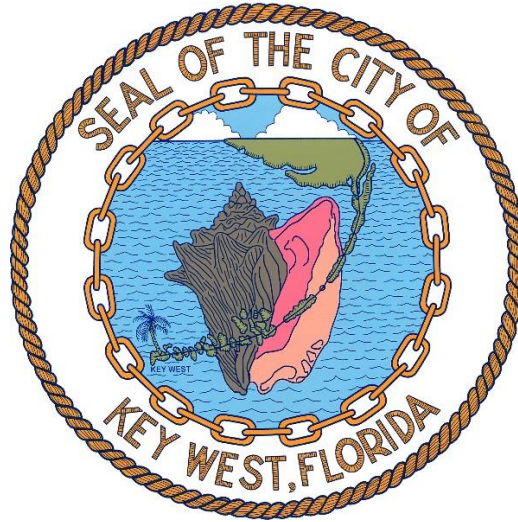


CONTRACT DOCUMENTS FOR:



ITB # 18-028

GLYNN ARCHER GYMNASIUM RENOVATIONS

July 11, 2018

MAYOR: CRAIG CATES

COMMISSIONERS:

RICHARD PAYNE

BILLY WARDLOW

JIMMY WEEKLEY

CLAYTON LOPEZ

SAM KAUFMAN

MARGARET ROMERO

PREPARED BY:
City of Key West
Engineering Services

CITY OF KEY WEST

KEY WEST, FLORIDA

CONTRACT DOCUMENTS

For

GLYNN ARCHER GYMNASIUM RENOVATIONS

CONSISTING OF:
BID REQUIREMENTS
CONTRACT FORMS
CONDITIONS OF THE CONTRACT
GENERAL REQUIREMENTS
DRAWINGS

KEY WEST, FLORIDA

JULY 11, 2018

Table of Contents

Page No.

PART 1 - BIDDING REQUIREMENTS

INVITATION TO BID	1
INSTRUCTIONS TO BIDDER	3
PROPOSAL FORM.....	8
FLORIDA BID BOND	16
ANTI – KICKBACK AFFIDAVIT	18
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES	19
INDEMNIFICATION FORM	22
LOCAL VENDORS FORM.....	23
DOMESTIC PARTNERSHIP AFFIDAVIT	24
CONE OF SILENCE AFFIDAVIT	25
NON-COLLUSION AFFIDAVIT	26
BIDDER'S CHECKLIST.....	27

PART 2 - CONTRACT

CONTRACT	29
PERFORMANCE BOND.....	31
PAYMENT BOND.....	33

PART 3 - CONDITIONS OF THE CONTRACT

PART 4 - GENERAL REQUIREMENTS & SCOPE OF WORK

PART 5 – DRAWINGS / SPECIFICATIONS

PART 6 - REPORTS

PART 1

BIDDING REQUIREMENTS

INVITATION TO BID

Sealed bids for the City of Key West ITB 18-028, Glynn Archer Gymnasium Renovations, addressed to the City of Key West, will be received at the Office of the City Clerk, 1300 White Street., Key West Florida, 33040 until 3:00 p.m. on **Wednesday, July 11, 2018** and then will be publicly opened and read. Any bids received after the time and date specified will not be considered.

Please submit one (1) original, and two (2) flash drives each with one single PDF file of the sections entitled “Bidding Requirements” and “Contract Forms”. Bid package is to be enclosed in a sealed envelope, clearly marked on the outside “ITB # 18-028 BID FOR GLYNN ARCHER GYMNASIUM RENOVATIONS” addressed and delivered to the City Clerk at the address noted above.

The project contemplated consists of providing all site work, materials, equipment and labor necessary to accomplish the following:

Interior renovations of the existing gym building to include new ADA compliant restrooms, new interior configuration, new mechanical system, new plumbing and new electrical work and interior demolition. Exterior work to include replacing windows and doors to match original, new white single ply roofing system inclusive of insulation and concrete spalling repair.

Drawings and Specifications may be obtained from Demand Star by Onvia or City of Key West. Please contact Demand Star at www.demandstar.com or call 1-800-711-1712 or www.cityofkeywest-fl.gov

A MANDATORY Pre - Bid meeting will be held on **June 27, 2018 at 2:00 in the City Managers Conference Room second floor**, Key West City Hall 1300 White Street, Key West, Florida.

EACH BID MUST BE SUBMITTED ON THE PRESCRIBED FORM AND ACCOMPANIED BY BID SECURITY AS PRESCRIBED IN THE INSTRUCTIONS TO BIDDERS, PAYABLE TO THE CITY OF KEY WEST, FLORIDA, IN AN AMOUNT NOT LESS THAN FIVE (5) PERCENT OF THE AMOUNT BID.

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

The successful Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of the State and the provisions of Chapter 66 Section 87 of the Code of Ordinances of the City of Key West; within 10 days following the Notice of Award and must demonstrate that he holds at a minimum, the following licenses & certificates;

- A. City of Key West Business Tax License Receipt
- B. A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida.

All bid bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or Insurance Company having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of

Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida.

Before a Contract will be awarded for the work contemplated herein, the CITY will conduct such investigation as is necessary to determine the performance record and ability of the apparent low Bidder to perform the size and type of work specified under this Contract. Upon request, the Bidder shall submit such information as deemed necessary by the CITY to evaluate the Bidder's qualifications.

Any request for information concerning this project must be made in writing, per City of Key West Ordinance Section 2-773, Cone of Silence, to L. Kreed Howell, Senior Construction Manager, at lhowell@cityofkeywest-fl.gov.

As stated above at the time of the bid submittal the Bidder must provide satisfactory documentation of State Licenses. The Bidder shall furnish documentation showing that he is in compliance with the licensing requirements of County, and City licenses as would be required within ten days of the award. The successful Bidder must also be able to satisfy the CITY Attorney as to such insurance coverage and legal requirements as may be demanded by the Bid in question. The CITY may reject bids for any and/or all of the following reasons: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bid does not strictly conform to the law or is non-responsive to the bid requirements, (4) if the bid is conditional, or (5) if a change of circumstances occurs making the purpose of the bid unnecessary to the CITY. The CITY may also waive any minor formalities or irregularities in any bid, (6) if such rejection is in the best interest of the CITY.

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

A. FORMAT

The Contract Documents are divided into parts, divisions, and sections for convenient organization and reference. Generally, there has been no attempt to divide the sections into work performed by the various building trades, work by separate subcontractors, or work required for separate facilities in the project.

B. DOCUMENT INTERPRETATION

The separate sections contained within these Contract Documents are intended to be mutually cooperative and to provide all details reasonably required for the execution of the proposed work.

Should there be any doubt as to the meaning or intent of said Contract Documents, the Bidder should request of the ENGINEER, in writing (at least ten (10) calendar days prior to bid opening) an interpretation thereof. Any interpretation or change in said Contract Documents will be made only in writing in the form of Addenda to the documents which will be available to all registered holders of Contract Documents via Demand star. Bidders shall submit with their Bids, or indicate receipt of, all Addenda. The CITY will not be responsible for any other explanation or interpretations of said Documents.

2. GENERAL DESCRIPTION OF THE PROJECT

A general description of the work to be done is contained in the Invitation to Bid. The scope is specified in applicable parts of these Contract Documents.

3. QUALIFICATION OF CONTRACTORS

The prospective Bidders must meet the statutorily prescribed requirements before award of Contract by the CITY. Bidders must hold or obtain all licenses and/or certificates as required by the State and Local Statutes to bid and perform the work specified herein.

4. BIDDER'S UNDERSTANDING

Each Bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful Bidder of his obligation to enter a Contract and complete the contemplated work in strict accordance with the Contract Documents. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction all information concerning site and subsurface conditions.

The CITY will make available to prospective Bidders upon request and at the office of the ENGINEER, prior to bid opening, any information that he may have as to subsurface conditions and surface topography at the worksite.

Each Bidder shall inform himself of, and the Bidder awarded a Contract shall comply with, federal,

state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, nondiscrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.

5. TYPE OF BID

A. LUMP SUM

The BID for the work is to be submitted on a lump sum basis. Lump sum prices shall be submitted for all items of work set forth in the bid. All items required to complete the work specified but not included in the bid shall be considered incidental to those set forth in the bid.

The Bidder shall submit the Schedule of Values INCLUDED within these documents. It shall be broken down by trade and type of work and include the cost of all LABOR, MATERIALS and PERMIT ALLOWANCE (provided) for use as a basis for payment.

6. PREPARATION OF BIDS

A. GENERAL

All blank spaces in the BID form must be filled in, as required, preferably in BLACK ink. All price information shall be shown in both words and figures where required. No changes shall be made in the phraseology of the forms. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. In case of discrepancy between unit prices and extended totals, unit prices shall prevail.

Any BID shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or in which any of the prices are obviously unbalanced, or which in any manner shall fail to conform to the conditions of the published Invitation to Bid.

Only one BID from any individual, firm, partnership, or corporation, under the same or different names, will be considered. Should it appear to the CITY that any Bidder is interested in more than one Bid for work contemplated; all Bids in which such Bidder is interested will be rejected.

B. SIGNATURE

The Bidder shall sign his BID in the blank space provided therefore. If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign Contracts on behalf of the corporation. If Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign Contracts in behalf of the partnership. If signature is by an agent, other than an officer of a corporation or a member of a partnership, a notarized power-of-attorney must be on file with the CITY prior to

opening of Bids or submitted with the Bid, otherwise the Bid will be regarded as not properly authorized.

C. SPECIAL BIDDING REQUIREMENTS

The Bidder's attention is brought to the hiring practices and licenses and permits of the City of Key West. These are defined in the addition to Article 39, ORDINANCES, PERMITS, AND LICENSES, as set forth in the Supplementary Conditions.

The Bidder shall submit with his Bid his experience record showing his experience and expertise in related work. Such experience record shall provide at least five current or recent projects (within the past 5 years) of similar work, within the State Florida and preferably Monroe County. For each project the following information shall be provided:

1. Description and location of work.
2. Contract amount.
3. Dates work was performed.
4. Owner.
5. Name of Owner's contact person and phone number.
6. ENGINEER.
7. Name of ENGINEER's contact person and phone number.

The bidder shall submit with his bid a list of items to be performed by his own labor and that performed by subcontractors or others.

D. ATTACHMENTS

Bidder shall complete and submit the following forms with his bid:

Anti-Kickback Affidavit
Public Entity Crimes Form
Indemnification Form
City of Key West Business License Tax Receipt
Local Vendors Form
Domestic Partnership Affidavit
Cone of Silence Affidavit
Non-Collusion Affidavit
Bidders' Checklist

E. PUBLIC ENTITY CRIMES FORM

Pursuant to the requirements of Chapter 287.133, Laws of Florida, pertaining to the sworn statement on Public Entity Crimes and the Convicted Vendor List, all Bidders shall submit a signed and notarized statement with their Bid on the form provided herein.

7. STATE AND LOCAL SALES AND USE TAXES

Unless the Supplementary Conditions contains a statement that the CITY is exempt from state sales tax on materials incorporated into the work due to the qualification of the work under this

Contract, the Contractor, as required by the laws and statutes of the state and its political subdivisions, shall pay all state and local sales and use taxes. Prices quoted in the Bid shall include all nonexempt sales and use taxes, unless provision is made in the Bid form to separately itemize the tax.

8. SUBMISSION OF BIDS

All BIDS must be submitted not later than the time prescribed, at the place, and in the manner set forth in the Invitation to Bid. BIDS must be made on the BID forms provided herewith, **submit one (1) ORIGINAL and two (2) FLASH DRIVES each containing a single PDF file of the entire bid package.**

Each BID must be submitted in a sealed envelope, so marked as to indicate the Bidder's name and its contents (project name and number) without being opened, and addressed in conformance with the instructions in the Invitation to Bid.

9. MODIFICATION OR WITHDRAWAL OF BIDS

Prior to the time and date designated for receipt of BIDS, any BID submitted may be withdrawn by notice to the party receiving BIDS at the place designated for receipt of BIDS. Such notice shall be in writing over the signature of the Bidder or by telegram. If by telegram, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of BID. No BID may be withdrawn after the time scheduled for opening of BIDS, unless the time specified in paragraph AWARD OF CONTRACT of these Instructions to Bidders shall have elapsed.

10. BID SECURITY

BIDS must be accompanied by cash, a certified check, or cashier's check drawn on a bank in good standing, or a bid bond issued by a Surety authorized to issue such bonds in the state where the work is located, in the amount of five (5) percent of the total amount of the Bid submitted. This bid security shall be given as a guarantee that the Bidder will not withdraw his BID for a period of ninety (90) days after bid opening, and that if awarded the Contract, the successful Bidder will execute the attached Contract and furnish properly executed Performance and Payment Bonds, each in the full amount of the Contract price within the time specified. Agent and Surety phone numbers must be provided.

The Attorney-in-Fact who executes this bond in behalf of the Surety must attach a notarized copy of his power-of-attorney as evidence of his authority to bind the Surety on the date of execution of the bond. Where State Statute requires, certification by a resident agent shall also be provided.

If the Bidder elects to furnish a Bid Bond, he shall use the Bid Bond form bound herewith, or one conforming substantially thereto in form and content.

11. RETURN OF BID SECURITY

Within 15 days after the award of the Contract, the CITY will return the bid securities to all Bidders whose BIDS are not to be further considered in awarding the Contract. Retained bid securities will be held until the Contract has been finally executed, after which all bid securities, other than

Bidders' bonds and any guarantees, which have been forfeited, will be returned to the respective Bidders whose Bids they accompanied.

12. AWARD OF CONTRACT

Within ninety (90) calendar days after the opening of Bids, the CITY will accept one of the Bids or will act in accordance with the following paragraphs. The acceptance of the Bid will be by written notice of award, mailed to the office designated in the Bid, or delivered to the Bidder's representative. In the event of failure of the lowest responsive, responsible Bidder to sign the Contract, provide additional documents, insurance certificate(s) and evidence of holding required licenses and certificates, the Owner may award the Contract to the next lowest responsive, responsible Bidder. Such award, if made, will be made within one hundred & twenty (120) days after the opening of Bids.

The CITY reserves the right to accept or reject any or all Bids, and to waive any informalities and irregularities in said Bids.

13. BASIS OF AWARD

The award will be made by the Owner on the basis of the BID from the lowest, responsive, responsible BIDDER which, in the Owner's sole and absolute judgment will best serve the interest of the Owner.

14. EXECUTION OF CONTRACT

The successful Bidder shall, within ten (10) working days after receiving Notice of Award, sign and deliver to the CITY an original Contract and two (2) copies in the form hereto attached, together with the insurance certificate as required in the Contract Documents and evidence of holding required licenses and certificates. Within 10 working days after receiving the signed Contract from the successful Bidder, the City's authorized agent will sign the Contract. Signature by both parties constitutes execution of the Contract.

16. FAILURE TO EXECUTE CONTRACT AND FURNISH BID BOND

The Bidder who has a Contract awarded to him and who fails to promptly and properly execute the Contract shall forfeit the bid security that accompanied his bid, and the bid security shall be retained as liquidated damages by the CITY, and it is agreed that this said sum is a fair estimate of the amount of damages the CITY will sustain in case the Bidder fails to enter into a Contract. Bid security deposited in the form of cash, a certified check, or cashier's check shall be subject to the same requirement as a Bid Bond.

17. TIME OF COMPLETION

The time of completion of the work to be performed under this Contract is the essence of the Contract. Delays and extensions of time may be allowed in accordance with the provisions stated in the General Conditions.

When the Contractor receives a Notice to Proceed, he shall commence work as soon as possible and shall complete all work within the number of calendar days stipulated in this Bid. The term of this contract will be **365** calendar days.

NOTE TO BIDDER: Use preferably BLACK ink for completing this BID form.

PROPOSAL FORM

To: The City of Key West
Address: 1300 White Street, Key West, Florida 33040
Project Title: Glynn Archer Gymnasium Renovations
ITB 18-028

Bidder's contact person for additional information on this BID:

Company Name: _____

Contact Name & Telephone #: _____

Email Address: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein, that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

CONTRACT EXECUTION

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder further agrees to begin work within 10 calendar days after the date of the Notice to proceed and to complete the project, in all respects within **365** calendar days after the date of the Notice to Proceed.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract and shall fail to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner at the rate of \$500.00 per day for all work awarded until the work has been satisfactorily completed as provided by the Contract Documents.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. ____, ____,
____, _____, _____, _____, _____, _____, _____, _____, _____,
(Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated bid prices for the work.

LUMP SUM ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum amounts. The Bidder agrees that the lump sum represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

LUMP SUM PRICE BID

Lump sum bid prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

LUMP SUM BASE BID

Lump Sum Base Bid (Inclusive of all permitting, fixtures, equipment, material and labor):

LUMP SUM \$ _____

_____ Dollars & _____ Cents
(amount written in words)

Base bid shall also include:

- 1. Removing and replacing with new 30% of the existing wood roof decking and joists.
- 2. Removing and replacing with new 30% of the existing wood finished floor and 20% of the existing wood sub-floor.

UNIT PRICES

The Bidder further proposes to accept as full payment for unit price work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following unit price amounts, it being expressly understood that the unit prices are independent of the exact quantities involved. The Bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

Provide unit pricing to remove and replace with new decking (per square foot) and for joists should actual (field measured) quantities vary from the 30% included in the base bid.

Roof Decking:

UNIT PRICE (Add/Deduct), per square foot \$ _____

Roof Joists:

UNIT PRICE (Add/Deduct), per linear foot \$ _____

Provide uniting price, per square foot, to remove and replace with new finished floor and sub-floor should actual (field measured) quantities vary from that allocated in the base bid.

Finished Wood Flooring:

UNIT PRICE (Add/Deduct), per square foot \$ _____

Wood Sub-floor:

UNIT PRICE (Add/Deduct), per square foot \$ _____

The unit price provided will be used as a credit if the replacement is less than the allocated amount.

Additive Bid Alternate No. 1 – Selective Demolition and Installation of a New Single Ply Roof System of the Attached Structure (SOS Kitchen):

SCOPE OF BID ALTERNATE: See Division 7 in the attached specifications regarding the scope of work required for the selective demolition and installation of the roofing system included in the original Scope of Work.

LUMP SUM (Add) \$ _____

Additive Bid Alternate No. 2 – Provide lightning protection system for the main gym structure and intermediate lower roof:

SCOPE OF BID ALTERNATE: See detail 1/A – 5.3 in the attached drawings regarding the scope of work required for this alternate.

LUMP SUM (Add) \$ _____

Additive Bid Alternate No. 3 – Provide lightning protection system for the adjacent “SOS” building:

SCOPE OF BID ALTERNATE: See detail 1/A – 5.3 in the attached drawings regarding the scope of work required for this alternate.

LUMP SUM (Add) \$ _____

NOTE: OWNER HAS THE RIGHT TO ACCEPT OR REJECT THE BID ALTERNATE. THE TOTAL OF BASE BID PLUS THE SUM OF OWNER SELECTED BID ALTERNATE WILL A BASIS OF EVALUATING LOW BIDDER AND SASIS OF AWARD.

BIDDER REPRESENTATION

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

I represent that this bid is submitted in compliance with all terms, conditions and specifications of the Invitation to Bid and that I am authorized by the owners/principals to execute and submit this proposal on behalf of the business identified below:

PROPOSAL FORM

To: The City of Key West
Address: 1300 White Street, Key West, Florida 33040
Project Title: Glynn Archer Gymnasium Renovations
ITB 18-028

Bidder's contact person for additional information on this BID:

Company Name: _____

Contact Name & Telephone #: _____

Email Address: _____

BIDDER'S DECLARATION AND UNDERSTANDING

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Bid are those named herein; that this Bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Bid is made without any connection or collusion with any person submitting another Bid on this Contract.

The Bidder further declares that he has carefully examined the Contract Documents for the construction of the project, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents, and that this Bid is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Bid.

CONTRACT EXECUTION

The Bidder agrees that if this Bid is accepted, he will, within 10 days, not including Sundays and legal holidays, after Notice of Award, sign the Contract in the form annexed hereto, and will at that time, deliver to the Owner evidence of holding required licenses and certificates, and will, to the extent of his Bid, furnish all machinery, tools, apparatus, and other means of construction and do the work and furnish all the materials necessary to complete all work as specified or indicated in the Contract Documents.

CERTIFICATES OF INSURANCE

Bidder agrees to furnish the Owner, before commencing the work under this Contract, the certificates of insurance as specified in these Documents.

START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

The Bidder further agrees to begin work within 10 calendar days after the date of the Notice to proceed and to complete the project, in all respects within 365 calendar days after the date of the Notice to Proceed.

LIQUIDATED DAMAGES

In the event the Bidder is awarded the Contract and shall fail to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid to the Owner at the rate of \$500.00 per day for all work awarded until the work has been satisfactorily completed as provided by the Contract Documents.

ADDENDA

The Bidder hereby acknowledges that he has received Addenda No's. ____, ____,
____, _____, _____, _____, _____, _____, _____, _____, _____,
(Bidder shall insert No. of each Addendum received) and agrees that all addenda issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Bid(s) includes all impacts resulting from said addenda.

SALES AND USE TAXES

The Bidder agrees that all federal, state, and local sales and use taxes are included in the stated bid prices for the work.

LUMP SUM ITEMS

The Bidder further proposes to accept as full payment for the work proposed herein the amounts computed under the provisions of the Contract Documents and based on the following lump sum amounts. The Bidder agrees that the lump sum represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these Contract Documents.

LUMP SUM PRICE BID

Lump sum bid prices stated in this proposal include all costs and expenses for labor, equipment, materials, disposal and contractor's overhead and profit. All work and incidental costs shall be included for payment under the several scheduled items of the overall contract, and no separate payment will be made therefore.

Lump Sum Base Bid (Inclusive of all permitting, fixtures, equipment, material and labor):

LUMP SUM \$ _____

_____ Dollars & _____ Cents
(amount written in words)

Additive Bid Alternate No. 1 – Selective Demolition and Installation of a New Single Ply Roof System of the Attached Structure (SOS Kitchen):

SCOPE OF BID ALTERNATE: See division 7 in the attached specifications regarding the scope of work required for the selective demolition and installation of the roofing system included in the original Scope of Work.

LUMP SUM (Add) \$ _____

Additive Bid Alternate No. 2 – Provide complete lightning protection system for the main gym structure and intermediate lower roof:

SCOPE OF BID ALTERNATE: See detail 1/A – 5.3 in the attached drawings regarding the scope of work required for this alternate.

LUMP SUM (Add) \$ _____

Additive Bid Alternate No. 3 – Provide complete lightning protection system for the adjacent “SOS” building:

SCOPE OF BID ALTERNATE: See detail 1/A – 5.3 in the attached drawings regarding the scope of work required for this alternate.

LUMP SUM (Add) \$ _____

NOTE: OWNER HAS THE RIGHT TO ACCEPT OR REJECT THE BID ALTERNATE. THE TOTAL OF BASE BID PLUS THE SUM OF OWNER SELECTED BID ALTERNATE WILL A BASIS OF EVALUATING LOW BIDDER AND SASIS OF AWARD.

BIDDER REPRESENTATION

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

I represent that this bid is submitted in compliance with all terms, conditions and specifications of the Invitation to Bid and that I am authorized by the owners/principals to execute and submit this proposal on behalf of the business identified below:

GLYNN ARCHER GYM RENOVATIONS ITB 18-028 (BIDDER TO COMPLETE WITH PROPOSAL)

A	B	C
Item Number	Description of Work	Schedule Value
1	Division 1 Gen Conditions	
2	<i>Key West / AIPP / Util*</i>	\$50,000.00
3	P&P Bonds	
4	Mobilization	
5	<i>General Conditions**</i>	
6	DIVISION 2 Site Work	
7	DIVISION 3 Concrete	
8	DIVISION 4 CMU	
9	DIVISION 5 Misc Metals	
10	DIVISION 6 Misc Carpentry	
11	DIVISION 7 Roofing	
12	DIVISION 8 Windows & Doors	
13	DIVISION 9 Finishes	
14	DIVISION 10 Specialties	
15	DIVISION 22 Plumbing	
16	DIVISION 23 Mechanical	
17	DIVISION 26 Electrical	
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
	TOTAL	\$50,000.00

Key West / AIPP / Utilities* = Key West Building permit - AIPP Fee - FCAA - FKEC

General Conditions** = P&O - Temp Facilities - Rental Equipment

Company Name: _____

Address: _____

Contact Name: _____

Email: _____

Telephone: _____

Fax: _____

Signature: _____ *Date:* _____

Payment for materials & equipment authorized by the Owner in a written Change Order but not listed in the Schedule of Values will be provided at suppliers' invoice plus 15 %.

List items to be performed by CONTRACTOR's own forces and the estimated total cost of these items. (Use additional sheets if necessary.)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

SUBCONTRACTORS

The Bidder further proposes that the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work if the Bidder is awarded the Contract:

Name

Street

City

State

Zip

Name

Street

City

State

Zip

Name

Street

City

State

Zip

Name

Street

City

State

Zip

Name

Street

City

State

Zip

Name

Street

City

State

Zip

SURETY

_____ whose address is

_____, _____, _____
Street City State Zip

BIDDER

The name of the Bidder submitting this Bid is

_____ doing business at

_____, _____, _____
Street City State Zip

which is the address to which all communications concerned with this Bid and with the Contract shall be sent.

The names of the principal officers of the corporation submitting this Bid, or of the partnership, or of all persons interested in this Bid as principals are as follows:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

If Sole Proprietor or Partnership

IN WITNESS hereto the undersigned has set his (its) hand this _____ day of _____ 2018.

Signature of Bidder

Title _____

If Corporation

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this _____ day of _____ 2018.

(SEAL)

Name of Corporation

By _____

Title _____

Attest _____

Secretary

FLORIDA BID BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that _____

hereinafter called the PRINCIPAL, and _____

a corporation duly organized under the laws of the State of _____

having its principal place of business at _____

_____ in the State of _____,

and authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto

hereinafter called the OBLIGEE, in the sum of _____

DOLLARS (\$ _____) for the payment for which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these present.

THE CONDITION OF THIS BOND IS SUCH THAT:

WHEREAS, the PRINCIPAL is herewith submitting his or its Bid for

ITB # 18-028 / Glynn Archer Gym Repairs said Bid, by reference thereto, being hereby made a part hereof.

WHEREAS, the PRINCIPAL contemplates submitting or has submitted a bid to the OBLIGEE for the furnishing of all labor, materials (except those to be specifically furnished by the CITY),

equipment, machinery, tools, apparatus, means of transportation for, and the performance of the work covered in the Bid and the detailed Specifications, entitled:

ITB # 18-028 / Glynn Archer Gym Repairs

WHEREAS, it was a condition precedent to the submission of said bid that a cashier's check, certified check, or bid bond in the amount of five (5) percent of the base bid be submitted with said bid as a guarantee that the Bidder would, if awarded the Contract, enter into a written Contract with the CITY for the performance of said Contract, within 10 working days after written notice having been given of the award of the Contract.

NOW, THEREFORE, the conditions of this obligation are such that if the PRINCIPAL within 10 consecutive calendar days after written notice of such acceptance, enters into a written Contract with the OBLIGEE and furnishes the Performance and Payment Bonds, each in an amount equal to 100 percent of the base bid, satisfactory to the CITY, then this obligation shall be void; otherwise the sum herein stated shall be due and payable to the OBLIGEE and the Surety herein agrees to pay said sum immediately upon demand of the OBLIGEE in good and lawful money of the United States of America, as liquidated damages for failure thereof of said PRINCIPAL.

Signed and sealed this _____ day of _____, 2018.

PRINCIPAL

By _____

STATE OF _____)

: SS

COUNTY OF _____)

SURETY

By _____

SWORN STATEMENT UNDER SECTION 287.133(3)(A)
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid or Bid for _____

2. This sworn statement is submitted by _____
(Name of entity submitting sworn statement)

whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is _____

(If the entity has no FEIN, include the Social Security Number of the individual
signing this sworn statement _____

3. My name is _____
(Please print name of individual signing)

and my relationship to the entity named above is _____

4. I understand that a “public entity crime” as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, any bid or contract for goods or services to be provided to any public or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, material misrepresentation.

5. I understand that “convicted” or “conviction” as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication guilt, in any federal or state trial court of record relating to charges brought by indictment information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an “affiliate” as defined in Paragraph 287.133(1)(a), Florida Statutes, means

- a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm’s length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a “person” as defined in Paragraph 287.133(1)(8), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Please indicate which statement applies).

____Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND (Please indicate which additional statement applies.)

____There has been a proceeding concerning the conviction before a hearing of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. (Please attach a copy of the final order.)

____The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. (Please attach a copy of the final order.)

____The person or affiliate has not been put on the convicted vendor list. (Please describe any action taken by or pending with the Department of General Services.)

(Signature)

(Date)

STATE OF _____

COUNTY OF _____

PERSONALLY, APPEARED BEFORE ME, the undersigned authority,

_____ who, after first being sworn by me, affixed his/her
(Name of individual signing)

Signature in the space provided above on this _____ day of _____, 2018.

My commission expires:

NOTARY PUBLIC

INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the “indemnitees”) from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney’s fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR’s insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers’ compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

CONTRACTOR: _____

SEAL:

Address

Signature

Print Name

Title

DATE: _____

LOCAL VENDOR CERTIFICATION PURSUANT TO CKW ORDINANCE 09-22 SECTION 2-798

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- a. Principle address as registered with the FL Department of State located within 30 miles of the boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation.
- b. Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.
- c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for Bids.
 - Not a local vendor pursuant to Ordinance 09-22 Section 2-798
 - Qualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self-certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name _____ Phone: _____

Current Local Address: _____ Fax: _____
(P.O Box numbers may not be used to establish status)

Length of time at this address: _____

Date: _____

Signature of Authorized Representative

STATE OF _____ COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2018.

By _____, of _____
(Name of officer or agent, title of officer or agent) (Name of corporation acknowledging)

or has produced identification _____ as identification
(Type of identification)

Signature of Notary

Print, Type or Stamp Name of Notary

Title or Rank

Return Completed form with
Supporting documents to:
City of Key West Purchasing

BIDDER'S CHECKLIST

(Note: The purpose of this checklist is to serve as a reminder of major items to be addressed in submitting a bid and is not intended to be all inclusive. It does not alleviate the Bidder from the responsibility of becoming familiar with all aspects of the Contract Documents and proper completion and submission of his bid.)

1. All Contract Documents thoroughly read and understood. []
2. All blank spaces in Bid filled in, using black ink. []
3. Total and unit prices added correctly and attached Schedule of Values []
4. Addenda acknowledged. []
5. Subcontractors are named as indicated in the Bid. []
6. Experience record included. []
7. Bid signed by authorized officer. []
8. Bid Bond completed and executed, including power-of-attorney dated the same date as Bid Bond. []
9. Bidder familiar with federal, state, and local laws, ordinances, rules and regulations affecting performance of the work. []
10. Bidder, if successful, able to obtain and/or demonstrate possession of required licenses and certificates within (10) ten calendar days after receiving a Notice of Award. []
11. BID submitted intact with the volume entitled "Bidding Requirements" and "Contract Forms", 1 original, and 2 flash drives as stated in the invitation to bid. []
12. Bid Documents submitted in sealed envelope and addressed and labeled in conformance with the instructions in the Invitation to Bid. []

PART 2

CONTRACT FORMS

CONTRACT

This Contract, made and entered into this _____ day of _____ 2018,

by and between the CITY OF KEY WEST, hereinafter called the "Owner", and _____

hereinafter called the "Contractor";

WITNESSETH:

The Contractor, in consideration of the sum to be paid him by the Owner and of the covenants and agreements herein contained, hereby agrees at his own proper cost and expense to do all the work and furnish all the materials, tools, labor, and all appliances, machinery, and appurtenances for **ITB 18-028, Glynn Archer Gymnasium Renovations**, Key West, Florida to the extent of the Bid made by the Contractor, dated the _____ th day of _____ 2018, all in full compliance with the Contract Documents referred to herein.

The CONTRACT DOCUMENTS, including the signed copy of the BID, BID BOND, CONTRACT FORM, SUMMARY OF WORK, SPECIFICATIONS, DRAWINGS, GENERAL & SUPPLEMENTARY CONDITIONS OF THE CONTRACT.

In consideration of the performance of the work as set forth in these Contract Documents, the Owner agrees to pay to the Contractor the amount bid in the Bid as adjusted in accordance with the Contract Documents, or as otherwise herein provided, and to make such payments in the manner and at the times provided in the Contract Documents.

The Contractor agrees to complete the work within *Three Hundred and Sixty Five (365)* days and to accept as full payment hereunder the amounts computed as determined by the Contract Documents and based on the said BID.

The Contractor agrees to remedy all defects appearing in the work or developing in the materials furnished and the workmanship performed under this Contract during the warranty period after the date of final acceptance of the work by the Owner, and further agrees to indemnify and save the Owner harmless from any costs encountered in remedying such defects.

It is agreed that the Contract, based upon the BID, shall be fully complete within the stated number of consecutive calendar days from the date the Notice to Proceed is issued.

In the event the Contractor fails to complete the work within the time limit or extended time limit agreed upon, as more particularly set forth in the Contract Documents, liquidated damages shall be paid at a rate of \$500.00 per day. Sundays and legal holidays shall be included in determining days in default.

This contract will automatically expire upon completion of the project. Contractors warranty obligations remain in effect.

IN WITNESS WHEREOF, we, the parties hereto, each herewith subscribe the same this

_____ Day of _____, A.D., 2018.

CITY OF KEY WEST

By _____

Title City Manager _____

CONTRACTOR

By _____

Title _____

FLORIDA PERFORMANCE BOND

BOND NO. _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05, _____

with offices, at _____

hereinafter called the CONTRACTOR, (Principal), and _____

with offices, at _____

a corporation duly organized and existing under and by virtue of the laws of the State of _____, hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound CITY OF KEY WEST,

represented by its _____, hereinafter called the City (Obligee), in the sum of:

_____ DOLLARS (\$ _____),
lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, and the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract hereto attached, with the CITY, dated _____, 2018, to furnish at his own cost, charges, and expense all the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the Contract Documents as defined therein, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein;

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR:

1. Shall in all respects comply with the terms and conditions of said Contract and his obligation there under, including the Contract Documents (which include the permit form, coral relocation plan, specifications, and conditions as prepared by the CITY, invitation to bid, instructions to bidders, the CONTRACTOR’S bid as accepted by the above CITY, the bid and contract performance and payment bonds, and all addenda, if any, issued prior to the opening of bids),

being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and

2. Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying PRINCIPAL with labor, materials, or supplies, used directly or indirectly by PRINCIPAL in the prosecution of the work provided for in the contract; and

3. Pays CITY all losses, costs, expenses, damages, attorney's fees, including appellate proceedings, injury or loss of whatever kind and however arising including, without limitation, delay damages to which said CITY may be subject by reason of any wrongdoing, misconduct, want of care or skill, negligence, failure of performance, breach, failure to petition within the prescribed time, or default, including patent infringements, on the part of said CONTRACTOR, his agents or employees, in the execution or performance of said Contract; and

4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this obligation shall be void; otherwise, to remain in full force and effect for the term of said Contract.

AND, the said Surety for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract Documents, or to the work to be performed, or materials to be furnished there under shall affect said obligation of said Surety on this Bond, and the said Surety does hereby waive notice of any such changes, extension of time, alterations, or additions of the terms of the Contract Documents, or to the work.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

IN WITNESS WHEREOF, the above parties bonded together have executed this instrument this day of _____, 2018, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____ (Seal)

_____ Attest

SURETY

By _____ (Seal)

_____ Attest

FLORIDA PAYMENT BOND

BOND NO _____

AMOUNT: \$ _____

KNOW ALL MEN BY THESE PRESENTS, that in accordance with Florida Statutes Section 255.05, _____

with offices at _____

hereinafter called the CONTRACTOR, (Principal), and

_____ with offices at _____

a corporation duly organized and existing under and by virtue of the laws of the State of _____, hereinafter called the SURETY, and authorized to transact business within the State of Florida, as SURETY, are held and firmly bound CITY OF KEY WEST,

represented by its _____, hereinafter called the City (Obligee), in the sum of:

_____ DOLLARS (\$ _____), lawful money of the United States of America, for the payment of which, well and truly be made to the CITY, and the CONTRACTOR and the SURETY bind themselves and each of their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents as follows:

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH THAT:

WHEREAS, the CONTRACTOR has executed and entered into a certain Contract for

ITB 18-028, Glynn Archer Gymnasium Renovations

attached hereto, with the CITY, dated _____, 2018, to furnish at his own cost, charges, and expense the necessary materials, equipment, and/or labor in strict and express accordance with said Contract and the plans, drawings (if any), and specifications prepared by the CITY, all of which is made a part of said Contract by certain terms and conditions in said Contract more particularly mentioned, which Contract, consisting of the various Contract Documents specifically mentioned herein and relative hereto, is made a part of this Bond as fully and completely as if said Contract Documents were set forth herein.

NOW THEREFORE, the conditions of this obligation are such that if the above bounden CONTRACTOR shall in all respects comply with the terms and conditions of said Contract and his obligation thereunder, including the Contract Documents (which include the permit form, coral

relocation plan, the specifications, and conditions prepared by the CITY, invitation to bid, instructions to bidders, the CONTRACTOR'S bid as accepted by the CITY, the bid and contract and payment bonds, and all addenda, if any, issued prior to the opening of bids), and further that if said CONTRACTOR shall promptly make payments to all persons supplying materials, equipment, and/or labor, used directly or indirectly by said CONTRACTOR or SUBCONTRACTORS in the prosecution of the work for said contract in accordance with Florida Statutes, Section 255.05 or Section 713.23, then this obligation shall be void; otherwise to remain in full force and effect for the term of said contract, including and all guarantee periods as specifically mentioned in said Contract Documents.

AND, the said SURETY for value received, hereby stipulates and agrees that no change involving any extension of time, or addition to the terms of the Contract or to the work to be performed, or materials to be furnished thereunder, or in the Contract Documents and specifications accompanying the said contract shall affect said obligation of said SURETY on this Bond, and the said SURETY does hereby waive notice of any such changes, extension of time, alternations, or additions of the terms of the Contract, or to the work, to the Contract Documents, or to the specifications.

Claimant shall give written notice to the CONTRACTOR and the SURETY as required by Section 255.05 or Section 713.23, Florida Statutes. Any action instituted against the CONTRACTOR or SURETY under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2) or Section 713.23, Florida Statutes.

IN WITNESS WHEREOF, the above parties bounded together have executed this instrument this _____ day of _____, 2018, the name and corporate seal of each corporate party being hereto affixed and those presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

By: _____ (Seal)

Attest

SURETY

By _____ (Seal)

Attest

PART 3

CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS
CONTENTS

Article

DEFINITIONS

1. AS APPROVED
2. AS SHOWN, AND AS INDICATED
3. BIDDER
4. CONTRACT DOCUMENTS
5. CONTRACTOR
6. CONTRACT COMPLETION
7. DAYS
8. DRAWINGS
9. ENGINEER
10. NOTICE
11. OR EQUAL
12. OWNER
13. PLANS
14. SPECIFICATIONS
15. NOTICE TO PROCEED
16. SUBSTANTIAL COMPLETION
17. WORK

CONTRACT DOCUMENTS

18. INTENT OF CONTRACT DOCUMENTS
19. DISCREPANCIES AND OMISSIONS
20. CHANGES IN THE WORK
21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS
22. DOCUMENTS TO BE KEPT ON THE JOBSITE
23. ADDITIONAL CONTRACT DOCUMENTS
24. OWNERSHIP OF CONTRACT DOCUMENTS

THE ENGINEER

25. AUTHORITY OF THE ENGINEER
26. DUTIES AND RESPONSIBILITIES OF THE ENGINEER
27. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES
28. REJECTED WORK
29. LINES AND GRADES
30. SUBMITTALS
31. DETAIL DRAWINGS AND INSTRUCTIONS

THE CONTRACTOR AND HIS EMPLOYEES

32. CONTRACTOR, AN INDEPENDENT AGENT
32. (a) ASSIGNMENT OF CONTRACT

33. SUBCONTRACTING
34. INSURANCE AND LIABILITY
 - A. GENERAL
 - B. CONTRACTOR AND SUB-CONTRACTOR INSURANCE
 - C. COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE
 - D. GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)
 - E. BUILDER'S RISK ALL RISK INSURANCE
 - F. NO PERSONAL LIABILITY OF PUBLIC OFFICIALS
35. INDEMNITY
36. EXCLUSION OF CONTRACTOR CLAIMS
37. TAXES AND CHARGES
38. REQUIREMENTS OF STATE LAW FOR PUBLIC WORKS PROJECTS
39. CODES, ORDINANCES, PERMITS, AND LICENSES
40. SUPERINTENDENCE
41. RECEPTION OF ENGINEER'S COMMUNICATIONS
42. SAFETY
43. PROTECTION OF WORK AND PROPERTY
44. RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY
45. MATERIALS AND APPLIANCES
46. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA AND OTHER CODE REQUIREMENTS
47. SUBSTITUTION OF MATERIALS
48. TESTS, SAMPLES, AND OBSERVATIONS
49. ROYALTIES AND PATENT
50. CONTRACTOR'S RIGHT TO TERMINATE CONTRACT
51. CORRECTION OF DEFECTIVE WORK DURING WARRANTY PERIOD

PROGRESS OF THE WORK

52. BEGINNING OF THE WORK
53. SCHEDULES AND PROGRESS REPORTS
54. PROSECUTION OF THE WORK
55. OWNER'S RIGHT TO RETAIN IMPERFECT WORK
56. OWNER'S RIGHT TO DO WORK
57. OWNER'S RIGHT TO TRANSFER EMPLOYMENT
58. DELAYS AND EXTENSION OF TIME
59. DIFFERING SITE CONDITION

GENERAL CONDITIONS
CONTENTS

Article

- 60. LIQUIDATED DAMAGES
- 61. OTHER CONTRACTS
- 62. USE OF PREMISES
- 63. SUBSTANTIAL COMPLETION DATE
- 64. PERFORMANCE TESTING
- 65. OWNER'S USE OF PORTION OF THE WORK
- 66. CUTTING AND PATCHING
- 67. CLEANING UP

PAYMENT

- 68. CHANGE ORDERS
 - A. UNIT PRICE
 - B. LUMP SUM
 - C. COST REIMBURSEMENT
WORK
- 69. PARTIAL PAYMENTS
 - A. GENERAL
 - B. ESTIMATE
 - C. DEDUCTION FROM ESTIMATE
 - D. QUALIFICATIONS FOR
PARTIAL PAYMENT FOR
MATERIALS DELIVERED
 - E. PAYMENT
- 70. CLAIMS FOR EXTRA WORK
- 71. RELEASE OF LIENS OR CLAIMS
- 72. FINAL PAYMENT
- 73. NO WAIVER OF RIGHTS
- 74. ACCEPTANCE OF FINAL PAYMENT
CONSTITUTES RELEASE

DEFINITIONS

Whenever in the Contract Documents the following terms are used, the intent and meaning shall be interpreted as follows:

1. AS APPROVED

The words “as approved”, unless otherwise qualified, shall be understood to be followed by the words “by the ENGINEER for conformance with the Contract Document”.

2. AS SHOWN, AND AS INDICATED

The words “as shown” and “as Indicated” shall be understood to be followed by the words “on the Drawings”.

3. BIDDER

The person or persons, partnership, firm, or corporation submitting a Bid for the work contemplated.

4. CONTRACT DOCUMENTS

The “Contract Documents” consist of the Bidding Requirements, Contract Forms, Conditions of the Contract, Specifications, Drawings, all modifications thereof incorporated into the Documents before their execution, Change Orders, and all other requirements incorporated by specific reference thereto. These form the Contract.

5. CONTRACTOR

The person or persons, partnership, firm, or corporation who enters into the Contract awarded him by the OWNER.

6. CONTRACT COMPLETION

The “Contract Completion” is the date the OWNER accepts the entire work as being in compliance with the Contract Documents, or formally waives nonconforming work to extent of nonconformity, and issues the final payment in accordance with the requirements set forth in Article, “Final Payment” of these General Conditions.

7. DAYS

Unless otherwise specifically stated, the term “days” will be understood to mean calendar days. Business day or working day means any day other than Saturday, Sunday, or legal holiday.

8. DRAWINGS

The term “Drawings” refers to the official Drawings, Profiles, cross sections, elevations, details, and other working drawings and supplementary drawings, or reproductions thereof, signed by the ENGINEER, which shows the location, character, dimensions, and details of the work to be performed. Drawings may either be bound in the same book as the balance of the Contract Documents, or bound in separate sets, and are a part of the Contract Documents, regardless of the method of binding.

9. ENGINEER

The person or organization identified as such in the Contract Documents. The Term “ENGINEER” means ENGINEER or his authorized representative.

10. NOTICE

The term “notice” or the requirement to notify, as used in the Contract Documents or applicable state or federal statutes, shall signify a written communication delivered in person or by registered mail to the individual, or to a member of the firm, or to an officer of the corporation for whom it is intended. Certified or registered mail shall be addressed to the last business address known to him

who gives the notice.

11. OR EQUAL

The term “or equal” shall be understood to indicate that the “equal” Product is equivalent to or better than the Product named in function, performance, reliability, quality, and general configuration. Determination of equality in reference to the Project design requirements will be made by the ENGINEER. Such equal Products shall not be purchased or installed by the CONTRACTOR without written authorization.

12. OWNER

The person, organization, or public body identified as such in the Contract Documents.

13. PLANS (See Drawings)

14. SPECIFICATIONS

The term “Specifications” refers to those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the work and certain administrative details applicable thereto. Where standard specifications, such as those of ASTM, AASHTO, etc., have been referred to, the applicable portions of such standard specifications shall become a part of these Contract Documents. If referenced specifications conflict with specifications contained herein, the requirements contained herein shall prevail.

15. NOTICE TO PROCEED

A written notice given by the OWNER to the CONTRACTOR (with a copy to the ENGINEER) fixing the date on which the Contract time will commence to run and on which the CONTRACTOR shall start to perform his obligation under the Contract Documents. The Notice to Proceed will be given within 30 days following the execution of the Contract by the OWNER.

16. SUBSTANTIAL COMPLETION

“Substantial Completion” shall be that degree of completion of the Project or a defined portion of the Project, as evidenced by the ENGINEER’s written notice of Substantial Completion, sufficient to Provide the OWNER, at his discretion, the full-time use of the Project or defined portion of the Project for the purposes for which it was intended. “Substantial Completion” of an operating facility shall be that degree of completion that has Provided a minimum of 7 continuous days of successful, trouble-free, operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the ENGINEER. All equipment contained in the work, plus all other components necessary to enable the OWNER to operate the facility in a manner that was intended, shall be complete on the substantial completion date.

17. WORK

The word “work” within these Contract Documents shall include all material, labor, tools, and all appliances, machinery, transportation, and appurtenances necessary to perform and complete the Contract, and such additional items not specifically indicated or described which can be reasonably inferred as belonging to the item described or indicated and as required by good Practice to Provide a complete and satisfactory system or structure. As used herein, “Provide” shall be understood to mean “furnish and install, complete in-place “.

CONTRACT DOCUMENTS

18. INTENT OF CONTRACT DOCUMENTS

The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all. The intent of the Documents is to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words which have a well-known technical

or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning.

Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect on the first published date of the Invitation to Bid, except as may be otherwise specifically stated. However, no Provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to ENGINEER, or any ENGINEER's consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of Article LIMITATIONS ON ENGINEER'S RESPONSIBILITIES.

19. DISCREPANCIES AND OMISSIONS

Any discrepancies or omissions found in the Contract Documents shall be reported to the ENGINEER immediately. The ENGINEER will clarify discrepancies or omissions, in writing, within a reasonable time.

In resolving inconsistencies among two or more sections of the Contract Documents, Precedence shall be given in the following order:

- A. CONTRACT
- B. BID
- C. SUPPLEMENTARY CONDITIONS
- D. INVITATION TO BID
- E. INSTRUCTIONS TO BIDDERS
- F. GENERAL CONDITIONS
- G. SPECIFICATIONS
- H. DRAWINGS

Addenda shall take Precedence over all sections referenced therein. Figure dimensions on Drawings shall take precedence over scale dimensions. Detailed Drawings shall take precedence over general Drawings.

20. CHANGES IN THE WORK

The OWNER, without notice to the Sureties and without invalidating the Contract, may order changes in the work within the general scope of the Contract by altering, adding to, or deducting from the work, the Contract being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except as specifically adjusted at the time of ordering such change.

In giving instructions, the ENGINEER may order minor changes in the work not involving extra cost and not inconsistent with the purposes of the Project, but otherwise, except in an emergency endangering life and Property, additions or deductions from the work shall be performed only in pursuance of an approved Change Order from the OWNER, countersigned by the ENGINEER.

If the work is reduced by alterations, such action shall not constitute a claim for damages based on loss of anticipated Profits.

21. EXAMINATION AND VERIFICATION OF CONTRACT DOCUMENTS

The CONTRACTOR shall thoroughly examine and become familiar with all of the various parts of these Contract Documents and determine the nature and location of the work, the general and local conditions, and all other matters, which can in any way affect the work under this Contract. Failure to make an examination necessary for this determination shall not release the CONTRACTOR from the obligations of this Contract. No verbal agreement or conversation with any officer, agent, or employee of the OWNER or with the ENGINEER either before or after the execution of this Contract shall affect or modify any of the terms or obligations herein contained.

22. DOCUMENTS TO BE KEPT ON THE JOBSITE

The CONTRACTOR shall keep one copy of the Contract Documents on the job- site, in good order, available to the ENGINEER

and to his representatives.

The CONTRACTOR shall maintain on a daily basis at the jobsite, and make available to the ENGINEER on request, one current record set of the Drawings which have been accurately marked to indicate all modifications in the completed work that differ from the design information shown on the Drawings. Upon Substantial completion of the work, the CONTRACTOR shall give the ENGINEER one complete set of these marked up record Drawings.

23. ADDITIONAL CONTRACT DOCUMENTS

Copies of Contract Documents or Drawings may be obtained on request from the ENGINEER and by paying the actual cost of reproducing the Contract Documents or Drawings.

24. OWNERSHIP OF CONTRACT DOCUMENTS

All portions of the Contract Documents, and copies thereof furnished by the ENGINEER are instruments of service for this Project. They are not to be used on other work and are to be returned to the ENGINEER on request at the completion of the work. Any reuse of these materials without specific written verification or adaptation by the ENGINEER will be at the risk of the user and without liability or legal expense to the ENGINEER. Such user shall hold the ENGINEER harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adaptation shall entitle the ENGINEER to further compensation at rates to be agreed upon by the user and the ENGINEER.

THE ENGINEER

25. AUTHORITY OF THE ENGINEER

The ENGINEER will be the OWNER's representative during the construction period. His authority and responsibility will be limited to the Provisions set forth in these Contract Documents. The ENGINEER will have the Authority to reject work that does not conform to the Contract Documents. However, neither the ENGINEER's authority to act under this Provision, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any SUBCONTRACTOR, their respective Sureties, any of their agents or employees, or any other person performing any of the work.

26. DUTIES AND RESPONSIBILITIES OF THE ENGINEER

The ENGINEER will make visits to the site at intervals appropriate to the various stages of construction to observe the Progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the intent of the Contract Documents. He will not make comprehensive or continuous review or observation to check quality or quantity of the work, and he will not be responsible for construction means, methods, techniques, sequences, or Procedures, or for safety Precautions and Programs in connection with the work. Visits and observations made by the ENGINEER shall not relieve the CONTRACTOR of his obligation to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

The ENGINEER will make recommendations to the OWNER, in writing, on all claims of the OWNER or the CONTRACTOR arising from interpretation or execution of the Contract Documents. Such recommendations will be of factual and/or technical nature, and will not include the legal interpretation of the Contract Documents. Any necessary legal interpretation of the Contract Document will be made by the OWNER. Such recommendation shall be necessary before the CONTRACTOR can receive additional money under the terms of the Contract. Changes in work ordered by the ENGINEER shall be made in compliance with Article CHANGES IN THE WORK.

One or more Project representatives may be assigned to observe the work. It is understood that such Project representatives shall have the authority to issue notice of nonconformance and make decisions within the limitations of the authority of the ENGINEER. The CONTRACTOR shall furnish all reasonable assistance required by the ENGINEER or Project representatives for Proper observation of the work. The above-mentioned Project representatives shall not relieve the CONTRACTOR of his obligations to conduct comprehensive inspections of the work and to furnish materials and perform acceptable work, and to provide adequate safety Precautions, in conformance with the intent of the Contract.

27. LIMITATIONS ON ENGINEER'S RESPONSIBILITIES

ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences, or Procedures of construction, or the safety Precautions and Programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform or furnish the work in accordance with the Contract Documents.

ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any SUBCONTRACTOR, any supplier, or of any other person or organization performing or furnishing any of the work.

Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed", "as approved", or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "Proper", or "satisfactory", or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of ENGINEER as to the work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to ENGINEER any duty or authority to supervise or direct the furnishing or performance of the work or any duty or authority to undertake responsibility contrary to the Provisions of this Article.

28. REJECTED WORK

Any defective work or nonconforming materials or equipment that may be discovered at any time prior to expiration of the warranty period shall be removed and replaced by work which shall conform to the Provisions of the Contract Documents. Any material condemned or rejected shall be removed at once from the Project site.

Failure on the part of the ENGINEER to condemn or reject bad or inferior work or to note nonconforming materials or equipment on CONTRACTOR submittals shall not be construed to imply acceptance of such work. The OWNER shall reserve and retain all of its rights and remedies at law against the CONTRACTOR and its Surety for correction of any and all latent defects discovered after the guarantee period.

29. LINES AND GRADES

Lines and grades shall be established as provided in the supplementary conditions. All stakes, marks, and other reference information shall be carefully preserved by the CONTRACTOR, and in case of their careless or unnecessary destruction or removal by him or his employees, such stakes, marks, and other information shall be replaced at the CONTRACTOR's expense.

30. SUBMITTALS

After checking and verifying all field measurements and after complying with applicable Procedures specified in Division I, GENERAL REQUIREMENTS, CONTRACTOR shall submit to ENGINEER, in accordance with the schedule for submittals for review, shop drawings, electrical diagrams, and catalog cuts for fabricated items and manufactured items (including mechanical and electrical equipment), which shall bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submittal. All submittals shall be identified as ENGINEER may require. The data shown shall be complete with respect to quantities, dimensions specified, performance and design criteria, materials, and similar data to enable ENGINEER to review the information. CONTRACTOR shall also submit to ENGINEER for review, with such promptness as to cause no delay in work, all samples required by the Contract Documents. All samples shall have been checked by and accompanied by a specific written indication that CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which intended.

Before submission of each submittal, CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each submittal with other submittals and with the requirements of the work and the Contract Documents.

At the time of each submission, CONTRACTOR shall give ENGINEER specific written notice of each variation that the submittal may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each shop drawing submitted to ENGINEER for review and approval of each variation.

ENGINEER will review submittals with reasonable Promptness, but ENGINEER's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences, or Procedures of construction (except where a specific means, method, technique, sequence, or Procedure of construction is indicated in or required by the Contract Documents) or to safety Precautions or Programs incident thereto. The review of a separate item as such will not indicate review of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER, and shall return the required number of corrected copies of shop drawings and submit as required new samples for review. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by ENGINEER on Previous submittals.

ENGINEER's review of submittals shall not relieve CONTRACTOR from the responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to each such variation at the time of submission and ENGINEER has given written approval of each such variation by a specific written notation thereof incorporated therein or accompanying the shop drawing or sample approval; nor will any approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the shop drawings or from responsibility for having complied with the Provisions herein. Where a shop drawing or sample is required by the specifications, any related work performed prior to ENGINEER's review and approval of the pertinent submission shall be at the sole expense and responsibility of the CONTRACTOR.

31. DETAIL DRAWINGS AND INSTRUCTIONS

The ENGINEER will furnish, with reasonable Promptness, additional instructions by means of Drawings or otherwise, if, in the ENGINEER's opinion, such are required for the Proper execution of the work. All such Drawings and instructions will be consistent with the Contract Documents, true developments thereof, and reasonably inferable there from.

THE CONTRACTOR AND HIS EMPLOYEES

32. CONTRACTOR, AN INDEPENDENT AGENT

The CONTRACTOR shall independently perform all work under this Contract and shall not be considered as an agent of the OWNER or of the ENGINEER, nor shall the CONTRACTOR's SUBCONTRACTORS or employees be subagents of the OWNER or of the ENGINEER.

33. SUBCONTRACTING

Unless modified in the Supplementary Conditions, within 10 days after the execution of the Contract, the CONTRACTOR shall submit to the ENGINEER the names of all SUBCONTRACTORS Proposed for the work, including the names of any SUBCONTRACTORS that were submitted with the Bid. The CONTRACTOR shall not employ any SUBCONTRACTORS to which the OWNER may object to as lacking capability to properly perform work of the type and scope anticipated.

The CONTRACTOR is as fully responsible to the OWNER for the acts and omissions of his SUBCONTRACTORS and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.

Nothing contained in the Contract Documents shall create any contractual relationship between any SUBCONTRACTOR and the OWNER or ENGINEER.

34. INSURANCE AND LIABILITY

A. GENERAL

The CONTRACTOR shall provide (from insurance companies acceptable to the OWNER) the insurance coverage designated hereinafter and pay all costs before commencing work under this Contract. The CONTRACTOR shall furnish the OWNER with certificates of insurance specified herein showing the type, amount class of operations covered, effective dates, and date of expiration of policies, and containing substantially the following statement:

"The insurance covered by this certificate shall not be canceled or materially altered, except after 30 days' written notice has been received by the OWNER."

In case of the breach of any Provision of this Article, the OWNER, at his option, may take out and maintain, at the expense of the

CONTRACTOR, such insurance as the OWNER may deem Proper and may deduct the cost of such insurance from any monies which may be due or become due the CONTRACTOR under this Contract.

B. CONTRACTOR AND SUBCONTRACTOR INSURANCE

The CONTRACTOR shall not commence work under this Contract until he has obtained all the insurance required hereunder and such insurance has been reviewed by the OWNER, nor shall the CONTRACTOR allow any SUBCONTRACTOR to commence work on his subcontract until insurance specified below has been obtained. Review of the insurance by the OWNER shall not relieve or decrease the liability of the CONTRACTOR hereunder.

C. COMPENSATION AND EMPLOYER'S LIABILITY INSURANCE

The CONTRACTOR shall maintain during the life of this Contract the statutory amount of Workmen's Compensation Insurance, in addition, Employer's Liability Insurance in an amount as specified in the Supplementary Conditions, for each occurrence, for all of his employees to be engaged in work on the Project under this Contract. In case any such work is subcontracted, the CONTRACTOR shall require the SUBCONTRACTOR to provide similar Workmen's Compensation and Employer's Liability Insurance for all of the SUBCONTRACTOR's employees to be engaged in such work.

D. GENERAL LIABILITY INSURANCE (INCLUDING AUTOMOBILE)

The CONTRACTOR shall maintain during the life of this Contract such general liability, completed operations and Products liability, and automobile liability insurance as will Provide coverage for claims for damages for personal injury, including accidental death, as well as for claims for Property damage, which may arise directly or indirectly from performance of the work under this Contract. The general liability policy shall include contractual liability assumed by the CONTRACTOR under Article **INDEMNITY**. Coverage for Property damage shall be on a "broad form" basis with no exclusions for "X, C & U". The amount of insurance to be provided shall be as specified in the Supplementary Conditions.

In the event any work under this Contract is performed by a SUBCONTRACTOR, the CONTRACTOR shall be responsible for any liability directly or indirectly arising out of the work performed by the SUBCONTRACTOR; to the extent such liability is not covered by the SUBCONTRACTOR's insurance.

The OWNER and ENGINEER, their officers, agents, and employees shall be named as Additional Insured's on the CONTRACTOR's and any SUBCONTRACTOR's general liability and automobile liability insurance policies for any claims arising out of work performed under this Contract.

E. BUILDERS RISK ALL RISK INSURANCE

Unless otherwise modified in the Supplementary Conditions, the CONTRACTOR shall secure and maintain during the life of this Contract, Builders Risk All Risk Insurance coverage in an amount equal to the full value of the facilities under construction. Such insurance shall include coverage for earthquake, landslide, flood, collapse, loss due to the results of faulty workmanship or design, and all other normally covered risks, and shall provide for losses to be paid to the CONTRACTOR, OWNER, and ENGINEER as their interests may appear.

The OWNER and ENGINEER, their officers, agents, and employees shall be named as additional insured's on the CONTRACTOR's and any SUBCONTRACTOR's Builders Risk All Risk insurance policies for any claims arising out of work performed under this Contract.

This insurance shall include a waiver of subrogation as to the ENGINEER, the OWNER, the CONTRACTOR, and their respective officers, agents, employees and SUBCONTRACTORS.

F. NO PERSONAL LIABILITY OF PUBLIC OFFICIALS

In carrying out any of the Provisions hereof in exercising any authority granted by the Contract, there will be no personal liability upon any public official.

35. INDEMNITY

To the maximum extent permitted by law, the CONTRACTOR shall indemnify and defend the OWNER and the ENGINEER, and their officers, employees, agents, and sub-consultants, from all claims and losses, including attorney's fees and litigation costs arising out of Property losses or health, safety, personal injury, or death claims by the CONTRACTOR, its SUBCONTRACTORS of any tier, and their employees, agents, or invitees regardless of the fault, breach of Contract, or negligence of the OWNER or ENGINEER, excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the OWNER or the ENGINEER and regardless of whether or not the CONTRACTOR is or can be named a party in a litigation.

36. EXCLUSION OF CONTRACTOR CLAIMS

In performing its obligations, the ENGINEER and its consultants may cause expense for the CONTRACTOR or its SUBCONTRACTORS and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the ENGINEER, its officers, employees, agents, and consultants for any claim arising out of, in connection with, or resulting from the ENGINEERING services performed or required to be performed.

37. TAXES AND CHARGES

The CONTRACTOR shall withhold and pay any and all sales and use taxes and all withholding taxes, whether State or Federal, and pay all Social Security charges and also all State Unemployment Compensation charges, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws.

38. REQUIREMENTS OF STATE LAW FOR PUBLIC WORKS PROJECTS

When the Contract Documents concern public works of the state or any county, municipality, or political subdivision created by its laws, the applicable statutes shall apply. All parties to this Contract shall determine the contents of all applicable statutes and comply with their Provisions throughout the performance of the Contract.

39. CODES, ORDINANCES, PERMITS AND LICENSES

The CONTRACTOR shall keep himself fully informed of all local codes and ordinances, as well as state and federal laws, which in any manner affect the work herein specified. The CONTRACTOR shall at all times comply with said codes and ordinances, laws, and regulations, and Protect and indemnify the OWNER, the ENGINEER and their respective employees, and its officers and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses and inspection fees necessary for Prosecution and completion of the work shall be secured and paid for by the CONTRACTOR, unless otherwise specified.

40. SUPERINTENDENCE

The CONTRACTOR shall keep at the project site, competent supervisory personnel. The CONTRACTOR shall designate, in writing, before starting work, a Project superintendent who shall be an employee of the CONTRACTOR and shall have complete authority to represent and to act for the CONTRACTOR. ENGINEER shall be notified in writing prior to any change in superintendent assignment. The CONTRACTOR shall give efficient supervision to the work, using his best skill and attention. The CONTRACTOR shall be solely responsible for all construction means, methods, techniques, and Procedures, and for providing adequate safety Precautions and coordinating all portions of the work under the Contract. It is specifically understood and agreed that the ENGINEER, its employees and agents, shall not have control or charge of and shall not be responsible for the construction means, methods, techniques, procedures, or for providing adequate safety precautions in connection with the work under Contract.

41. RECEPTION OF ENGINEER'S COMMUNICATIONS

The superintendent shall receive for the CONTRACTOR all communications from the ENGINEER. Communications of major importance will be confirmed in writing upon request from the CONTRACTOR.

The ENGINEER may schedule Project meetings for the purposes of discussing and resolving matters concerning the various

elements of the work. Time and place for these meetings and the names of persons required to be Present shall be as determined by the ENGINEER. CONTRACTOR shall comply with these attendance requirements and shall also require his SUBCONTRACTORS to comply.

42. SAFETY

The CONTRACTOR shall be solely and completely responsible for conditions of the jobsite, including safety of all persons (including employees) and Property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. Safety Provisions shall conform to U.S. Department of Labor (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. Where any of these are in conflict, the more stringent requirement shall be followed. The CONTRACTOR's failure to thoroughly familiarize himself with the aforementioned safety Provisions shall not relieve him from compliance with the obligations and penalties set forth therein.

The CONTRACTOR shall develop and maintain for the duration of this Contract, a safety Program that will effectively incorporate and implement all required safety Provisions. The CONTRACTOR shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety Program. The duty of the ENGINEER to conduct construction review of the work does not include review or approval of the adequacy of the CONTRACTOR's safety Program, safety supervisor, or any safety measures taken in, on, or near the construction site. The CONTRACTOR, as a part of his safety Program, shall maintain at his office or other well-known place at the jobsite, safety equipment applicable to the work as Prescribed by the aforementioned authorities, all articles necessary for giving first-aid to the injured, and shall establish the Procedure for the immediate removal to a hospital or a doctor's care of persons (including employees) who may be injured on the jobsite.

If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to both the ENGINEER and the OWNER. In addition, the CONTRACTOR must promptly report in writing to the ENGINEER all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses.

If a claim is made by anyone against the CONTRACTOR or any SUBCONTRACTOR on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the ENGINEER, giving full details of the claim.

43. PROTECTION OF WORK AND PROPERTY

The CONTRACTOR shall at all times safely guard and Protect from damage the OWNER's Property, adjacent Property, and his own work from injury or loss in connection with this Contract. All facilities required for Protection by federal, state, or municipal laws and regulations and local conditions must be provided and maintained. The CONTRACTOR shall Protect his work and materials from damage due to the nature of the work, the elements, carelessness of other CONTRACTORS, or from any cause whatever until the completion and acceptance of the work. All loss or damages arising out of the nature of the work to be done under these Contract Documents, or from any unforeseen obstruction or defects which may be encountered in the Prosecution of the work, or from the action of the elements, shall be sustained by the CONTRACTOR.

44. RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

In case of an emergency which threatens loss or injury of Property, and/or safety of life, the CONTRACTOR shall act, without previous instructions from the OWNER or ENGINEER, as the situation may warrant. The CONTRACTOR shall notify the ENGINEER thereof immediately thereafter. Any claim for compensation by the CONTRACTOR, together with substantiating documents in regard to expense, shall be submitted to the OWNER through the ENGINEER and the amount of compensation shall be determined by agreement.

45. MATERIALS AND APPLIANCES

Unless otherwise stipulated, the CONTRACTOR shall Provide and pay for all materials, labor, water, tools, equipment, heat, light, fuel, power, transportation, construction equipment and machinery, appliances, telephone, sanitary facilities, temporary facilities and other facilities and incidentals necessary for the execution and completion of the work.

Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of good quality. The

CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

In selecting and/or approving equipment for installation in the Project, the OWNER and ENGINEER assume no responsibility for injury or claims resulting from failure of the equipment to comply with applicable federal, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials.

46. CONTRACTORS' AND MANUFACTURERS' COMPLIANCE WITH STATE SAFETY, OSHA, AND OTHER CODE REQUIREMENTS

The completed work shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items required by the state and federal (OSHA) industrial authorities and applicable local and national codes. Further, any features of the work subject to such safety regulations shall be fabricated, furnished, and installed (including OWNER-furnished equipment) in compliance with these requirements. CONTRACTORS and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. CONTRACTORS shall notify all equipment suppliers and SUBCONTRACTORS of the Provisions of this Article.

47. SUBSTITUTION OF MATERIALS

Except for OWNER-selected equipment items, and items where no substitution is clearly specified, whenever any material, article, device, Product, fixture, form, type of construction, or Process is indicated or specified by patent or Proprietary name, by name of manufacturer, or by catalog number, such specifications shall be deemed to be used for the purpose of establishing a standard of quality and facilitating the description of the material or Process desired. This Procedure is not to be construed as eliminating from competition other Products of equal or better quality by other manufacturers where fully suitable in design, and shall be deemed to be followed by the words "or equal". The CONTRACTOR may, in such cases, submit complete data to the ENGINEER for consideration of another material, type, or Process that shall be substantially equal in every respect to that so indicated or specified. Substitute materials shall not be used unless approved in writing. The ENGINEER will be the sole judge of the substituted article or material.

48. TESTS, SAMPLES, AND OBSERVATIONS

The CONTRACTOR shall furnish, without extra charge, the necessary test pieces and samples, including facilities and labor for obtaining the same, as requested by the ENGINEER. When required, the CONTRACTOR shall furnish certificates of tests of materials and equipment made at the point of manufacture by a recognized testing laboratory.

The OWNER, ENGINEER, and authorized government agents, and their representatives shall at all times be Provided safe access to the work wherever it is in Preparation or Progress, and the CONTRACTOR shall Provide facilities for such access and for observations, including maintenance of temporary and permanent access.

If the Specifications, laws, ordinances, or any public authority require any work, to be specially tested or approved, the CONTRACTOR shall give timely notice of its readiness for observations. If any work should be covered up without approval or consent of the ENGINEER, it shall, if required by the ENGINEER, be uncovered for examination at the CONTRACTOR's expense. Reexamination of questioned work may be ordered by the ENGINEER, and, if so ordered, the work shall be uncovered by the CONTRACTOR. If such work is found to be in accordance with the Contract Documents, the OWNER will pay the cost of uncovering, exposure, observation, inspection, testing and reconstruction. If such work is found to be not in accordance with the Contract Documents, the CONTRACTOR shall correct the defective work, and the cost of reexamination and correction of the defective work shall be paid by the CONTRACTOR.

49. ROYALTIES AND PATENTS

The CONTRACTOR shall pay all royalty and licenses fees, unless otherwise specified. The CONTRACTOR shall defend all suits or claims for infringement of any patent rights and shall save the OWNER and the ENGINEER harmless from any and all loss, including reasonable attorneys' fees, on account thereof.

50. CONTRACTOR'S RIGHT TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of more than 3 months, through no act or fault of the CONTRACTOR, its SUBCONTRACTORS, or respective employees or if the ENGINEER should fail to make recommendation for payment to the OWNER or return payment request to CONTRACTOR for revision within 30 days after it is due, or if the OWNER should fail to pay the CONTRACTOR within 30 days after time specified in Article PARTIAL PAYMENTS, any sum recommended by the ENGINEER, then the CONTRACTOR may, upon 15 days' written notice to the OWNER and the ENGINEER, stop work or terminate this Contract and recover from the OWNER payment for all acceptable work performed and reasonable termination expenses, unless said default has been remedied.

51. CORRECTION OF DEFECTIVE WORK DURING WARRANTY PERIOD

The CONTRACTOR hereby agrees to make, at his own expense, all repairs or replacements necessitated by defects in materials or workmanship, Provided under terms of this Contract, and pay for any damage to other works resulting from such defects, which become evident within 2 years after the date of final acceptance of the work or within 2 years after the date of substantial completion established by the ENGINEER for specified items of equipment, or within such longer period as may be Prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents. Un-remedied defects identified for correction during the warranty period but remaining after its expiration shall be considered as part of the obligations of the warranty. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the warranty shall subject the remedied portion of the work to an extended warranty period of 2 years after the defect has been remedied.

The CONTRACTOR further assumes responsibility for a similar guarantee for all work and materials provided by SUBCONTRACTORS or manufacturers of packaged equipment components. The effective date for the start of the guarantee or warranty period for equipment qualifying as substantially complete is defined in Article SUBSTANTIAL COMPLETION, AND Article SUBSTANTIAL COMPLETION DATE, in these General Conditions.

The CONTRACTOR also agrees to hold the OWNER and the ENGINEER harmless from liability of any kind arising from damage due to said defects. The CONTRACTOR shall make all repairs and replacements promptly upon receipt of written order for same from the OWNER. If the CONTRACTOR fails to make the repairs and replacements promptly, or in an emergency where delay would cause serious risk, or loss, or damage, the OWNER may have the defective work corrected or the rejected work removed and replaced, and the CONTRACTOR and his Surety shall be liable for the cost thereof.

PROGRESS OF THE WORK

52. BEGINNING OF THE WORK

Following execution of the Contract, the CONTRACTOR shall meet with the OWNER and ENGINEER relative to his arrangements for prosecuting the work.

53. SCHEDULES AND PROGRESS REPORTS

Prior to starting the construction, the CONTRACTOR shall Prepare and submit to the ENGINEER, a Progress schedule showing the dates on which each part or division of the work is expected to be started and finished, and a Preliminary schedule for submittals. The Progress schedule for submittals shall be brought up to date and submitted to the ENGINEER at the end of each month or at such other times the ENGINEER may request.

The CONTRACTOR shall forward to the ENGINEER, at the end of each month, an itemized report of the delivery status of major and critical items of purchased equipment and material, including shop drawings and the status of shop and field fabricated work. These Progress reports shall indicate the date of the purchase order, the current percentage of completion, estimated delivery, and cause of delay, if any.

If the completion of any part of the work or the delivery of materials is behind the submitted Progress schedule, the CONTRACTOR shall submit in writing a plan acceptable to the OWNER and ENGINEER for bringing the work up to schedule.

The OWNER shall have the right to withhold Progress payments for the work if the CONTRACTOR fails to update and submit the Progress schedule and reports as specified.

54. PROSECUTION OF THE WORK

It is expressly understood and agreed that the time of beginning, rate of Progress, and time of completion of the work are the essence of this Contract. The work shall be prosecuted at such time, and in or on such part or parts of the Project as may be required, to complete the Project as contemplated in the Contract Documents and the Progress schedule.

If the CONTRACTOR desires to carry on work at night or outside the regular hours, he shall give timely notice to the ENGINEER to allow satisfactory arrangements to be made for observing the work in Progress.

55. OWNER'S RIGHT TO RETAIN IMPERFECT WORK

If any part or portion of the work completed under this Contract shall Prove defective and not in accordance with the Drawings and Specifications, and if the imperfection in the same shall not be of sufficient magnitude or importance as to make the work dangerous or unsuitable, or if the removal of such work will create conditions which are dangerous or undesirable, the OWNER shall have the right and authority to retain such work but will make such deductions in the final payment therefore as may be just and reasonable.

56. OWNER'S RIGHT TO DO WORK

Should the CONTRACTOR neglect to Prosecute the work in conformance with the Contract Documents or neglect or refuse at his own cost to remove and replace work rejected by the ENGINEER, then the OWNER may notify the Surety of the condition, and after 10 days' written notice to the CONTRACTOR and the Surety, or without notice if an emergency or danger to the work or public exists, and without Prejudice to any other right which the OWNER may have under Contract, or otherwise, take over that portion of the work which has been improperly or non-timely executed, and make good the deficiencies and deduct the cost thereof from the payments then or thereafter due the CONTRACTOR.

57. OWNER'S RIGHT TO TRANSFER EMPLOYMENT

If the CONTRACTOR should abandon the work or if he should persistently or repeatedly refuse or should fail to make prompt payment to SUBCONTRACTORS for material or labor, or to persistently disregard laws, ordinances, or to prosecute the work in conformance with the Contract Documents, or otherwise be guilty of a substantial violation of any Provision of the Contract or any laws or ordinance, then the OWNER may, without Prejudice to any other right or remedy, and after giving the CONTRACTOR and Surety 10 days' written notice, transfer the employment for said work from the CONTRACTOR to the Surety. Upon receipt of such notice, such Surety shall enter upon the Premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this contract and employ by Contract or otherwise, any qualified person or persons to finish the work and Provide the materials therefore, in accordance with the Contract Documents, without termination of the continuing full force and effect of this contract. In case of such transfer of employment to such Surety, the Surety shall be paid in its own name on estimates according to the terms hereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.

If, after the furnishing of said written notice to the Surety, the CONTRACTOR and the Surety still fail to make reasonable Progress on the performance of the work, the OWNER may terminate the employment of the CONTRACTOR and take possession of the Premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient and charge the cost thereof to the CONTRACTOR and the Surety. In such case, the CONTRACTOR shall not be entitled to receive any further payment until the work is finished. If the expense of completing the Contract, including compensation for additional managerial and administrative services, shall exceed such unpaid balance, the CONTRACTOR and the Surety shall pay the difference to the OWNER.

58. DELAYS AND EXTENSION OF TIME

If the CONTRACTOR is delayed in the Progress of the work by any act or neglect of the OWNER or the ENGINEER, or by any separate CONTRACTOR employed by the OWNER, or by strikes, lockouts, fire, adverse weather conditions not reasonably anticipated, or acts of Nature, and if the CONTRACTOR, within 48 hours of the start of the occurrence, gives written notice to the OWNER of the cause of the potential delay and estimate of the possible time extension involved, and within 10 days after the cause of the delay has been remedied, the CONTRACTOR gives written notice to the OWNER of any actual time extension requested as a result of the aforementioned occurrence, then the Contract time may be extended by change order for such reasonable time as the

ENGINEER determines. It is agreed that no claim shall be made or allowed for any damages, loss, or expense which may arise out of any delay caused by the above referenced acts or occurrences other than claims for the appropriate extension of time. No extension of time will be granted to the CONTRACTOR for delays occurring to parts of the work that have no measurable impact on the completion of the total work under this Contract. No extension of time will be considered for weather conditions reasonably anticipated for the area in which the work is being performed. Reasonably anticipated weather conditions will be based on official records of monthly Precipitation and other historical data. Adverse weather conditions, if determined to be of a severity that would impact Progress of the work, may be considered as cause for an extension of Contract completion time.

Delays in delivery of equipment or material purchased by the CONTRACTOR or his SUBCONTRACTORS, including OWNER-selected equipment shall not be considered as a just cause for delay, unless the OWNER determines that for good cause the delay is beyond the control of the CONTRACTOR. The CONTRACTOR shall be fully responsible for the timely ordering, scheduling, complete the work is the per-diem rate, as stipulated in the Bid. The said amount is hereby agreed upon as a reasonable estimate of the costs, which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due, or that may become due the CONTRACTOR, or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

59. DIFFERING SITE CONDITIONS

The CONTRACTOR shall promptly, and before the conditions are disturbed, give a written notice to the OWNER and ENGINEER of:

- A. subsurface or latent physical conditions at the site which differ materially from those indicated in this contract,
- B. unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The ENGINEER will investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or the time required for, performing any part of the work under this Contract, whether or not changed as a result of the conditions, and equitable adjustment shall be made under this Article and the Contract modified in writing accordingly.

No request by the CONTRACTOR for an equitable adjustment to the Contract under this Article will be allowed, unless the CONTRACTOR has given the written notice required; provided that the time prescribed above for giving written notice may be extended by the OWNER.

No request by the CONTRACTOR for an equitable adjustment to the Contract for differing site conditions will be allowed if made after final payment under this Contract.

60. LIQUIDATED DAMAGES

Should the CONTRACTOR fail to complete the work, or any part thereof, in the time agreed upon in the Contract or within such extra time as may have been allowed for delays by extensions granted as Provided in the Contract, the CONTRACTOR shall reimburse the OWNER for the additional expense and damage for each calendar day, Sundays and legal holidays included, that the Contract remains uncompleted after the Contract completion date. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per-diem rate, as stipulated in the Bid. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the OWNER after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty, but as liquidated damages which have accrued against the CONTRACTOR. The OWNER shall have the right to deduct such damages from any amount due, or that may become due the CONTRACTOR, or the amount of such damages shall be due and collectible from the CONTRACTOR or Surety.

61. OTHER CONTRACTS

The OWNER reserves the right to let other Contracts in connection with the work. The CONTRACTOR shall afford other CONTRACTORS reasonable opportunity for the introduction and storage of their materials and the execution of their work and shall properly connect and coordinate his work with theirs.

If any part of the work under this Contract depends for Proper execution or results upon the work of any other CONTRACTOR, utility service company or OWNER, the CONTRACTOR shall inspect and Promptly report to the ENGINEER in writing any patent or apparent defects to deficiencies in such work that render it unsuitable for such Proper execution and results. The CONTRACTOR's failure to so report shall constitute and acceptance of the work by others as being fit and Proper for integration with work under this Contract, except for latent or non-apparent defects and deficiencies in the work.

62. USE OF PREMISES

The CONTRACTOR shall confine his equipment, the storage of materials and the operation of his workers to limits shown on the Drawings or indicated by law, ordinances, permits, or directions of the ENGINEER, and shall not unreasonably encumber the Premises with his materials. The CONTRACTOR shall provide, at his own expense, the necessary rights-of-way and access to the work, which may be required outside the limits of the OWNER's Property and shall furnish the ENGINEER copies of permits and agreements for use of the Property outside that provided by the OWNER.

The CONTRACTOR shall not load nor permit any part of the structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the work or adjacent Property to stresses or Pressures that will endanger it.

63. SUBSTANTIAL COMPLETION DATE

The ENGINEER may issue a written notice of substantial completion for the purpose of establishing the starting date for specific equipment guarantees, and to establish the date that the OWNER will assume the responsibility for the cost of operating such equipment. Said notice shall not be considered as final acceptance of any portion of the work or relieve the CONTRACTOR from completing the remaining work within the specified time and in full compliance with the Contract Documents. See SUBSTANTIAL COMPLETION under DEFINITIONS of these General Conditions.

64. PERFORMANCE TESTING

Operating equipment and systems shall be performance tested in the Presence of the ENGINEER to demonstrate compliance with the specified requirements. Performance testing shall be conducted under the specified design operating conditions or under such simulated operating conditions as recommended or approved by the ENGINEER. Schedule such testing with the ENGINEER at least one week in advance of the planned date for testing.

65. OWNER'S USE OF PORTIONS OF THE WORK

Following issuance of the written notice of Substantial Completion, the OWNER may initiate operation of the facility. Such use shall not be considered as final acceptance of any portion of the work, nor shall such use be considered as cause for an extension of the Contract completion time, unless authorized by a Change Order issued by the OWNER.

66. CUTTING AND PATCHING

The CONTRACTOR shall do all cutting, fitting, or patching of his work that may be required to make its several parts come together Properly and fit it to receive or be received by work of other CONTRACTORS shown upon or reasonably implied by the Drawings.

67. CLEANING UP

The CONTRACTOR shall, at all times, keep Property on which work is in Progress and the adjacent Property free from accumulations of waste material or rubbish caused by employees or by the work. Upon completion of the construction, the CONTRACTOR shall remove all temporary structures, rubbish, and waste materials resulting from his operations.

PAYMENT

68. PAYMENT FOR CHANGE ORDERS

The OWNER's request for quotations on alterations to the work shall not be considered authorization to proceed with the work expediting, delivery, and installation of all equipment and materials. Within a reasonable period after the CONTRACTOR submits

to the OWNER a written request for an extension of time, the ENGINEER will Present his written opinion to the OWNER as to whether an extension of time is justified, and, if so, his recommendation as to the number of days for time extension. The OWNER will make the final decision on all requests for extension of time.

Prior to the issuance of a formal Change Order, nor shall such request justify any delay in existing work. Quotations for alterations to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and profit. OWNER may require detailed cost data in order to substantiate the reasonableness of the proposed costs.

Any compensation paid in conjunction with the terms of a Change Order shall comprise total compensation due the CONTRACTOR for the work or alteration defined in the Change Order. By signing the Change Order, the CONTRACTOR acknowledges that the stipulated compensation includes payment for the work or alteration plus all payment for the interruption of schedules, extended overhead, delay, or any other impact claim or ripple effect, and by such signing specifically waives any reservation or claim for additional compensation in respect to the subject Change Order.

At the OWNER's option, payment or credit for any alterations covered by a Change Order shall be determined by one or a combination of the methods set forth in A, B, or C below, as applicable:

A. UNIT PRICES

Those unit Prices stipulated in the Bid shall be utilized where they are applicable. In the event the Change Order results in a change in the original quantity that is materially and significantly different from the original bid quantity, a new unit Price shall be negotiated upon demand of either party. Unit Prices for new items included in the Change Order shall be negotiated and mutually agreed upon.

B. LUMP SUM

A total lump sum for the work negotiated and mutually acceptable to the CONTRACTOR and the OWNER. Lump sum quotations for modifications to the work shall include substantiating documentation with an itemized breakdown of CONTRACTOR and SUBCONTRACTOR costs, including labor, material, rentals, approved services, overhead, and Profit, all calculated as specified under "C" below.

C. COST REIMBURSEMENT WORK

The term "cost reimbursement" shall be understood to mean that payment for the work will be made on a time and expense basis, that is, on an accounting of the CONTRACTOR's forces, materials, equipment, and other items of cost as required and used to do the work.

If the method of payment cannot be agreed upon Prior to the beginning of the work, and the OWNER directs by written Change Order that the work be done on a cost reimbursement basis, then the CONTRACTOR shall furnish labor, and furnish and install equipment and materials necessary to complete the work in a satisfactory manner and within a reasonable period of time. For the work performed, payment will be made for the documented actual cost of the following:

1. Labor including foremen for those hours they are assigned and participating in the cost reimbursement work (actual payroll cost, including wages, fringe benefits as established by negotiated labor agreements, labor insurance, and labor taxes as established by law). No other fixed labor burdens will be considered, unless approved in writing by the OWNER.
2. Material delivered and used on the designated work, including sales tax, if paid by the CONTRACTOR or his SUBCONTRACTOR.
3. Rental or equivalent rental cost of equipment, including necessary transportation for items having a value in excess of \$100. Rental or equivalent rental cost will be allowed for only those days or hours during which the equipment is in actual use. Rental and transportation allowances shall not exceed the current rental rates prevailing in the locality. The rentals allowed for equipment will, in all cases, be understood to cover all fuel, supplies, repairs, and renewals, and no further allowances will be made for those items, unless specific agreement to that effect is made.
4. Additional bond, as required and approved by the OWNER.
5. Additional insurance (other than labor insurance) as required and approved by the OWNER.

In addition to items 1 through 5 above, an added fixed fee for general overhead and Profit shall be negotiated and allowed for

the CONTRACTOR (or approved SUBCONTRACTOR) actually executing the Cost Reimbursement work.

An additional fixed fee shall be negotiated and allowed the CONTRACTOR for the administrative handling of portions of the work that are executed by an approved SUBCONTRACTOR. No additional fixed fee will be allowed for the administrative handling of work executed by a SUBCONTRACTOR of a SUBCONTRACTOR, unless by written permission from the OWNER.

The added fixed fees shall be considered to be full compensation, covering the cost of general supervision, overhead, Profit, and any other general expense. The CONTRACTOR's records shall make clear distinction between the direct costs of work paid for on a cost reimbursement basis and the costs of other work. The CONTRACTOR shall furnish the ENGINEER report sheets in duplicate of each day's cost reimbursement work no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the CONTRACTOR, SUBCONTRACTOR or other forces. The daily report sheets shall provide names or identifications and classifications of workers, the hourly rate of pay and hours worked, and also the size, type, and identification number of equipment and hours operated.

Material charges shall be substantiated by valid copies of vendors' invoices. Such invoices shall be submitted with the daily report sheets, or, if not available, they shall be submitted with subsequent daily report sheets. Said daily report sheets shall be signed by the CONTRACTOR or his authorized agent.

The OWNER reserves the right to furnish such materials and equipment as he deems expedient and the CONTRACTOR shall have no claim for profit or added fees on the cost of such materials and equipment. To receive partial payments and final payment for cost reimbursement work, the CONTRACTOR shall submit to the ENGINEER, detailed and complete documented verification of the CONTRACTOR's and any of his SUBCONTRACTORS' actual costs involved in the cost reimbursement work. Such costs shall be submitted within 30 days after said work has been performed.

69. PARTIAL PAYMENTS

A. GENERAL

Nothing in this Article shall be construed to affect the right, hereby reserved, to reject the whole or any part of the aforesaid work, should such work be later found not to comply with the Provisions of the Contract Documents. All estimated quantities of work for which partial payments have been made are subject to review and correction on the final estimate. Payment by the OWNER and acceptance by the CONTRACTOR of partial payments based on periodic estimates of quantities of work performed shall not, in any way, constitute acceptance of the estimated quantities used as a basis for computing the amounts of the partial payments.

B. ESTIMATE

At least 30 days before each Progress payment falls due, as specified in the Supplementary Conditions, the CONTRACTOR shall submit to the ENGINEER a detailed estimate of the amount earned during the Preceding month for the separate portions of the work, and request payment. As used in this Article, the words "amount earned" means the value, on the date of the estimate for partial payment, of the work completed in accordance with the Contract Documents, and the value of approved materials delivered to the Project site suitable stored and Protected Prior to incorporation into the work.

ENGINEER will, within 7 days after receipt of each request for payment, either indicate in writing a recommendation of payment and present the request to OWNER, or return the request to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may, within 7 days, make the necessary corrections and resubmit the request.

ENGINEER may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to OWNER. ENGINEER may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such an extent as may be necessary in ENGINEER's opinion to protect the OWNER from loss because:

1. The work is defective, or completed work has been damaged requiring correction or replacement;

2. Written claims have been made against OWNER or Liens have been filed in connection with the work;
3. The Contract Price has been reduced because of Change Orders;
4. OWNER has been required to correct defective work or complete the work in accordance with Article OWNER'S RIGHT TO DO WORK;
5. Of CONTRACTOR's unsatisfactory Prosecution of the work in accordance with the Contract Documents; or
6. CONTRACTOR's failure to make payment to SUBCONTRACTORS or for labor, materials, or equipment.

C. DEDUCTION FROM ESTIMATE

Unless modified in the Supplementary Conditions, deductions from the estimate will be as described below:

1. The OWNER will deduct from the estimate, and retain as part security, 10 percent of the amount earned for work satisfactorily completed. A deduction and retainage of 10 percent will be made on the estimated amount earned for approved items of material delivered to and properly stored at the jobsite but not incorporated into the work. When the work is 50 percent complete, the OWNER may reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date provided the CONTRACTOR is making satisfactory progress and there is no specific cause for a greater retainage. The OWNER may reinstate the retainage up to 10 percent if the OWNER determines, at his discretion, that the CONTRACTOR is not making satisfactory progress or where there is other specific cause for such withholding.

D. QUALIFICATION FOR PARTIAL PAYMENT FOR MATERIALS DELIVERED

Unless modified in the Supplementary Conditions, qualification for partial payment for materials delivered but not yet incorporated into the work shall be as described below:

1. Materials, as used herein, shall be considered to be those items which are fabricated and manufactured material and equipment. No consideration shall be given to individual purchases of less than \$200 for any one item.
2. To receive partial payment for materials delivered to the site, but not incorporated in the work, it shall be necessary for the CONTRACTOR to include a list of such materials on the Partial Payment Request. At his sole discretion, the ENGINEER may approve items for which partial payment is to be made. Partial payment shall be based on the CONTRACTOR's actual cost for the materials as evidenced by invoices from the supplier. Proper storage and Protection shall be provided by the CONTRACTOR, and as approved by the ENGINEER. Final payment shall be made only for materials actually incorporated in the work and, upon acceptance of the work, all materials remaining for which advance payments had been made shall revert to the CONTRACTOR, unless otherwise agreed, and partial payments made for these items shall be deducted from the final payment for the work.
3. CONTRACTOR warrants and guarantees that title to all work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER at the time of payment free and clear of all liens, claims, security interests, and encumbrances.
4. If requested by the ENGINEER, the CONTRACTOR shall provide, with subsequent pay requests, invoices receipted by the supplier showing payment in full has been made.

E. PAYMENT

After deducting the retainage and the amount of all previous partial payments made to the CONTRACTOR from the amount earned, the amount due will be made payable to the CONTRACTOR. Recommendations for payment received by the OWNER less than 9 days Prior to the scheduled day for payment will not be Processed or paid until the following month.

70. CLAIMS FOR EXTRA WORK

In any case where the CONTRACTOR deems additional time or compensation will become due him under this Contract for circumstances other than those defined in Article DELAYS AND EXTENSION OF TIME, the CONTRACTOR shall notify the ENGINEER, in writing, of his intention to make claim for such time or compensation before he begins the work on which he bases

the claim, in order that such matters may be settled, if possible, or other appropriate action taken. The notice of claim shall be in duplicate, in writing, and shall state the circumstances and the reasons for the claim, but need not state the amount. If such notification is not given or if the ENGINEER is not afforded proper facilities by the CONTRACTOR for keeping strict account of actual cost, then the CONTRACTOR hereby agrees to waive the claim for such additional time or compensation. Such notice by the CONTRACTOR, and fact that the ENGINEER has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

No extension of time will be granted to the CONTRACTOR for delays resulting from extra work that have no measurable impact on the completion of the total work under this Contract. Claims for additional time or compensation shall be made in itemized detail and submitted, in writing, to the OWNER and ENGINEER within 10 days following completion of that portion of the work for which the CONTRACTOR bases his claim. Failure to make the claim for additional compensation in the manner and within the time specified above shall constitute waiver of that claim. In case the claim is found to be just, it shall be allowed and paid for as provided in Article PAYMENT FOR CHANGE ORDERS.

71. RELEASE OF LIENS OR CLAIMS

The CONTRACTOR shall indemnify and hold harmless the OWNER from all claims for labor and materials furnished under this Contract. Prior to the final payment, the CONTRACTOR shall furnish to the OWNER, as part of his final payment request, a certification that all of the CONTRACTOR's obligations on the project have been satisfied and that all monetary claims and indebtedness have been paid. The CONTRACTOR shall furnish complete and legal effective releases or waivers, satisfactory to the OWNER, of all liens arising out of or filed in connection with the work.

72. FINAL PAYMENT

Upon completion of all the work under this Contract, the CONTRACTOR shall notify the ENGINEER, in writing, that he has completed his part of the Contract and shall request final payment. Upon receipt of such notice the ENGINEER will inspect and, if acceptable, submit to the OWNER his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the CONTRACTOR. Upon approval of this final estimate by the OWNER and compliance by the CONTRACTOR with Provisions in Article **RELEASE OF LIENS OR CLAIMS**, and other Provisions as may be applicable, the OWNER shall pay to the CONTRACTOR all monies due him under the Provisions of these Contract Documents.

73. NO WAIVER OF RIGHTS

Neither the inspection by the OWNER, through the ENGINEER or any of his employees, nor any order by the OWNER for payment of money, nor any payment for, or acceptance of, the whole or any part of the work by the OWNER or ENGINEER, nor any extension of time, nor any possession taken by the OWNER or its employees, shall operate as a waiver of any Provision of this Contract, or any power herein reserved to the OWNER, or any right to damages herein Provided, nor shall any waiver of any breach in this Contract be held to be a waiver of any other or subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the OWNER's rights under the warranty.

74. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by the CONTRACTOR of the final payment shall release the OWNER and the ENGINEER, as representatives of the OWNER, from all claims and all liability to the CONTRACTOR for all things done or furnished in connection with the work, and every act of the OWNER and others relating to or arising out of the work except claims Previously made in writing and still unsettled. No payment, however, final or otherwise, shall operate to release the CONTRACTOR or his Sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds and warranties, as herein provided.

SUPPLEMENTARY CONDITIONS

The General Conditions are hereby revised as follows:

ARTICLE 9 “ENGINEER”

Delete Article “ENGINEER” in its entirety and substitute the following:

The person or organization identified as such in the Contract Documents. The Term “ENGINEER” means William Horn Architects, Inc. or his authorized representative.

ARTICLE 32 “CONTRACTOR, AN INDEPENDENT AGENT”

Add the following:

A. ASSIGNMENT OF CONTRACT

Assignment of any part or the whole of this Contract shall be subject to review and approval of the City Commission

ARTICLE 34 "INSURANCE & LIABILITY”

Delete Articles 34 A, B, C, D & E and substitute the following:

Contractor shall maintain limits no less than those stated below:

CONTRACTOR is to secure, pay for, and file with the City of Key West, prior to commencing any work under the Contract, all certificates for workers’ compensation, public liability, and property damage liability insurance, and such other insurance coverages as may be required by specifications and addenda thereto, in at least the following minimum amounts with specification amounts to prevail if greater than minimum amounts indicated. Notwithstanding any other provision of the Contract, the CONTRACTOR shall provide the minimum limits of liability insurance coverage as follows:

Auto Liability	\$1,000,000	Combined Single Limit
General Liability	\$2,000,000	Aggregate (Per Project)
	\$2,000,000	Products Aggregate
	\$1,000,000	Any One Occurrence
	\$1,000,000	Personal Injury
	\$ 300,000	Fire Damage/Legal
Additional Umbrella Liability	\$2,000,000	Occurrence / Aggregate

CONTRACTOR shall furnish an original Certificate of Insurance indicating, and such policy providing coverage to, City of Key West named as an additional insured on a PRIMARY and NON CONTRIBUTORY basis utilizing an ISO standard endorsement at least as broad as CG 2010 (11/85) or its equivalent, (combination of CG 20 10 07 04 and CG 20 37 07 04, providing coverage for completed operations, is acceptable) including a waiver of subrogation clause in

favor of City of Key West on all policies. CONTRACTOR will maintain the General Liability and Umbrella Liability insurance coverages summarized above with coverage continuing in full force including the additional insured endorsement until at least 3 years beyond completion and delivery of the work contracted herein.

Notwithstanding any other provision of the Contract, the CONTRACTOR shall maintain complete workers' compensation coverage for each and every employee, principal, officer, representative, or agent of the CONTRACTOR who is performing any labor, services, or material under the Contract. Further, CONTRACTOR shall additionally maintain the following minimum limits of coverage:

Bodily Injury Each Accident	\$1,000,000
Bodily Injury by Disease Each Employee	\$1,000,000
Bodily Injury by Disease Policy Limit	\$1,000,000

CONTRACTOR's insurance policies shall be endorsed to give 30 days' written notice to the City of Key West in the event of cancellation or material change, using form CG 02 24, or its equivalent.

Certificates of Insurance submitted to the City of Key West will not be accepted without copies of the endorsements being requested. This includes additional insured endorsements, cancellation/material change notice endorsements, and waivers of subrogation. PLEASE ADVISE YOUR INSURANCE AGENT ACCORDINGLY.

CONTRACTOR will comply with any and all safety regulations required by any agency or regulatory body including but not limited to OSHA. CONTRACTOR will notify City of Key West immediately by telephone at (305) 809-3811 any accident or injury to anyone that occurs on the jobsite and is related to any of the work being performed by the CONTRACTOR.

Add the following Article:

B. SURETY AND INSURER QUALIFICATIONS

All bonds, insurance contracts, and certificates of insurance shall be either executed by or countersigned by a licensed resident agent of the Surety or insurance company, having his place of business in the State of Florida, and in all ways complying with the insurance laws of the State of Florida. Further, the said Surety or Insurance Company shall be duly licensed and qualified to do business in the State of Florida. If requested, Contractor shall Provide Proof of Florida Licensure for all insurance companies. The City of Key West shall be named as Additional Insured on the insurance certificates.

ARTICLE 35 "INDEMNITY"

Delete Article "INDEMNITY" in its entirety and substitute the following:

INDEMNITY

To the fullest extent permitted by law, the CONTRACTOR expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnitees") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of CONTRACTOR's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any. The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the CONTRACTOR or of any third party to whom CONTRACTOR may subcontract a part or all the Work. This indemnification shall continue beyond the date of completion of the work.

ARTICLE 39 "CODES, ORDINANCES, PERMITS, AND LICENSES"

Add the following:

A. NOISE ORDINANCE

City of Key West has a noise ordinance that allows working hours between 8:00 AM to 7:00 PM, Monday through Friday. No work should be performed during weekends or City Holidays, State Holidays and National Holidays. Any construction operations outside these hours and these days will require a variance from the City of Key West Commission.

B. "LICENSES"

THE BIDDER MUST BE A LICENSED CONTRACTOR BY THE STATE OF FLORIDA AND SUBMIT PROOF OF SUCH WITH THE BID.

1. Within 10 days of Notice of Award, the successful Bidder must represent that he holds all applicable, county, and City of Key West licenses and permits required to do business as a contractor with respect to the work described in the Contract Documents.
2. Further, the successful Bidder must, within 10 days of Notice of Award, furnish documentation showing that, as a minimum, he has complied with the provisions of Chapter 18 of the Code of Ordinances of the City of Key West to enter the Agreement contained in the Contract Documents.

3. Specifically, within 10 days after Notice of Award, the successful Bidder must demonstrate that he holds, as a minimum, the following licenses and certificates:
 - a.) City of Key West Tax License Receipt;
 - b.) A valid Certificate of Competency issued by the Chief Building Official of Key West, Florida
 - c.) A valid occupational license issued by the City of Key West, Florida.

ARTICLE 40 "SUPERINTENDENCE"

Add the following sub article:

The CONTRACTOR shall keep at the project site, competent supervisory personnel, able to read, write and speak English to effectively communicate with City staff.

ARTICLE 42 "SAFETY"

Add the following sub article:

OCCUPATIONAL SAFETY AND HEALTH

The Contractor shall observe and comply with all applicable local, state, and federal occupational safety and health regulations during the prosecution of work under this Contract. In addition, full compliance by the Contractor with the U.S. Department of Labor's Occupational Safety and Health Standards, as established in Public Law 91-596, will be required under the terms of this Contract.

ARTICLE 43 "PROTECTION OF WORK AND PROPERTY"

Add the following Article:

HISTORIC PRESERVATION

The Contractor shall comply with Florida's Archives and Historic Act (Florida Statutes, Chapter 267) and the regulations of the local historic preservation board as applicable and protect against the potential loss or destruction of significant historical or archaeological data, sites, and properties in connection with the project.

ARTICLE 57 "OWNERS RIGHT TO TRANSFER EMPLOYMENT"

Add the following Article:

TERMINATION FOR CONVENIENCE AND RIGHT OF SUSPENSION

A. Owner shall have the right to terminate this Contract without cause by written notice of Termination to the Contractor. In the event of such termination for convenience, the Contractor's recovery against the Owner shall be limited to that portion of the Contract amount earned through the date of termination, together with any retainage withheld and reasonable termination expenses incurred. Contractor shall not be entitled to any other or further recovery against the Owner, including, but not limited to, damages or any anticipated profit on portions of the Work not performed.

B. The Owner shall have the right to suspend all or any portions of the Work upon giving the Contractor prior written notice of such suspension. If all or any portion of the Work is so suspended, the Contractor shall be entitled to reasonable costs, expenses and time extension associated with the suspension.

ARTICLE 60 "LIQUIDATED DAMAGES"

Delete Article "LIQUIDATED DAMAGES" in its entirety and substitute the following:
LIQUIDATED DAMAGES

Should the Contractor fail to complete the work or any part thereof in the time agreed upon in the Contract Documents or within such extra time as may have been allowed for delays by extensions granted as provided in the Contract, the Contractor shall reimburse the Owner for the additional expense and damage for each calendar day that project outlined in Contract Documents remains uncompleted after the completion date. Liquidated damages shall be assessed. It is agreed that the amount of such additional expense and damage incurred by reason of failure to complete the work is the per diem rate as stipulated in the Bid. The said amount is hereby agreed upon as a reasonable estimate of the costs which may be accrued by the Owner after the expiration of the time of completion. It is expressly understood and agreed that this amount is not to be considered in the nature of a penalty but as liquidated damages, which have accrued against the Contractor. The Owner shall have the right to deduct such damages from any amount due or that may become due the Contractor or the amount of such damages shall be due and collectible from the Contractor.

ARTICLE 68 "PAYMENT"

Sub article C. "COST REIMBURSEMENT WORK"

Delete the third & fourth paragraph in its entirety & substitute the following;

In addition to 1 through 5 above, an added fixed fee of 15 percent (%) for general overhead & profit shall be allowed for the CONTRACTOR (or approved SUBCONTRACTOR) executing the Cost Reimbursement work.

An additional fixed fee of 5 % will be allowed the CONTRACTOR for the administrative handling of portions of the work that are executed by an approved SUBCONTRACTOR. No additional fixed fee will be allowed for the administrative handling of work executed by the SUBCONTRACTOR of a SUBCONTRACTOR.

ARTICLE 69 "PARTIAL PAYMENTS"

Delete the first paragraph of Sub Article B. "ESTIMATE" and substitute the following:

No more than once each month the Contractor shall submit to the ENGINEER a detailed estimate of the amount earned during the preceding month for the separate portions of the work and request payment. As used in this Article the words "amount earned" means the value, on the date of the estimate, for partial payment of the work completed in accordance with the Contract Documents and the value of approved materials delivered to the project site suitably stored and protected prior to incorporation into the work. Payment will be made by the Owner to the Contractor within 40 days receipt of the written recommendation of payment from the ENGINEER.

Sub Article C. "DEDUCTION FROM ESTIMATE"

Delete third sentence in its entirety and substitute add the following;

1. When the work is 90 per cent complete, the OWNER may reduce the retainage to 5 percent of the dollar value of all work satisfactorily completed to date provided the CONTRACTOR is making satisfactory progress and there is no specific cause for greater retainage.

Delete Sub article E. "PAYMENT" in its entirety and substitute the following:

After deducting the retainage and the amount of all previous partial payments made to the Contractor from the amount earned the amount due will be made payable to the Contractor. Recommendations for payment received by the Owner less than 40 days prior to the scheduled day for payment will not be processed or paid until the following month.

ARTICLE 72 "FINAL PAYMENT"

Delete Article "FINAL PAYMENT" in its entirety and substitute the following:

FINAL PAYMENT

Upon completion of the work the Contractor shall notify the ENGINEER, in writing, that he has completed it and shall request final payment. The Contractor shall be responsible for keeping an accurate and detailed record of his actual construction. Upon completion of construction and before final acceptance and payment the Contractor shall furnish the ENGINEER as-built drawings of his construction. Upon receipt of a request for final payment and the as-built drawings the ENGINEER will inspect and, if acceptable, submit to the Owner his recommendation as to acceptance of the completed work and as to the final estimate of the amount due the Contractor. Upon approval of this final estimate by the Owner and compliance by the Contractor with provisions in Article RELEASE OF LIENS OR CLAIMS, and other provisions as may be applicable, the Owner shall pay to the Contractor all monies due him under the provisions of these Contract Documents.

A. Acceptance and Final Payment

Whenever the Contractor has completely performed the work provided for under the Contract and the ENGINEER has performed a final inspection and made final acceptance and subject to the terms of the ENGINEER will prepare a final estimate showing the value of the work as soon as the ENGINEER makes the necessary measurements and computations. The ENGINEER will correct all prior estimates and payments in the final estimate and payment. The OWNER will pay the estimate, less any sums that the OWNER may have deducted or retained under the provisions of the Contract, as soon as practicable after final acceptance of the work, provided the Contractor has met the requirements of (1) through (4) below.

1. The Contractor has agreed in writing to accept the balance due or refund the overpayment, as determined by the OWNER, as full settlement of his account under the Contract and of all claims in connection therewith, or the Contractor, accepted the balance due or refunded the overpayment, as determined by the OWNER, with the stipulation that his acceptance of such payment or the making of such refund does not constitute any bar, admission, or estoppel, or have any effect as to those payments in dispute or the subject of a pending claim between the Contractor and the OWNER. To receive payment based on a FINAL PAYMENT CERTIFICATE, The Contractor further agrees, by submitting a FINAL PAYMENT CERTIFICATE that any pending or future arbitration claim or suit is limited to those particulars, including the itemized amounts, defined in the original FINAL PAYMENT CERTIFICATE , and that he will commence with any such arbitration claim or suit within 15 calendar days from and after the time of final PAYMENT of the work and that his failure to file a formal claim within this period constitutes his full acceptance of the ENGINEER's final estimate and payment. The overpayment refund check from the Contractor, if required, will be considered a part of any Acceptance Letter executed.
2. The Contractor has properly maintained the project, as specified hereinbefore.
3. The Contractor has furnished a sworn affidavit to the effect that the Contractor has paid all bills and no suits are pending (other than those exceptions listed, if any) in connection with work performed under the Contract and that the Contractor has not offered or made any gift or gratuity to, or made any financial transaction of any nature with, any employee of the OWNER in the performance of the Contract.
4. Final payment will not be released until the City receives Certified As-built drawings in Auto Cad & Adobe format as well as:

As-Built Drawing Standards:

All supplied data collections, as-builts, drawings and files to be compatible with esri ArcGIS 10.2.2 Software. The current computing environment consists of:

- Microsoft SQL Server - Windows 7/Server 2008 - ESRI GIS Platform

Interfaces and Integrations:

The City of Key West uses a number of software applications critical to its core operation and mission. The proposed mobile asset data collection solution will need to interface or integrate with these existing platforms. - Arc Collector-ArcGIS Online - ArcMap 10.2

END OF SECTION

PART 4

GENERAL REQUIREMENTS

SECTION 01001
GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 PROJECT DESCRIPTION

- A. A brief description of the work is stated in the Invitation to Bid. To determine the full scope of the project or of any part of the project, coordinate the applicable information in the several parts of these Contract Documents.

1.2 MOBILIZATION AND DEMOBILIZATION

- A. Contractor shall be responsible for mobilization and demobilization of labor, materials and equipment. Payment for mobilization and demobilization will be included in the lump sum price indicated in the BID. Parking for vehicles used on site will be determined by the ENGINEER prior to mobilization.

B. DAILY REPORTS

- 1) The CONTRACTOR shall submit daily reports of construction activities to the ENGINEER if requested. The report shall include:
 - a) Manpower, number of workers by craft
 - b) Quality Control
 - c) Equipment on the Project
 - d) Major deliveries
 - e) Activities worked
 - f) New problems
 - g) Other pertinent information

1.3 SCHEDULING

- A. Prior to starting the work, confer with the ENGINEER and Owner's representative to develop an approved work schedule. Which will permit the surrounding facilities to function as normally as practical. It may be necessary to do certain parts of the work outside normal working hours to avoid undesirable conditions. The Contractor shall do this work at such times and at no additional cost to the Owner.
- B. SPECIAL EVENTS: Contractor may be asked to stop work during special events.

1.4 COORDINATION

- A. Contractors shall cooperate in the coordination of their separate activities in a manner that will provide the least interference with the Owner's operations and other contractors and utility companies working in the area, and in the interfacing and connection of the separate elements of the overall project work.
- B. If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the ENGINEER.

- C. CONTRACTOR shall notify all residents and proprietors adjacent to construction site of work to be performed, more specifically the notice shall state the day and time construction will begin, the name and phone number of the Contractor's representative responsible for the completion of the proposed improvements. Notice shall also include the Owner's representative for the project.

1.5 SITE INVESTIGATION AND REPRESENTATION

- A. The Contractor acknowledges satisfaction as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, access to the site, disposal, handling and storage of materials, availability of labor, water, electric power, roads, and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions at the site, the character of equipment and facilities needed preliminary to and during the prosecution of the work, and all other matters which can any way affect the work or the cost thereof under this Contract.
- B. The Contractor further acknowledges satisfaction as to character, quality, and quantity of surface and subsurface materials to be encountered from his inspection of the site and from reviewing any available records of exploratory work furnished by the Owner or included in these Documents. Failure by the Contractor to become acquainted with the physical conditions of the site and all available information will not relieve the Contractor from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor warrants that as a result of examination and investigation of all the aforesaid data, the contractor can perform the work in a good and workmanlike manner and to the satisfaction of the Owner.
- D. The Owner assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.

1.6 INFORMATION ON SITE CONDITIONS

- A. General: Any information obtained by the ENGINEER regarding site conditions, subsurface information, water level, existing construction of site facilities as applicable, and similar data will be available for inspection at the office of the ENGINEER upon request. Such information is offered as supplementary information only. Neither the ENGINEER nor the Owner assumes any responsibility for the completeness or interpretation of such supplementary information.
- B. The Contractor shall provide a color audio-video recording showing the entire preconstruction site. The video photographer shall be an established enterprise that routinely provides these services. The videos shall be in DVD format or .wav files on removable USB drive, indicating the date, project name, and a brief description of the location where the video was taken. The Contractor shall submit one (1) copy of the preconstruction audio-video to the OWNER.

1.7 DIFFERING SUBSURFACE CONDITIONS

- A. The ENGINEER shall investigate such conditions promptly and following this investigation, the Contractor shall proceed with the work, unless otherwise instructed by the ENGINEER. If the ENGINEER finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for performing the work, the ENGINEER will recommend to the Owner the amount of adjustment in cost and time he considers reasonable. The Owner will make the final decision on all Change Orders to the Contract regarding any adjustment in cost or time for completion.

1.8 UTILITIES

- A. During excavation, the Contractor shall be responsible for determining, at his cost, the locations of all known utilities in the project area.
- B. Contractor shall notify utility location service (e.g. Call Sunshine 1-800-432-4770) a minimum for 48 hours prior to work order mobilization. Assigned notification number shall be maintained at the job site at all times and recorded in the daily reports.

1.9 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the Contractor's operations could cause damage or inconvenience to telephone, television, gas, water, sewer, or irrigation systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the Contractor.
- B. Notify all utility offices, which are affected by the construction operation at least 48 hours in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities.
- C. The Contractor shall be solely and directly responsible to the Owner and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract
- D. Neither the Owner nor its Officers or agents shall be responsible to the Contractor for damages as a result of the Contractor's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.
- F. In the event the Contractor encounters water service lines that interfere with trenching, he may, by obtaining prior approval of the property owner, Florida Keys Aqueduct Authority (FKAA), or Fire Department as applicable, and the ENGINEER, cut the service dig through, and restore service with similar and equal materials at the Contractor's expense.

- G. The Contractor shall replace, at his own expense, all existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract Documents or ordered by the ENGINEER.

1.10 TEMPORARY WATER

- A. The Owner will make water available for the Contractor.

1.11 TEMPORARY ELECTRIC POWER

- A. Power will be made available to the Contractor by the Owner.

1.12 SAFETY REQUIREMENTS FOR TEMPORARY ELECTRIC POWER

- A. Temporary electric power installation shall meet the construction Safety requirements of OSHA, State, and other governing agencies.

1.13 SANITARY FACILITIES

- A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractor's employees that will comply with the regulations of the local and State Departments of Health and as directed by the Owner.

1.14 STORAGE OF MATERIALS

- A. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary, they shall be placed on wooden platforms or other clean hard surfaces and not on the ground. Stored materials shall be located so as to facilitate prompt inspection. Stored materials on city property must be safe and secured from the general public and if necessary they must be fitted with lights at night. Private property shall not be used for storage purposes without the written permission of the owner or lessee. Materials shall not be stored where access to any structure, plot, parking space or road is blocked. Location of stored materials approved by the ENGINEER or his designee.
- B. Delicate instruments and materials subject to vandalism shall be placed under lock cover and, if necessary, provided with temperature control as recommended by the manufacturer.

1.15 CONSTRUCTION SAFETY PROGRAM

- A. The Contractor shall develop and maintain for the duration of this Contract, a safety program that will effectively incorporate and implement all required safety provisions. The Contractor shall appoint an employee who is qualified and authorized to supervise and enforce compliance with the safety program.
- B. The duty of the ENGINEER to conduct construction review of the Contractor's performance is not intended to include a review or approval of the adequacy of the Contractor's safety supervisor, the safety program or any safety measures taken in, on, or near the construction site.
- C. The Contractor shall do all work necessary to protect the public from hazards, including, but not limited to, surface irregularities, or unramped grade changes on pedestrian walkways and

docks. Barricades, lights, and proper signs shall be furnished in sufficient amount to safeguard the public and the work.

- D. The performance of all work shall be in accordance with the applicable governing safety authorities.

1.16 ACCIDENT REPORTS

- A. If death or serious injuries or serious damages are caused; the Contractor must promptly report by telephone or messenger to the ENGINEER. In addition, the Contractor must promptly report in writing to the ENGINEER all accidents whatsoever arising out of or in connection with, the performance of the work whether on, or adjacent, to the site, giving full details and statements of witnesses.
- B. If a claim is made against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the ENGINEER, giving full details of the claim.

1.17 FIRE PREVENTION AND PROTECTION

- A. The Contractor shall perform all work in a fire-safe manner and shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The Contractor shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

1.18 SITE RESTORATION AND CLEANUP:

- A. At all times during the work keep the premises clean and orderly and upon completion of daily work repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences regardless of whether these are on private property, or State, County, or City rights-of-way. Remove all excavated materials from grassed and planted areas, and leave these surfaces in a condition equivalent to their original condition.

1.19 FINISHING OF SITE AND STORAGE AREAS

- A. Upon completion of the project, all areas used by the Contractor shall be properly cleared of all temporary structures, rubbish and waste materials and properly graded to drain and blend in with the abutting property. Areas used for the deposit of waste materials shall be finished to properly drain and blend in with the surrounding terrain.

1.20 AREA CLEANUP DURING CONSTRUCTION

- A. Thoroughly clean all spilled dirt, gravel, sand or other foreign materials caused by the construction operations from all streets and roads, grass, pathways, docks or concrete walkways and from adjacent areas (e.g., City Hall parking lot) at the conclusion of each day's operation. Truck or equipment wash down is not to be performed on City Property.

1.21 PREVENTION

- A. Applicable environmental regulations shall be strictly adhered to.

1.22 SUBMITTALS

- A. See Submittals section of the specifications

1.23 PAYMENT

- A. The cost of the work in this section is considered incidental to the contract.

END OF SECTION

SECTION 01010
SCOPE OF WORK

The project contemplated consists of providing all materials, equipment and labor necessary to renovate the Gymnasium at the historic Glynn Archer School.

1.1 DESCRIPTION

Construct/ renovate the Glynn Archer Gymnasium as detailed in the specifications and drawings in ITB 18-028 including all site work and necessary appurtenances, record drawings, and incidental work to provide a complete and serviceable project identified as:

B. ITB 18-028 – Glynn Archer Gym Renovations

C. Related requirements in other parts of the Contract Documents: Include but not limited to:

1. General and Supplementary Conditions of the Contract for Construction.

1.2 CONTRACTOR'S DUTIES:

A. In addition to provisions stipulated in other portions of the Contract Documents, the Contractor shall:

1. Secure permits as necessary for proper execution and completion of the work. All conditions of the permit must be adhered to by the contractor.
2. Notify (in writing) all vendors, residents and proprietors adjacent to construction site of work to be performed, more specifically the notice shall state the day and time construction will begin, hours of work, the name and phone number of the Contractor's Superintendent and an end date for the project.

B. The Contractor shall be totally responsible for securing and complying with all, required permits and payment of associated fees. Contractor shall ensure that construction complies with all applicable local, state, and federal codes.

C. Provide an experienced, qualified, and competent Superintendent able to read, write and speak English to oversee the work and perform quality assurance inspections. Prior to starting construction, the proposed Superintendent's qualifications shall be submitted in writing to the City for approval. The approved Superintendent shall be expected to remain for the duration of the Project, unless the City or ENGINEER deem him/her inadequate and requests his/her removal or the Contractor cannot continue his services to the Project for a reason or reasons that shall be communicated in writing to the City.

D. It shall be the Contractor's responsibility to comply with the City's Ordinance

Chapter 26 Environment, Article IV. Sound Control below:

Sec. 26-193. - Exceptions.

The prohibitions contained in this article shall not apply to the following:

(3) Construction/demolition. Sound levels produced from tools and equipment in commercial construction, demolition, drilling, or reasonably similar activities. However, such sound levels are limited to the hours of 8:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. The tools and equipment must be muffled and maintained equal to the functional standards of the industry. No exceptions contained in this subsection shall apply on Thanksgiving Day, Christmas Day and New Year's Day.

E. Contractor is responsible for all costs associated with the disposal of materials and must dispose of in an environmentally responsible manner.

F. The Contractor shall maintain on site material safety data sheets for chemicals, paints, coatings and materials used on-site prior to initiation of work.

1.3 CONTRACTOR'S USE OF PREMISES

A. Work shall be scheduled as to not interfere with on-going area activities.

B. Coordinate use of premises and requirements for security under direction of City.

C. Assume full responsibility for the protection and safekeeping of products, under this Contract, stored on the site.

D. Obtain and pay for the use of additional storage or work areas needed for operation.

1.4 MAINTENANCE OF EXISTING UTILITIES OPERATION

A. Provide at least three weeks' notice prior to interruption of utility services for temporary or permanent connections.

B. Keep interruption of utility services, and utility outages during disconnection, moving, and reconnection to a minimum.

C. Keys Energy shall be notified two weeks in advance in writing by the contractor for any KEYS support equipment required by the Contractor during construction. No additional payment will be paid for this coordination.

END OF SECTION

SECTION 01300
SUBMITTALS

PART 1 - GENERAL

1.1 GENERAL

- A. Inquiries: Direct to ENGINEER regarding procedure, purpose, or extent of Submittal.
- B. Submittal Submission Procedures: As provided in General Conditions, as specified herein, and as may otherwise be established during the preconstruction conference.
- C. OWNER's Authorization: At any time, OWNER may authorize changes to procedures and requirements for Submittals, as necessary to accomplish specific purpose of each Submittal. Such authorization will be by Field Order or Work Change Directive.
- D. Timeliness: Make submissions in accordance with requirements of individual Specification sections, as shown on the current accepted schedule of Submittals submissions, and in such sequence as to cause no delay in Work or in work of other contractors.

E. Identification of Submittals:

- 1. Complete, sign, and transmit with each Submittal package, one Transmittal of CONTRACTOR's Submittal Form.
- 2. Identify each Submittal with numbering and tracking system reviewed by ENGINEER:
 - a. Sequentially number each Submittal.
 - b. Resubmission of a Submittal will have original number with sequential alphabetic suffix.
- 3. Show date of submission and dates of previous submissions.
- 4. Show Project title and OWNER's contract identification and contract number.
- 5. Show names of CONTRACTOR, Subcontractor or Supplier, and manufacturer as appropriate.
- 6. Identify, as applicable, Contract Document section and paragraph to which Submittal applies.
- 7. Clearly identify revisions from previous submissions.

F. Incomplete Submittal Submissions:

- 1. At ENGINEER's sole discretion, ENGINEER will either (i) return the entire Submittal for CONTRACTOR's revision/correction and resubmission, or (ii) retain portions of the Submittal and request submission/resubmission of specified items or as noted thereon.
- 2. Submittals which do not clearly bear CONTRACTOR's specific written indication of CONTRACTOR review and approval of Submittal or which are transmitted with an unsigned or uncertified submission form or as may otherwise be required under Contract Documents, will be returned to CONTRACTOR unreviewed for resubmission in accordance with Contract Documents.
- 3. Delays, re-sequencing or other impact to Work resulting from the CONTRACTOR's submission of unchecked or unreviewed, incomplete, inaccurate or erroneous, or nonconforming Submittals,

which will require CONTRACTOR's resubmission of a Submittal for ENGINEER's review, shall not constitute a basis of claim for adjustment in Contract Price or Contract Times.

G. Non-specified Submissions: Submissions not required under these Contract Documents and not shown on schedule of Submittals submissions will not be reviewed and will be returned to CONTRACTOR.

H. Transmit submittals in accordance with current accepted schedule of Submittal submissions, and deliver the ENGINEER designated by the ENGINEERING Department of the City of Key West.

I. Disposition of Submittals: As specified herein for administrative Submittals. ENGINEER will review, stamp, and indicate requirements for resubmission or acceptance on Submittal as follows:

1. No Exceptions Taken.
2. Reviewed as Noted:
 - a. Reference the General Conditions for intent.
 - b. CONTRACTOR may proceed to perform Submittal related Work.
 - c. One copy for ENGINEER's file.
 - d. One copy returned to CONTRACTOR.
3. Revise and Resubmit (Revise/Correct or Develop Replacement and Resubmit):
 - a. Revise/correct in accordance with ENGINEER's comments and resubmit.
 - b. One copy to ENGINEER's file.
 - c. One copy returned to CONTRACTOR appropriately annotated.

J. Payment for the work in this section will be incidental to the contract.

END OF SECTION

PART 5

DRAWINGS AND SPECIFICATIONS



OLD GYMNASIUM BUILDING RENOVATION

WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL. (305) 296-8302
FAX (305) 296-1033

LICENSE NO.
AA 0003040

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA.

SEAL

DATE

05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY

JW

PROJECT
NUMBER

1702

KEY WEST CITY COMMISSIONERS

MAYOR CRAIG CATES

COMMISSIONER JIMMY WEEKLEY, DISTRICT I

COMMISSIONER SAMUEL KAUFMAN, DISTRICT II

COMMISSIONER BILLY WARDLOW, DISTRICT III

COMMISSIONER RICHARD PAYNE, DISTRICT IV

COMMISSIONER MARGARET ROMERO, DISTRICT V

COMMISSIONER CLAYTON LOPEZ, DISTRICT VI

CITY MANAGER JAMES K. SCHOLL



SHOP DRAWING / SUBMITTAL REVIEW

REVIEWED / APPROVED

This review is for general conformance with plans and specifications only. Approvals are subject to subcontractors performance within the confines of the contract documents. Review of dimensions will not serve to relieve the subcontractor of contractual responsibility for any deviation from the contract requirements.

By: L. Kreed Howell, Sr. Construction Manager, City of Key West

Signature: _____

AREA OF WORK

KEY PERSONNEL

ARCHITECT:

WILLIAM P. HORN ARCHITECT, P.A.

WILLIAM P. HORN, RA, LEED AP
915 EATON ST.
KEY WEST, FL 33040
TEL. (305) 296-8302

STRUCTURAL ENGINEERING:

ATLANTIC ENGINEERING SERVICE

MARK J. KEISTER, P.E.
6501 ARLINGTON EXPRESSWAY
BUILDING B, SUITE 201.
JACKSONVILLE, FL 32211
TEL. (904) 725-9295

OWNER:

CITY OF KEY WEST

P.O. Box 1409
Key West, FL 33041-1409
TEL. (305) 808-3867

CIVIL ENGINEERING:

PEREZ ENGINEERING
AND DEVELOPMENT INC.

ALLEN E. PEREZ, PE
1010 Kennedy Drive, Suite 201
Key West, FL 33040
TEL. (305) 293-9440

MEP ENGINEERING:

C&B COMMISSIONING FOR
BUILDINGS INC.

DONALD H. AUSTIN, JR., PE,
LEED AP, C&A, OPMP
PRESIDENT

5070 PERIGNON WAY - CORAL SPRINGS
FLORIDA 33067
TEL. 954-448-3996

SURVEYOR:

ISLAND SURVEYING, INC.
ENGINEERS PLANNERS
SURVEYORS

FREDERICK H. HILDEBRANDT,
PROFESSIONAL SURVEYOR

3150 NORTHRIDE DRIVE, SUITE 101
KEY WEST, FL. 33040

DESIGN CRITERIA

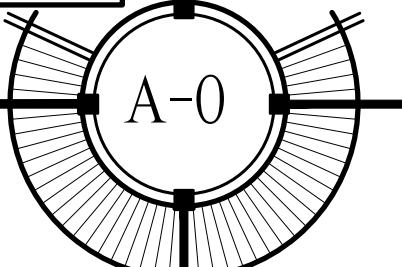
THE FLORIDA BUILDING CODE 2017 EDITION, AS AMENDED BY GOVERNING LOCAL ORDINANCES AND REQUIREMENTS OF THE STATE OF FLORIDA COASTAL ZONE PROTECTION ACT, TOGETHER WITH APPLICABLE REQUIREMENTS OF GOVERNING PUBLIC AGENCIES AND THE FOLLOWING LISTED CODES SHALL APPLY TO THIS PROJECT
NATIONAL ELECTRIC CODE, CURRENT EDITION
FLORIDA PLUMBING CODE, 2017 EDITION
FLORIDA MECHANICAL CODE, 2017 EDITION
WIND LOADING SHALL BE BASED ON ASCE 7-10 180 MPH WIND LOADING.
NOTE ANY REFERENCE TO WIND LOADING FOUND IN THE DRAWINGS OR SPECIFICATIONS WHICH DIFFERS FROM THE ABOVE SHALL BE SUPERCEDED BY THIS STATEMENT.

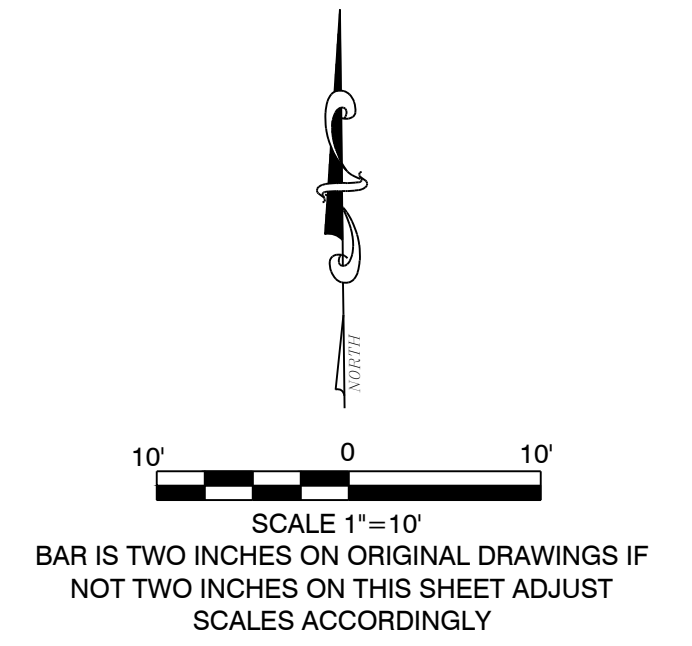
SCOPE OF WORK

SCOPE OF WORK: INTERIOR RENOVATIONS OF THE EXISTING GYM BUILDING TO INCLUDE NEW ADA COMPLIANT RESTROOMS, NEW INTERIOR CONFIGURATION, NEW MECHANICAL SYSTEM, NEW PLUMBING, AND NEW ELECTRICAL WORK, INTERIOR DEMOLITION. EXTERIOR WORK TO INCLUDE REPLACING WINDOWS AND DOORS TO MATCH ORIGINAL, NEW WHITE SINGLE PLY MEMBRANE ROOF AND INSULATION AND CONCRETE SPALLING REPAIR. SEE DRAWINGS AND SPECIFICATIONS FOR COMPLETE SCOPE OF WORK.

SITE DATA	
LAND USE DESIGNATION: HPS (HISTORIC PUBLIC AND SEMI-PUBLIC SERVICES)	
FLOOD ZONES: "X" THERE IS NO SITE WORK IN THIS PROJECT SCOPE OTHER THAN UTILITY HOOKUPS.	
BUILDING DATA	
EXISTING BUILDING IS A CONTRIBUTING HISTORIC STRUCTURE WITHIN THE KEY WEST HISTORIC DISTRICT AND ALL USES OF THE BUILDING ARE EXISTING USES (OCCUPANCY USES). REAR ONE STORY MASONRY BUILDING IS NOT PART OF THIS PROJECT.	
EXISTING BUILDING	ENCLOSED
	OTM = 5,541 S.F.
	STORAGE ROOMS = 442 S.F.
	STORAGE MEZZANINE = 901 S.F.
	TOTAL = 6,884 S.F.
	COVERED
	FRONT ENTRY = 53 S.F.
	REAR ENTRY = 590 S.F.
	TOTAL = 643 S.F.
EXISTING BUILDING IS ONE STORY OCCUPANCY CLASSIFICATION = ASSEMBLY A-4 (INDOOR SPORTING EVENTS AND ACTIVITIES) CONSTRUCTION TYPE = III B, NON-SPRINKLERED	
HEIGHT	ALLOWABLE = 2 STORY, 55'
	PROVIDED = 1 STORY, W/MEZZANINE, 30'
AREA	ALLOWABLE = 9,500 S.F.
	PROVIDED = 7,527 S.F.
FIRE SPRINKLER SYSTEM : NOT REQUIRED IF LESS THAN 300 PEOPLE OCCUPANCY COUNT = 1,276 S.F. (ASSEMBLY AREA) / 5 S.F./ PERSON = 255.2 PEOPLE MAX. (BASED ON WORSE CASE SCENARIO, PEOPLE ARE STANDING AT 5 S.F./ PERSON)	
ASSEMBLY W/OUT FIXED SEATS (UNCONCENTRATED) = 15 S.F./PERSON NET STORAGE = 300 S.F./PERSON	
MAIN EXERCISE ROOM	= 3,375 S.F./15 = 225 PEOPLE
SMALL EXERCISE ROOM	= 360 S.F./15 = 24 PEOPLE
LOWER LEVEL STORAGE	= 326 S.F./300 = 2 PEOPLE
MEZZANINE STORAGE	= 660 S.F./300 = 3 PEOPLE
	TOTAL = 254 PEOPLE
PLUMBING FIXTURES REQUIRED. 254 PEOPLE / 2 = 127 FEMALES, 127 MALES	
WATER CLOSETS :	MALE : 127/75 = 1.69 (2 PROVIDED PLUS 1 URINAL)
	FEMALE : 127/40 = 3.175 (4 PROVIDED)
SINKS :	MALE : 127/200 = 0.635 (2 PROVIDED)
	FEMALE : 127/150 = 0.846 (4 PROVIDED)
DRINKING FOUNTAIN :	1 PER 500 REQUIRED
SERVICE SINK :	2 PROVIDED 1 REQUIRED 1 PROVIDED

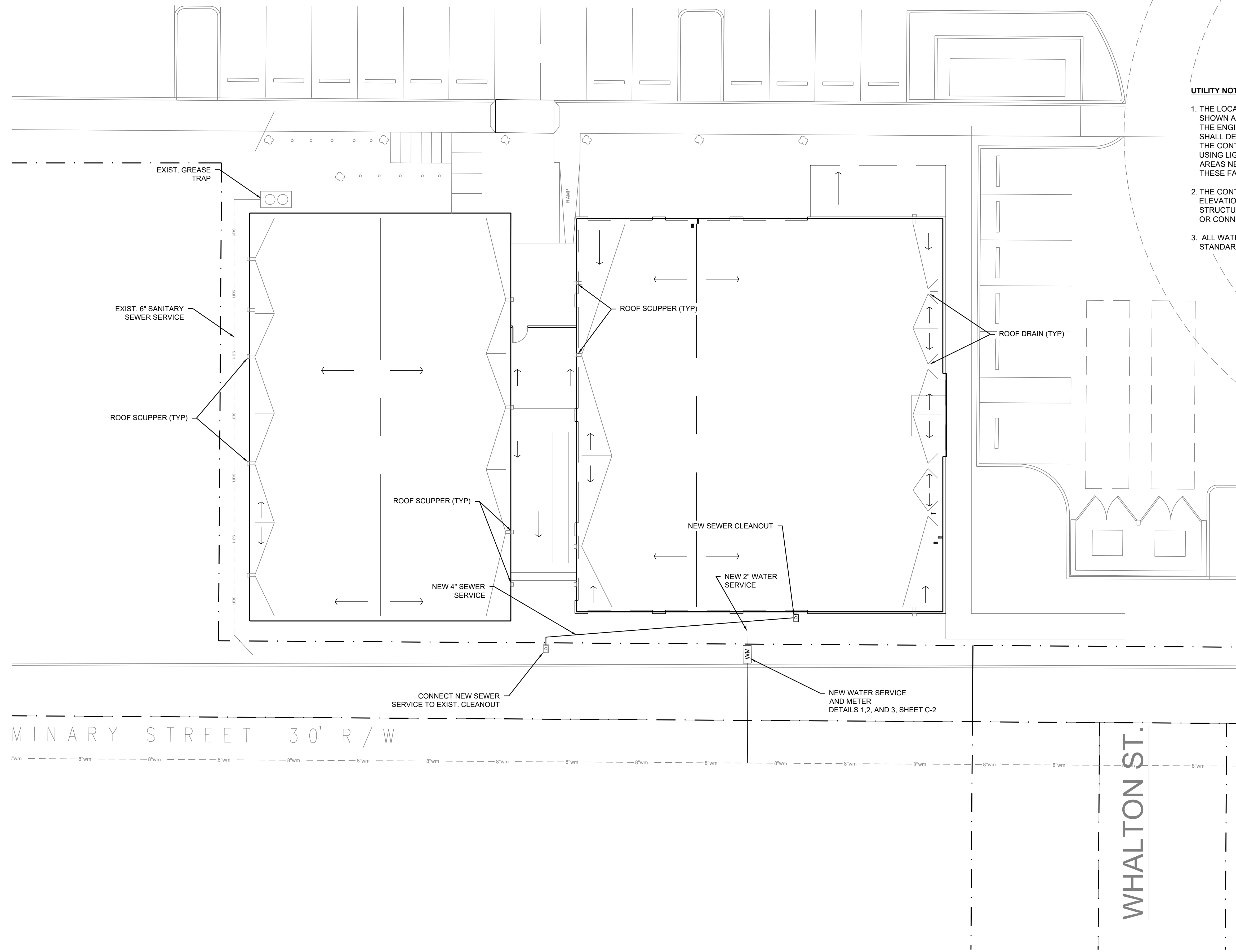
OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA





UTILITY NOTES:

1. THE LOCATIONS, SIZES, AND ELEVATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO OBTAIN ANY AVAILABLE RECORD DRAWINGS AND SHALL DETERMINE THE EXACT LOCATION AND ELEVATION IN THE FIELD. THE CONTRACTOR SHALL ANTICIPATE THAT SCANNING AND EXCAVATION USING LIGHT EQUIPMENT AND HAND METHODS WILL BE NECESSARY IN AREAS NEAR EXISTING UTILITIES AND STRUCTURES TO AVOID DAMAGING THESE FACILITIES.
2. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES IN THE FIELD PRIOR TO ORDERING NEW STRUCTURES AND PRIOR TO INSTALLING ANY NEW WORK THAT CROSSES OR CONNECTS TO EXISTING UTILITY SYSTEMS.
3. ALL WATER UTILITY WORK SHALL BE IN ACCORDANCE WITH FKAA STANDARDS AND SPECIFICATIONS.



MINARY STREET 30' R/W

WHALTON ST.

CIVIL ENGINEERING • REGULATORY PERMITTING & CONSTRUCTION MANAGEMENT

PEREZ ENGINEERING

8 DEVELOPMENT, INC

1010 BENTLEY DRIVE SUITE 201
KEY WEST, FLORIDA 33040
TEL: (305) 283-1145 FAX: (305) 296-0243

ALLEN E. PEREZ, P.E.
Florida P.E. NO. 51488
May 5, 2018

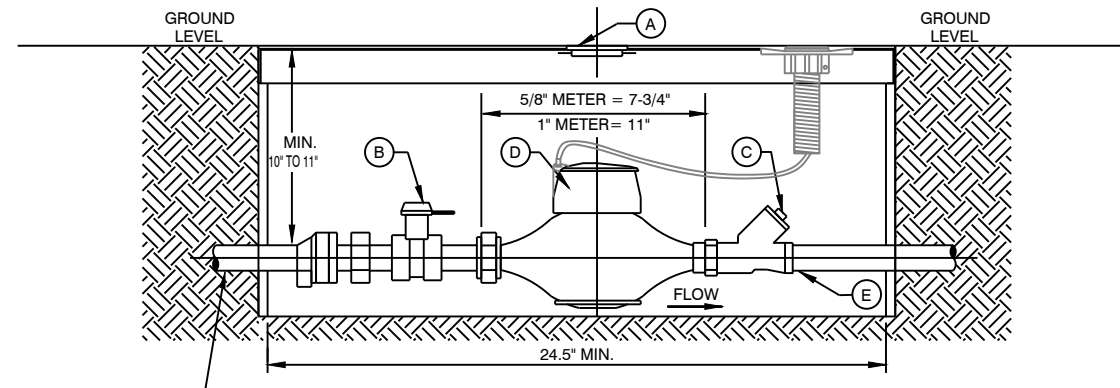
REVISIONS:

1	ORIGINAL	MAY 2018
2		
3		
4		
5		
6		

CITY OF KEY WEST
OLD GYMNASIUM BUILDING
1300 WHITE STREET, REAR
CIVIL PLAN

CITY OF KEY WEST
1300 WHITE STREET
KEY WEST, FL. 33040

JOB NO.	181019
DRAWN	AEP
DESIGNED	AEP
CHECKED	AEP



1 5/8" & 1" Meter w/ Dual Check Valve
NTS

ELEVATION VIEW

A- METER BOX AND LID
B- 80% OLDCASTLE PRECAST #02001102-FL127 FIBRELYTE GRAY COMPOSITE BOX (7" HOLES)

NOTE: METER BOXES MUST HAVE LIDS IN PLACE PRIOR TO POURING THE CONCRETE.

B- FORD LOCKABLE CURB STOP OR APPROVED EQUAL

METER DIAMETER	CURB STOP
3/4" x 1/2"	No. 843-342 W
1"	No. 843-344 W

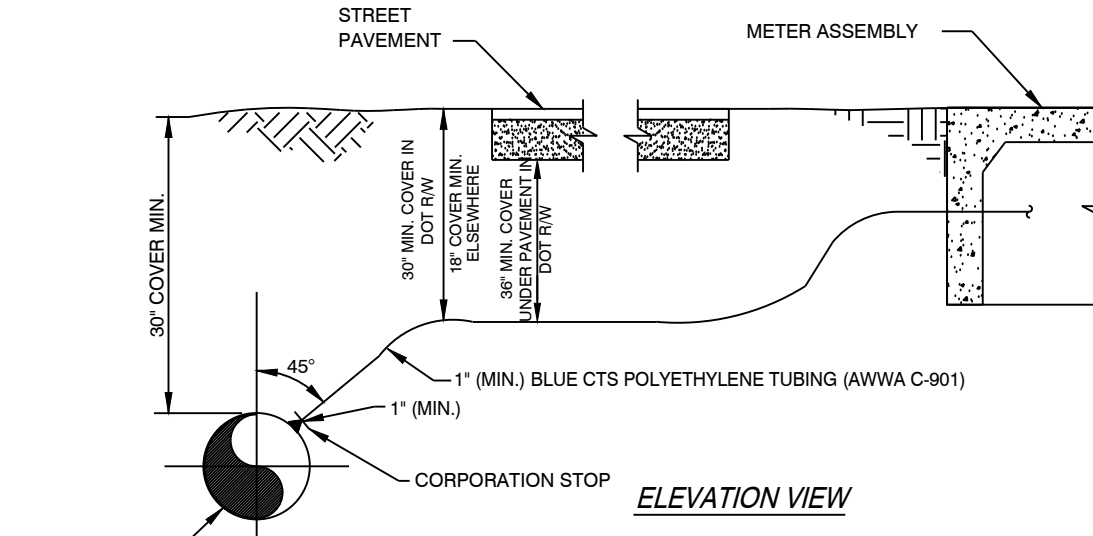
* W/ ON CATALOG NUMBER IS FOR PACKLOCK WINGS & SHOULD OPEN TO THE LEFT.

C- FKA APPROVED DUAL CHECK VALVE: MUELLER No. H-14242 OR FORD HHS 31-323, HHS 31-344, OR APPROVED EQUAL. IF DOWNSTREAM BACKFLOW PREVENTOR (BFP OR DCV) IS REQUIRED, CURB STOP SHOULD BE INSTALLED IN LIEU OF DUAL CHECK.

D- SEALED REGISTER WATER METER

E- CUSTOMER TIE-IN POINT

NOTE:
1. MINIMUM DISTANCES BETWEEN METER INLETS/OUTLETS AND THE CLOSEST FITTINGS SHALL BE MAINTAINED PER METER MANUFACTURER'S REQUIREMENTS.

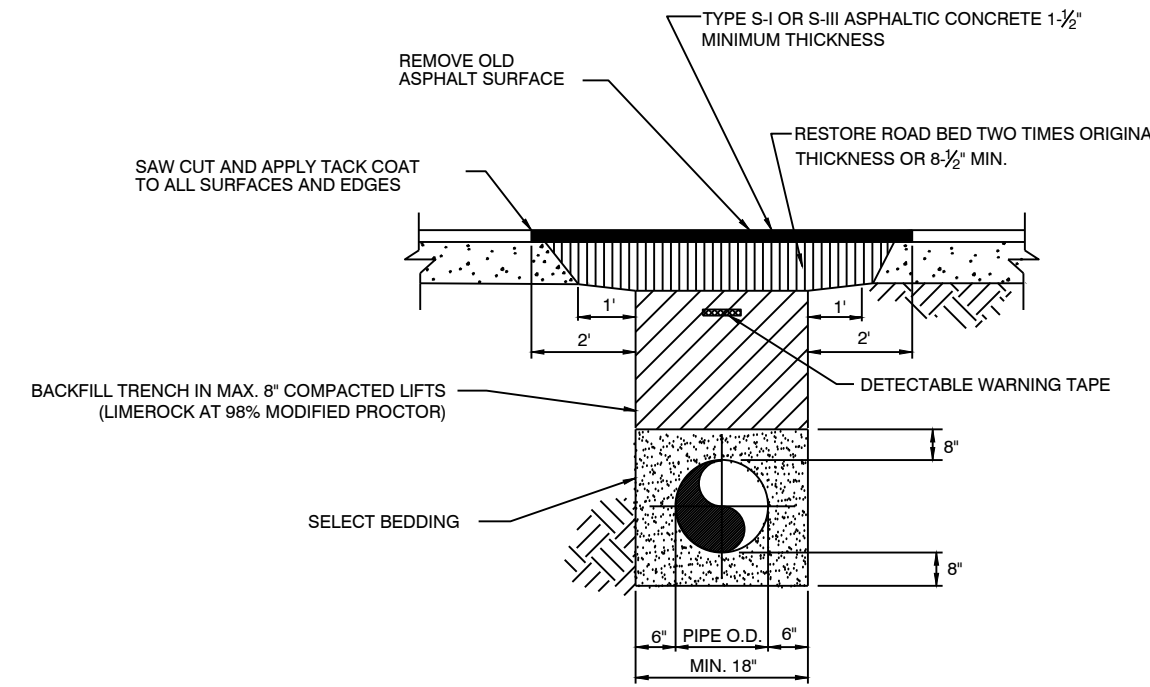


2 Water Service Connection Detail
NTS

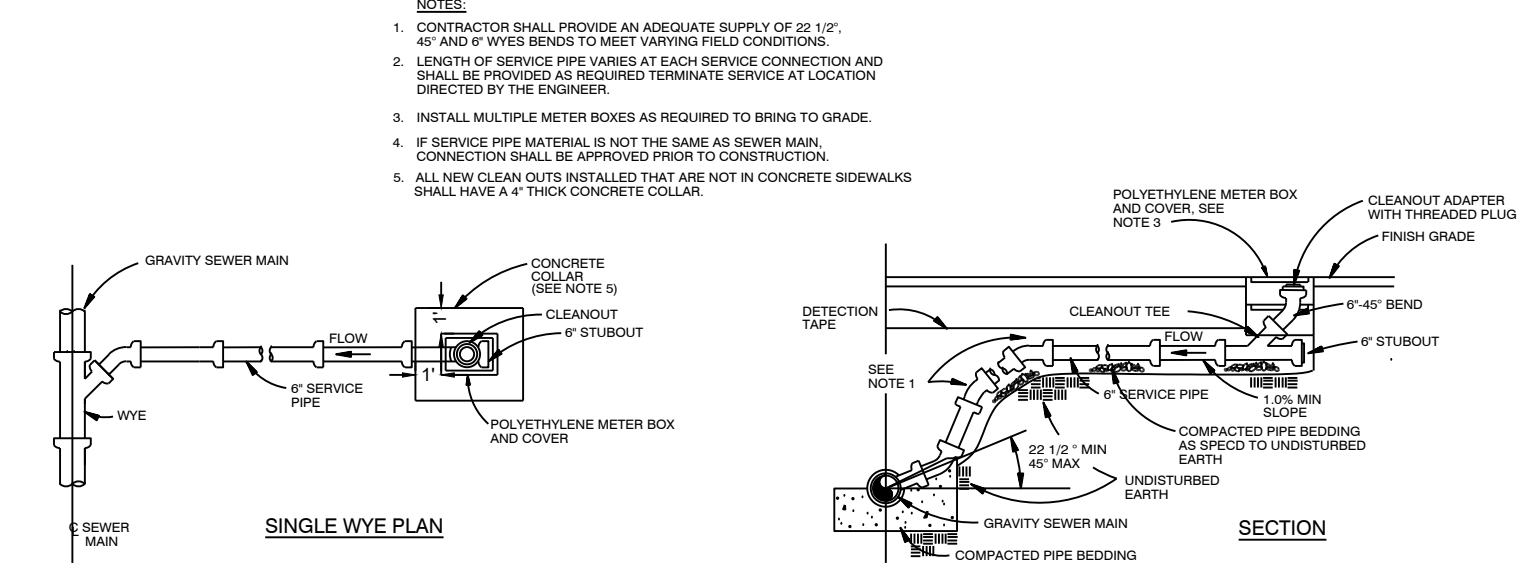
ELEVATION VIEW

NOTE:
1. SADDLES SHALL BE ROCKWELL INTERNATIONAL, TYPE 323, STYLE DOUBLE STRAP BRONZE SADDLES, FOR PVC AND DUCTILE IRON PIPE, OR APPROVED EQUAL. TAPPING SADDLES SHALL BE USED FOR ALL TAPS ON 4" PVC PIPE OR GREATER SHALL HAVE A TAPPING SLEEVE AND VALVE.

2. CORPORATION STOPS SHALL BE FORD F-1000, FB-1000, OR APPROVED EQUAL. THE LARGEST CORPORATION STOP WHICH CAN BE TAPPED DIRECTLY INTO THE PIPE IS 1 INCH.



3 Water Service Trench Restoration Detail
NTS



4 TYPICAL SEWER SERVICE CONNECTION
NOT TO SCALE

NOTES:
1. CONTRACTOR SHALL PROVIDE AN ADEQUATE SUPPLY OF 20 1/2\"/>

CIVIL ENGINEERING • REGULATORY PERMITTING & CONSTRUCTION MANAGEMENT

Perez Engineering & Development, Inc.

10101 EAST UNIVERSITY DRIVE, SUITE 100
KEY WEST, FLORIDA 33040
TEL: (305) 228-9145 FAX: (305) 296-0243

ALLEN PEREZ, P.E.
Florida P.E. NO. 51468
May 5, 2018

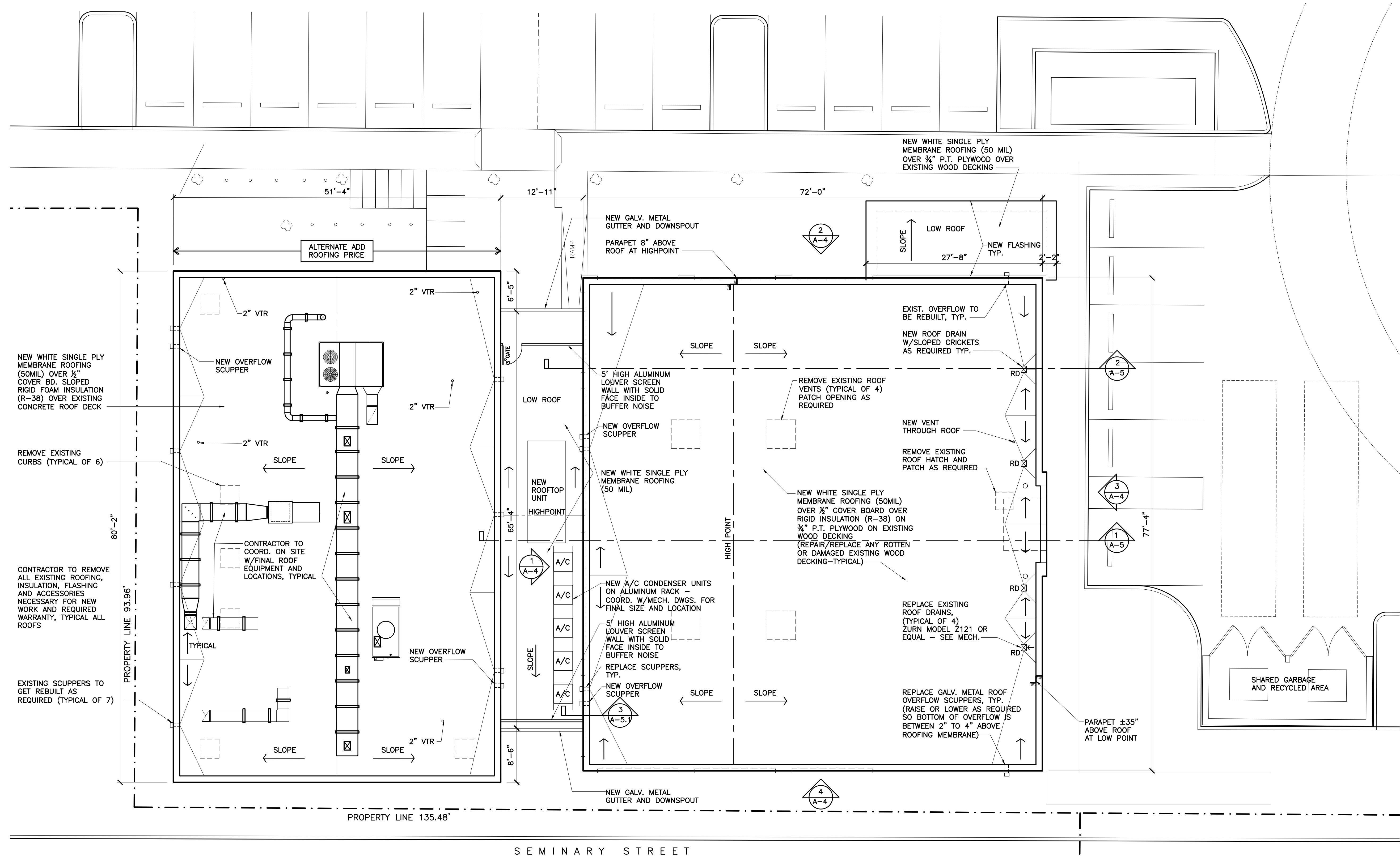
ORIGINAL: MAY 2018

REVISIONS:	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

CITY OF KEY WEST
1300 WHITE STREET
KEY WEST, FL. 33040

CITY OF KEY WEST
OLD GYMNASIUM BUILDING
1300 WHITE STREET, REAR
DETAILS

JOB NO.	181019
DRAWN	AEP
DESIGNED	AEP
CHECKED	AEP
SHEET	C-2



PROPOSED SITE/ROOF PLAN

SITE PLAN BASED ON INFORMATION OBTAINED FROM SURVEY
PREPARED BY FRED H. HILDEBRANDT, SURVEYOR DATED ON
06/08/1998. UPDATED 7/12/2013

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

SINGLE PLY MEMBRANE ROOFING ASSEMBLY

- IS BASED ON FIBERTITE BY SEAMAN CORPORATION, 50 MIL MEMBRANE ROOFING ASSEMBLY. DETAILS OF INSTALLATION INCLUDING FASTENERS AND MATERIALS SHALL BE IN ACCORDANCE WITH MIAMI/DADE N.O.A. INDICATING COMPLIANCE WITH PROJECT WINDLOAD REQUIREMENTS. THE INSTALLATION SHALL COMPLY WITH THE MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS, THE LATEST INDUSTRY STANDARDS, AND THE CONTRACT DOCUMENTS.
- PROVIDE A FULL SHOP DRAWING SUBMITTAL INCLUDING N.O.A. COMPLIANCE WITH PROJECT WIND LOADS AND ALL ACCESSORIES AND DETAILS REQUIRED FOR A COMPLETE WATERTIGHT INSTALLATION.
- REFER TO STRUCTURAL FOR DESIGN PRESSURES.
- NOMINAL DESIGN PRESSURE (0.6% OF TABULATED PRESSURES FROM STRUCTURAL DRAWINGS IS +16.2/-54.6)
- NOA FOR ROOFING: NOA NO. 16-0518.09
 - SINGLE PLY ON CONCRETE DECK W/INSULATION MAX. DESIGN PRESSURE = - 290 PSF
 - SINGLE PLY ON CONCRETE DECK MAX. DESIGN PRESSURE = - 320 PSF
- NOA FOR ROOFING: NOA NO. 15-1026.07
 - SINGLE PLY ON WOOD DECK W/INSULATION MAX DESIGN PRESSURE = -60 PSF

PROVIDE AN ALTERNATE PRICE FOR ALL ROOFING WORK ON REAR ADDITION (LOWER MID-ROOF IS IN BASE BID).
CONTRACTOR TO INSPECT FINAL REAR ADDITION ROOF AND EQUIPMENT LAYOUT AND PROVIDE FOR ALL EXISTING CONDITIONS.

DEMOLITION NOTE:

CONTRACTOR TO REMOVE ALL ITEMS NECESSARY TO DO NEW WORK, INCLUDING BUT NOT LIMITED TO EXISTING ROOFING, INSULATION, FLASHING, ROOF DRAINS, VENTS, SCUPPERS, ETC. ALL ROOFING WILL BE NEW, WITH A 20 YEAR WARRANTY.

FASTENERS:

ALL FASTENERS USED IN ROOFING ASSEMBLIES SHALL BE PER MANUFACTURERS RECOMMENDATIONS AND N.O.A. TEST REQUIREMENTS. ALL MATERIALS SHALL BE CORROSION RESISTANT FOR A SALT AIR ENVIRONMENT AND SHALL BE COMPATIBLE WITH CONTACT MATERIALS AND SUBSTRATES, INCLUDING PRESSURE TREATED WOOD. INSURE PROTECTION OF DISSIMILAR METALS BY USE OF TAPE, MEMBRANES OR GASKETS APPROVED FOR THE USE.

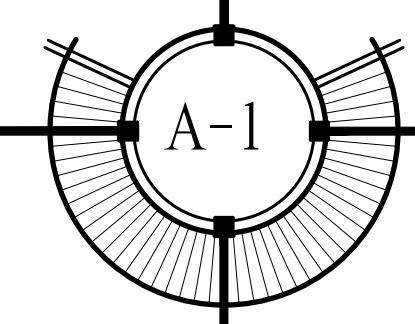
SEAL

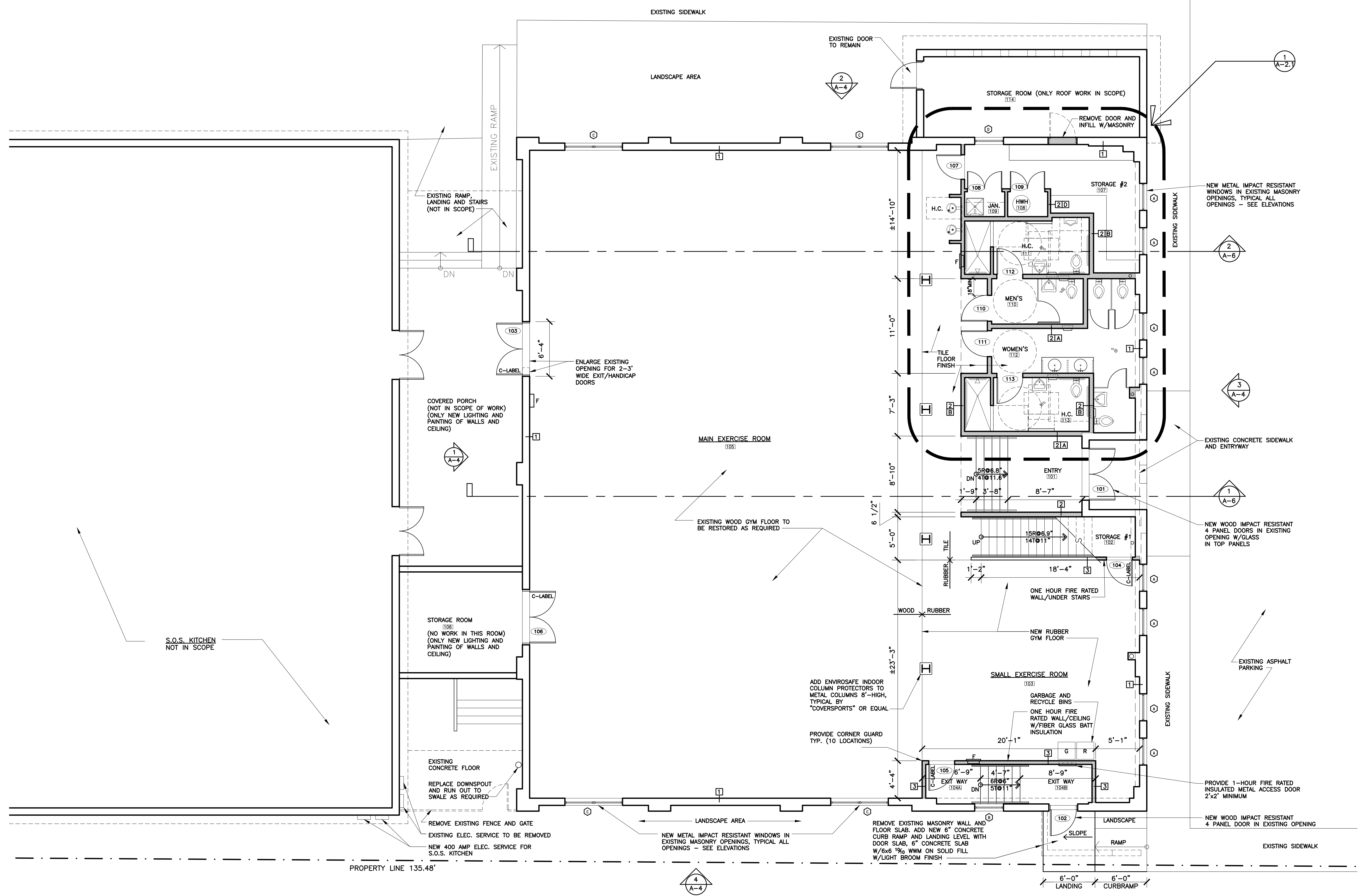
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702

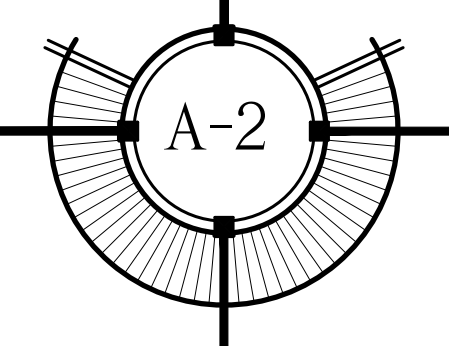




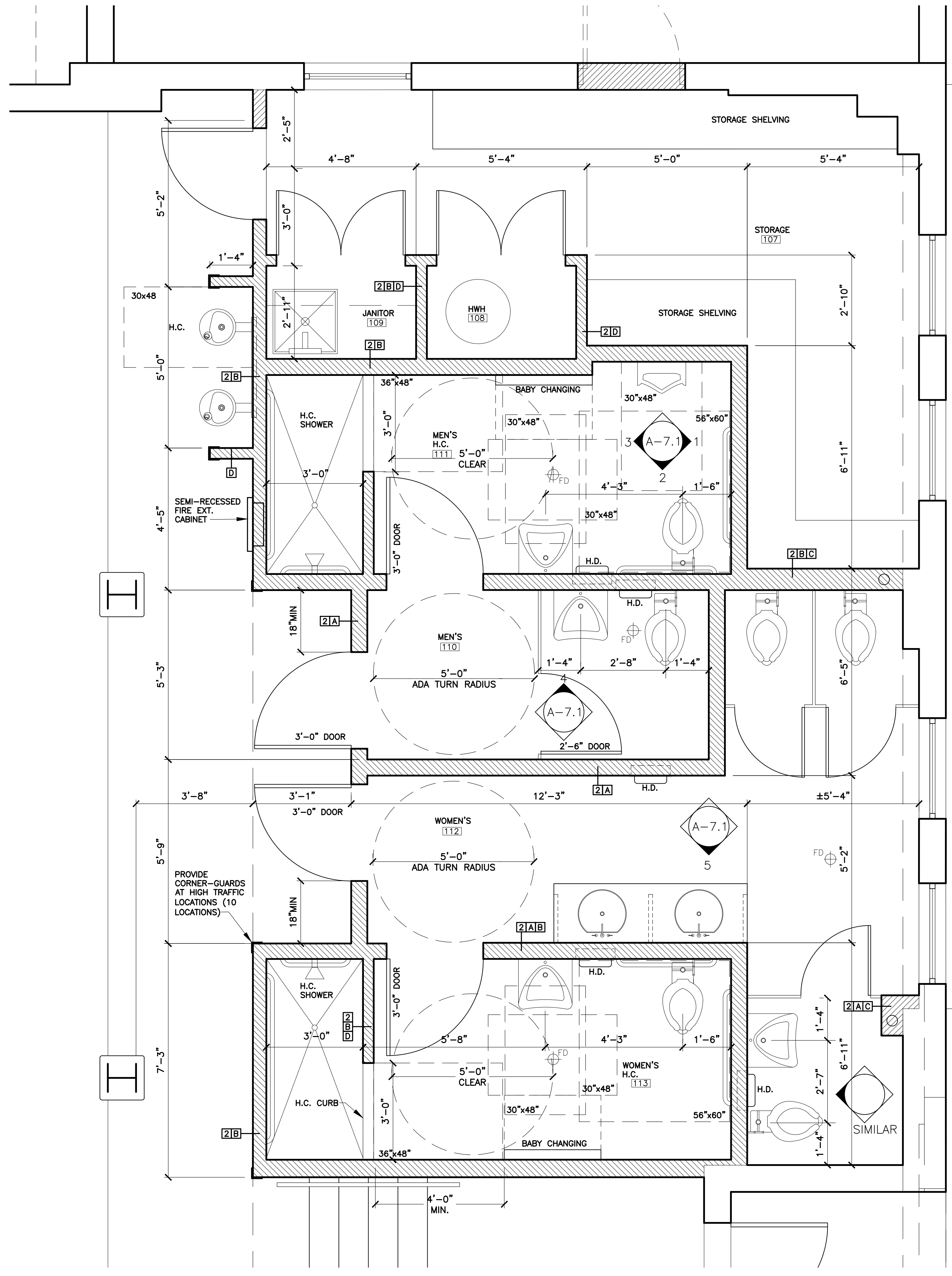
PROPOSED FIRST FLOOR PLAN

SCALE: 3/16"=1'-0"

OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA



WALL LEGEND	
EXISTING WALLS	
	1 EXISTING CONCRETE/MASONRY WALLS WITH STUCCO FINISH TO REMAIN (PATCH AND RE-PAINT BOTH SIDES AS REQUIRED).
NEW WALLS	
	2 NEW WALL - USE P.T. 2x6 WOOD STUDS @16" O.C. WITH 5/8" GYP. BD. FINISH, PAINTED.
	3 NEW WALL - ONE HOUR FIRE RATED. USE P.T. 2x6 WOOD STUDS @16" O.C. WITH 5/8" TYPE 'X' GYP. BD. BOTH SIDES - ADD R-19 FIBERGLASS BATT INSULATION
	A USE 5/8" MOISTURE RESISTANT GYP. BD. IN LIEU OF REGULAR 5/8" GYP. BD. IN JANITOR CLOSET AND RESTROOMS.
	B ADD WALL TILE AND 5/8" FIBER CEMENT BOARD IN LIEU OF 5/8" GYP. BD.
	C FURRING TO BE SIZED TO ALLOW ROOF DRAIN PIPE.
	D USE P.T. 2x4 WOOD STUDS @16" O.C. IN LIEU OF 2x6



1
A-2.1

PROPOSED ENLARGED RESTROOMS PLAN

SCALE: 1/2"=1'-0"

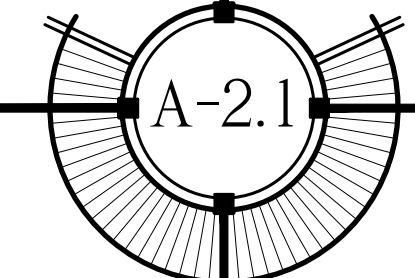
SEAL

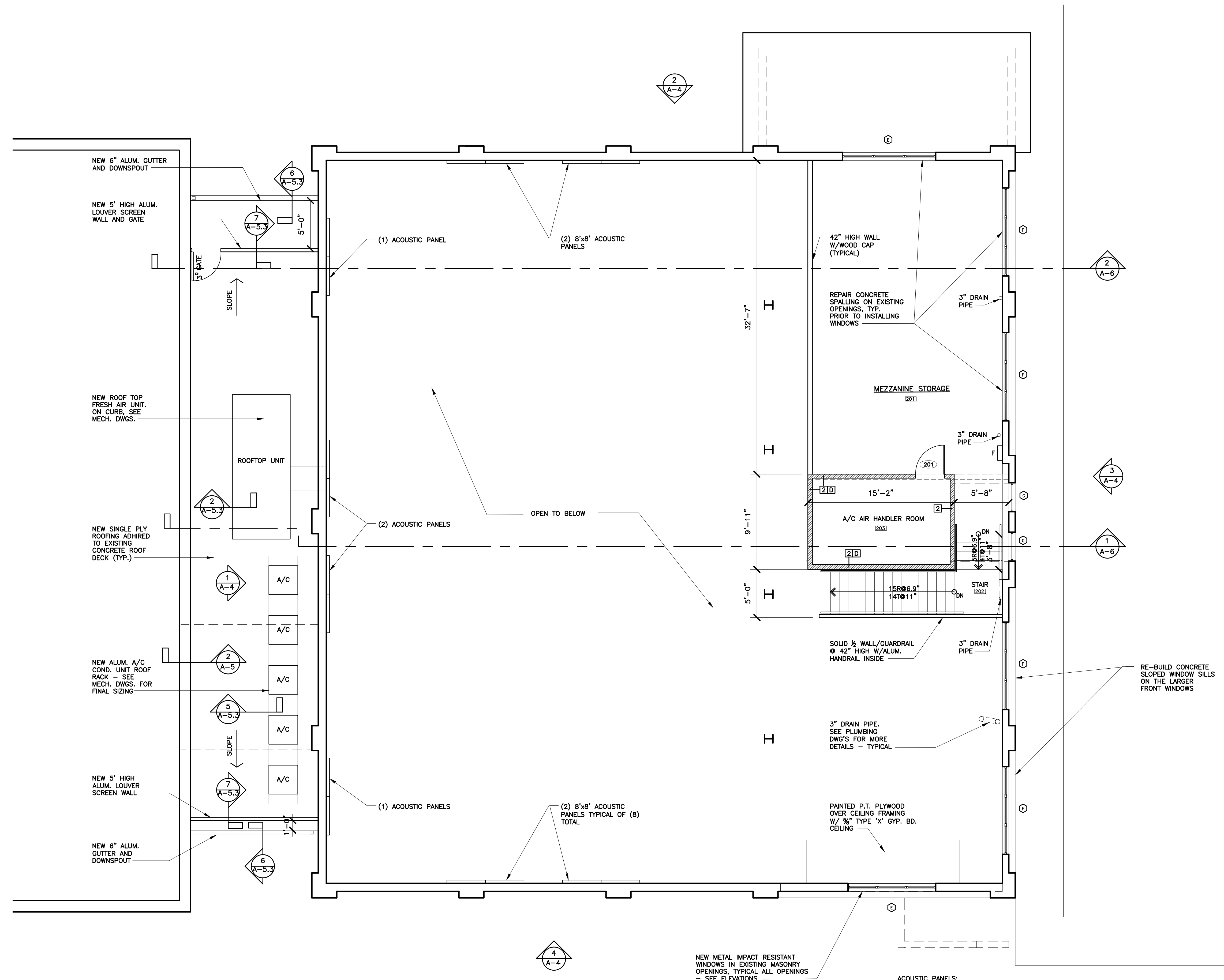
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702





SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

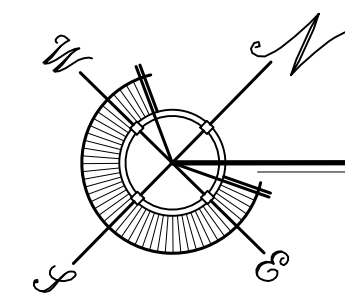
REVISIONS

DRAWN BY
JW

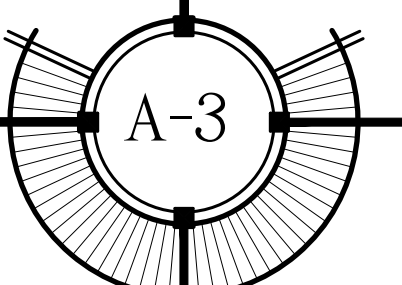
PROJECT
NUMBER
1702

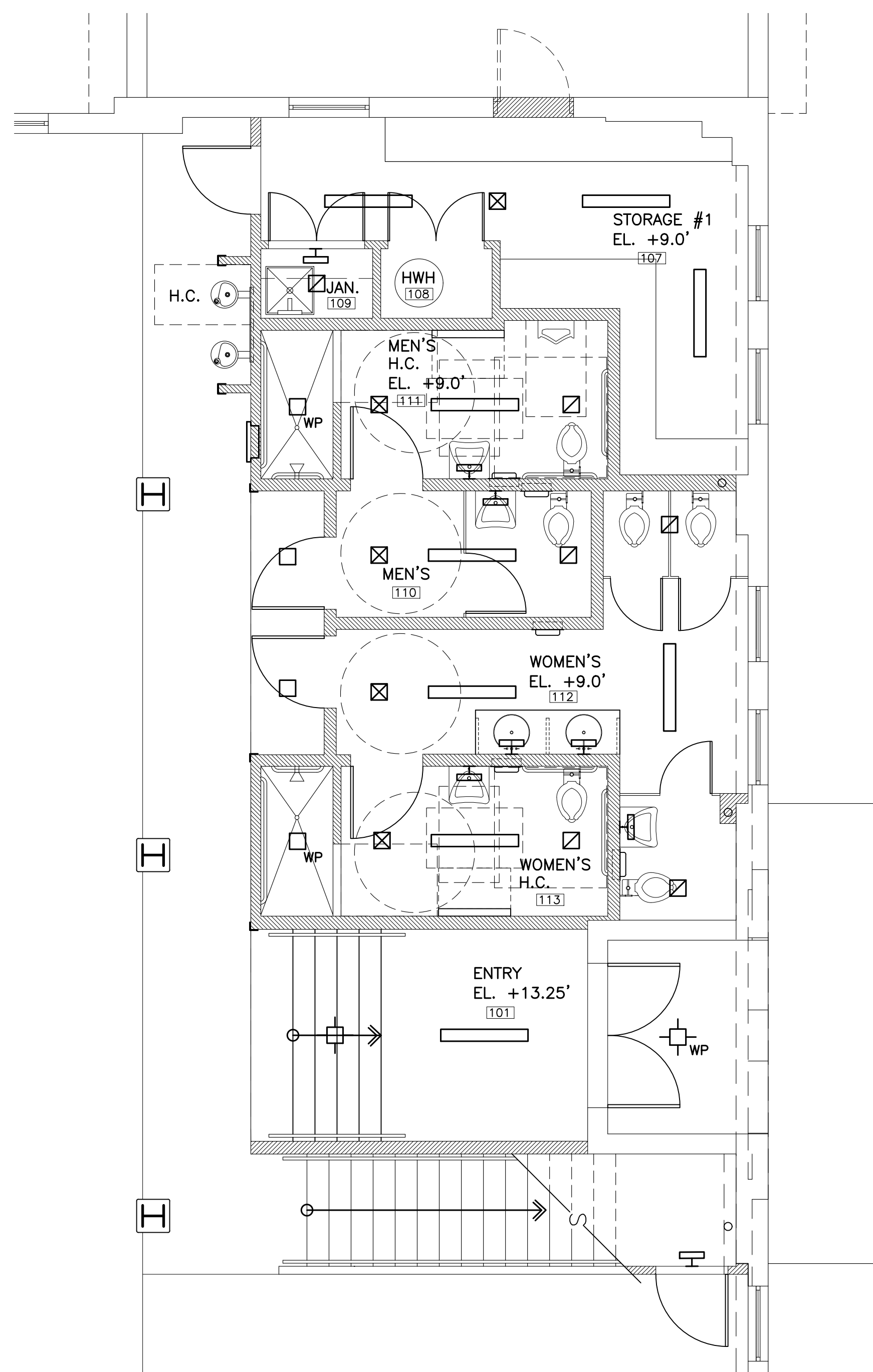
PROPOSED UPPER FLOOR PLAN

SCALE: 3/16" = 1'-0"



ACOUSTIC PANELS:
PROVIDE 8'-8'x8' ACOUSTIC PANELS ON WALLS AS SHOWN. EACH 8'x8' PANEL WILL BE MADE FROM (2) 4'x8' PANELS. ALL PANELS TO BE 1" THICK W/BEVELED LONG EDGE. PANELS TO BE TECTUM DIRECT - ATTACHED ACOUSTIC WALL PANELS W/COARSE TEXTURE BY "ARMSTRONG" OR EQUAL. MUST BE CLASS A FIRE RATED W/ANTI-MOLD+MILDEW (BIGBLOCK), SAG RESISTANT (HUMI-GUARD+), LOW VOC EMISSIONS, IMPACT RESISTANT, CLEANABLE. COLORS TO BE SELECTED FROM MANUFACTURERS FULL COLOR SELECTION. PROVIDE SHOP DRAWINGS FOR REVIEW.
*PROVIDE AN ALTERNATE TO ADD 8 MORE 8'x8' ACOUSTIC PANELS.

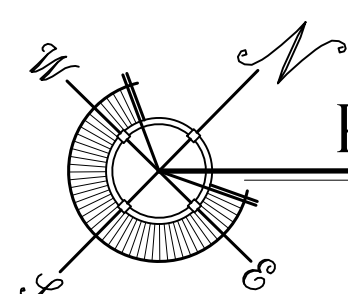




CEILING
ALL CEILINGS IN THIS AREA
WILL BE AT EL. +9.0' ABOVE
FINISH FLOOR AND WILL BE
¾" GYP. BD.- PAINTED

ELECTRICAL LEGEND	
⊕	WALL DUPLEX OUTLET
⊙	WALL SINGLE OUTLET
⊕	240V SINGLE OUTLET
⊕	SPECIAL PURPOSE OUTLET
\$	WALL SWITCH
\$3	3-WAY WALL SWITCH
⊕	WALL MOUNTED LIGHT FIXTURE
⊕	CEILING MOUNTED LIGHT FIXTURE
⊕	CEILING FAN/LIGHT-52" MIN.
○	RECESSED CAN CEILING FIXTURE
⊕	FLOOD LIGHTING
⊕	EXIT LIGHT
⊕	TRACK LIGHTING
⊕	UNDER CABINET LIGHTING
⊕	FIRE EXTINGUISHER
⊕	FIRE ALARM
⊕	TELEPHONE OUTLET
⊕	SMOKE DETECTOR (HARDWIRE)
⊕	CABLE T.V.
⊕	EXHAUST FAN
⊕	JUNCTION BOX
WP	WATER PROOF ITEM
GFI	GROUND FAULT INTERRUPTER
D	DIMMER
G.D.	GARBAGE DISPOSAL

ACTUAL LOCATION OF ALL WORK TO BE
SITE VERIFIED AND COORDINATE WITH OWNER.



PROPOSED REFLECTED CEILING PLAN RESTROOMS

SCALE: 1/4"=1'-0"

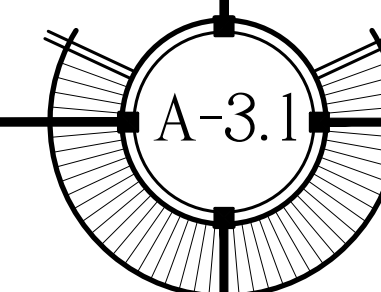
SEAL _____

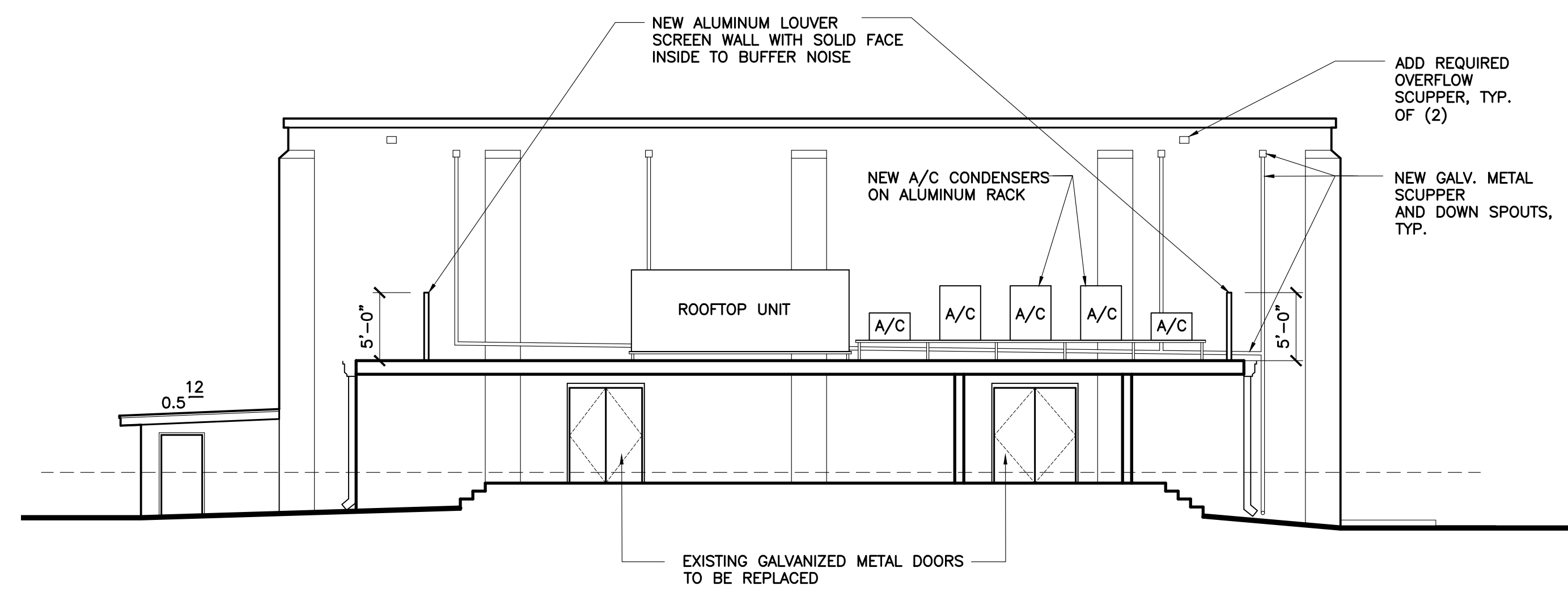
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS _____

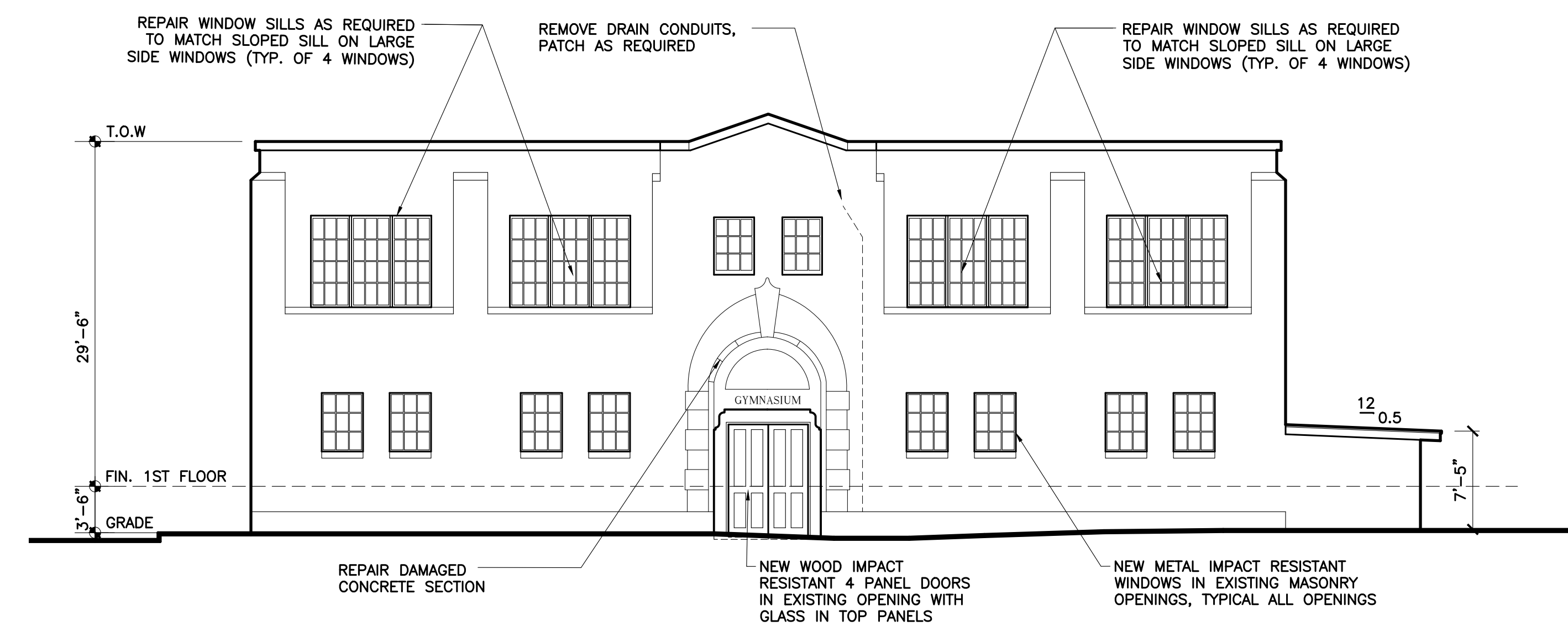
DRAWN BY
JW

PROJECT
NUMBER
1702

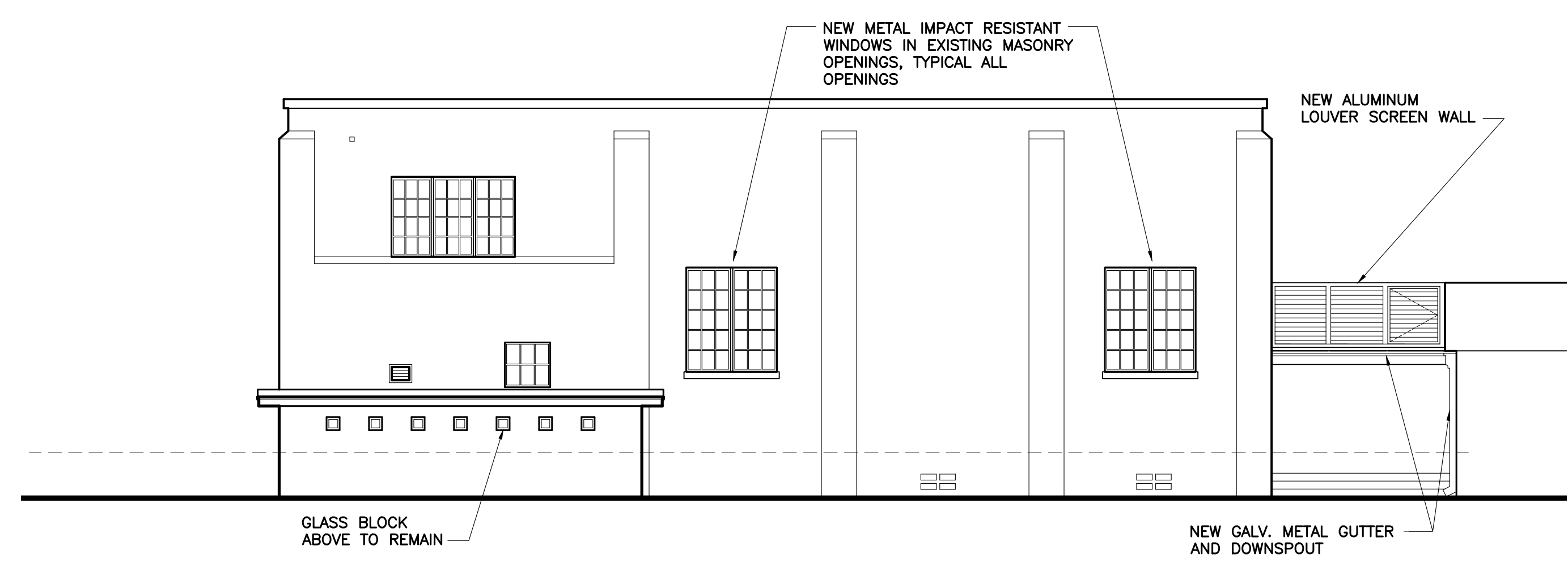




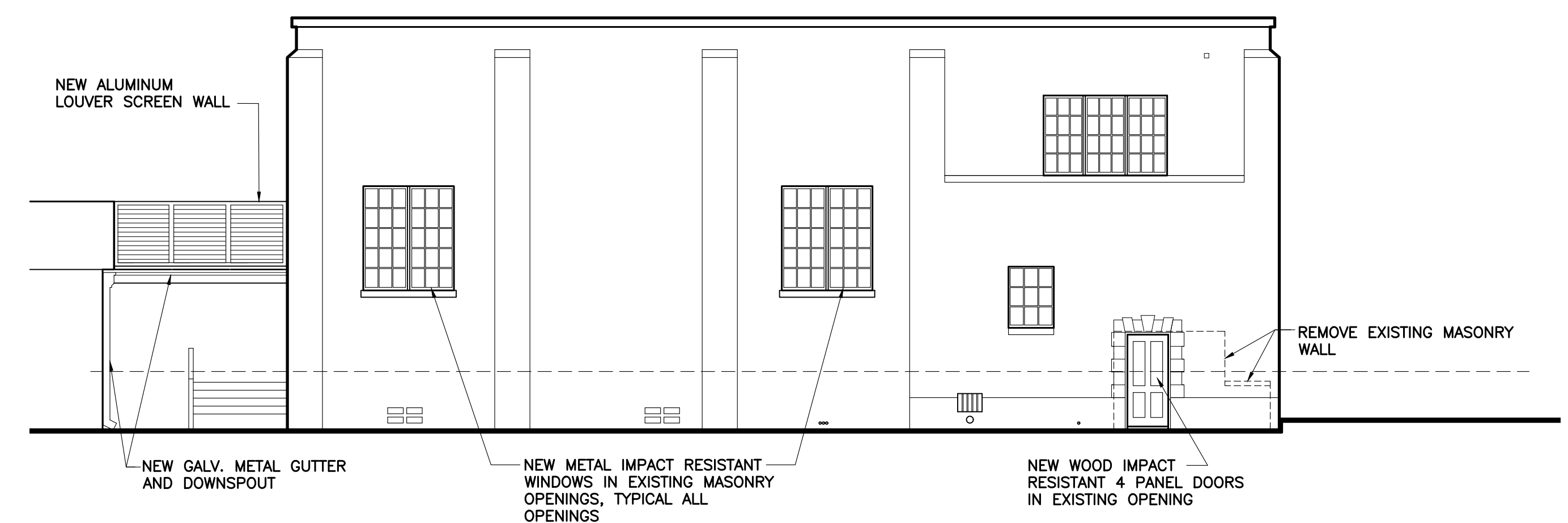
1
A-4
PROPOSED SOUTH ELEVATION
 SCALE: 1/8"=1'-0"



3
A-4
PROPOSED NORTH ELEVATION
 SCALE: 1/8"=1'-0"



2
A-4
PROPOSED WEST ELEVATION
 SCALE: 1/8"=1'-0"



4
A-4
PROPOSED EAST ELEVATION
 SCALE: 1/8"=1'-0"

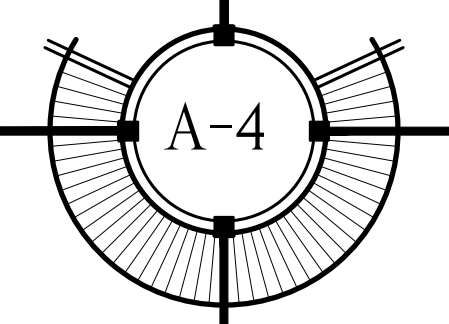
SEAL _____

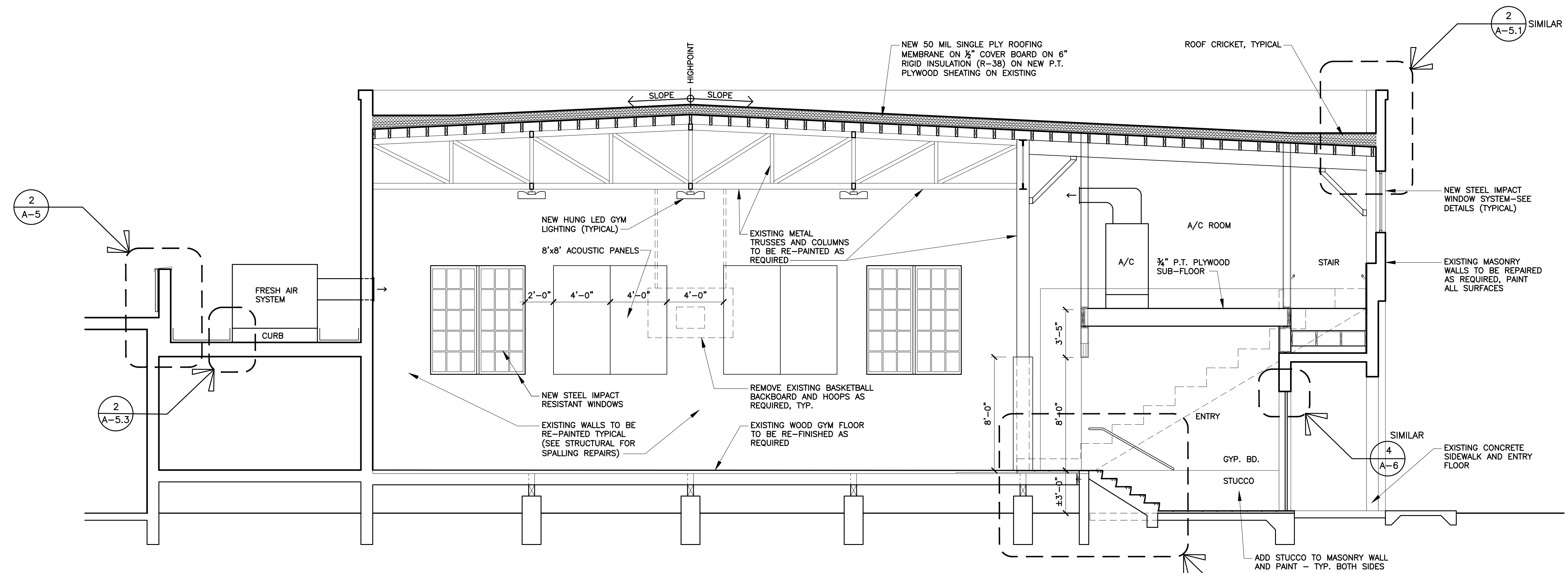
DATE
 05-15-17 HARC
 01-23-18 REV
 05-09-18 BID

REVISIONS _____

DRAWN BY
 JW

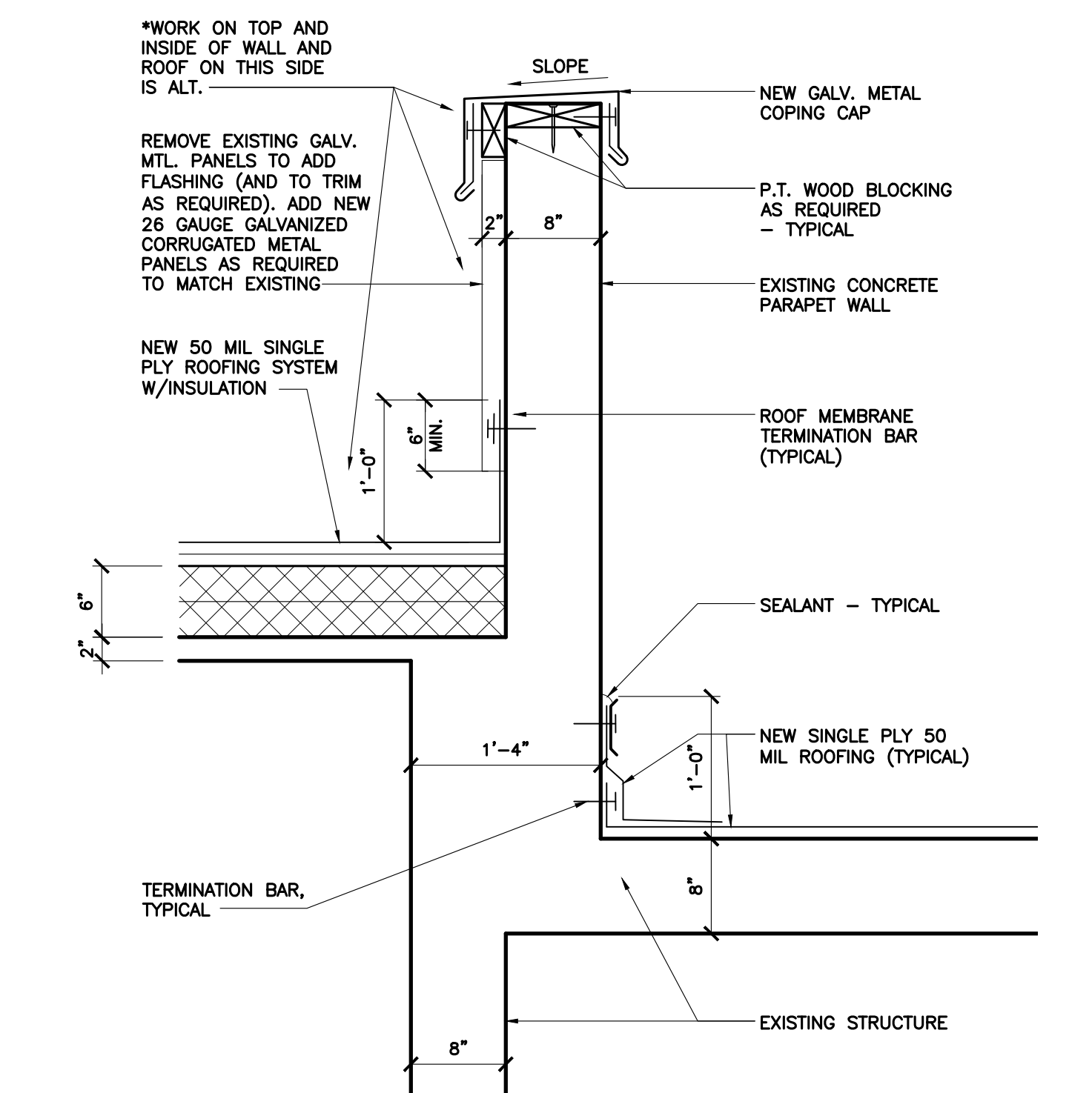
PROJECT
 NUMBER
 1702





1 A-5 PROPOSED SECTION

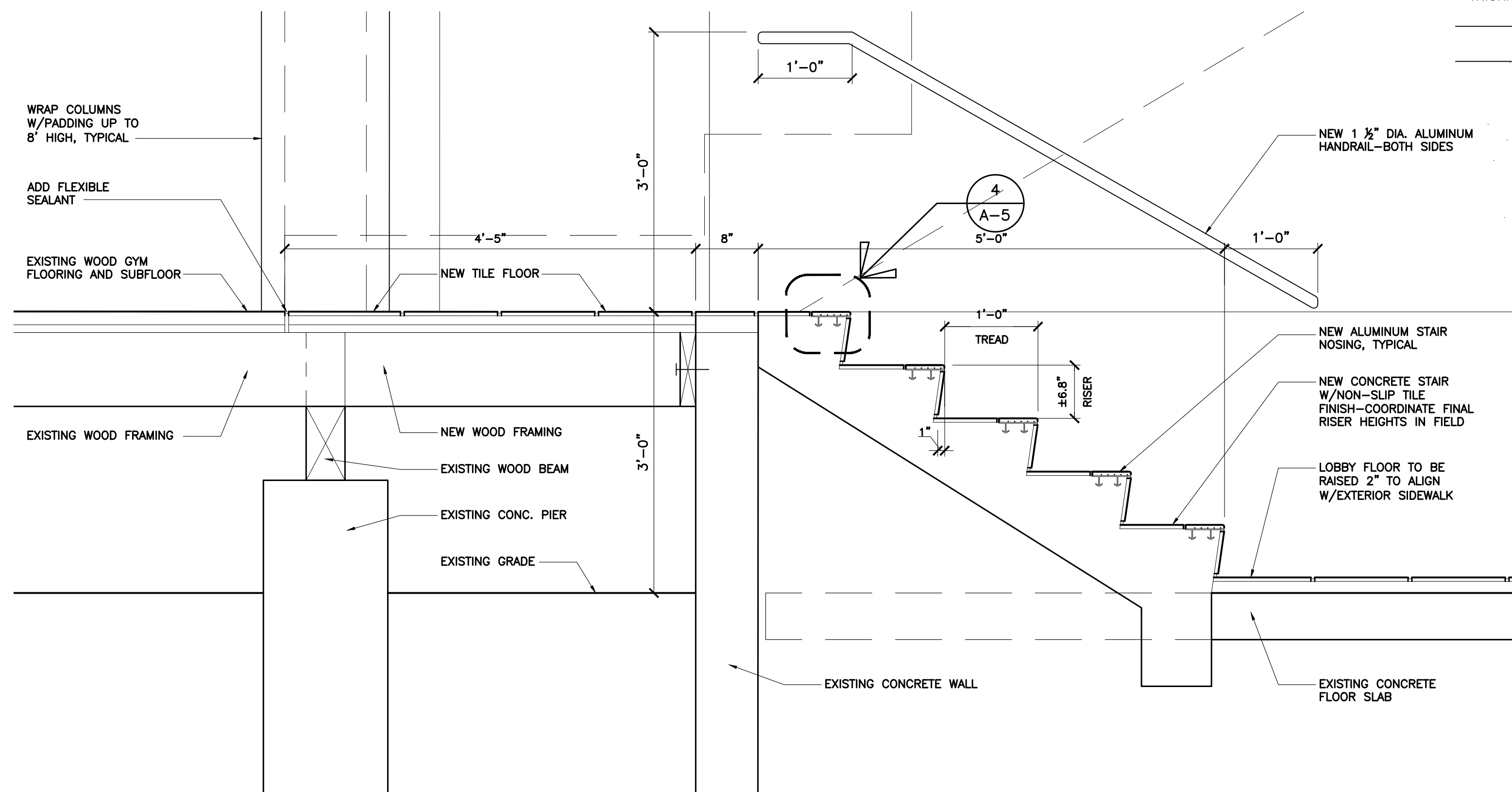
SCALE: 1/4"=1'-0"



2 A-5 ROOFING DETAIL - REAR BUILDING

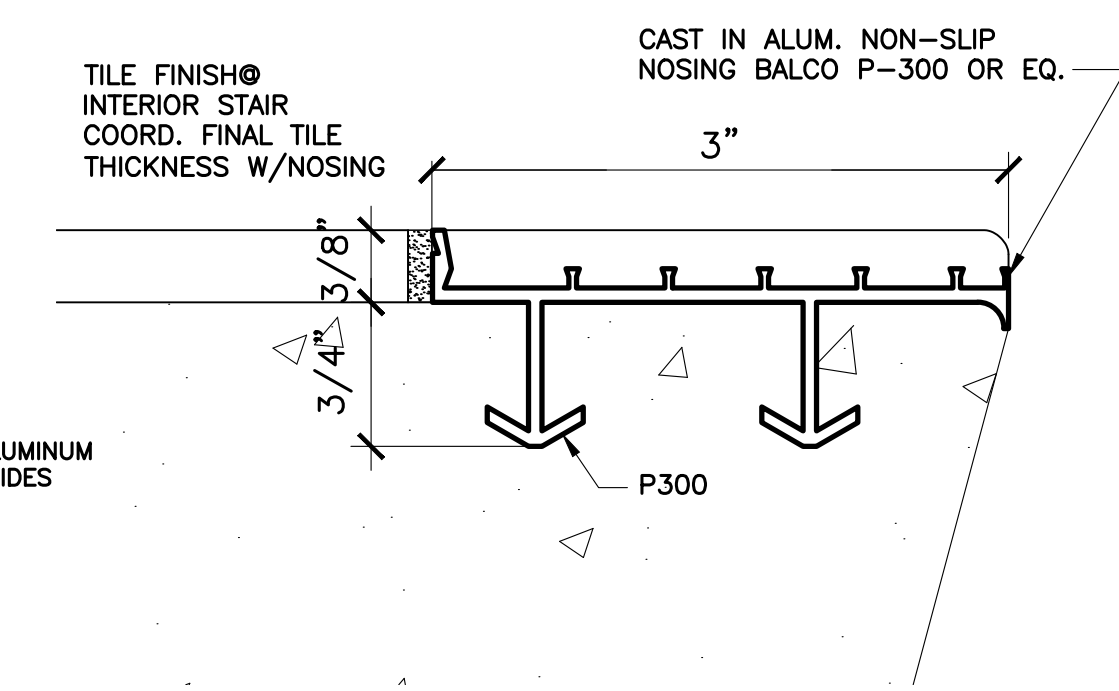
REAR BUILDING

SCALE: 1"=1'-0"



3 A-5 STAIR SECTION

SCALE: 1"=1'-0"



4 A-5 NOSING

SCALE: FULL

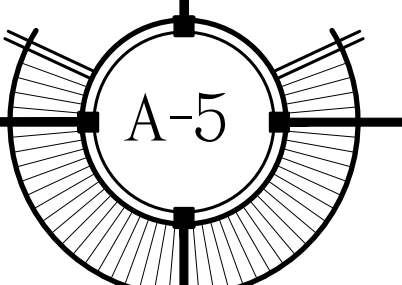
SEAL

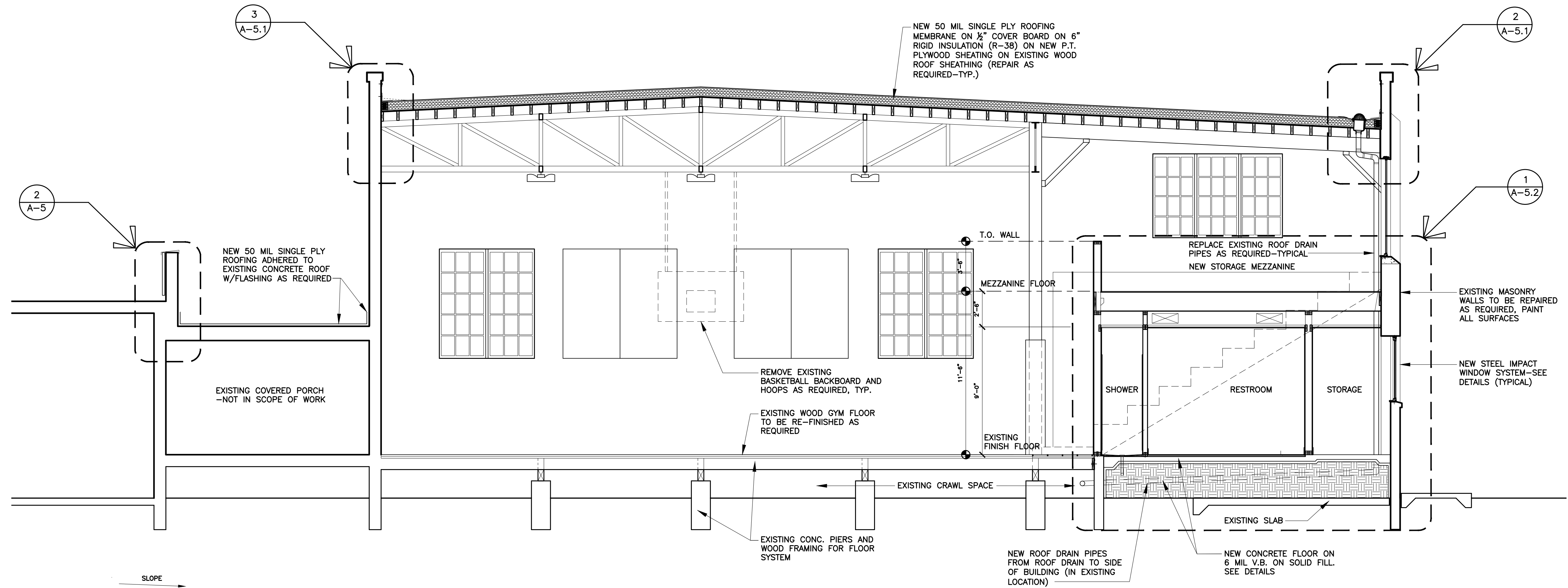
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

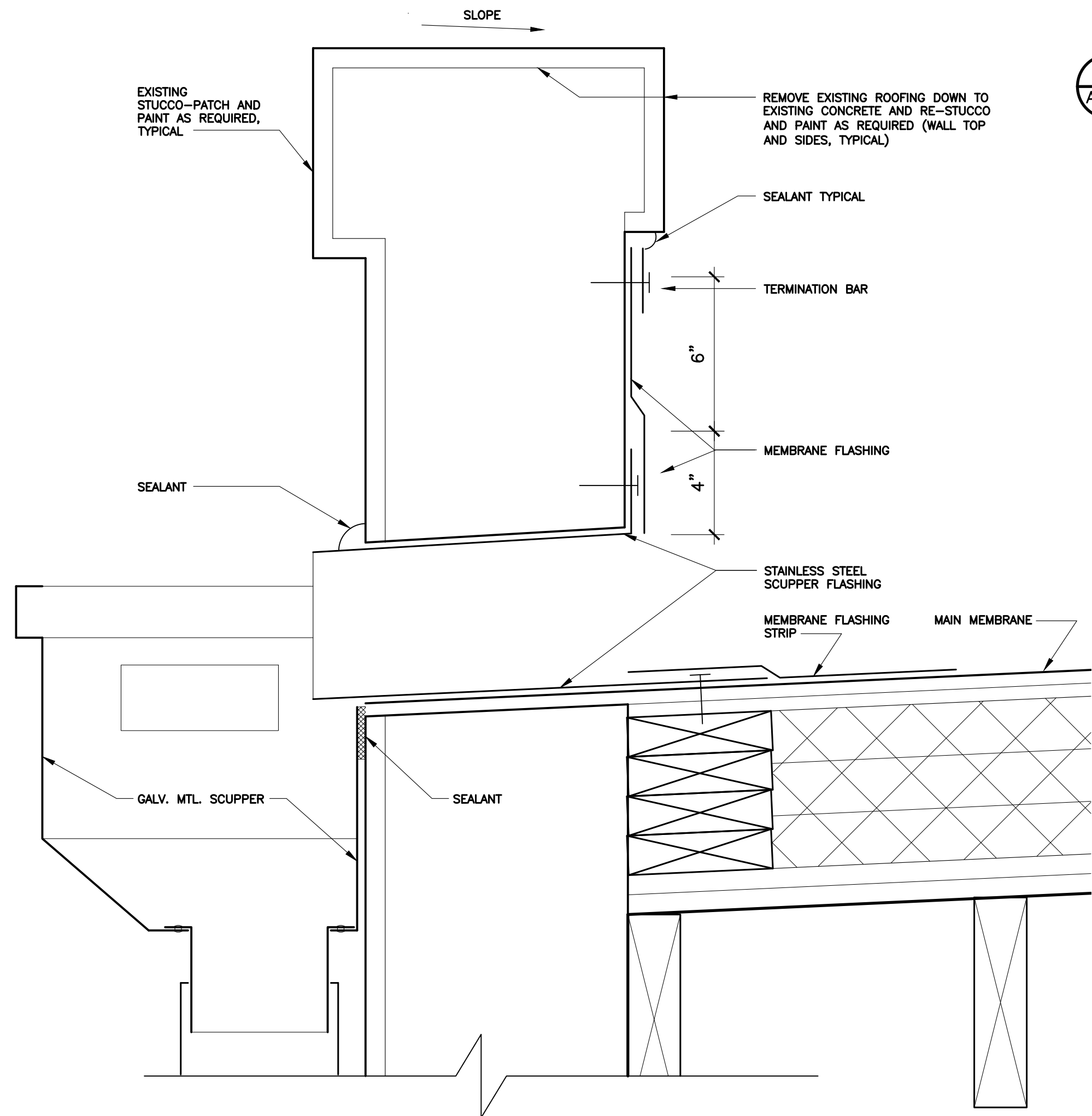
DRAWN BY
JW

PROJECT NUMBER
1702

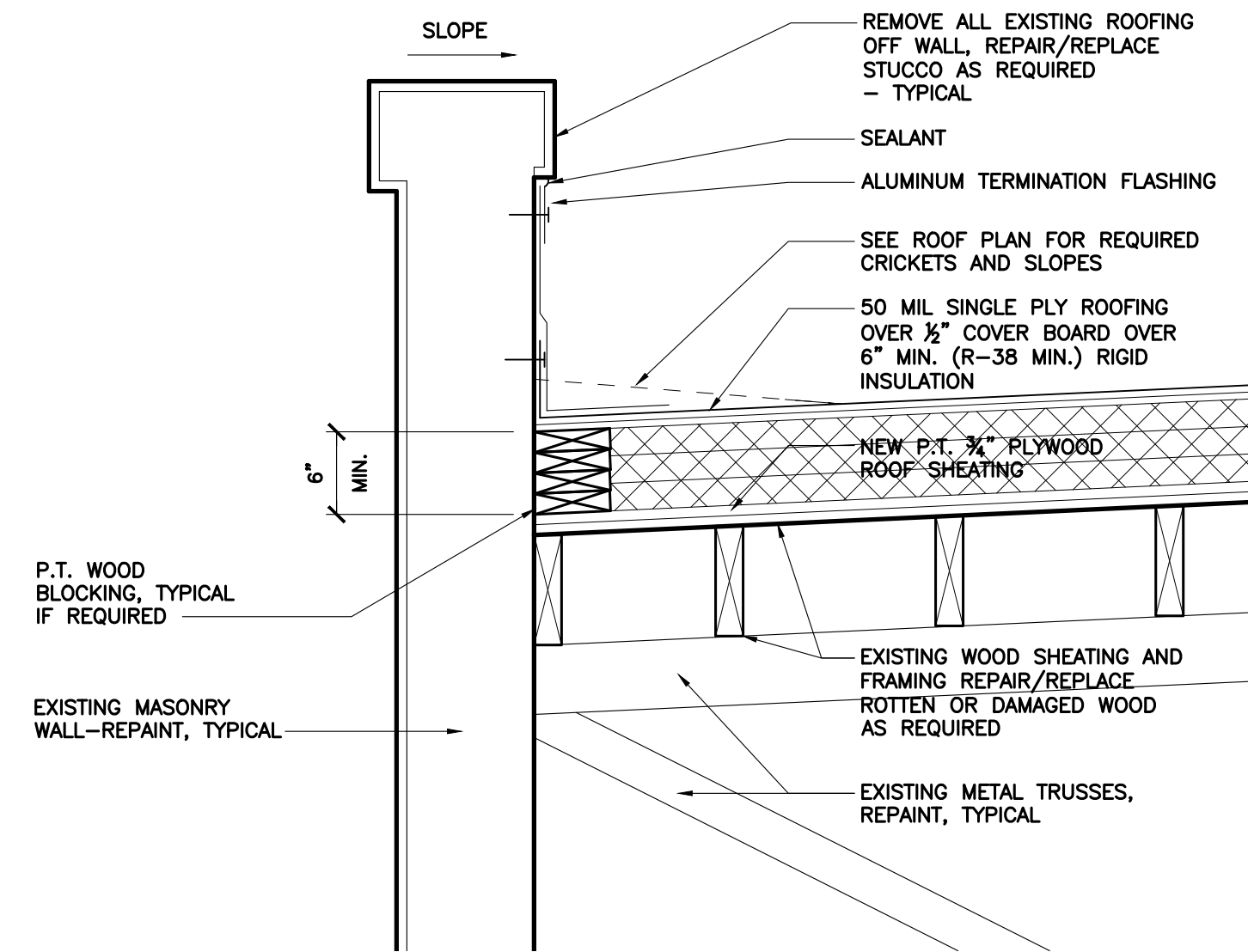




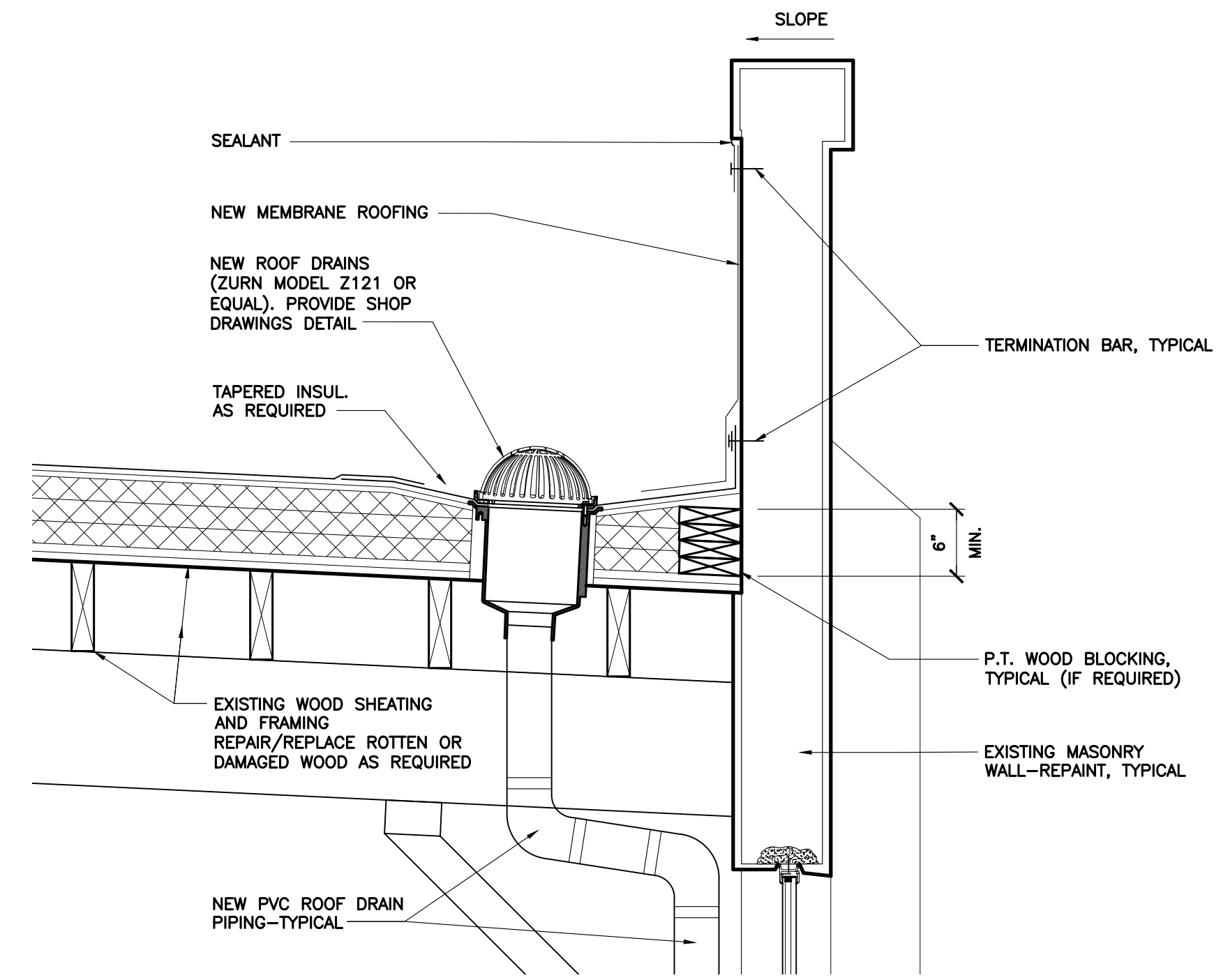
1 A-5.1 PROPOSED SECTION
SCALE: 1/4"=1'-0"



4 A-5.1 SCUPPER DETAIL
SCALE: 3"=1'-0"



3 A-5.1 ROOF SECTION
SCALE: 1"=1'-0"



2 A-5.1 ROOF SECTION
SCALE: 1"=1'-0"

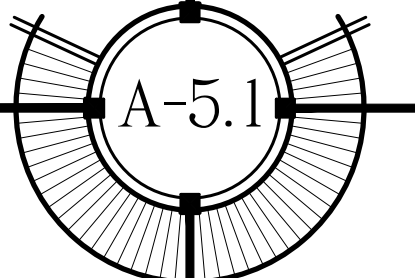
SEAL

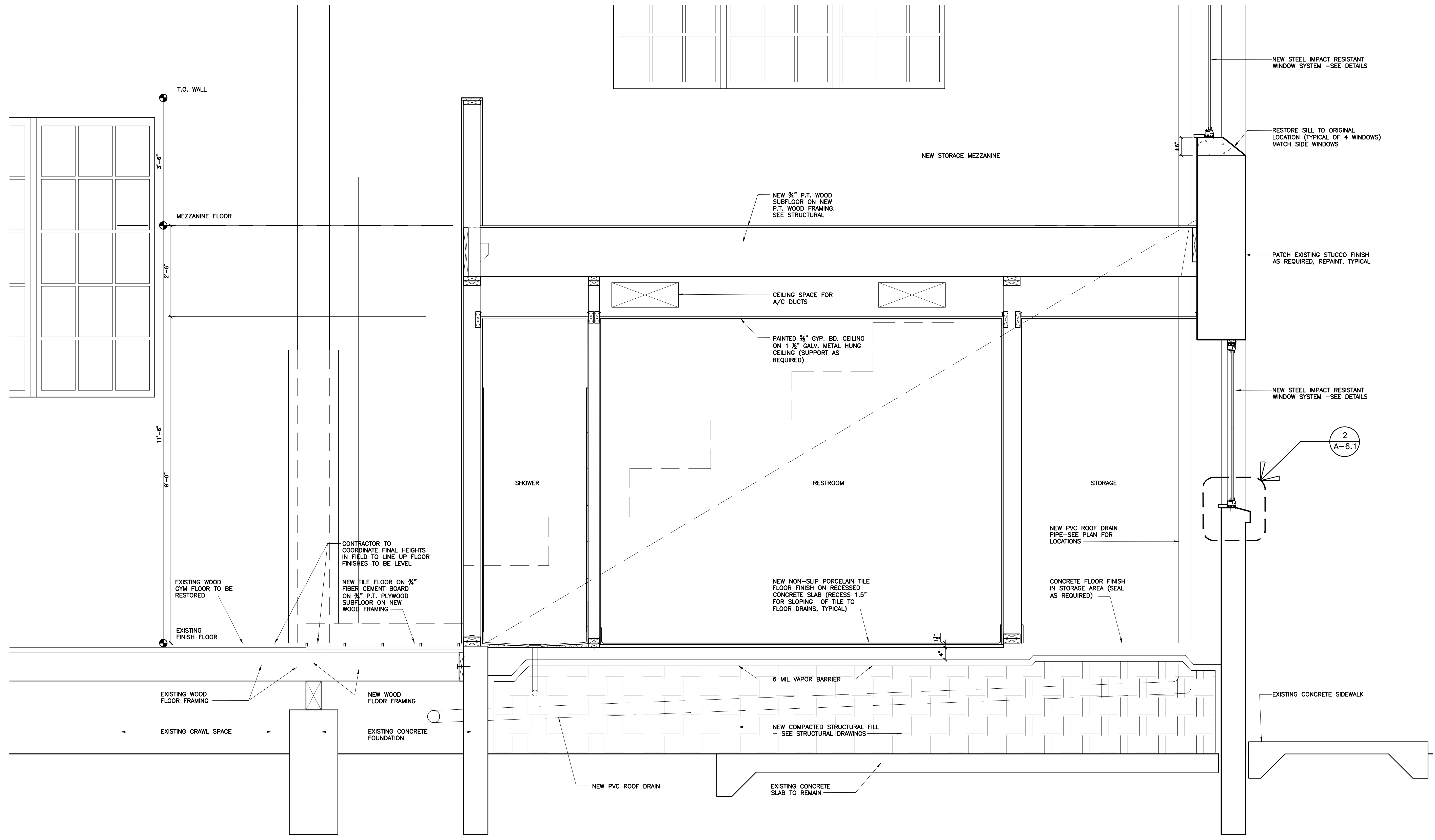
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702





SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

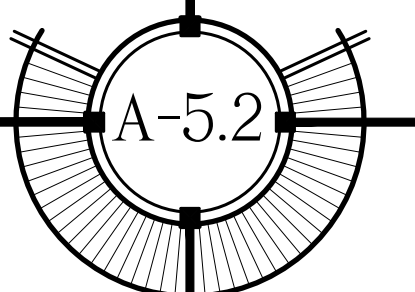
DRAWN BY
JW

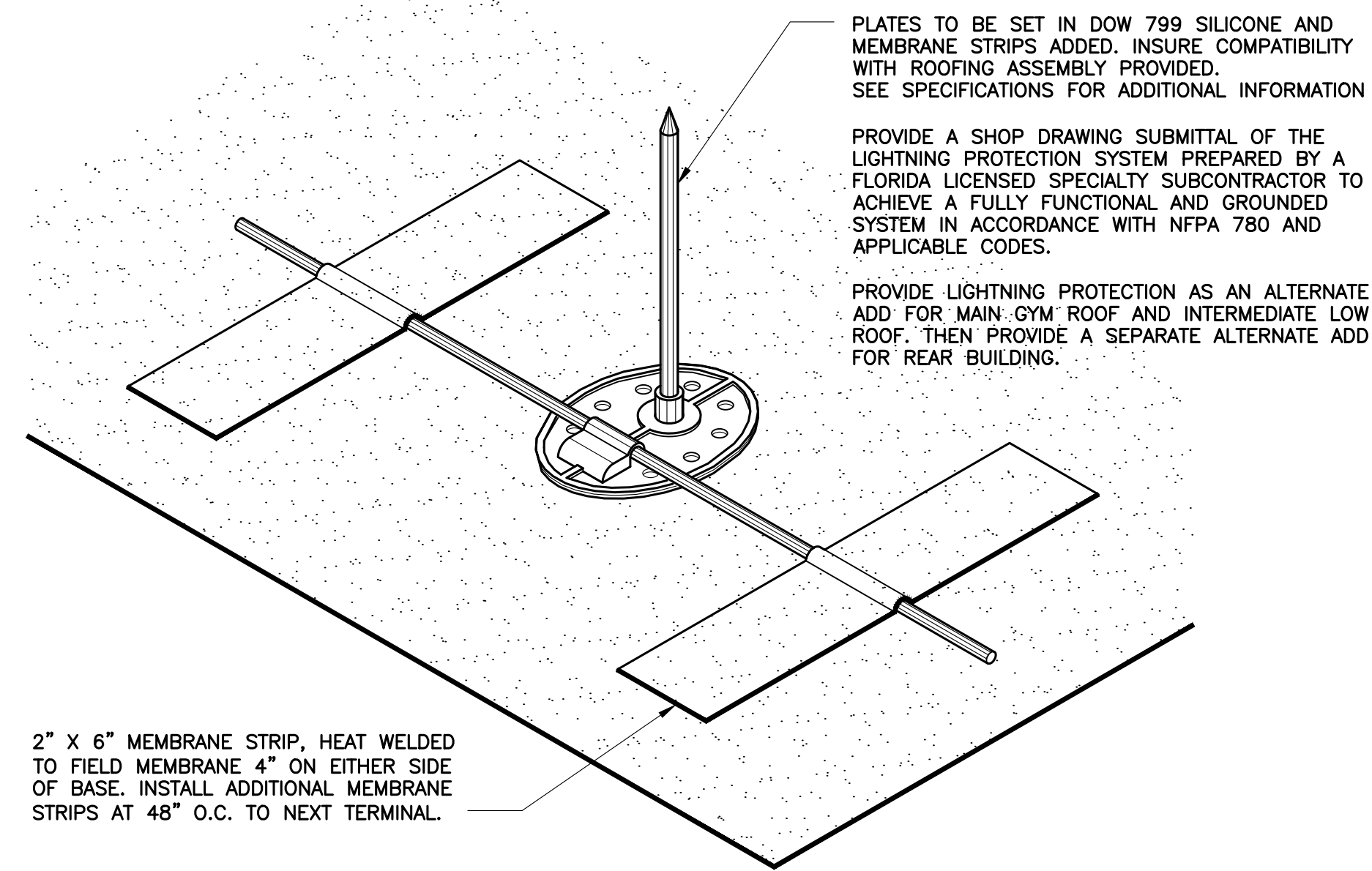
PROJECT NUMBER
1702

1
A-5.2

SECTION DETAILS

SCALE: 3/4"=1'-0"

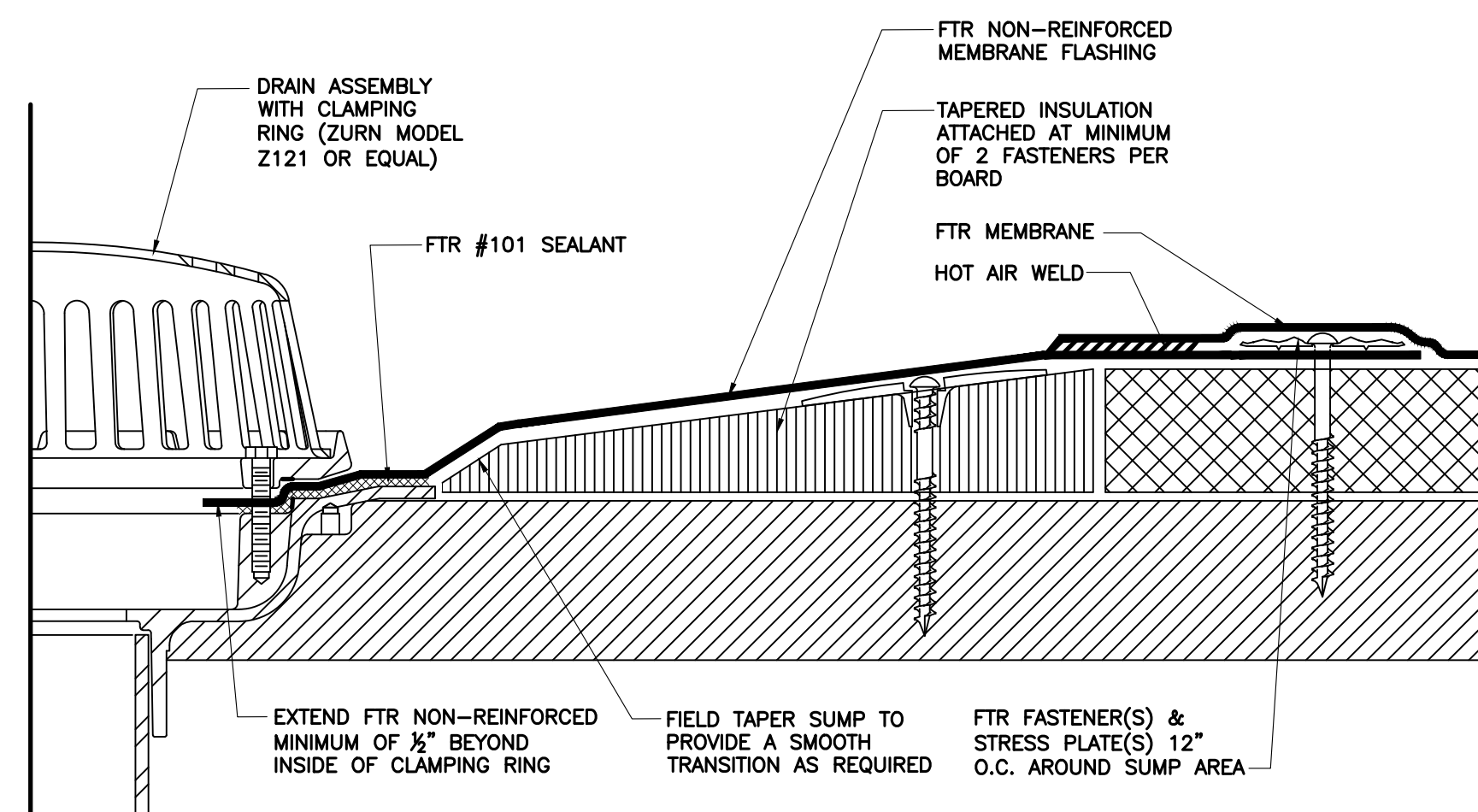




1 LIGHTNING PROTECTION

A-5.3

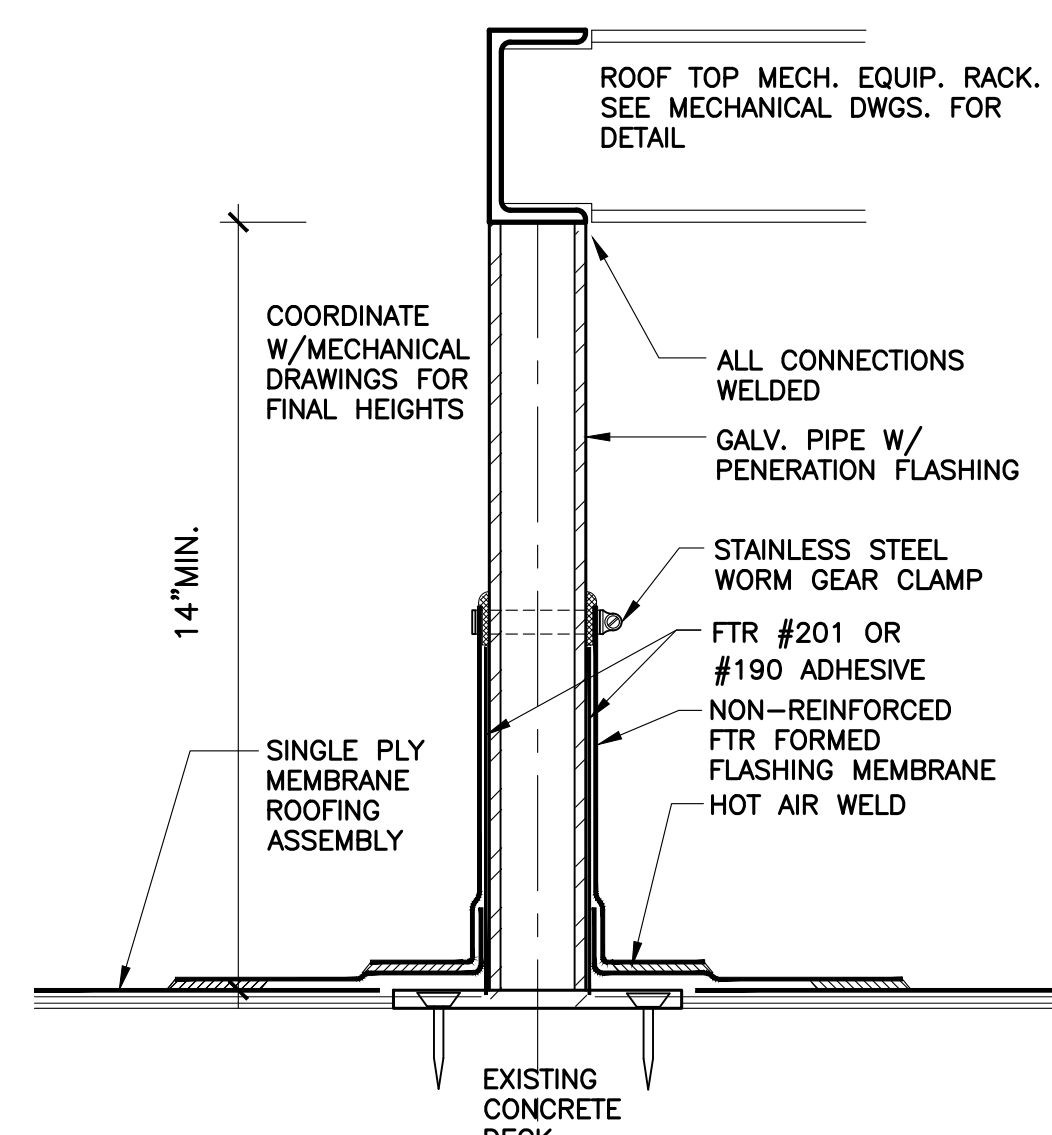
SCALE : 3" = 1'-0"



4 ROOF DRAIN DTL.

A-5.3

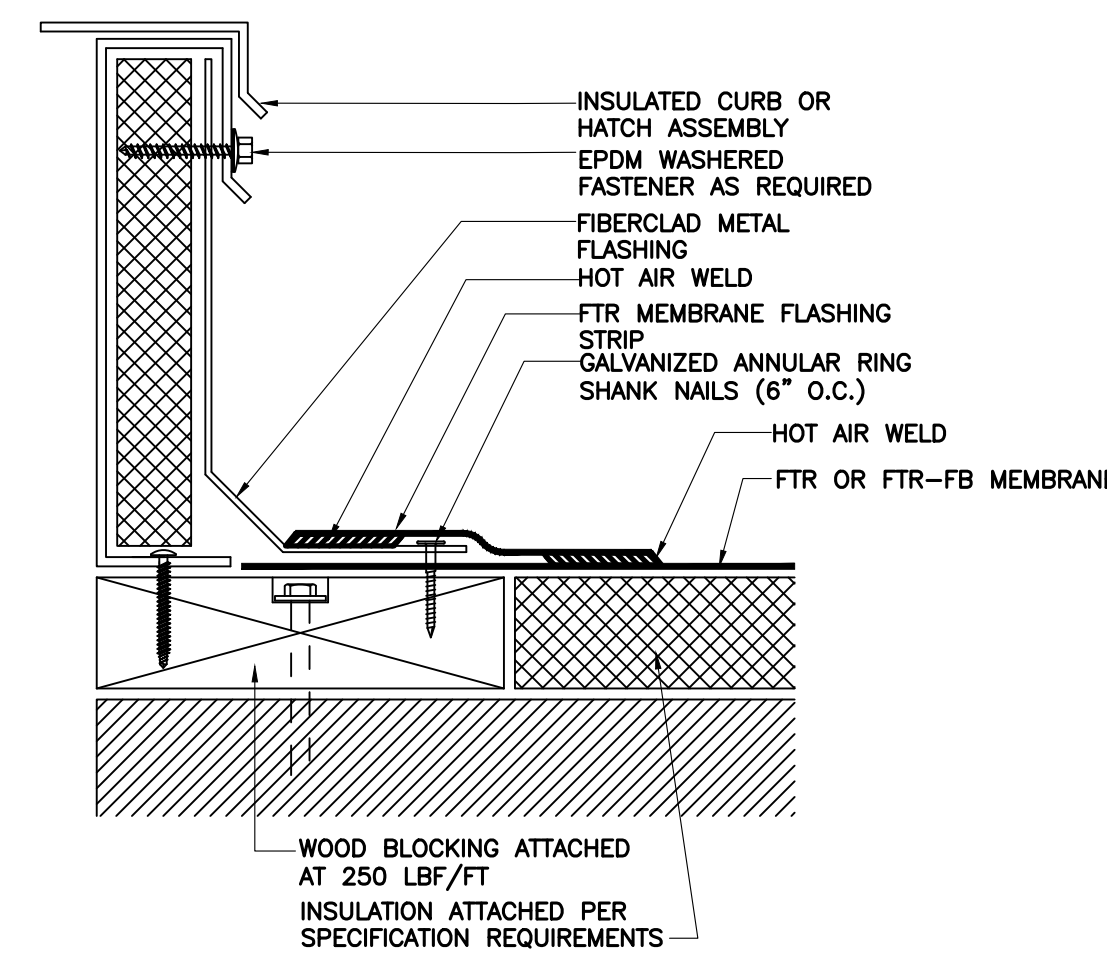
N.T.S.



5 EQUIP. RACK - DETAIL

A-5.3

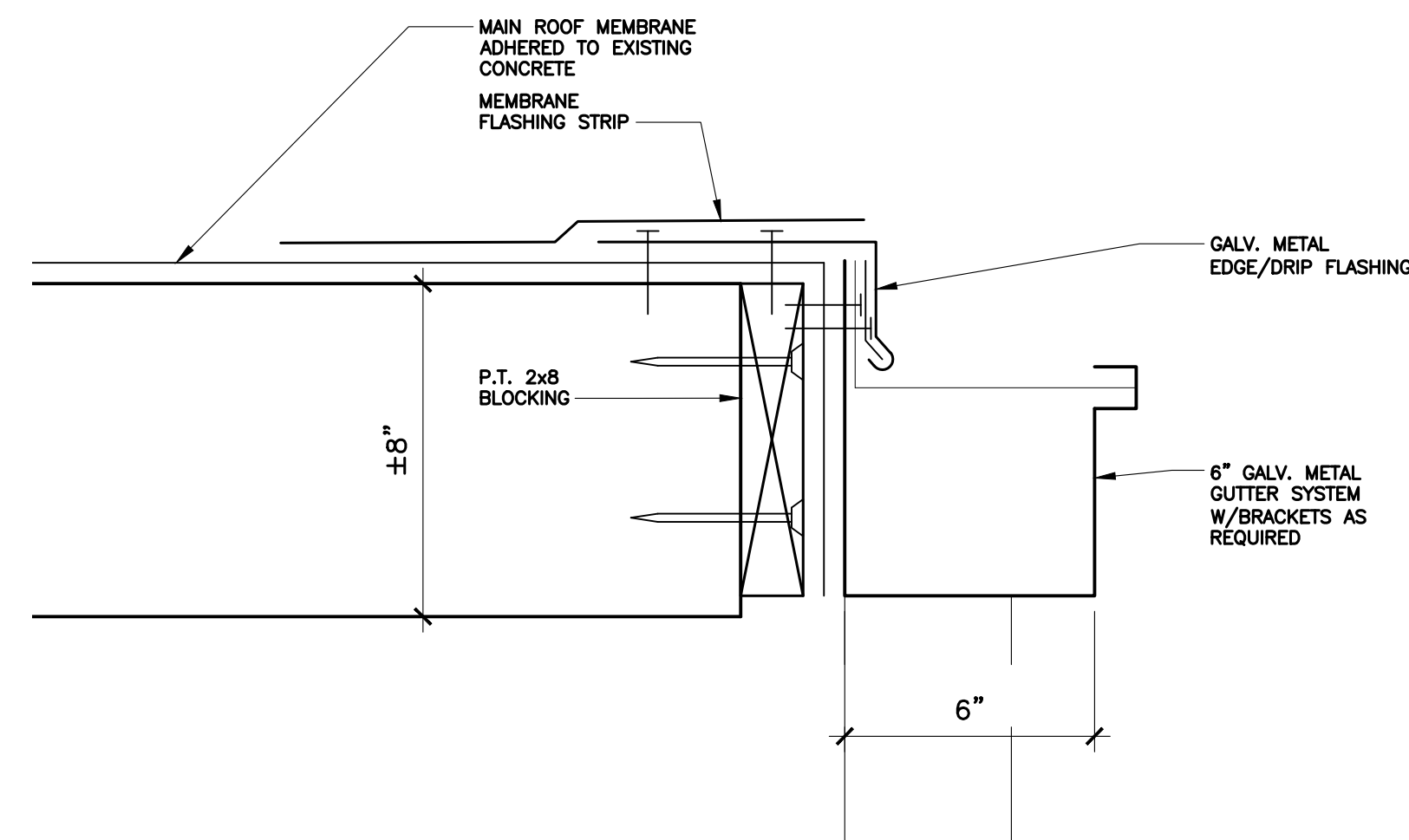
SCALE : 3" = 1'-0"



2 PACKAGE A/C EQUIP. CURB FLASHING DTL.

A-5.3

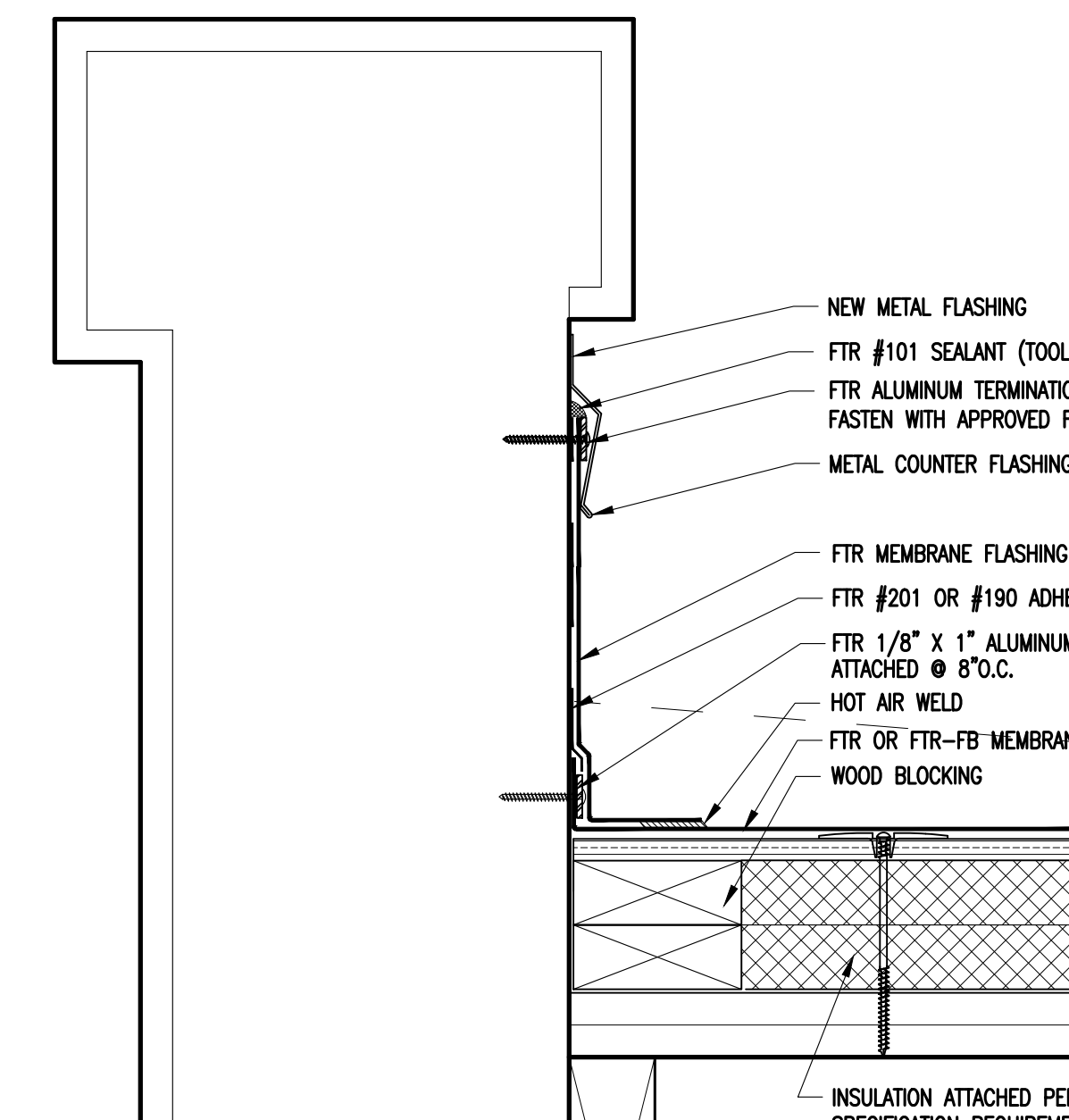
N.T.S.



6 GUTTER DETAIL

A-5.3

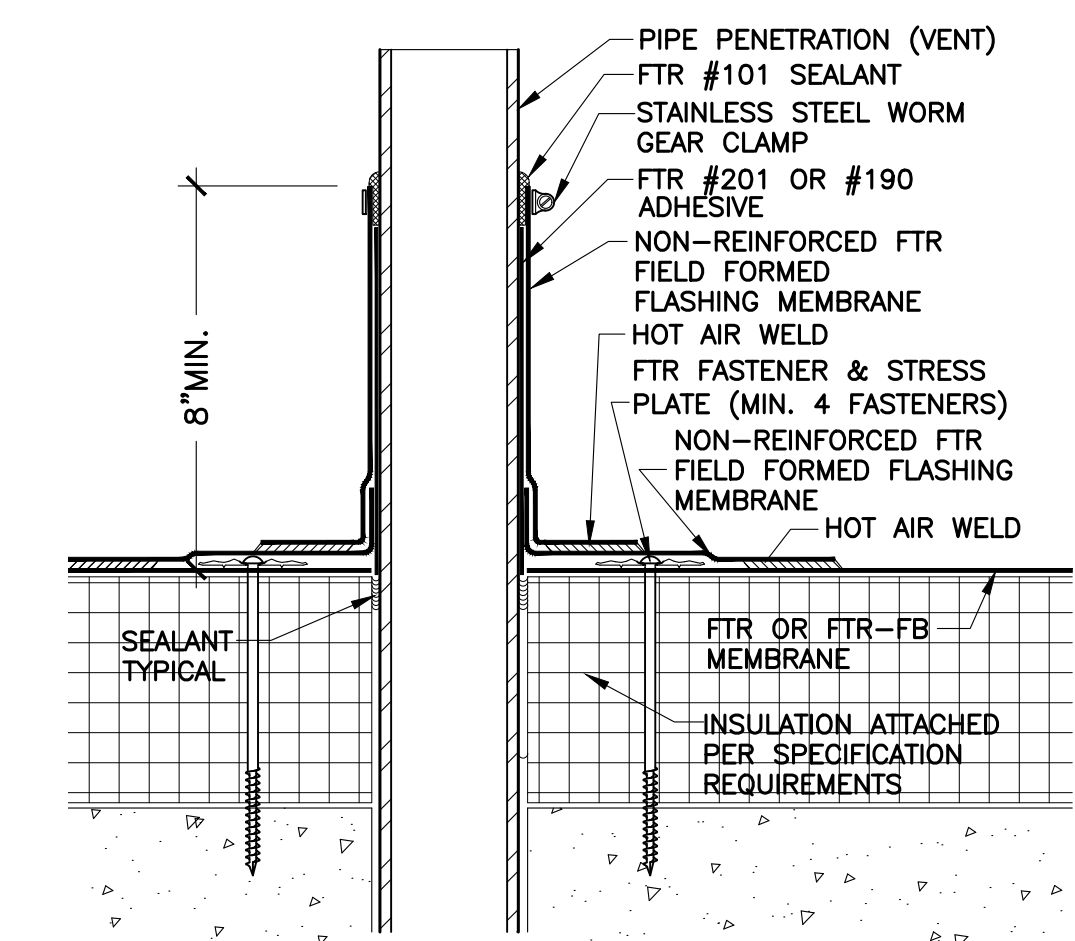
SCALE : 3" = 1'-0"



7 TYPICAL WALL FLASHING DTL.

A-5.3

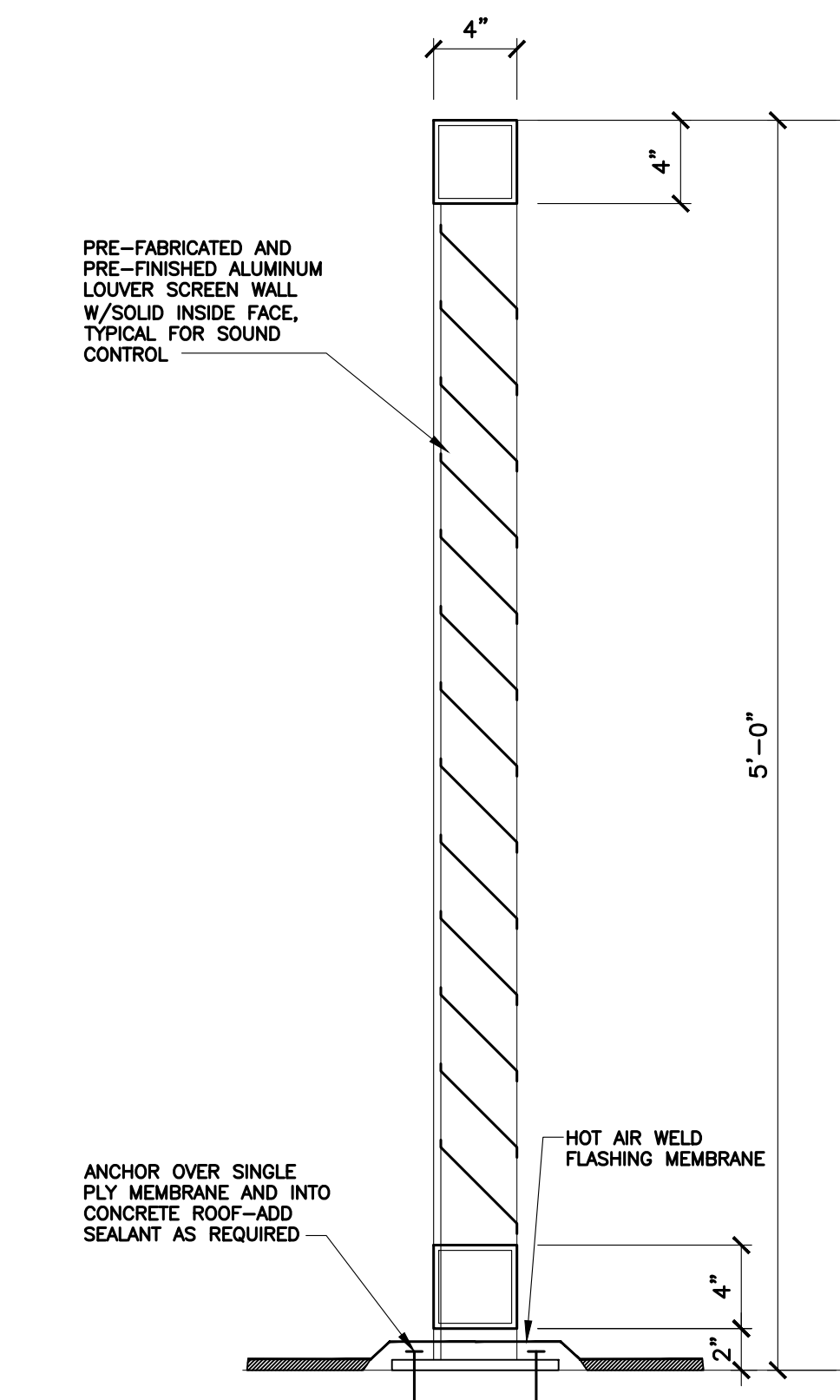
SCALE: 3" = 1'-0"



3 PENETRATION FLASHING

A-5.3

SCALE : 3" = 1'-0"



8 ALUM. LOUVER DETAIL

A-5.3

SCALE: 1 1/2" = 1'-0"

PROVIDE COMPLETE SET OF SHOP DRAWINGS, SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER, MEETING ALL REQUIRED WIND LOADS AND CODES FOR THIS PROJECT. PROVIDE ALL DETAILS FOR THE CUSTOM INSTALLATION, INCLUDING SCREEN WALL, GATE AND ANCHORING DETAILS.

SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702

DOOR SCHEDULE

NO.	LOCATION	SIZE (APPROX.)*			DOOR			FRAME			HARDWARE	LABEL	N.O.A. TEST LOAD	DESIGN PRESSURES	MANUFACTURER	REMARKS
		WIDTH	HEIGHT	THICK	MATERIAL	FINISH	TYPE	MATERIAL	FINISH							
101	ENTRY	5'-10" PAIR	8'-3"	2 1/4"	WOOD	STAINED	A	WOOD	STAINED	SET NO. 1-EXIT		15-0921.11 (+/-75)	+41.4/-52.2	ROTAN MAHOGANY USA, INC.	EXTERIOR, SWINGING DOOR, 4 PANEL, IMPACT RESISTANT (TOP PANELS GLASS) W/CLOSURE, WEATHER STRIPPING	
102	EXIT WAY	3'-0"	7'-0"	2 1/4"	WOOD	STAINED	B	WOOD	STAINED	SET NO. 1-EXIT		15-0921.11 (+/-75)	+41.4/-52.2	ROTAN MAHOGANY USA, INC.	EXTERIOR, SWINGING DOOR, 4 PANEL, IMPACT RESISTANT, W/CLOSURE, WEATHER STRIPPING	
103	MAIN EXERCISE ROOM	6'-0" PAIR	7'-0"	1 3/4"	GALV. METAL	PAINTED	C	GALV. METAL	PAINTED	SET NO. 1-EXIT	C-LABEL	17-1102.02 (+/-90)	+41.4/-52.2	QUALITY ENGINEERED PRODUCTS CO., INC.	EXTERIOR, SWINGING DOOR, IMPACT RESISTANT, 3/4 FIRE RATED W/CLOSURE, WEATHER STRIPPING	
104	STORAGE #1	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 2-STORAGE	C-LABEL				INTERIOR, SWINGING DOOR, 3/4 FIRE RATED W/CLOSURE	
105	EXIT WAY	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 1-EXIT	C-LABEL				INTERIOR, SWINGING DOOR, 3/4 FIRE RATED W/CLOSURE	
106	STORAGE ROOM	6'-0" PAIR	7'-0"	1 3/4"	GALV. METAL	PAINTED	E	GALV. METAL	PAINTED	SET NO. 2-STORAGE	C-LABEL				INTERIOR, SWINGING DOOR, 3/4 FIRE RATED W/CLOSURE, INSULATED, WEATHER STRIPPING	
107	STORAGE #2	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	WOOD	STAINED	SET NO. 2-STORAGE					INTERIOR, SWINGING DOOR	
108	JANITOR	4'-0" PAIR	7'-0"	1 3/4"	GALV. METAL	PAINTED	F	GALV. METAL	PAINTED	SET NO. 4-SERVICE					INTERIOR, SWINGING DOOR W/CLOSURE	
109	HWH	4'-0" PAIR	7'-0"	1 3/4"	GALV. METAL	PAINTED	F	GALV. METAL	PAINTED	SET NO. 4-SERVICE					INTERIOR, SWINGING DOOR	
110	MEN'S TOILET	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 3-TOILETS					INTERIOR, SWINGING DOOR W/CLOSURE	
111	WOMEN'S TOILET	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 3-TOILETS					INTERIOR, SWINGING DOOR W/CLOSURE	
112	MEN'S H.C. TOILET	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 3-TOILETS					INTERIOR, SWINGING DOOR W/CLOSURE	
113	WOMEN'S H.C. TOILET	3'-0"	7'-0"	1 3/4"	WOOD	STAINED	D	GALV. METAL	PAINTED	SET NO. 3-TOILETS					INTERIOR, SWINGING DOOR W/CLOSURE	
201	A/C AIR HANDLER ROOM	3'-0"	7'-0"	1 3/4"	GALV. METAL	PAINTED	E	GALV. METAL	PAINTED	SET NO. 4-SERVICE					INTERIOR, SWINGING DOOR	

*CONTRACTOR TO VERIFY ALL OPENING DIMENSIONS AND COORDINATE WITH MANUFACTURED PRODUCTS AVAILABLE. CONTRACTOR RESPONSIBLE FOR FINAL MASONRY OPENING SIZES AND COORDINATION. CONTRACTOR TO INCORPORATE ANY REQUIRED MULLION STRUCTURAL SUPPORTS REQUIRED BY MANUFACTURER BETWEEN MULTIPLE OPENINGS.

- ALL EXTERIOR OPENINGS OF THE BUILDING ENVELOPE SHALL BE PROVIDED WITH DOORS AND WINDOWS WHICH MEET ASCE/SEI 7-10, FLA. BUILDING CODE, 2017 EDITION. WIND PRESSURE ON COMPONENTS AND CLADDING (CH 30 PART 1) ALL PRESSURES SHOWN ARE BASED UPON ASD DESIGN, WITH A LOAD FACTOR OF 0.6. 180 MPH. WIND LOAD AND IMPACT REQUIREMENTS, SEE SPECIFICATIONS.
- DOORS SHALL BE PREFINISHED TO BE SELECTED BY THE ARCHITECT FROM THE MANUFACTURERS FULL RANGE OF AVAILABLE COLOR SELECTIONS INCLUDING CLEAR ANODIZED ALUM. COLOR.
- DESIGN PRESSURES PROVIDED BY STRUCTURAL ENGINEER.
- ALL FIRE RATED DOORS TO HAVE LABEL NOTING RATING.
- ALL EXTERIOR FENESTRATIONS SHALL HAVE A MAXIMUM U-FACTOR AND SHGC AS PER FLORIDA COMMERCIAL ENERGY CONSERVATION BUILDING CODE 2017 UNLESS OTHERWISE NOTATED IN PROFORMANCE METHOD CALCULATIONS PROVIDED BY ENGINEER.
- THE THERMAL ENVELOPE OF THE BUILDING SHALL COMPLY WITH FLORIDA COMMERCIAL ENERGY CONSERVATION BUILDING CODE 2017 AND SECTION C402.5, AND TABLE C402.5.2. FOR AIR LEAKAGE AND AIR BARRIER REQUIREMENTS. CONTRACTOR TO ENSURE ALL EXTERIOR DOORS AND WINDOWS ARE SEALED TO COMPLY WITH AIR LEAKAGE AND AIR BARRIER REQUIREMENTS. ALL EXTERIOR FENESTRATIONS SHALL BE GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.
- DESIGN WIND LOAD REQUIREMENTS PROVIDED BY STRUCTURAL ENGINEER.
- ALL METAL EXTERIOR DOORS TO BE INSULATED AND HAVE PROPER WEATHER STRIPPING IN ADDITION TO NOA REQUIREMENTS.
- CONTRACTOR TO MEET ALL CODE AND N.O.A. (OR FL. PRODUCT APPROVAL) REQUIREMENTS.
- CONTRACTOR TO PROVIDE FULL SET OF SHOP DRAWINGS SPECIFIC TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO DOOR, WINDOW, LOUVER AND STOREFRONT ELEVATIONS, SILL/JAMB/HEAD DETAILS, GLASS TYPE, HARDWARE, NOA OR FLORIDA PRODUCT APPROVALS, FINISH SAMPLES, ETC.

HARDWARE NOTES:

- ALL NEW HARDWARE SHALL BE BRUSHED STAINLESS STEEL FINISH
- ALL HARDWARE TO BE HANDICAP COMPLIANT
- ALL HARDWARE TO BE, ANSI GRADE 1 FOR HEAVY COMMERCIAL OR BETTER.
- ALL LOCKS SHALL BE AS MANUFACTURED BY BEST LOCK COMPANY AND SHALL BE KEYPED IN ACCORDANCE WITH THE OWNERS INSTRUCTIONS AND SHALL INCLUDE A MASTER AND GRAND MASTER KEYING SYSTEM. COORDINATE WITH OWNER PRIOR TO BIDDING.
- ALL LOCKS SHALL BE INSTALLED BY THE CONTRACTOR AND INCLUDED IN THE BASE BID.
- DUE TO SALT AIR ENVIRONMENT ALL HARDWARE COMPONENTS INCLUDING SCREWS STRIKE PLATES AND MISCELLANEOUS ITEMS SHALL BE SALT RESISTANT MATERIALS SUCH AS STAINLESS STEEL.
- PROVIDE COMPLETE SHOP DRAWING SUBMITTAL FOR ALL HARDWARE BY QUALIFIED DOOR HARDWARE SUB-CONTRACTOR FOR REVIEW AND APPROVAL.

HARDWARE SETS

SET NO. 1-EXIT

- 1 1/2 PAIR BUTTS 4 1/2"
- 1 PANIC PUSH BAR W/ EXTERIOR KEY OPERATION
- 1 SET WEATHER STRIPPING THRESHOLD
- 3 SILENCERS
- CLOSURE W/ HOLD OPEN

SET NO. 2 STORAGE

- 1 1/2 PAIR BUTTS 4 1/2"
- 1 LATCHSET-MORTISE LEVER (H.C.)
- 1 DEAD BOLT LOCK, THUMB TURN INSIDE OPERATION
- 3 SILENCERS
- 1 STOP AND HOLD

SET NO. 2 TYPICAL - OFFICE

- NOT USED

SET NO. 3 TOILETS-H.C.

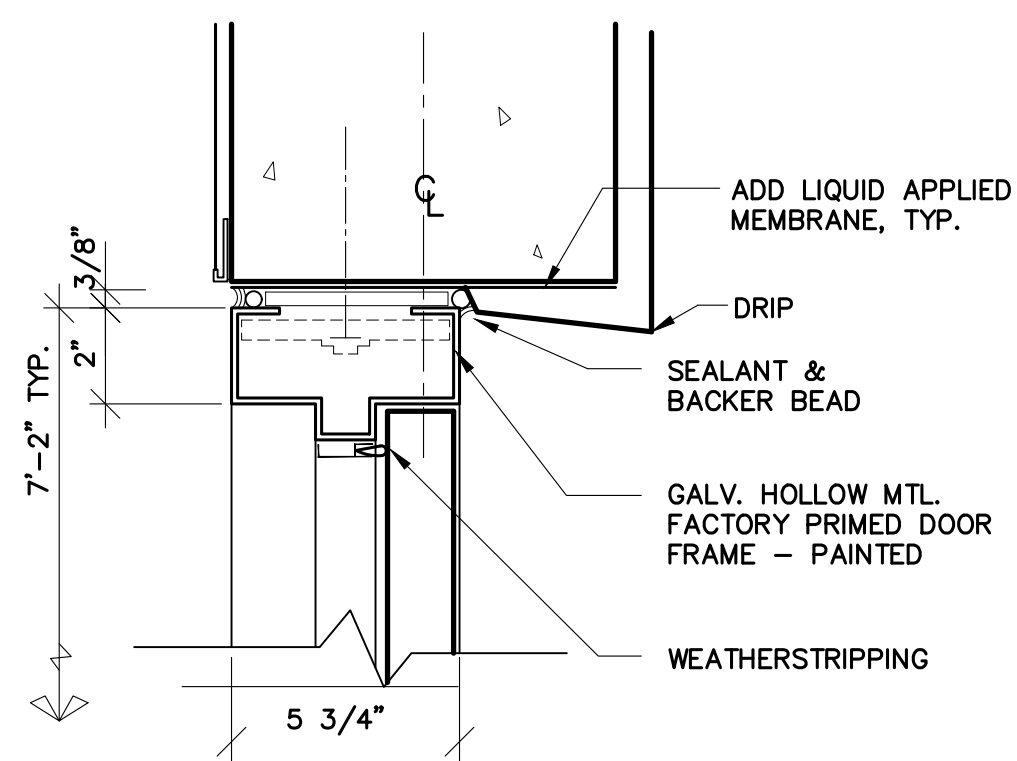
- 1 1/2 PAIR BUTTS 4 1/2"
- 1 LATCHSET - MORTISE LEVER-H.C.
- 1 DEAD BOLT LOCK KEY OPERATED BOTH SIDES
- 1 WALL STOP WITH HOLDER
- 3 SILENCERS
- 1 CLOSER

SET NO. 4 SERVICE

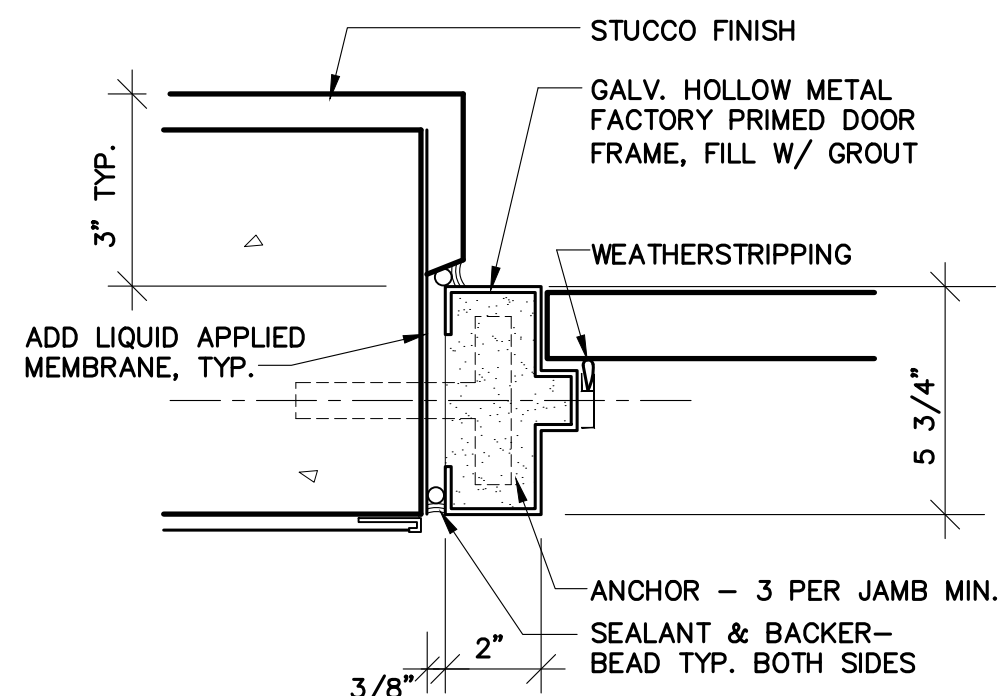
- TOP AND BOTTOM PIVOTS EA. LEAF
- PUSH / PULL HANDLES
- 1 WALL STOP
- 3 SILENCERS
- 1 CLOSER, CONCEALED, EA. LEAF W/ TWO WAY SWING

SET NO. 5-A -SAME WIDTH

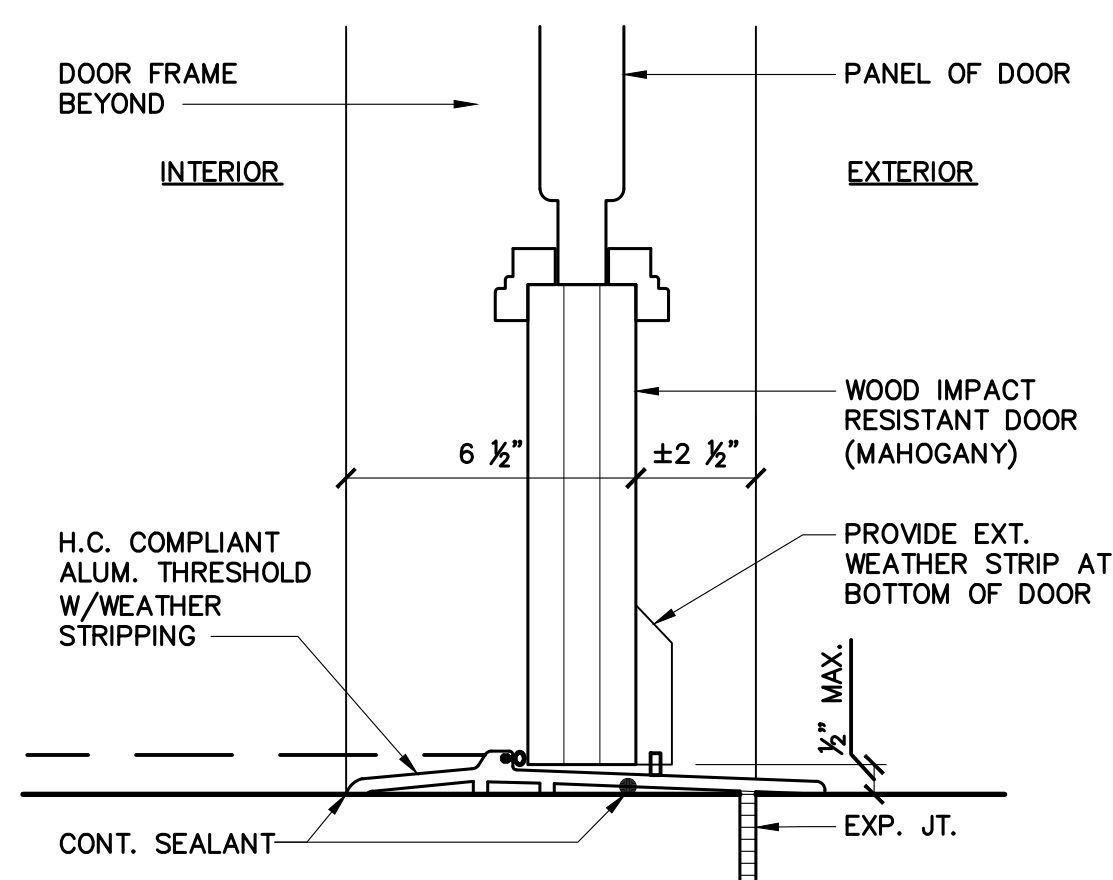
- NOT USED



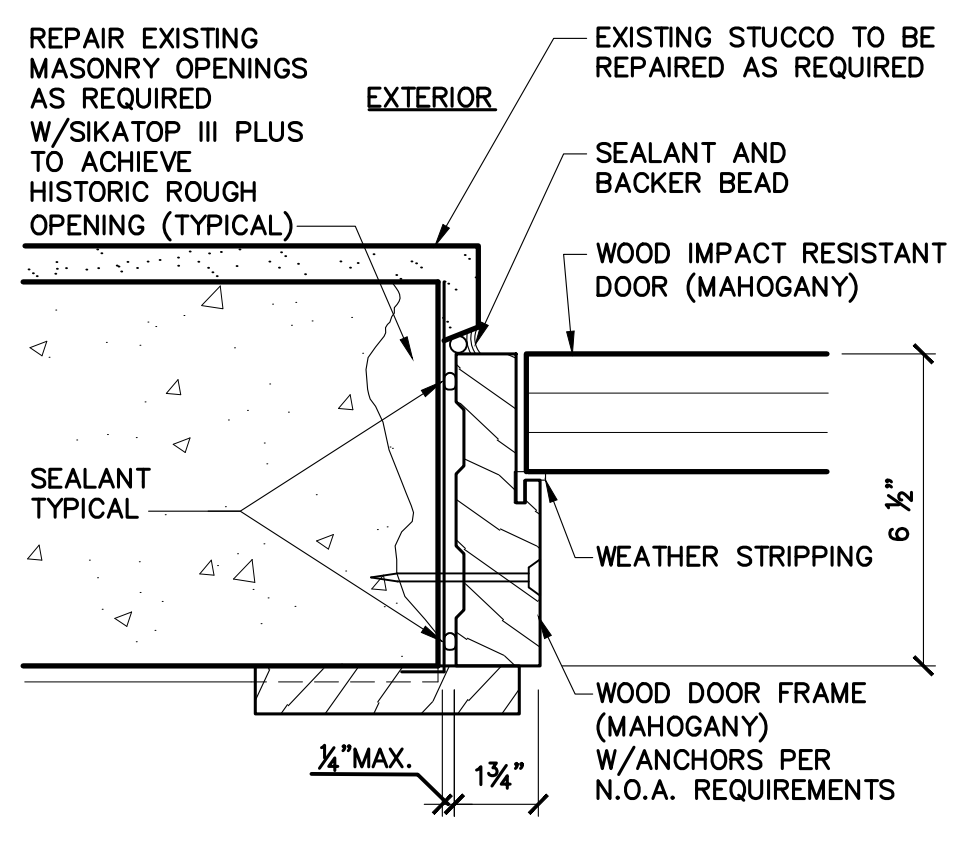
1 HEAD DETAIL
A-6 EXT. DOOR FRAME-METAL 3"=1'-0"



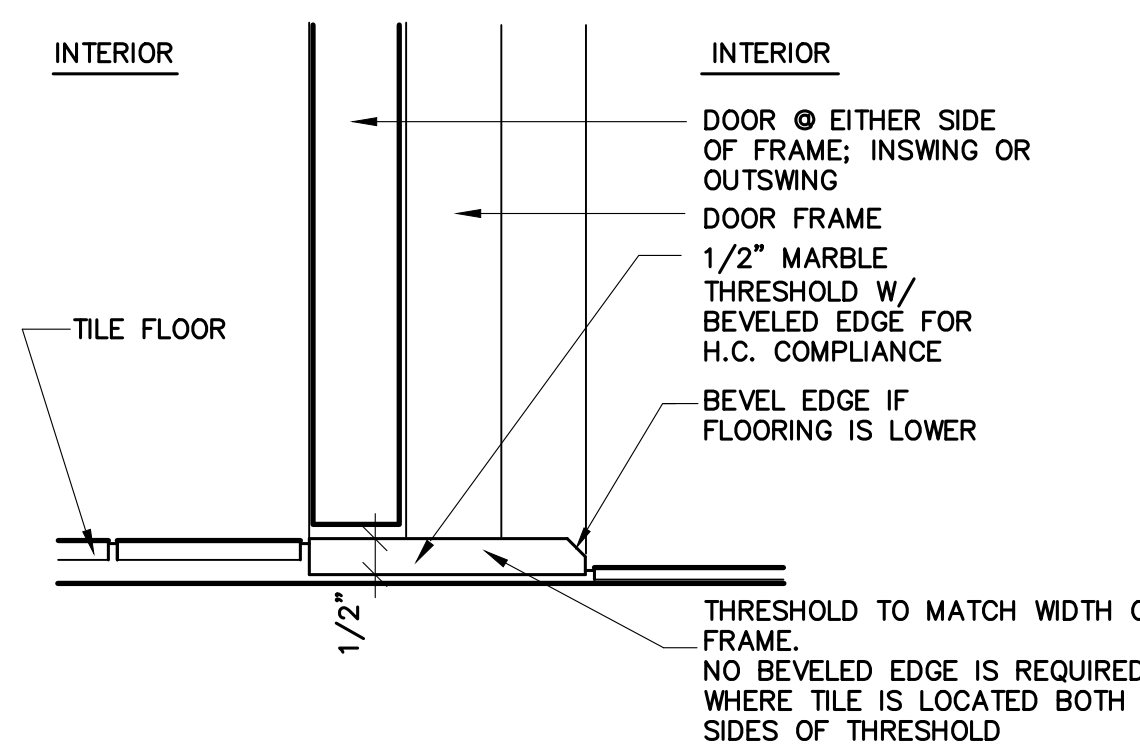
2 JAMB DETAIL
A-6 EXT. DOOR FRAME-METAL 3"=1'-0"



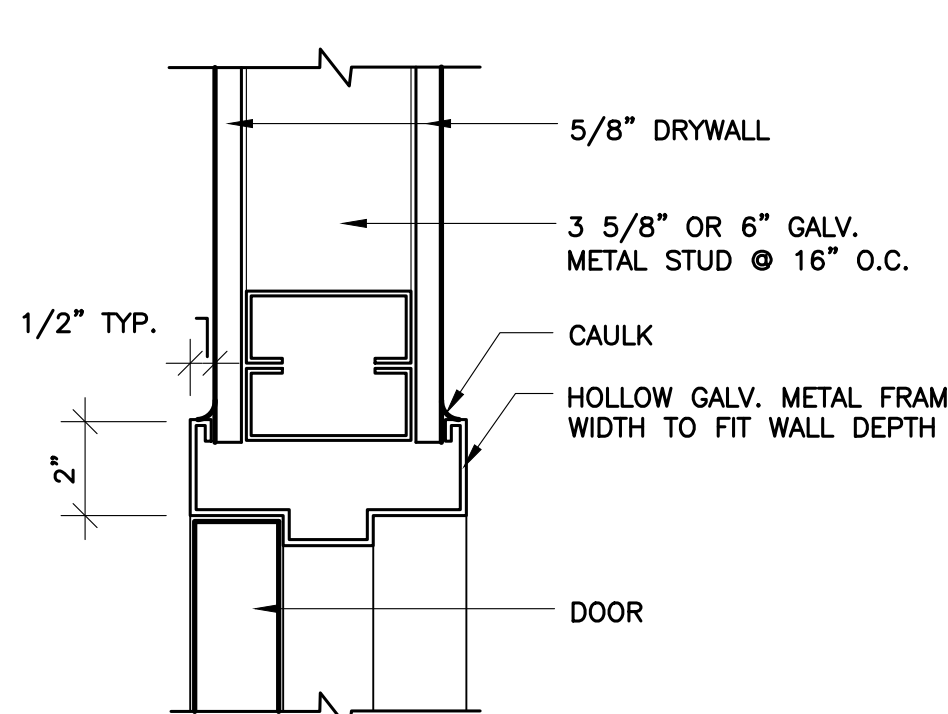
3 THRESHOLD DETAIL-H.C.
A-6 EXT. WOOD IMPACT DOOR (COORDINATE FINAL THRESHOLD PROFILE WITH FINAL FINISHES AND HEIGHTS) 3"=1'-0"



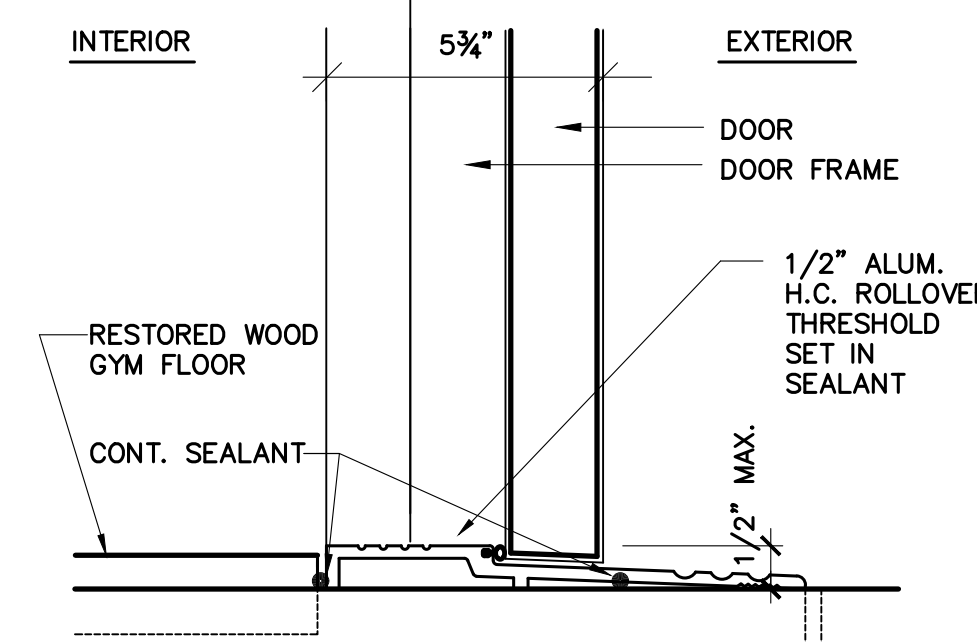
4 JAMB DETAIL HEAD SIMILAR
A-6 EXT. DOOR IMPACT DOOR (CONTRACTOR TO MEET ALL CODE AND N.O.A. REQUIREMENTS-TYPICAL) 3"=1'-0"



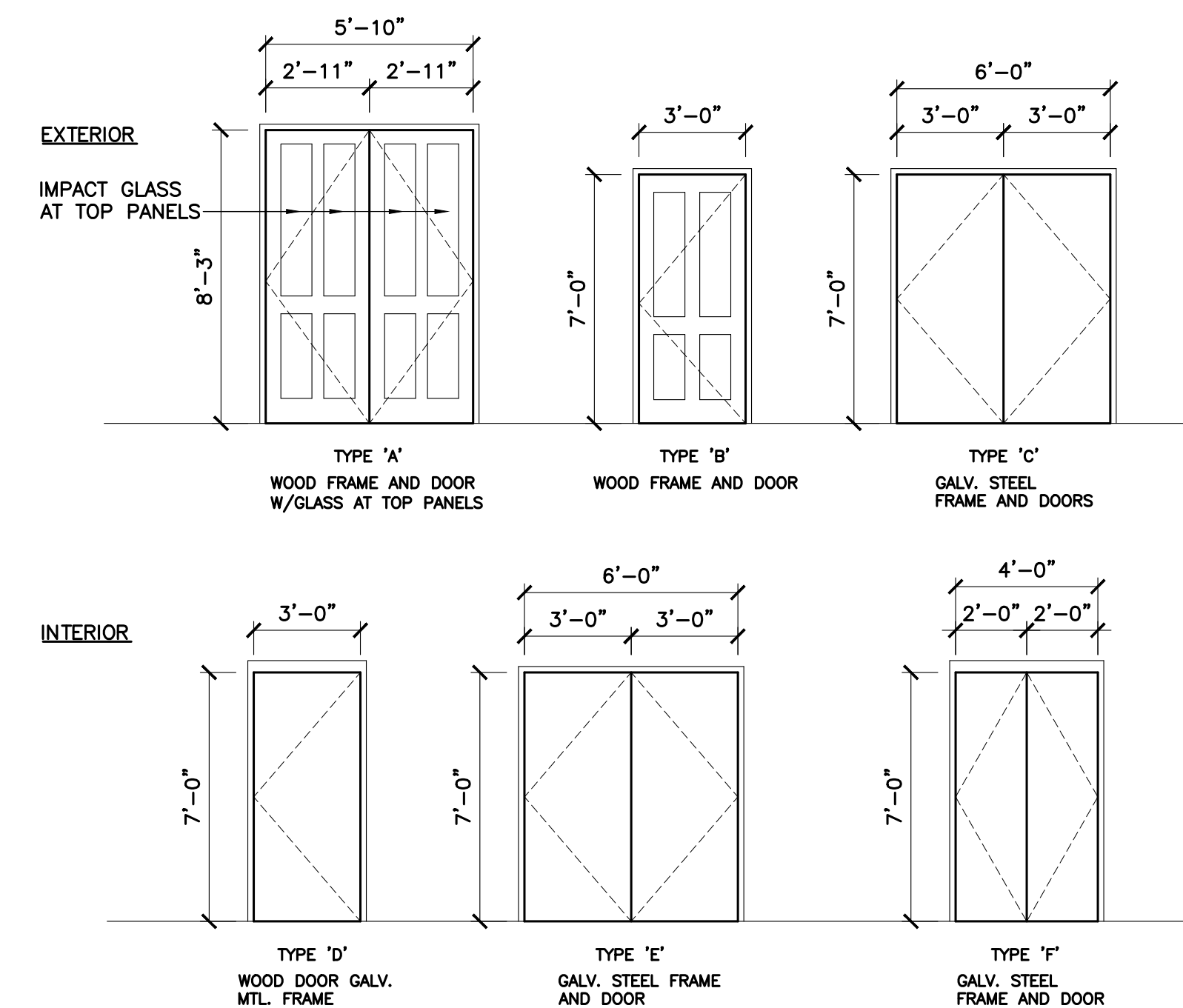
5 THRESHOLD DETAIL
A-6 MARBLE 3"=1'-0"



6 JAMB DETAIL HEAD SIMILAR
A-6 3"=1'-0"



7 THRESHOLD DETAIL
A-6 COORDINATE FINAL THRESHOLD PROFILE WITH LEVEL OF GYM FLOOR 3"=1'-0"



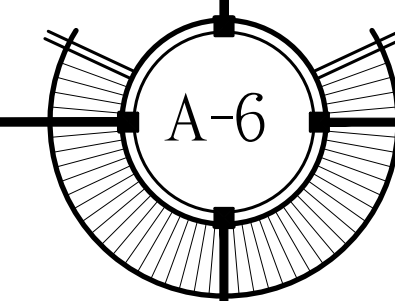
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702

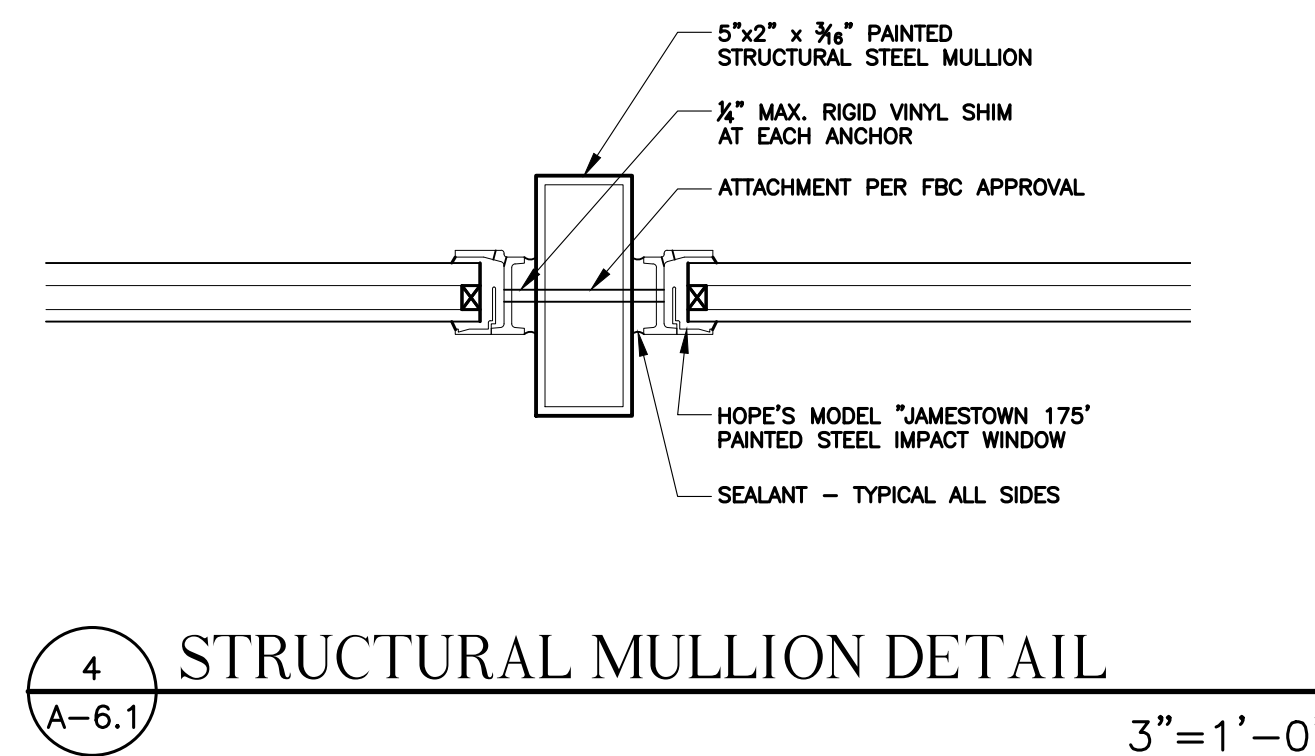
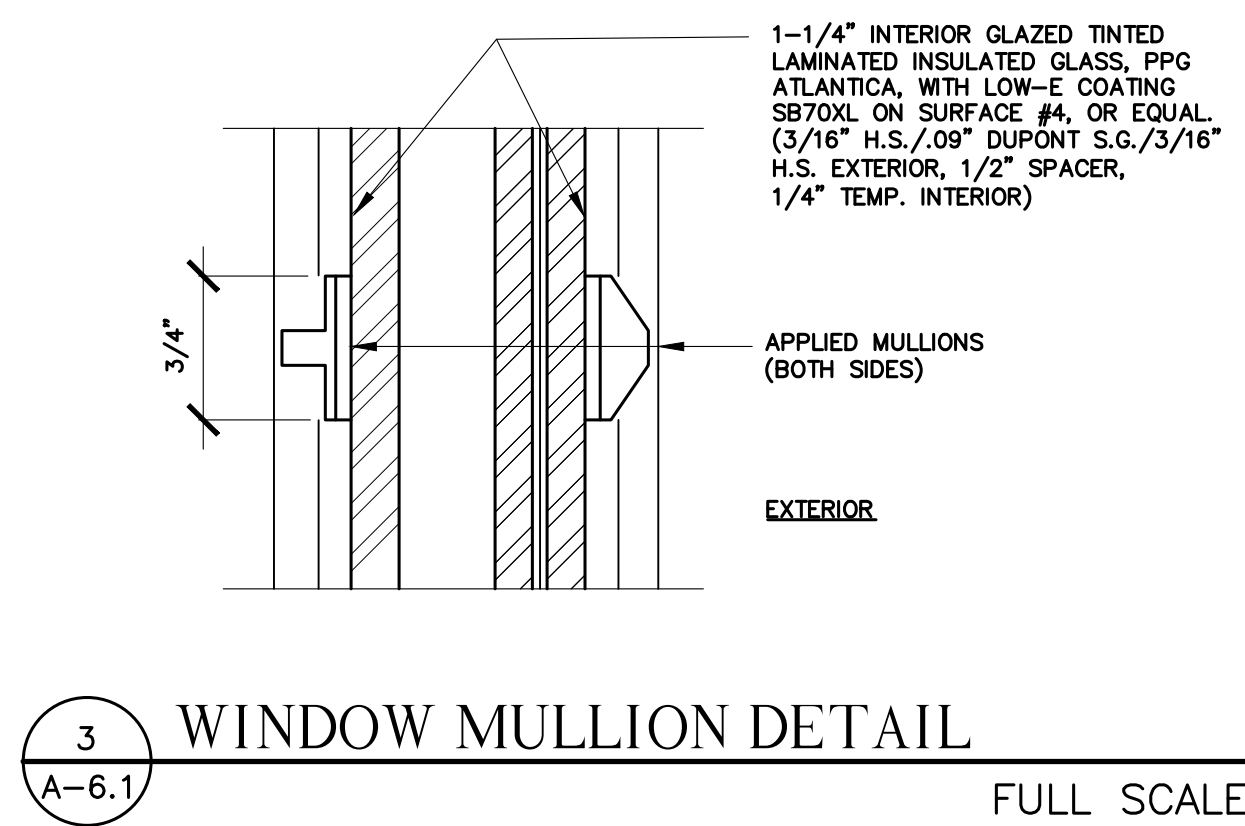
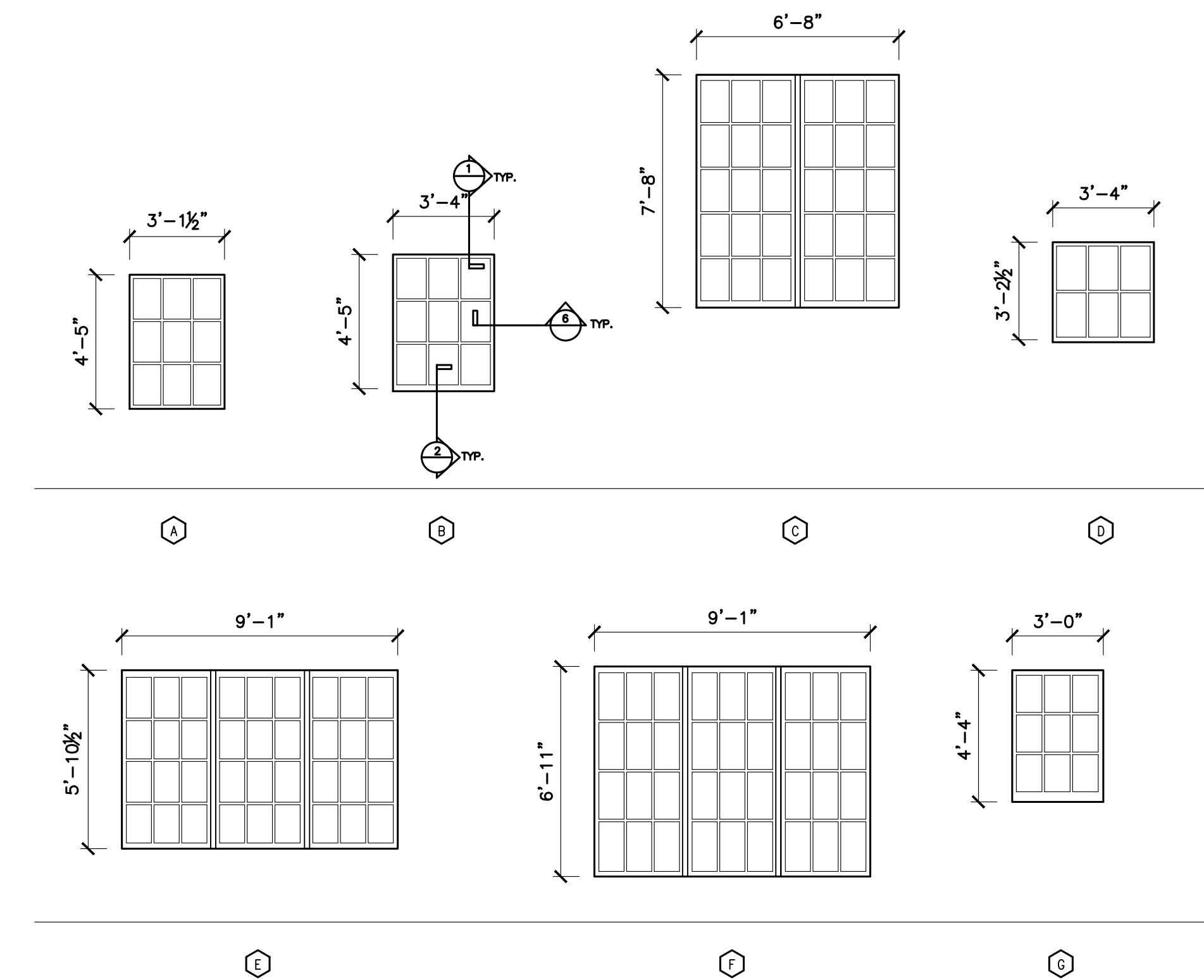
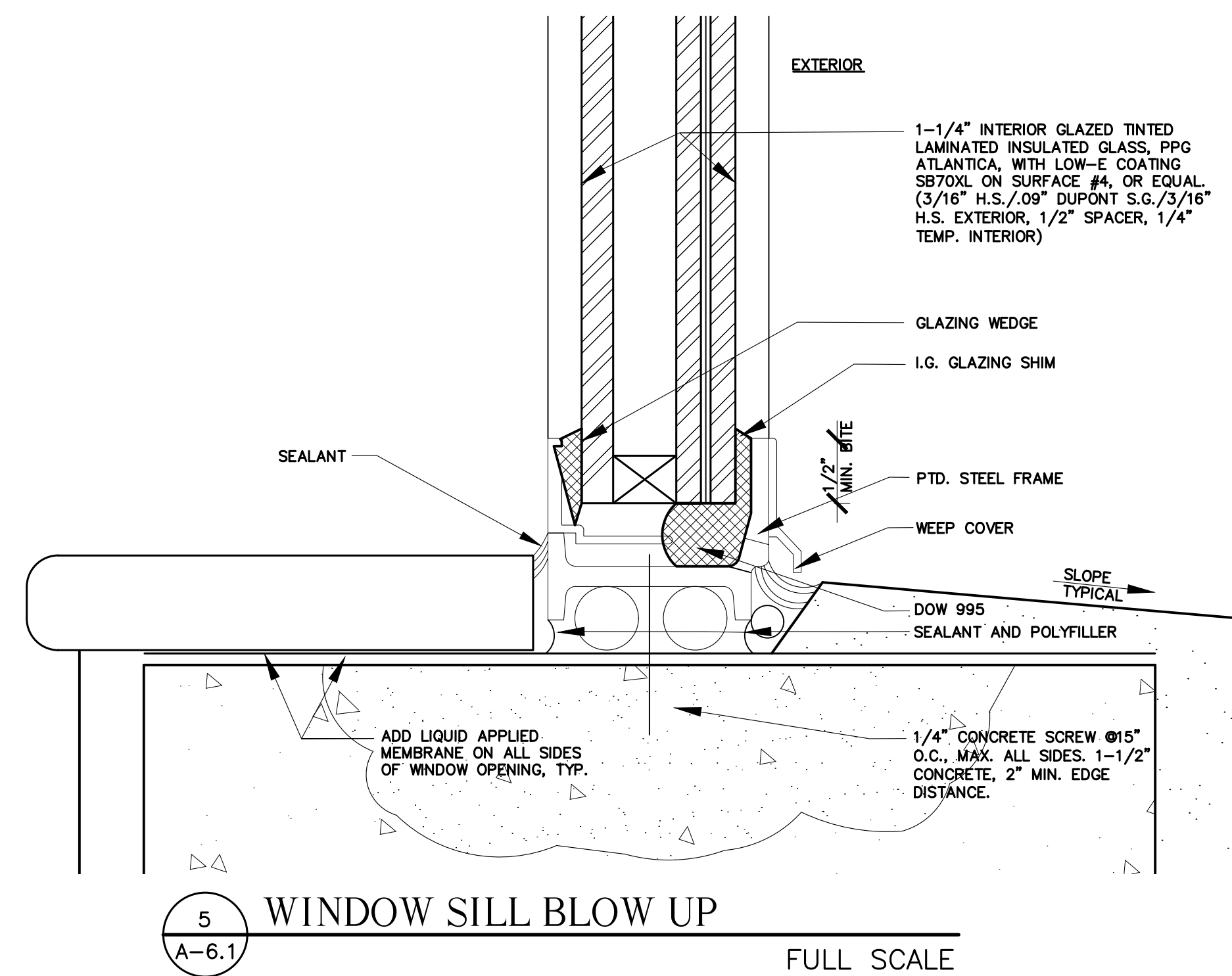
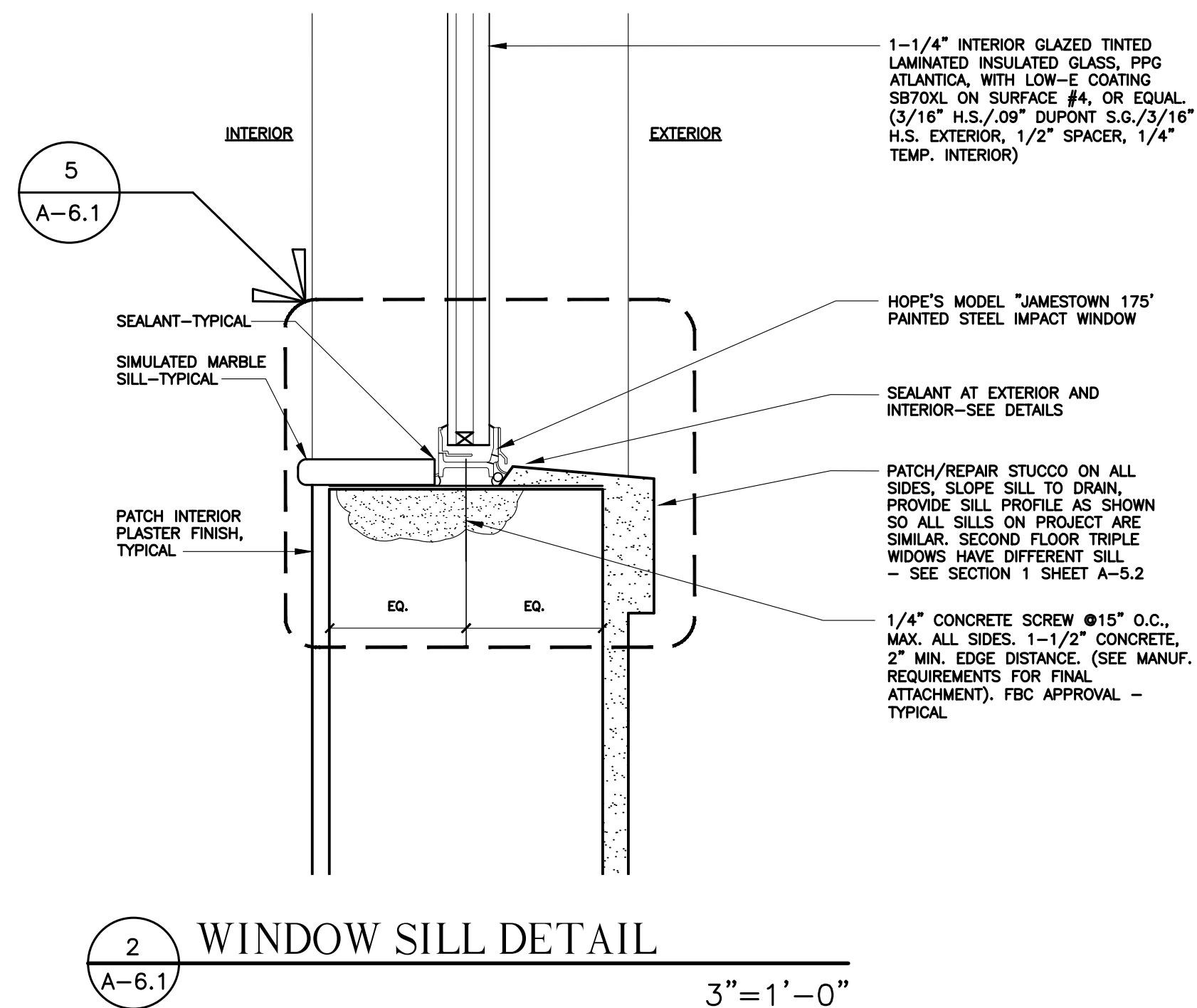
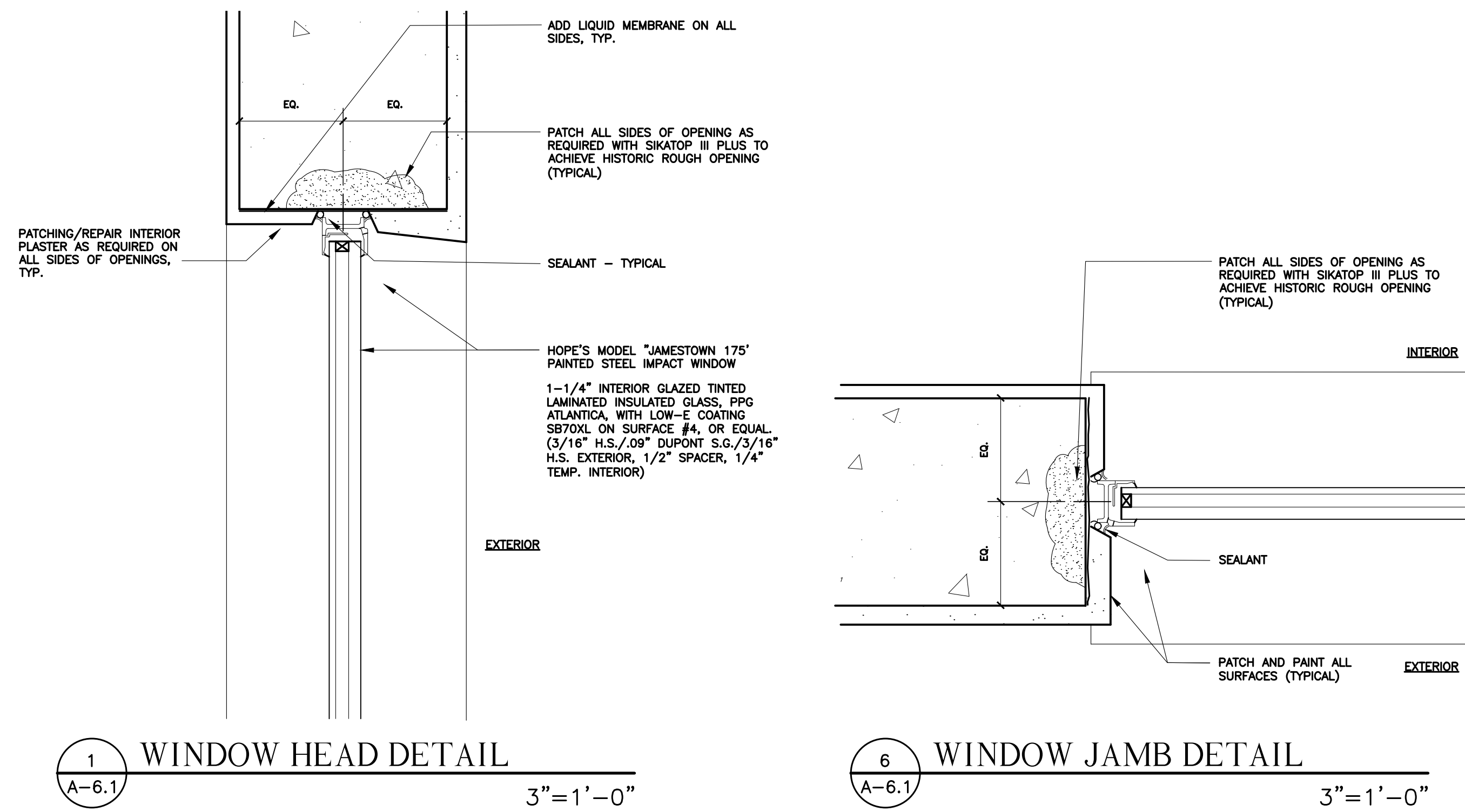


WINDOW SCHEDULE										BASIS OF DESIGN: HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	
	SIZE (APPROX.)*	FINISH	GLAZING	FRAME MAT.	WIND LOAD RATING (FIELD)	WIND LOAD RATING (CORNER)	APPROVAL NUMBER	MANUF. WIND LOAD RATING	MANUFACTURER	TYPE	
A	3'5"x4'5"	PAINTED	IMPACT	GALV. STEEL	+44.4/-48.0	+44.4/-57.6	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
B	3'4"x4'5"	PAINTED	IMPACT	GALV. STEEL	+44.4/-48.0	+44.4/-57.6	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
C	6'8"x7'8"	PAINTED	IMPACT	GALV. STEEL	+39.6/-43.2	+39.6/-48.0	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
D	3'4"x3'2.5"	PAINTED	IMPACT	GALV. STEEL	+44.4/-48.0	+44.4/-57.6	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
E	9'1"x10'5"	PAINTED	IMPACT	GALV. STEEL	+39.6/-43.2	+39.6/-48.0	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
F	9'1"x6'11"	PAINTED	IMPACT	GALV. STEEL	+39.6/-43.2	+39.6/-48.0	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	
G	3'0"x4'	PAINTED	IMPACT	GALV. STEEL	+44.4/-48.0	+44.4/-57.6	FL 14148	+80.2/-87.1	HOPE'S JAMESTOWN 175 SERIES HEAVY CUSTOM HOT ROLLED STEEL	FIXED WINDOW, IMPACT RESISTANT	

*CONTRACTOR TO VERIFY ALL OPENING DIMENSIONS AND COORDINATE WITH MANUFACTURED PRODUCTS AVAILABLE. CONTRACTOR RESPONSIBLE FOR FINAL MASONRY OPENING SIZES AND COORDINATION. CONTRACTOR TO INCORPORATE ANY REQUIRED MULTION STRUCTURAL SUPPORTS REQUIRED BY MANUFACTURER BETWEEN MULTIPLE OPENINGS.

NOTES:

1. ALL EXTERIOR OPENINGS SHALL BE PROVIDED WITH DOORS, WINDOWS, OR LOUVERS WHICH MEET ASCE/SEI 7-10, FLA. BUILDING CODE, 2017 EDITION. WIND PRESSURE ON COMPONENTS AND CLADDING (CH 30 PART 1) ALL PRESSURES SHOWN ARE BASED UPON ASD DESIGN, WITH A LOAD FACTOR OF 0.8. 180 MPH, WIND LOAD AND IMPACT REQUIREMENTS, SEE SPECIFICATIONS.
2. DESIGN PRESSURES PROVIDED BY STRUCTURAL ENGINEER.
3. ALL EXTERIOR FENESTRATIONS SHALL HAVE A MAXIMUM U-FACTOR AND SHGC AS PER FLORIDA COMMERCIAL ENERGY CONSERVATION BUILDING CODE 2017 UNLESS OTHERWISE NOTATED IN PERFORMANCE METHOD CALCULATIONS PROVIDED BY ENGINEER.
4. THE THERMAL ENVELOPE OF THE BUILDING SHALL COMPLY WITH FLORIDA COMMERCIAL ENERGY CONSERVATION BUILDING CODE 2017 AND SECTION C402.5, AND TABLE C402.5.2. FOR AIR LEAKAGE AND AIR BARRIER REQUIREMENTS. CONTRACTOR TO ENSURE ALL EXTERIOR DOORS AND WINDOWS ARE SEALED TO COMPLY WITH AIR LEAKAGE AND AIR BARRIER REQUIREMENTS. ALL EXTERIOR FENESTRATIONS SHALL BE GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.
5. CONTRACTOR TO PROVIDE FULL SET OF SHOP DRAWINGS SPECIFIC TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO WINDOW, LOUVER AND STOREFRONT ELEVATIONS, SILL/JAMB/HEAD DETAILS, GLASS TYPE, NOA OR FLORIDA PRODUCT APPROVALS, FINISH SAMPLES, ETC.



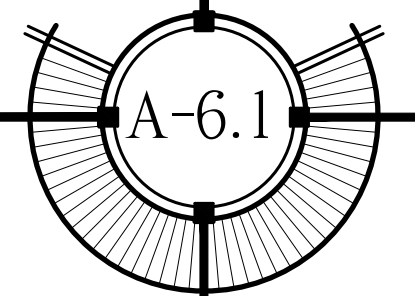
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

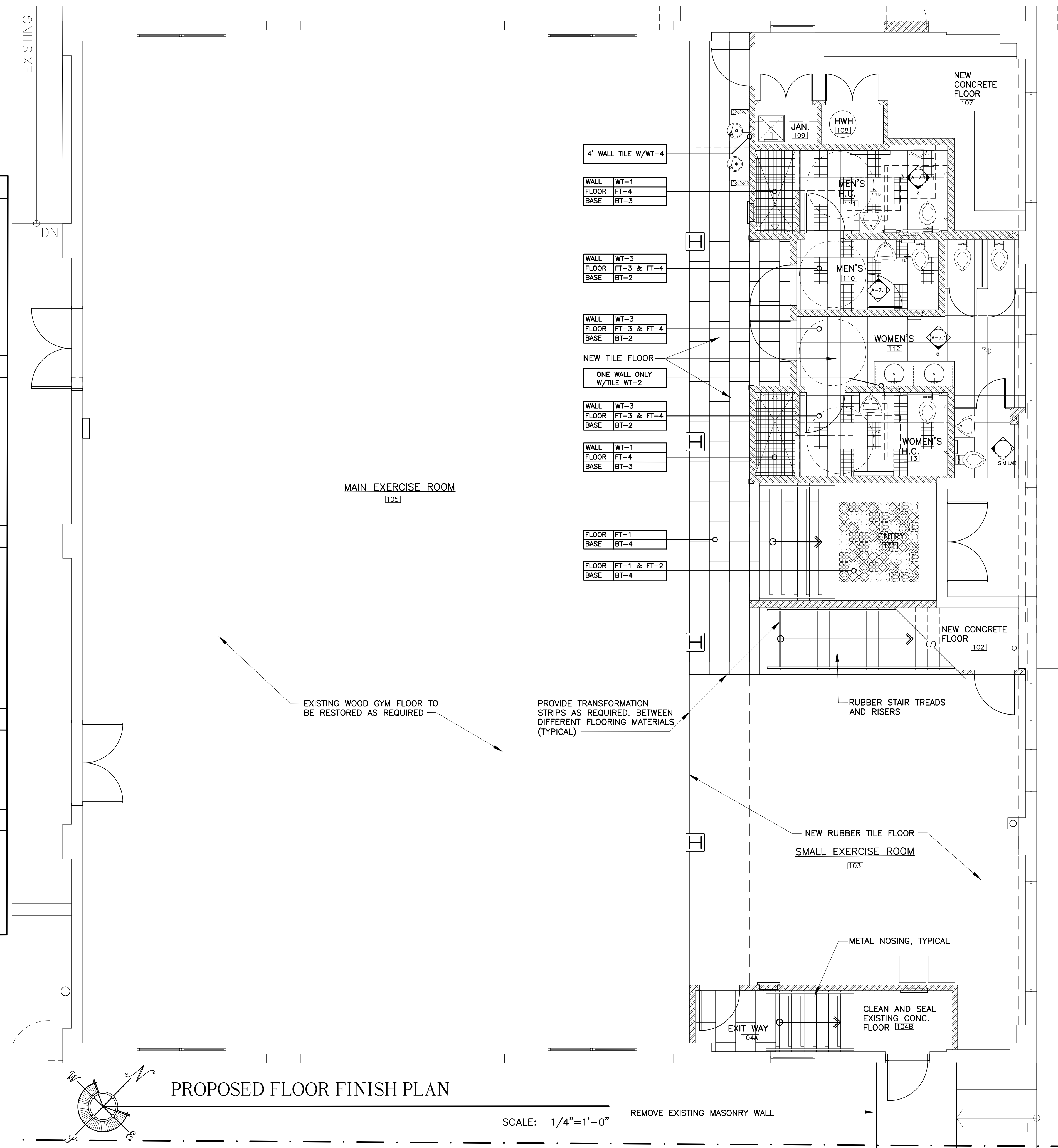
DRAWN BY
JW

PROJECT NUMBER
1702



FLOOR TILE	
FT-1	18"x36" FLORIDA TILE OR EQ. COLOR: 33315 PLATINUM SUITE BY LEVEL 10 COLLECTION
FT-2	18"x18" (SET OF 4 DESIGNS) FLORIDA TILE OR EQ. COLOR: 33301B/19X9 ORNAMENT COOL INSERTS BY LEVEL 10 COLLECTION
FT-3	12"x24 FLORIDA TILE OR EQ. COLOR: 33318 SALON BRONZE BY LEVEL 10 COLLECTION
FT-4	12"x12" (25 PIECE MOSAIC) FLORIDA TILE OR EQ. COLOR 33318 SALON BRONZE BY LEVEL 10 COLLECTION
WALL TILE	
WT-1	18"x18" FLORIDA TILE OR EQ. COLOR: 33341 MEZZANINE GOLD BY LEVEL 10 COLLECTION
WT-2	18"x18" (SET OF 4 DESIGNS) FLORIDA TILE OR EQ. COLOR: 33301A/19X9 ORNAMENT WARM INSERTS BY LEVEL 10 COLLECTION
WT-3	12"x24 FLORIDA TILE OR EQ. COLOR: 33341 MEZZANINE GOLD BY LEVEL 10 COLLECTION
WT-4	18"x18" (SET OF 4 DESIGNS) FLORIDA TILE OR EQ. COLOR: 33301B/19X9 ORNAMENT COOL INSERTS BY LEVEL 10 COLLECTION
BASE	
BT-1	NOT USED
BT-2	3"x12" FLORIDA TILE OR EQ., BULLNOSE P43C9 COLOR: 33318 SALON BRONZE BY LEVEL 10 COLLECTION
BT-3	18"x18" FLORIDA TILE OR EQ. COLOR: 33341 MEZZANINE GOLD BY LEVEL 10 COLLECTION
BT-4	VINYL BASE. PROVIDE JOHNSONITE RESILIENT WALL BASE MANUF. BY TARKETT (WWW.TARKETTNA.COM) OR EQUAL. BASE SHALL BE "MILLWORK WALL BASE SYSTEM" - INFLECTION PROFILE, 5.25 HIGH BY .375" THICK. SELECT SOLID COLOR FRONT MANUF. FULL RANGE OF SOLID COLORS. PROVIDE ALL ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
RUBBER FLOORING	
RUBBER FLOORING SHALL BE 4 FOOT WIDE X 3/8" THICK RECYCLED TIRE RUBBER, POLYMERICALLY BOUND AND GLUED DOWN TO FLOOR. PROVIDE FLECK COLORING SAMPLES FOR COLOR SELECTION. PROVIDE 3 YEAR WARRANTY FOR MATERIALS AND WORKMANSHIP. VOC CONTENT SHALL = 0. PROVIDE 'SURVIVOR ROLLED RUBBER' FLOORING 3/8" THICK BY COMMERCIAL MATS AND RUBBER, OR EQUAL.	
RUBBER STAIR TREADS AND RISERS	
PROVIDE RUBBER STAIR TREAD/RISER/LANDING TILES BY ARMSTRONG COMMERCIAL FLOORING OR EQUAL. RUBBER SHALL BE A VULCANIZED COMPOSITION OF RUBBER BINDER, REINFORCING FILLERS AND PIGMENTS. STAIR TREADS TO HAVE LOW PROFILE RAISED ELEMENTS W/CHAMFERED SHOULDERS W/SHARPLY DEFINED EDGES AT THE TOP. PROVIDE SOLID COLOR THROUGHOUT ENTIRE THICKNESS OF ALL ITEMS. COLOR SHALL BE SELECTED FROM FULL RANGE OF COLOR OPTIONS FROM MANUF. PROVIDE ALL ACCESSORIES AS REQUIRED FOR A COMPLETE SYSTEM. PROVIDE A 5 YEAR WARRANTY.	

- TILE NOTES:**
- ALL TILE TO MEET CURRENT SLIP RESISTANT COEFFICIENT ASTM STANDARDS RELATIVE TO LOCATION OF INSTALLATION.
 - TILE SHALL BE INSTALLED OVER THICK SET MORTAR BED.
 - SLOPE ALL TILE FLOORS TO FLOOR DRAINS. MAX SLOPE 1:50 FOR ADA COMPLIANCE IN ALL DIRECTIONS.
 - SLIP RESISTANT FOR INTERIOR CONDITIONS (DCOF ACUTEST >= 0.42) PER ANSI A137.1-2012



PROPOSED FLOOR FINISH PLAN

SCALE: 1/4"=1'-0"

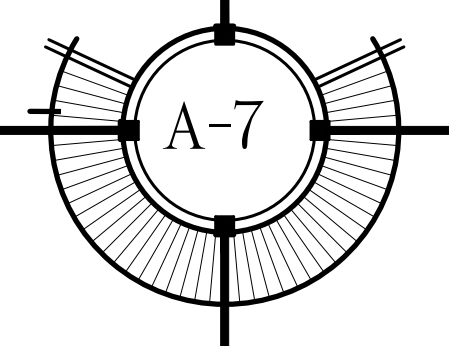
SEAL

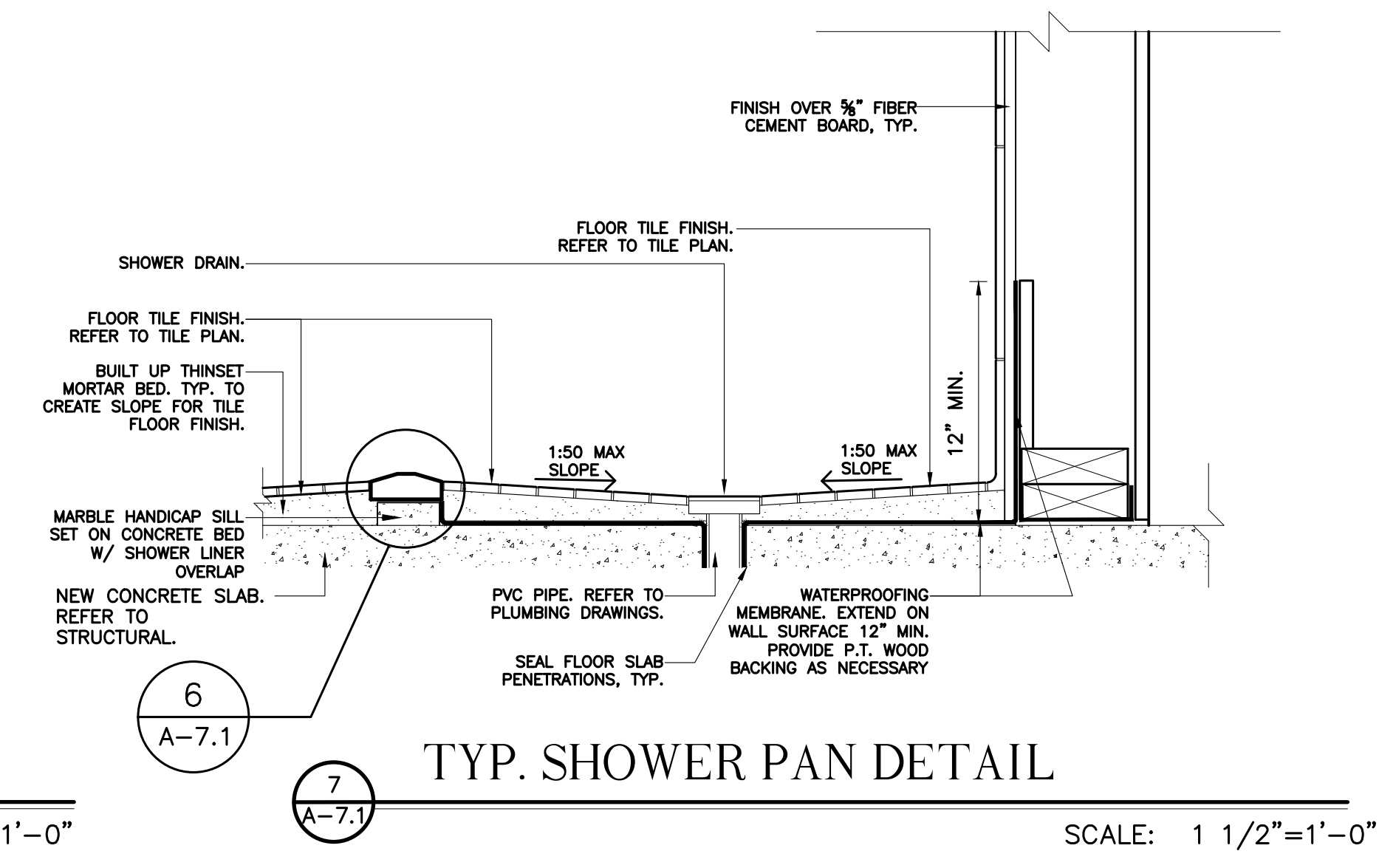
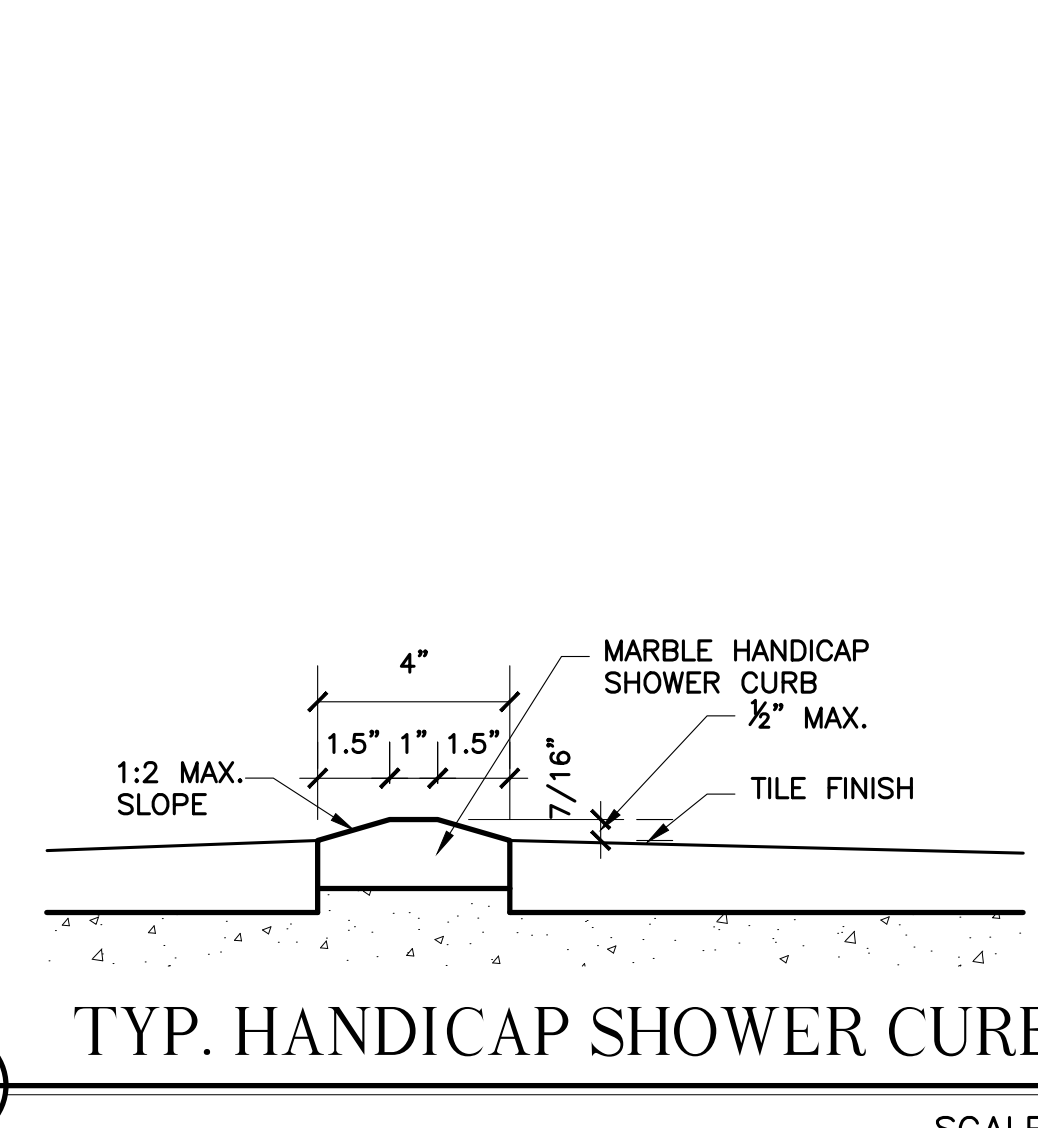
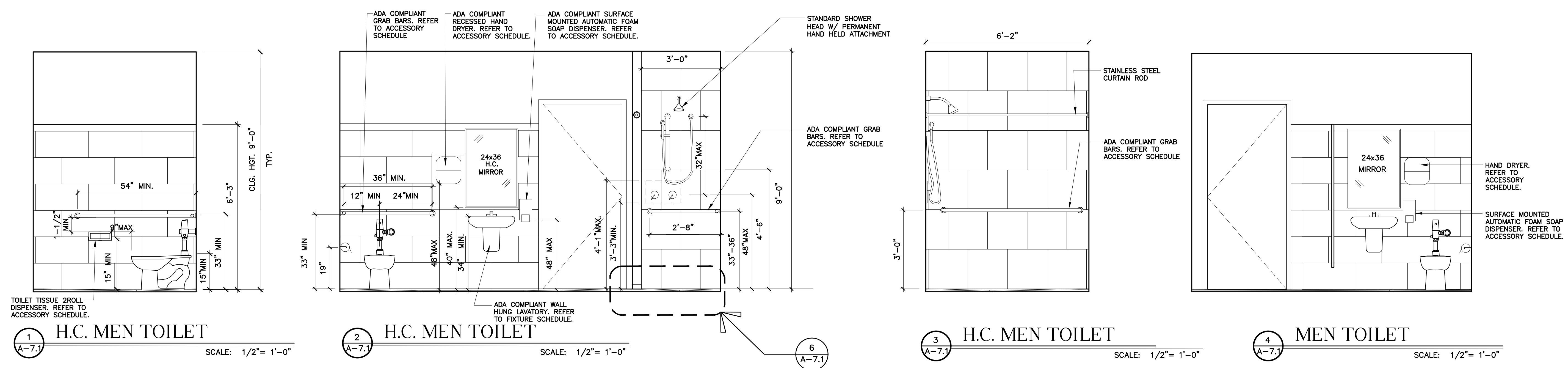
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702



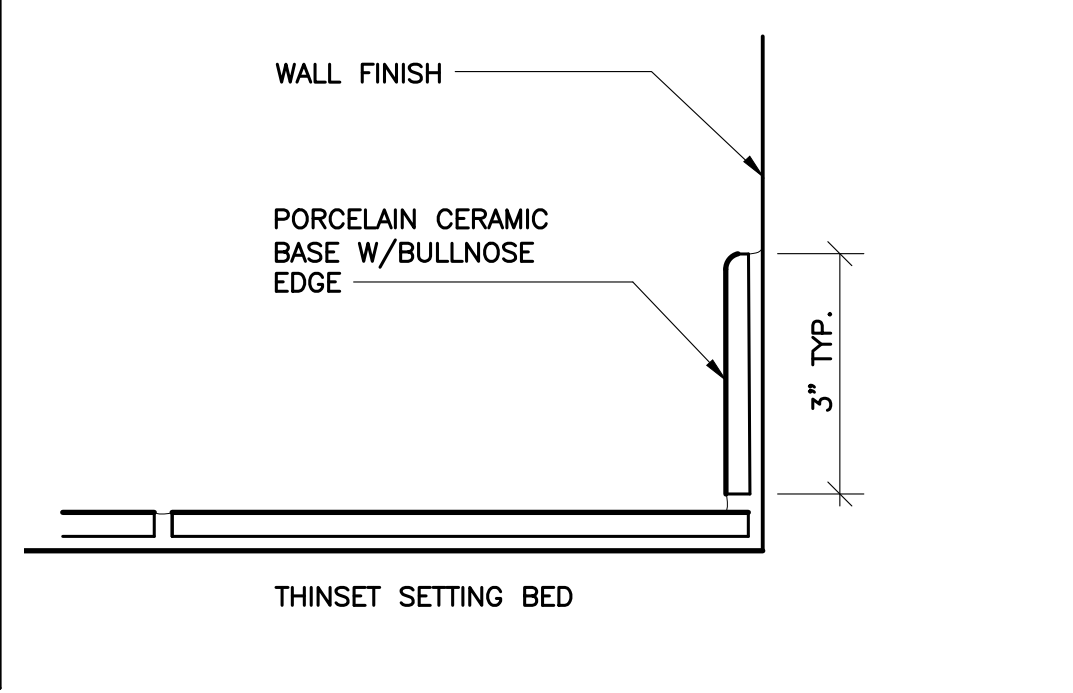


ROOM NAME	FLOOR		BASE		WALLS		CEILING		REMARKS				
	PLYWOOD-PAINTED	PORCELAIN TILE	CONCRETE, SEALED	WOOD FLOOR	RUBBER TILE	TILE	VINYL	M.R. GYP.BD. PAINT		PORCELAIN TILE TO 6'-3" AFF	PLASTER PAINTED	PAINTED STRUCTURE	PAINTED STRUCTURE
101 ENTRY													
102 STORAGE #1													
103 SMALL EXERCISE ROOM													
104A EXIT WAY													
104B EXIT WAY													
105 MAIN EXERCISE ROOM													
106 STORAGE ROOM													
107 STORAGE #2													
108 HWH ROOM													
109 JANITOR													
110 MEN'S													
111 MEN'S H.C.													
112 WOMEN'S													
113 WOMEN'S H.C.													
201 MEZZANINE STORAGE													
202 STAIR													
203 A/C ROOM													

NOTE:
1. FLOOR TILE SHALL BE INSTALLED WITH AN UNCOUPLING OR CLEAVAGE MEMBRANE TO REDUCE THE POSSIBILITY OF CRACKS. SEE SPECIFICATIONS.
2. USE EPOXY GROUT FOR ALL FLOOR TILE.
3. INTERIOR DOOR TRIM TO BE 1x4 #1 PRIMED PINE TRIM.
4. CERAMIC TILE WHERE PLACED ON FRAMED WALL CONST. SHALL BE MOUNTED OVER 5/8" FIBER-CEMENTITIOUS BD. IN LIEU OF MOISTURE RESISTANT GYP. BD. USED ELSEWHERE IN WET LOCATIONS.

NO.	DESCRIPTION	BASIS OF DESIGN	SIZE	MATERIAL	FINISH
01	HAND DRYER, ADA-COMPLIANT RECESS KIT	XLERATOR XL-SB, 40502	HAND DRYER DIM: 11 3/4" W, 12 1/2" H, 6 1/2" D RECESS KIT DIM FOR H.C. ROOMS: 16 3/8" W, 26" H, 3 3/8" D	STAINLESS STEEL	BRUSHED
02	WALL-MOUNTED FOAM SOAP DISPENSER	RENOWN RENO2473; CARTRIDGE: RENO2528	CAPACITY OF 1250 ML. 4.6"W, 10.6"H, 3.9"D	PLASTIC	BLACK/CHROME
03	GRAB BARS 1 1/2" WITH CONCEALED MOUNTING	BOBRICK 8120-059 GRAB BAR 1-1/2" O.D.	SIZES VARIES - SEE ELEVATIONS	STAINLESS STEEL	SAFETY-GRIP WITH HIGH-POLISH
04	FIXED ANGLE TILT MIRROR	AMERICAN SPECIALTIES 0535-2436	24" W X 36" H FOR COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES, BOTTOM OF REFLECTING SURFACE SHOULD BE INSTALLED 40"	STAINLESS STEEL	SATIN
05	SURFACE-MOUNTED HIGH-TRAFFIC TOILET TISSUE DISPENSER	REVOLUTION TORK FOR OPTICORE 565820	3 ROLL CONTROL 14 1/2"W, 14 1/2"H, 6 1/2"D	PLASTIC	BLACK
06	HORIZONTAL BABY CHANGING STATION	AMERICAN SPECIALTIES 9012	36"W 20" DEPTH UNIT IS OPERABLE WITH LESS THAN 5LBS	STAINLESS STEEL	SATIN
07	CLOTHES/TOWEL HOOK STRIP - FRONT MOUNTING	AMERICAN SPECIALTIES 129	MEETS ADA. DIM: 18" W, 5 1/2" H, 3 3/8" DEPTH	STAINLESS STEEL	SATIN
08	EXTRA-HEAVY DUTY SHOWER CURTAIN ROD	AMERICAN SPECIALTIES 1204	1-1/4" DIA	STAINLESS STEEL	SATIN
09	ADA COMPLIANT SURFACE-MOUNTED TOILET TISSUE DISPENSER	BOBRICK B-885	HOLDS ONE ROLL: 5-1/2"DIA. UNIT 7-1/4" W, 2" H	STAINLESS STEEL	SATIN

ACCESSORY NOTE: CONTRACTOR TO PROVIDE LISTED BASIS OF DESIGN OR PROVIDE EQUAL IN PERFORMANCE AND FINISH.



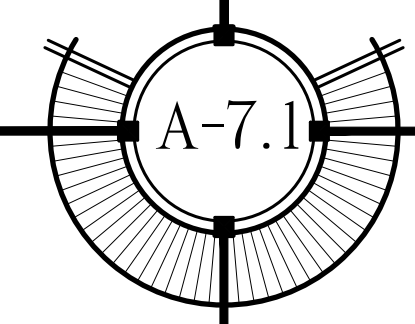
USE THIS BASE ON ALL WALLS IN ALL RESTROOMS AND JANITOR ROOM THAT HAVE TILE ON FLOOR BUT NOT ON WALLS-TYP.

LOW EMITTING MATERIALS
ALL ADHESIVES, SEALANTS AND COATINGS USED IN THE PROJECT SHALL BE LOW VOC AND MEET THE LIMITS BELOW ESTABLISHED BY THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE #1168 AND ALL SEALANTS USED AS FILLERS MUST MEET THE REQUIREMENTS OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATION 8, RULE 51.

VOLATILE ORGANIC COMPOUND (VOC) LIMITS (GRAMS PER LITER) LESS WATER AND LESS EXEMPT COMPOUNDS

ADHESIVES AND SEALANTS	
Indoor Carpet Adhesives	50
Carpet Pad Adhesives	50
Outdoor Carpet Adhesives	150
Wood Flooring Adhesive	100
Rubber Floor Adhesives	60
Subfloor Adhesives	50
Ceramic Tile Adhesives	65
VCT and Asphalt Tile Adhesives	50
Dry Wall and Panel Adhesives	50
Cove Base Adhesives	50
Multipurpose Construction Adhesives	70
Structural Glazing Adhesives	100
Single Ply Roof Membrane Adhesives	250

CONTRACTOR SHALL MAINTAIN AND MAKE AVAILABLE MATERIAL SAFETY DATA SHEETS OR ACCEPTABLE DOCUMENTATION HIGHLIGHTING THE STATED VOC EMISSIONS FOR EACH ADHESIVE, SEALANT, PAINT AND COATING USED IN THE BUILDING.

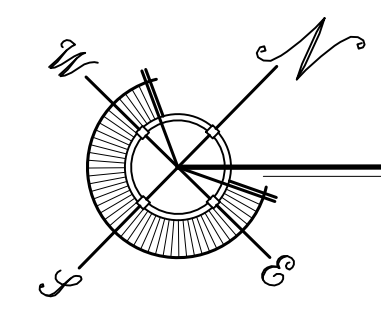
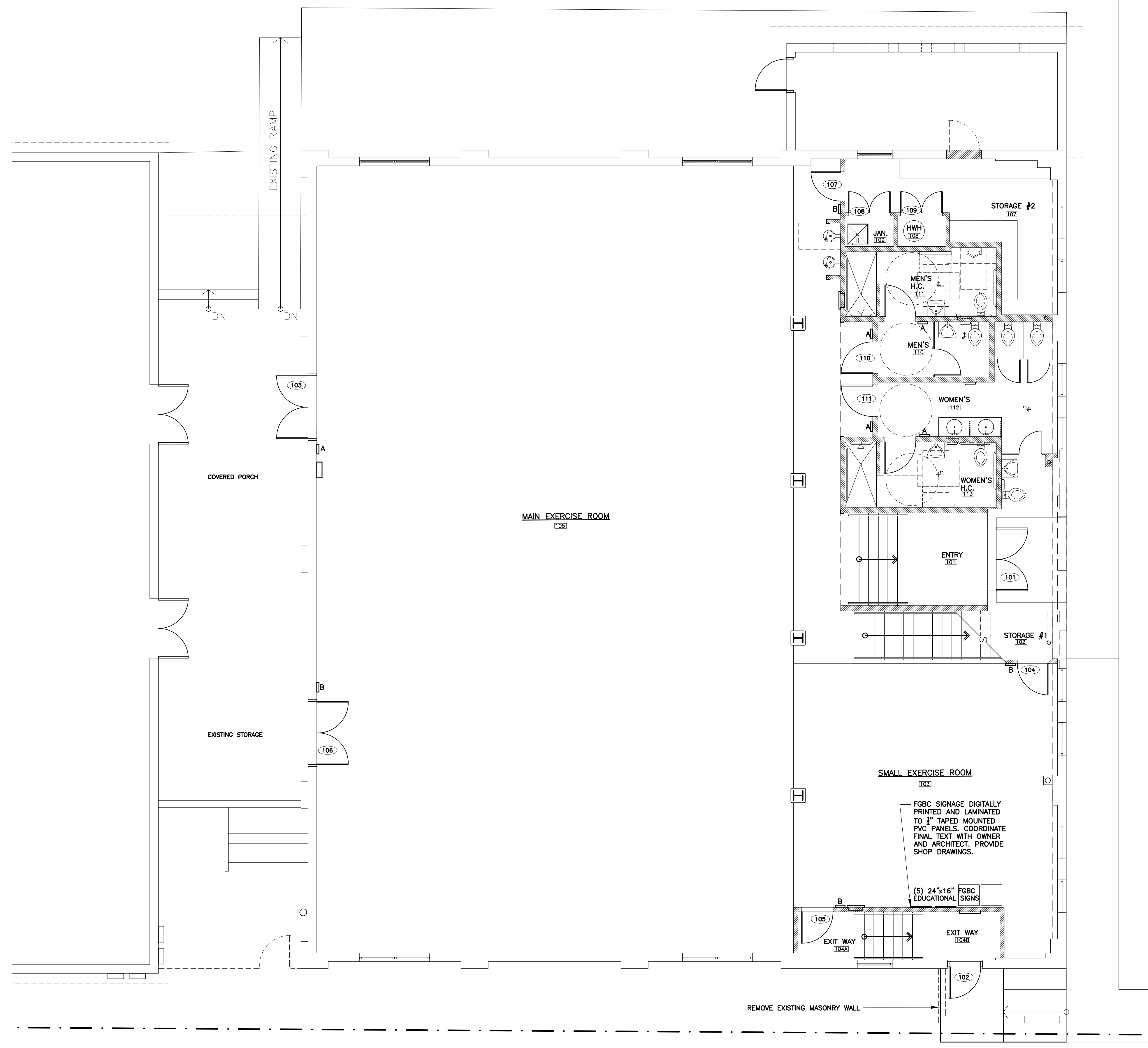
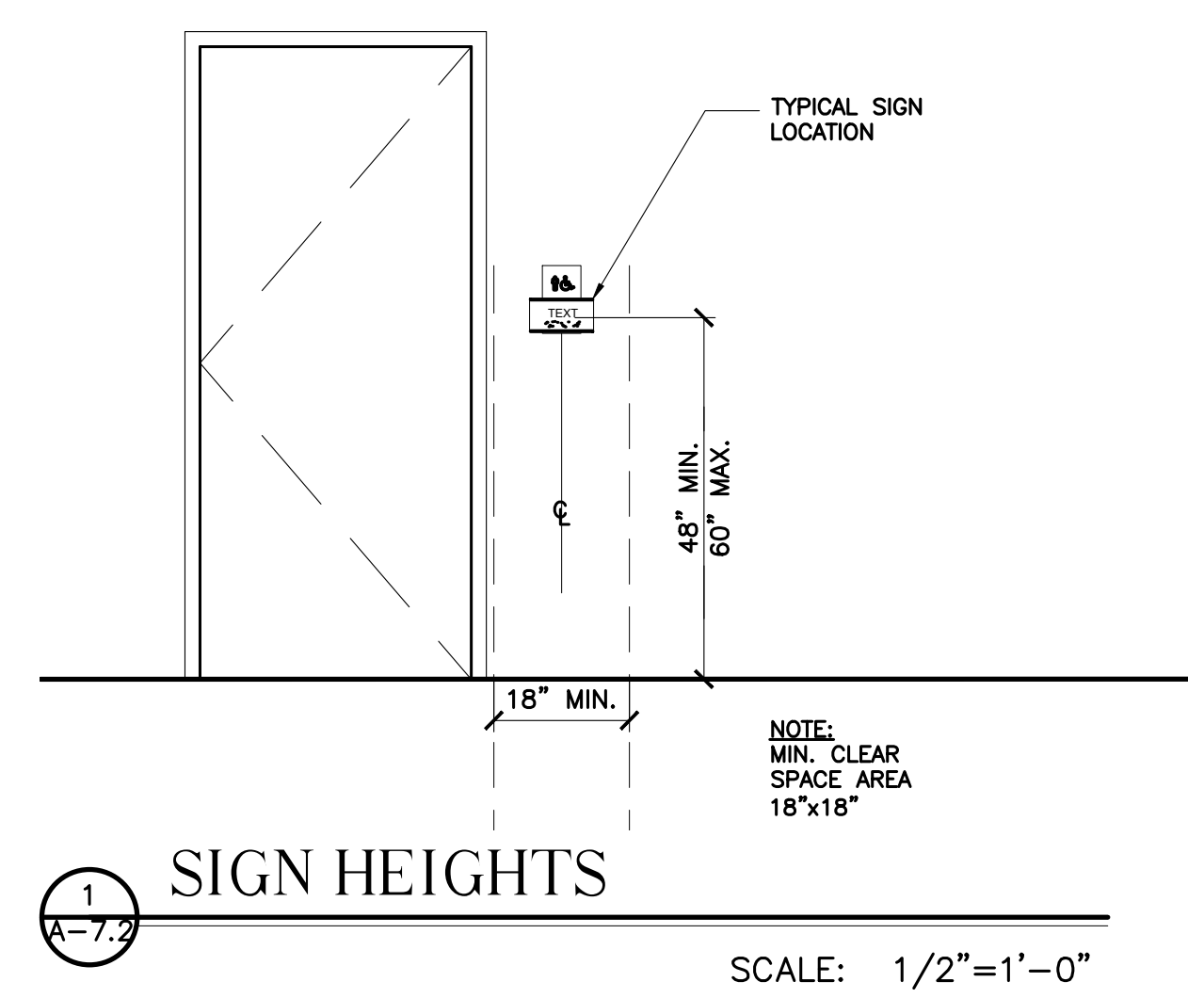
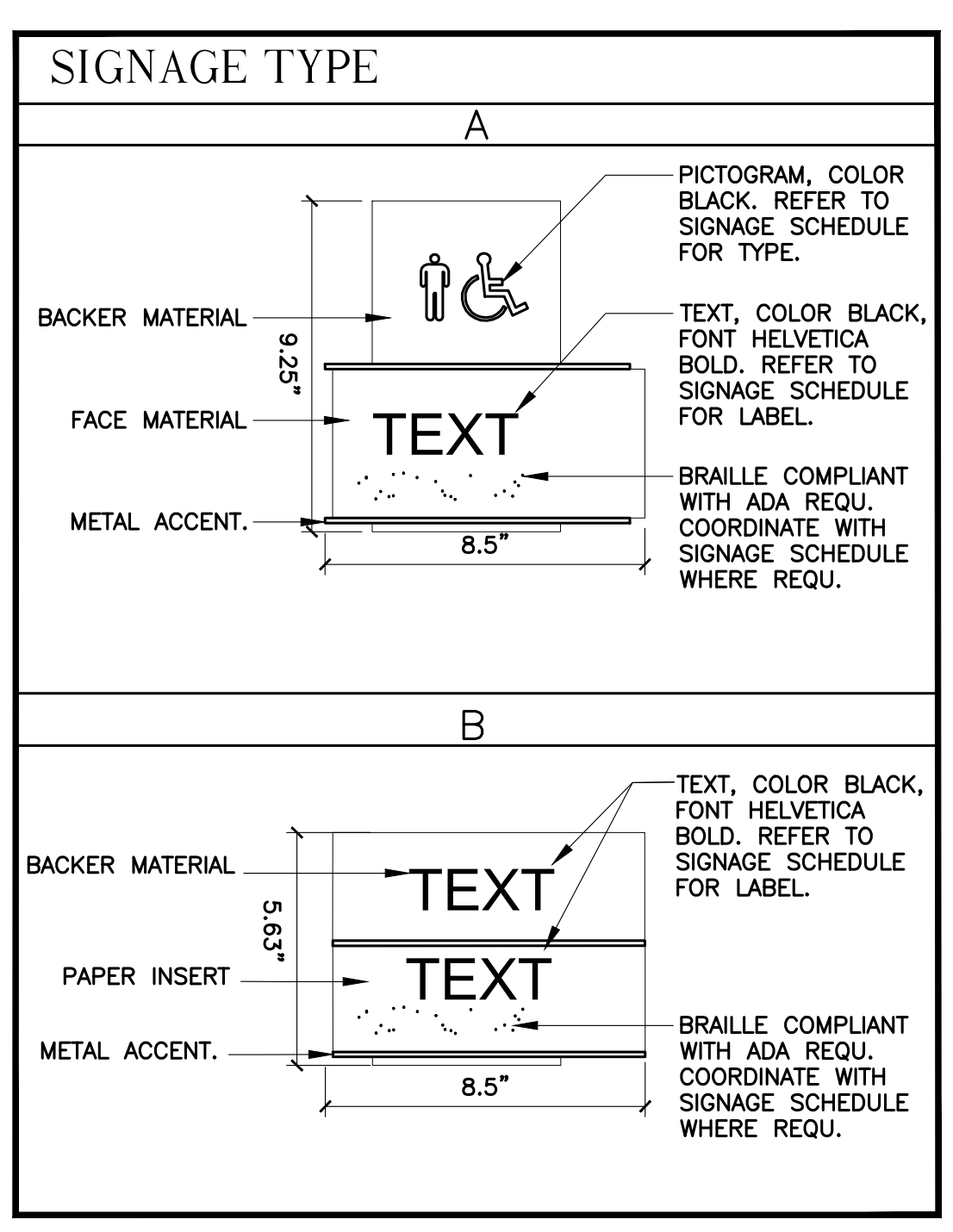


SIGNAGE GENERAL NOTES

- SIGNAGE BASIS OF DESIGN FUSION BY TAKEFORM ARCHITECTURAL GRAPHICS OR EQUAL.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS DETAILING EACH SIGNAGE TYPE, MATERIAL, AND INSTALLATION DETAILS. FINAL MATERIALS TO BE REVIEWED BY ARCHITECT.
- FINAL TEXT TO BE REVIEWED BY ARCHITECT.

SIGNAGE SCHEDULE

DOOR #	SIGN TYPE	TEXT	PICTOGRAM
104	B	STORAGE #1	
105	B	EXIT WAY	
106	B	EXISTING STORAGE	
107	B	STORAGE #2	
110	A	MEN'S RESTROOM	ACCESSIBLE/MEN
111	A	WOMEN'S RESTROOM	ACCESSIBLE/WOMEN



SIGNAGE PLAN

SCALE: 3/16"=1'-0"

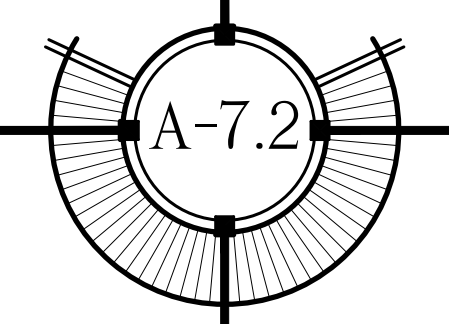
SEAL

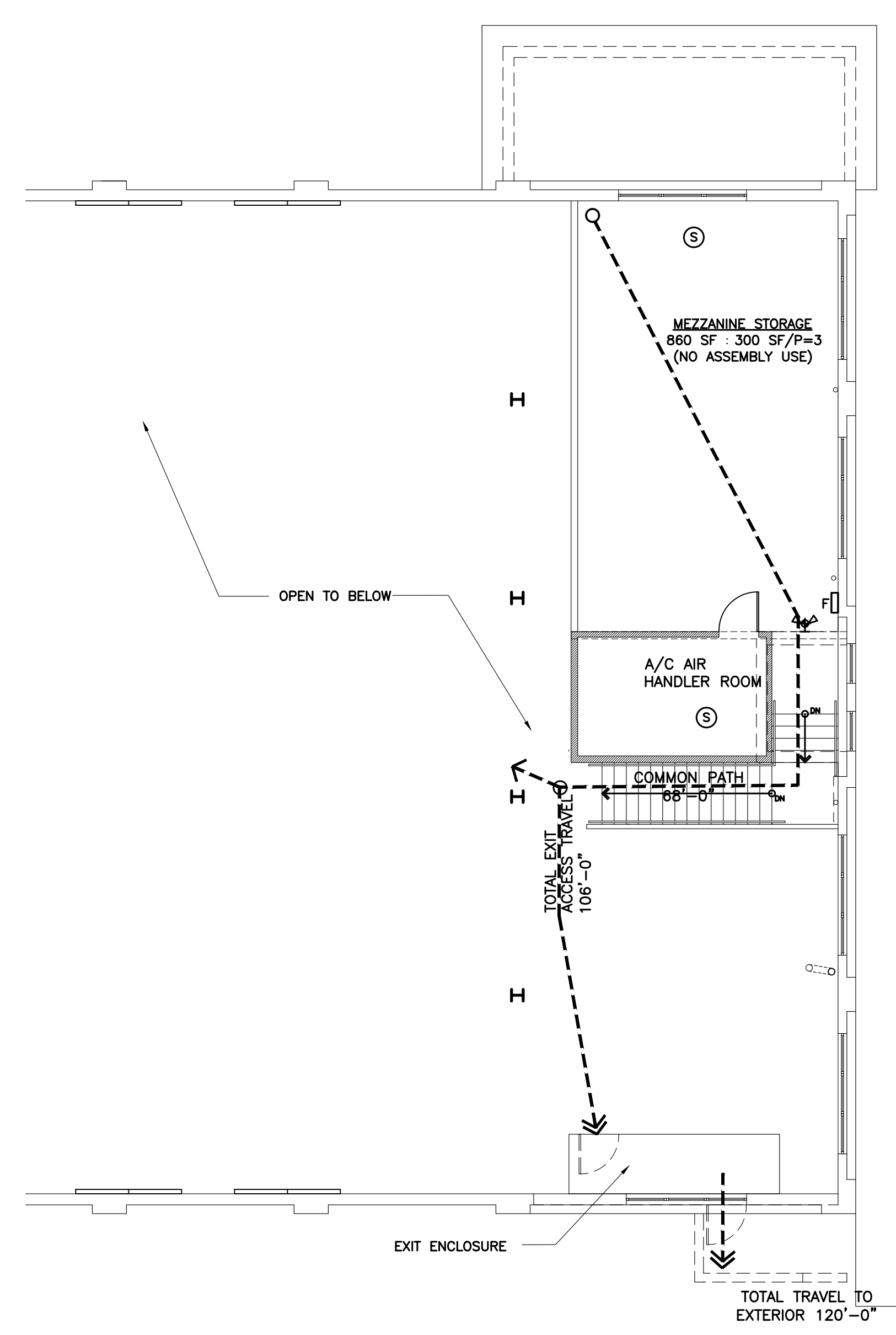
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

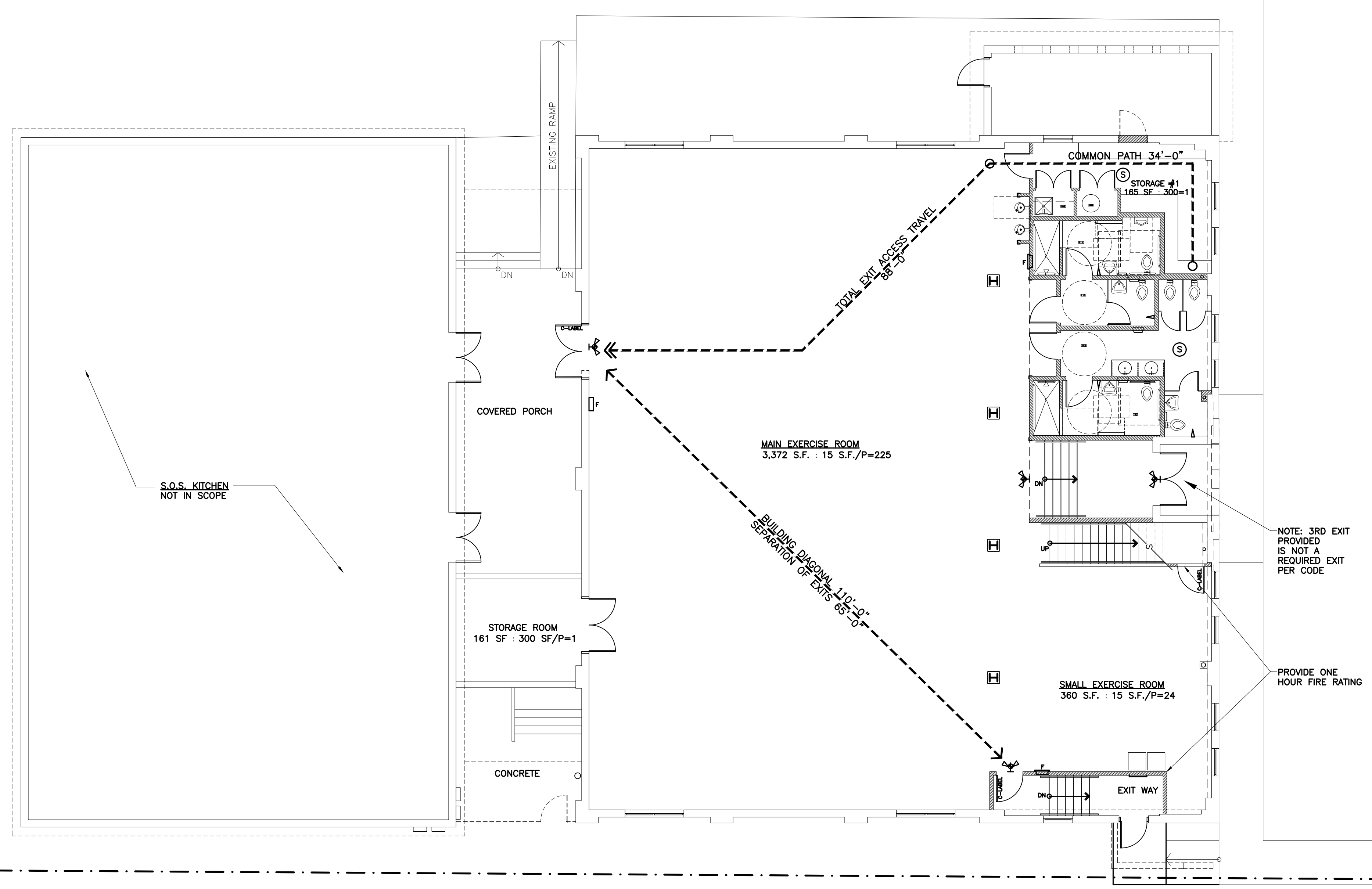
PROJECT NUMBER
1702





PROPOSED LIFE SAFETY MEZZANINE FLOOR PLAN

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



PROPOSED LIFE SAFETY 1ST FLOOR PLAN

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

CONSTRUCTION TYPE = III B, NON-SPRINKLERED
OCCUPANCY TYPE = A-4 (INDOOR SPORTING EVENTS AND ACTIVITIES)
OCCUPANCY COUNT (TABLE 1004.1.2)

ASSEMBLY W/OUT FIXED SEATS (UNCONCENTRATED) = 15 S.F./PERSON
NET
STORAGE = 300 S.F./PERSON

MAIN EXERCISE ROOM	= 3,375 S.F./15	= 225 PEOPLE
SMALL EXERCISE ROOM	= 360 S.F./15	= 24 PEOPLE
LOWER LEVEL STORAGE	= 326 S.F./300	= 2 PEOPLE
MEZZANINE STORAGE	= 860 S.F./300	= 3 PEOPLE
TOTAL = 254 PEOPLE		

LIFE SAFETY LEGEND

	EXIT LIGHT
	COMBO EXIT LIGHT AND EMERGENCY LIGHT
	SMOKE DETECTOR
	STROBE
	FIRE EXTINGUISHER AND CABINET
	NEW 1-HR RATED WALL ASSEMBLY

NOTE: 3RD EXIT PROVIDED IS NOT A REQUIRED EXIT PER CODE

PROVIDE ONE HOUR FIRE RATING

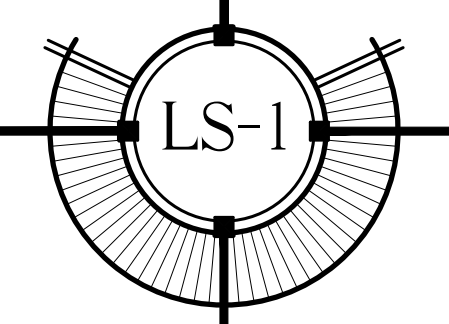
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
JW

PROJECT NUMBER
1702



GENERAL NOTES

- 100. DESIGN CRITERIA
100.1 DESIGN BUILDING CODE:
A. FLORIDA BUILDING CODE, SIXTH EDITION (2017)
100.2 GRAVITY LOADS:
A. FLOOR LIVE LOADS:
1. GROUND FLOOR 125 PSF
2. STORAGE 100 PSF
3. MECHANICAL 100 PSF
4. STAIRS 100 PSF
B. ROOF LIVE LOADS:
1. FLAT ROOF 20 PSF
100.3 LATERAL LOADS:
A. WIND LOADS (IN ACCORDANCE WITH DESIGN BUILDING CODE PER GENERAL NOTE 100.1):
1. ULTIMATE DESIGN WIND SPEED (3 SECOND GUST), Vu11 = 180 MPH
2. NOMINAL DESIGN WIND SPEED (3 SECOND GUST), Vasd = 140 MPH
3. RISK CATEGORY = II
4. EXPOSURE CATEGORY = C
5. ENCLOSURE CLASSIFICATION = ENCLOSED
6. INTERNAL PRESSURE COEFFICIENT (Gcpi) = +/- 0.18
7. COMPONENTS AND CLADDING PRESSURES: SEE "COMPONENTS AND CLADDING WIND LOADS" TABLE AND "COMPONENTS AND CLADDING WIND PRESSURE DIAGRAM"
110. GENERAL
110.1 THESE DRAWINGS HAVE BEEN PRODUCED ENTIRELY ON ATLANTIC ENGINEERING SERVICES CAD SYSTEM. ANY OTHER LINES OR SYMBOLS, OTHER THAN PROFESSIONAL STAMPS AND SIGNATURES, HAVE BEEN MADE WITHOUT THE AUTHORIZATION OF ATLANTIC ENGINEERING SERVICES AND ARE INVALID.
110.2 THE STRUCTURAL DRAWINGS SHALL GOVERN THE WORK FOR ALL STRUCTURAL FEATURES. UNLESS NOTED OTHERWISE, THE ARCHITECTURAL DRAWINGS SHALL GOVERN THE WORK FOR ALL DIMENSIONS.
110.3 DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS. ONLY DIMENSIONS INDICATED ON DRAWINGS MAY BE USED TO ESTABLISH THE LOCATION AND EXTENT OF STRUCTURAL WORK. IF A REQUIRED DIMENSION IS NOT FURNISHED ON DRAWINGS, THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION TO OBTAIN THE DIMENSION.
110.4 UNLESS OTHERWISE INDICATED, PROVIDE EQUAL SPACING OF STRUCTURAL COMPONENTS BETWEEN OVERALL DIMENSIONS INDICATED ON DRAWINGS.
110.5 THE METHOD AND FREQUENCY OF ATTACHING MECHANICAL EQUIPMENT UNITS, ETC., TO THE STRUCTURAL ELEMENTS SHALL BE SUBJECT TO THE ENGINEER'S REVIEW AND APPROVAL.
110.6 UNLESS OTHERWISE INDICATED, STRUCTURAL COMPONENTS SUPPORTING MECHANICAL EQUIPMENT HAVE NOT BEEN DESIGNED FOR THE VIBRATIONAL EFFECTS OF THE EQUIPMENT. THE CONTRACTOR SHALL PROVIDE VIBRATION ISOLATORS FOR ANY MECHANICAL EQUIPMENT MOUNTED TO THE STRUCTURE IN ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
110.7 THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ETC., AND SHALL NOTIFY THE ARCHITECT AND ALL DISCREPANCIES, ADDITIONAL INFORMATION, ETC., BEFORE BEGINNING THE WORK.
110.8 THE CONTRACTOR SHALL USE EXTREME CAUTION IN THE DEMOLITION OF EXISTING STRUCTURES. SUCH DEMOLITION SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL EXISTING STRUCTURES TO REMAIN. PROVIDE SHORING AS REQUIRED.
110.9 STRUCTURAL WORK SHALL BE INSPECTED IN ACCORDANCE WITH ALL LOCAL ORDINANCES. THE OWNER SHALL ENGAGE AN EXPERIENCED, QUALIFIED INSPECTION AGENCY, SUBJECT TO THE REVIEW OF THE ARCHITECT, TO PERFORM ALL INSPECTION WORK, AS REQUIRED.
110.10 STRUCTURAL WORK SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL NOTES. THE CONTRACTOR SHALL ENGAGE AN EXPERIENCED, QUALIFIED TESTING AGENCY, SUBJECT TO THE REVIEW OF THE ARCHITECT, TO PERFORM ALL TESTING WORK, AS REQUIRED.
120. SHOP DRAWINGS
120.1 THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY ATLANTIC ENGINEERING SERVICES AND THE PROJECT ARCHITECT. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL COMPONENTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
A. REINFORCING STEEL FOR CONCRETE AND MASONRY
B. CONCRETE MIX DESIGN
C. CONCRETE AND/OR MASONRY POST-INSTALLED ANCHORS
D. COLD FORMED STEEL FABRICATIONS UTILIZED IN WOOD-TO-WOOD CONNECTIONS.
120.2 SHOP DRAWINGS TO BE SUBMITTED SHALL PROVIDE COMPLETE INFORMATION FOR THE PRODUCTS OR COMPONENTS TO BE SUPPLIED. SUBMITTAL INFORMATION SHALL INCLUDE, BUT NOT BE LIMITED TO: MEMBER SIZES AND DIMENSIONS; GRADES OF MATERIAL FURNISHED; MATERIAL PREPARATION REQUIRED; MATERIAL FINISH AND MATERIAL COATINGS TO BE FURNISHED; INFORMATION REGARDING CUTS, COPES, AND HOLES REQUIRED FOR OTHER TRADES; END CONNECTIONS; CAMBER AND OTHER DEVIATION FROM LINE; SPECIAL ERECTION AND/OR INSTALLATION PROCEDURES, INCLUDING REQUIREMENTS FOR TEMPORARY STABILIZATION.
120.3 ALL SHOP DRAWING RESUBMITTALS AND RECORD COPY SUBMITTALS SHALL HAVE ALL REVISIONS SUBSEQUENT TO THE PREVIOUS SUBMISSION CLOUDED OR OTHERWISE IDENTIFIED ON THE RESUBMITTED SHEETS. RESUBMITTALS AND RECORD COPY SUBMITTALS WITHOUT IDENTIFICATION OF REVISIONS WILL BE REJECTED WITHOUT REVIEW.
120.4 THE CONTRACTOR SHALL NOT DIRECTLY INCORPORATE THE STRUCTURAL DRAWINGS, OR PORTIONS THEREOF, INTO SHOP DRAWINGS OR ERECTION DRAWINGS TO BE SUBMITTED FOR THIS PROJECT WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION OF ATLANTIC ENGINEERING SERVICES. SUBMITTED SHOP DRAWINGS WHICH CONTAIN COPIES OR REPRODUCTIONS OF ANY PORTION OF THE STRUCTURAL DRAWINGS WITHOUT THE EXPRESS WRITTEN PERMISSION OF ATLANTIC ENGINEERING SERVICES WILL BE RETURNED REJECTED. PERMISSION FOR A SPECIFIC CONTRACTOR OR SUB-CONTRACTOR TO USE PORTIONS OF THE STRUCTURAL DRAWINGS IN THEIR PREPARATION OF SHOP DRAWINGS REQUIRES THAT CONTRACTOR OR SUB-CONTRACTOR TO ENTER INTO A WRITTEN AGREEMENT WITH ATLANTIC ENGINEERING SERVICES AND TO PAY A SERVICE FEE. SUCH AGREEMENT IS NON-TRANSFERABLE AND IS EXTENDED ONLY TO THAT CONTRACTOR FOR THE DURATION OF THIS PROJECT.

- 120.5 THE CONTRACTOR SHALL SUBMIT ELECTRONIC OR PRINTED COPIES OF SHOP DRAWINGS (ELECTRONIC COPIES ARE PREFERRED), COPIES SHALL BE SUBMITTED TO ATLANTIC ENGINEERING SERVICES IN PDF FILE FORMAT (ISO 32000-1) WITH ONE (1) ELECTRONIC FILE PER SUBMISSION. ATLANTIC ENGINEERING SERVICES WILL REVIEW, ANNOTATE, AND RETURN ONE (1) FILE TO THE ARCHITECT FOR THEIR REVIEW AND DISTRIBUTION TO THE CONTRACTOR.
120.6 THE REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS FOR THIS PROJECT IS FOR CONFORMANCE WITH THE GENERAL CONCEPTS AND FOR GENERAL COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. COMMENTS REGARDING THESE SUBMITTALS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.
200. FOUNDATIONS - GENERAL
200.1 FOUNDATIONS HAVE BEEN DESIGNED UTILIZING THE FOLLOWING "PRESUMPTIVE LOAD BEARING VALUES OF SOILS" INDICATED IN SECTION 1806 OF THE 2009 INTERNATIONAL BUILDING CODE:
A. ALLOWABLE FOUNDATION PRESSURE = 2000 PSF
B. ALLOWABLE LATERAL BEARING = 150 PSF/FT
C. COEFFICIENT OF FRICTION/SLIDING = 0.25
200.2 NO BACKFILLING AGAINST FOUNDATION WALLS SHALL BE PERMITTED UNTIL SUPPORTING STRUCTURAL ELEMENTS HAVE BEEN PLACED AND HAVE BECOME CAPABLE OF FURNISHING THE NECESSARY SUPPORT FOR THE WALLS. PROVIDE TEMPORARY SHORING WHERE REQUIRED, WHERE BACKFILL IS REQUIRED ON BOTH SIDES OF THE WALL, BACKFILL BOTH SIDES SIMULTANEOUSLY WITH A GRADE DIFFERENCE NOT TO EXCEED 2'-0" AT ANY TIME. CONTRACTOR SHALL USE EXTREME CAUTION DURING BACKFILLING TO PREVENT DAMAGE TO FOUNDATION WALLS. THE USE OF HEAVY EQUIPMENT FOR BACKFILLING IS NOT RECOMMENDED.
200.3 THE CONTRACTOR SHALL OBSERVE WATER CONDITIONS AT THE SITE AND TAKE THE NECESSARY PRECAUTIONS TO ENSURE THAT THE FOUNDATION EXCAVATIONS REMAIN DRY DURING CONSTRUCTION. PROVIDE FOR DEWATERING AS NECESSARY.
200.4 THE CONTRACTOR SHALL USE EXTREME CAUTION DURING EXCAVATION. SUCH EXCAVATION SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL EXISTING STRUCTURES TO REMAIN. PROVIDE TEMPORARY SHORING AS REQUIRED.
200.5 CONCRETE SLABS ON GRADE HAVE BEEN DESIGNED TO BEAR ON COMPACTED SUBGRADE SOILS OR PROPERLY COMPACTED FILL AS RECOMMENDED BY A LICENSED GEOTECHNICAL ENGINEER SUBJECT TO THE APPROVAL OF THE ARCHITECT AND ENGAGED BY THE CONTRACTOR.
200.6 PROVIDE FLEXIBLE SHEET MEMBRANE VAPOR RETARDER BETWEEN THE CONCRETE FLOOR SLAB AND THE COMPACTED BEARING SOILS. VAPOR RETARDER SHALL BE IN ACCORDANCE WITH ASTM E1745, CLASS A. INSTALL VAPOR RETARDER PER ASTM E1643. LAP JOINTS 6 INCHES AND SEAL WITH RECOMMENDED ADHESIVE TAPE.
210. SHALLOW FOUNDATIONS
210.1 SPREAD FOOTINGS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED ROCK OR PROPERLY COMPACTED FILL HAVING AN ALLOWABLE BEARING CAPACITY OF 2000 PSF, AS PER NOTE 200.1.
210.2 ELEVATIONS SHOWN ON THE DRAWINGS AT WHICH FOUNDATIONS ARE TO BEAR ARE APPROXIMATE. MATERIAL ON WHICH FOUNDATIONS ARE TO BEAR SHALL BE AT LEAST THE ABOVE NOTED CAPACITY. ALL EXTERIOR FOUNDATIONS SHALL BE A MINIMUM OF 12" BELOW FINISHED GRADE.
210.3 THE OWNER SHALL RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER, SUBJECT TO THE APPROVAL OF THE ARCHITECT, TO INSPECT THE FOUNDATIONS, BEARING LEVELS, ETC., AND VERIFY THAT THE MATERIAL ON WHICH FOUNDATIONS BEAR HAS AT LEAST THE ABOVE NOTED CAPACITY.
205. SITE NOTES
205.1 REMOVE ALL TOPSOIL, VEGETATION, ORGANIC MATERIAL AND DELETERIOUS MATERIAL. STRIPPING DEPTHS ARE ANTICIPATED TO RANGE BETWEEN 0" AND 6".
205.2 AFTER STRIPPING AND SITE CLEARING, COMPACT THE EXPOSED SOILS WITH A LIGHTWEIGHT COMPACTOR, LIGHTWEIGHT SLED OR ROLLER UNTIL A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557) HAS BEEN OBTAINED TO A DEPTH OF AT LEAST 12" BELOW THE COMPACTED SURFACE.
205.3 STRUCTURAL FILL SHALL CONSIST OF AN INORGANIC, NON-PLASTIC, GRANULAR SOIL CONTAINING LESS THAN 10% MATERIAL PASSING THE NO. 200 MESH SIEVE. PLACE STRUCTURAL FILL IN LIFTS NOT EXCEEDING 6" IN LOOSE THICKNESS AND COMPACT EACH LIFT THOROUGHLY WITH THE LIGHTWEIGHT COMPACTOR, LIGHTWEIGHT SLED OR ROLLER. COMPACTION SHALL BE CONTINUED UNTIL A DENSITY OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY IS OBTAINED IN EACH LIFT.
205.4 THE UPPER 12" OF ALL SANDY BEARING SOILS SHALL BE COMPACTED TO AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. COMPACTION OR RE-COMPACTION OF SANDY BEARING SOILS SHALL BE DONE WITH A RELATIVELY LIGHTWEIGHT SLED OR ROLLER. WHEN USING A LIGHTWEIGHT COMPACTOR, INDIVIDUAL FILL LIFTS SHALL BE 6" OR LESS IN LOOSE THICKNESS.
205.5 TESTING: A MINIMUM OF ONE IN-PLACE DENSITY TEST PER 1500 SQUARE FEET PER LAYER OF COMPACTED SURFACE.
300. REINFORCED CONCRETE
300.1 ALL REINFORCED CONCRETE WORK SHALL BE IN CONFORMANCE WITH THE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318, LATEST EDITION) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301, LATEST EDITION) OF THE AMERICAN CONCRETE INSTITUTE.
300.2 MINIMUM DESIGN COMPRESSION STRENGTH (F'c) REQUIRED AT 28 DAYS:
A. SLABS ON GRADE 4000 PSI
300.3 MAXIMUM WATER TO CEMENTITIOUS MATERIALS RATIO:
A. SLABS ON GRADE 0.56
300.4 ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (MINIMUM 144 PCF) WITH ALL CEMENT CONFORMING TO ASTM C150, TYPE I, OR III. MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2" FOR FOUNDATIONS AND 3/4" FOR WALLS AND SLABS, CONFORMING TO ASTM C33.
300.5 REINFORCEMENT
A. DEFORMED BARS ASTM A615, GRADE 60
B. DEFORMED BARS (WELDABLE) ASTM A706, GRADE 60
C. WELDED WIRE REINFORCING ASTM A1064

- 300.6 COVER FOR CAST-IN-PLACE CONCRETE REINF., UNLESS OTHERWISE SHOWN ON DRAWINGS, SHALL BE AS FOLLOWS (REFER TO ACI 117 FOR ALLOWABLE CONSTRUCTION TOLERANCES):
A. COLUMNS & PEDESTALS (OVER VERT. REINF.) 2"
B. BEAMS (OVER MAIN REINF.) 2"
C. SLABS CAST AGAINST EARTH 2" FOR 4" SLABS; DEPTH/3 FOR SLABS GREATER THAN 4".
300.7 SPLICES IN REINFORCEMENT, WHERE PERMITTED, SHALL BE AS FOLLOWS:
A. WELDED WIRE REINFORCING 8"
B. ALL OTHERS CLASS "B" TENSION, CASE "1" MINIMUM, UNO
300.8 CLASS "B", CASE "1" TENSION SPLICES IN INCHES, SHALL BE AS FOLLOWS:
SIZE TOP BARS ALL OTHERS
#3 (#10) 24 19
#4 (#13) 32 25
#5 (#16) 40 31
#6 (#19) 48 37
300.9 SPLICES IN TOP REINFORCEMENT SHALL BE LOCATED AT MIDSPAN AND SPLICES IN BOTTOM REINFORCEMENT SHALL BE LOCATED OVER SUPPORTS, UNLESS NOTED OTHERWISE.
300.10 TOP BARS IN BEAMS SHALL TERMINATE IN A CLASS "B" TENSION SPLICE OR HOOK AT DISCONTINUOUS END.
300.11 ALL REINFORCING SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES DURING PLACEMENT OF CONCRETE. REINFORCING SUPPORTS FOR ALL EXPOSED CONCRETE SHALL BE GALVANIZED WITH PLASTIC COATED FEET. ALL WELDED WIRE REINFORCING SHALL BE CHAIRED.
300.12 ALL TIES/STIRRUPS SHALL HAVE 135 DEGREE BENDS UNLESS OTHERWISE APPROVED BY ENGINEER.
300.13 PROVIDE 1/2" PREMOULDED EXPANSION MATERIAL WHERE SLAB ON GRADE IS POURED AROUND COLUMNS AND AGAINST WALLS UNLESS OTHERWISE SHOWN ON DRAWINGS.
300.14 CONTRACTION JOINTS FOR SLABS ON GRADE SHALL BE SPACED AS INDICATED ON THE SLAB PLAN OR NO MORE THAN 16'-0" ON CENTER WHEN NOT INDICATED ON DRAWINGS. PANELS FORMED BY JOINTS OR SLAB EDGES SHALL BE AS SQUARE AS POSSIBLE WITH A LENGTH-TO-WIDTH RATIO NOT TO EXCEED 1.5.
300.15 CONTRACTOR SHALL VERIFY DIMENSIONS AND LOCATIONS OF ALL SLOTS, PIPE SLEEVES, ETC., AS REQUIRED FOR MECHANICAL TRADES BEFORE CONCRETE IS PLACED.
300.16 PRIOR TO CONCRETE PLACEMENT, THE CONTRACTOR SHALL SUBMIT A CONCRETE MIX DESIGN PREPARED IN ACCORDANCE WITH ACI-318 CHAPTER 5 TO THE STRUCTURAL ENGINEER FOR REVIEW.
300.17 THE CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING LABORATORY, SUBJECT TO THE APPROVAL OF THE OWNER, TO SAMPLE AND TEST CONCRETE AT THE POINT OF PLACEMENT PER ACI 301. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE OWNER AND ENGINEER. TESTING SHALL INCLUDE AT LEAST THE FOLLOWING:
A. RECORD THE TEMPERATURE AND PERFORM ONE SLUMP TEST PER ASTM C 143 FOR EACH 10 CY OF CONCRETE PLACED.
B. CAST AND LABORATORY CURE SIX (6) CONCRETE COMPRESSIVE STRENGTH TEST CYLINDERS IN ACCORDANCE WITH ASTM C 31 FOR EACH 50 CY OF EACH CLASS OF CONCRETE OR FRACTION THEREOF PLACED PER DAY. TEST (IN ACCORDANCE WITH ASTM C 39) TWO (2) CYLINDERS AT 7 DAYS, TWO (2) CYLINDERS AT 28 DAYS AND RETAIN TWO (2) CYLINDERS FOR TESTING AT 56 DAYS IN THE EVENT THE 28 DAY CYLINDERS DO NOT MEET THE SPECIFIED CONCRETE COMPRESSIVE STRENGTH.
350. CONCRETE/MASONRY ANCHORS
350.1 ALL ADHESIVE FOR ANCHORING TO CONCRETE SHALL BE "HILTI HIT-HY 200 ADHESIVE ANCHORS" AS MANUFACTURED BY HILTI FASTENING SYSTEMS, INC. (OR APPROVED EQUIVALENT).
350.2 THE "HAS-E THREADED ROD" SHALL CONFORM TO ISO 898 CLASS 5.8 WITH A MINIMUM TENSILE STRENGTH OF 72.5 KSI. THE NUT SHALL CONFORM TO SAE J995 GRADE 5.
350.3 THE "HIT-Z ANCHOR ROD" SHALL CONFORM TO AISI 1038 WITH A MINIMUM TENSILE STRENGTH OF 94.2 KSI. THE NUT SHALL CONFORM TO ASTM A563 AND ANSI B18.2. HIT-Z THREADED RODS MAY BE USED IN UN-CLEANED HOLES IN ACCORDANCE WITH HILTI SPECIFICATIONS.
350.4 ALL ADHESIVE ANCHORS FOR ANCHORING TO GROUT-FILLED MASONRY SHALL BE "HILTI HIT-HY 70 ADHESIVE ANCHORS" AS MANUFACTURED BY HILTI FASTENING SYSTEMS, INC. (OR EQUAL).
350.5 ALL ADHESIVE ANCHORS FOR ANCHORING TO HOLLOW MASONRY SHALL BE "HILTI HIT-HY 70 ADHESIVE ANCHORS" WITH PLASTIC MESH SCREEN TUBES INDICATED ON THE DRAWINGS AND MANUFACTURED BY HILTI FASTENING SYSTEMS, INC. (OR APPROVED EQUIVALENT).
350.6 THE SPACING AND MINIMUM EMBEDMENT OF POST-INSTALLED ANCHORS SHALL BE AS INDICATED ON DRAWINGS. THE INSTALLATION OF THE ANCHORS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
420. MASONRY
420.1 ALL MASONRY WORK SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 5) AND THE "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 6) OF THE MASONRY SOCIETY.
420.2 MORTAR SHALL CONFORM TO THE PROPORTION SPECIFICATION OF ASTM C270, TYPE M OR S. PROVIDE TYPE M MORTAR AT ALL HIGH STRENGTH MASONRY NOTED AS F'm = 2500 PSI OR GREATER. PROVIDE TYPE S MORTAR AT ALL STRUCTURAL MASONRY AND REINFORCED MASONRY UNLESS NOTED OTHERWISE.
420.3 GROUT SHALL CONFORM TO ASTM C476 AND AS FOLLOWS:
A. COMPRESSIVE STRENGTH (F'c) OF GROUT = F'm AS INDICATED BELOW BUT NO LESS THAN 2,000 PSI.
B. SLUMP OF GROUT SHALL BE 8 TO 11 INCHES AS MEASURED ACCORDING TO ASTM C143.
C. MAX. AGGREGATE SIZE SHALL BE 3/8" (AGGREGATE GRADED TO PRODUCE FINE GROUT IN CONFORMANCE WITH ASTM C476 AND C404).
420.4 LIMIT CEMENTITIOUS MATERIALS IN MORTAR TO PORTLAND CEMENT CONFORMING TO ASTM C150 TYPE I, LIME CONFORMING TO ASTM C207; MORTAR CEMENT CONFORMING TO ASTM C1329; AND MASONRY CEMENT CONFORMING TO ASTM C91.

- 420.5 PROVIDE SOLID AND HOLLOW LOAD BEARING CONCRETE BLOCK UNITS CONFORMING TO ASTM C90. FURNISH CONCRETE BLOCK WITH NET AREA COMPRESSIVE STRENGTH AS SPECIFIED BY TABLE 2 OF TMS 602/ACI 530.1/ASCE 6, SECTION 1.4 B.2 BASED ON THE UNIT STRENGTH METHOD
420.6 MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH OF MASONRY (TO BE VERIFIED BY PRISM TESTING AS PER TMS 602/ACI 530.1/ASCE 6 AND ASTM C1314):
A. F'm 2000 PSI
420.7 HORIZONTAL JOINT REINFORCING FOR ALL EXTERIOR AND LOAD BEARING WALLS SHALL BE GALVANIZED TRUSS OR LADDER TYPE DUR-O-WAL, OR EQUIVALENT AS APPROVED BY THE ENGINEER WITH 2-9 GAUGE LONGITUDINAL WIRE AND 9 GAUGE CROSS WIRE, SPACED AT 16" CENTER TO CENTER, UNLESS NOTED OTHERWISE. PROVIDE ADDITIONAL LAYERS OF JOINT REINFORCEMENT IN THE FIRST TWO COURSES ABOVE AND BELOW A MASONRY OPENING. PROVIDE LAP AS RECOMMENDED BY MANUFACTURER WITH A MINIMUM OF 6". DISCONTINUE JOINT REINFORCING AT CONTROL JOINTS. PROVIDE "L" SHAPE AND "T" SHAPE DUR-O-WAL AT ALL INTERSECTION CORNERS WITH 8" MINIMUM LAP. SEE TYPICAL DETAILS.
420.8 FULL BED AND HEAD JOINTS SHALL BE USED.
420.9 GROUT SOLID ALL CELLS CONTAINING REINFORCING, AND WHERE INDICATED ON PLANS AND SECTIONS.
420.10 PROVIDE FINE GROUT PER ASTM C476 WHEN WIDTH OF GROUT SPACE IS LESS THAN 2". PROVIDE COARSE GROUT FOR GROUT SPACE WIDTHS 2" OR GREATER. PROVIDE FINE GROUT WHEN REINFORCING HAS LESS THAN 1/2" CLEARANCE.
420.11 DEFORMED BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60. PROVIDE LAP SPLICES PER THE TABLE BELOW. PROVIDE BAR SPACERS AS REQUIRED TO PROPERLY LOCATE REINFORCING.
#3 (#10) 15"
#4 (#13) 20"
#5 (#16) 25"
#6 (#19) 30"
420.12 MASONRY COURSING SHOWN IN SECTION IS APPROXIMATE. REFER TO PLANS AND ELEVATIONS FOR ACTUAL COURSING. COORDINATE ACTUAL COURSING REQUIREMENTS WITH ARCHITECTURAL DRAWINGS.
610. STRUCTURAL LUMBER
610.1 ALL STRUCTURAL LUMBER WORK SHALL BE IN ACCORDANCE WITH THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (NDS - LATEST EDITION) PUBLISHED BY THE AMERICAN WOOD COUNCIL.
610.2 ALL STRUCTURAL LUMBER SHALL BE AS A MINIMUM NO. 2 GRADE SOUTHERN PINE AND SHALL HAVE AT LEAST THE FOLLOWING MINIMUM ALLOWABLE DESIGN STRESSES (NOT INCORPORATING THE SIZE ADJUSTMENT FACTOR (CF)) AND MODULUS OF ELASTICITY AT A MAXIMUM MOISTURE CONTENT OF 19%:
A. Fb (BENDING) 750 PSI
B. Fv (SHEAR) 175 PSI
C. Fc (COMPRESSION) 1,250 PSI
D. Ft (TENSION) 450 PSI
E. E 1,400,000 PSI
610.3 ALL LUMBER SHALL COMPLY WITH PS 20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND WITH THE APPLICABLE RULE OF INSPECTION AGENCIES CERTIFIED BY AMERICAN LUMBER STANDARD. FACTORY-MARK EACH PIECE OF LUMBER WITH GRADE STAMP OF INSPECTION AGENCY ENDORSEMENT COMPLIANCE WITH GRADING RULE REQUIREMENTS.
610.4 STRUCTURAL STEEL PLATES, ANGLES, ETC., SHALL BE ASTM A36. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL MISCELLANEOUS METALS FOR REVIEW BY STRUCTURAL ENGINEER.
610.5 ALL BOLTS SHALL BE 5/8" DIAMETER ASTM A307 UNLESS NOTED OTHERWISE WITH 2 WASHERS PER BOLT UNLESS OTHERWISE NOTED.
610.6 EXTERIOR STUD WALLS SHALL BE CONTINUOUSLY BRIDGED AT MID-HEIGHT WITH WOOD BLOCKING.
610.7 PROVIDE CONTINUOUS DOUBLE 2X TOP PLATE TYPICAL AT ALL WOOD STUD WALLS. SPLICES IN TOP PLATE PLYS SHALL BE MADE OVER STUDS. PROVIDE CONTINUOUS SINGLE 2X BOTTOM PLATE AT ALL WOOD STUD WALLS. BOTTOM PLATES IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED UNLESS NOTED OTHERWISE.
610.8 NO CUTS, HOLES, OR COPES REQUIRED FOR OTHER TRADES IN STRUCTURAL WOOD FRAMING WILL BE PERMITTED WITHOUT PRIOR REVIEW AND APPROVAL OF ENGINEER AND ARCHITECT.
610.9 ONE ROW OF BRIDGING SHALL BE PROVIDED AT CENTER LINE OF JOIST SPAN OR AS INDICATED ON THE DRAWINGS.
610.10 PRESSURE TREAT WITH WATER-BORNE PRESERVATIVES ALL LUMBER FOR SILL PLATES AND OTHER WOOD WHICH MAY BE EXPOSED TO WEATHER OR EARTH. PRESSURE TREATMENT SHALL COMPLY WITH REQUIREMENTS OF AWWA STANDARDS C2 AND LP-22.
610.11 ALL "MICROLLAM" LUMBER SHALL BE MANUFACTURED BY THE TRUSS JOIST, A WEVERHAEUSER BUSINESS, OR AN APPROVED EQUIVALENT MANUFACTURER WITH AT LEAST THE FOLLOWING MINIMUM DESIGN STRESSES:
A. Fb (BENDING) 2600 PSI
B. Fv (SHEAR) 285 PSI
C. Fc (COMPRESSION PARALLEL TO GRAIN) 2500 PSI
D. Fc (COMPRESSION PERPENDICULAR TO GRAIN) 750 PSI
E. E 1,900,000 PSI
610.12 PROVIDE MINIMUM 4" BEARING FOR ALL "MICROLLAM" MEMBERS.
610.13 PROVIDE NAILING PATTERN IN COMPLIANCE WITH THE DESIGN BUILDING CODE'S RECOMMENDED FASTENING SCHEDULE WHEN JOINING TWO OR MORE FRAMING MEMBERS.
610.14 PROVIDE DOUBLE JOISTS OR SOLID BLOCKING AT 24" ON CENTER UNDER ALL PARTITIONS.
610.15 ALL WOOD JOISTS BEARING ENDS SHALL BE ANCHORED TO SUPPORT IN WOOD FRAMING WITH A TYPE A34 FRAMING ANCHOR, AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC.

- 610.16 ALL WOOD JOIST OR HEADERS ENDS WHICH FRAME INTO BEAMS SHALL BE HUNG WITH THE FOLLOWING JOISTS HANGERS, AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC., OR WITH APPROVED SUBSTITUTES WITH THE FOLLOWING WORKING LOAD CAPACITIES.
JOIST SIZE SIMPSON HANGER LOAD CAPACITY
2X6 U26 705 LBS.
2X8 U26 705 LBS.
2X10 U210 1,175 LBS.
2X12 U210 1,175 LBS.
1-3/4"x16" LVL IUS1 81/16 1,660 LBS.
2-2X6 HU26-2 990 LBS.
2-2X8 HU28-2 1,303 LBS.
2-2X10 HU210-2 1,666 LBS.
2-2X12 HU212-2 2,016 LBS.
2-1-3/4"x16" LVL IUS3.56/16 1,660 LBS.
610.17 ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTANCE AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE SPECIFIED DETAILS SHOWN ON THE DRAWINGS THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE DETAILS WHICH HE PROPOSES.
620. STRUCTURAL WOOD PANELS/WOOD SHEATHING
620.1 FURNISH PANELS THAT ARE EACH FACTORY MARKED WITH A CERTIFICATION STAMP EVIDENCING COMPLIANCE WITH GRADE AND SPAN RATING REQUIREMENTS. THE CENTER-TO-CENTER SPACING IN INCHES SHALL NOT EXCEED THE SPAN RATING STAMPED ON THE PANELS. INSTALLATION OF THE PANELS SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE APA.
620.2 PANELS SHALL COMPLY WITH USDOC PS-1 OR PS-2 AND APA PRP-108 AND SHALL MEET THE FOLLOWING REQUIREMENTS:
A. FLOORING:
1. MIN. THICKNESS = 3/4"
2. BOND CLASSIFICATION = EXPOSURE 1
3. GRADE = APA RATED SHEATHING STRUCTURAL I
4. SPAN RATING = AS REQUIRED TO SUIT JOIST/TRUSS SPACING
620.3 ALL FLOOR PANELS WHICH HAVE ANY EDGE OR FACE PERMANENTLY EXPOSED TO THE WEATHER SHALL BE CLASSED EXTERIOR, EXCEPT OPEN SOFFITS OR ROOF SHEATHING EXPOSED ON THE UNDERSIDE MAY BE CLASSED EXPOSURE 1.
620.4 ALL FLOOR PANELS SHALL HAVE THE END JOINTS LOCATED OVER SUPPORTS AND SHALL HAVE THE ROWS STAGGERED ONE HALF PANEL LENGTH FROM ADJACENT PANELS. PROVIDE 1/8" SPACE AT PANEL ENDS AND EDGES.
620.5 ALL PANELS INSTALLED IN FLOORS SHALL HAVE TONGUE-AND-GROOVE EDGES.
620.6 THE USE OF ORIENTED STRAND BOARD STRUCTURAL PANELS IN FLOOR CONSTRUCTION IS PROHIBITED UNLESS APPROVED BY THE ARCHITECT.
620.7 ALL FLOOR STRUCTURAL PANELS SHALL BE NAILED WITH 10D COMMON NAILS AT 6" ON CENTER AT ALL ENDS AND EDGES AND AT 10" ON CENTER AT ALL INTERMEDIATE SUPPORTS.
620.8 ALL PLYWOOD PANELS SHALL COMPLY WITH THE WIND UPLIFT REQUIREMENTS OF NM519 FOR FULLY-WIND-RESISTIVE ROOF ASSEMBLIES COMPLYING WITH UL CLASS 90 CLASSIFICATION.

WILLIAM P. HORN ARCHITECT, P.A.

915 EATON ST.

KEY WEST,

FLORIDA

33040

TEL (305) 296-8302

FAX (305) 296-1033

LICENSE NO.

AA 0003040

OLD GYMNASIUM BUILDING 1300 White Street Rear KEY WEST, FLORIDA.

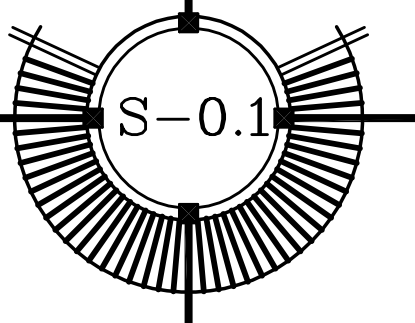
SEAL MARK J KEISTER PE 37435

DATE 05-15-17 HARC 01-23-18 REV 05-09-18 BID

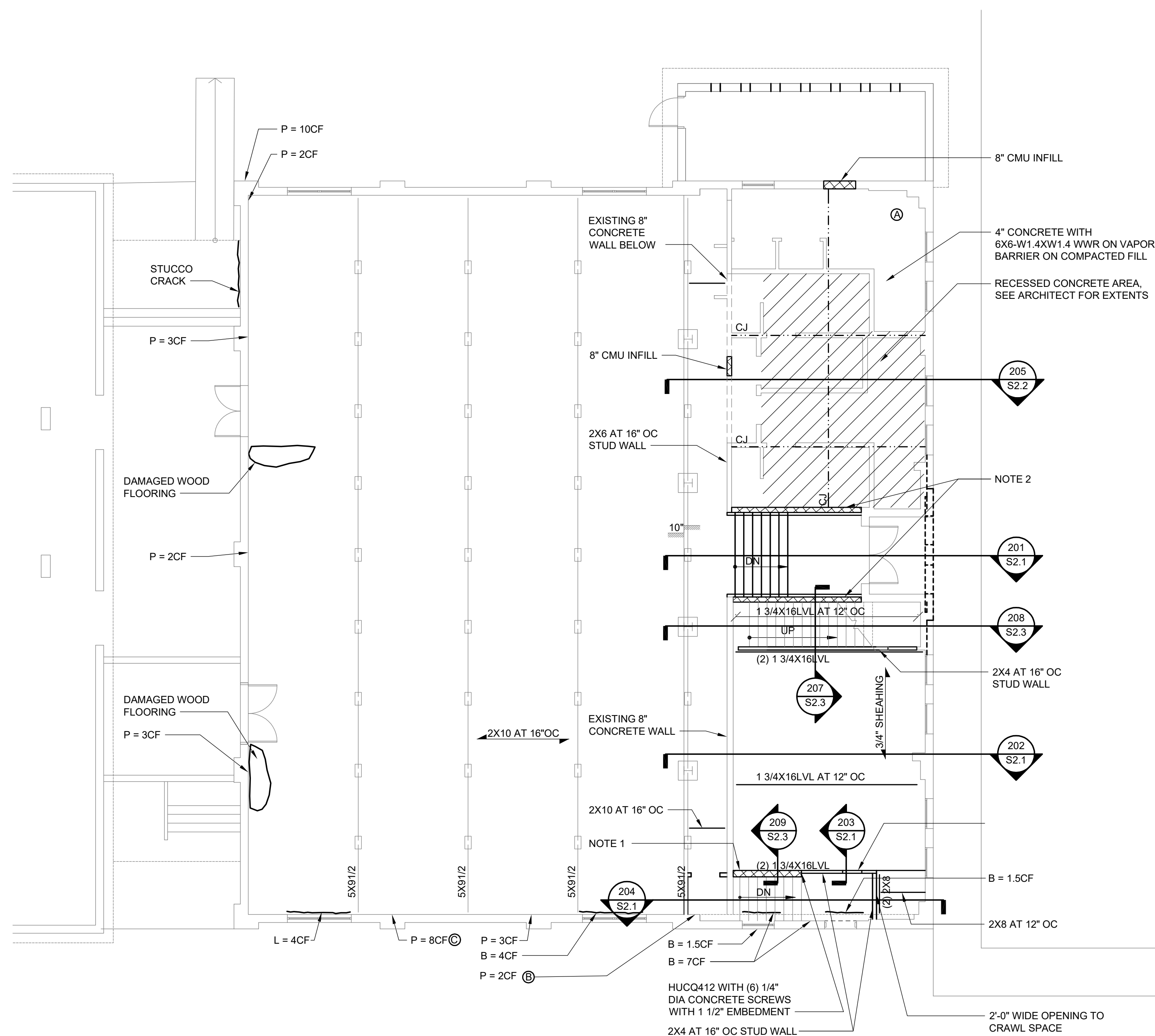
REVISIONS

DRAWN BY JEM

PROJECT NUMBER 1702



OLD GYMNASIUM BUILDING 1300 White Street Rear KEY WEST, FLORIDA



FIRST FLOOR PLAN

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

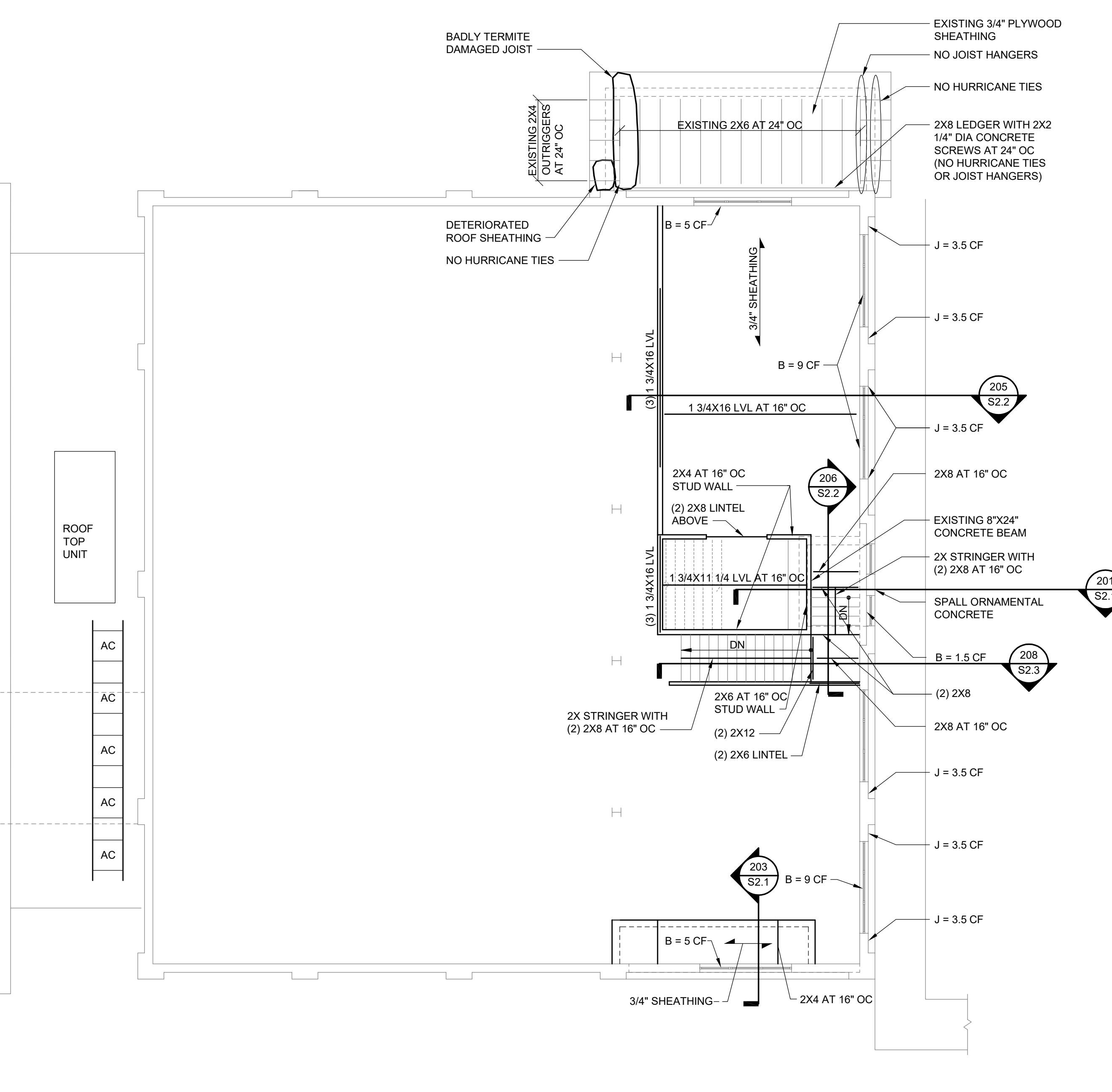
NOTES:

1. 2X4 AT 16" OC ON 8" CMU WALL WITH #5 AT 48" OC. DRILL AND ADHESIVE INTO EXISTING FOOTING WITH 6" EMBEDMENT. FILL ALL CELLS SOLID WITH 3000 PSI GROUT.
2. 2X6 AT 16" OC ON 8" CMU WALL WITH #5 AT 48" OC. DRILL AND ADHESIVE INTO EXISTING FOOTING WITH 6" EMBEDMENT. FILL ALL CELLS SOLID WITH 3000 PSI GROUT.

LEGEND:

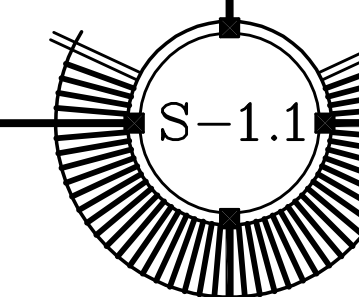
- P - CONCRETE PILASTER SPALL REPAIR PER B/SS.1.
- B - CONCRETE BEAM SPALL REPAIR PER C/SS.1.
- J - WINDOW JAMB SPALL REPAIR PER C/SS.1.

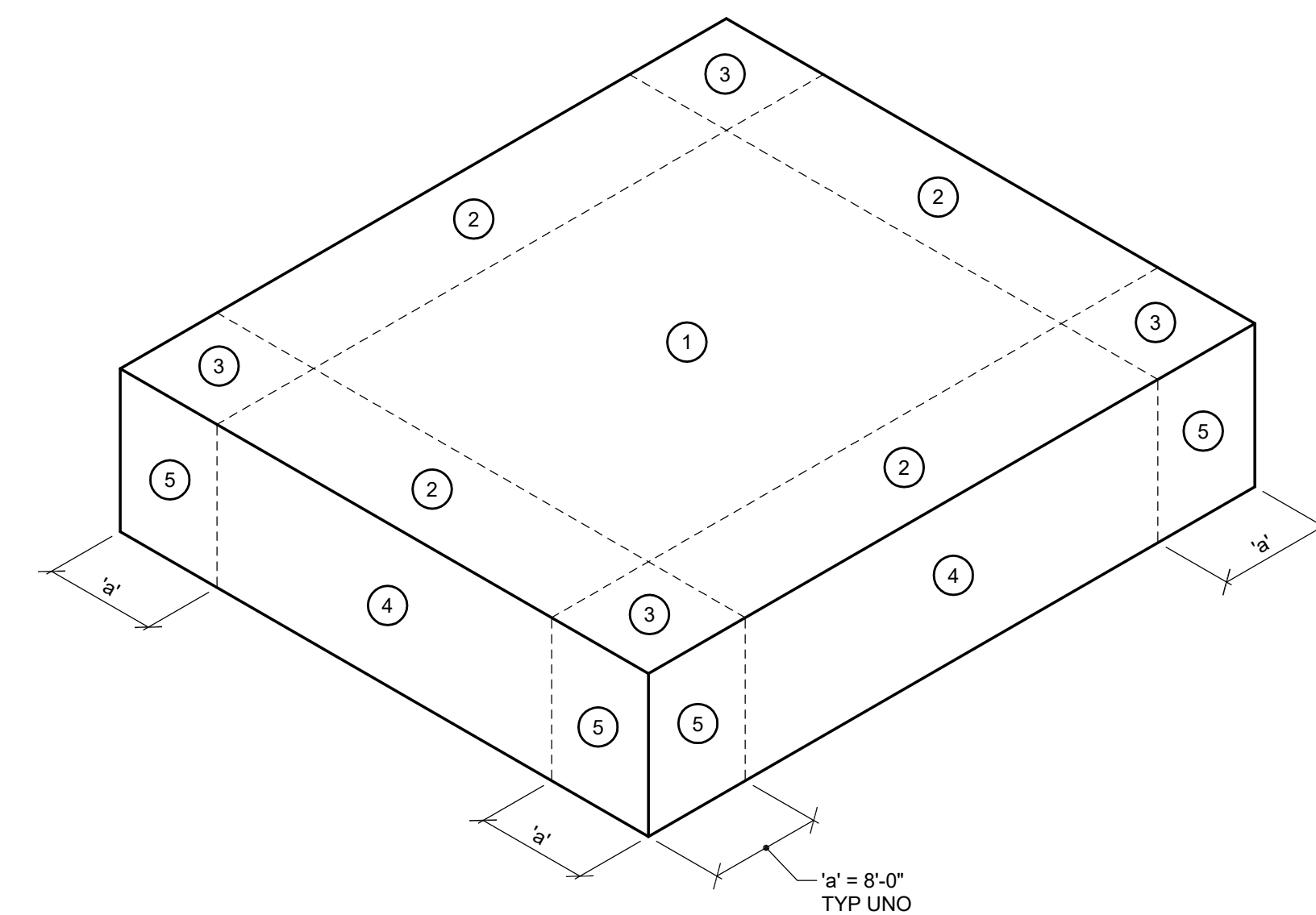
Ⓞ - CARBONATION TEST / CHLORIDE TEST LOCATION



UPPER LEVEL PLAN

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



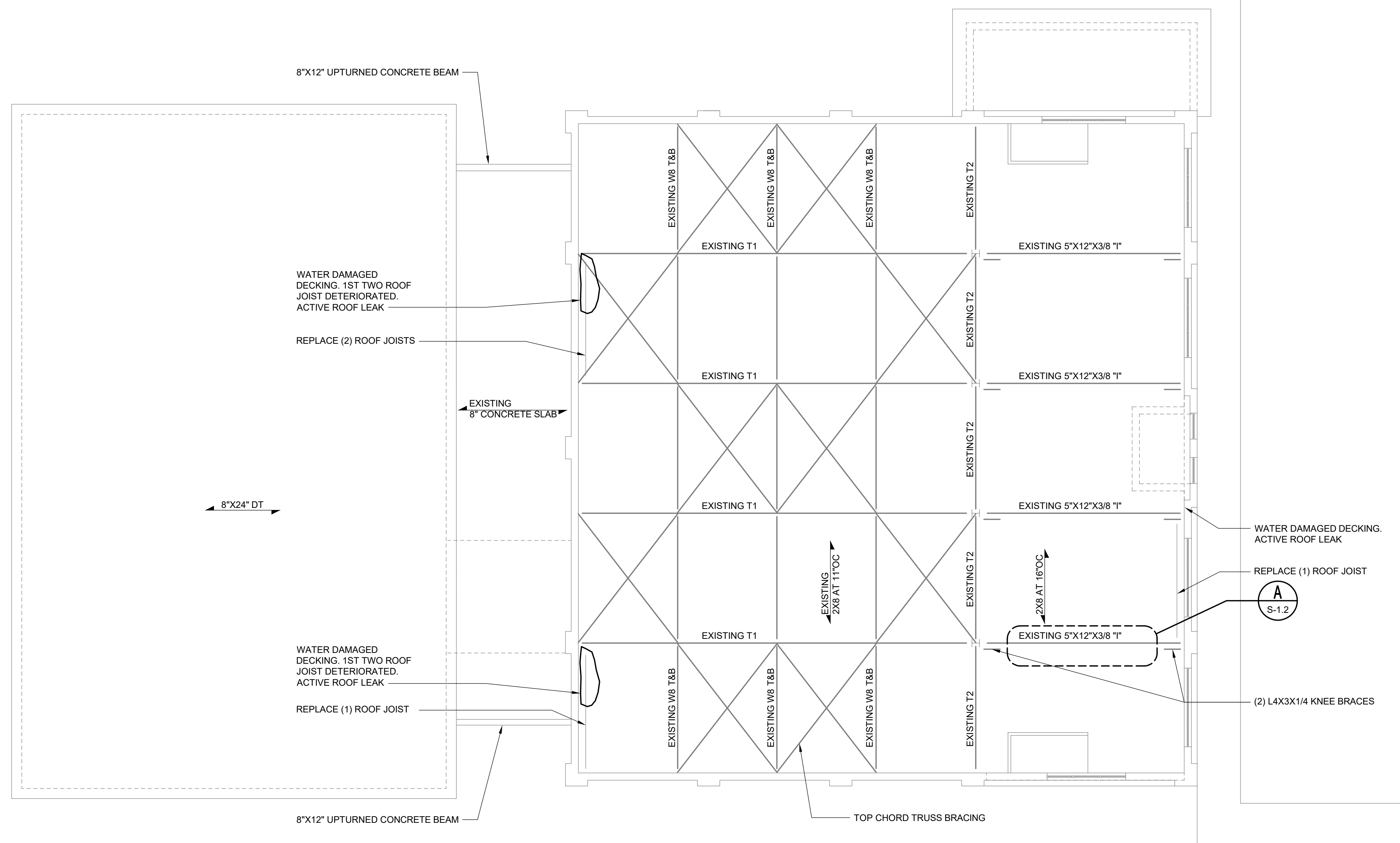


FLAT ROOF AND WALL ZONES

TRIBUTARY AREA (SF)	ROOF ZONE			WALL ZONE	
	1	2	3	4	5
10	+35/-84	+35/-141	+35/-212	+77/-84	+77/-103
20	+32/-82	+32/-126	+32/-176	+74/-80	+74/-96
50	+30/-79	+30/-106	+30/-128	+69/-76	+69/-87
100	+27/-77	+27/-91	+27/-91	+66/-72	+66/-80

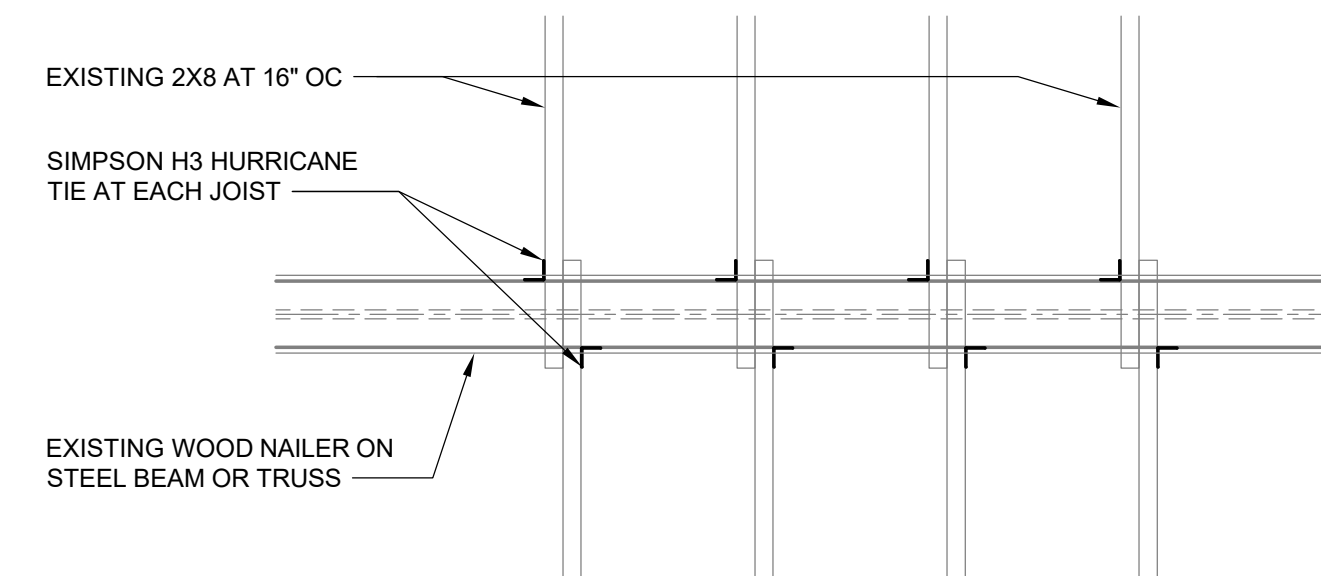
NOTES:

- ALL LOADS ARE IN POUNDS PER SQUARE FOOT (PSF).
- (+) DENOTES PRESSURE, (-) DENOTES SUCTIONS.
- "a" SHALL BE 10% OF LEAST HORIZ DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN 4% OF LEAST HORIZ DIMENSION OR 3'-0".
- "h" = MEAN ROOF HEIGHT.
- TABULATED COMPONENT AND CLADDING PRESSURES (P_{ult}) HAVE BEEN CALCULATED IN ACCORDANCE WITH THE DESIGN BUILDING CODE PER NOTE 100.1 BASED ON ULTIMATE DESIGN WIND SPEED (V_{ult}) PER NOTE 100.3A AND SHOULD BE USED IN CONJUNCTION WITH ASCE 7-10 LOAD COMBINATIONS. TABULATED PRESSURES CAN BE CONVERTED TO NOMINAL VALUES BY MULTIPLYING BY 0.6.



ROOF PLAN

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

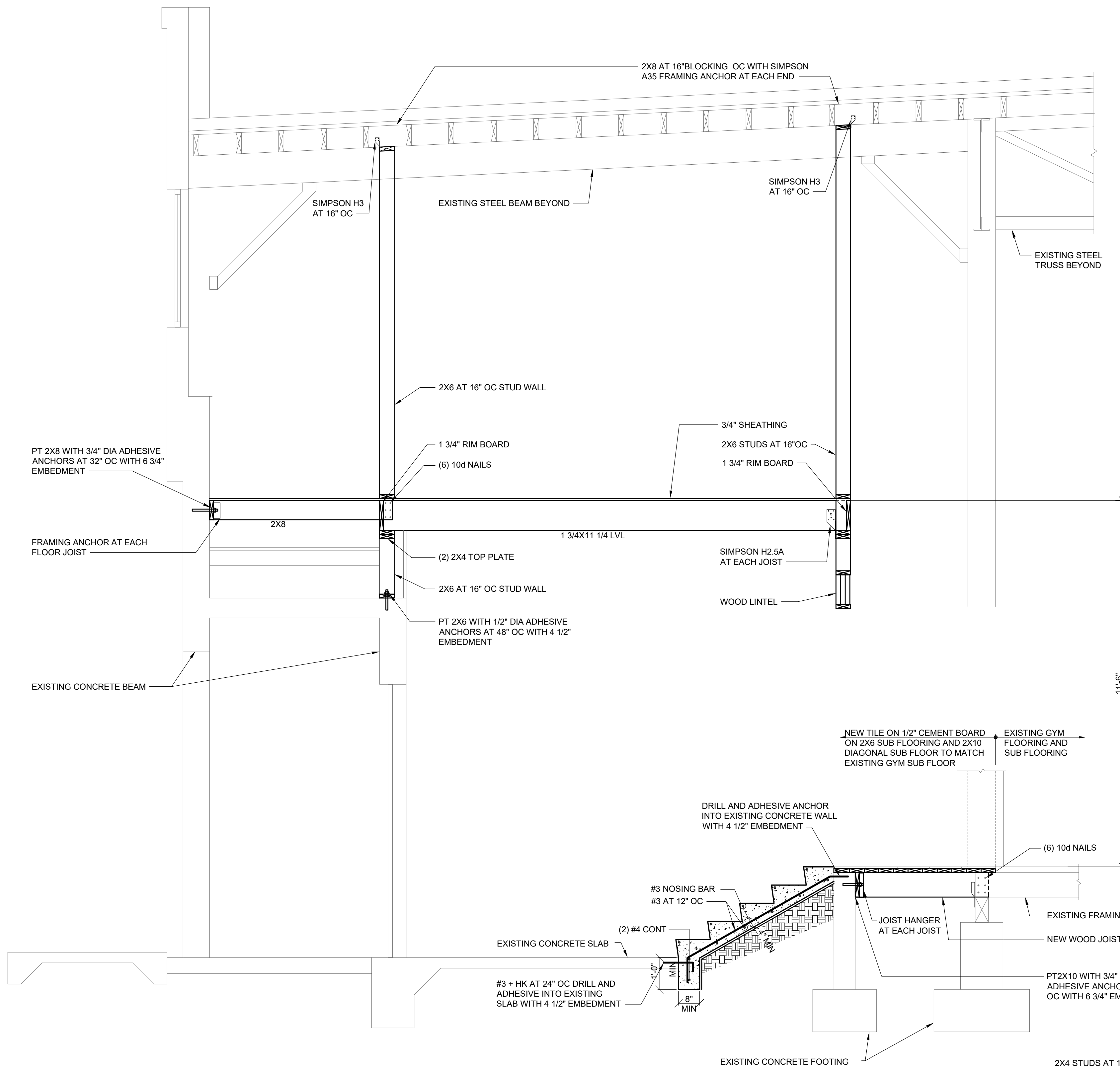


DETAIL

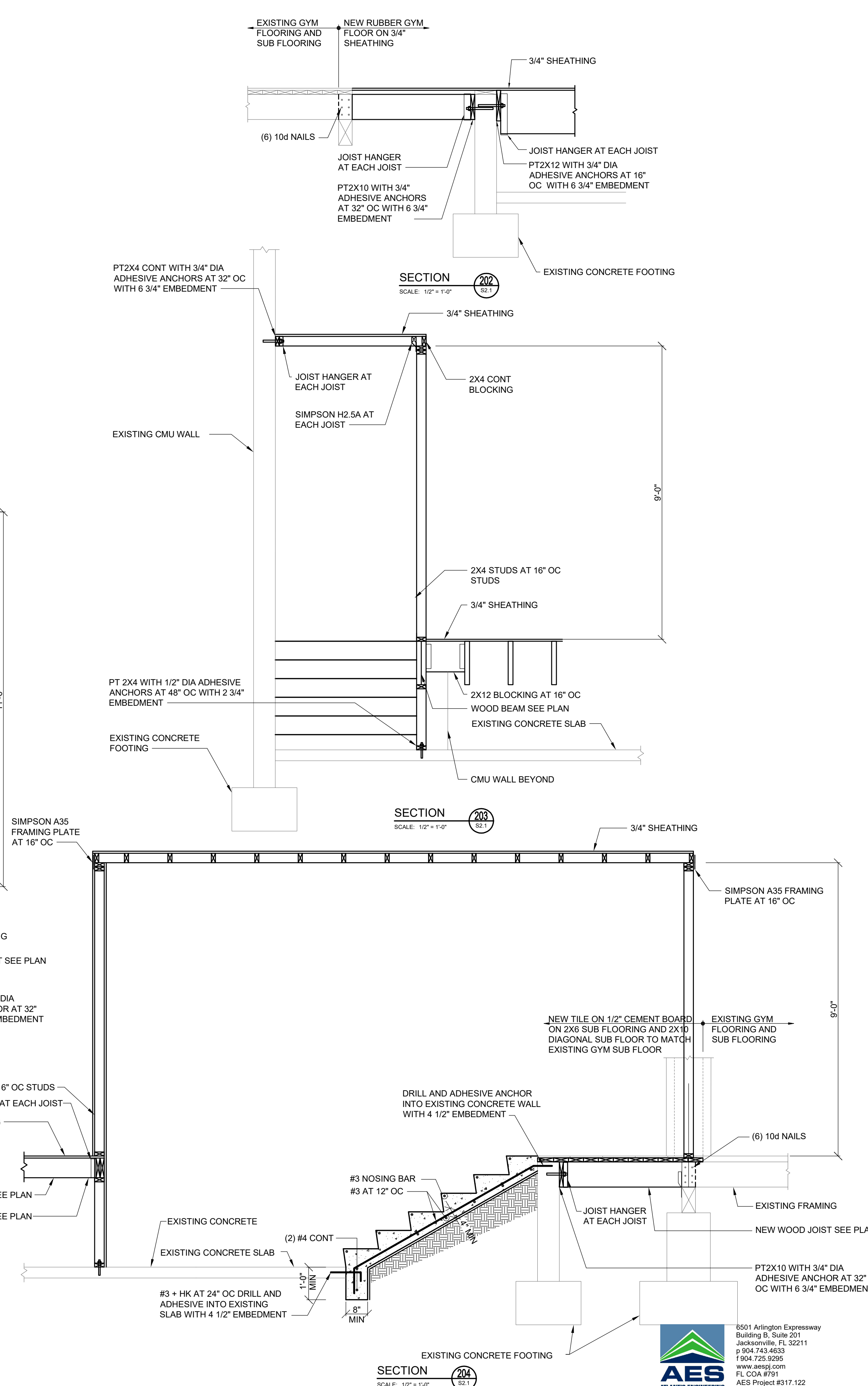
SCALE: 3/4" = 1'-0"

A
S-1.2





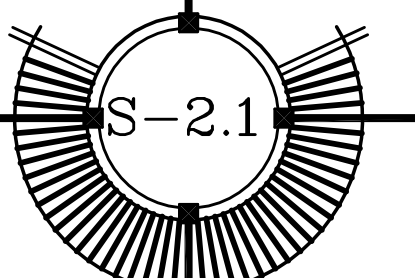
SECTION 201
SCALE: 1/2" = 1'-0"

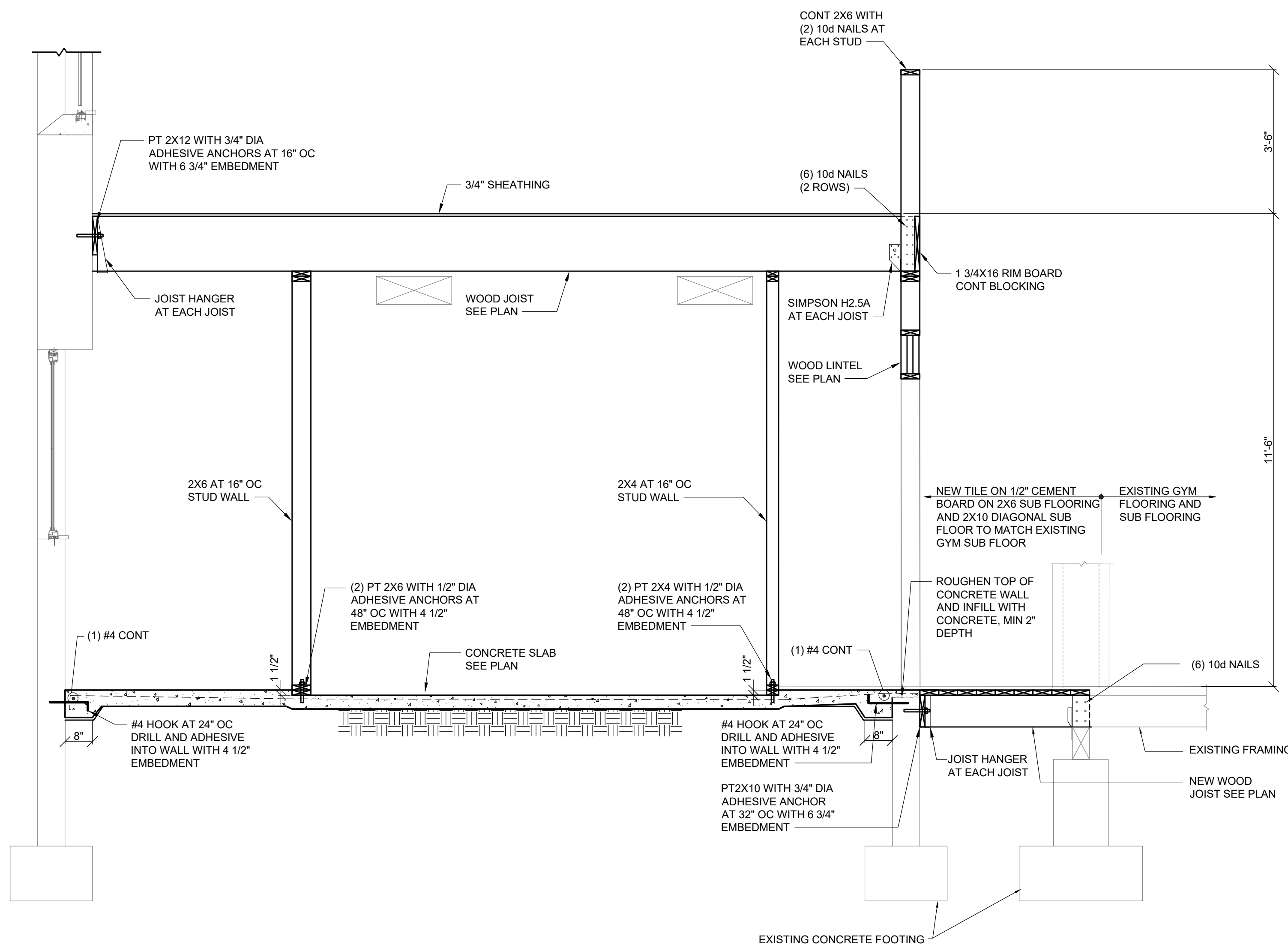


SECTION 202
SCALE: 1/2" = 1'-0"

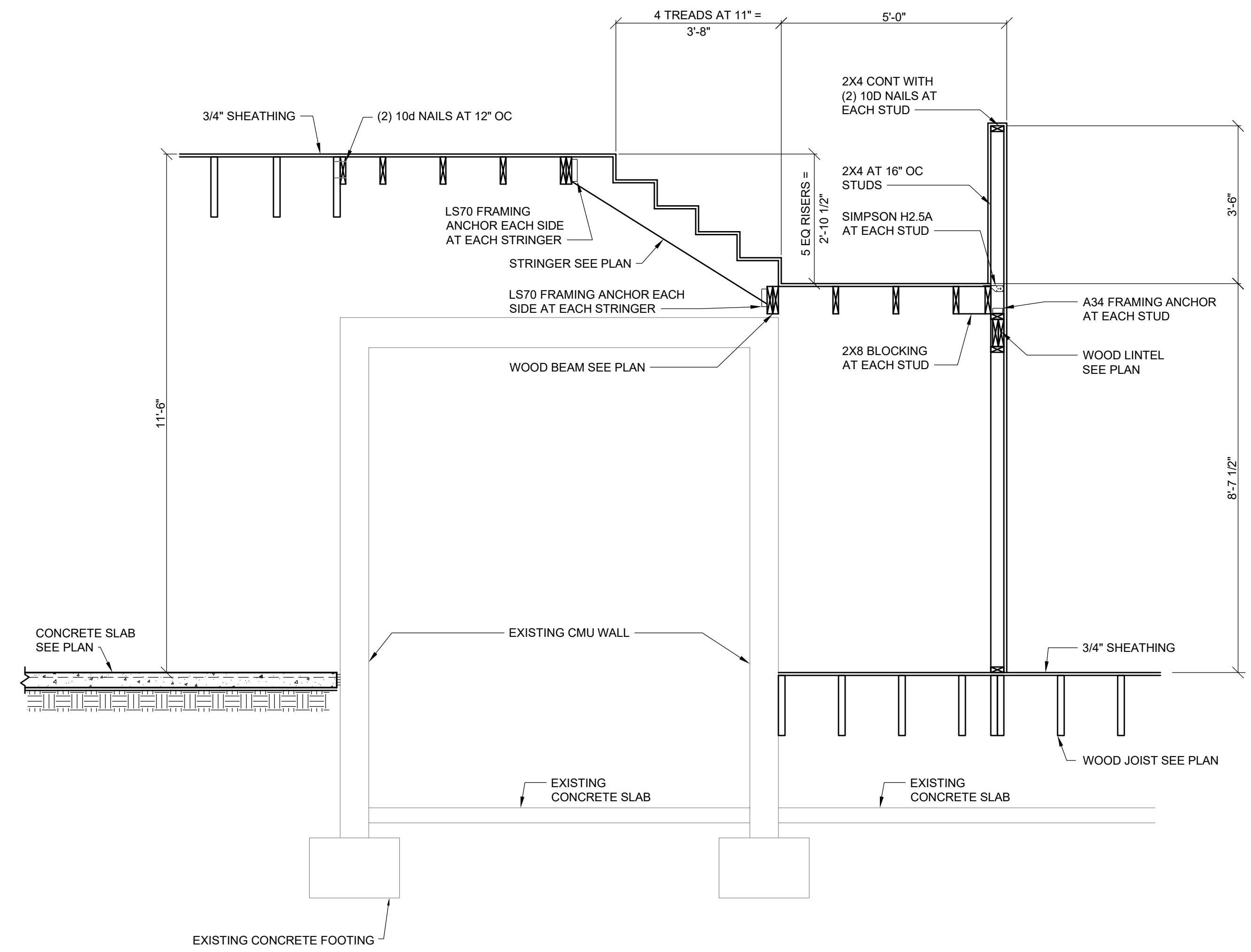
SECTION 203
SCALE: 1/2" = 1'-0"

SECTION 204
SCALE: 1/2" = 1'-0"





SECTION 205
SCALE: 1/2" = 1'-0"
S2.2



SECTION 206
SCALE: 1/2" = 1'-0"
S2.2

WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL. (305) 296-8302
FAX (305) 296-1033

LICENSE NO.
AA 0003040

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA.

SEAL
MARK J KEISTER PE 37435

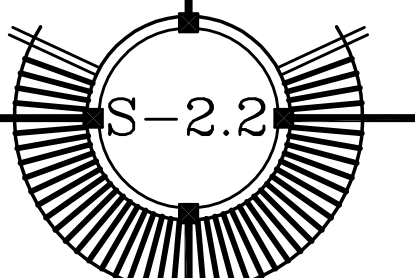
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

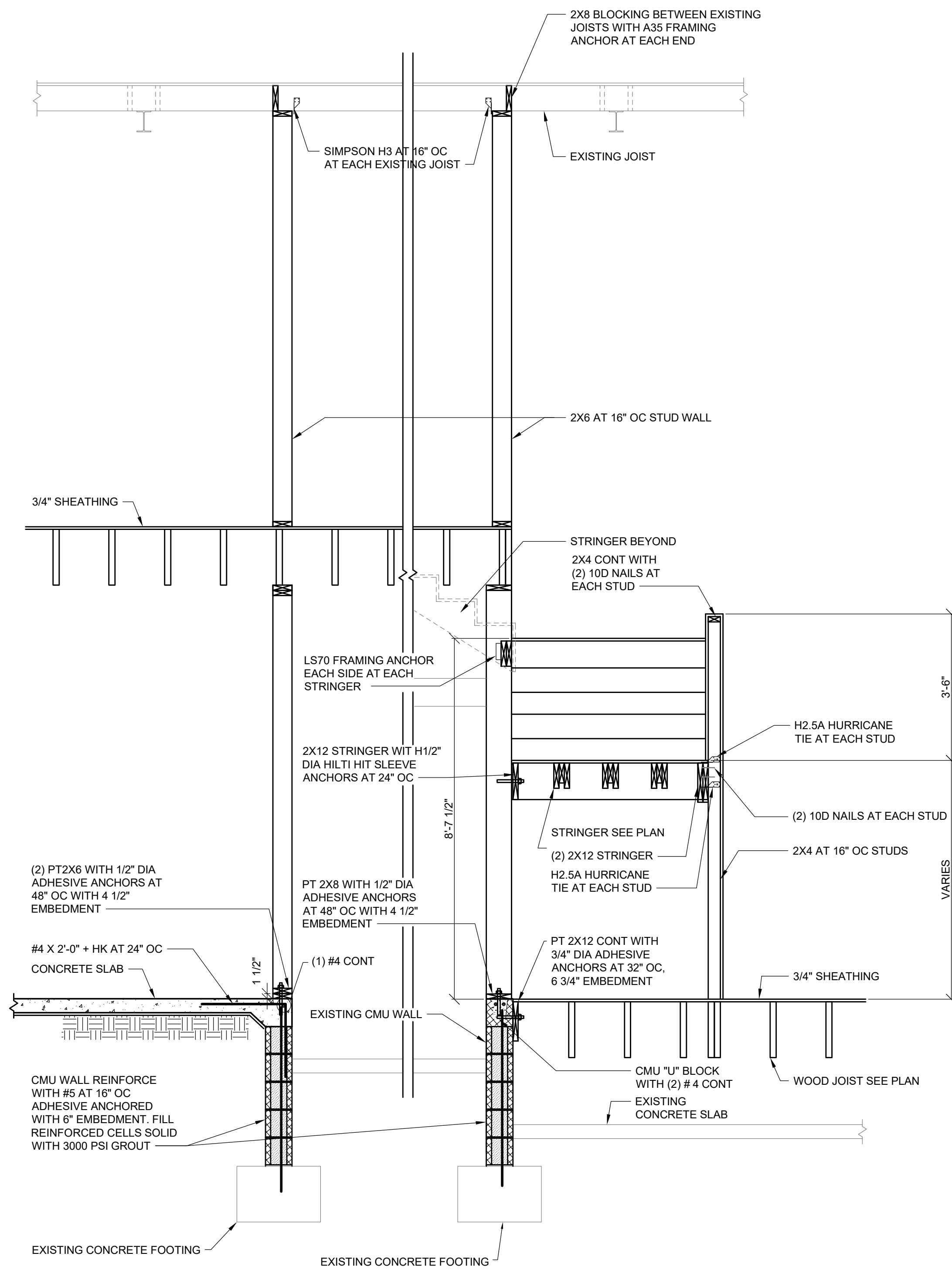
DRAWN BY
JEM

PROJECT
NUMBER
1702

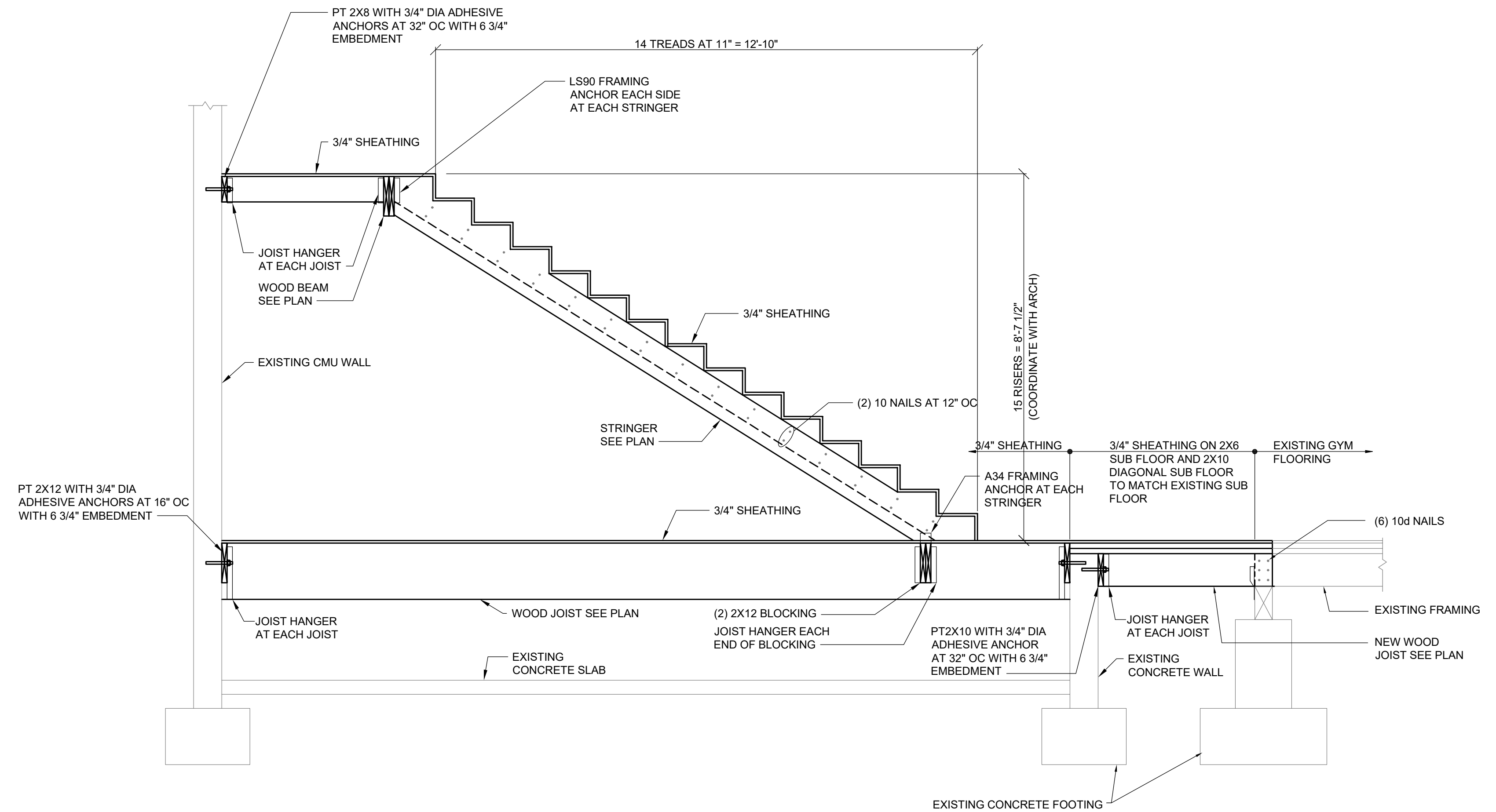
6501 Arlington Expressway
Building B, Suite 201
Jacksonville, FL 32211
p 904.743.4633
f 904.725.9295
www.aespi.com
FL COA #791
AES Project #317.122
© Copyright AES 2017



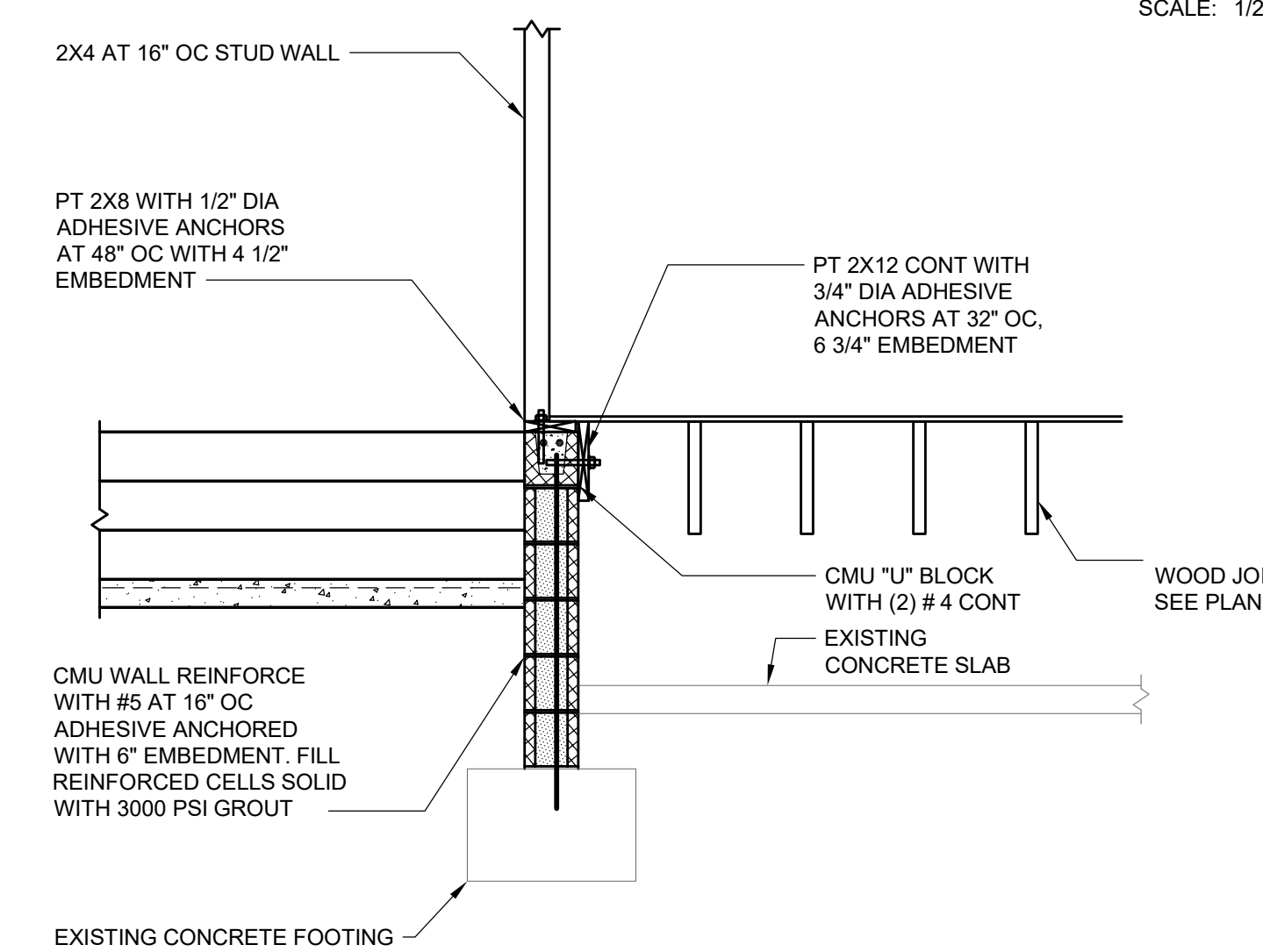
OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA



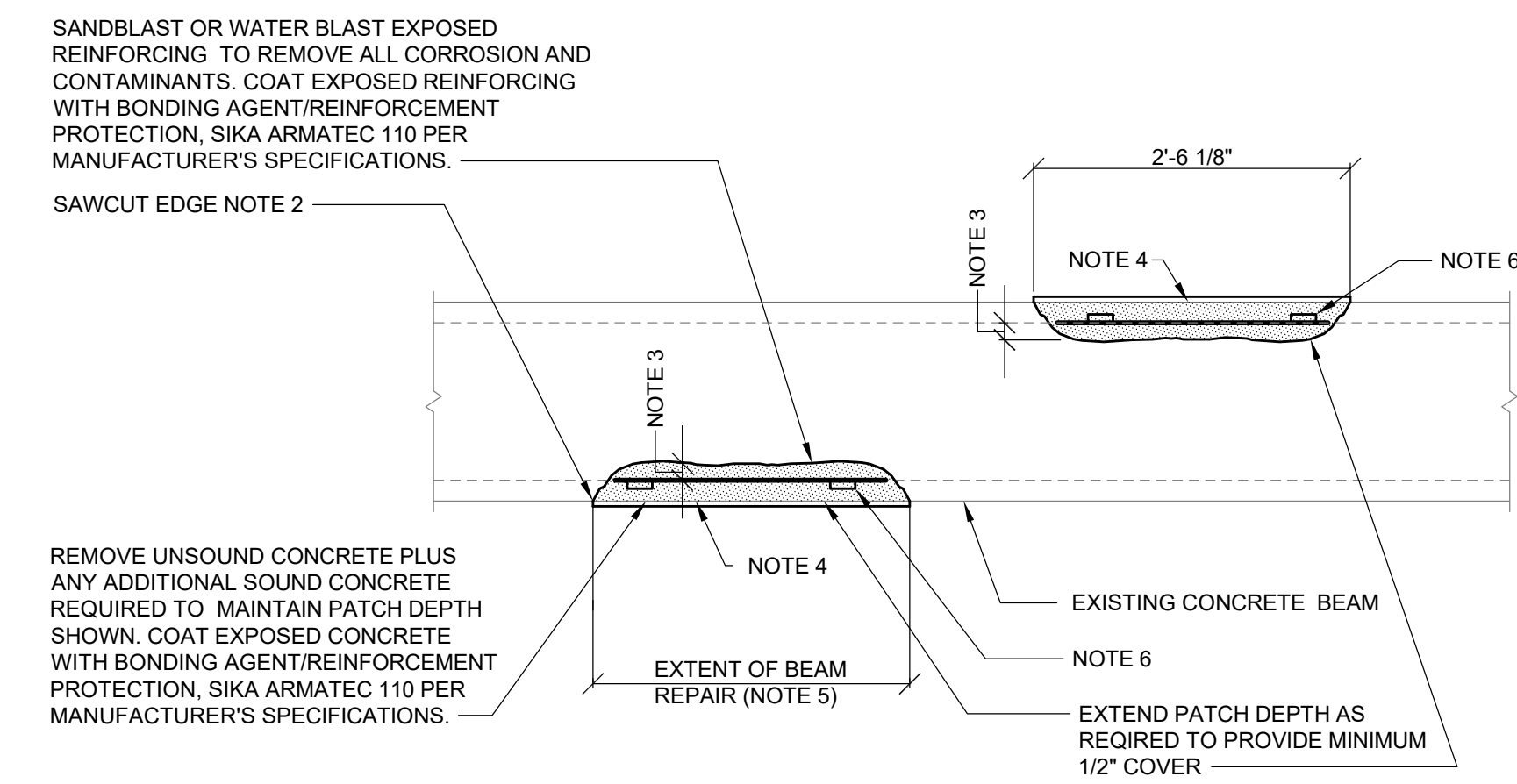
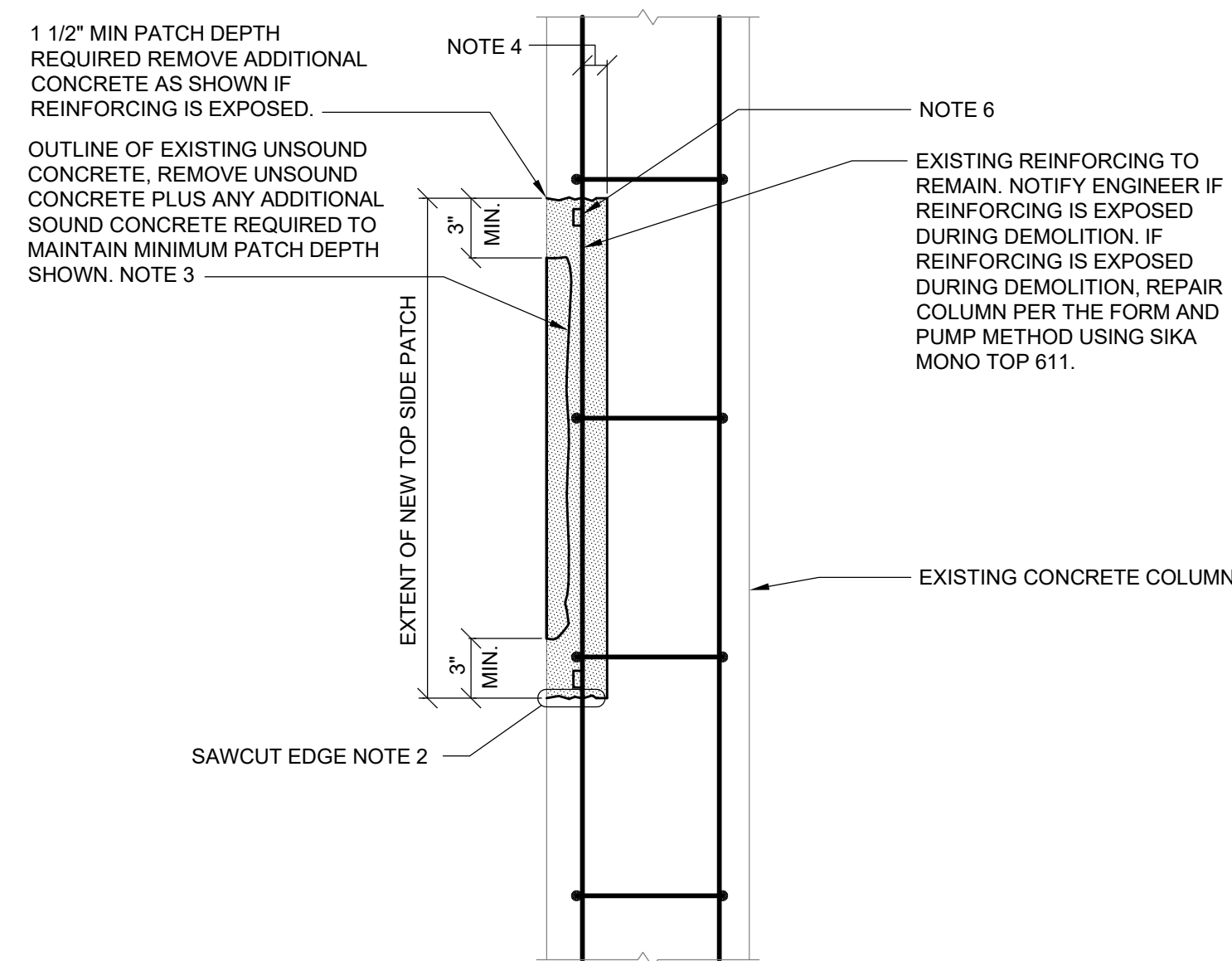
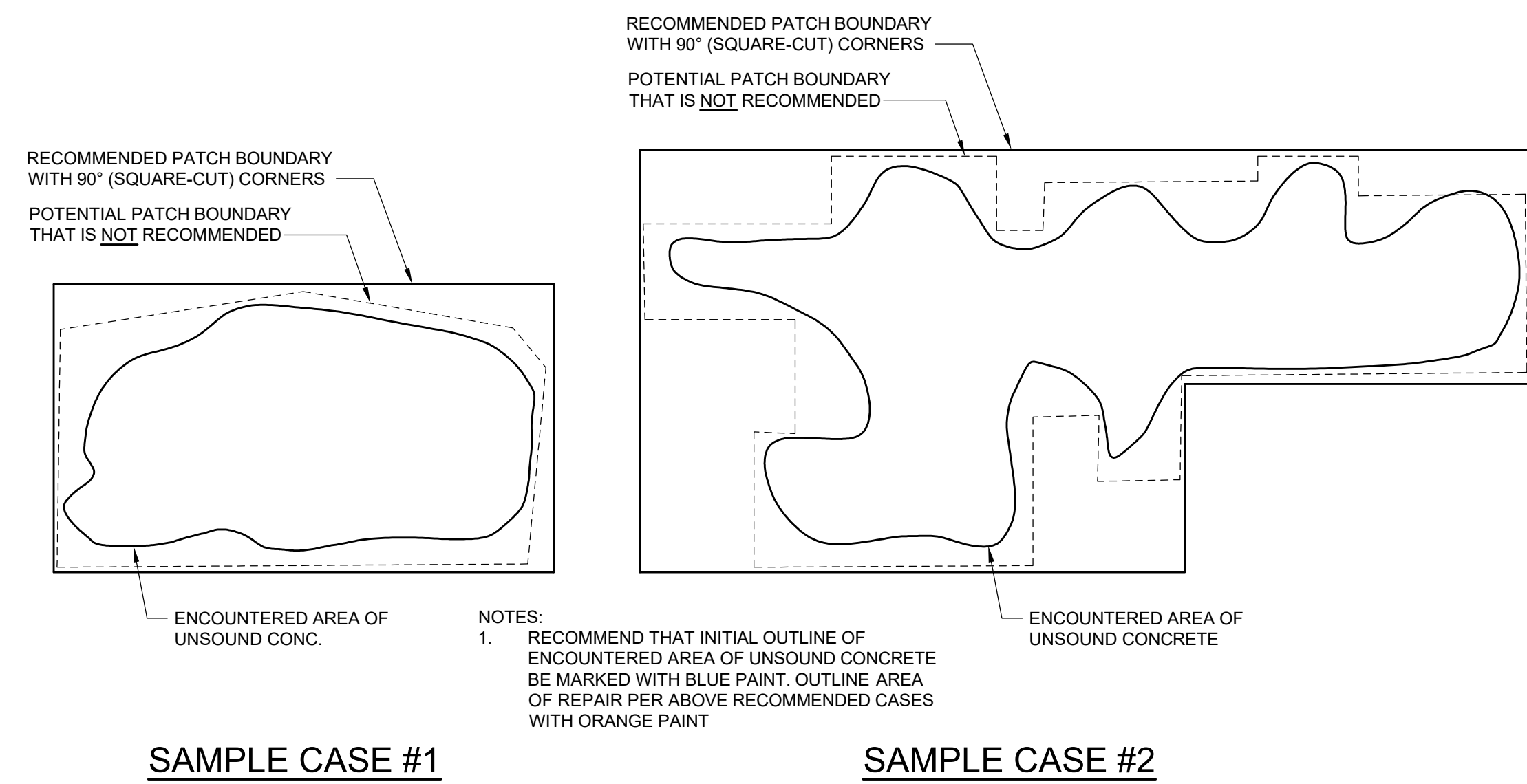
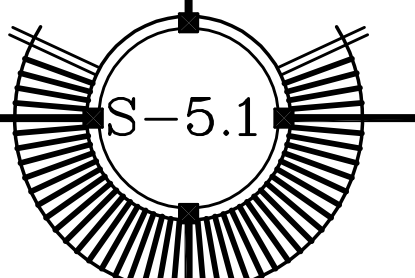
SECTION 207
SCALE: 1/2" = 1'-0"



SECTION 208
SCALE: 1/2" = 1'-0"



SECTION 209
SCALE: 1/2" = 1'-0"



DEMOLITION

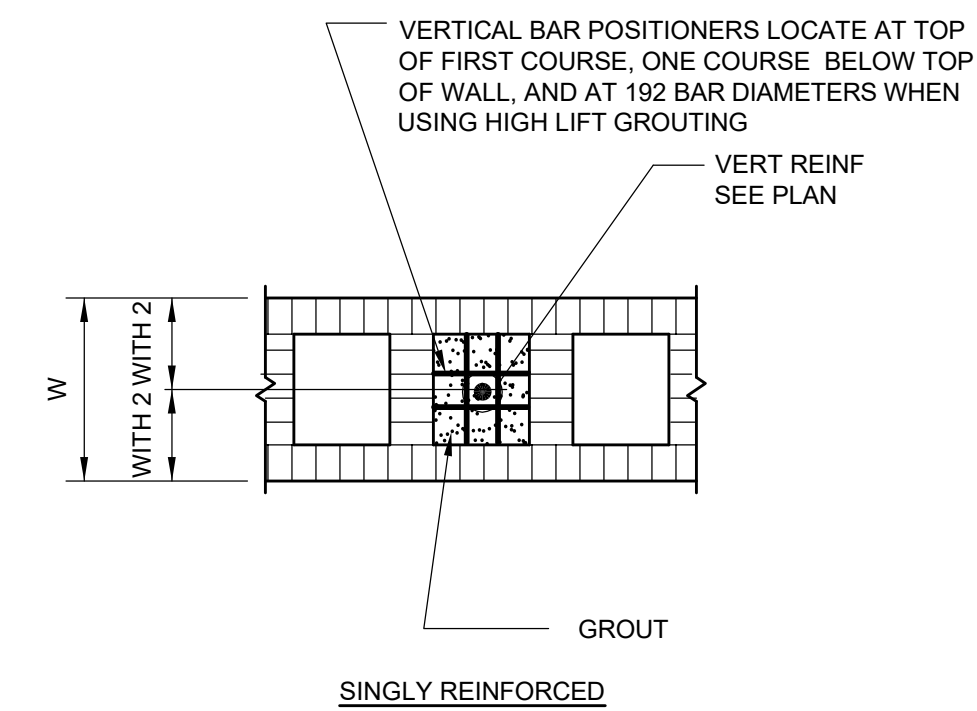
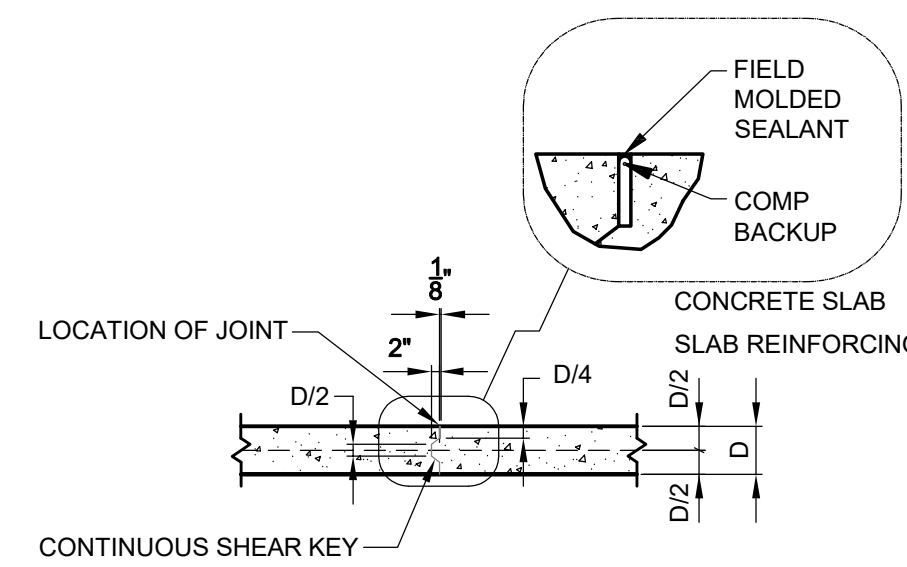
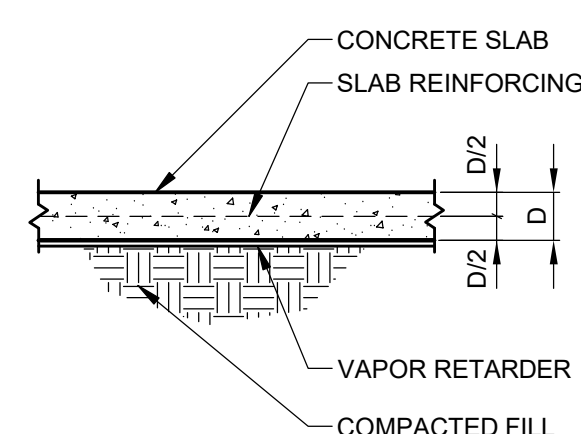
- PERFORM SOUNDING OF CONCRETE SURFACES AS REQUIRED TO IDENTIFY SPALLING CONCRETE. MARK ALL SPALLED AREAS WITH A PAINT OUTLINE.
- DEMOLISH CONCRETE TO AT LEAST THE LIMITS MARKED PER NOTE #1 ABOVE IN ACCORDANCE WITH THE SECTIONS AND TYPICAL DETAILS AND TO A MINIMUM DEPTH OF 1 1/2" OR TO SOUND CONCRETE WHICHEVER IS GREATER. FINAL DEMOLISHED AREA SHALL BE APPROXIMATELY RECTANGULAR WITH STRAIGHT SIDES, LEVEL SURFACE AND SQUARE CUT CORNERS. THIS MAY NECESSITATE REMOVAL OF SOUND CONCRETE SHALL BE DETERMINED AND APPROVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- AT THE PERIMETER OF THE DEMOLITION THE SURFACE NORMAL TO THE FACE OF MEMBERS SHALL BE SAW-CUT APPROXIMATELY STRAIGHT FOR A MINIMUM DEPTH OF 1/2" OR TO THE DEPTH OF THE EXISTING REINFORCING STEEL WHICHEVER IS LESS.
- THE FINAL DEMOLISHED SURFACE AT ANY LOCATION SHALL BE REASONABLY SMOOTH WITH NO SHARP PROJECTIONS.
- DO NOT DAMAGE OR CUT EXISTING REINFORCING STEEL DURING DEMOLITION.
- SAND BLAST OR WATER BLAST CLEAN ALL DEMOLISHED SURFACES AND REINFORCING. REMOVE ALL LOOSE MATERIALS AND RUST AND DISPOSE ALL DEBRIS OFF SITE.

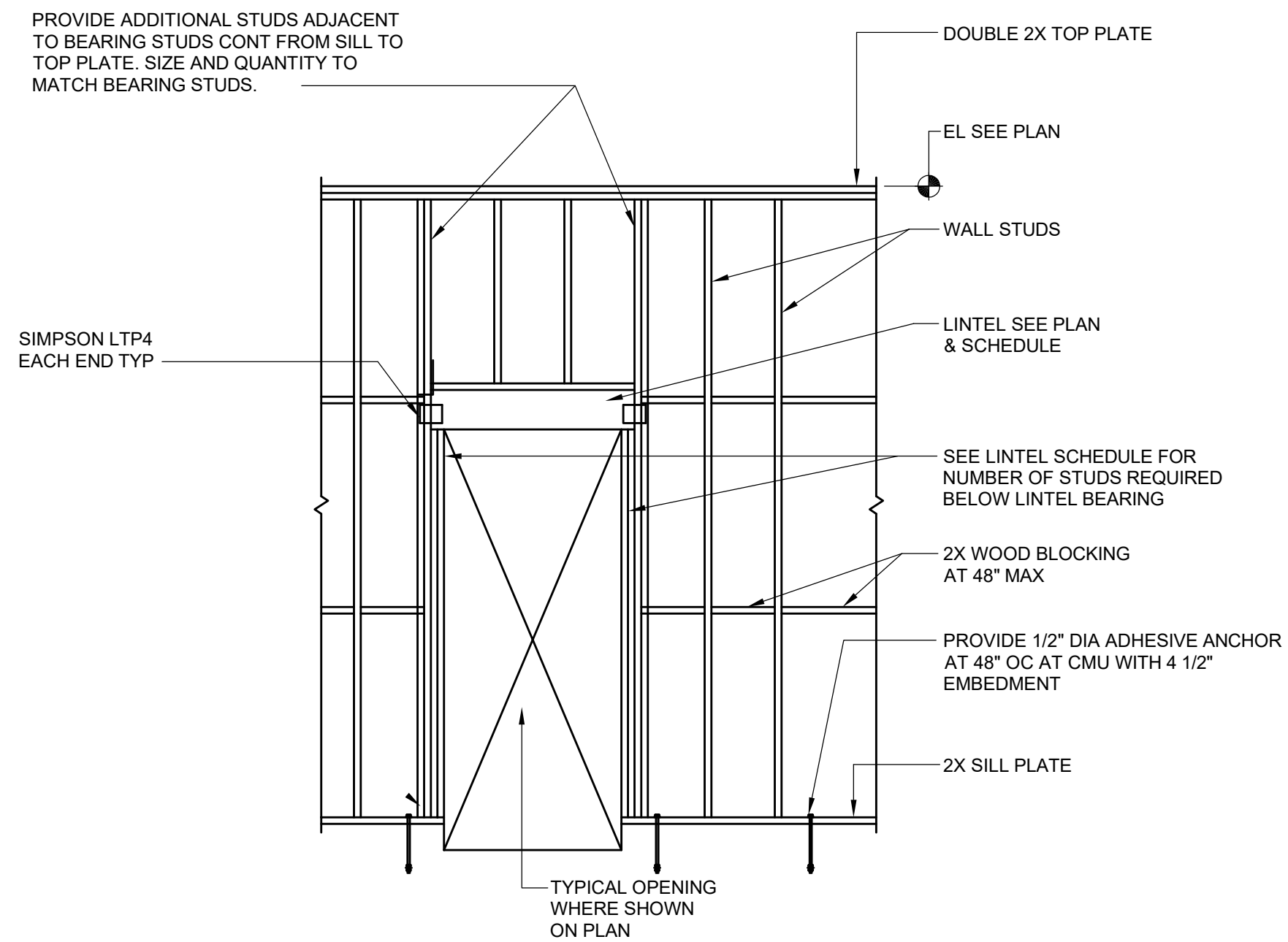
SPALL REPAIR

- ALL REINFORCED CONCRETE WORK SHALL BE IN CONFORMANCE WITH THE "BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE" (ACI 318, LATEST EDITION) AND SPECIFICATION OF STRUCTURAL CONCRETE (ACI 301, LATEST EDITION) OF THE AMERICAN CONCRETE INSTITUTE.
- DEMOLISHED CONCRETE AREA SHALL BE REPAIRED BY THE FORM AND CAST METHOD FOR VERTICAL REPAIRS AND THE CAST-IN-PLACE METHOD FOR HORIZONTAL REPAIRS. DEPTH OF DEMOLISHED AREAS SHALL BE MAINTAINED AT A MINIMUM OF 1 1/2".
- REINFORCEMENT
A. DEFORMED BARS
ASTM A615 GRADE 60
- ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, STIRRUPS OR CHAIRS SHALL BE PROVIDED THE THE CONTRACTOR TO FURNISH SUPPORT FOR ALL BARS.

PAINTING

- PAINT ALL EXPOSED CONCRETE IN AREAS THAT HAVE BEEN PREVIOUSLY PAINTED TO MATCH EXISTING PAINT TYPE AND COLOR. COORDINATE WITH THE OWNER.





TYPICAL STUD WALL ELEVATION

NOTES:
 1. SEE PLAN FOR SHEATHING AND ATTACHMENT REQUIREMENTS. HURRICANE TIES NOT SHOWN - SEE OTHER SECTIONS FOR REQUIREMENTS - TYP.

WOOD LINTEL SCHEDULE (2X4 WALL)				
SPAN	LINTEL	BEARING STUDS	FULL HEIGHT STUDS	STUD PLATE
0'-0" <L < 4'-8"	(2) 2X6	(2) 2X4	(2) 2X4	LTP4
4'-8" <L < 6'-0"	(2) 2X8	(2) 2X4	(2) 2X4	LTP4

WOOD LINTEL SCHEDULE (2X6 WALL)				
SPAN	LINTEL	BEARING STUDS	FULL HEIGHT STUDS	STUD PLATE
0'-0" <L < 4'-8"	(2) 2X6	(2) 2X6	(2) 2X6	LTP4
4'-8" <L < 6'-0"	(2) 2X8	(2) 2X6	(2) 2X6	LTP4

WILLIAM P. HORN
 ARCHITECT, P.A.

915 EATON ST.
 KEY WEST,
 FLORIDA
 33040

TEL. (305) 296-8302
 FAX (305) 296-1033

LICENSE NO.
 AA 0003040

OLD GYMNASIUM
 BUILDING
 1300 White Street Rear
 KEY WEST, FLORIDA.

SEAL
 MARK J KEISTER PE 37435

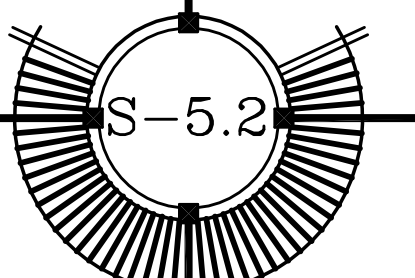
DATE
 05-15-17 HARC
 01-23-18 REV
 05-09-18 BID

REVISIONS

DRAWN BY
 JEM

PROJECT
 NUMBER
 1702

AES
 ATLANTIC ENGINEERING & ARCHITECTURE
 6501 Arlington Expressway
 Building B, Suite 201
 Jacksonville, FL 32211
 p 904.743.4633
 f 904.725.9295
 www.aespi.com
 FL COA #791
 AES Project #317.122
 © Copyright AES 2017



OLD GYMNASIUM BUILDING
 1300 White Street Rear
 KEY WEST, FLORIDA

MECHANICAL NOTES

- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE 6TH EDITION OF THE FLORIDA BUILDING CODE 2017 AND ALL OTHER STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST ADDITION OF THE FOLLOWING PUBLICATIONS: SMACNA-85, 92, 95; ASHRAE 15-01, 34-01, 62-01; NFPA 70-02, 72-02, 90A-02, 90B-02, 91-99, 96-01; ANSI Z10.1-98, Z10.3-98, Z21.8-94, Z21.83-98.
- THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
- THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES.
- THE CONTRACTOR SHALL SUPPLY THE ARCHITECT WITH "AS-BUILT" DRAWINGS.
- CONTRACTOR SHALL SUBMIT, FOR APPROVAL SIX (6) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.
- ALL MATERIAL SHALL BE NEW OF U.S. MANUFACTURER OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED AT INDUSTRY STANDARD QUALITY LEVEL BY CERTIFIED PROFESSIONALS. ALL EQUIPMENT SHALL BE UL OR ETL LISTED.
- DUCTWORK:
ALL DUCTWORK EXPOSED IN THE GYMNASIUM AND THE MEZZANINE SHALL BE CONSTRUCTED OF GALVANIZED SHEETMETAL. DUCT EXTERIOR SHALL BE TREATED TO ALLOW PAINTING IF DESIRED. SUPPLY DUCTS SHALL BE INTERNALLY SOUND LINED WITH 1" SOUNDLINER. DUCT SIZES SHOWN ON PLANS ARE INTERNAL DIMENSIONS. SOUND LINER SHALL BE OWENS CORNING "QUIETR" OR APPROVED EQUAL.
ALL CONCEALED AIR CONDITIONING DUCT WORK SHALL BE OF 1" DUCT BOARD, (R-4.2) SPECIAL DUTY, FSK FOIL REINFORCED FIBERGLASS WITH MANUFACTURER'S LOGO PRINTED ON VAPOR BARRIER, WITH A HIGH-TENSILE, RESISTANT MAT COATING, EQUAL TO "SUPERDUCT" BY MANVILLE OR "TOUGHGARD" BY CERTAINTED, AND ANTI-MICROBIAL PROPERTIES.
ALL FLEXIBLE DUCT TO BE R-4.2 WITH A MAX. TOTAL LENGTH NOT TO EXCEED 15 FT. INSTALL UL LISTED FOR PLENUM, FLEXIBLE DUCTWORK ELBOW SUPPORTS AT EACH DIFFUSER, GRILLE, AND REGISTER EQUAL TO "FLEXFLOW ELBOW" AS MANUFACTURED BY "THERMAFLEX".
- ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS. ALL OUTSIDE AIR DUCT SHALL BE INSULATED WITH EXTERNAL BLANKET INSULATION R-6 MIN.
ALL METAL EXHAUST, MAKE-UP OR OTHERWISE DUCTS INSTALLED IN LOCATIONS WHERE DEWPOINT CONDITIONS CAN OCCUR INSIDE THE DUCT SHALL BE EXTERNALLY INSULATED WITH R-6 MIN.
- SUPPLY AIR DUCTS EXPOSED TO THE OUTSIDE SHALL BE DOUBLE WALL WITH 2" INSULATION BETWEEN THE SHEETMETAL DUCTS. THE EXTERIOR OF THE DUCT SHALL BE PAINTED WITH AN OUTDOOR PAINT.
- DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
- ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLES) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BAKED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE AS SPECIFIED OR EQUAL TO TITUS OR METALAIR. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS AS INDICATED ON PLANS. PROVIDE BALANCING DAMPERS FOR ALL AIR DEVICES TO ENSURE COMPLIANCE WITH FMC 2014, PAR. 601.4 AND PAR. 603.15 FOR BALANCED AIR FLOW.
- THERMOSTAT/HUMIDISTAT
A. FOR NEW UNITS: SHALL BE COMBINATION COOLING/HEATING/RELATIVE HUMIDITY, WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE AS RECOMMENDED BY MANUFACTURER, HONEYWELL OR EQUAL. PROVIDE TAMPER PROOF COVERS.
B. FOR EXISTING UNITS: SHALL BE SERVICED AND RELOCATED AS SHOWN. IF NEW THERMOSTAT IS PROVIDED IT SHALL MATCH BUILDING STANDARDS.
C. FOR VAV BOXES: CONTROLS TO BE DDC, PROVIDE ROOM THERMOSTAT/SENSOR WITH OVERRIDE
- BRAZING-JOINT TYPE FITTINGS, USE BRAZING MATERIALS FOR HIGH PRESSURE PIPING PER AWS A5.8: BCuP SERIES COPPER-PHOSPHORUS ALLOY OR BAg1 SILVER ALLOY. REFRIGERANT LINES SHALL BE SIZED PER MANUFACTURER'S RECOMMENDATIONS. SOFT COPPER TYPE "M" SHALL BE ALLOWED FOR RISER PIPING INSIDE CHASE TO LIMIT NUMBER OF JOINTS. COORDINATE WITH ENGINEER FOR PRIOR APPROVAL.
ALL EXPOSED INSULATION SHALL BE PROTECTED WITH UV RESISTANT PAINT OR ALUMIN. SHIELD.
- ARMAFLEX INSULATION SHALL BE USED FOR SUCTION LINES (1/2" FOR ABOVE 40' F AND 1" FOR BELOW 40' F) PER FLORIDA ENERGY CODE TABLE 4-11 FOR PIPING INSULATION. FILTER/DRYER AND SIGHT GLASS SHALL BE PROVIDED AT LIQUID LINES.
- ALL BRANCH TAKE-OFFS TO BE PROVIDED W/ MANUAL VOLUME DAMPERS. PROVIDE RADIUS ELBOWS WHERE FEASIBLE, SQUARE ELBOWS AND TEE'S SHALL BE FURNISHED W/SINGLE FOIL TURNING VANES. PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE-OFFS. PROVIDE REMOTE, CABLE OPERATED VOLUME DAMPERS IN INACCESSIBLE AND HARD CEILING AREAS, "YOUNG REGULATOR" OR EQUAL.
- PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE START-UP, REPLACE PRIOR TO FINAL ACCEPTANCE BY OWNER.
- PROVIDE SMOKE DETECTORS WITH SERVICE ACCESS DOORS IN ALL SUPPLY & RETURN AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON PLENUM OF 2000 CFM OR ABOVE. FOR SMOKE DETECTORS NOT VISIBLE, IN CONCEALED SPACES, PROVIDE REMOTE ANNUNCIATION/TEST STATION AS REQUIRED BY AUTHORITY HAVING JURISDICTION, COORDINATE PRIOR TO INSTALLATION. DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND FIRE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
- PROVIDE TYPE "B" DYNAMIC FIRE DAMPERS WITH SERVICE ACCESS DOORS IN ALL DUCTS AND OPENINGS PENETRATING FIRE RATED WALLS, MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS, TENANT SEPARATION, PARTITIONS, FLOOR OR ROOF SLABS AND AT OUTSIDE AIR INTAKES AS REQUIRED. PROVIDE RADIATION DAMPERS IN RATED CEILINGS FOR ALL CEILING OPENINGS, CEILING FANS, DIFFUSERS OR GRILLES RATED FOR USE IN THE CEILING ASSEMBLY. PROVIDE LOW-LEAKAGE CLASS DAMPERS FOR ALL SITUATIONS WHERE THE AIRFLOW CFM HAS TO BE CONTROLLED. VERIFY AND REPLACE AS REQUIRED FOR EXISTING SYSTEMS.
- HVAC CONTRACTOR SHALL PROVIDE A T & B REPORT PER F.B.C. 2014, FOR BOTH EXISTING 1ST FLOOR AND NEW SYSTEMS. T & B SHALL BE PROVIDED BY AN INDEPENDANT CONTRACTOR. T & B SHALL INCLUDE ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE TEST AND BALANCE REPORT SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLES, RETURN GRILLES AND EXHAUST GRILLES AND THE LEAVING AND ENTERING AIR TEMPERATURE (T) FROM SUPPLY GRILLES AND EVAPORATORS.
- THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER AND ENGINEER BEFORE INSTALLATION. INSTALL THERMOSTAT 48" (MAX.) A.F.F. PER A.D.A REQUIREMENTS WHERE APPLICABLE. MECHANICAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIREMENTS FOR JUNCTION BOXES, CONDUITS, CONTROL WIRING, POWER, ETC. AND DEFINE RESPONSIBILITIES AND SCOPE OF WORK FOR EACH TRADE PRIOR TO ANY PURCHASING OR INSTALLATION.
- RUN INSULATED FIRE RATED CONDENSATE DRAINS AS REQUIRED.
- ALL INSULATION WILL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
- MECHANICAL EQUIPMENT ON ROOF OR ELEVATED STRUCTURES SHALL COMPLY WITH FBC 2014 PAR. 306.5 IF INSTALLED HIGHER THAN 16 FEET A.F.F.
MECHANICAL EQUIPMENT SHALL BE PROTECTED WITH MECHANICAL BARRIERS IF EXPOSED TO MECH. DAMAGE. ALL EQUIPMENT SHALL BE INSTALLED ON 6" CONCRETE PAD AT GRADE LEVEL.
- PROVIDE A MIN. OF 36" CLEARANCE IN FRONT OF ALL 120-208 VOLT PANELS AND MIN. 42" CLEARANCE IN FRONT OF ANY 240-480 VOLT PANEL. PROVIDE ADEQUATE SIDE CLEARANCE PER NEC.
- MECHANICAL PLANS IN GENERAL, ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, PLUMBING, ELECTRICAL, AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS SHALL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. CHANGES IN DUCTWORK SIZE AND ROUTE WILL BE REQUIRED TO AVOID STRUCTURAL, PLUMBING, FIRE SPRINKLER AND ARCHITECTURAL BUILDING FEATURES. DUCTWORK CHANGES MAY BE MADE BY CONTRACTOR USING EQUIVALENT SIZED DUCT. CONTACT ENGINEER IF DUCT AREA WILL NOT FIT.
- THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING, ORDERING, FABRICATION OR INSTALLATION OF MATERIALS OR EQUIPMENT.
- CONDENSATE DRAIN PIPING TO BE AS SPECIFIED PER PLUMBING PLANS, IF NOT SPECIFIED TO BE TYPE "L" COPPER OR PVC WHERE ALLOWED BY CODE WITH 1/2" ARMAFLEX INSULATION. PROVIDE APPROVED WATER LEVEL DETECTOR OR FLOAT SWITCH TO AUTOMATICALLY SHUT DOWN THE AIR COND. UNIT, AS A SECONDARY DRAIN SYSTEM TO COMPLY WITH FMC 2004, SEC. 307 SUPPLY CONDENSATE PUMP WHERE NECESSARY AS IMPOSED BY FIELD CONDITIONS OR INSTALLATION CHANGES AND PIPE TO CONDENSATE DRAIN PER PLUMBING PLANS.
- MANUFACTURER'S WARRANTY: CONTRACTOR SHALL PROVIDE WARRANTY FOR A PERIOD OF ONE YEAR AFTER BUILDING SUBSTANTIAL COMPLETION. FOR ALL MECHANICAL SYSTEMS, CONTROLS ACCESSORIES AND ALL OTHER EQUIPMENT, PARTS AND LABOR UNDER THESE DRAWINGS AND SPECIFICATIONS, CONTRACTOR SHALL PROVIDE WARRANTY FOR COMPRESSORS FOR (5) FIVE YEARS. ANY REPAIRS REQUIRING SYSTEM SHUTDOWN WILL BE DONE DURING NON-OPERATIONAL PERIODS OR AS AGREED WITH OWNER.
- AUXILIARY DRAIN PANS SHALL BE INSTALLED UNDER ALL COILS ON WHICH CONDENSATION CAN OCCUR AND UNDER ALL UNITS IN CONCEALED SPACES OR ANY AREA WHERE BLDG. DAMAGE CAN OCCUR AS A RESULT OF AN OVERFLOW, TO COMPLY WITH FBC 2014, PAR. 307.2.
- ALL MATERIALS IN MECHANICAL PLENUMS AND HVAC CLOSETS SHALL BE OF NON-COMBUSTIBLE MATERIALS.

SHEET INDEX

M-1	MECHANICAL LEGEND, GENERAL NOTES & SHEET INDEX
M-2	PROPOSED FIRST FLOOR HVAC PLAN, SCHEDULES AND DETAILS
M-3	PROPOSED PARTIAL ROOF PLAN, MEZZANINE HVAC PLAN AND SCHEDULES
M-4	MECHANICAL SECTION VIEWS
M-5	MECHANICAL SPECIFICATIONS

MECHANICAL LEGEND

	SUPPLY AIR CEILING DIFFUSER		CONDENSING UNITS ON A ROOF STAND
	RETURN AIR CEILING GRILLE		AIR HANDLING UNIT, VERTICAL UNIT, SET ON STAND
	SIDE WALL GRILLE		IN-LINE FAN
	FIRE DAMPER		SUPPLY AIR
	VOLUME CONTROL DAMPER		RETURN OR EXHAUST AIR
	COMBINATION THERMOSTAT/HUMIDISTAT REDUCER (WHERE DUCT SHOWN ONE LINE)		DUCT SMOKE DETECTOR
	EXIST. FLEX DUCT (SHOWN ON DEMO PLAN)		MOTORIZED DAMPER
	EXIST. DUCTWORK (SHOWN ON DEMO PLAN)		
	EXIST. FLEX DUCT TO BE REMOVED (SHOWN ON DEMO PLAN)		
	EXIST. DUCTWORK TO BE REMOVED (SHOWN ON DEMO PLAN)		
	NEW FLEX DUCT		
	NEW RECTANGULAR DUCTWORK		

HVAC ABBREVIATION LEGEND

AFF	ABOVE FINISH FLOOR	MCA	MINIMUM CIRCUIT AMPS (FOR WIRE SIZING)
AHU	AIR HANDLING UNIT	MOCPP	MAXIMUM OVERCURRENT PROTECTION DEVICE AMPS
CD	CONDENSATE DRAIN	LAT	LEAVING AIR TEMPERATURE
CD	CEILING DIFFUSER	R/A	RETURN AIR
EF	EXHAUST FAN	O/A	OUTSIDE AIR
CU	CONDENSING UNIT	VD	VOLUME CONTROL DAMPER
EXH	EXHAUST	RAG	RETURN AIR GRILLE
FD	FIRE DAMPER	SAR	SUPPLY AIR REGISTER
EAT	ENTERING AIR TEMPERATURE		
EAG	EXHAUST AIR GRILLE		
AD	ACCESS DOOR		
PLCS.	PLACES		

GENERAL NOTES

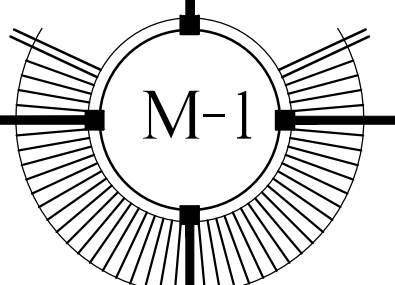
MECHANICAL CONTRACTOR SHALL INSTALL ACTUAL EQUIPMENT WITH PROPER CLEARANCES FOR SERVICING OF EQUIPMENT. CONTRACTOR SHALL PROVIDE STATEMENT THAT THE INSTALLATION OF THE EQUIPMENT COMPLIES WITH MANUFACTURERS SPECIFICATION AND CLEARANCES REQUIREMENTS. ALL EQUIPMENT SHALL BE BASED ON APPROVED SUBMITTALS.

OUTSIDE AIR CALCULATIONS

AREA SERVED OR UNIT TAG	NET OCCUPIABLE AREA SQ.FT.	VENTILATION RATE CFM / SQ.FT.	TOTAL NO. OF PEOPLE	VENTILATION RATE CFM / PERSON.	TOTAL VENT. REQUIRED	TOTAL CFM O/A PROVIDED	NOTES
GYMNASIUM	5295	0.06	250	7.5 CFM	2,193	2,400	1

NOTES:

- CALCULATIONS ARE BASED ON ESTIMATED MAX. OCCUPANCY RATES PER ARCHITECTURAL PLANS AND ASHRAE 62-89. VENTILATION RATES PER FLORIDA BUILDING CODE, 6TH EDITION, 2017 (TABLE 403.3) AND ASHRAE 62-89.



AIR CONDITIONING SPLIT SYSTEM SCHEDULE

CONDENSING UNIT

CU TAG	MANUFACTURER & MODEL	NOMINAL TONNAGE	CAP. STAGES	(S)EER/PLV	REFRIG./LBS	LIQ./SUCT.	NO. FANS	FAN (WATTS)	NO. COMP.	COMP.PLA(EA)	VOLTAGE/PH	MCA/MOCP	WEIGHT (LBS)	L x W x H (IN)	NOTES
CU-1 thru 5	DAIKIN/DX20VC0601	5.0	INVERTER	20.0	R-410A	3/8 / 1-1/8	1	185	1	27.1	208/1/60	31.1/35	310	36X40X41	

AIR HANDLING UNIT

AHU TAG	MANUFACTURER & MODEL	TOTAL MBH	SENSIBLE MBH	TOTAL CFM	O/A CFM	E.S.P. ("W.G.)	ENT. DB/WB	LEAV. DB/WB	ROWS/FPI	FAN HP/FLA	HEATER KW	VOLTAGE/PH	MCA/MOCP	WEIGHT (LBS)	L x W x H (IN)
AHU-1 thru 5	DAIKIN/DV61PECD14	60.0	48.3	2000	-	0.6	80/67	56/54	3/15	1.0/8.6	6.0	208/1/60	37.4/50	170	21 x 24 x 58

NOTES:

1. UNITS RATED PER ARI 210, 240 AND 270, APPROVED EQUAL: TRANE or DAIKIN
2. PROVIDE WITH ORIFICE METERING DEVICE, LIQUID LINE FILTER DRYER AND MULTI-USE SERVICE VALVES
3. PROVIDE COMPRESSOR WITH CRANKCASE HEATER AND MIN. 5-YEAR WARRANTY
4. PROVIDE HIGH AND LOW PRESSURE CONTROL AND OVER TEMPERATURE PROTECTION.
5. PROVIDE WEATHERPROOF ELECTRIC CONTROLS AND SINGLE SIDE SERVICE ACCESS
6. PROVIDE SINGLE POINT POWER ENTRY AND HEAVY DUTY NICKEL-CHROMIUM ELEMENT HEATER
7. PROVIDE 2" THROWAWAY, MIN. 30% EFF. FILTER AND VIBRATION ISOLATION FOR AHU
8. PROVIDE FACTORY MOUNTED DISCONNECT/STARTER FOR A.H.U., COORDINATE PRIOR TO PURCHASING
9. PROVIDE 24/7 PROGRAMMABLE FACTORY THERMOSTAT
10. PROVIDE REFRIGERANT LINES SIZE AS RECOMMENDED BY MANUFACTURER, NOT TO EXCEED 100 FT. EQUIV. LENGTH FOR LONGER RUNS COORDINATE WITH MANUFACTURER PRIOR TO PURCHASE OR ANY WORK.
11. PROVIDE SMOKE DETECTOR IN SUPPLY AIR DUCT
12. PROVIDE TWO STAGE COMPRESSOR
13. PROVIDE VARIABLE SPEED AHU

COORDINATION NOTE:

MECHANICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS AND ACCESSORIES WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASING AND INSTALLATION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF ENGINEER

FAN SCHEDULE

SELECTION DATA				FAN DATA				MOTOR DATA				GENERAL DATA			
TAG	SERVICE AREA	MANUF.(*)	MODEL	CONFIG.	CFM	ESP ("WG)	HP	RPM	DRIVE	VOLTAGE	WEIGHT (LBS)	DIMENSIONS L"xW"xH"	DUCT CON. L"xW"	CONTROL	ACCESSORIES
EF-1	1ST FL TOILETS/SHOWERS	GREENHECK	VG-1/4 SQ-90	IN-LINE CENTRIF.	400	0.50	0.25	1448	DIRECT	115	41	16X15X15	12X12	TIME CLOCK	1,2,3,4, & 5

(*) APPROVED EQUAL MANUFACTURER: COOK, TWIN-CITY, ACME, PENN

ACCESSORIES NOTES:

1. PROVIDE BACKDRAFT DAMPER
2. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH
3. PROVIDE FAN WITH HANGER BRACKETS AND VIBRATION ISOLATORS
4. PROVIDE MOTOR WITH THERMAL OVERLOADS
5. MECHANICAL CONTRACTOR TO FURNISH TIME CLOCK FOR ON-OFF CONTROL.

GENERAL FAN NOTES:

- a. ALL CONTINUOUS-DUTY MOTORS SHALL BE PROVIDED WITH OVERLOAD PROTECTION ACCORDING TO NATIONAL ELECTRICAL CODE PAR. 430-32.
- b. COORDINATE WITH ELECTRICAL CONTRACTOR BEFORE BIDDING OR ORDERING ANY EQUIPMENT.
- c. SEE PROJECT PLANS AND SPECIFICATIONS FOR OTHER FIELD SUPPLIED ITEMS

AIR DISTRIBUTION SCHEDULE

TAG	MANUF. & MODEL	FACE SIZE	NECK SIZE	MATERIAL	FRAME	FINISH	DAMPER	THROW	NC	CFM RANGE	NOTES
SUPPLY AIR											
A	TITUS / DL	40X12	PER FLEX	ALUM.	LAY-IN	WHITE	OBD	SEE NOTE #1	MAX. 30	SEE SCH.	1,2,3,4,5,6
B	TITUS / TMSA-AA	12X12	PER FLEX	ALUM.	LAY-IN	WHITE	OBD	SEE NOTE #2	MAX. 30	SEE SCH.	1,2,3,4,5,6
RETURN/EXHAUST AIR											
AA	TITUS / 63-FL	24X24	SEE SCHEDULE	ALUM.	SIDE-WALL	WHITE	-	-	MAX. 30	SEE SCH.	3,4,6,7
BB	TITUS / PAR-AA	12X12	SEE SCHEDULE	ALUM.	SURFACE	WHITE	OBD	-	MAX. 30	SEE SCH.	3,4,6,7

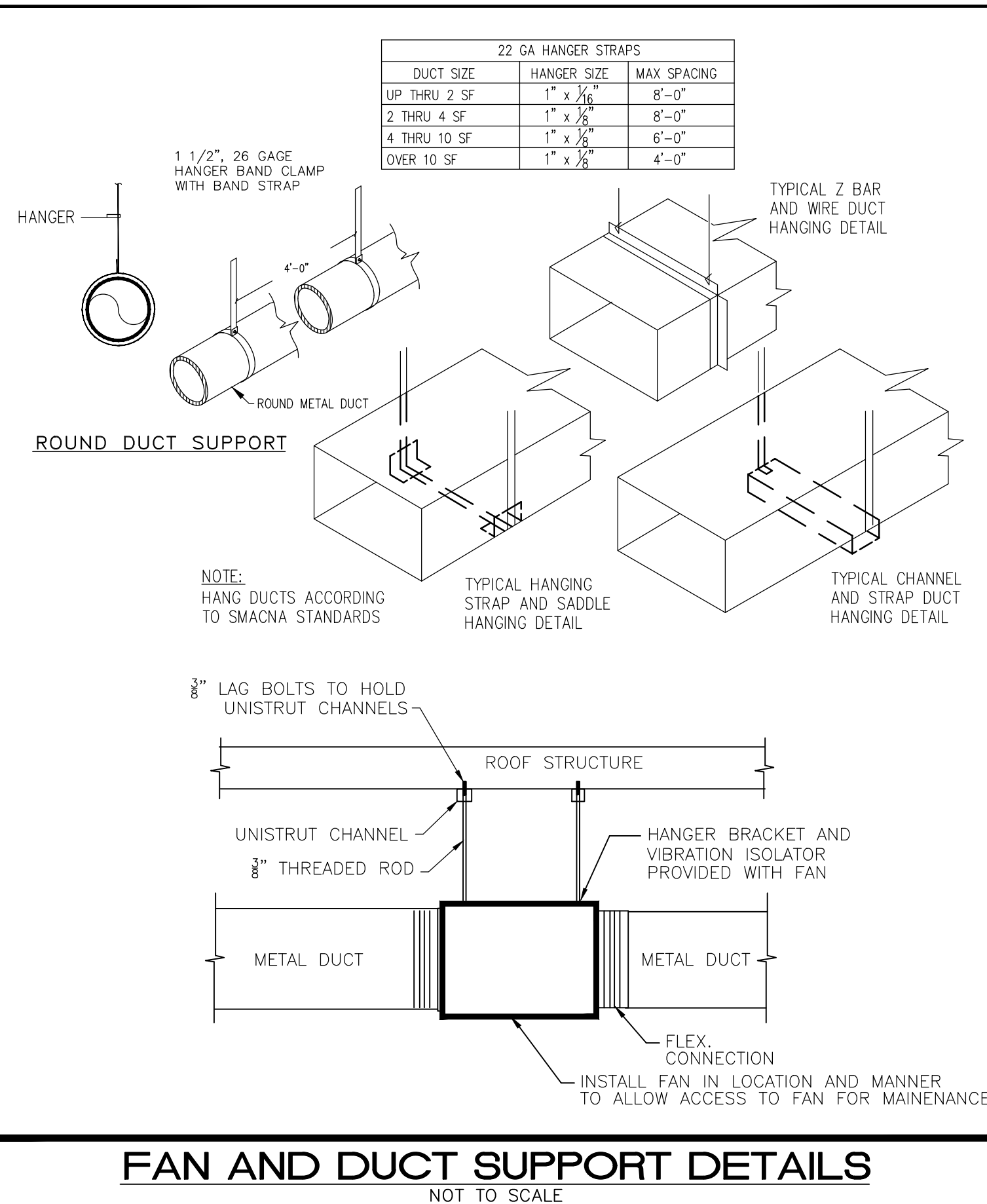
SUPPLY AIR DIFFUSER OR GRILLE
 RETURN OR TRANSFER AIR GRILLE

(*) EQUIVALENT MANUFACTURER: PRICE, METALAIR, CARNES, T & B, NAILOR

GENERAL NOTES:

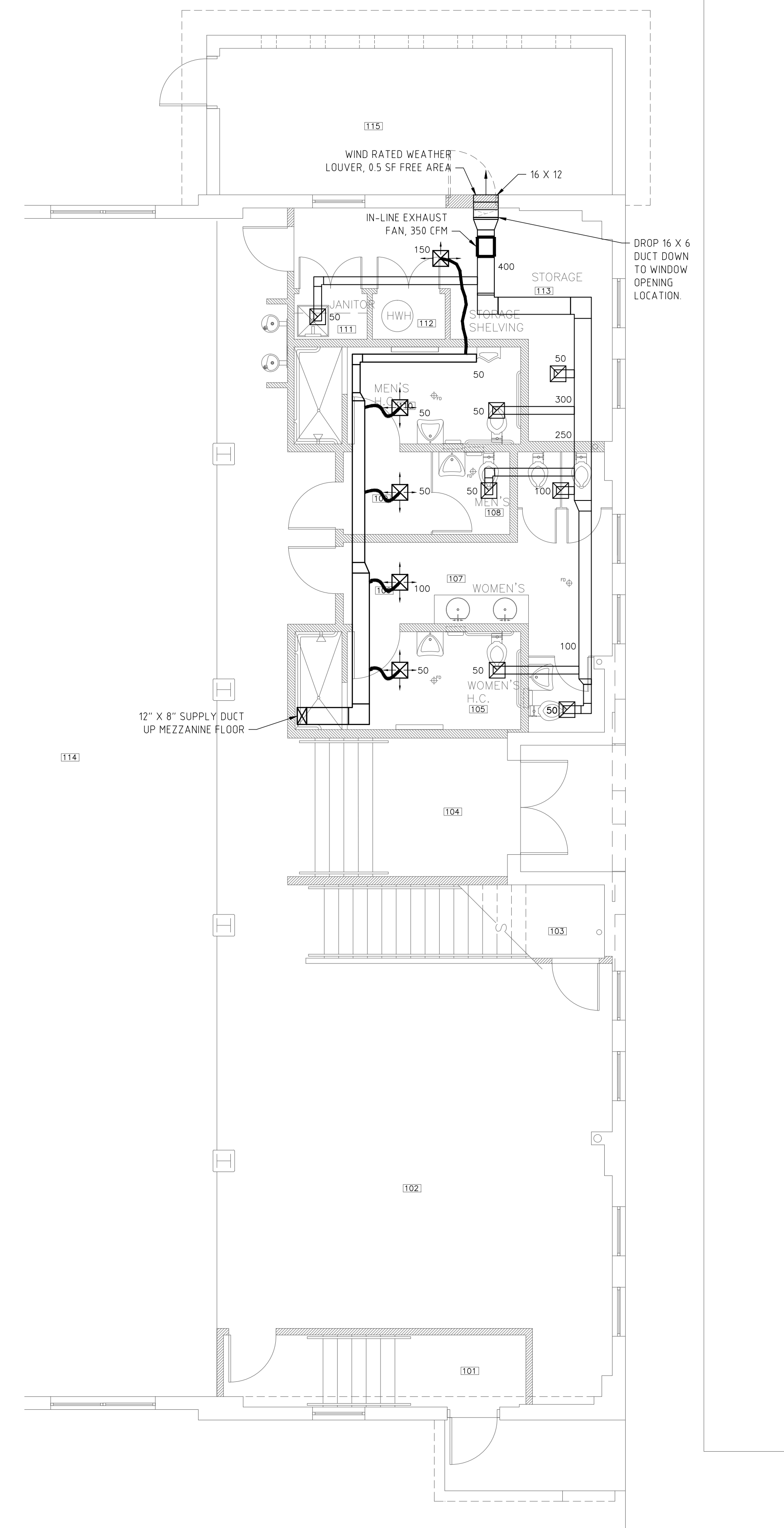
1. DRUM LOUVER DIFFUSER SHALL BE SIZED FOR 45 FT. THROW.
2. PROVIDE TYPICAL 4-WAY DIFFUSION, 2-WAY, 3-WAY OR 1-WAY WHERE INDICATED ON PLANS.
3. REFER TO ARCHITECT PLANS FOR CEILING TYPE.
4. FINAL COLOR SELECTION SUBJECT TO ARCHITECT APPROVAL.
5. FLEX DUCT SIZE TO BE SAME AS DIFFUSER NECK SIZE.
6. CONTRACTOR TO COORDINATE FINAL SELECTION WITH ARCHITECT AND OWNER

TITUS PAR-AA SCHEDULE				FLEX SCHEDULE	
NECK SIZE	CFM RANGE	NECK SIZE	CFM RANGE	6"	50-125 CFM
6X6	0-200 CFM	15X15	0-1000 CFM	8"	130-200 CFM
8X8	0-350 CFM	16X16	0-1300 CFM	10"	205-330 CFM
10X10	0-540CFM	18X18	0-1350 CFM	12"	335-450 CFM
12X12	0-700 CFM	22X22	0-2000 CFM	14"	455-700 CFM



FAN AND DUCT SUPPORT DETAILS

NOT TO SCALE



PROPOSED FIRST FLOOR HVAC PLAN

SCALE: 3/16"=1'-0"

WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL (305) 296-8302
FAX (305) 296-1033

LICENSE NO.
AA 0003040

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA.

SEAL

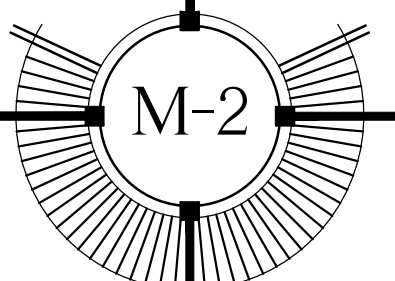
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

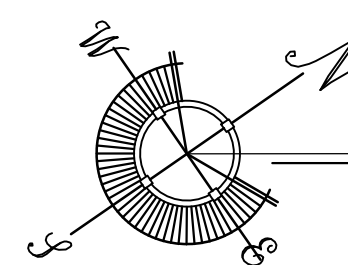
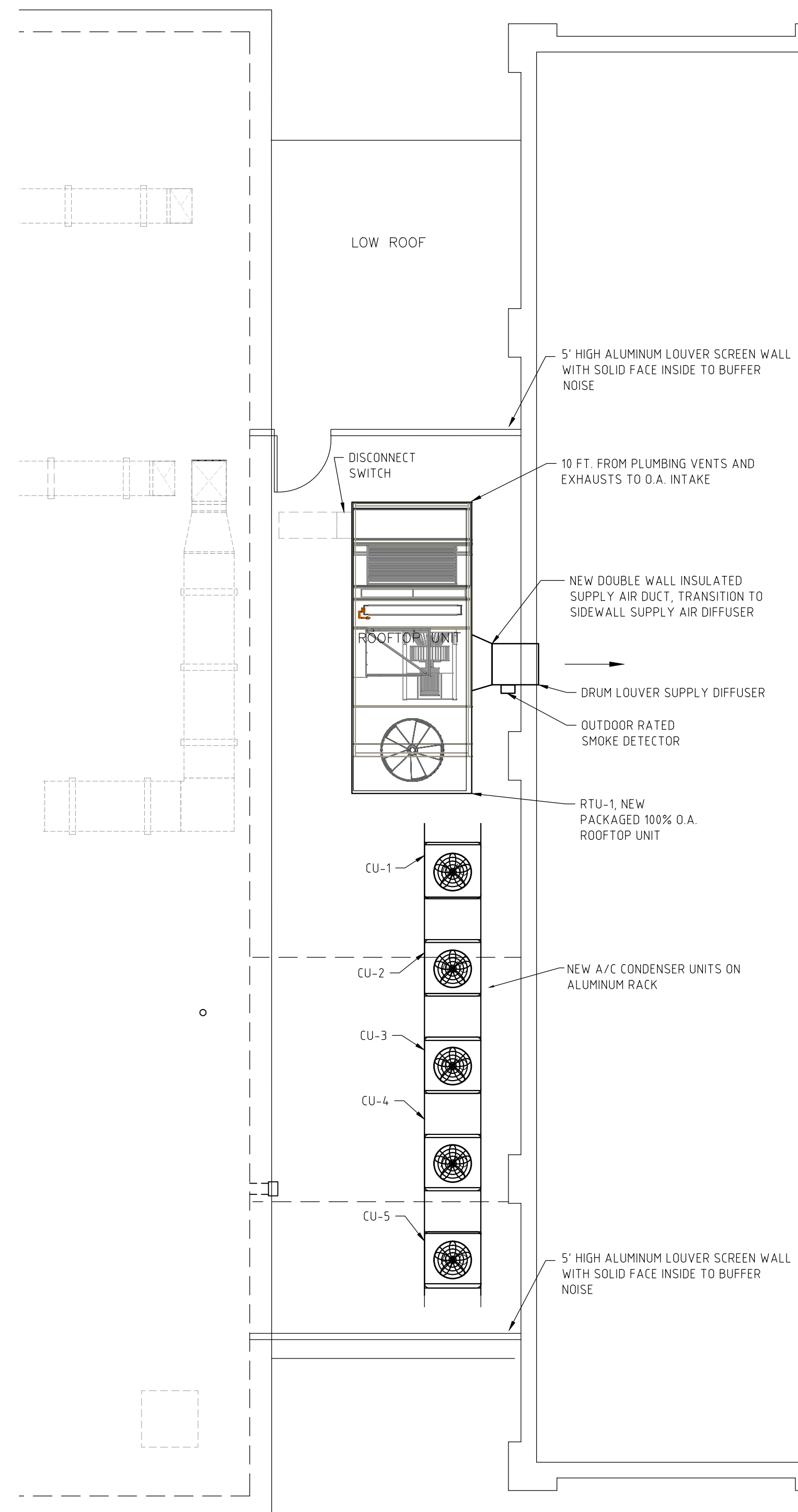
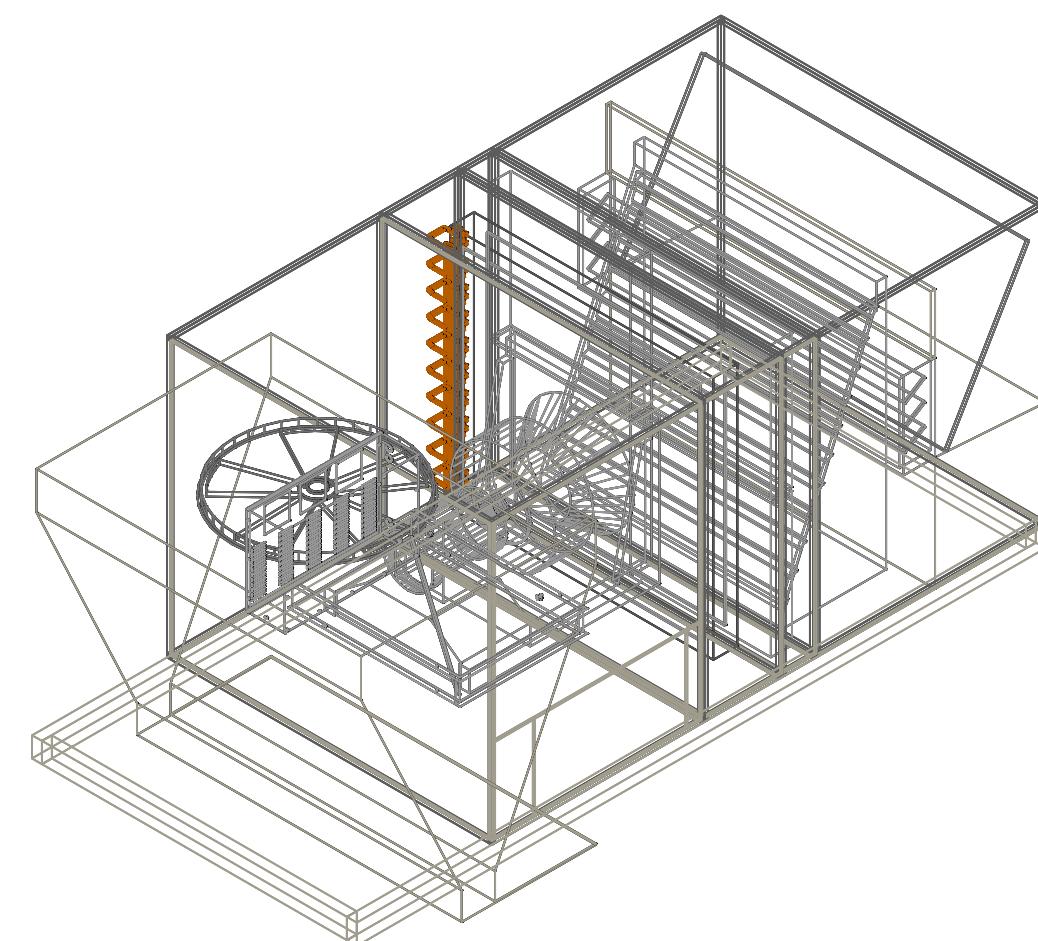
DRAWN BY
DHA

PROJECT
NUMBER
1702

OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

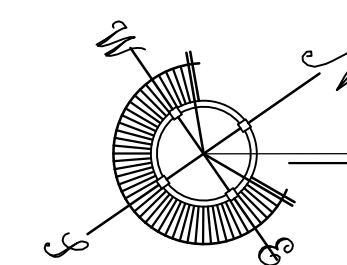
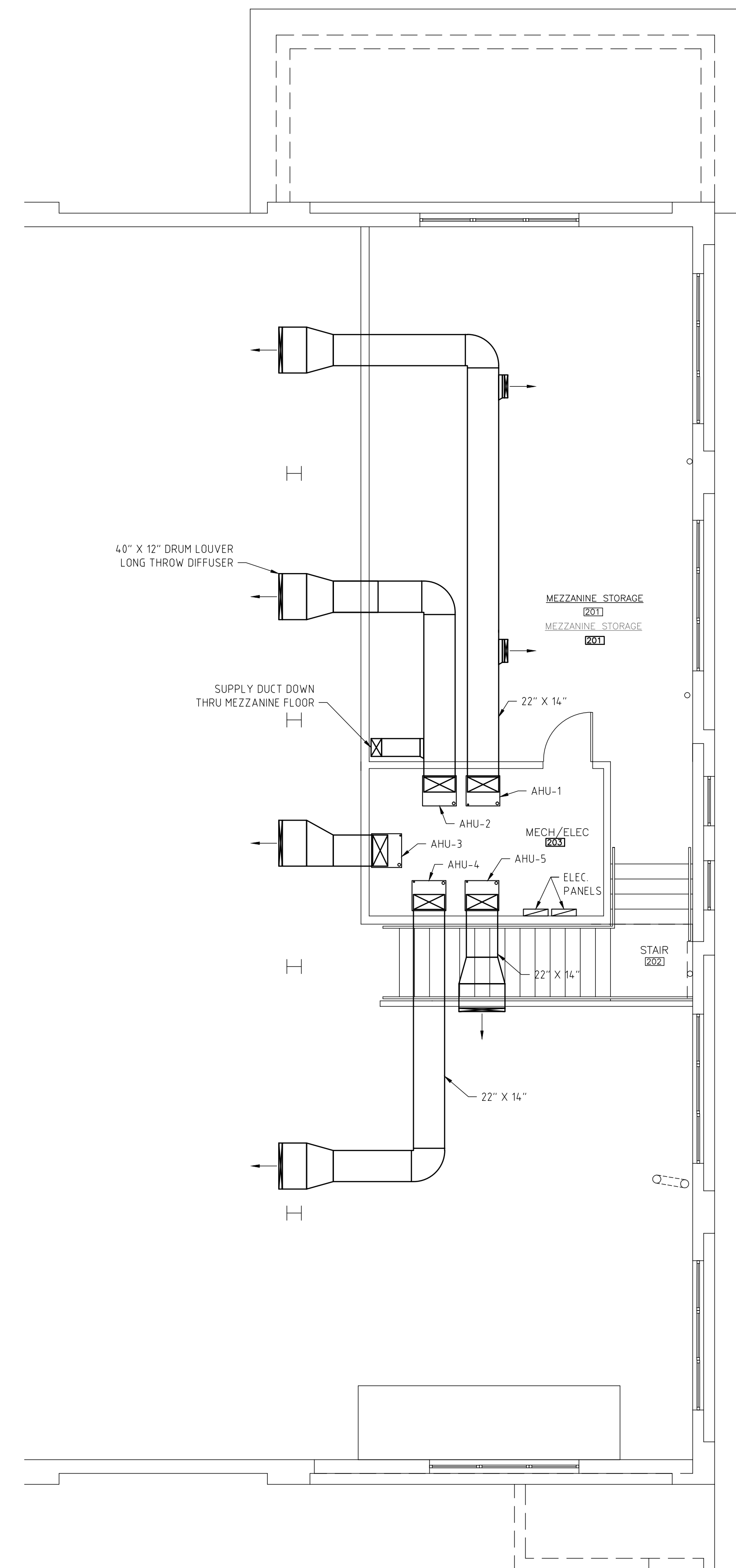


PACKAGED AIR CONDITIONING UNIT				
GENERAL	UNIT TAG	RTU-1		
	LOCATION	ROOF		
	MANUFACTURER	DAIKIN		
	MODEL NUMBER	DPS018A		
	NOMINAL TONNAGE	17.0		
	SEER	11.4 EER		
	AIRFLOW CONFIGURATION	HORIZONTAL		
	TOTAL AIR FLOW	CFM	2,400	
	OUTSIDE AIR TEMP	DB/WB	91/79	
	OUTSIDE AIR FLOW	CFM	2,400	
	MAX OPERATING WT.	LBS	3,543	
	UNIT DIMS LxWxH	INCHES	162.3 X 76.5 X 70.5	
	ELECTRICAL	V/Ph/Hz	208/3/60	
	UNIT M.C.A.	AMPS	77.0	
UNIT M.O.C.P.	AMPS	110.0		
COOLING	E.A.T.	DB/WB	91/79	
	L.A.T.	DB/WB	55.3/55.3	
	COIL FACE AREA	SQ.FT.	18.9	
	FACE VELOCITY	FPM	127.0	
	TOTAL CAPACITY	MBH	206.3	
	SENSIBLE CAPACITY	MBH	93.8	
HOT GAS REHEAT	COIL AIR PRESSURE DROP	INCHES	0.10	
	L.A.T.	DB/WB	70.0/60.7	
	COIL FACE AREA	SQ.FT.	21.6	
	COIL AIR PRESSURE DROP	INCHES	0.10	
SUPPLY FAN	TOTAL CAPACITY	MBH	38.4	
	DRIVE TYPE/ No. OF FANS	DIRECT/1		
	SIZE/ TYPE	16.0 INCH SWSI/AF		
	E.S.P.	IN W.G.	1.0	
COMPRESSOR	T.S.P.	IN W.G.	SEE NOTE 6	
	MOTOR SIZE	HP	2.0	
	QUANTITY/TYPE	1 INVERTER SCROLL		
CONDENSER FAN	RLA	EACH	47.0A	
	QUANTITY/TYPE	PROPELLER		
ACCESSORIES	FLA	EACH	8.4A	
	ROOF CURB HEIGHT	16" MINIMUM		
GENERAL REMARKS:	FILTER TYPE	2" MERV-8		
	ELECTRIC HEAT/STAGES	20 KW, 2 STAGES		



PROPOSED PARTIAL ROOF HVAC PLAN

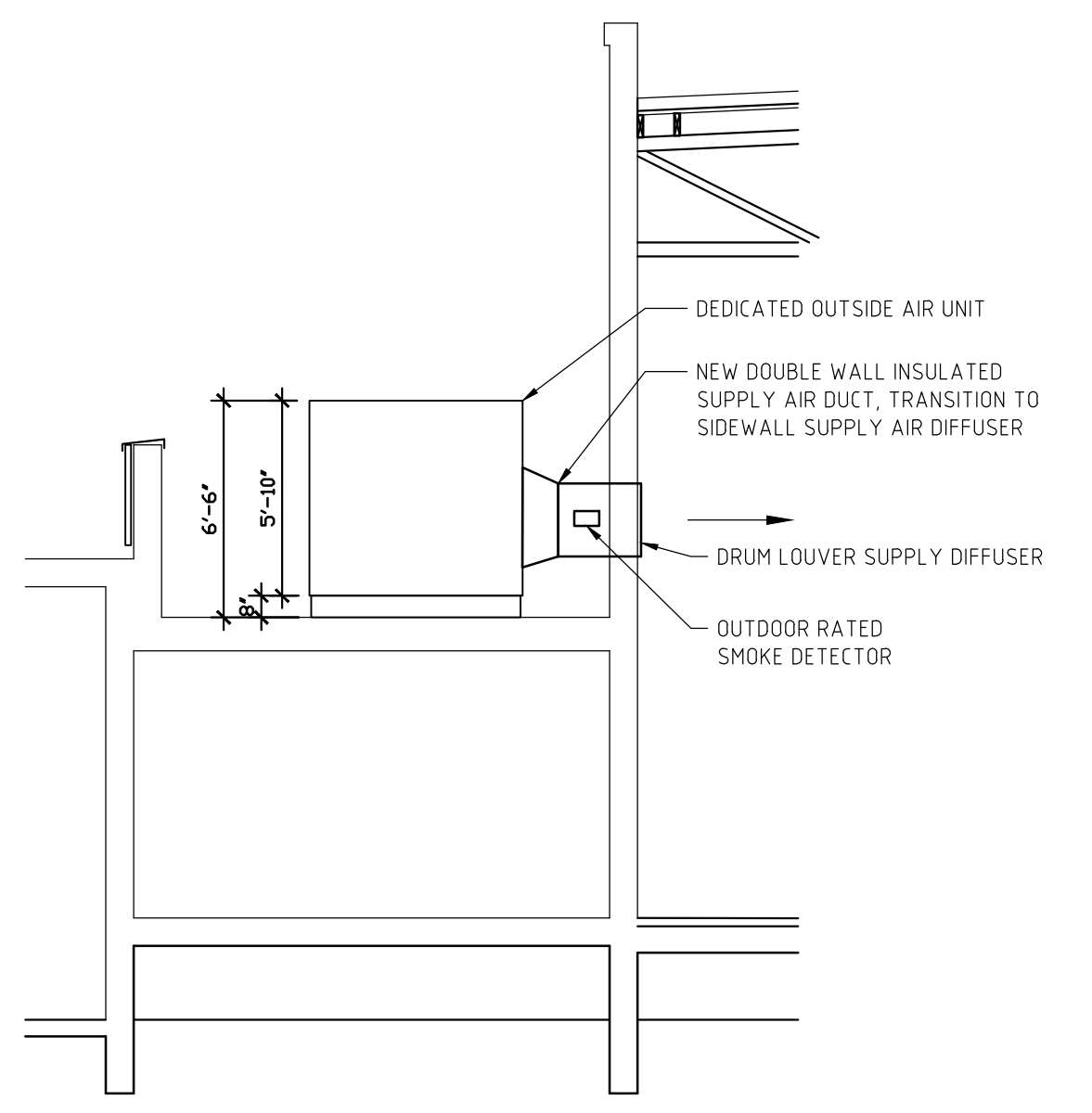
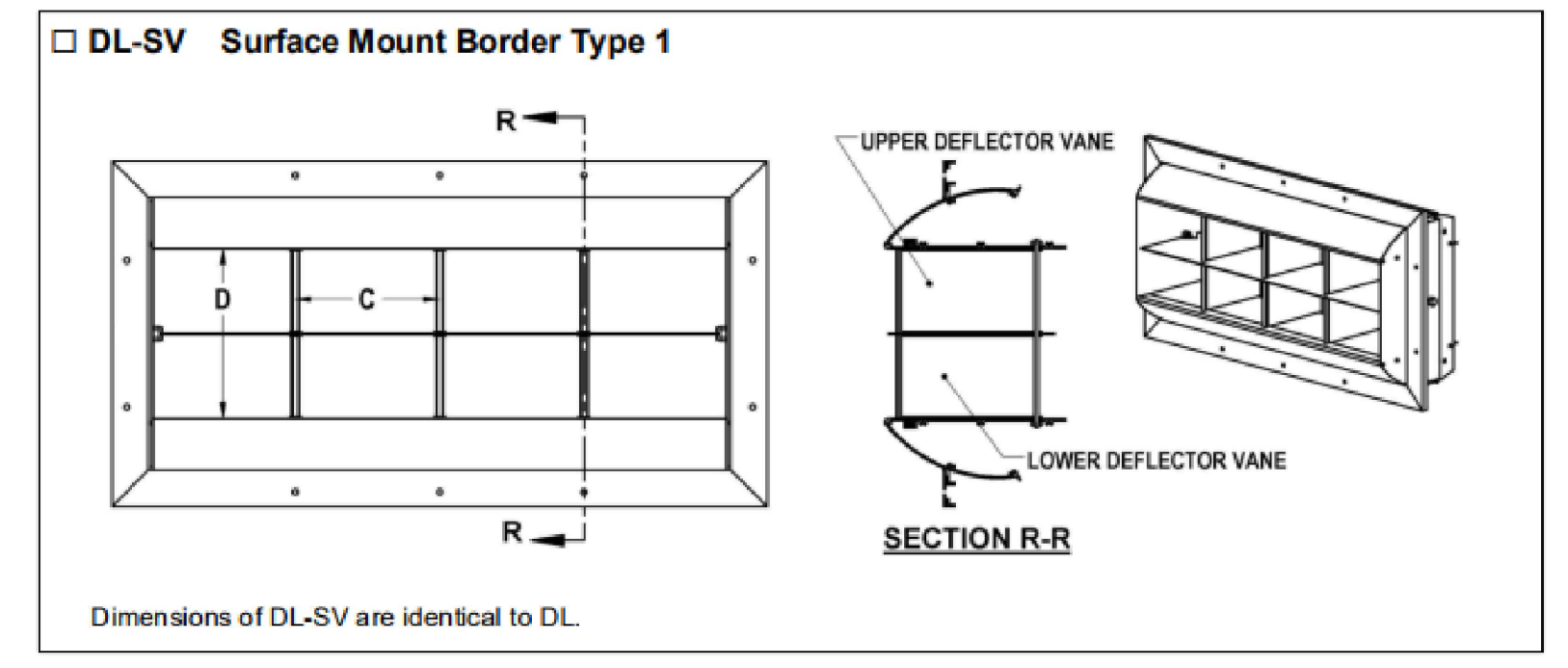
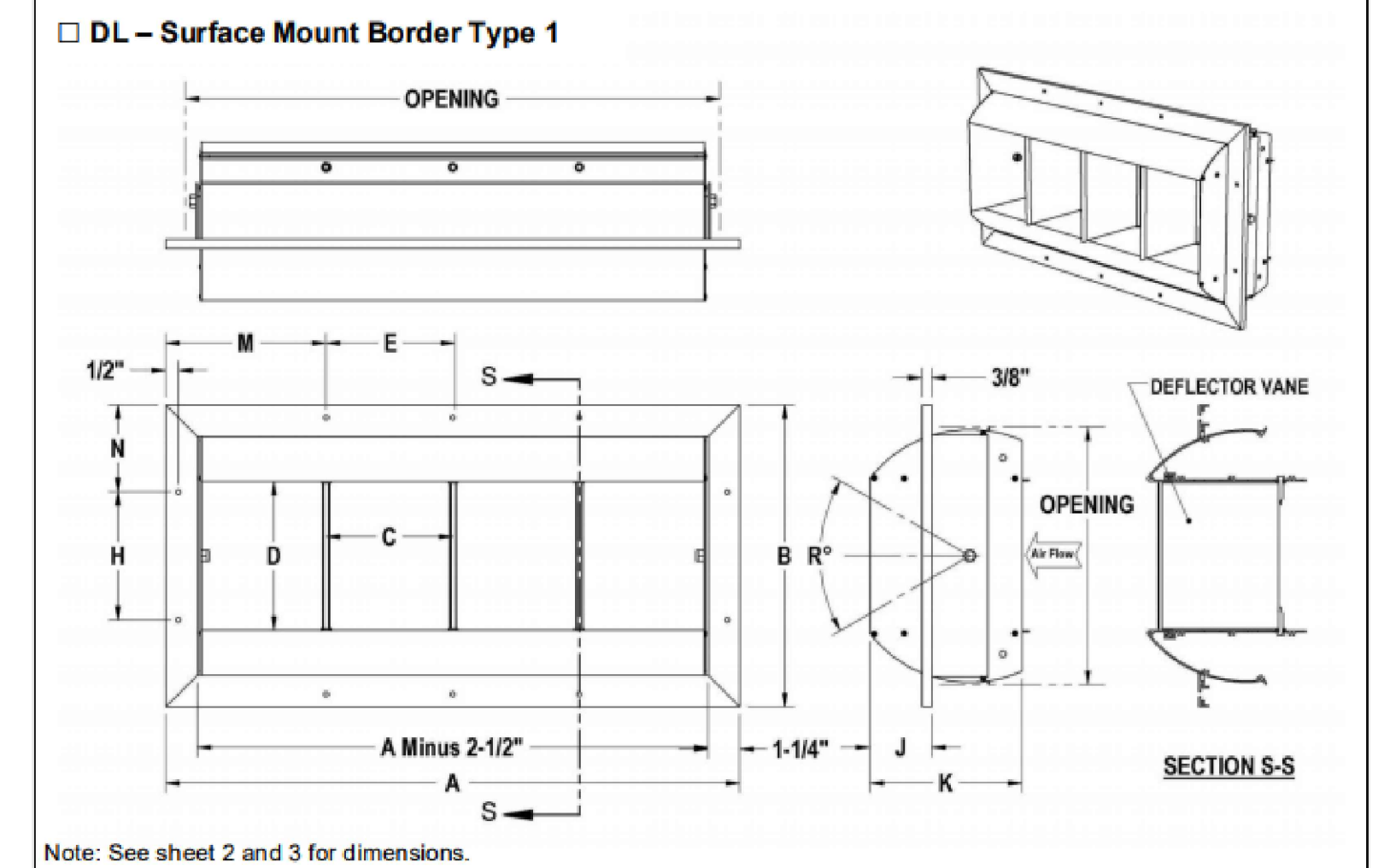
SCALE: 3/16"=1'-0"



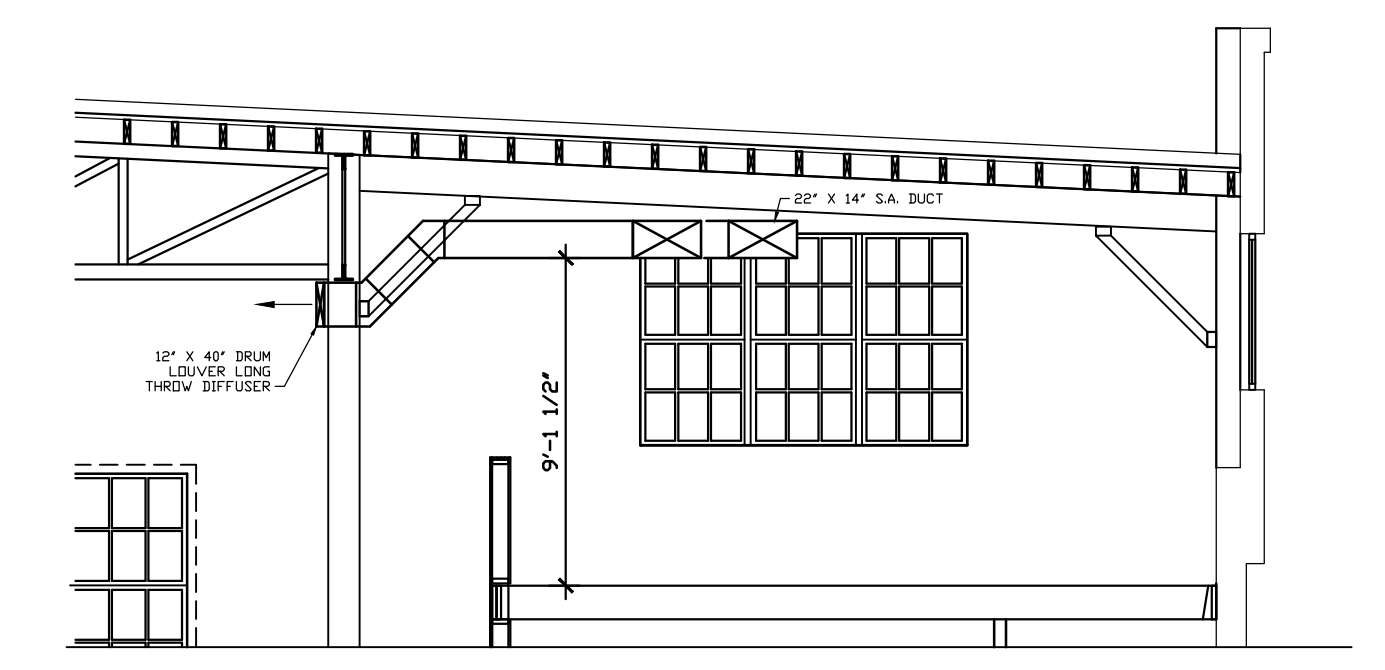
PROPOSED MEZZANINE HVAC PLAN

SCALE: 3/16"=1'-0"

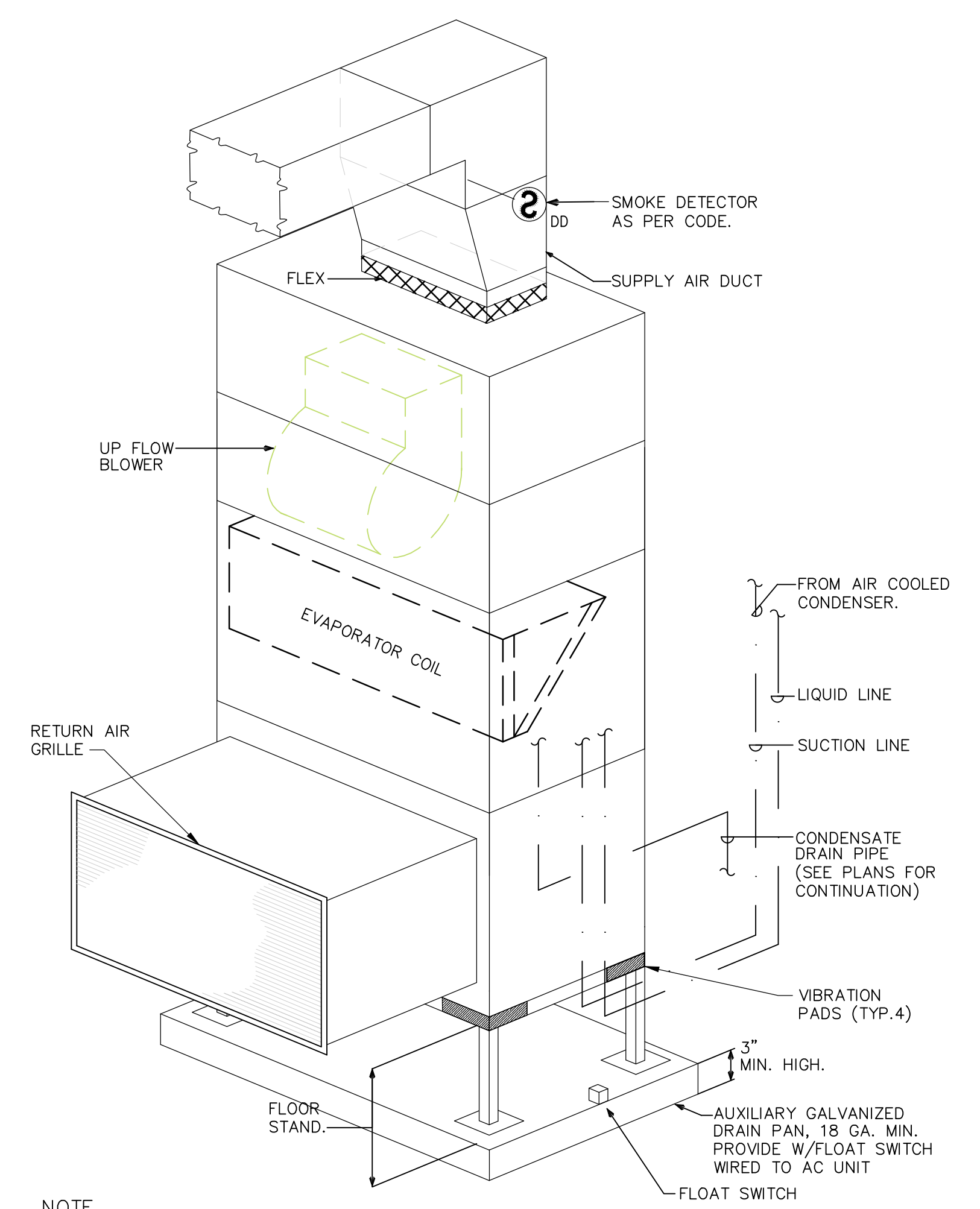
**Commercial / Industrial Supply Grilles
Aluminum Drum • Aluminum Border**
Model: DL • High Capacity • Long Throw
DL-SV • High Capacity • Long Throw • Split Deflector Vane



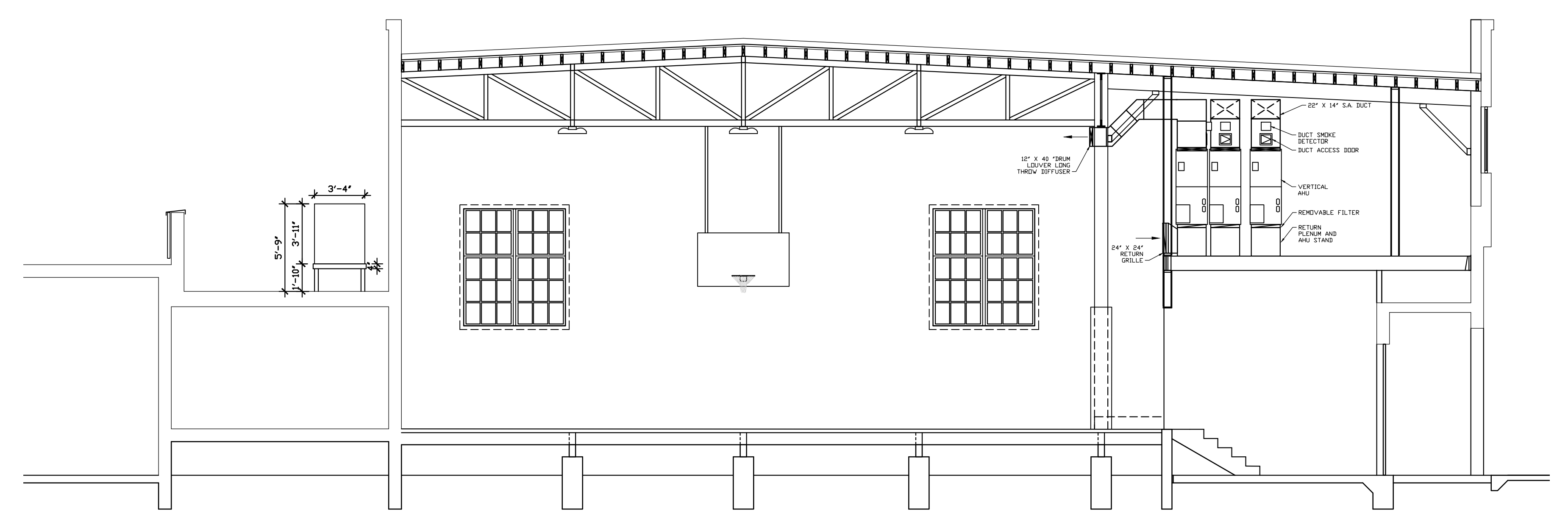
SECTION VIEW
SCALE: 3/16"=1'-0"



SECTION VIEW
SCALE: 3/16"=1'-0"



NOTE
INSTALL UNIT TO PROVIDE REQUIRED SERVICE CLEARANCE REQUIRED BY CODE AND ACCORDING TO MANUFACTURER'S REQUIREMENTS.



SECTION VIEW
SCALE: 3/16"=1'-0"

WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL (305) 296-6302
FAX (305) 296-1033

LICENSE NO.
AA 0003040

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA.

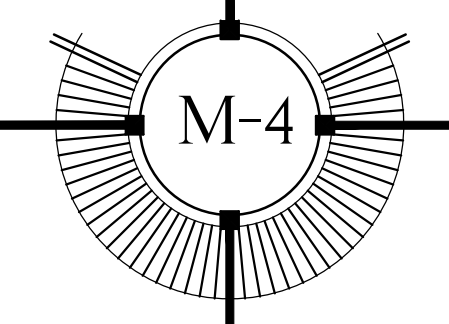
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
DHA

PROJECT NUMBER
1702



15010 – BASIC MECHANICAL REQUIREMENTS

A. CODES & REFERENCES

1. FLORIDA BUILDING CODE 2017 (6th EDITION).
2. SMACNA
3. NFPA 101
4. NFPA 90A
5. NFPA 99

B. SCOPE OF WORK

1. PROVIDE ALL REQUIRED PERMITS, LABOR, MATERIAL AND EQUIPMENT REQUIRED TO COMPLETE THE SCOPE OF THE PROJECT SHOWN ON THE DRAWINGS AND READY FOR OCCUPANCY AND USE BY OWNER. THE WORK SHALL INCLUDE BUT IS NOT LIMITED TO:
 - a. REMOVAL OF EXISTING EQUIPMENT
 - b. CUTTING AND PATCHING TO REMOVE EXISTING OR INSTALL NEW WORK
 - c. INSTALLATION OF NEW HVAC EQUIPMENT, DUCTWORK AND DIFFUSERS.
 - d. REFRIGERANT PIPING, CONDENSATE DRAIN PIPING AND CONTROLS.
 - e. CLEANING AND TESTING.
 - f. INSTRUCTION TO OWNER'S PERSONNEL.

2. ALL REMOVAL WORK AND DISRUPTIONS OF EXISTING SERVICES SHALL BE COORDINATED AND SCHEDULED IN ADVANCE WITH OWNER'S REPRESENTATIVES.
3. PROVIDE ALL BUILDING PENETRATIONS REQUIRED TO COMPLETE PROJECT. ALL PENETRATIONS TO BE PATCHED AND SEALED TO BE WATERTIGHT. MAINTAIN FIRE RATINGS OF EXISTING STRUCTURE.

4. PROVIDE ALL NECESSARY DUCT, EQUIPMENT AND PIPE SUPPORTS AND MATERIALS REQUIRED FOR INSTALLATION. PER THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL CODES.

5. NOT ALL COMPONENTS REQUIRED ARE INDICATED ON THESE DRAWINGS. REFER TO MANUFACTURERS INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS INCLUDING CONNECTION LOCATIONS, TYPES AND SIZES. PROVIDE ISOLATING VALVES AND UNIONS AT ALL EQUIPMENT CONNECTIONS.

C. REQUIRED SHOP DRAWINGS

1. INSULATION
2. AIR DEVICES.
3. REFRIGERANT PIPING AND ACCESSORIES
4. DUCTWORK AND ACCESSORIES
5. THERMOSTATS AND INTERLOCK CONTROLS
6. AIR HANDLING UNITS AND CONDENSING UNITS
7. PACKAGED ROOF MOUNTED A/C UNIT & CURB
8. FILTERS

D. MAINTENANCE MANUALS

1. PROVIDE MAINTENANCE MANUALS FOR ALL NEW EQUIPMENT CONTAINING ALL OPERATING AND MAINTENANCE DATA, SUBMITTALS, WARRANTIES, DIAGRAMS, INSPECTION REPORTS AND VALVE LISTS IN A 3 RING BINDER WITH POCKETS FOR DRAWINGS. PROVIDE OWNER WITH 2 COPIES.

E. AS-BUILT DRAWINGS

1. THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF ALL CHANGES MADE TO THE CONTRACT DOCUMENTS (AS-BUILT).
 2. THE CONTRACTOR SHALL PROVIDE THE ENGINEER 2 SETS OF COMPLETED AS-BUILT DRAWINGS.
 3. THE PROJECT WILL NOT BE CONSIDERED COMPLETE UNTIL ACCURATE AS-BUILTS ARE DELIVERED.
- F. SUBSTITUTIONS
1. EQUIPMENT AND DESIGN OF SYSTEMS INDICATED ON THE DESIGN DRAWINGS AND WITHIN THESE SPECIFICATIONS SHALL BE CONSIDERED AS "SPECIFIED STANDARD" OF QUALITY. NO SUBSTITUTIONS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER 10 DAYS PRIOR TO BID DATE.
 2. ANY DEVIATION FROM SPECIFIED EQUIPMENT THAT AFFECTS THE ELECTRICAL REQUIREMENTS SHALL BE COORDINATED BY THE MECHANICAL CONTRACTOR AND EQUIPMENT VENDOR WITH THE ELECTRICAL CONTRACTOR PRIOR TO SUBMITTING BIDS.

G. WIND LOADS

1. ALL EQUIPMENT TO BE MOUNTED OUTSIDE SHALL BE FURNISHED WITH A NOA (NOTICE OF ACCEPTANCE) FOR WINDSTORM OR BE FURNISHED WITH AN ENGINEERED DETAIL GOOD FOR THE LOCAL WIND RATE. CONTRACTOR SHALL SUBMIT ENGINEERED SHOP DRAWINGS.

15050 – BASIC MATERIALS AND METHODS

- A. ACCESS PANELS – FURNISHED BY MECHANICAL CONTRACTOR, INSTALLED BY GENERAL CONTRACTOR, PAINTED TO MATCH ADJACENT SURFACES.

1. PROVIDE FOR ACCESS TO ALL SERVICEABLE EQUIPMENT IN WALLS AND CEILINGS.
2. MICOR STYLE M FOR DRYWALL
3. MICOR STYLE K FOR PLASTER
4. MINIMUM SIZE 16"x16"
5. NYSTROM, KARP, J.L. INDUSTRIES OR WILLIAMS PAINT.

B. LABELING

1. PROVIDE RIGID PLASTIC EMBOSSED EQUIPMENT NAME TAGS FOR ALL NEW EQUIPMENT AND DISCONNECTS. SETON NAMEPLATE CORPORATION.

C. MECHANICAL SYSTEMS CLEANING

1. CLEAN AND TOUCH UP ALL FACTORY FINISHES.
2. VACUUM AND CLEAN ALL HVAC SYSTEMS BEFORE CONNECTION TO EQUIPMENT.

D. CLEANING TESTING AND ADJUSTING

1. THE MECHANICAL CONTRACTOR, AT HIS EXPENSE, SHALL CLEAN, REPAIR, ADJUST, CHECK, BALANCE AND PLACE IN SERVICE THE VARIOUS SYSTEMS HEREIN SPECIFIED WITH THEIR RESPECTIVE EQUIPMENT, ACCESSORIES AND PIPING. HE/SHE SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS REQUIRED TO PERFORM TESTS REQUIRED BY THESE SPECIFICATIONS AND BY THE GOVERNING AUTHORITIES.
2. NO WORK SHALL BE COVERED OR CONCEALED UNTIL PROPERLY INSPECTED AND TESTED.

E. HANGERS AND SUPPORTS

1. PROVIDE ALL NECESSARY DUCTWORK, PIPE SUPPORTS, HANGERS, RODS, CLAMPS AND ATTACHMENTS TO PROPERLY INSTALL AND SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM THE BUILDING STRUCTURE.
2. PROVIDE ANY ANGLE IRON OR UNISTRUT AND SUSPENSION RODS REQUIRED TO INSTALL EQUIPMENT, PIPING AND DUCTWORK.
3. ALL SUPPORTS EXPOSED TO OUTDOORS SHALL BE CLEANED, PRIMED AND PAINTED TO PREVENT RUSTING. FINISH COLOR AS SELECTED BY OWNER.
4. THE USE OF BALING WIRE OR PERFORATED METAL STRAPPING IS NOT PERMITTED FOR SUPPORTS.

F. WARRANTY/GUARANTEE

1. THE CONTRACTOR SHALL WARRANTY/GUARANTEE AND MAINTAIN THE STABILITY OF WORK AND MATERIALS AND KEEP SAME IN PERFECT REPAIR AND CONDITION OF THE PERIOD OF ONE YEAR FROM SUBSTANTIAL COMPLETION.
2. DEFECTS OF ANY KIND DUE TO THE FAULTY WORK OR MATERIALS APPEARING DURING THE ABOVE MENTIONED PERIOD MUST BE IMMEDIATELY MADE GOOD BY THE CONTRACTOR AT HIS OWN EXPENSE TO THE ENTIRE SATISFACTION OF THE OWNER AND ENGINEER. SUCH RECONSTRUCTION AND REPAIRS SHALL INCLUDE DAMAGE TO THE FINISH OR FURNISHING OF THE BUILDING RESULTING FROM THE ORIGINAL DEFECT OR REPAIR THERETO.
3. EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR FROM SUBSTANTIAL COMPLETION AND COMPRESSORS SHALL HAVE EXTENDED WARRANTY FOR 5 YEARS.

15060 – PIPING

A. TYPE L HARD COPPER PIPE USED FOR:

1. COOLING COIL CONDENSATE PIPING
2. REFRIGERANT PIPING

B. OUTDOORS EXPOSED INSULATED PIPING:

1. ALL OUTDOOR EXPOSED INSULATED PIPING SHALL BE PAINTED WITH TWO COATS OF ARMAFLEX STANDARD WHITE WB FINISH. PRIOR TO APPLYING THE FINISH, THE INSULATION SHALL BE WIPE CLEAN WITH DENATURED ALCOHOL. THE FINISH SHALL NOT BE TINTED.
2. ALL OUTDOOR EXPOSED PIPING SHALL HAVE THE SEAMS LOCATED ON THE LOWER HALF OF THE PIPE.
3. CONTACT MANUFACTURER FOR ALTERNATIVE PRODUCTS.

15103 – SLEEVES

- A. SLEEVES TO BE 18 GAGE SHEET METAL OR SCHEDULE 40 PIPE. SLEEVE THE FOLLOWING:

1. MASONARY WALLS SLEEVE ALL PIPE PENETRATIONS
2. FLOORS SLEEVE ALL HVAC PIPING. EXTEND SLEEVES 1/2" ABOVE FINISHED FLOOR (2" ABOVE FINISHED FLOORS IN MECHANICAL ROOMS)
3. NON-FIRE RATED PARTITIONS NO SLEEVES REQUIRED. SEAL WALL TO INSULATION
4. USE U.L. LISTED ASSEMBLY FOR ALL PENETRATIONS THRU RATED CONSTRUCTION.

15242 – VIBRATION ISOLATION

A. ACCEPTABLE MANUFACTURERS:

1. MASON INDUSTRIES.
 2. KINETICS NOISE CONTROL.
 3. KORFUND.
 4. AMBER BOOTH.
- B. MASON TYPE SLF CONTROL FOR AHUS (UNLESS INTERNAL)
- C. MASON SUPER W RUBBER PAD FOR FLOOR MOUNTED AHUS (IF INTERNAL).
- D. MASON TYPE HS CEILING SUSPENDED FANS AND AHUS.

15250 – INSULATION

- A. INSULATION, ADHESIVES, COATINGS, SEALERS, TAPES, ETC. SHALL HAVE A FLAME SPREAD OF 25 OR LESS AND SMOKE DEVELOPMENT OF 50 OR LESS IN ACCORDANCE WITH ASTM E-84, NFPA 225, UL 723 AND MEET THE REQUIREMENTS OF NFPA 90A. ALL INSULATING R-VALUES TO MEET THE REQUIREMENTS OF THE FLORIDA ENERGY CODE. INSULATION SHALL CONTAIN NO FORMALDEHYDE.

- B. FLEXIBLE ELASTOMERIC INSULATION, ARMSTRONG "AP ARMAFLEX", MITCHEL, RUBATEX:

1. CONDENSATE DRAINS - 3/4" THICK
2. REFRIGERATION MACHINE EVAPORATOR - 2 LAYERS - 3/4" THICK.
3. REFRIGERATION SUCTION LINES: 3/4" THICK

- C. BLANKET TYPE DUCT INSULATION, JOHNS MANVILLE, CERTAINTED, KNAUF, OWENS CORNING, MINIMUM R-6.0, FOIL FACED KRAFT VAPOR BARRIER.

1. ALL SUPPLY, OUTSIDE AIR AND RETURN WHERE CONCEALED FROM VIEW, R-6.

D. SEMI RIGID BOARD TYPE DUCT INSULATION 15lb DENSITY, CERTAINTED 18-300, JOHNS MANVILLE, KNAUF, OWENS CORNING

1. ALL SUPPLY, RETURN AND OUTSIDE AIR WHERE EXPOSED.

2. MINIMUM DUCT INSULATION THICKNESS AND R VALUES ARE AS FOLLOWS:

- a. SUPPLY AND RETURN AIR IN UNCONDITIONED SPACE: 2" (R-6 MIN.)
- b. SUPPLY AND RETURN AIR IN CONDITIONED INTERIOR SPACE: 1.5" (R-4.2 MIN.)
- c. OUTSIDE AIR: 2" (R-6 MIN.)
- d. SUPPLY AIR IN CEILING RETURN AIR PLENUM: 1.5" (R-4.2 MIN.)
- e. RETURN AIR IN CEILING RETURN AIR PLENUM: NOT REQUIRED.
- f. DUCTWORK OUTSIDE OF BUILDING: 3" (R-8 MIN.)

FIBERGLASS DUCTWORK:

- A. ALL DUCTWORK OPERATING AT OR BELOW 15" W.G. STATIC PRESSURE, 1500 FPM VELOCITY AND 250°F AIR TEMPERATURE CAN BE CONSTRUCTED OF 1 1/2" THICK (R-6) FIBROUS GLASS DUCT BOARD MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARD. ALL DUCTWORK LOCATED WITHIN CONDITIONED SPACE AT OR BELOW 15" W.G. STATIC PRESSURE, 1500 FPM VELOCITY AND 250°F AIR TEMPERATURE CAN BE CONSTRUCTED OF 1" THICK (R-4.2) FIBROUS GLASS DUCT BOARD MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARD. ALL FLEX DUCT SHALL BE RATED CLASS I, UL-181 LISTED WITH METALIZED INNER AND OUTER FOIL LINERS.

- B. FABRICATION AND INSTALLATION OF DUCT AND FITTINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARD. FURTHERMORE, CLOSURE SYSTEMS FOR LONGITUDINAL SEAMS AND TRANSVERSE JOINTS SHALL BE IN ACCORDANCE WITH PROCEDURES NECESSARY TO COMPLY WITH SECTION III, CLOSURES.

15890 – SHEETMETAL DUCTWORK

- A. ALL DUCT TO BE INSTALLED ACCORDING TO LATEST SMACNA STANDARDS.

15910 – SHEETMETAL ACCESSORIES

A. AIR INLETS AND OUTLET.

1. REFER TO SCHEDULE
2. ALL ALUMINUM CONSTRUCTION
3. ACCEPTABLE MANUFACTURERS: TITUS, PRICE, METAL-AIRE, CARNES, ANEMOSTAT, NAILOR.

FLEXIBLE INSULATED DUCT FOR SUPPLY AND RETURN AIR.

- A. FLEXIBLE DUCT: UL 181, CLASS 1, MULTIPLE LAYERS OF ALUMINUM LAMINATE SUPPORTED BY HELICALLY WOUND, SPRING-STEEL WIRE, FIBROUS-GLASS INSULATION, POLYETHYLENE OR ALUMINIZED VAPOR-BARRIER FILM. FLEXMASTER, MASTERDUCT TYPE SM LOW PRESSURE INSULATED OR EQUAL.

1. PRESSURE RATING: 10-INCH WG POSITIVE AND 10-INCH WG NEGATIVE.
 2. MAXIMUM AIR VELOCITY: 4000 FPM.
 3. TEMPERATURE RANGE: MINUS 20 TO PLUS 210 DEG F.
 4. INSULATION R-VALUE: COMPLY WITH ASHRAE/IESNA 90.1, R-6 MINIMUM.
 5. FLAME SPREAD: LESS THAN 25
 6. SMOKE DEVELOPED: LESS THAN 50
- B. CONNECT FLEXIBLE DUCTS TO METAL DUCTS, DIFFUSERS, OR TAKE-OFFS WITH DRAW BANDS AND PRESSURE SENSITIVE TAPE.
- C. COMPLY WITH FMC SECTION 603, DUCT CONSTRUCTION AND INSTALLATION.
- D. SPLICING OF TWO OR MORE SECTIONS SHALL NOT BE PERMITTED. DO NOT EXCEED CENTERLINE BEND RADIUS OF 15 X DIAMETER. TRIM DUCTS TO PROPER LENGTHS AND DO NOT ALLOW DUCTS TO SAG.

- E. DUCTS SHALL BE SUPPORTED WITH APPROVED HANGERS IN ACCORDANCE WITH THE REQUIREMENTS OF FMC SECTIONS 603.10.1 THROUGH 603.10.3, OR BY OTHER APPROVED DUCT SUPPORT SYSTEMS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE. FLEXIBLE DUCTS SHALL BE CONFIGURED AND SUPPORTED SO AS TO PREVENT THE USE OF EXCESS DUCT MATERIAL, PREVENT DUCT DISLOCATION OR DAMAGE, AND PREVENT CONSTRUCTION OF THE DUCT BELOW THE RATED DUCT DIAMETER IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

1. DUCTS SHALL BE INSTALLED FULLY EXTENDED. THE TOTAL EXTENDED LENGTH OF DUCT MATERIAL SHALL NOT EXCEED 5 PERCENT OF THE MINIMUM REQUIRED LENGTH FOR THAT RUN.
2. BENDS SHALL MAINTAIN A CENTER LINE RADIUS OF NOT LESS THAN ONE DUCT DIAMETER.
3. TERMINAL DEVICES SHALL BE SUPPORTED INDEPENDENTLY OF THE FLEXIBLE DUCT.
4. HORIZONTAL DUCT SHALL BE SUPPORTED AT INTERVALS NOT GREATER THAN 5 FEET. DUCT SAG BETWEEN SUPPORTS SHALL NOT EXCEED 1/2 INCH (12.7 MM) PER FOOT OF LENGTH. SUPPORTS SHALL BE PROVIDED WITHIN 1-1/2 FEET OF INTERMEDIATE FITTINGS AND BETWEEN INTERMEDIATE FITTINGS AND BENDS. CEILING JOISTS AND RIGID DUCT OR EQUIPMENT MAY BE CONSIDERED TO BE SUPPORTS.
5. VERTICAL DUCT SHALL BE STABILIZED WITH SUPPORT STRAPS AT INTERVALS NOT GREATER THAN 6 FEET.
6. HANGERS, SADDLES AND OTHER SUPPORTS SHALL MEET THE DUCT MANUFACTURER'S RECOMMENDATIONS AND SHALL BE OF SUFFICIENT WIDTH TO PREVENT RESTRICTION OF THE INTERNAL DUCT DIAMETER. IN NO CASE SHALL THE MATERIAL SUPPORTING FLEXIBLE DUCT THAT IS IN DIRECT CONTACT WITH IT BE LESS THAN 1-1/2 INCHES WIDE.

F. BALANCING DAMPERS

1. GENERAL – IN ALL DUCTWORK SYSTEMS, PROVIDE DAMPERS FOR PROPER CONTROL AND BALANCING OF AIR QUANTITIES. CONCEALED DAMPERS TO HAVE CONCEALED DAMPER REGULATOR. ALL COMPONENTS FOR PROPER OPERATION; (i.e. GEARS, LINKAGES, CABLE, ETC.) SHALL BE INCLUDED.
2. TYPE: OPPOSED BLADE.
3. MATERIAL: STEEL, 3V TYPE BLADES MOUNTED IN STEEL CHANNEL FRAME.
4. SHAFT: 1/2" SQUARE ROD OPERATOR WITH END BEARINGS AND GASKET SEAL AT DUCT PENETRATIONS. TERMINATE SHAFT IN DAMPER FRAME WITH BUSHINGS.
5. OPERATOR: LOCKING QUADRANT HANDLE WITH DAMPER POSITION INDICATOR AND INSULATION STAND OFF MOUNTING BRACKET FOR EXTERNALLY INSULATED DUCTWORK.

G. ACCESS DOORS

1. ACCEPTABLE MANUFACTURERS: RUSKIN, VENCO, NAILOR.
2. SIZE ACCESS DOOR AS FOLLOWS:

- a. DUCT SIZES UNDER 12": DOOR SIZED SUFFICIENT TO EQUIPMENT OR REPLACE FUSIBLE LINK.
 - b. DUCT SIZES 12" TO 20": 12"x12" DOOR.
 - c. DUCT SIZES 20" TO 36": 18"x18" DOOR.
 - d. DUCT SIZES 36" AND ABOVE: 24"x24" DOOR.
3. USE DOUBLE PANEL CONSTRUCTION, TWO SHEETS OF AT LEAST 24 GAUGE GALVANIZED STEEL WITH 1" THICK INSULATION BETWEEN PANELS.
 4. MOUNT DOORS IN A RIGID FRAME OF AT LEAST 22 GAUGE FORMED GALVANIZED STEEL OR ALUMINUM.
 5. PROVIDE LATCHES THAT PERMIT EASY REMOVAL OF ACCESS DOOR WHILE MAINTAINING POSITIVE CLOSING AND MINIMUM LEAKAGE.
 6. PROVIDE SPONGE RUBBER GASKETS FOR ALL DOORS.
 7. IN ACCORDANCE WITH NFPA 90A, IDENTIFY EACH ACCESS DOOR WITH 1/2" HIGH STENCILED LETTERS AS 'FIRE DAMPER', 'SMOKE DAMPER', OR 'COMBINATION FIRE/SMOKE DAMPER'.

SPLIT SYSTEM A/C UNITS

ACCEPTABLE MANUFACTURERS

- A. CARRIER
- B. FRANE
- C. LENOX

A. OUTDOOR UNIT:

1. REFRIGERANT: R-410A.
2. HOUSING: STEEL, PAINTED WITH COASTAL CORROSION PROTECTION.
3. COMPRESSOR: HERMETIC WITH VIBRATION ISOLATION.
4. SERVICE VALVES: SOLID BRASS FOR LIQUID AND SUCTION LINES LOCATED OUTSIDE OF UNIT.
5. CONTROLS: FACTORY WIRED WITH THERMAL AND CURRENT OVERLOAD SENSORS.
6. COIL: ALUMINUM FINS, NON-FERROUS TUBING.
7. FAN: DIRECT DRIVE, PROPELLER TYPE, UPBLAST.
8. ACCESSORIES: PRECHARGED TUBING PACKAGE.

B. INDOOR UNIT:

1. REFRIGERANT: R-410A.
2. CASE: 20 GAUGE STEEL ENAMEL PAINT.
3. FAN: FORWARD CURVE CENTRIFUGAL, STATICALLY AND DYNAMICALLY BALANCED, RESILIENTLY MOUNTED, THERMAL OVERLOAD PROTECTION.
4. COIL: ALUMINUM FINS, NON-FERROUS TUBING, PRECHARGED WITH SUFFICIENT REFRIGERANT FOR SYSTEM.
5. CONTROLS: 24 VOLT TRANSFORMER AND FAN RELAY, SIZED TO INCLUDE OA DAMPER LOAD.
6. FILTER: THROWAWAY FILTER AND MOUNTING FRAME (MINIMUM MERV 8).
7. HEATER: U.L. LISTED, FACTORY INSTALLED AND WIRED.

15970 – TEMPERATURE CONTROLS

- A. MOUNT THERMOSTATS 48" A.F.F. ALIGN WITH LIGHT/SWITCHES, DOOR SWINGS AND OTHER WALL MOUNTED DEVICES. COORDINATE LOCATION WITH ARCHITECT.
- B. PROVIDE 24V DC CONTROL WIRING BETWEEN OA DAMPER AND CONDENSING UNIT. DAMPER SHALL OPEN WHEN CONDENSING IS ENERGIZED.
- C. SEE SHEET M3.20 FOR MORE CONTROL SYSTEM SPECIFICATIONS AND DETAILS.

15990 – TEST AND BALANCE

- A. PROVIDE COMPLETE INDEPENDENT TEST AND BALANCE OF ALL WATER AND AIR SYSTEMS IN ACCORDANCE WITH NEBB (NATIONAL ENVIRONMENTAL BALANCING BUREAU) OR AABC (ASSOCIATED AIR BALANCE COUNCIL) STANDARDS.

B. TEST AND BALANCE FIRM TO BE:

1. CERTIFIED TEST & BALANCE – (561) 961-5068, OR (954) 532-4772.
2. DADE TEST AND BALANCE, INC. – (954) 791-3194.
3. TOTAL DYNAMIC BALANCE – (954) 425-0764.
4. EARL HAGOOD, INC. – (305) 266-7070.
5. OR APPROVED EQUAL.

C. CONTRACTOR SHALL:

1. VISIT SITE AT START OF PROJECT AND COORDINATE REQUIRED BALANCING EQUIPMENT AND DAMPERS WITH MECHANICAL CONTRACTOR.
2. AIR SYSTEMS:
 - a. MAKE CHANGES TO BELTS, PULLEYS, DAMPERS, VOLUME BOXES, ETC. TO OBTAIN DESIGN CONDITIONS AS REQUIRED BY TAB PROCEDURES.
 - b. BALANCE SUPPLY, RETURN AND EXHAUST AIR OUTLETS WITHIN 10% OF DESIGN WHILE MAINTAINING REQUIRED PRESSURE RELATIONSHIPS. RECORD DESIGN AND ACTUAL TOTALS.
 - c. MEASURE AND REPORT FAN RPM, FAN SUCTION PRESSURE, FAN DISCHARGE PRESSURE, FAN TOTAL PRESSURE AND PRESSURE DROP ACROSS COMPONENTS, DESIGN AND ACTUAL SUPPLY, RETURN, OUTSIDE AND EXHAUST AIR.
 - d. ACTUAL AND DESIGN NAMEPLATE AMPERAGE ON FAN MOTORS.
 - e. PRESSURE DIFFERENTIAL ACROSS DUCT SMOKE DETECTORS.
 - f. ADJUST FANS FOR LOWEST STATIC PRESSURE REQUIRED TO DELIVER TO OUTLETS AS NOTED IN NEBB OR AABC PROCEDURES.
 - g. MEASURE SUPPLY AND RETURN ENTERING AND LEAVING TEMPERATURES (DB/WB) ACROSS EACH COIL AND AT EACH SUPPLY DISCHARGE AND RETURN INLET AT UNIT.
3. PROVIDE WRITTEN REPORT AT LEAST ONE WEEK BEFORE FINAL INSPECTION AND A TECHNICIAN DURING FINAL INSPECTION OF PROJECT.

WILLIAM P. HORN
ARCHITECT, P.A.

915 EATON ST.
KEY WEST,
FLORIDA
33040

TEL: (305) 296-8302
FAX: (305) 296-1033

LICENSE NO.
AA 0003040

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA.

SEAL

DATE

05-15-17 HRC
01-23-18 REV
05-09-18 BID

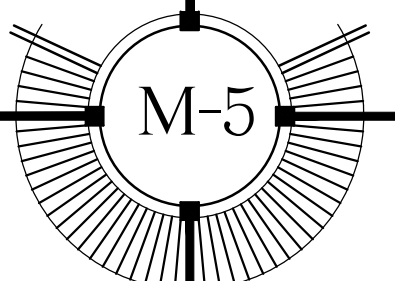
REVISIONS

DRAWN BY

DHA

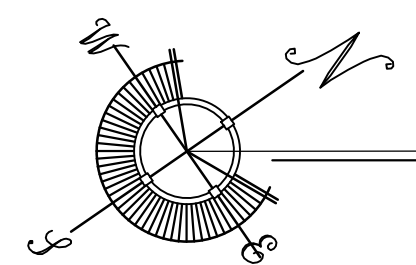
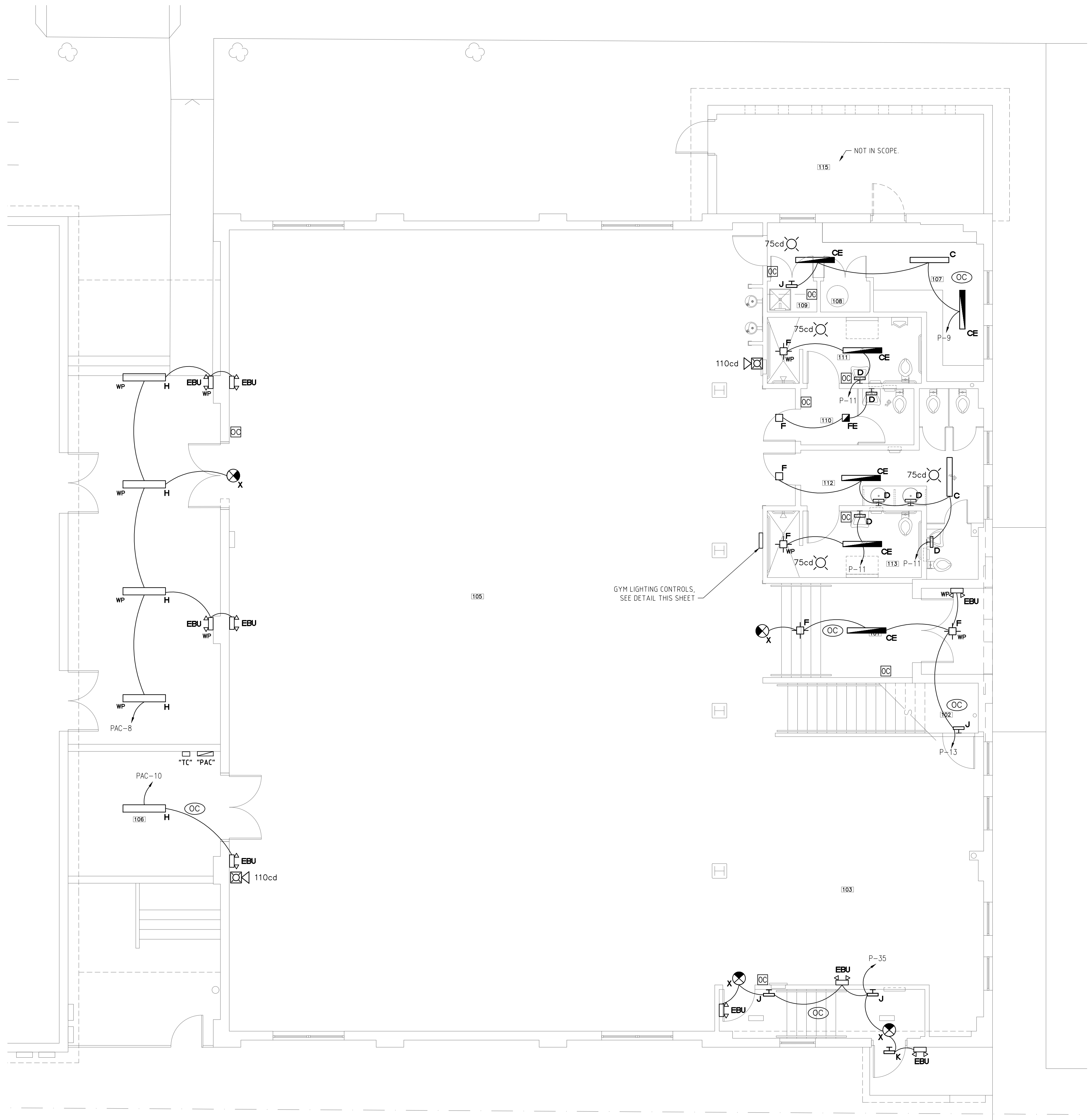
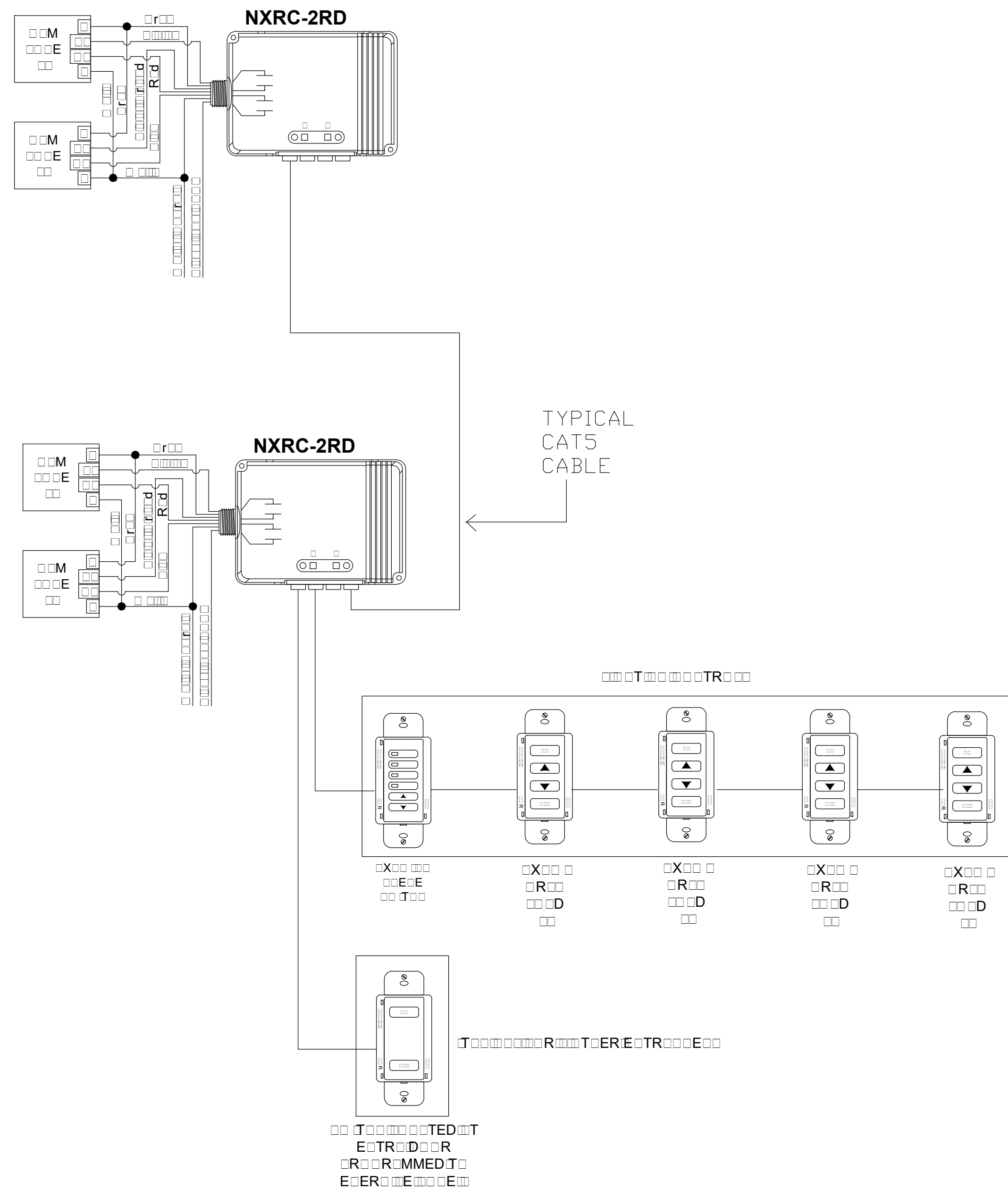
PROJECT NUMBER

1702



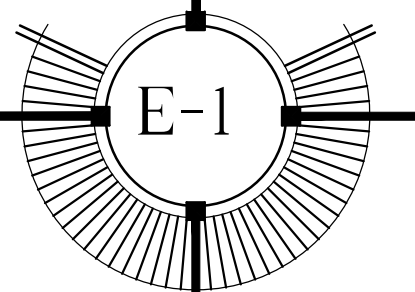
OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

LIGHTING POWER DENSITY						
SPACE	Label	Qty	Lum. Watts	Total Watts	AREA S.F.	LPD Watts/SF
GYM	A	19	154.8	2,941	4,243	0.69
MEZZ. STORAGE	B	2	109.2	218	640	0.34
MECH ROOM	C	1	47	47	128	0.37
FIRST FL STORAGE	C, D	3, 1	30	171	203	0.84
RESTROOMS/SHOWERS	C, D, F	4, 4, 2	13.5	335	416	0.81
STAIRWAY	G	2	30	60	138	0.43
ENTRYWAY	J	2	30	60	72	0.83
TOTAL	-	-	-	3,832	5,840	0.65



PROPOSED FIRST FLOOR LIGHTING PLAN

SCALE: 3/16"=1'-0"



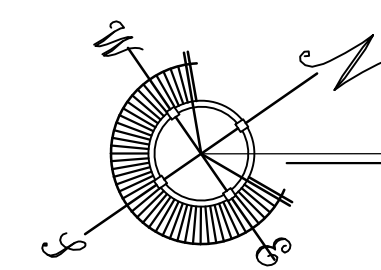
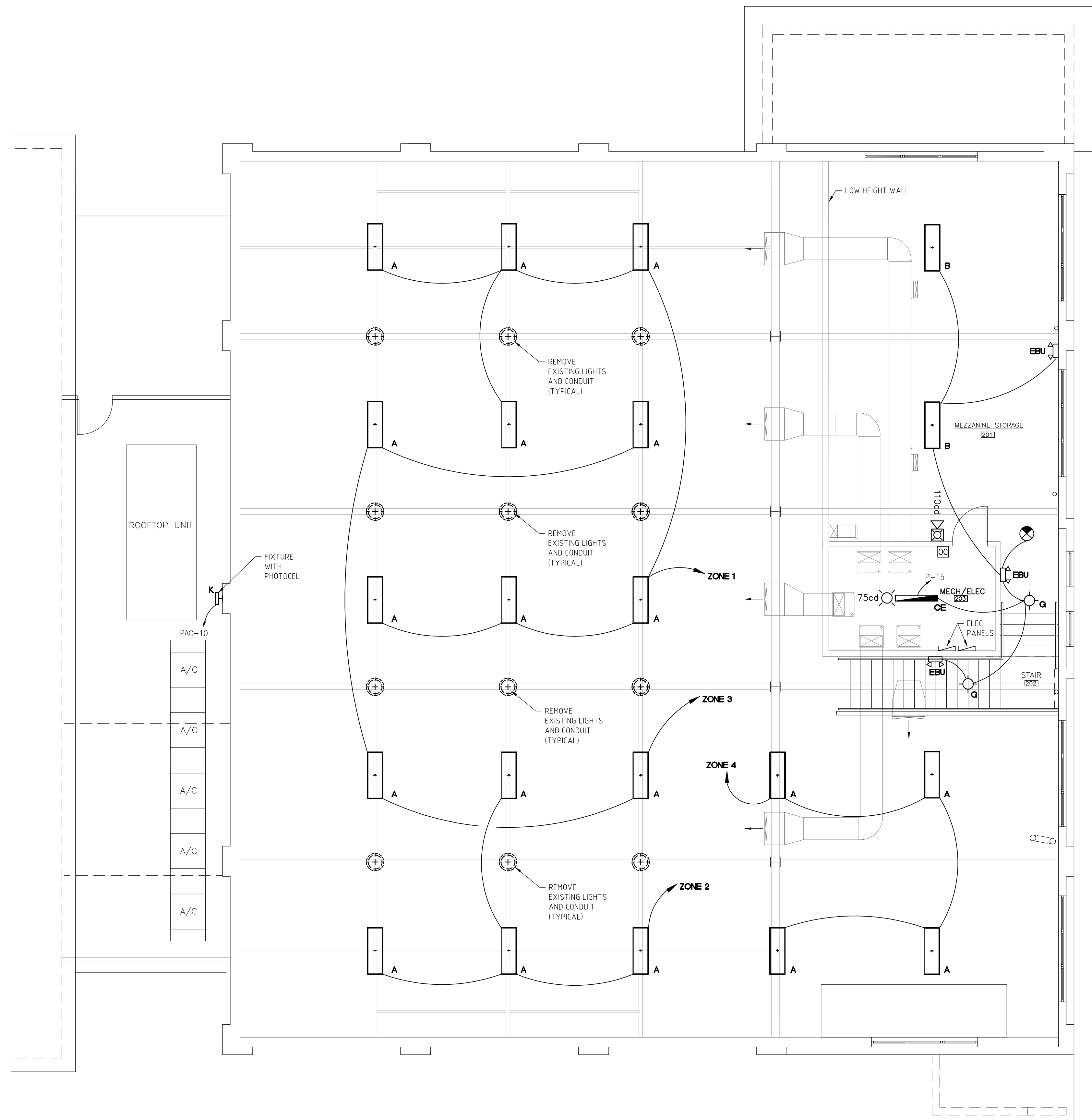
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

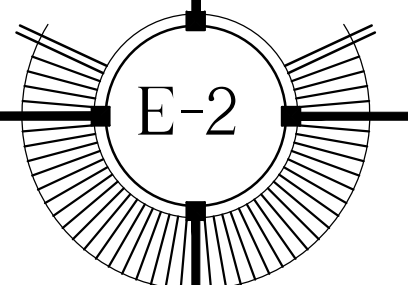
DRAWN BY
DHA

PROJECT
NUMBER
1702



PROPOSED MEZZANINE & HIGH CEILING LIGHTING PLAN

SCALE: 3/16"=1'-0"



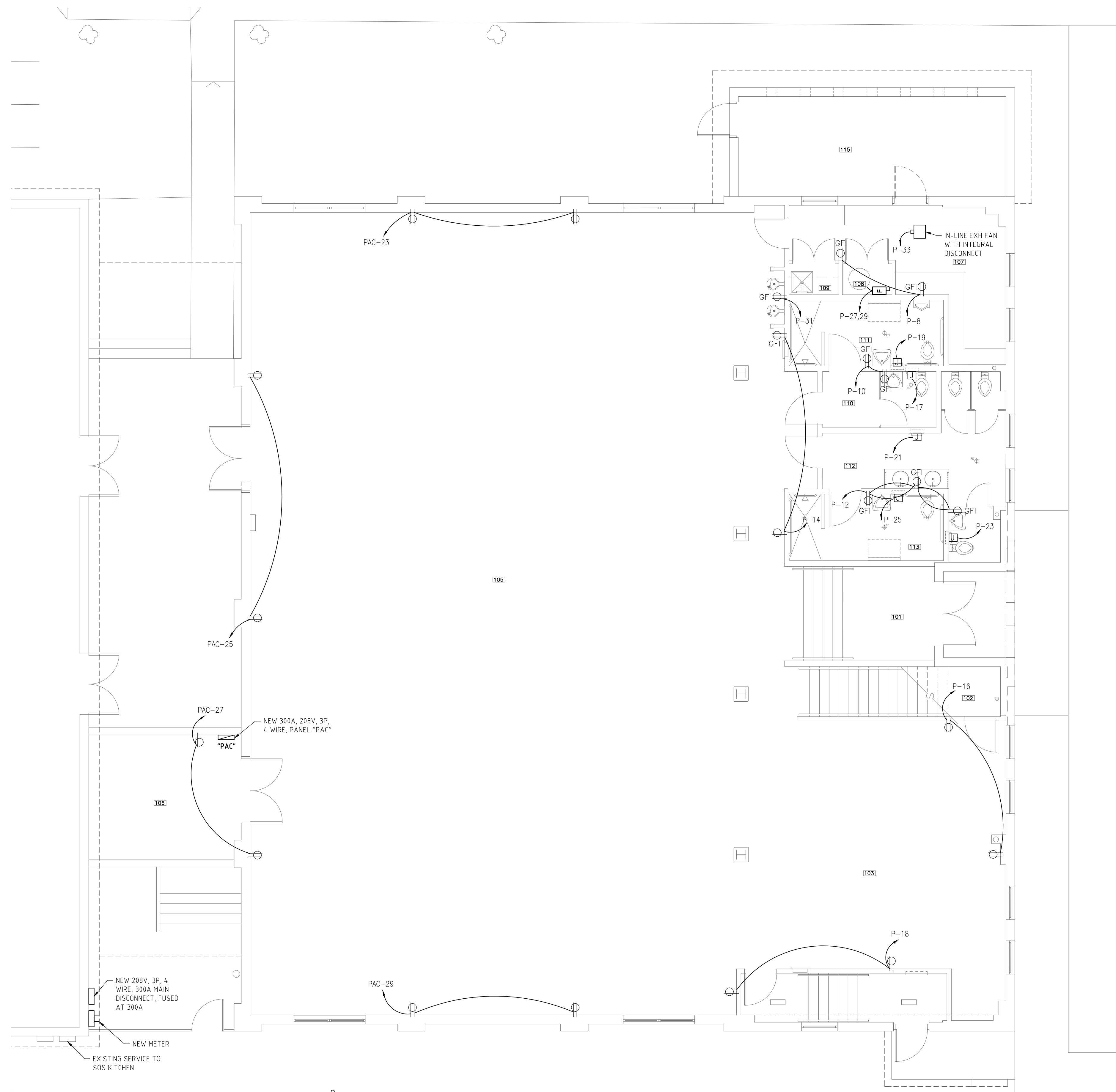
SEAL _____

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS _____

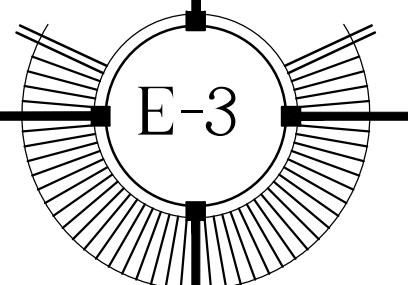
DRAWN BY
DHA

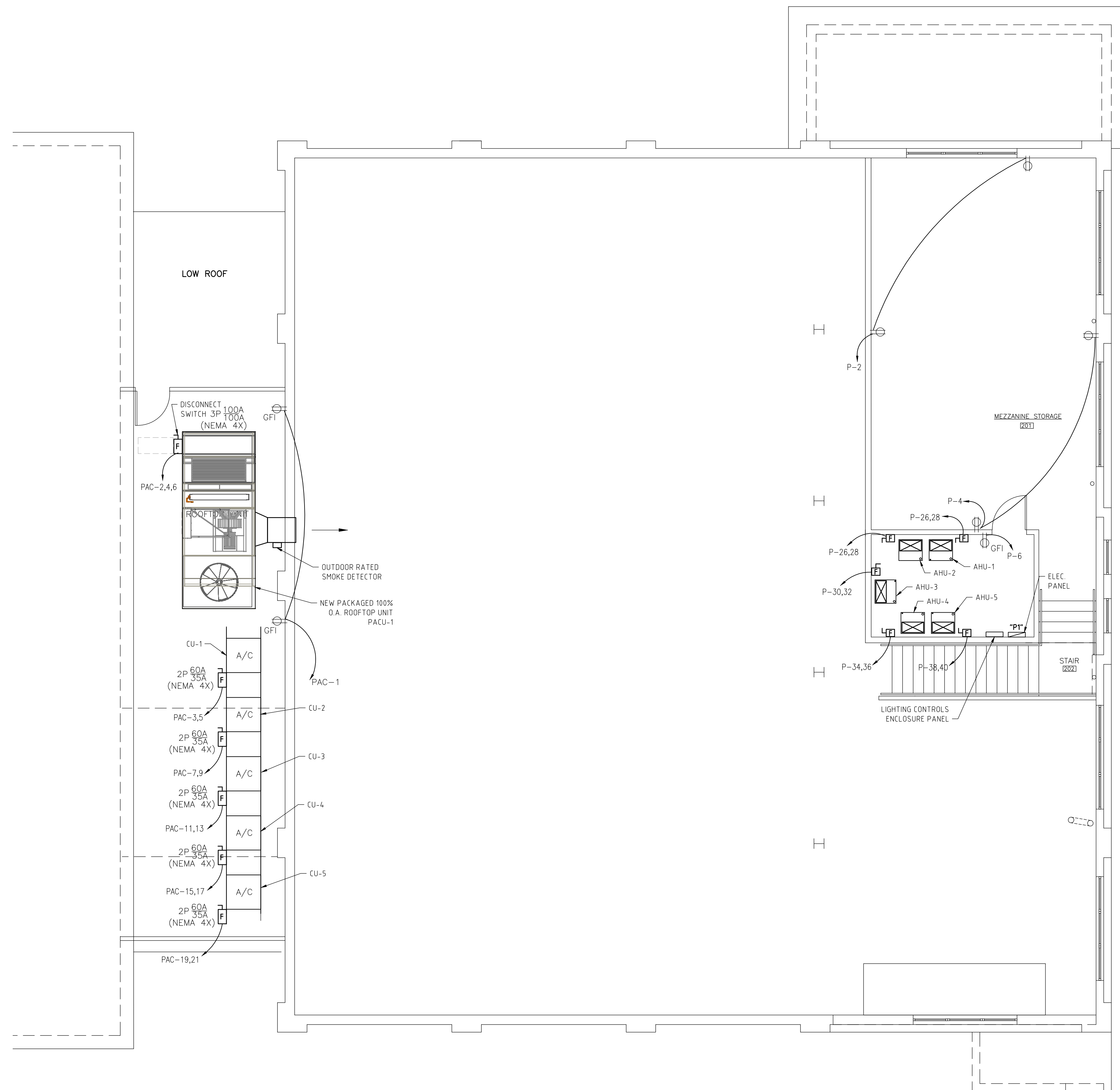
PROJECT NUMBER
1702



PROPOSED FIRST FLOOR POWER PLAN

SCALE: 3/16"=1'-0"





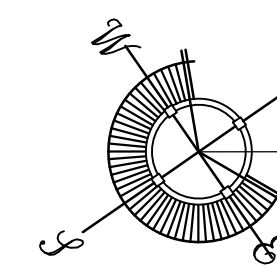
SEAL _____

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS _____

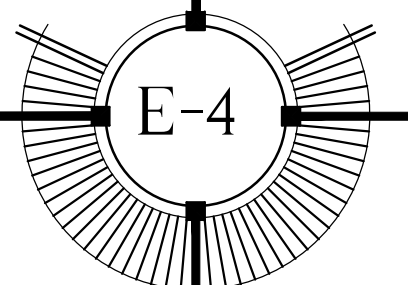
DRAWN BY
DHA

PROJECT
NUMBER
1702

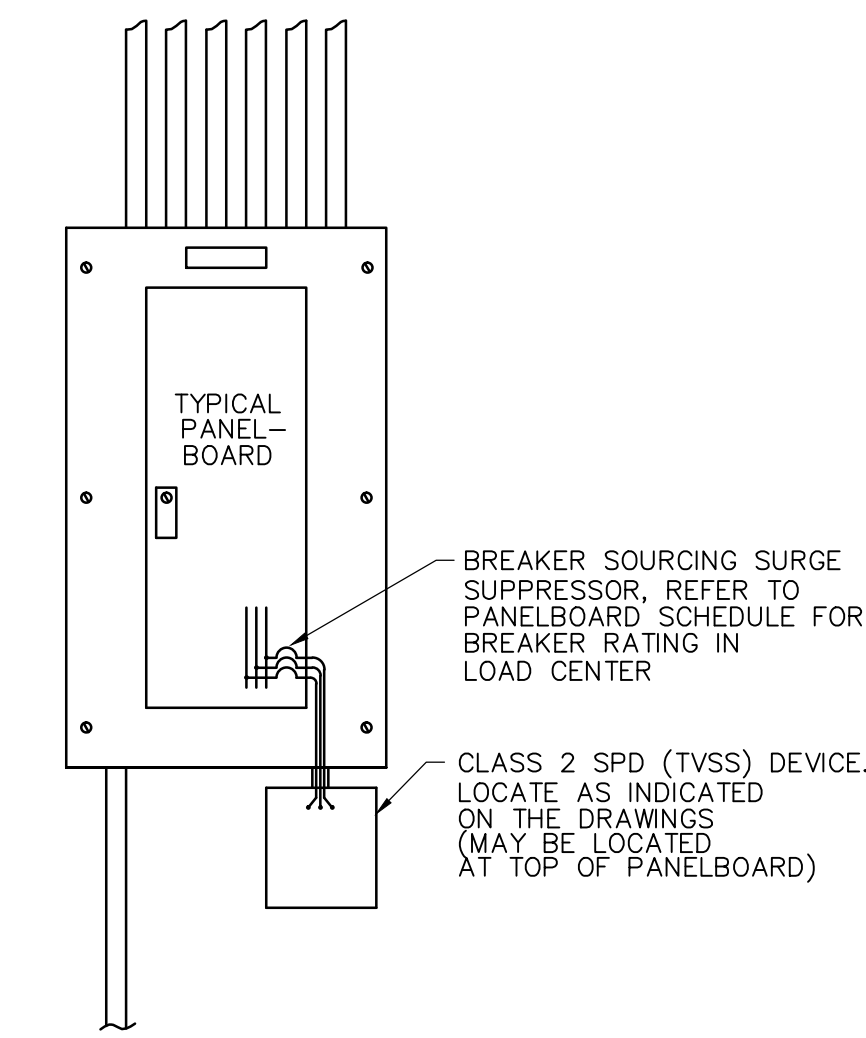


PROPOSED MEZZANINE POWER PLAN

SCALE: 3/16"=1'-0"

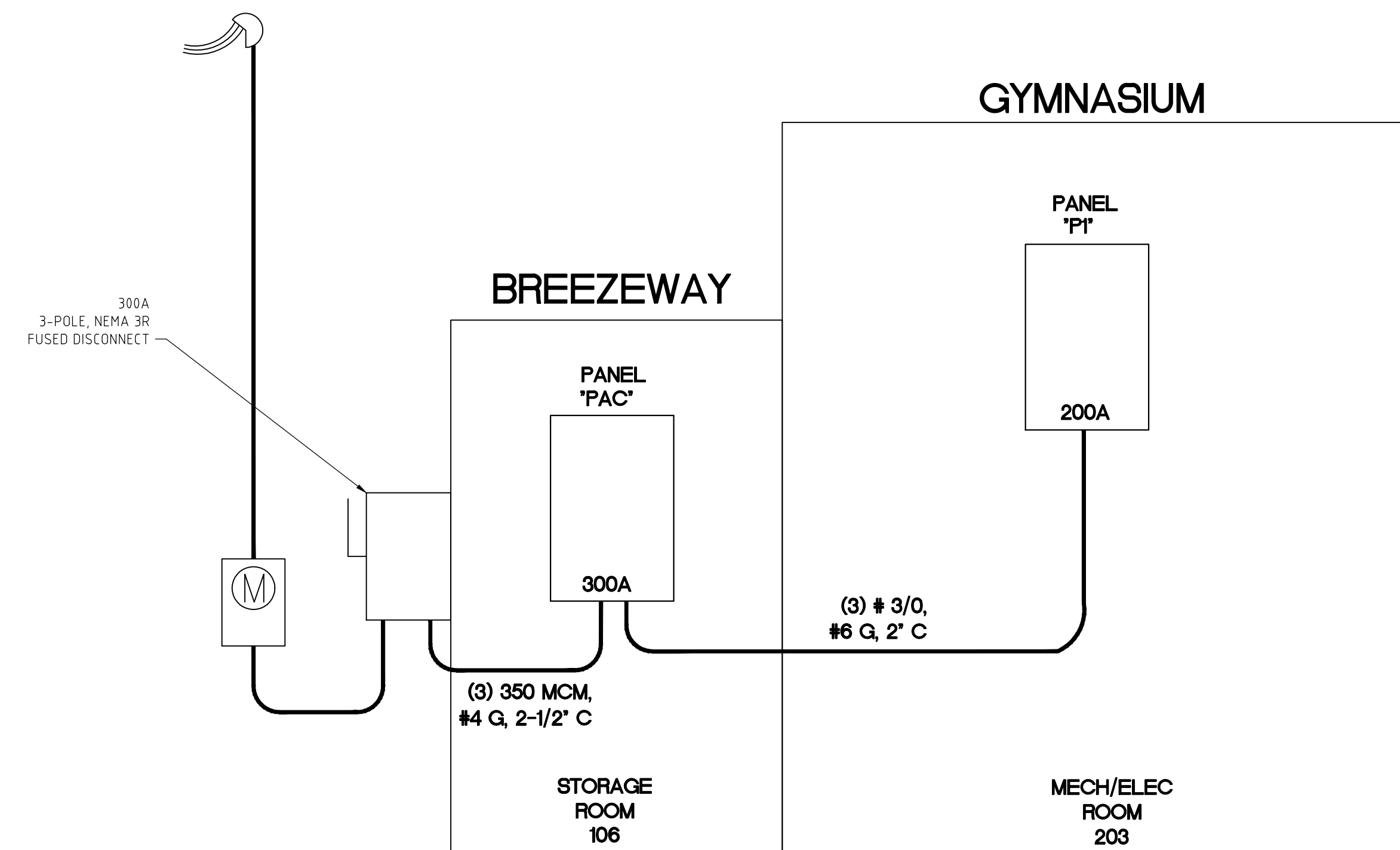


MFG SQUARE 'D' OR EQUAL				TYPE		NQ		KEY NOTES: 1 & 2				PANEL RATING			300 AMPS				
VOLTS 120/208V 3Ø4W				PANEL	PAC	(NEW PANEL)													
BUS A (KVA)	BUS B (KVA)	BUS C (KVA)	LOAD	KEY NOTES	COND	WIRE SIZE	GND	AMPS	CKT	CKT	AMPS	GND	WIRE SIZE	COND	KEY NOTES	LOAD	BUS A (KVA)	BUS B (KVA)	BUS C (KVA)
0.7			BREEZEWAY ROOF RECEPT.		-	-	-	-	1	2	100	8	3	1-1/4"		RTU-1	7.4		
	3.0		CU-1		3/4"	10	10	35	3	4								7.4	
		3.0							5	6									
3.0			CU-2		3/4"	10	10	35	7	8	20	12	12	1/2"		BREEZEWAY LIGHTING	0.5		
	3.0								9	10	20	12	12	1/2"		ROOF AND ST. RM. LTG.		0.5	
		3.0	CU-3		3/4"	10	10	35	11	12	-	-	-	-					
3.0									13	14	-	-	-	-					
	3.0		CU-4		3/4"	10	10	35	15	16	200	6	3/0	2"		PANEL "P1"		20.8	
		3.0							17	18	-	-	-	-					20.8
3.0			CU-5		3/4"	10	10	35	19	20	-	-	-	-			20.8		
	3.0								21	22	-	-	-	-				0.0	
0.7		0.7	RECEPTACLES		1/2"	12	12	20	23	24	-	-	-	-			0.0		0.0
			RECEPTACLES		1/2"	12	12	20	25	26	-	-	-	-			0.0		0.0
	0.7		RECEPTACLES		1/2"	12	12	20	27	28	-	-	-	-			0.0		0.0
		0.7	RECEPTACLES		1/2"	12	12	20	29	30	-	-	-	-			0.0		0.0
0.0					-	-	-	-	31	32	-	-	-	-			0.0		0.0
	-12.0			3	-	-	-	-	33	34	-	-	-	-				0.0	0.0
		-9.0		3	-	-	-	-	35	36	-	-	-	-					0.0
-9.0				3	-	-	-	-	37	38	-	-	-	-			0.0		0.0
	0.0				-	-	-	-	39	40	-	-	-	-				0.0	0.0
		0.0			-	-	-	-	41	42	-	-	-	-					0.0
TOTALS																			
KVA ΦA	KVA ΦB	KVA ΦC																	
30.1	29.4	29.6																	
LOAD CALCULATIONS PER NEC 220				REMARKS & KEY NOTES															
1ST 10KVA OF RECEPT.	0.0	AT 100%	0.0	1. MAIN LUGS ONLY. ELECTRICAL CONTRACTOR SHALL PROVIDE AN ACCURATE PER FIELD CONDITIONS, TYPED UP PANEL SCHEDULE UPON COMPLETION OF THE PROJECT.															
REMAINDER OF RECEPT.	0.0	AT 50%	0.0	2. VERIFY ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO CONSTRUCTION; ALL EQUIPMENT'S ELECTRICAL REQUIREMENTS SHALL BE CONFIRMED WITH MFG SPECS. VERIFY VOLTAGE, AMPERAGE, AND BREAKER SIZES.															
LIGHTING	0.0	AT 125%	0.0	3. REDUCTION DUE TO NON CONCURRENT LOAD WITH AHUS AND THE ELECTRIC HEATERS. CONDENSING UNITS ARE THE LOWER OF THE TWO LOADS.															
LARGEST MOTOR	0.0	AT 125%	0.0																
WATER HEATER	0.0	AT 125%	0.0																
KITCHEN EQUIPMENT	0.0	AT 65%	0.0																
REMAINDER OF LOADS		AT 100%	89.1																
			TOTAL KVA	89.1															
			TOTAL AMPS	247.3															
* SEE POWER RISER FOR WIRE & CONDUIT SIZES				MOUNT SURFACE			MIN A.I.C. 65,000A												



SPD (TVSS) EXTERIOR OPTIONAL MOUNTING DETAILS
NOT TO SCALE

MFG SQUARE 'D' OR EQUAL				TYPE		NQ		KEY NOTES: 1, 2				PANEL RATING			200 AMPS				
VOLTS 120/208V 3Ø4W				PANEL	P1	(NEW PANEL)													
BUS A (KVA)	BUS B (KVA)	BUS C (KVA)	LOAD	KEY NOTES	COND	WIRE SIZE	GND	AMPS	CKT	CKT	AMPS	GND	WIRE SIZE	COND	KEY NOTES	LOAD	BUS A (KVA)	BUS B (KVA)	BUS C (KVA)
1.1			LIGHTING Gym Zone 1		1/2"	12	12	20	1	2	20	12	12	1/2"		RECEPTACLES	0.7		
	0.6		LIGHTING Gym Zone 2		1/2"	12	12	20	3	4	20	12	12	1/2"		RECEPTACLES		0.7	
		0.6	LIGHTING Gym Zone 3		1/2"	12	12	20	5	6	20	12	12	1/2"		RECEPTACLES			0.7
0.6			LIGHTING Gym Zone 4		1/2"	12	12	20	7	8	20	12	12	1/2"		RECEPTACLES	0.7		
		0.4	LIGHTING 1st Floor Storage		1/2"	12	12	20	9	10	20	12	12	1/2"		RECEPTACLES		0.7	
		0.7	LIGHTING Restrooms		1/2"	12	12	20	11	12	20	12	12	1/2"		RECEPTACLES			0.7
0.5			LIGHTING Entry 101		1/2"	12	12	20	13	14	20	12	12	1/2"		RECEPTACLES	0.7		
		0.5	LIGHTING 2nd Floor Storage		1/2"	12	12	20	15	16	20	12	12	1/2"		RECEPTACLES		0.7	
		1.5	Hand Dryer Room 110		1/2"	12	12	20	17	18	20	12	12	1/2"		RECEPTACLES			0.7
1.5			Hand Dryer Room 111		1/2"	12	12	20	19	20	20	-	-	-		SPARE	0.0		
		1.5	Hand Dryer Room 112		1/2"	12	12	20	21	22	50	10	8	3/4"		AHU-1		3.7	
		1.5	Hand Dryer Room 112		1/2"	12	12	20	23	24									3.7
1.5			Hand Dryer Room 113		1/2"	12	12	20	25	26	50	10	8	3/4"		AHU-2	3.7		
		2.3	WATER HEATER		3/4"	8	10	40	27	28								3.7	
		2.3							29	30	50	10	8	3/4"		AHU-3			3.7
0.5			RECEPT. WATER COOLER		1/2"	12	12	20	31	32							3.7		
		0.7	EXHAUST FAN EF-1		1/2"	12	12	20	33	34	50	10	8	3/4"		AHU-4		3.7	
		0.7	LIGHTING		1/2"	12	12	20	35	36									3.7
0.0			SPACE		-	-	-	-	37	38	50	10	8	3/4"		AHU-5	3.7		
	0.0		SPACE		-	-	-	-	39	40								3.7	
		0.0	SPACE		-	-	-	-	41	42	-	-	-	-		SPACE			0.0
TOTALS																			
KVA ΦA	KVA ΦB	KVA ΦC																	
18.9	22.9	20.5																	
LOAD CALCULATIONS PER NEC 220				REMARKS & KEY NOTES															
1ST 10KVA OF RECEPT.	0.0	AT 100%	0.0	1. MAIN LUGS ONLY.															
REMAINDER OF RECEPT.	0.0	AT 50%	0.0	2. VERIFY ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT PRIOR TO CONSTRUCTION; ALL EQUIPMENT'S ELECTRICAL REQUIREMENTS SHALL BE CONFIRMED WITH MFG SPECS. VERIFY VOLTAGE, AMPERAGE, AND BREAKER SIZES.															
LIGHTING	0.0	AT 125%	0.0																
LARGEST MOTOR	0.0	AT 125%	0.0																
WATER HEATER	0.0	AT 125%	0.0																
KITCHEN EQUIPMENT	0.0	AT 65%	0.0																
REMAINDER OF LOADS		AT 100%	62.3																
			TOTAL KVA	62.3															
			TOTAL AMPS	172.9															



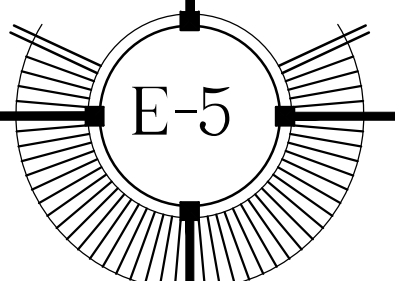
SEAL

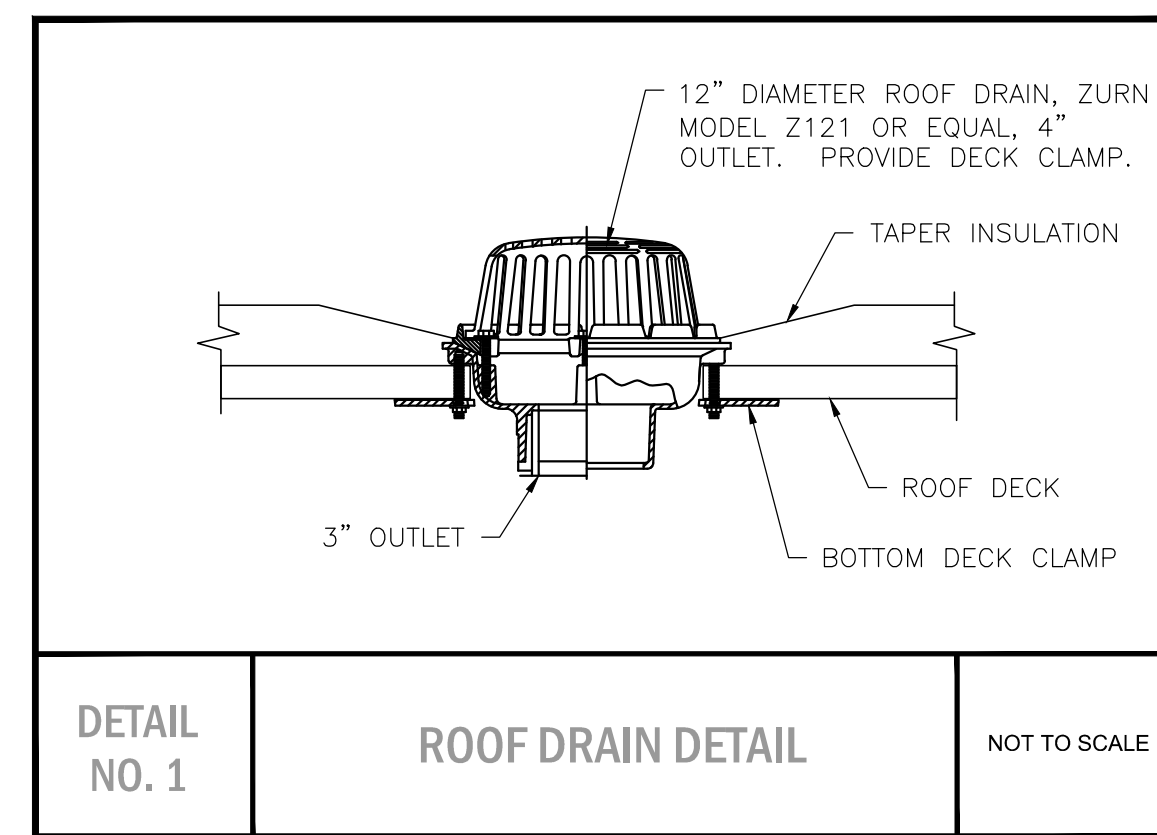
DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
DHA

PROJECT NUMBER
1702





DETAIL NO. 1 ROOF DRAIN DETAIL NOT TO SCALE

TABLE 1106.2
STORM DRAIN PIPE SIZING

PIPE SIZE (inches)	CAPACITY (gpm)				
	VERTICAL DRAIN	SLOPE OF HORIZONTAL DRAIN			
		1/16 inch per foot	1/8 inch per foot	1/4 inch per foot	1/2 inch per foot
2	34	15	22	31	44
3	87	39	55	79	111
4	180	81	115	163	231
5	311	117	165	234	331
6	538	243	344	487	689
8	1,117	505	714	1,010	1,429

PLUMBING FIXTURE SPECIFICATIONS

- WC** WATER CLOSET (HANDICAP) AMERICAN STANDARD "MADERA" MODEL #2857.128 COLOR WHITE. SEAT MODEL #5901.100 COLOR WHITE. FLUSH VALVE MODEL #604.7.121.
 - WC** WATER CLOSET SAME AS HWC ABOVE
 - HUR** URINAL (HANDICAP) AMERICAN STANDARD "WASHBROOK FLOWISE" MODEL #6590.125, 0.125 GPF. WALL MOUNT, WITH TWO WALL HANGERS, EXPOSED TOP SPUD, COLOR WHITE. MANUAL FLUSH VALVE MODEL #604.5.0131.
 - HLAV** LAVATORY LAVATORY, AMERICAN STANDARD #0356.028 LUCERNE WALL MOUNTED SINK. AMERICAN STANDARD, MONTERREY 0.5 GPM TWO HANDLE FAUCET WITH CONVENTIONAL SPOUT. PROVIDE POWERS CONTROLS TEMPERING VALVE HYDRO GUARD e480 SERIES. PROVIDE WALL CARRIER. PROVIDE STRAINER, TAILPIECE, P-TRAP WITH ADA PROTECTION WRAP, AND STOP VALVES.
 - LAV** LAVATORY LAVATORY, AMERICAN STANDARD #0491.019 RONDALYN COUNTERTOP SINK. SEE ARCHITECTURAL DRAWINGS. AMERICAN STANDARD, MONTERREY 0.5 GPM TWO HANDLE FAUCET WITH CONVENTIONAL SPOUT. PROVIDE POWERS CONTROLS TEMPERING VALVE HYDRO GUARD e480 SERIES. PROVIDE STRAINER, TAILPIECE, P-TRAP AND STOP VALVES.
 - FWC-1** HIGH-LOW WATER COOLER (HANDICAP) HI-LO DRINKING FOUNTAIN AND BOTTLE FILLING STATION. ELKAY VRCLBWSK ADA COMPLIANT, BI-LEVEL COOLER, VANDAL RESISTANT BUBBLER, EASY TOUCH CONTROLS, 115 VOLT, 4.0 AMP, 8.0 GPH.
 - HSH** SHOWER HANDICAPPED SHOWER, POWERS HYDRO PANEL II, T/P #710 MIXING VALVE WITH METAL HANDLES, #450-7104 HAND SHOWER, 2.0 GPM. GLIDE RAIL, VB AND SOAP DISH. ACTUATOR, SELF-CONTAINED CARTRIDGE AND INTEGRAL SERVICE STOPS. PROVIDE FLOOR DRAIN FOR SHOWER, SEE FD BELOW.
 - MS-1** MOP SINK MUSTEE, 6.3M DURASTONE, DURAGUARD WALL GUARD - 67.24.24, MOP HANGER 65.600, HOSE AND HOSE HOLDER 65.700, SINK FAUCET 63.600A, ADJUSTABLE P-TRAP.
 - FD** FLOOR DRAIN ZURN MODEL # ZN 415-U-V-VP-P, DURA COATED CAST IRON BODY WITH POLISHED BRONZE TYPE B STRAINER, BACKWATER VALVE, TRAP PRIMER FITTING AND VANDAL PROOF TOP. PROVIDE CHROME PLATED BRONZE TOP AND STRAINER FOR SHOWER DRAINS.
 - WATER HEATER** LOCHINVAR 40 GALLON LIGHT COMMERCIAL ELECTRIC WATER HEATERS MODEL #E5J40KD 208 SINGLE PHASE 4.5 KW
- NOTES:**
 1. MOUNTING HEIGHT PER ADA STANDARD. INSULATE WATER AND DRAIN LINE.
 2. PROVIDE CUT SHEETS FOR REVIEW AND APPROVAL PRIOR TO PURCHASE.
 3. PLUMBING FIXTURES TO COMPLY WITH TABLE 604.4 F.B.C.
 4. ALL WALL HUNG PLUMBING FIXTURES SHALL COMPLY WITH F.B.C. 2517.5.11, 2517.5.12 AND 2517.5.13
 5. ALL EXPOSED PIPING AND SURFACES UNDER LAVATORIES SHALL COMPLY WITH FBC 404.6.4.

PLUMBING FIXTURE UNIT CALCULATIONS

SANITARY SIZING	NO.	F.U./EACH	TOTAL	MIN. TRAP SIZE
WATER CLOSET	6	4.0	24	3"
URINAL	1	2.0	2.0	1 1/2"
LAVATORY	6	1.0	6	1 1/4"
SHOWER	2	2.0	4	2"
MOP SINK	1	2.0	2	1 1/2"
DRINKING FOUNTAIN	1	0.5	5	1 1/4"
FLOOR DRAIN	4	2.0	8	2"
TOTAL	-	-	46.5	-

TOTAL SANITARY FIXTURE UNITS: 46.5
 MINIMUM SIZE SANITARY LINE @ 1/8" SLOPE: 4"

HOT & COLD WATER SIZING PER TABLE E103.3(2) F.B.C. 2014 (PLUMBING)	NO.	C.W.F.U./EA.	H.W.F.U./EA.	PER FIXTURE TOTAL	MULTIPLIED TOTAL
WATER CLOSET	6	10.0	-	10.0	60
URINAL	1	5.0	-	5.0	5.0
LAVATORY	6	1.5	1.5	2.0	12
SHOWER	2	1.5	1.5	2.0	4
MOP SINK	1	2.25	2.25	3.0	3
DRINKING FOUNTAIN	1	0.25	-	0.25	25
TOTAL	-	-	-	-	84.25

TOTAL C.W.F.U. = 84.25
 MINIMUM SIZE WATER SERVICE: 2"

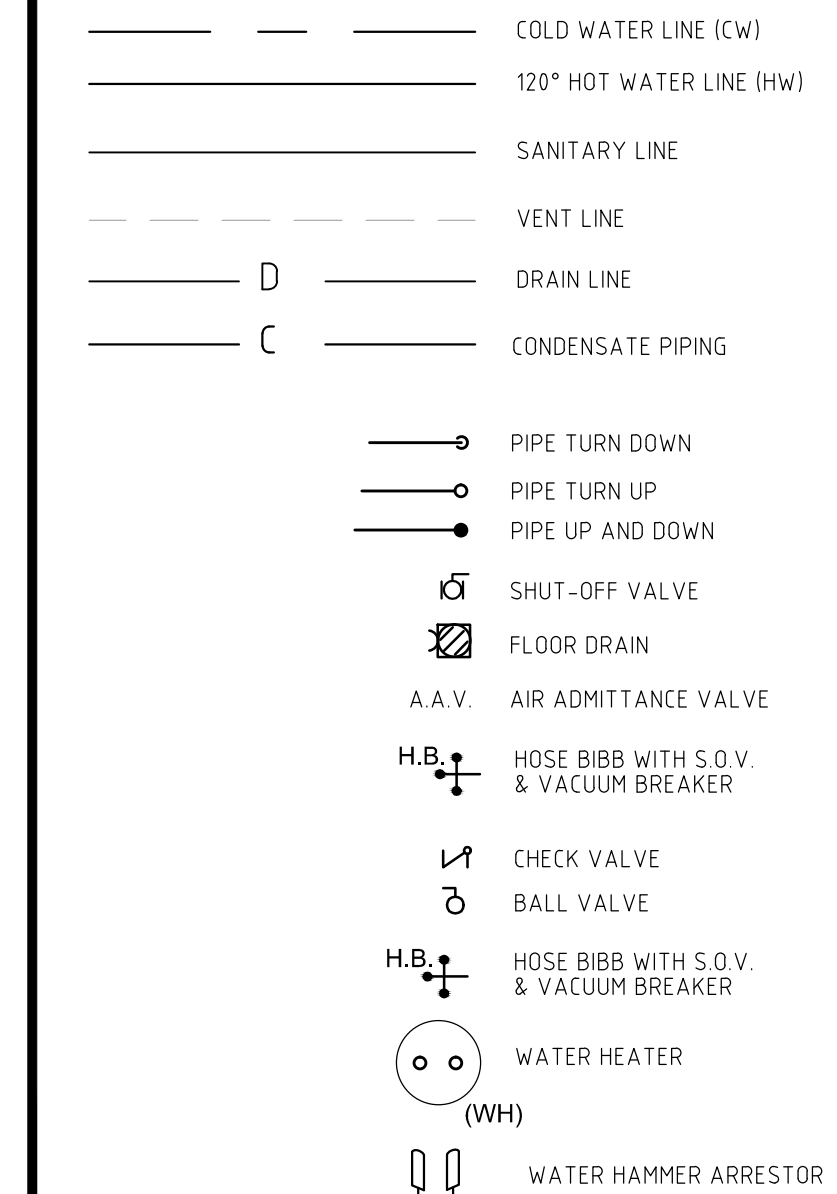
PLUMBING SPECIFICATIONS

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2017 EDITION PLUMBING SECTION AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES AND AS FOLLOWS.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE NATIONAL, STATE, LOCAL CODES, RULES AND ORDINANCES.
 - CONTRACTOR SHALL VISIT THE JOB SITE & THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
 - ALL MATERIALS SHALL BE NEW.
 - ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE.
 - ALL EXCAVATION & BACK FILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
 - REQUIRED INSURANCE SHALL BE PROVIDED BY THIS CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY & PROPERTY DAMAGE FOR THE DURATION OF WORK.
 - CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS & TEST. SUBSTITUTIONS BY THE CONTRACTOR SHALL HAVE PRIOR APPROVAL. ANY CHANGES MADE WITHOUT APPROVAL WILL BE PAID BY THE CONTRACTOR TO RETURN TO THE ORIGINAL DESIGN.
 - ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.
 - THE CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR REVIEW OF THE GENERAL NOTES, SPECIFICATIONS, AND ALL OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS.
 - DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. FIELD VERIFY FINAL LOCATIONS FOR EQUIPMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND EXACT LOCATION OF PLUMBING FIXTURES. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS.
 - DRAWINGS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
 - VERIFY LOCATION, SIZE, TRAPS, INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES. ANY COST RESULTING FROM DISCREPANCIES NOT REPORTED AT THIS TIME SHALL BE PAID BY THE CONTRACTOR.
 - INSTALL SIOUX CHIEF 650 SERIES SHOCK ARRESTORS IN PIPING TO QUICK-CLOSING VALVES AS DEFINED IN FLORIDA PLUMBING CODE.
 - PROVIDE SHUT-OFF VALVES IN THE SUPPLY PIPING TO EVERY FIXTURE.
 - ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS.
 - CAP ALL PIPING OPENINGS DURING CONSTRUCTION UNTIL FINAL CONNECTIONS TO EQUIPMENT AND ACCESSORIES ARE MADE.
 - SANITARY PIPE 2 1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT. SANITARY PIPE 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT. CONDENSATE PIPING SHALL BE SLOPED AT A MINIMUM OF 1/4" PER FOOT.
 - ALL PENETRATIONS MUST BE SLEEVED, FIRE STOPPED, GROUTED, SEALED AND MADE WATERPROOF. COORDINATE ALL CONCRETE TRENCHING/CORING TO ENSURE THAT ANY UNDER SLAB UTILITIES, ETC. ARE NOT DAMAGED DURING FLOOR CUT. ANY DAMAGE TO BE REPAIRED AT CONTRACTOR EXPENSE. CUTTING AND PATCHING ACTIVITIES WHICH CREATE NOISE MUST BE PERFORMED AFTER-HOURS SO LONG AS ANY TENANTS ARE OCCUPYING THE BUILDING. PRIOR APPROVAL AND COORDINATION WITH PROPERTY MANAGEMENT IS REQUIRED FOR ALL CONCRETE CUTTING.
 - DO NOT ROUTE ANY WET PIPING OVER ELECTRICAL EQUIPMENT.
 - WATER PIPING TO BE TYPE "L" COPPER ABOVE AND TYPE "K" COPPER BELOW GRADE.
 - SOIL, WASTE & VENT PIPING TO BE PVC #40 DVW.
 - STORM WATER PIPING SHALL BE SCHEDULE 40 PVC.
 - WHERE DISSIMILAR METALS ARE TO BE JOINED, APPROVED INSULATING UNIONS SHALL BE USED.
 - ALL PLUMBING PIPES PENETRATING FIRE RATED WALLS, CEILINGS AND/OR FLOORS SHALL BE PROVIDED WITH U.L. APPROVED FIRE RATED ASSEMBLY. (EQUAL TO WALL FIRE RATING - SEE ARCHITECTURAL DRAWINGS).
 - CONDENSATE LINES TO BE COPPER/PVC DEPENDING ON PROJECT REQUIREMENTS. INSULATE WITH 1/2" THICK ARMAFLEX INSULATION.
 - FEDERAL LAW MANDATES AS OF JANUARY 4, 2014 THE WETTED SURFACE OF EVERY PIPE, FIXTURE AND FITTING INSTALLED IN POTABLE WATER APPLICATIONS SHALL NOT CONTAIN MORE THAN 0.25% LEAD BY WEIGHT. SOLDER AND FLUX SHALL NOT CONTAIN MORE THAN 0.2% LEAD. NON-COMPLIANCE MAY RESULT IN FINES, INSTALLED PRODUCT REMOVAL COSTS, LAWSUITS BY PRIVATE PARTIES OR GOVERNMENT AGENCY.
 - CONTRACTOR SHALL GUARANTEE ALL MATERIALS & WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
 - CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO BID AND INSTALLATION. INFORM THE ENGINEER OF RECORD OF ANY DISCREPANCY BETWEEN THE DOCUMENTS AND THESE CONDITIONS AND HE SHALL INCLUDE IN HIS BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER THE CONTRACT HAS BEEN AWARDED.
 - CONTRACTOR SHALL KEEP AS-BUILTS AND SUBMIT TO THE ENGINEER OF RECORD FOR REVIEW. ALL CHANGES SHALL BE FORWARDED A MINIMUM OF (2) WEEKS PRIOR TO FINAL INSPECTION. ANY EXPENSES, SUCH AS REVISIONS OR AS-ABUILTS, NECESSARY FOR FINAL C.O. SHALL BE AT THE EXPENSE OF THE OWNER.

PLUMBING SHEET INDEX

SHEET#	DESCRIPTION
P-1	PLUMBING LEGEND, SPECS, NOTES & SCHEDULES
P-2	FIRST FLOOR PLUMBING PLANS
P-3	PLUMBING ROOF PLAN & PLUMBING RISERS
P-4	PLUMBING - DETAILS

PLUMBING LEGEND



SCOPE OF WORK

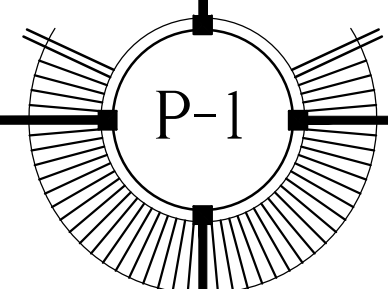
THIS IS A RENOVATION OF EXISTING BUILDING FOR THE ADDITION OF RESTROOMS. WORK SHALL INCLUDE BUT IS NOT LIMITED TO STORM DRAIN, SANITARY, DOMESTIC WATER, AND CONDENSATE.

MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FITTINGS

AMENDMENT TO CHAPTER 6 OF THE FLORIDA BUILDING CODE (PLUMBING)	
FIXTURE TYPE	MAXIMUM FLOW RATES (GPM)
LAVATORY, PUBLIC (OTHER THAN METERING)	0.5 GPM AT 60PSI
SINK	15 GPM AT 60PSI
WATER CLOSET	128 GPF CYCLE

FLOOD ELEVATION

ALL CONSTRUCTION BELOW FLOOD ELEVATION SHALL BE FLOOD RESISTANT IN ACCORDANCE WITH FEMA TECHNICAL BULLETIN 2-7008 (I.E. WALLS, FINISHES, DOORS, FRAMES, BASE BOARD FOR GARAGE, STORAGE AREAS).
 ALL UTILITIES AND EQUIPMENTS AND ACCESSORIES (ELECTRICAL, MECHANICAL AND PLUMBING) SERVICING THE BUILDING SHALL BE INSTALLED ABOVE THE BFE. (ASCE 24-05 CH. 7.0).



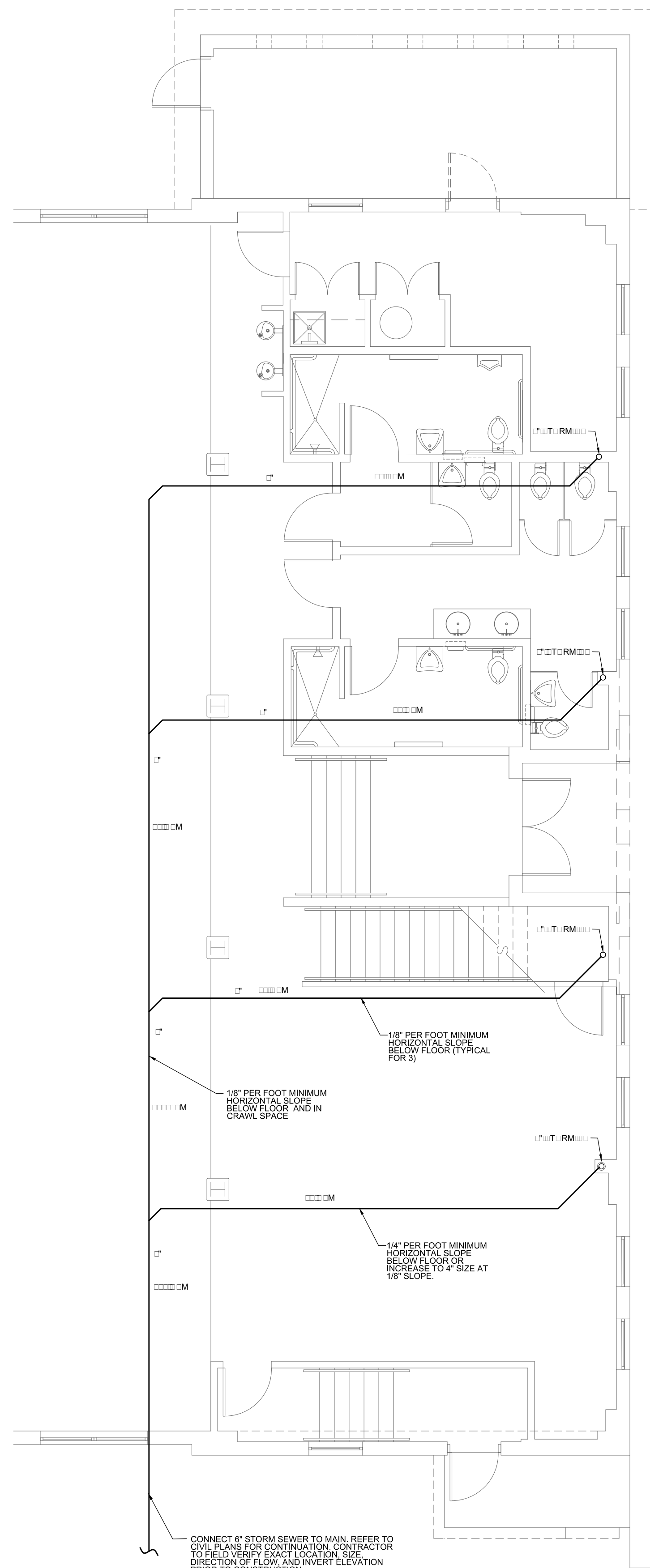
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

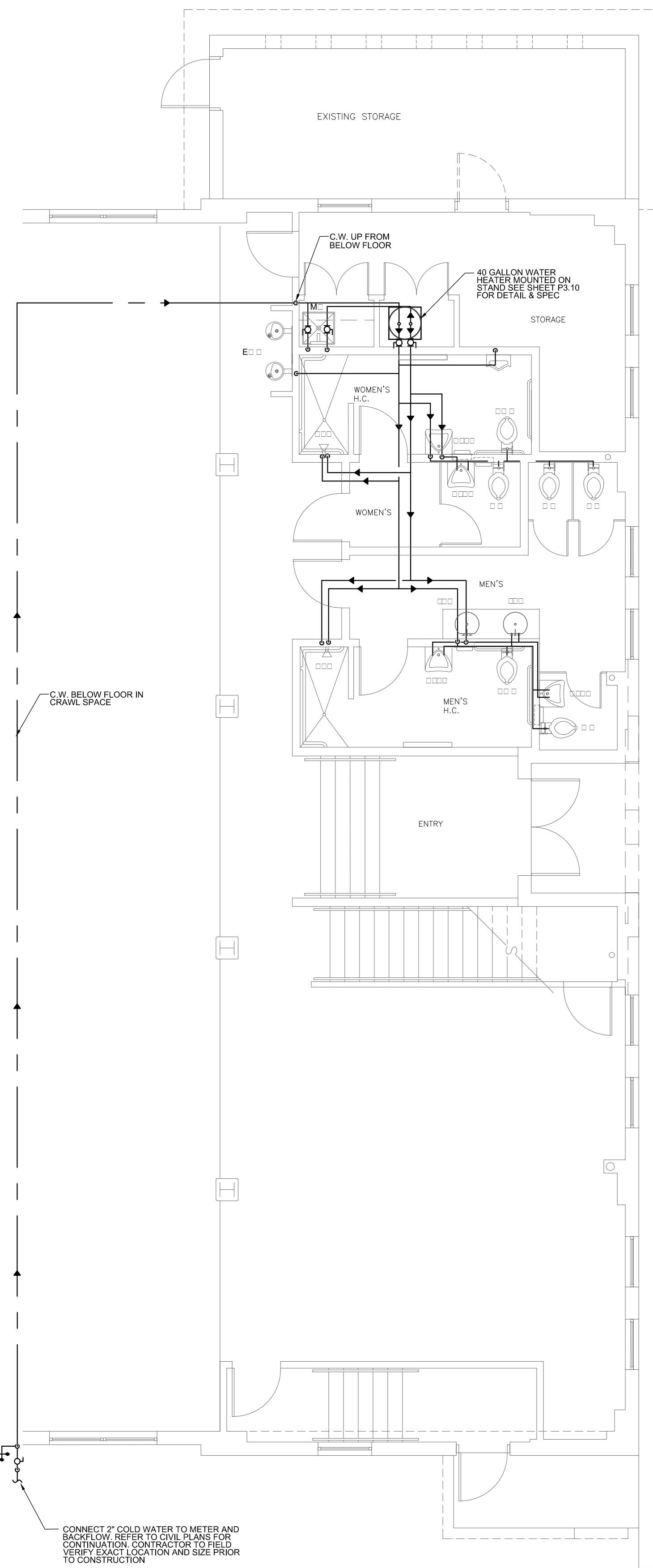
DRAWN BY
DHA

PROJECT
NUMBER
1702



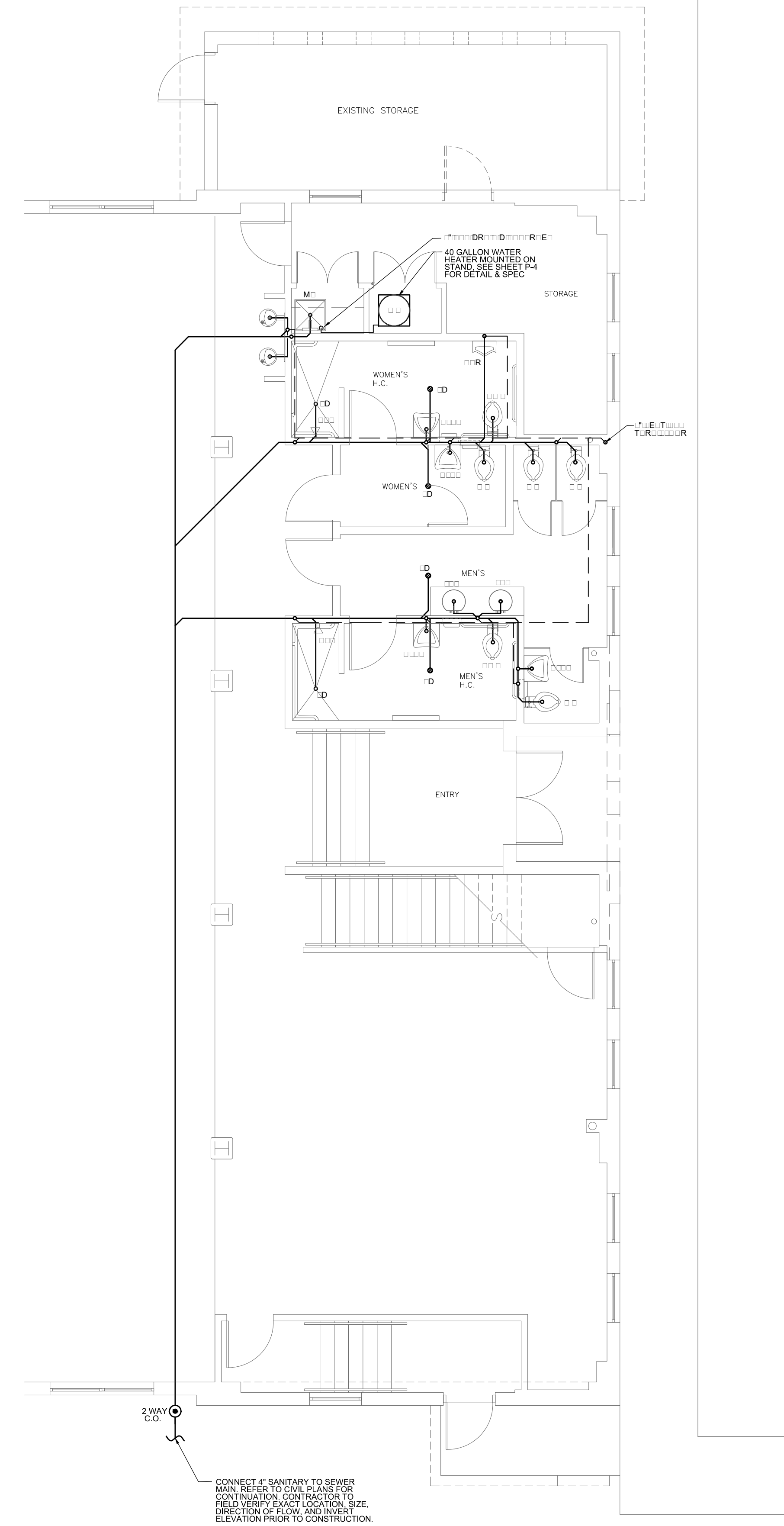
FIRST FLOOR PLUMBING PLAN - STORM

SCALE: 3/16"=1'-0"



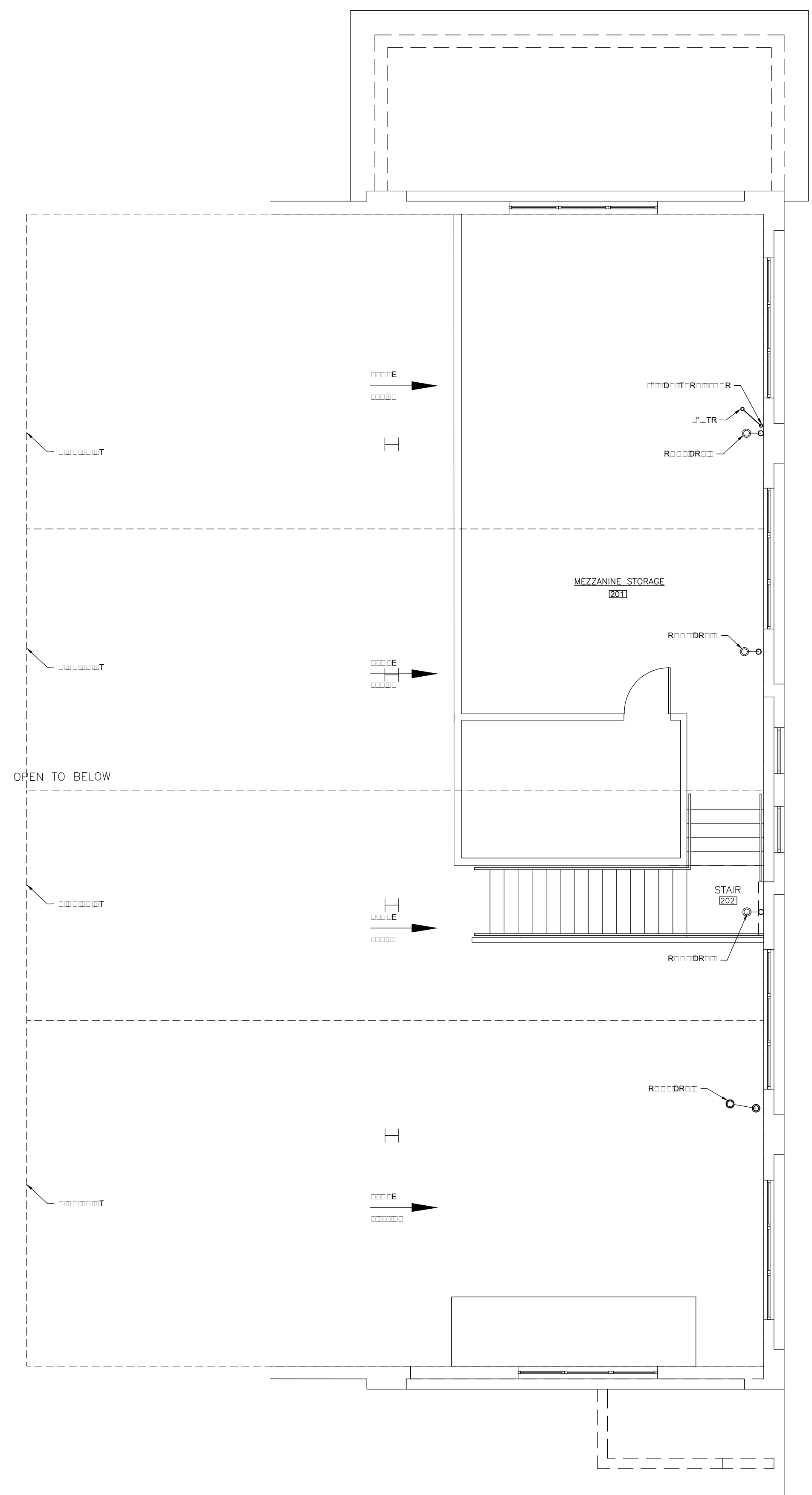
FIRST FLOOR PLUMBING PLAN - WATER

SCALE: 3/16"=1'-0"



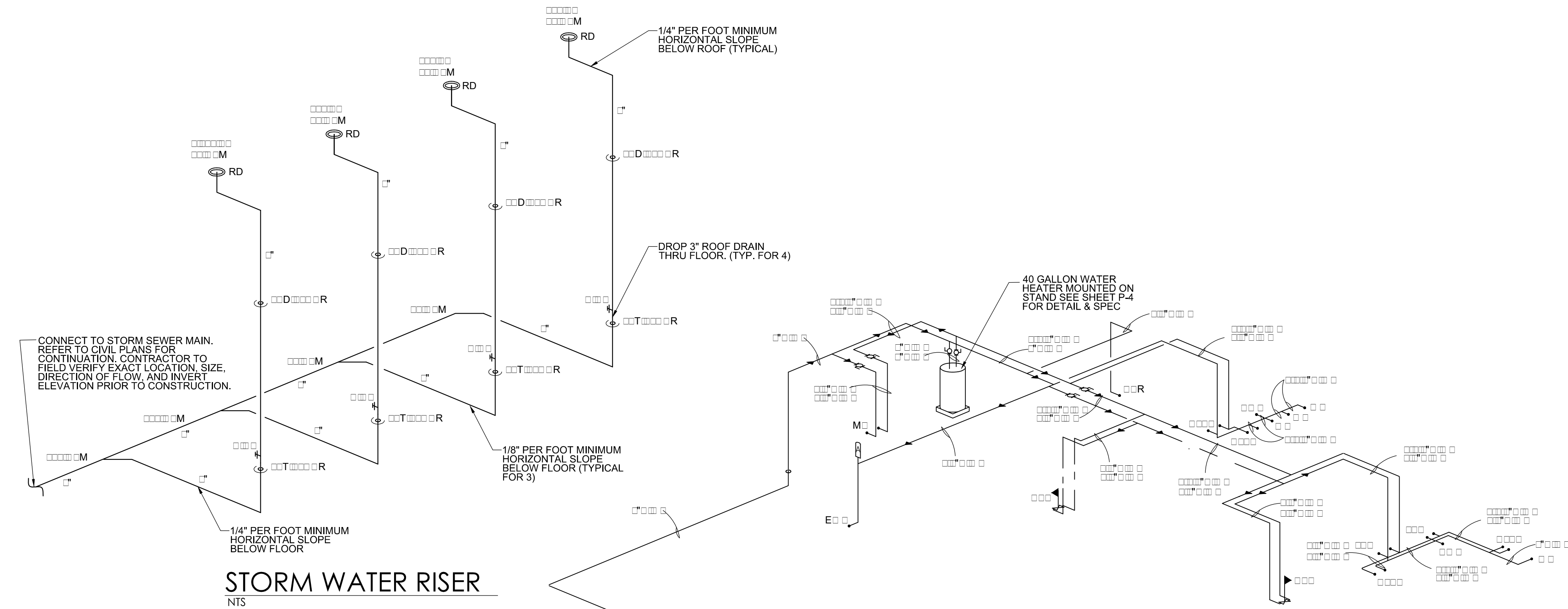
FIRST FLOOR PLUMBING PLAN - SANITARY

SCALE: 3/16"=1'-0"

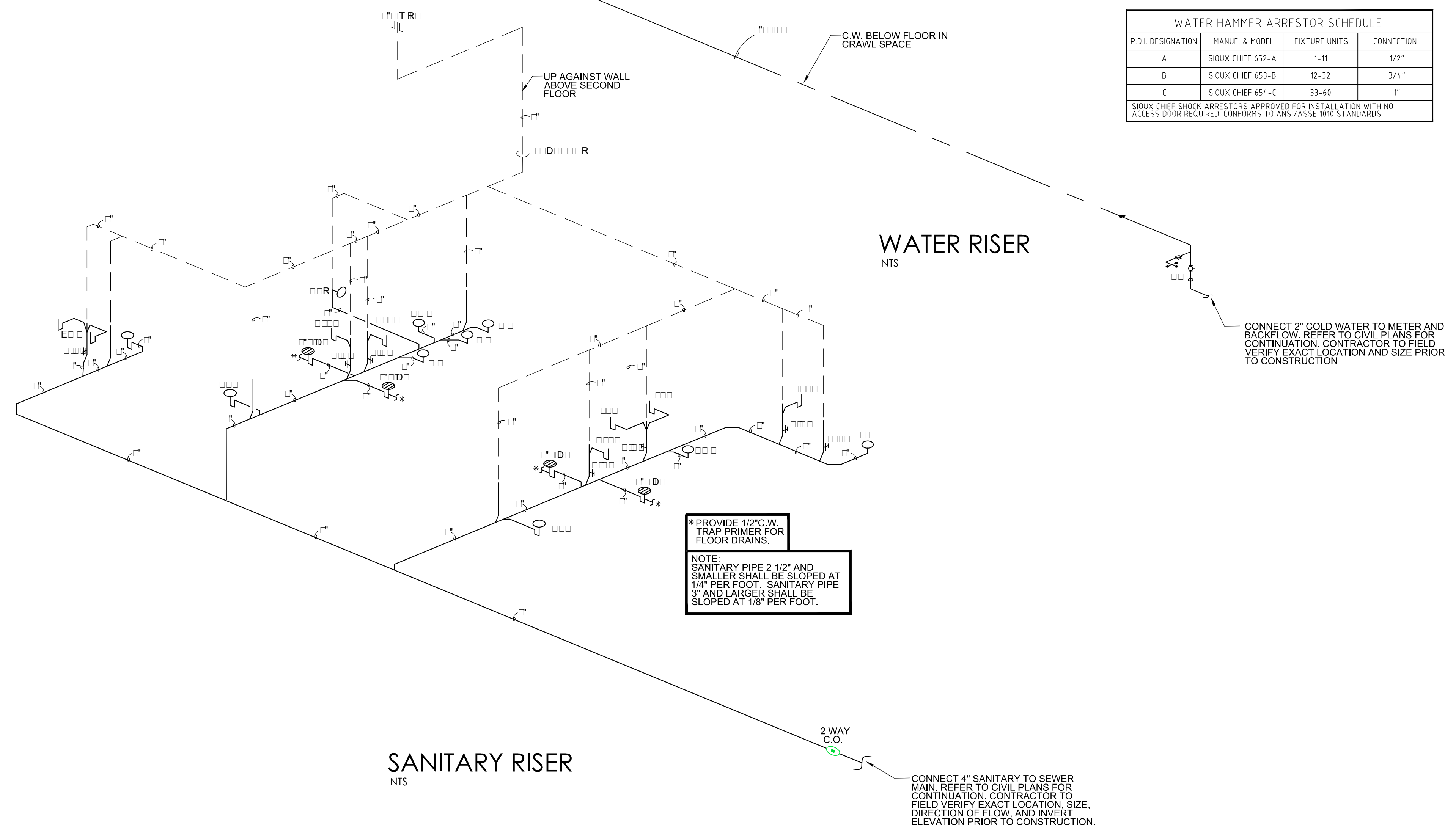


PROPOSED ROOF PLAN

SCALE: 3/16"=1'-0"



STORM WATER RISER
NTS



WATER RISER
NTS

SANITARY RISER
NTS

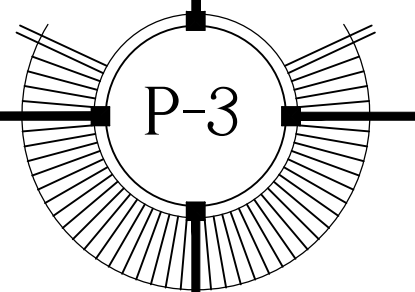
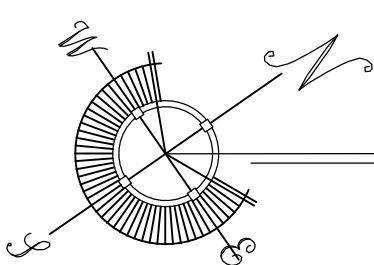
WATER HAMMER ARRESTOR SCHEDULE			
P.D.I. DESIGNATION	MANUF. & MODEL	FIXTURE UNITS	CONNECTION
A	SILOUX CHIEF 652-A	1-11	1/2"
B	SILOUX CHIEF 653-B	12-32	3/4"
C	SILOUX CHIEF 654-C	33-60	1"

SILOUX CHIEF SHOCK ARRESTORS APPROVED FOR INSTALLATION WITH NO ACCESS DOOR REQUIRED. CONFORMS TO ANSI/ASSE 1010 STANDARDS.

* PROVIDE 1/2" C.W. TRAP PRIMER FOR FLOOR DRAINS.
NOTE: SANITARY PIPE 2 1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT. SANITARY PIPE 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT.

CONNECT 2" COLD WATER TO METER AND BACKFLOW. REFER TO CIVIL PLANS FOR CONTINUATION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION, SIZE, DIRECTION OF FLOW, AND INVERT ELEVATION PRIOR TO CONSTRUCTION.

CONNECT 4" SANITARY TO SEWER MAIN. REFER TO CIVIL PLANS FOR CONTINUATION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION, SIZE, DIRECTION OF FLOW, AND INVERT ELEVATION PRIOR TO CONSTRUCTION.



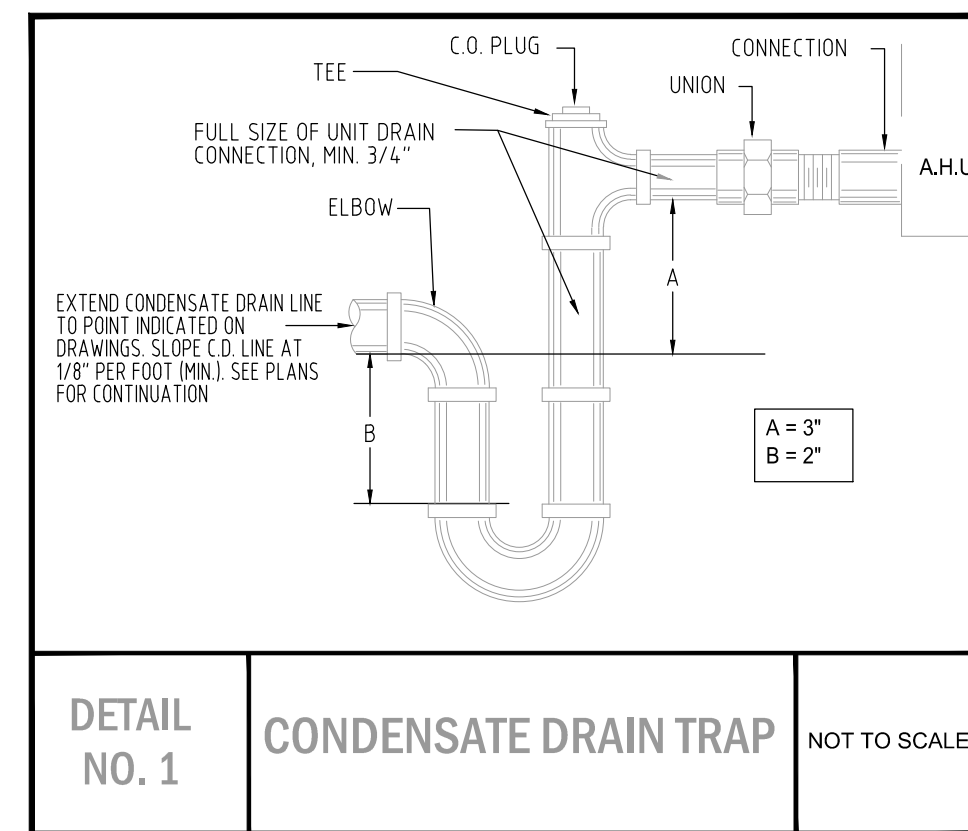
SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

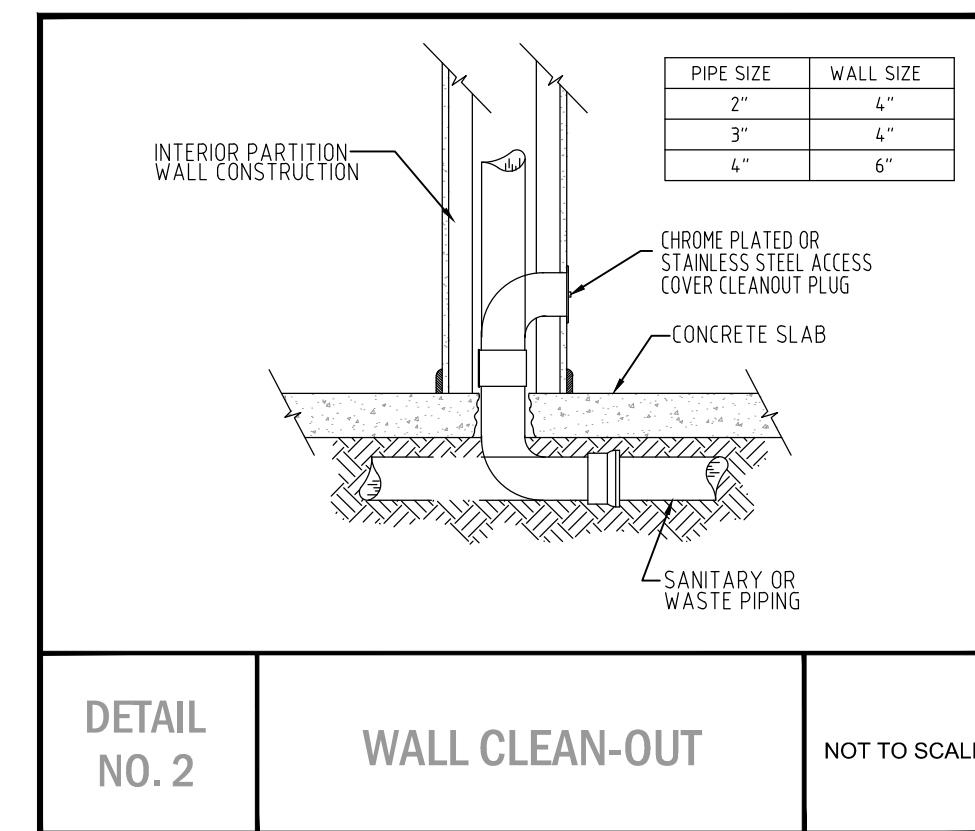
REVISIONS

DRAWN BY
DHA

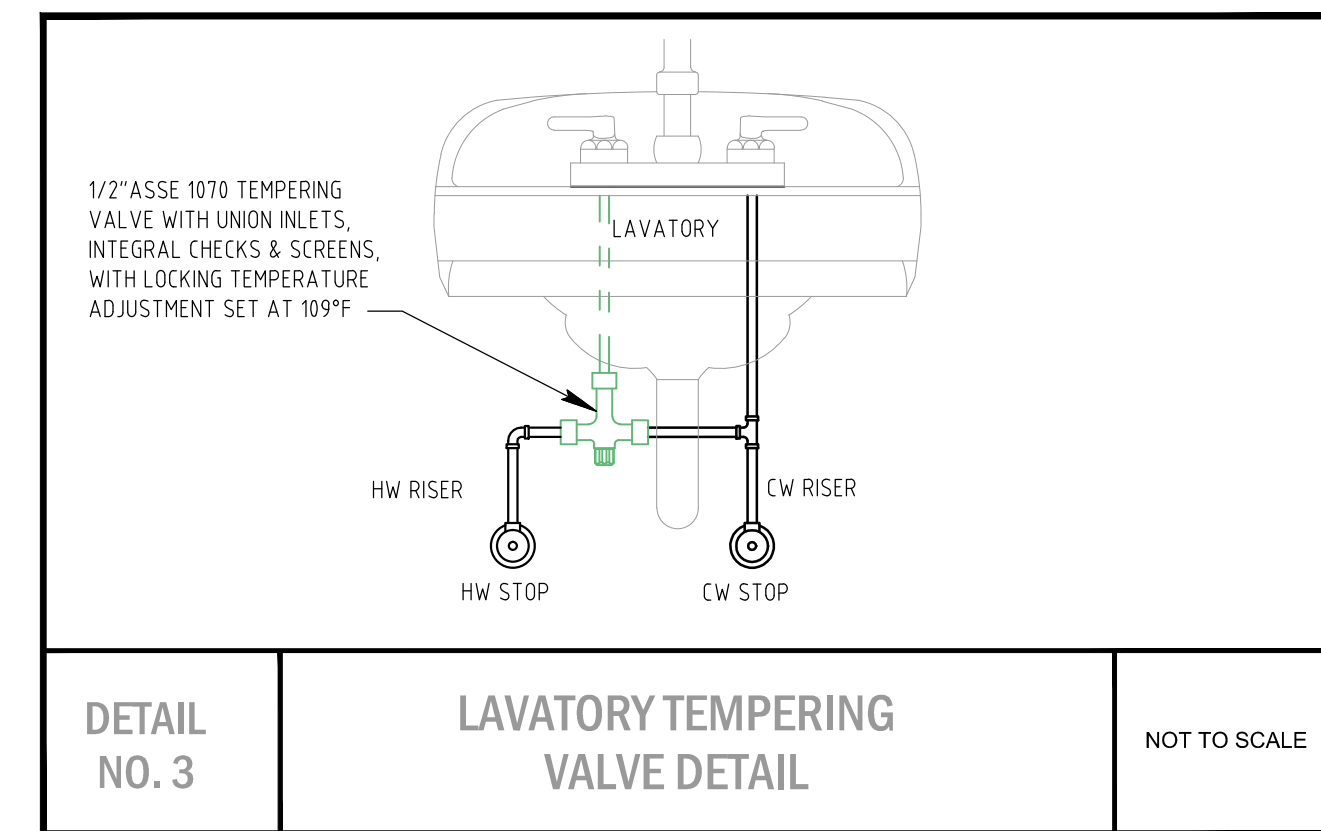
PROJECT NUMBER
1702



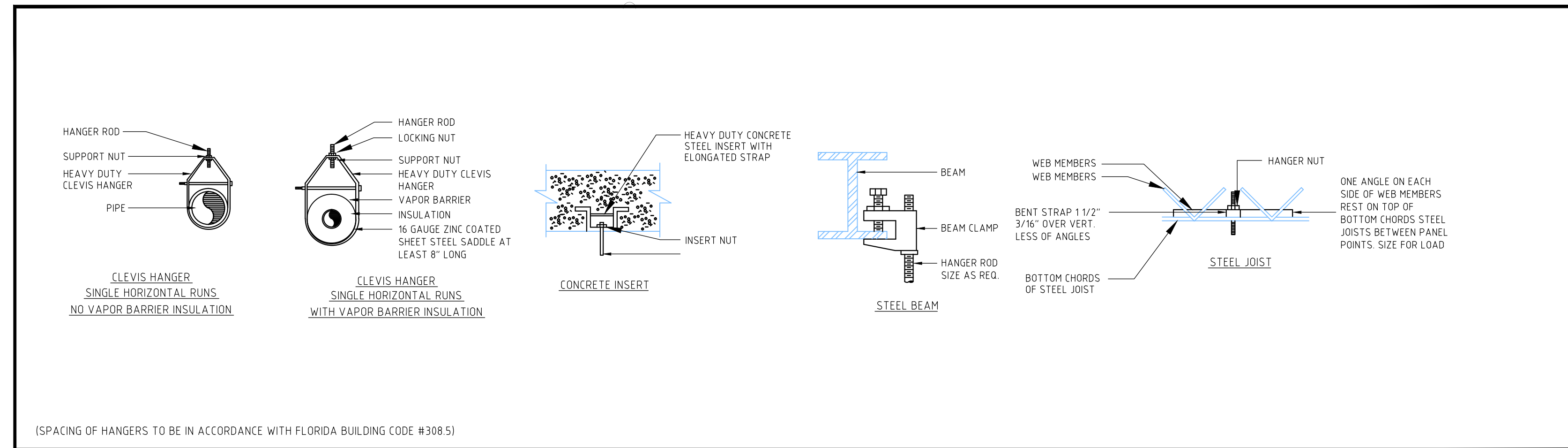
DETAIL NO. 1 CONDENSATE DRAIN TRAP NOT TO SCALE



DETAIL NO. 2 WALL CLEAN-OUT NOT TO SCALE

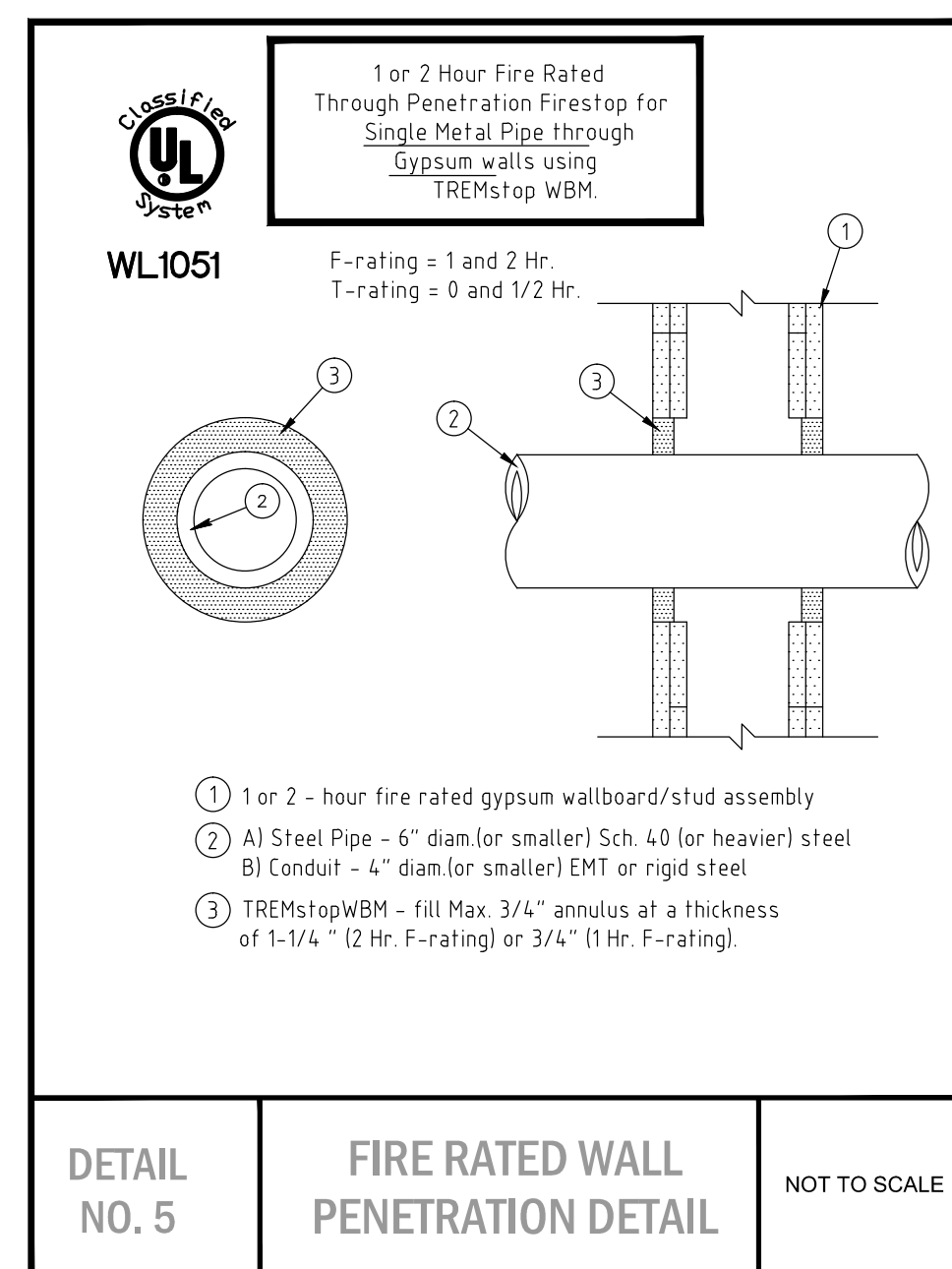


DETAIL NO. 3 LAVATORY TEMPERING VALVE DETAIL NOT TO SCALE

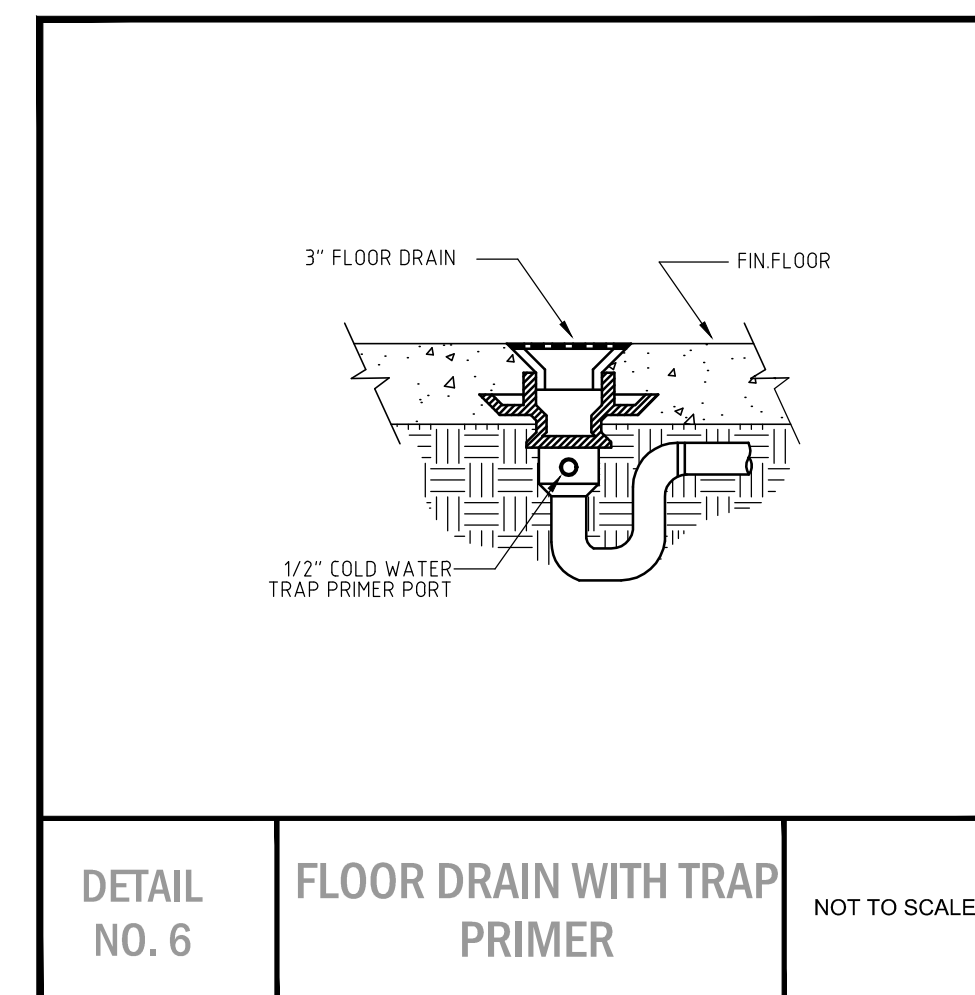


(SPACING OF HANGERS TO BE IN ACCORDANCE WITH FLORIDA BUILDING CODE #308.5)

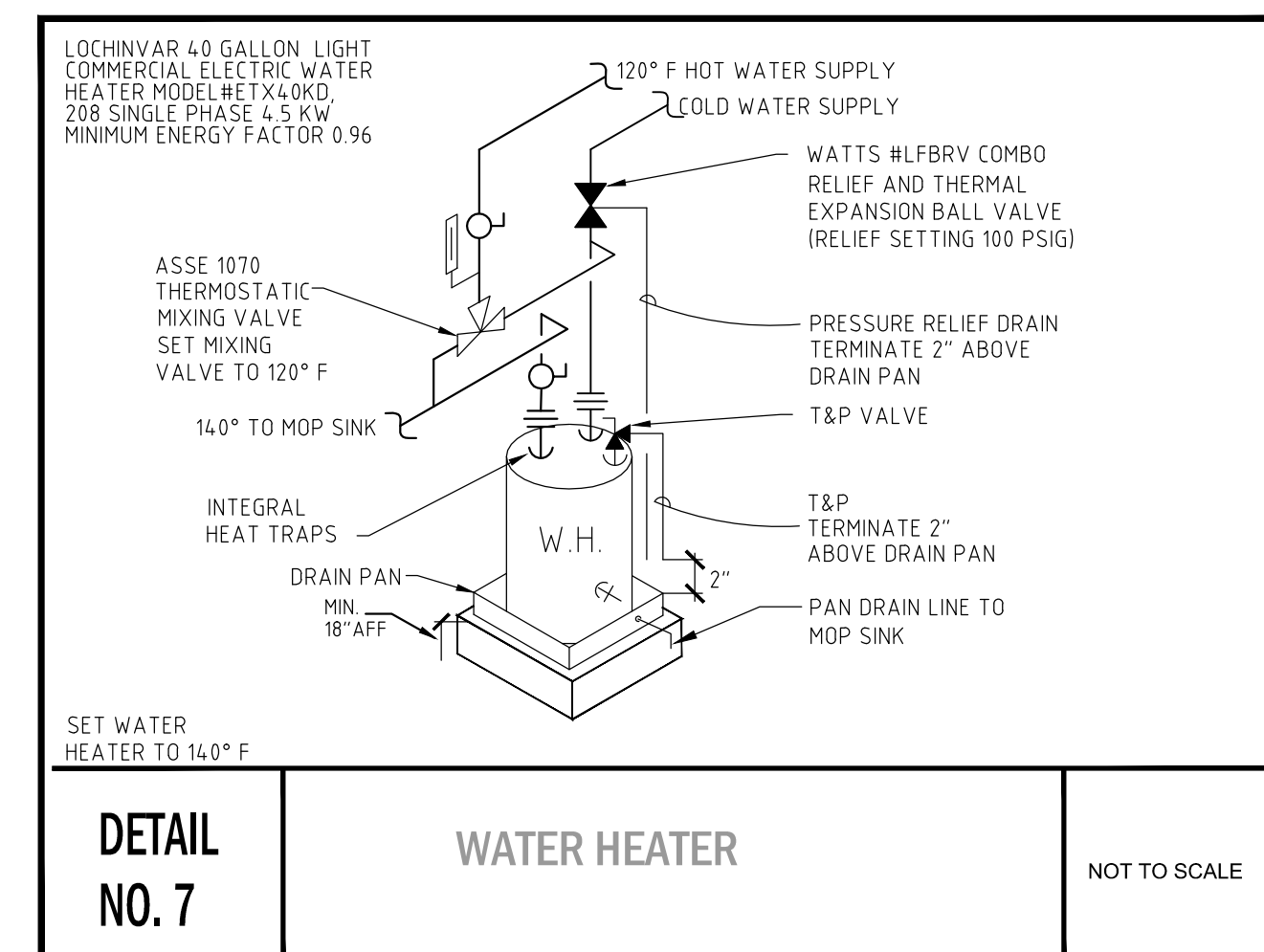
DETAIL NO. 4 PIPE SUPPORT DETAILS NOT TO SCALE



DETAIL NO. 5 FIRE RATED WALL PENETRATION DETAIL NOT TO SCALE



DETAIL NO. 6 FLOOR DRAIN WITH TRAP PRIMER NOT TO SCALE



DETAIL NO. 7 WATER HEATER NOT TO SCALE

SEAL

DATE
05-15-17 HARC
01-23-18 REV
05-09-18 BID

REVISIONS

DRAWN BY
DHA

PROJECT NUMBER
1702

PART 6

REPORTS



**ATLANTIC
ENGINEERING**
SERVICES

Structural Condition Assessment Old Gymnasium Building Key West, FL

Prepared For

William P. Horn Architect, P.A.
915 Eaton Street
Key West, FL 33040-06922

Prepared By

Atlantic Engineering Services of Jacksonville
6501 Arlington Expressway, Building B, Suite 201
Jacksonville, FL 32211

AES Project No. 317-122
November 27, 2017



TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
BACKGROUND	1
OBSERVATIONS.....	1 - 2
EVALUATION AND RECOMMENDATIONS	2
CONCLUSIONS	3
PHOTOGRAPHS	4 - 10
APPENDIX A – SURVEY DRAWINGS	
APPENDIX B – CONCRETE CARBONATION AND CHLORIDE TESTING	
APPENDIX C – DEFINITION OF TERMS ASSOCIATED WITH THE DURABILITY OF CONCRETE	
APPENDIX D – EXISTING STRUCTURAL CONDITIONS EVALUATION CRITERIA	



**ATLANTIC
ENGINEERING
SERVICES**

6501 Arlington Expy.
Building B, Suite 201
Jacksonville, FL 32211
PH: 904.743.4633
FX: 904.725.9295
jax@aespj.com
www.aespj.com

November 27, 2017

Mr. William P. Horn, RA, LEED AP BD+C
William P. Horn Architect, P.A.
915 Eaton Street
Key West, FL 33040-6922

Re: Structural Condition Assessment
Old Gymnasium Building
1300 White Street
Key West, Florida

AES Project: #317-122

Dear Bill:

Atlantic Engineering Services of Jacksonville (AES) has completed its structural condition assessment of the Old Gymnasium Building located at 1300 White Street behind the Key West, City Hall on Seminary Street in Key West, Florida. Our assessment consisted of visual review of the structure on October 16th and 17th, 2017, along with carbonation and chloride testing. Concrete chloride testing was performed by AMEC Foster Wheeler Environmental & Infrastructure, Inc., and carbonation testing was performed by AES. Present at the site were Mr. William P. Horn, RA and Mr. Mark J. Keister, P.E.

BACKGROUND

The Old Gymnasium Building is the original Gymnasium Building for the original Key West, High School constructed in 1923 and 1927. The Old Gymnasium Building is a one-story building with a framed first floor; a basement under the fixed bleachers, and a small one-story, Storage Building accessed from the basement at the northwest corner (see Photograph 1). Construction consists of a low sloped roof with 1" x 6" wood decking on 2" x 8" wood joists at 16" on center, supported by steel beams and steel trusses, which are supported by interior steel columns, perimeter stucco clad concrete beams and pilasters with infill CMU walls above the ground floor, and concrete walls below (see Photograph 2). The fixed bleachers on the east side are supported by 2" x 12" wood joists at 16" on center, supported by the east wall and an interior continuous concrete wall (see Photograph 3). The ground floor of the main Gymnasium floor consists of a wood floor on a wood subfloor on 2" x 10" at 16" on center floor joists, supported by 5" x 9-1/2" wood floor beams and concrete piers (see Photograph 4). The Storage Building consists of a wood framed roof with plywood sheathing supported by 2" x 6" wood joists at 24" on center, which bear on perimeter CMU walls and the original Gymnasium wall (see Photograph 5). The basement floors are a concrete slab on grade, and the foundations are concrete footings socketed into the cap rock.

OBSERVATIONS

Our structural condition assessment consisted of a visual review of the structure. The survey plans approximately locates the deteriorated areas pinpointed during our survey (see Appendix A). Concrete carbonation testing was determined at three (3) locations and concrete chloride testing was also determined at three (3) locations. The testing locations are noted on the survey plans (see Appendix A). The results for the concrete carbonation and chloride testing results are shown in Appendix B.



Fresh concrete has a PH of approximately 12 to 13, which creates a layer of passivity on embedded reinforcing that protects the reinforcing from corrosion. With exposure to atmospheric carbon dioxide, concrete PH slowly decreases over time as carbon dioxide penetrates the concrete. When the concrete PH reduces to a value of about 9 to 10, the passivating layer protecting the reinforcing is destroyed and the reinforcing can corrode due to exposure to oxygen and water. The PH at all three (3) locations is 8.0 or lower at the face of reinforcing and the concrete is no longer protecting the reinforcing from corrosion near the surface of the concrete.

Chlorides in concrete greatly accelerate corrosion and the lower the concrete PH, the greater the impact of chloride induced corrosion. Chloride content in concrete exposed to moisture should be less than .15% of Cl to weight of cement and the chloride corrosion threshold is 1.2 lbs. of chloride per cubic yard of concrete, which works out to .0317% Cl for concrete weighing 140 lbs. /cubic yard. Of the three (3) samples tested for chlorides, all exceeded the chloride corrosion threshold with two (2) being very high in chloride content.

The wood roof decking and roof joists of the Old Gymnasium Building are in excellent condition except for the areas where there are active roof leaks, and the roof deck and roof joists are deteriorated (see Photograph 6). There is no mechanical connection between the roof joists and the interior steel beams and trusses other than toe nails, but at the perimeter concrete beams, the roof joists are fire cut into the concrete beams. The steel structure of the Old Gymnasium Building is in excellent condition. At the Storage Building, the wood roof structure is in good condition with areas of deteriorated plywood sheathing and badly termite deteriorated roof joists (see Photograph 7). There are hurricane ties at the roof joists at the newer CMU walls, but no hurricane ties at the original Gymnasium wall. The framing for the wood bleachers are in excellent condition with no signs of distress except at the active roof leaks. The Gymnasium main floor is also in excellent condition except for the areas of active roof leaks (see Photograph 8). There are several random cracks in the exterior stucco with a major concrete pilaster spall at the southwest corner and a concrete spall in the ornamental concrete over the north entrance (see Photographs 9 and 10). The interior concrete of the Old Gymnasium Building has numerous concrete pilaster spalls, concrete beam spalls, and upper window jamb concrete spalls (see Photographs 11, 12 and 13). All the spalls are being caused by corroding concrete reinforcing.

EVALUATION AND RECOMMENDATIONS

The Old Gymnasium Building is in good condition, but it does require repair. The roof has active roof leaks that are contributing to the deteriorating roof decking and roof joists in these areas. The roof needs to be re-roofed. The roof joists do not have a mechanical connection to the roof steel beams and trusses, and they need to be connected with hurricane ties. At the storage addition, the deteriorated roof sheathing needs to be replaced as well as the termite damaged roof joists. The roof joists at the original Gymnasium wall need to be mechanically fastened to the wall with hurricane ties, and a new roof should be installed when the new gymnasium roof is re-roofed. After the roof is re-roofed, the damaged main Gymnasium floor and bleacher flooring should be repaired under the active roof leak locations. The spalled areas and areas of exposed corroded reinforcing need to have the deteriorated concrete removed back to sound concrete in square cuts. The reinforcing needs to be coated with a corrosion inhibiting bonding agent and the areas filled with concrete repair mortar. Once the roof replacement, roof joist attachment and concrete repair is completed, the exterior wall stucco cracks should be repaired and the walls should be waterproofed. To dramatically slow down the reinforcing corrosion in the concrete pilasters; beams and jambs due to low Ph, and the presence of chlorides, the building should be air conditioned with proper humidity control.



CONCLUSIONS

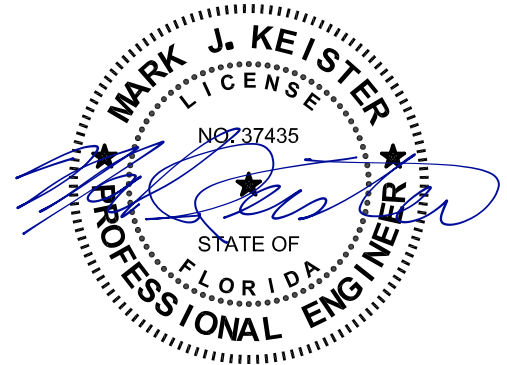
In general, the Old Gymnasium Building is in good condition, but does require repair in the form of a new roof, attachment of the roof joists to the roof structure, replacement of deteriorated wood framing and concrete repair. Once this work is complete, the exterior walls should be waterproofed and the building air conditioned.

It has been a pleasure serving you as a consulting structural engineer. Please contact our office if there are any questions regarding this correspondence, or if you need any additional information.

Very truly yours,
ATLANTIC ENGINEERING SERVICES OF JACKSONVILLE
FLORIDA CERTIFICATE OF AUTHORIZATION #791

Mark J. Keister, P.E.
Principal

MJK/drg



11/28/17



PHOTOGRAPH 1



PHOTOGRAPH 2



PHOTOGRAPH 3



PHOTOGRAPH 4



PHOTOGRAPH 5



PHOTOGRAPH 6



PHOTOGRAPH 7



PHOTOGRAPH 8



PHOTOGRAPH 9



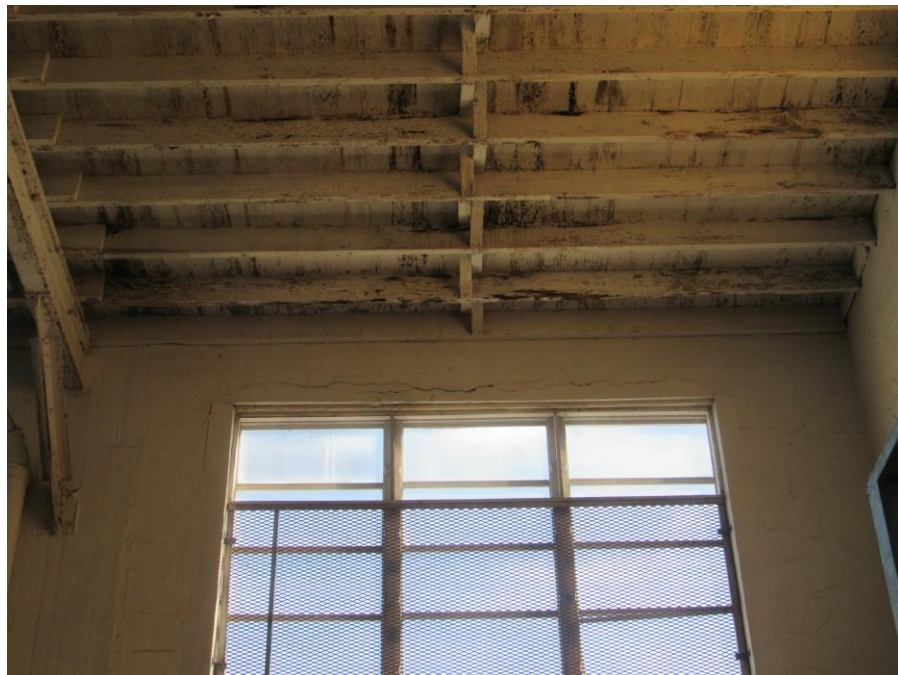
PHOTOGRAPH 10



PHOTOGRAPH 11



PHOTOGRAPH 12



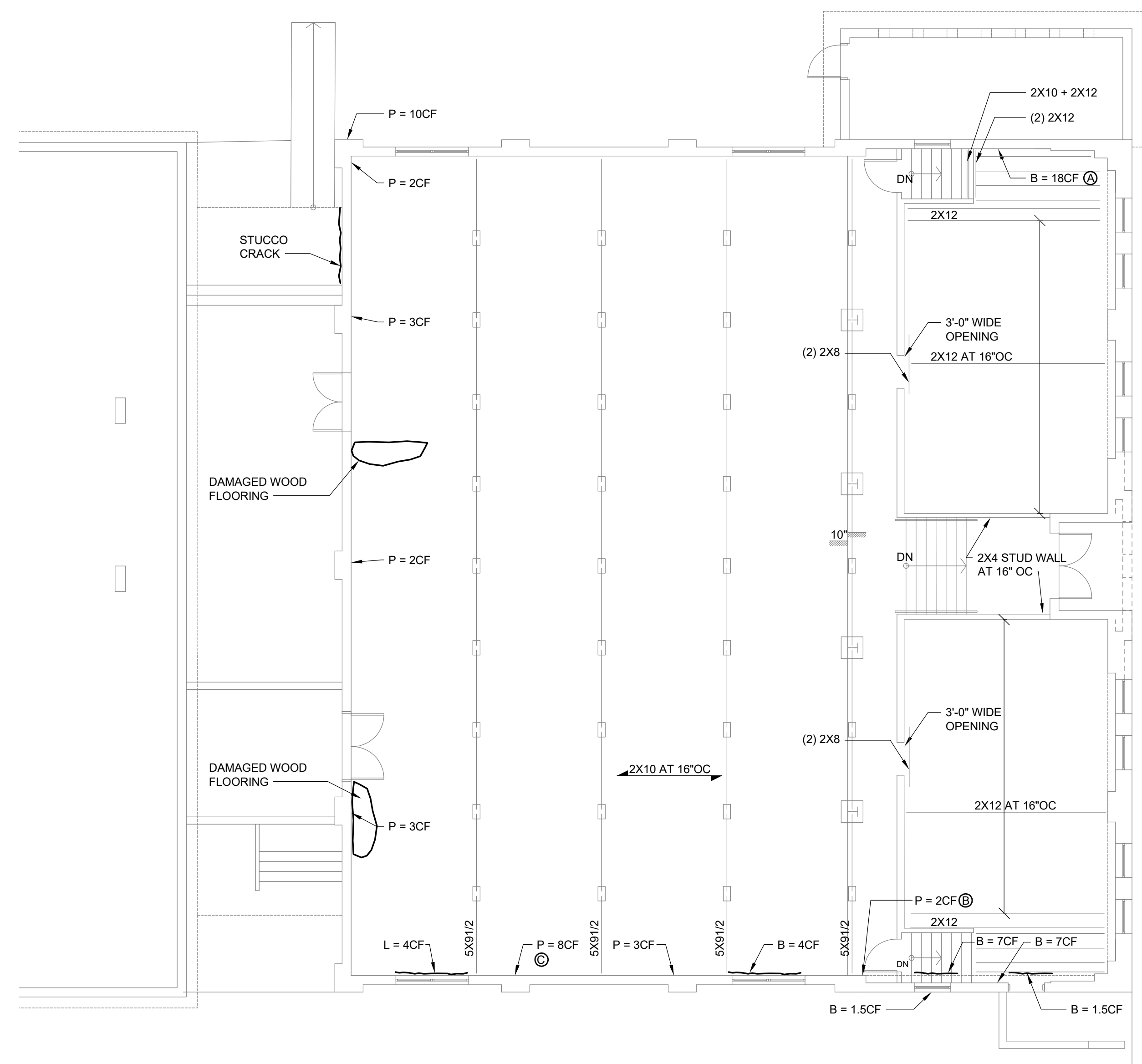
PHOTOGRAPH 13



**ATLANTIC
ENGINEERING**
SERVICES

APPENDIX A

SURVEY DRAWINGS



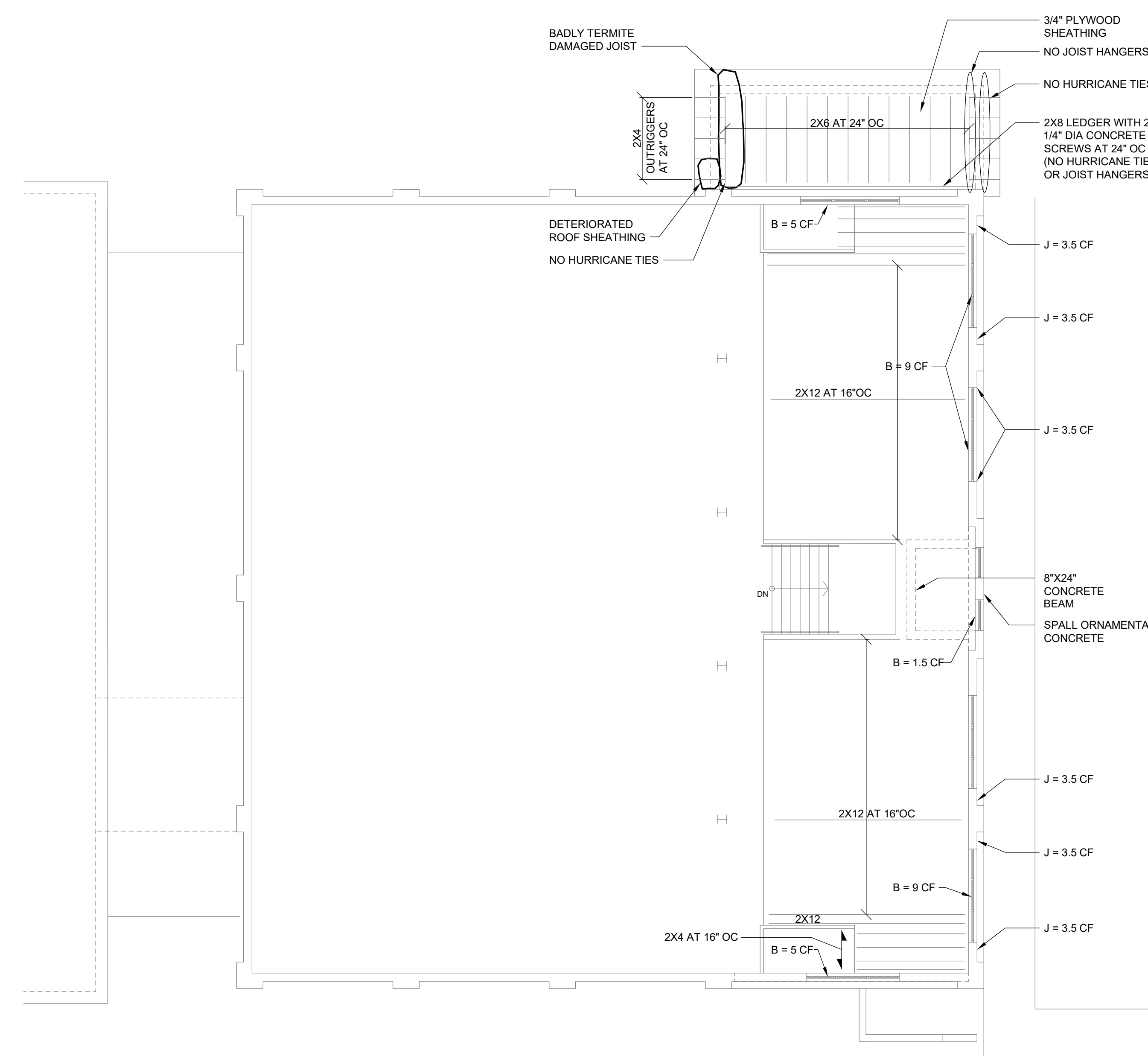
FIRST FLOOR PLAN

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

LEGEND:

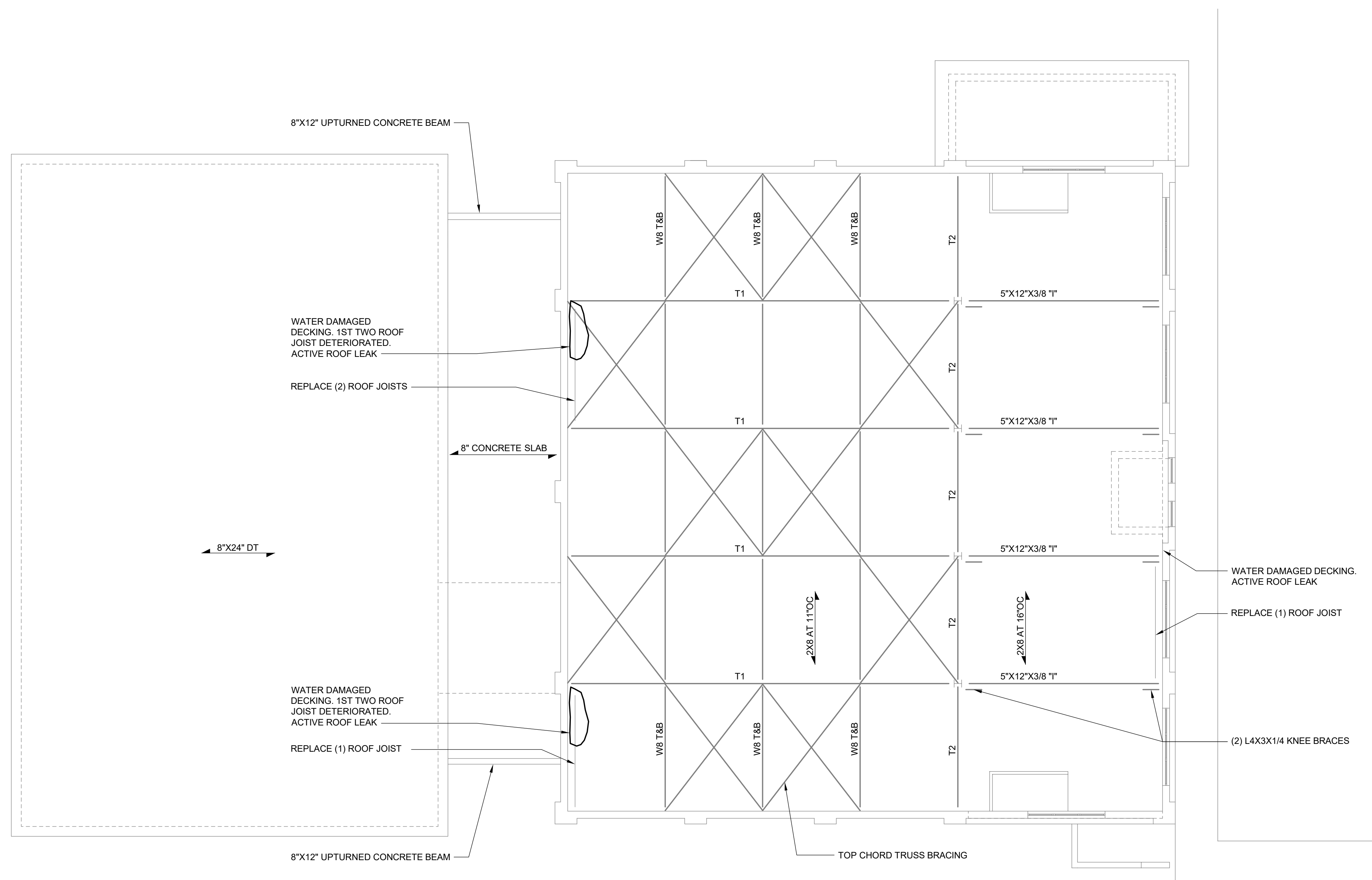
- P - CONCRETE PILASTER SPALL
- B - CONCRETE BEAM SPALL
- J - WINDOW JAMB SPALL

Ⓢ - CARBONATION TEST / CHLORIDE TEST LOCATION



UPPER LEVEL PLAN

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



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



**ATLANTIC
ENGINEERING**
SERVICES

APPENDIX B

CONCRETE CARBONATION AND CLORIDE TESTING



DEPTH OF CARBONATION

TEST LOCATION

A

B

C

PH AT DEPTH

7.0 at reinforcing 2" depth

8.0 at reinforcing 2-1/2" depth

7.5 at reinforcing 2" depth



REPORT OF ACID SOLUBLE CHLORIDE TESTING

PROJECT: Glynn Archer Gym
Key West, FL

PROJECT NO.: 6738-17-5525.02

CLIENT: AES

DATE TESTED: November 27, 2017

As requested, AMEC Foster Wheeler has completed testing of a concrete fragments received from Atlantic Engineering Services on November 17, 2017 . The samples were crushed and tested in general accordance with Florida Test Method FM5-516. Results are outlined below.

Choride Content

Sample ID	% Cl	ppm
A	0.0692	691.8
B	0.1138	1138.3
C	0.3080	3079.6

Respectfully Submitted

DRAFT

Corey T. Chascin, E.I.



**ATLANTIC
ENGINEERING**
SERVICES

APPENDIX C

DEFINITION OF TERMS ASSOCIATED WITH THE DURABILITY OF CONCRETE



DEFINITION OF TERMS ASSOCIATED WITH THE DURABILITY OF CONCRETE

(From ACI 201.1R-08)

1 CRACKING

Crack- A complete or incomplete separation, of either concrete or masonry, into two or more parts produced by breaking or fracturing.

- 1.1 *Checking*- Development of shallow cracks at closely spaced but irregular intervals on the surface of plaster, cement paste, mortar, or concrete (See also *cracks* and *crazing*).
- 1.2 *Craze cracks*- Fine random cracks or fissures in a surface of plaster, cement paste, mortar or concrete. *Crazing*- The development of craze cracks; the pattern of craze cracks existing in a surface (See also *checking* and *cracks*).
- 1.3 *D-cracks*- A series of cracks in concrete near and roughly parallel to joints and edges.
- 1.4 *Diagonal crack*- In a flexural member, an inclined crack, caused by shear stress, usually at approximately 45 degrees to the axis; or a crack in a slab, not parallel to either the lateral or longitudinal directions.
- 1.5 *Hairline cracks*- Cracks in an exposed-to-view concrete surface having widths so small as to be barely perceptible.
- 1.6 *Longitudinal cracks*- A crack that develops parallel to the length of the member.
- 1.7 *Map cracking*- 1) Intersecting cracks that extend below the surface of hardened concrete; caused by shrinkage of the drying surface concrete that is restrained by concrete at greater depths where either little or no shrinkage occurs; vary in width from fine and barely visible to open and well defined; or 2) the chief symptom of a chemical reaction between alkalis in cement and mineral constituents in aggregate within hardened concrete; due to differential rate of volume change in different members of the concrete; cracking is usually random and on a fairly large scale and, in severe instances, the cracks may reach a width of 12.7 mm (0.50 in.) (See also *checking* and *crazing*; also known as *pattern cracking*).
- 1.8 *Pattern cracking*- Cracking on concrete surfaces in the form of a repeated sequence; resulting from a decrease in volume of the material near the surface, or an increase in volume of the material below the surface, or both (see *map cracking*).
- 1.9 *Plastic shrinkage cracking*- Cracking that occurs in the surface of fresh concrete soon after it is placed and while it is still plastic.
- 1.10 *Random cracks*- Uncontrolled cracks that develop at various directions away from the control joints.
- 1.11 *Shrinkage cracking*- Cracking of a structure or member due to failure in tension caused by external or internal restraints as reduction in moisture content develops, carbonation occurs, or both.
- 1.12 *Temperature cracking*- Cracking due to tensile failure, caused by temperature drop in members subjected to external restraints or by a temperature differential in members subjected to internal restraints.
- 1.13 *Transverse cracks*- Cracks that occur across the longer dimension of the member.



2 DISTRESS

Deterioration- 1) Physical manifestation of failure of a material (for example, cracking, delamination, flaking, pitting, scaling, spalling, and staining) caused by environmental or internal autogenous influences on rock and hardened concrete as well as other materials; or 2) Decomposition of material during either testing or exposure to service (See also *disintegration*).

- 2.1 *Chalking*- Formation of a loose powder resulting from the disintegration of the surface of concrete or an applied coating, such as cementitious coating.
- 2.2 *Curling*- The distortion of concrete member from its original shape such as the warping of a slab due to differences in temperature or moisture content in the zones adjacent to its opposite faces (See also *warping*).
- 2.3 *Deflection*- Movement of a point on a structure or structural element, usually measured as a linear displacement or as succession displacements transverse to a reference line or axis.
- 2.4 *Deformation*- A change in dimension or shape.
- 2.5 *Delamination*- A separation along a plane parallel to a surface, as in the case of a concrete slab, a horizontal splitting, cracking, or separation within a slab in a plane roughly parallel to, and generally near, the upper surface; found most frequently in bridge decks and caused by the corrosion of reinforcing steel or freezing or thawing; similar to spalling, scaling, or peeling except that delamination affects large areas and can often only be detected by non-destructive tests, such as tapping or chain dragging.
- 2.6 *Disintegration*- Reduction into small fragments and subsequently into particles (See also *deterioration*).
- 2.7 *Distortion*- See *Deformation*.
- 2.8 *Drummy area*- area where there is a hollow sound beneath a layer of concrete due to a delamination, poor consolidation, or void (See also *delamination*).
- 2.9 *Dusting*- The development of a powdered material at the surface of hardened concrete (See also *chalking*).
- 2.10 *Efflorescence*- A deposit of salts, usually white, formed on a surface, the substance having emerged in solution from within either concrete or masonry and subsequently been precipitated by a reaction, such as carbonation or evaporation.
- 2.11 *Exfoliation*- Disintegration occurring by peeling off in successive layers; swelling up, and opening into leaves or plates like a partly opened book.
- 2.12 *Exudation*- A liquid or viscous gel-like material discharged through a pore, crack, or opening in the surface of concrete.
- 2.13 *Joint deficiencies*- Expansion, contraction, and construction joints not functioning in intended service conditions.
 - 2.13.1 *Joint spall*- A spall adjacent to a joint.
 - 2.13.2 *Joint sealant failure*- Joints opened due to a cracked and/or debonded sealant.
 - 2.13.3 *Joint leakage*- Liquid migrating through the joint.
 - 2.13.4 *Joint fault*- Differential displacement of a portion of a structure along a joint.
- 2.14 *Leakage*- Contained material is migrating through the concrete member.
 - 2.14.1 *Leakage, liquid*- Liquid is migrating through the concrete.
 - 2.14.2 *Leakage, gas*- Gas is migrating through the concrete.



- 2.15** *Mortar flaking*- A form of scaling over coarse aggregate.
- 2.16** *Peeling*- A process in which thin flakes of mortar are broken away from a concrete surface, such as by deterioration or by adherence of surface mortar to forms as forms are removed.
- 2.17** *Pitting*- Development of relatively small cavities in a surface; in concrete, localized disintegration, such as a popout; localized corrosion evident as minute cavities on the surface.
- 2.18** *Popout*- The breaking away of small portions of a concrete surface due to localized internal pressure that leaves a shallow, typical conical, depression with a broken coarse aggregate at the bottom.
 - 2.18.1** *Popouts, small*- Popouts leaving depressions up to 10 mm (0.4 in.) in diameter, or the equivalent.
 - 2.18.2** *Popouts, medium*- Popouts leaving depressions between 10 and 50 mm (0.4 and 2 in.) in diameter.
 - 2.18.3** *Popouts, large*- Popouts leaving depressions greater than 50 mm (2 in.) in diameter.
- 2.19** *Scaling*- Local flaking or peeling away of the near-surface portion of hardened concrete or mortar (See also *peeling* and *spalls*).
 - 2.19.1** *Scaling, light*- Loss of surface mortar without exposure of coarse aggregate.
 - 2.19.2** *Scaling, medium*- Loss of surface mortar 5 to 10 mm (0.2 to 0.4 in.) in depth and exposure of coarse aggregate.
 - 2.19.3** *Scaling, severe*- Loss of surface mortar 5 to 10 mm (0.2 to 0.4 in.) in depth with some loss of mortar surrounding aggregate particles 10 to 20 mm (0.4 to 0.8 in.) in depth.
 - 2.19.4** *Scaling, very severe*- Loss of coarse aggregate particles as well as surface mortar, generally to a depth greater than 20 mm (0.8 in.).
- 2.20** *Spall*- A fragment, usually in the shape of a flake, detached from a concrete member by a blow, by the action of weather, by pressure, by fire, or by expansion within the larger mass.
 - 2.20.1** *Small spall*- A roughly circular depression not greater than 20 mm (0.8 in.) in depth and 150 mm (6 in.) in any dimension.
 - 2.20.2** *Large spall*- May be roughly circular or oval or, in some cases, elongated, and is more than 20 mm (0.8 in.) in depth and 150 mm (6 in.) in greatest dimension.
- 2.21** *Warping*- Out-of-plane deformation of the corners, edges, and surface of a pavement, slab, or wall panel from its original shape (See also *curling*).

3 TEXTURAL FEATURES AND PHENOMENA RELATIVE TO THEIR DEVELOPMENT.

- 3.1 *Air void*- A space in cement paste, mortar, or concrete filled with air; an entrapped air void is characteristically 1 mm (0.04 in.) or greater in size and irregular in shape; entrained air void is typically between 10 μ m and 1 mm (0.04 mil and 0.04 in.) in diameter and spherical or nearly so.
- 3.2 *Blistering*- the irregular raising of a thin layer at the surface of placed mortar or concrete during or soon after the completion of the finishing operation; also, bulging of the finish plaster coat as it separates and draws away from the base coat.
- 3.3 *Bugholes*- Small regular or irregular cavities, usually not exceeding 15 mm (0.6 in.) in diameter, resulting from entrapment of air bubbles at the surface of formed concrete during placement and consolidation (Also known as surface air voids).
- 3.4 *Cold joint*- A joint or discontinuity resulting from a delay in placement of sufficient duration to preclude intermingling and bonding of the material in two successive lifts of concrete, mortar, or the like.
- 3.5 *Cold-joint lines*- Visible lines on the surfaces of formed concrete indicating the presence of a cold joint where one layer of concrete had hardened before subsequent concrete was placed.
- 3.6 *Discoloration*- Departure of color from that which is normal or desired (See also *staining*).
- 3.7 *Honeycomb*- Voids left in concrete due to failure of the mortar to effectively fill the spaces among coarse aggregate particles.
- 3.8 *Incrustation*- A crust or coating, generally hard, formed on the surface of concrete or masonry construction or on aggregate particles.
- 3.9 *Laitance*- A layer of weak material known as residue derived from cementitious material and aggregate fines either: 1) carried by bleeding to the surface or to the internal cavities of freshly placed concrete; or 2) separated from the concrete and deposited on the concrete surface or internal cavities during placement of concrete underwater.
- 3.10 *Sand pocket*- A zone in concrete or mortar containing fine aggregate with little or no cement material.
- 3.11 *Sand streak*- A streak of exposed fine aggregate in the surface of formed concrete, caused by bleeding.
- 3.12 *Segregation*- The differential concentration of the components of mixed concrete, aggregate, or the like, resulting in nonuniform proportions in the mass.
- 3.13 *Staining*- Discoloration by foreign matter.
- 3.14 *Stalactite*- A downward-pointing deposit formed as an accretion of mineral matter produced by evaporation of dripping liquid from the surface of concrete, commonly shaped like an icicle (See also *stalagmite*).
- 3.15 *Stalagmite*- An upward-pointing deposit formed as an accretion of mineral matter produced by evaporation of dripping liquid, projecting from the surface of rock or of concrete, commonly roughly conical in shape (See also *stalactite*).
- 3.16 *Stratification*- The separation of overwet or overvibrated concrete into horizontal layers with increasingly lighter material toward the top; water, laitance, mortar, and coarse aggregate tend to occupy successively lower positions in that order; a layered structure in concrete resulting from placing of successive batches that differ in appearance; occurrence in aggregate stockpiles of layers of differing grading or composition; a layered structure in a rock foundation.



**ATLANTIC
ENGINEERING**
SERVICES

APPENDIX D

EXISTING STRUCTURAL CONDITIONS EVALUATION CRITERIA



**EXISTING STRUCTURAL CONDITIONS
EVALUATION CRITERIA**

EXCELLENT	Meets or exceeds current structural code requirements. Capable of safely carrying proposed occupancies. No significant vibrations, cracking or deflections. No structural reinforcement or repairs required. Very minor, if any, maintenance required.
GOOD	Meets current structural code requirements. Capable of safely carrying proposed occupancies. Deflections, cracking, vibrations may be observable. No structural reinforcement required. Minor structural repairs required. Some significant maintenance repairs required.
FAIR	Majority of structure meets structural code requirements. Portions of structure are not capable of carrying proposed occupancies. Deflections, cracking, vibrations, structural distress is observable. Structural reinforcement required in limited portions of the structure. Structural repairs required generally. Many significant maintenance repairs required.
POOR	Majority of structure does not meet structural code requirements. Much of the building is not capable of carrying proposed occupancies. Deflections, cracking, vibrations, structural distress commonly observable throughout the structure. Major reinforcement or reconstruction of the structure is required. Major maintenance repairs are required.
EXTREMELY POOR	Collapse of structure is imminent. Structure exhibits significant deflections, cracking, vibrations, structural distress. Structure requires extensive reinforcement or reconstruction of impractical scope.

NOTE: Some parts of each definition may not apply.



5363-Stuart-17
October 24, 2017

James W. Bouquet P.E.
Director of Engineering
City of Key West
1300 White Street
Key West, FL 33040

Transmitted via electronic mail to James Bouquet at jbouquet@cityofkeywest-fl.gov on October 24, 2017.

Reference: P.O. 084857

Subject: Glynn Archer Gym Asbestos and Lead Based Paint Surveys

Dear Mr. Bouquet:

Per P.O. 084857 under the General Environmental Engineering Services Agreement between the City of Key West and Tetra Tech Inc., we are submitting an Asbestos and Lead Base Paint Assessment for the Glynn Archer Gym at 1119 White Street.

Tetra Tech conducted a lead based paint assessment and subcontracted Jupiter Environmental Laboratories, Inc. to analyze lead paint samples. A total of 3 samples were collected. None of the sample concentrations for lead exceed the criteria set by the EPA or HUD. Results are displayed in Table 1 and the laboratory analytical report is attached.

Tetra Tech subcontracted Florida Air Quality Solutions (FAQS) to conduct an asbestos assessment. A total of 25 samples were collected. Samples were collected from the ceiling, the roof, and the parapit/flashing. None of the samples detected asbestos. Results are located in the FAQS survey report attached.

Table 1

Sample	Concentration	Criteria
East Wall	90 mg/kg	5000 mg/kg (ppm)
South Wall	240 mg/kg	5000 mg/kg (ppm)
North Wall	700 mg/kg	5000 mg/kg (ppm)

The EPA and HUD rules exempt renovations when the paint to be disturbed has been determined to be below the EPA-HUD standard for lead-based paint of 1 mg/cm² or 5000mg/g (0.5%) of lead, or 5,000 ppm. (See <http://www.epa.gov/oppt/chemtest/pubs/petitions.html#petition5> for links to the petition and EPA's response.)

City of Key West

Page 2

If you have any questions or require any additional information, please contact me at 706.831.7259.

Sincerely,

Shauna Stotler

Project Manager

cc: Brian Proctor, Tetra Tech, Inc.

October 20, 2017

Shauna Stotler
Tetra Tech - SC
117 Hearthstone Dr SW
Aiken, SC 29803

RE: LOG# 1753689
Project ID: LBP 194-5363
COC# 1753689

Dear Shauna Stotler:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, October 16, 2017. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Rebecca Lourido for
Kacia Baldwin
V.P. of Operations

FDOH# E86546
CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



SAMPLE ANALYTE COUNT

Workorder: 1753689

Project ID: LBP 194-5363

Lab ID	Sample ID	Method	Analytes Reported
1753689001	KW-Gym-1	EPA 6020	1
1753689002	KW-Gym-2	EPA 6020	1
1753689003	KW-Gym-3	EPA 6020	1
1753689004	KW-103-1	EPA 6020	1
1753689005	KW-103-2	EPA 6020	1
1753689006	KW-103-4	EPA 6020	1
1753689007	KW-103-5	EPA 6020	1
1753689008	KW-103-6	EPA 6020	1
1753689009	KW-103-7	EPA 6020	1
1753689010	KW-103-8	EPA 6020	1
1753689011	KW-103-9	EPA 6020	1
1753689012	KW-103-10	EPA 6020	1
1753689013	KW-103-11	EPA 6020	1
1753689014	KW-103-12	EPA 6020	1
1753689015	KW-103-13	EPA 6020	1
1753689016	KW-103-14	EPA 6020	1
1753689017	KW-103-15	EPA 6020	1
1753689018	KW-103-3	EPA 6020	1

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..

SAMPLE SUMMARY

Workorder: 1753689

Project ID: LBP 194-5363

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1753689001	KW-Gym-1	Soil/Solid	10/12/2017 10:21	10/16/2017 09:50
1753689002	KW-Gym-2	Soil/Solid	10/12/2017 10:23	10/16/2017 09:50
1753689003	KW-Gym-3	Soil/Solid	10/12/2017 10:27	10/16/2017 09:50
1753689004	KW-103-1	Soil/Solid	10/12/2017 11:29	10/16/2017 09:50
1753689005	KW-103-2	Soil/Solid	10/12/2017 11:37	10/16/2017 09:50
1753689006	KW-103-4	Soil/Solid	10/12/2017 11:43	10/16/2017 09:50
1753689007	KW-103-5	Soil/Solid	10/12/2017 11:45	10/16/2017 09:50
1753689008	KW-103-6	Soil/Solid	10/12/2017 11:51	10/16/2017 09:50
1753689009	KW-103-7	Soil/Solid	10/12/2017 11:56	10/16/2017 09:50
1753689010	KW-103-8	Soil/Solid	10/12/2017 12:03	10/16/2017 09:50
1753689011	KW-103-9	Soil/Solid	10/12/2017 12:10	10/16/2017 09:50
1753689012	KW-103-10	Soil/Solid	10/12/2017 12:13	10/16/2017 09:50
1753689013	KW-103-11	Soil/Solid	10/12/2017 12:17	10/16/2017 09:50
1753689014	KW-103-12	Soil/Solid	10/12/2017 12:38	10/16/2017 09:50
1753689015	KW-103-13	Soil/Solid	10/12/2017 12:41	10/16/2017 09:50
1753689016	KW-103-14	Soil/Solid	10/12/2017 12:43	10/16/2017 09:50
1753689017	KW-103-15	Soil/Solid	10/12/2017 12:46	10/16/2017 09:50
1753689018	KW-103-3	Soil/Solid	10/12/2017 11:40	10/16/2017 09:50

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..

ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689001** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-Gym-1** Date Collected: 10/12/2017 10:21

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	91	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 14:54	ZS	

FDOH# E86546
CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689002** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-Gym-2** Date Collected: 10/12/2017 10:23

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	240	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:04	ZS	L1

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689003** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-Gym-3** Date Collected: 10/12/2017 10:27

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	700	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:14	ZS	L1



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689004** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-1** Date Collected: 10/12/2017 11:29

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	350	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:23	ZS	L1

FDOH# E86546
CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689005** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-2** Date Collected: 10/12/2017 11:37

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	350	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:33	ZS	L1



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689006** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-4** Date Collected: 10/12/2017 11:43

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	9300	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:43	ZS	L2

FDOH# E86546
CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689007** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-5** Date Collected: 10/12/2017 11:45

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	4100	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 15:53	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689008** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-6** Date Collected: 10/12/2017 11:51

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	23000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 16:02	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689009** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-7** Date Collected: 10/12/2017 11:56

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	76000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 16:38	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689010** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-8** Date Collected: 10/12/2017 12:03

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	26000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 16:46	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689011** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-9** Date Collected: 10/12/2017 12:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	120000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 16:53	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689012** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-10** Date Collected: 10/12/2017 12:13

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead		1000 mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:00	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689013** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-11** Date Collected: 10/12/2017 12:17

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead		2000 mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:06	ZS	L2

FDOH# E86546
CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Jupiter Environmental Laboratories, Inc..



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689014** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-12** Date Collected: 10/12/2017 12:38

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	4000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:12	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689015** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-13** Date Collected: 10/12/2017 12:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	13000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:22	ZS	L2

ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689016** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-14** Date Collected: 10/12/2017 12:43

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	7000	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:32	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689017** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-15** Date Collected: 10/12/2017 12:46

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	2200	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:42	ZS	L2



ANALYTICAL RESULTS

Workorder: 1753689
Project ID: LBP 194-5363

Lab ID: **1753689018** Date Received: 10/16/2017 09:50 Matrix: Soil/Solid
Sample ID: **KW-103-3** Date Collected: 10/12/2017 11:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
Analysis Desc: EPA 6020 Metals SCAN by ICP/MS (S)					Preparation Method: EPA 3050B					
					Analytical Method: EPA 6020					
Lead	240	mg/Kg	1.0	0.16	2	10/18/2017 09:45	ZS	10/18/2017 17:51	ZS	L1



ANALYTICAL RESULTS QUALIFIERS

Workorder: 1753689

Project ID: LBP 194-5363

PARAMETER QUALIFIERS

- L1 Reported value is above the calibration range but is within the instrument LDR (Linear Dynamic Range).
- L2 Off-scale high. Reported value is above the calibration range and the instrument LDR (Linear Dynamic Range).

PROJECT COMMENTS

- 1753689 A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the practical quantitation limit.
W|Sample(s) is reported as received (uncorrected for dry weight).

QUALITY CONTROL DATA

Workorder: 1753689

Project ID: LBP 194-5363

QC Batch:	MXX/9079	Analysis Method:		EPA 6020		
QC Batch Method:	EPA 3050B					
Associated Lab Samples:	1753678006	1753689001	1753689002	1753689003	1753689004	1753689005
	1753689006	1753689007	1753689008	1753689009	1753689010	1753689011
	1753689012	1753689013	1753689014	1753689015	1753689016	1753689017
	1753689018	1753733001	1753733002			

METHOD BLANK: 127639

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Lead	mg/Kg	U	0.039	

LABORATORY CONTROL SAMPLE & LCSD: 127640 127641

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lead	mg/Kg	10	9.4	10	94.5	101	80-120	6.19	20	

MATRIX SPIKE SAMPLE: 127643 Original: 1753733002

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Lead	mg/Kg	6.4	20	25	94.9	75-125	

SAMPLE DUPLICATE: 127642 Original: 1753733002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Lead	mg/Kg	6.4	7.6	4.58	20	

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 1753689

Project ID: LBP 194-5363

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1753689001	KW-Gym-1	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689002	KW-Gym-2	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689003	KW-Gym-3	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689004	KW-103-1	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689005	KW-103-2	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689006	KW-103-4	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689007	KW-103-5	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689008	KW-103-6	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689009	KW-103-7	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689010	KW-103-8	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689011	KW-103-9	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689012	KW-103-10	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689013	KW-103-11	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689014	KW-103-12	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689015	KW-103-13	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689016	KW-103-14	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689017	KW-103-15	EPA 3050B	MXX/9079	EPA 6020	MMS/8170
1753689018	KW-103-3	EPA 3050B	MXX/9079	EPA 6020	MMS/8170

Jupiter

Environmental Laboratories, Inc.

www.jupiterlabs.com

150 S. Old Dixie Highway, Jupiter, FL 33458

(561) 575-0030 • FAX (561) 575-4118 • clientservices@jupiterlabs.com

J.E.L. Log # 1753689

P.O. # _____

Quote # _____

Company Name <u>Tetra Tech</u>						LAB ANALYSIS										Requested Turnaround Time			
Address <u>117 Hearthstone Dr SW</u>						Pres Codes											Note: Rush requests subject to acceptance by the laboratory		
City <u>Aiken</u> State <u>SC</u> Zip <u>29803</u>						Parameters											Standard		
Sampling Site Address <u>Key West FL</u>																	<input checked="" type="checkbox"/> Expedited		
Attn: <u>Shauna Stotler</u> Email <u>shauna.stotler@tetratech.com</u>																	Due <u>10/20/17</u>		
Project Name <u>LBP</u> Project # <u>194-5363</u>																	Comments		
Sampler Name/Signature <u>Shauna Stotler / S Stotler</u>						Lead													
#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	# of Cont														
1	KW-Gym-1	10-12-17	1021	Ø	1		X											N	Paint Flakes
2	KW-Gym-2		1023	Ø	1		X												
3	KW-Gym-3		1027	Ø	1		X												
4	KW-103-1		1129	Ø	1		X												
5	KW-103-2		1137	Ø	1		X												
6	KW-103-4		1143	Ø	1		X												
7	KW-103-5		1145	Ø	1		X												
8	KW-103-6		1151	Ø	1		X												
9	KW-103-7		1156	Ø	1		X												
10	KW-103-8		1203	Ø	1	X													

Matrix Codes*				Pres Codes		Relinquished by		Date	Time	Received by		Date	Time
S	Soil/Solid Sediment	SW	Surface Water	A	none	I	Ice	Shauna Stotler	10-13-17	0930	Fedex	-	-
GW	Ground Water	SL	Sludge	B	HNO ₃	O	Other						
WW	Waste Water	O	Other (Please Specify)	C	H ₂ SO ₄	M	MeOH	Fedex	10/16/17	0950	CM	10/16/17	0950
DW	Drinking Water			D	NaOH	N	Na ₂ S ₂ O ₄						
				E	HCl	Z	ZnAc						

QA/QC level with report
None 1 2 3 See price guide for applicable fees

FDEP Dry Cleaning FDEP UST Pre-Approval Temp Control: RT °C
SFWD ADaPT DOT

7-21-17

Jupiter

Environmental Laboratories Inc.

www.jupiterlabs.com
 150 S. Old Dixie Highway, Jupiter, FL 33458
 (561) 575-0030 • FAX (561) 575-4118 • clientservices@jupiterlabs.com

J.E.L. Log # **1753689**

P.O. # _____

Quote # _____

Company Name Tetra Tech						LAB ANALYSIS										Requested Turnaround Time													
Address 117 Hearthstone Dr SW						Pres Codes											Field Filtered (Y/N)	Note: Rush requests subject to acceptance by the laboratory											
City Aiken State SC Zip 29803																		Standard											
Sampling Site Address Key West FL						Parameters											Field Filtered (Y/N)	<input checked="" type="checkbox"/> Expedited											
Attn: Shauna Stotter Email shauna.stottera@tetratech.com																		Due 10/20/17											
Project Name LBP Project # 194-5363																		Lead											
Sampler Name/Signature Shauna Stotter / S Stotter																													
#	Sample Label (Client ID)	Collected Date	Collected Time	Matrix Code*	# of Cont											Comments													
1	KW-103-9	10-12-17	1210	Ø	1											N Paint Flakes													
2	KW-103-10	}	1213	Ø	1																								
3	KW-103-11		1217	Ø	1																								
4	KW-103-12		1238	Ø	1																								
5	KW-103-13		1241	Ø	1																								
6	KW-103-14		1243	Ø	1																								
7	KW-103-15	↓	1246	Ø	1																								
* 18	KW-103-3	10/12/17	1140	Ø	1											* Added per email of 10/16/17													
9																													
0																													
Matrix Codes*				Pres Codes		Relinquished by		Date	Time	Received by		Date	Time																
S	Soil/Solid Sediment	SW	Surface Water	A- none	I- Ice	Shauna Stotter FedEx		10-13-17	0930	FedEx		—	—																
GW	Ground Water	SL	Sludge	B- HNO ₃	O- Other																								
WW	Waste Water	Ø Other (Please Specify)		C- H ₂ SO ₄	M- MeOH			10/16/17	0950	CM		10/16/17	0950																
DW	Drinking Water	D- NaOH	N- Na ₂ S ₂ O ₈	E- HCl	Z- ZnAc																								
QA/QC level with report None <u> 1 </u> <u> 2 </u> <u> 3 </u> See price guide for applicable fees																													
FDEP Dry Cleaning <input type="checkbox"/> FDEP UST Pre-Approval <input type="checkbox"/> SFWMD <input type="checkbox"/> ADAPT <input type="checkbox"/> DOT <input type="checkbox"/>				Temp Control:																									
				RT °C																									

10/21/17

ORIGIN ID:EYWA (706) 831-7259
CHARLOTTE STOTLER

117 HEARTHSTONE DR

AIKEN, SC 29803
UNITED STATES US

SHIP DATE: 13OCT17
ACTWGT: 0.50 LB
CAD: 006994065/SSFE1822

BILL THIRD PARTY

Part # 156297-201/2466/1645-08/18

TO **SAMPLE RECEIVING**
JUPITER LAB
150 S OLD DIXIE HWY

JUPITER FL 33458

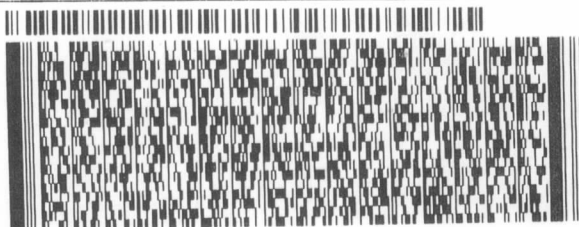
(661) 576-0030

REF:

INU:

DEPT:

PO:



FedEx
Express



010316071121JL

TRK# 7880 6685 6072
0201

MON - 16 OCT 10:30A
PRIORITY OVERNIGHT

3E PBIA

33458
FL-US **PBI**



Sample Receiving

From: Stotler, Shauna
Sent: Monday, October 16, 2017 3:23 PM
To: Sample Receiving
Subject: Re: Attached COC

1140

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Sample Receiving <samplereceiving@jupiterlabs.com>
Date: 10/16/17 3:16 PM (GMT-05:00)
To: "Stotler, Shauna" <Shauna.Stotler@tetrattech.com>
Subject: RE: Attached COC

Do you have a collected time for that sample?

Best Regards,
Sample Custodian | Sample Receiving | www.jupiterlabs.com | 561-575-0030 (ext. 112)
NELAP . DoD ELAP . ISO 17025 . WMBE

From: Stotler, Shauna [<mailto:Shauna.Stotler@tetrattech.com>]
Sent: Monday, October 16, 2017 1:14 PM
To: Sample Receiving <samplereceiving@jupiterlabs.com>
Subject: Re: Attached COC

Yes please

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: Sample Receiving <samplereceiving@jupiterlabs.com>
Date: 10/16/17 1:11 PM (GMT-05:00)
To: "Stotler, Shauna" <Shauna.Stotler@tetrattech.com>
Subject: Attached COC

Good Afternoon!

We received sample KW-103-3 that isn't on the COC, is it okay to add it and proceed with the Pb testing?

I've attached the COC for reference.

Best Regards,
Sample Custodian | Sample Receiving | www.jupiterlabs.com | 561-575-0030 (ext. 112)
NELAP . DoD ELAP . ISO 17025 . WMBE



THE CITY OF KEY WEST

1300 White Street, Key West, FL 33040 (305) 809-3792

MEMORANDUM

To: Enid Torregrosa, HARC

From: Jim Bouquet, P.E., Director of Engineering

Jim Bouquet
6/6/17

Date: June 6, 2017

RE: Glynn Archer Old Gymnasium Building

Engineering Services Department has reviewed the attached design information provided by William P. Horn, P.A. (Horn) regarding projected sound levels resulting from operation of four 5-ton air conditioning units located over the structure connecting the Old Gymnasium Building (gym) with the SOS Kitchen. The units service the gym proposed for renovation.

As indicated in the attached Commissioning for Buildings (Cx4b) letter dated June 3, 2017, projected average sound 5 feet from a 5-ton unit is 72 decibels (dBA). Cx4b predicts this level will diminish below 50 dBA 75 feet from the receptor. Based on observations from Google Earth, the following receptor locations were noted:

Nearest Residence (across Seminary Street):	60 feet from source
Abutting Residence (west):	73 feet from source
United Street Sidewalk:	140 feet from source

Based on projected sound levels and distance from units to the above receptors, sound levels similar to those generated by a refrigerator can be expected at those locations. Cumulative sound increase due to multiple units is expected to be minimal due the logarithmic nature of the decibel. Sound levels will be further attenuated by 5-foot-high aluminum screen wall mounted on the connecting structure (see attached plans).

Attachments:

Plan and Elevation Views of Gym
Cx4b Report

WILLIAM P. HORN
ARCHITECT, P.A.

REGISTRATION #
KEY WEST,
FLORIDA
3046

TEL: 304 996-8327
FAX: 304 996-0333

1100 S.W. 10TH
AVENUE, SUITE 100

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST FLORIDA

SEAL

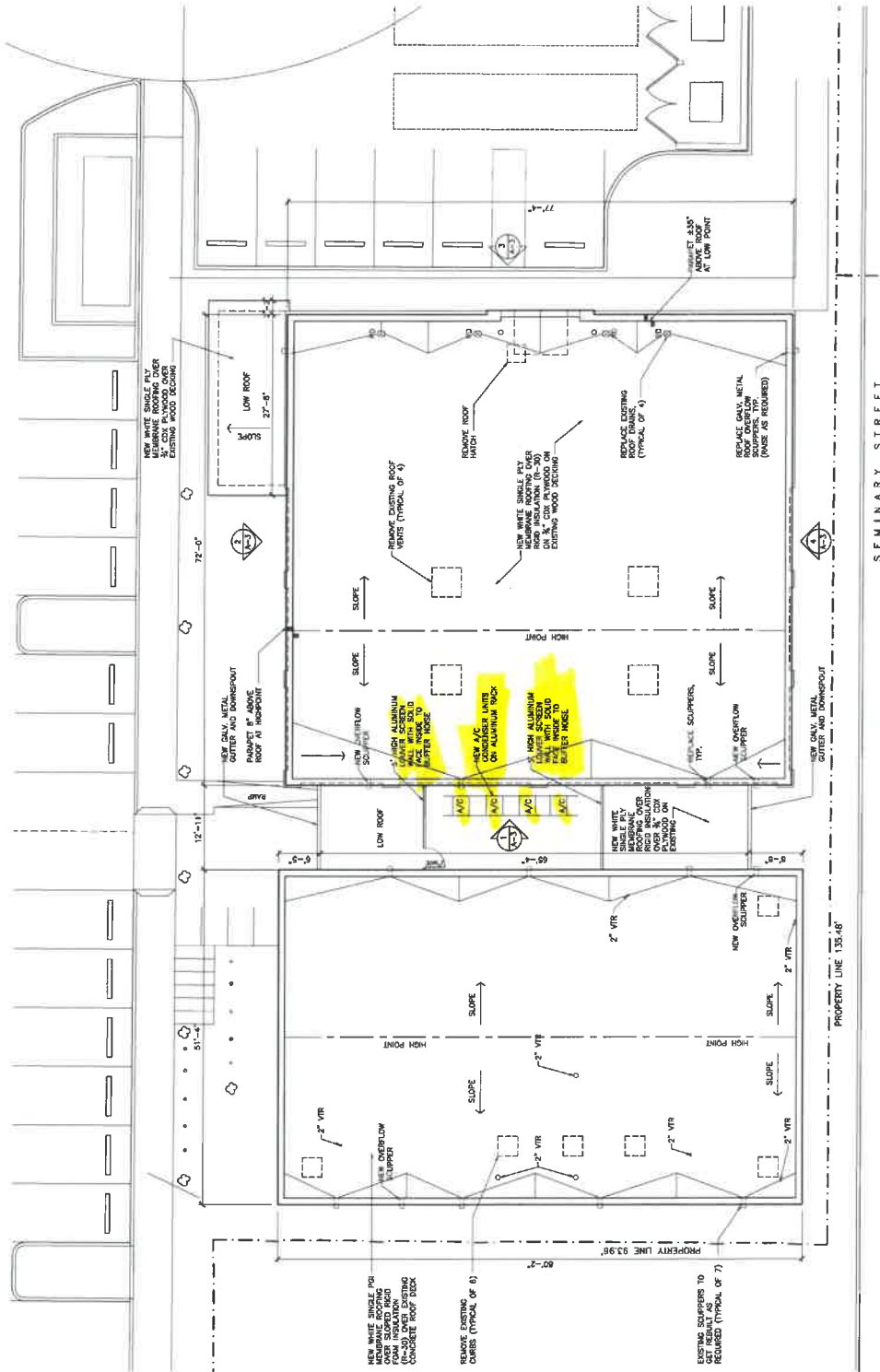
DATE
09-24-17

REVISIONS

DRAWN BY
J.W.

PROJECT
NO. 1702

A-1



PROPOSED SITE/ROOF PLAN
 SCALE: 1/8"=1'-0"
 SITE PLAN BASED ON INFORMATION OBTAINED FROM
 SURVEY PREPARED BY FRED H. HILDEBRANDT,
 SURVEYOR DATED ON 06/08/1998

OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

WILLIAM P. HORN
ARCHITECT, P.A.

REGISTERED
KEY WEST,
FLORIDA
33040

TEL. 304.296.6322
FX 1.304.296.6333

LEWIS 103
A 4 000840

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

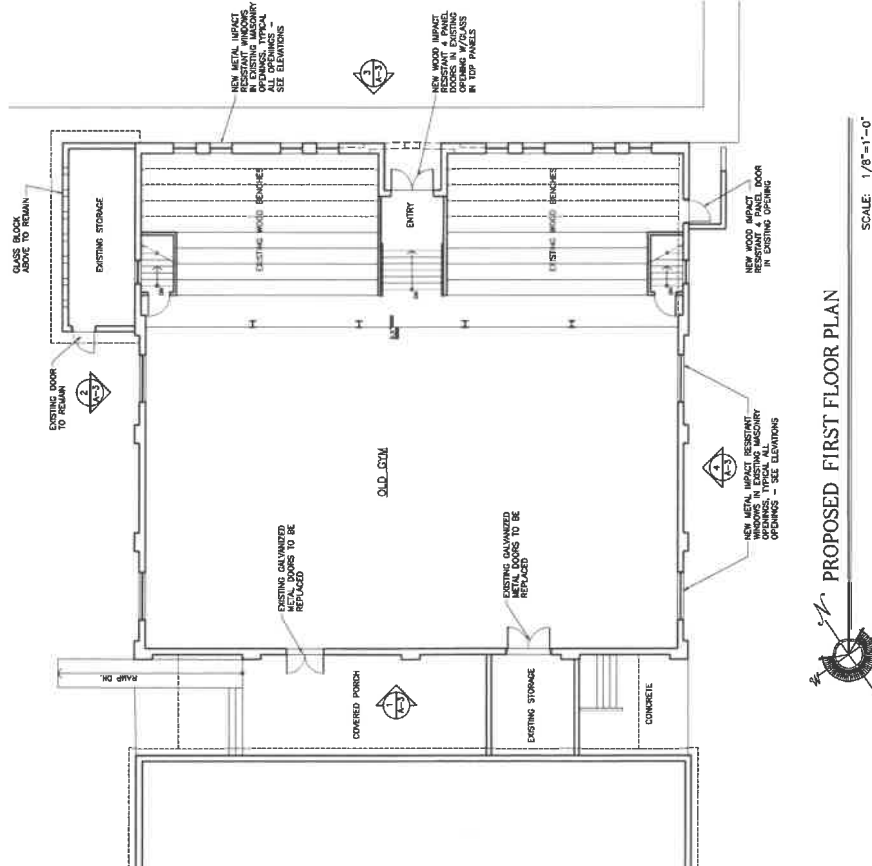
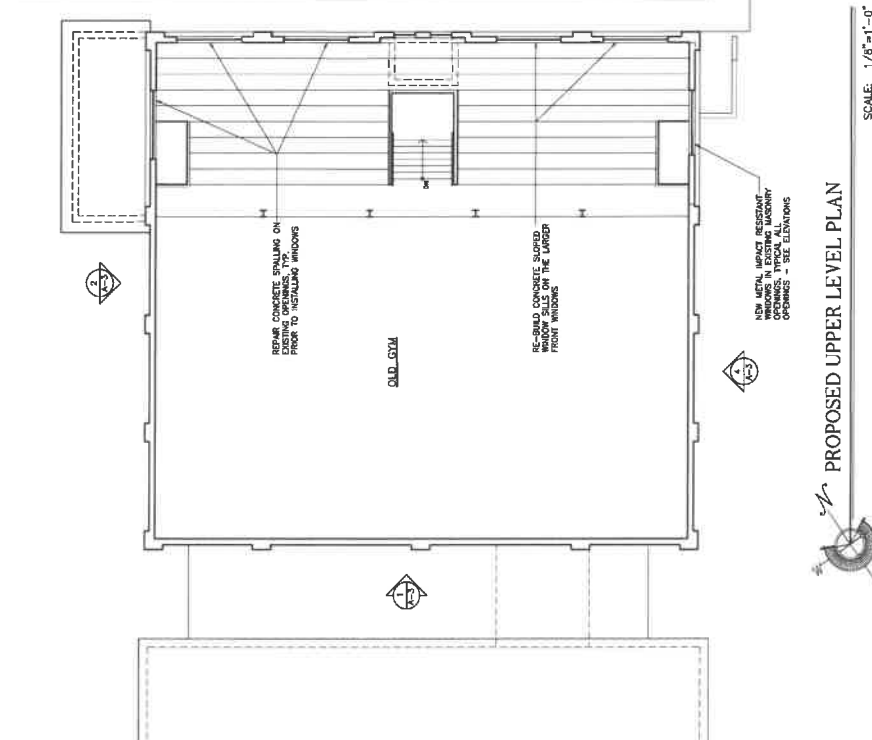
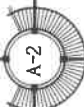
SEAL

DATE
05-01-17

REVISIONS

DRAWN BY
JW

PROJECT
NO. 1772



OLD GYMNASIUM BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

WILLIAM P. HORN
ARCHITECT, P.A.

REGISTERED
KEY WEST,
FLORIDA
33040

TEL: 304 296-8897
FAX: 304 296-1022
WWW: WWW.WPHORN.COM
AIA 0008060

OLD GYMNASIUM
BUILDING
1300 White Street Rear
KEY WEST, FLORIDA

SCALE

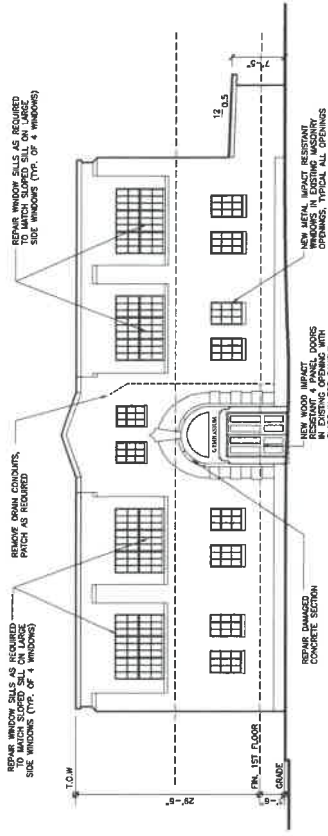
DATE
05-04-17

REVISIONS

DRAWN BY
J.W.

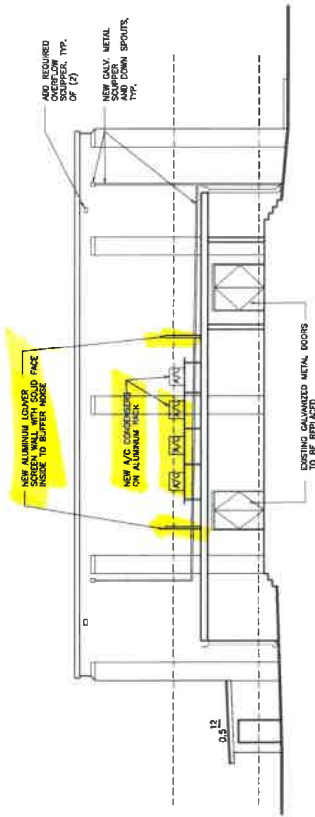
PROJECT
NO. 1712

A-3



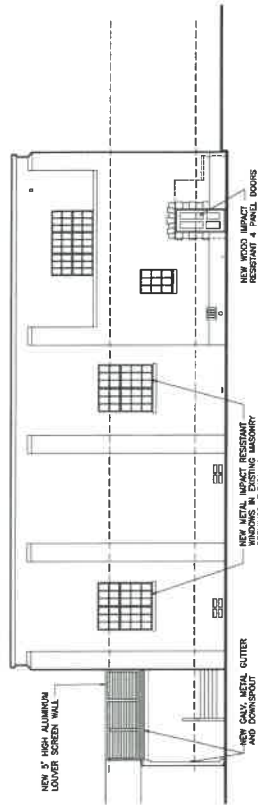
PROPOSED NORTH ELEVATION

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



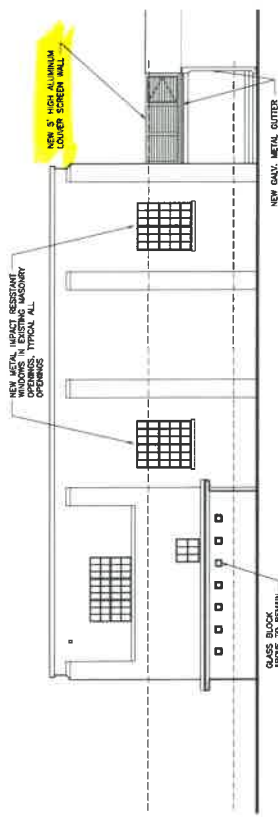
PROPOSED SOUTH ELEVATION

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



PROPOSED EAST ELEVATION

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



PROPOSED WEST ELEVATION

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

OLD GYMNASIUM BUILDING
1300 White Street Rear

KEY WEST, FLORIDA



**Commissioning
for Buildings**

William P. Horn Architect, PA.
915 Eaton Street
Key West, Florida 33040
Phone No. 305-296-8302

Attn: Bill Horn

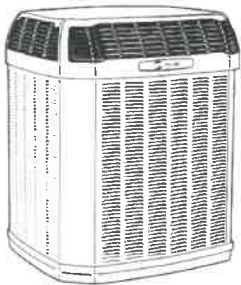
jwphorn@aol.com
VIA EMAIL

June 3, 2017

Re: **Old Gym Building - New City Hall Site - Key West
Considerations of Sound from Condensing Units**

Dear Bill:

We understand the project will consist of renovations and improvements to an existing Gymnasium for a multipurpose facility adjacent to the New City Hall Site in Key West, Florida. The project scope will include new air conditioning for the Multipurpose Facility. The total area renovated is approximately 4,700 SF. We estimate the cooling requirements will be approximately 20 tons. The new air conditioning systems proposed will consist of four 5 ton units. (DX split systems) The proposed units will be high efficiency and the outdoor component will look similar to the one pictured below. The units feature variable speed fans and multi-stage compressors which are extremely quiet. During night time when sound levels are more critical, the units will be running at low capacity and will be very quiet.



The unit's full capacity rated sound level is 72 dBA at 5 feet away. This value is very quiet compared to a typical commercial type air conditioning system. In addition, the sound level is reduced 6 dBA each time the distance is doubled. It is calculated that the sound level at 75 feet from the units will be below 50 dBA which is lower than the most stringent night time sound level requirements.

Calculation of the sound level L_2 , which is found at the distance r_2		
Reference distance r_1 from sound source 5 m or ft	Sound level L_1 at reference distance r_1 72 dBSPL	Search for L_2
Another distance r_2 from sound source 75 m or ft	Sound level L_2 at another distance r_2 48.48 dBSPL	Sound level difference $\Delta L = L_1 - L_2$ 23.52 dB
	calculate	reset

The tables below show common noise sources and the respective sound levels.

Noise Source	Decibel Level	comment
Quiet suburb, conversation at home. Large electrical transformers at 100 ft	50	One-fourth as loud as 70 dB.
Library, bird calls (44 dB); lowest limit of urban ambient sound	40	One-eighth as loud as 70 dB.
Quiet rural area	30	One-sixteenth as loud as 70 dB. Very Quiet
Whisper, rustling leaves	20	

dBA	Example	Home & Yard Appliances
0	healthy hearing threshold	
10	a pin dropping	
20	rustling leaves	
30	whisper	
40	babbling brook	computer
50	light traffic	refrigerator
60	conversational speech	air conditioner
70	shower	dishwasher

Based on the type of AC equipment proposed and the distance from the nearest property line, we do not feel noise will be an issue. We hope this provides information that you were looking for. Please give us a call with any questions or comments.

Yours truly,

COMMISSIONING FOR BUILDINGS, LLC.

Donald H. Austin, Jr, PE, LEED-AP, CxA,
President