

ADDENDUM NO. 2

ORANGE BEACH FIRE STATION CITY OF ORANGE BEACH

ADDENDUM NO. Two (2) – DATED January 7, 2022

This Addendum is directed to all bidders to whom the City of Orange Beach and Printing Pros has issued drawings and specifications. The following conditions, drawings, specification changes, etc., take precedence over any conflicting conditions in the Drawings and Specifications or other Contract and Bid Documents. Portions of the Contract Documents not changed by Addendum remain in effect.

SPECIFICATIONS

ITEM 2.01 SECTION 00 4000 – Procurement Forms and Supplements (Attached)

Bid Form has been clarified. Form AIA A310 has been removed under FORMS 1.02.

- ITEM 2.02 SECTION 00 4100 Bid Form (Attached) Deductive Alternate No. 1 has been added to the Bid Form.
- ITEM 2.03 SECTION 00 4310.10 Requirements for Contracts and Purchases (Attached) Revised project name.
- ITEM 2.04SECTION 00 7300 Supplementary Conditions (Attached)
Revised time frame under Section 8.
- ITEM 2.05 SECTION 01 2700 Unit Prices (Attached) Revised Base Bid Quantity of unsuitable soils. Base bid amount to be based on Geotechnical Report and Civil Drawings. 02300 Earth Work has been changed to 02 3000 Earth Moving.
- ITEM 2.06 SECTION 02 4800 Landscaping Delete this section in its entirety. The City will be handling landscaping and irrigation system.
- ITEM 2.07 SECTION 03 3511 Concrete Finishes (Attached) Specification added to address sealed concrete floors.
- ITEM 2.08 SECTION 06 2000 Finished Carpentry (Attached) Revised to reflect stained grade cabinets.
- Item 2.09SECTION 07 01236 Self Adhering Sheet Waterproofing
This specification applies to the "ice and water shield" for the roof deck.
- Item 2.10SECTION 08 7100 Door Hardware (Attached)Replace Hardware Sets in the specification with the attached new Hardware Sets
dated January 4, 2022. Note door146A has been deleted.
- Item 2.11SECTION 09 5123 Acoustical Tile Ceiling (Attached)Specification added for acoustical ceiling system.

ITEM 2.12 SECTION 10 1400 – Signage (Attached)

Verbiage added for #5 sign on the tower. Manufacturer added for Signage. Monument sign added.

ITEM 2.13 SECTION 10 2000 – Louvers and Vents Note 1.2 Summary, Louvers and Vents should apply to Apparatus Bay and other areas as specified.

DRAWINGS

ITEM 2.14 \$1.0 DRAWING (Attached)

Drawing revised to provide for structural steel notes/specifications.

ITEM 2.15 S2.0 DRAWING (Attached)

Drawing revised to show slab construction note.

ITEM 2.16 \$3.0 DRAWING (Attached)

Drawing revised to show correct Hardie siding detail.

ITEM 2.17 A1.1 DRAWING (Attached)

Drawing revised to show pre-fabricated aluminum canopy in lieu of timber.

ITEM 2.18 A1.2 DRAWING (Attached)

Drawing revised to show lights and details in clerestory and dorm plan.

ITEM 2.19 A2.2 DRAWING (Attached)

Drawing revised to show ceiling height in corridor and sealed concrete in Rooms 138, 135, 140, 141, 142, 143, 144, and 145.

ITEM 2.20 A3.1 DRAWING (Attached)

Drawing revised to reflect correct direction of building on site plan, top plate dimension, and removed lettering from landscape wall.

ITEM 2.21 A4.1 DRAWING (Attached)

Drawing revised to reflect 1x4 added at top of apparatus bay.

ITEM 2.22 A4.2 DRAWING (Attached)

Drawing revised to provide for new monument sign.

ITEM 2.23 A5.1 DRAWING (Attached)

Drawing revised to provide for wood-stained cabinetry throughout.

ATTACHMENTS:

- Official Sign-in Sheet
- 00 4000 Procurement Forms and Supplements
- 00 4100 Bid Form
- 00 4310.10 Requirements for Contracts and Purchases
- 06 2000 Finished Carpentry
- 00 7300 Supplementary Conditions
- 01 2700 Unit Prices
- 03 3511 Concrete Finishes
- 06 2000 Finished Carpentry
- 08 7100 Door Hardware (Hardware Sets only)
- 10 1400 Signage
- Drawing \$1.0
- Drawing \$2.0

- Drawing \$3.0
- Drawing C1.1
- Drawing A1.1
- Drawing A1.2
- Drawing A2.2
- Drawing A3.1
- Drawing A4.1
- Drawing A4.2
- Drawing A5.1

NOTE: Receipt of all addenda must be acknowledged on the Bid Form in order for the proposal to be considered a conforming bid.

Stedmann B. McCollough McCollough Architecture, Inc.

END OF ADDENDUM #2



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ORANGE BEACH FIRE STATION NO. 5 PRE-BID MEETING SIGN-IN SHEET

Mandatory Pre-Bid -Thursday December 2, 2021 - 10:00 AM

	NAME	COMPANY	EMAIL	PHONE
1.	PAUL CLARK	BEAR	PAUL@BEARGC.COM	850-497-4366
2.	AJ Brown	Wharton-Smith	ajbrownewhartonsmith.com	950-501-5793
3.	Matt McWhorter	Whaten -South	mmewhorter@whortensmith.	com 850-532-9930
4.	Iff Bell	Sharpe	Sampunior @ bell South, No	<u> 850-43</u> 3-2129
5.	Pavin Smith :	The breen - Simmons G	davin @green-simmons.co	
6.	Richard C. Davis	Phil Hallis Con.	brenda @ Marris con	STruction. Net 968-7128
7.	ZACH MORDAN	MW ROOFES	ZACHQ MWEDDERS, NFT	850-978-2600
8.	ScotbGooke	11 GUARDIAN INteg	rator scott.goodselbguard	isvintegrators com
	STEVE ROBINSO		ARY, INC. JERRY@GORDONZAK	



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ORANGE BEACH FIRE STATION NO. 5 PRE-BID MEETING SIGN-IN SHEET

Mandatory Pre-Bid -Thursday December 2, 2021 - 10:00 AM

	NAME	COMPANY	EMAIL	PHONE
10.	KyAN Long	Highland	Relowighestuart construction	251-968-9253
11.	Michael Durough	STUATET CONST.	Mchuroughestuart construction	llc.com 251.295,5350
			V	
13.				
14.	-			
15.				
16.				
17.				
18.				

SECTION 00 4000 PROCUREMENT FORMS AND SUPPLEMENTS

PART 1 GENERAL

- 1.01 CONTRACTOR IS RESPONSIBLE FOR OBTAINING A VALID LICENSE TO USE ALL COPYRIGHTED DOCUMENTS SPECIFIED, UNLESS LEGAL COPIES ARE INCLUDED IN THE PROJECT MANUAL.
 - A. AIA documents may be obtained individually at the following web site: https://documentsondemand.aia.org.
 - B. AIA document bulk licensing may be obtained at the following web site: http://www.aia.org/contractdocs/forcontractors/index.htm.

1.02 FORMS

- A. Use the following forms for the specified purposes unless otherwise indicated elsewhere in the procurement requirements.
- B. Instructions to Bidders: AIA A701.
- C. Substitution Request Form (During Procurement): CSI Form 1.5C, 2013 Edition.
- D. Bid Form: Section 00 4100 Bid Form.
- E. Procurement Form Supplements:
 - 1. Bid Form: 00 4100.
 - 2. Substitution Request Form (for substitutions requested with bid): 00 4325 -Substitution

Request Form, CSI/CSC Form 1.5C - Substitution Request Form (During the Bidding/Negotiating Stage).

- 3. Proposed Schedule of Values Form: AIA G703.
- F. Representations and Certifications:
 - 1. Bidder's Qualifications: AIA A305.

1.03 REFERENCE STANDARDS

- A. AIA A305 Contractor's Qualification Statement; 1986.
- B. AIA A310 Bid Bond; 2010.
- C. AIA A701 Instructions to Bidders; 2007.
- D. AIA G703 Continuation Sheet; 1992.
- E. CSI/CSC Form 1.5C Substitution Request (During the Bidding/Negotiating Stage); Current Edition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

BID FORM

TO: **The City of Orange Beach**, Orange Beach, Alabama, hereinafter called the Owner Date: _____

In compliance with the Invitation to Bid and subject to all the conditions thereof, the undersigned

(Legal Name of Bidder) hereby proposes to furnish all labor and materials and perform all work required for the construction of WORK: Orange Beach Fire Station No. 5

in accordance with Drawings and Specifications, dated ______, prepared by McCollough Architecture, Architect/Engineer.

The Bidder, which is organized and existing under the laws of the State of ______, having its principal offices in the City of ______, is: a Corporation a Partnership an individual (other) ______.

LISTING OF PARTNERS OR OFFICERS: If Bidder is a Partnership, list all partners and their addresses; if Bidder is a Corporation, list the names, titles, and business addresses of its officers:

BIDDER'S REPRESENTATION: The Bidder declares that it has examined the site of the Work, having become fully informed regarding all pertinent conditions, and that it has examined the Drawings and Specifications (including all Addenda received) for the Work and the other Bid and Contract Documents relative thereto, and that it has satisfied itself relative to the Work to be performed.

ADDENDA: The Bidder acknowledges receipt of Addenda Nos._____ through _____ inclusively.

BASE BID FOR CIVIL/SITEWORK: Refer to Civil drawings provided by Sawgrass Engineering and include all work up to three (3) feet of the building and/or as specified in the Civil drawings. For construction complete as shown and specified, the sum of

	Dollars (\$)
TOTAL BID (including Base Bid & Allowance):		
	Dollars (\$)
ALLOWANCE NO. 1: Bidders shall include a \$75,000.00) contingency in their bid.	
	Dollars (\$)
BASE BID FOR BUILDING: For construction complete as	shown and specified, the sum of	
	Dollars (\$)

DEDUCTIVE ALTERNATE NO. 1: Bidders shall provide a deductive fee for the removal of the clerestory condition of the cupola which includes: removal of the clerestory windows, providing for fixed shutters, lowering the interior ceiling in the main corridors and expanding the attic storage space.

_____ Dollars (\$ ______)

UNIT PRICE: Provide unit prices in accord with Section 01 2700 – Unit Price

Unit Price 1: Removal & Replacement of Unsuitable Soils per cubic yard.

\$_____

Attach Section 004102 – Bid Proposal Form Attachment "A" to this Bid Proposal Form.

BID SECURITY: The undersigned agrees to enter into a Construction Contract and furnish the prescribed Performance and Payment Bonds Alternates and evidence of insurance within fifteen calendar days, or such other period stated in the Bid Documents, after the contract forms have been presented for signature, provided such presentation is made within 30 calendar days after the opening of bids, or such other period stated in the Bid Documents. As security for this condition, the undersigned further agrees that the funds represented by the Bid Bond (or cashier's check) attached hereto may be called and paid into the account of the Awarding Authority as liquidated damages for failure to so comply.

Attached hereto is a: (Mark the appropriate blank and provide the applicable information.)

Bid Bond, executed by			as Surety,		
a cashier's check on the		_Bank of	,		
for the sum of			Dollars		
(\$)m	ade payable to the C)wner.			
···,	. ,				
BIDDER'S ALABAMA LICENSE: State License for General Contracting:					
-	License Number	Bid Limit	Type(s) of Work		

CERTIFICATIONS: The undersigned certifies that he or she is authorized to execute contracts on behalf of the Bidder as legally named, that this proposal is submitted in good faith without fraud or collusion with any other bidder, that the information indicated in this document is true and complete, and that the bid is made in full accord with State law. Notice of acceptance may be sent to the undersigned at the address set forth below.

The Bidder also declares that a list of all proposed major subcontractors and suppliers will be submitted at a time subsequent to the receipt of bids as established by the Architect in the Bid Documents but in no event shall this time exceed twenty-four (24) hours after receipt of bids.

ORANGE BEACH FIRE STATION NO. 5 CITY OF ORANGE BEACH ORANGE BEACH, ALABAMA

Legal Name of Bidder	
Mailing Address	
* By (Legal Signature)	
* Name (type or print)	(Seal)
* Title	
Telephone Number	

* If other than the individual proprietor, or an above-named member of the Partnership, or the abovenamed president, vice-president, or secretary of the Corporation, attach written authority to bind the Bidder. Any modification to a bid shall be over the initials of the person signing the bid, or of an authorized representative.

- END OF PROPOSAL FORM -



REQUIREMENTS FOR CONTRACTS AND PURCHASES

Effective January 1, 2012 under the "Beason-Hammon Alabama Taxpayer and Citizen Protection Act," Act No. 2011-535, Alabama Code (1975) Section 31-13-1, Et Seq., before entering into a contract with The City of Orange Beach to:

- 1. Perform a service;
- 2. Perform work;
- 3. Provide a product;
- 4. Accept a grant; and/or
- 5. Accept an initiative

The State of Alabama requires the business entity to sign a notarized affidavit agreeing:

- 1. Not to knowingly employ, hire for employment, or continue to employ, any unauthorized aliens in the State of Alabama;
- 2. To enroll in the E-Verify Program, to verify the immigration status of every employee required to be re-verified through that system and to provide documentation of its enrollment; and
- 3. To require its subcontractors to comply with the above requirements.

Before any contract can be let, purchase can be made, or payment can be issued by the City of Orange Beach after January 1, 2012, the Affidavit on the reverse side of this document must be completed, notarized, and returned to our offices.

Note: Proof of enrollment in the E-Verify Program must accompany the Affidavit, unless you do not have or hire any employees.

Questions about this process may be directed to Renee Eberly, City Clerk/Procurement Officer, at (251) 981-6806 or via e-mail at <u>reberly@orangebeachal.gov</u>.

COMPLETED AFFIDAVIT MUST BE RETURNED IN SEALED BID.



SECTION 00 7300 SUPPLEMENTARY CONDITIONS

PART 1 GENERAL

1.1 SUMMARY

- A. These Supplementary Conditions amend and supplement the General Conditions defined in Document 00 7200 - General Conditions and other provisions of the Contract Documents as indicated below. Provisions that are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions that are defined in the General Conditions have the meanings assigned to them in the General Conditions.

1.2 RELATED SECTIONS

Section 00 5000 - Contracting Forms and Supplements.

1.3 MODIFICATIONS TO GENERAL CONDITIONS ARTICLE 1.1

- BASIC DEFINITIONS

After Section 1.1.8, add the following definitions:

- 1.1.9 Miscellaneous Definitions
 - .1 The term "product" includes materials, systems, and equipment.
 - .2 The term "furnish" means to supply and deliver to project site.
 - .3 The term "install" means to place in position for service or use.

.4 The term "provide" includes furnishing and installing a product, complete in place, tested and approved.

.5 The term "building code" and the term "code" refer to regulations of governmental agencies having jurisdiction.

.6 The terms "approved", "required", and "as directed" refer to and indicate the work or materials that may be approved, required, or directed by the Architect acting as the agent of the Owner.

.7 The term "similar" means in its general sense and not necessarily identical.

.8 The terms "shown", "indicated", "detailed", "noted", "scheduled", and terms of similar import, refer to requirements contained in the Contract Documents.

.9 Project Manual: The Project Manual is the volume usually assembled for the Work which includes the Bid Documents, Contract Documents, and Specifications.

1.4 ARTICLE 3 - CONTRACTOR

Delete Paragraph 3.6 and replace with the following;

3.6 TAXES

3.6.1 Contractor shall not include sales and use taxes in the Contract Amount. The Base Bid and all Alternate Bids submitted on the proposal form will NOT INCLUDE the cost of taxes including sales taxes and use taxes. See section 00 7323 ADOR.

3.6.2 After selection of successful contract bidder, Owner and Contractor will enter into an

purchasing agency agreement. Contractor shall act as agent of the Owner for the purpose of purchasing materials relating to the Work of this Contract. Payment for such materials shall be made directly by Owner.

3.6.2.1 Owner will provide necessary agreement and forms at the time when Agreement is executed.

ARTICLE 5 - SUBCONTRACTORS

Add the followingsubparagraph:

5.2.5 Not later than 15 days after the date of commencement of the Work, the Contractor shall furnish in writing to the Owner through the Architect the names of persons or entities proposed as manufacturers or fabricators for certain products, equipment and systems identified in the General Requirements (Division 1 of the Specifications) and, where applicable, the name of the installing Subcontractor.

ARTICLE 7 - CHANGES IN THE WORK

Add the followingsubparagraphs:

7.1.5 The combined overhead and profit included in the total cost to the Owner for a change in the Work shall be based on the following schedule:

.1 For the Contractor, for Work performed by the Contractor's own forces, 20 percent of the cost.

.2 For the Contractor, for Work performed by the Contractor's Subcontractors, 10 percent of the amount due the Subcontractors.

.3 For each Subcontractor involved, for Work performed by that Subcontractor's own forces, 15 percent of the cost.

.4 For each Subcontractor involved, for Work performed by the Subcontractor's Sub-subcontractors, 10 percent of the amount due the Sub-subcontractor. .5 Cost to which overhead and profit is to be applied shall be determined in

accordance with Section 7.3.7.

.6 In order to facilitate checking of quotations for extras or credits, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. Where major cost items are Subcontracts, they shall be itemized also. In no case will a change involving over \$5,000.00 be approved without such itemization.

ARTICLE 8 - TIME

Add the following subparagraph:

8.1.5: Contract Time commences at the time indicated in a written Notice To Proceed. The Work shall be Substantially Complete on or before 365 days after the Notice to Proceed at 5:00 pm CST on that day. See Section 01 1000 - Summary, 1.02 D. for other pertinent dates.

ARTICLE 9 - PAYMENTS AND COMPLETION

Add the followingsubparagraph:

9.3.1.3 Until Substantial Completion, the Owner shall pay 90 percent of the amount due the Contractor on account of progress payments.

9.3.1.4 Until all work is satisfactorily completed in accordance with this agreement and all closeout requirements have been provided, less five percent (5%) of the amount of such estimate which is to be retained by the Owner.

Add the following section:

9.11: Liquidated Damages:

9.11 Liquidated Damages shall be \$750 per day.

ARTICLE 11 - INSURANCE ANDBONDS

ARTICLE 11.1 - CONTRACTORS LIABILITYINSURANCE

Contractors Liability Insurance: Add the following Section 11.1.1.9:

11.1.1.10 If the General Liability coverages are provided by a Commercial General Liability Policy on a claims-made basis, the policy date or Retroactive Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverages required to be maintained after final payment, certified in accordance with Subparagraph 9.10.1 and 9.10.2.

ARTICLE 11.1.1.8.5 Builder's Risk Insurance

1. The Builder's Risk Policy shall cover the interests of the Owner, Contractor and Subcontractors in the Work. The policy amount shall be equal to 100% of the Contract Sum, plus the value of subsequent Change Orders and cost of materials supplied or installed by others, comprising total value for the Work at the site on a replacement cost basis without optional deductibles. The policy shall be maintained until final payment has been made as provided in Article 9.10 of the General Conditions or until no person or entity other than the Owner has an insurable.

Add the following Clause 11.1.2.1 to 11.1.2:

11.1.2.1 Insurance coverage required by Section 11.1.1 shall be written for not less than the following amounts, or greater if required by law:

1. Workers Compensation and Employer's liability:

- a) State: Statutory
- b) Applicable Federal: Statutory
- c) Employer's Liability:
- (1) \$1,000,000.00 per accident.
- (2) \$1,000,000.00 Disease, PolicyLimit.
- (3) \$1,000,000.00 Disease, Each Employee.

2. Comprehensive or Commercial General Liability (including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage):

- a. a) Each Occurrence: \$1,000,000.00
- b. General Aggregate:\$2,000,000.00
- c. Personal and advertising injury: \$1,000,000.00
- d. Products completed operations aggregate: \$2,000,000.00

b) Policy shall be endorsed to have the general aggregate per project. in the amount of \$2,000,000.00.

c) Products and Completed Operations to be maintained ONE (1) year after either

- 90 days after Substantial Completion or final payment, whichever is earlier.
- d) Automobile Liability Insurance (including owned, non-owned and hired vehicles): Each Occurrence: \$1,000,000.00

ORANGE BEACH FIRE STATION NO. 5 CITY OF ORANGE BEACH ORANGE BEACH, ALABAMA

e) Umbrella Excess Liability:

1) \$1,000,000.00 over primary

insurance. Add the following Section 11.1.2.2:

11.1.2.2 All Contractors insurance policies shall name the Architect and Owner as additional insureds.

Add to Section 11.1.3:

Notice of Insurance shall be filed with all named insureds including written notice of cancellation. In addition of Notice of Cancellation, notify named insureds withinTen (10) days for nonpayment of

premium. Add Section 11.1.3.1:

11.1.3.1 Certificates of insurance shall be in the form of Acord Form 25-S,

supplemented by AIA Document G715, "Supplemental Attachment",

or otherwise acceptable to the Owner and listing the Owner as the certificate holder. The insurance certificate(s) must be delivered to the Owner with the Construction Contract and Bonds for final approval and execution of the Construction Contract. The insurance certificate must provide the following:

- 1) Name and address of authorized agent of the insurance company
- 2) Name and address of insured and additional insureds.
- 3) Name of insurance company or companies
- 4) Description of policies
- 5) Policy Number(s)
- 6) Policy Period(s)
- 7) Limits of liability
- 8) Name and address of Owner as certificateholder
- 9) Project Name and Number if any
- 10) Signature of authorized agent of the insurance company
- 11) Mandatory thirty (30) day notice of cancellation / non-renewal / change

ARTICLE 11.4 - PERFORMANCE BOND AND PAYMENT BOND

11.4.3: The bond value requirements are as follows:Provide bonds on City of Orange Beach Forms.Provide a 100 percent Performance Bond.

Provide a 100 percent Payment Bond.

1. Deliver bonds with the Construction Contract and Certificate of Insurance for final approval and execution of the Contract.

ARTICLE 15.3 - MEDIATION

Add the following at the beginning of the first sentence in 15.3.1:

15.3.1 With the mutual agreement of the parties to the claim or dispute,

ARTICLE 15.4 - ARBITRATION

Delete Article 15.4 in its entirety. The parties may, by mutual agreement of all parties involved, submit claims to binding arbitration.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF DOCUMENT

SECTION 01 2700 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for unit prices.

1.3 DEFINITIONS

A. Unit price is price per unit of measurement for materials or services added to or deducted from the Contract Sum by Change Order, if estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, and all overhead and profit for general contractor and subcontractor(s).
- B. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A list of unit prices is included at the end of this Section. Specification Sections referenced in the schedule contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

- A. Unit Price No. 1: Removal and Replacement of Unsuitable Soils.
 - 1. <u>Description</u>: After Contractor has stripped and cleared the site, the Contractor's geotechnical engineer shall check and probe the subgrade to identify unsuitable soil material. Unsuitable soils shall be removed, disposed of off-site, and replaced with suitable, inorganic structural fill which shall be placed and compacted in accordance with Section 02 3000-EARTH MOVING.
 - 2. <u>Unit of Measurement:</u> Cubic yard of soil excavated and replaced. Quantity shall be determined through verification of actual quantity of backfill placed and compacted in the overexcavated areas from which the unsuitable material was removed.
 - 3. <u>Base Bid Quantity</u>: Base Bid shall include the removal and replacement of unsuitable soils referenced in the Geotechnical Report and Civil Drawings.
 - 4. <u>Adjustment to Contract Sum</u>: If the actual amount of work is either more or less than the Base Bid Quantity, the Contract Sum will be adjusted by a Change Order using the unit price in the Contract.

END OF SECTION 01 2700

SECTION 03 3511 CONCRETE FLOOR FINISHES PART 1 GENERAL

1.01 SECTION INCLUDES

A. Surface treatments for concrete floors and slabs.

1.02 RELATED REQUIREMENTS

A. Section 03 3000 - Cast-in-Place Concrete: Finishing of concrete surface to tolerance; floating, troweling, and similar operations; curing.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with concrete floor placement and concrete floor curing.

1.04 SUBMITTALS

- A. See Section 01 3000 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's published data on each finishing product, including information on compatibility of different products and limitations.
- C. Maintenance Data: Provide data on maintenance and renewal of applied finishes.

1.05 MOCK-UP

- A. Mock-Up Size: 10 feet square.
- B. Locate where directed.
- C. Mock-up may remain as part of the work.

1.06 QUALITY ASSURANCE

- A. Protection: Protect concrete finish at all times during construction to prevent oils, dirt, metal, excessive water and other potentially damaging materials from affecting the finished concrete surface. Protection measures listed below shall begin immediately after the concrete slab is poured:
 - 1. All hydraulic powered equipment shall be diapered to avoid staining of the concrete.
 - 2. All vehicle parking shall be prohibited on the finish slab area. If necessary to complete their scope of work, drop cloths shall be placed under vehicles at all times.
 - 3. No pipe cutting machine shall be used on the finished floor slab.
 - 4. Steel shall not be placed on the finish slab to avoid rusting.
 - 5. Acids and acidic detergents will not come in contact with slab.
 - 6. All painters will use drop cloths on the concrete. If paint gets on the concrete, it must be immediately removed.
 - 7. All trades will be informed that the slab must be protected at all times. Enforce compliance.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's sealed packaging, including application instructions.

1.08 FIELD CONDITIONS

- A. Maintain light level equivalent to a minimum 200 W light source at 8 feet above the floor surface over each 20 foot square area of floor being finished.
- B. Do not finish floors until interior heating system is operational.
- C. Maintain ambient temperature of 50 degrees F minimum.

PART 2 PRODUCTS

201 CONCRETE FLOOR FINISH APPLICATIONS

- A. Liquid Densifier/Hardener:
 - 1. Use at following locations: Finish Schedule Type SCF.

202 DENSIFIERS AND HARDENERS

- A. Liquid Densifier/Hardener: Penetrating chemical compound that reacts with concrete, filling the pores and dustproofing; for application to concrete after set.
 - 1. Composition: Lithium silicate.
 - 2. Products:
 - a. W. R. Meadows, Inc; Liqui-Hard: www.wrmeadows.com/sle.
 - b. Dayton Superior Corporation; Pentra-Hard® Guard: www.daytonsuperior.com.
 - c. Euclid Chemical Company; EUCO DIAMOND HARD: www.euclidchemical.com/#sle.
 - d. Kaufman Products Inc; SureHard LS: www.kaufmanproducts.net.
 - e. L&M Construction Chemicals, Inc, a subsidiary of Laticrete International, Inc; LiON HARD: www.lmcc.com.
 - f. L.M. Scofield Company; SCOFIELDae Formula One99 Lithium Densifier MP: www.scofield.com.
 - g. Nox-Crete Products Group; Duro-Nox LS: www.nox-crete.com.
 - h. PROSOCO, Inc; Consolideck LS: www.prosoco.com/consolideck/sle.
 - i. SpecChem, LLC; LithSeal SC: www.specchemllc.com/sle.
 - j. Substitutions: See Section 01 6000 Product Requirements.

203 COATINGS

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that floor surfaces are acceptable to receive the work of this section.
- B. Verify that flaws in concrete have been patched and joints filled with methods and materials suitable for further finishes.

3.02 GENERAL

A. Apply materials in accordance with manufacturer's instructions.

3.03 COATING APPLICATION

- A. Verify that surface is free of previous coatings, sealers, curing compounds, water repellents, laitance, efflorescence, fats, oils, grease, wax, soluble salts, residues from cleaning agents, and other impediments to adhesion.
- B. Verify that water vapor emission from concrete and relative humidity in concrete are within limits established by coating manufacturer.
- C. Protect adjacent non-coated areas from drips, overflow, and overspray; immediately remove excess material.
- D. Apply coatings in accordance with manufacturer's instructions, matching approved mock-ups for color, special effects, sealing and workmanship.

END OF SECTION

SECTION 06 2000 - FINISH CARPENTRY

PART 1 - GENERAL

- 1.1 SECTION REQUIREMENTS
 - A. Submittals: Physical samples for stained wood cabinets.

PART 2 - PRODUCTS

- 2.1 MATERIALS, GENERAL
 - A. Lumber: DOC PS 20 and grading rules of inspection agencies certified by American Lumber Standards Committee Board of Review.
 - B. Softwood Plywood: DOC PS 1.
 - C. Hardwood Plywood: HPVA HP-1.
- 2.2 SHELVING AND CLOTHES RODS
 - A. Shelving: ³/₄" painted birch plywood (frame and shelves) with 1"x2" trim and continuous recessed adjustable shelving track and related hardware. Provide bullnose edges on all frames.
 - B. Closet Shelf Brackets with Rod Support: BHMA A156.16, B04051; prime-painted formed steel.

2.3 WOOD CABINETS

- A. Wood Cabinets for Stained grade.
 - 1. AWI Type of Cabinet Construction: Reveal overlay on face frame.
 - 2. WI Construction Style: Style B, Face Frame.
 - 3. WI Door and Drawer Front Style: Reveal overlay.
 - 4. Wood Species and Cut for Exposed Surfaces: White birch, plain sawn or sliced.
 - 5. Grain Direction: Vertically for drawer fronts, doors, and fixed panels.
 - 6. Veneer Matching within Panel Face: Running match.
 - 7. Semi-exposed Surfaces Other Than Drawer Bodies: Same species and cut indicated for exposed surfaces.
 - 8. Drawer Sides and Backs: Solid-hardwood lumber, same species indicated for exposed surfaces.
 - 9. Drawer Bottoms: Hardwood plywood.
 - 10. Finish architectural woodwork at the fabrication shop; defer only final touch up until after installation. Before installation, condition woodwork to average prevailing humidity conditions in installation areas.
 - 11. Install woodwork to comply with referenced quality standard for grade specified.
 - 12. Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm).
 - 13. Scribe and cut woodwork to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.

- 14. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Fasten with countersunk concealed fasteners and blind nailing. Use fine finishing nails for exposed nailing, countersunk and filled flush with woodwork.
- 15. Cabinets: Install so doors and drawers are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.
- 16. Fasten wall cabinets through back, near top and bottom, at ends and not more than 16 inches (400 mm) on center with No. 10 wafer-head screws sized for 1-inch (25-mm) penetration into wood framing, blocking, or hanging strips.
- 17. Anchor countertops securely to base units. Seal space between backsplash and wall.
- 18. Frameless Concealed Hinges (European Type): BHMA A156.9, B01602, 135 degrees of opening, self-closing.
- 19. Wire Pulls: Back mounted, solid metal 5 inches (127 mm) long, 2-1/2 inches (63.5 mm) deep, and 5/16 inch (8 mm) in diameter.

2.4 MISCELLANEOUS MATERIALS

- A. Fasteners for Exterior Finish Carpentry: stainless steel.
- B. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue recommended by manufacturer.
 - 1. Use waterproof resorcinol glue for exterior applications.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Condition finish carpentry in installation areas for 24 hours before installing.
- B. Prime and backprime lumber for painted finish exposed on the exterior.
- C. Install finish carpentry level, plumb, true, and aligned with adjacent materials. Scribe and cut to fit adjoining work. Refinish and seal cuts.
- D. Install standing and running trim with minimum number of joints practical, using full-length pieces from maximum lengths of lumber available. Stagger joints in adjacent and related trim. Cope at returns and miter at corners.
- E. Nail siding at each stud. Do not allow nails to penetrate more than one thickness of siding, unless otherwise recommended by siding manufacturer. Seal joints at inside and outside corners and at trim locations.
- F. Select and arrange paneling for best match of adjacent units. Install with uniform tight joints.

END OF SECTION 06 2000

Set #01

Doors: 101A			
1 Mortise Cylinder	21 41 13-0512 MK VK KEYS	32D	SA
Set #02			
Doors: 102A, 103A, 109A, 128A			
3 Hinges 1 Lockset 1 Wall Bumper	TA2714 4 1/2 X 4 1/2 21 28 10G05 LP 2 3/4" BS MK VK KEYS 409	26D 26D US26D	MC SA RO
Set #03			
Doors: 104A, 106A, 108A, 114A,	138A		
3 Hinges 1 Lockset 1 Wall Bumper	TA2714 4 1/2 X 4 1/2 21 28 10G04 LP 2 3/4" BS MK VK KEYS 409	26D 26D US26D	MC SA RO
Set #04			
Doors: 105A			
3 Hinges1 Lockset1 Closer1 Protection Plate1 Wall Bumper	TA2714 4 1/2 X 4 1/2 21 28 10G04 LP 2 3/4" BS MK VK KEYS 281 UO K1050 10" x 34" CSK HVBEV 409	26D 26D EN US32D US26D	MC SA SA RO RO
Set #05			
Doors: 107A, 123A, 124A, 125A,	136A		
 3 Hinges 1 Privacy Set 1 Closer 1 Protection Plate 1 Wall Bumper 1 Smoke Seal 	TA2714 4 1/2 X 4 1/2 28 10U65 LP 2 3/4" BS 281 UO K1050 10" x 34" CSK HVBEV 409 S88 BL 20'	26D 26D EN US32D US26D	MC SA SA RO RO PE
Set #05.1			
Doors: 139A			
 3 Hinges 1 Passage Set 1 Closer 1 Protection Plate 1 Smoke Seal 1 Door Bottom 1 Threshold 	TA2714 4 1/2 X 4 1/2 28 10U15 LP 2 3/4" BS 281 CPS K1050 10" x 34" CSK HVBEV S88 BL 20' 315 CN 35 3/4" 271 A 36" MSES25SS	26D 26D EN US32D	MC SA SA RO PE PE PE

Set #05.2

Doors: 137A

Set #05.2

 3 Hinges 1 Privacy Set 1 Closer 1 Protection Plate 1 Smoke Seal 1 Door Bottom 1 Threshold 	TA2714 4 1/2 X 4 1/2 28 10U65 LP 2 3/4" BS 281 UO K1050 10" x 34" CSK HVBEV S88 BL 20' 315 CN 35 3/4" 271 A 36" MSES25SS	26D 26D EN US32D	MC SA SA RO PE PE PE
Set #06			
Doors: 110A, 112A			
6 Hinges2 Flush Bolts1 Passage Set2 Wall Bumper1 Dust Proof Strike	TA2714 4 1/2 X 4 1/2 555 28 10U15 LP 2 3/4" BS 409 570	26D US26D 26D US26D US26D	MC RO SA RO RO
Set #07			
Doors: 110B			
3 Hinges1 Passage Set1 Overhead Stop	TA2714 4 1/2 X 4 1/2 28 10U15 LP 2 3/4" BS OH902S	26D 26D US32D	MC SA RO
Set #08			
Doors: 110C, 112B, 141K			
 Hinges Lockset Closer Adjustable Door Bottom Weatherstrip Threshold 	CONTINUOUS HINGES BY SPECIAL-LITE 21 8237 LP MK VK KEYS 281 CPS SL-301 BY SPECIAL-LITE 316 AS 1 x 36" 2 x 96" 271 A 36" MSES25SS	32D EN	VA01 SA SA VA01 PE PE
Set #09			
Doors: 111A, 111B, 111C, 111D			
3 Hinges1 Passage Set1 Overhead Stop/Holder	TA2714 4 1/2 X 4 1/2 28 10U15 LP 2 3/4" BS OH1001M	26D 26D US32D	MC SA RO
Set #10			
Doors: 113A			
3 Hinges1 Passage Set1 Wall Bumper	TA2714 4 1/2 X 4 1/2 28 10U15 LP 2 3/4" BS 409	26D 26D US26D	MC SA RO
Set #11			

Doors: 115A, 116A, 117A, 118A, 130A, 131A, 132A, 133A

Set #	#11			
1	1 Privacy Lock	FH23PD8440-26D 8440 POCKET LOCK TTURN FH23 TRIM X 2 3/4" BS	26D	VA01
1	1 Overhead Mount Track	H800S-OH/8		PE
Set #	#12			
D	oors: 121A, 122A			
1	1 Entry Lock	FH23PD8450-26D POCKET ENTRY CYL X TTO8 FH23 TRIM, 2 3/4" BS	26D	VA01
	1 Mortise Cylinder 1 Overhead Mount Track	21 41 13-0512 MK VK KEYS H800S-OH/8	32D	SA PE
Set #	#13			
D	oors: 129A			
2 1 1 2 1 2	 5 Hinges 2 Flush Bolts 1 Lockset 1 Closer 2 Wall Bumper 1 Smoke Seal 2 Door Bottom 1 Threshold 	TA2714 4 1/2 X 4 1/2 555 21 28 10G04 LP 2 3/4" BS MK VK KEYS 281 UO 409 S88 BL 20' 315 CN 35 3/4" 271 A 72" MSES25SS	26D US26D 26D EN US26D	MC RO SA SA RO PE PE PE
Set #	#14			
D	oors: 134A			
1 1 1 1 2	 6 Hinges 1 Flush Bolts 1 Lockset 1 Closer 1 Overhead Stop 1 Smoke Seal 2 Door Bottom 1 Threshold 	TA2314 4 1/2 X 4 1/2 NRP 555 21 28 10G04 LP 2 3/4" BS MK VK KEYS 281 CPS OH902S S88 BL 20' 315 CN 29 3/4" 271 A 60" MSES25SS	32D US26D 26D EN US32D	MC RO SA SA RO PE PE PE
Set #	#14.1			
De	oors: 140A, 142A, 143A, 144A, 1	145A		
2 1 2 1	 5 Hinges 2 Flush Bolts 1 Lockset 2 Overhead Stop 1 Smoke Seal 2 Door Bottom 	TA2314 4 1/2 X 4 1/2 NRP 555 21 28 10G04 LP 2 3/4" BS MK VK KEYS OH901S S88 BL 20' 315 CN 23 3/4"	32D US26D 26D US32D	MC RO SA RO PE PE

271 A 48" MSES25SS

1 Threshold

Set #15

Doors: 135A

ΡE

Set #15

6 Hinges	TA2314 4 1/2 X 4 1/2	32D	MC
2 Exit Device	12 NB 8715 F ETL	32D	SA
2 Closer	281 UO	EN	SA
2 Protection Plate	K1050 10" x 34" CSK HVBEV	US32D	RO
2 Wall Bumper	409	US26D	RO
2 Smoke Seal	S88 BL 20'		PE
2 Door Bottom	315 CN 35 3/4"		PE
1 Threshold	271 A 72" MSES25SS		PE
Set #15.1			
Doors: 141A			
6 Hinges	TA2314 4 1/2 X 4 1/2	32D	MC
2 Exit Device	12 NB 8715 F ETL	32D	SA

2 Exit Device	12 NB 8715 F ETL	32D	SA
2 Closer	281 UO	EN	SA
2 Protection Plate	K1050 10" x 34" CSK HVBEV	US32D	RO
2 Wall Bumper	409	US26D	RO
2 Smoke Seal	S88 BL 20'		PE
2 Door Bottom	315 CN 35 3/4"		PE
1 Threshold	271 A 72" MSES25SS		PE

SECTION 09 5000 Acoustical Ceilings

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

- A. Section Includes
 - 1. Acoustical ceiling panels
 - 2. Exposed grid suspension system
 - 3. Wire hangers, fasteners, main runners, cross tees, and wall angle moldings
 - 4. Perimeter Trim

B. Related Sections

- 1. Section 09 51 00 Acoustical Ceilings
- 2. Section 09 51 13 Acoustical Fabric-Faced Panel Ceilings
- 3. Section 09 53 00 Acoustical Ceiling Suspension Assemblies
- 4. Section 09 20 00 Plaster and Gypsum Board
- 5. Section 01 81 13 Sustainable Design Requirements
- 6. Section 01 81 19 Indoor Air Quality Requirements
- 7. Section 02 42 00 Removal and Salvage of Construction Materials
- 8. Divisions 23 HVAC Air Distribution
- 9. Division 26 Electrical

C. Alternates

1. Prior Approval: Unless otherwise provided for in the Contract documents, proposed product substitutions may be submitted no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by the Addenda. If included in a Bid are substitute products that have not been approved by Addenda, the specified products shall be provided without additional compensation.

2. Submittals that do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); Underwriters' Laboratories Classified Acoustical performance; Panel design, size, composition, color, and finish; Suspension system component profiles and sizes; Compliance with the referenced standards.

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM A 1008 Standard Specification for Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

2. ASTM A 641 Standard Specification for Zinc-Coated (Galvanized) Carbon Steel Wire

3. ASTM A 653 Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process

4. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method

5. ASTM C 635 Standard Specification for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings

6. ASTM C 636 Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels

7. ASTM D 3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber

8. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials

9. ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Material

A. Armstrong Fire Guard Products

10. ASTM E 580 Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint

11. ASTM E 1111 Standard Test Method for Measuring the Interzone Attenuation of Ceilings Systems

12. ASTM E 1414 Standard Test Method for Airborne Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum

13. ASTM E 1264 Classification for Acoustical Ceiling Products

B. International Building Code

C. ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality

D. NFPA 70 National Electrical Code

E. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures

F. International Code Council-Evaluation Services - AC 156 Acceptance Criteria for Seismic Qualification Testing of Non-structural Components

G. International Code Council-Evaluation Services Report - Seismic Engineer Report

1. ESR 1308 - Armstrong Suspension Systems

H. International Association of Plumbing and Mechanical Officials - Seismic Engineer Report

1. 0244 - Armstrong Single Span Suspension System

I. California Department of Public Health CDPH/EHLB Emission Standard Method Version 1.1 2010

J. LEED - Leadership in Energy and Environmental Design is a set of rating systems for the design, construction, operation, and maintenance of green buildings

K. International Well Building Standard

L. Mindful Materials

M. Living Building Challenge

N. U.S. Department of Agriculture BioPreferred program (USDA BioPreffered).

1.4 SYSTEM DESCRIPTION

Continuous/Wall-to-Wall

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's technical data for each type of acoustical ceiling unit and suspension system required.

B. Samples: Minimum 6 inch x 6 inch samples of specified acoustical panel; 8 inch long samples of exposed wall molding and suspension system, including main runner and 4 foot cross tees.

C. Shop Drawings: Layout and details of acoustical ceilings show locations of items that are to be coordinated with, or supported by the ceilings.

D. Acoustical Certifications: Manufacturer's certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards. For acoustical performance, each carton of material must carry an approved independent laboratory classification of NRC, CAC, and AC.

a. If the material supplied by the acoustical subcontractor does not have an Underwriter's Laboratory classification of acoustical performance on every carton, subcontractor shall be required to send material from every production run appearing on the job to an independent or NVLAP approved laboratory for testing, at the architect's or owner's discretion. All products not conforming to manufacturer's current published values must be removed, disposed of and replaced with complying product at the expense of the Contractor performing the work.

1.6 SUSTAINABLE MATERIALS

Transparency: Manufacturers will be given preference when they provide documentation to support sustainable requirements for the following: Material ingredient transparency, Removal of Red List Ingredients per LBCV3, Life Cycle impact information, Low-Emitting Materials, and Clean Air performance.

1. Health Product Declaration. The end use product has a published, complete Health Product Declaration with disclosure at a minimum of 1000ppm of known hazards in compliance with the Health Product Declaration open Standard.

2. Declare Label. The end use product has a published Declare label by the International Living Future Institute with disclosure of 100 ppm with a designation of Red List Free or Compliant (less than 1% proprietary ingredients).

3. Low Emitting products with VOC emissions data. Preference will also be given to manufacturers that can provide emissions data showing their products meet CDHP Standard Method v1.1 (Section 01350).

4. Life cycle analysis. Products that have communicated lifecycle data through Environmental Product Declarations (EPDs) will be preferred.

5. End of Life Programs/Recycling: Where applicable, manufacturers that provide the option for recycling of their products into new products at end-of-life through take-back programs will be preferred.

6. Products meeting LEED V4 requirements including:

Storage & Collection of Recyclables

Construction and Demolition Waste Management Planning

Building Life-Cycle Impact Reduction

Building Product Disclosure and Optimization Environmental Product Declarations

Building Product Disclosure and Optimization Sourcing of Raw Materials

Building Product Disclosure and Optimization Material Ingredients

Construction and Demolition Waste Management

1.7 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide acoustical panel units and grid components by a single manufacturer.

1. Fire Performance Characteristics: Identify acoustical ceiling components with appropriate markings of applicable testing and inspecting organization.

2. Surface Burning Characteristics: As follows, tested per ASTM E 84 and complying with ASTM E 1264 Classification.

3. Fire Resistance: As follows tested per ASTM E119 and listed in the appropriate floor or roof design in the Underwriters Laboratories Fire Resistance Directory

B. Acoustical Panels: As with other architectural features located at the ceiling, may obstruct or skew the planned fire sprinkler water distribution pattern through possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Designers and installers are advised to consult a fire protection engineer, NFPA 13, or their local codes for guidance where automatic fire detection and suppression systems are present.

C. Coordination of Work: Coordinate acoustical ceiling work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.8 DELIVERY, STORAGE AND HANDLING

A. Deliver acoustical ceiling units to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.

B. Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.

C. Handle acoustical ceiling units carefully to avoid chipping edges or damaged units in any way.

1.9 PROJECT CONDITIONS

A. Space Enclosure:

Standard Ceilings: Do not install interior ceilings until space is enclosed and weatherproof; wet work in place is completed and nominally dry; work above ceilings is complete; and ambient conditions of temperature and humidity are continuously maintained at values near those intended for final occupancy. Building areas to receive ceilings shall be free of construction dust and debris.

HumiGuard Plus Ceilings: Building areas to receive ceilings shall be free of construction dust and debris. Products with HumiGuard Plus performance and hot dipped galvanized steel, aluminum or stainless steel suspension systems can be installed up to 120°F (49°C) and in spaces before the building is enclosed, where HVAC systems are cycled or not operating. Cannot be used in exterior applications where standing water is present or where moisture will come in direct contact with the ceiling.

HumiGuard Max Ceilings: Building areas to receive ceilings shall be free of construction dust and debris. Ceilings with HumiGuard Max performance can be installed in conditions up to 120°F (49°C) and maximum humidity exposure including outdoor applications, and other standing water applications, so long as they are installed with either SS Prelude Plus, AL Prelude Plus, or Prelude Plus Fire Guard XL suspension systems. Products with Humiguard Max performance can be installed in exterior applications, where standing water is present, or where moisture will come in direct contact with the ceiling. Only Ceramaguard with AL Prelude Plus suspension system can be installed over swimming pools.

1.10 ALTERNATE CONSTRUCTION WASTE DISPOSAL

A. Ceiling material being reclaimed must be kept dry and free from debris.

B. Contact the Armstrong Recycle Center a consultant will verify the condition of the material and that it meets the Armstrong requirements for recycling. The Armstrong consultant with provide assistance to facilitate the recycling of the ceiling.

C. Recycling may qualify for LEED Credits:

a. LEED 2009 - Category 4: Material and Resources (MR)

i. Credit MRc2: Construction Waste Management

b. LEEDv4 - MRp2 - Construction Waste Management Planning Qualifies as a material stream (non-structural) targeted for diversion. Ceilings will be source-separated and diverted through the Armstrong Ceiling Recycling Program.

c. LEEDv4-MRc5 -

i. Option 1: Divert ceilings to qualify for one of the 3 material streams (50%)

ii. Option 2: Divert ceilings to qualify for one of the 4 material streams (75%)

1.11 WARRANTY

A. Acoustical Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period. Failures include, but are not limited to the following:

- 1. Acoustical Panels: Sagging and warping
- 2. Grid System: Rusting and manufacturer's defects

B. Warranty Period:

1. Acoustical panels: Ten (10) years from date of substantial completion

2. Suspension: Ten (10) years from date of substantial completion

3. Ceiling System: Thirty (30) years from date of substantial completion

C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

1.12 MAINTENANCE

A. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.

1. Acoustical Ceiling Units: Furnish quality of full-size units equal to 5.0 percent of amount installed.

2. Exposed Suspension System Components: Furnish quantity of each exposed suspension component equal to 2.0 percent of amount installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Ceiling Panels:

1. Armstrong World Industries, Inc.

- B. Suspension Systems:
 - 1. Armstrong World Industries, Inc.
- C: Perimeter Systems

1. Armstrong World Industries, Inc.

2.2.1 ACOUSTICAL CEILING UNITS

- A. Acoustical Panels Type AP
 - 1. Surface Texture: Fine
 - 2. Composition: Mineral Fiber

- 3. Color: White
- 4. Size: 24 in x 24 in

5. Edge Profile: Beveled Tegular 9/16 in for interface with SUPRAFINE XL 9/16" Exposed Tee grid.

6. Noise Reduction Coefficient(NRC): ASTM C 423; Classified with UL label on product carton 0.75

7. Ceiling Attenuation Class (CAC): ASTM C 1414; Classified with UL label on product carton

35

8. Sabin:N/A

9. Articulation Class (AC):

- 10. Flame Spread: ASTM E 1264; Class A (UL)
- 11. Light Reflectance (LR) White Panel: ASTM E 1477; 0.88
- 12. Dimensional Stability: HumiGuard Plus
- 13. Recycle Content: Post-Consumer 0% 1% Pre-Consumer 75% 76%
- 14. Material Ingredient Transparency: Health Product Declaration (HPD); Declare Label
- 15. Life Cycle Assessment: Third Party Certified Environment Product Declaration (EPD)

16. Acceptable Product: TECHZONE with ULTIMA Field Panels, 1912 No added formaldehyde as manufactured by Armstrong World Industries

2.3.1 METAL SUSPENSION SYSTEMS

A. Components:

Main beams and cross tees, base metal and end detail, fabricated from commercial quality hot dipped galvanized steel complying with ASTM A 653. Main beams and cross tees are double-web steel construction with type exposed flange design. Exposed surfaces chemically cleansed, capping prefinished galvanized steel in baked polyester paint. Main beams and cross tees shall have rotary stitching.

a. Structural Classification: ASTM C 635 Intermediate Duty duty

b. Color: White and match the actual color of the selected ceiling tile, unless noted otherwise.

c. Acceptable Product: SUPRAFINE XL 9/16" Exposed Tee as manufactured by Armstrong World Industries

B. Attachment Devices: Size for five times design load indicated in ASTM C 635, Table 1, Direct Hung unless otherwise indicated.

C. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft annealed, with a yield stress load of at least time three design load, but not less than 12 gauge.

D. Edge Moldings and Trim:

1. 7804 - 12ft Hemmed Angle Molding

E. Accessories:

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed recommendations. (Exception: HumiGuard Max Ceilings)

3.2 PREPARATION

A. Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less than half width units at borders, and comply with reflected ceiling plans. Coordinate panel layout with mechanical and electrical fixtures.

B. Coordination: Furnish layouts for preset inserts, clips, and other ceiling anchors whose installation is specified in other sections.

1. Furnish concrete inserts and similar devices to other trades for installation well in advance of time needed for coordination of other work.

3.3 INSTALLATION

A. Follow manufacturer installation instructions.

B. Install suspension system and panels in accordance with the manufacturer's instructions, and in compliance with ASTM C 636 and with the authorities having jurisdiction.

C. Suspend main beam from overhead construction with hanger wires spaced 4-0 on center along the length of the main runner. Install hanger wires plumb and straight.

D. Install wall moldings at intersection of suspended ceiling and vertical surfaces. Miter corners where wall moldings intersect or install corner caps.

E. For reveal edge panels: Cut and reveal or rabbet edges of ceiling panels at border areas and vertical surfaces.

F. Install acoustical panels in coordination with suspended system, with edges resting on flanges of main runner and cross tees. Cut and fit panels neatly against abutting surfaces. Support edges by wall moldings.

3.4 ADJUSTING AND CLEANING

A. Replace damaged and broken panels.

B. Clean exposed surfaces of acoustical ceilings, including trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage. Remove any ceiling products that cannot be successfully cleaned and or repaired. Replace with attic stock or new product to eliminate evidence of damage.

C. Before disposing of ceilings, contact the Armstrong Recycling Center at 877-276-7876, select option #1 then #8 to review with a consultant the condition and location of building where the ceilings will be removed. The consultant will verify the condition of the material and that it meets the Armstrong requirements for recycling. The Armstrong consultant with provide assistance to facilitate the recycle of the ceiling.

SECTION 10 1400 - SIGNAGE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following signs:

- 1. Panel signs.
- 2. Dimensional letters and numbers.
- 3. Post-mounted metal disabled parking space signs.

1.3 SUBMITTALS

A. General: Submit the following according to the Conditions of the Contract.

B. Product data for each type of sign specified, including details of construction relative to materials, dimensions of individual components, profiles, and finishes.

C. Shop drawings showing fabrication and erection of signs. Include plans, elevations, and largescale sections of typical members and other components. Show anchors, grounds, layout, reinforcement, accessories, and installation details.

- 1. Provide message list for each sign required, including large-scale details of wording and lettering layout.
- 2. Templates: Furnish full-size spacing templates for individually mounted dimensional letters and numbers.

D. Samples: Provide the following samples of each sign component for initial selection of color, pattern and surface texture as required and for verification of compliance with requirements indicated.

- 1. Samples for initial selection of color, pattern, and texture:
 - a. Cast Acrylic Sheet and Melamine Sheet: Manufacturer's color charts consisting of actual sections of material including the full range of colors available for each material required.
 - b. Aluminum: Samples of each finish type and color, on 6-inch-long sections of extrusions and not less than 4-inch squares of sheet or plate, showing the full range of colors available.
- 2. Samples for verification of color, patterns, and texture selected and compliance with requirements indicated:

- a. Cast Acrylic Sheet and Melamine Sheet: Provide a sample panel not less than 8-1/2 inches by 11 inches for each material, color, texture, and pattern required. On each panel include a representative sample of the graphic image process required, showing graphic style, and colors and finishes of letters, numbers, and other graphic devices.
- b. Dimensional Letters: Provide full-size representative samples of each dimensional letter type required, showing letter style, color, and material finish and method of attachment.

1.4 QUALITY ASSURANCE

A. Sign Fabricator Qualifications: Firm experienced in producing signs similar to those indicated for this Project, with a record of successful in-service performance, and sufficient production capacity to produce sign units required without causing delay in the Work.

B. Single-Source Responsibility: For each separate sign type required, obtain signs from one source of a single manufacturer.

C. All signs shall conform to all requirements of the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, Articles 4.1.2 (7) and 4.30.1 through 4.30.7 (1) inclusive.

1.5 PROJECT CONDITIONS

A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication to ensure proper fitting. Show recorded measurements on final shop drawings. Coordinate fabrication schedule with construction progress to avoid delay.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- 1. Manufacturers of Panel Signs:
 - a. Andco Industries Corp.
 - b. Modern Signs, Inc.
 - c. APCO Graphics, Inc.
 - d. ASI Sign Systems, Inc.
 - e. Best Manufacturing Company
 - f. Mohawk Sign Systems
- 2. Manufacturers of Dimensional Letters:
 - a. Andco Industries Corp.

- b. Modern Signs, Inc.
- c. A.R.K. Ramos Manufacturing Company, Inc.
- d. ASI Sign Systems, Inc.
- e. Metal Arts
- g. The Southwell Company

2.2 PANEL SIGNS FOR ROOM IDENTIFICATION

A. Panel signs shall be minimum 1/8" thick (excluding thickness of raised sign letters) melamine or acrylic plastic with 1/32" thick raised characters with Grade 2 Braille.

B. At sign manufacturer's option, the minimum 1/8" thickness of the panel can be achieved by laminating a base layer of melamine or acrylic to the top layer containing the integral raised characters. Edges shall be ground smooth.

C. The characters and background of signs shall be eggshell, matte, or other non-glare finish. Characters and symbols shall contract with the background – either light characters on a dark background or dark characters on a light background. Submit manufacturer's standard palette of colors meeting these requirements to Architect for selection.

D. Graphics and text are to be etched to achieve correctly spaced and accurately reproduced sharp, true characters and Braille. The text shall be an integral part of the sign and not applied to the plate with adhesive or chemicals. Text height is to be determined within the range of 5/8" up to 2". Graphics are etched into the face prior to the application of the background color.

E. Room identification signs are to be provided for ALL ROOMS and as otherwise indicated on drawings.

F. In addition to a room name sign provide pictograms of the international symbol of accessibility.

Example:

Room Name Sign: Men's Restroom

Pictogram: Accessibility Symbol

G. Fabrication; the sign size shall be approximately $4^{"} \times 8^{"}$. Sign edges are to be straight and free form saw marks or any other imperfections. Corners shall be rounded, with $1/4^{"}$ to $3/8^{"}$ radius.

2.3 BUILDING SIGNAGE DIMENSIONAL LETTERS AND NUMBERS

Sign 1: "5" (2 located on entry tower).

A. Furnish reverse channel fabricated illuminated letter minimum of 5" deep with internal LED backlit Illumination. Letters to be painted with Matthews Acrylic Polyurethane Enamel Paint.

1. Size: "5"s +/-7 feet tall.

Sign 2: "ORANGE BEACH FIRE STATION NO. 5" mounted on monument sign

A. Lettering: Pin mounted custom aluminum plate signage by general contractor (Arial Bold typeface 10" lettering. Produce characters with smooth, flat faces, sharp corners, and precisely formed lines and profiles, free from pits, scale, sand holes, or other defects. Cast lugs into the back of characters and tap to receive threaded mounting studs. Comply with requirements indicated for finish, style, and size.

1. Size: Letters/Numbers +/-10 inches tall.

B. LOGO: Pin-Mounted custom etched brass plaque of City Logo 16" diameter.

C. Finish: Letters and numbers to be painted with Matthews Acrylic Polyurethane Enamel Paint. Physical samples of full range of colors to be submitted to architect.

D. Typeface: ARIAL

2.4 DISABLED PARKING SPACE SIGNS

A. Post mounted handicapped parking space signs shall be provided for each accessible parking space as indicated on the drawings.

B. Signs shall be constructed of 18 gauge bonderized steel with baked enamel finish and screen printed copy.

C. Signs shall bear the international symbol of accessibility of top half of sign (blue background with white symbol) and the caption "PARKING BY DISABLED PERMIT ONLY" on the bottom half of the sign (white background with blue lettering). In addition, sign shall state "\$258 FINE, F.S. 318.14."

D. Main sign size to be 12" wide x 18" high, with 12" wide by 6" high separate sign stating fine mounted below main sign.

E. Posts to be galvanized steel "U" channel; weight 2.5 lbs. Per foot minimum. Height to be 12 feet overall.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Locate sign units and accessories where indicated, using mounting methods of the type described and in compliance with the manufacturer's instructions.

B. Install signs level, plumb, and at the height indicated, with sign surfaces free from distortion or other defects in appearance.

C. Room Identification Signs: Mount on adjoining walls and locate signs adjacent to the latch side of the door. In case of conflicts with closely spaced doors, with vision panels or where there is no wall space to the latch side of the door, notify Architect. Verify all sign locations with Architect prior to installation.

D. Wall Mounted Signs: Attach signs to wall surfaces using a minimum of two stainless steel screws. For exterior signs, use four stainless steel screws. Use expansion shields for screws set in masonry; use "Molly" type hollow wall fasteners for screws set in gypsum board or plaster.

E. Mounting shall be at a height of 60" to the centerline of the sign (to centerline of top sign when two signs are mounted one above the other).

- F. Dimensional Letters and Numbers: Letters to be mounted on custom-formed curved aluminum tube or angle mechanically fastened to concrete block wall. See drawing elevations for details.
- G. Projected Mounting: Mount letters at a 1" projection distance from the wall surface indicated.
- H. Disabled Parking Space Signs: Install in locations and at mounting heights indicated on drawings.

3.2 CLEANING AND PROTECTION

A. After installation, clean soiled sign surfaces according to the manufacturer's instruction. Protect units from damage until acceptance by the Owner.

END OF SECTION 10 1400

GENERAL NOTES

- THE NOTES AND SPECIFICATIONS GIVEN ON THE STRUCTURAL DRAWINGS ARE EXCERPTS FROM THE RELATING PROJECT SPECIFICATIONS. THEY ARE NEITHER COMPLETE NOR DO THEY REPLACE THE CONTRACT SPECIFICATIONS.
- CODE: CONSTRUCTION SHALL CONFORM TO THE PROVISIONS 2. THE INTERNATIONAL BUILDING CODE, 2018 EDITION AND STANDARDS REFERENCED THEREIN.
- GENERAL DETAILS: AND NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS. ALL WORK OR CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES, REGULATION AND SAFETY REQUIREMENTS.
- DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO CODES, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED. ANY SUCH DISCREPANCY OMISSION, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND WORK SHALL BE PERFORMED IN A MANNER AS DIRECTED BY THE ENGINEER.
- SHORING: IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING. BRACING, AND FORMWORK, AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING TH CONSTRUCTION OF THIS BUILDING. EXCESS LOAD CAPACITY OF SLAB SHALL NOT EXCEED LOADS EQUIVALENT TO THE DESIGN SUPERIMPOSED LOADS LESS CONSTRUCTION DEAD AND LIVE LOADS. DESIGN SUPERIMPOSED LOADS INCLUDE LIVE LOAD. PARTITION LOAD, AND ANY OTHER LOAD NOT IN PLACE AT THE TIME OF SHORING.
- EXCAVATION: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURE INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY. STRUCTURES. STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.
- OTHER TRADES: SEE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT AND OTHER OPENINGS AND DETAILS NOT SHOWN ON THESE STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED WITH THE ARCHITECTURAL DRAWINGS.
- BACKFILL: BACKFILL AROUND THE EXTERIOR PERIMETER OF WALL SHALL NOT BE PLACED UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. DO NOT PROCEED WITH BACKFILL UNTIL SEVEN (7) DAYS AS A MINIMUM AFTER THE COMPLETION OF INTERIOR FLOOR SYSTEMS UNLESS WALLS ARE ADEQUATELY BRACED. BACKFILL SHALL NOT BE PLACED UNTIL AFTER COMPLETION AND INSPECTION OF WATERPROOFING WHERE WATERPROOFING OCCURS.
- BRACING: TEMPORARY BRACING SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.
- 10. WELDING: ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE WELDS TO BE MADE; SEE SPECIFICATIONS FOR WELDING PROCESS TO BE USED. WELDING OF REINFORCING STEEL FOR USE IN STRUCTURAL CONCRETE OR STRUCTURAL MASONRY SHALL BE PERMITTED ONLY WHERE SPECIFICALLY DESIGNATED ON THESE PLANS OR WHERE SPECIFICALLY APPROVED BY THE ENGINEER.
- 11. SAFETY: THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY, AND THE PUBLIC, AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR
- 12. INSPECTIONS: ANY INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR THESE PLANS, SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE, OR SUBSTITUTE, INSPECTIONS UNLESS SPECIFICALLY CONTRACTED FOR
- 13. SHOP DRAWINGS: SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
- 14. SHOP DRAWING CHECK: THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH A MINIMUM OF TWO COPIES OF CHECKED SHOP DRAWINGS BEARING THE CONTRACTOR'S STAMP OF APPROVAL AND SIGNATURE A MINIMUM OF THREE WEEKS PRIOR TO FABRICATION. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THIS REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT, COMPLETE, NOR DOES IT INFER THAT THEY SUPERCEDE THE STRUCTURAL DRAWINGS.

MASONRY

- GENERAL DETAILS: ALL BLOCKS SHALL CONFORM TO GRADE N UNITS GIVEN IN ASTM C90, LATEST EDITION, AND IN ADDITION SHALL HAVE A LINEAR SHRINKAGE OF 0.065% MAXIMUM FROM SATURATED TO THE DRY OVEN CONDITION. MASONRY UNITS SHALL HAVE CURED FOR NOT LESS THAN (28) DAYS WHEN PLACED IN THE STRUCTURE. PROVIDE ALL BOND BEAM UNITS, LINTELS, ETC., AS REQUIRED.
- DEFECTIVE UNITS: DO NOT USE CHIPPED OR CRACKED BLOCKS. IF ANY SUCH BLOCKS ARE DISCOVERED IN ANY FINISHING WALL, THEY SHALL BE PROMPTLY REMOVED AND REPLACED WITH NEW BLOCKS TO THE APPROVAL OF THE ENGINEER.
- CEMENT: SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C150, TYPE I or II, AND SHALL BE ENTIRELY OF ONE MANUFACTURER.
- 4. WATER: WATER USED FOR MORTAR AND GROUT SHALL BE CLEAN AND FREE FROM DELETERIOUS AMOUNTS OF ACIDS, SALTS, ALKALI, AND ORGANIC MATERIALS
- AGGREGATES: SAND FOR MORTAR SHALL CONFORM TO ASTM C144 EXCEPT THAT NOT LESS THAN 3% OF THE SAND SHALL PASS THE NUMBER 100 SIEVE. SAND AND PEA GRAVEL FOR THE GROUT SHALL CONFORM TO ASTM C404, TABLE 1, COARSE AGGREGATE, EXCEPT WHEN OTHER GRADINGS ARE SPECIFICALLY APPROVED BY THE ENGINEER.
- 6. QUICKLIME: QUICKLIME SHALL CONFORM TO ASTM C5.

MASONRY (cont'd.)

- MORTAR: SHALL BE TYPE S UNLESS OTHERWISE NOTED.
- GROUT: FOR PUMPING SHALL BE FLUID CONSISTENCY AND SHALL NOT HAVE LESS THAN (5) SACKS OF CEMENT IN EACH CUBIC YARD OF GROUT. FLUID CONSISTENCY SHALL MEAN A CONSISTENCY AS FLUID AS POSSIBLE FOR POURING WITHOUT SEGREGATION OF THE CONSTITUENT PARTS.
- ADMIXTURES: THE USE OF ADMIXTURES SHALL NOT BE PERMITTED IN MORTAR OR GROUT UNLESS SUSTAINING DATA HAS BEEN SUBMITTED TO AND REVIEWED BY THE ENGINEER. THE USE OF ADMIXTURES IN THE MORTAR SHALL NOT BE PERMITTED WITHOUT REDUCING THE LIME CONTENT. THE USE OF UNCONTROLLED FIRE CLAY, DIRT, AND OTHER DELETERIOUS MATERIALS IS PROHIBITED.
- 10. MIXING: PLACE THE SAND, CEMENT AND WATER IN THE MIXER IN THAT ORDER FOR EACH BATCH OR MORTAR OR GROUT AND MIX FOR A PERIOD OF AT LEAST 2 MINUTES. ADD THE LIME AND CONTINUE MIXING FOR AS LONG AS NEEDED TO SECURE A UNIFORM MASS. BUT IN NO CASE LESS THAN 10 MINUTES. USE MIXERS TO SECURE A UNIFORM CAPACITY. BATCHES REQUIRING FRACTIONAL SACKS WILL NOT BE PERMITTED UNLESS CEMENT IS WEIGHED FOR EACH SUCH BATCH. RETEMPER MORTAR ONLY BY ADDING WATER INTO A BATCH MADE WITH THE MORTAR AND THEN CAREFULLY WORKING THE WATER INTO THE MORTAR. RETEMPERING THE MORTAR BY DASHING WATER OVER THE MORTAR SHALL NOT BE PERMITTED. ANY MORTAR OR GROUT WHICH IS UNUSED WITHIN ONE HOUR AFTER INITIAL MIXING SHALL BE REMOVED FROM THE WORK. MORTAR SHALL BE MIXED AND MAINTAINED ON THE BOARDS TO A SLUMP OF 2-3/4 INCHES PLUS OR MINUS 1/4 INCH USING A TRUNCATED CONE. 4 INCHES BY 2 INCHES; 6 INCHES HIGH.
- 11. CONSTRUCTION JOINTS: WHEN GROUTING IS STOPPED FOR A PERIOD OF 1) HOUR OR LONGER, FORM HORIZONTAL CONSTRUCTION JOINTS BY STOPPING THE GROUT POUR 1-1/2 INCHES MINIMUM BELOW THE UPPER-MOST UNIT.
- 12. ALIGNMENT OF VERTICAL CELLS: ALL MASONRY SHALL BE BUILT TO PRESERVE THE UNOBSTRUCTED VERTICAL CONTINUITY OF THE CELLS TO BE FILLED. THE VERTICAL ALIGNMENT SHALL BE SUFFICIENT TO MAINTAIN A CLEAR. UNOBSTRUCTED VERTICAL FLUE MEASURING NOT LESS THAN 3 INCHES BY 3 INCHES, EXCEPT WHERE OPEN END UNITS ARE USED.
- 13. LAYING: IN PLACING MORTAR IN HORIZONTAL JOINTS, COMPLETELY COVER THE FACE SHELLS OF THE UNITS WITH MORTAR. SOLIDLY FILL A HEAD JOINTS. LAY ALL MASONRY WITH RUNNING BOND. HOLD RAKING TO A MINIMUM.
- 14. REINFORCEMENT: REINFORCEMENT SHALL BE FULLY EMBEDDED IN GROUT. SEE SEE STRUCTURAL NOTES & DETAILS FOR SIZE, GRADE, LAPS ETC.
- GROUT QUALITY: GROUT FILL FOR CELLS SHALL CONSIST OF ONE PART 15. PORTLAND CEMENT TO NOT MORE THAN (3) PARTS SAND, TO (2) PARTS PEA GRAVEL, 3/8" INCH MAXIMUM SIZE COARSE AGGREGATE. GROUT FILL USING COARSER AGGREGATE MAY BE USED IF THE MIX IS PROPERLY DESIGNATED AND APPROVED BY THE ENGINEER. THE MAXIMUM SIZE OF AGGREGATE USED SHALL NOT EXCEED 1/5 THE LATERAL DIMENSION OF THE CELL TO BE FILLED. GROUT SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT (28) DAYS.
- 16. GROUTING: ALL WALLS SHALL HAVE ALL CELLS FILLED SOLID WITH GROUT 17. DOWELS: ALL VERTICAL WALL REINFORCEMENT SHALL HAVE DOWELS EQUAL IN SIZE EMBEDDED INTO FOOTINGS UNLESS NOTED OTHERWISE ON THESE PLANS.
- 18. STRENGTH: COMPRESSIVE STRENGTH (F'm) SHALL BE 1500 PSI.
- 19. MAXIMUM HEIGHT: MAXIMUM HEIGHT OF ANY GROUT POUR SHALL NOT BE GREATER THAN 4 FEET UNLESS PROPER HIGH-LIFT PROCEDURES ARE USED. MASONRY REBAR LAP LENGTH:

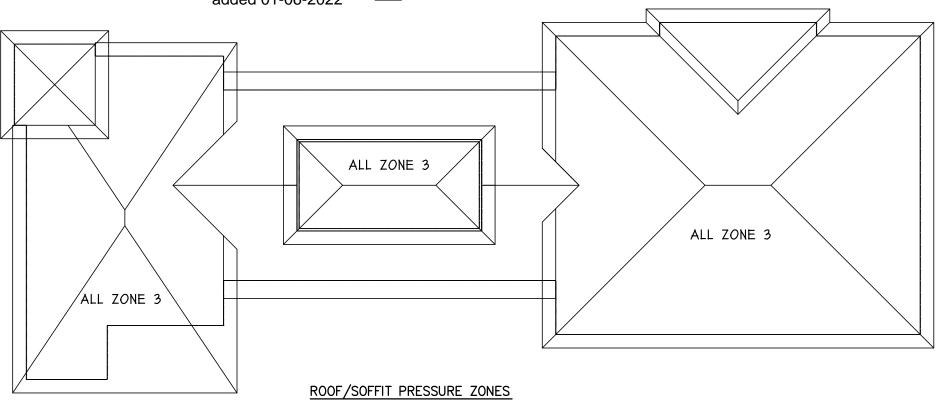
BAK 217	Ł
# 4	24"
<i>#</i> 5	24"
<i>#</i> 6	36"
<i>"</i> #7	42"
<i></i> #8	

20. REINFORCING COVER: 3" BELOW GRADE, 2" OTHER 21. SPECIAL INSPECTION REQUIRED (SEE 'INSPECTION' & 'INSPECTION NOTES')

\cdots STEEL

- STRUCTURAL STEEL: W-SECTION BEAMS SHALL COMPLY WITH ASTM A992, Fy = 50 ksi. RECTANGULAR (and SQUARE) HSS: ASTM A500, grade B, Fy = 46 ksi
- STRUCTURAL PLATES AND ANGLES: ASTM A36, Fy = 36 ksi. HEX NUTS: ASTM A563
- WASHERS: ASTM F436
- BOLTS: ASTM A325 THREADED RODS: ASTM A36 or BETTER
- THE ERECTOR SHALL BE RESPONSIBLE FOR THE MEANS. METHODS AND SAFETY
- OF ERECTION OF THE STRUCTURAL STEEL FRAMES.
- THE STRUCTURAL ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR THE STRUCTURAL ADEQUACY OF THE STRUCTURE IN THE COMPLETED PROJECT. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE MEANS,
- METHODS AND SAFETY OF ERECTION OF THE STRUCTURAL STEEL FRAME. WELDING: STRUCTURAL STEEL IN ACCORDANCE WITH AWS D1.1 AND COLD-FORMED SHEET STEEL IN ACCORDANCE TO AWS D.1.3. WELDS SHALL BE MADE ONLY BY
- WELDERS AND WELDING OPERATORS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TESTS AS PRESCRIBED IN AWS D1.1 TO PERFORM TYPE OF WORK REQUIRED HSS FRAME ASSEMBLIES AND PLATES SHALL BE
- BE HOT-DIPPED GALVANIZED WITH 2.3 oz/sq.ft. PER ASTM A123.
- STRUCTURAL STEEL HARDWARE SHALL BE HOT DIPPED GALVANIZED WITH 2.3 oz/sq.ft. PER ASTM A153
- COLD-FORMED WALL FRAMING AND ENGINEERED TRUSS SYSTEM SHALL BE GALVANIZED 7. w/ 0.9 Oz/sqft PER ASTM A653.
- FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC'S "CODE 8.
- OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES". REFER TO PROJECT SPECIFICATIONS FOR THE REPAIR OF GALVANIZING OR SHOP
- PAINT 10. REFER TO PROJECT SPECIFICATIONS FOR SHOP DRAWINGS, CALCULATIONS AND
- DETAIL SUBMITTALS TO THE PROJECT ENGINEER OF RECORD.

added 01-06-2022



CONCRETE AND REINFORCEMENT

- CONCRETE PLACEMENT AND QUALITY: SPECIFIED IN PROJECT SPECIFICATIONS.
- 2. DEBRIS: REMOVE ALL DEBRIS FROM FORMS BEFORE POURING.
- SEGREGATION OF AGGREGATES: CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS AND COLUMNS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES OR TRUNKS OF VARYING LENGTH SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED EIGHT FEET, AND A SUFFICIENT NUMBER SHALL BE USED TO ENSURE THAT THE CONCRETE IS KEPT LEVEL AT ALL TIMES.
- 4. INSERTS: ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING
- SPLICES: SPLICE BARS IN MEMBERS SUCH AS SPANDRELS. 5. BEAMS, ETC., AS FOLLOWS: TOP BARS AT CENTERLINE OF SPAN, BOTTOM BARS AT THE SUPPORT. ALL REINFORCING STEEL SHALL BE SECURELY WIRED AND PROPERLY SUPPORTED ABOVE GROUND AND AWAY FROM THE FORMS.
- 6. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS SHALL HAVE ENTIRE SURFACE REMOVED TO EXPOSE CLEAN, SOLIDLY EMBEDDED AGGREGATE. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN SLABS AND BEAMS.
- 7. TEMPERATURE AND SHRINKAGE REINFORCEMENTSHALL HAVE A LAP OF THIRTY (30) BAR DIAMETERS, BUT NOT LESS THAN 18 INCHES, AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN FIVE (5) FEET APART
- REBAR GRADES: ALL REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:
 - #3 & SMALLER BARS. GRADE 40 #4 & LARGER BARS... ..GRADE 60

THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS SHALL NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI (RETEST SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI) AND THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN 1.25.

- 9. WELDED WIRE FABRIC: WELDED WIRE FABRIC SHALL CONFORM TO ASTM A82 AND A185.
- 10. WELDING: TACK WELDING OF REBAR IS NOT PERMITTED UNLESS CALLED FOR OR APPROVED BY THE ENGINEER. WELDING OF STIRRUPS, TIES, INSERTS OR OTHER SIMILAR ELEMENTS TO LONGITUDINAL REINFORCING BARS SHALL NOT BE PERMITTED.
- 11. REBAR COVER: MINIMUM REBAR COVER FOR PRESTRESSED CONCRETE SHALL BE AS SHOWN IN THIS TABLE:

EXPOSURE CONDITION	MINIMUM COVER	TOLERANCE (-)
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"	3/8 INCH
EXPOSED TO EARTH OR WEATHER:		
NO. 5 AND SMALLER BARS	3"	1/4 INCH
NO. 6 AND LARGER BARS	3"	1/4 INCH
NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:		
BEAMS AND COLUMNS (PRIMARY REINFORCEMENT, TIES, STIRRUPS & SPIRALS)	2"	1/4 INCH
SLABS ON GRADE	2"	1/4 INCH

- 12. TOLERANCES FOR REBAR PLACEMENT: TOLERANCE FOR LONGITUDINAL LOCATION OF BENDS AND ENDS OF REINFORCEMENT SHALL BE PLUS OR MINUS TWO (2) INCHES, EXCEPT AT DISCONTINUOUS ENDS OF MEMBERS WHERE TOLERANCES SHALL BE 1/2 INCH.
- 13. CONCRETE QUALITY: SHALL BE AS SHOWN IN TABLE BELOW:

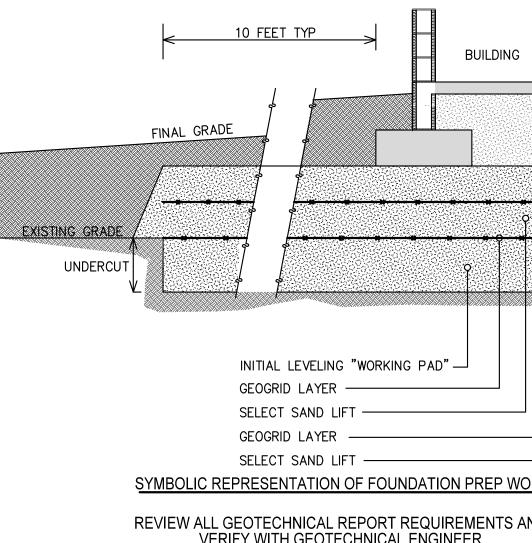
CONCRETE USE	STRENGTH AT 28 DAYS	SLUMP	AIR	AGGREGATE SIZE	AGGREGATE TYPE
EXTERIOR WALKS AND CURBS	3000	6"	Ι	1 1/2"	HARDROCK
	4000 (truck bay) 3000 psi (other)	4"	-	1"	HARDROCK
ELEVATED SLABS	3000	4"	_	1"	HARDROCK

_ grade slab/01-05-22 14. CONCRETE WEIGHT: ALL CONCRETE SHALL BE OF REGULAR WEIGHT OF 145 POUNDS PER CUBIC FOOT UNLESS NOTED OTHERWISE.

15. AGGREGATE: SIZE OF AGGREGATE SHALL CONFORM TO ASTM C33-85.

> 3/4".. .ASTM SIZE C67 .ASTM SIZE C57

- 16. CEMENT: SHALL BE TYPE II.
- CONCRETE AGE: NO MORE THAN 90 MINUTES SHALL ELAPSE 17. BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY TESTING AGENCY.
- 18. WET SET: REINFORCEMENT MAY NOT BE WET SET IN CONCRETE POURS.
- 19. ROUGHENED SURFACES: WHERE INDICATED ON THE DRAWINGS, ROUGHENED SURFACES SHALL BE PROVIDED BY MEANS OF HEAVY RAKING OR GROOVING. OTHER METHODS MAY BE ACCEPTABLE PENDING WRITTEN APPROVAL FROM THE ENGINEER. ALL INTERFACING SURFACES MUST BE CLEAN AND FREE OF LOOSE MATERIALS.

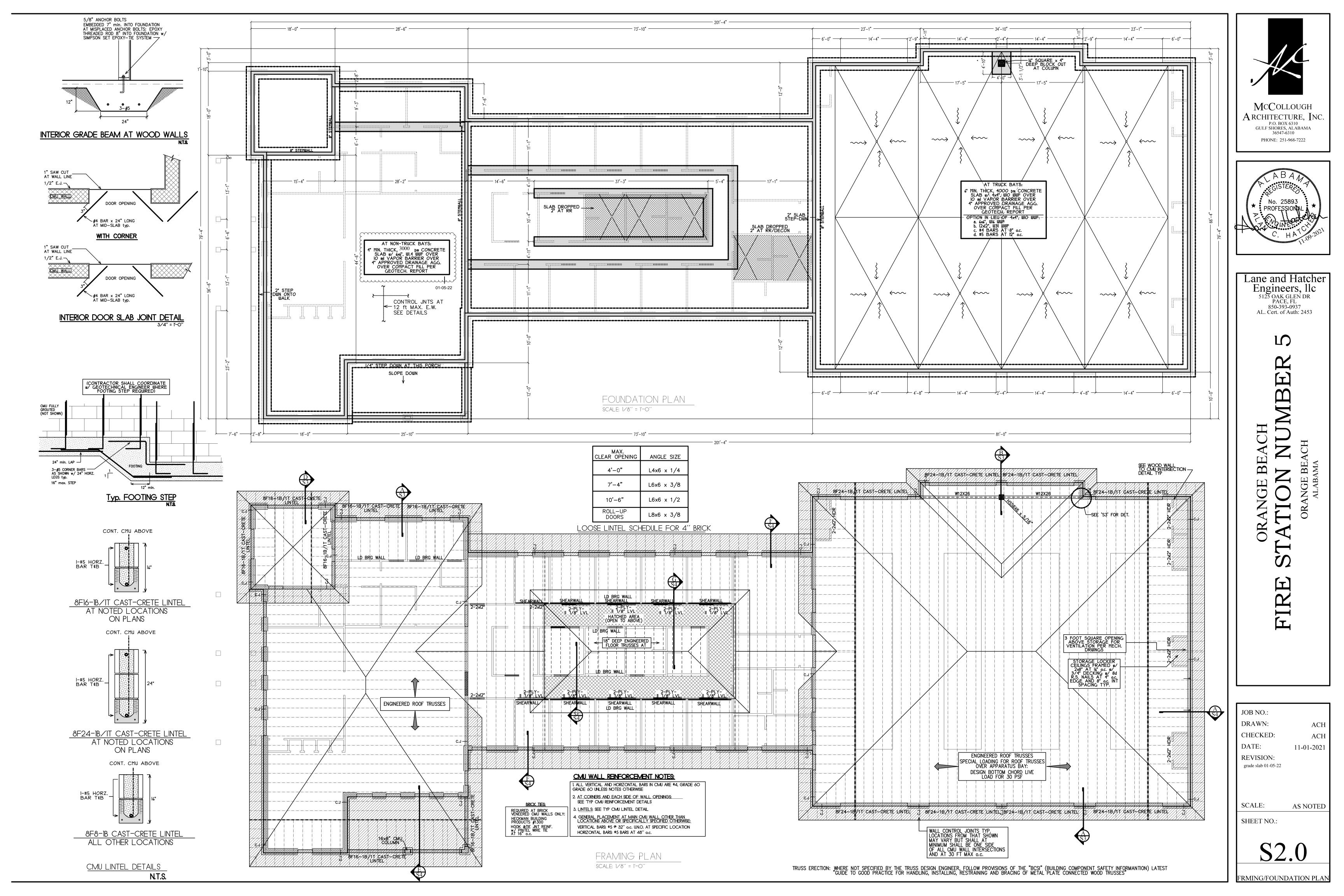


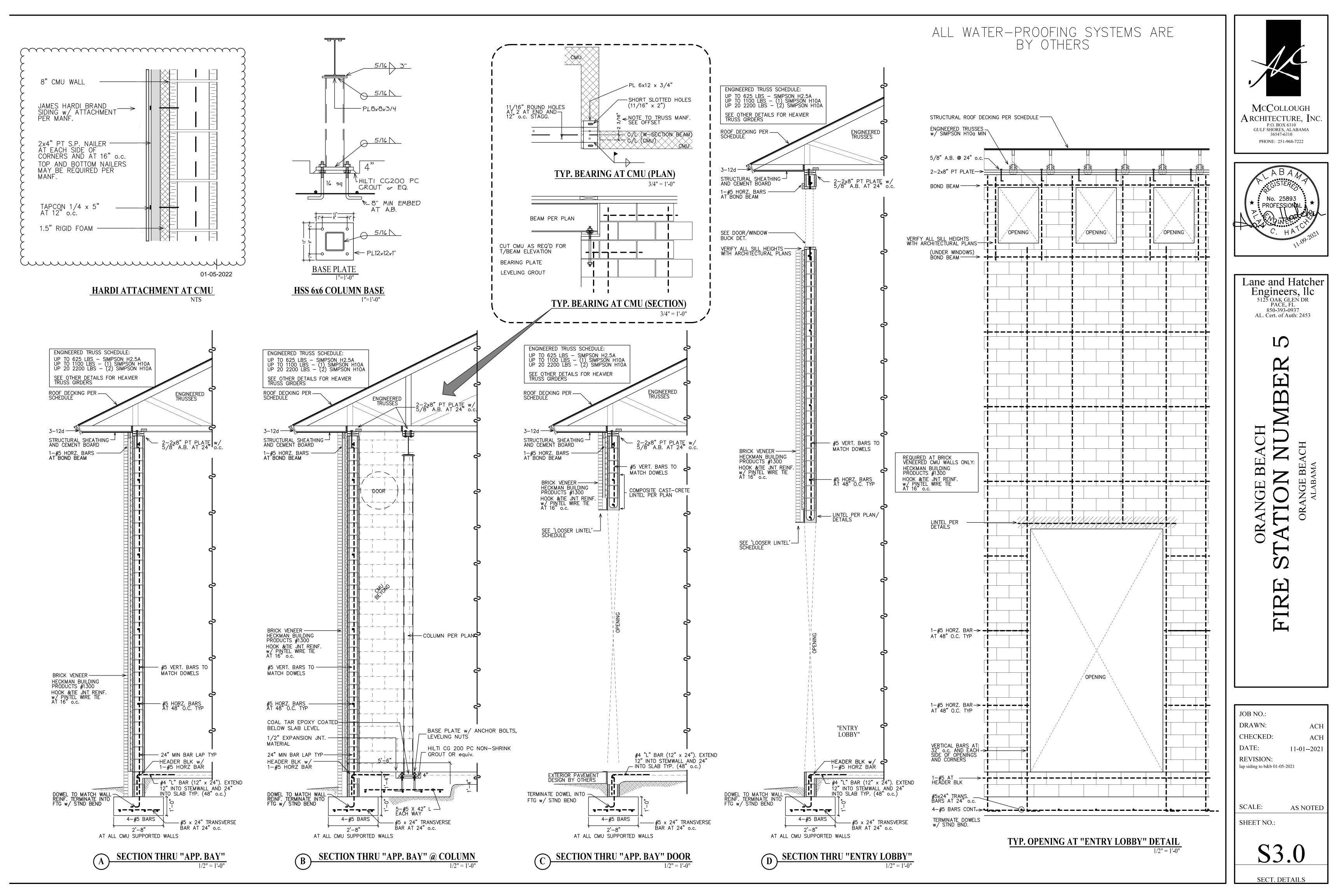
 MIX WITHOUT THE APPROVAL OF THE ENGINEER, UNLESS NOTED OTHERWISE. 21. CONCRETE TESTINGS: ALL TESTINGS SHALL BE PERFORMED BY INDEPENDENT LABORATORY. TESTING PER: a. ASTM C143 b. ASTM C143 b. ASTM C39 : 1 TEST CYLINDER PER 50 CUBIC YARDS (OR FRACTION THERE OF) PLACED PER DAY. REQUIRED CYLINDER(s) 	 GENERAL: IN ADDITION TO THE INSPECTIONS REQUIRED BY THE IBC, THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION ON THE TYPES OF WORK DESCRIBED IN THIS SECTION.
TESTING PER: a. ASTM C143 b. ASTM C39 : 1 TEST CYLINDER PER 50 CUBIC YARDS (OR FRACTION THERE OF) PLACED PER DAY. REQUIRED CYLINDER(s)	
QUANTITIES AND TEST AGE AS FOLLOWS: 1 AT 3 DAYS 1 AT 7 DAYS 1 AT 28 DAYS	2. CONCRETE: DURING THE TAKING OF TEST SPECIMENS AND PLACING OF ALL REINFORCED CONCRETE AND PNEUMATICALLY PLACED CONCRETE.
ONE ADDITIONAL RESERVE CYLINDER TO BE TESTED UNDER DIRECTION OF THE ENGINEER. IF 28 DAY STRENGTH IS ACHIEVED, THE ADDITIONAL CYLINDER(s) MAY BE DISCARDED. 22. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR CONCRETE SEALER REQUIREMENTS. SOIL	STRUCTURAL INSPECTION NOTES
 A GEOTECHNICAL SOILS EXPLORATIONS, STUDIES AND REPORT WAS PROVIDED FOR THIS SPECIFIC PROJECT BY 'GEOCON ENGINEERING AND MATERIALS TESTING' FILE DL2732-21 	1. REFER TO THE INTERNATIONAL BUILDING CODE CODE FOR AMPLIFICATION OF THE FOLLOWING REQUIREMENTS:
2. ALL RECOMMENDATIONS FOR SITE AND FOUNDATION WORK SHALL BE FOLLOWED EXPLICITLY AS SPECIFIED IN 'REPORT'	2. FOUNDATIONS: YES NO N/A A. COMPACTED FILL INCLUDING UTILITY TRENCHES ■ B. VISUAL EXAMINATION & APPROVAL OF ALL ■ FOUNDATION EXCAVATIONS ■
FINAL GRADE	 3. CONCRETE: CONTINUOUS INSPECTION & TEST CYLINDERS FOR CONCRETE OVER 2500 PSI 4. REINFORCING: A. PLACING OF REINFORCING
	A. PLACING OF REINFORCING B. SAMPLING & TESTING OF STEEL (MILL REPORTS & IDENTIFICATION OF STEEL) C. CONTINUOUS INSPECTION OF INSTALLATION OF REBAR COUPLERS 5. MASONRY:
INITIAL LEVELING "WORKING PAD"	A. SAMPLING & TESTING OF MASONRY B. SAMPLING & TESTING OF GROUT & MORTAR C. CONTINUOUS INSPECTION
SELECT SAND LIFT	 6. INSULATING CONCRETE FILL: TEST & INSPECTIONS □ □ ■ 7. WELDING:
REVIEW ALL GEOTECHNICAL REPORT REQUIREMENTS AND VERIFY WITH GEOTECHNICAL ENGINEER	A. ALL STRUCTURAL FIELD WELDING (INCLUDES DECKING) INCLUDES DECKING) INCLUDES DECKING B. NON-DESTRUCTIVE TESTING OF MOMENT-RESISTING SPACE FRAMES INC C. STRUCTURAL LIGHT GAGE METAL FRAMING INC
	 8. BOLTING: A. HIGH STRENGTH BOLTING B. EXPANSION BOLTS IN CONCRETE OR MASONRY 9. STRUCTURAL STEEL:
STRUCTURAL SHEATHING SCHEDULE: OF SHEATHING: ~ 5/8" APA RATED SHEATHING W/ 8D RING SHANK GALV. NAILS AT 4" O.C. EDGE AND 6" O.C. INTERIOR SPACING (GLUE AND NAIL)	A. MILL REPORTS & IDENTIFICATION OF STEEL (AFFIDAVIT OF COMPLIANCE) SAMPLING & TESTING 10. APPROVED FABRICATORS:
TIC STORAGE FLOOR: ~ 3/4" APA RATED SHEATHING W/ #10 SCREWS AT 4" O.C. EDGE AND 12" O.C. INTERIOR SPACING (GLUE AND SCREW)	MUST SUBMIT CERTIFICATE OF COMPLIANCE FOR ALL OFFSITE FABRICATION SUCH AS STRUCTURAL STEEL, GLU-LAMS, PRECAST CONCRETE, ETC.
RCH AND SOFFIT CEILING: ~ 1/2" APA RATED SHEATHING W/ 8D RINGED GALV. NAILS AT 4" O.C. EDGE AND 8" O.C. INTERIOR SPACING OR 1x6" T&G PINE	11. ALL TESTS & INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT INSPECTION AGENCY. JOB SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR INSPECTIONS UNLESS THE STRUCTURAL ENGINEER IS CONTRACTED TO DO SO.
	NOTE: <u>IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO SEE</u> THAT THESE TESTS AND INSPECTIONS ARE PERFORMED.

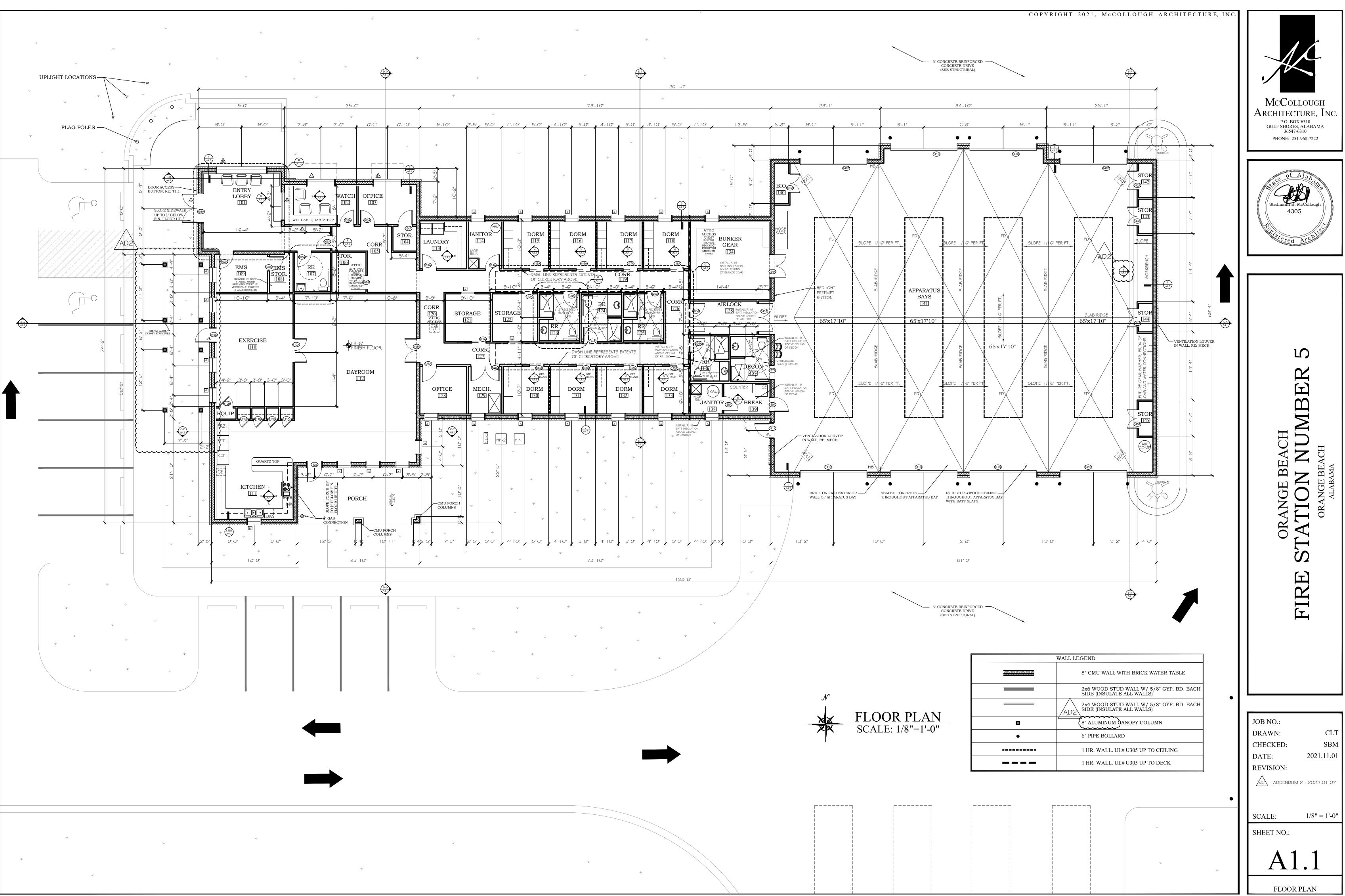
PER INTERN	ATIONAL BUILD	ING	CODE, 201	8		
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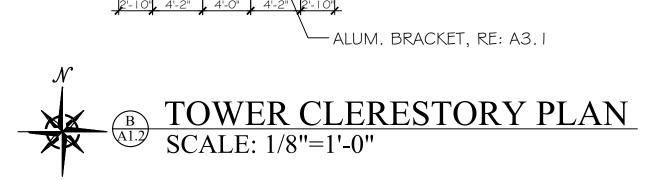
NSTRUCTION LL 20	DESIGNED FOR: 175 MPH (ULT.), 135 MPH ALLOWABLE STRESS DESIGN TERRAIN EXPOSURE CATEGORY: D GUST EFFECT FACTOR: 0.85 DEAD AND LIVE LOAD: INTERNAL PRESSURE: +/- 0.18 ROOF LIVE LOAD: 20 PSF RISK (OCCUPANCY) CATEGORY: IV ROOF DEAD LOAD: 15 PSF WALL PRESSURE FOR COMPONENTS AND CLADDING:				
	Vasd (ULT) mph AREA (sqft) INTERIOR (ZONE 4) END (ZONE 5) 124 (160) up to 50 53.3/-57.6 53.3/-71.2 51 to 130 47.7/-52.2 47.7/-60.0				
RE NT (psf) T	USE WIND SPEED REQUIRED BY DESIGN CRITERIA LISTED ABOVE FOR EXPOSURE D END ZONE= WITHIN 4FT OF MAIN BUILDING CORNERS <u>NOTE TO TRUSS MANUFACTURER:</u> ABOVE 'BOXED' SECTION IS THE WRITTEN SPECIFICATIONS FOR THE TRUSS DESIGN OF THIS PROJECT. TRUSS MANUFACTURE SHALL MEET OR EXCEED THE REQUIREMENTS FOR WIND/GRAVITY DESIGN AS LISTED INCLUDING REQUIRED WIND SPEED, TERRAIN EXPOSURE CATEGORY, INTERNAL PRESSURE, BUILDING CATEGORY AND BUILDING RISK CATEGORY.				
.4 PSF					

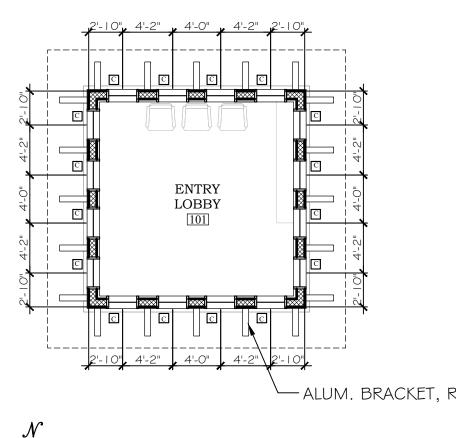


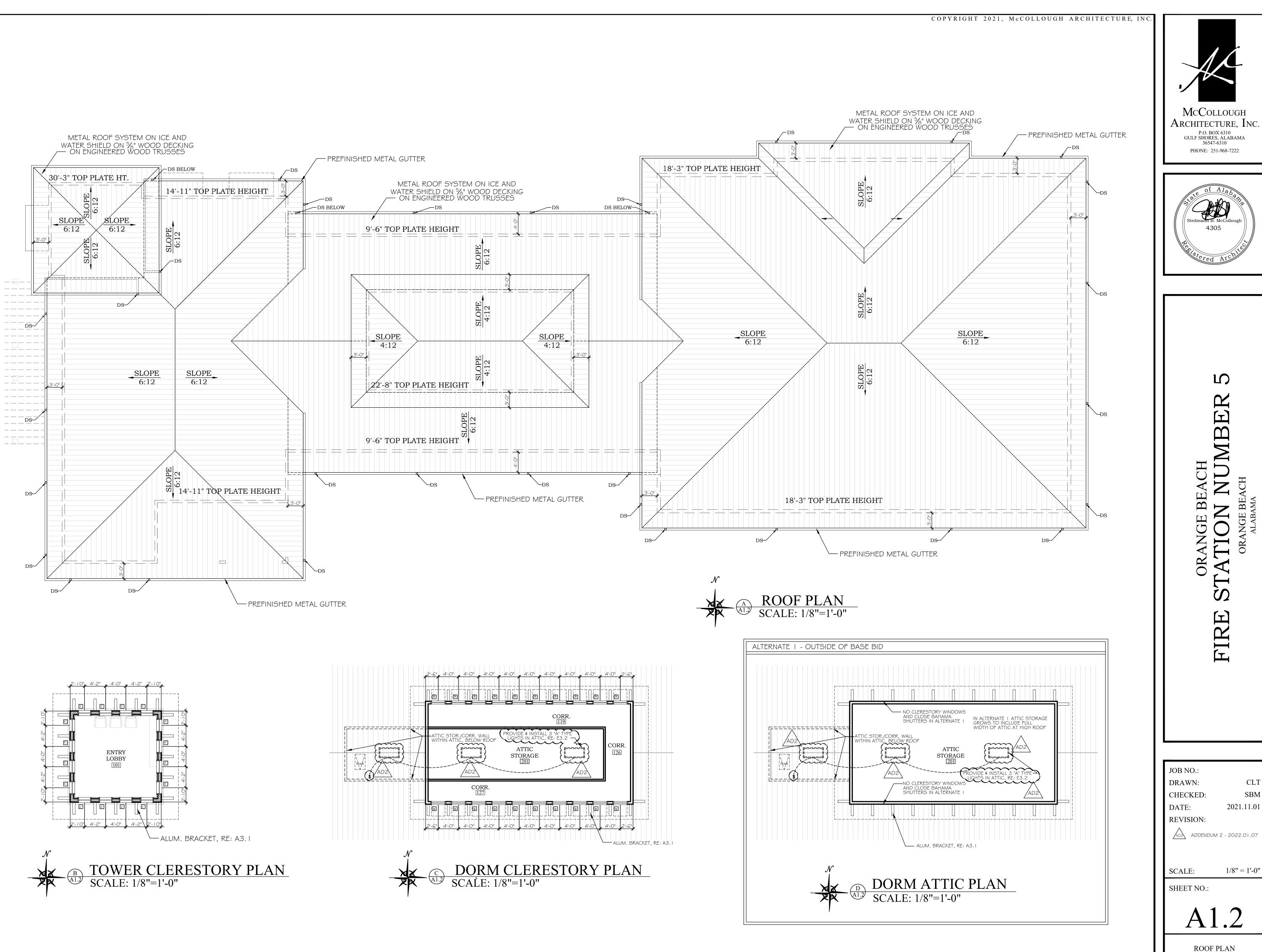


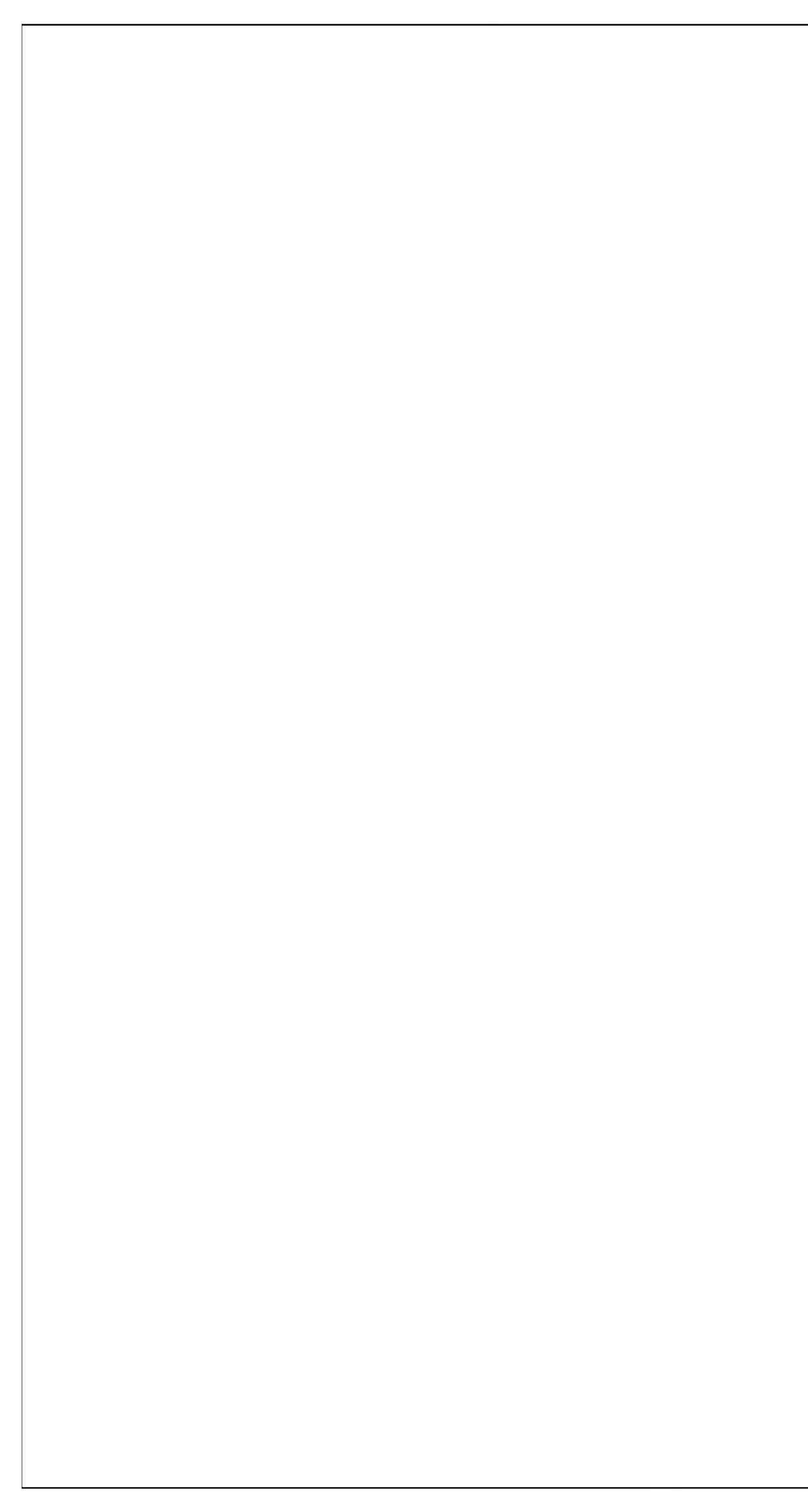






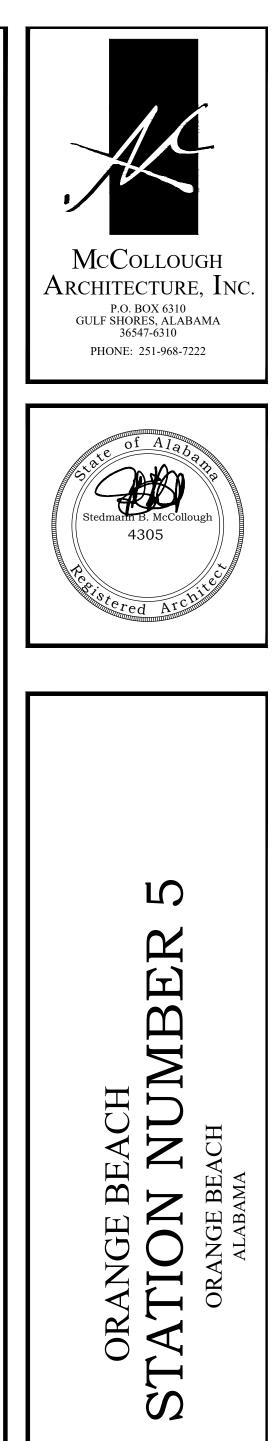






DOOM FINICH SCHEDIILE

				ROOM FINISH SCHE	DULE					
ROOM	ROOM	FLOORS		WALLS (1)		CEILI	CEILING			
NUMBER	NAME	FLOOR	BASE	MATERIALS	FINISH	MATERIAL	FINISH	HEIGHT	REMARKS	
101	ENTRY LOBBY	LVT (8)	VINYL	GYP.BD.	PAINT (G)	GYP.BD.	PAINT	±30'-4"		
102	WATCHMAN AREA	LVT (8)	VINYL	GYP.BD.	PAINT (G)	GYP.BD.	PAINT	2'-0"		
103	OFFICE	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP. BD.	PAINT	12'-0"		
104	STORAGE	LVT (8)	VINYL	GYP.BD.	PAINT (6)	GYP.BD.	PAINT	9'-0"		
105	CORRIDOR	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	10'-0"		
106	STORAGE	LVT (8)	VINYL	GYP.BD.	PAINT (6)	GYP.BD.	PAINT	9'-0"		
107	RESTROOM	P.T. (9)	C.T.	M.R. GYP.BD.	PAINT (6)	GYP.BD.	PAINT	9'-0"		
108	EMS STORAGE	LVT (8)	VINYL	GYP.BD.	PAINT (G)	GYP.BD.	PAINT	9'-0"		
109	EMS	LVT (8)	VINYL	GYP.BD.	PAINT (G)	GYP.BD.	PAINT	9'-0"		
110	EXERCISE	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	12'-0"	PROVIDE SEPARATE HVAC SYSTEM	
	KITCHEN	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	12'-0"		
112	DAYROOM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	12'-0"		
113	LAUNDRY	LVT (8)	VINYL	M.R. GYP.BD.	PAINT (G)	GYP. BD.	PAINT	9'-0"		
114	JANITOR	LVT (8)	VINYL	M.R. GYP.BD.	PAINT (G)	GYP. BD.	PAINT	9'-0"		
115	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
116	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
117	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
118	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
119	CORRIDOR	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	VARIES	LOW CLG @ 10'-0" HIGH CLG. @ ±22'-8" RE:D/A1.2	
120	CORRIDOR	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	10'-0"	RE:D/A1.2	
121	STORAGE	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	9'-0"	<u>AD2</u>	
122	STORAGE	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	9'-0"		
123	RESTROOM	P.T. (9)	C.T.	M.R. GYP.BD.	PAINT (7)	GYP. BD.	PAINT	10'-0"	C.T. WALLS AT SHOWER (SEE ELEVATIONS)	
124	RESTROOM	P.T. (9)	C.T.	M.R. GYP.BD.	PAINT (7)	GYP. BD.	PAINT	10'-0"	C.T. WALLS AT SHOWER (SEE ELEVATIONS)	
125	RESTROOM	P.T. (9)	C.T.	M.R. GYP.BD.	PAINT (7)	GYP. BD.	PAINT	10'-0"	C.T. WALLS AT SHOWER (SEE ELEVATIONS)	
126	CORRIDOR	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	±22'-8"	RE:D/A1.2	
127	CORRIDOR	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP.BD.	PAINT	VARIES	LOW CLG @ 10'-0" HIGH CLG. @ ±22'-8" RE:D/A1.2	
128	OFFICE	LVT (8)	VINYL	GYP.BD.	PAINT (5)	GYP. BD.	PAINT	9'-0"		
129	MECHANICAL	LVT (8)	VINYL	M.R. GYP.BD.	PAINT (G)	GYP. BD.	PAINT	9'-0"	AD2	
130	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
131	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
132	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
133	DORM	LVT (8)	VINYL	GYP.BD.	PAINT (5)	ACT	-	9'-0"		
134	BUNKER GEAR	SEALED CONC. (2)	VINYL	M.R. GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	M.R. GYP.BD.	PAINT	10'-0"	PROVIDE SEPARATE HVAC SYSTEM	
135	AIRLOCK	SEALED CONC. (2)	VINYL	M.R. GYP.BD.	PAINT (7)	M.R. GYP.BD.	PAINT	10'-0"		
136	RESTROOM	P.T. (9)	C.T.	M.R. GYP.BD.	PAINT (7)	GYP. BD.	PAINT	9'-0"	C.T. WALLS AT SHOWER (SEE ELEVATIONS)	
137	DECONTAMINATION	P.T. (9)	-	P.T. (9)	-	M.R. GYP.BD.	PAINT	10'-0"	P.T. UP TO 7'	
138	JANITOR	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"		
139	BREAK	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"		
140	BIOHAZARD	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"	3/4" PLYWOOD ABOVE CLG. JOISTS FOR STOR. ABOVE	
4	APPARATUS BAYS	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	PLYWOOD (3)	PAINT	8'-0"	CMU - EPOXY LOW/ACRYLIC HIGH, RE: A-A & F-F / A4. I	
142	STORAGE	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"	3/4" PLYWOOD ABOVE CLG. JOISTS FOR STOR. ABOVE	
143	STORAGE	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"	3/4" PLYWOOD ABOVE CLG. JOISTS FOR STOR. ABOVE	
144	STORAGE	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	10'-0"	3/4" PLYWOOD ABOVE CLG. JOISTS FOR STOR. ABOVE	
145	STORAGE ZADZ	SEALED CONC.	VINYL	GYP.BD. & PAINTED CMU BLOCK	PAINT (7)	GYP. BD.	PAINT	I O'-O''	3/4" PLYWOOD ABOVE CLG. JOISTS FOR STOR. ABOVE	
	ATTIC STORAGE								CELLING HEIGHT CHANGES AT CLEDESTORY	
201		3/4" PLYWOOD	-	GYP.BD.	TAPE & FLOAT	GYP. BD.	TAPE ∉ FLOAT		CEILING HEIGHT CHANGES AT CLERESTORY	
CONC = C MR = MOI SCF = SE	CELAIN TILE	C.T.= CERAMIC	C TILE AD2	NOTES (1) INSULATE ALL STUD WALLS; R-13 MIN. IN 4" C (2) NOT USED (3) PAINTED PLYWOOD CEILING WITH BATT STRIPS (4) NOT USED	AVITY AND R-19 MIN. IN AT 4'-0" O.C. EACH WA	I G" CAVITIES. Y		(6) SW- 91 (7) SW- 76 (8) SHAW F	22 REFLECTIONS. 38 STARDEW 63 MONORAIL SILVER 100R 1029 PACIFIC SUMMIT 5 2000 MOTION WHITE SERIES	



JOB NO.:	
DRAWN:	CLT
CHECKED:	SBM
DATE:	2021.11.01
REVISION:	
AD2 ADDENDUN	12-2022.01.07
SCALE:	
SHEET NO.:	
A2	2.2
ROOM FINISH	I SCHEDULE

FIRE

