University of North Alabama
Office of Procurement
UNA Box 5025
Florence, AL 35632
Phone: (256)765-4206
Fax: (256)765-4329

==========

INVITATION FOR BIDS:

Sealed Proposals for furnishing materials, equipment or services as described herein will be received at the Purchasing Department, Bibb Graves Hall, Room 126, University of North Alabama, Florence, Alabama, until 2:00 p.m. local time on June 22, 2015.

It is understood that the owner may accept any or all items at the prices listed in this proposal within a noted timeframes on the specification page. Time is of the essence to this bid and if delivery is not made within the time specified, the University reserves the right to cancel any order placed as a result of this bid. This bid may be withdrawn at any time prior to the scheduled time for the opening of bids, or any authorized postponement thereof.

DIRECTIONS FOR MAILING BIDS:

Do not place more than one bid in an envelope. Envelopes containing more than one bid may not be opened in time for a bid to be considered.

Envelopes containing bids must be sealed, marked and addressed as follows:

ADDRESSED TO:	(If via any postal service University of North Alabama Purchasing Department - Bid 2015-26 UNA M/S 5025 One Harrison Plaza Florence, AL 35632-0001	(If hand carry) University of North Alabama Purchasing Department - Bid 2015-26 Bibb Graves Hall, Room 126 One Harrison Plaza Florence, AL 35632-0001
BID FOR:	Waste Equipment & Removal Bid No. 2015-26	

CAUTION – The above mailing address line, UNA Box 5025, is the address for the University of North Alabama Central Mail Room and is not part of the physical address for the University of North Alabama Purchasing Department. Envelopes or packages addressed to this box number may not be received in the Purchasing Department by the specified bid due date and time. It is the bidder's responsibility to ensure that the bid is received in the Purchasing Department by the date and time specified; no assumptions should be made in regard to an extension due to unforeseen circumstances of any kind, no due date or time will change without advance written notice from the Procurement Office.

Bidders are strongly cautioned to mail or ship bids to allow ample time for receipt in the Purchasing Department, not the Central Mail Room nor Central Receiving. Overnight or next day delivery services may not be adequate. Since bids must be received in a sealed envelope, faxed or emailed bid copies cannot be accepted.

Bids received in the Purchasing Department after the specified date and time set forth above will not be considered

Bids will be opened in Bibb Graves Hall, Room 126 at 2:00 p.m. local time on June 22, 2015

Revised 1/30/08

____ initial
I have read and understand the contents of this page

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INSTRUCTIONS TO BIDDERS

1. All bidders are to submit bids on proposal forms furnished by the Assistant Vice President of Business Services, University of North Alabama (forms enclosed). All bid forms are to be signed in all designated spaces by an authorized officer or employee of the bidder. Telephone bids will not be accepted. Bids submitted by "fax" machine will not be accepted. All bids are to be mailed or delivered in a sealed envelope.

2. All bidders shall base their proposals on the exact schedule of equipment, material or service specifications herein.

3. Pictures, descriptions, and specifications should accompany all bids when required or desirable. Samples may be required and, if so, shall be furnished free of cost to the Owner.

4. Reference to manufacturers, suppliers, catalog numbers, etc., is intended to set quality standards and does not preclude bids from others as long as quality standards are met. Offers of equal items shall state the brand and number or level of quality. Alternates will not be considered unless they conform to the specifications.

5. All bidders are required to submit unit prices and extended prices, where applicable, for each item bid. Where the unit price and the extended total price do not agree, the unit price shall prevail.

6. The Owner reserves the right to accept any or all items on any bidder's proposal at the unit price submitted. The Owner reserves the right to reject any and all bids and to waive informalities.

7. All prices submitted on the proposal are to be delivered prices to the University of North Alabama and shall not include any state or local sales tax.

8. Bidders should sign & return all pages of the complete bid to imply complete understanding and compliance with all bid requirements.

9. All questions should be directed to the Purchasing Office, University of North Alabama, UNA Box 5025, Florence, AL 35632-0001, phone 256/765-4206.

10. Should a bidder find discrepancies in, or omissions from the bid documents or should he be in doubt as to their meaning, he should at once notify the Owner who will send written instructions to all bidders.

11. Bids received after the bid opening date and time, or any authorized postponement thereof, will not be considered.

12. **EQUAL EMPLOYMENT OPPORTUNITY/U.S. FAIR LABOR STANDARDS ACT:** By signing this proposal, bidder certifies that bidder is in compliance with the nondiscrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375, relative to Equal Employment Opportunity for all persons without regard to race, color, religion, sex, or national origin, and the rules and regulations prescribed by the Secretary of Labor, Veteran's Act 38USC4212, Section 503 - Rehabilitation act of 1973 Title I of the Americans with Disabilities Act of 1990 42USC12101, and that any and all goods were produced in compliance with all applicable requirements of Sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

13. Verbal communication before or while Bid is open shall have no force or affect whatsoever toward this bid as written, or the entire agreement. All parties represent that no promises, representations, or inducements have been made with respect to the subject matter of the bid nor a contract, except as specifically set forth herein. The bid or final contract, agreement, or order, can only be changed, altered, modified or amended by written agreement from both parties.

____ initial
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==========

PROPOSAL FORM

In compliance with the University of North Alabama **INVITATION FOR BIDS** and **INSTRUCTIONS TO BIDDERS**, the undersigned hereby proposes to furnish and supply items to the University of North Alabama, Florence, Alabama, in strict accordance with the **SCHEDULE** and **SPECIFICATIONS**.

The undersigned bidder/proposer hereby certifies that it, its officers, partners, owners, providers, representatives, employees, and parties in interest, including the affiant, has not in any way colluded, conspired, connived or agreed, directly or indirectly, with any other bidder/proposer, potential bidder/proposer, firm or person, in connection with this solicitation, to submit a collusive or sham bid/proposal, to refrain from bidding/proposing, to manipulate or ascertain the price(s) of other bidders/proposers or potential bidders/proposers, or to secure through any unlawful act an advantage over other bidders/proposers or the university.

The prices submitted herein have been arrived at in an entirely independent and lawful manner by the bidder/proposer without consultation with other bidders/proposers or potential bidders/proposers or foreknowledge of the prices to be submitted in response to this solicitation by other bidders/proposers or potential bidders/proposers on the part of the bidder/proposer, its officers, partners, owners, providers, representatives, employees, or parties in interest, including the affiant.

DATED:_____

COMPANY NAME:_____

BY:_____
(Signature)

_____
(Typed or Printed Name)

_____
(Title)

BUSINESS ADDRESS:_____

_____

_____

TELEPHONE:_____

Email Address:_____
This address will be used to publish the bid tabulation & any other communication regarding bid results

If Bidder is a Corporation, write the State of Incorporation, and if a Partnership, give full name of partners, using space below.

____ initial
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UNIVERSITY OF NORTH ALABAMA
VENDOR CERTIFICATION
PURSUANT TO ACT NO 2012-491 & ACT2014-044

ALABAMA LAW (SECTION 31-13-9 , CODE OF ALABAMA 1975: By signing a contract resulting from this proposal, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the state of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom.

ALABAMA LAW SECTION 16-25-26C , CODE OF ALABAMA 1975; Legislation requiring the University of North Alabama to report to Retirement Systems of Alabama individuals paid for personal services who are currently receiving benefits from TRSA or ESA became effective October 1, 2013. No minimum level of compensation was defined. **Any individual receiving direct or indirect compensation from this contract who is a retiree receiving benefits from the State of Alabama Retirement System MUST NOTIFY UNA of this status along with Bid/RFP Submission.**

Bidder hereby certifies full compliance with Act No. 2012-491 & Act No. 2014-044:

Date: _____

Company:_____

Authorizing Signature: _____

Printed Name: _____

Title: _____

State** of* _____County** of* _____

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CERTIFICATE OF COMPLIANCE WITH THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535, as amended by Act 2012-491)

DATE:_____ RE: Contract/Grant/ Incentive ***(describe by number or subject):*** **BID/RFP_____**

_____by and between

_____(Contractor/Grantee) and

_____(State Agency, Department or Public Entity)

The undersigned hereby certifies to the State of Alabama as follows:

1. The undersigned holds the position of with the Contractor/Grantee named above, and is authorized to provide representations set out in this Certificate as the official and binding act of that entity, and has knowledge of the provisions of THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 201 1-535 of the Alabama Legislature, as amended by Act 2012-491) which is described herein as "the Act".
2. Using the following definitions from Section 3 of the Act, select and initial either (a) or (b), below, to describe the Contractor/Grantee's business structure. BUSINESS ENTITY. Any person or group of persons employing one or more persons performing or engaging in any activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood, whether for profit or not for profit. "Business entity" shall include, but not be limited to the following:
   a) Self-employed individuals, business entities filing articles of incorporation, partnerships, limited partnerships, limited liability companies, foreign corporations, foreign limited partnerships, foreign limited liability companies authorized to transact business in this state, business trusts, and any business entity that registers with the Secretary of State.
   b) Any business entity that possesses a business license, permit, certificate, approval, registration, charter, or similar form of authorization issued by the state, any business entity that is exempt by law from obtaining such a business license, and any business entity that is operating unlawfully without a business license.

EMPLOYER.: Any person, firm, corporation, partnership, joint stock association, agent, manager, representative, foreman, or other person having control or custody of any employment, place of employment, or of any employee, including any person or entity employing any person for hire within the State of Alabama, including a public employer.
This term shall not include the occupant of a household contracting with another person to perform casual domestic labor within the household.

____(a) The Contractor/Grantee is a business entity or employer as those terms are defined in Section 3 of the Act.

____(b) The Contractor/Grantee is not a business entity or employer as those terms are defined in Section **3** of the Act.

3. As of the date of this Certificate, Contractor/Grantee does not knowingly employ an unauthorized alien within the State of Alabama and hereafter it will not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama;
4. Contractor/Grantee is enrolled in E-Verify unless it is not eligible to enroll because of the rules of that program or other factors beyond its control.

Certified this____ day of_____ 20_____. _____
Name of Contractor/Grantee/Recipient

By:_____

Its:_____

The above Certification was signed in my presence by the person whose name appears above, on this_____ day of _____20____.

WITNESS:_____ *Printed name of Witness:* _____

____ initial
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State of Alabama

Disclosure Statement

(Required by Act 2001-955)

ENTITY COMPLETING FORM Agreement Number

ADDRESS

CITY, STATE, ZIP TELEPHONE NUMBER ( )

STATE AGENCY/DEPARTMENT THAT WILL RECEIVE GOODS, SERVICES, OR IS RESPONSIBLE FOR GRANT AWARD

ADDRESS

CITY, STATE, ZIP TELEPHONE NUMBER ( )

This form is provided with:

☐ Contract ☐ Proposal ☐ Request for Proposal ☐ Invitation to Bid ☐ Grant Proposal

Have you or any of your partners, divisions, or any related business units previously performed work or provided goods to any State Agency/Department in the current or last fiscal year?

☐ Yes ☐ No

If yes, identify below the State Agency/Department that received the goods or services, the type(s) of good or services previously provided, and the amount received for the provision of such goods or services.

Have you or any of your partners, divisions, or any related business units previously applied and received any grants from any State Agency/Department in the current or last fiscal year?

☐ Yes ☐ No

If yes, identify the State Agency/Department that awarded the grant, the date such grant was awarded, and the amount of the grant.

1. List below the name(s) and address(es) of all public officials/public employees with whom you, members of your immediate family, or any of your employees have a family relationship and who may directly personally benefit financially from the proposed transaction. Identify the State Department/Agency for which the public officials/public employees work. (Attach additional sheets if necessary.)

2. List below the name(s) and address(es) of all family members of public officials/public employees with whom you, members of your immediate family, or any of your employees have a family relationship and who may directly personally benefit financially from the proposed transaction. Identify the public officials/public employees and State Department/Agency for which the public

____ initial

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officials/public employees work. (Attach additional sheets if necessary.)

If you identified individuals in items one and/or two above, describe in detail below the direct financial benefit to be gained by the public officials, public employees, and/or their family members as the result of the contract, proposal, request for proposal, invitation to bid, or grant proposal. (Attach additional sheets if necessary.)

Describe in detail below any indirect financial benefits to be gained by any public official, public employee, and/or family members of the public official or public employee as the result of the contract, proposal, request for proposal, invitation to bid, or grant proposal. (Attach additional sheets if necessary.)

List below the name(s) and address(es) of all paid consultants and/or lobbyists utilized to obtain the contract, proposal, request for proposal, invitation to bid, or grant proposal:

By signing below, I certify under oath and penalty of perjury that all statements on or attached to this form are true and correct to the best of my knowledge. I further understand that a civil penalty of ten percent (10%) of the amount of the transaction, not to exceed $10,000.00, is applied for knowingly providing incorrect or misleading information.

Signature Date

Notary's Signature Date Date Notary Expires

Act 2001-995 requires the disclosure statement to be completed and filed with all proposals, bids, contracts, or grant proposals to the State of Alabama in excess of $5,000.

____ initial
I have read and understand the contents of this page

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REQUIREMENTS/ SPECIFICATIONS

GENERAL

Introduction:

The University of North Alabama (UNA) requests proposals from qualified firms to provide trash removal services for two Student Housing Facilities. The first building (Mattielou Hall) is located at 810 North Pine Street and the second building (Olive Hall) is located at 710 Olive Street. UNA also request proposals to supply, install, and maintain a trash compactor at each location which will accept a 3 cy trash container per the provided specifications. These two facilities are currently under construction with an anticipated completion date for Building 1 of July 8, 2015 and completion date for Building 2 of December 1, 2015.

Waste Generation Assumptions:

UNA has estimated that each student will produce approximately 0.188 cubic yards of waste per month. Building 1 will house 326 students. Therefor it is estimated that building 1 will require service for one 3yd container per day Monday through Friday with an additional 3cy container serviced on Monday for a total of 6 lifts per week. Building 2 will house 438 students. Therefor it is estimated that building 2 will require service for one 3yd container Monday through Saturday with an additional 3 cy container serviced on Monday and Saturday for a total of 8 lifts per week. UNA will require lifts to be completed during normal business hours Monday through Friday. Saturday lifts will be determined upon selection of a vendor.

Compactor Equipment Requirements:

Building 1 and Building 2 are both constructed to house an apartment style compactor. The compactor rooms were designed to house a Wastequip Model C-33X-APT Apartment compactor with (3) 3cy containers (See attached cut sheet). Necessary utilities are available in the trash room for the vendor installed equipment. Each facility has a roll-up door with direct access to the lifting area (See attached floor plans). It is the intent of this RFP for the service company to provide, install, and service this equipment. All associated costs shall be included as part of the monthly fees as an equipment fee.

EQUIPMENT TO BE PROVIDED AND INSTALLED:

Mattielou Hall (Building 1) (Estimated start date – August 1, 2015)

- (1) Wastequip Model C-33X-APT trash compactor
- (3) 3 cy containers as specified to match and attach to trash compactor
- Unit connection to existing electrical disconnect located adjacent to the compactor. Electrical supply is from a 30-amp, 208-volt 3-phase disconnect
- All necessary electrical and control wiring to safely operate trash compactor
- Color to be selected by Owner from manufacturer's standard colors

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Olive Hall (Building 2) (Estimated start date – January 1, 2016)

- (1) Wastequip Model C-33X-APT trash compactor
- (3) 3 cy containers as specified to match and attach to trash compactor
- Unit connection to existing electrical disconnect located adjacent to the compactor. Electrical supply is from a 30-amp, 208-volt 3-phase disconnect
- All necessary electrical and control wiring to safely operate trash compactor
- Color to be selected by Owner from manufacturer's standard colors

Safety Requirements

- Unit to be Underwriters Laboratories (UL) listed
- Provide required safety interlock switches to all gates and doors
- Provide key actuated start switch and emergency stop button
- Compactor shall comply with all OSHA requirements

Installation Requirements

- Installation shall comply with all State of Alabama code requirements.
- Installer will work with the UNA Facilities Department for all phases of installation and final connection to electrical service.
- Provide on-site Owner training on the operation, maintenance and safety features
- Proposer shall respond on site within 48 hours of call for warranty service.

PROJECT TIME LINE:

June 5, 2015	RFP Release Date
June 10, 2015	Voluntary Pre-proposal Meeting on Site for Interested Firms at 1:00 PM
June 12, 2015	Written Questions due from Proposers by 4:00 PM
June 15, 2015	Owner's Written Response to Questions
June 22, 2015	Proposals Due by 2:00 p.m.
June 24, 2015	UNA Review of Proposals and Notice of Intent-to-Award
June 24, 2015	UNA to issue Purchase Order to successful proposer
July 29, 2015	Proposed Installation complete

****

For any questions regarding ***use or needed performance of this equipment and service***
Contact Michael Gautney (256)765-4354 email mbgautney@una.edu
For questions regarding ***bid submission***
Contact the Office of Procurement, Cindy Conlon (256)765-4293; email chconlon@una.edu

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==========

This form must be completed and returned before any contract(s) will be issued by the University of North Alabama

BID SHEET

The following format for submitting fee structure is listed below. Any additional items the vendor deems necessary for clarification are accepted. **Equipment price posted here MUST REFLECT a Delivered & Installed Price; NO Additional expense will be approved for labor & delivery.**

Mattielou Hall (Building 1)

Monthly Equipment Fee _____ Provide terms of equipment lease (attach details)

Monthly Service Rate _____

State of Alabama Disposal Fee _____

Fuel Surcharge _____

Environmental Fee _____

Regulatory Recover Fee _____

TOTAL FEE (Building 1) _____

Special Trips for Service (each) _____

Olive Hall (Building 2)

Monthly Equipment Fee _____ Provide terms of equipment lease (attach details)

Monthly Service Rate _____

State of Alabama Disposal Fee _____

Fuel Surcharge _____

Environmental Fee _____

Regulatory Recover Fee _____

TOTAL FEE (Building 2) _____

Special Trips for Service (each) _____

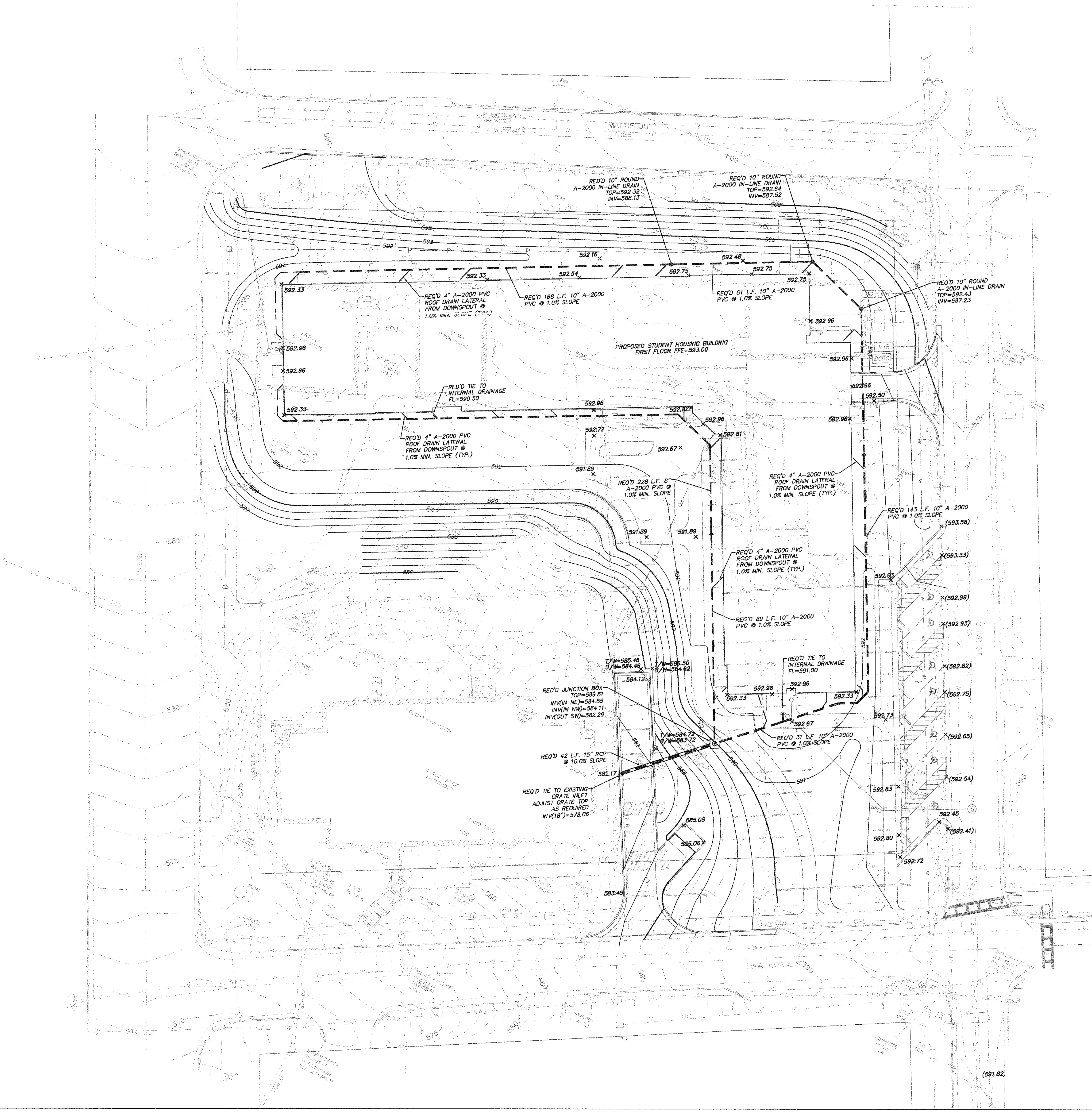
****

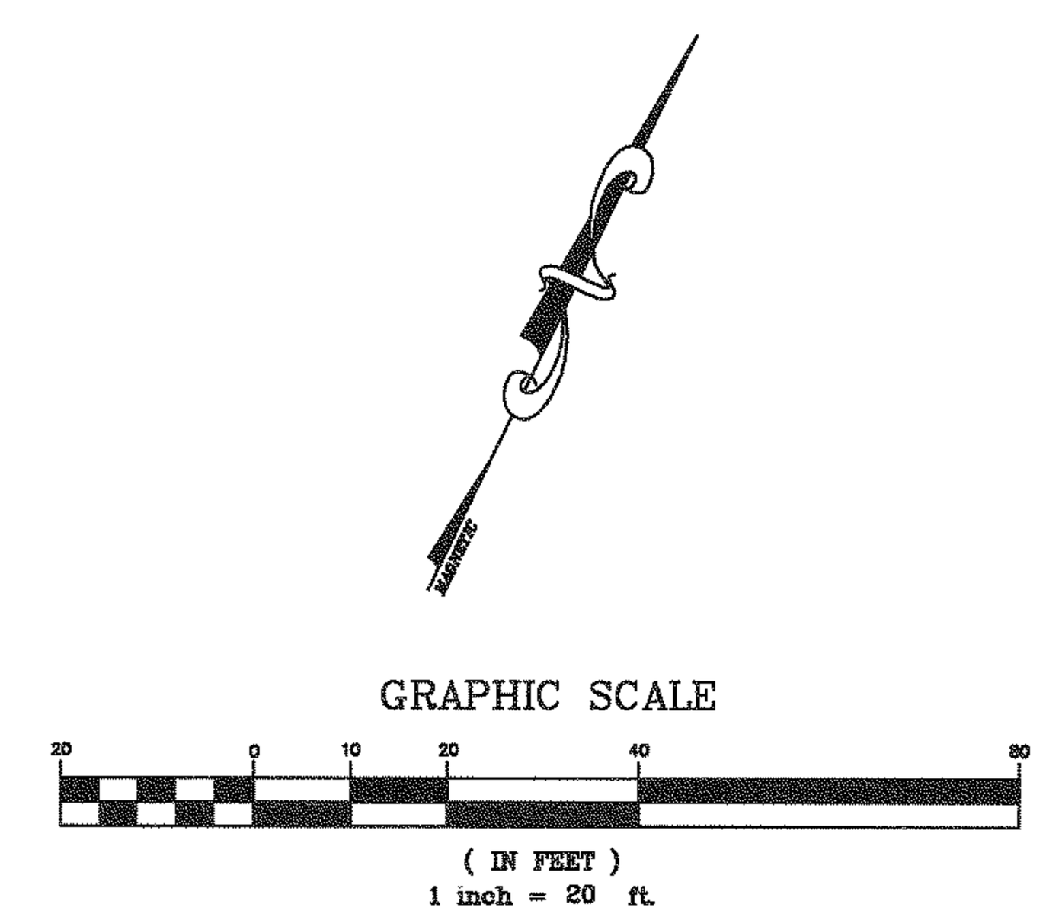
BIDDER TO ATTACH:

- **Formal quote on company letterhead with details of equipment and services offered.**
- **Specification Sheet(s) of Compactor proposed.**
- **Brief description of company qualifications for this job**

____ initial

I have read and understand the contents of this page





Legend

× 235.50	Proposed Spot Elevation
× (235.50)	Existing Spot Elevation
× T/W=235.50	Top of Wall
× B/W=235.50	Bottom of Wall at Finished Grade Elevation
—240—	Finished Grade Contour Line
---241---	Ex. Contour Line (1' Interval)
	Single Wing Catch Basin (SWCB)
	Flat Grate Inlet (FG Inlet) or Open Throat Inlet
	Storm Sewer Junction Box
	Storm Sewer (Size as Noted)

GOODWYN | MILLS | CAWOOD
2701 1st Avenue S, Suite 100 | Birmingham, AL 35233
Tel 205.879.44
GMCNETWORK.COM

ISSUE	DATE
CONTRACT SET	07/18/14

drawn by:
checked by:

UNIVERSITY OF NORTH ALABAMA
STUDENT HOUSING - BUILDING 1

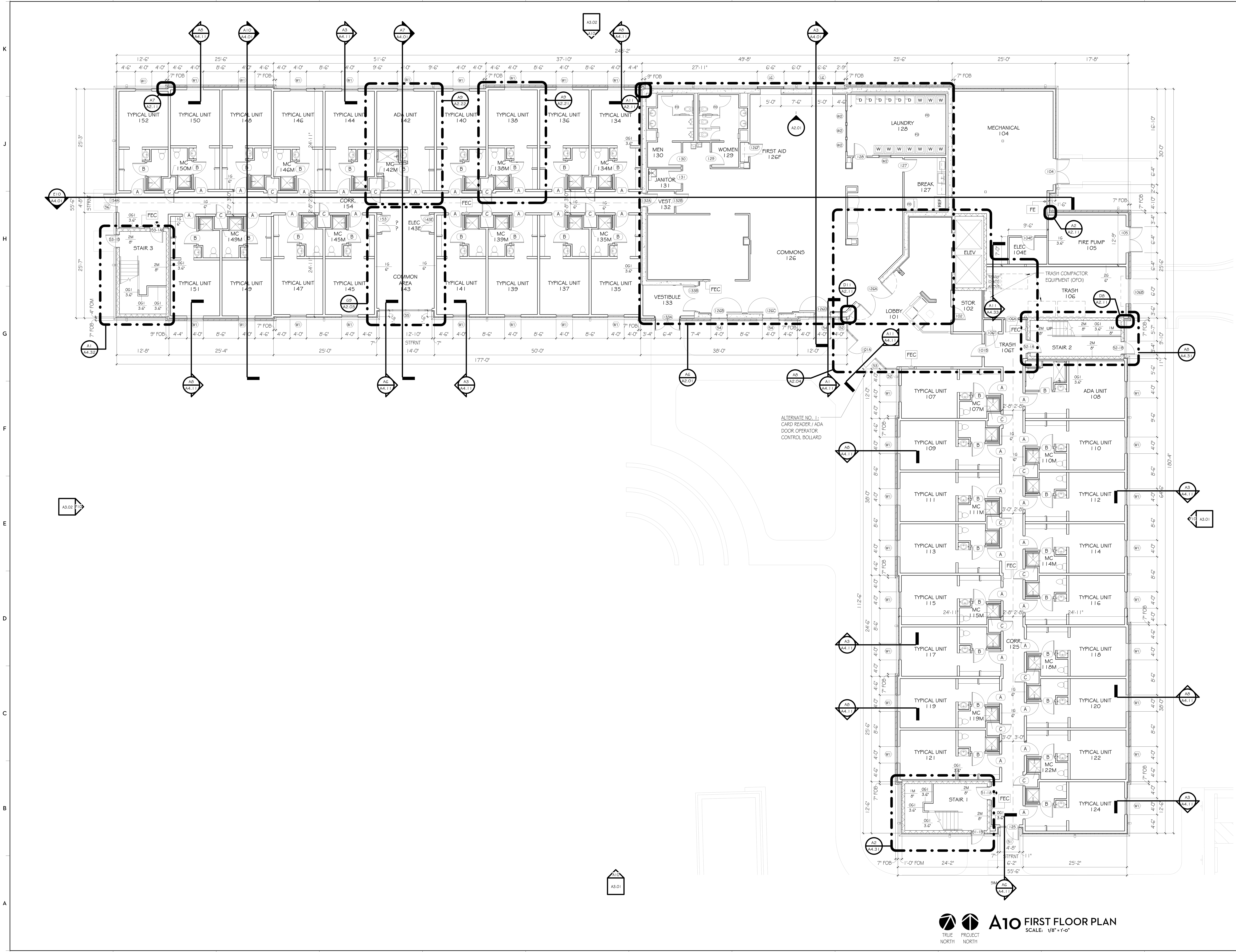
BUILDING 1

ABC # 2013547
GMC # ABHM130031
FOR CONSTRUCTION

SITE GRADING AND DRAINAGE PLAN

C2.0

sheet of



GOODWYN | MILLS | CAWOOD
2701 1st Avenue S, Suite 100 | Birmingham, AL 35233
Tel 205.879.4462 | GMCNETWORK.COM

ISSUE	DATE
CONTRACT SET	07/18/14

drawn by: MM
checked by: JSM

UNIVERSITY OF NORTH ALABAMA
STUDENT HOUSING - BUILDING 1

BUILDING 1

ABC # 2013547
GMC # ABHM130031

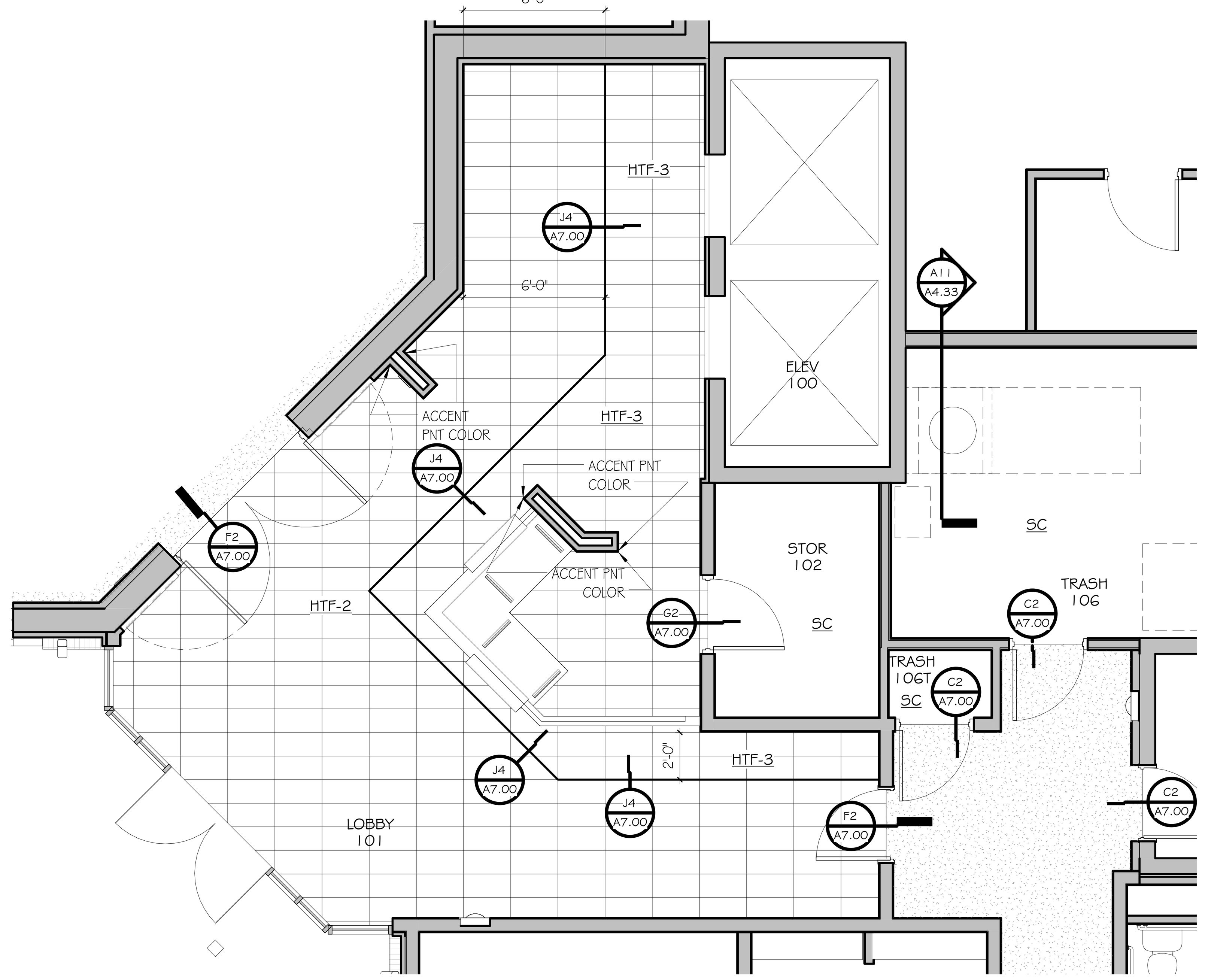
STATE of ALABAMA REGISTERED ARCHITECT JEFFREY A. BREWER 4752

FIRST FLOOR PLAN

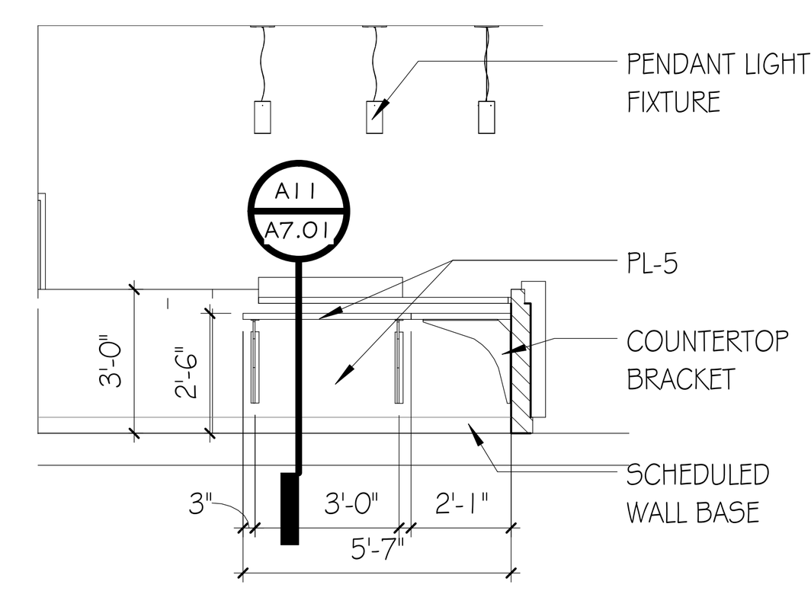
A1.01

sheet of

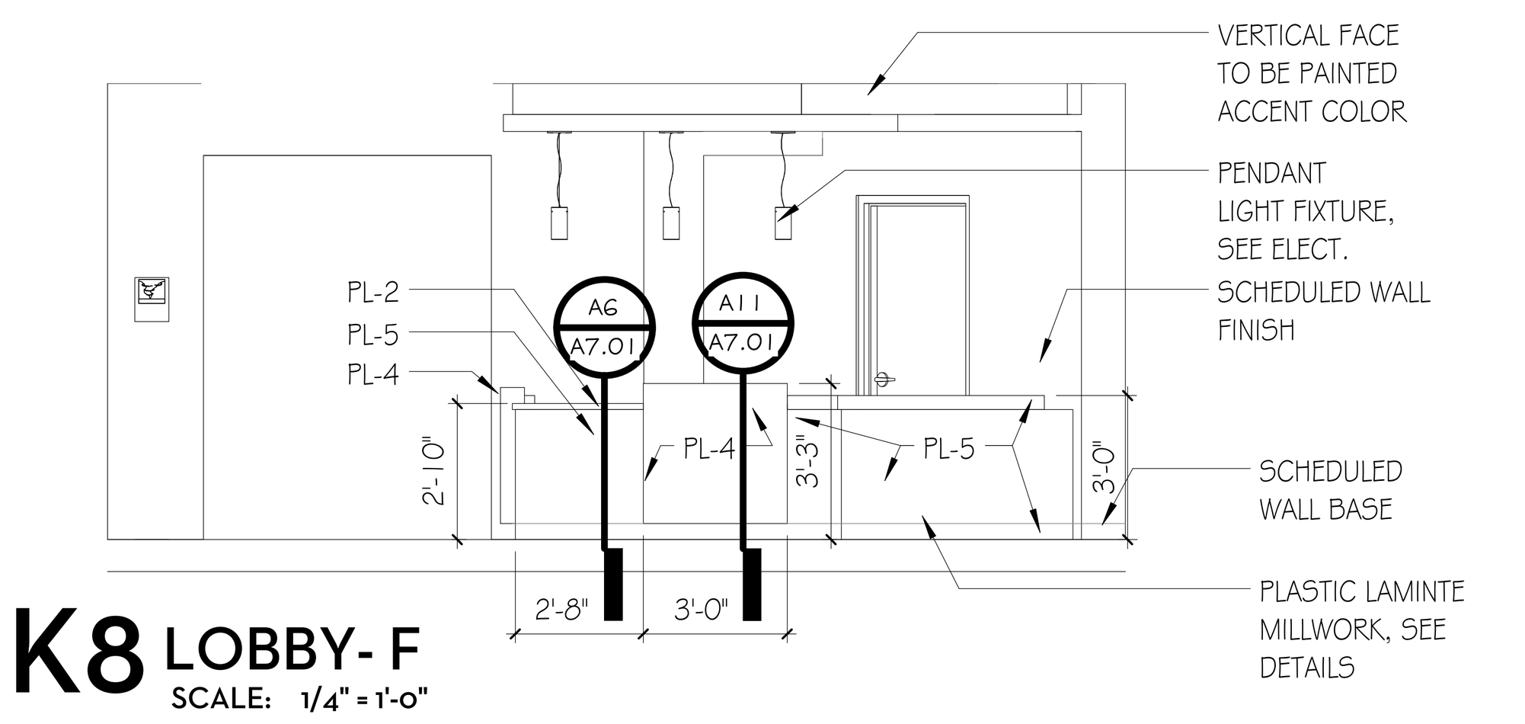
7/16/2014 5:35:06 PM



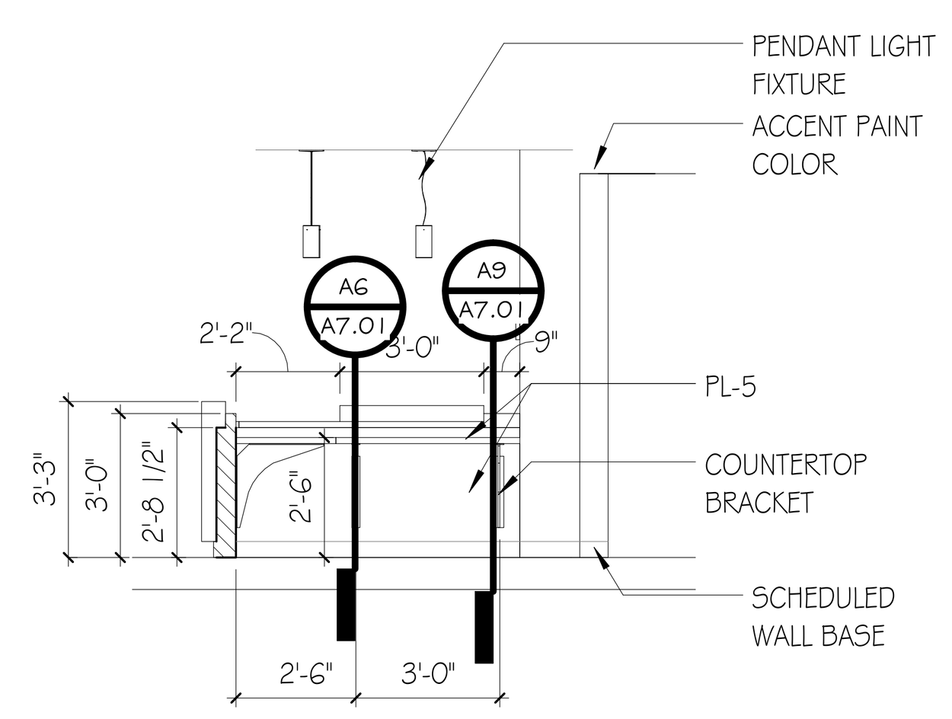
A1 LOBBY- FINISH PLAN
SCALE: 1/4" = 1'-0"



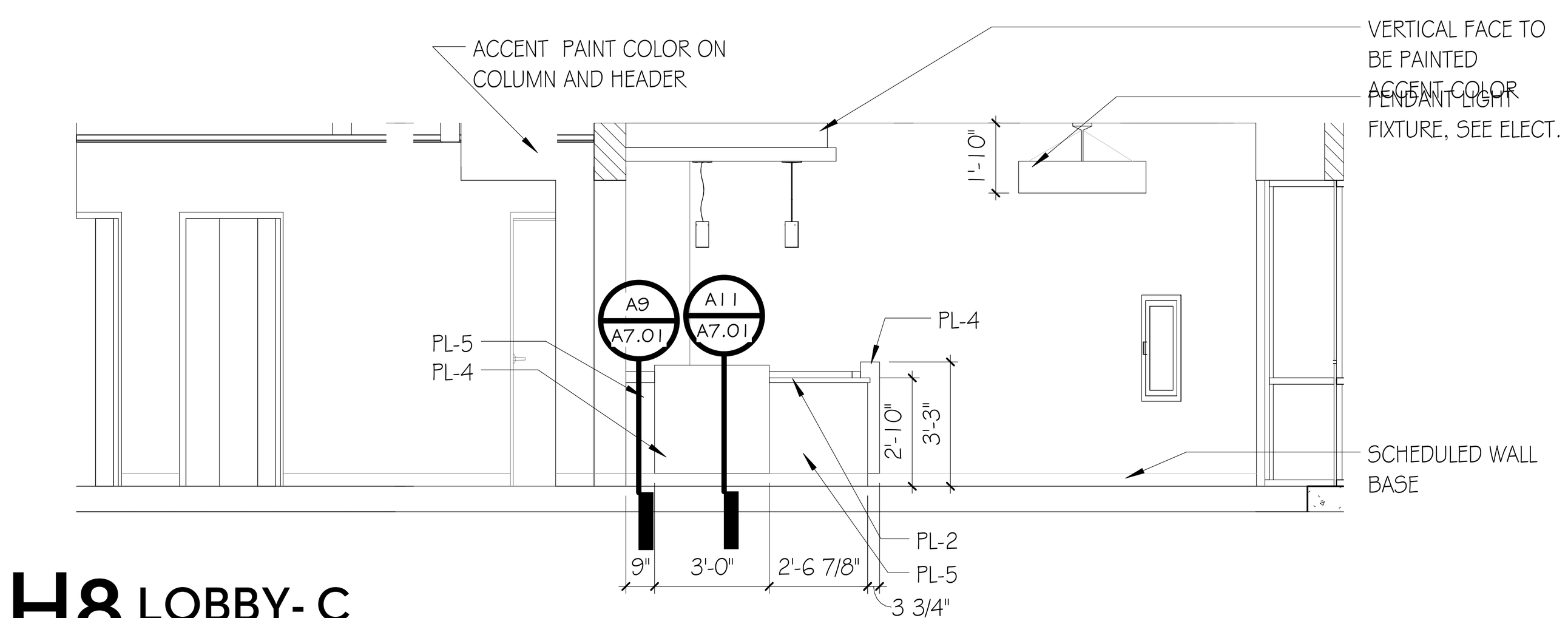
K6 LOBBY- H
SCALE: 1/4" = 1'-0"



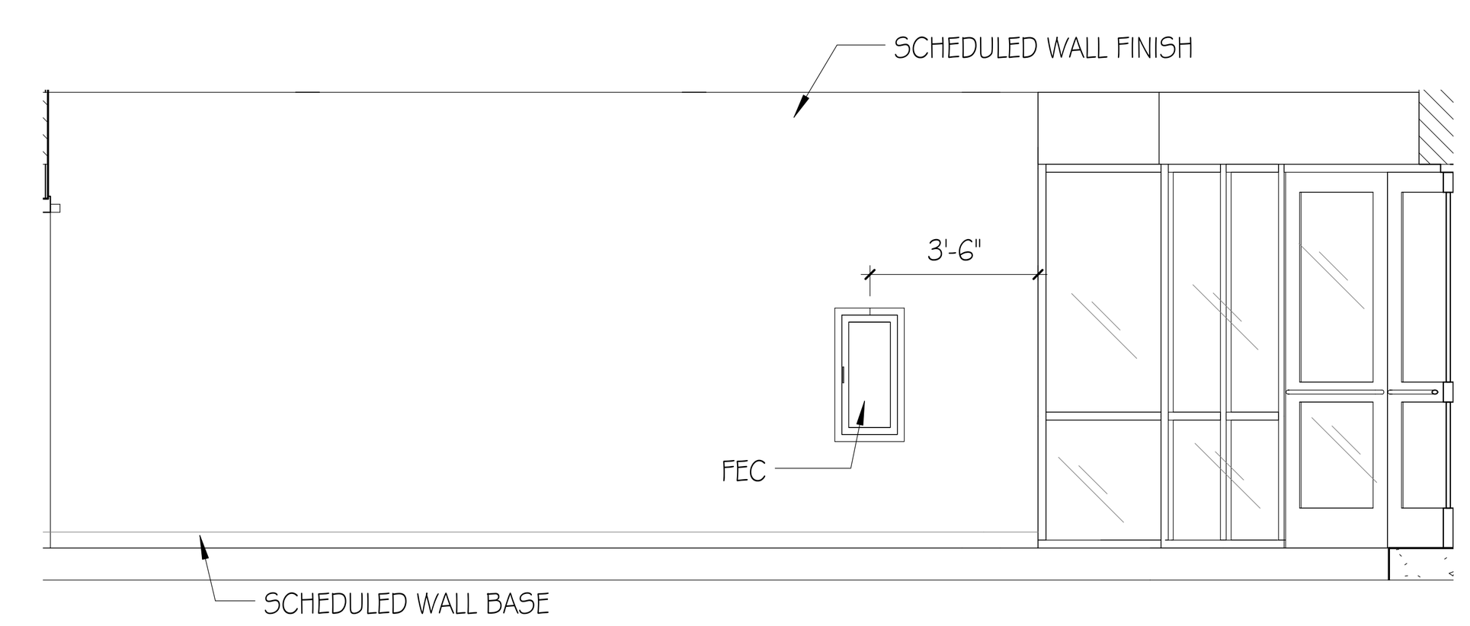
K8 LOBBY- F
SCALE: 1/4" = 1'-0"



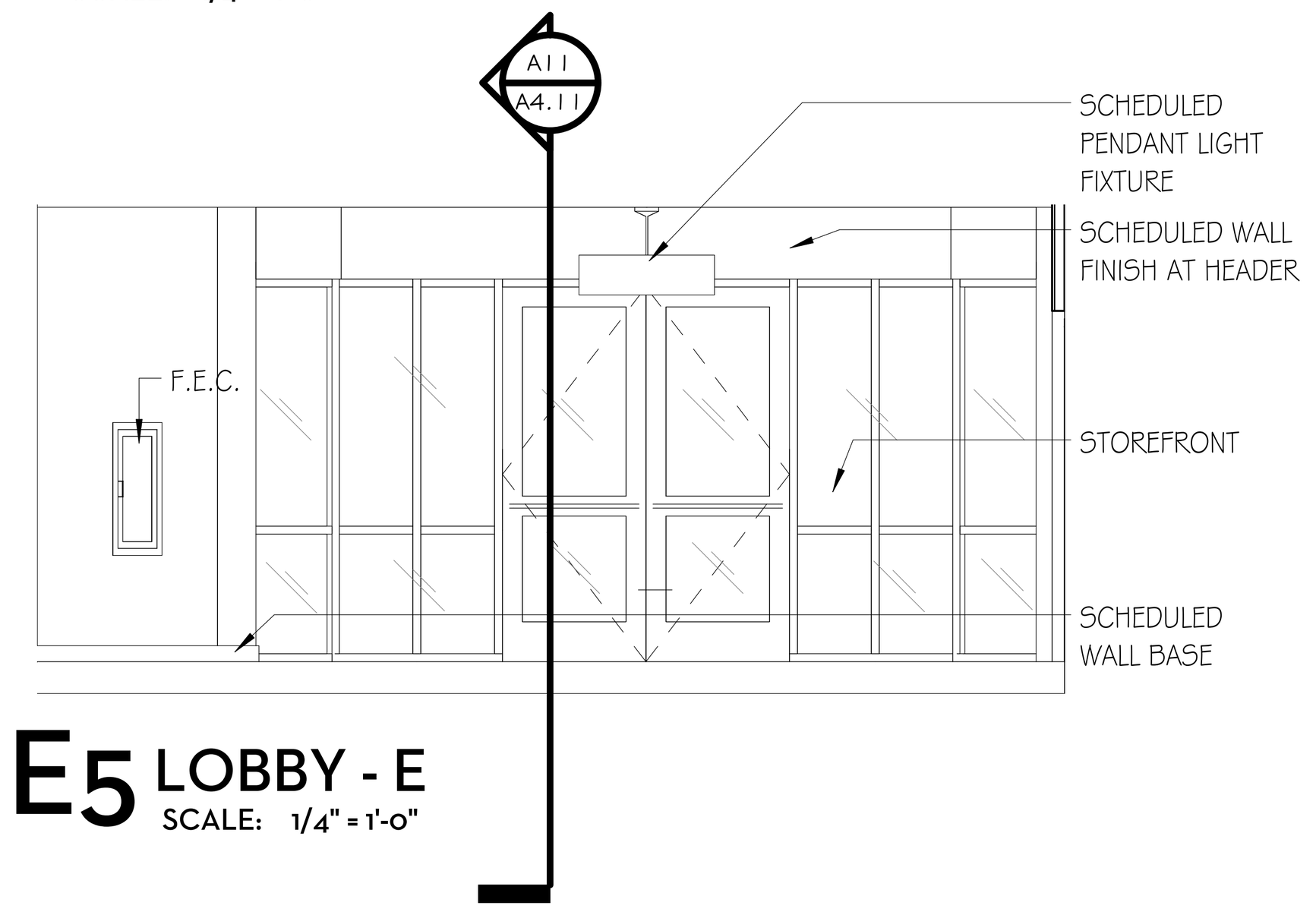
H6 LOBBY- G
SCALE: 1/4" = 1'-0"



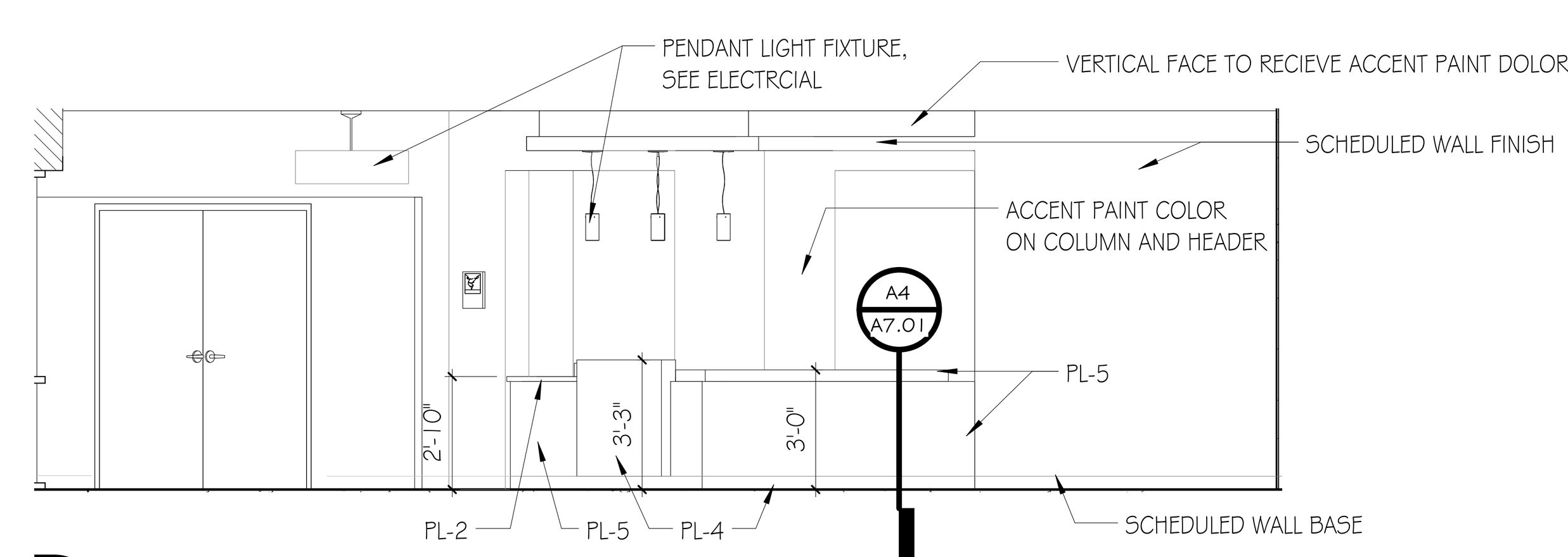
H8 LOBBY- C
SCALE: 1/4" = 1'-0"



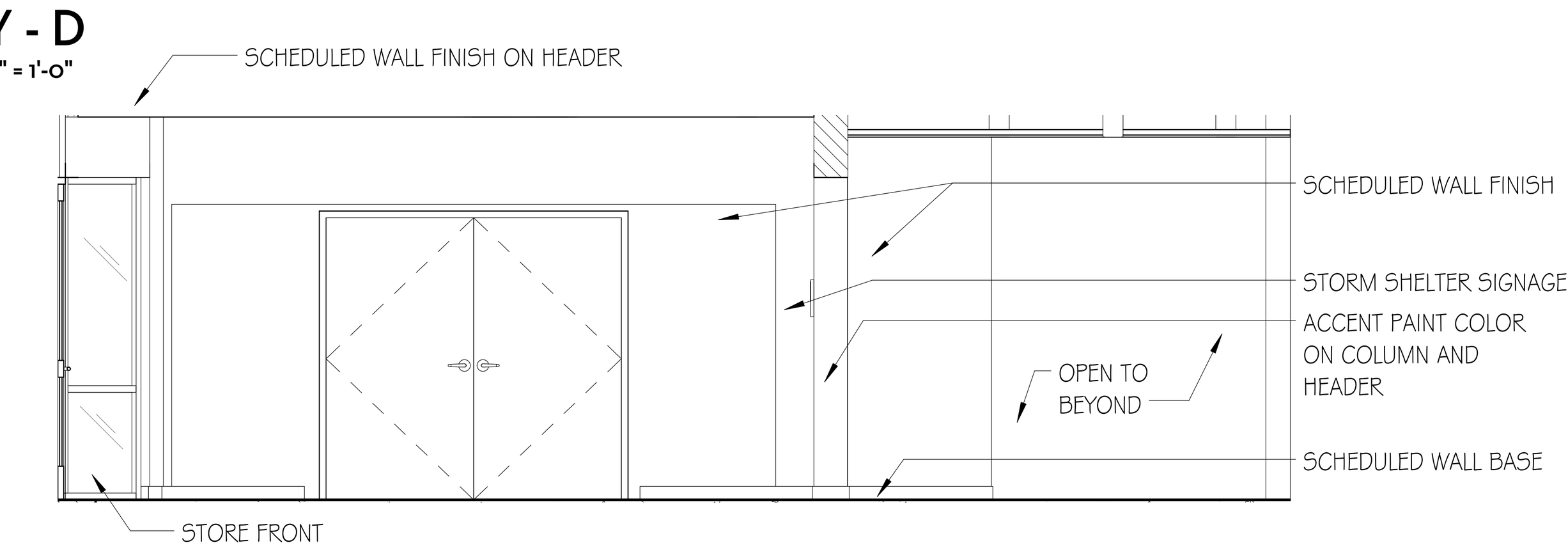
E7 LOBBY - D
SCALE: 1/4" = 1'-0"



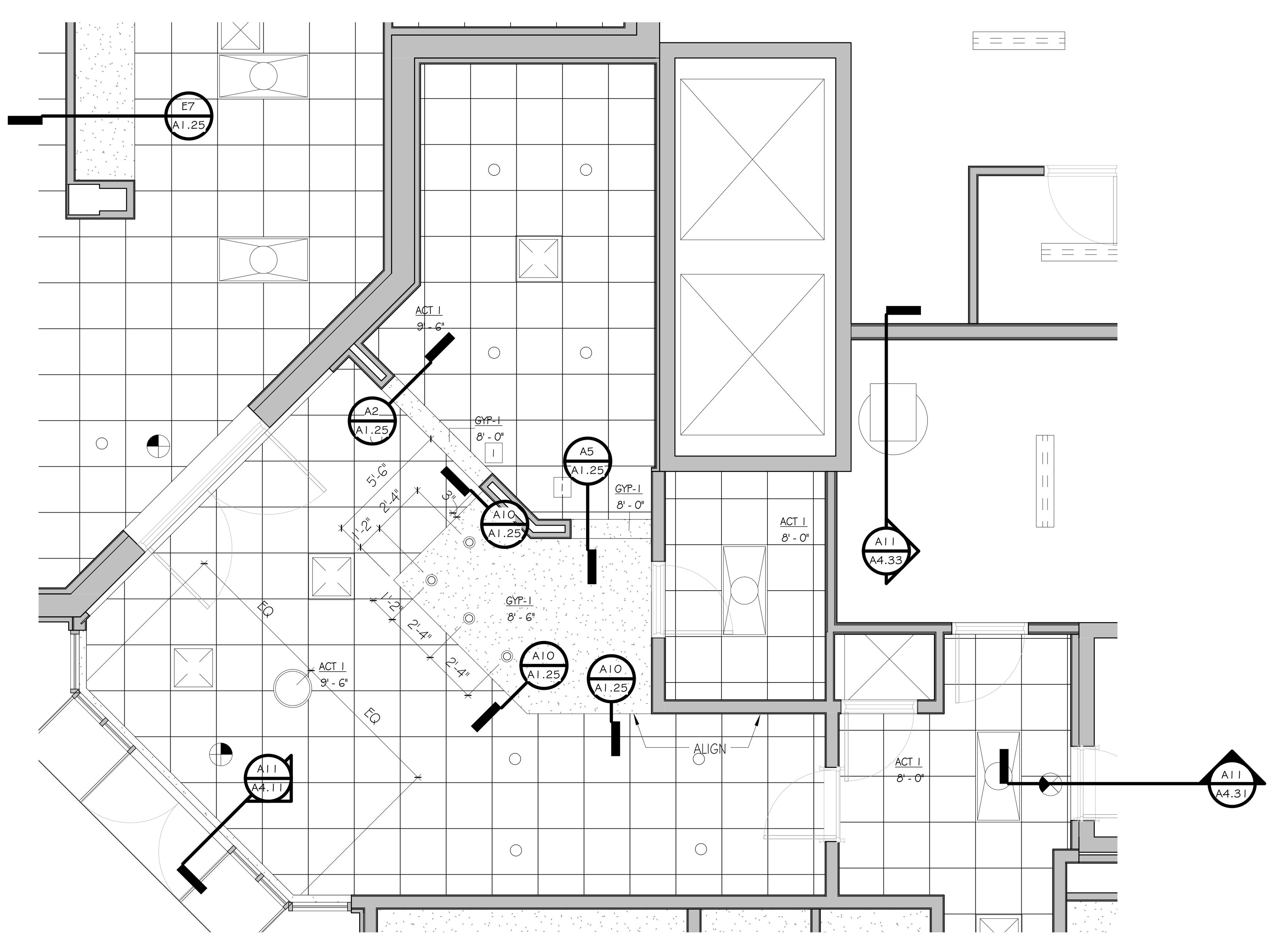
E5 LOBBY - E
SCALE: 1/4" = 1'-0"



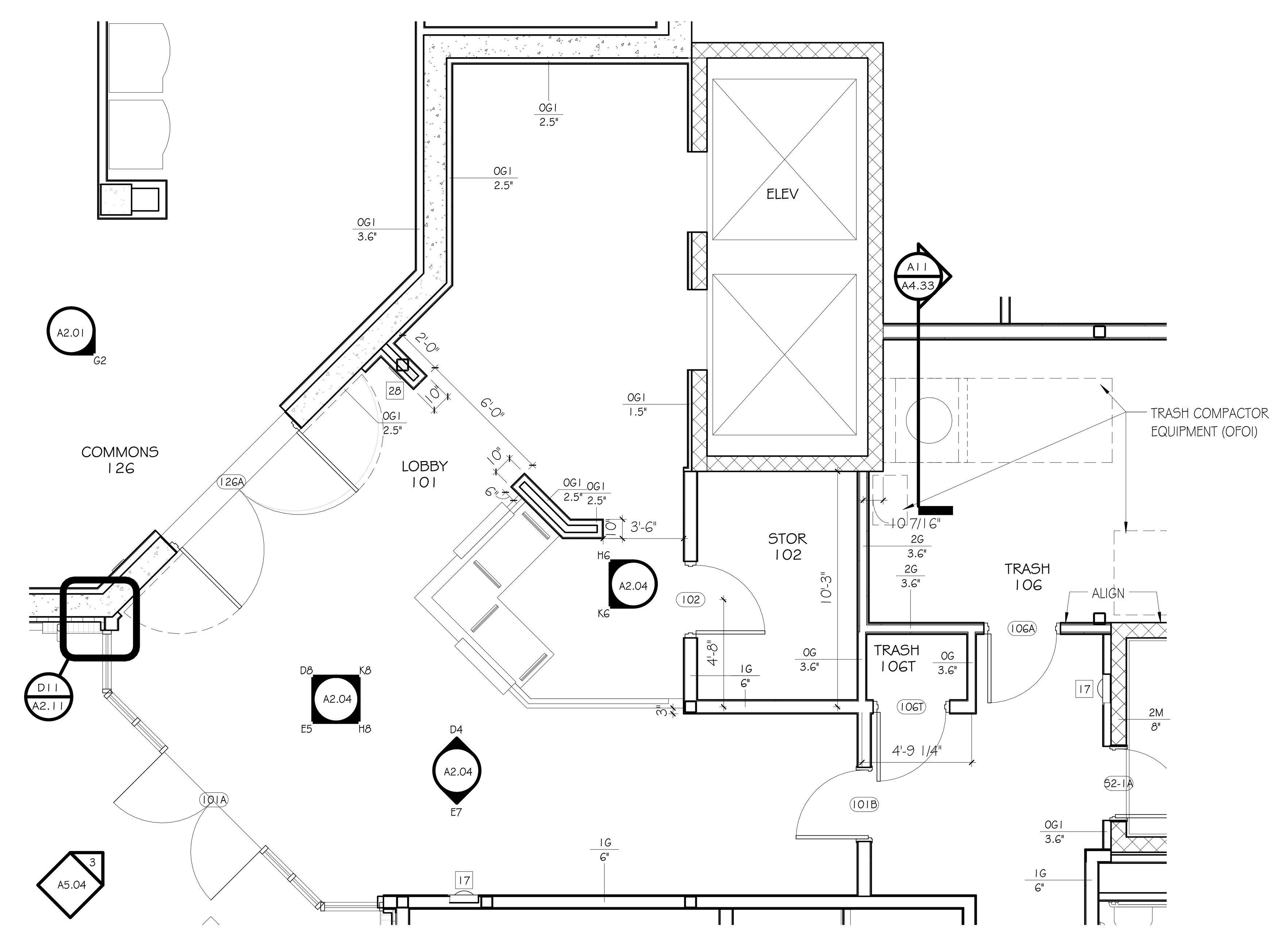
D4 LOBBY - B
SCALE: 1/4" = 1'-0"



D8 LOBBY - A
SCALE: 1/4" = 1'-0"



A4 LOBBY RCP
SCALE: 1/4" = 1'-0"



A8 LOBBY FLOOR PLAN
SCALE: 1/4" = 1'-0"

TOILET ACCESSORIES SPECIALTY EQUIPMENT SCHEDULE	
#	DESCRIPTION
1	TOILET PAPER DISPENSER- PROVIDE IN WALL BLOCKING
2	18" VERTICAL GRAB BAR- PROVIDE IN WALL BLOCKING.
3	42" HORIZONTAL GRAB BAR- PROVIDE IN WALL BLOCKING.
4	36" HORIZONTAL GRAB BAR- PORVIDE IN WALL BLOCKING
5	24" HORIZONTAL GRAB BAR- PROVIDE IN WALL BLOCKING
6	54" HORIZONTAL GRAB BAR- PROVIDE IN WALL BLOCKING
7	24" TOWEL BAR- PROVIDE IN WALL BLOCKING.
9	24" W x 36" H MIRROR
10	16" DEEP WIRE SHELF- MOUNT AT 60" A.F.F. IN ADA ROOM, MOUNT AT 42" A.F.F.
11	SHOWER CURTAIN ROD, VERIFY LENGTH IN FIELD. COORDINATE BLOCKING REQUIREMENTS WITH SHOWER INSERT VENDER. CURTAIN AND RINGS, N.I.C.
12	DRYER, N.I.C.
13	PAPER TOWEL DISPENSER, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
14	SOAP DISPENSER, N.I.C
15	MIRROR- 636" H X WIDTH OF OPENING.
16	TOILET PAPER DISPENSER, N.I.C.
17	SEMI-RECESSED FIRE EXTINGUISHER CABINET, WHITE
18	TOILET PARTITION
19	FIRE EXTINGUISHER
20	ELECTRIC WATER COOLER
21	MOP SINK
22	MOP HOLDER AND SHELF
23	REFRIGERATOR
24	COMMERCIAL ICE MAKER, FLOOR DRAIN BELOW.
25	COUNTERTOP MICROWAVE
26	VENDING MACHINE, N.I.C.
27	WASHING MACHINE, N.I.C.
28	STORM SHELTER SIGNAGE
34	SANITARY NAPKIN DISPOSER
35	WALL MOUNTED TELEVISION AND MOUNTING BRACKET, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
36	ROBE HOOK

REFLECTED CEILING PLAN

GENERAL NOTES

1. INTERIOR CEILING HEIGHTS AS INDICATED ON THE REFLECTED CEILING PLANS.
2. REFER TO CONSTRUCTION FLOOR PLANS FOR REQUIRED COMPOSITION OF WALL CONSTRUCTION.
3. LOCATION OF LIGHTS, DIFFUSERS, AND RETURN AIR GRILLES TO BE COORDINATED BETWEEN REFLECTED CEILING PLANS, LIGHTING PLANS, AND HVAC PLANS. FINAL LOCATION TO BE APPROVED BY ARCHITECT.
4. SEE FINISH LEGEND FOR CEILING FINIISH KEYS AND MATERIALS.
5. SEE SPECIFICATIONS FOR ADDITIONAL CEILING FINISH INFORMATION AND REQUIREMENTS. NOTIFY ARCHITECT WITH ANY DISCREPANCIES BETWEEN SPECIFICATION AND DRAWINGS.
7. WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER ABOUT DOOR.

DRAWING NOTES

1. SOFFIT TO BE PAINTED ADJACENT WALL COLOR.
2. SOFFIT TO BE PAINTED ACCENT COLOR.

REFLECTED CEILING PLAN LEGEND

CEILING FINISHES:

- 2'X2' LAY-IN ACOUSTICAL CEILING & GRID SYSTEM
- GYPSUM BOARD - INTERIOR EIFS SOFFIT - EXTERIOR
- EXPOSED STRUCTURE
- 16" X 72" METAL PLANK CEILING

MECHANICAL:

- SUPPLY DIFFUSER
- SUPPLY DIFFUSER
- RETURN AIR GRILL
- EXHAUST FAN

LIGHTING:

- FIRE ALARM
- EXIT SIGN

LIGHTING:

- 2X4 LIGHT FIXTURE
- 2X2 LIGHT FIXTURE
- LINEAR BOX FIXTURE
- SURFACE MOUNTED STRIP FLUORESCENT
- WALL MOUNTED STRIP FLUORESCENT
- SUSPENDED LINEAR FLUORESCENT FIXTURE
- RECESSED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- SURFACE MOUNTED LIGHT FIXTURE
- LARGE PENDENT FIXTURE

INTERIOR GENERAL NOTES

1. FURNITURE SHOWN FOR REFERENCE ONLY. NOT IN CONTRACT.
2. REFER TO FINISH LEGEND FOR PAINT COLORS CALLED OUT ON REFLECTED CEILING PLANS AND FINISH PLANS.
3. UNLESS OTHERWISE NOTED, ALL FLOOR TILE, CEILING GRID, AND LIGHT FIXTURES SHALL BE CENTERED IN ROOM/OPENING.
4. CONTRACTOR TO REVIEW WITH ARCHITECT, ON SITE, AREAS WITH MULTIPLE CEILING/WALL/FLOOR FINISHES BEFORE FINISH WORK BEGINS.
5. RUBBER BASE TO RUN AROUND CABINETRY IN UNITS.
6. REFER TO REFLECTED CEILING PLAN LEGEND ON OVERALL REFLECTED CEILING PLANS FOR ABBREVIATIONS AND FINISHES.
7. RUBBER BASE DOES NOT RUN IN FRONT OF SHOWER IN UNITS.
8. ALL DIRECTIONAL REFERENCES IN FINISH SCHEDULE REFER TO THE DIRECTION OF THE PLAN, NOT THE TRUE DIRECTION OF THE BUILDING.
9. WALL TILE AND BASE GROUT LINES SHALL ALIGN WITH FLOOR TILE.
10. EXTERIOR WINDOWS AT UNITS TO RECEIVE MINI BLINDS.
11. GROMMETS TO BE LOCATED IN FIELD AT ALL COUNTERTOPS WITH METAL BRACKET SUPPORTS. ALLOW FOR ONE GROMMET EVERY 36" O.C.
12. FIRST AID STORAGE IN STORM SHELTER TO RECEIVE 4 ROWS OF 16" DEEP WIRE SHELVING.
13. EACH UNIT BATHROOM TO RECEIVE (2) ROBE HOOKS. LOCATION IN ROOM T.B.D.

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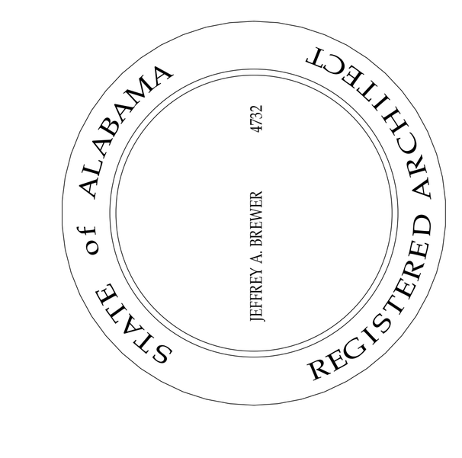
BUILDING 1

ABC # 2013547
GMC # ABHM130031



ENLARGED PLANS, ELEVATIONS, AND DETAILS

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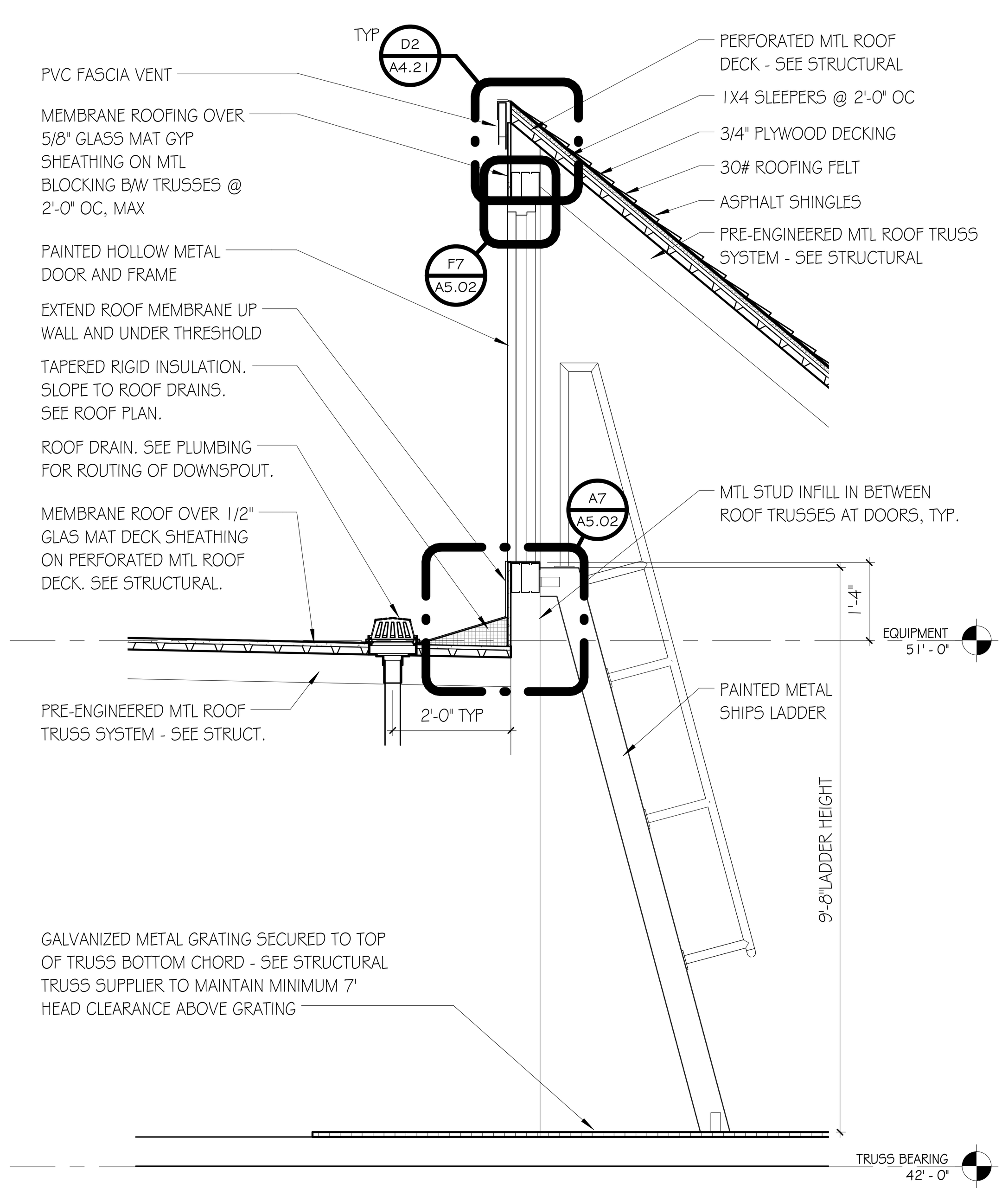
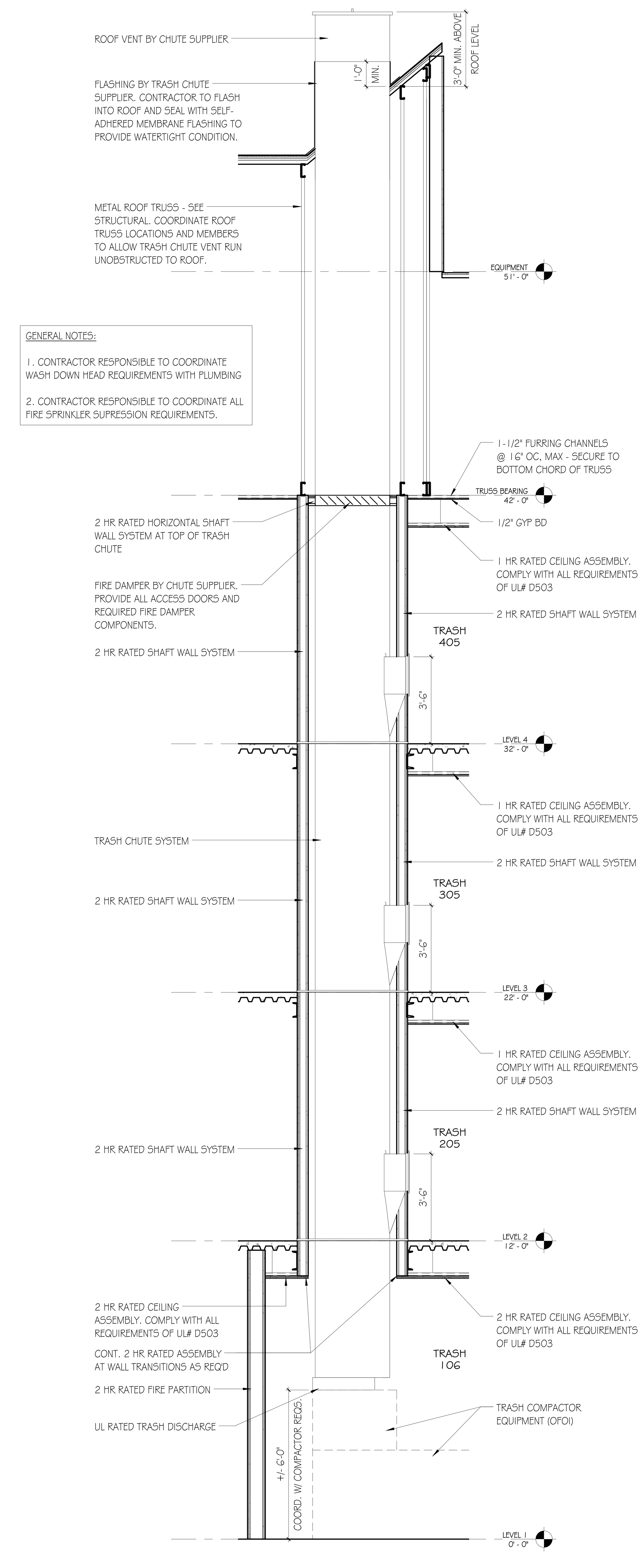


A2 ROOF ACCESS SECTION
SCALE: 1/2" = 1'-0"



A11 TRASH CHUTE SECTION
SCALE: 3/8" = 1'-0"

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STATE of ALABAMA REGISTERED ARCHITECT

VERTICAL CIRCULATION

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Project # 014-00062-00

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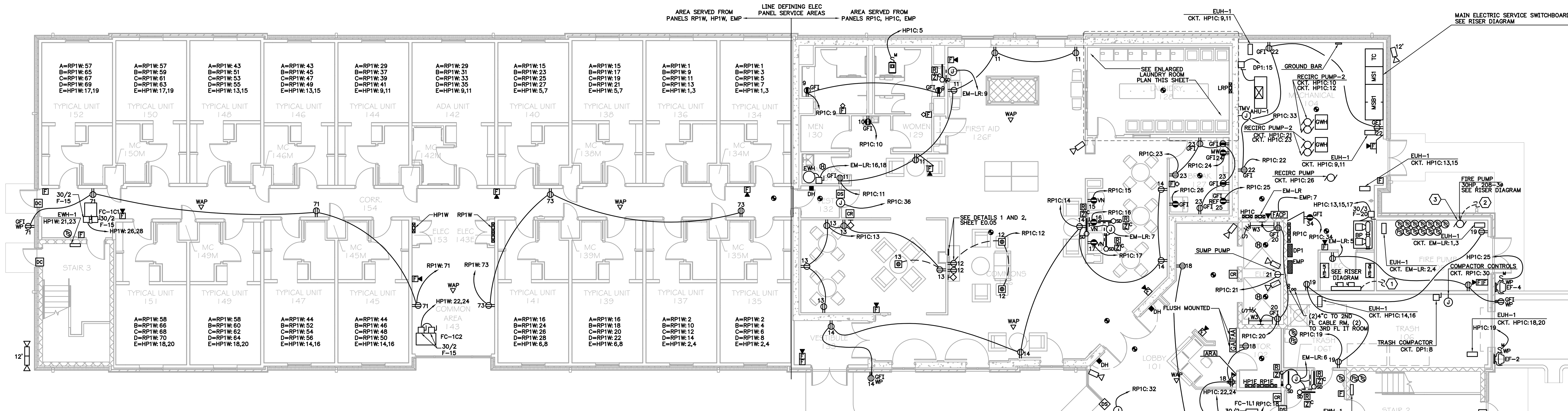
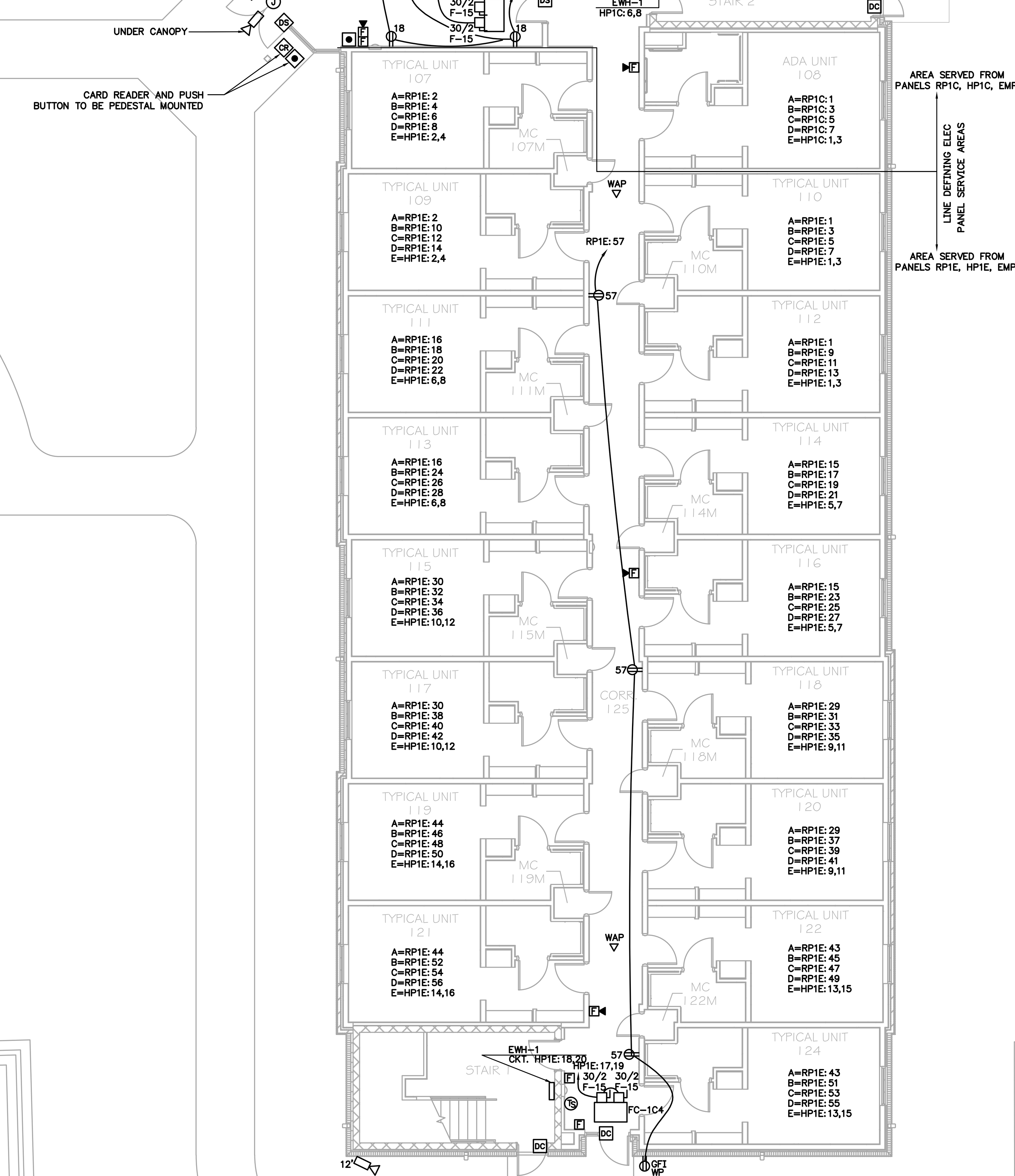
07/18/2014

GENERAL NOTES:

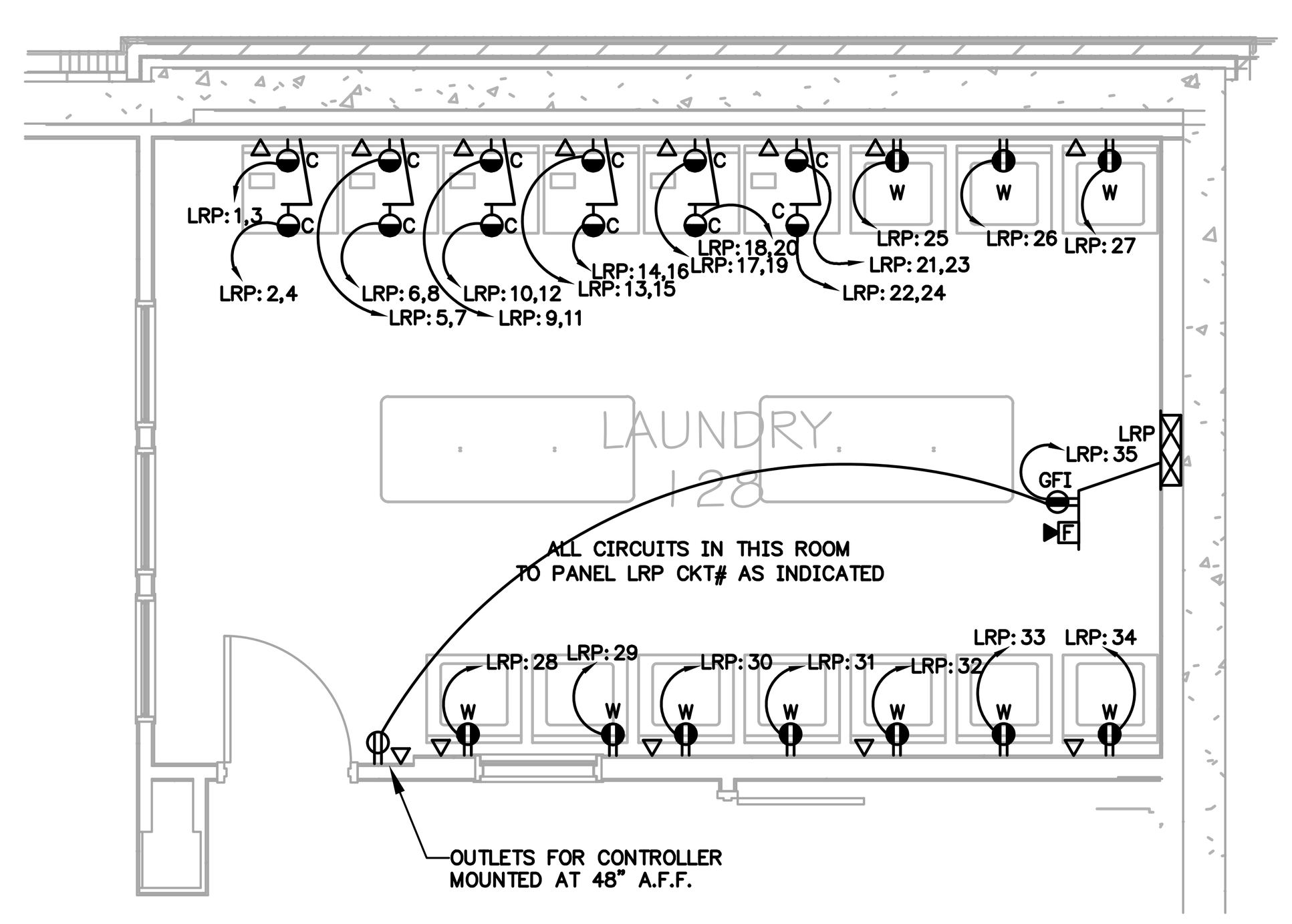
A. ALL OUTLETS WITHIN 6' OF A SINK SHALL HAVE GROUND FAULT PROTECTION.

PLAN NOTES:

1. TO GENERATOR. SEE SITE PLAN AND RISER DIAGRAM.
2. TO GENERATOR AND UTILITY TRANSFORMER. SEE SITE PLAN AND RISER DIAGRAM.
3. PROVIDE MONITORING ZAMS TO MONITOR THE FOLLOWING: PUMP OR MOTOR RUNNING, LOSS OF PHASE, PHASE REVERSAL, CONTROLLER CONNECTED TO ALTERNATE SOURCE. ACTIVATION OF ANY WILL PROVIDE A SUPERVISORY SIGNAL AT THE FACP AND REMOTE MONITORING STATION PER NFPA 20 AND NFPA 72, 23.8.5.9.

FOR MECHANICAL INFORMATION, REFER TO MECHANICAL DRAWINGS

FIRST FLOOR PLAN
POWER AND AUXILIARY
0 2 4 6 8 16
SCALE: 1/8" = 1'-0"



NOTES:

1. VERIFY PLUG CONFIGURATION OF DRYER WITH DRYER MANUFACTURER PRIOR TO ROUGH-IN.
2. EMPTY CONDUITS AND BOXES ARE TO BE PROVIDED AND CONCEALED AT THE LOCATIONS INDICATED BEHIND WASHERS AND DRYERS. PROVIDE (1) 3/4" EMPTY CONDUIT WITH BUSHING FROM EACH DATA JACK LOCATION STUBBED UP ABOVE CEILING. CONTROLLER OUTLET TO INCLUDE DATA OUTLET AND CABLING. PROVIDE (1) 3/4" CONDUIT FROM CONTROLLER TO TELECOM ROOM.

ENLARGED LAUNDRY ROOM
ELECTRICAL
0 1 2 3 4 8
SCALE: 1/4" = 1'-0"

ALL FIRE ALARM A/V DEVICES HAVE BEEN CHANGED FROM HORN-STROBES TO SPEAKER-STROBES.

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FIRST FLOOR PLAN POWER AND AUXILIARY

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PANEL:	1-MS-1	MAIN SWITCH AND FUSE RATING	2500 AMP	BUSS RATING:	2500 AMP	MOUNTING:	FREE STANDING
		MAIN LUGS ONLY	NA	VOLTS:	120 / 208	LOCATION:	MECHANICAL 136
TYPE:	FUSED SWITCHBOARD	SOLID NEUTRAL	100%	3 PHASE, 4 WIRE, 60 HZ		FED FROM:	SERVICE TRANSFORMER
		GROUND BUS	100%	AIC RATING:	100,000		
				CALC. FAULT CURRENT: 41,087 AMPS			

	CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	FUSES SIZE	TYPE	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
FREE STANDING SWITCHBOARD	1	1000 (SPS)	3	208	1000	KRP-C	DP1	(4)#250, (1)#2/0G	(4) 2-1/2"	327	290	806	
	2	200	3	208	125	LPN-RK	ATS-LR	(4)#1, (1)#6G	2"	29.86	29.86	83	
	3	100	3	208	100	LPN-RK	ATS-EM	(4)#2, (1)#8G	1 1/2"	14.58	14.58	41	
	4	600	3	208	600	KRP-C	DP3	(4)#350, (1)#1G	(2) 3"	220	174	484	
	5	600	3	208	600	LPN-RK	PPRW	(4)#350, (1)#1G	(2) 3"	146.19	146.19	406	
	6	400	3	208	400	LPN-RK	PPRE	(4)#500, (1)#3G	3-1/2"	90.7	90.7	252	
								TOTAL LOADS		828	745	2,071	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW. ULSE FOR SERVICE ENTRANCE.

PANEL:	DP1	MAIN BREAKER RATING	N/A	BUSS RATING:	1000	AMP	MOUNTING:	FREE STANDING
		MAIN LUGS ONLY	1000 AMP	VOLTS:	120 / 208		LOCATION:	MECHANICAL 136
TYPE:	CCB	SOLID NEUTRAL	100%	3 PHASE, 4 WIRE, 60 HZ			FED FROM:	MS-1
		GROUND BUS	100%	AIC RATING:	42,000			
				CALC. FAULT CURRENT: 30,914 AMPS				

	CKT NO.	BREAKER AMPS	POLE	VOLTS	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
PANELBOARD	1	150	3	208	RP1W	(4)#1/0, (1)#6G	2"	30.96	22.55	63	
	2	100	3	208	HP1W	(4)#3, (1)#8G	1-1/4"	7.66	7.66	21	
	3	100	3	208	RP1C	(4)#3, (1)#8G	1-1/4"	18.85	18.19	51	
	4	100	3	208	HP1C	(4)#3, (1)#8G	1-1/4"	25.47	25.47	71	
	5	400	3	208	LRP	(4)#500, (1)#3G	3-1/2"	75.36	75.36	209	
	6	150	3	208	RP1E	(4)#1/0, (1)#6G	2"	27.71	20.92	58	
	7	100	3	208	HP1E	(4)#3, (1)#8G	1-1/4"	6.93	6.93	19	
	8	30	3	208	TRASH COMPACTOR	(4)#10, (1)#10G	3/4"	7.50	7.50	21	
	9	150	3	208	RP2W	(4)#1/0, (1)#6G	2"	30.96	22.55	63	
	10	100	3	208	HP2W	(4)#3, (1)#8G	1-1/4"	5.66	5.66	16	
	11	150	3	208	RP2C	(4)#1/0, (1)#6G	2"	27.35	20.56	57	
	12	100	3	208	HP2C	(4)#3, (1)#8G	1-1/4"	5.27	5.27	15	
	13	150	3	208	RP2E	(4)#1/0, (1)#6G	2"	27.06	20.27	56	
	14	100	3	208	HP2E	(4)#3, (1)#8G	1-1/4"	4.93	4.93	14	
	15	150	3	208	AHU-1	(4)#1/0, (1)#6G	2"	25.80	25.80	72	
						TOTAL LOADS		327	290	805	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW.

PANEL:	DP3	MAIN BREAKER RATING	N/A	BUSS RATING:	600	AMP	MOUNTING:	FREE STANDING
		MAIN LUGS ONLY	600 AMP	VOLTS:	120 / 208		LOCATION:	MECH/ELEC 329
TYPE:	CCB	SOLID NEUTRAL	100%	3 PHASE, 4 WIRE, 60 HZ			FED FROM:	MS-1
		GROUND BUS	100%	AIC RATING:	22,000			
				CALC. FAULT CURRENT: 20,853 AMPS				

	CKT NO.	BREAKER AMPS	POLE	VOLTS	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
PANELBOARD	1	150	3	208	RP3C	(4)#1/0, (1)#6G	2"	26.81	20.29	56	
	2	100	3	208	HP3C	(4)#3, (1)#8G	1-1/4"	7.27	7.27	20	
	3	150	3	208	RP3W	(4)#1/0, (1)#6G	2"	30.96	22.55	63	
	4	100	3	208	HP3W	(4)#3, (1)#8G	1-1/4"	7.66	7.66	21	
	5	150	3	208	RP3E	(4)#1/0, (1)#6G	2"	27.06	20.27	56	
	6	100	3	208	HP3E	(4)#3, (1)#8G	1-1/4"	6.93	6.93	19	
	7	150	3	208	RP4C	(4)#1/0, (1)#6G	2"	28.78	21.90	61	
	8	100	3	208	HP4C	(4)#3, (1)#8G	1-1/4"	5.27	5.27	15	
	9	150	3	208	RP4W	(4)#1/0, (1)#6G	2"	30.96	22.55	63	
	10	100	3	208	HP4W	(4)#3, (1)#8G	1-1/4"	5.66	5.66	16	
	11	150	3	208	RP4E	(4)#1/0, (1)#6G	2"	27.06	20.27	56	
	12	100	3	208	HP4E	(4)#3, (1)#8G	1-1/4"	4.93	4.93	14	
	13	70 (ST)	3	208	ELEVATOR	(4)#4, (1)#8G	1-1/4"	10.80	10.80	30	PROVDE SHUNT TRIP BREAKER
						TOTAL LOADS		220	176	490	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW.

GENERAL NOTES:

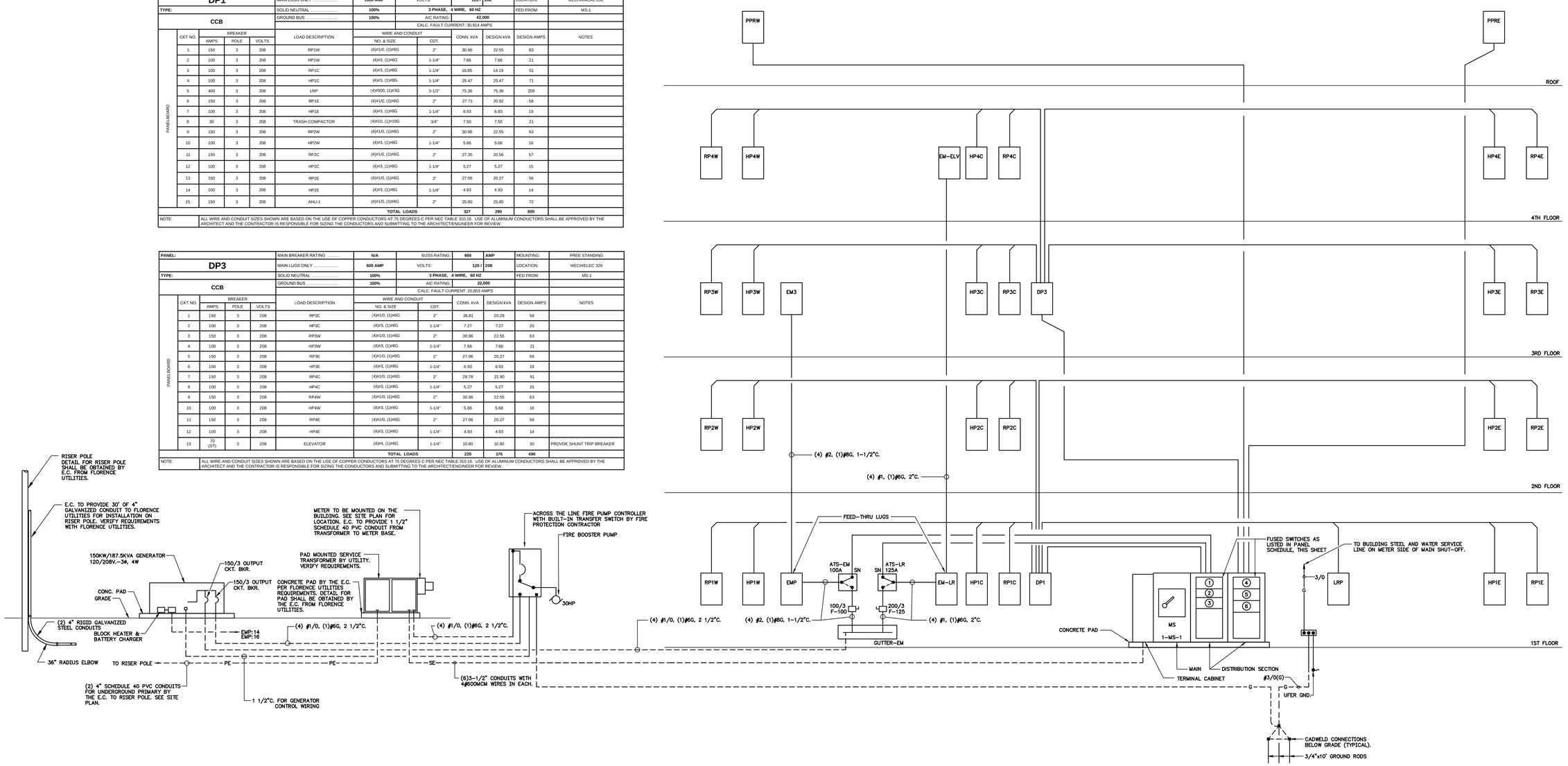
A. FIELD MARK ALL ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT.

B. PROVIDE ARC-FLASH WARNING LABELS THAT COMPLIES WITH NEC 110.16 ON ALL ELECTRICAL EQUIPMENT.

C. SERVICE TO FIRE PUMP SHALL BE ACCORDANCE WITH NEC 695 AND NFPA 20.

D. HIGH VOLTAGE PRIMARY BY ELECTRIC UTILITY. VERIFY AID-IN-CONSTRUCTION FEES WITH ELECTRIC UTILITY.

E. VERIFY ALL SERVICE POLICIES AND AID-IN-CONSTRUCTION FEES WITH ELECTRIC UTILITY.



ELECTRICAL RISER DIAGRAM
NO SCALE

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Project # 014-00062-00

ALABAMA REGISTERED No. 27041 PROFESSIONAL ENGINEER
07/18/2014

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BUILDING 1

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GMC # ABHM130031

ELECTRICAL RISER DIAGRAM

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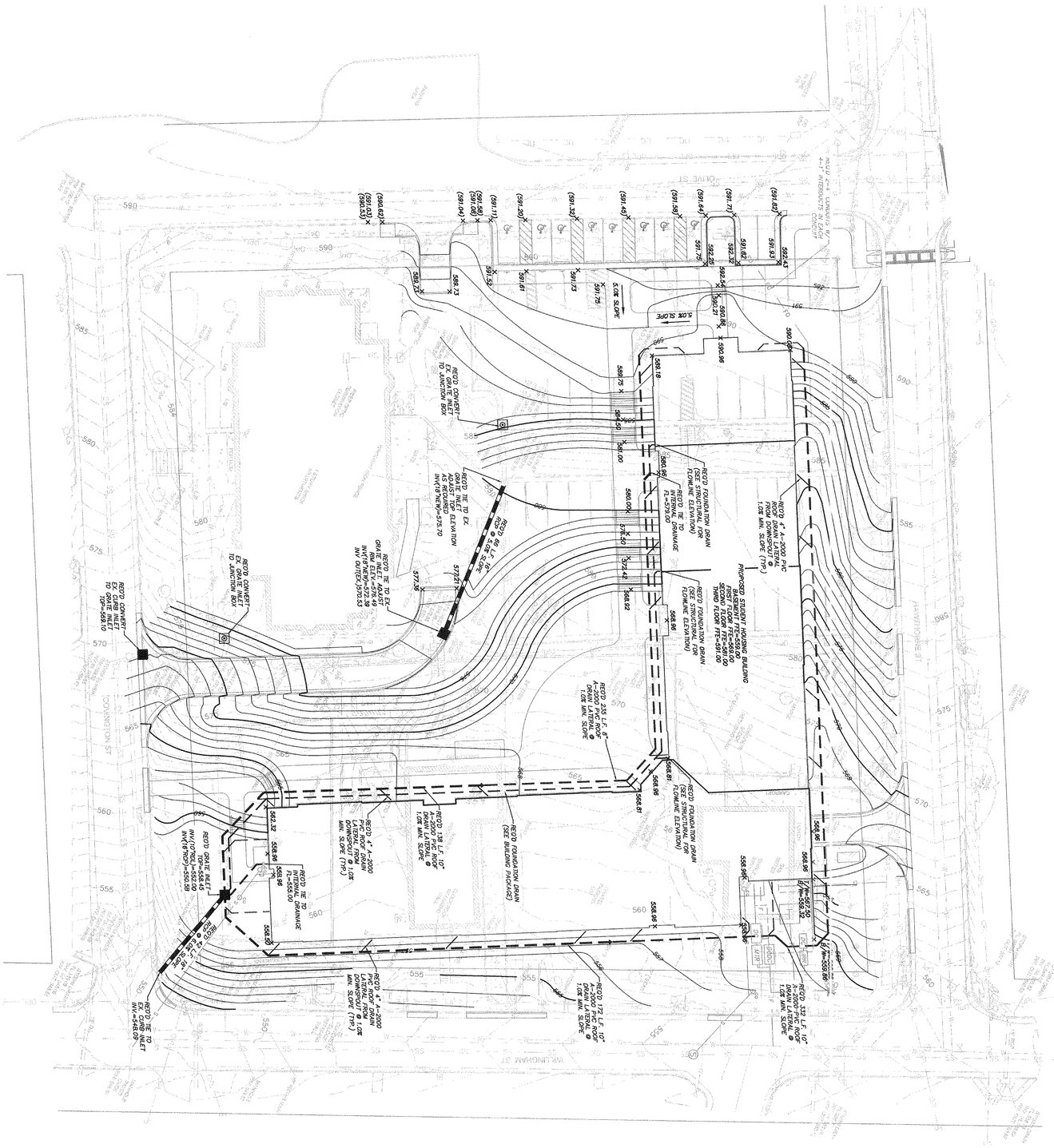

Legend

- Proposed Spot Elevation
- Finished Grade Contour Line
- Ex. Contour Line (1' Interval)
- Single Wing Catch Basin (SWCB)
- Flat Grate Inlet (FG Inlet) or Open Throat Inlet
- Storm Sewer Junction Box
- Storm Sewer (Size as Noted)

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

SITE GRADING AND DRAINAGE PLAN

C2.0
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7-19-14

UNIVERSITY OF NORTH ALABAMA
STUDENT HOUSING - BUILDING 2

ABC # 2013547
GMC # ABHM130031
FOR CONSTRUCTION

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A6 FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

A10 FIRST FLOOR PLAN
SCALE: 1/8"=1'-0"

TRUE NORTH
PROJECT NORTH

FIRST FLOOR PLAN

A1.02
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STATE of ALABAMA
JEFFREY A. BREWER 4712
REGISTERED ARCHITECT

UNIVERSITY OF NORTH ALABAMA
STUDENT HOUSING - BUILDING 2

ABC # 2013547
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BUILDING **2**

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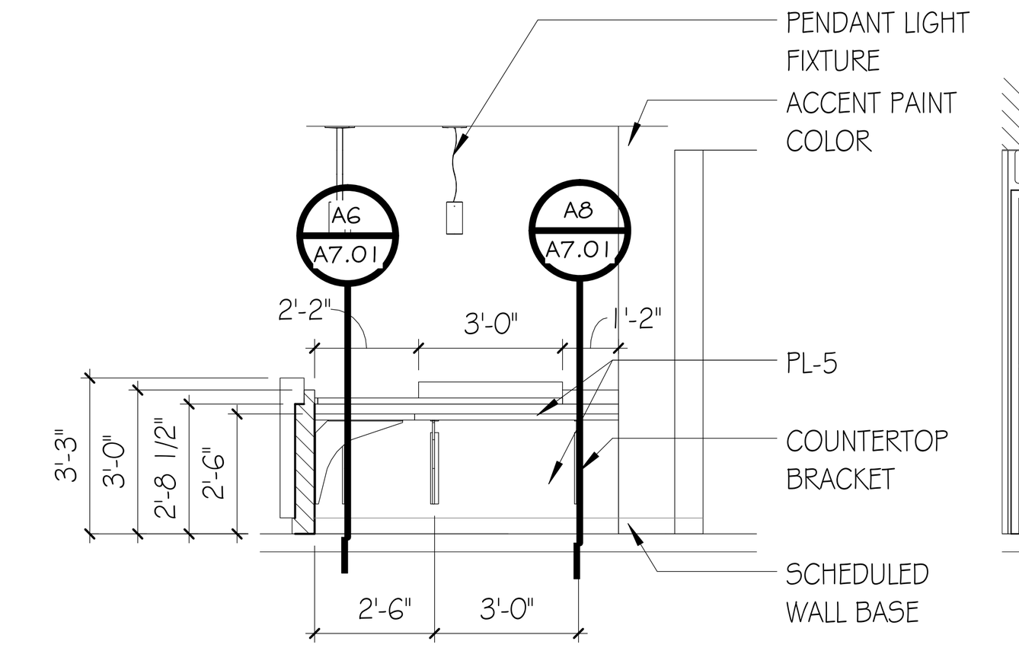
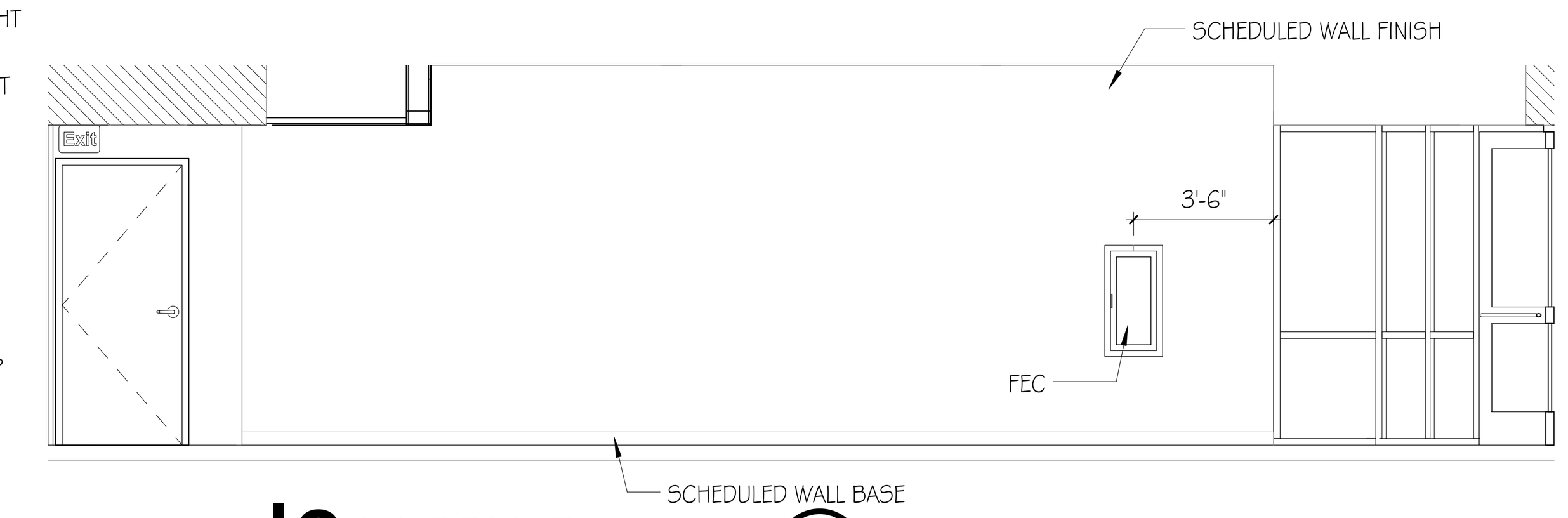
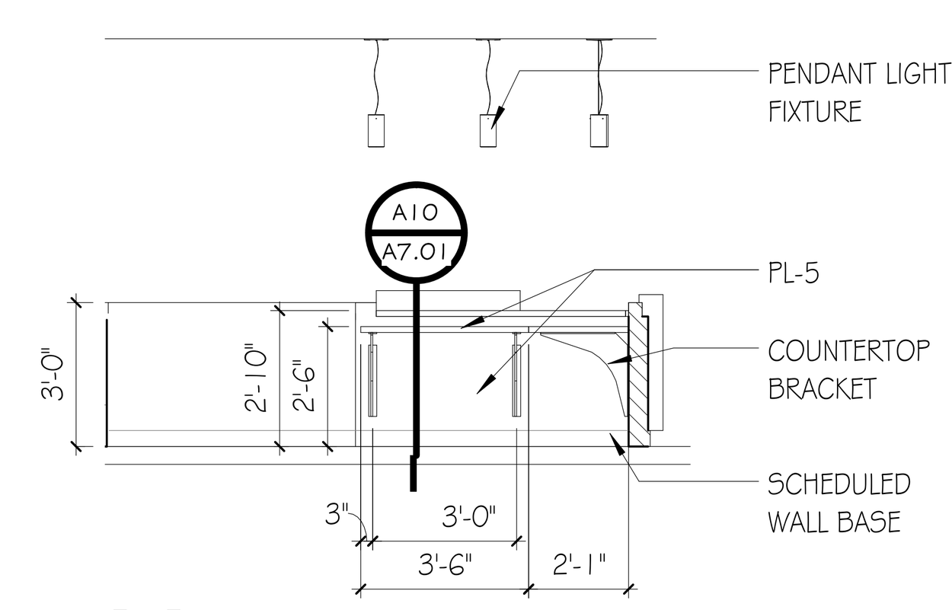


J6 LOBBY- H
SCALE: 1/4" = 1'-0"



J8 LOBBY- F
SCALE: 1/4" = 1'-0"



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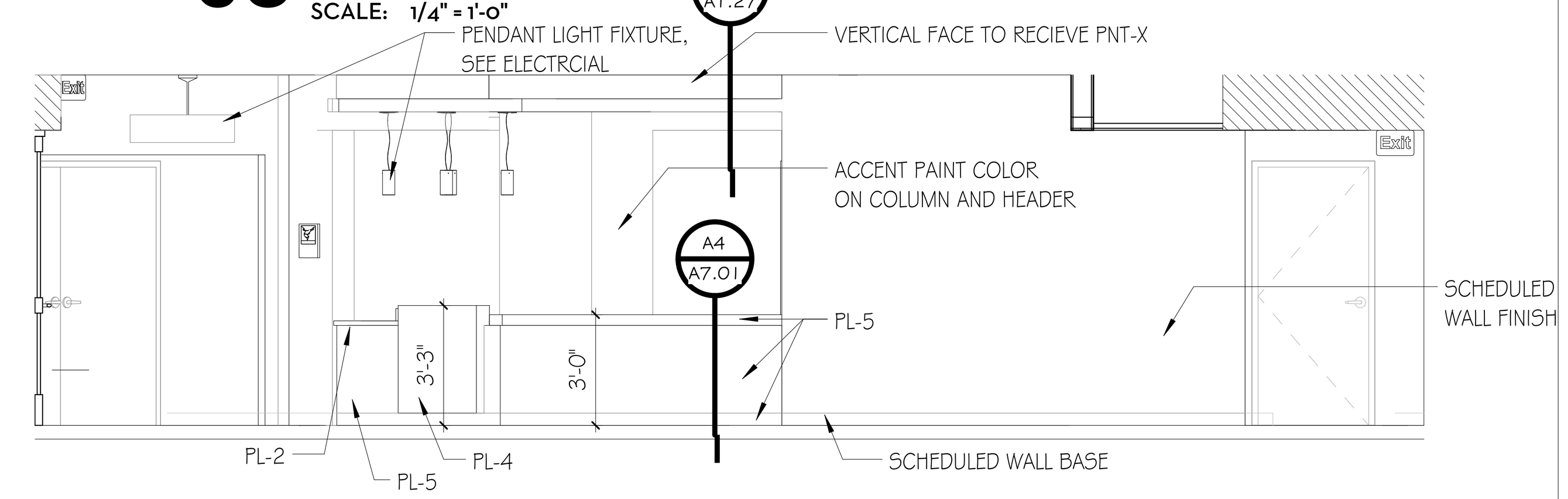
SCALE: 1/4" = 1'-0"



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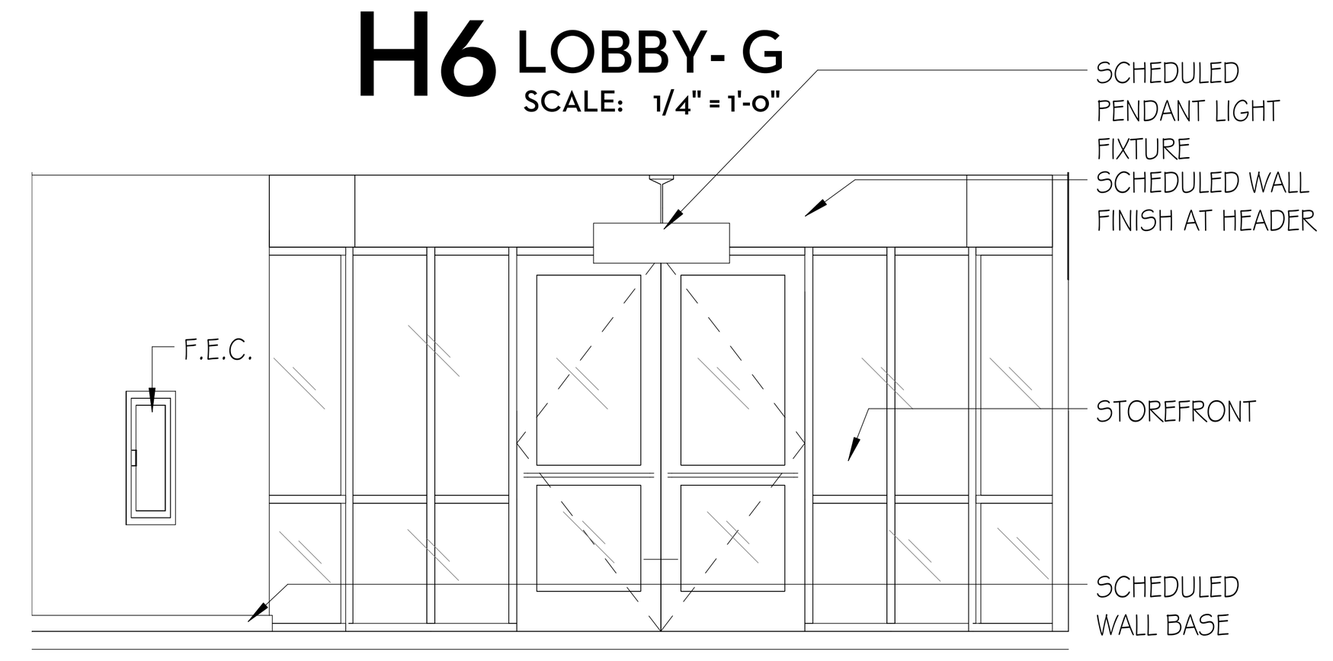
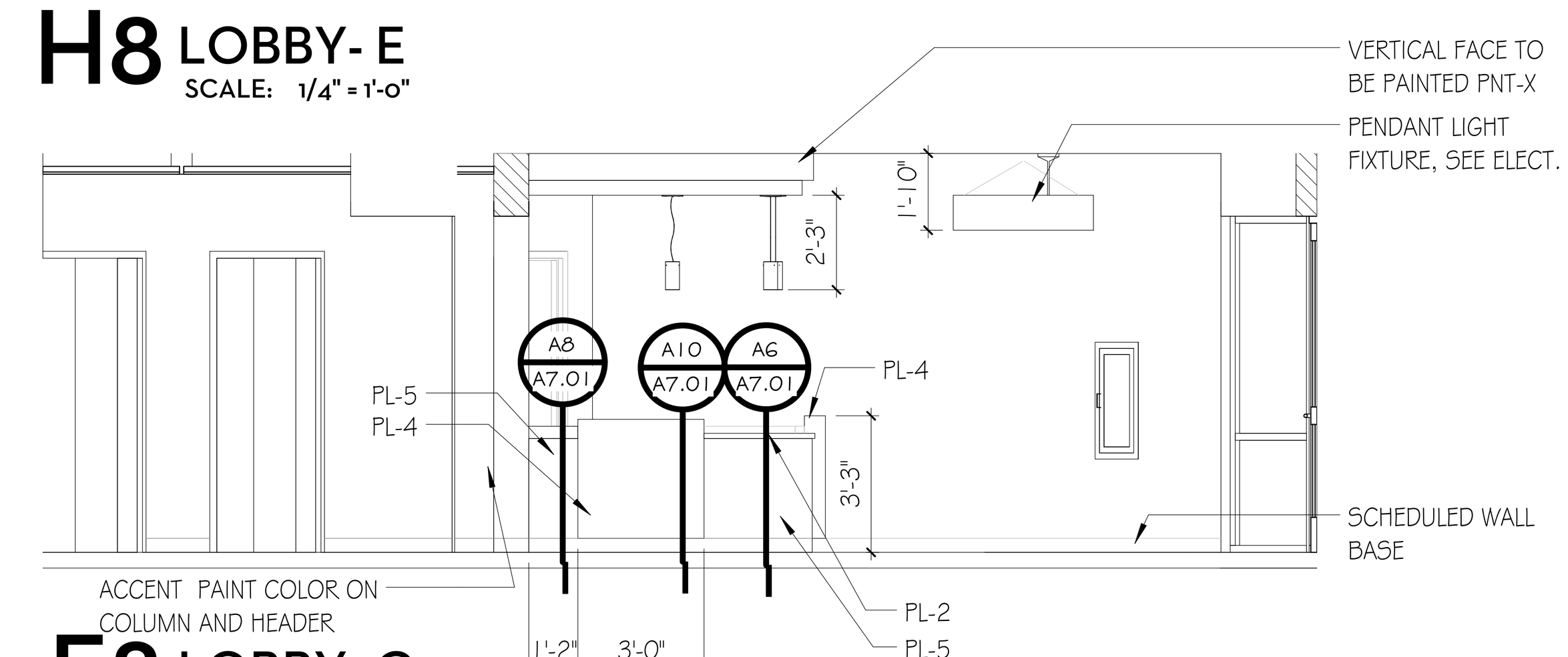
SCALE: 1/4" = 1'-0"



F6 LOBBY- D
SCALE: 1/4" = 1'-0"



F8 LOBBY- C
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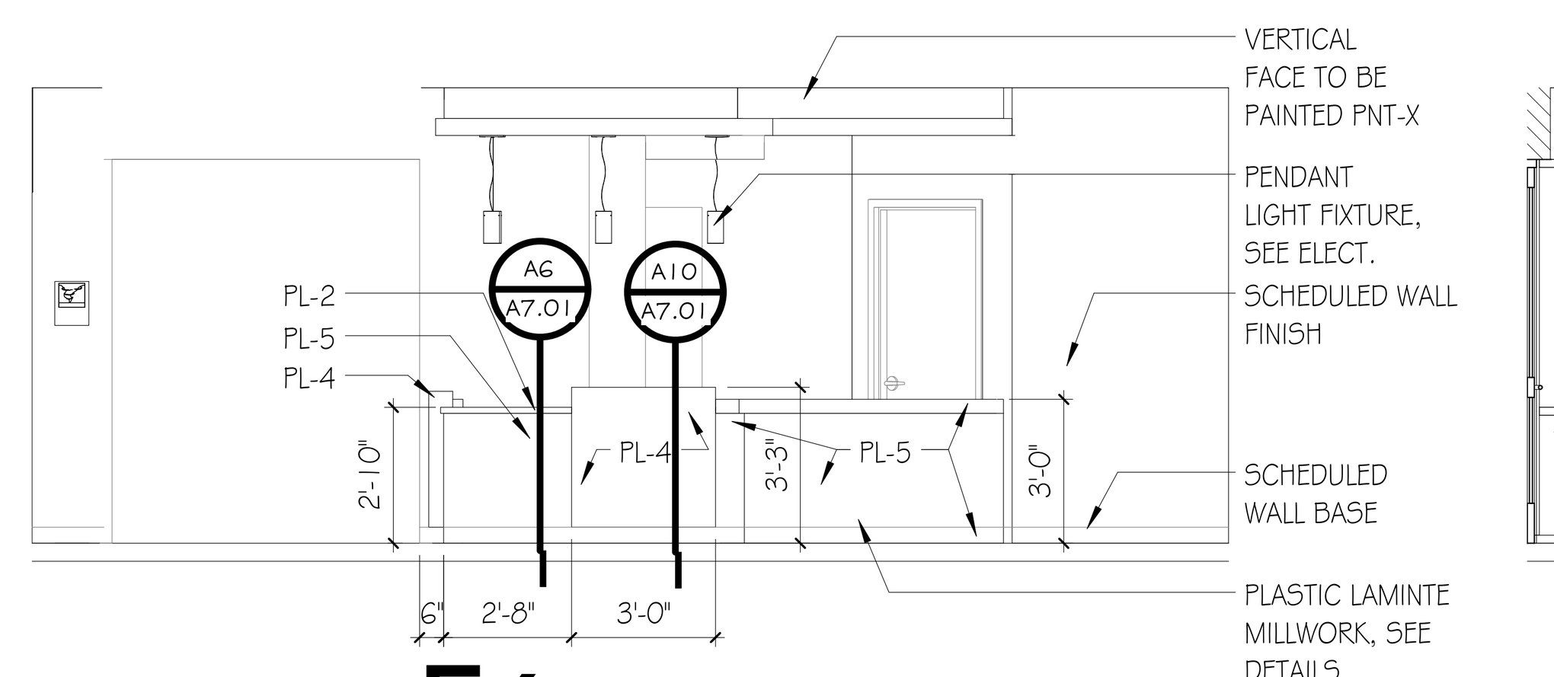
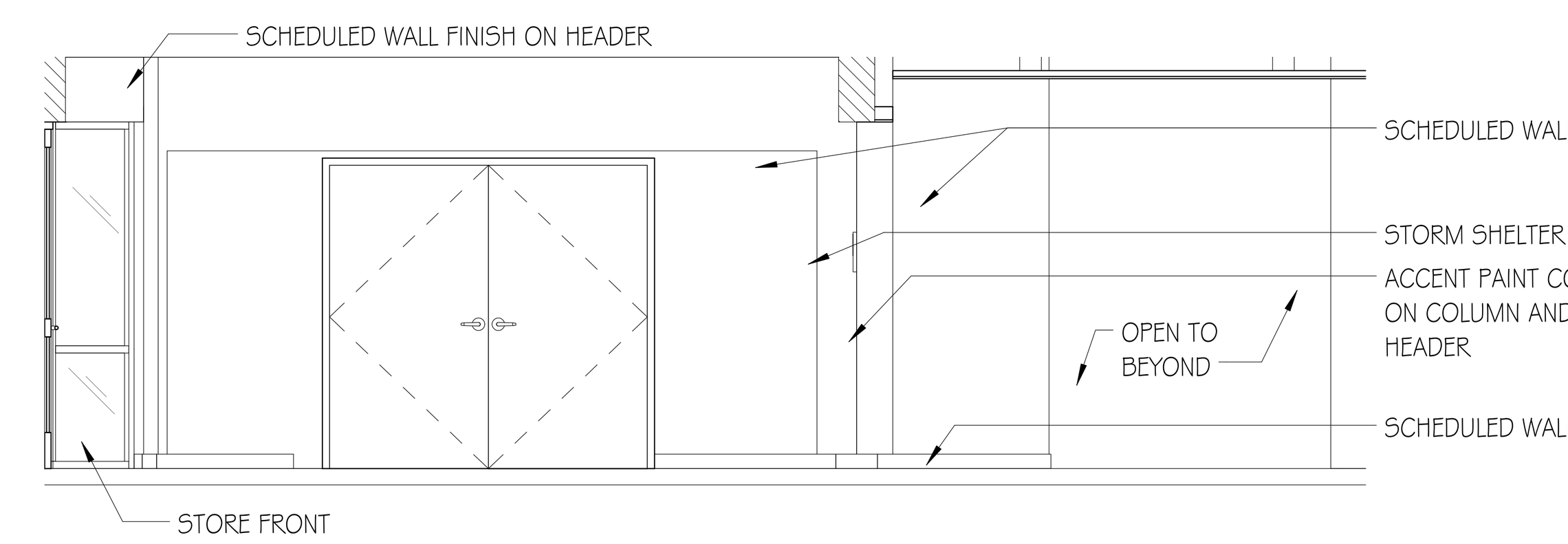


E6 LOBBY- B
SCALE: 1/4" = 1'-0"



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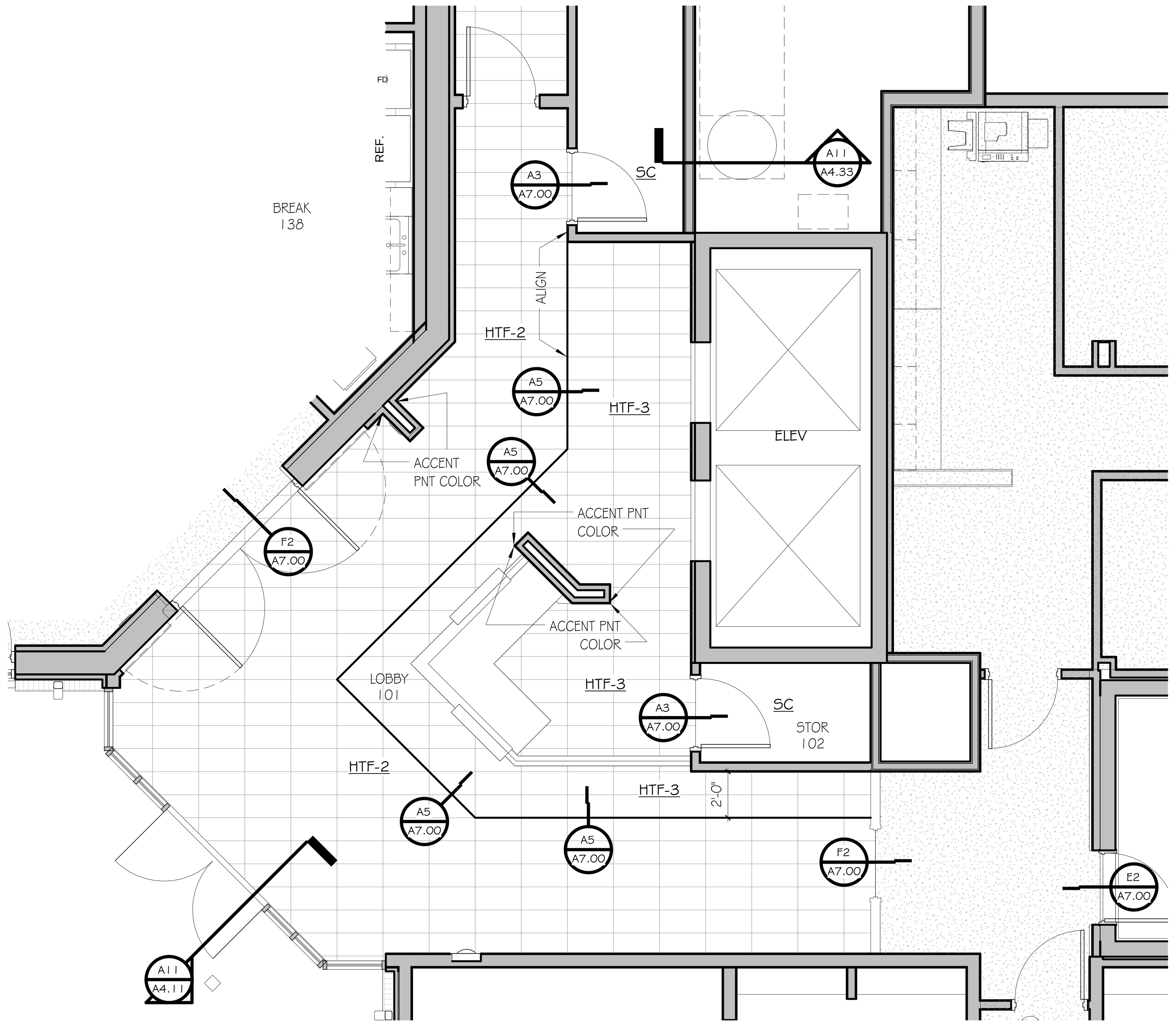
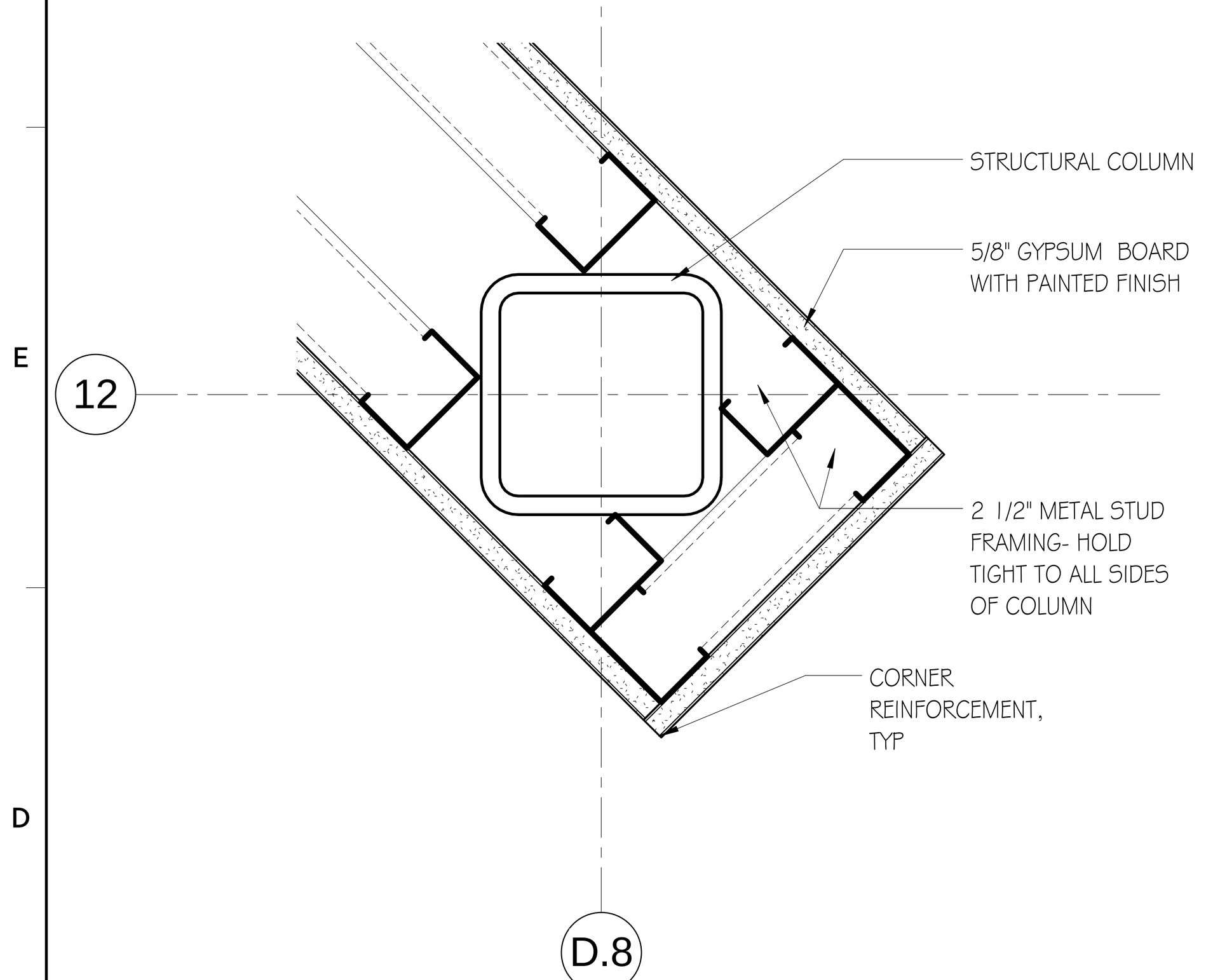
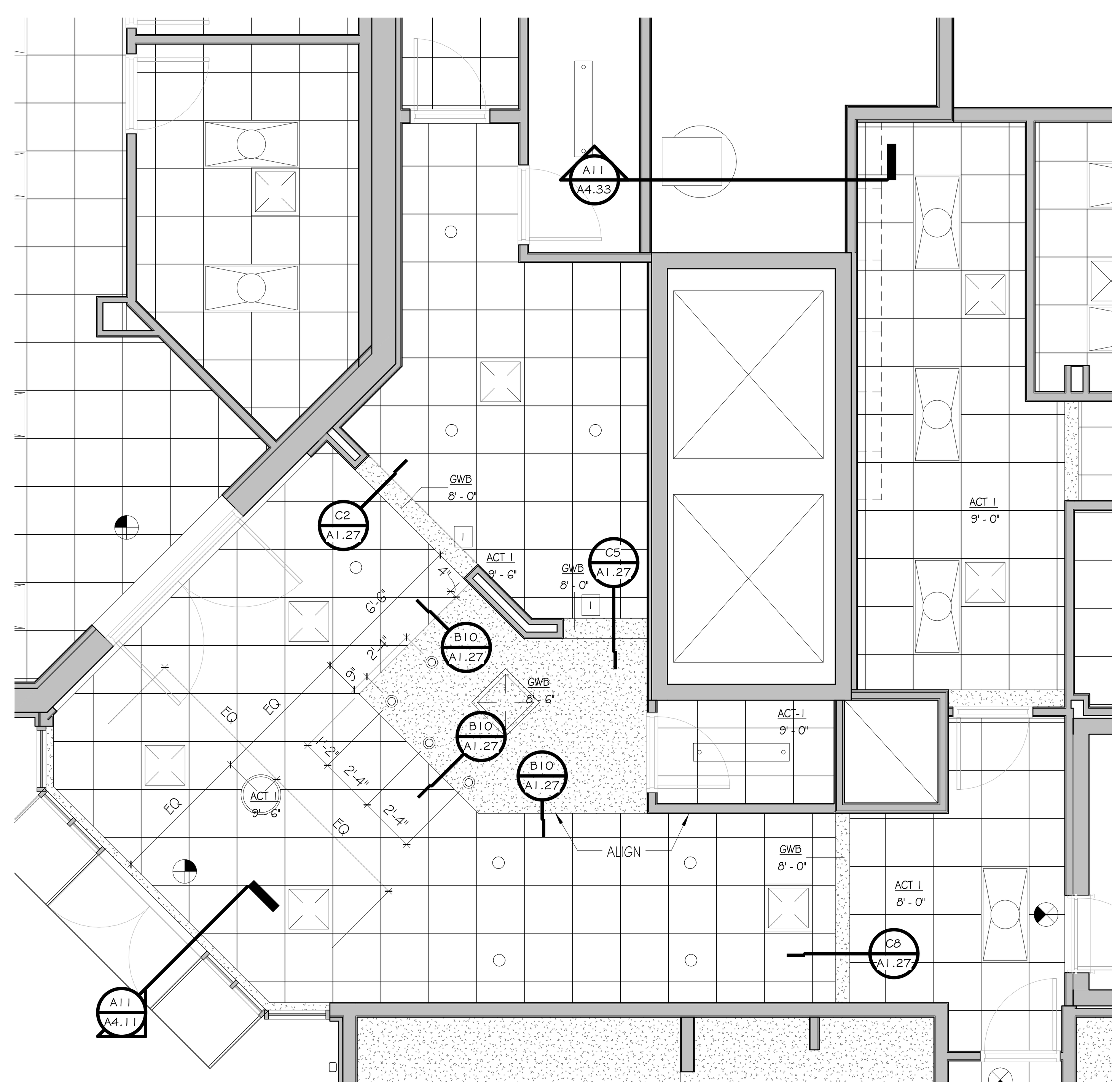
SCALE: 1/4" = 1'-0"



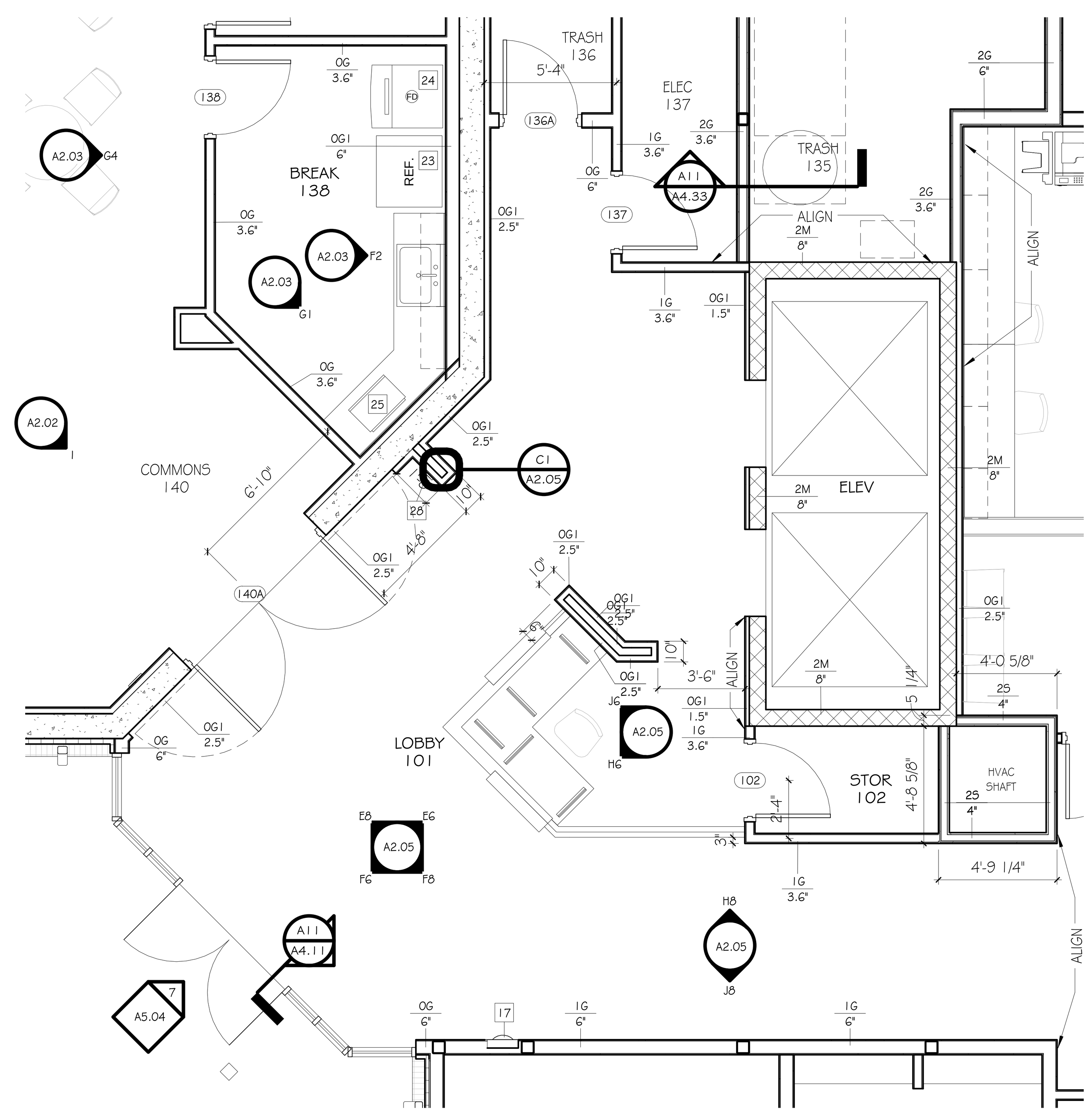
F1 LOBBY- FINISH PLAN
SCALE: 1/4" = 1'-0"



C1 LOBBY DETAIL
SCALE: 3" = 1'-0"



A3 LOBBY- RCP
SCALE: 1/4" = 1'-0"



A7 LOBBY- FLOOR PLAN
SCALE: 1/4" = 1'-0"

TOILET ACCESSORIES/ SPECIALTY EQUIPMENT SCHEDULE	
#	DESCRIPTION
1	TOILET PAPER DISPENSER
2	18" VERTICAL GRAB BAR
3	42" HORIZONTAL GRAB BAR
4	36" HORIZONTAL GRAB BAR
5	36" HORIZONTAL GRAB BAR
6	54" HORIZONTAL GRAB BAR
7	24" TOWEL BAR
8	HAND TOWEL RING
9	24" W x 36" H MIRROR
10	16" DEEP WIRE SHELF- MOUNT AT 60" AF.F. IN ADA ROOM, MOUNT AT 42" A.F.F.
11	SHOWER CURTAIN ROD, VERIFY LENGTH IN FIELD. CURTAIN AND RINGS, N.I.C.
12	DRYER, N.I.C.
13	PAPER TOWEL DISPENSER, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
14	SOAP DISPENSER, N.I.C.
15	MIRROR- 36" H X WIDTH OF OPENING
16	TOILET PAPER DISPENSER, N.I.C.
17	SEMI-RECESSED FIRE EXTINGUISHER CABINET, WHITE
18	TOILET PARTITION
19	FIRE EXTINGUISHER
20	ELECTRIC WATER COOLER
21	MOP SINK
22	MOP HOLDER AND SHELF
23	REFRIGERATOR
24	COMMERCIAL ICE MAKER, FLOOR DRAIN BELOW.
25	COUNTERTOP MICROWAVE
26	VENDING MACHINE, N.I.C.
27	WASHING MACHINE, N.I.C.
28	STORM SHELTER SIGNAGE
29	30" RANGE- ADA COMPLIANT
30	30" RANGE
31	24"W DISHWASHER
32	WASHER/ DRYER STACK COMBO
33	18" DIAM. HOT WATER HEATER. SEE PLUMBING.
34	SANITARY NAPKIN DISPOSER
35	WALL MOUNTED TELEVISION AND MOUNTING BRACKET, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
36	WALL MOUNTED POWERED PROJECTION SCREEN, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
37	CEILING MOUNTED PROJECTOR, N.I.C. COORDINATE BLOCKING REQUIREMENTS WITH OWNER.
38	ROBE HOOK

REFLECTED CEILING PLAN

GENERAL NOTES

1. INTERIOR CEILING HEIGHTS AS INDICATED ON THE REFLECTED CEILING PLANS.
2. REFER TO CONSTRUCTION FLOOR PLANS FOR REQUIRED COMPOSITION OF WALL CONSTRUCTION.
3. LOCATION OF LIGHTS, DIFFUSERS, AND RETURN AIR GRILLES TO BE COORDINATED BETWEEN REFLECTED CEILING PLANS, LIGHTING PLANS, AND HVAC PLANS. FINAL LOCATION TO BE APPROVED BY ARCHITECT.
4. SEE FINISH LEGEND FOR CEILING FINIISH KEYS AND MATERIALS.
5. SEE SPECIFICATIONS FOR ADDITIONAL CEILING FINISH INFORMATION AND REQUIREMENTS. NOTIFY ARCHITECT WITH ANY DISCREPANCIES BETWEEN SPECIFICATION AND DRAWINGS.
7. WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER ABOUT DOOR.

DRAWING NOTES

1. SOFFIT TO BE PAINTED ADJACENT WALL COLOR.
2. SOFFIT TO BE PAINTED ACCENT COLOR.

REFLECTED CEILING PLAN LEGEND

CEILING FINISHES:
- 2X2' LAY-IN ACOUSTICAL CEILING & GRID SYSTEM
- GYPSUM BOARD - INTERIOR EIFS SOFFIT - EXTERIOR
- EXPOSED STRUCTURE
- 16" X 72" METAL PLANK CEILING

MECHANICAL:
- SUPPLY DIFFUSER
- SUPPLY DIFFUSER
- RETURN AIR GRILL
- EXHAUST FAN

LIGHTING:
- FIRE ALARM
- EXIT SIGN

LIGHTING:
- 2X4 LIGHT FIXTURE
- 2X2 LIGHT FIXTURE
- LINEAR BOX FIXTURE
- SURFACE MOUNTED STRIP FLUORESCENT
- WALL MOUNTED STRIP FLUORESCENT
- SUSPENDED LINEAR FLUORESCENT FIXTURE
- 1X4 RECESSED FLUORESCENT WITH SLOTTED DIFFUSER
- RECESSED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- PENDANT LIGHT FIXTURE
- SURFACE MOUNTED LIGHT FIXTURE
- LARGE PENDENT FIXTURE

INTERIOR GENERAL NOTES

1. FURNITURE SHOWN FOR REFERENCE ONLY. NOT IN CONTRACT.
2. REFER TO FINISH LEGEND FOR PAINT COLORS CALLED OUT ON REFLECTED CEILING PLANS AND FINISH PLANS.
3. UNLESS OTHERWISE NOTED, ALL FLOOR TILE, CEILING GRID, AND LIGHT FIXTURES SHALL BE CENTERED IN ROOM/OPENING.
4. CONTRACTOR TO REVIEW WITH ARCHITECT, ON SITE, AREAS WITH MULTIPLE CEILING/WALL/FLOOR FINISHES BEFORE FINISH WORK BEGINS.
5. RUBBER BASE TO RUN AROUND CABINETRY IN UNITS.
6. REFER TO REFLECTED CEILING PLAN LEGEND ON OVERALL REFLECTED CEILING PLANS FOR ABBREVIATIONS AND FINISHES.
7. RUBBER BASE DOES NOT RUN IN FRONT OF SHOWER IN UNITS.
8. ALL DIRECTIONAL REFERENCES IN FINISH SCHEDULE REFER TO THE DIRECTION OF THE PLAN, NOT THE TRUE DIRECTION OF THE BUILDING.
9. WALL TILE AND BASE GROUT LINES SHALL ALIGN WITH FLOOR TILE.
10. EXTERIOR WINDOWS AT UNITS TO RECEIVE MINI BLINDS.
11. GROMMETS TO BE LOCATED IN FIELD AT ALL COUNTERTOPS WITH METAL BRACKET SUPPORTS. ALLOW FOR ONE GROMMET EVERY 36" O.C.
12. FIRST AID STORAGE IN STORM SHELTER TO RECEIVE 4 ROWS OF 16" DEEP WIRE SHELVING.
13. EACH UNIT BATHROOM TO RECEIVE (2) ROBE HOOKS. LOCATION IN ROOM T.B.D.

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checked by: JSM

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STUDENT HOUSING - BUILDING 2

BUILDING 2

ABC # 2013547
GMC # ABHM130031

ENLARGED PLANS, ELEVATIONS, AND DETAILS

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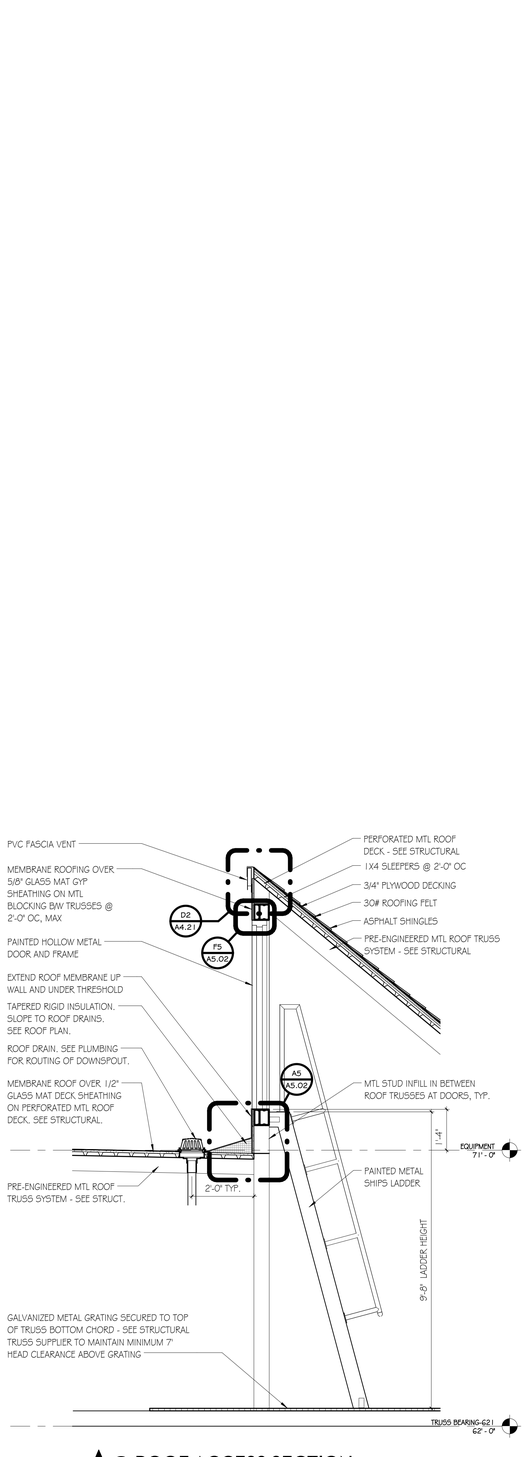
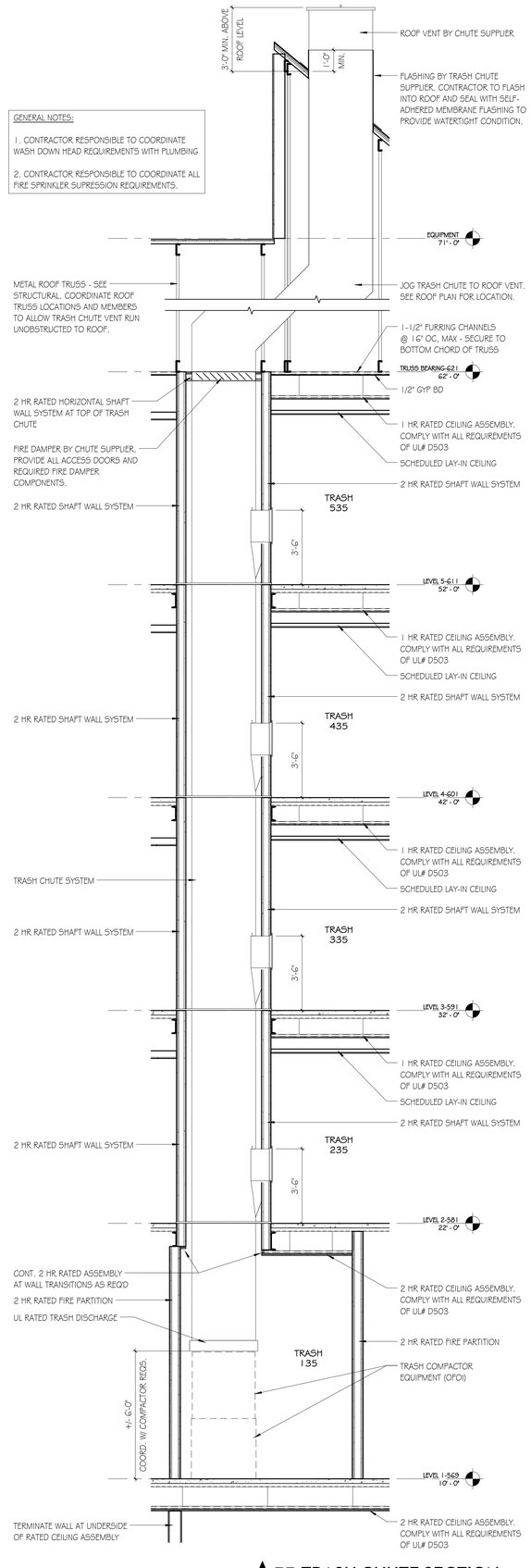


A2 ROOF ACCESS SECTION
SCALE: 1/2" = 1'-0"



A11 TRASH CHUTE SECTION
SCALE: 3/8" = 1'-0"

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BUILDING 2

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STATE of ALABAMA REGISTERED ARCHITECT 4721 JEFFREY A. BREWER

VERTICAL CIRCULATION

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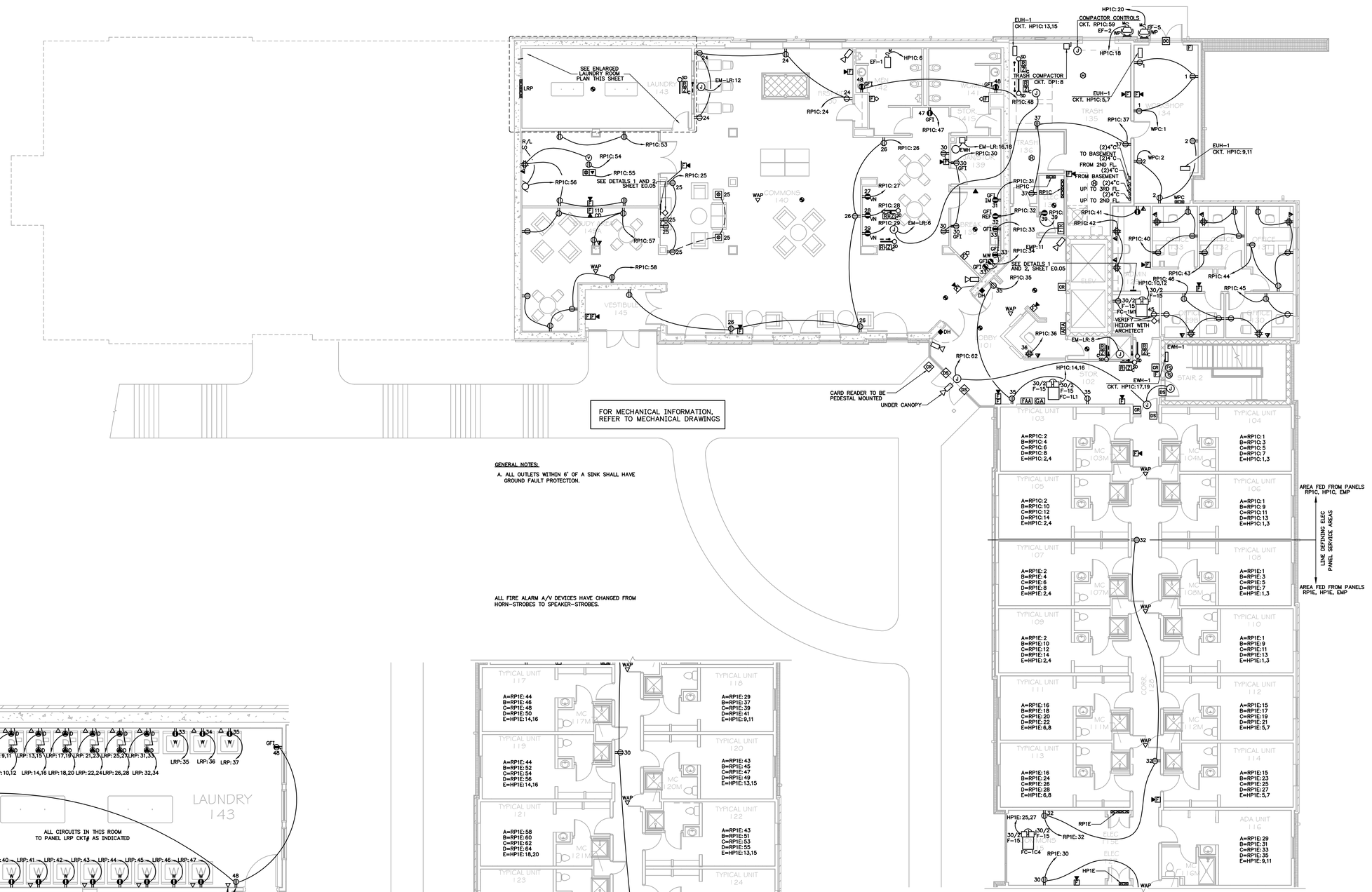
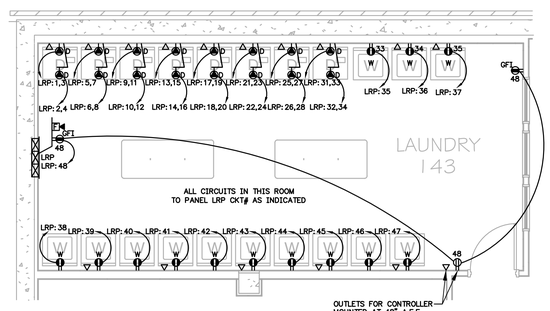


GENERAL NOTES:

A. ALL OUTLETS WITHIN 6' OF A SINK SHALL HAVE GROUND FAULT PROTECTION.

ALL FIRE ALARM A/V DEVICES HAVE CHANGED FROM HORN-STROBES TO SPEAKER-STROBES.



NOTES:

1. VERIFY PLUG CONFIGURATION OF DRYER WITH DRYER MANUFACTURER PRIOR TO ROUGH-IN.
2. EMPTY CONDUITS AND BOXES ARE TO BE PROVIDED AND CONCEALED AT THE LOCATIONS INDICATED BEHIND WASHERS AND DRYERS. PROVIDE (1) 3/4" EMPTY CONDUIT WITH BUSHING FROM EACH DATA JACK LOCATION STUBBED UP ABOVE CEILING. CONTROLLER OUTLET TO INCLUDE DATA OUTLET AND CABLING. PROVIDE (1) 3/4" CONDUIT FROM CONTROLLER TO TELECOM ROOM.

ENLARGED LAUNDRY ROOM
ELECTRICAL

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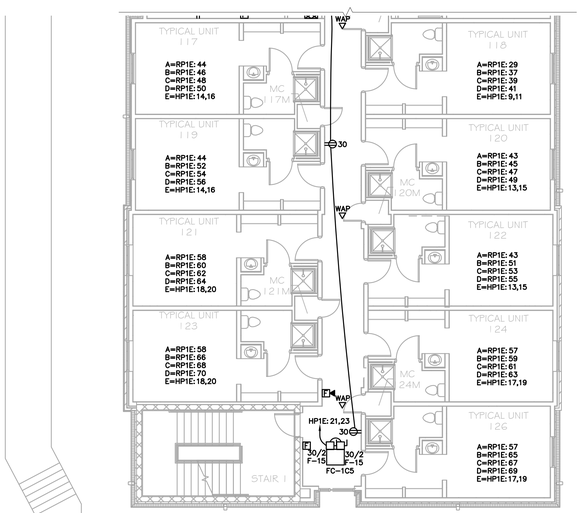
SCALE: 1/4" = 1'-0"



NORTH

FIRST FLOOR PLAN
POWER AND AUXILIARY

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

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ALABAMA REGISTERED No. 24641 PROFESSIONAL ENGINEER PHILIP GRATTON
07/18/2014

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checked by: TPG

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STUDENT HOUSING - BUILDING 2

BUILDING 2

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GMC # ABHM130031

FIRST FLOOR PLAN
POWER AND AUXILIARY

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PANEL: 2-MS-1 — TYPE: FUSED SWITCHBOARD

MAIN SWITCH AND FUSE RATING 2000A	BUSS RATING: 2000 AMP	MOUNTING:	FREE STANDING
MAIN LUGS ONLY .... N/A	VOLTS: 120 / 208	LOCATION:	MECHANICAL B21
SOLID NEUTRAL 100%	3 PHASE, 4 WIRE, 60 HZ	FED FROM:	SERVICE TRANSFORMER
GROUND BUS 100%	AIC RATING: 65,000		
	CALC. FAULT CURRENT: 56,525 AMPS		

FREE STANDING SWITCHBOARD

CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	FUSES SIZE	TYPE	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
1	1200 (BPS)	3	208	1200	KRP-C	DPB	(4)#350, (1)#3/0G	(4)3"	369	348	967	
2	200	3	208	125	LPN-RK	ATS-LR	(4)#1, (1)#6G	2"	27.98	27.98	78	
3	100	3	208	100	LPN-RK	ATS-EM	(4)#2, (1)#8G	1 1/2"	18.76	18.76	52	
4	600	3	208	600	LPN-RK	DP2	(4)#350, (1)#1G	(2) 3"	208	165	459	
5	400	3	208	400	LPN-RK	SPARE					0	
							TOTAL LOADS		624	560	1,556	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW. ULSE FOR SERVICE ENTRANCE.

PANEL: 2-MS-2 — TYPE: FUSED SWITCHBOARD

MAIN SWITCH AND FUSE RATING 2000A	BUSS RATING: 2000 AMP	MOUNTING:	FREE STANDING
MAIN LUGS ONLY .... N/A	VOLTS: 120 / 208	LOCATION:	MECHANICAL B21
SOLID NEUTRAL 100%	3 PHASE, 4 WIRE, 60 HZ	FED FROM:	SERVICE TRANSFORMER
GROUND BUS 100%	AIC RATING: 65,000		
	CALC. FAULT CURRENT: 56,525 AMPS		

FREE STANDING SWITCHBOARD

CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	FUSES SIZE	TYPE	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
1	800	3	208	800	LPN-RK	DP4	(4)#600, (1)#1/0G	(2) 3-1/2"	233	185	514	
2	800	3	208	800	LPN-RK	PPRW	(4)#600, (1)#1/0G	(2) 3-1/2"	177.54	177.54	493	
3	600	3	208	600	LPN-RK	PPRE	(4)#350, (1)#1G	(2) 3"	141.41	141.41	393	
4	400	3	208	400	LPN-RK	SPARE					0	
5	400	3	208	400	LPN-RK	SPARE					0	
							TOTAL LOADS		552	504	1,400	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW. ULSE FOR SERVICE ENTRANCE.

PANEL: DPB — TYPE: CCB

MAIN BREAKER RATING .... N/A	BUSS RATING: 1200 AMP	MOUNTING:	FREE STANDING
MAIN LUGS ONLY .... 1200 AMP	VOLTS: 120 / 208	LOCATION:	MECHANICAL B21
SOLID NEUTRAL 100%	3 PHASE, 4 WIRE, 60 HZ	FED FROM:	MS-1
GROUND BUS 100%	AIC RATING: 65,000		
	CALC. FAULT CURRENT: 44,209 AMPS		

FREE STANDING SWITCHBOARD

CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
1	100	3	208	BPC	(4)#3, (1)#8G	1-1/4"	24.03	20.63	57	
2	225	3	208	HPC	(4)#4/0, (1)#4G	2-1/2"	43.69	43.69	121	
3	225	2	208	LC-B14	(3)#4/0, (1)#4G	2-1/2"	32.32	32.32	155	
4	225	2	208	LC-B15	(3)#4/0, (1)#4G	2-1/2"	32.5	32.5	156	
5	150	3	208	RP1C	(4)#1/0, (1)#6G	2"	30.32	24.02	67	
6	100	3	208	HP1C	(4)#3, (1)#8G	1-1/4"	19.24	19.24	53	
7	100	3	208	WPC	(4)#3, (1)#8G	1-1/4"	14.4	12.2	34	
8	400	3	208	LRP	(4)#500, (1)#3G	3-1/2"	98.54	98.54	274	
9	150	3	208	RP1E	(4)#1/0, (1)#6G	2"	31.8	23.3	65	
10	100	3	208	HP1E	(4)#3, (1)#8G	1-1/4"	6.26	6.26	17	
11	100	3	208	AHU-1	(4)#3, (1)#8G	1-1/4"	35.6	35.6	99	
12	30	3	208	TRASH COMPACTOR	(4)#10, (1)#10G	3/4"	7.5	7.5	21	
					TOTAL LOADS		369	348	968	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW.

PANEL: DP2 — TYPE: CCB

MAIN BREAKER RATING .... N/A	BUSS RATING: 600 AMP	MOUNTING:	FREE STANDING
MAIN LUGS ONLY .... 600 AMP	VOLTS: 120 / 208	LOCATION:	MECH/ELEC 237
SOLID NEUTRAL 100%	3 PHASE, 4 WIRE, 60 HZ	FED FROM:	MS-1
GROUND BUS 100%	AIC RATING: 42,000		
	CALC. FAULT CURRENT: 29,756 AMPS		

FREE STANDING SWITCHBOARD

CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
1	150	3	208	RP2C	(4)#1/0, (1)#6G	2"	23.62	18.63	52	
2	100	3	208	HP2C	(4)#3, (1)#8G	1-1/4"	6.67	6.67	19	
3	150	3	208	RP2W	(4)#1/0, (1)#6G	2"	24.40	18.87	52	
4	100	3	208	HP2W	(4)#3, (1)#8G	1-1/4"	6.46	6.46	18	
5	150	3	208	RP2E	(4)#1/0, (1)#6G	2"	31.14	22.64	63	
6	100	3	208	HP2E	(4)#3, (1)#8G	1-1/4"	7.66	7.66	21	
7	150	3	208	RP3C	(4)#1/0, (1)#6G	2"	24.16	18.90	53	
8	100	3	208	HP3C	(4)#3, (1)#8G	1-1/4"	4.67	4.67	13	
9	150	3	208	RP3W	(4)#1/0, (1)#6G	2"	35.21	25.27	70	
10	100	3	208	HP3W	(4)#3, (1)#8G	1-1/4"	6.86	6.86	19	
11	150	3	208	RP3E	(4)#1/0, (1)#6G	2"	31.14	22.64	63	
12	100	3	208	HP3E	(4)#3, (1)#8G	1-1/4"	5.66	5.66	16	
					TOTAL LOADS		208	165	458	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW.

PANEL: DP4 — TYPE: CCB

MAIN BREAKER RATING .... N/A	BUSS RATING: 800 AMP	MOUNTING:	FREE STANDING
MAIN LUGS ONLY .... 800 AMP	VOLTS: 120 / 208	LOCATION:	MECH/ELEC 437
SOLID NEUTRAL 100%	3 PHASE, 4 WIRE, 60 HZ	FED FROM:	MS-2
GROUND BUS 100%	AIC RATING: 42,000		
	CALC. FAULT CURRENT: 27,985 AMPS		

FREE STANDING SWITCHBOARD

CKT NO.	FUSED SWITCHES AMPS	POLE	VOLTS	LOAD DESCRIPTION	WIRE AND CONDUIT NO. & SIZE	CDT.	CONN. kVA	DESIGN kVA	DESIGN AMPS	NOTES
1	150	3	208	RP4C	(4)#1/0, (1)#6G	2"	24.52	19.08	53	
2	100	3	208	HP4C	(4)#3, (1)#8G	1-1/4"	6.67	6.67	19	
3	150	3	208	RP4W	(4)#1/0, (1)#6G	2"	34.96	25.02	70	
4	100	3	208	HP4W	(4)#3, (1)#8G	1-1/4"	8.86	8.86	25	
5	150	3	208	RP4E	(4)#1/0, (1)#6G	2"	31.14	22.64	63	
6	100	3	208	HP4E	(4)#3, (1)#8G	1-1/4"	7.66	7.66	21	
7	150	3	208	RP5C	(4)#1/0, (1)#6G	2"	25.23	20.06	56	
8	100	3	208	HP5C	(4)#3, (1)#8G	1-1/4"	4.67	4.67	13	
9	150	3	208	RP5W	(4)#1/0, (1)#6G	2"	34.78	24.93	69	
10	100	3	208	HP5W	(4)#3, (1)#8G	1-1/4"	6.86	6.86	19	
11	150	3	208	RP5E	(4)#1/0, (1)#6G	2"	30.96	22.55	63	
12	100	3	208	HP5E	(4)#3, (1)#8G	1-1/4"	5.66	5.66	16	
13	70 (ST)	3	208	ELEVATOR	(4)#4, (1)#8G	1-1/4"	10.80	10.80	30	PROVIDE SHUNT TRIP BREAKER
					TOTAL LOADS		233	185	515	

NOTE: ALL WIRE AND CONDUIT SIZES SHOWN ARE BASED ON THE USE OF COPPER CONDUCTORS AT 75 DEGREES C PER NEC TABLE 310.16. USE OF ALUMINUM CONDUCTORS SHALL BE APPROVED BY THE ARCHITECT AND THE CONTRACTOR IS RESPONSIBLE FOR SIZING THE CONDUCTORS AND SUBMITTING TO THE ARCHITECT/ENGINEER FOR REVIEW.

GENERAL NOTES:

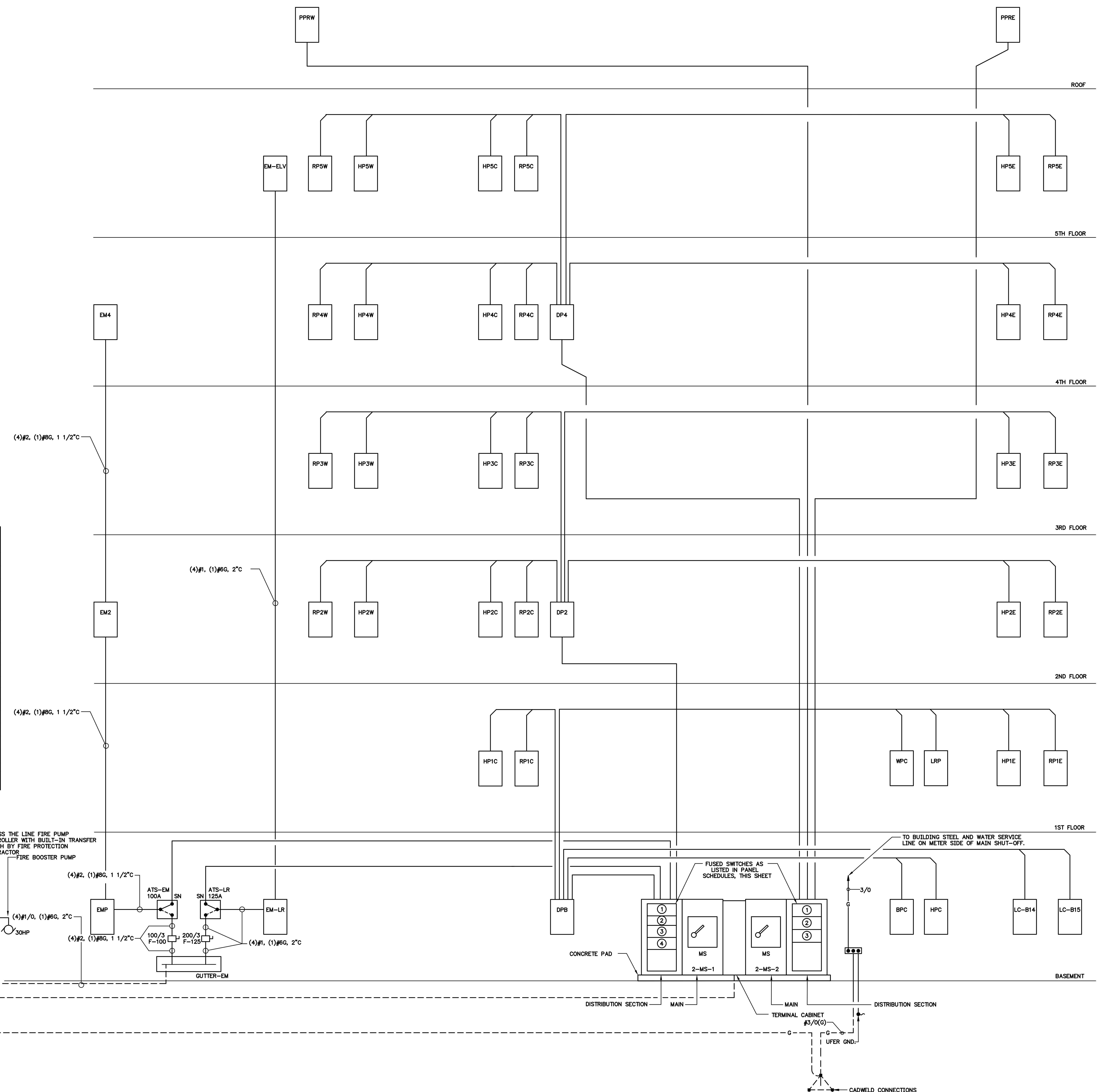
A. FIELD MARK ALL ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT.

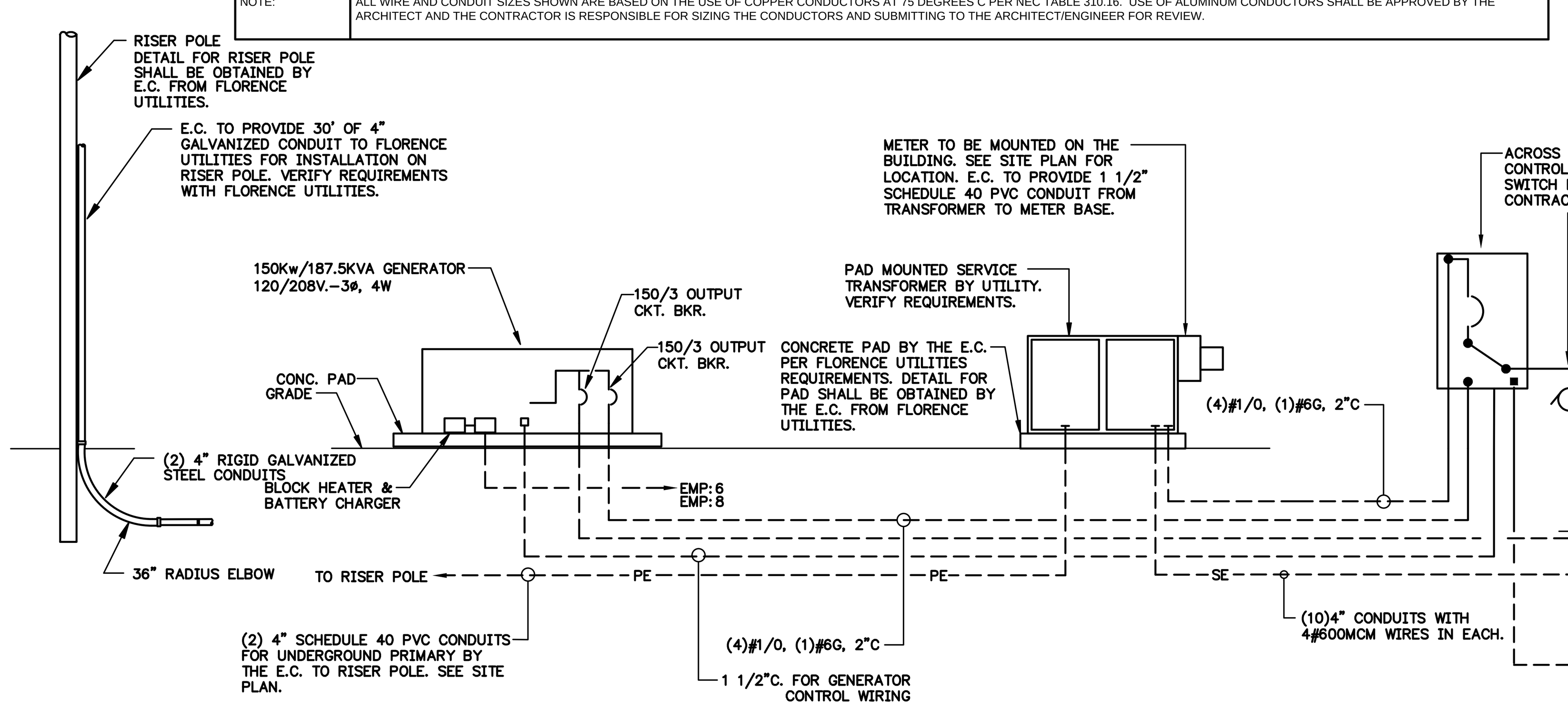
B. PROVIDE ARC–FLASH WARNING LABELS THAT COMPLIES WITH NEC 110.16 ON ALL ELECTRICAL EQUIPMENT.

C. SERVICE TO FIRE PUMP SHALL BE ACCORDANCE WITH NEC 695 AND NFPA 20.

D. HIGH VOLTAGE PRIMARY BY ELECTRIC UTILITY. VERIFY AID–IN–CONSTRUCTION FEES WITH ELECTRIC UTILITY.

E. VERIFY ALL SERVICE POLICIES AND AID–IN–CONSTRUCTION FEES WITH ELECTRIC UTILITY.





ELECTRICAL RISER DIAGRAM
NO SCALE

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PHILLIP GRAYDON — REGISTERED PROFESSIONAL ENGINEER — ALABAMA — No. 24441
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checked by: TPG

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STUDENT HOUSING - BUILDING 2

BUILDING 2

ABC # 2013547
GMC # ABHM130031

ELECTRICAL RISER DIAGRAM

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SECTION 14560
CHUTES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Gravity chutes for waste (trash, refuse).

B. Chute maintenance.

1.02 RELATED REQUIREMENTS

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

B. Section 06100 - Rough Carpentry: Wood curb at roof vent.

C. Section 07540 - Thermoplastic Membrane Roofing: Cants and roofing flashing at chute roof vent.

D. Section 07620 - Sheet Metal Flashing and Trim: Counterflashing at chute roof vent.

E. Section 15325 - Automatic Sprinkler System: Connection to sprinklers inside chute.

F. Division 15 - Plumbing:
   1. Water piping connections to spray cleaning equipment.

G. Section 16155 - Equipment Wiring:
   1. Connection of control panels to 110 VAC electrical power.
   2. Wiring and conduit between control panels and controlled components.
   3. Wiring and conduit between discharge room spray cleaning switch and flushing spray head.

1.03 REFERENCE STANDARDS

A. ASTM A463/A463M - Standard Specification for Steel Sheet, Aluminum-Coated, by the Hot-Dip Process; 2010.

B. NFPA 13 - Standard for the Installation of Sprinkler Systems; National Fire Protection Association; 2013.

C. NFPA 82 - Standard on Incinerators and Waste and Linen Handling Systems and Equipment; National Fire Protection Association; 2009.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene 7 days before start of installation to review code requirements, manufacturer's recommendations, and related work.

1.05 SUBMITTALS

A. See Section 01300 - Administrative Requirements for additional requirements.

B. Product Data: Manufacturer's printed data sheets on each component, indicating which options are provided.

C. Shop Drawings: Detailed layout of chute and components, indicating interface with structure, enclosing walls, and utilities; show:
   1. Openings in floors and required clearances.
   2. Location and size of each field connection to structure.
   3. Pipe sizes and locations.
   4. Electrical wiring sizes, conduits, and location of connections.
   5. Clearly indicate components required but not furnished by chute installer.

D. Reports: Submit for each test/inspection; see Section 01400 for requirements.

E. Certificates: Certify that chute assembly meets or exceeds NFPA 82 and specified requirements.

F. Maintenance Contract.

G. Project Record Documents: Record actual locations of piping and electrical connections.

H. Operation and Maintenance Data: Manufacturer's operation instructions.
   1. See Section 01780 for additional requirements.
   2. Include control wiring diagrams.

I. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
   1. See Section 01600 - Product Requirements, for additional provisions.
   2. Laundry Bags: Cotton dacron with sufficient strength to withstand impact at discharge hopper without bursting.
      a. Maximum Weight When Full: 40 pounds.
      b. Size: As required so as not to jam in chute when full.
      c. Provide 20 bags.
      d. Include purchasing source for bags.
   3. Sanitizing Solution or Chemicals for Cleaning Chute: 2 gallons.

1.06 QUALITY ASSURANCE

A. See Section 01400 for additional requirements.

B. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.

C. Manufacturer Qualifications: Company specializing in making products specified in this section.
   1. With not less than three years of experience.
   2. With similar installation in satisfactory service for at least one year.
   3. Having a permanent service organization maintained or trained by manufacturer, that is able to provide service within 12 hours of receipt of notice that service is required.

D. Installer Qualifications: Company specializing in performing the work of this section:
   1. With minimum 2 years of documented experience.
   2. Approved by manufacturer.

1.07 WARRANTY

A. See Section 01780 for additional requirements.

B. Correct defective work within a five year period after Date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Chutes and Chute Components: Use one of the following:
   1. American Chute Systems: www.americanchutesystems.com.
   2. CHUTES International: www.chutes.com.
   3. Wilkinson-Hi-Rise LLC: www.whrise.com.
   4. U. S. Chutes Corp: www.uschutes.com.
   5. Valiant Products, Inc: www.linenchutes.com.
   6. Substitutions: See Section 01600 - Product Requirements.

B. All components need not be made by the same manufacturer, provided manufacturer providing assembled units assumes responsibility for all components.

2.02 CHUTES

A. Waste and Recyclables Chutes: Sheet metal, round, constant diameter extending from above roof to lowest floor, with intake doors at each floor and bottom outlet into room designated on drawings; complying with requirements of NFPA 82 and local code.
   1. Diameter: 40 inches inside.
   2. Intake Doors: Hopper type, no locks.
   3. Intake Door Size: 15 by 18 inches wide by high.
   4. Manual controls to activate spray cleaning from discharge room.

2.03 COMPONENTS

A. Chute: Factory-fabricated to the greatest extent possible, with continuously welded or lock-seamed joints and smooth, non-snag interior (no protruding bolts, rivets, hardware, sharp edges or corners).
   1. Material: Aluminum-coated steel sheet complying with ASTM A463/A463M CS Type B, with minimum T1-40/T1M-120 coating.
   2. Sheet Metal Thickness: 16 gage, 0.06 inch.
   3. Chute Offsets: Reinforced with additional layer of sheet metal at impact zones.
   4. Throat Sections: Provide sloped throat sections for intake doors, of same material and construction as chute.
   5. Factory-coat outside of chute with sprayed sound-dampening material.
   6. Fabricate with support frames at each floor with sound isolator pads and expansion joints in chute between each support point.

B. Intake Doors: Factory-assembled door and frame, self-closing and positive-latching; frame designed for chase construction, flush-mounted.
   1. Material: Stainless steel, brushed or satin finish.
   2. Fire Rating: 1-1/2 hour ("B" label) with 30-minute temperature rise of 250 degrees F.
   3. Pulls: T-handle or lever handle latch; polished stainless steel.

C. Discharge Doors: Aluminum-coated steel; normally-open, 1 1/2-hour ("B" label) fire rated, with fusible link closing; style as required by chute configuration.

D. Access Doors: Same construction and fire rating as intake doors, with locks; provide wherever equipment requiring maintenance is located inside chute, including sprinklers and plumbing and electrical connections.

E. Roof Vent: Full diameter, extending minimum 48 inches above roof level, with roof deck flange.
   1. Material: Manufacturer's standard.
   2. Counterflashing and clamping ring of non-ferrous metal compatible with chute material.
   3. Top Unit: Screened vent.

F. Fire Sprinklers: Comply with NFPA 82 and NFPA 13; provide 1/2 inch NPS sprinkler heads mounted inside chute intake throats at the following locations:
   1. At or above the top intake opening.
   2. At the lowest intake opening.
   3. In buildings of more than two stories, at every other floor.

G. Spray Cleaning Equipment:
   1. Flushing Spray: Solenoid controlled 3/4 inch NPS spray head mounted above top intake door.
   2. Sanitizing Unit: Tank and feeder to introduce disinfectant into flushing spray line.

a. Provide backflow preventer valve and actuator switch.
b. Minimum 1 gallon capacity.
c. Accessible through access door immediately above top intake door.

H. Electrical Controls: 110 V AC.

PART 3 EXECUTION

3.01 COORDINATION

A. Complete chute installation and testing before completion of enclosing construction.

B. Coordinate sprinkler and spray cleaning devices with size, location and installation of service utilities.

C. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

3.02 INSTALLATION

A. Install chutes and equipment in accordance with NFPA 82 requirements and manufacturer's instructions.

B. Maintain fire-resistive capacity of enclosing walls.

C. Install chute plumb and without offsets or obstructions that might prevent free fall of materials, except where indicated on drawings.

D. Anchor securely in manner required to withstand impact and weight of materials in chute.

E. Install roof vent flange to roof deck prior to installation of roofing.

F. Install counterflashing after roofing installation.

G. Adjust doors and other operating components for smooth operation.

3.03 FIELD QUALITY CONTROL

A. See Section 01400 for additional requirements.

B. Notify Owner at least 7 days prior to testing.

C. Place bagged material of expected size in chute to verify free fall.

D. Test all components for proper operation.
1. Operate doors, locks, and interlocks.
2. Operate spray cleaning devices.
3. Simulate fire conditions inside chute to verify sprinkler and detector operation.

3.04 CLEANING

A. After completion of enclosing walls, clean exposed chute components; do not remove testing agency labels.

3.05 MAINTENANCE

A. See Section 01700 - Execution Requirements, for additional requirements relating to maintenance service.

B. Provide service and maintenance of chute and equipment for one year from Date of Substantial Completion.

END OF SECTION 14560

B.L. Harbert International, LLC
820 Shades Creek Parkway
Birmingham, AL 35253
Ph : (205) 802-2800

Submittal

Job: 14-370-33
UNA Student Housing

Florence, AL

Spec Section No: 14560
Submittal No: 2
Revision No: 0
Sent Date: 12/18/2014
Due Date: 1/2/2015

Spec Section Title:

Submittal Title: Chutes - Shop Drawings

Contractor:
B.L. Harbert International, LLC

Contractor's Stamp

THESE SUBMITTALS HAVE BEEN REVIEWED FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND CHECKED FOR COMPLETENESS

THIS REVIEW DOES NOT RELIEVE THE GENERAL CONTRACTOR, SUBCONTRACTOR OR VENDOR OF RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS

APPROVED
COLOR SAMPLE
X APPROVED AS NOTED
REVISE AND RESUBMIT
REJECTED
FOR INFORMATION ONLY
DATE: 12/18/2014
B.L. HARBERT INTERNATIONAL, LLC
BY: AM

GOODWYN I MILLS I CAWOOD
Jeff Miller

COMMENTS:
- Contractor confirm that intake doors may be left unlocked.
- Contractor request waste removal service equipment information, details, and dimensions for coordination.
- Contractor coordinate Plumbing, Fire Protection, and Electrical requirements.
- The contractor requested verification of floor to floor dimensions, those shown are consistent with the design but the contractor is responsible to field verify all dimensions.
- The contractor is responsible to coordinate the truss spacing, openings, and locations with the chute offset.

Architect's Stamp

SUBMITTAL REVIEW
SUBMITTAL NO. _____
G. M. & C. JOB NO. _____
Review is subject to Compliance with Bid and Contract Documents. No responsibility is assumed for Correctness of Dimensions, Details, or Quantities.
☐ No Exception Taken
☐ Amend & Resubmit
☐ Rejected-See Remarks
☐ Note Markings
☒ Make Corrections Noted
☐ Submit Specified Item
Goodwyn, Mills & Cawood, Inc.
Date 3/8/2015 By jsm

Engineer's Stamp

B.L. Harbert International, LLC
820 Shades Creek Parkway
Birmingham, AL 35253
Ph : (205) 802-2800

Submittal

Job: 14-370-33
UNA Student Housing

Florence, AL

Spec Section No: 14560
Submittal No: 1
Revision No: 0
Sent Date: 12/18/2014
Due Date: 1/2/2015

Spec Section Title:

Submittal Title: Chutes - Product Data

Contractor:
B.L. Harbert International, LLC

Contractor's Stamp

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x APPROVED COLOR SAMPLE

APPROVED AS NOTED

REVISE AND RESUBMIT

REJECTED

FOR INFORMATION ONLY

DATE: 12/18/2014

B.L. HARBERT INTERNATIONAL, LLC BY: AM

GOODWYN I MILLS I CAWOOD
Jeff Miller

Architect's Stamp

Engineer's Stamp

B.L. Harbert International, LLC
820 Shades Creek Parkway
Birmingham, AL 35253
Ph : (205) 802-2800

Submittal

Job: 14-370-33
UNA Student Housing

Florence, AL

Spec Section No: 14560
Submittal No: 7
Revision No: 0
Sent Date: 12/18/2014
Due Date: 1/2/2015

Spec Section Title:

Submittal Title: Chutes - Operation & Maintenance Data

Contractor:
B.L. Harbert International, LLC

Contractor's Stamp

THESE SUBMITTALS HAVE BEEN REVIEWED FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND CHECKED FOR COMPLETENESS

THIS REVIEW DOES NOT RELIEVE THE GENERAL CONTRACTOR, SUBCONTRACTOR OR VENDOR OF RESPONSIBILITY FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS

X APPROVED COLOR SAMPLE

APPROVED AS NOTED

REVISE AND RESUBMIT

REJECTED

FOR INFORMATION ONLY

DATE: 12/18/2014

B.L. HARBERT INTERNATIONAL, LLC BY: AM

GOODWYN I MILLS I CAWOOD
Jeff Miller

Architect's Stamp

Engineer's Stamp

City reviewed and approved contract documents during design phase. AM/BLHI

AE Verify: Ref. RFI 113

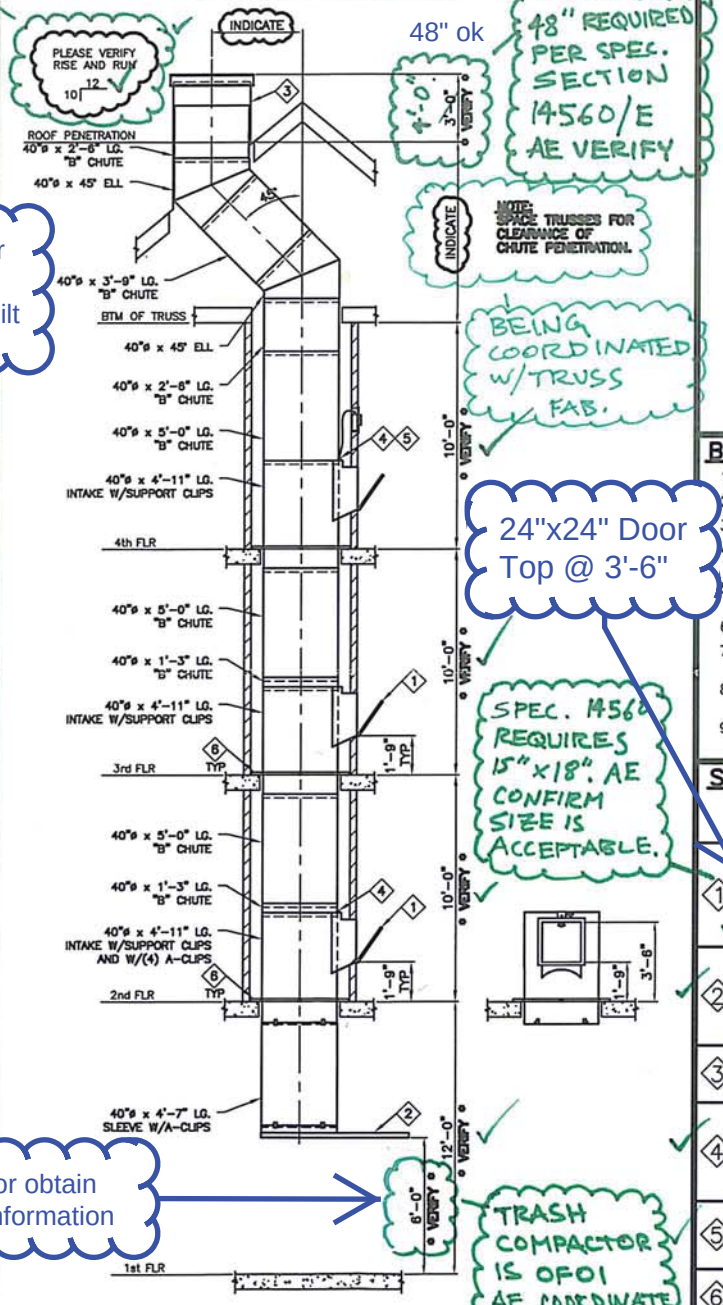
* PLEASE VERIFY OR INDICATE WHERE NOTED *

NOTE:
DUE TO OFFSET IN CHUTE, THIS CONFIGURATION DOES NOT COMPLY WITH NFPA 82 CODE. CONSULT WITH YOUR LOCAL F.M. FOR APPROVAL.

CONDITION DOES NOT OCCUR. BUILDING 1, ONLY BLDG 2.

AE VERIFY

Contractor verify what is built



48" ok

48" REQUIRED PER SPEC. SECTION 14560/E AE VERIFY

INDICATE
NOTE: SPACE TRUSSES FOR CLEARANCE OF CHUTE PENETRATION.

BEING COORDINATED W/TRUSS FAB.

24"x24" Door Top @ 3'-6"

SPEC. 14560 REQUIRES 15"x18". AE CONFIRM SIZE IS ACCEPTABLE.

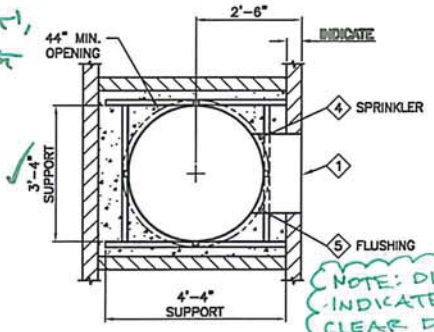
Contractor obtain current information

TRASH COMPACTOR IS OF01 AE COORDINATE

ELEVATION
BLDG. 1

TO INSURE FLUSH DOOR INSTALLATION:

THE DISTANCE FROM THE CENTERLINE OF THE CHUTE OPENING TO THE FRONT OF FINISHED WALL MUST EQUAL THE DIMENSION SHOWN ON THE DRAWING. PLEASE VERIFY.



TYPICAL CHUTE SUPPORT

NOTE: DIMENSIONS INDICATED ARE FINISHED CLEAR DIMENSIONS OF SHAFT WALL. AM/BLHI

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

FLOOR SLAB OPENING 44" SQ. OR ROUND
IF THE CHUTE IS TO BE INSTALLED IN A CHASE
PLEASE INDICATE SIZE: 37" x 41"

INTAKE WALL MUST BE INSTALLED AFTER CHUTE.

BUILDING PREPARATIONS AND GENERAL NOTES

1. THE CHUTE SHALL BE INSTALLED AFTER THE BUILDING IS TOPPED.
2. ALL FLOORS MUST BE SET AND OPENING CLEAR OF OBSTACLES.
3. PROVIDE ROOF OPENING 2" LARGER THAN CHUTE DIAMETER.
4. TRASH ROOMS ARE TO BE CLEARED OF STORED MATERIALS AND TRASH.
5. PLEASE INDICATE ALL OBSTRUCTIONS: BEAMS, COLUMNS, HEADERS OR RAFTERS.
6. ALL SECTIONS OF CHUTE CAN BE ROTATED IN 90° INTERVALS.
7. ALL FLOOR OPENINGS, CUTTING, PATCHING OR GROUTING BY OTHERS.
8. CHUTE GUARANTEE IS VOID IF CHUTE IS USED DURING CONSTRUCTION.
9. PARTITIONS AROUND CHUTE TO BE ERECTED AFTER CHUTE IS INSTALLED.

30"

SPECIFICATIONS *VERIFY SPECS BELOW*

QTY ONE – CHUTE TO BE 40" DIAMETER AND FABRICATED OF 16ga ALUMINIZED STEEL.

INTAKES: 3 REQ'D

1. 21" WIDE x 21" HIGH, BOTTOM HINGED, HAND OPERATED, SELF-CLOSING, STAINLESS DOOR W/SATIN FINISH AND STEEL ANGLE FRAME, "B" LABEL, 1-1/2 HOUR, 250°F, 30 MINUTE TEMP. RISE WITH POSITIVE LATCHING KEY CYLINDER LOCKING T-HANDLE

HORIZONTAL ROLLING DISCHARGE:

2. SPRING LOADED AND HELD OPEN WITH A 165° FUSIBLE LINK. FABRICATED WITH 12ga GALVANIZED PLATE AND 12ga FORMED CHANNEL. ATTACHED TO CHUTE WITH A-CLIPS.

VENT: PITCHED ROOF TYPE

3. FULL DIAMETER VENT WITH METAL SAFETY CAP AND FLASHING.

SPRINKLER HEADS:

4. AUTOMATIC 155° BRASS 1/2" IPS SPRINKLER HEADS LOCATED ABOVE TOP INTAKE AND ALTERNATE INTAKES WITH MANDATORY SPRINKLER LOCATED AT LOWEST SERVICE LEVEL, READY FOR CONNECTION BY OTHERS.

FLUSHING HEAD:

5. BRASS 3/4" IPS FLUSHING SPRAY HEAD LOCATED ABOVE TOP INTAKE. READY FOR CONNECTION BY OTHERS.

CHUTE SUPPORTS: (Typical per floor)

6. FABRICATED FROM 1 1/2" x 1 1/2" x 3/16" STEEL ANGLE

ADDITIONAL ACCESSORIES: (PER CHUTE)

- ELECTRIC INTERLOCKS W/MANUAL CONTROL BOX
- 15x15 'B' LABEL ACCESS DOOR W/SANITIZING UNIT
- KORFUND ISOLATOR PADS – (4) PER CHUTE SUPPORT)
- FACTORY APPLIED SPRAY ON SOUND COATING

SUBMITTAL
DO NOT BUILD

CONTRACTOR TO VERIFY ALL DIMENSIONS ON THIS DRAWING WITH FIELD CONDITIONS. VALIANT PRODUCTS WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS UNLESS SO NOTED. APPROVAL OF THIS SHEET CONSTITUES APPROVAL OF ALL SHEETS IN THIS SET.

☐ AS SUBMITTED ☐ AS NOTED

DATE: _____
BY: _____
DELIVERY REQ'D.: _____

Valiant Products, Inc.
P.O. Box 405 • Lakeland, FL 33802
PH. (863) 688-7998
FAX (863) 683-9749
LICENSE #CS C033741

TITLE: 40" TRASH CHUTE		PROJECT: UNIV. OF NORTH ALABAMA FLORENCE, AL BL HARBERT	
SIGNATURE	DATE		
DRAWN: SRM	28OCT14		
CHK'D:		DRAWING NO. 11393A	REV. –
APV'D:			

REV	DESCRIPTION	BY	DATE	SCALE: 3/16" = 1	DO NOT SCALE DRAWING	SHEET 1 of 2

City reviewed and approved contract documents during design phase. AM/BLHI

AE Verify

* PLEASE VERIFY OR INDICATE WHERE NOTED *

NOTE:
DUE TO OFFSET IN CHUTE, THIS CONFIGURATION DOES NOT COMPLY WITH NFPA 82 CODE. CONSULT WITH YOUR LOCAL F.M. FOR APPROVAL.

SEE RFI 113

AE VERIFY

PLEASE VERIFY RISE AND RUN 10 12

INDICATE

48" ok

48" REQUIRED PER SPEC. SECTION 14560/E AE VERIFY

ROOF PENETRATION
40°g x 2'-6" LG. "B" CHUTE
40°g x 45° ELL
45°
40°g x 3'-9" LG. "B" CHUTE
BTM OF TRUSS
40°g x 45° ELL
40°g x 2'-6" LG. "B" CHUTE
40°g x 5'-0" LG. "B" CHUTE
40°g x 4'-11" LG. INTAKE W/SUPPORT CLIPS
5th FLR
40°g x 5'-0" LG. "B" CHUTE
40°g x 1'-3" LG. "B" CHUTE
40°g x 4'-11" LG. INTAKE W/SUPPORT CLIPS
4th FLR
40°g x 5'-0" LG. "B" CHUTE
40°g x 1'-3" LG. "B" CHUTE
40°g x 4'-11" LG. INTAKE W/SUPPORT CLIPS
3rd FLR
40°g x 5'-0" LG. "B" CHUTE
40°g x 1'-3" LG. "B" CHUTE
40°g x 4'-11" LG. INTAKE W/SUPPORT CLIPS AND W/(4) A-CLIPS
2nd FLR
40°g x 4'-7" LG. SLEEVE W/A-CLIPS
1st FLR
6 TYP
1'-9" TYP
10'-0" VERIFY
12'-0" VERIFY
6'-0" VERIFY

INDICATE
NOTE: SPACE TRUSSES FOR CLEARANCE OF CHUTE PENETRATION.

BEING COORDINATED w/TRUSS FAB.

AE ok VERIFY

AE ok VERIFY

AE ok VERIFY

AE ok VERIFY

AE VERIFY ok

Contractor verify what is built

Contractor obtain current information

24"x24" Door Top @ 3'-6"

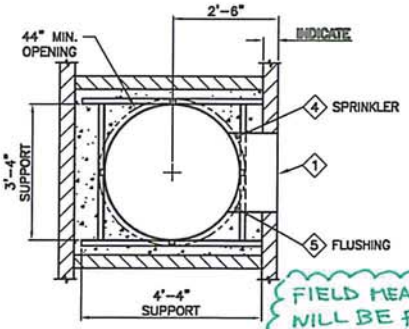
30"

SPEC. 14560 REQUIRES 15"x 18". AE CONFIRM SIZE IS ACCEP.

TRASH COMPACTOR OF OI ITEM. AE COORDINATE

TO INSURE FLUSH DOOR INSTALLATION:

THE DISTANCE FROM THE CENTERLINE OF THE CHUTE OPENING TO THE FRONT OF FINISHED WALL MUST EQUAL THE DIMENSION SHOWN ON THE DRAWING. PLEASE VERIFY.



FIELD MEASUREMENT WILL BE PROVIDED ONCE R/D IS BUILT

TYPICAL CHUTE SUPPORT

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

FLOOR SLAB OPENING 44" SQ. OR ROUND
IF THE CHUTE IS TO BE INSTALLED IN A CHASE
PLEASE INDICATE SIZE: TBD x TBD

INTAKE WALL MUST BE INSTALLED AFTER CHUTE.

BUILDING PREPARATIONS AND GENERAL NOTES

1. THE CHUTE SHALL BE INSTALLED AFTER THE BUILDING IS TOPPED.
2. ALL FLOORS MUST BE SET AND OPENING CLEAR OF OBSTACLES.
3. PROVIDE ROOF OPENING 2" LARGER THAN CHUTE DIAMETER.
4. TRASH ROOMS ARE TO BE CLEARED OF STORED MATERIALS AND TRASH.
5. PLEASE INDICATE ALL OBSTRUCTIONS: BEAMS, COLUMNS, HEADERS OR RAFTERS.
6. ALL SECTIONS OF CHUTE CAN BE ROTATED IN 90° INTERVALS.
7. ALL FLOOR OPENINGS, CUTTING, PATCHING OR GROUTING BY OTHERS.
8. CHUTE GUARANTEE IS VOID IF CHUTE IS USED DURING CONSTRUCTION.
9. PARTITIONS AROUND CHUTE TO BE ERECTED AFTER CHUTE IS INSTALLED.

SPECIFICATIONS *VERIFY SPECS BELOW*

QTY ONE – CHUTE TO BE 40" DIAMETER AND FABRICATED OF 16ga ALUMINIZED STEEL.

INTAKES: 4 REQ'D

1 — 21" WIDE x 21" HIGH, BOTTOM HINGED, HAND OPERATED, SELF-CLOSING, STAINLESS DOOR W/SATIN FINISH AND STEEL ANGLE FRAME, "B" LABEL, 1-1/2 HOUR, 250°F, 30 MINUTE TEMP. RISE WITH POSITIVE LATCHING KEY CYLINDER LOCKING T-HANDLE

HORIZONTAL ROLLING DISCHARGE:

2 — SPRING LOADED AND HELD OPEN WITH A 165° FUSIBLE LINK. FABRICATED WITH 12ga GALVANIZED PLATE AND 12ga FORMED CHANNEL. ATTACHED TO CHUTE WITH A-CLIPS.

3 — **VENT:** PITCHED ROOF TYPE
FULL DIAMETER VENT WITH METAL SAFETY CAP AND FLASHING.

SPRINKLER HEADS:

4 — AUTOMATIC 155° BRASS 1/2" IPS SPRINKLER HEADS LOCATED ABOVE TOP INTAKE AND ALTERNATE INTAKES WITH MANDATORY SPRINKLER LOCATED AT LOWEST SERVICE LEVEL, READY FOR CONNECTION BY OTHERS.

FLUSHING HEAD:

5 — BRASS 3/4" IPS FLUSHING SPRAY HEAD LOCATED ABOVE TOP INTAKE. READY FOR CONNECTION BY OTHERS.

CHUTE SUPPORTS: (Typical per floor)

6 — FABRICATED FROM 1 1/2" x 1 1/2" x 3/16" STEEL ANGLE

ADDITIONAL ACCESSORIES: (PER CHUTE)
- ELECTRIC INTERLOCKS W/MANUAL CONTROL BOX
- 15x15 'B' LABEL ACCESS DOOR W/SANITIZING UNIT
- KORFUND ISOLATOR PADS – (4) PER CHUTE SUPPORT)
- FACTORY APPLIED SPRAY ON SOUND COATING

SUBMITTAL
DO NOT BUILD

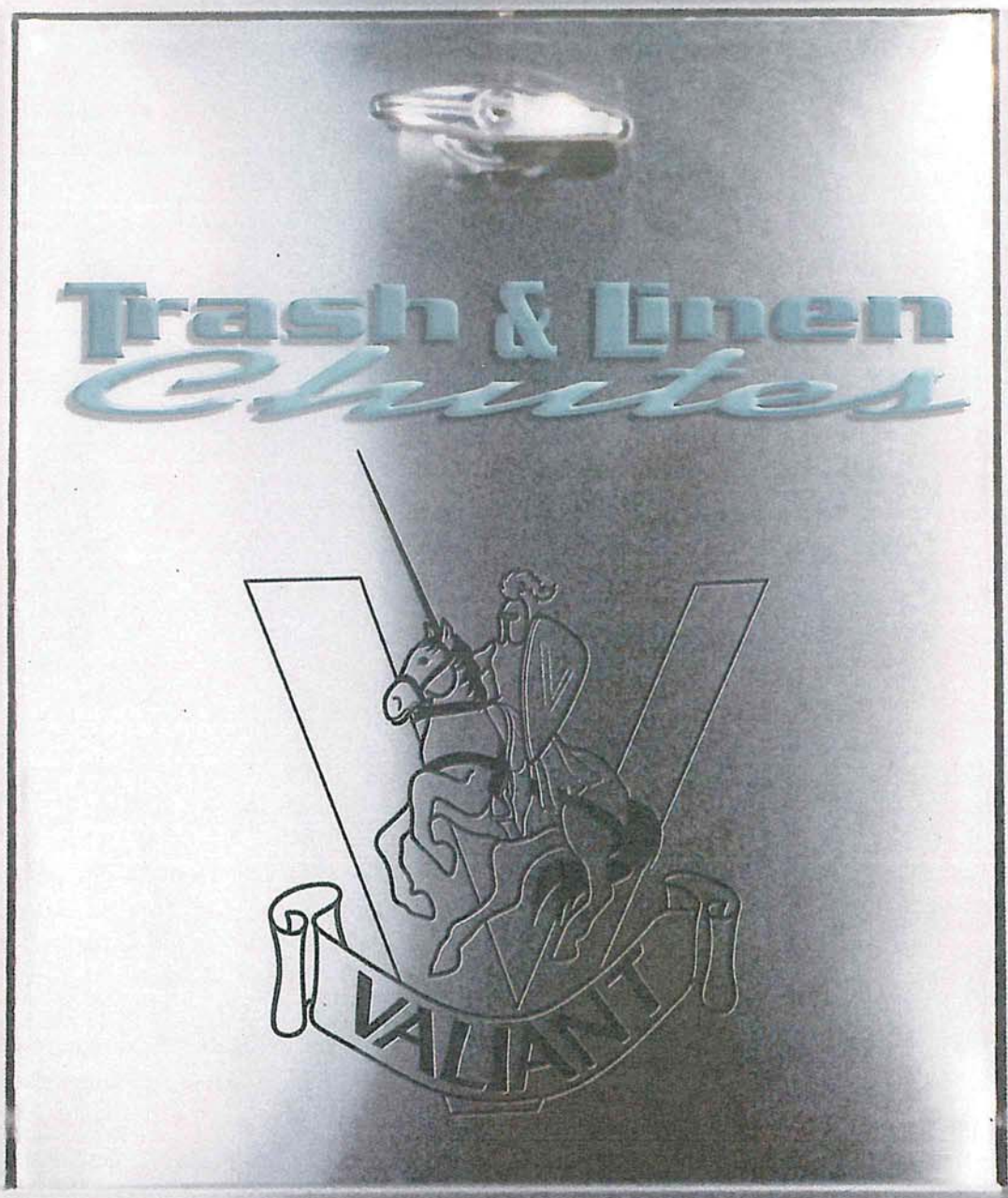
ELEVATION
BLDG. 2

REV	DESCRIPTION	BY	DATE

Valiant Products, Inc.
P.O. Box 405 • Lakeland, FL 33802
PH. (863) 688-7998
FAX (863) 683-9749
LICENSE #CS C033741

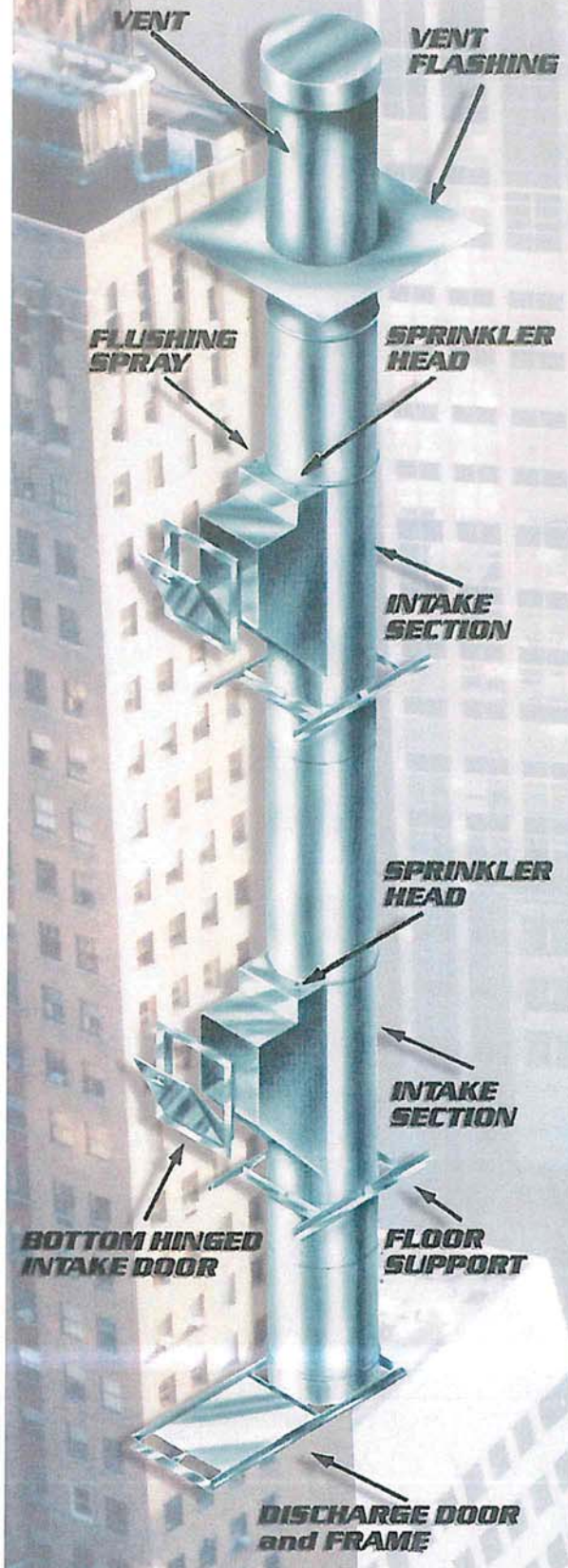
TITLE: 40" TRASH CHUTE	PROJECT: UNIV. OF NORTH ALABAMA FLORENCE, AL BL HARBERT
SIGNATURE / DATE	
DRAWN: SRM 28OCT14	
CHK'D:	DRAWING NO. 11393A
APV'D:	REV. –
SCALE: 3/16" = 1	DO NOT SCALE DRAWING
	SHEET 2 of 2

11175/VAL
BuyLine 2312



Centralized, Convenient Disposal of Rubbish and Soiled Linens

Trash & Linen Chutes

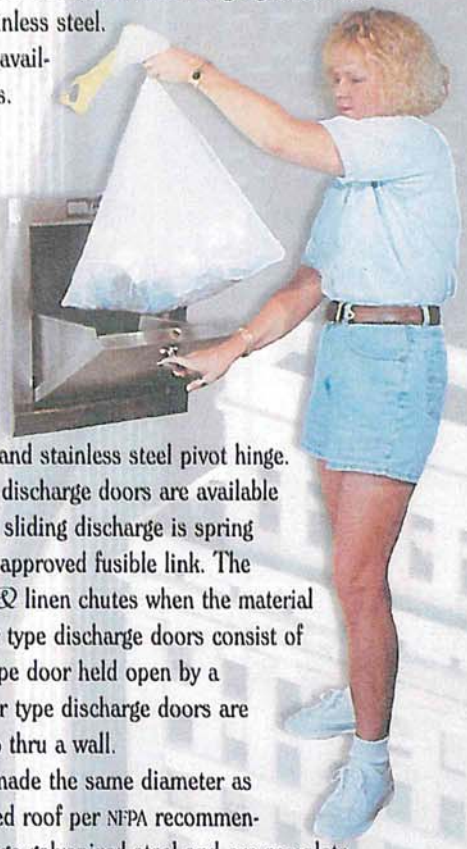


GENERAL INFORMATION

Chute Construction Valiant Products Inc. Chutes are fully factory assembled with all joints welded or lock seamed. There is one expansion joint per floor. All chutes have a flush interior and are assembled without bolts, rivets or clips protruding into the chute opening. Chutes are equipped with chute support clips pre-positioned at the factory to insure proper chute alignment. The adjustable intake door and frame are securely fastened to the intake throat. If required, offsets will be reinforced and supported in impact areas.

Material Valiant Products, Inc. chutes are constructed of 16 gauge standard aluminized steel, galvanized steel or stainless steel.

Sizes Valiant Products, Inc. chutes are available in 36", 30", 24" and 20" diameters. The standard chute size is 24" per NFPA recommendations.



Intake Doors Valiant Products, Inc. U.L."B" labeled self closing intake doors are constructed of 22 gauge polished stainless steel fronts and 18 gauge aluminized steel backs and wings. Each door is equipped with a chrome plated Tee handle with lock & two keys, fire rated latching mechanism and stainless steel pivot hinge.

Discharge Doors Two types of fire discharge doors are available from Valiant Products, Inc. The standard sliding discharge is spring loaded and held open with a 155° U.L. approved fusible link. The sliding discharge is used for both trash & linen chutes when the material drops directly into a container. Hopper type discharge doors consist of a stainless steel "B" label constructed type door held open by a 155° U.L. approved fusible link. Hopper type discharge doors are used when a 90° offset is required to go thru a wall.

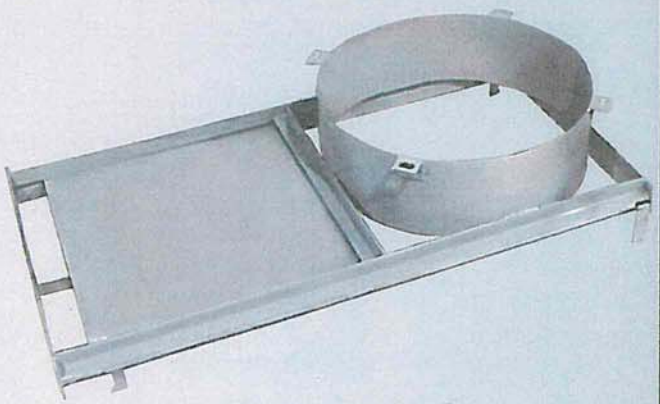
Vents Valiant Products, Inc. vents are made the same diameter as the chute and extend 4' above the finished roof per NFPA recommendations. Vents are constructed of 22 gauge galvanized steel and are complete with roof flashing and metal weather cap.

Sprinkler System Valiant Products, Inc. furnishes one (1) U.L. approved ½", 155° automatic brass sprinkler head above the top intake door of each chute complete with a fitting for connection by a plumber. Depending on the number of floors and local fire codes, additional sprinkler heads are furnished on alternate lower floors.

Flushing Head Valiant Products. Inc. furnishes one (1) ½" brass spray head, above the top intake door of each chute, complete with a fitting for connection by plumber.

Optional Equipment When required, optional equipment such as sound insulation, isolator pads, electric door interlocks, sanitizing units, smoke detectors and temperature controlled sprinklers can be furnished with our standard chute. Contact the factory at 800.659.1797 for specific information.

Trash Linen Chutes



Intake Door

A bottom hinged, hand operated, self closing, 22 gauge stainless steel intake door with steel angle frame assembly. U.L."B" label, 1½ hr. 250° 30 min. temperature rise.

Recommended Door Sizes

Chute Size	Door Size - W x H
24" Diameter Chute	15" x 18" Door
30" Diameter Chute	18" x 18" Door
36" Diameter Chute	21" x 18" Door

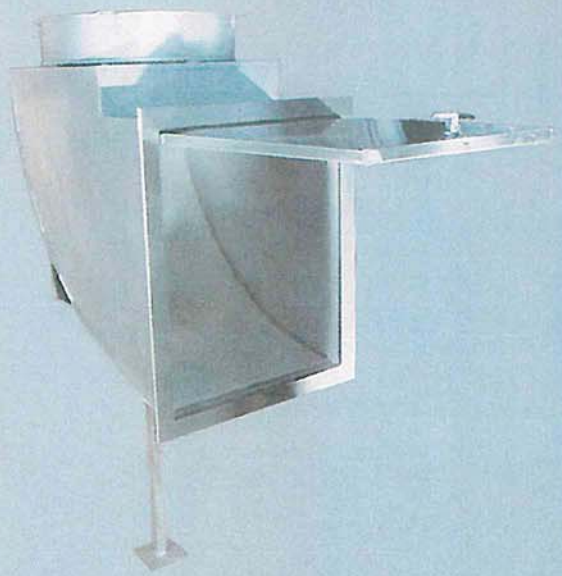
Discharge Door

Fabricated from 12 gauge galvanized plate that slides in a 1½" x ¼" steel track. Plate is spring loaded and held open with a U.L. approved 165° fusible link.

Recommended Door Sizes

Chute Size	Door Size - W x H
24" Diameter Chute	26½" x 50½" Door
30" Diameter Chute	32½" x 62½" Door
36" Diameter Chute	38½" x 74½" Door

W = Door Width



Intake Door

Side hinged, hand operated, self closing, 22 gauge stainless steel intake door with steel angle frame assembly. U.L."B" label, 1½ hr. 250° 30 min. temperature rise.

Recommended Door Sizes

Chute Size	Door Size - W x H
20" Diameter Chute	15" x 15" Door
24" Diameter Chute	18" x 18" Door
30" Diameter Chute	21" x 21" Door
36" Diameter Chute	24" x 24" Door

Discharge Door

Top hinged stainless steel door held opened with U.L. approved 155° fusible link. U.L."B" label with steel angle frame assembly, drain panel and adjustable support pedestal.

Recommended Door Sizes

Chute Size	Door Size - W x H
20" Diameter Chute	20" x 30" Door
24" Diameter Chute	24" x 30" Door
30" Diameter Chute	30" x 36" Door
36" Diameter Chute	36" x 48" Door

H = Door Height

High Wind Velocity

The vent assembly is designed to withstand high wind velocity. The vent is self flashing and a roof curb is not required for installation.

Valiant Guarantee

Valiant Products, Inc. chutes and accessories are guaranteed against defective material and workmanship for a period of one (1) year

Standard Specifications

Trash Chute (in compliance with NFPA codes) Furnish and deliver a 24 inch diameter trash chute as manufactured by Valiant Products, Inc., Lakeland, Florida 33802.

Chute Material Chute to be constructed of 16 gauge aluminized steel. Optional: 16 gauge stainless steel.

Intake Doors Furnish chute with 15" x 18" hand operated hopper type, stainless steel #304 intake doors. Doors to be bottom hinged with 1½ 250° 30 minute temperature rise, U.L." B" label fire rating.

Discharge Door Provide sliding discharge door with 155° U.L. approved fusible link at bottom of chute in trash room.

Vent Equal to chute diameter extending four (4) feet above the roof. Constructed of 22 gauge galvanized steel with flashing to insure a water tight seal, and metal weather cap.

Accessories Furnish ½" IPS flushing head and ½" fusible link sprinkler head above top intake door. Additional sprinkler heads shall be provided at alternate floors.

Linen Chute Same specification as above except substitute side hinged intake doors for bottom hinged doors.

Installation

Valiant Products are manufactured complete and ready for installation. Typical floors consist of two (2) sections per floor. Installation instructions are included with each shipment.

Codes & Certification

All Valiant Products, Inc. chutes are approved by the State's Fire Marshal where required and are manufactured to comply with the standards of the National Fire Protection Association (NFPA) #82. Standard size intake doors are manufactured to bear the Underwriter's Laboratories, Inc., 1½ hour, 30 min., 250° "B" label.

VALIANT PRODUCTS, INC.

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www.linenchutes.com

Valiant Products, Inc.

Owner's Chute Documentation

P.O. Box 405 • Lakeland, FL 33802
Phone: 863-688-7998
Fax: 863-683-9749
www.linenchutes.com

Owner's Chute Documentation

Sections

I. Operation of chutes
II. Installation Instructions
III. Interlock System
IV. Plumbing Hookups with Sanitizer
V. Maintenance
VI. Sample Warranty
    a. Materials
    b. Installation

Owner's Chute Documentation

I. Operations of Chute

Valiant chutes are designed to convey trash or linen from many locations to one central location for disposal. Each floor is equipped with an intake door. To use the chute, the operator simply steps up to the intake door, opens the door with one hand and deposits the trash or linen into the intake. The operator may then release the door and the job is complete. Valiant's doors are designed per NFPA 82 fire codes and are required to be self-closing.

II. Installation Instructions

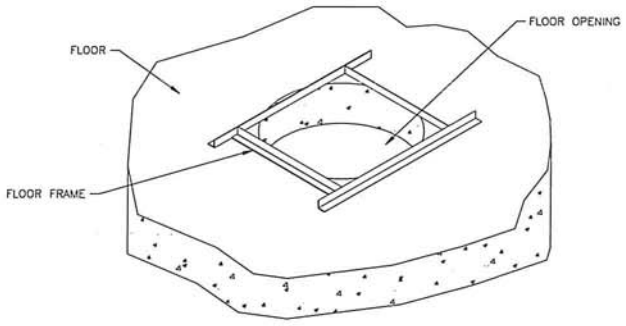
Installation of a Valiant chute requires very few tools; hammer, screwdriver, drill, wrench and level.

Materials are prefabricated to dimensions shown on shop drawings; therefore, no field cutting or fitting is required. The joints are "slip joints" to permit slight field height variations.

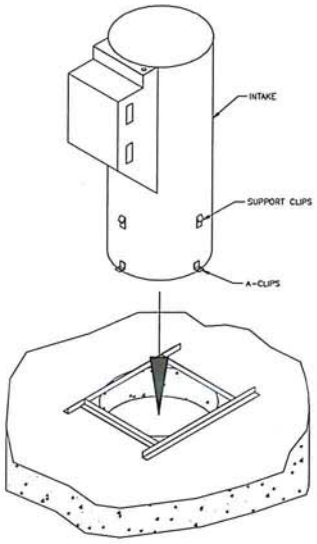
Intake doors, frames and hardware are prefabricated and installed on each intake section throat, fully assembled. Doors and pneumatic closure tension are adjusted. The protective covering on the doors should be removed only after completion of plastering and painting.

1. Distribute chute sections, typically one intake and one "b" section per floor, noting that the top intake section will have a flushing head and a sprinkler head.

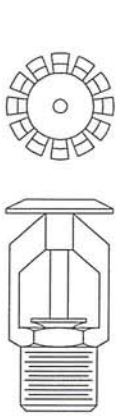
2. On the first floor above the discharge room, place a floor support angle over floor opening with cross members parallel to the intake door.



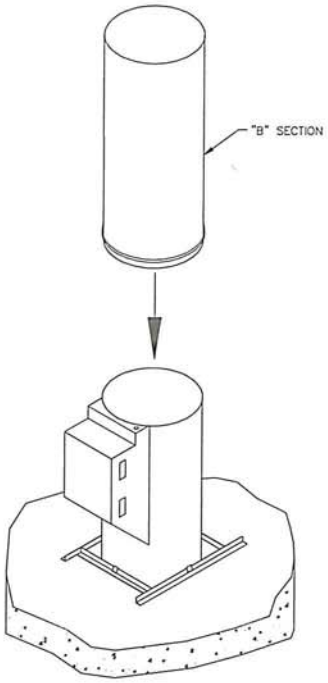
3. Set the first intake section, this section has 4 a-clips with slots welded to the bottom of it; into the floor opening and seat the support clips over the floor support.

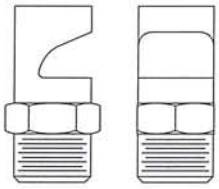


4. After first intake section has been set, slip the beaded end of the plain chute section ("b" section) into the intake section making sure it is sealed all around. Some floor heights may require multiple "b" sections. Check with level to plumb chute as installation proceeds.



Sprinkler
Head
165°
Automatic
Brass, ½" IPS

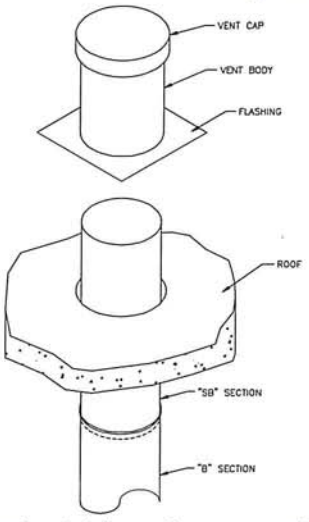




Flushing Head
½" IPS, located
above
top intake door.

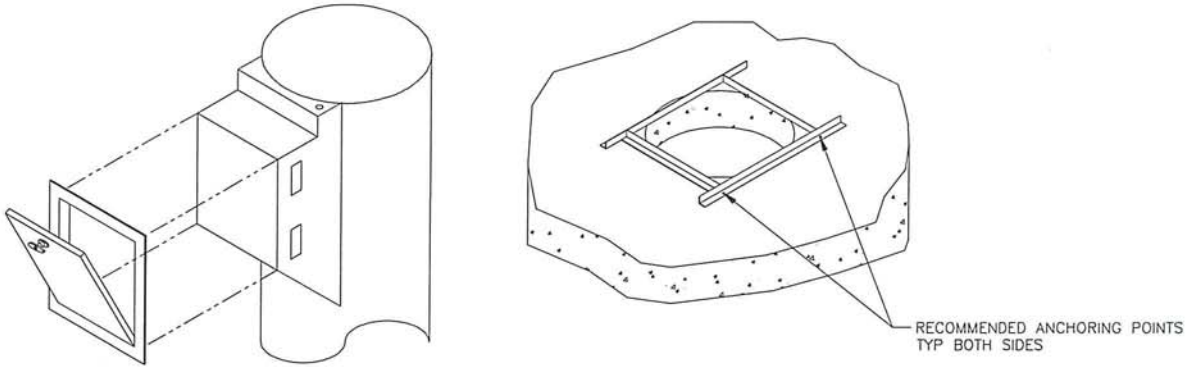
5. Repeat steps #2, #3 and #4 on the remaining floors. Note the floors requiring intakes with sprinkler heads. Per NFPA, this means the top floor and at alternate floor levels with a mandatory one at the first intake floor.

6. After installation of the top intake section and final "b" sections, the final beaded section or "sb" section of chute is installed to protrude above the roof.

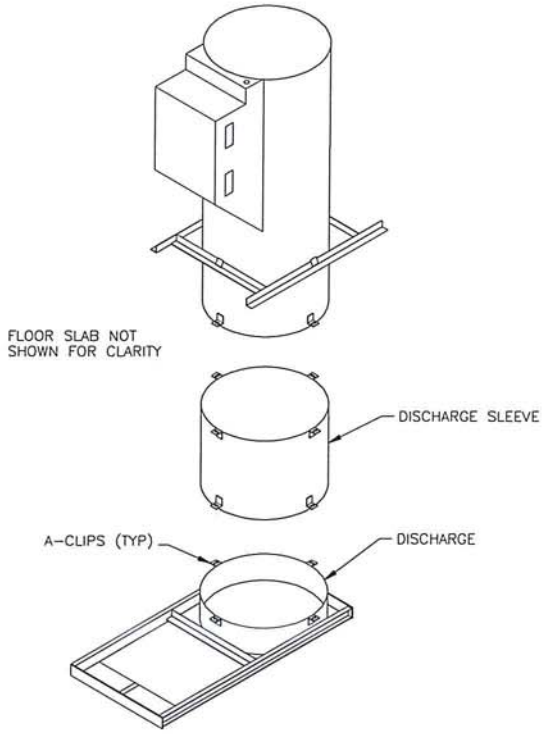


7. Place vent assembly over the "sb" section protruding through the roof, until the vent is seated onto the roof. Secure the vent body to the "sb" section using ¾" long tek-screws. Attach flashing to the roof; the roofer may then finish over the flashing assembly.

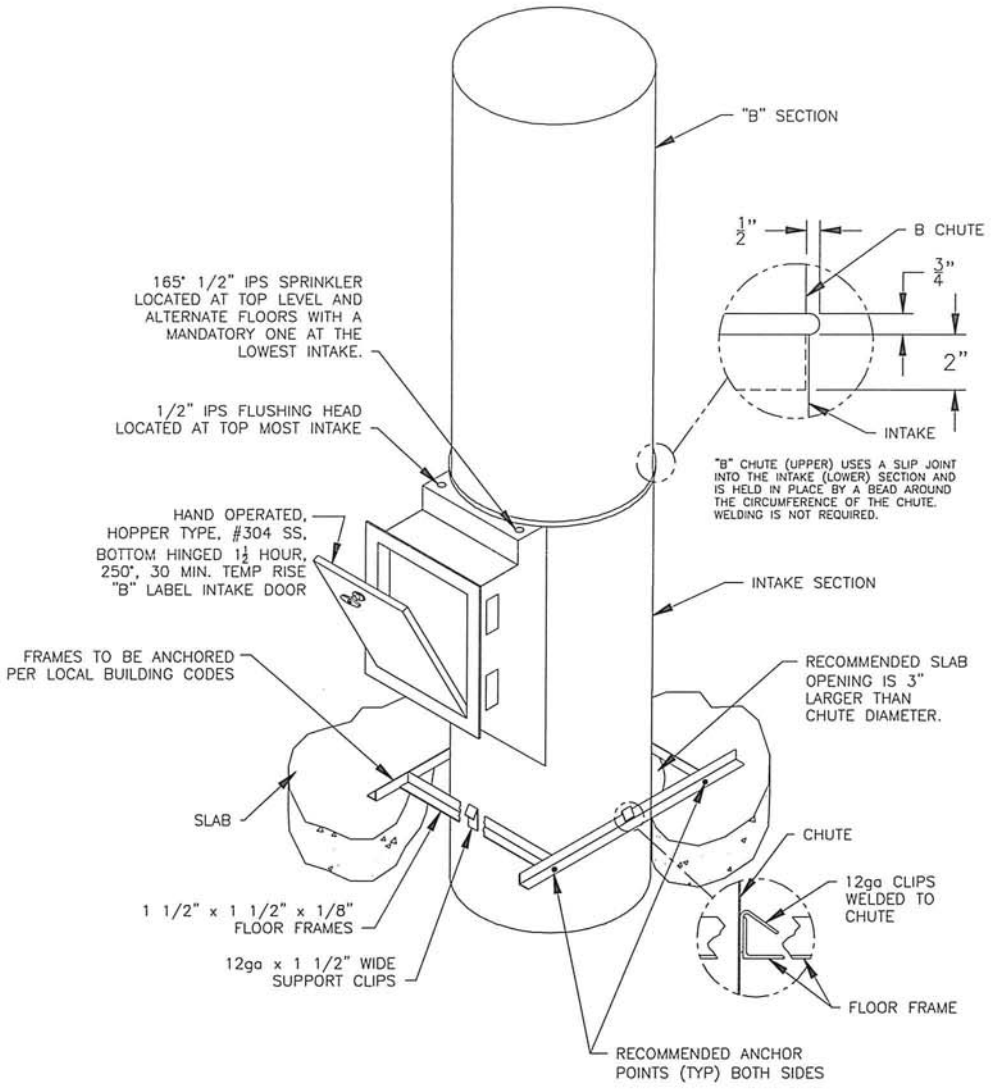
8. After all floors of chute have been installed, starting at the first intake floor, plumb and level intake doors. Make sure that the face of the doors will be flush to the proposed wall. Fasten the floor support frames to the floor slab. The frames are to be anchored per local building codes.



9. Complete installation in the discharge room. Slip the discharge sleeve; this sleeve has 4 angle clips on each end, over the section of chute projecting through the first floor slab. Match the clips and secure with (4) 2 ½" long bolts and nuts. Secure the discharge in the same manner to the sleeve. If the discharge is a horizontal rolling type, slide the door back and connect the fusible link to the angle clip on the bottom of the door. If the discharge is hopper style, attach the top hinged door to the throat of the hopper. Attach the door support arm to the flange of the door using the bolts and nuts supplied. Open the door and connect the fusible link to the eye ring located on the door.



Standard Floor Elevation



III. Interlock System (optional)

To reduce the risk of electric shock, this equipment has a grounding type plug that has a third grounding pin. This plug will only fit into a grounding type outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet.

1. Overview

   Electric interlocks are designed to lock out all the intake doors on a chute when one door is opened. When an intake door is in an opened position, the locked intakes are signified by a light above the door, indicating the chute is in use.

   The power supply box is equipped with a toggle switch that allows the ability to lock out all the doors when servicing the equipment.

   The interlock system comes pre-wired and is designed to use 110VAC. The power supply box is equipped with a transformer so that the power is stepped down to 24VDC.

2. Installation

   Note: Before attaching any wires, be sure that the power supply box is not plugged in.

   Once the chute has been installed, do the following:
   1. Go to the top intake floor of the chute; secure the tri-strand color-coded wire (trunk).
   2. Drop the trunk down the shaft, outside of the chute.
   3. Separate the 3 wires. Allow about 12" slack of wire. Attach a blue wiretap, which is supplied, to each of the ends. Plug the wires into the corresponding color wire of the lockout box on the intake door. Secure the slack at the intake using an adhesive tape.
   4. Repeat step 3 at each intake level.
   5. In the discharge area, mount the supplied shelf in the desired location.
   6. Set the power supply box on the provided shelf.
   7. Remove any excess trunk wire and separate the 3 wires.
   8. Strip each wire's sheathing approximately 3/16" from the end and attach the provided male insulated solderless connectors to each wire that was just stripped and crimp them on securely.
   9. Plug the wires that the ends were put on, into the corresponding color wire.
   10. Power may now be supplied by plugging in the power supply box into a 110-volt AC grounded outlet.

3. Proper Care During Construction Phase

   1. Seal around the door gap with duct tape.
   2. Keep the doors from being exposed to water.
   3. Keep the doors locked.
   4. Keep the main power trunk out of the way during the masonry or drywall phase.
   5. Secure the discharge level wires until the power supply box shelf is mounted in the desired location and you are ready to wire the power supply box.

4. Preparing the System for Intended Use

    1. Clean the exterior of the doors to eliminate debris from causing obstructions.
    2. Remove the sealant tape from around the doors.
    3. Attach the trunk to the power supply box.
    4. Inspect the microswitch and solenoid at each intake. Check for rust, construction dust and ease of movement.

5. Troubleshooting

    When the chute is working correctly, two things should happen.
    1. When you open one door, all other doors should lock out. All doors should have their indicator lights on and the power supply box should also have its indicator light on.
    2. When the power supply box is turned on, so the trash or linen may be taken care of, all of the doors should lock above so that the chute is not usable while being serviced.

    There are a variety of things to look for when either of these two things is not working correctly.
    1. Check to see if the circuit reset button has been tripped.
    2. If nothing is working from the doors to the box, check the wiring. Make sure that all the wires are going to the appropriate places. Make sure that the power supply box is plugged in and the outlet has power.

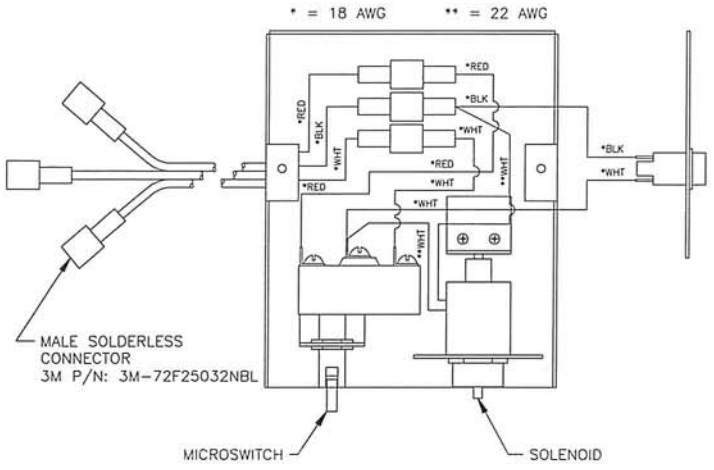
    If your problem is contained to one door not working:
    1. The first thing you want to do is make sure that your door is opening and closing correctly.
    2. Next, open and close the door slowly, you should hear a clicking noise. If you hear this noise, the micro switch is working properly. If you do not hear this noise, close the door and look in the gap between the door and the frame, you will be able to see the roller. There is a nut holds the micro switch in place. If you loosen that nut, you will be able to move the micro switch to where it is touching the door. Once you have moved it, close the door and repeat this step. Once you have made sure that the micro switch is touching the door and you still do not hear a clicking noise, you have a bad micro switch. If you hear a clicking noise, move on to step 3.
    3. Open the door and look inside right where the lockout box is, you will see the micro switch and the solenoid. Take your finger and press up on the roller to the micro switch. You should hear a clicking noise. This should also engage the solenoid. Every time that the micro switch is pressed up, the solenoid should engage as though it were going into the door. If this does not happen, you will need to take the faceplate off of the door, so that you may get inside the lockout box.
    4. Once inside the lockout box, make sure that all wires are connected to the corresponding color and that there is not a loose connection. The solenoid should also be connected.
    5. If all the wires are connected securely and the colors are corresponding, check to make sure that the solenoid is working. Take your finger and press down on the black washer that is connected to the solenoid pin. Do this a few times quickly to loosen up the pin. It is also advisable to try blowing out any debris that may be in

the lockout box from construction. Once this is done, push up on the roller switch again and the solenoid should engage.

If this does not resolve the problem, please contact Valiant Products.

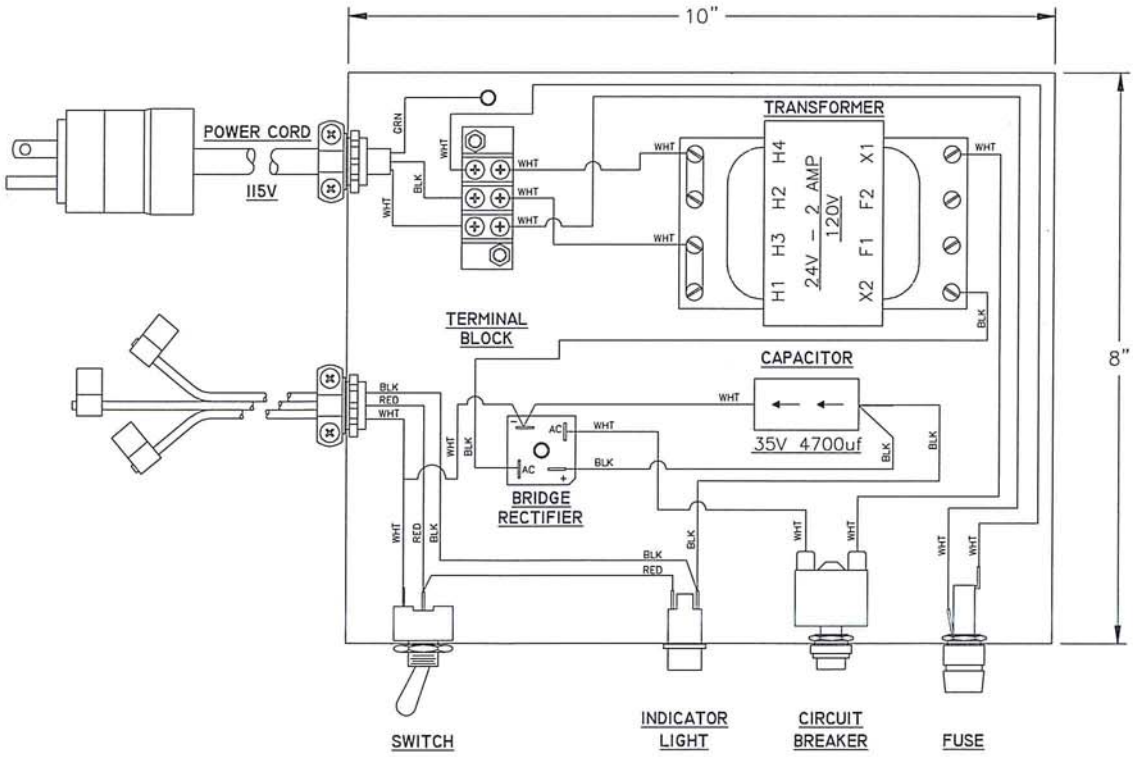
6. Schematics

   1. This is the schematic for a typical lockout box, located above the intake door.

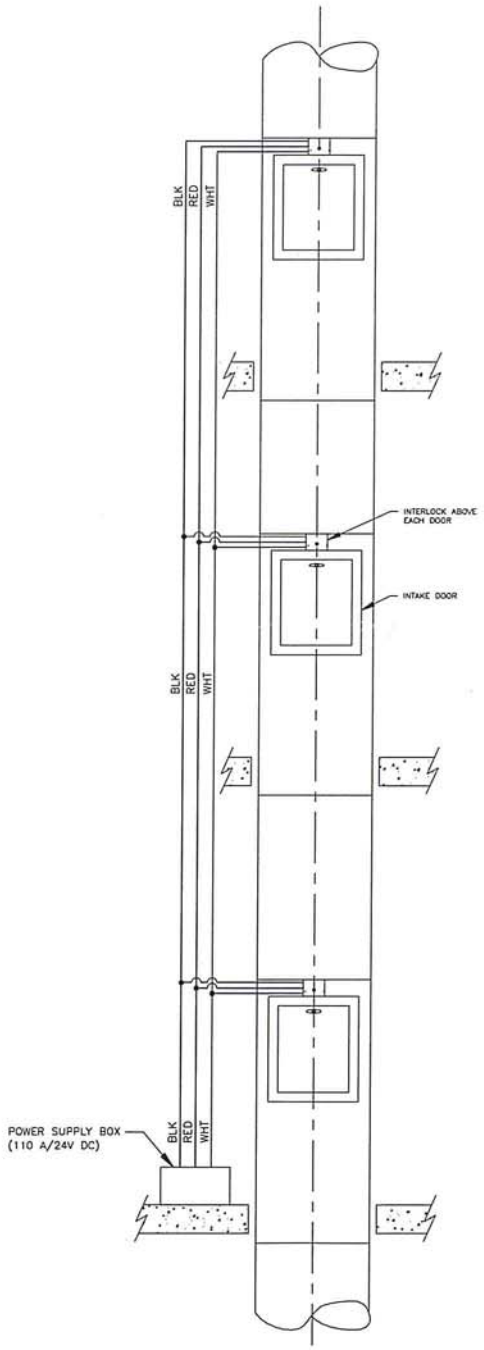


WIRING DIAGRAM
TYPICAL LOCK-OUT BOX

   2. This is the schematic for the power supply box, located in the discharge room.



3. This is the schematic for the trunk, which is dropped from the top floor, down the chase, outside of the chute and into the discharge room.



TYPICAL WIRING DIAGRAM FOR ELECTRIC INTERLOCKS

7. Replacement Parts List

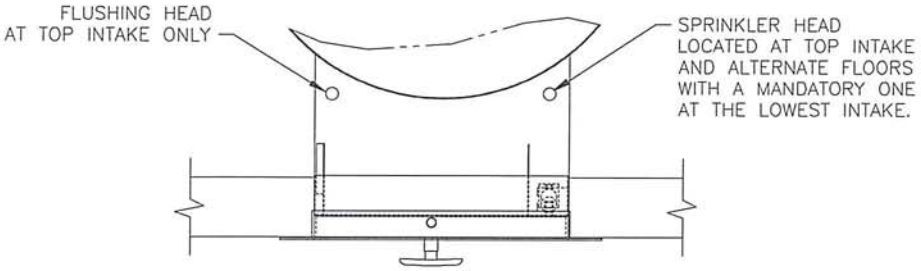
The wiring that Valiant provides meets UL 1015/CSA.

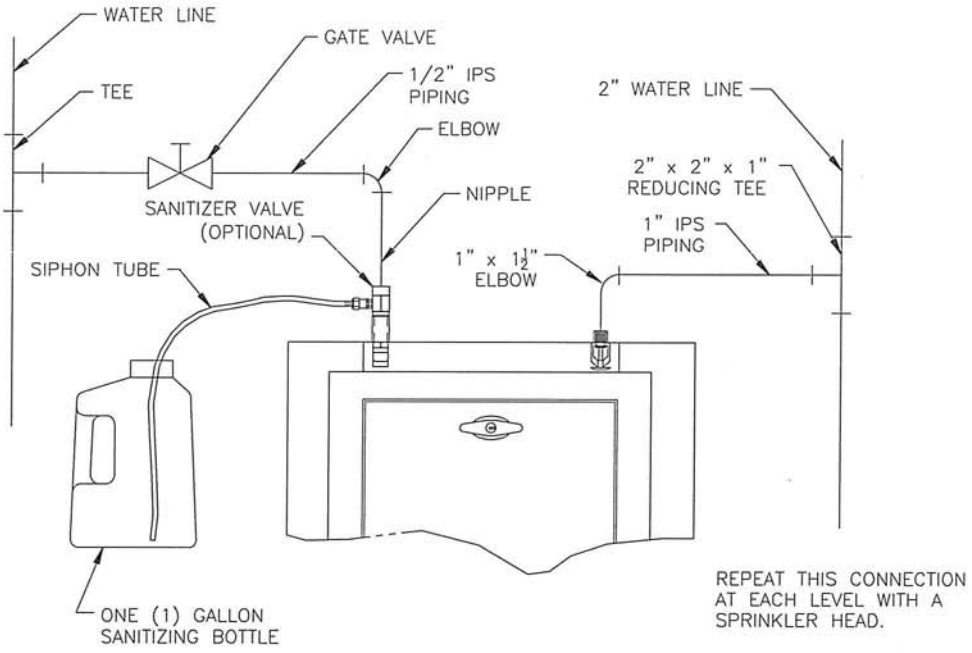
List of replaceable parts in the system.

1. Power Supply Box
   a. Capacitor: Mallory Inc. P/N TC50500 Type TC, 50WVDC; 65VDC
   b. Fuse Holder: Littlefuse P/N 342001, panel mount, fingergrip, type 3AG
   c. Fuse: 4 amp Littlefuse P/N 312004, type 3AG, fast-acting, 120/240VAC
   d. Switch: GC Waldom P/N 35-0119-0000, SPST
   e. Terminal strip: Molex-Beau P/N 78003, double row, 3 pole
   f. Rectifier: Fagor P/N FB5006
   g. Transformer: Acme P/N TA-2-81143, 120/240VAC Pri, 24VDC Sec 50Hz
   h. Breaker: GC Waldom P/N 35-2103, 120VAC, 3A
   i. Light: Solico P/N 3039-3-11-38310, 28V
2. Lock-out Box
   a. Light: Solico P/N 3039-3-11-38310, 28V
   b. Solenoid: Guardian P/N TP8X9-C-24VD
   c. MicroSwitch: Honeywell P/N BZ-2RQ181-A2, 15A, 125VAC

IV. Plumbing Hook-ups and Sanitizer (optional)

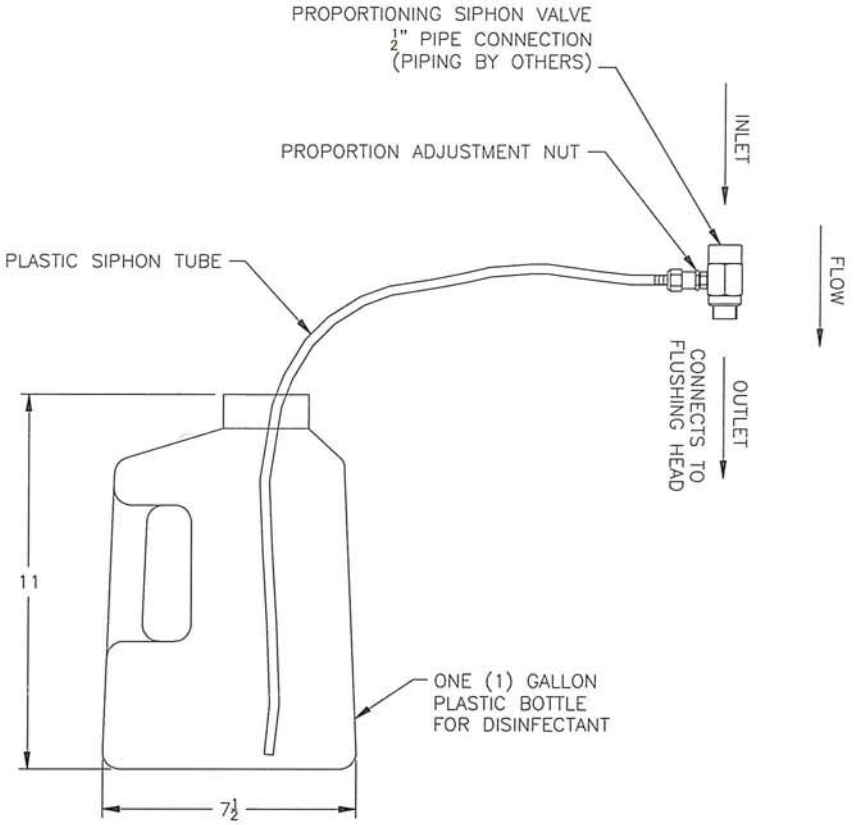
1. Typical Plumbing hook-up





PLUMBING HOOKUPS
BY OTHERS

2. Sanitizer System



SANITIZING UNIT

V. Maintenance

The Valiant trash/linen chute installed in your building has been manufactured and installed to comply with all building codes and fire regulations currently in effect in your area. It is very important to the safety of your building and tenants that you maintain your chute to stay in compliance with the fire codes. Failure to do so will result in the chute being permanently sealed or the building being closed and evacuated until the proper repairs are made.

To insure that your chute is working properly, and in compliance with the fire codes, you must:

1. **Make sure all doors close completely and latch** – To do this, make sure the shaft hinges are well oiled, the hydraulic door closer is working properly, the door frame is free of debris and the door handles and latches are in good repair.
2. **Make sure the fire door at the bottom of the chute will close in case of fire** – On a trash chute, the bottom of the chute is equipped with a fire door that closes if a fire occurs in the room and the temperature exceeds 155°F. The door consists of a sliding or rolling panel that is held in the open position by (2) 1" x 12" springs and a 155° lead fusible link. The fire door should be inspected annually. Make sure the springs have retained their tension, the fusible link is intact and the track that the door slides or rolls on is free of debris and corrosion. To test the door, remove the springs and fusible link and manually roll or slide the door back and forth on the track. If the door does not move freely, clean the track and apply oil or WD-40. Once you test the door, reattach the springs and fusible link. For a linen chute with top hinged door, make sure the chain holding the door open is equipped with a 155° fusible link and the door is free from any obstruction that would prevent the door from closing in the case of a fire.
3. **Make sure the roof vent is clear of obstructions and open to free air** – The vent located on the roof is designed to vent smoke out of the chute in case of fire. Check the vent periodically and make sure nothing is preventing the free flow of smoke.
4. **Fire sprinklers** – Your chute is equipped with 155° automatic fire sprinklers; located on the top floor, alternate floors down and the first intake level. If a fire does occur in the chute, the fire sprinklers will automatically turn on to extinguish the fire. Once the sprinklers are used, they need to be replaced. Fire sprinklers are located inside the chute doors in the upper left hand corner. To install new sprinklers, unscrew the old sprinkler and replace with a new one. It is recommended you wrap the threaded section of the new sprinkler with Teflon tape before inserting the new sprinklers.

TO KEEP THE CHUTE CLEAN AND FREE FROM ODOR, IT IS RECOMMENDED THAT ALL GARBAGE BE BAGGED AND SECURED BEFORE BEING DEPOSITED INTO THE CHUTE.

APARTMENT COMPACTOR
C-33X-APT

WASTEQUIP
Tel: 877-468-9278 | sales@wastequip.com
www.wastequip.com

The Apartment Compactor offers powerful compaction for small spaces.

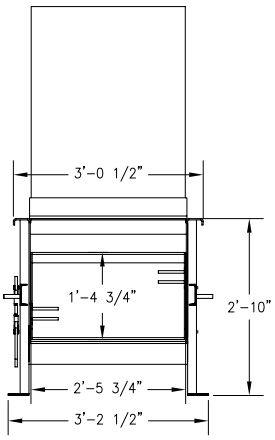
The C-33X-APT Apartment Compactor is designed to fit into tight trash rooms of high-rise buildings and apartment complexes where space is a commodity. It features a crossed cylinder mini design with totally automatic operation. Save money with the Apartment Compactor by minimizing the overall cost, pick-up frequency, and labor hours associated with standard containers.

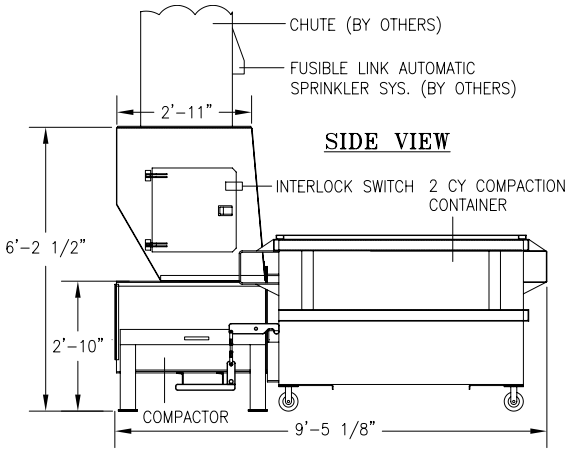
Compactor allows side feed, rear feed or chute feed.
Shown without compaction container.
Containers available in 2 and 3 cubic yard sizes.

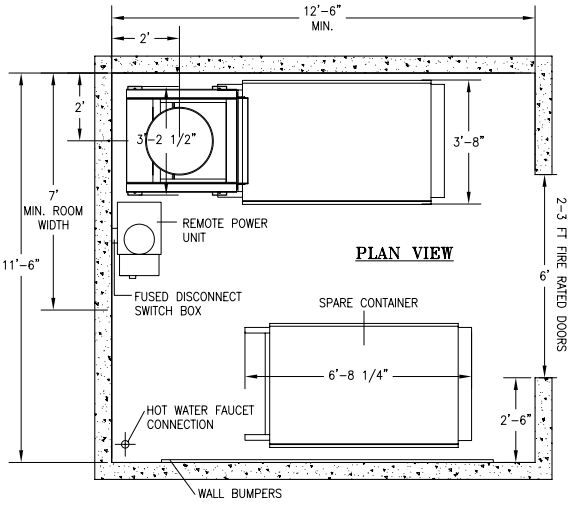
Value-Added Benefits

Space maximizing design	• Designed to be small and powerful and fit into trash rooms with limited space • Model is one half-foot shorter than the leading competitor; at only 38-1/2" long, it saves valuable work space
Standard features included at no additional charge	• Automatic cycle operation – Photo electric eye senses trash and starts compaction into container – Automatically shuts off after cycle – Full container light on panel illuminates when compactor is full • Ground-loading access door • Easy-to-use single-side attachment is ideal for tight spaces • 6" of ram penetration results in less spillage and cleanup as compared to other 4" penetration models • Powerful 5 hp motor • NEMA 4 control panel protects against windblown dust, splashing water and hose-directed water (superior to NEMA 3 models) • Large, clear top opening accommodates bulky items
Warranty	• 3-1-1 warranty (three-year structural, one-year parts, and one-year labor warranty)

APARTMENT COMPACTOR
C-33X-APT







Specifications

Charge Box
- Wastequip rating - 0.33 cubic yards
- Wastec rating - 0.23 cubic yards
- Charge box width - 29.75″
- Charge box length - 22.00″

RAM
- Height - 16.75″
- Ram penetration - 6.00″
- Face plate - 1/2″
- Base plate - 3/8″
- Top plate - 3/8″
- Side plates - 1/4″

Weight
- Compactor - 1,480 lbs.
- 2-Yard Container - 700 lbs.
- 3-Yard Container - 800 lbs.

Hydraulic Performance
- Normal ram face pressure - 28.8 psi
- Maximum ram face pressure - 33.9 psi
- Normal packing pressure - 1,700 psi
- Maximum packing pressure - 2,000 psi
- Normal packing force - 14,350 lbs
- Maximum packing force - 16,800 lbs

Compactor Head
- Floor - 3/8″
- Steel sides - 1/4″ with 4″ reinforcing channel stiffeners
- Top rail - 1/4″ formed steel cross member adds stiffness
- Bottom rail - 1/4″ formed channel cross member for stiffness
- Breaker bar - 4 x 4 x 1/2″ angle steel
- Top deck cover - formed 1/4″ steel for strength (cover is standard)

Electrical
- Electric motor - 5 hp
- Motor RPM - 1,800
- Voltage - 208/230/460, 3 phase, 60 HZ
- Options - 575 volts
- Housing type - TEFC (Totally Enclosed Fan Cooled)
- Control circuit - 24V
- Control panel - UL Rated

Hydraulic Specifications
- Pump - 4.7 gpm
- Cycle time - 18 seconds
- Hydraulic cylinder - Two, scissor style
- Cylinder bore - 2.5″
- Cylinder rod - 1.375″
- Cylinder stroke - 20.00″
- Hydraulic oil tank - 13-gallon reservoir
- Power unit location - Remote

WASTEC MEMBER

PARTS PLACE — Replacement parts available online at www.partsplace-inc.com

Standard Color Choices*

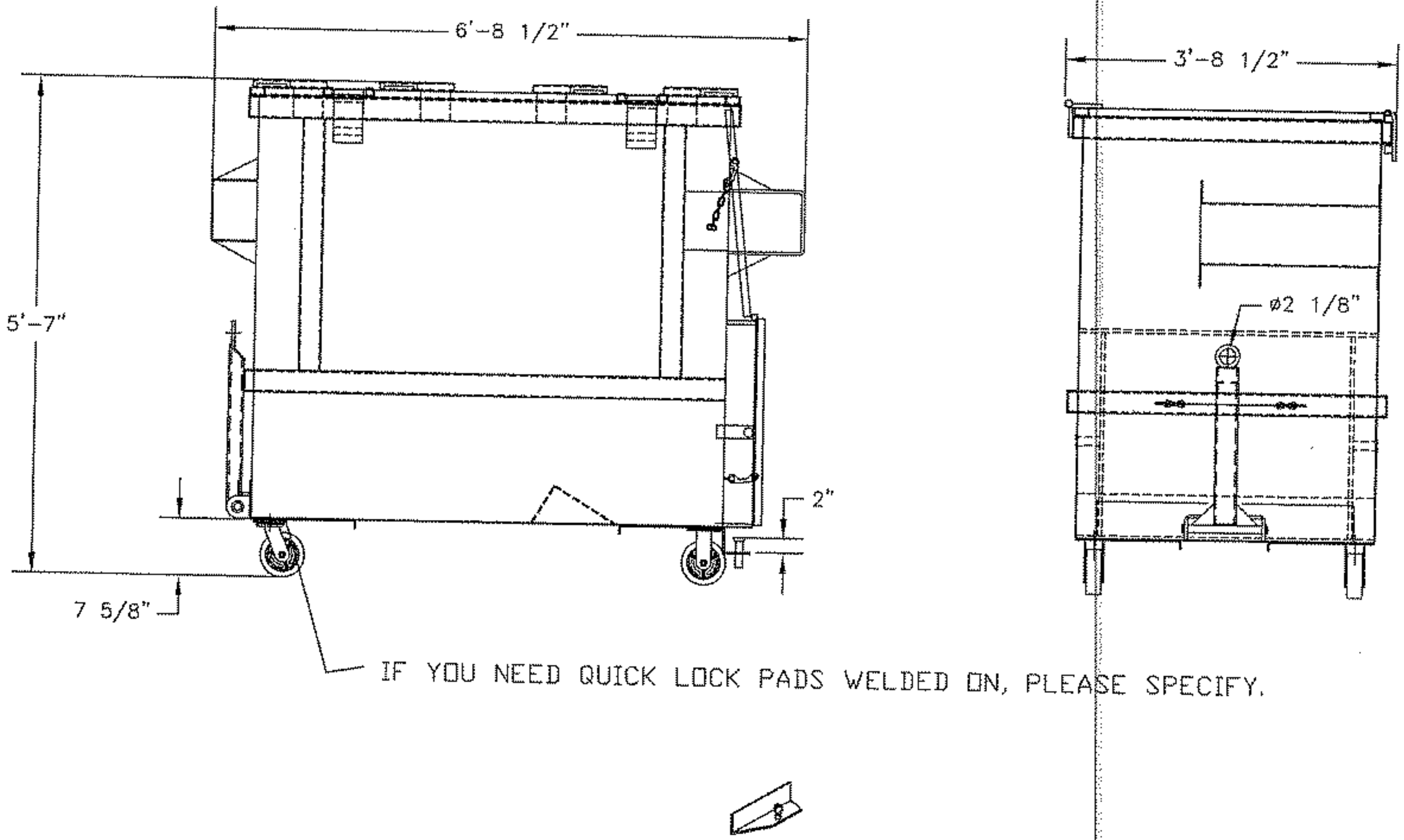
White, Gray, Black, Teal, Med. Blue, Dark Blue, Med. Green, Dark Green, Cream, Yellow, Orange, Red, Burgundy, Brown

*** Colors shown are as accurate as printing allows. The actual color is subject to variation from the printed color sample. Color choices vary by plant location. Please contact your local sales representative for available colors. Custom colors are available upon request and are subject to an additional charge.**

WASTEQUIP®

Tel: 877.468.9278 | sales@wastequip.com | www.wastequip.com

WQP007-052014



DO NOT SCALE DRAWING

WASTEQUIP
Wastequip, Inc.
Beachwood, Ohio

1/8" = 1'
9/10/12

HOPPERS D4
FRONTLOAD ASSY
3 CU YD
STANDARD TOW PACK

206190