad membrane layer under each pipe stand for. Do not penetrate roof membrane.

3.11 CLEANING

A. See Section 017000 - Execution and Closeout Requirements for additional requirements.

B. Remove bituminous markings from finished surfaces.

C. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and comply with their documented instructions.

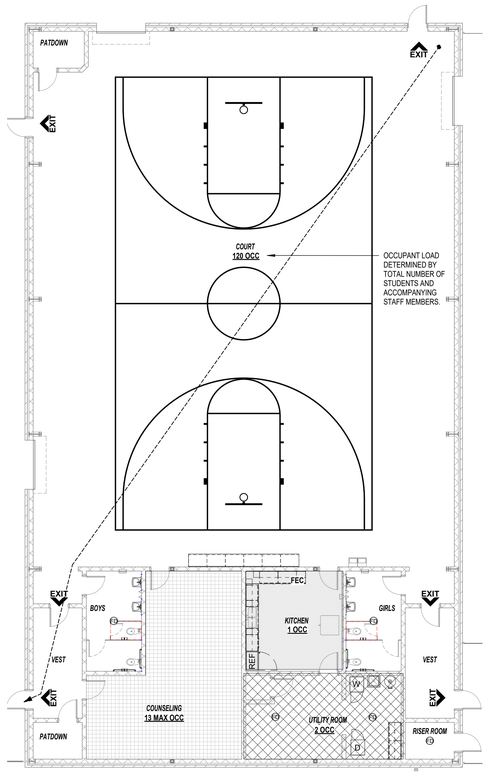
D. Repair or replace defaced or damaged finishes caused by work of this section.

3.12 PROTECTION

A. Protect installed roofing and flashings from construction operations.

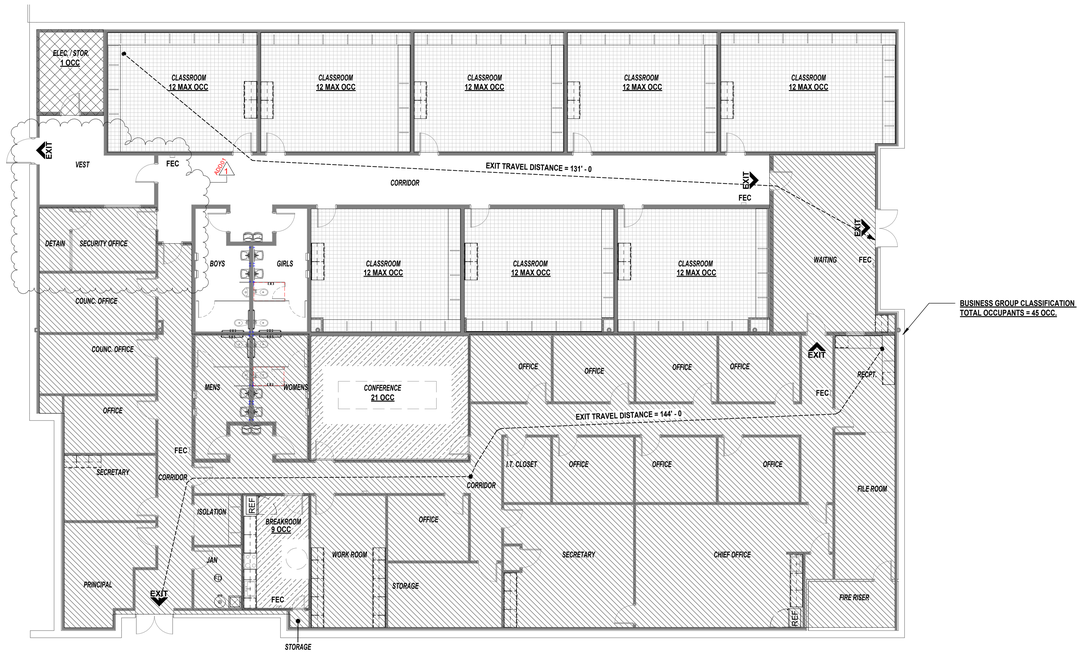
B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION



C1 **CODE PLAN -FLOOR PLAN - BLDG. 'B'**

1" = 10'-0"



A1 **CODE PLAN - FLOOR PLAN - BLDG. 'A'**

1" = 10'-0"

FUNCTION OF SPACE LEGEND:

- ACCESSORY STORAGE AREA, MECHANICAL EQUIPMENT ROOMS
- BUSINESS AREA
- KITCHENS, COMMERCIAL
- EDUCATIONAL, CLASSROOM AREAS
- ASSEMBLY UNCONCENTRATED FIXED SEATS

EGRESS LEGEND:

EXTERIOR DOOR EGRESS

1 PAIR OF 3'-0" DOORS (66-3/4" CLR)
AT .2"/OCCUPANT = 333 OCCUPANTS

2 SINGLE 3'-0" DOOR (33-1/4" CLR)
AT .2"/OCCUPANT = 166 OCCUPANTS

EGRESS PATH (300' MAX.)

SMOKE RATED PARTITION - 20min.

XXX OCC OCCUPANT LOAD TAG

PLUMBING FIXTURE COUNT - BLDG. 'A'

OCCUPANCY:	USE GROUP	OCC LOAD	WATER CLOSET M	WATER CLOSET F	URINALS	LAVS M	LAVS F	DRINKING FOUNTAIN	SERVICE SINK
ASSEMBLY	A-3	30	0.1	0.2	-	0.1	0.1	0.1	
BUSINESS	B	45	0.9	0.9	-	0.6	0.6	0.5	
EDUCATION	E	96	0.9	0.9	-	1.0	1.0	1.0	1
					-				
					-				
TOTAL REQUIRED			2	2	-	2	2	2	1
TOTAL PROVIDED			2	2	1	2	2	2	1

FIXTURE COUNT NOTES:

1. 1 SERVICE SINK IS REQUIRED.
2. VALUES WITH DECIMAL POINTS ARE ROUNDED TO THE NEAREST TENTH FOR SIMPLICITY. FURTHER CALCULATIONS DO NOT USE THE ROUNDED VALUE.
3. VALUES WITHOUT DECIMAL POINTS ARE ROUNDED UP TO THE NEAREST WHOLE NUMBER AT THE END OF THE CALCULATION.
4. IN EACH RESTROOM, HALF OF THE MALE WATER CLOSETS WILL BE SUBSTITUTED FOR URINALS. IF AN ODD NUMBER OF URINALS AND WATER CLOSETS ARE PROVIDED, THERE WILL BE ONE MORE WATER CLOSET THAN URINALS.
5. FACTORY OCCUPANT LOAD IS SHOWN AS 75% MALE & 25% FEMALE TO ALIGN CLOSER TO INDUSTRY DEMOGRAPHICS.

PLUMBING FIXTURE COUNT - BLDG. 'B'

OCCUPANCY:	USE GROUP	OCC LOAD	WATER CLOSET M	WATER CLOSET F	URINALS	LAVS M	LAVS F	DRINKING FOUNTAIN	SERVICE SINK
ASSEMBLY	A-3	120	0.4	0.9	-	0.3	0.3	0.2	
					-				
					-				1
					-				
					-				
TOTAL REQUIRED			1	1	-	1	1	1	1
TOTAL PROVIDED			2	2	1	1	1	1	1

FIXTURE COUNT NOTES:

1. 1 SERVICE SINK IS REQUIRED.
2. VALUES WITH DECIMAL POINTS ARE ROUNDED TO THE NEAREST TENTH FOR SIMPLICITY. FURTHER CALCULATIONS DO NOT USE THE ROUNDED VALUE.
3. VALUES WITHOUT DECIMAL POINTS ARE ROUNDED UP TO THE NEAREST WHOLE NUMBER AT THE END OF THE CALCULATION.
4. IN EACH RESTROOM, HALF OF THE MALE WATER CLOSETS WILL BE SUBSTITUTED FOR URINALS. IF AN ODD NUMBER OF URINALS AND WATER CLOSETS ARE PROVIDED, THERE WILL BE ONE MORE WATER CLOSET THAN URINALS.
5. FACTORY OCCUPANT LOAD IS SHOWN AS 75% MALE & 25% FEMALE TO ALIGN CLOSER TO INDUSTRY DEMOGRAPHICS.

FIRE EXTINGUISHER NOTES

1. FIRE EXTINGUISHERS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODES AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS. EXTINGUISHERS MUST BE STRATEGICALLY LOCATED TO ENSURE THEY ARE ACCESSIBLE WITHIN 75 FEET OF TRAVEL DISTANCE FROM ANY POINT IN THE BUILDING.
2. PROVIDE CLASS A, B, AND C EXTINGUISHERS AS APPROPRIATE FOR THE OCCUPANCY TYPE AND POTENTIAL FIRE HAZARDS PRESENT IN THE BUILDING.
3. FIRE EXTINGUISHERS SHALL BE MOUNTED ON WALL BRACKETS OR IN CABINETS AT A HEIGHT THAT ALLOWS FOR EASY ACCESS, GENERALLY BETWEEN 3.5 FEET AND 5 FEET ABOVE THE FINISHED FLOOR.
4. ADEQUATE SIGNAGE SHALL BE PROVIDED TO INDICATE THE LOCATION OF FIRE EXTINGUISHERS. SIGNS MUST BE CLEARLY VISIBLE AND COMPLY WITH APPLICABLE CODES.

PROJECT GENERAL INFORMATION:

- PROJECT → HALE COUNTY - JJAEP ANNEX 3 - BUILDING CONVERSION & NEW MULTI-PURPOSE BLDG.
- LOCATION → 305 BROADWAY & 308 N. AUSTIN, PLAINVIEW TEXAS
- BUILDING CODE → 2021 INTERNATIONAL BUILDING CODE
- BUILDING USE → JUVENILE JUSTICE ALTERNATIVE EDUCATION PROGRAM
- OCCUPANCY GROUP → BLDG. 'A'; REFORMATORY (I3) | BLDG.; 'B' REFORMATORY (I3) ** NO HOUSING IMPLEMENTED
- BUILDING CONSTRUCTION TYPE → BLDG. 'A'; TYPE IIB | BLDG. 'B'; TYPE IIB
- SPRINKLERED → BLDG. 'A'; YES | BLDG. 'B'; YES
- NUMBER OF STORIES → BLDG. 'A'; ONE | BLDG. 'B'; ONE
- BUILDING HEIGHT → BLDG. 'A'; 15' - 0" | BLDG. 'B'; 32' - 8"
- GROSS FLOOR AREA → BLDG. 'A'; 13,983SF. | BLDG. 'B'; 8,723SF
- TOTAL OCCUPANCY LOAD → BLDG. 'A'; 200 OCCUPANTS | BLDG. 'B'; 136 OCCUPANTS

** CLASSROOM OCCUPANCY COUNT CONSIDERED THE ALLOWED STUDENT / STAFF RATIO OF 12/1 DEFINED IN THE TJJD LAWS AND STATUTES.
** MULTI-PURPOSE BUILDING OCCUPANCY COUNT CONSIDERS THE TOTAL NUMBER OF STUDENTS ALLOWED BY TJJD 12/1 RATIOS AND ADDITIONAL STAFF MEMBERS AS REQUIRED.

PARKING

- TOTAL ON CAMPUS → 55
- ACCESSIBLE → 3

CODE REVIEW: IBC 2021

- OCCUPANCY (SEC.305.1) → GROUP I3 - REFORMATORY
- AUTOMATIC SPRINKLER SYSTEM (SEC 903) → YES
- TYPE OF CONSTRUCTION (SEC. 602) → TYPE II-B
- BUILDING AREA AND HEIGHT LIMITATION (TABLE 506.2, 504.3, 504.4) FOR GROUP I OCCUPANCY → 40,000 AREA / 85 FT HGT / 2 STORY HEIGHT
- MAXIMUM ALLOWABLE AREA INCREASES → N/A SEC 506.3.3

TOTAL MAXIMUM ALLOWABLE AREA EQUATION (506.2.1):

- Aa=At +(NS x IF') → N/A SEC 506.2.1
- TOTAL MAXIMUM ALLOWABLE AREA: → N/A

FIRE-RESISTANCE REQUIREMENTS: IBC 2021

FOR GENERAL BUILDING ELEMENTS:	(TABLE 601 AND SECTION 602)	DOOR RATING (TABLE 716.1(2))
STRUCTURAL FRAME	0 HR	
BEARING WALLS		
EXTERIOR	0 HR	0 MIN
INTERIOR	0 HR	0 MIN
NONBEARING WALLS:		
EXTERIOR — LESS THAN 5'	1 HR	45 MIN
5' OR LESS THAN 10'	1 HR	45 MIN
10' OR LESS THAN 30'	0 HR	0 MIN
GREATER THAN 30'	0 HR	0 MIN
FLOOR CONSTRUCTION (INCL. SUPPORT BEAM/JOISTS)	0 HR	
ROOF CONSTRUCTION (INCL. SUPPORT BEAM/JOISTS)	0 HR	

FOR SPECIFIC BUILDING ELEMENTS:

- SHAFT ENCLOSURES (713) → 1 HR (NOT APPLICABLE)
- VERTICAL EXIT ENCLOSURES (SEC 1020, EXC 9) → 0 HR (NOT APPLICABLE)
- FIRE WALLS (TABLE 706.4, EXC A) → 2 HR (NOT APPLICABLE)
- FIRE BARRIERS (SEC 707) → 2 HR (NOT APPLICABLE)
- FIRE PARTITIONS (SEC 708.3, EXC 2) → 0 HR (W/ SPRINKLER SYSTEM)
- CORRIDORS (TABLE 1018.1) → 0 HR (W/ SPRINKLER SYSTEM)
- ELEVATOR MACHINE ROOM (SEC 3006.4) → 2 HR (NOT APPLICABLE)
- OCCUPANCY SEPARATIONS: → 1/2 HR AT DWELLING UNITS (SEC 508)

INCIDENTAL USE SEPARATIONS (TABLE 509):

- LAUNDRY ROOMS OVER 100 SF → 1 HR OR PROVIDE SPRINKLER SYSTEM
- WASTE AND LINEN ROOMS OVER 100 SF → 1 HR OR PROVIDE SPRINKLER SYSTEM

MISCELLANEOUS DETAILED REQUIREMENTS: IBC 2021

- CEILING HEIGHT FOR MEANS OF EGRESS (SEC 1003.2) → MIN. 7'-6"
- STAIRS (SEC 1009.2) → MIN. 6'-8" (NOT APPLICABLE)
- CEILING HEIGHT FOR OCCUPIABLE SPACES AND CORRIDORS (SEC 1208.2) → MIN. 7'-6"
- SAFETY GLAZING MISCELLANEOUS REQUIREMENT → SEC 2406 (N/A)
- ELEVATOR MISCELLANEOUS REQUIREMENTS → CHAPTER 30 (NOT APPLICABLE)
- STAIRS NOT REQUIRED TO BE ENCLOSED → SEC 1020.1 EXC 9 (NOT APPLICABLE)
- PANIC DOOR HARDWARE REQUIRED → SEC 1008.1.9
- TWO MEANS OF EGRESS FROM A SPACE → TABLE 1015.1

EGRESS REQUIREMENTS: IBC 2021

OCCUPANCY LOADS: (TABLE 1004.1.2)

FUNCTION OF SPACE:	SQ. FT. PER OCCUPANT:
ACCESSORY STORAGE AREAS, MECH. EQUIPMENT ROOMS	300 GROSS
ASSEMBLY (EXHIBIT GALLERY)	30 NET
BUSINESS	150 GROSS
CLASSROOM	20 NET
CLASSROOM VOCATIONAL	50 NET
FACTORY INDUSTRIAL	100 GROSS

REQUIRED EGRESS WIDTH: IBC 2021

- MINIMUM CORRIDOR WIDTH (SEC 1005.3, TABLE 1018.2) → 44" MIN OR .2" PER OCCUPANT WHICHEVER IS GREATER
- MINIMUM STAIR WIDTH (SEC 1005.3.1, SEC 1009.4) → 44" MIN OR .3" PER OCCUPANT WHICHEVER IS GREATER

NUMBER OF EXITS REQUIRED (SEC 1021)

- 1-49 OCCUPANTS → 1
- 50-500 OCCUPANTS → 2
- 501-1000 OCCUPANTS → 3
- 1001 OR MORE OCCUPANTS → 4

- MAXIMUM EXIT ACCESS TRAVEL DISTANCE (TAB 1016.2) → 200' W/ SPRINKLER SYSTEM 300' W/ OUT SPRINKLER SYSTEM
- MAXIMUM LENGTH OF DEAD END CORRIDORS (1018.4) → 20' OR 50' WHEN BUILDING IS EQUIPPED WITH SPRINKLER SYSTEM AND UNLIMITED LENGTH WHEN LENGTH IS 2.5 TIMES LESS THAN LEAST WIDTH OF DEAD END CORRIDOR
- EXITS THROUGH ADJOINING ROOMS (1014.2) → PERMITTED AT ACCESSORY, NON-HAZARD ROOMS W/ A DISCERNIBLE PATH OF TRAVEL PROVIDED; NOT PERMITTED THROUGH KITCHENS, STORAGE, OR SIMILAR
- COMMON PATH OF TRAVEL (SEC 1014.3) → 75' WITHOUT SPRINKLER SYSTEM

bld. arch.
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architects
planners
designers
consultants

REGISTERED ARCHITECT JOHN GARCIA 26451 STATE OF TEXAS

01.09.2025

chambers engineering, llc.
robertson structural
centerline engineering & consulting, LLC

consultant team

PROJECT

HALE COUNTY - JJAEP ANNEX 3

BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING

305 BROADWAY
PLAINVIEW TX. 79072

THE STATE OF TEXAS HALE COUNTY

0	01.09.2025 |100% CONSTRUCTION DOCUMENTS
1	01.24.2025 | ADDENDUM No.01

LIFE SAFETY PLANS

G-003

Project Number 1224

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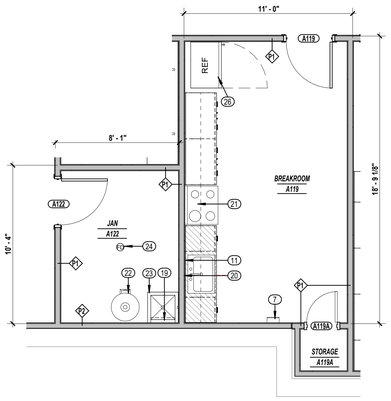
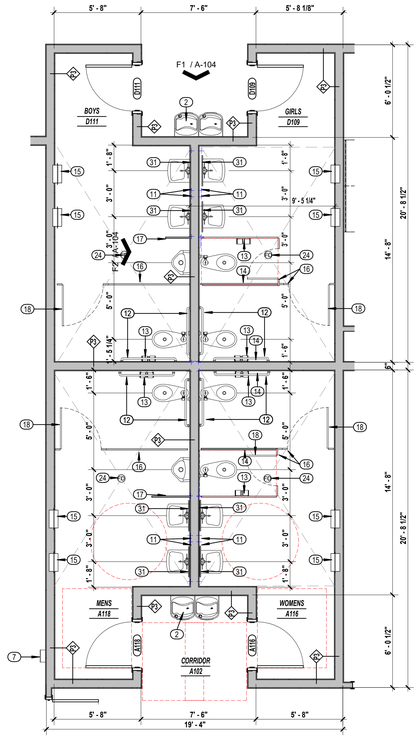


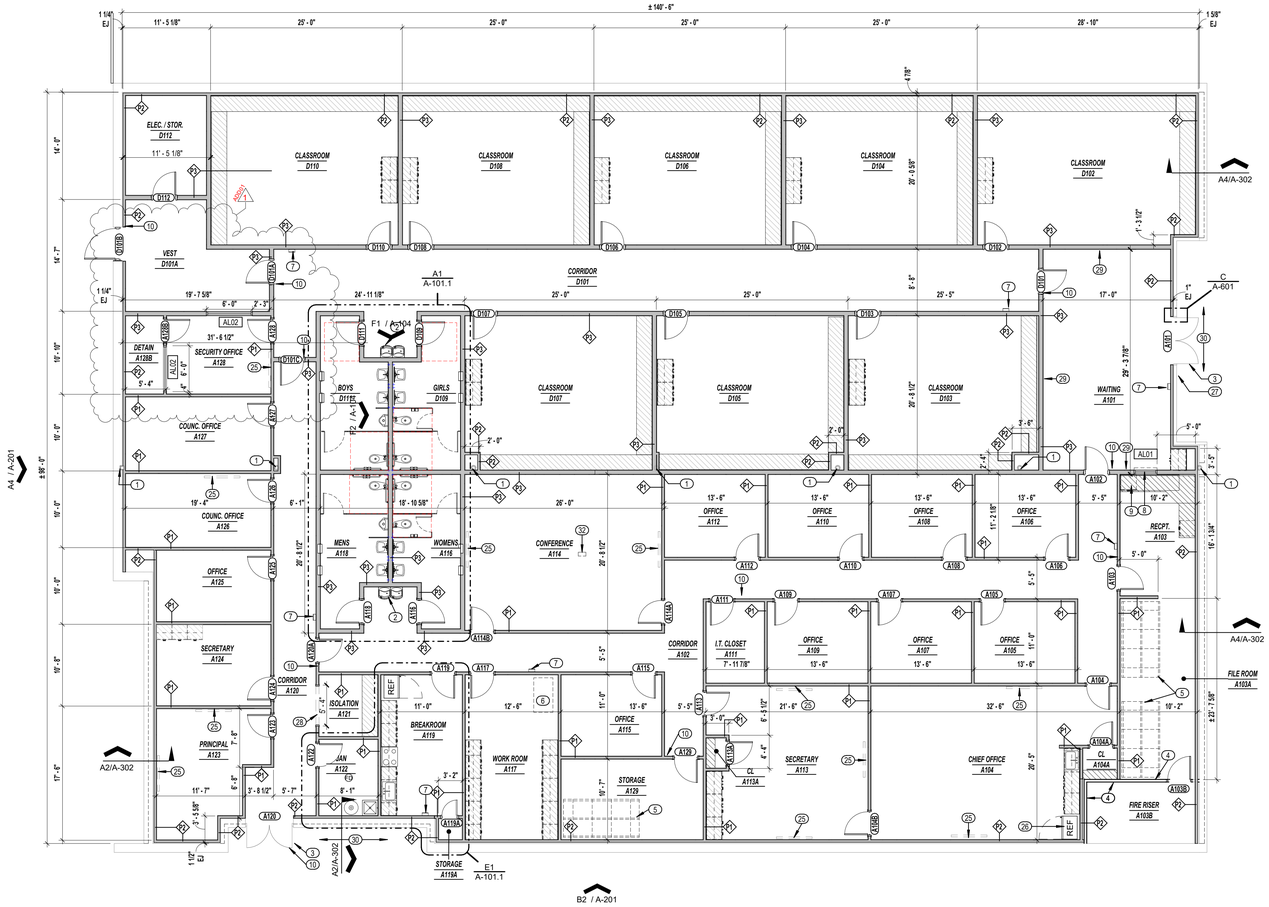
E1 ENLARGED PLAN - KICTHEN / JAN.

1/4" = 1'-0"



A1 ENLARGED PLAN - TOILET ROOMS

1/4" = 1'-0"



A2 FLOOR PLAN - BLDG 'A'

1/8" = 1'-0"

PLAN NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
2. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM LOCAL AUTHORITIES BEFORE COMMENCING CONSTRUCTION ACTIVITIES.
3. COORDINATE WITH OTHER TRADES FOR ANY CONFLICTS OR DISCREPANCIES.
4. ALL DIMENSIONS ARE TO BE TAKEN FROM THE FACE OF STUDS, MASONRY, COLUMNS, OR WALLS UNLESS NOTED OTHERWISE.
5. VERIFY ALL DIMENSIONS IN THE FIELD BEFORE PROCEEDING WITH CONSTRUCTION.
6. REFER TO THE SPECIFICATIONS FOR MATERIAL TYPES, FINISHES, AND INSTALLATION METHODS.
7. COORDINATE WITH MECHANICAL, ELECTRICAL, AND PLUMBING (MEP) TRADES FOR ROUTING AND CLEARANCES.
8. CONFIRM LOCATIONS OF HVAC VENTS, LIGHT FIXTURES, AND OUTLETS WITH THE MEP & ARCHITECTURAL DRAWINGS.
9. COMPLY WITH ACCESSIBILITY REQUIREMENTS AS PER LOCAL CODES AND THE AMERICANS WITH DISABILITIES ACT (ADA).
10. ENSURE CLEAR PATHS OF TRAVEL AND ACCESSIBLE ROUTES ARE MAINTAINED THROUGHOUT THE PROJECT.
11. MAINTAIN A CLEAN AND SAFE WORK AREA THROUGHOUT THE CONSTRUCTION PROCESS.
12. NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSPECTIONS AND APPROVALS AS REQUIRED. ADDRESS ANY DEFICIENCIES NOTED DURING INSPECTIONS PROMPTLY.
13. PROVIDE BLOCKING IN WALLS AS REQUIRED FOR SUPPORT OF FIXTURES, CABINETRY, AND EQUIPMENT. BLOCKING SHALL BE SOLID WOOD (FIRE TREATED) OR STRUCTURAL STEEL, INSTALLED FLUSH WITH THE WALL FRAMING, AT HEIGHTS AND LOCATIONS INDICATED ON THE DRAWINGS. ENSURE ALL BLOCKING IS SECURELY ANCHORED AND CAPABLE OF SUPPORTING THE APPLIED LOADS. VERIFY DIMENSIONS AND LOCATIONS IN THE FIELD PRIOR TO INSTALLATION.
14. ANY DISCREPANCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE ARCHITECT FOR CLARIFICATION PRIOR TO START OF CONSTRUCTION.

LEGEND

- REINFORCED CONCRETE MASONRY PARTITION, REF. PARTITION TYPES
- METAL STUD CONSTRUCTION, REF. PARTITION TYPES
- AL.XX — GLAZING TAG
- X — KEYED NOTE - REFER THIS SHEET
- X - AXXX — ELEVATION / SECTION TAG
- X — PARTITION TAG
- Room Name / XXXX — ROOM NAME & NUMBER TAG
- XXX — DOOR TAG
- MILLWORK HATCH

KEYED NOTES

1 EXISTING STRUCTURAL COMPONENTS TO REMAIN, PROTECT DURING CONSTRUCTION.
2 HI-LO DRINKING FOUNTAIN
3 EXISTING ARCHITECTURAL COMPONENTS TO REMAIN, PROTECT DURING CONSTRUCTION. PATCH, PREPARE AND MATCH ANY DAMAGES CAUSED DURING CONSTRUCTION.
4 GYPSUM BOARD, 5/8"
5 HIGH DENSITY MOBILE STORAGE 4- POST UNITS AS SPECIFIED; CFCI
6 FREE STANDING COPY AND PRINTING MACHINE; OFOI
7 FIRE EXTINGUISHER CABINET AS SPECIFIED; CFCI
8 BULLET RESISTANT TRANSACTION GLAZING SYSTEM AS SPECIFIED
9 EMERGENCY, DOOR RELEASE, & INTERCOMM SYSTEM PUSH BUTTON, COORDINATE WITH ELECTRICAL SHEETS & COUNTY I.T. DEPARTMENT.
10 DOOR TO BE PROVIDED WITH CARD READER SYSTEM, REFER ELECTRICAL SHEETS.
11 SOAP DISPENSER, CFCI
12 ACCESSIBLE 36" & 42" GRAB BAR, CFCI
13 TOILET TISSUE DISPENSER, CFCI
14 SANITARY NAPKIN DISPENSER, CFCI
15 COMBINATION PAPER TOWEL DISPENSER/WASTE RECEPTACLE (PTDWR)
16 TLT PARTITION, CFCI
17 URINAL SCREEN, CFCI
18 COAT HOOK, CFCI
19 MOP HOLDER AND SHELF, CFCI
20 PAPER TOWEL DISPENSER, CFCI
21 RANGE HOOD, REFER TO MECHANICAL SHEETS
22 ELECTRIC WATER HEATER, REF PLUMBING
23 FLOOR SINK, REF PLUMBING
24 FLOOR DRAIN, PROVIDE 1/8" MIN. POSITIVE SLOPE TOWARDS DRAIN, REF FOUNDATION PLAN
25 PROVIDE ELECTRICAL POWER, DATA, & BLOCKING AT 72" A.F.F FOR MONITOR AND MOUNT; OFOI
26 REFRIGERATOR UNIT; OFOI
27 DOOR TO BE PROVIDED WITH PUSH BUTTON VOICE AND VIDEO INTERCOM SYSTEM.
28 HOLLOW METAL CASING AND FRAME,REFER DOOR ELEVATION SCHEDULE 'G' FOR SIZE; REFER SPECIFICATION FOR METAL GAUGE.
29 PARTITIONS SHALL INCLUDE BULLET RESISTIVE PANELS ON PUBLIC SIDE AS SCHEDULED ON SHEET A-601.
30 NEW SITE CONCRETE WALK, REF CIVIL FOR DETAILING AND REQUIREMENTS
31 18X36 FRAMED PLATE GLASS MIRROR, CFCI
32 ELECTRICAL FIXTURE, REFER ELECTRICAL SHEETS

KEY PLAN

'A'

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architects
planners
designers
consultants

REGISTERED ARCHITECT JOHN GARCIA 26451 STATE OF TEXAS

01.09.2025

chambers engineering, llc.
robertson structural
CENTERLINE ENGINEERING & CONSULTING, LLC

consultant team

PROJECT

HALE COUNTY - JJAEP ANNEX 3

BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING

305 BROADWAY
PLAINVIEW TX. 79072

THE STATE OF TEXAS HALE COUNTY

0	01.09.2025 |100% CONSTRUCTION DOCUMENTS
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OVERALL FLOOR PLAN & ENLARGED PLANS - BLDG. 'A'

A-101.1

Project Number 1224

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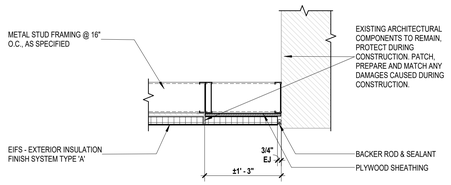
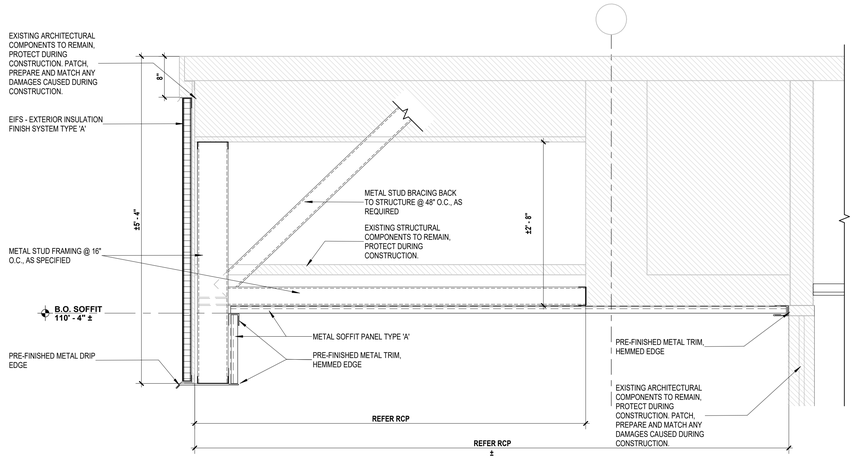


E3 PLAN DETAIL

1" = 1'-0"



E4 SECTION DETAIL

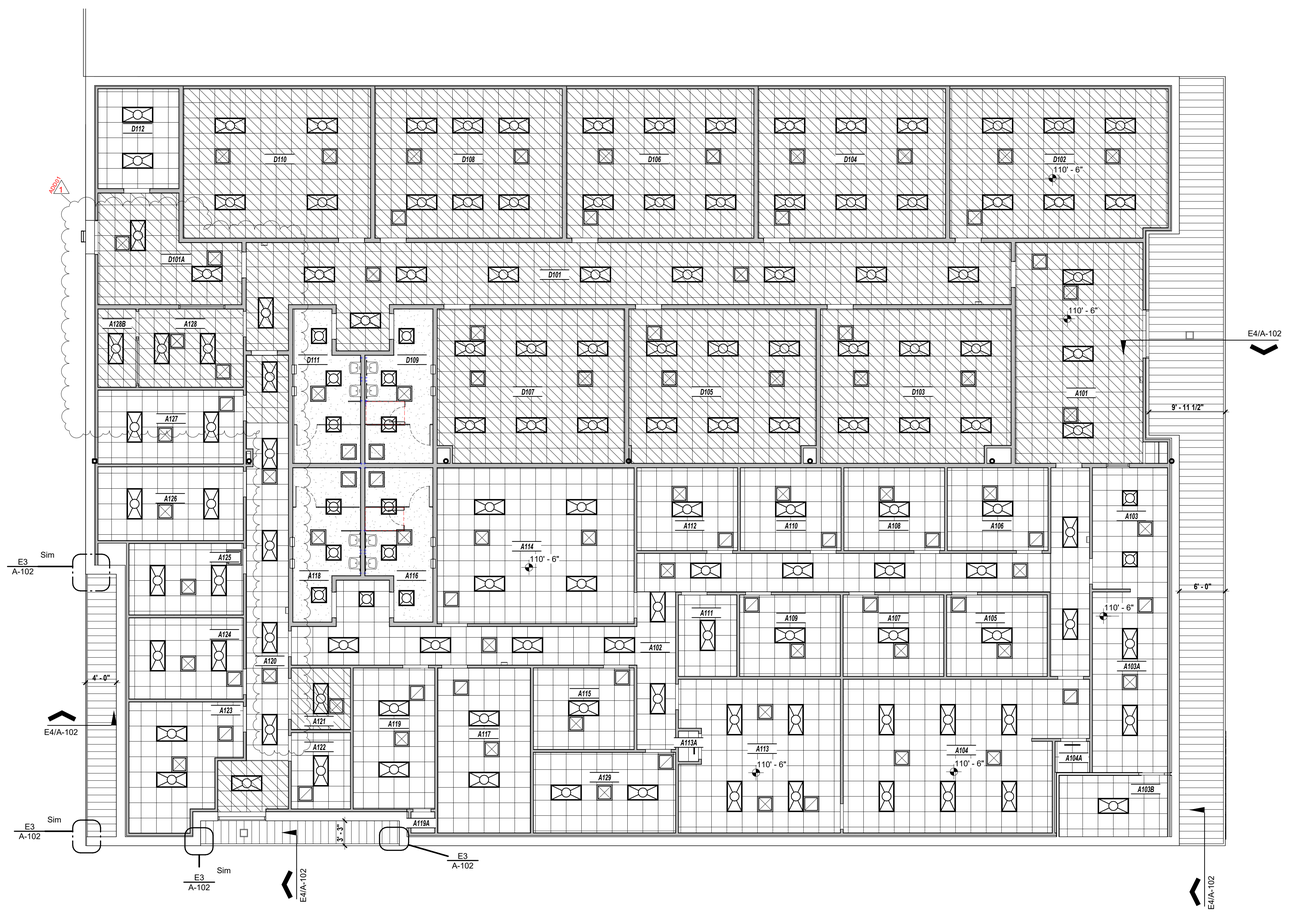
1" = 1'-0"

REFLECTED CEILING PLAN NOTES

1. CEILING HEIGHTS ARE MEASURED FROM FINISHED FLOOR TO THE BOTTOM OF THE CEILING GRID OR FINISH AND SHALL BE **(9' - 0")** FROM FFE UNLESS OTHERWISE NOTED.
2. CEILING MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS.
3. REFER TO THE FINISH SCHEDULE FOR SPECIFIC MATERIALS AND COLORS.
4. ALL LIGHTING FIXTURES SHALL BE INSTALLED AS INDICATED ON THE REFLECTED CEILING PLAN.
5. VERIFY LOCATIONS OF FIXTURES WITH ELECTRICAL DRAWINGS FOR COORDINATION.
6. COORDINATE LOCATIONS WITH MECHANICAL TRADES TO AVOID CONFLICTS.
7. PROVIDE ACCESS PANELS WHERE REQUIRED FOR MAINTENANCE OF MECHANICAL AND ELECTRICAL SYSTEMS.
8. ACCESS PANELS SHALL BE LOCATED AS SHOWN AND INSTALLED FLUSH WITH CEILING FINISH. COORDINATE ACCESS PANELS NOT SHOWN IN PLAN DURING CONSTRUCTION WITH ARCHITECT.
9. SUSPENDED CEILING SYSTEMS SHALL BE INSTALLED PER MANUFACTURER 'S SPECIFICATIONS. BRACING SHALL BE PROVIDED AS REQUIRED BY LOCAL CODES.
10. ALL FIXTURES AND DEVICES MOUNTING HEIGHTS SHALL BE VERIFIED IN THE FIELD AND ADJUSTED AS NECESSARY TO MEET DESIGN INTENT, UNLESS OTHERWISE NOTED.
11. CEILING FINISHES SHALL BE APPLIED AFTER ALL ROUGH WORK AND MECHANICAL INSTALLATIONS ARE COMPLETE AND TESTED, PER THE SPECIFICATIONS. PROTECT ALL FINISHES DURING CONSTRUCTION ACTIVITIES.
12. INSTALL FIRE-RATED CEILING ASSEMBLIES WHERE INDICATED ON THE DRAWINGS. ALL PENETRATIONS IN FIRE-RATED CEILINGS MUST BE FIRESTOPPED PER CODE REQUIREMENTS.
13. NOTIFY THE ARCHITECT/ENGINEER PRIOR TO CEILING INSTALLATION FOR REQUIRED INSPECTIONS.

LEGEND

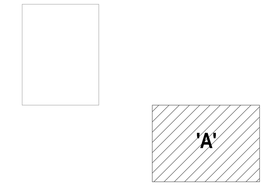
- FLUSH METAL PANEL AS SPECIFIED
- ACOUSTICAL LAY-IN CEILING TILES
- EXPOSED VINYL LINER SYSTEM ABOVE
- AREA INDICATED WITH HATCH SHALL INCLUDE CEILING HOLD DOWN CLIPS
- 2X4 TROUGH LIGHT
- 2X2 TROUGH LIGHT
- LED HIGH BAY LIGHTING
- SURFACE MOUNTED LIGHTING
- UTILITY STRIP LIGHT
- 2X2 SUPPLY DIFFUSER
- 2X2 RETURN REGISTER



A2 REFLECTED CEILING PLAN - BLDG. 'A'

1/8" = 1'-0"

KEY PLAN



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PROJECT

HALE COUNTY - JJAEP ANNEX 3

BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING

305 BROADWAY
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THE STATE OF TEXAS HALE COUNTY

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REFLECTED CEILING PLAN - BLDG. 'A'

A-102

Project Number 1224

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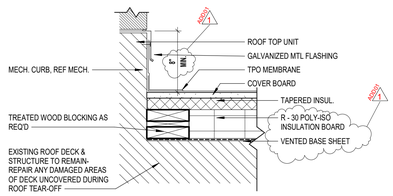
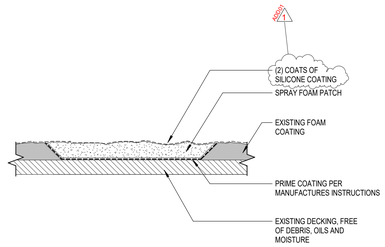


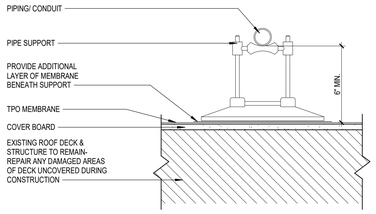
E1 TYP. EQUIPMENT CURB - ADD ALT.

1 1/2" = 1'-0"



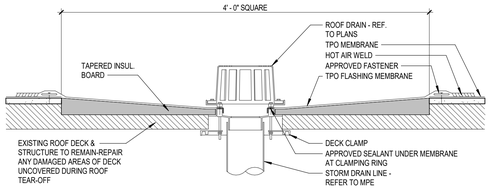
E2 TYP. ROOF PATCH - BASE BID

1 1/2" = 1'-0"



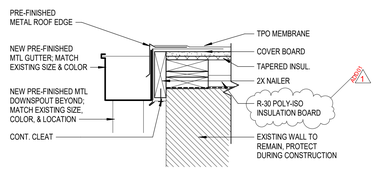
D1 TYP. PIPE SUPPORT

1 1/2" = 1'-0"



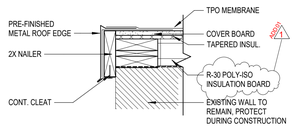
C1 TYP. ROOF DRAIN

1 1/2" = 1'-0"



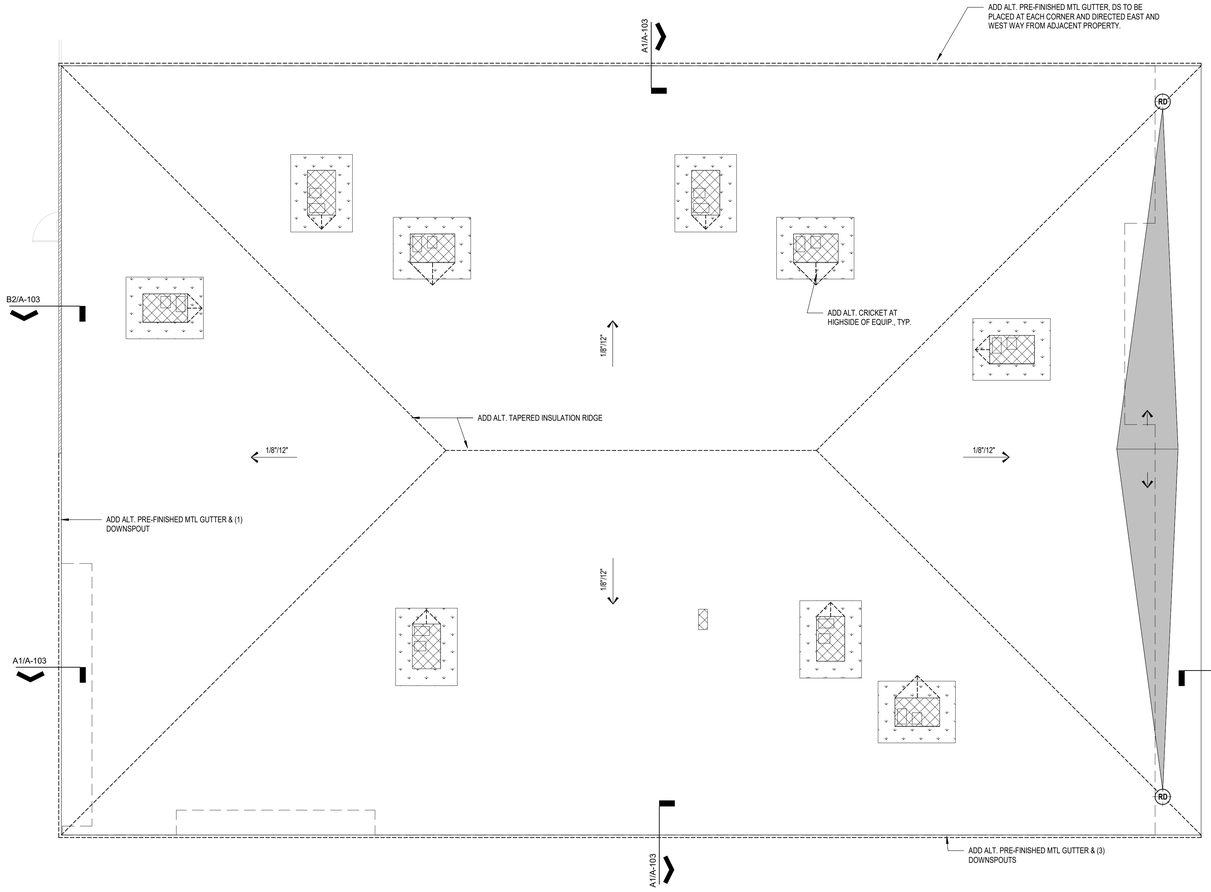
B2 GUTTER DETAIL - ADD ALT.

1 1/2" = 1'-0"



A1 TYP. ROOF EDGE - ADD ALT.

1 1/2" = 1'-0"



A3 OVERALL ROOF PLAN - BLDG. 'A'

1/8" = 1'-0"

ROOF PLAN LEGEND

1. ROOFING MATERIALS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS. REFER TO THE ROOFING SPECIFICATIONS FOR MATERIAL TYPES AND PERFORMANCE CRITERIA.
2. ALL ROOFS SHALL BE DESIGNED FOR POSITIVE DRAINAGE TO PREVENT WATER PONDING.
3. ROOF DRAINS, SCUPPERS, AND GUTTERS SHALL BE INSTALLED AS SHOWN ON THE ROOF PLAN.
4. ROOF SLOPES ARE INDICATED ON THE ROOF PLAN. VERIFY SLOPE REQUIREMENTS WITH THE ROOFING SPECIFICATIONS.
5. PROVIDE CRICKETS AND SADDLES AS NECESSARY TO DIRECT WATER TO DRAINAGE POINTS.
6. ALL MECHANICAL EQUIPMENT LOCATED ON THE ROOF SHALL BE INSTALLED AS PER MECHANICAL DRAWINGS. COORDINATE WITH MEP TRADES FOR CLEARANCES AND ACCESS.
7. FLASHING SHALL BE INSTALLED AT ALL ROOF EDGES, PENETRATIONS, AND CHANGES IN ROOF PLANE AS INDICATED. USE DISSIMILAR METAL FLASHING WHERE REQUIRED TO PREVENT CORROSION.
8. PROVIDE EXPANSION JOINTS AS REQUIRED BY STRUCTURAL DRAWINGS AND SPECIFICATIONS.
9. PROVIDE ROOF HATCHES AND LADDERS AS SHOWN ON THE PLANS FOR ACCESSIBILITY TO THE ROOF. ALL ACCESS POINTS SHALL BE LOCATED AND DIMENSIONED AS INDICATED.
10. ALL ROOF PENETRATIONS (VENTS, PIPES, ETC.) SHALL BE PROPERLY FLASHED AND SEALED TO PREVENT WATER INTRUSION.
11. PROTECT ALL ROOF MATERIALS AND FINISHES DURING CONSTRUCTION. ENSURE THAT ROOF SURFACES ARE CLEANED AND FREE OF DEBRIS PRIOR TO INSTALLATION OF ROOFING MATERIALS.
12. ALL PIPING / CONDUIT SHALL BE SUPPORTED ON MANUFACTURER PIPE SUPPORTS. REFERENCE MPE SHEETS FOR LOCATIONS.
13. IN ADDITION TO PADS SHOWN, INSTALL 4 WALK PADS AT EACH OF THE FOLLOWING LOCATIONS: NEW RTU UNITS, ALL LADDERS, AND ROOF HATCHES.
14. NOTIFY THE ARCHITECT/ENGINEER PRIOR TO ROOF INSTALLATION FOR REQUIRED INSPECTIONS.
15. ALL WORK SHALL BE INSPECTED AND APPROVED PRIOR TO THE INSTALLATION OF FINAL ROOFING MATERIALS.

LEGEND

- PRE-FINISHED METAL GUTTER
- 60 MIL. TPO ROOF SYSTEM, OVER 1/2" COVERBOARD, OVER EXISTING ROOF SYSTEM; BASE BID
- ROOF CRICKET
- MECHANICAL EQUIPMENT CURB, CAP CURB WITH SHEET METAL INSULATED PAN
- WALK-OFF MAT
- RD ROOF DRAIN
- VS VENT STACK
- ADD ALTERNATE ITEMS

ALTERNATES

ALTERNATE LIST

Alternate No. One - Add:
Base Bid Item: Section 072119
Alternate Item: Section 075400

PROVIDE ALTERNATE PRICING FOR THE FOLLOWING SCOPE OF WORK:

1. REMOVE AND REPLACE THE EXISTING SPRAY FOAM ROOF SYSTEM DOWN TO THE EXISTING GYPSUM DECK. REMOVE ALL DETERIORATED EXISTING ROOF DECK, BASE FLASHING, CANT STRIPS, EXPANSION JOINT COVERS & COUNTER FLASHING, THROUGHOUT. PATCH & REPAIR ALL DAMAGES CAUSED OR NOT CAUSED BY CONSTRUCTION.
2. ADHERE VENTED BASE SHEET, ADHERE ALL ASSOCIATED CRICKETS, ½" SLOPE MINIMUM AND, INSULATION AS REQUIRED BY DRAWINGS IN THE SPECIFIED ADHESIVE AS SPECIFIED.
3. ADHERE (2) LAYERS OF TWO-INCH (3") POLYISOCYANURATE AND A ONE HALF (1/2") COVER BOARD SET IN THE ADHESIVE SPECIFIED.
4. INSTALL SPECIFIED 60 MIL. THERMOPLASTIC MEMBRANE SYSTEM OVER ½" COVER BOARD IN FULL BED OF SPECIFIED ADHESIVE.
5. INSTALL ALL FLASHING, COUNTERFLASHING, ACCESSORIES, ETC AS SPECIFIED. NEW METAL SHALL MEET ANSI SPRI ES-1 BE PREFINISHED, SELECTED BY THE OWNER FROM A FULL RANGE OF COLORS INCLUDING PREMIUM AND METALLIC. THE NEW METAL FLASHING & SHEET METAL ACCESSORIES ARE TO COMPLY WITH THE REQUIREMENTS IN DIVISION 7 "SHEET METAL FLASHING AND TRIM."
6. INSTALLATION SHALL BE AS PER NRCA, SMACNA, ANSI/SPRI, SPECIFICATIONS, DETAILS AND MANUFACTURER'S GUIDELINES. ALL GAS LINES TO BE TESTED AND CERTIFIED BY A MASTER PLUMBER AND PAINTED PER SPECIFICATIONS.
7. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEY PLAN

'A'

bld. arch.
p: 806.252.7719
architects
planners
designers
consultants
REGISTERED ARCHITECT JOHN GARCIA 26451 STATE OF TEXAS
01.09.2025
chambers engineering, llc.
robertson structural
centerline engineering & consulting, LLC
consultant team

PROJECT

HALE COUNTY - JJAEP ANNEX 3

BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING

305 BROADWAY
PLAINVIEW TX. 79072

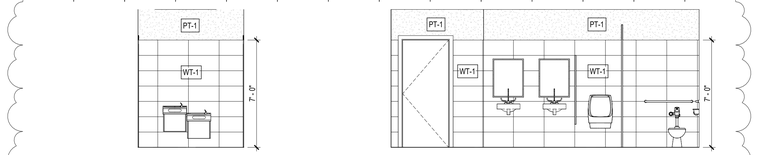
0	01.09.2025 |100% CONSTRUCTION DOCUMENTS
1	01.24.2025 | ADDENDUM No.01

OVERALL ROOF PLAN - BLDG. 'A'

A-103

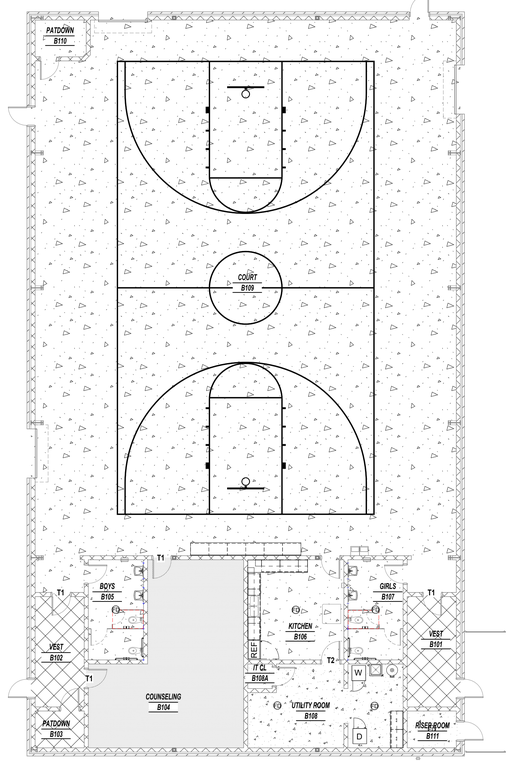
Project Number 1224

12/4/2025 12:59:47 AM



F1 TYP. DRINKING FOUNTAIN
1/4" = 1'-0"

F2 TYP. RESTROOM ELEVATION
1/4" = 1'-0"



A1 FINISHES FLOOR PLAN - BLDG 'A' & 'B'
1" = 10'-0"

MATERIAL / FINISHES LEGEND

- COMMERCIAL CARPET (CPT-1)
- COMMERCIAL CARPET (CPT-2)
- WALK-OFF COMMERCIAL CARPET (CPT-3)
- POLISHED CONCRETE (PCF-1)
- PORCELAIN TILE (PCT-1)
- SEALED CONCRETE (SC-1)
- CERAMIC TILE (WT-1)
- CERAMIC TILE (WT-1)

GENERAL FINISHES PLAN NOTES

1. REFER TO THE FINISH SCHEDULE FOR SPECIFIC MATERIALS, COLORS, AND INSTALLATION METHODS FOR EACH SPACE.
2. ALL FINISHES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. ALL SURFACES MUST BE PREPARED PROPERLY TO RECEIVE FINISHES, INCLUDING CLEANING, PATCHING, AND PRIMING AS NECESSARY.
4. COORDINATE INSTALLATION OF FINISHES WITH MECHANICAL, ELECTRICAL, AND PLUMBING TRADES TO AVOID CONFLICTS.
5. PROTECT ALL FINISHED SURFACES FROM DAMAGE DURING CONSTRUCTION ACTIVITIES. USE DROP CLOTHS, MASKING TAPE, AND OTHER PROTECTIVE MEASURES AS REQUIRED.
6. NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION OF FINISHES FOR REQUIRED INSPECTIONS.
7. ALL FINISHES MUST BE APPROVED BY SUBMITTAL AND BY THE OWNER OR OWNER'S REPRESENTATIVE BEFORE INSTALLATION.
8. PROVIDE MAINTENANCE INSTRUCTIONS FOR ALL FINISHES TO THE OWNER UPON COMPLETION OF WORK.
9. ENSURE THAT ALL INSTALLERS ARE TRAINED IN THE PROPER MAINTENANCE OF INSTALLED FINISHES.

ROOM NUMBER	ROOM	FLOOR	BASE	WALL FINISH NORTH	WALL FINISH SOUTH	WALL FINISH EAST	WALL FINISH WEST	WAINSCOT FINISH	WAINSCOT HEIGHT	CEILING FINISH	MILLWORK CAB / SHELVES	MILLWORK COUNTERTOPS / SPLASHES	OTHER	FINISH NOTES
A101	WAITING	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A102	CORRIDOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A103	RECPT.	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A103A	FILE ROOM	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A103B	FIRE RISER	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A104	CHIEF OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A104A	CL	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	---		
A105	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A106	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A107	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A108	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A109	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A110	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A111	I.T. CLOSET	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		4.
A112	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A113	SECRETARY	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A113A	CL	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	---		
A114	CONFERENCE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A115	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A116	WOMENS	PCT-1	---	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	WT-1	7' - 0"	ACT-1	---	---		
A117	WORK ROOM	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A118	MENS	PCT-1	---	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	WT-1	7' - 0"	ACT-1	---	---		
A119	BREAKROOM	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A119A	STORAGE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A120	CORRIDOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A121	ISOLATION	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	PLAM-1		
A122	JAN	SC-1	RB-1	PT-1 / FRP-1	PT-1 / FRP-1	PT-1 / FRP-1	PT-1 / FRP-1	FRP-1	8' - 0"	ACT-1	---	---		
A123	PRINCIPAL	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A124	SECRETARY	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
A125	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A126	COUNC. OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A127	COUNC. OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A128	SECURITY OFFICE	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A128B	DETAIN	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
A129	STORAGE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		

ROOM NUMBER	ROOM	FLOOR	BASE	WALL FINISH NORTH	WALL FINISH SOUTH	WALL FINISH EAST	WALL FINISH WEST	WAINSCOT FINISH	WAINSCOT HEIGHT	CEILING FINISH	MILLWORK CAB / SHELVES	MILLWORK COUNTERTOPS / SPLASHES	OTHER	FINISH NOTES
D101	CORRIDOR	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
D101A	VEST	CPT-3	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
D102	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D103	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D104	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D105	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D106	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D107	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D108	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D109	GIRLS	PCT-1	---	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	WT-1	7' - 0"	ACT-1	---	---		
D110	CLASSROOM	CPT-2	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	PLAM-2	PLAM-1		
D111	BOYS	PCT-1	---	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	PT-1 / WT-1	WT-1	7' - 0"	ACT-1	---	---		
D112	ELEC. / STOR.	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		
D113	I.T.CL	SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	NA	---	ACT-1	---	---		4.

ROOM NUMBER	ROOM	FLOOR	BASE	WALL FINISH NORTH	WALL FINISH SOUTH	WALL FINISH EAST	WALL FINISH WEST	WAINSCOT FINISH	WAINSCOT HEIGHT	CEILING FINISH	MILLWORK CAB / SHELVES	MILLWORK COUNTERTOPS / SPLASHES	OTHER	FINISH NOTES
B101	VEST	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B102	VEST	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B103	PATDOWN	CPT-3	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B104	COUNSELING	CPT-2	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B105	BOYS	PCF-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B106	KITCHEN	PCF-1	RB-2	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	PLAM-2	PLAM-1		
B107	GIRLS	PCF-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B108	UTILITY ROOM	SC-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	PLAM-2	PLAM-1		
B108A	IT CL	SC-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		4.
B109	COURT	PCF-1	RB-2	PT-2 / MP-TYPE B	PT-2 / MP-TYPE B	PT-2 / MP-TYPE B	PT-2 / MP-TYPE B	NA		EXPOSED	PLAM-2	PLAM-1		1.
B110	PATDOWN	PCF-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		ACT-1	---	---		
B111	RISER ROOM	SC-1	RB-1	PT-2	PT-2	PT-2	PT-2	NA		EXPOSED	---	---		

FINISH NOTES

1	COURT STRIPING SHALL BE OF CONTRASTING COLOR AND APPLIED IN ACCORDANCE WITH HARDNER / DENSIFIER APPLICATION.
2	REFER TO DOOR SCHEDULE FOR DOOR / FRAME TYPE & MATERIALS.
3	ALL EXPOSED STRUCTURE TO BE PAINTED (PT-1).
4	SURROUND IT CLOSETS WITH 3/8" (EXPOSED) PLYWOOD @ LOCATIONS DIRECTED BY I.T. DEPARTMENT

MATERIAL KEY LEGEND

MATERIAL KEY	FINISHES DESCRIPTION	NOTES
01 BASE		
RB-1	RESILIENT BASE/TRADITIONAL: ROPPE, PINNACLE TYPE TS, COLOR:BLACK BROWN (193); SIZE: 4" x 1/8" THK., CONTINUOUS ROLL.	
RB-2	RESILIENT BASE/TRADITIONAL: ROPPE, PINNACLE TYPE TS, COLOR:BLACK BROWN (193); SIZE: 6" x 1/8" THK., CONTINUOUS ROLL.	
02 FLOORING		
CPT-1	COMMERCIAL CARPET TILE FLOORING: MANNINGTON COMMERCIAL; COLLECTION: AUTOMATA; STYLE: CRYPTOGRAM; COLORWAY: OSCILLATOR (31373); INSTALL STACKED BOND	
CPT-2	COMMERCIAL CARPET TILE FLOORING: MANNINGTON COMMERCIAL; COLLECTION: AUTOMATA; STYLE: CRYPTOGRAM; COLORWAY: RAKE (81371); INSTALL STACKED BOND	
CPT-3	WALK-OFF COMMERCIAL CARPET TILE FLOORING: MANNINGTON COMMERCIAL; COLLECTION: FRIXTION; STYLE: CHARGE; KINETIC (11360); INSTALL STACKED BOND	
PCF-1	POLISHED CONCRETE: FINISH,TOP POLISH HIGH SHINE WITH CREAM FINISH, LIGHT AGGREGATE EXPOSURE	
PCT-1	PORCELAIN TILE FLOORING: DALTILE: SERIES: OUTLANDER; COLOR BODY: MOONLIGHT SQUARE GRANDE; SIZE: 2'-0" H X 2'-0" W; INSTALL STACKED BOND	
SC-1	SEALED CONCRETE - REFER TO SPECIFICATIONS	
03 WALLS		
FRP-1	FIBERGLASS REINFORCED PANELS: MARLITE FRP, COLOR: TUMBLED MOSAIC, FINISH: PEBBLED EMBOSSED TEXTURE, SIZE: 8'-0" H X 4'-0" W	
MP-TYPE B	REFER SPECIFICATIONS	
PT-1	PAINT/TYPICAL: SHERWIN WILLIAMS; COLOR: 'SHIITAKE'; FINISH: EGG SHELL, TEXTURE: ORANGE PEEL	
PT-2	PAINT: SHERWIN WILLIAMS; COLOR: 'SHIITAKE'; FINISH: HIGH GLOSS.	
WT-1	CERAMIC TILE WALL: DALTILE; SERIES: OUTLANDER; COLOR BODY: MOONLIGHT SQUARE PALAZZO; SIZE: 1'-0" H X 2'-0" W; INSTALL STACKED BOND ELEVATIONS	
WT-2	FIBERGLASS REINFORCED PANELS: MARLITE FRP, COLOR: BISCUIT (P440N), FINISH: PEBBLED EMBOSSED TEXTURE, SIZE: 8'-0" H X 4'-0" W	
04 CEILINGS		
ACT-1	CEILING TILE: ARMSTRONG; PRODUCT: FISSURED; COLOR: WHITE (815); SIZE: 2'-0" H X 2'-0" W	
EXPOSED	EXPOSED STRUCTURE - PAINT PT-1	
05 COUNTERTOPS/SPLASHES		
PLAM-1	PLASTIC LAMINATE COUNTER TOP; WILSONART STANDARD LAMINATE; COLOR, "GRAPHITE NEBULA"; FINISH, MATTE	
06 MILLWORK / CABINETS / SHELVES		
PLAM-2	PLASTIC LAMINATE; WILSONART STANDARD LAMINATE; COLOR, "PALISADES OAK"; FINISH, FINE VELVET	
07 OTHER		
CG	CORNER GUARDS; CONSTRUCTION SPECIALTIES; MATERIAL, STAINLESS-STEEL; SIZE: 1 1/2" X 1 1/2" X 96" TALL	
DR-1	DOOR: HOLLOW METAL PAINTED: 'DARK BRONZE'; FINISH; SEMI-GLOSS FOR METALS, REFER TO SPECIFICATIONS	
DR-2	DOOR: SOLID CORE WOOD: STAIN TO MATCH PLAM-2	
FRM-1	FRAME: CONSIDERED AT ALL HOLLOW METAL FRAMES; PAINTED: 'DARK BRONZE'; FINISH; SEMI-GLOSS FOR METALS, REFER TO SPECIFICATIONS	
T1	PENKO EV2320_ECO-V THRESHOLD	
T2	SCHLUTER SYSTEM; Schluter®-RENO-TK TRANSITION; COLOR; STAINLESS-STEEL; SIZE, COORDINATE mm HEIGHT WITH ADJACENT CPT & TILE MATERIALS	
TLTP-1	TOILET PARTITIONS: STRANTON PRODUCTS; HIGH DENSITY POLYETHYLENE (HDPE); COLOR, MOCHA; REFER SPECIFICATIONS	

bld. arch.
p: 806.252.7719
architects
planners
designers
consultants

REGISTERED ARCHITECT JOAN GARCIA 26451 STATE OF TEXAS

01.09.2025

consultant team
chambers engineering, llc.
robertson structural
CENTERLINE ENGINEERING & CONSULTING, LLC

PROJECT
HALE COUNTY - JJAEP ANNEX 3
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

THE STATE OF TEXAS HALE COUNTY

0	01.09.2025 |100% CONSTRUCTION DOCUMENTS
1	01.24.2025 | ADDENDUM No.01

FINISHES FLOOR PLANS - BLDG. 'A' & BLDG. 'B'

A-104
Project Number 1224

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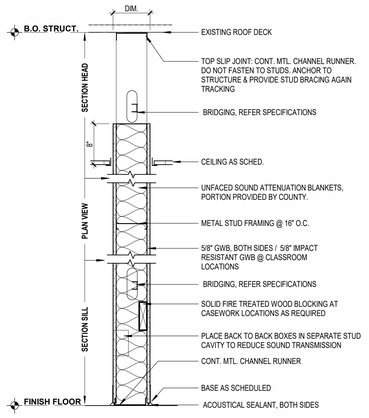
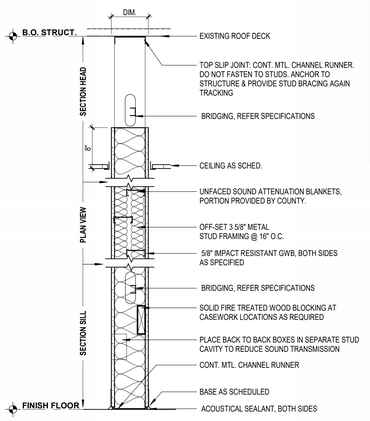


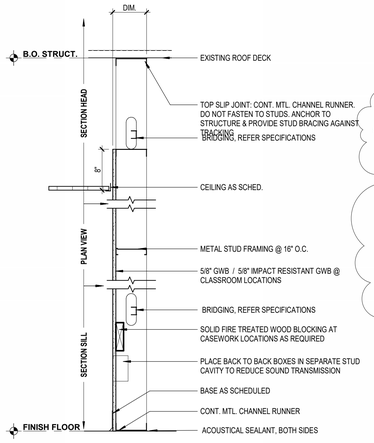
DESCRIPTION: (P1) ACOUSTICAL PARTITION; FULL HEIGHT, GWB

STUD SIZE:	3 5/8"
STC RATING:	45-55
PARTITION WIDTH:	4 7/8"
FIRE RATED:	NA



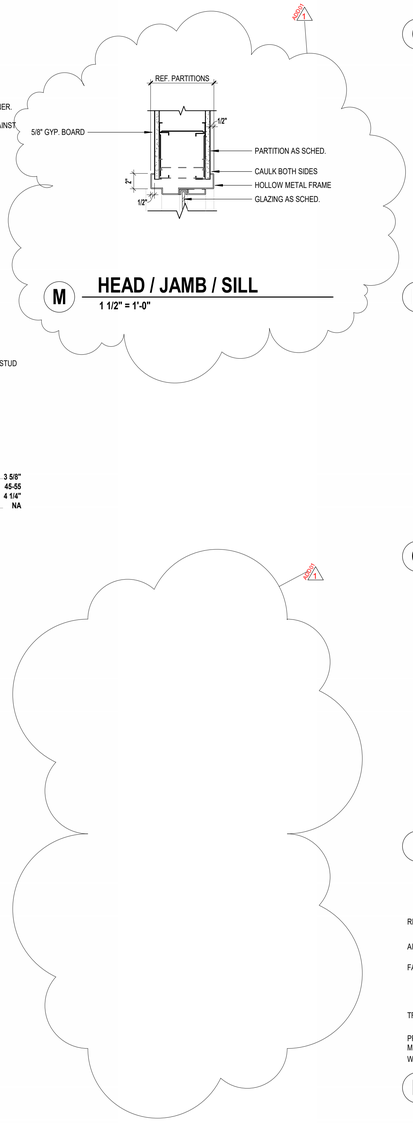
DESCRIPTION: (P3) ACOUSTICAL PARTITION; FULL HEIGHT, GWB

STUD SIZE:	6"
STC RATING:	45-55
PARTITION WIDTH:	7 1/4"
PARTITION WIDTH AT ARMOR PLATE LOCATIONS	FIELD VERIFY
FIRE RATED:	NA



DESCRIPTION: (P2) WALL PARTITION; FULL HEIGHT, GWB ONE SIDE

STUD SIZE:	3 5/8"
STC RATING:	45-55
PARTITION WIDTH:	4 1/4"
FIRE RATED:	NA

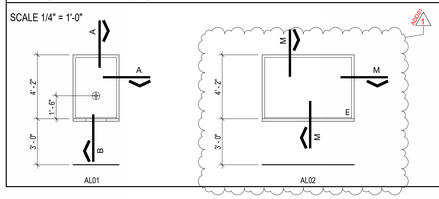


DESCRIPTION: (M1) MASONRY PARTITION; STRUCTURALLY REINFORCED

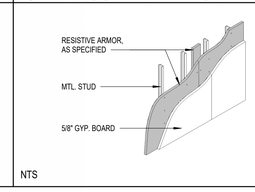
CMU SIZE:	8"x16"
STC RATING:	NA
PARTITION WIDTH:	7 5/8"
FIRE RATED:	NA

WINDOW ELEVATIONS

SCALE 1/4" = 1'-0"



BULLET RESISTIVE PANEL INSTALL DIAGRAM



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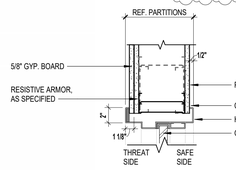
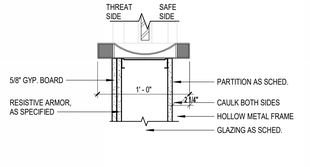
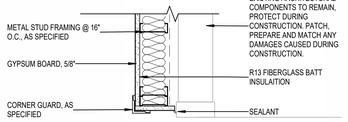


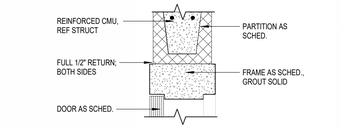
A HEAD / JAMB SIM.
1 1/2" = 1'-0"



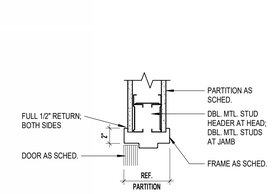
B SILL
1 1/2" = 1'-0"



C JAMB DETAIL - TYP.
1 1/2" = 1'-0"

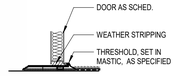


D HEAD / JAMB SIM.
1 1/2" = 1'-0"

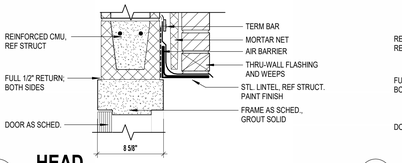


M HEAD / JAMB / SILL
1 1/2" = 1'-0"

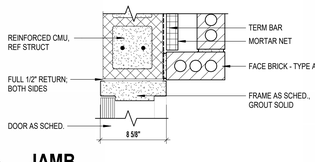
E HEAD / JAMB SIM.
1 1/2" = 1'-0"



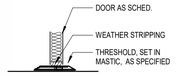
F SILL
1 1/2" = 1'-0"



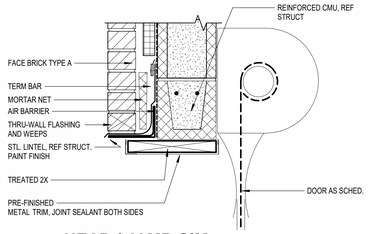
G HEAD
1 1/2" = 1'-0"



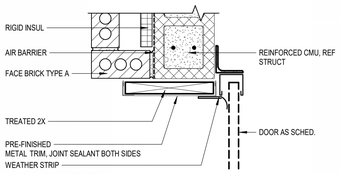
H JAMB
1 1/2" = 1'-0"



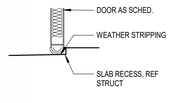
I SILL
1 1/2" = 1'-0"



J HEAD / JAMB SIM.
1 1/2" = 1'-0"



K JAMB
1 1/2" = 1'-0"



L SILL
1 1/2" = 1'-0"

DOOR SCHEDULE BLDG. 'A' ADMINISTRATION / OFFICE

MARK	SIZE (W x H) WIDTH	HEIGHT	FRAME	DOOR MATERIAL	DOOR THICKNESS	DOOR ELEV.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE /SMOKE RATING	GLAZING	NOTES
A101	6' - 0"	7' - 0"	EXT.	EXT.	1 3/4"	F	---	C	---	---	---	04.
A102	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	02.
A103	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	02.
A103B	3' - 0"	7' - 0"	HM	HM	1 3/4"	A	E	E	---	---	---	
A104	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A104A	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A104B	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A105	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A106	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A107	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A108	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A109	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A110	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A111	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	02.
A112	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A113	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A113A	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A114A	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A114B	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A115	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A116	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A117	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A118	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A119	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	---	
A119A	2' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A120	5' - 11"	7' - 0"	EXT.	EXT.	1 3/4"	F	---	C	---	---	C	02.
A120A	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	02.
A122	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	
A123	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A124	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A125	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A126	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A127	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A128	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A128B	3' - 0"	7' - 0"	HM	SWC	1 3/4"	C	E	E	---	---	C	
A129	3' - 0"	7' - 0"	HM	SWC	1 3/4"	A	E	E	---	---	---	02.

DOOR SCHEDULE BLDG. 'A' CLASSROOM AREA

MARK	SIZE (W x H) WIDTH	HEIGHT	FRAME	DOOR MATERIAL	DOOR THICKNESS	DOOR ELEV.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE/SMOKE RATING	GLAZING	NOTES
D101	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D101A	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	I	---	E	
D101B	4' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	F	---	---	05.
D101C	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	02.
D102	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D103	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D104	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D105	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D106	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D107	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D108	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D109	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	E	E	---	---	---	
D110	3' - 0"	7' - 0"	HM	HM	1 3/4"	C	E	E	---	---	E	
D111	3' - 0"	7' - 0"	HM	HM	1 3/4"	A	E	E	---	---	---	
D112	3' - 0"	7' - 0"	HM	HM	1 3/4"	A	E	E	---	---	---	

DOOR SCHEDULE BLDG. 'B'

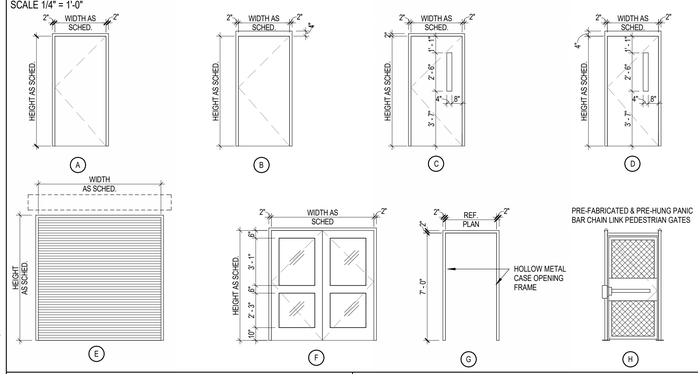
MARK	SIZE (W x H) WIDTH	HEIGHT	FRAME	DOOR MATERIAL	DOOR THICKNESS	DOOR ELEV.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE/SMOKE RATING	GLAZING	NOTES
B101	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	G	H	F	---	E	02.
B101A	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	D	D	I	---	E	02.
B102	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	G	H	F	---	E	02.
B102A	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	D	D	---	---	E	02.
B103	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	02.
B104	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	D	D	---	---	E	
B104A	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	D	D	---	---	E	02.
B105	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	
B106	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	D	D	---	---	E	02.
B107	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	
B108	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	
B108A	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	02.
B109	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	G	H	F	---	E	02.
B109A	3' - 0"	7' - 0"	HM	HM	1 3/4"	D	G	H	F	---	E	02.
B109B	8' - 0"	8' - 0"	STL	STL	3"	E	J	K	L	---	---	
B109C	8' - 0"	8' - 0"	STL	STL	3"	E	J	K	L	---	---	
B109D	8' - 0"	8' - 0"	STL	STL	3"	E	J	K	L	---	---	
B110	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	D	D	---	---	---	
B111	3' - 0"	7' - 0"	HM	HM	1 3/4"	B	G	H	F	---	---	

DOOR SCHEDULE EXTERIOR FENCE GATES

MARK	SIZE (WxH) WIDTH	HEIGHT	FRAME	DOOR MATERIAL	DOOR THICKNESS	DOOR ELEV.	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	FIRE / SMOKE RATING	GLAZING	NOTES
E01	4' - 0"	8' - 0"	GALV.	GALV. / CHAINLINK	---	H	---	---	---	---	---	---
E02	4' - 0"	8' - 0"	GALV.	GALV. / CHAINLINK	---	H	---	---	---	---	---	---
E03	4' - 0"	8' - 0"	GALV.	GALV. / CHAINLINK	---	H	---	---	---	---	---	---
E04	4' - 0"	8' - 0"	GALV.	GALV. / CHAINLINK	---	H	---	---	---	---	---	---

DOOR TYPE ELEVATIONS

SCALE 1/4" = 1'-0"



DOOR MATERIAL LEGEND

DOOR MATERIALS	FRAME MATERIALS
ALUM : ALUMINUM STOREFRONT FRAME	ALUM : ALUMINUM STOREFRONT FRAME
HM: HOLLOW METAL FRAME	HM: HOLLOW METAL FRAME
STL: STEEL FRAME, REF MANUFACTURER	STL: STEEL FRAME, REF MANUFACTURER
SWC: SOLID WOOD CORE	

GENERAL & SPECIFIC DOOR NOTES

01. LITE KIT FRAME SHALL BE PAINTED SIM COLOR TO ADJACENT DOOR / FRAME COLOR.
02. DOOR SHALL INCLUDE CARD READER FUNCTION, REFER ELECTRICAL SHEETS.
03. DOOR SHALL INCLUDE CARD READER AND MAGLOCK.
04. DOOR SHALL BE PROVIDED WITH MAGLOCK, TIE BACK TO RECEPTIONIST PUSH BUTTON.
05. DOOR SHALL INCLUDE A SAFETY DOOR SCOPE, REFER HARDWARE SCHEDULE.

GLAZING SCHEDULE

MARK	GLASS TYPE	UNIT THICKNESS	THICKNESS EACH LITE	OUTDOOR LITE	OUTDOOR LITE COATING	INTERSPACE CONTENT	INDOOR LITE	WINTER U-FACTOR	SUMMER U-FACTOR	SHGC	VISIBLE LIGHT TRANSMITTANCE
A	TINTED INSULATING GLASS	1"	6.0 MM	PPG SOLARBAN 67	PPG SOLARBRONZE 67 ON 2ND SURFACE	AIR	CLEAR FLOAT GLASS	.29	.27	.22	32%
C	1/4" GLASS, CLEAR	1/4"	6.0 MM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
D	1/4" GLASS, TINTED	1/4"	6.0 MM	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FULLY TEMPERED GLASS LITES WITH SAFETY GLAZING LABELING IN LOCATION REQUIRED BY CODE

HIGH IMPACT GLAZING SCHEDULE

MARK	GLASS TYPE	UNIT THICKNESS	SECURITY GRADE	BASIS OF DESIGN	RATING	NOTES
E	ASTM F1233 Class 1.4, UL 972 Burglar Resistance, HP White 5-aa1, Duration 14m / 47s	0.43"	ANSI Z97.1 (Safety Cat I & II), ASTM C1036, ASTM C1172, ASTM C1048	DEFENDED ED	NA	PROVIDE SMOKE SEAL GASKET FOR A COMPLETE SEAL.

bld. arch.
p: 806.252.7719
architects
planners
designers
consultants
REGISTERED ARCHITECT DANGARCH 26451 STATE OF TEXAS
01.09.2025
chambers engineering, llc.
robertson structural
centerline engineering & consulting, LLC
consultant team

PROJECT
HALE COUNTY - JJAEP ANNEX 3
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

THE STATE OF TEXAS HALE COUNTY

0	01.09.2025 |100% CONSTRUCTION DOCUMENTS
1	01.24.2025 | ADDENDUM No.01

SCHEDULES

A-601

Project Number 1224

1/23/2025 2:32:24 PM

W.C. HAMILTON ENGINEERING, INC.

GEOTECHNICAL INVESTIGATION

NEW MULTI-PURPOSE BUILDING

HALE COUNTY JJAEP ANNEX 3

N. AUSTIN STREET AND W. 3rd STREET

PLAINVIEW, TEXAS

(BACK OF FRONT COVER)

P. O. Box 61307 Midland, TX 79711-1307 (432) 550-5866 FAX (432) 550-5899
bill@wchamiltonengr.com

GEOTECHNICAL INVESTIGATION
NEW MULTI-PURPOSE BUILDING
HALE COUNTY JJAEP ANNEX 3
N. AUSTIN STREET AND W. 3rd STREET
PLAINVIEW, TEXAS

prepared for

MR. JOHN GARCIA III, AIA

bld.architects

LUBBOCK, TEXAS

NOVEMBER 13, 2024

PROJECT NO. 15221124

prepared by

William C. Hamilton, P.E.
Vice-President

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GEOTECHNICAL INVESTIGATION

NEW MULTI-PURPOSE BUILDING

HALE COUNTY JJAEP ANNEX 3

N. AUSTIN STREET AND W. 3rd STREET

PLAINVIEW, TEXAS

INTRODUCTION

General: This geotechnical investigation at the site of a proposed new Hale County JJAEP annex building in Plainview, Texas, was authorized by signed agreement on October 22, 2024, by Mr. John Garcia III, AIA, President, bld.architects, Lubbock, Texas, and was performed in general accordance with our letter proposal dated October 22, 2024.

The purpose of this investigation has been to explore subsurface conditions at the site, to conduct field and laboratory tests to characterize the physical soil properties, to provide design and construction recommendations to assist the structural engineer in the design of the foundation system for the structure, and to provide pavement section and construction recommendations for the pavement areas.

The site is located on the northeast corner of N. Austin Street and W. 3rd Street in Plainview, Texas. The general location of the site is shown on the site vicinity map on Plate I in Appendix A.

Existing Site Conditions: The site was covered with concrete pavement and small areas of exposed soil and was serving as a parking lot at the time of the geotechnical drilling operations. No other previous use of the site was evident or made known to W. C. Hamilton Engineering at the time this report was prepared.

Subsurface Exploration: Subsurface materials at the site were explored by a total of two borings at locations selected by the client. The borings were drilled to a maximum depth of 20.0 feet. The approximate boring locations are shown on Plate I in Appendix A. Field drilling operations were completed with the plugging of the holes on November 5, 2024.

The borings were advanced using continuous sampling techniques. At the direction of the geotechnical engineer, the materials were monitored during the drilling operations for any signs of physical changes in the materials. An auger bit was used to advance each boring the entire depth of the hole. The samples obtained were visually examined, identified, wrapped and sealed in plastic, when appropriate, and placed in core boxes for transportation to the laboratory.

The Standard Penetration (SPT) Test, ASTM D1586, was conducted at various intervals of depth during the exploration to aid in strength evaluations. This test procedure drops a 140 pound hammer from a height of 30 inches to advance a split barrel drive point. Depending on the resistance of the materials to penetration by the drive point, either the number of blows required to advance the drive point 12 inches, 50 blows resulting in six inches or less penetration, or the inches of penetration due to 100 blows is recorded. Results of the SPT tests are shown on the left-hand side of the Logs of Boring. The SPT samples were visually examined, identified, and wrapped and sealed in plastic for transportation to the laboratory.

Samples obtained from the field operations that were not utilized in the laboratory testing will be stored for 30 days from the date of this report. After that time they will be discarded unless written notification is received.

Laboratory Testing: The soil samples were returned to the laboratory where they were re-examined and the visual classifications checked by the geotechnical engineer. Selected

specimens were chosen for testing to identify their soil classifications and natural moisture contents. The specific tests conducted are summarized as follows:

- Atterberg Limits Tests
- Percent Passing No. 200 Sieve Tests
- Natural Moisture Content Tests

The Atterberg Limits tests, percent passing No. 200-mesh sieve tests, and natural moisture content tests were used to evaluate the basic engineering properties of the soil. The results of these tests and the classifications of the subsurface materials are shown in the summary on Plate II in Appendix A. The soil classifications refer to the Unified Soil Classification System per ASTM D2487.

Summary: The results from the field exploration and the laboratory investigation were utilized in an engineering study to develop recommendations for the design of the building and pavement foundation systems. These evaluations and recommendations are discussed in the following sections.

SUBSURFACE MATERIALS AND CONDITIONS

Stratification: Specific types and depths of the subsurface strata encountered in the borings are shown on the attached Logs of Boring in Appendix B. In general, the subsurface materials encountered from the ground surface down consisted of:

Stratum I	Concrete Pavement Section 4.0 inches in thickness in B-2 only;
Stratum II	Brown SANDY LEAN CLAY 2.2 to 4.0 feet in thickness;
Stratum III	Light Brown to Tan LEAN CLAY at least to the bottoms of the borings.

Material Characteristics: The results of the SPT tests indicate that the SANDY LEAN and LEAN CLAYS were medium stiff to stiff in consistency.

Subsurface Water Conditions: The borings were advanced to a depth of 20.0 feet using dry sampling techniques. Groundwater was not encountered in the borings during the geotechnical drilling operations. Notes on groundwater observations are contained on the Logs of Boring in Appendix B.

Be aware that these limited observations do not represent a groundwater study which was beyond the scope of this investigation, and that due to the nature of subsurface water and its relationship to climatic influences, the groundwater may be intermittent and of varying quantities and depths due to changes in the seasonal moisture content.

Shrink/Swell Potential: The tendency for a soil to shrink and swell with changes in soil moisture content is a function of the clay content and the type of clay mineral. These are reflected in soil consistency as indicated by the liquid limit and plasticity index of the Atterberg Limits tests. A generalized relationship between shrink/swell potential and the soil plasticity index (P.I.) is shown as follows:

General Relationship Between P.I. and Shrink/Swell Potential

P.I. Range	*Shrink/Swell Potential*
0 to 15	Low
15 to 25	Medium
25 to 35	High
>35	Very High

The amount of expansion that will actually occur with increases in soil moisture content is inversely related to the overburden pressure; that is, the larger the overburden pressure, the smaller the amount of expansion. Near-surface soils are thus susceptible to shrink/swell behavior because of the low overburden pressures. Shrink/swell behavior is normally considered to be limited to the upper 15 feet (zone of seasonal moisture changes) of the various soil formations. Overall, the materials encountered at this site possess medium shrink/swell potential.

Frost Depth: The published frost depth for the area is six inches.

Seismic Activity: According to ASCE 7-16, the peak acceleration at this site is 1.3% g. The *International Building Code-21* site classification is D.

FOUNDATION DESIGN RECOMMENDATIONS

General: Plans call for the construction of a single-story structure and paved parking areas and drives. The structural loads associated with the project are anticipated to be light to moderate in intensity.

Potential Soil Movements: McDowell's potential vertical rise (PVR) procedure (Reference 1) has been used to estimate the possible magnitude of shrink/swell movements at the site. The results indicate possible shrink/swell movements over the site to be up to 1.0 inch with the soil moisture changing from a "dry" to a "wet" soil moisture content due to seasonal soil moisture variations. It should be noted that this method utilizes correlations of soil types to swell potential and as such, the results must be considered as giving approximate values of the shrink/swell potential.

The materials encountered in the borings were generally in a state that is not susceptible to classic consolidation settlement. Footings designed using the recommended design values will be subject to settlement of less than one inch total and one-half inch differential settlement.

Also, be aware that these potential soil movement estimates are indicative of the relative magnitude of probable movement under seasonal changes in soil moisture content. Soil movements in excess of these values due to either expansion or consolidation may be expected if increases in soil moisture content occur as a result of broken water and sewer lines, improper drainage of surface water, shrubbery and trees planted near the foundation, excessive lawn or shrubbery irrigation, or ponding of water near the foundation. These movement potentials must be considered in the design of the foundation support system.

Structural Load Support, Drilled Piers: The most positive means of structural support for this project is drilled piers. Drilled piers founded at a minimum depth of 14.0 feet below the existing ground surface at the time of the geotechnical drilling operations may be sized using a net allowable unit loading intensity of ***8,500 pounds per square foot***. The piers should be designed

as underreamed. The underreamed design should be limited to a maximum 30° angle from the vertical shaft. Underreaming is recommended to resist the uplift forces created by the expansive soil forces. It is also recommended that 2% additional reinforcing steel be added to provide tension resistance in each pier.

Grade beams spanning pier-to-pier should have a minimum permanent void space of six inches.

Interior Floor Slab Considerations: Due to the up to 1.0 inch of potential vertical rise at the site, a structural floor is recommended for the floor slab system. A permanent minimum six-inch void space should be provided beneath the slab bottom.

As an alternative, an interior ground and fill-supported floor slab may be considered. For this to be considered as an alternative, the owner and structural engineer must consider the potential movement involved and, based on the usage of the floor slab area, determine if the movement can be lowered to an acceptable level at a reasonable cost.

An interior floor slab founded on the existing subgrade will be subjected to upward expansion on the order of up to 1.0 inch. This potential movement will occur if the expansive soils are provided access to moisture. It is commonly found that exterior sources of moisture from poor drainage practices and interior plumbing lines provide the water sources that allow the soil moisture changes to swell the subgrade. Therefore, one design consideration of utmost importance is to incorporate measures into the construction that limit these sources of moisture. Paved areas extending up to the foundation and properly sealed is one method which is useful in both limiting moisture entry and in limiting future subsurface drying. Areas which will be landscaped must have slopes away from the building which drain to ditches and/or area drains located not closer than 20 feet to the building. Roof gutter outlets must be directed well away from the building and/or discharged into storm drains or paved areas. Sprinkler systems are often found to be a source of water from leaks and/or overwatering practices and thus are discouraged.

The above described measures do not reduce the swell potential but are measures to attempt to alleviate or reduce water entry into the soil and thereby minimize the changes in soil moisture content after construction.

Alternative Structural Load Support, Stiffened Beam and Slab: Stiffened beam and slab foundations may be considered for this project. Theoretically, the beam and slab foundation can be built with sufficient stiffness such that differential movements are minimized. The degree of stiffening is a function of the potential soil volume changes (PVR), the magnitude of expected loads, and tolerance of the structure to vertical movements. The stiffened beam and slab foundation should be designed by a structural engineer familiar with expansive clay soils. The unit loading intensity beneath grade beams and interior stiffening beams should be limited to ***3,000 pounds per square foot***, with an embedment of the foundation element extending at least 2.5 feet below the finished grade, and the foundation should be designed to withstand movements in the range of 1.0 inch.

Lateral Load Resistance: The structure will impart lateral loads outward from the base of the footings. These lateral loads will be resisted by the weight of the footings, the weight of the soil placed above the footings, frictional resistance between the contact area of the footing base and the soil, and passive earth pressures of the soil against the outer side area of the footings.

The passive earth pressure resistance for each foot of width of the footing may be calculated using the following formula:

$$P_p = 0.5\gamma H^2 + 2CH$$

where P_p = Ultimate resultant force per foot of width of the footing (lbs)
γ = Unit weight of soil (pcf)
C = Cohesion (psf)
H = Soil/footing contact height (ft)

The following are recommended soil values for use:

γ = 105 pcf
C = 1000 psf

A factor of safety of at least 1.5 is recommended.

Lateral Earth Pressures: Walls below grade, if required, will be acted upon by lateral earth pressures. The magnitude of the lateral earth pressures will be a function of the type of materials used as backfill, compaction achieved during placement, placement method, and specifics of the wall design (i.e., smooth wall, rough wall, braced, battered, height of wall, finished grade, etc.).

If the top of the wall is allowed to move slightly, then the "active" Rankine lateral earth pressure case will be developed. If the top of the wall is restrained against movement, then the "at rest" lateral earth pressure case will be developed. The following values are recommended for design purposes and reflect the average or mixed condition for on-site material:

Material Type	***At Rest Equivalent Fluid Pressure K_h***	***Active Equivalent Fluid Pressure K_a***
On-site Material	90 lbs/ft^2/lin ft	75 lbs/ft^2/lin ft

These earth pressure values are for horizontal pressures on a vertical wall (not exceeding 15 feet in height) and do ***not*** include surcharge loading or hydrostatic pressure buildup.

OTHER DESIGN CONSIDERATIONS

Other Design Values: Based on the results of the plasticity index tests, sieve analyses, and correlations of the results with similar materials, the following are recommended design values for the properties of the on-site materials:

Angle of Internal Friction (Ø):	SANDY LEAN and LEAN CLAYS:	7°
Modulus of Subgrade Reaction for Mats and Slabs (pci)*:		200
Ultimate Friction Factor between Soil and Base Concrete:		(Unformed) 0.4 to 0.5 (Formed) 0.3
Unit Weight of Soil:		105 pounds per cubic foot

*When prepared as recommended in the *Foundation Construction Criteria* section of this report

FOUNDATION CONSTRUCTION CRITERIA

Site Preparation: Prior to starting any work at the site it is recommended that proper construction drainage be provided to maintain a relatively dry condition. This will be very important if any work is attempted during periods of prolonged rainfall which occur seasonally in this area. Ponding of water at the site should be avoided during all phases of construction and post construction grading.

Due to the proximity of existing structures, vibratory rollers are ***not*** recommended for this project.

Site preparation should begin by removing all surface vegetation and root systems to a minimum depth of six inches within the building areas and six inches within the pavement areas for a distance of five feet outside the building lines and two feet beyond pavement lines. The existing concrete should be removed in the areas where any new structure will be placed. These materials should not be used for structural fill or in the building areas.

Tree stumps, if encountered, should be completely removed and backfilled. Backfilling should be accomplished in maximum eight-inch loose lifts and then compacted to a minimum of 95 percent of maximum density (ASTM D 698) at not less than two percentage points of optimum moisture. Compacted select, non-expansive fill material should be used to fill in stump holes.

After the existing concrete from the pavement section has been removed, the area should be backfilled with select fill material within the footprint of the proposed new structure. The material used should be of the type and compacted as specified in the *Select Non-Expansive Fill Material* section of this report.

The exposed surfaces for the building areas (when at proper subgrade) should be compacted to a minimum of 95 percent of ASTM D 698 maximum density at not less than two percentage points of the optimum moisture content determined by this test. If any soft or weak areas are

revealed, they should be removed and then replaced with compacted select fill prior to placement of fill or base material.

Any areas found not to comply with the compaction requirements should be reworked and retested prior to placing the next lift. A density test frequency of one test for every 2,500 square feet of building area is recommended.

Occasionally, the shallow soils become wet and pump during site preparation, and become difficult to work. This condition generally occurs with trapped moisture in the subgrade. If this condition occurs during construction, the soils need to be excavated, aerated to dry, and recompacted adequately. At times excavating and replacing with selected soils may be required to achieve an adequate subgrade.

Select Non-Expansive Fill Material: Fill material used should be a select non-expansive material meeting the following general requirements:

Maximum Aggregate Size	3.0 inches
Percent Retained on No. 4 Sieve	25-50
Percent Retained on No. 40 Sieve	50-85
Plasticity Index	4 minimum, 15 maximum

Other local materials that do not meet these requirements should be submitted to the geotechnical engineer for evaluation and testing prior to their use.

The fill material should be compacted to a minimum of 95 percent of ASTM D698 maximum density in maximum eight-inch loose lifts and tested for compliance prior to proceeding with subsequent lifts. Should fill material placement exceed 3.5 feet in depth, the density requirement should be increased to 98 percent of ASTM D698 maximum density. The moisture content should be maintained at or near the optimum moisture content as determined by ASTM D698, and should not be less than two percentage points of the optimum moisture content determined by this test.

Vapor Barrier: A vapor barrier below the floor slab should be considered in areas where moisture sensitive floor coverings will be applied. The vapor barrier should be designed according to ACI criteria.

Foundation Construction: It is recommended that all footing excavations be inspected and checked by the owner's authorized representative for proper foundation supporting material and depth, proper dimensions, and proper reinforcement size and placement. Loose material should be removed from the excavations prior to the placement of steel and concrete. Foundation excavations should remain open only the minimum time necessary to permit good quality construction and in no case should the pier holes remain open overnight. Although caving was not encountered in the drilling operations and is not anticipated, it is recommended that the use of temporary steel casing be included in the bid or contract documents as a separate item should it be required during construction.

Drainage Considerations: Proper drainage should be provided away from the foundation elements during all phases of construction and post-construction grading. Proper drainage is essential to the long-term stability of the structure. Ponding of water near the foundation elements from improper grading, excessive landscape watering, or gutter downspouts should not be permitted.

Backfill Compaction: In the event that *footings* are constructed in such a manner that they require backfilling, a select material should be used as backfill. The material should be compacted to not less than 95 percent of maximum density (ASTM D698) in maximum six-inch lifts. The select material should have a plasticity index of 15 or less. Non-plastic materials should have at least 30 percent by weight passing the No. 200-mesh sieve. The maximum particle size should be less than two inches when hand compacted techniques are used. A three-inch maximum particle size is permissible when large construction equipment is utilized for backfill compaction. Backfill compaction consideration should also be given to any utility trenches within or near the construction area.

PAVEMENT DESIGN AND CONSTRUCTION CRITERIA

Design Criteria: The predominant subgrade providing support for the pavement areas should be the SANDY LEAN CLAY. Based on the laboratory tests and past experience with similar soils, the support strength of this material has been estimated to have a Texas Triaxial Classification of 4.7 when compacted to at least 95 percent of AASHTO T180 density.

Traffic Conditions and Pavement Thicknesses: The total pavement thickness for any particular paved area will depend on the traffic characteristics as estimated by the number of 18-kip axle load repetitions. For parking areas that will be primarily for automobile and other light vehicles, the estimated design number of equivalent 18-kip axle load repetitions is 25,000.

The required pavement thicknesses have been selected using the *1993 AASHTO Guide for Design of Pavement Structures*. The required total pavement thickness and individual layer thicknesses for flexible and rigid pavement sections with assumptions are provided below:

FLEXIBLE PAVEMENT

1.	18-Kip ESAL, W_{18}	25,000
	Reliability, R	80%
	Overall Standard Deviation, S_o	0.45
	Soil Resilient Modulus, M_R	7,000 psi
	Initial Serviceability, p_o	4.1
	Terminal Serviceability, p_t	2.25
	Design Structural Number, SN	1.78

2. Layer Coefficients

Asphaltic Concrete Surface, a_1	0.40
Asphaltic Concrete Base, a_2	0.25
Base, a_2	0.10

Recommended Section

1.5 inches of Hot Mix Asphaltic Concrete Surface Course (HMACS)

5.0 inches of Hot Mix Asphaltic Concrete Base Course (HMACB)

6.5 inches Total Constructed Pavement Thickness, *above*

6.0 inches of Compacted Subgrade

or

Alternate Section

2.5 inches of Hot Mix Asphaltic Concrete Surface Course (HMACS)

8.0 inches of Flexible Base Material

10.5 inches Total Constructed Pavement Thickness, *above*

6.0 inches of Compacted Subgrade

On truck delivery routes and areas, an additional one inch of HMACS and either one inch of HMACB (recommended section) or two inches of Flexible Base (alternate section) should be added to the selected pavement section.

RIGID PAVEMENT

Assumptions for rigid pavement section are the same as outlined previously except for the following additional assumptions:

Load Transfer, J = 4.1 (Assuming no load transfer devices in jointed pavement)

Concrete Compressive Strength (28 days) = 3,000 psi

Concrete Modulus of Elasticity = 3,600,000 psi

Modulus of Rupture = 500 psi

Overall Standard Deviation, S_o = 0.35

Modulus of Subgrade Reaction = 200 pci

The following rigid pavement section would be appropriate at this site:

5.0 inches of Portland Cement Concrete

6.0 inches of Compacted Subgrade

Reinforcing steel consisting of deformed steel re-bars (not wire mesh) should be used in concrete pavement at these sites. Thickness selection is based on concrete flexural strength, soil modulus, and traffic volume. Selection of steel is dependent on joint spacing, slab thickness, and other factors as discussed in the Portland Cement Association publications.

Construction Criteria: The pavement should be specified, constructed, and tested to meet the following requirements:

1. Hot Mix Asphaltic Concrete Pavement - Texas Department of Transportation (TxDOT) Item 340, Type C or D, 2014 Specification, compacted to at least 93% of the Rice Specific Gravity (TEX Method 227-F).

2. Hot Mix Asphaltic Concrete Base - TxDOT Item 340, Type B, 2014 Specification, compacted to at least 93% of the Rice Specific Gravity (TEX Method 227-F) in maximum four-inch lifts.

3. Flexible Base Material - TxDOT Item 247, Type A, Grade 3, 2014 Specification. The material should be compacted to a minimum of 95% of AASHTO T180-15 density near optimum moisture content.

4. Compacted Subgrade - The subgrade beneath the pavements should be compacted to a minimum of 95% of AASHTO T180-15 density near optimum moisture content.

5. Portland Cement Concrete - Portland Cement Concrete should be specified to contain a minimum of 5.0 sacks of cement per cubic yard and minimum 3000 psi compressive strength at 28 days. Reinforcing steel is recommended for temperature and expansion control.

Drainage: Proper drainage of the paved area, including minimization of ponding of water on the pavement surface, is essential to provide maximum pavement life.

LIMITATIONS OF THIS INVESTIGATION

This report has been prepared based on a specific site and specific use and was authorized and performed under a signed contract with a scope of services negotiated for the specific project. Others not signature to the contract are responsible for their own due diligence. The use or reliance of this report by others constitutes their acceptance of the terms and conditions of the original contract (provided upon written request).

The geotechnical engineer must be consulted prior to this report being used for other than the specific project and use for which this report was written. Also, the geotechnical engineer must be consulted should the project scope change after publication of this report.

The subsurface materials and conditions are known only at the specific boring locations and within the depths explored. Subsurface conditions have been extrapolated based on known conditions in the borings, and actual field conditions elsewhere at the site may differ from those described in this report due to geological, prior use, or other factors. For this reason, we recommend that the geotechnical engineer be retained through the construction phase to include plan review and to identify variations in subsurface materials and conditions and to confirm that the recommendations contained in this report are applicable to subsurface conditions encountered elsewhere on this site.

This report should not be copied without permission of the geotechnical engineer. When copied with his/her permission, the report should be copied in its entirety and in no case should the boring logs be separated from the body of the report.

It is recommended that the construction materials testing laboratory shall meet the basic requirements of ASTM E329, but as a minimum shall have demonstrated satisfactory performance in the AASHTO Materials Reference Laboratory Proficiency Sample Program in soils and concrete.

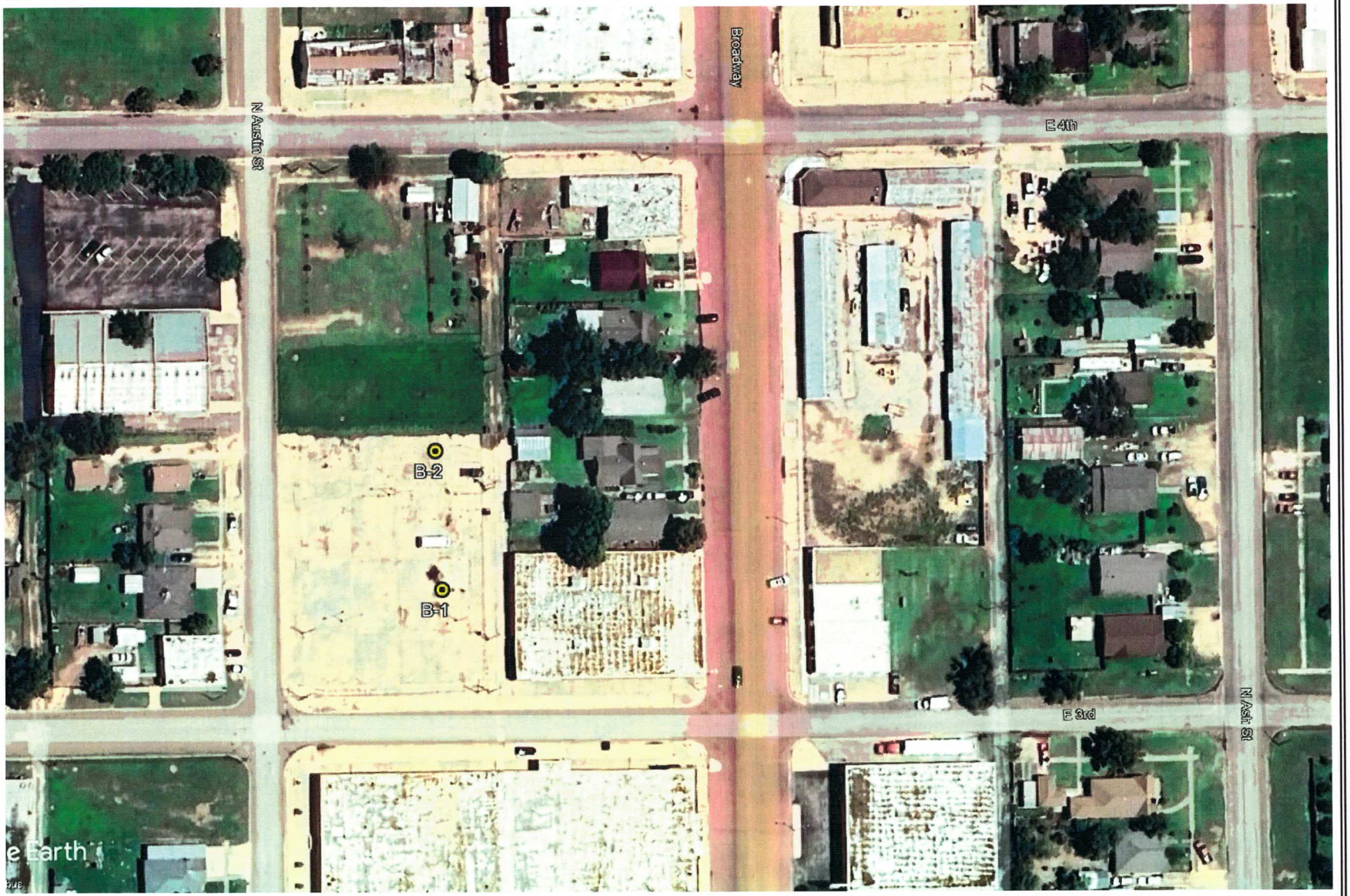
REFERENCES

1. McDowell, C., "The Relation of Laboratory Testing to Design for Pavements and Structures on Expansive Soils," *Quarterly of the Colorado School of Mines*, Vol. 54, No. 4, Oct. 1959, pp. 127-153

2. *AASHTO Guide for Design of Pavement Structures*, American Association of State Highway and Transportation Officials, 1993

3. *Standard Specifications for Construction of Highways, Streets and Bridges*, Texas Department of Transportation (TxDOT), 2014

APPENDIX A



SITE VICINITY MAP AND APPROX. BORING LOCATIONS	Project No. 15221124 Hale County JJAEP Annex 3 Plainview, Texas	PLATE I

W. C. HAMILTON ENGINEERING, INC.
Texas Registered Engineering Firm F-3724

SUMMARY OF SOIL CLASSIFICATION TEST RESULTS

Boring Number	*Depth in Feet*	*Liquid Limit %*	*Plasticity Index %*	*% Passing 200-mesh Sieve*	*Natural Moisture Content %*	*Classi-fication*	*Material Description*
B-1	1.0-2.5	36	19	67.1	23.3	CL	Brown SANDY LEAN CLAY
B-1	5.0-6.5	34	21	78.3	16.4	CL	Light Brown to Tan LEAN CLAY
B-1	13.0-14.5	42	22	70.9	17.8	CL	Light Brown to Tan LEAN CLAY
B-2	2.5-4.0	44	26	76.9	20.9	CL	Light Brown to Tan LEAN CLAY
B-2	9.0-10.5	38	21	80.4	18.9	CL	Light Brown to Tan LEAN CLAY

TEST RESULTS	Project No. 15221124 Hale County JJAEP Annex 3 Plainview, Texas	**PLATE II**

APPENDIX B

KEY TO LOG OF BORING

DEPTH FEET	SYMBOL	SAMPLE	TEST	MATERIAL DESCRIPTION	UDW pcf	UC tsf	MC	LL	PI	% -200	SOIL CLASS
			4.5	Push Tube Sample and Pocket Penetrometer Result							
			18	Standard Penetration Test Sample and "N" Value							
5				Cuttings Sample							
			C-5.0 R-4.5 RQD 50.0	Core Sample							
10				Testable Core Sample							
				Unit Dry Weight Test Result, pcf	115.8						
				Unconfined Compression Test Result, tsf		4.35					
15				Moisture Content Test Result, %			12.8				
				Atterberg Limits Test Results				25	12		
				Passing No. 200-Mesh Sieve Test Result, %						66.3	
20				Unified Soil Classification							CL
				Water Surface Level ▽ Water Surface Date 01/01/2020							
25											

SYMBOLS

LEAN CLAY (CL)	SAND (SP)		CALICHE
FAT CLAY (CH)	GRAVEL (GP)		LIMESTONE
CLAYEY SAND (SC)	SILT (ML)		SANDSTONE
SILTY SAND (SM)	ELASTIC SILT (MH)		SHALE

Groundwater Note: The boring was advanced to a depth of ____ feet below the ground surface without using drilling fluid and groundwater was not encountered above that depth.

LOG OF BORING	Project No. Project Name Location	Date:	Type: Air Rotary	BORING NO.

DEPTH FEET	SYMBOL	SAMPLE	TEST	MATERIAL DESCRIPTION	UDWpcf	UCtsf	MC	LL	PI	%-200	SOIL CLASS
			8	Brown SANDY LEAN CLAY			23.3	36	19	67.1	CL
5			16								
			16				16.4	34	21	78.3	CL
10			19	Light Brown to Tan LEAN CLAY							
			33				17.8	42	22	70.9	CL
15											
			34								
20				Total Depth of Boring = 20.0 Feet							
25											
30											
35											
40											

Groundwater Note: The boring was advanced to a depth of 20.0 feet below the ground surface without using drilling fluid and groundwater was not encountered above that depth.

LOG OF BORING	Project No. 15221124 Hale County JJAEP Annex 3 Plainview, TX	Date: 11-5-2024	Type: Auger	BORING NO. B-1

DEPTH FEET	SYMBOL	SAMPLE	TEST	MATERIAL DESCRIPTION	UDWpcf	UCtsf	MC	LL	PI	%-200	SOIL CLASS
				Pavement Section (4" Concrete)							
				Brown SANDY LEAN CLAY							
			12								
			17				20.9	44	26	76.9	CL
5											
			14								
				Light Brown to Tan LEAN CLAY							
10			24				18.9	38	21	80.4	CL
			35								
15											
			35								
20											
				Total Depth of Boring = 20.0 Feet							
25											
30											
35											
40											

Groundwater Note: The boring was advanced to a depth of 20.0 feet below the ground surface without using drilling fluid and groundwater was not encountered above that depth.

LOG OF BORING	Project No. 15221124 Hale County JJAEP Annex 3 Plainview, TX	Date: 11-5-2024	Type: Auger	BORING NO. B-2

HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
PLAINVIEW, TEXAS

Chambers Engineering, LLC
Mechanical & Electrical Consulting Engineers
TX Firm #F-005124
5501 Spur 327
Lubbock, Texas 79424

ADDENDUM NUMBER ONE

January 23, 2025

NOTICE TO BIDDERS:
The following shall be incorporated in and become a part of the original Drawings and Specifications of the above identified project. Please acknowledge receipt of this Addendum by noting it on your Proposal.

Mechanical Items:

Item 1. On the drawings, sheet M-101.1, relocate mini-split from I.T. room to Elec./Stor. D112. Remove transfer air ductwork and exhaust fan (EF-4) system.

Item 2. On the drawings, sheet M-200, remove EF-4 from the schedule. Revise CF-1 schedule.

Item 3. In the specifications, add the attached section 230900 – instrumentation and control for HVAC to be bid under alternate two.

Item 4. In the specifications, section 235400, add the following to Part 2.1.D:

a. All units shall be installed with a UL2998 compliant needlepoint bipolar ionization device equal to GPS-FC48-AC with programmable auto-cleaning and integral BAS Alarm Contacts.

Electrical Items:

Item 5. On the drawings, sheet E-00, changed the responsibility matrix to indicate that the card reader scope is now the Contractor's responsibility.

Item 6. On the drawings, sheet E-101.1, revise lighting design based on floor plan change.

Item 7. On the drawings, sheet E-101.3, revise power and special systems design based on floor plan change.

Item 8. On the drawings, sheet E-101.4, revised power requirements for CF-1.

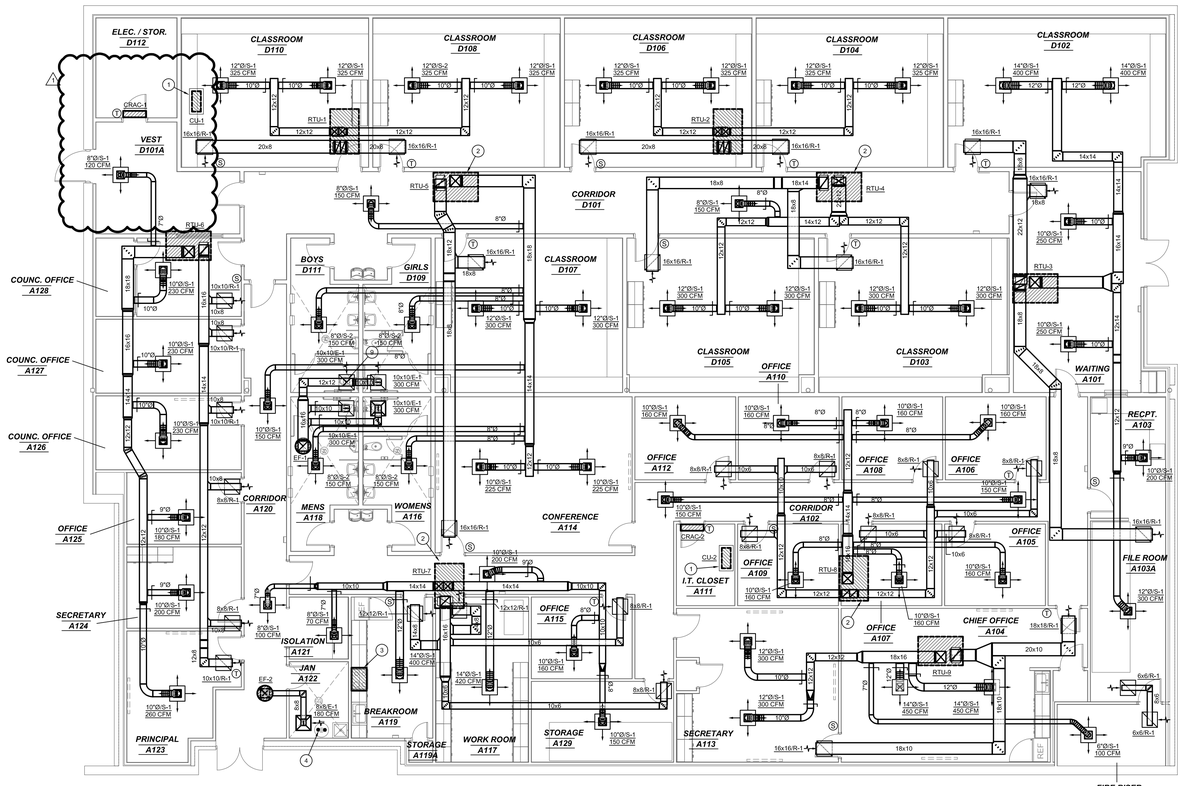
Item 9. On the drawings, sheet E-2.0, revised the riser diagrams for both buildings to include a fused disconnect on the outside of the building. Removed a ground bar for the IT room that was removed.

Item 10. On the drawings, sheet E-201.4, revised the panel schedules to reflect the floorplan changes.

Item 11. On the drawings, sheet E-201.5, revised the panel schedules to reflect the changes to the power requirements for CF-1.

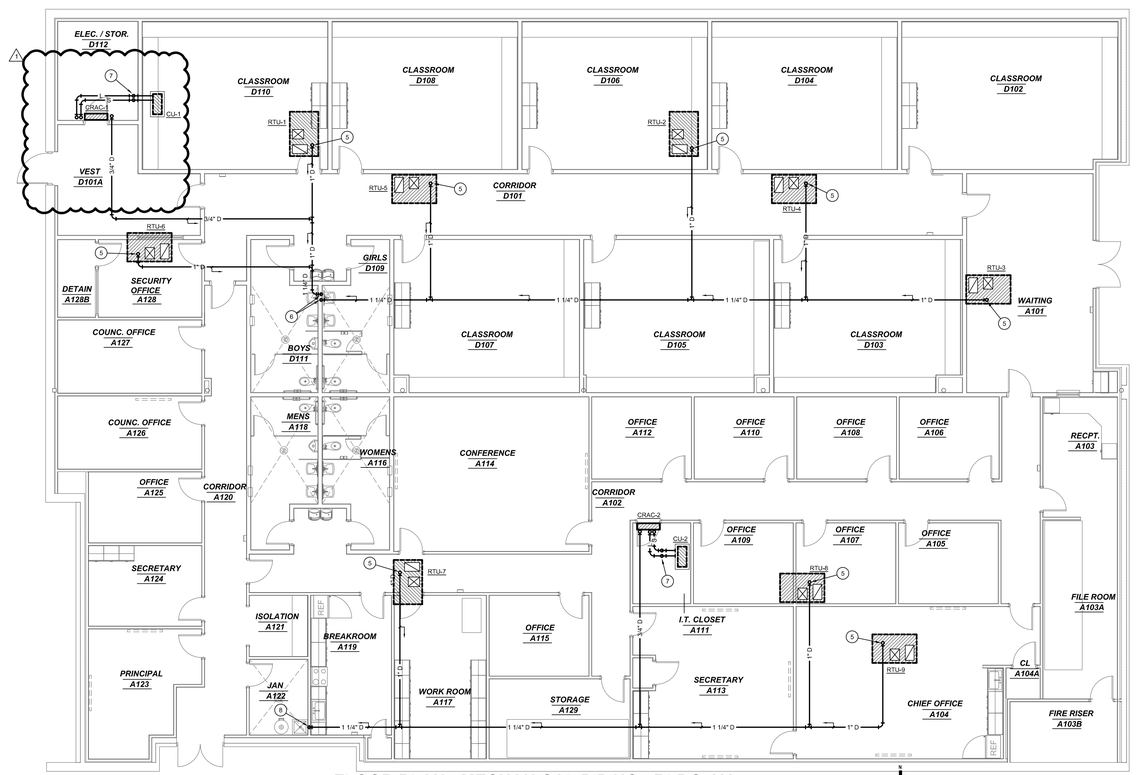
Item 12. On the drawings, sheet ESP-100, revised the site plan to show exterior fused disconnects for both buildings. Revised the location of the underground conduit from the IT room in Building B to the Elec/Storage room in Building A.

End of Chambers Engineering, LLC Addendum



M1 **FLOOR PLAN - MECHANICAL - BLDG. 'A'**

1/8" = 1'-0"



M2 **FLOOR PLAN - MECHANICAL PIPING - BLDG. 'A'**

1/8" = 1'-0"

GENERAL NOTES:

A. LOCATE ALL THERMOSTATS A MINIMUM OF SIX INCHES FROM WALL CORNERS, DOOR FRAMES AND OTHER DEVICES. MOUNT THERMOSTATS AT 48" A.F.F. COORDINATE THE LOCATION OF ALL THERMOSTATS WITH ARCHITECT PRIOR TO INSTALLATION.

B. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATION OF ALL CEILING MOUNTED AIR DISTRIBUTION DEVICES.

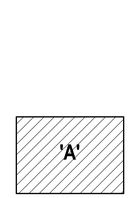
C. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. VERIFY IN FIELD EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN ON LIGHTING PLAN AND REQUIRED CEILING HEIGHTS. ROUTED DUCT RUNOUTS IN JOIST SPACE WHERE REQUIRED.

D. INSTALL ALL UNITS SUCH THAT O.A. INTAKES ARE 10' FROM ALL EXHAUST FANS, FLUES AND PLUMBING VENTS. VERIFY EXACT LOCATIONS AT JOBSITE.

NOTES INDICATED BY "⬡":

1. PRE-ENGINEERED ROOF EQUIPMENT SUPPORTS EQUAL TO BIG FOOT STANDS BY RECTORSEAL.
2. INSTALL NEW RTU ON EXISTING ROOF OPENING, PROVIDE ADAPT-A-CURB AS REQUIRED.
3. RESIDENTIAL RANGE HOOD EQUAL TO BROAN ELITE ALTA 3 SERIES UNDER-CABINET RANGE HOOD.
4. 3" CPVC COMBUSTION AIR AND FLUE PIPES UP THRU ROOF IN CONCENTRIC ADAPTER. ALIGN FLUES AND TERMINATE 36" AWAY FROM ANY OUTSIDE AIR OR COMBUSTION AIR INTAKE. PROVIDE CONCENTRIC ADAPTER AS MANUFACTURED BY EQUIPMENT MANUFACTURER.
5. TURN CONDENSATE DRAIN LINE UP THRU ROOF CURB TO CONNECT TO RTU. REFER TO DETAIL.
6. TURN CONDENSATE DRAIN LINE DOWN IN WALL TO CONNECT TO TAILPIECE OF LAVATORY. REFER TO DETAIL.
7. TURN REFRIGERANT LINES DOWN THRU ROOF. REFER TO DETAIL.
8. TURN CONDENSATE LINE DOWN IN WALL AND EXTEND OUT AT 18" A.F.F. TO SPILL TO MOP SINK. PROVIDE ESCUTCHEON AT WALL PENETRATION.
9. EXTEND 10"x10" E.A. DUCT DOWN TO CONNECT TO E.A. GRILLE. PROVIDE MBD IN VERTICAL AND BALANCE TO INDICATED CFM.

KEY PLAN



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PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

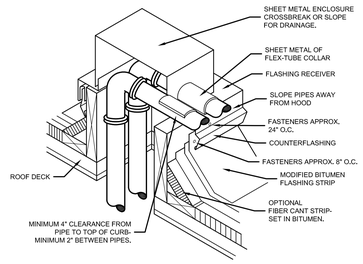
HALE COUNTY

00	01.09.2025 |100% CONSTRUCTION DOCUMENTS
1	01.23.2025 |ADDENDUM NO. 01

FLOOR PLAN - MECHANICAL
BLDG. 'A'

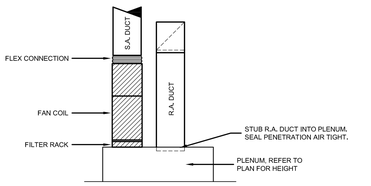
M-101.1

Project Number 2023-17

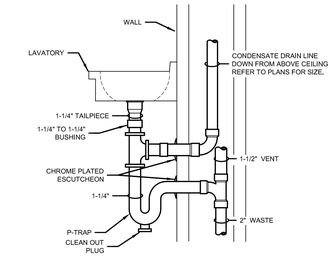


REFRIGERANT PIPING THROUGH ROOF DETAIL
NO SCALE

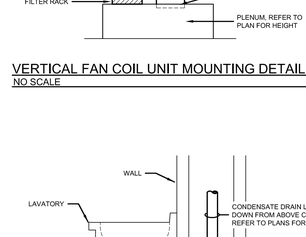
NOTE: THIS HOOD DETAIL DEPICTS JOB-SITE FABRICATED CONSTRUCTION. MANY MANUFACTURERS OFFER PREFABRICATED BOOTS AND OTHER MATERIALS FOR THIS PURPOSE, ONE TYPICAL CONFIGURATION IS SHOWN IN THE INSET. SPECIFICS ON THESE PROPRIETARY DESIGNS VARY GREATLY, AND INDIVIDUAL MANUFACTURERS SPECIFICATIONS SHOULD BE CONSULTED FOR THEIR USE.



VERTICAL FAN COIL UNIT MOUNTING DETAIL
NO SCALE

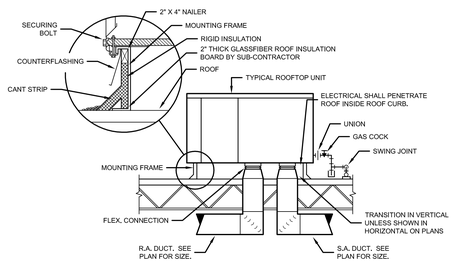


CONDENSATE DRAIN AT TAILPIECE DETAIL
NO SCALE

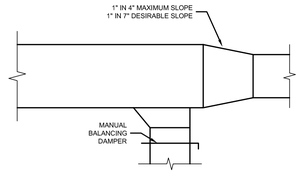


ROOFTOP UNIT DRAIN LINE DETAIL
NO SCALE

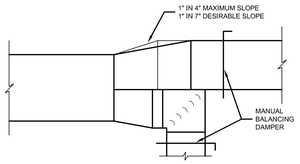
EXHAUST FAN MOUNTING DETAIL
NO SCALE



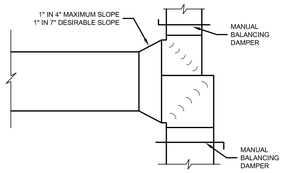
ROOFTOP UNIT MOUNTING DETAIL
NO SCALE



ANGLE TAP DETAIL
NO SCALE

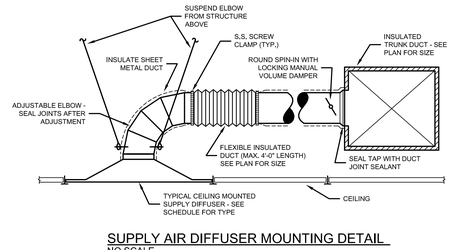


FULL ELBOW TAKE-OFF DETAIL
NO SCALE



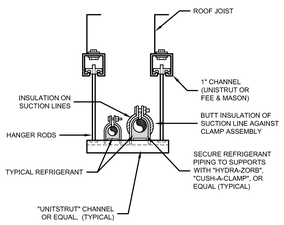
DOUBLE ELBOW TAKE-OFF DETAIL
DOUBLE ELBOW TAKE-OFF DETAIL

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
RTU	ROOF TOP UNIT
EF	EXHAUST FAN
kW	KILOWATT
CFM	CUBIC FEET PER MINUTE
RPM	REVOLUTIONS PER MINUTE
BTUH	BRITISH THERMAL UNITS PER HOUR
MBH	BTUH X 1000
EWT	ENTERING WATER TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
PD	PRESSURE DROP
SP	STATIC PRESSURE
ESP	EXTERNAL STATIC PRESSURE
HP	HORSEPOWER
EAT	ENTERING AIR TEMPERATURE
LAT	LEAVING AIR TEMPERATURE
DB	DRY BULB TEMPERATURE
WB	WET BULB TEMPERATURE
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
EA	EXHAUST AIR
	MANUAL BALANCING DAMPER
T	THERMOSTAT
TS	AVERAGING TEMPERATURE SENSOR
	SUPPLY DIFFUSER WITH PATTERN
	EXHAUST REGISTER
	RETURN GRILLE
	SUPPLY DUCT - CROSS SECTION
	EXHAUST DUCT - CROSS SECTION
	RETURN DUCT - CROSS SECTION
	ELBOW TURNED DOWN
	ELBOW TURNED UP
D	CONDENSATE DRAIN LINE
S	SUCTION LINE
L	LIQUID LINE
	SLOPE DOWN IN DIRECTION OF ARROW
FCU	FURNACE & COIL UNIT
CU	CONDENSING UNIT
UH	UNIT HEATER

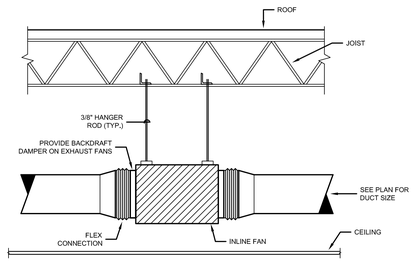


SUPPLY AIR DIFFUSER MOUNTING DETAIL
NO SCALE

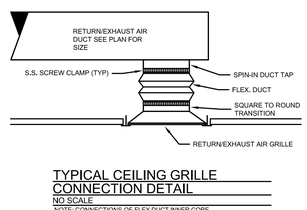
NOTE: CONNECTIONS OF FLEX DUCT INNER CORE SHALL BE MADE WITH S.S. WORM DRIVE CLAMPS. OUTER INSULATION SHALL BE FITTED OVER CORE CONNECTION AND SECURED WITH S.S. CLAMP.



SUSPENDED REFRIGERANT PIPE SUPPORT AT CEILING
NO SCALE

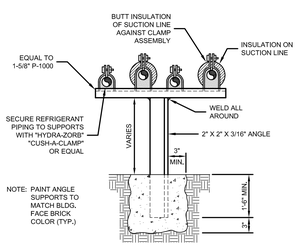


INLINE EXHAUST FAN MOUNTING DETAIL
NO SCALE

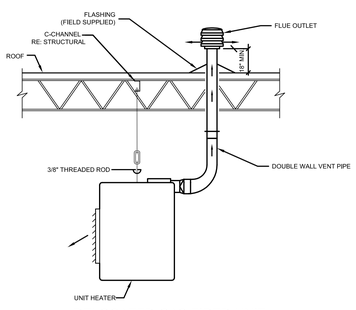


TYPICAL CEILING GRILLE CONNECTION DETAIL
NO SCALE

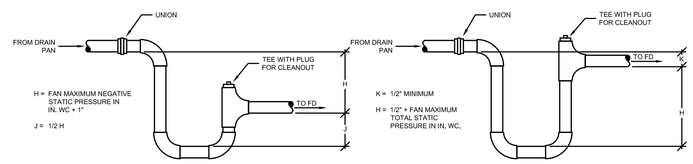
NOTE: CONNECTIONS OF FLEX DUCT INNER CORE SHALL BE MADE WITH S.S. WORM DRIVE CLAMPS. OUTER INSULATION SHALL BE FITTED OVER CORE CONNECTION AND SECURED WITH S.S. CLAMP.



EXTERIOR REFRIGERANT PIPE SUPPORT DETAIL
NO SCALE



RELOCATED GAS FIRED UNIT HEATER MOUNTING DETAIL
NO SCALE



DRAIN SIZE	HVAC EQUIP. TOTAL CFM
3/4"	0 - 800
1"	801 - 2,000
1-1/4"	2,001 - 12,000
1-1/2"	12,001 - 20,000
2"	20,001 - 68,000

CONDENSATE DRAIN DETAIL
NO SCALE

NOTE: CONDENSATE DRAIN SHALL NOT BE SMALLER THAN UNIT CONNECTION.

ROOF TOP UNIT SCHEDULE - NATURAL GAS HEAT

MARK	SUPPLY FAN DATA				COOLING DATA			GAS HEAT		ELECTRICAL DATA	EXAMPLE: TRANE
	CFM	MIN. O.A.	ESP	BHP	SENSIBLE	TOTAL	EAT (DB/WB)	EER	INPUT	OUTPUT	
RTU-1	1300	320	0,7	0,49	27,6	43,4	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK048A3S0
RTU-2	1300	320	0,7	0,49	27,6	43,4	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK048A3S0
RTU-3	1800	310	0,7	0,76	36,8	53,6	80,0°F/67,0°F	12,0	100,0	81,0	208 V, 3 Ø, 60 Hz	YSK060A3S0
RTU-4	1350	320	0,7	0,49	28,6	43,7	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK060A3S0
RTU-5	1950	600	0,7	0,88	37,8	55,2	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK060A3S0
RTU-6	1450	130	0,7	0,49	29,2	44,1	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK048A3S0
RTU-7	1500	180	0,7	0,60	33,7	52,6	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK060A3S0
RTU-8	1420	170	0,7	0,46	28,9	44,0	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK048A3S0
RTU-9	1600	120	0,7	0,60	33,9	53,1	80,0°F/67,0°F	12,0	80,0	64,8	208 V, 3 Ø, 60 Hz	YSK060A3S0

NOTES:
1. ALL SELECTIONS BASED ON ARI 210/240 RATINGS AT JOBSITE ELEVATION.
2. COOLING COIL VELOCITY SHALL BE 500 FPM OR LESS.
3. SENSIBLE AND TOTAL CAPACITIES ARE EXPRESSED IN MBTUH.
4. ALL ROOFTOP UNITS PROVIDE TWO STAGE HEATING AND COOLING.
5. AMBIENT TEMPERATURE IS 105° F.
6. ROOFTOP UNIT SHALL BE SECURED TO ROOF CURB.
7. PROVIDE EACH UNIT WITH THE FOLLOWING:
   a. PHASE MONITORING.
   b. LOW AMBIENT KIT DOWN TO 0°F.
   c. HINGED ACCESS PANELS.
   d. PLEATED MERV 13 FILTERS.
   e. FACTORY MOUNTED GFI RECEPTACLE IN A WEATHER PROOF ENCLOSURE.

COMPUTER ROOM AIR CONDITIONING UNIT SCHEDULE

MARK	FAN DATA S.A. CFM	COOLING DATA		ELECTRICAL DATA	EXAMPLE
		TOTAL	EAT		
CRAC-1	381	9,0	80°/67°	POWERED BY OUTDOOR UNIT	TRANE MSY-GS09NA
CRAC-2	455	12,0	80°/67°	POWERED BY OUTDOOR UNIT	TRANE PKA-A12LA

NOTES:
1. ALL SELECTIONS BASED ON JOBSITE ELEVATION.
2. VERIFY ALL REFRIGERANT PIPING SIZE REQUIREMENTS WITH EQUIPMENT MANUFACTURER.
3. PROVIDE CONDENSATE PUMP.
4. PROVIDE UNIT WITH SPECIFIED REMOTE WALL MOUNTED THERMOSTAT.

CONDENSING UNIT SCHEDULE

MARK	SERVES	CAPACITY - MBH	SEER	ELECTRICAL DATA	REFRIGERANT LINE SIZES	EXAMPLE
CU-1	CRAC-1	9,0	27,0	208 V, 1 Ø, 60 Hz	3/8 S, 1/4 L	TRANE MUY-GS09NA
CU-2	CRAC-2	12,0	21,0	208 V, 1 Ø, 60 Hz	1/2 S, 1/4 L	TRANE PUZ-A12NKA7

NOTES:
1. ALL SELECTIONS BASED ON JOBSITE ELEVATION.
2. VERIFY ALL REFRIGERANT PIPING SIZE REQUIREMENTS WITH EQUIPMENT MANUFACTURER.

EXHAUST FAN SCHEDULE

MARK	CFM	SP	RPM	HP	DRIVE	ELECTRICAL DATA	TYPE	EXAMPLE
EF-1	1200	0,5	1351	1/2	DIRECT	115 V, 1 Ø, 60 Hz	P,R,V	GREENHECK G-120-VG
EF-2	180	0,5	1547	1/10	DIRECT	115 V, 1 Ø, 60 Hz	P,R,V	GREENHECK G-080-VG
EF-3	90	0,5	1547	1/10	DIRECT	115 V, 1 Ø, 60 Hz	P,R,V	GREENHECK G-080-VG

NOTES:
1. PROVIDE BACKDRAFT DAMPER ON EXHAUST FANS.
2. PROVIDE FACTORY MOUNTED GFI RECEPTACLE IN A WEATHER PROOF ENCLOSURE.

AIR DISTRIBUTION SCHEDULE

MARK	TYPE	LOCATION	FRAME	FINISH	EXAMPLE
S-1	SUPPLY	CEILING	TB	WHITE	PRICE SPD, 24x24
S-2	SUPPLY	CEILING	PF	WHITE	PRICE ASPD, ALUMINUM
E-1	EXHAUST	CEILING	PF	WHITE	PRICE 10A
E-2	EXHAUST	CEILING	TB	WHITE	PRICE 10, 24x24
R-1	RETURN	CEILING	TB	WHITE	PRICE 10, 24x24
R-2	RETURN	SIDEWALL	PF	WHITE	PRICE 60

1. OBD = OPPOSED BLADE DAMPER
2. EXT = EXTRACTOR
3. PF = PLASTER FRAME
4. TB = LAY-IN T-BAR
5. VERIFY FRAME TYPE WITH CEILING INSTALLER'S LAYOUT.

GAS FURNACE AND COIL SCHEDULE

MARK	FAN DATA					COOLING DATA			HEATING		EXAMPLE (TRANE)
	S.A. CFM	S.A. CFM	ESP	HP	ELECTRICAL DATA	SENS	TOTAL	EAT(DB/WB)	INPUT	OUTPUT	
FCU-1	1750	220	0,5	1	115 V, 1 Ø, 60 Hz	46,0	53,7	80,0°F/64,0°F	120,0	116,4	4TXCD010DS3/S9X1D120U5PSB

NOTES:
1. ALL SELECTIONS BASED ON JOBSITE ELEVATION,
2. COOLING COIL VELOCITY 500 FPM OR LESS,
3. SENSIBLE AND TOTAL CAPACITIES ARE EXPRESSED IN MBTUH,
4. HEATING OUTPUT AND INPUT ARE EXPRESSED IN MBTUH,
5. PROVIDE WITH ION SYST01D1CW THERMOSTAT/CONTROLLER.

CONDENSING UNIT SCHEDULE

MARK	SERVES	CAPACITY - MBH	SEER	ELECTRICAL DATA	REFRIGERANT LINE SIZES	EXAMPLE (TRANE)
CU-3	FCU-1	60,0	17,0	208 V, 3 Ø, 60 Hz	1-1/8 S, 3/8 L	4TTA7060A3

NOTES:
1. ALL SELECTIONS BASED ON JOBSITE ELEVATION.
2. VERIFY ALL REFRIGERANT PIPING SIZE REQUIREMENTS WITH EQUIPMENT MANUFACTURER.

LOUVER SCHEDULE

MARK	FREE AREA	DIMENSION	TYPE	FRAME	EXAMPLE
L-1	0,50 SQ. FT.	14" W X 14" H	DRAINABLE	CHANNEL	RUSKIN ELF6375DX
L-2	0,73 SQ. FT.	16" W X 16" H	DRAINABLE	CHANNEL	RUSKIN ELF6375DX

NOTES:
1. PROVIDE INSIDE BIRDSCREEN WITH ALL EXHAUST LOUVERS AND INSECT SCREEN ON ALL INTAKE LOUVERS.
2. LOUVER CONSTRUCTION SHALL BE ALUMINUM.
3. LOUVER SHALL BE FACTORY FINISHED WITH KYNAR; COLOR SHALL BE SELECTED FROM FACTORY STANDARD COLORS BY ARCHITECT.

CEILING FAN SCHEDULE

MARK	DIAMETER	HP	MOTOR CONTROL	ELECTRICAL DATA	EXAMPLE
CF-1	16"	1-1/2	VSD	208 V, 1 Ø, 60 Hz	EPIC FANS EIF16-155

NOTES:
1. ALL FANS SHALL BE REVERSIBLE.

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PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

00	01.09.2025 100% CONSTRUCTION DOCUMENTS
1	01.23.2025 ADDENDUM NO. 01

MECHANICAL SCHEDULES AND DETAILS

M-200

Project Number 2023-17

SECTION 230900 - INSTRUMENTATION AND CONTROL FOR HVAC (BID UNDER ALTERNATE TWO)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes control equipment for HVAC systems and components.

1.3 DEFINITIONS

A. FMS: Facility Management System.
B. ASC: Application Specific Controller.
C. BMS: Building Management System.
D. DDC: Direct Digital Control
E. GUI: Graphical User Interface
F. HVAC: Heating, Ventilation, and Air Conditioning
G. LAN: Local Area Network.
H. PID: Proportional, Integral, Derivative
I. NAE: Network Automation Engineer
J. FEC: Field Equipment Controller
K. VAV: Variable Air Volume
L. UDP: User Datagram Protocol

1.4 SCOPE

A. Furnish and install a BMS to control the equipment as shown on the drawings and described herein. New system shall integrate into existing BMS at City Hall building.

B. Furnish all labor, materials, equipment, and service necessary for a complete and operating temperature control system, utilizing a high speed peer to peer network of Direct Digital Controls as shown on the drawings and as described herein.

C. Drawings are diagrammatic only. Equipment and labor not specifically referred to herein or on the plans, that are required to meet the functional intent, shall be provided without additional cost to the Owner.

D. Complete temperature control system to be DDC with electronic sensors and electric actuation of valves and dampers and electronic actuation of terminal equipment valves and actuators as specified herein.

E. All work described in this section shall be installed, wired, circuit tested and calibrated by factory certified technicians qualified for this work and in the regular employment of the temperature control system manufacturer. The local installing office shall be a manufactured owned branch and shall have a minimum of twenty years of installation experience. Supervision, calibration

and checkout of the system shall be by the employees of the local temperature control contracting office. Supplier shall have an in place support facility within 150 miles of the site with technical staff, spare parts inventory and all necessary test and diagnostic equipment.

F. All installation labor (i.e. wiring, conduit, tubing, etc.) and installation material for the installation of the control system, including all power requirements to all controls shall be provided by the temperature control subcontractor.

G. Provide controllers compatible with the latest software, Metasys Version 10.0.

1.5 FMS DESCRIPTION

A. The FMS shall be a complete system designed for use on Intranets and the Internet. This functionality shall extend into the equipment rooms. Primary nodes located in equipment rooms and similar shall be fully IT compatible devices that mount and communicate directly on the IT infrastructure existing in the facility. Contractor shall be responsible for coordination with the owner's IT staff to ensure that the FMS will perform in the owner's environment without disruption to any of the other activities taking place on that LAN.

B. All points of user interface shall be on standard PCs that do not require the purchase of any special software from the FMS manufacturer for use as a building operations terminal. The primary point of interface on these PCs will be a standard Web Browser such as Internet Explorer or Netscape.

C. All programs that reside in the DDC System Controllers shall be accessible from the user interface at the campus front end such that program parameters, pid loop adjustments, and changes can be made live without disruption to the control process or equipment being controlled. Systems that require the above changes to be made at the building, or interrupt equipment operation, are not acceptable.

D. The FMS work shall consist of all labor, materials, tools, equipment, software, software licenses, wiring, tubing, installation, engineering, calibration, documentation, submittals, testing, verification, training services, permits and licenses, management, warranties, services and items as Specified in these Division documents which are required for the complete, fully functional and commissioned FMS.

1.6 QUALITY ASSURANCE

A. Bids by wholesalers, franchised, and non-franchised contractors shall not be acceptable.

B. The system manufacturer shall, as a minimum, manufacture and supply the Application Specific Controllers, Supervisory Controllers, Graphical User Interface, damper actuators, and valve actuator assembly.

C. All work described in this section shall be installed, wired, circuit tested and calibrated by factory certified technicians qualified for this work and in the direct employment of the temperature control system manufacturer.

D. The Building Management System contractor shall have a full service facility that is staffed with engineers in Johnson Controls systems and technicians fully capable of providing instructions and routine emergency maintenance service on all Johnson Controls system components.

E. Mechanical equipment manufacturers desiring to provide DDC type controls as factory mounted equipment shall not be acceptable.

F. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

G. Comply with NFPA 90A, "Installation of Air Conditioning and Ventilation Systems."

H. Comply with National Electric Code.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Factory-Mounted Components: Where control devices specified in this Section are indicated to be factory mounted on equipment, arrange for shipping of control devices to unit manufacturer.

1.8 COORDINATION

A. Coordinate location of thermostats and other exposed control sensors with plans and room details before installation.

B. Coordinate equipment from other divisions including "Intrusion Detection," "Motor-Control Centers," "Panelboards," and "Fire Alarm" to achieve compatibility with equipment that interfaces with those systems.

C. Coordinate supply of conditioned electrical circuits for control units and panels

1.9 SYSTEM INSTALLATION GUIDELINES

A. All exposed temperature control and interlock wiring shall be installed in conduit, unless otherwise noted on the plans. Power or interlock wiring shall be run in separate conduit from sensor and communications wiring.

B. All power wiring for control cabinets and transformers powering terminal units shall be supplied by the Division 16 contractor.

C. All non-plenum rated cable will be run in conduit from termination to termination points.

D. Plenum rated cabling run in the return plenum above dropped ceilings does not need to be run in conduit, but shall be installed and supported as close as possible to the structural members. Main cable bundles shall, in general, run above Corridor ceilings, with individual cables extending above ceiling to the terminal units. Cable shall not lay on the ceiling grid, lights, ductwork etc. It will be run at right angles, parallel and perpendicular to the building lines with run outs into rooms being perpendicular to the main cable bundles.

E. All wiring within Mechanical Rooms or Air Handling Rooms shall be run in conduit. Wiring extending from these rooms shall be installed in conduit that extends a minimum of 12" beyond the mechanical room wall. Remote satellite boxes used for housing control transformers shall be located above accessible ceilings of Corridors within 10 feet of mechanical rooms. Control transformers shall not be installed above ceilings of limited access areas such as offices, conference rooms, office suites, etc. or above non-accessible ceilings.

F. All plenum rated cabling run in standard drywall construction will be run inside the wall in new or existing conduit which extends six inches above the top plate of the wall and exiting the wall through standard wall boxes.

G. On wall constructed of solid concrete, cinder block or plaster, cables will be run in concealed conduit, surface wire mold or other approved raceway.

H. No ceiling tiles will be removed or holes punched out to accommodate cable penetration into a room.

I. All cabling will be labeled or tagged to indicate system served and termination number. Matching labels are required on both ends of the cable. Bundle labels shall be provided at every 50 feet on exposed runs or 25 feet on concealed runs, and at every entry/exit point throughout the run.

J. Cabling shall be bundled neatly and well secured using nylon zip straps. It shall not be wrapped around piping or conduit. Support cabling at walls, to sub-ceiling or structural steel with wall locks or clamps. Cabling shall not be installed with excessive slack.

K. Cables requiring crimp-on connectors must have those connectors attached with an appropriate and recommended specialized crimping tool.

L. The Temperature Control Contractor in accordance with the requirements as stated in Division 26 shall install all low voltage control wiring.

M. Identify each item, mounted on the face of a control panel, with an engraved nameplate (1/4" high engraved letters minimum).

N. Thermostats or sensors mounted on outside walls shall be mounted on an insulated mounting base (or equal).

O. All sensor elements in water lines shall be installed in separable wells, packed with heat conductive compound.

1.10 SYSTEM PERFORMANCE

A. Performance Standards. The system shall conform to the following:
   1. Graphic Display. The system shall display a graphic with 20 dynamic points with all current data within 20 seconds.
   2. Graphic Refresh. The system shall update a graphic with 20 dynamic points with all current data within 20 seconds.
   3. Object Command. The maximum time between the command of a binary object by the operator and the reaction by the device shall be less than 5 seconds. Analog objects should start to adjust within 5 seconds.
   4. Object Scan. All changes of state and change of analog values will be transmitted over the high-speed network such that any data used or displayed at a controller or workstation will be updated within 60 seconds.
   5. Alarm Response Time. The maximum time from when an object goes into alarm to when it is annunciated at the workstation shall be 20 seconds.
   6. Program Execution Frequency. Custom and standard applications shall be capable of running as often as once every 5 seconds. The Contractor shall be responsible for selecting execution times consistent with the mechanical process under control.

7. Performance. Digital controllers shall be able to execute DDC PID control loops at a selectable frequency of at least once per second. The controller shall scan and update the process value and output generated by this calculation at this same frequency.
8. Multiple Alarm Annunciation. All workstations on the network must receive alarms within 5 seconds of each other.
9. Reporting Accuracy. The system shall report all values with an end-to-end accuracy as listed or better than those listed below:

Measure Variable	Reported Accuracy
Space Temperature	±1ºF
Ducted Air	±1ºF
Outside Air	±2ºF
Dew point	±3ºF
Water Temperature	±1ºF
Relative Humidity	±5% RH
Water Flow	±5% of full scale
Airflow (terminal)	±10% of reading
Airflow (measuring stations)	±5% of full scale
Air Pressure (ducts)	±0.1 "W.G.
Air Pressure (space)	±0.01 "W.G.
Water Pressure	±2% of full scale (absolute or differential)
Electrical	5% of reading (A, V, W, Power factor)
Carbon Dioxide (CO2)	±5% of reading

10. Stability of Control. Control loops shall maintain measured variable at set point within the tolerances listed below:

Controlled Variable	Control Accuracy	Range of Medium
Air Pressure	±0.2" w.g.	0-6" w.g.
	±0.01" w.g.	-0.1 to 0.1" w.g.
Airflow	± 5% of full scale	
Temperature	±1.0ºF	
Humidity	±5% RH	
Fluid Pressure	±1.5 psi	1-150 psi
	±1.0" w.g.	0-50"w.g. differential

1.11 WORK BY OTHERS

A. Automatic Valves: Installed under applicable piping section under supervision of the temperature control subcontractor. All reducers and fittings necessary to install smaller than pipe size valves shall be furnished and installed under applicable piping sections.

B. Automatic Dampers: Installed under Division 15, Air Distribution System, under supervision of the temperature control subcontractor.

C. Smoke detectors shall be furnished and installed by the Division 16 contractor. The temperature controls subcontractor shall be responsible for interlock wiring between the smoke detectors and the air handling unit safety circuits.

D. Motor starters shall be furnished and installed by the Division 16 contractor. The temperature controls subcontractor shall be responsible for all wiring necessary involving the starter to perform the sequence of operation specified.

E. Humidifier air flow switch will be provided by humidifier manufacturer.

F. Patching and painting is not in this section.

1.12 QUALITY ASSURANCE

A. Ten (10) copies of shop drawings of the entire control system shall be submitted and shall consist of a complete list of equipment and materials, including manufacturer's catalog data sheets and installation instructions. Shop drawings shall also contain complete wiring and schematic diagrams, software descriptions, calculations, and any other details required to demonstrate that the system has been coordinated and will properly function as a system. Terminal identification for all control wiring shall be shown on the shop drawings.

B. A complete written Sequence of Operation as well as a hard copy graphical depiction of the application control programs shall also be included with the submittal package. Device identification as shown on the control schematics and wiring diagrams shall be referenced in the written Sequence of Operation.

C. Listing and explanation of both standard and user defined configuration parameters for the device.

D. System Architecture: Provide a schematic diagram of the Local Area Network and a controls network architecture diagram indicating supervisory controllers and Graphical User Interface(s). This should be accompanied by explicit information regarding configuration of Routers, Bridges and Repeaters. Each schematic shall have all control points labeled. The schematic shall graphically show all control elements. The point name format shall be approved by the Engineer before any drawing or programming proceeds.

1.13 WARRANTY

A. The temperature control system contractor shall provide a one (1) year warranty that will commence from the Date of Substantial Completion.

B. The contractor shall respond during normal business hours to the job site within a 24 hour period for any emergency relating to the control system during the warranty period.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Johnson Controls, Inc.; Controls Group – (Basis of Design)
   2. Contech
   3. Control Consultants & Services, Inc. (CCSI)

2.2 GENERAL

A. All materials and equipment used shall be standard components, of regular manufacture for this application. All systems and components shall have been thoroughly tested and proven in actual use.

B. All products used in this project shall be new, currently under manufacture, and shall be applied in similar installations for a minimum of 2 years. This installation shall not be used as a test site for any new products unless explicitly approved by the Owner's Representative in writing. Spare parts shall be available for at least 5 years after completion of this contract.

2.3 MATERIALS

A. Wiring and Conduit:

1. All wire shall be copper and meet the minimum wire size and insulation class listed below:

Wire Class	Wire Size	Isolation Class
Power	12 Gauge	600 Volt
Class One	14 Gauge Std.	600 Volt
Class Two	18 Gauge Std.	300 Volt
Class Three	18 Gauge Std.	300 volt

Communications Per Mfr. Recommendations

2. Power and Class One wiring may be run in the same conduit. Class Two and Three wiring and communications wiring may be run in the same conduit.
3. Where different wiring classes terminate within the same enclosure, maintain clearances and install barriers per the National Electric Code.
4. Where wiring is required to be installed in conduit, EMT shall be used. Conduit shall be minimum ½ inch galvanized EMT. Watertight compression fittings shall be used. Provide conduit sealoff fitting where exterior conduits enter the building or between areas of high temperature/moisture differential.
5. Flexible metallic conduit (max. 3 feet) shall be used for connections to controllers, and sensors mounted on vibration producing equipment. Liquid-tight flexible conduit shall be use in exterior locations and interior locations subject to moisture.
6. Junction boxes shall be provided at all cable splices, equipment terminations, and transitions from EMT to flexible conduit. Interior dry location J-boxes shall be galvanized pressed steel, nominal four-inch square with blank cover. Exterior and damp location JH-boxes shall be cast alloy FS boxes with threaded hubs and gasketed covers.

B. Control Valves:

1. Control valves shall be two-way pattern, constructed for tight shutoff and shall operate satisfactorily against system pressures and differentials. Valves with size up to and including 2 1/2" shall be "screwed" with 250 psi ANSI pressure body rating; 3" and larger valves shall be 'flanged' configuration. Proportional control valves shall be sized for a maximum pressure drop of 5.0 psig at rated flow (except as noted).

C. Damper and Valve Actuators:

1. Control air damper actuators shall be electric, low voltage (24 VAC) utilizing a 4-20 mA modulating control signal as required by the sequence of operation. Each actuator shall incorporate a spring return to position the dampers to their normal positions upon a loss of the 24 VAC control power. Control air damper actuators shall be properly sized to provide sufficient torque to their respective dampers throughout the actuator's operating range. All control air damper actuators shall be mounted outside of the air stream. Provide low leakage controls dampers to prevent air leakage for better pressure control of the zone. Provide fast acting actuators for better smoke purge reaction time.
2. Valve actuators for heating water and chilled water systems shall be electric. Operators shall be sized to operate their appropriate valves with sufficient reserve power to provide smooth modulating action or two position action as specified.

D. Control Panels

1. All application specific direct digital controllers, not specifically designed for direct mounting on the equipment served, shall be installed in NEMA 1 enclosures. Enclosures

shall be of suitable size to accommodate all power supplies, relays and accessories required for the application. Each enclosure shall include a perforated subpanel for direct mounting on the enclosure devices. Include matched key locks for all enclosures provided.

E. Temperature Sensors:
1. Duct/Wall Sensors:
a. As required by the sequence of operation, provide either 1,000 OHM Balco or 10K OHM Thermistor type sensors. Where the element is used for sensing mixed air or coil discharge temperatures and/or the duct cross-sectional area is in excess of 14 square feet, the element shall be of the averaging type. Where temperature elements are used for sensing liquid temperatures, they shall be furnished with separable stainless steel wells. Cold Deck and Hot Duct temperature sensor product shall be a Johnson Controls TE-6311M-1. Mixed air temperature sensor product shall be a Johnson Controls TE-6316M-1. Discharge air temperature sensors for VAV Boxes shall be Johnson Controls NS-DTN7043-0.
2. Space Temp/Humidity Sensors:
a. Space temperature/humidity sensors shall be Resistance temperature devices (RTD) or thermistor equipped with set point adjustment, override switch, and communication port. Humidity accuracy shall be 3%. LCD shall be provided for the temperature and the humidity. Product shall be a Johnson Controls NS-BHB7002-0.
3. Binary Temperature Devices:
a. Low-voltage space thermostat shall be 24 V, bimetal-operated, snap action type, with either adjustable or fixed anticipation heater, concealed setpoint adjustment, 55°F to 85°F setpoint range, 2°F maximum differential, and vented ABS plastic cover.
b. Line-voltage space thermostat shall be bimetal-actuated, open contact or bellows-actuated, enclosed, snap-switch type, or equivalent solid-state type, with heat anticipator, UL listed for electrical rating, concealed setpoint.
c. Low-limit thermostats. Low-limit thermostats shall be vapor pressure type with an element 20 ft minimum length. Element shall respond to the lowest temperature sensed by any 1 ft section. The low-limit thermostat shall be manual reset only. Product shall be a Johnson Controls A70HA-1C. This shall be installed on the hot deck and cold deck coils.

F. Analog Current Sensors:
1. As required by the sequence of operation, provide split-core, sensors for indication of equipment amperage. Span shall be adjustable for improved resolution. Current sensors shall incorporate trip indication LED's and shall be sized for proper operation with equipment they serve. Current sensors and installation to be provided under work of this section. Product shall be a CSD-SA1E1-1.

G. Duct Temperature/Humidity Sensor:
1. The temperature and humidity combination sensor shall be used in calculated enthalpy for the economizer function. Product shall have 3% accuracy with a 1k Ohm nickel temperature sensor. Product shall be Johnson Control HE-67N3-0N00P. This device will be installed in the return air and outside air duct work.
2. Inline (full bore) Electromagnetic Type – For Line sizes 2" & Smaller. Note: Can be used for flow only without a System-10: Provide an ONICON F-3200 Series Electromagnetic Flow Meter complete with integral or remote electronics module. The electronics module shall include a backlit graphic display and keypad. Connections to the piping shall be ANSI class 150 flanges (ANSI class 300 available where required). The installing contractor is responsible for providing suitable mating flanges. The flow tube shall be epoxy coated steel; the sensing electrodes shall be 316SS; the liner shall be

polypropylene or ebonite for low temperature service, PFTE for hot water service. Each flow meter shall be individually wet-calibrated and accurate to within ±0.2% of reading from 3 to33 feet per second velocity. A certificate of calibration shall be provided with each flow meter. Output signals shall be 4-20 mA and programmable pulse. The flow meter shall be capable of measuring bi-directional flow. For installations in non-metallic pipe, install grounding rings between flanges. Each flow meter shall be factory programmed for its specific application, and shall be re-programmable using the integral keypad on the converter (no special interface device or computer required)

H. Water Flow Meters
1. Water flow meters shall be electromagnetic type with integral microprocessor-based electronics. The meter shall have an accuracy of 1%. Meter shall be Onicon F-3500 selected for the correct application.
2. Inline (full bore) Electromagnetic Type – For Line sizes 2" & Smaller. Note: Can be used for flow only without a System-10: Provide an ONICON F-3200 Series Electromagnetic Flow Meter complete with integral or remote electronics module. The electronics module shall include a backlit graphic display and keypad. Connections to the piping shall be ANSI class 150 flanges (ANSI class 300 available where required). The installing contractor is responsible for providing suitable mating flanges. The flow tube shall be epoxy coated steel; the sensing electrodes shall be 316SS; the liner shall be polypropylene or ebonite for low temperature service, PFTE for hot water service. Each flow meter shall be individually wet-calibrated and accurate to within ±0.2% of reading from 3 to33 feet per second velocity. A certificate of calibration shall be provided with each flow meter. Output signals shall be 4-20 mA and programmable pulse. The flow meter shall be capable of measuring bi-directional flow. For installations in non-metallic pipe, install grounding rings between flanges. Each flow meter shall be factory programmed for its specific application, and shall be re-programmable using the integral keypad on the converter (no special interface device or computer required)

I. Gas Meters
1. Gas meters shall be a thermal mass flow meter equal to Onicon 5100 series flow meter with totalizer.

J. Carbon Dioxide Transmitter
1. The CO2 transmitter shall measure and transmit CO2 levels ranging from 0 to 2,000 parts per million (ppm) and have a Vaisala CARBOCAP single-beam, dual wavelength design. The transmitter shall have CARBOCAP silicon, micro-machined construction with 5 years of reliable calibration and stable infrared reference. Product shall produce a 0 to 10V or 4 to 20 mA signals. Product shall be a Johnson Controls CD-P00-00-0.
2. Carbon dioxide sensors in rooms shall be mounted on wall at 48" AFF.

2.4 DDC EQUIPMENT

A. Workstation Client Hardware Stations: The system shall be capable of supporting clients using a standard Web browser such as Internet Explorer™ operating on any standard computer that supports the current version of Internet Explorer™.

B. Web Browser Clients:
1. The Web browser shall provide the same view of the system, in terms of graphics, schedules, calendars, logs, etc., and provide the same interface methodology as is provided by the Graphical User Interface. Systems that require different views or that require different means of interacting with objects such as schedules, or logs, shall not be permitted.
2. The Web browser client shall support at a minimum, the following functions:

a. User log-on identification and password shall be required. If an unauthorized user attempts access, a blank web page shall be displayed. Security using Java authentication and encryption techniques to prevent unauthorized access shall be implemented.
b. Graphical screens developed for the GUI shall be the same screens used for the Web browser client. Any animated graphical objects supported by the GUI shall be supported by the Web browser interface.
c. HTML programming shall not be required to display system graphics or data on a Web page. HTML editing of the Web page shall be allowed if the user desires a specific look or format.
d. Storage of the graphical screens shall be in the Building Control Units (BC), without requiring any graphics to be stored on the client machine. Systems that require graphics storage on each client are not acceptable.
e. Real-time values displayed on a Web page shall update automatically without requiring a manual “refresh” of the Web page.
f. User’s shall have administrator-defined access privileges. Depending on the access privileges assigned, the user shall be able to perform the following:
    1) Modify common application objects, such as schedules, calendars, and set points in a graphical manner.
    2) Schedule times will be adjusted using a graphical slider, without requiring any keyboard entry from the operator.
    3) Holidays shall be set by using a graphical calendar, without requiring any keyboard entry from the operator.
    4) Commands to start and stop binary objects shall be done by right-clicking the selected object and selecting the appropriate command from the pop-up menu.
    5) View logs and charts.
    6) View and acknowledge alarms.
    7) The system shall provide the capability to specify a user’s (as determined by the log-on user identification) home page. Provide the ability to limit a specific user to just their defined home page. From the home page, links to other views, or pages in the system shall be possible, if allowed by the system administrator.
    8) Graphic screens on the Web Browser client shall support hypertext links to other locations on the Internet or on Intranet sites, by specifying the Uniform Resource Locator (URL) for the desired link.

C. Control Units General:
1. Provide an adequate number of control units to achieve monitoring and control of all data points specified and necessary to satisfy the sequence of operation for all mechanical systems shown on the plans. Provide a minimum of one separate controller for each AHU or other HVAC system. Multiple DDC controllers may control one system provided that all points associated with individual control loops are assigned to the same DDC controller. Points used for control loop reset such as outside air or space temperature are exempt from this requirement. Each of the following panel types shall meet the following requirements.
2. Controllers shall be suitable for the anticipated ambient conditions.
3. Controllers used outdoors and/or in wet ambient conditions shall be mounted within waterproof enclosures, and shall be rated for operation at -40°F to 140°F and 5 to 95% RH, non condensing.
4. Controllers used in conditioned ambient space shall be mounted in dust-proof enclosures, and shall be rated for operation at 32°F to 122°F and 5 to 95% RH, non condensing.
5. Serviceability: Provide diagnostic LEDs for power, communication, and processor. All wiring connections shall be made to field-removable, modular terminal strips or to a termination card connected by a ribbon cable.

6. Memory: The Control Units shall maintain all BIOS and programming information in the event of a power loss for at least 72 hours.
7. Diagnostics: The Building Controller shall continually check the status of its processor and memory circuits. If an abnormal operation is detected, the controller shall assume a predetermined failure mode and generate an alarm notification.
8. Immunity to power and noise: Controller shall be able to operate at 90% to 110% of nominal voltage rating and shall perform an orderly shutdown below 80% nominal voltage. Operation shall be protected against electrical noise of 5 to 120 Hz and from keyed radios up to 5 W at 3 ft.
9. Automatic staggered restart of field equipment after restoration of power and short cycle protection.

D. Network Automation Engine (NAE):
1. The Network Automation Engine (NAE) shall provide the interface between the LAN or WAN and the field control devices, and provide global supervisory control functions over the control devices connected to the UNC. It shall be capable of executing application control programs to provide:
   a. Calendar functions
   b. Scheduling
   c. Trending
   d. Alarm monitoring and routing
   e. Time synchronization by means of an Atomic Clock Internet site including automatic synchronization
   f. Integration of controller data and BACnet controller data
   g. Network Management functions for all BACnet based devices
2. The Network Automation Engine (NAE) must provide the following hardware features as a minimum:
   a. One Ethernet Port – 10/100 Mbps
   b. One RS-232 port
   c. Battery Backup
   d. Flash memory for long term data backup (If battery backup or flash memory is not supplied, the controller must contain a hard disk with at least 1 gigabyte storage capacity)
3. NAE shall provide the capability for multiple user access to the system and support for relational database access (ODBC, SQL or IBM). A database resident on the NAE shall be ODBC compliant database or must be capable of supporting an ODBC data access mechanism to read and write data stored within it.
4. NAE shall provide the capability to support standard Web browser access via the Intranet/Internet. It shall support a minimum of 4 simultaneous users.
5. Event Alarm Notification and Actions:
   a. The NAE shall provide alarm recognition, storage; routing, management, and analysis to supplement distributed capabilities of equipment or application specific controllers.
   b. The NAE shall be able to route any alarm condition to any defined user location whether connected to a local network or remote via dial-up telephone connection, or wide-area network.
   c. Alarm generation shall be selectable for annunciation type and acknowledgement requirements including but limited to:
      1) To alarm
      2) Return to normal
      3) To fault
   d. Provide for the creation of a minimum of eight of alarm classes for the purpose of routing types and or classes of alarms, i.e.: security, HVAC, Fire, etc.
   e. Provide timed (schedule) routing of alarms by class, object, group, or node.

f. Provide alarm generation from binary object “runtime” and /or event counts for equipment maintenance. The user shall be able to reset runtime or event count values with appropriate password control.
g. Control equipment and network failures shall be treated as alarms and annunciated.
h. Alarms shall be annunciated in any of the following manners as defined by the user.
i. Email of the complete alarm message to multiple recipients. Provide the ability to route and email alarms based on:
   1) Day of week
   2) Time of day
   3) Recipient
j. Pagers via paging services that initiate a page on receipt of email message.
k. The following shall be recorded by the NAE for each alarm (at a minimum):
   1) Time and date
   2) Location (building, floor, zone, office number, etc.)
   3) Equipment (air handler #, accessway, etc.)
   4) Acknowledge time, date, and user who issued acknowledgement.
   5) Number of occurrences since last acknowledgement.
l. Alarm actions may be initiated by user defined programmable objects created for that purpose.
m. Defined users shall be given proper access to acknowledge any alarm, or specific types or classes of alarms defined by the user.
n. Provide a “query” feature to allow review of specific alarms by user defined parameters.
o. A separate log for system alerts (controller failures, network failures, etc.) shall be provided and available for review by the user.
p. An Error Log to record invalid property changes or commands shall be provided and available for review by the user.

E. Data Collection and Storage:
1. The NAE shall have the ability to collect data for any property of any object and store this data for future use.
2. The data collection shall be performed by log objects, resident in the NAE that shall have, at a minimum, the following configurable properties:
   a. Designating the log as interval or deviation.
   b. For interval logs, the object shall be configured for time of day, day of week and the sample collection interval.
   c. For deviation logs, the object shall be configured for the deviation of a variable to a fixed value. This value, when reached, will initiate logging of the object.
   d. For all logs, provide the ability to set the maximum number of data stores for the log and to set whether the log will stop collecting when full, or rollover the data on a first-in, first-out basis.
3. Each log shall have the ability to have its data cleared on a time-based event or by a user-defined event or action.
4. All log data shall be stored in a relational database in the NAE and the data shall be accessed from a standard Web Browser.
5. All log data shall be available to the user in the following data formats:
   a. HTML
   b. XML
   c. Plain Text
   d. Comma or tab separated values
6. The NAE shall have the ability to archive its log data either locally (to itself), or remotely to a server or other NAE on the network. Provide the ability to configure the following archiving properties, at a minimum:
   a. Archive on time of day.

b. Archive on user-defined number of data stores in the log (buffer size).
c. Archive when log has reached its user-defined capacity of data stores.
d. Provide ability to clear logs once archived.

F. Audit Log:
1. Provide and maintain an Audit Log that tracks all activities performed on the NAE. Provide the ability to specify a buffer size for the log and the ability to archive log based on time or when the log has reached its user-defined buffer size. Provide the ability to archive the log locally (to the NAE), to another NAE on the network, or to a server. For each log entry, provide the following data:
a. Time and date
b. User ID
c. Change or activity: i.e., Change setpoint, add or delete objects, commands, etc.

G. Data Backup and Storage:
1. The NAE shall have the ability to automatically backup its database. The database shall be backed up based on a user-defined time interval.
2. Copies of the current database and, at the most recently saved database shall be stored in the NAE and in the primary Server. The age of the most recently saved database is dependent on the user-defined database save interval.
3. The NAE database shall be stored, at a minimum, in XML format to allow for user viewing and editing, if desired. Other formats are acceptable as well, as long as XML format is supported.

H. DDC System Controllers (FEC2600):
1. Standalone DDC panels shall be microprocessor-based, multi-tasking, multi-user, real-time digital control processors. Each standalone DDC panel shall consist of modular hardware with plug-in enclosed processors, communication controllers, power supplies, and input/output modules. A sufficient number of controllers shall be supplied to fully meet the requirements of this Specification and the attached point list.
2. Hardware Overrides – As indicated in the point schedule, the operator shall have the ability to manually override automatic or centrally execute commands.
3. Hardware Override Monitoring – DDC panels shall monitor the status or position of all overrides, and include this information in logs and summaries to inform the operator that automatic control has been inhibited. DDC panels shall also collect override activity information for daily and monthly reports.

PART 3 - EXECUTION

3.1 INSTALLATION AND WORKSMANSHIP

A. Install equipment, piping and wiring raceway parallel to the building lines (i.e., horizontal, vertical and parallel to walls) wherever possible.

B. Provide sufficient slack and flexible connections to allow for vibration of piping and equipment.

C. Install all equipment in readily accessible locations as defined by Chapter 1, Article 100, Part A of the National Electric Code (NEC).

D. Verify integrity of all wiring to ensure continuity and freedom from shorts and grounds.

E. All equipment, installation and wiring shall comply with acceptable industry specifications and standards for performance, reliability and compatibility and be executed in strict adherence to local codes and standard practices.

3.2 ELECTRICAL INTERLOCKS

A. All electrical interlocks shall be provided as specified. All electrical interlocks shall be made by means of motor starters or shall be accomplished by separate relays. No motor power lead shall be utilized in an interlock circuit. All interlocked starters with disconnect switches shall be provided with auxiliary contacts on the disconnect switch so that interlocking circuits are interrupted when the disconnect switch is in the off position.

3.3 OWNERSHIP OF PROPRIETARY MATERIAL

A. The owner shall sign a copy of the manufacturer's standard software and firmware licensing agreement as a condition of this contract. Such license shall grant use of all programs and application software to owner as defined by the manufacturer's license agreement, but shall protect manufacturer's rights to disclosure of trade secrets contained within such software. All project developed software and documentation shall become the property of the owner. These include, but are not limited to project graphic images, record drawings, project database, project specific application programming code, and all other associated documentation.

3.4 TRAINING

A. Provide a minimum of 8 hours of on-site or classroom training throughout the contract period for personnel designated by the Owner. Train the designated staff of Owners Representative and Owner to enable them to:
1. Proficiently operate the system.
2. Understand control system architecture and configuration.
3. Understand DDC system components.
4. Understand system operation, including DDC system control and optimizing routines (algorithms).
5. Operate the workstation and peripherals.
6. Log on and off the system.
7. Access graphics, point reports, and logs.
8. Adjust and change system set points, time schedules, and holiday schedules.
9. Recognize malfunctions of the system by observation of the printed copy and graphical visual signals.
10. Understand system drawings, and Operation and Maintenance manual.
11. Understand the job layout and location of control components.
12. Access data from DDC controller.
13. Operate portable operator's terminals.

PART 4 - SEQUENCE OF OPERATIONS

4.1 PACKAGED ROOFTOP UNIT

A. Supply Fan Control – The supply fan (SF-C) will be started on occupancy schedule. When the supply fan status (SF-S) indicates the fan started, the control sequence will be enabled. Upon loss of airflow, the supply fan will attempt to automatically restart until positive status is received.

B. Economizer Control – Economizer control will be initiated and controlled by the RTU internal controls.

C. Dehumidification Mode
   1. Return air relative humidity is above humidity setpoint.
   2. Compressor starts using Compressor Start sequence.
   3. The reheat coil has full (0-100%) modulating capabilities. The reheat output will modulate to maintain the space temperature at set point year round

D. Temperature Control – The unit will control to maintain the zone temperature setpoint as sensed by the zone temperature sensor.

E. Occupied Mode – The occupancy mode will be controlled by the occupied and unoccupied schedule.

F. Cooling – The compressors will be staged in sequence to maintain the temperature setpoint.

G. Heating – The gas heat will be staged in sequence to maintain the temperature setpoint.

H. Additional Point Monitored
   1. Supply Fan Status
   2. Discharge Air Sensor

4.2 FURNACE AND COIL SPLIT SYSTEM UNITS

A. Supply Fan Control – The supply fan (SF-C) will be started on occupancy schedule. When the supply fan status (SF-S) indicates the fan started, the control sequence will be enabled. Upon loss of airflow, the supply fan will attempt to automatically restart until positive status is received.

B. Temperature Control – The unit will control to maintain the zone temperature setpoint as sensed by the zone temperature sensor.

C. Occupied Mode – The occupancy mode will be controlled by the occupied and unoccupied schedule.

D. Cooling – The compressors will be staged in sequence to maintain the temperature setpoint.

E. Heating – The gas heat will be staged in sequence to maintain the temperature setpoint.

F. Additional Point Monitored
   1. Supply Fan Status
   2. Discharge Air Sensor

4.3 EXHAUST FANS

A. GENERAL EXHAUST FANS: The exhaust fans will be start/stopped based on a schedule. If the status does not match the commanded value, generate an alarm.

4.4 DOMESTIC HOT WATER SYSTEM

A. SYSTEM ENABLED: The heating system will automatically start when the system enable is “on”. When the system enable is “off”, the heating system will be disabled. The BMS will command, monitor alarms, and adjust setpoint though the solid state control module located on the water heater. Provide temperature sensor in discharge line from each water heater.

B. HOT WATER PUMP CONTROL: When enabled, a pump for each operating water heater will be started. If the pump status does not match the commanded value, an alarm will be generated and pump will be stopped. Upon loss of status, the pump will re-start after the system reset is activated.

4.5 ADDITIONAL ALARM MONITORING

A. Domestic water meter. Meter shall be Onicon FT-3400 series with D-100 Series flow meter display.

B. Natural Gas meter integration. Meter shall be Onicon F-5400 series thermal mass flow meter with no display. Provide D-100 series flow meter display and BACnet integration.

C. IDF and Electrical Rooms: Monitor the temperatures for alarm purposes.

END OF SECTION

PROJECT ELECTRICAL NOTES

A. SEE E-01 FOR ELECTRICAL SYMBOL LEGEND.

B. GENERAL NOTES LISTED HERE APPLY TO ALL ELECTRICAL DRAWINGS; SPECIFIC EXCEPTIONS ARE GIVEN ON INDIVIDUAL SHEETS.

C. COORDINATE ELECTRICAL WORK WITH ARCHITECT, CIVIL, STRUCTURAL, MECHANICAL, AND PLUMBING SO AS TO AVOID INTERFERENCE WITH OR COMPROMISE OF OTHER SYSTEMS.

D. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS & WORK INCLUDED IN CONTRACT. FOLLOW DRAWINGS IN LAYOUT WORK AND CHECK DRAWINGS OF OTHER TRADES RELATING TO WORK TO MAINTAIN HEADROOM & SPACE CONDITIONS AS REQUIRED BY NEC & OTHER APPLICABLE CODES. REFER TO MECHANICAL DWGS FOR GUIDANCE ON EXACT LOCATIONS AND DIMENSIONS OF PIPES, DUCTS, & EQUIPMENT. INSTALL THE ELECTRICAL SYSTEMS SO AS NOT TO INTERFERE W/PIPES, DUCTS, STRUCTURAL, OR OTHER SYSTEMS. DO NOT INSTALL DEVICE, LUMINAIRES, & EQUIPMENT ON TOP OF DUCT WORK OR PIPING, WHERE OBSCURED BY OTHER EQUIPMENT OR SYSTEMS, OR AT INACCESSIBLE LOCATIONS. COORDINATE FINAL LOCATIONS W/OWNER'S REPRESENTATIVE.

E. EQUIPMENT MUST FIT IN LOCATION WHERE SHOWN. INSTALLATION SHALL COMPLY WITH WORKING CLEARANCE AND DEDICATED EQUIPMENT SPACE REQUIREMENTS OF NEC-110.26 AND NEC-110.34.

F. INSTALL ELECTRICAL SYSTEMS AS SHOWN ON DRAWINGS AND AS SPECIFIED IN DIVISION 26. SUBMIT DEVIATIONS FROM DRAWINGS AND SPECIFICATIONS TO ARCHITECT/ENGINEER AND TO OWNER'S REPRESENTATIVE FOR ACCEPTANCE PRIOR TO EXECUTION OF WORK. WORK PERFORMED PRIOR TO ACCEPTANCE OF PROPOSED DEVIATIONS BY ARCHITECT/ENGINEER SHALL BE UNDERTAKEN AT CONTRACTOR'S RISK, AND SHALL BE DEMOLISHED AND/OR REWORKED AS DIRECTED BY OWNER'S REPRESENTATIVE, AT NO ADDITIONAL COST TO OWNER.

G. CONDUIT BELOW GRADE OR ENCASED IN CONCRETE SHALL BE MIN. 1" SCH 40 PVC, UON. PROVIDE NYLON PULLING LINE IN EACH EMPTY CONDUIT. EXTEND CONDUIT BEYOND EDGE OR SURFACE OF SLAB AND SEAL CONDUIT PRIOR TO PLACING CONCRETE. STUB UP CONDUIT IN ACCORDANCE WITH ELECTRICAL DETAILS. PROVIDE INSULATING BUSHING FOR TERMINATIONS OF METALLIC AND NON-METALLIC CONDUIT, AND FOR EACH STUB-UP AND STUB-OUT LOCATION.

H. INSTALL JUNCTION BOXES IN FINISHED AREAS AT ACCESSIBLE LOCATION ABOVE LAY-IN CEILING, UON. INSTALL JUNCTION BOXES IN UNFINISHED AREAS AT ACCESSIBLE LOCATION ADJACENT TO DEVICE OR AT STRUCTURE, UON.

I. PLACE NO MORE THAN FOUR 90-DEGREE BENDS BETWEEN ACCESS POINTS IN RACEWAY AND DUCT FOR ELECTRICAL SYSTEMS. PLACE NO MORE THAN TWO 90-DEGREE BENDS BETWEEN ACCESS POINTS IN CONDUIT AND DUCT FOR COMMUNICATIONS, SECURITY, & AV SYSTEMS. PROVIDE ADDITIONAL ACCESS POINTS AS REQUIRED.

J. INSTALL WIRING IN CONDUIT EXCEPT AS NOTED BELOW OR ALLOWED IN SPECIFICATIONS. FA WIRING SHALL BE PLENUM-RATED. FA WIRING SHALL BE INSTALLED IN RED CONDUIT.

K. INSTALL POWER AND LIGHTING CIRCUITS IN SEPARATE RACEWAYS.

L. COORDINATE W/FINAL FURNITURE PLANS FOR LOCATION OF FLOOR BOXES, POKE-THRU UNITS, AND CONDUIT STUB-UPS FOR ELECTRICAL, COMMUNICATIONS, & AV SERVICE TO FURNITURE. FINAL DIMENSIONING OF ROUGH-IN LOCATIONS SHALL BE FIELD MEASURED AND LOCATED BY ARCHITECT. FINAL DIMENSIONING OF FLOOR BOX AND POKE-THRU UNIT LOCATIONS BY ARCHITECT.

1 M. COORDINATE WORK BETWEEN DIVISION 26, 27, AND 28 FOR SECURITY, COMMUNICATIONS AND AUDIO/VISUAL (AV) SYSTEMS. WITH THE EXCEPTION OF THE CARD READER SYSTEM, DIVISION 26 SHALL PROVIDE EMPTY RACEWAY & BOXES FOR AV, SECURITY, DATA, AND COMMUNICATIONS SYSTEM WIRING OUTLETS, & DEVICES. THE CARD READER SYSTEM IS CONTRACTOR PROVIDED AND INSTALLED (INCLUDING ALL CABLING).

N. REFER TO ARCHITECTURAL PLANS FOR DEVICE MOUNTING HEIGHT.

O. MOTOR STARTERS, CONTROL PANELS, MOTORS, AND VFD'S ARE FURNISHED BY DIV 23 AND INSTALLED BY DIV 26, UON.

P. COORDINATE W/DIV 23 & CONTROLS SUPPLIER TO PROVIDE CONTROL RELAY BY DIV 23 FOR STARTING & STOPPING OF EACH SINGLE PHASE MOTOR BY THE BAS/EMS/DDC.

Q. WHERE CONDUITS CROSS AN EXPANSION JOINT, PROVIDE A PROPER FITTING AND A GROUNDING STRAP TO MAINTAIN ELECTRICAL CONTINUITY OF THE RACEWAY.

R. RACEWAYS SHALL NOT BE USED AS THE SOLE GROUNDING CONDUCTOR. PROVIDE A GREEN-INSULATED GROUNDING CONDUCTOR IN EACH RACEWAY FOR POWER & LIGHTING SYSTEMS, SIZE PER NEC TABLE 250.122 UON.

S. LOCATE SNAP SWITCHES ON LOCK SIDE OF DOORS. VERIFY DOOR SWINGS PRIOR TO ROUGH-IN.

T. PROVIDE GFCI RCPT W/IN 6' OF SINKS & SIMILAR PLUMBING FIXTURES.

U. REFER TO DIVISION 26 SECTIONS OF THE CONTRACT DOCUMENTS FOR ADDITIONAL ELECTRICAL REQUIREMENTS.

V. PREPARE COORDINATION DRAWINGS PRIOR TO INSTALLATION OR ROUGH-IN OF EQUIPMENT, SYSTEMS, DEVICES, AND RACEWAY. RETAIN COORDINATION DRAWINGS AT JOBSITE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

W. REFER TO THE RESPONSIBILITY MATRIX ON THIS DRAWING FOR LOW VOLTAGE SYSTEM REQUIREMENTS.

LIGHTING PLAN GENERAL NOTES

A. VERIFY THE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT WITH THE OWNER AND ARCHITECT PRIOR TO INSTALLATION.

B. VERIFY ALL ELECTRICAL INSTALLATIONS WITH LOCAL CODES PRIOR TO INSTALLATION.

C. MINIMUM CONDUIT SIZE SHALL BE 1/2".

D. ALL CONDUCTORS SHALL BE COPPER AND AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED IN EACH CONDUIT.

E. ALL LIGHTING CONTROLS SHALL BE IN COMPLIANCE WITH IECC 2015.

F. THE CONTRACTOR SHALL FURNISH A POWER PACK / RELAY FOR EACH ZONE OF LIGHTING CONTROLLED THROUGH THE LIGHTING CONTROL SYSTEM. BASIS OF DESIGN IS NLIGHT NPP16 SERIES.

G. THE CONTRACTOR SHALL FURNISH A POWER PACK/RELAY CAPABLE OF 0-10V DIMMING FOR EACH ZONE OF LIGHTING CONTROLLED BY 0-10V DIMMING SWITCHES/DEVICES. BASIS OF DESIGN IS THE NPP16-D BY NLIGHT.

H. NOT ALL RELAYS, POWER PACKS, POWER SUPPLIES OR SENSORS REQUIRED FOR OPERATION ARE SHOWN. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT FOR A COMPLETE AND OPERATIONAL SYSTEM.

I. UON. WHERE SHOWN, THE DAYLIGHT HARVESTING SENSOR SHALL CONTROL THE ZONE NEAREST THE WINDOWS.

J. ALL LIGHTING CONTROL PANELS SHALL BE LOCATED IN ELECTRICAL PANEL ROOMS. THEIR LOCATIONS SHALL BE NOTED ON THE AS BUILDS.

K. BASIS OF DESIGN FOR THE LIGHTING CONTROL SYSTEM IS NLIGHT BY ACUITY. ANY SUBSTITUTIONS SHALL BE PRE APPROVED WITH 10 WORKING DAY PRIORS, CONSISTING OF CUT SHEETS AND LAYOUT DRAWINGS OF THE CONTROL SYSTEM.

L. SEE E-01 FOR ELECTRICAL SYMBOL LEGEND.

M. SEE ARCH RCP FOR FINAL LUMINAIRE LOCATIONS.

N. SINGLE-FACE EXIT SIGNS ARE TYPE AS SCHEDULED, UON.
DOUBLE-FACE EXIT SIGNS ARE TYPE AS SCHEDULED, UON.
EXIT SIGNS SHALL BE UNSWITCHED, UON.

O. COORDINATE ELECTRICAL WORK WITH ARCHITECT, CIVIL, STRUCTURAL, MECHANICAL, AND PLUMBING SO AS TO AVOID INTERFERENCE WITH OR COMPROMISE OF OTHER SYSTEMS.

P. WHERE EXIT SIGNS AND EMERGENCY EGRESS LUMINAIRES ARE NOT SHOWN, PROVIDE EXIT SIGNS AND EMERGENCY EGRESS LUMINAIRES PER NFPA 101 LIFE SAFETY CODE.

Q. GENERALLY, CONNECT EVERY OTHER LIGHT IN CORRIDORS TO EMERGENCY POWER FOR ILLUMINATION PER NFPA 101 LIFE SAFETY CODE. WHERE FACILITY HAS NO EMERGENCY OR LIFE SAFETY BRANCH ELECTRICAL DISTRIBUTION SYSTEMS, 'EMERGENCY POWER' SHALL BE ACCOMPLISHED BY FACTORY-INSTALLED BATTERY PACKS AND EMERGENCY DRIVERS INTERGRAL TO DESIGNATED LUMINAIRES.

R. CONNECT AT LEAST ONE LIGHT IN WORK AREAS, AND SIMILAR MULTI-OCCUPANT AREAS TO EMERGENCY POWER. WHERE FACILITY HAS NO EMERGENCY OR LIFE SAFETY BRANCH ELECTRICAL DISTRIBUTION SYSTEMS, 'EMERGENCY POWER' SHALL BE ACCOMPLISHED BY FACTORY-INSTALLED BATTERY PACKS AND EMERGENCY DRIVERS INTERGRAL TO DESIGNATED LUMINAIRES. CONNECT ADDITIONAL LIGHTS TO EMERGENCY POWER PER NFPA 101 LIFE SAFETY CODE. PROVIDE A UL924-LISTED AUXILIARY LOAD CONTROL RELAY (ALCR) FOR CONTROL OF EMERGENCY LIGHTING IN EACH ROOM; SEE ELECTRICAL SCHEMATICS.

POWER AND MECHANICAL POWER AND SPECIAL SYSTEMS GENERAL NOTES

A. SEE E-01 FOR ELECTRICAL SYMBOL LEGEND.

B. MOUNT RCPTS 18" AFF UON. VERIFY HEIGHT OF DEVICES WITH ARCH DRAWINGS. COORD OUTLET & RCPT LOCATIONS W/MILLWORK, CASEWORK, ETC.

C. MOUNT RCPTS ABOVE CONTERTOPS HORIZONTALLY W/GROUND PIN TO THE LEFT. SEE ARCH DETAIL & ELEVATIONS.

D. LOCATE DISCONNECT SWITCHES FOR EQUIPMENT AND MECHANICAL SYSTEMS ADJACENT TO, BUT SEPARATE FROM, EQUIPMENT SERVED. PROVIDE SECURELY-ANCHORED METAL FRAMING PER DIV 26 SECTION "METAL FRAMING AND SUPPORTS".

E. MOTOR STARTERS, CONTROL PANELS, MOTORS, AND VFD'S ARE FURNISHED BY DIV 23 AND INSTALLED BY DIV 26, UON. RACEWAY, WIRING, & CONNECTIONS ARE PROVIDED BY DIV 26, UON.

F. MAX OF 6 RCPTS PER 20A, 120V CKT FOR GENERAL PURPOSE OUTLETS.

G. PROVIDE CONNECTIONS AND HOMERUNS FOR EQUIPMENT REQUIRING POWER AS INDICATED ON MECH, PLBG, ARCH, CIVIL AND LANDSCAPE, DRAWINGS AND SPECIFICATIONS.

H. VERIFY THE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.

I. ALL RECEPTACLES WITHIN 6' OF A SINK SHALL BE GFI TYPE.

J. MINIMUM CONDUIT SIZE FOR ALL ABOVE GRADE CONDUIT SHALL BE 1/2". MINIMUM CONDUIT SIZE FOR ALL BELOW GRADE CONDUIT SHALL BE 1".

K. ALL CONDUCTORS SHALL BE COPPER AND AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED IN EACH CONDUIT.

L. PROVIDE PULLSTRING IN ALL EMPTY CONDUITS.

M. ALL GROUNDING SHALL BE PROVIDED PER NEC.

N. THE ELECTRICAL CONTRACTOR SHALL FIELD VERIFY THE EXACT POWER REQUIREMENTS FOR OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN. TERMINATE AS DIRECTED BY EQUIPMENT NAME PLATES. COORDINATE EXACT LOCATION FOR INSTALLATIONS WITH OWNER PRIOR TO ROUGH-IN.

Q. VERIFY THE EXACT LOCATION OF ALL ELECTRICAL EQUIPMENT WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.

R. VERIFY ALL ELECTRICAL INSTALLATIONS WITH LOCAL CODES AND STANDARDS PRIOR TO INSTALLATION.

S. ALL FIRE ALARM INSTALLATION AND SMOKE DETECTION SHALL BE DONE IN ACCORDANCE WITH THE NFPA, ADA AND ALL OTHER APPLICABLE LOCAL,STATE AND FEDERAL LAWS, CODES AND ORDINANCES. THE FIRE ALARM CONTRACTOR SHALL HAVE A NICET IV DESIGNER ON STAFF AND SUBMIT A COMPLETE SET OF FIRE ALARM INSTALLATION DRAWINGS TO THE LOCAL AUTHORITY HAVING JURISDICTION (FIRE MARSHAL) FOR APPROVAL PRIOR TO BEGINNING ANY CONSTRUCTION.

T. FIRE ALARM DEVICE LOCATIONS SHOWN ARE FOR INFORMATION ONLY. THE FIRE ALARM CONTRACTOR SHALL DESIGN AND INSTALL AN ADDRESSABLE FIRE ALARM SYSTEM TO MEET THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE, NFPA72, NFPA101, TAS, ADA AND ALL OTHER APPLICABLE CITY OF PLAINVIEW LAWS, REGULATIONS AND STANDARDS. THE CONTRACTOR SHALL HAVE A NICET LEVEL IV FIRE ALARM DESIGNER ON STAFF. SUBMIT A COPY OF FINAL DESIGN AND INSTALLATION FIRE ALARM DRAWINGS TO THE LOCAL AUTHORITY HAVING JURISDICTION (FIRE MARSHAL) AND THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING ANY INSTALLATION.

U. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

V. FURNISH A PLASTIC STOPPER COVER FOR EACH MANUAL PULL STATION.

W. THE FIRE ALARM SYSTEM SHALL HAVE THE CAPABILITIES OF FLASHING THE STROBES AFTER THE SYSTEM HAS BEEN SILENCED UNTIL SYSTEM RESET HAS OCCURRED.

X. MECHANICAL EQUIPMENT IS SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY EQUIPMENT COUNTS AND LOCATION WITH THE MECHANICAL PLANS.

Y. ALL FIRE ALARM SYSTEM CONDUCTORS SHALL BE INSTALLED IN RED CONDUIT.

Z. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT, CONDUIT, WIRE AND PROGRAMMING REQUIRED TO INTEGRATE THE NEW FIRE ALARM DEVICES WITH THE EXISTING SYSTEM. THE EXISTING SYSTEM IS IN THE PFC SERIES BY POTTER.

AA. THERE SHALL BE NO J-HOOKS INSTALLED IN AREAS OPEN TO DECK OR WITHOUT AN ACCESSIBLE CEILING. THESE AREAS SHALL BE RUN IN CONDUIT.

AB. FIRETROL HOLDS THE CURRENT FIRE ALARM SYSTEM MAINTENANCE CONTRACT WITH THE COUNTY. THE EXISTING SYSTEM IN BUILDING A, AND THE NEW SYSTEM IN BUILDING B SHALL BE INSTALLED AND MAINTAINED BY THEM.

DEMOLITION PLAN GENERAL NOTES

A. SEE E-01 FOR ELECTRICAL SYMBOL LEGEND.

B. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

C. VERIFY ALL ELECTRICAL EQUIPMENT AT THE JOBSITE PRIOR TO DEMOLITION.

D. COORDINATE ALL DEMOLITION REQUIREMENTS AT THE JOBSITE WITH THE ARCHITECTURAL DEMOLITION PLAN.

E. COORDINATE THE EXACT LOCATION OF ALL BOXES AND CONDUIT TO REMAIN.

F. VERIFY ALL ELECTRICAL PANEL CONNECTIONS BEING RELOCATED IN AREAS TO BE DEMOLISHED.

G. ALL ELECTRICAL DEVICES SHOWN DASHED, ON DASHED WALLS, OR NOTED TO BE DEMOED ALONG WITH ALL WIRING AND CONDUIT ASSOCIATED WITH THE DEVICE SHALL BE REMOVED BACK TO IT'S POINT OF ORIGIN UNLESS NOTED OTHERWISE.

H. THE OWNER HAS FIRST RIGHT OF SALVAGE FOR ALL EXISTING LIGHT FIXTURES AND LENSES. IF THEY DECIDE TO SALVAGE THEM, THE FIXTURES SHALL BE CAREFULLY REMOVED AND STORED AS DIRECTED BY THE OWNER.

I. THE CONTRACTOR SHALL DEMO ALL CONDUIT, WIRE AND DISCONNECTS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN DEMOED ON THE MECHANICAL/PLUMBING DRAWINGS. ALL CONDUIT AND WIRE SHALL BE DEMOED TO IT'S SOURCE.

J. THE ELECTRICAL WIRING DEVICES SHOWN ON THIS DRAWING WERE TAKEN FROM AS BUILDS AND A CASUAL FIELD OBSERVATION. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND NUMBER OF DEVICES TO BE DEMOLISHED PRIOR TO BID.

K. VERIFY ALL ELECTRICAL PANEL CONNECTIONS BEING REMOVED IN AREAS TO BE DEMOLISHED. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL PANEL CONNECTIONS PRIOR TO PANEL REMOVAL.

1

RESPONSIBILITY MATRIX	
TASK	RESPONSIBILITY
ACCESS CONTROL DESIGN (CARD READERS, ETC.)	CONTRACTOR
ACCESS CONTROL SYSTEM INSTALLATION (CARD READERS, ETC.)	CONTRACTOR
ACCESS CONTROL SYSTEM PATHWAYS AND ROUGH IN (CARD READERS, ETC.)	CONTRACTOR
ACCESS CONTROL SYSTEM POWER (CARD READERS, ETC.)	CONTRACTOR
WRAPs INSTALLATION	OWNER
WRAPs SYSTEM PATHWAYS AND ROUGH IN	CONTRACTOR
SECURITY CAMERA SYSTEM INSTALLATION	OWNER
SECURITY CAMERA SYSTEM PATHWAYS AND ROUGH IN (INCLUDING ANY POWER REQUIRED)	CONTRACTOR
COMMUNICATION CABLE (CAMERA, DATA SYSTEMS) PURCHASE AND INSTALLATION	OWNER
COMMUNICATION CABLE (CARD READER SYSTEMS) PURCHASE AND INSTALLATION	CONTRACTOR

ABBREVIATION

A, AMP	AMPERES
AC	ALTERNATING CURRENT, AIR COMPRESSOR
ACC	AIR COOLED CHILLER
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERES INTERRUPTING CAPACITY
AL	ALUMINUM
ARCH	ARCHITECT, ARCHITECTURAL
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
B	BOILER
BF	BALLAST FACTOR
BAS	BUILDING AUTOMATION SYSTEM
BCSC	BRANCH CKT SELECTION CURRENT
BKR	BREAKER
BLDG	BUILDING
CL	CENTERLINE
C	CONDUIT
CAFSS	CLEAN AGENT FIRE SUPPRESSION SYSTEM
CATV	CABLE TELEVISION SYSTEM
CB	CIRCUIT BREAKER
CH	CHILLER
CKT	CIRCUIT
CLG	CEILING
CMH	COMMUNICATIONS MANHOLE
COAX	COAXIAL CABLE
CONT	CONTINUATION
COORD	COORDINATION/COORDINATE
CP	CONTROL PANEL
CPE	CENTERPOINT ENERGY
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CTR	CONTROLLER
CU	COPPER, CONDENSING UNIT
CV	CONSTANT VOLUME TERMINAL UNIT
CWXX	COORDINATE WITH DIV 'XX' & SUPPLIER FOR FINAL LOCATION, QUANTITY, ELECTRICAL ROUGH-IN REQUIREMENTS, AND METHOD OF CONNECTION.
DATACOM	DATA AND/OR COMMUNICATION
DB	DUCT BANK
DC	DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL
DEMO	DEMOLITION
DIV	DIVISION
DPDT	DOUBLE POLE, DOUBLE THROW
DPST	DOUBLE POLE, SINGLE THROW
DWG	DRAWING
DWP	DOMESTIC WATER PUMP
E, EM	EMERGENCY
EA	EACH
EC	EMPTY CONDUIT
EDF	ELECTRIC DRINKING FOUNTAIN
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EGP	ELECTRONIC GRADE PANEL
ELS	EMERGENCY LIFE SAFETY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRIC METALLIC TUBING
E.O.	ELECTRICALLY OPERATED
EPR	ETHYLENE-PROPYLENE RUBBER
EIWH	ELECTRIC INSTANT WATER HEATER
EXIST, EX (E)	EXISTING
FA	FIRE DETECTION AND ALARM SYSTEM
FAP	FIRE ALARM ANNUNCIATION PANEL
FACP	FIRE ALARM CONTROL PANEL
FCU	FAN-COIL UNIT
FCV	FAN-CONSTANT VOLUME TERMINALUNIT
FLA	FULL LOAD AMPS
FO	FIBER OPTIC(S)
FP	FIRE PUMP
FSD	FIRE SMOKE DAMPER
FTL	FEED-THROUGH LUGS
FUT	FUTURE
FVNR	FULL VOLTAGE NON-REVERSING
FVV	FAN-VARIABLE VOLUME TERMINAL UNIT
GAGP	GEAR AUXILIARY OIL PUMP
GEN	GENERATOR
GFI / GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFEP	GROUND FAULT EQUIPMENT PROTECTION
G, GND	GROUND
GRAP	GENERATOR REMOTE ANNUNCIATOR PANEL
H	HOT
HID	HIGH INTENSITY DISCHARGE
HMT	HARMONIC MITIGATING TRANSFORMER
HOA	HAND OFF AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HRG	HIGH RESISTANCE GROUND
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
HWC	HOT WATER CIRCULATING PUMP
I/O	INPUT/OUTPUT
IG	ISOLATED GROUND
IS	INSTANT START
JB	JUNCTION BOX
JP	JOCKEY PUMP
K	KILO, THOUSAND
KA	KILOAMPERES
KAIC	THOUSAND AMPERES INTERRUPTING CAPACITY
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPERES
KW	KILOWATT
KWH	KILOWATT-HOUR
LTG	LIGHTING
LC	LIGHTING CONTACTOR
LCP	LIGHTING CONTROL PANEL
LED	LIGHT EMITTING DIODE
LP	LIGHTNING PROTECTION
LR	LOCAL-REMOTE
LRA	LOCKED ROTOR AMPERES
LS	LONG TIME, SHORT TIME
LSI	LONG TIME, SHORT TIME, INSTANTANEOUS
LSG	LONG TIME, SHORT TIME, GROUND
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND
LI	LONG TIME, INSTANTANEOUS
LIG	LONG TIME, INSTANTANEOUS, GROUND
mA	MILLIAMPS
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MECH	MECHANICAL
MFAP	MAIN FIRE DETECTION & ALARM PANEL
MFR	MANUFACTURER
MH	METAL HALIDE
MLO	MAIN LUGS ONLY
MOV	METAL OXIDE VARISTOR
MTD	MOUNTED
MV-90	MEDIUM VOLTAGE CABLE 90 C, 105C
MVA	MEGA VOLT AMPERES
MW	MEGA WATTS
N, NEU	NEUTRAL
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NIC	NOT IN CONTRACT
NIS	NOT IN SCOPE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
#	NUMBER
NTS	NOT TO SCALE
OAS	OR ACCEPTED SUBSTITUTION
OCPD	OVERCURRENT PROTECTIVE DEVICE
OC	ON CENTER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OH	OVERHEAD
OL	OVERLOAD
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX
PDU	POWER DISTRIBUTION UNIT
PF	POWER FACTOR
PFB	PROVISIONS FOR BREAKER
PFCC	POWER FACTOR CORRECTION CAPACITOR
PH	PHASE
PIR	PASSIVE INFRARED
PLBG	PLUMBING
PLC	PROGRAMMABLE LOGIC CONTROLLER
PMH	POWER MANHOLE
PMT	PAD MOUNT
PNL	PANELBOARD
PS	PROGRAMMED START
PVC	POLYVINYL CHLORIDE
PVC-RGS	PVC COATED RIGID GALVANIZED STEEL CONDUIT
RAC	RIGID ALUMINUM CONDUIT
RCPT, RECPT	RECEPTACLE
RE	REFER TO, REGARDING, REFERENCE
RFAP	REMOTE FIRE DETECTION & ALARM PANEL
RGS	RIGID GALVANIZED STEEL CONDUIT
RL	RAISE-LOWER
RMS	ROOT MEAN SQUARE
RS	RAPID START
RTD	RESISTANCE TEMPERATURE DETECTOR
SB	SMARTBOARD
SCH	SCHEDULE
SF	SUPPLY FAN
SHLD	SHIELDED
SP	SUMP PUMP
SPD	SURGE PROTECTION DEVICE
SPDT	SINGLE POLE, DOUBLE THROW
SPST	SINGLE POLE, SINGLE THROW
SPF	STAIRWELL PRESSURIZATION FAN
SS	STAINLESS STEEL
SSOL	SOLID STATE OVER LOAD
STD	STANDARD
STP	SHIELDED TWISTED PAIR
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
SYNCH	SYNCHRONOUS
TELECOM	TELECOMMUNICATIONS
TSP	TWISTED SHIELDED PAIR
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
UTIL	UTILITY
V	VOLTS
VA	VOLT AMPERES
VAC	VOLTS ALTERNATING CURRECT
VAR	VOLT AMPERES REACTIVE
VDC	VOLTS DIRECT CURRENT
VFD	VARIABLE FREQUENCY DRIVE
VP	VACUUM PUMP
VT	VOLTAGE TRANSFORMER
VV	VARIABLE VOLUME TERMINAL UNIT
W	WIRE
W/	WITH
WCR	WITHSTAND CURRENT RATING
WG	WIRE GUARD
WH	WATER HEATER
WP	WEATHERPROOF
XFMR	TRANSFORMER
Y	WYE
Z	IMPEDANCE
Δ	DELTA

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consultant team

PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

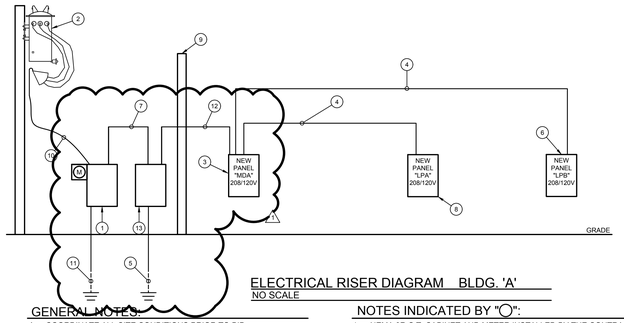
THE STATE OF TEXAS HALE COUNTY

00 |01.09.2025 |100% CONSTRUCTION DOCUMENTS
1 |01.23.2025 |ADDENDUM NO. 01

GENERAL NOTES AND ABBREVIATIONS - ELECTRICAL

E-00

Project Number 2023-17



ELECTRICAL RISER DIAGRAM BLDG. 'A'
NO SCALE

GENERAL NOTES:

A. COORDINATE ALL SITE CONDITIONS PRIOR TO BID.

B. COORDINATE ALL ELECTRICAL UTILITY REQUIREMENTS WITH POWER COMPANY PRIOR TO BID.

C. ALL ELECTRICAL ITEMS TO BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL ORDINANCES AND CODES.

D. MINIMUM DEPTH FOR UNDERGROUND CONDUIT IS 30" BELOW FINISHED GRADE.

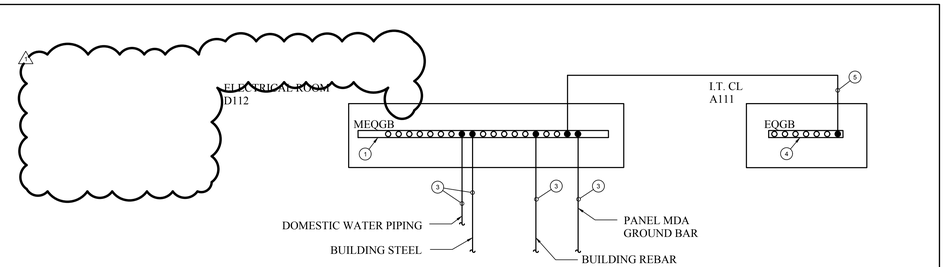
E. ALL TRENCHING AND BACK FILLING BY THE ELECTRICAL CONTRACTOR.

F. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC.

G. ALL CONDUCTORS SHALL BE COPPER.

NOTES INDICATED BY "◯":

1. NEMA 3R C.T. CABINET AND METER INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE UTILITY COMPANY.
2. 208Y/120V, THREE PHASE SECONDARY POLE MOUNTED TRANSFORMER BY UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION PRIOR TO BID.
3. 208Y/120V, 800A PANEL MDA. THE CONTRACTOR SHALL FURNISH A METER FOR THIS PANEL EQUAL TO THE IEM3565 BY SQUARE D. THE METER SHALL BE MOUNTED REMOTELY IN AN MMU-1-04-01-D-N-2 ENCLOSURE.
4. 3-250MCM PHASE CONDUCTORS, 1-250MCM NEUTRAL CONDUCTOR AND A #4 GROUND IN A 2-1/2" CONDUIT.
5. 3/0 GROUND CONDUCTOR. REFER TO SERVICE GROUNDING DETAIL.
6. CONTRACTOR FURNISHED 250A MAIN LUG ONLY PANEL LPB.
7. 3 PARALLEL RUNS OF 3-300 MCM PHASE CONDUCTORS AND 1-300 MCM NEUTRAL CONDUCTOR IN 3" CONDUIT.
8. CONTRACTOR FURNISHED 250A MAIN LUG ONLY PANEL LPA.
9. EXTERIOR BUILDING WALL. REFER TO THE SITE PLAN FOR THE APPROXIMATE LOCATION.
10. UTILITY FURNISHED OVERHEAD FEEDER.
11. GROUND CONDUCTOR SIZED AND INSTALLED AS REQUIRED BY THE UTILITY.
12. 3 PARALLEL RUNS OF 3-300 MCM PHASE CONDUCTORS, 1-300 MCM NEUTRAL CONDUCTOR AND A 1/0 GROUND CONDUCTOR IN 3" CONDUIT.
13. 208Y/120V, THREE PHASE, 800A, SERVICE ENTRANCE RATED, FUSED DISCONNECT IN A NEMA 3R ENCLOSURE. FURNISH 3 800A TIME DELAY FUSES AS REQUIRED.



GROUND RISER DETAIL
NO SCALE

LEGEND
○ BOLTED CONNECTION
● EXOTHERMIC WELD

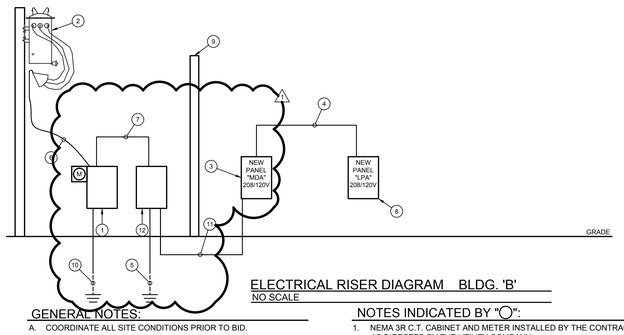
NOTES INDICATED BY "◯":

1. SIZE AS REQUIRED FOR EQUIPMENT GROUNDS IN ADDITION TO WHAT IS SHOWN.
2. 2/0 COPPER GROUND CONDUCTOR.
3. 3/0 CU.
4. 1/4" D x 4" W x 24" L
5. 4/0 COPPER GROUND CONDUCTOR

ELECTRICAL GROUNDING RISER BUILDING A
NO SCALE

GENERAL NOTES:

A. GROUNDING RISER FOR THE BUILDING. THIS IS IN ADDITION TO THE REQUIREMENTS IN THE SERVICE GROUNDING DETAIL FOR THIS BUILDING.



ELECTRICAL RISER DIAGRAM BLDG. 'B'
NO SCALE

GENERAL NOTES:

A. COORDINATE ALL SITE CONDITIONS PRIOR TO BID.

B. COORDINATE ALL ELECTRICAL UTILITY REQUIREMENTS WITH POWER COMPANY PRIOR TO BID.

C. ALL ELECTRICAL ITEMS TO BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL LOCAL ORDINANCES AND CODES.

D. MINIMUM DEPTH FOR UNDERGROUND CONDUIT IS 30" BELOW FINISHED GRADE.

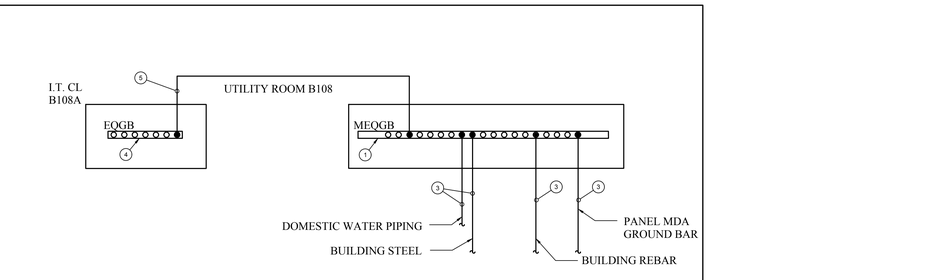
E. ALL TRENCHING AND BACK FILLING BY THE ELECTRICAL CONTRACTOR.

F. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC.

G. ALL CONDUCTORS SHALL BE COPPER.

NOTES INDICATED BY "◯":

1. NEMA 3R C.T. CABINET AND METER INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE UTILITY COMPANY.
2. 208Y/120V, THREE PHASE SECONDARY POLE MOUNTED TRANSFORMER BY UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION PRIOR TO BID.
3. 208Y/120V, 300A PANEL MDA. THE CONTRACTOR SHALL FURNISH A METER FOR THIS PANEL EQUAL TO THE IEM3565 SERIES BY SQUARE D. THE METER SHALL BE MOUNTED REMOTELY IN AN MMU-1-04-01-D-N-2 ENCLOSURE.
4. 3-250MCM PHASE CONDUCTORS, 1-250MCM NEUTRAL CONDUCTOR AND A #4 GROUND IN A 2-1/2" CONDUIT.
5. 3/0 GROUND CONDUCTOR. REFER TO SERVICE GROUNDING DETAIL.
6. UTILITY FURNISHED OVERHEAD FEEDER.
7. 3-350 MCM PHASE CONDUCTORS AND 1-350 MCM NEUTRAL CONDUCTOR IN A 3" CONDUIT.
8. CONTRACTOR FURNISHED 250A MAIN LUG ONLY PANEL LPA.
9. EXTERIOR BUILDING WALL. REFER TO THE SITE PLAN FOR THE APPROXIMATE LOCATION.
10. GROUND CONDUCTOR SIZED AND INSTALLED AS REQUIRED BY THE UTILITY.
11. 3-350 MCM PHASE CONDUCTORS, 1-350 MCM NEUTRAL CONDUCTOR AND A #4 GROUND CONDUCTOR IN A 3" CONDUIT.
12. 208Y/120V, 300A, THREE PHASE, SERVICE ENTRANCE RATED, FUSED DISCONNECT IN A NEMA 3R ENCLOSURE. FURNISH 3 300A TIME DELAY FUSES AS REQUIRED.



GROUND RISER DETAIL
NO SCALE

LEGEND
○ BOLTED CONNECTION
● EXOTHERMIC WELD

NOTES INDICATED BY "◯":

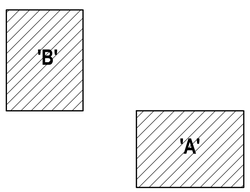
1. SIZE AS REQUIRED FOR EQUIPMENT GROUNDS IN ADDITION TO WHAT IS SHOWN.
2. 2/0 COPPER GROUND CONDUCTOR.
3. 3/0 CU.
4. 1/4" D x 4" W x 24" L
5. 4/0 COPPER GROUND CONDUCTOR

ELECTRICAL GROUNDING RISER BUILDING B
NO SCALE

GENERAL NOTES:

A. GROUNDING RISER FOR THE BUILDING. THIS IS IN ADDITION TO THE REQUIREMENTS IN THE SERVICE GROUNDING DETAIL FOR THIS BUILDING.

KEY PLAN



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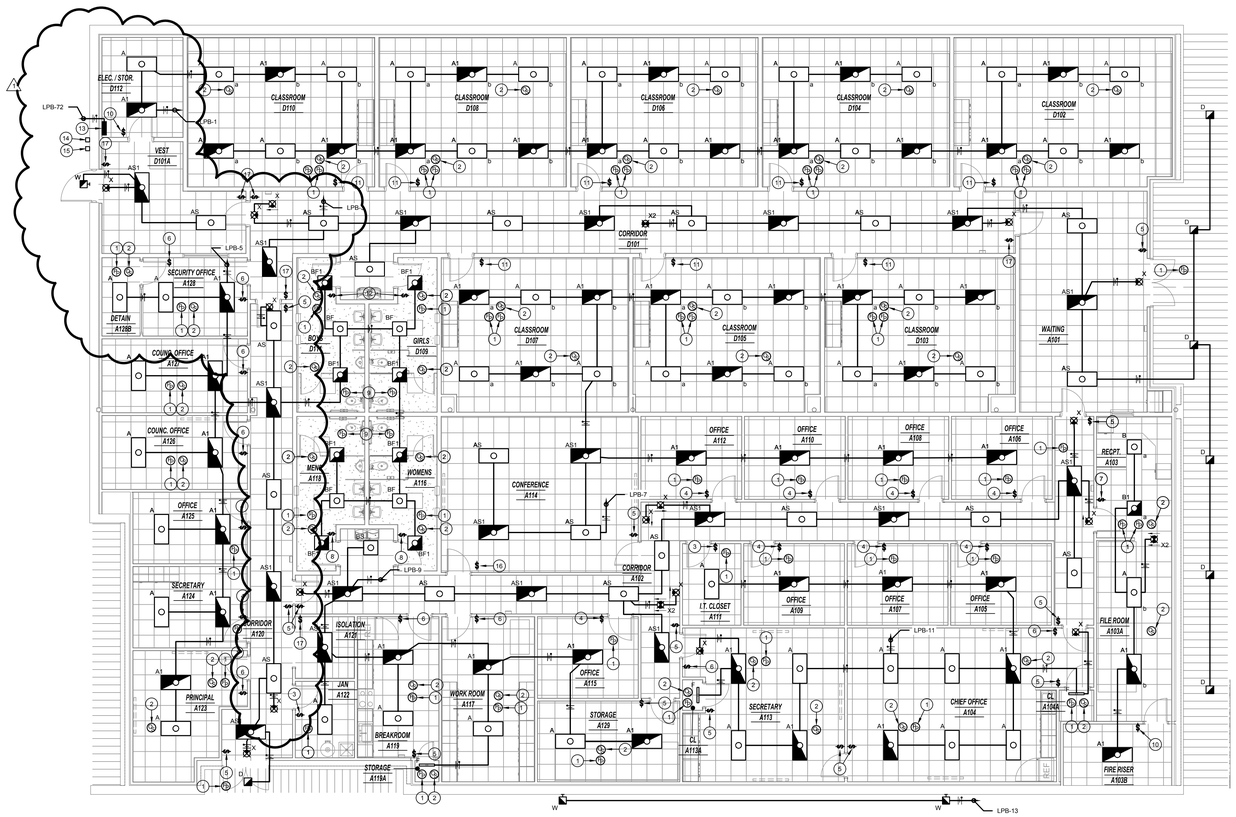
ONE LINE - ELECTRICAL
BLDG. 'A' AND 'B'

E-2.0

Project Number 2023-17



E1 **FLOOR PLAN - ELECTRICAL LIGHTING - BLDG. 'A'**
1/8" = 1'-0"

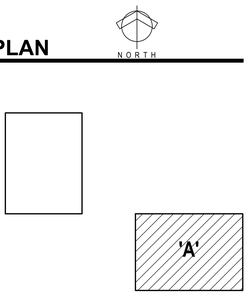
GENERAL NOTES:

A. REFER TO DRAWINGS E-00 AND E-01 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

NOTES INDICATED BY "⬡":

1. CONTRACTOR FURNISHED POWER PACK. BASIS OF DESIGN IS NLIGHT NPP16 SERIES
2. CONTRACTOR FURNISHED CEILING MOUNTED OCCUPANCY SENSOR. BASIS OF DESIGN IS NLIGHT NCM-PDT SERIES.
3. CONTRACTOR FURNISHED WALL MOUNTED OCCUPANCY SENSOR SWITCH. BASIS OF DESIGN IS NWSX-PDT-LV.
4. CONTRACTOR FURNISHED WALL MOUNTED OCCUPANCY SENSOR SWITCH WITH DIMMING. BASIS OF DESIGN IS NWSX-PDT-LV-DX.
5. CONTRACTOR FURNISHED ON/OFF SWITCH. BASIS OF DESIGN IS NLIGHT NPODMA.
6. CONTRACTOR FURNISHED ON/OFF SWITCH WITH DIMMING. BASIS OF DESIGN IS NLIGHT NPODMA-DX.
7. CONTRACTOR FURNISHED 2 SCENE CONTROL SWITCH WITH DIMMING. BASIS OF DESIGN IS NLIGHT NPODMA-2S-DX.
8. CONTRACTOR FURNISHED ON/OFF SWITCH TO CONTROL LIGHTS AND EXHAUST FAN. BASIS OF DESIGN IS NLIGHT NPODMA-2P-WH.
9. CONTRACTOR FURNISHED POWER PACK FOR EXHAUST FAN CONTROL. BASIS OF DESIGN IS NLIGHT NPP20 SERIES.
10. CONTRACTOR FURNISHED LINE VOLTAGE SWITCH.
11. CONTRACTOR FURNISHED 2 SCENE CONTROL SWITCH WITH DIMMING. BASIS OF DESIGN IS NLIGHT NPODMA-2S-DX. WALL SWITCH SHALL BE INSTALLED IN A POLYCARBONATE LOCKABLE COVER.
12. CONTRACTOR FURNISHED ON/OFF SWITCH TO CONTROL LIGHTS AND EXHAUST FAN. BASIS OF DESIGN IS NLIGHT NPODMA-2P-WH. WALL SWITCH SHALL BE INSTALLED IN A POLYCARBONATE LOCKABLE COVER.
13. CONTRACTOR FURNISHED LIGHTING CONTROL HEAD END UNIT. BASIS OF DESIGN IS NLIGHT NECY-MVOLT-BAC-ENC-GFXK.
14. CONTRACTOR FURNISHED WIRELESS ANTENNA MOUNTED VERTICALLY WITH A CLEAR VIEW TO WIRELESS EXTERIOR FIXTURE. BASIS OF DESIGN IS NLIGHT NECYD-NLTAIR-G2.
15. CONTRACTOR FUNISHED PHOTOCELL MOUNTED ON ROOF FACING NORTH. BASIS OF DESIGN IS NLIGHT ARPA-PC.
16. CONTRACTOR FURNISHED 4 SCENE CONTROL SWITCH WITH DIMMING. BASIS OF DESIGN IS NLIGHT NPODMA-4S-DX.
17. CONTRACTOR FURNISHED ON/OFF KEYED SWITCH. BASIS OF DESIGN IS NLIGHT NPOD-KEY-STS. FACEPLATE SHALL BE SECURED WITH TAMPER PROOF SCREWS.

KEY PLAN



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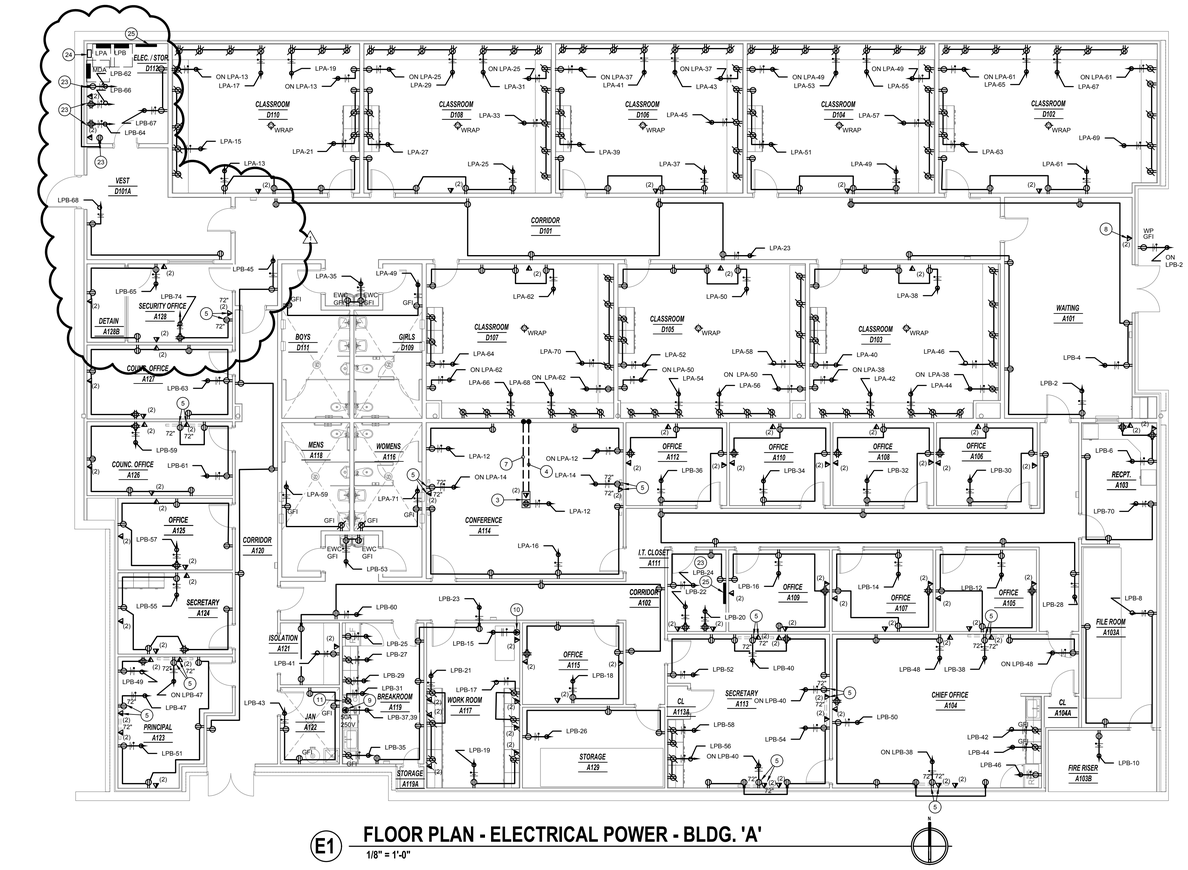
FLOOR PLAN - ELECTRICAL
BLDG. 'A'

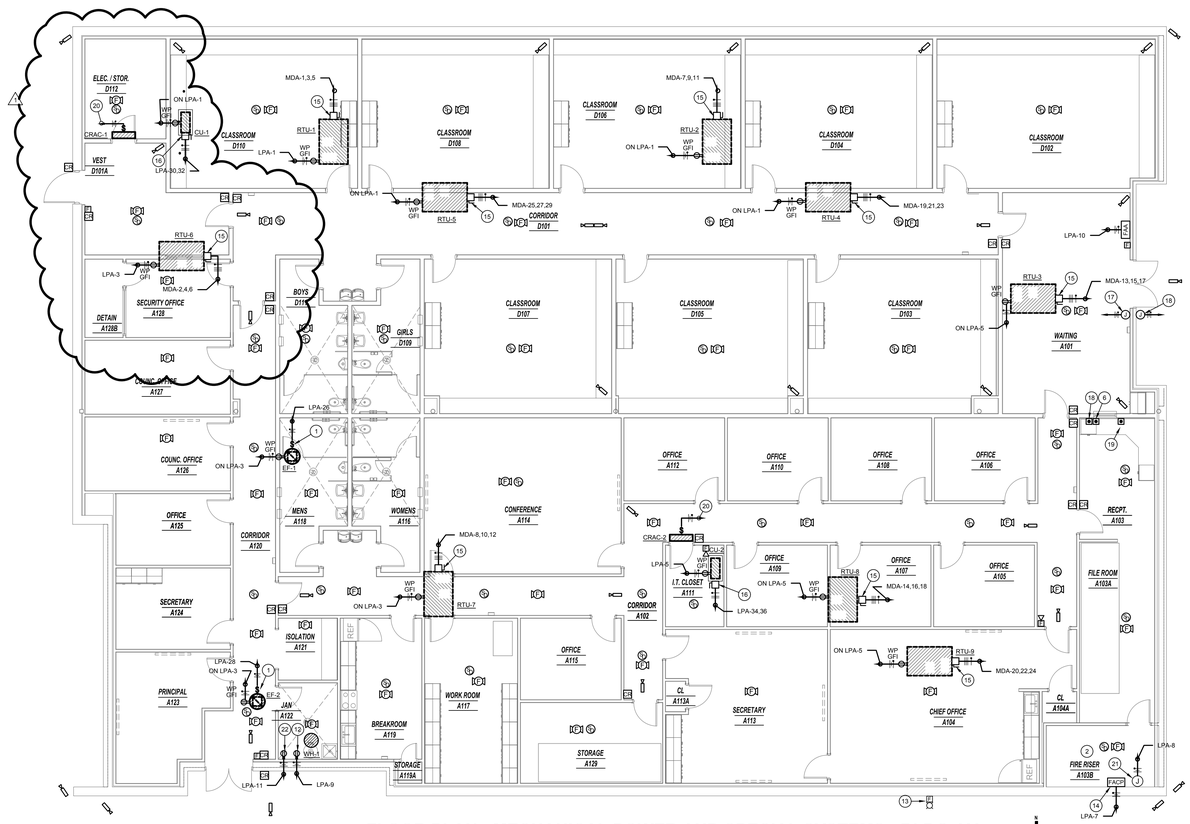
E-101.1

Project Number 2023-17



E1 FLOOR PLAN - ELECTRICAL POWER - BLDG. 'A'

1/8" = 1'-0"



E2 FLOOR PLAN - MECHANICAL POWER AND SPECIAL SYSTEMS - BLDG. 'A'

1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO DRAWINGS E-00 AND E-01 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

NOTES INDICATED BY "⬡":

1. CONTRACTOR FURNISHED HP RATED SNAP SWITCH IN NEMA 3R ENCLOSURE FOR DISCONNECTING MEANS.
2. THE FIRE ALARM SYSTEM SHALL BE CIRCUITED TO THE TAMPER/FLOW SWITCH(ES) LOCATED IN THIS ROOM AS REQUIRED.
3. CONTRACTOR FURNISHED FLOOR BOX. BASIS OF DESIGN IS LEGRAND EFB45S-OG.COORDINATE THE EXACT LOCATION WITH THE ARCHITECT PRIOR TO ROUGH IN. PROVIDE THE STEEL DARK BRONZE OPTION FOR THE FLOOR BOX COVER (EFB45BTB2).
4. CONTRACTOR FURNISHED 1-1/4" CONDUIT FOR DATA. THE CONDUIT SHALL BE STUBBED 6" ABOVE ACCESSIBLE CEILING.
5. CONTRACTOR FURNISHED RECEPTACLE AND DATA FOR DISPLAY MONITOR. COORDINATE EXACT LOCATION AND HEIGHT WITH ARCHITECT PRIOR TO ROUGH IN.
6. CONTRACTOR FURNISHED EMERGENCY PUSH BUTTON. THE CONTRACTOR SHALL FURNISH A CONDUIT PATHWAY FROM THIS LOCATION TO THE IT CLOSET A111.
7. CONTRACTOR FURNISHED 1" CONDUIT FOR POWER TO THE FLOOR BOX.
8. CONTRACTOR FURNISHED COMMUNICATION OUTLET FOR THE FIRE ALARM ANNUNCIATOR PANEL. FIELD COORDINATE THE EXACT LOCATION.
9. CONTRACTOR FURNISHED RECEPTACLE FOR THE RANGE. COORDINATE THE NEMA CONFIGURATION WITH THE OWNER FURNISHED EQUIPMENT.
10. CONTRACTOR FURNISHED RECEPTACLE FOR THE PRINTER. COORDINATE THE NEMA CONFIGURATION WITH THE OWNER FURNISHED EQUIPMENT.
11. CONTRACTOR FURNISHED RECEPTACLE FOR THE RANGE HOOD. COORDINATE THE EXACT LOCATION WITH THE ARCHITECTURAL DRAWINGS.
12. CONTRACTOR FURNISHED RECEPTACLE FOR THE RE-CIRCULATING PUMP.
13. EXISTING FIRE ALARM STROBE THE CONTRACTOR SHALL CIRCUIT THE STROBE TO THE FIRE ALARM SYSTEM AS REQUIRED.
14. EXISTING FIRE ALARM CONTROL PANEL. THE CONTRACTOR SHALL EXPAND THE SYSTEM TO MEET THE NEW SYSTEM REQUIREMENTS.
15. CONTRACTOR FURNISHED 60A, 3P, 600V NON-FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.
16. CONTRACTOR FURNISHED 30A, 2P, 600V NON-FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.
17. CONTRACTOR FURNISHED JUNCTION BOX AND ASSOCIATED 3/4" CONDUIT FOR A WALL MOUNTED DOOR RELEASE PUSH BUTTON. COORDINATE THE EXACT REQUIREMENTS WITH THE MANUFACTURER.
18. CONTRACTOR FURNISHED JUNCTION BOX FOR THE VIDEO INTERCOM SYSTEM PUSH BUTTON. FURNISH A 1" CONDUIT FROM THIS LOCATION TO I.T. CLOSET A111. FURNISH AN ADDITIONAL 1" CONDUIT FROM THIS LOCATION TO THE RECEPTION'S DESK IN A103. COORDINATE THE EXACT REQUIREMENTS WITH THE MANUFACTURER.
19. CONTRACTOR FURNISHED PUSH BUTTON TO RELEASE THE EXTERIOR DOOR INTO WAITING A101. FURNISH A 3/4" CONDUIT FROM THIS LOCATION TO THE DOOR CONTACTS. COORDINATE THE EXACT REQUIREMENTS WITH THE MANUFACTURER.
20. THE CONTRACTOR SHALL CIRCUIT THE INDOOR UNIT TO THE OUTDOOR UNIT AS REQUIRED. FURNISH A HORSEPOWER RATED SNAP SWITCH FOR DISCONNECTING MEANS.
21. CONTRACTOR FURNISHED JUNCTION BOX FOR THE TAMPER/FLOW SWITCH. FIELD COORDINATE THE EXACT LOCATION.
22. CONTRACTOR FURNISHED RECEPTACLE FOR THE WATER HEATER CONTROLS. FIELD COORDINATE THE EXACT LOCATION.
23. ⚠1 RECEPTACLES INDICATED ARE DESIGNATED FOR IT/COMMUNICATION USE. COORDINATE THE EXACT LOCATIONS WITH THE IT/COMMUNICATION SYSTEM INSTALLER.
24. CONTRACTOR FURNISHED METER ENCLOSURE. REFER TO THE RISER DIAGRAM ON DRAWING E-2.0 FOR ADDITIONAL INFORMATION.
25. CONTRACTOR FURNISHED GROUND BAR. REFER TO THE GROUNDING RISER FOR ADDITIONAL INFORMATION.

KEY PLAN

NORTH

'A'

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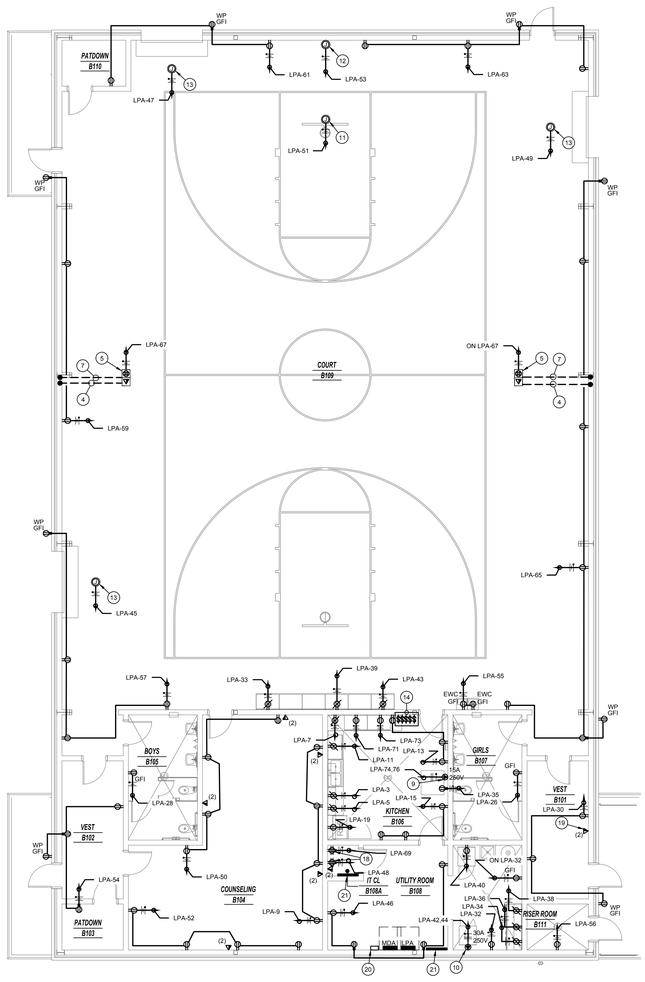
FLOOR PLAN - ELECTRICAL
BLDG. 'A'

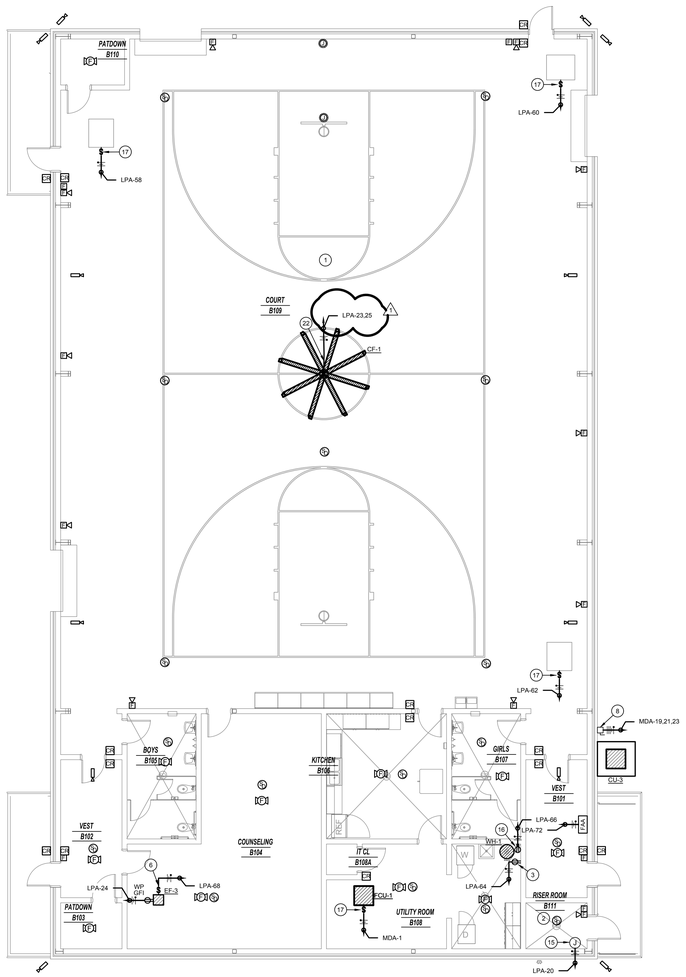
E-101.3

Project Number 2023-17



E1 **FLOOR PLAN - ELECTRICAL POWER - BLDG. 'B'**

1/8" = 1'-0"



E2 **FLOOR PLAN - MEHCANICAL POWER AND FIRE ALARM - BLDG. 'B'**

1/8" = 1'-0"

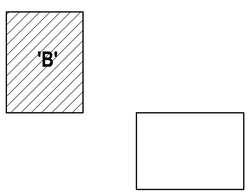
GENERAL NOTES:

A. REFER TO DRAWINGS E-00 AND E-01 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

NOTES INDICATED BY "⬡":

1. WITH THE EXCEPTION OF THE FIRE ALARM PULL STATIONS AND CARD READERS, ALL DEVICES IN THIS ROOM SHALL BE EQUIPPED WITH A WIRE GUARD.
2. THE FIRE ALARM SYSTEM SHALL BE CIRCUITED TO THE TAMPER/FLOW SWITCH(ES) LOCATED IN THIS ROOM AS REQUIRED.
3. CONTRACTOR FURNISHED RECEPTACLE FOR THE RE-CIRCULATING PUMP.
4. CONTRACTOR FURNISHED 1-1/4" CONDUIT FOR DATA. THE CONDUIT SHALL BE STUBBED 6" ABOVE ACCESSIBLE CEILING.
5. CONTRACTOR FURNISHED FLOOR BOX. BASIS OF DESIGN IS LEGRAND EFB45S-OG.COORDINATE THE EXACT LOCATION WITH THE ARCHITECT PRIOR TO ROUGH IN. PROVIDE THE STEEL DARK BRONZE OPTION FOR THE FLOOR BOX COVER (EF B45BTB2).
6. CONTRACTOR FURNISHED HP RATED SNAP SWITCH IN NEMA 3R ENCLOSURE FOR DISCONNECTING MEANS.
7. CONTRACTOR FURNISHED 1" CONDUIT FOR POWER TO THE FLOOR BOX.
8. CONTRACTOR FURNISHED 60A, 3P, 600V NON-FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.
9. CONTRACTOR FURNISHED RECEPTACLE FOR THE WARMING OVEN. RECEPTACLE BASIS OF DESIGN IS A NEMA 6-15R. COORDINATED THE EXACT REQUIREMENTS WITH THE OWNER PROVIDED CONTRACTOR INSTALLED EQUIPMENT.
10. CONTRACTOR FURNISHED RECEPTACLE FOR THE DRYER. COORDINATE THE NEMA CONFIGURATION WITH THE OWNER FURNISHED EQUIPMENT.
11. CONTRACTOR FURNISHED CEILING MOUNTED JUNCTION BOX FOR THE BASKETBALL GOAL. CONTRACTOR SHALL FURNISH A THREE POSITION HP RATED SNAP SWITCH IN THE KITCHEN FOR GOAL OPERATION. COORDINATE THE EXACT LOCATION WITH THE OWNER PRIOR TO ROUGH IN.
12. CONTRACTOR FURNISHED CEILING MOUNTED JUNCTION BOX FOR THE BACK STOP. CONTRACTOR SHALL FURNISH A THREE POSITION HP RATED SNAP SWITCH IN THE KITCHEN FOR BACK STOP OPERATION. COORDINATE THE EXACT LOCATION WITH THE OWNER PRIOR TO ROUGH IN.
13. CONTRACTOR FURNISHED CEILING MOUNTED JUNCTION BOX FOR THE OVERHEAD DOOR. CONTRACTOR SHALL FURNISH A THREE POSITION HP RATED SNAP SWITCH IN THE KITCHEN FOR DOOR OPERATION. COORDINATE THE EXACT LOCATION WITH THE OWNER PRIOR TO ROUGH IN.
14. CONTRACTOR FURNISHED HP RATED SNAP SWITCHES FOR KEYED NOTES 11,12, AND 13. COORDINATE EXACT LOCATIONS WITH THE OWNER PRIOR TO ROUGH-IN. THE CONTRACTOR SHALL FURNISH A PHENOLIC LABEL TO INDICATE WHAT EACH SWITCH CONTROLS.
15. CONTRACTOR FURNISHED JUNCTION BOX FOR THE TAMPER/FLOW SWITCH. FIELD COORDINATE THE EXACT LOCATION.
16. CONTRACTOR FURNISHED RECEPTACLE FOR THE WATER HEATER CONTROLS. FIELD COORDINATE THE EXACT LOCATION.
17. CONTRACTOR FURNISHED HP RATED SNAP SWITCH FOR DISCONNECTING MEANS.
18. RECEPTACLE FOR DATA RACK. COORDINATE EXACT LOCATION WITH IT/COMMUNICATION SYSTEM INSTALLER.
19. CONTRACTOR FURNISHED COMMUNICATION OUTLET FOR THE FIRE ALARM ANNUNCIATOR PANEL. FIELD COORDINATE THE EXACT LOCATION.
20. CONTRACTOR FURNISHED METER ENCLOSURE. REFER TO THE RISER DIAGRAM ON DRAWING E-2.0 FOR ADDITIONAL INFORMATION.
21. CONTRACTOR FURNISHED GROUND BAR. REFER TO THE GROUNDING RISER FOR ADDITIONAL INFORMATION.
22. THE BASIS OF DESIGN FOR FAN CF-1 HAS A VFD. CONTRACTOR TO FIELD COORDINATE THE EXACT LOCATION OF THE FAN AND VFD. FURNISH A 2P, 30A, NON FUSED DISCONNECT AS REQUIRED.

KEY PLAN



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PROJECT

HALE COUNTY ANNEX 3 - JJAEP

BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING

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PLAINVIEW TX. 79072

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HALE COUNTY

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FLOOR PLAN - ELECTRICAL
BLDG. 'B'

E-101.4

Project Number 2023-17

Existing?	Equipment Type	Service Type	Section	Area	Floor
New	Panel	Normal		_	01

Chambers Engineering Panel Schedule
This panel schedule is not to be used without the direct permission of Chambers Engineering

BUILDING NAME	BUILDING NUMBER	PANEL DESIGNATION	Section	HALE COUNTY JJAEP
BLDG. A	ANNEX 3	MDA (New)	1 of 1	

PREV PANEL No:	None	PREV NAME:	None	ROOM:	D112	Normal Panel	VOLTAGE:	208 / 120 Volt	Three Phase	4 wire	Wye
LOC:	BLDG. A - 1st. Floor			Mounting	Surface	12 CKT Ø Ø Ø 18 CKT	800 A	MAIN BREAKER	100% NEUTRAL		42 KAIC

LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION	KVA	TRIP RATING	TYPE	30 CKT / 42 CKT	CKT	24 CKT / 84 CKT	TYPE	TRIP RATING	KVA	LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION
MECH	ROOF	RTU-1	7.8	40 /3			1	2		40 /3	7.8	MECH	ROOF	RTU-6
							3	4						
							5	6						
MECH	ROOF	RTU-2	7.8	40 /3			7	8		45 /3	8.4	MECH	ROOF	RTU-7
							9	10						
							11	12						
MECH	ROOF	RTU-3	8.4	45 /3			13	14		40 /3	7.8	MECH	ROOF	RTU-8
							15	16						
							17	18						
MECH	ROOF	RTU-4	8.4	45 /3			19	20		45 /3	8.4	MECH	ROOF	RTU-9
							21	22						
							23	24						
MECH	ROOF	RTU-5	8.4	45 /3			25	26		50 /3		SPARE		
							27	28						
							29	30						
SPARE				50 /3			31	32		100 /3		SPARE		
							33	34						
							35	36						
PANEL		LPA		250 /3			37	38		250 /3		PANEL		LPB
							39	40						
							41	42						

CONNECTED LOAD	THIS PANEL	SUB-FEEDS	TOTAL	DEMAND FACTOR	TOTAL DEMAND
LTS		6.3	6.3	kva@ 125% Demand	7.8 kva
REC		20.0	10.0	kva@ 100% Demand	10.0 kva
REC		46.2	REM 56.2	kva@ 50% Demand	28.1 kva
A/C				kva@ 100% Demand	
HEAT				kva@ 100% Demand	
KIT				kva@ 100% Demand	
SITE LTG				kva@ 100% Demand	
EQUIP		28.3	28.3	kva@ 100% Demand	28.3 kva
MECH	72.9	6.8	79.7	kva@ 100% Demand	79.7 kva
MOTORS				kva@ 25% Demand	
MOTORS				kva@ 100% Demand	
PANEL				kva@ 100% Demand	
MISC				kva@ 100% Demand	
TOTAL	72.9	107.6 kva	180.6 kva	kva	154.0 kva

NOTES:

1 - PANEL AND XFRMR LOADS, ALTHOUGH NOT SHOWN IN KVA COLUMN, ARE FACTORED INTO TOTAL LOAD CALC.

*THIS PANEL REQUIRES SURGE PROTECTION REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

Type ' S ' for Shunt Trip
Type ' G ' for Ground Fault
Type ' M ' for Motorized
Type ' A ' for Arc Fault Rated

CONNECTED LOAD (EXCLUDING OTHER PANELS)
a: 24.3 kva 202 Amps
b: 24.3 kva 202 Amps
c: 24.3 kva 202 Amps

TOTAL CONNECTED (INCLUDING OTHER PANELS) 180.6 kva

TOTAL DEMAND (INCLUDING OTHER PANELS) 154.0 kva 427 Amps

MOST RECENT DEMAND READINGS DATE: A B C

FED FROM: FUSED DISCONNECT
Mfg: Model #:
Style: Feed Thru Lugs No
Bus: Copper Double Lugs No

Edited by: RVZ Date: 10/23/24

Existing?	Equipment Type	Service Type	Section	Area	Floor
New	Panel	Normal		_	01

Chambers Engineering Panel Schedule
This panel schedule is not to be used without the direct permission of Chambers Engineering

BUILDING NAME	BUILDING NUMBER	PANEL DESIGNATION	Section	HALE COUNTY JJAEP
BLDG. A	ANNEX 3	LPA (New)	1 of 1	

PREV PANEL No:	None	PREV NAME:	None	ROOM:	D112	Normal Panel	VOLTAGE:	208 / 120 Volt	Three Phase	4 wire	Wye
LOC:	BLDG. A - 1st. Floor			Mounting	Surface	12 CKT Ø Ø Ø 18 CKT	250 A	MAIN LUGS ONLY	100% NEUTRAL		30 KAIC

LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION	KVA	TRIP RATING	TYPE	30 CKT / 42 CKT	CKT	24 CKT / 84 CKT	TYPE	TRIP RATING	KVA	LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION
REC	ROOF	ROOF MECH UNIT RECEPT	0.9	20 /1			1	2		20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
REC	ROOF	ROOF MECH UNIT RECEPT	0.7	20 /1			3	4		20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
REC	ROOF	ROOF MECH UNIT RECEPT	0.7	20 /1			5	6		20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
EQUIP	A103B	FACP	1.0	20 /1			7	8		20 /1	0.5	EQUIP	A103B	TAMPER FLOW SWITCH
MECH	A122	RECIRC PUMP	1.0	20 /1			9	10		20 /1	1.0	EQUIP	A101	FAA
MECH	A122	WATER HEATER CONTROLS	0.5	20 /1			11	12		20 /1	1.1	REC	D107	CONF ROOM RECEPTS
REC	D110	CLASSROOM RECEPTS	1.1	20 /1			13	14		20 /1	1.0	EQUIP	D107	CONF DISPLAYS
REC	D110	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			15	16		20 /1	0.7	REC	D107	CONF ROOM RECEPTS
REC	D110	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			17	18		20 /1		SPARE		
REC	D110	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			19	20		20 /1		SPARE		
REC	D110	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			21	22		20 /1		SPARE		
REC	D101	CORRIDOR RECEPTS	1.1	20 /1			23	24		20 /1		SPARE		
REC	D108	CLASSROOM RECEPTS	1.1	20 /1			25	26		20 /1	0.2	MECH	MENS RESTR EF-1	
REC	D108	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			27	28		20 /1	0.2	MECH	JAN A122	EF-2
REC	D108	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			29	30		15 /2	2.1	MECH	ROOF	CU-1
REC	D108	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			31	32		----------				----------
REC	D108	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			33	34		30 /2	1.8	MECH	ROOF	CU-2
EQUIP	D101	EWC	1.0	20 /1			35	36		----------				----------
REC	D106	CLASSROOM RECEPTS	1.1	20 /1			37	38		20 /1	1.1	REC	D103	CLASSROOM RECEPTS
REC	D106	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			39	40		20 /1	0.7	REC	D103	CLASSROOM ABV CNTR REC
REC	D106	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			41	42		20 /1	0.7	REC	D103	CLASSROOM ABV CNTR REC
REC	D106	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			43	44		20 /1	0.5	REC	D103	CLASSROOM ABV CNTR RECEPTS
REC	D106	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			45	46		20 /1	0.5	REC	D103	CLASSROOM ABV CNTR REC
REC	D111,109	REST RECEPTS	0.4	20 /1			47	48		20 /1		SPARE		
REC	D104	CLASSROOM RECEPTS	1.1	20 /1			49	50		20 /1	1.1	REC	D105	CLASSROOM RECEPTS
REC	D104	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			51	52		20 /1	0.7	REC	D105	CLASSROOM ABV CNTR REC
REC	D104	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			53	54		20 /1	0.7	REC	D105	CLASSROOM ABV CNTR REC
REC	D104	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			55	56		20 /1	0.5	REC	D105	CLASSROOM ABV CNTR REC
REC	D104	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			57	58		20 /1	0.5	REC	D105	CLASSROOM ABV CNTR REC
REC	A118	REST RECEPTS	0.4	20 /1			59	60		20 /1		SPARE		
REC	D102	CLASSROOM RECEPTS	1.1	20 /1			61	62		20 /1	1.1	REC	D107	CLASSROOM RECEPTS
REC	D102	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			63	64		20 /1	0.7	REC	D107	CLASSROOM ABV CNTR REC
REC	D102	CLASSROOM ABV CNTR RECEPTS	0.7	20 /1			65	66		20 /1	0.7	REC	D107	CLASSROOM ABV CNTR REC
REC	D102	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			67	68		20 /1	0.5	REC	D107	CLASSROOM ABV CNTR REC
REC	D102	CLASSROOM ABV CNTR RECEPTS	0.5	20 /1			69	70		20 /1	0.7	REC	D107	CLASSROOM ABV CNTR REC
REC	A116	REST RECEPTS	0.4	20 /1			71	72		20 /1		SPARE		
SPARE				20 /1			73	74		20 /1		SPARE		
SPARE				20 /1			75	76		20 /1		SPARE		
SPARE				20 /1			77	78		20 /1		SPARE		
SPARE				20 /1			79	80		20 /1		SPARE		
SPARE				20 /1			81	82		20 /1		SPARE		
SPARE				20 /1			83	84		20 /1		SPARE		

CONNECTED LOAD	THIS PANEL	SUB-FEEDS	TOTAL	DEMAND FACTOR	TOTAL DEMAND
LTS				kva@ 125% Demand	
REC	1st. 10.0		10.0	kva@ 100% Demand	10.0 kva
REC	REM 25.3		REM 25.3	kva@ 50% Demand	12.6 kva
A/C				kva@ 100% Demand	
HEAT				kva@ 100% Demand	
KIT				kva@ 100% Demand	
SITE LTG				kva@ 100% Demand	
EQUIP	7.5		7.5	kva@ 100% Demand	7.5 kva
MECH	6.8		6.8	kva@ 100% Demand	6.8 kva
MOTORS				kva@ 25% Demand	
MOTORS				kva@ 100% Demand	
PANEL				kva@ 100% Demand	
MISC				kva@ 100% Demand	
TOTAL	49.6		49.6 kva	kva	37.0 kva

NOTES:

1 - PANEL AND XFRMR LOADS, ALTHOUGH NOT SHOWN IN KVA COLUMN, ARE FACTORED INTO TOTAL LOAD CALC.

Type ' S ' for Shunt Trip
Type ' G ' for Ground Fault
Type ' M ' for Motorized
Type ' A ' for Arc Fault Rated

CONNECTED LOAD (EXCLUDING OTHER PANELS)
a: 19.6 kva 163 Amps
b: 15.9 kva 132 Amps
c: 14.2 kva 118 Amps

TOTAL CONNECTED (INCLUDING OTHER PANELS) 49.6 kva

TOTAL DEMAND (INCLUDING OTHER PANELS) 37.0 kva 103 Amps

MOST RECENT DEMAND READINGS DATE: A B C

FED FROM: MDA
Mfg: Model #:
Style: Feed Thru Lugs No
Bus: Copper Double Lugs No

Edited by: RVZ Date: 10/23/24

Existing?	Equipment Type	Service Type	Section	Area	Floor
New	Panel	Normal		_	01

Chambers Engineering Panel Schedule
This panel schedule is not to be used without the direct permission of Chambers Engineering

BUILDING NAME	BUILDING NUMBER	PANEL DESIGNATION	Section	HALE COUNTY JJAEP
BLDG. A	ANNEX 3	LPB (New)	1 of 1	

PREV PANEL No:	None	PREV NAME:	None	ROOM:	D112	Normal Panel	VOLTAGE:	208 / 120 Volt	Three Phase	4 wire	Wye
LOC:	BLDG. A - 1st. Floor			Mounting	Surface	12 CKT Ø Ø Ø 18 CKT	250 A	MAIN LUGS ONLY	100% NEUTRAL		30 KAIC

LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION	KVA	TRIP RATING	TYPE	30 CKT / 42 CKT	CKT	24 CKT / 84 CKT	TYPE	TRIP RATING	KVA	LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION
LTS	D112	N CLASSROOM LIGHTING	1.3	20 /1			1	2		20 /1	0.7	REC	A101	WAITING RECEPTS
LTS	D101	N CORRIDOR LIGHTING	0.7	20 /1			3	4		20 /1	0.7	REC	A101	WAITING RECEPTS
LTS	A128	W OFFICE LIGHTING	1.2	20 /1			5	6		20 /1	0.9	REC	A103	RECEPT DESK RECEPTS
LTS	A114	CONF & OFFICE LIGHTING	1.0	20 /1			7	8		20 /1	0.5	REC	A103	FILE ROOM RECEPTS
LTS	A102	S CORRIDOR LIGHTING	0.9	20 /1			9	10		20 /1	0.2	REC	A103B	FIRE RISER RECEPT
LTS	A104	SE OFFICE LIGHTING	0.7	20 /1			11	12		20 /1	0.9	REC	A105	OFFICE RECEPTS
LTS	EXT	EXTERIOR LIGHTING	0.5	20 /1			13	14		20 /1	0.9	REC	A107	OFFICE RECEPTS
EQUIP	A117	WORKROOM PRINTER	1.0	20 /1			15	16		20 /1	0.9	REC	A109	OFFICE RECEPTS
REC	A117	WORKROOM RECEPTS	0.4	20 /1			17	18		20 /1	0.9	REC	A115	OFFICE RECEPTS
REC	A117	WORKROOM RECEPTS	0.4	20 /1			19	20		20 /1	1.0	EQUIP	A111	IT EQUIP
REC	A117	WORKROOM RECEPTS	0.5	20 /1			21	22		20 /1	1.0	EQUIP	A111	IT EQUIP
REC	A119	BREAKROOM RECEPTS	0.7	20 /1			23	24		20 /1	0.5	REC	A111	IT ROOM RECEPTS
EQUIP	A119	BREAKROOM FRIDGE	1.0	20 /1			25	26		20 /1	0.5	REC	A129	STORAGE RECEPTS
REC	A119	BREAKROOM ABV CNTR RECEPT	0.2	20 /1			27	28		20 /1	1.1	REC	A102	CORRIDOR RECEPTS
REC	A119	BREAKROOM ABV CNTR RECEPT	0.2	20 /1			29	30		20 /1	0.9	REC	A106	OFFICE RECEPTS
EQUIP	A119	BREAKROOM RANGE HOOD	0.5	20 /1			31	32		20 /1	0.9	REC	A108	OFFICE RECEPTS
SPARE				20 /1			33	34		20 /1	0.9	REC	A110	OFFICE RECEPTS
REC	A119	BREAKROOM RECEPTS	0.2	20 /1			35	36		20 /1	0.9	REC	A112	OFFICE RECEPTS
EQUIP	A119	BREAKROOM RANGE	8.3	50 /2			37	38		20 /1	0.8	EQUIP	A104	DISPLAY SCREENS
		----------		----------			39	40		20 /1	1.0	EQUIP	A113	DISPLAY SCREENS
REC	A121	ISOLATION RECEPTS	0.2	20 /1			41	42		20 /1	0.2	REC	A104	ABV CNTR RECEPT
REC	A122	JANITOR ROOM RECEPTS	0.7	20 /1			43	44		20 /1	0.2	REC	A104	ABV CNTR RECEPT
REC	A120	CORRIDOR RECEPTS	0.9	20 /1			45	46		20 /1	1.0	EQUIP	A104	OFFICE FRIDGE
EQUIP	A123	DISPLAY SCREENS	1.0	20 /1			47	48		20 /1	1.1	REC	A104	OFFICE RECEPTS
REC	A123	OFFICE RECEPTS	0.5	20 /1			49	50		20 /1	0.7	REC	A104	OFFICE RECEPTS
REC	A123	OFFICE RECEPTS	0.7	20 /1			51	52		20 /1	0.9	REC	A113	OFFICE RECEPTS
EQUIP	A102	EWC	1.0	20 /1			53	54		20 /1	0.7	REC	A113	OFFICE RECEPTS
REC	A124	OFFICE RECEPTS	1.1	20 /1			55	56		20 /1	0.4	REC	A113	OFFICE RECEPTS
REC	A125	OFFICE RECEPTS	0.9	20 /1			57	58		20 /1	0.4	REC	A113	OFFICE RECEPTS
REC	A126	OFFICE RECEPTS	0.9	20 /1			59	60		20 /1	1.1	REC	A102	CORRIDOR RECEPTS
EQUIP	A126	OFFICE DISPL AND RECEPTS	0.8	20 /1			61	62		20 /1	1.0	EQUIP	D113	IT EQUIP
REC	A127	OFFICE RECEPTS	1.3	20 /1			63	64		20 /1	1.0	EQUIP	D113	IT EQUIP
REC	A128	OFFICE RECEPTS	1.3	20 /1			65	66		20 /1	0.4	REC	D113	IT ROOM RECEPTS
REC	D112	ELECT ROOM RECEPTS	0.4	20 /1			67	68		20 /1	0.2	REC	D101A	VEST RECEPTS
SPARE				20 /1			69	70		20 /1	0.5	REC	A103	FILE ROOM RECEPTS
SPARE				20 /1			71	72		20 /1	0.2	EQUIP	D112	TO CONTROL PANEL
SPARE				20 /1			73	74		20 /1	0.5	REC	A128	COUNC. OFFICE RECEPTS
SPARE				20 /1			75	76		20 /1		SPARE		
SPARE				20 /1			77	78		20 /1		SPARE		
SPARE				20 /1			79	80		20 /1		SPARE		
SPARE				20 /1			81	82		20 /1		SPARE		
SPARE				20 /1			83	84		20 /1		SPARE		

CONNECTED LOAD	THIS PANEL	SUB-FEEDS	TOTAL	DEMAND FACTOR	TOTAL DEMAND
LTS	6.3		6.3	kva@ 125% Demand	7.8 kva
REC	1st. 10.0		10.0	kva@ 100% Demand	10.0 kva
REC	REM 21.0		REM 21.0	kva@ 50% Demand	10.5 kva
A/C				kva@ 100% Demand	
HEAT				kva@ 100% Demand	
KIT				kva@ 100% Demand	
SITE LTG				kva@ 100% Demand	
EQUIP	20.8		20.8	kva@ 100% Demand	20.8 kva
MECH				kva@ 100% Demand	
MOTORS				kva@ 25% Demand	
MOTORS				kva@ 100% Demand	
PANEL				kva@ 100% Demand	
MISC				kva@ 100% Demand	
TOTAL	58.0		58.0 kva	kva	49.1 kva

NOTES:

1 - PANEL AND XFRMR LOADS, ALTHOUGH NOT SHOWN IN KVA COLUMN, ARE FACTORED INTO TOTAL LOAD CALC.

Type ' S ' for Shunt Trip
Type ' G ' for Ground Fault
Type ' M ' for Motorized
Type ' A ' for Arc Fault Rated

CONNECTED LOAD (EXCLUDING OTHER PANELS)
a: 20.6 kva 172 Amps
b: 20.8 kva 174 Amps
c: 16.6 kva 138 Amps

TOTAL CONNECTED (INCLUDING OTHER PANELS) 58.0 kva

TOTAL DEMAND (INCLUDING OTHER PANELS) 49.1 kva 136 Amps

MOST RECENT DEMAND READINGS DATE: A B C

FED FROM: MDA
Mfg: Model #:
Style: Feed Thru Lugs No
Bus: Copper Double Lugs No

Edited by: RVZ Date: 10/23/24

KEY PLAN

'A'

bld. arch.
p: 806.252.7719
architects
planners
designers
consultants

chambers engineering, llc
mechanical and electrical
consulting engineers
tx registration #f-005124
8501 spur 327
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consultant team

PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

00 | 01.09.2025 | 100% CONSTRUCTION DOCUMENTS
1 | 01.23.2025 | ADDENDUM NO. 01

SCHEDULES - ELECTRICAL
BLDG. 'A'

E-201.4
Project Number 2023-17

Existing?	Equipment Type	Service Type	Section	Area	Floor
New	Panel	Normal		_	01

Chambers Engineering Panel Schedule
This panel schedule is not to be used without the direct permission of Chambers Engineering

BUILDING NAME	BUILDING NUMBER	PANEL DESIGNATION	Section	1 of 1	HALE COUNTY JJAEP
BLDG. B	ANNEX 3	MDA (New)			

PREV PANEL No:	None	PREV NAME:	None	ROOM:	B110	Normal Panel	VOLTAGE:	208 / 120 Volt	Three Phase	4 wire	Wye
LOC:	BLDG. B - 1st. Floor			Mounting	Surface	12 CKT Ø Ø Ø 18 CKT	300 A	MAIN BREAKER	100% NEUTRAL		35 KAIC

LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION	KVA	TRIP RATING	TYPE	30 CKT 24 CKT	42 CKT 84 CKT	TYPE	TRIP RATING	KVA	LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION
MECH	B108	FCU-1	1.7	20 /1		1 • | | 2			/3		SPACE		
SPARE				20 /2		3 | • | 4			----------				----------
		----------		----------		5 | | • 6			----------				----------
EQUIP	EXT	MOTORIZED GATE	1.0	20 /3		7 • | | 8			/3		SPACE		
		----------		----------		9 | • | 10			----------				----------
		----------		----------		11 | | • 12			----------				----------
EQUIP	EXT	MOTORIZED GATE	1.0	20 /3		13 • | | 14			/3		SPACE		
		----------		----------		15 | • | 16			----------				----------
		----------		----------		17 | | • 18			----------				----------
MECH	EXT	CU-3	7.9	35 /3		19 • | | 20			/3		SPACE		
		----------		----------		21 | • | 22			----------				----------
		----------		----------		23 | | • 24			----------				----------
SPARE				100 /3		25 • | | 26			/3		SPACE		
		----------		----------		27 | • | 28			----------				----------
		----------		----------		29 | | • 30			----------				----------
SPARE				40 /3		31 • | | 32		30 /3			SPARE		
		----------		----------		33 | • | 34		----------					----------
		----------		----------		35 | | • 36		----------					----------
PANEL		LPA		250 /3		37 • | | 38		20 /3			SPARE		
		----------		----------		39 | • | 40		----------					----------
		----------		----------		41 | | • 42		----------					----------

	CONNECTED LOAD				TOTAL
	THIS PANEL	SUB-FEEDS	TOTAL	DEMAND FACTOR	DEMAND
LTS		4.9	4.9	kva@ 125% Demand	6.2 kva
REC		10.0	10.0	kva@ 100% Demand	10.0 kva
REC		8.7	REM 8.7	kva@ 50% Demand	4.4 kva
A/C				kva@ 100% Demand	
HEAT				kva@ 100% Demand	
KIT				kva@ 100% Demand	
SITE LTG				kva@ 100% Demand	
EQUIP	2.0	22.7	24.7	kva@ 100% Demand	24.7 kva
MECH	9.7	6.5	16.1	kva@ 100% Demand	16.1 kva
MOTORS				kva@ 25% Demand	
MOTORS				kva@ 100% Demand	
PANEL				kva@ 100% Demand	
MISC				kva@ 100% Demand	
TOTAL	11.7	52.8 kva	64.4 kva	kva	61.3 kva

NOTES:

1 - PANEL AND XFRMR LOADS, ALTHOUGH NOT SHOWN IN KVA COLUMN, ARE FACTORED INTO TOTAL LOAD CALC.

*THIS PANEL REQUIRES SURGE PROTECTION REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

Type ' S ' for	Shunt Trip		
Type ' G ' for	Ground Fault		
Type ' M ' for	Motorized		
Type ' A ' for	Arc Fault Rated		

CONNECTED LOAD (EXCLUDING OTHER PANELS)		
a:	5.0 kva	42 Amps
b:	3.3 kva	28 Amps
c:	3.3 kva	28 Amps
TOTAL CONNECTED (INCLUDING OTHER PANELS)	64.4 kva	
TOTAL DEMAND (INCLUDING OTHER PANELS)	61.3 kva	170 Amps

MOST RECENT DEMAND READINGS	DATE:	A	B	C

FED FROM:	FUSED DISCONNECT		
Mfg:		Model #:	
Style:		Feed Thru Lugs	No
Bus:	Copper	Double Lugs	No
Edited by:	RVZ	Date:	10/23/24

Existing?	Equipment Type	Service Type	Section	Area	Floor
New	Panel	Normal		_	01

Chambers Engineering Panel Schedule
This panel schedule is not to be used without the direct permission of Chambers Engineering

BUILDING NAME	BUILDING NUMBER	PANEL DESIGNATION	Section	1 of 1	HALE COUNTY JJAEP
BLDG. B	ANNEX 3	LPA (New)			

PREV PANEL No:	None	PREV NAME:	None	ROOM:	B110	Normal Panel	VOLTAGE:	208 / 120 Volt	Three Phase	4 wire	Wye
LOC:	BLDG. B - 1st. Floor			Mounting	Surface	12 CKT Ø Ø Ø 18 CKT	250 A	MAIN LUGS ONLY	100% NEUTRAL		25 KAIC

LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION	KVA	TRIP RATING	TYPE	30 CKT 24 CKT	42 CKT 84 CKT	TYPE	TRIP RATING	KVA	LOAD TYPE	ROOM NUMBER	LOAD DESCRIPTION
SPARE				20 /1		1 • | | 2			20 /1	1.0	LTS	B107	LIGHTING
REC	B106	KITCHEN ABV CNTR RECEPT	1.0	20 /1		3 | • | 4			20 /1	1.1	LTS	B111	GYM LIGHTING
REC	B106	KITCHEN ABV CNTR RECEPT	1.0	20 /1		5 | | • 6			20 /1	0.8	LTS	B111	GYM LIGHTING
REC	B106	KITCHEN ABV CNTR RECEPT	1.0	20 /1		7 • | | 8			20 /1	0.8	LTS	B111	GYM LIGHTING
REC	B104	COUNSELING RECEPTS	0.7	20 /1		9 | • | 10			20 /1	0.8	LTS	B111	GYM LIGHTING
REC	B106	KITCHEN ABV CNTR RECEPT	1.0	20 /1		11 | | • 12			20 /1	0.4	LTS	EXT	EXTERIOR LIGHTING
REC	B106	KITCHEN RECEPT	0.5	20 /1		13 • | | 14			20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
REC	B106	KITCH RECEPT	0.4	20 /1		15 | • | 16			20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
SPARE				20 /1		17 • | | 18			20 /1	1.0	EQUIP		RSVD FOR FA SYSTEM
EQUIP	B106	KITCHEN FRIDGE	1.0	20 /1		19 | • | 20			20 /1	0.5	EQUIP	B111	TAMPER FLOW SWITCH
EQUIP	B108A	FIRE ALARM CONTROL PANEL	0.5	20 /1		21 • | | 22			20 /1	0.5	EQUIP	B108	SPRINKLER CONTROLLER
MECH	B109	CF-1	0.8	20 /2		23 | • | 24			20 /1	0.2	REC	ROOF	MECH EQ RECEPT
		----------		----------		25 • | | 26			20 /1	0.2	REC	B107	GIRLS REST RECEPTS
SPARE				20 /1		27 | • | 28			20 /1	0.2	REC	B105	BOYS REST RECEPT
SPARE				20 /1		29 • | | 30			20 /1	0.5	REC	B101	VEST, RISER ROOM RECEPTS
SPARE				20 /1		31 | • | 32			20 /1	0.4	REC	B108	UTILITY ROOM RECEPTS
REC	B109	GYM ABV CNTR RECEPT	1.0	20 /1		33 • | | 34			20 /1	0.2	REC	B108	UTILITY ROOM RECEPTS
REC	B106	KITCHEN RECEPT	0.2	20 /1		35 | • | 36			20 /1	0.2	REC	B108	UTILITY ROOM RECEPTS
SPARE				20 /1		37 • | | 38			20 /1	0.2	REC	B108	UTILITY ROOM RECEPTS
REC	B109	GYM ABV CNTR RECEPT	1.0	20 /1		39 | • | 40			20 /1	1.0	EQUIP	B108	WASHING MACHINE
SPARE				20 /1		41 • | | 42			30 /2	5.0	EQUIP	B108	DRYER
REC	B109	GYM ABV CNTR RECEPT	1.0	20 /1		43 | • | 44							
EQUIP	B109	GYM OVHD DOOR	1.0	20 /1		45 • | | 46			20 /1	0.7	REC	B108	UTILITY ROOM RECEPTS
EQUIP	B109	GYM OVHD DOOR	1.0	20 /1		47 | • | 48			20 /1	1.0	EQUIP	B108A	IT EQUIP
EQUIP	B109	GYM OVHD DOOR	1.0	20 /1		49 • | | 50			20 /1	0.7	REC	B104	COUNSELING RECEPT
EQUIP	B109	GYM MOTORIZED GOAL	1.0	20 /1		51 | • | 52			20 /1	0.9	REC	B104	COUNSELING RECEPT
EQUIP	B109	GYM MOTORIZED BACK STOP	1.0	20 /1		53 • | | 54			20 /1	0.7	REC	B102	VEST, PATDOWN RECEPTS
EQUIP	B109	EWC	1.0	20 /1		55 | • | 56			20 /1	0.2	REC	B111	RISER ROOM RECEPT
REC	B109	GYM RECEPTS	0.7	20 /1		57 • | | 58			20 /1	1.2	MECH	B109	UNIT HEATER
REC	B109	GYM RECEPTS	0.5	20 /1		59 | • | 60			20 /1	1.2	MECH	B109	UNIT HEATER
REC	B109	GYM RECEPTS	0.5	20 /1		61 • | | 62			20 /1	1.2	MECH	B109	UNIT HEATER
REC	B109	GYM RECEPTS	0.7	20 /1		63 | • | 64			20 /1	1.0	MECH	B108	RECIRC PUMP
REC	B109	GYM RECEPTS	1.1	20 /1		65 • | | 66			20 /1	0.5	MECH	B108	WATER HEATER CONTROLS
REC	B109	GYM RECEPTS	0.7	20 /1		67 | • | 68			20 /1	0.5	MECH	ROOF	EF-3
EQUIP	B108A	IT EQUIPMENT	1.0	20 /1		69 • | | 70			20 /1		SPARE		
REC	B106	KITCHEN RECEPT	0.2	20 /1		71 | • | 72			20 /1	1.0	EQUIP	B101	FAA
REC	B106	KITCHEN RECEPT	0.2	20 /1		73 • | | 74			15 /2	2.2	EQUIP	B106	KITCHEN OVEN
SPARE				20 /1		75 | • | 76			----------				----------
SPARE				20 /1		77 • | | 78			20 /1		SPARE		
SPARE				20 /1		79 | • | 80			20 /1		SPARE		
SPARE				20 /1		81 • | | 82			20 /1		SPARE		
SPARE				20 /1		83 | • | 84			20 /1		SPARE		

	CONNECTED LOAD				TOTAL
	THIS PANEL	SUB-FEEDS	TOTAL	DEMAND FACTOR	DEMAND
LTS	4.9		4.9	kva@ 125% Demand	6.2 kva
REC	1st. 10.0		10.0	kva@ 100% Demand	10.0 kva
REC	REM 8.7		REM 8.7	kva@ 50% Demand	4.4 kva
A/C				kva@ 100% Demand	
HEAT				kva@ 100% Demand	
KIT				kva@ 100% Demand	
SITE LTG				kva@ 100% Demand	
EQUIP	22.7		22.7	kva@ 100% Demand	22.7 kva
MECH	6.5		6.5	kva@ 100% Demand	6.5 kva
MOTORS				kva@ 25% Demand	
MOTORS				kva@ 100% Demand	
PANEL				kva@ 100% Demand	
MISC				kva@ 100% Demand	
TOTAL	52.8		52.8 kva	kva	49.7 kva

NOTES:

1 - PANEL AND XFRMR LOADS, ALTHOUGH NOT SHOWN IN KVA COLUMN, ARE FACTORED INTO TOTAL LOAD CALC.

Type ' S ' for	Shunt Trip		
Type ' G ' for	Ground Fault		
Type ' M ' for	Motorized		
Type ' A ' for	Arc Fault Rated		

CONNECTED LOAD (EXCLUDING OTHER PANELS)		
a:	17.6 kva	147 Amps
b:	18.7 kva	156 Amps
c:	16.4 kva	137 Amps
TOTAL CONNECTED (INCLUDING OTHER PANELS)	52.8 kva	
TOTAL DEMAND (INCLUDING OTHER PANELS)	49.7 kva	138 Amps

MOST RECENT DEMAND READINGS	DATE:	A	B	C

FED FROM:	MDA		
Mfg:		Model #:	
Style:		Feed Thru Lugs	No
Bus:	Copper	Double Lugs	No
Edited by:	RVZ	Date:	10/23/24

KEY PLAN

'B'

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planners
designers
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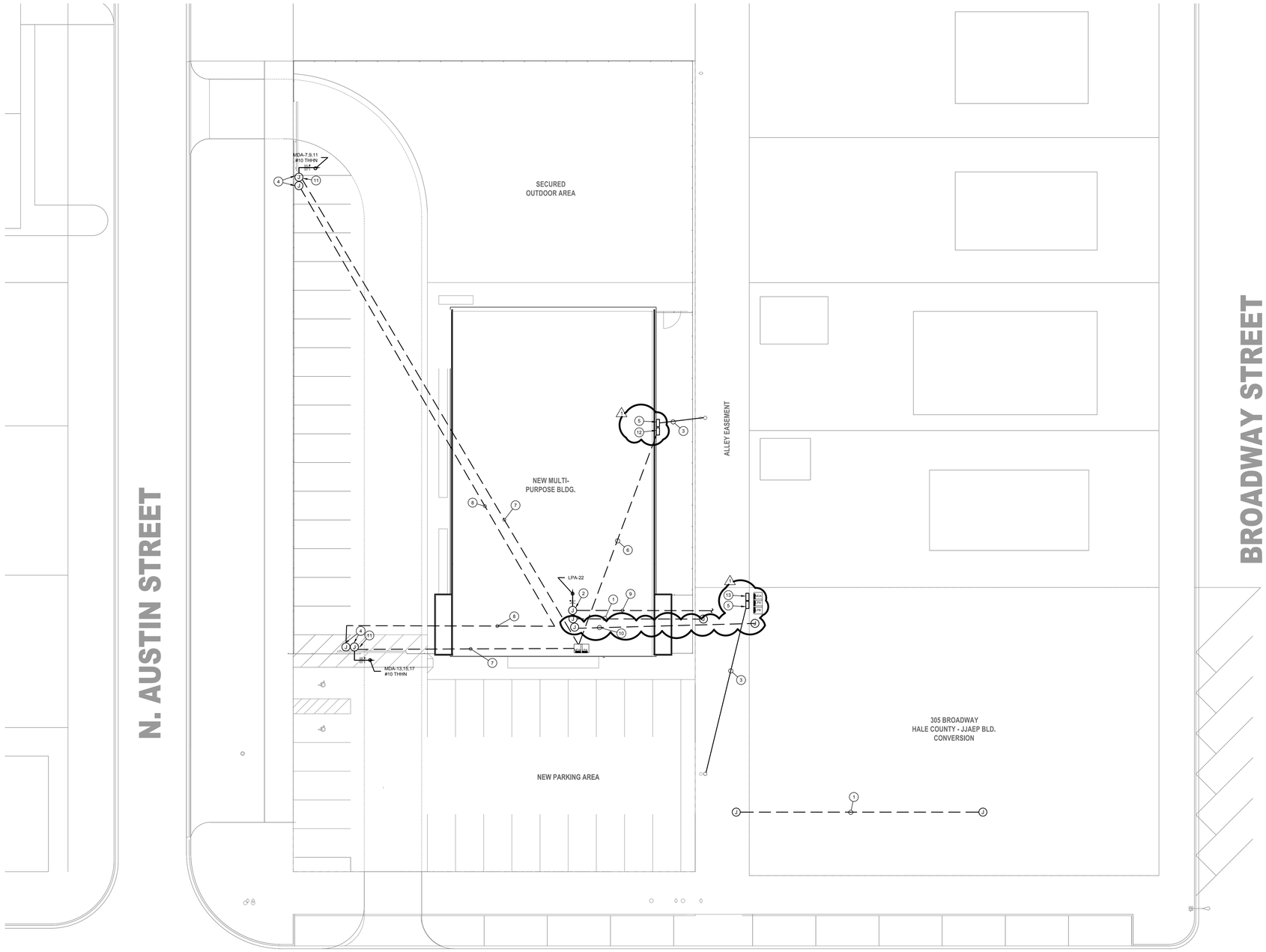
PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

HALE COUNTY

00 | 01.09.2025 | 100% CONSTRUCTION DOCUMENTS
1 | 01.23.2025 | ADDENDUM NO. 01

SCHEDULES - ELECTRICAL
BLDG. 'B'

E-201.5
Project Number 2023-17



GENERAL NOTES:

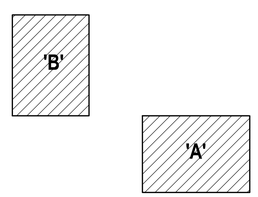
A. REFER TO DRAWINGS E-00 AND E-01 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.

NOTES INDICATED BY "⬡":

1. TWO CONTRACTOR FURNISHED 4" SCHEDULE 40PVC CONDUITS WITH INNERDUCT FOR DATA. ONE STUB UP SHALL BE IN THE IT ROOM AND THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE OTHER STUB UP WITH THE UTILITY PROVIDER. INNERDUCT BASIS OF DESIGN IS MX-ED-86-38-4-BK BY MAXCELL.
2. CONTRACTOR FURNISHED JUNCTION BOX FOR THE SPRINKLER CONTROLLER. THE CONTROLLER WILL BE LOCATED IN ROOM B108. COORDINATE THE EXACT LOCATION WITH THE ARCHITECT PRIOR TO ROUGH IN.
3. CONTRACTOR FURNISHED OVERHEAD SERVICE FROM THE ELECTRICAL UTILITY. THE CONTRACTOR SHALL COORDINATE THE UTILITY POLE LOCATION WITH THE UTILITY PRIOR TO BID.
4. CONTRACTOR FURNISHED JUNCTION BOXES FOR THE MOTORIZED GATE. THERE SHALL BE ONE JUNCTION BOX FOR POWER AND ONE FOR DATA. COORDINATE THE EXACT LOCATION WITH THE ARCHITECTURAL DRAWINGS.
5. APPROXIMATE LOCATION OF THE CONTRACTOR FURNISHED C.T. ENCLOSURE.
6. CONTRACTOR FURNISHED UNDERGROUND CONDUITS FOR PANEL MDA. REFER TO THE RISER DIAGRAM FOR ADDITIONAL INFORMATION.
7. CONTRACTOR FURNISHED 1" UNDERGROUND SCHEDULE 40 PVC CONDUIT FOR GATE POWER.
8. CONTRACTOR FURNISHED 2" UNDERGROUND SCHEDULE 40 PVC CONDUIT FOR GATE COMMUNICATIONS. THE CONDUIT SHALL STUB UP IN IT CLOSET B109A.
9. CONTRACTOR FURNISHED 2" UNDERGROUND SCHEDULE 40 PVC CONDUIT FOR SPRINKLER CONTROL.
10. CONTRACTOR FURNISHED 4" UNDERGROUND CONDUIT WITH INNERDUCT FROM ELECISTOR ROOM D112 IN BUILDING A TO B110A IN BUILDING B. THE CONDUIT SHALL STUB UP AT THE WEST WALL OF EACH SPACE. INNERDUCT BASIS OF DESIGN IS MX-ED-86-38-4-BK BY MAXCELL.
11. THE CONTRACTOR SHALL FURNISH A 3/4" x 10' COPPER CLAD STEEL GROUND ROD CIRCUITED TO THE GATE OPERATOR AS REQUIRED BY THE GATE MANUFACTURER.
12. CONTRACTOR FURNISHED 300A, 208Y/120V, 3 PHASE, SERVICE ENTRANCE RATED FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.
13. CONTRACTOR FURNISHED 800A, 208Y/120V, 3 PHASE, SERVICE ENTRANCE RATED FUSED DISCONNECT IN A NEMA 3R ENCLOSURE.

E1 SITE PLAN - ELECTRICAL
1/16" = 1'-0"

KEY PLAN



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PROJECT
HALE COUNTY ANNEX 3 - JJAEP
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
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THE STATE OF TEXAS
HALE COUNTY

00 | 01.09.2025 | 100% CONSTRUCTION DOCUMENTS
1 | 01.23.2025 | ADDENDUM NO. 01

SITE PLAN - ELECTRICAL

ESP-100

Project Number 2023-17

GENERAL STRUCTURAL NOTES

General Structural and Coordination Notes

Drawings and Specifications:
1. The structural drawings shall be used in conjunction with the drawings of all other disciplines and the specifications. The contractor shall verify the requirements of other trades as to sleeves, chases, hangers, inserts, anchors, holes, and other items to be placed or set in the structural work.
2. The contractor shall compare the architectural, structural, mechanical, electrical, plumbing, and other series drawings and report any discrepancies between each set of drawings and within each set of drawings prior to fabrication and installation of any structural members.

Safety and Responsibility:
1. The contractor shall be responsible for complying with all safety precautions and regulations. During the work, the engineer will not advise on nor issue direction as to safety precautions and programs.
2. The engineer shall not be responsible for the methods, techniques, and sequences of procedures to perform the work. The supervision of the work is the sole responsibility of the contractor.

Temporary Supports and Bracing:
1. The structural drawings represent the finished structure. The contractor shall provide all temporary guying and bracing required to erect and hold the structure in proper alignment until all structural work and connections have been completed. The investigation, design, safety, adequacy, and inspection of erection bracing, shoring, temporary supports, etc., is the sole responsibility of the contractor.
2. All structural elements of the project have been designed by the engineer to resist the required code vertical and lateral forces that could occur in the final completed structure only. It is the responsibility of the contractor to provide all required bracing during construction to maintain the stability and safety of all structural elements during the construction process until the lateral-load resisting or stability-providing system is completely installed and the structure is completely tied together.

Shop Drawings and Submittals:
1. Shop drawings and other items shall be submitted to the engineer for review prior to fabrication. All shop drawings shall be reviewed by the general contractor before submittal. The engineer's review is to be for conformance with the design concept and general compliance with the relevant contract documents. The engineer's review does not relieve the contractor of the sole responsibility to review, check, and coordinate the shop drawings prior to submission. The contractor remains solely responsible for errors and omissions associated with the preparation of shop drawings as they pertain to member sizes, details, dimensions, etc.
2. Submit shop drawings in PDF form. In no case shall reproduction of the contract drawings be used as shop drawings. As a minimum, submit the following items for review:
   a. Concrete mix design(s).
   b. Reinforcing steel shop drawings.
   c. Pre-engineered metal building system (see notes).

Coordination of Openings and Equipment:
1. Only larger sleeve openings and framed openings in structural framing component members are indicated on the structural drawings. However, all sleeves, inserts, and openings, including frames and/or sleeves, shall be provided for passage, provision, and/or incorporation of the work of the contract, including but not limited to mechanical, electrical, and plumbing work. This work shall include the coordination of sizes, alignment, dimensions, position, locations, elevations, and grades as required to serve the intended purpose. Openings not indicated on the structural drawings, but required as noted above, shall be submitted to the engineer for review.
2. Compatibility of the structure and provisions for building equipment supported on or from structural components shall be verified as to size, dimensions, clearances, accessibility, weights, and reaction with the equipment for which the structure has been designed prior to submission of shop drawings and data for each piece of equipment and for structural components. Differences shall be noted on the submittals.

Field Verification and Site Conditions:
1. All dimensions and conditions of existing construction shall be verified at the job site prior to the preparation of shop drawings. Differences between existing construction and that shown on the structural drawings shall be referred to the architect. Differences shall also be clouded on the shop drawings.
2. Contractors shall visit the site prior to bid to ascertain conditions which may adversely affect the work or cost thereof.

Loading and Construction Loads:
1. Loading applied to the structure during the process of construction shall not exceed the safe load-carrying capacity of the structural members. The live loadings used in the design of this structure are indicated in the "Design Criteria Notes". Do not apply any construction loads until structural framing is properly connected together and until all temporary bracing is in place.

Special Inspections:
1. In accordance with section 1705 of IBC 2021, special inspections will be required for this project. Special inspections shall be performed in accordance with the "Schedule of Special Inspections". All fabricators shall satisfy the "exception" noted in section 1704.2.2, which requires the fabricator to maintain an agreement with an approved independent inspection or quality control agency. The contractor shall notify the special inspector at least 48 hours in advance for work that will require inspection or testing.

Demolition and Site Observation:
1. Unless otherwise indicated, all items noted to be demolished shall become the contractor's property and be removed from the site.
2. Periodic site observation by field representatives is solely for the purpose of determining if the work is proceeding in accordance with the structural contract documents. This limited site observation is not intended to be a check of the quality or quantity of the work, but rather a periodic check in an effort to inform the owner against defects and deficiencies in the work of the contractor.

Conflict Resolution and Strict Requirements:
1. Where conflict exists among the various parts of the structural contract documents, structural drawings, general notes, and specifications, the strictest requirements, as indicated by the engineer, shall govern.

Building Code and Design Criteria

General Building Code:
1. 2021 International Building Code
2. 2021 International Existing Building Code

Design Criteria
1. **Structural Concrete**:
   - ACI 318-14 - Building Code Requirements for Reinforced Concrete, American Concrete Institute, ACI 318, as referenced by the General Building Code
2. **Concrete Masonry**:
   - ACI 530-13 - Building Code Requirements for Concrete Masonry Structures, American Concrete Institute,

DESIGN CRITERIA

The building structure has been designed to resist the following code prescribed loads:

Dead Loads

Ceiling and Mechanical at floors	4 psf
All other Collateral	actual weight 6 psf

Live Loads

OCCUPANCY OR USE	UNIFORM (psf)	CONCENTRATED (lbs.)
Roof - Unreduced	20	

Snow Load

Ground Snow Load, Pg	15 PSF
Flat Roof Snow Load, Pf	11 PSF
Snow Importance Factor	1.1
Snow Exposure Factor, Ce	0.9
Thermal Factor at Building, Ct	1.0

Wind Loads

Ultimate Design Wind Speed (3 Second Gust), Vult	114 MPH
Wind Exposure Category	C
Mean Roof Height	29 FT
Internal Pressure Coefficient	±0.18
Risk Category	III

Components And Cladding Ultimate Pressures

Roofs		
Zone 1		
	20 Sf Or Less	-38.5 Psf
	100 Sf Or Greater	-12.0 Psf
Zone 2e		
	20 Sf Or Less	-38.5 Psf
	100 Sf Or Greater	-12.0 Psf
Zone 2n		
	10 Sf Or Less	-56.1 Psf
	250 Sf Or Greater	-20.8 Psf
Zone 2r		
	10 Sf Or Less	-56.1 Psf
	250 Sf Or Greater	-20.8 Psf
Zone 3e		
	10 Sf Or Less	-56.1 Psf
	250 Sf Or Greater	-20.8 Psf
Zone 3r		
	10 Sf Or Less	-66.7 Psf
	100 Sf Or Greater	-34.9 Psf
Walls		
Zone 4		
	10 Sf Or Less	-22.9 Psf
	500 Sf Or Greater	-17.5 Psf
Zone 5		
	10 Sf Or Less	-28.3 Psf
	500 Sf Or Greater	-17.5 Psf

Seismic Design Data

Spectral Response Acceleration, Ss	0.092
Spectral Response Acceleration, S1	0.033
Site Class	D
Seismic Importance Factor	1.0
Seismic Design Category (Sdc)	A
Spectral Response Coefficient, Sds	0.098
Spectral Response Coefficient, Sd1	0.053

Cast-In-Place Concrete Notes

Concrete Mixes:
1. Concrete mixes shall be designed per ACI 301, using Portland cement conforming to ASTM C-150 or C-595, aggregate conforming to ASTM C-33, and admixtures conforming to ASTM C-494, C-1017, C-618, C-989, and C-260. Concrete shall be ready mixed in accordance with ASTM C-94.
2. Concrete exposed to freezing and thawing shall contain 6% (plus or minus 1.5%) entrained air.
3. Calcium chloride is not permitted as a concrete additive.
4. A maximum of 20% of the cementitious materials used in mix designs may be replaced with class C or F fly ash. Fly ash shall not be used in architecturally exposed concrete.
5. Lightweight concrete shall have a maximum cured density of 120 pounds per cubic foot.

Compressive Strength, Slump, and Water/Cement Ratio:
1. Concrete shall conform to the specified compressive strength, slump, and water/cement ratio requirements below. At the contractor's option, an approved admixture may be used to produce flowable concrete. Maximum slump shall not exceed 10 inches. The contractor shall submit test results of the proposed concrete mixes along with the manufacturer's technical data for approval prior to placing concrete.

Concrete Mix Usage Schedule:
1. All concrete shall conform to the requirements specified in the table below, unless noted otherwise on the Structural Drawings:

Use	Strength (psi)	Aggregate Type , Size	Slump (inches)	Max w/c	Air Content
Footings, Elevator Pit Walls	3000	NWT , 1"	3-5	----	-----
Interior Slab-on-Grade	4000	NWT , 1"	3-5	----	-----

Reinforcing Steel:
1. All reinforcing steel shall conform to ASTM A-615, Grade 60. Bar sizes from No. 7 to No. 18 shall conform to ASTM A615, Grade 75. All reinforcing steel shall be new deformed bars.
2. All welding of reinforcing steel shall be in accordance with AWS D1.4 and reinforcing steel shall conform to ASTM A706. Welding of reinforcing steel will only be permitted where specifically shown on the structural drawings.

Detailing of Reinforcing Steel
1. Reinforcing steel, including hooks and bends, shall be detailed in accordance with ACI 315. All reinforcing steel indicated as being continuous shall be lapped with a type 2 lap splice unless otherwise noted.
2. Welded Wire Reinforcement shall be continuous across the entire concrete surface and not interrupted by beams or girders, and properly lapped one cross wire spacing plus 2".
3. In unscheduled grade beams, walls, and slabs, detail reinforcing as follows:
   A. Class A lap beam top reinforcing bars at mid span.
   B. Class A lap beam bottom reinforcing bars at the supports.
   C. Provide Class B lap at other locations pending Engineer's approval.
   D. Provide standard hooks in top bars at cantilever and discontinuous ends of beams, walls, and slabs.
   E. Provide corner bars for all horizontal bars at the inside and outside faces of intersecting beams or walls. Corner bars are not required if horizontal bars are hooked.
   F. Provide 2-#4 diagonal bars at all slab re-entrant corners placed under the top mat of steel.
4. Heat shall not be used in the fabrication or installation of reinforcement.

Clear Cover Requirements:
1. Concrete cover to reinforcing steel, unless noted otherwise, shall be as follows:
   A. Surfaces cast against earth: 3"
   B. Formed surfaces in contact with earth or exposed to weather: (Formed Footings, Slab-on-grade)
      1. #6 or larger: 2"
      2. #5 or smaller: 1 1/2"
   C. Foundation concrete: See "Foundation notes"

Bar Supports and Placement:
1. Bar supports and holding bars shall be provided for all reinforcing steel to ensure minimum concrete cover. Bar supports shall be plastic-tipped or stainless steel.
2. All chairs supported by grade shall include sand plates.
3. Bar supports which come in contact with exposed surfaces shall have plastic or rubber tips or be stainless steel.
4. Provide dowels of the same size and spacing as vertical wall or column pier reinforcing at the foundation, unless noted otherwise. Dowels shall be tied in place prior to concrete placement.
5. Provide bent corner bars to match and lap with horizontal bars at corners and intersections of walls, beams, and footings.
6. Continuous top bars in beams and grade beams shall be spliced at midspan and bottom bars over supports, unless noted otherwise.

Control and Construction Joints:
1. Provide control joints in slabs on grade at approximately 15 ft spacing where joints will be exposed or under non-resilient floor covering. At locations below resilient finish or carpet, control joint spacing may be increased to approximately 20 ft. Coordinate joints in the floor with floor finishes.
2. Provide control joints in walls at approximately 30 ft spacing. Do not locate within 5 ft of a corner or column. Coordinate joints in walls with veneer joints.
3. Drawings showing the location of construction and control joints and placing sequence shall be submitted for architect/engineer review prior to preparation of the reinforcing steel shop drawings.
4. Horizontal construction joints are not permitted in concrete members unless shown on the drawings or approved in advance. Vertical construction joints or bulkheads shall be made at midspan or points of minimum shear.

Formwork and Shoring:
1. Formwork shall remain in place until concrete has obtained at least 90% of its 28-day compressive strength. The contractor shall provide all shoring and reshoring.

Openings and Embedded Items:
1. Verify the location of openings shown through concrete slabs or walls and coordinate any additional required openings with other trades and the architect/engineer.
2. Aluminum conduit or piping may not be embedded in any concrete.
3. Embedded conduits or piping shall not displace reinforcement by modifying the elevation, location, or spacing of reinforcement. Reinforcement placement has priority over conduit or piping.
4. Embedded conduits or piping running perpendicular to reinforcement may be tied to reinforcement.
5. Embedded conduits or piping running parallel to reinforcement may not be tied to reinforcement and must be independently supported on chairs or bolsters supplied by the electrical/mechanical contractor. Maintain a minimum clear distance between conduit and reinforcement = 1 inch or the diameter of the reinforcement, whichever is greater.
6. Embedded conduits, pipes, and sleeves shall meet the requirements of ACI 318, including the following:
   - Conduits and pipes embedded within a slab, wall, or beam (other than those passing through) shall not be larger in outside dimension than 1/3 the overall thickness of the slab, wall, or beam in which they are embedded.
   - Conduits, pipes, and sleeves shall not be spaced closer than three diameters or widths on center.

Documentation and Inspections:
1. Contractors shall provide the engineer with documentation that all materials conform to the quality standards specified in IBC 2021.
2. In accordance with IBC 2021, special inspections are required for the concrete work. The owner will hire the special inspector to perform all required special inspections.

Additional Requirements:
1. In order to avoid concrete shrinkage cracking, place concrete slabs in an alternating lane pattern. The maximum length of slab cast in any one continuous pour shall be limited to 80 feet.
2. The contractor shall allow in the bid an additional one (1) ton of reinforcing steel to be placed in the field at the direction of the engineer. Any unused portion of this allowance shall be credited to the owner.
3. Edges of permanently exposed concrete surfaces shall be chamfered ¾" unless otherwise noted.
4. Thickened slabs on grade shall be installed below non-bearing interior masonry walls.

Drilled Piers:

General Requirements:
1. Foundation design parameters are based on recommendations from the geotechnical exploration report number 15221124 dated November 13, 2024 by Hamilton Engineering, Inc. Refer to the geotechnical report for soil classification.
2. Bearing stratum shown on typical pier detail.
3. Piers not specifically located on the plan shall be located on centerline of column above. Where no column occurs, locate on centerline of wall or beam.
4. Provide dowels from piers into concrete above using same bar size and number as shown for pilaster above. Where no pilaster occurs, use dowels of same size and number as pier reinforcing steel. Extend dowels 30 bar diameters into pier and beam, wall, pilaster or column, unless noted otherwise on the Structural Drawings.
5. Elevation of top of piers, unless noted otherwise on the Structural Drawings, is at the bottom of the deepest intersecting beam or wall supported by the pier.
6. Reinforcing cage shall be held securely away from earth at sides and bottom by sets of 3 spacers at a maximum spacing of 8 ft. along the length of the cage and 1'-0" from the bottom.
7. Pier reinforcing and concrete shall be placed immediately after drilling operations are complete; in no case shall a pier be drilled that cannot be placed by the end of the workday.

Design Criteria:
1. Allowable end bearing: 8,500 psf
2. Frost depth: 6 inches
3. Void space beneath grade beams: 6 inches

Reinforcing Steel:
1. See plans for pier sizes, reinforcing and depth.
2. The contractor shall verify depths of piers before pier steel is cut. Pier steel may be delivered to the jobsite in standard lengths and cut as required. Provide 64 bar diameter laps in all vertical pier reinforcing.
3. Reinforcing steel shop drawings shall include placing drawings for templates to set dowels in piers.

Inspection:
1. Top of pier shall be of the specified diameter. Form top of pier if required to maintain the specified diameter. Any concrete extending beyond the specified diameter shall be removed.
2. Temporary steel casing may be required during pier drilling operations. Prior to the placement of concrete, any seepage water shall be removed from the pier holes. Special construction procedures in accordance with ACI 336.1 and ACI 336.3R and specifications shall be followed during extraction of the casing and during concrete placement.

Contractor Responsibilities:
1. Contractor shall include in bid documents, unit-costs for casing if required and unit-cost for greater and lesser depth of drilling for each pier size.
2. All piers shall be inspected by a representative of a qualified geotechnical laboratory in order to ensure that the proposed bearing material has been reached in accordance with the recommendations given in the geotechnical report.
3. The contractor shall make and maintain accurate records of the drilled pier depths, bearing stratum, depth of penetration into bearing stratum, diameter and location (including off center eccentricities), and shall submit this information to the Engineer.

Site and Building Pad Preparation

Excavation and Subgrade Preparation:
1. Excavate a minimum of 6" of existing soil within an area extending at least five feet beyond the building limits.
2. Remove all organics, pavement, roots, debris, and other unsuitable material.
3. Inspect the exposed subgrade by probing or testing for pockets of soft or unsuitable material. Excavate unsuitable soil as directed by the geotechnical engineer/testing agency.
4. Proof roll the exposed subgrade surface with a loaded tandem axle dump truck. Remove all soils that pump or do not compact properly as directed by the geotechnical engineer/testing agency.
5. Vibratory rollers are NOT to be used.

Controlled Fill and Structural Fill Material:
1. Plasticity Index: 4 to 15
2. Maximum Aggregate Size: 3 inches
3. Gradation:
   1. Retained on No. 4 sieve: 25% - 50%
   2. Retained on No. 40 sieve: 50% – 85%

Fill Placement:
1. Fill all excavated areas with approved controlled fill. Place in 8-inch loose lifts and compact to a minimum of 95% of the maximum dry density in accordance with ASTM D-698.
2. Compacted select, non-expansive fill material should be used to fill in stump holes.

Inspection and Testing:
1. Provide field density tests for each 2,500 square feet of building area for each lift of controlled fill.
2. Compaction and moisture content of subgrade and each lift of structural fill shall be inspected and approved by a qualified engineering technician, supervised by a Geotechnical Engineer.

Additional Requirements:
1. Structural fill shall not be placed beyond the limits of the exterior building structure.
2. Provide a vapor retarder conforming to ASTM E1745, Class A or better, with a maximum water vapor permeance of 0.03 perms per ASTM E96. Vapor retarder shall be no less than 10 mils thick

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PROJECT
HALE COUNTY - JJAEP ANNEX 3
BUILDING CONVERSION & NEW MULTI-PURPOSE BUILDING
305 BROADWAY
PLAINVIEW TX. 79072

THE STATE OF TEXAS
HALE COUNTY

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GENERAL NOTES

S0.00

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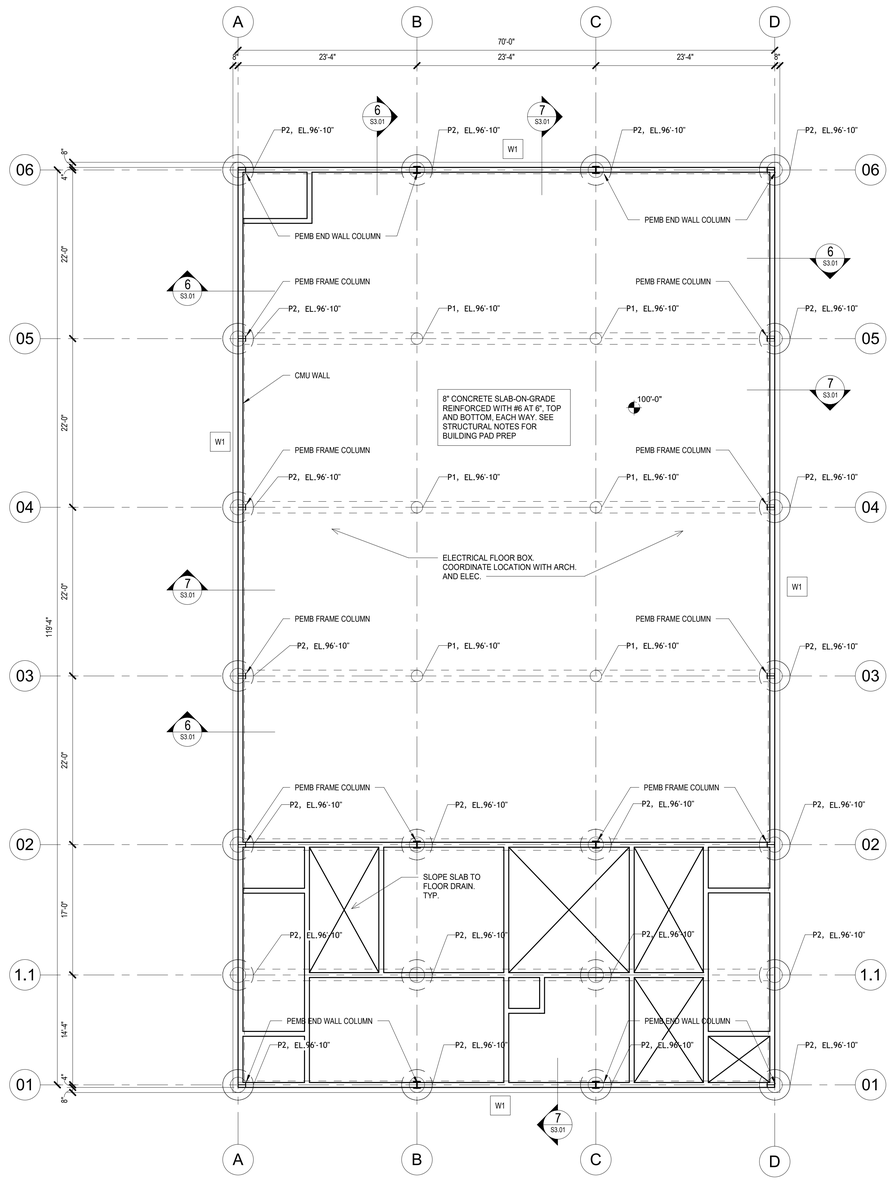

North

1 FOUNDATION PLAN - BUILDING B

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

PLAN NOTES:

1. SEE 9/S4.00 FOR WALL SIZE AND REINFORCING.
2. SEE 8/S4.00 FOR LINTEL SCHEDULE.
3. SEE 1/S4.00 FOR LOOSE LINTEL SCHEDULE.
4. FINISH FLOOR ELEVATION = 100'-0", UNLESS NOTED OTHERWISE
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR DRAINS.
6. CENTERLINES OF PIERS NOT SPECIFICALLY LOCATED ON PLAN BY NOTE OR DIMENSION SHALL BE LOCATED AS FOLLOWS:
   A. SUPPORTING FREESTANDING COLUMNS: CENTERLINES OF COLUMN.
   B. SUPPORTING GRADEBEAMS AND WALLS: CENTERLINE OF GRADEBEAM OR WALL IN ONE DIRECTION, GRID OR AS NOTED IN OTHER DIRECTION. AT CORNER CONDITIONS: CENTERLINES OF GRADEBEAMS OR WALLS.
   C. COLUMNS EMBEDED IN GRADEBEAMS OR WALLS (PILASTERS): CENTERLINES OF THE COLUMN.
6. FOUNDATIONS FOR THE PRE-ENGINEERED BUILDING COLUMNS HAVE BEEN DESIGNED USING ASSUMED REACTIONS. THESE ASSUMED REACTIONS ARE THAT THE BUILDING COLUMNS HAVE A PINNED BASE AND WILL NOT TRANSFER AN APPLIED MOMENT. PRIOR TO THE CONSTRUCTION OF THE DETAILED FOUNDATION, THE REACTIONS FROM THE BUILDING COLUMNS SHALL BE SUBMITTED TO THE FOUNDATION ENGINEER TO VERIFY THE FOUNDATION DESIGN
7. THE PRE-ENGINEERED BUILDING MANUFACTURER SHALL DESIGN AND SUPPLY ALL MATERIAL AS REQUIRED TO MEET THE ARCHITECTURAL DRAWINGS AND THE LOCAL BUILDING CODES. THE PRE-ENGINEERED BUILDING MANUFACTURER SHALL ACT AS THE ENGINEER OF RECORD FOR ALL COMPONENTS ABOVE THE FOUNDATION, INCLUDING THE CONNECTION OF HIS/HER DESIGN TO THE FOUNDATION. ALL SUBMITTALS SHALL BE SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE THE BUILDING IS CONSTRUCTED.

SHEET INDEX:

KEY PLAN

'B'

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PROJECT

HALE COUNTY - JJAEP ANNEX 3

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HALE COUNTY

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FOUNDATION PLAN

S1.00

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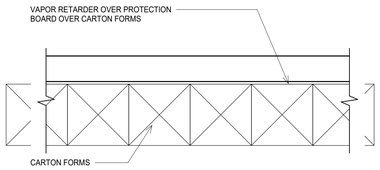
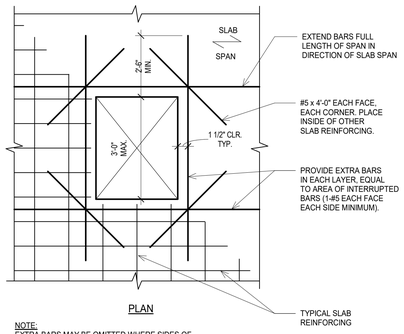


NOTES:

1. REPLACE CARTON FORMS THAT HAVE BEEN DAMAGED OR IF THEY BECOME SATURATED AND WEAK. TAKE SPECIAL CARE TO PREVENT CRUSHING OF CARTON FORMS DURING PLACEMENT OF REINFORCING AND CONCRETE.
2. SLABS HAVE BEEN DESIGNED FOR DEGRADABLE VOID PRODUCTS. USE OF A DIFFERENT PRODUCT IS PROHIBITED.

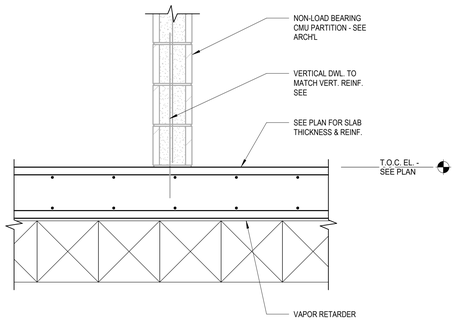
8 SLAB-ON-VOID
SCALE: 1" = 1'-0"



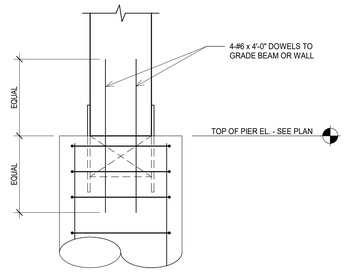
PLAN

NOTE:
EXTRA BARS MAY BE OMITTED WHERE SIDES OF OPENING ARE FRAMED BY BEAMS.

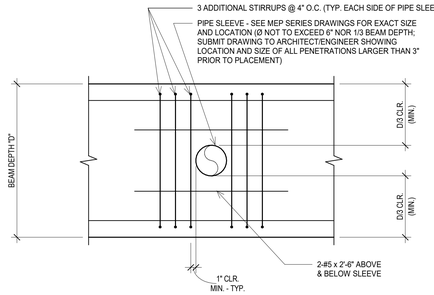
9 REINFORCEMENT AT SLAB OPENING
SCALE: 1" = 1'-0"



10 NON-LOAD BEARING WALL AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"

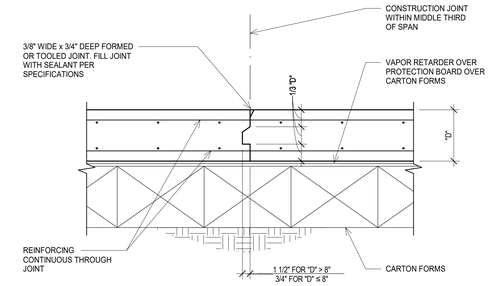


4 TOP OF PIER TO GRADE BEAM
SCALE: 1" = 1'-0"

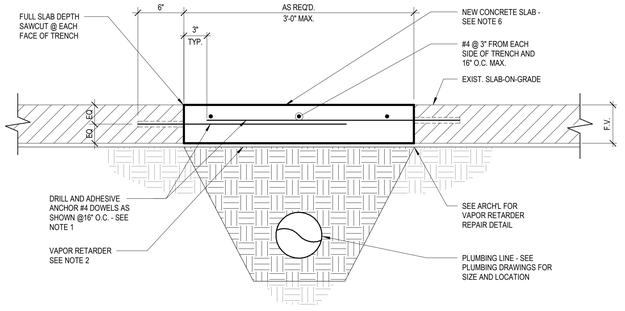


ELEVATION

5 HORIZONTAL GRADE BEAM PENETRATION DETAIL
SCALE: 1" = 1'-0"



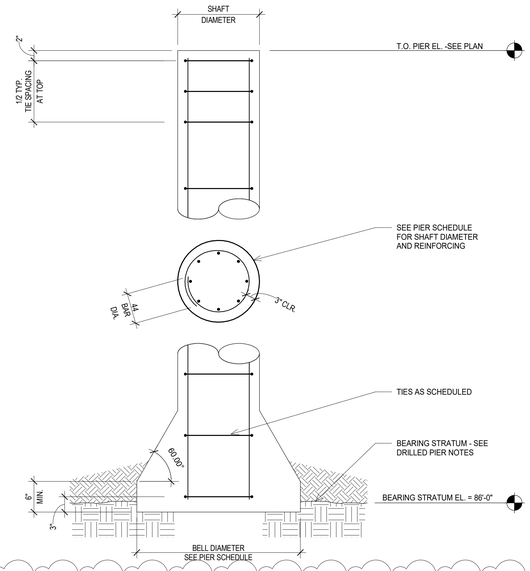
6 CONSTRUCTION JOINT AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



NOTES:

1. ADHESIVE ANCHORING SYSTEM SHALL BE HILTI "HIT-HY 200" OR SIMPSON "ACRYLIC-TIE". FOLLOW ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. VAPOR RETARDER SHALL MEET THE FOLLOWING PROPERTIES:
   a. 15 MIL MINIMUM THICKNESS
   b. MEET ASTM E 1745 CLASS A
   c. WATER VAPOR PERMEANCE PER ASTM E96 SHALL BE 0.01 OR LESS
3. LAP JOINTS IN VAPOR RETARDER 6" MIN. USE MANUFACTURER'S STANDARD ADHESIVE OR PRESSURE SENSITIVE TAPE FOR SEALING MEMBRANE AT SEAMS, PIPE PENETRATIONS, TEARS, ETC.
4. PROVIDE 2-#4x2'-0" DIAGONAL BARS AT RE-ENTRANT CORNERS IN SAWCUT. PLACE AT MID-DEPTH OF SLAB.
5. SOIL REMOVED FOR SLAB TRENCH SHALL BE REPLACED AND RECOMPACTED TO A MINIMUM OF 95% STANDARD PROCTER DENSITY (ASTM D698).
6. PLACE SLAB BACK TO THICKNESS TO MATCH EXISTING WITH A MINIMUM 3,000 PSI NORMAL WEIGHT CONCRETE AND A WATER-CEMENT RATIO OF 0.50 OR LESS.
7. THE CONTRACTOR SHALL ENSURE THAT TRENCHING FOR THE UTILITY LINE IS NOT OVEREXCAVATED AND THAT NO PORTION OF THE SURROUNDING SLAB-ON-GRADE IS LEFT UNSUPPORTED.
8. CONTRACTOR SHALL PROVIDE A COLD JOINT EVERY 30 LINEAR FEET IN THE PORTION OF NEW CONCRETE SLAB THAT IS PLACED DUE TO UNDER-SLAB TRENCHING.

7 TRENCH DETAIL FOR UNDER-SLAB PLUMBING LINES
SCALE: 1 1/2" = 1'-0"

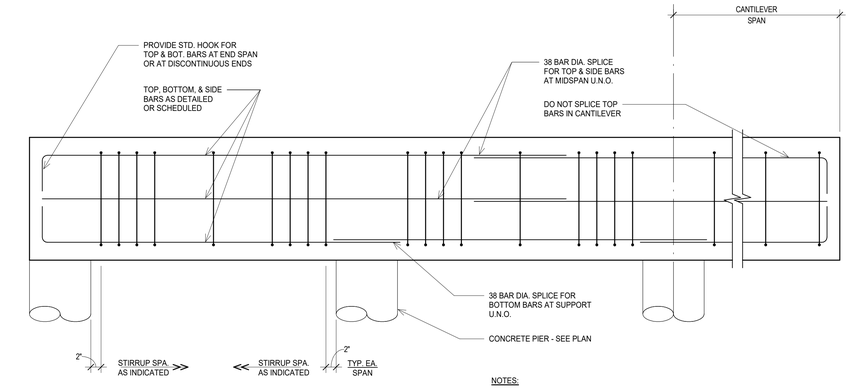


ELEVATION

PIER SCHEDULE				
TYPE	SHAFT DIAMETER	BELL DIAMETER	VERTICAL REINFORCING	TIES
P1	18"	-	6 - #6	#3 AT 10"
P2	24"	48"	6 - #7	#3 AT 12"

NOTES:
1. SEE PLAN FOR TOP PIER ELEVATION. - 01

1 DRILLED PIER WITH UNDERREAMED SHAFT DETAIL
SCALE: 1" = 1'-0"

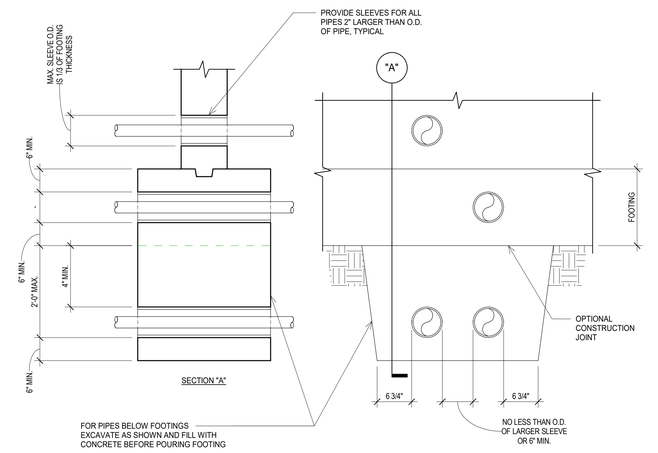


NOTES:

1. BAR SPLICE LENGTHS SHALL BE AS INDICATED UNLESS SCHEDULED OR NOTED OTHERWISE.
2. INCREASE ALL LAP LENGTHS BY 25% @ 75 ksi REINF. BARS - TYP.

ELEVATION

2 GRADE BEAM REINFORCING DETAIL
SCALE: 1" = 1'-0"



SECTION "A"

NOTES:

1. DO NOT PASS PIPES THROUGH ISOLATED FOOTINGS.
2. WHERE PIPES ARE MORE THAN 2'-0" BELOW FOOTING, BACKFILL WITH SOIL AS SPECIFIED.

3 PIPES AND TRENCHES AT GRADE BEAMS
SCALE: 1" = 1'-0"

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PROJECT
HALE COUNTY - JJAEP ANNEX 3
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305 BROADWAY
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CONCRETE DETAILS

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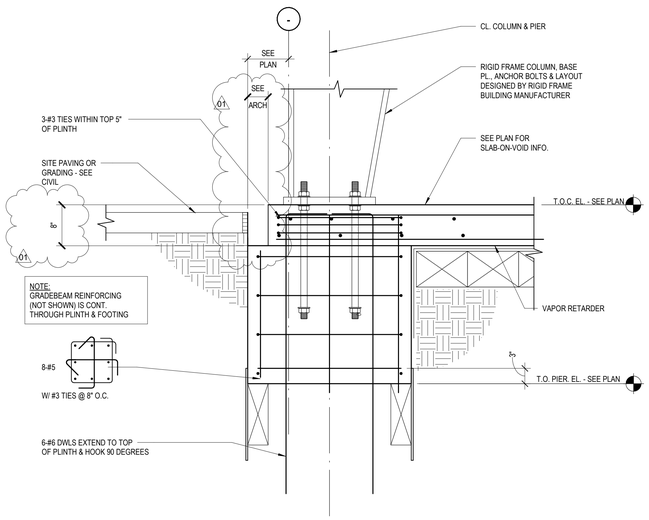
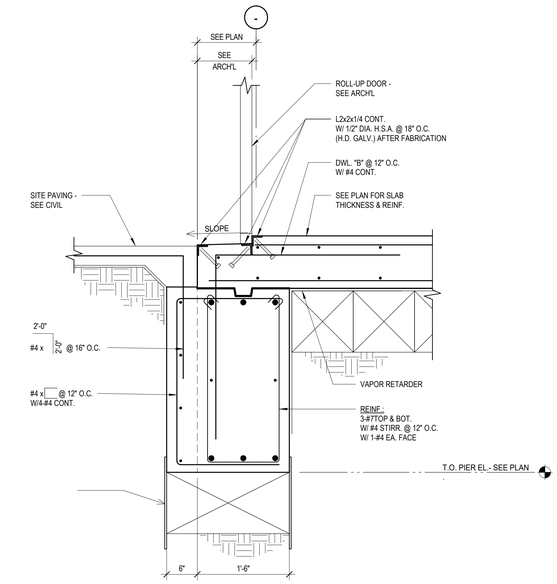


5 SECTION
SCALE: 1" = 1'-0"



6 SECTION
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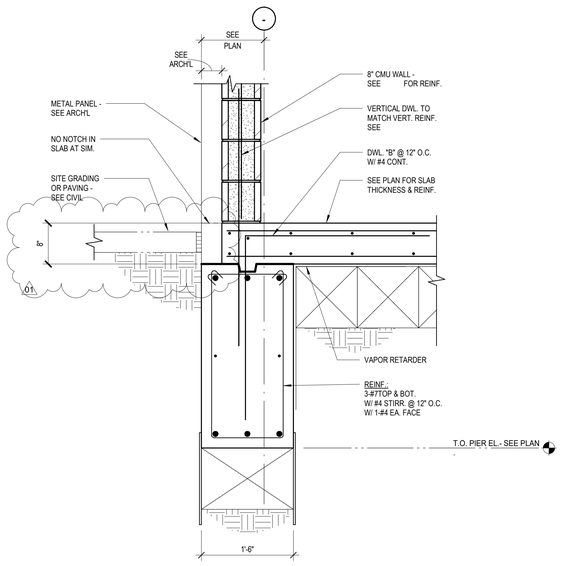
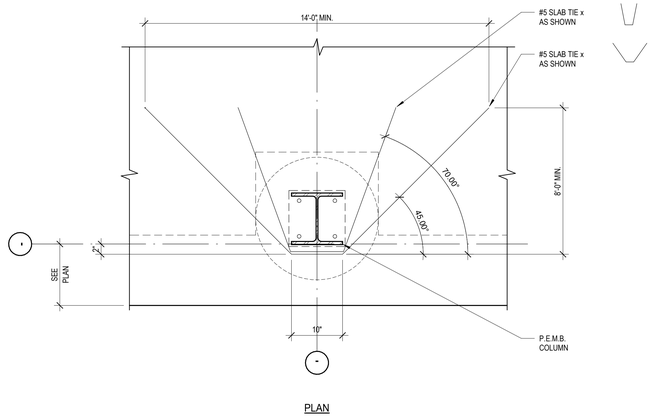
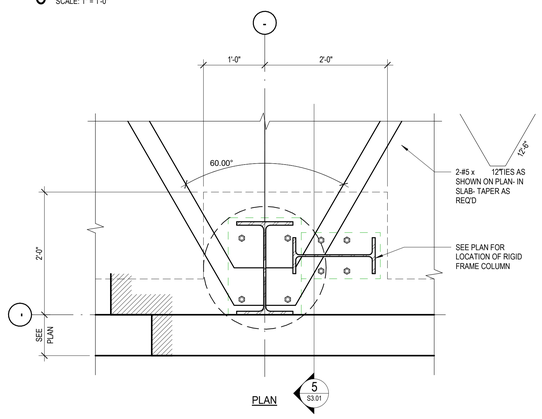


7 SECTION
SCALE: 1" = 1'-0"



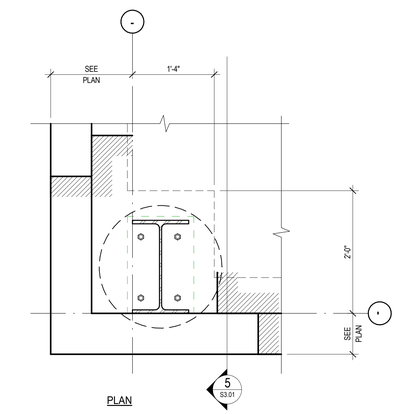
PLAN

1 TYPICAL SLAB TIE DETAIL
SCALE: 1" = 1'-0"



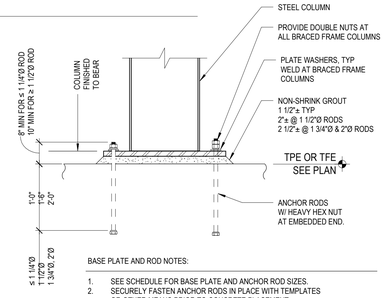
PLAN

2 TYPICAL TOP OF PIER DETAIL
SCALE: 1" = 1'-0"



PLAN

3 TYPICAL TOP OF EXTERIOR PIER DETAIL
SCALE: 1" = 1'-0"



BASE PLATE AND ROD NOTES:

1. SEE SCHEDULE FOR BASE PLATE AND ANCHOR ROD SIZES.
2. SECURELY FASTEN ANCHOR RODS IN PLACE WITH TEMPLATES OR OTHER MEANS PRIOR TO CONCRETE PLACEMENT. INSERTION INTO CONCRETE AFTER CASTING IS PROHIBITED.

BASE PLATE HOLE AND PLATE WASHER REQUIREMENTS		
ANCHOR ROD DIAMETER	HOLE DIAMETER	PLATE WASHER SIZE
3/4"	1 5/16"	1/4"x2"x2"
1"	1 13/16"	3/8"x3"x3"

4 ANCHOR ROD DETAIL
SCALE: 1" = 1'-0"

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