

INVITATION FOR BIDS

CCK-2603.0-1-24
Princeton Ancillary Building – Residence Hall
ADDENDUM # 1
11/21/2023

IMPORTANT: BID AND ADDENDUM MUST BE RECEIVED BY 12/13/2023 @ 3:00 P.M. LEXINGTON, KY TIME

Bidder must acknowledge receipt of this and any addendum as stated in the Invitation for Bids.

ITEM #1: BIDDER NOTICES

• Refer to and incorporate within the offer, the enclosed updated specifications.

OFFICIAL APPROVAL UNIVERSITY OF KENTUCKY	<u>SIGNATURE</u>
Ken Scott	
Contracting Officer / (859) 257-9102	Typed or Printed Name

University of Kentucky Purchasing Division 322 Peterson Service Building Lexington, KY 40506-0005 FOR THE PROJECT TITLED:

CCK-2602.0-1-24 PRINCETON ANCILLARY BUILDING RESIDENCE HALL JRA Project No. 202225.04 UK Project 2603.0

University of Kentucky Lexington, Kentucky

To: Prospective Bidders

From: JRA Architects

3225 Summit Square Place, Suite 200

Lexington, KY 40509

Project Contact: D. Robert Deal, AIA, LEED AP

The Addendum will form a part of the Contract Documents and modifies the original Bidding Documents dated October 2023.

Bidders must acknowledge receipt of this Addendum in the space provided on the Form of Proposal. Failure to do so may subject the bidder to disqualification.

Bidding Documents, including the Drawings and Specifications, are amended as described herein.

GENERAL ITEMS:

Item No. 1.01

Refer to revised sheet G-001 Cover Sheet and revised specification 011000 Summary Lemoine Program services contact updated.

CIVIL ITEMS:

Item No. 1.02

General Note All Civil Sheets: Revise Project Title Block Phase to "Construction Documents".

Item No. 1.03

Refer to revised sheet C-101 Existing Topographic & Demolition Plan. Added Key Notes 10 & 11.

Item No. 1.04

Refer to revised sheet C-201 Existing Topographic & Demolition Plan. Added Key Note 24.

Item No. 1.05

Refer to revised sheet C-201A Development Plan (Dorm) Alternates. Deleted front porch steps in Alternate 1 plan.

Item No. 1.06

Refer to revised sheet C-401 Grading Plan. Revised spot elevations near north entrance.

Item No. 1.07

Refer to revised sheet C-401A Grading Plan (Dorm) Alternates. Revised spot elevations on Alternate 2 plan.

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Item No. 1.08

Refer to revised sheet C-601 Stormwater Plan. Revised areas of plan to reveal previously obscured items.

Item No. 1.09

Refer to revised sheet C-701 Utility Plan. Revised Key Note 2, Key Note 9, & Key Note 11. Added Key Note 18, Key Note 19, & Key Note 20. Made clarifications and revisions to proposed Domestic Water and Fire Main lines.

Item No. 1.10

Refer to revised sheet C-802 Utility Details. Added Detail 9 (Tapping Valve Detail), and Detail 10 (Gate Valve).

STRUCTURAL ITEMS:

ITEM NO. 1.11

Revise sheet S-101 to include the clouded revisions shown on the attachment below.

ITEM NO. 1.12

Revise sheet S-102 to include the clouded revisions shown on the attachment below.

ARCHITECTURAL ITEMS:

Item No. 1.13

Refer to revised specification 012300 Alternates, and revised sheet A372 Stairs Details – Alternate No. 1 (Front Lawn) corrected to match drawings.

Item No. 1.14

Refer to revised specification 035416 Hydraulic Cement Underlayment, revised sheets A521 Foundation Details, A-130 Basement Reflected Ceiling Plan – Sound control mat updated to 3/8" thick.

Item No. 1.15

Refer to revised specification 102800 Toilet, Bath, and Laundry Accessories. Basis of design and other requirements provided for private shower grab bar.

Item No. 1.16

Refer to revised sheet A-101 First Floor Plan soap dispenser - surface mounted, vertical and paper towel dispenser – surface mounted have been changed to owner furnished and owner installed.

Item No. 1.17

Refer to Refer to revised specification 113013 Residential Appliances and revised sheet A-121 First Floor Dimension Plan. Capacity and finish of the appliances updated.

Item No. 1.18

Refer to revised sheet A-521 Foundation Details – Dimension to footer removed on detail B/ A-521. Refer to structural for footer dimensions.

Item No. 1.19

Refer to revised sheet A-601 Door Schedule and Details. Doors 117 and 119 incorrectly numbered.

Item No. 1.20

Refer to revised sheet A-353 Wall Sections and A-541 Enlarged Section and Roof Details fascia extended 0'- 1 3/8" to allow for 3/4" exterior plywood and fiber reinforced cement panel.

MEP ITEMS:

ITEM NO. 1.21

For all MEP drawings, the title block description text was changed from "PHASE 3 – CD REVIEW SUBMITTAL" to "CONSTRUCTION DOCUMENTS"

ITEM NO. 1.22

Fire Alarm system shall have a preferred manufacturer of Simplex.

The following statement has been added to specification – 283100 FIRE ALARM SYSTEM

"Fire alarm system shall have a preferred manufacturer of Simplex. Contractor shall provide an allowance of \$57,730.57. The scope of work covered under the allowance shall include the following:

- Equipment
- Installation of the fire alarm and device trim out
- Shipping
- State submittal fees
- Design/ CAD files
- Commissioning / Acceptance testing
- 1 year of central station monitoring

The contractor is responsible for providing and installing all conduit, back boxes and 120V circuits associated with the fire alarm system."

ITEM NO. 1.23

Refer to sheet FP-100 - FIRE PROTECTION LEGEND:

 Refer to additional fire protection detail. All fire-stopping shall be provided per manufacturer requirements. Refer to architectural drawing for rated walls. Typical all disciplines through penetrations of rated walls.

ITEM NO. 1.24

Refer to sheet P-100 – PLUMBING LEGEND:

- o Refer to Plumbing Fixture Schedule for clarifications to plumbing fixture requirements.
- Refer to sump pump schedule for clarifications and additional detail for sump pump basin and associated system requirements on related detail.
- o Refer to water heater schedule for additional details on natural gas pressure range. Coordinate final delivery pressure with manufacturer.

ITEM NO. 1.25

Refer to sheet P-201A - FIRST FLOOR ALTERNATE - PLUMBING PLAN:

o Refer to clarified pipe sizes.

ITEM NO. 1.26

Refer to sheet P-301 – PLUMBING ENLARGED PLANS:

o Refer to clouded piping modifications to shower. Typical all units, water piping to be coordinated down at required control location. Refer to architectural drawings for details.

ITEM NO. 1.27

Refer to sheet P-400 - PLUMBING DETAILS AND SCHEMATICS:

o Refer to revised domestic water entrance schematic – pipe size clarifications.

ITEM NO. 1.28

Refer to sheet IC-102 – MECHANICAL CONTROLS:

 Refer to revised sequence of operation and clarifications surrounding the required occupancy sensors, to be provided by controls contractor.

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ITEM NO. 1.29

Refer to sheet M-101 – BASEMENT AIR DISTRIBUTION PLAN:

o Provide additional grilles in security closet as clouded on sheet.

ITEM NO. 1.30

Refer to sheet M-102 - FIRST FLOOR - AIR DISTRIBUTION PLAN:

- Refer to additional grille required for stairwell conditioning.
- Refer to slightly shifted condensing unit location.
- o Refer to slightly shifted grille locations as required to avoid conflict with lighting.

ITEM NO. 1.31

Refer to sheet M-102A - FIRST FLOOR ALTERNATE - AIR DISTRIBUTION PLAN:

o Refer to Fire rated grille requirement and slightly different diffuser positions to avoid conflict with lighting.

ITEM NO. 1.132

Refer to sheet M-302 - MECHANICAL ENLARGED PLANS:

- o Refer to additional duct for stairwell as clouded.
- Refer to clarifications and additional requirements for dryer exhaust duct including associated in-wall cleanout.

ITEM NO. 1.33

Refer to sheet M-501 – MECHANICAL SCHEDULES:

o Refer to additional Registers, Grilles, and Diffusers and minor clarifications to performance requirements.

ITEM NO. 1.34

Refer to sheet E-104 - ATTIC LIGHTING PLANS:

- o Light fixtures and switching has been added to the draftstop areas in the attic spaces.
- o Tagged note L11 was added to the plan.
- o Light fixtures were removed from the center aisle of the attic.

ITEM NO. 1.35

Refer to sheet E-202 – FIRST FLOOR – POWER:

Disconnect switch for CU-1D has shifted north along the wall.

END OF ADDENDUM NO. 1.00

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Johnson Controls Fire Protection LP Quotation

To: University of Kentucky 348 University Drive PRINCETON, KY 42445-0000 Project: UK Princeton Dorm - CPQ-485525 Johnson Controls Reference: 650485525

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Johnson Controls is pleased to offer for your consideration this quotation for the above project

Scope of Work

THIS PRICE WILL BE HONORED FOR 30 DAYS FROM THE DATE LISTED ON THE PROPOSAL. THIS IS DUE TO MATERIAL COST VOLITILITY.

This quote is for Johnson Controls Fire Protection (JCFP) to provide parts and install the fire alarm system for the UK Princeton Graduate Dormitory.

The following items were utilized for takeoff / design:

· Construction drawings dated 10.27.2023

This price includes the following items:

- · Design / CAD
- · State submittal fees
- Equipment
- Shipping
- · Commissioning / Acceptance testing
- · 1 year of central station monitoring
- · Installation of fire alarm wiring and device trim out

The electrical contractor shall provide and install all conduit, back boxes, and 120v circuits per the approved JCFP drawings.

PROJECT SPECIFIC DETAILS:

The following items are included:





- · 4010es panel with connected service gateway
- · Single action manual pull station.
- · Addressable relay for access control system
- · White notification devices with red lettering
- IAM for WF/TS as the building is fully sprinklered.
- · Carbon monoxide detection provided for the mechanical room with fuel burning water heaters
- 520hz horns provided for sleeping units.
- · Visual notification provided in ADA units (2).

The following are excluded from this quote:

- · Mass notification system, Dual alert strobe devices
- · AOM for ancillary building system
- Duct smoke detectors as no air handlers are >2000cfm





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BASE BID - FIRE ALARM SYSTEM

Headend Equipment

QTY	MODEL NUMBER	DESCRIPTION
1	4010-9601	4010ES IDNAC FACP 120V RED
1	4010-2504	CS GATEWAY W/IP COM 4010ES
4	2081-9275	BATTERY 18AH
1	4606-9102	REMOTE LCD ANNUN FOR 4010ES
1	4009-9601	IDNAC REPEATER PLATINUM
Indiada a Davida a		

Initiating Devices

QTY	MODEL NUMBER	DESCRIPTION
6	4099-9004	STATION-LED, SA ADDR
28	4098-9792	SENSOR BASE
1	4098-9770	CO SENSOR BASE EXTENDED LIFE
29	4098-9714	PHOTO SENSOR

Notification Devices

QTY	MODEL NUMBER	DESCRIPTION
8	49VO-WWF	VO Wall White FIRE
7	49AV-WWF	AV Wall White FIRE
8	49MT-WWF	ADDR MT WALL WHITE FIRE
2	49MTV-WWF	MTV, WALL WHITE FIRE

Sprinkler Monitoring

QTY	MODEL NUMBER	DESCRIPTION
8	4090-9001	SUPERVISED IAM
8	YJ1283	SINGLE GANG IAM BRACKET
1	2081-9044	OVERVOLTAGE SUPPRESSOR
0.1.25015		

Submittal Fees

QTY MODEL NUMBER DESCRIPTION



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DPSVC DP SVCS (PERMITS/FEES/BONDS)

Central Station Monitoring

QTY MODEL NUMBER DESCRIPTION

DPSVC DP SVCS (PERMITS/FEES/BONDS)

Professional Labor

QTY MODEL NUMBER DESCRIPTION

DSGN LAB DESIGN LABOR
CAD LAB CAD LABOR

PM LAB PROJECT/CONSTRUCTION MGMT

COMM LAB COMMISSIONING LABOR

Access Control Shutdown

QTY MODEL NUMBER DESCRIPTION

1 4090-9002 RELAY IAM

1 4090-9801 COVER-ADDRESS MODULE FLUSH

ALTERNATE - FIRE ALARM SYSTEM

Initiating Devices

QTY	MODEL NUMBER	DESCRIPTION
2	4099-9004	STATION-LED, SA ADDR
8	4098-9792	SENSOR BASE
8	4098-9714	PHOTO SENSOR

Notification Devices

QTY	MODEL NUMBER	DESCRIPTION
1	49VO-WWF	VO Wall White FIRE
1	49AV-WWF	AV Wall White FIRE
4	49MT-WWF	ADDR MT WALL WHITE FIRE
Sprinkler Monitoring		



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QTY MODEL NUMBER DESCRIPTION

2 4090-9001 SUPERVISED IAM

2 YJ1283 SINGLE GANG IAM BRACKET

Professional Labor

QTY MODEL NUMBER DESCRIPTION

DSGN LAB DESIGN LABOR
CAD LAB CAD LABOR

PM LAB PROJECT/CONSTRUCTION MGMT

COMM LAB COMMISSIONING LABOR

BASE BID - INSTALLATION

Labor

QTY MODEL NUMBER DESCRIPTION

PM LAB PROJECT/CONSTRUCTION MGMT

INST LAB INSTALLATION LABOR

Material

QTY MODEL NUMBER DESCRIPTION

1 DPIM INSTALLATION MATERIALS

Per Diem

QTY MODEL NUMBER DESCRIPTION

INST EXP INSTALLER TRAVEL EXPENSES

ALTERNATE - INSTALLATION

Labor

QTY MODEL NUMBER DESCRIPTION

PM LAB PROJECT/CONSTRUCTION MGMT

INST LAB INSTALLATION LABOR

Material



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QTY MODEL NUMBER DESCRIPTION

1 DPIM INSTALLATION MATERIALS

Per Diem

QTY MODEL NUMBER DESCRIPTION

INST EXP INSTALLER TRAVEL EXPENSES

Total net selling price, FOB shipping point, \$54,730.57

Johnson Controls has **not** included an estimate for all state and local sales tax for this quote based on the understanding that a valid exemption and/or resale certificate is received by Johnson Controls from Purchaser. Otherwise, actual sales tax due will be calculated and billed

Payment Options:

Johnson Controls Capital Funding Solutions

<u>Equipment Finance Agreement:</u> Allows for payment over time for products and installation costs, while maintaining ownership of assets. No down payment required.

<u>As a Service Subscription:</u> Covers costs of installation and services over time without ownership of assets. No upfront costs.

Final pricing subject to change based on credit approval, any applicable state/local taxes
For more information on Johnson Controls Capital funding solutions, please forward this proposal along with any questions to your sales representative and JCCapitalNA@jci.com.



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IMPORTANT NOTICE TO CUSTOMER

This Agreement is contingent on credit approval, which may be checked at JCl's discretion and requires final approval of a JCl authorized manager before any equipment/ services may be provided. Should credit and/or approval be declined, this Agreement libe terminated and JCl's only obligation to customer will be to notify Customer of such termination and refund any amounts paid in advance. In accepting this Proposal, Customer agrees to the terms and conditions contained herein and any attachments or riders attached hereto that contain additional terms and conditions. It is understood that these terms and conditions shall prevail over any variation in terms and conditions on any purchase order or other document that the Customer may issue. Any changes in the system requested by the Customer after the execution of this Agreement shall be paid for by Customer and such changes shall be authorized in writing. ATTENTION IS DIRECTED TO THE LIMITATION OF LIABILITY, WARRANTY, INDEMNITY AND OTHER CONDITIONS ON THE PRECEDING PAGES. This proposal shall be void if not accepted in writing within 30 days from the date of the Proposal.

For Customers located in Canada, this Fire Domain Sale and Installation Agreement has been drawn up and executed in English at the request of and with the full concurrence of Customer. Ce contrat a été rédigé en anglais à la demande et avec l'assentiment du client.

Unless otherwise agreed to by the parties, pricing is based upon the following billing and payment terms: Invoices will be delivered via Email () payment due date of PWP, deposit for a minimum of 0% of the sell price, and the invoices are to be paid via Electronic Funds Transfer. Johnson Controls Electronic Funds Transfer details will be forth coming upon contractual agreement. This offer shall be void if not accepted in writing within thirty (30) days from the date first set forth above.		
To ensure that JCI is compliant with your company's billing requirements, please provide the following information:		
PO is required to facilitate billing: NO: This signed contract satisfies requirement		
YES: Please reference this PO Number:		
Offered By:	Accepted By: (Customer)	
Johnson Controls Fire Protection LP	Company:	
973 Beasley Street, Suite 100	Address:	
Lexington, KY 40505	Signature:	
Telephone: (859) 294-7233	Title:	
Representative:	Date:	
Email: william.fraley@jci.com	Date.	



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TERMS AND CONDITIONS (Rev. 8/23)

 Payment and Invoicing. All payments are PWP from the date of invoice. Invoices shall be paid by Customer via Electronic Funds Transfer delivery by Customer via Electronic Funds Transfer delivery via Email Invoicing disputes must be identified in writing within 21 days of the invoice date. Payments of any disputed amounts are due and payable upon resolution. All other amounts remain due within Due Upon Receipt from the date of the invoice. Company shall invoice Customer for progress payments to 100% percent based upon equipment delivered or stored, and services performed. In the event project duration exceeds one month, Company reserves the right to submit partial invoices for progress payments for work completed at the project site. Customer agrees to pay any progress invoices in accordance with the payment terms set forth herein. In exchange for close-out documents to be provided by Company, Customer agrees to pay Company the remaining for close-out documents to be provided by Company, Customer agrees to pay Company the remaining project balance when on-site labor is completed and prior to any final inspections. Customer shall provide financial information requested by Company to verify Customer's ability to pay for goods or services. If Customer fails to provide financial information or if Company, in its sole discretion determines that reasonable grounds exist to question Customer's ability or willingness to make payments when due (e.g., not making payments when due, late payments, or a reduction in Customer's credit score), Company may defer shipments. Change payment terms, require or a reduction in Customer's credit score), Company may defer shipments, change payment terms, require cash in advance and/or require other security, without liability and without waiving any other remedies Company may have against Customer. Company shall provide Customer with advance written notice of changes to payment terms. Customer acknowledges and agrees that timely payments of the full amounts listed on invoices is an essential term of this Agreement and that Customer's failure to make payment when due is a material breach of this Agreement. Customer further acknowledges that if there is any amount outstanding on an invoice, it is payment when due is a material breach of this Agreement. Customer further acknowledges that if there is any amount outstanding on an invoice, it is material to Company and will give Company, without prejudice to any other right or remedy, the right to, without notice: (i) suspend, discontinue or terminate performing any services and/or withhold further deliveries of equipment and other materials, terminate or suspend any unpaid software licenses, and/or suspend Company's obligations under or terminate this Agreement; and (ii) charge Customer interest on the amounts unpaid at a rate equal to the lesser of one and one half (1.5) percent per month or the maximum rate permitted under applicable law, until payment is made in full. Company's election to continue providing future services does not, in any way diminish Company's right to terminate or suspend services or exercise any or all rights or remedies under this Agreement. Company shall not be liable for any damages, claims, expenses, or liabilities arising from or relating to suspension of services for non-payment. In the event that there are exigent circumstances requiring services or the Company suspension, those services shall be governed by the terms of this Agreement unless a separate contract is

payment. In the event that there are exigent circumstances requiring services or the Company otherwise performs services at the premises following suspension, those services shall be governed by the terms of this Agreement unless a separate contract is executed. If Customer disputes any late payment notice or Company's efforts to collect payment, Customer shall immediately notify Company in writing and explain the basis of the dispute. Customer agrees to pay all of Company's reasonable collection costs, including legal fees and expenses.

2. Deposit. Unless prohibited by law, Customer agrees to pay a deposit for a minimum of 0% of the project sell price (pre-tax) prior to Company providing any labor or materials on the project. Company will generate an invoice for the deposit after Company's receipt of a written agreement or order from Customer. Company will not commence work until receipt of the deposit.

3. Pricing. The pricing set forth in this Agreement is based on the number of devices to be installed and services to be performed as set forth in the Scope of Work ("Equipment" and "Services"). If the actual number of devices installed or services to be performed is greater than that set forth in the Scope of Work, the price will be increased accordingly. If this Agreement extends beyond one year, Company may increase prices upon notice to the Customer. All stated prices are exclusive of and Customer agrees to pay any taxes, fees, duties, tariffs, false alarm assessments, installation or alarm permits, and levies or other similar charges imposed and/ or enacted by a government, however designated or imposed, including but not limited to value-added and withholding taxes that are levied or based upon the amounts paid under this Agreement. This Agreement is entered into with the understanding that the services to be provided by Company are not subject to any local, state, or federal prevailing wage statute. If it is later determined that local, state, or federal

prevailing wage rates apply to the services to be provided by Company, Company reserves the right to issue a modification or change order to adjust the wage rates to the required prevailing wage rate. Customer agrees to pay for the applicable prevailing wage rates.

wage rates.

Prices in any quotation or proposal from Company are subject to change upon notice sent to Customer at any time before the quotation or proposal has been accepted. Prices for products covered by this Agreement may be adjusted by Company, upon notice to Customer at any time prior to shipment and regardless of Customer's acceptance of the Company's proposal or quotation, to reflect any increase in Company's cost of raw materials (e.g., steel, aluminum) inability to secure Products, changes or increases in law, labor, taxes, duties, tariffs or quotas, acts of government, any similar charges, or to cover any extra, unforeseen and unusual cost elements.

4. Alarm Monitoring Services. Any reference to alarm monitoring services in this Agreement is included for pricing purposes only. Alarm monitoring services are performed pursuant to the terms and conditions of Company's standard alarm monitoring services agreement.

included for pricing purposes only. Alarm monitoring services are performed pursuant to the terms and conditions of Company's standard alarm monitoring services agreement.

5. Code Compliance. Company does not undertake an obligation to inspect for compliance with laws or regulations unless specifically stated in the Scope of Work. Customer acknowledges that the Authority Having Jurisdiction (e.g. Fire Marshal) may establish additional requirements for compliance with federal, state/provincial and local codes. Any additional services or equipment required will be provided at an additional cost to Customer.

6. Limitation of Liability; Limitations of Remedy. It is understood and agreed by the Customer that Company is not an insurer and that insurance coverage shall be obtained by the Customer and that amounts payable to company hereunder are based upon the value of the services and the scope of liability set forth in this Agreement and are unrelated to the value of the Customer's property and the property of others located on the premises. Customer agrees to look exclusively to the Customer's insurer to recover for injuries or damage in the event of any loss or injury and that Customer releases and waives all right of recovery against Company arising by way of subrogation. Company makes no guaranty or Warranty, including any implied warranty of merchantability or fitness for a particular purpose that equipment or services supplied by Company will detect or avert occurrences or the consequences therefrom that the equipment or service was designed to detect or avert. It is impractical and extremely difficult to fix the actual damages, if any, which may proximately result from failure on the part of Company to perform any of its obligations under this Agreement. Accordingly, Customer agrees that, Company shall be exempt from liability for any loss, damage or injury arising directly or indirectly from occurrences, or the consequences therefrom, which the equipment or service was designed to detect or avert. Should C Where this Agreement covers multiple sites, liability shall be limited to the amount of the payments allocable to the site where the incident occurred. Such sum shall be complete and exclusive. In no event shall Company be liable for any damage, loss, injury, or any other claim arising from any servicing, alterations, modifications, changes, or movements of the Covered System(s) or any of its component parts by Customer or any third party. To the maximum extent permitted by law, in no event shall Company and its affiliates and their respective personnel, suppliers and vendors be liable to Customer or any third party under any cause of action or theory of liability, even if advised of the possibility of such damages, for any (a) special, incidental, consequential, punitive or indirect damages of any kind; (b) loss of profits, revenues, data, customer opportunities, business, anticipated savings or goodwill; (c) business arising from viruses, ransomware, cyber-attacks or failures or interruptions to network systems. The limitations of liability set forth in this Agreement shall inure to the benefit of all parents, subsidiaries and affiliates of Company, whether direct or indirect, Company's employees, agents, officers and directors.

officers and directors.

7. Reciprocal Waiver of Claims (SAFETY Act).
Certain of Company's systems and services have received Certification and/or Designation as Qualified Anti-Terrorism Technologies ("QAI"T") under the Support Anti-terrorism by Fostering Effective Technologies Act of 2002, 6 U.S.C. §§ 441-444 (the "SAFETY Act"). As required under 6 C.F.R. 25.5 (e), to the maxinum extent permitted by law. Company to the maximum extent permitted by law, Company and Customer hereby agree to waive their right to make any claims against the other for any losses, including business interruption losses, sustained by including business interruption losses, sustained by either party or their respective employees, resulting from an activity resulting from an "Act of Terrorism" as defined in 6 C.F.R. 25.2, when QATT have been deployed in defense against, response to, or recovery from such Act of Terrorism.

8. General Provisions. Customer has selected the service level desired after considering and balancing various levels of protection afforded, and their related costs. All work to be performed by Company will be performed during normal working hours of normal working days (8:00 a.m. - 5:00 p.m., Monday through Friday, excluding Company holidays), as defined by Company, unless additional times are specifically described in this Agreement. Company will perform the services described in the Scope of Work section ("Services") for one or more system(s) or equipment as described in the Scope of Work section or the listed attachments ("Covered System(s)"). The Customer shall promptly notify Company of any malfunction in the Covered System(s) which comes to Customer's attention. This Agreement assumes the Covered System(s) are in operational and maintainable condition as of the Agreement date. If, upon initial inspection, Company determines that repairs are recommended, repair charges will be submitted for approval prior to any work. Should such repair work be declined Company shall be relieved from any and all liability arising therefrom. UNLESS OTHERWISE SPECIFIED IN THIS AGREEMENT, ANY INSPECTION (AND, IF SPECIFIED, TESTING) PROVIDED UNDER THIS AGREEMENT DOES NOT INCLUDE ANY MAINTENANCE, REPAIRS, ALTERATIONS, REPLACEMENT OF PARTS, OR ANY FIELD ADJUSTMENTS WHATSOEVER, NOR DOES IT INCLUDE THE CORRECTION OF ANY DEFICIENCIES IDENTIFIED BY COMPANY TO CUSTOMER. COMPANY SHALL NOT BE RESPONSIBLE FOR EQUIPMENT FAILURE OCCURRING WHILE COMPANY IS IN THE PROCESS OF FOLLOWING ITS INSPECTION TECHNIQUES, WHERE THE FAILURE ALSO RESULTS FROM THE AGE OR OBSOLESCENCE OF THE ITEM OR DUE TO NORMAL WEAR AND TEAR THIS AGREEMENT DOES NOT COVER SYSTEMS, EQUIPMENT, COMPONENTS OR PARTS THAT ARE BELOW GRADE BEHIND WALLS OR OTHER OBSTRUCTIONS OR EXTERIOR TO THE BUILDING, ELECTRICAL WIRING, AND PIPING

9. Customer Responsibilities. Customer shall 9. Customer Responsibilities. Customer shall furnish all necessary facilities for performance of its work by Company, adequate space for storage and handling of materials, light, water, heat, heat tracing, electrical service, local telephone, watchman, and crane and elevator service and necessary permits. Where wet pipe system is installed, Customer shall supply and maintain sufficient heat to prevent freezing of the system. Customer shall promote points. supply and maintain sufficient heat to prevent freezing of the system. Customer shall promptly notify Company of any malfunction in the Covered System(s) which comes to Customer's attention. This Agreement assumes any existing system(s) are in operational and maintainable condition as of the Agreement date. If, upon initial inspection, Company determines that repairs are recommended, repair charges will be submitted for approval prior to any work. Should such repair work be declined Company shall be relieved from any and all liability arising therefrom. Customer shall further:



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- supply required schematics and drawings unless they are to be supplied by Company in accordance with this Agreement;
- Provide a safe work environment, in the event of an emergency or Covered System(s) failure, take reasonable safety precautions to protect against personal injury, death, and property damage, continue such measures until the Covered System(s) are operational, and notify Company as soon as possible under the circumstances
- Provide Company access to any system(s) to be serviced.
- Comply with all laws, codes, and regulations pertaining to the equipment and/or services provided under this Agreement.

Customer is solely responsible for the establishment, operation, maintenance, access, security and other aspects of its computer network ("Network") and shall supply Company secure Network access for providing its services. Products networked, connected to the internet, or otherwise connected to computers or otherwise connected to computers or other devices must be appropriately protected by Customer and/or end user against unauthorized access. Customer is responsible to take appropriate measures, including performing back-ups, to protect information, including without limit data, software, or files (collectively "Data") prior to receiving the service or products.

or products.

10. Excavation. In the event the Work includes excavation, Customer shall pay, as an extra to the contract price, the cost of any additional work performed by Company dues to water, quicksand, rock or other unforeseen condition or obstruction

performed by Company dues to water, quicksand, rock or other unforeseen condition or obstruction encountered or shoring required.

11.Structure and Site Conditions. While employees of Company will exercise reasonable care in this respect, Company shall be under not responsibility for loss or damage due to the character, condition or use of foundations, walls, or other structures not erected by Company or resulting from the excavation in proximity thereto, or for damage resulting from concealed piping, wiring, fixtures, or other equipment or condition of water pressure. All shoring or protection of foundation, walls or other structures subject to being disturbed by any excavation required hereunder shall be the responsibility of Customer. Customer shall have all things in readiness for installation including, without limitation, structure to support the sprinkler system and related equipment (including tanks), other materials, floor or suitable working base, connections and facilities for erection at working base, connections and facilities for erection at working base, connections and facilities for erection a the time the materials are delivered. In the event Customer fails to have all things in readiness at the time scheduled for receipt of materials, Customer shall reimburse Company for all expenses caused by such failure. Failure to make areas available to Company during performance in accordance with schedules that are the basis for Company's proposal shall be considered a failure to have things in shall be considered a failure to have things in readiness in accordance with the terms of this

- Agreement.

 12. Confined Space. If access to confined space by 12. Contined space. If access to confined space by Company is required for the performance of Services, Services shall be scheduled and performed in accordance with Company's then-current hourly rate.
 13. Hazardous Materials. Customer represents that, except to the extent that Company has been given written notice of the following hazards prior to the execution of this Agreement, to the best of Customer's hopewlade there is no. knowledge there is no:
- Space in which work must be performed that, because of its construction, location, contents or work activity therein, accumulation of a hazardous gas, vapor, dust or fume or the creation of an oxygen-deficient atmosphere may occur,
- "permit confined space," as defined by OSHA for work performed by Company in the United States,
- risk of infectious disease.
- need for air monitoring, respiratory protection, or other medical risk,
- asbestos. asbestos-containing material. formaldehyde or other potentially toxic or otherwise hazardous material contained in or on the surface of the floors, walls, ceilings, insulation or other structural components of the area of any

building where work is required to be performed under this Agreement.

building where work is required to be performed under this Agreement.

All of the above are hereinafter referred to as "Hazardous Conditions". Company shall have the right to rely on the representations listed above. If hazardous conditions are encountered by Company during the course of Company's work, the discovery of such materials shall constitute an event beyond Company's control and Company shall have no obligation to further perform in the area where the hazardous conditions exist until the area where the hazardous conditions exist until the area has been made safe by Customer as certified in writing by an independent testing agency, and Customer shall pay disruption expenses and re-mobilization expenses as determined by Company. This Agreement does not provide for the cost of testing involving a discharge or release, capture, containment, transport, removal, or disposal (collectively, the "Discharge Services") of any hazardous waste materials, hazardous materials, or firefighting materials including without limitation firefighting foam encountered in and/or discharged from any of the Covered System(s) and/or during performance of the Services. Said materials shall at all times remain the responsibility and property of Customer. Customer shall be responsible for any Discharge Services associated with such materials, including all discharged firefighting foam in accordance with all applicable law. Company shall not be responsible for the testing, removal or disposal of such hazardous materials. Customer shall indemnify and hold Company harmless from and against any and all claims, demands and/or damages arising in whole or in part from the use of or any Discharge Services associated with any hazardous waste, hazardous materials or firefighting foam encountered or discharged from any of the Covered System(s) and/or during performance of the Services.

14. Occupational Health and Safety/OSHA

Complaince. Customer shall indemnify and hold Company harmless from and against any and all claims, demands and/or d

Company.

15. Interferences. Customer shall be responsible to coordinate the work of other trades (including but no limited to ducting, piping, and electrical) and for and additional costs incurred by Company arising out of interferences to Company's work caused by other trades.

interferences to Company's work caused by other trades.

16. Modifications and Substitutions. Company reserves the right to modify materials, including substituting materials of later design, providing that such modifications or substitutions will not materially affect the performance of the Covered System(s).

17. Changes, Alterations, Additions. Changes, alterations and additions to the Scope of Work, plans, specifications or construction schedule shall be invalid unless approved in writing by Company. Should changes be approved by Company, that increase or decrease the cost of the work to Company, the parties shall agree, in writing, to the change in price prior to performance of any work. However, if no agreement is reached prior to the time for performance of said work, and Company elects to perform said work so as to avoid delays, then Company's estimate as to the value of said work requested by Customer shall pay for all extra work requested by Customer or made necessary because of incompleteness or inaccuracy of plans or other information submitted by Customer with respect to the location, type of occupancy, or other details of the work to be performed. In the event the layout of Customer's facilities has been altered, or is altered by Customer prior to the completion of the Work, Customer shall advise Company, and prices, delivery and completion dates shall be changed by Company as may be required.

18. Commodities Availability. Company shall not be responsible for failure to provide services, deliver products, or otherwise perform work required by this Agreement due to lack of available steel products or products made from plastics or other commodities. In the event Company is unable, after reasonable commercial efforts, to acquire and provide steel products, or ortherwise perform work required by this Agreement, or the required to perform work required by this Agreement, for the Agreement, at no additional cost and without penalty. Customer agrees to pay Company in full for all work performed up to t 16. Modifications and Substitutions. Company

19. Project Claims. Any claim of failure to perform against Company arising hereunder shall be deemed waived unless received by Company, in writing specifically setting forth the basis for such claim, within ten (10) days after such claims arises.

20. Back charges. No charges shall be levied against Company unless seventy-two (72) hours prior written notice is given to Company to correct any alleged deficiencies which are alleged to necessitate such charges and unless such alleged deficiencies are solely and directly caused by Company.

21. System Equipment. The purchase of equipment or peripheral devices (including but not limited to smoke detectors, passive infrared detectors, card readers, sprinkler system components, extinguishers and hoses) from Company shall be subject to the terms and conditions of this Agreement. If, in

and hoses) from Company shall be subject to the terms and conditions of this Agreement. If, in Company's sole judgment, any peripheral device or other system equipment, which is attached to the Covered System(s), whether provided by Company or a third party, interferes with the proper operation of the Covered System(s), Customer shall remove or replace such device or equipment promptly upon notice from Company. Failure of Customer to remove or replace the device shall constitute a material breach of this Agreement. If Customer adds any third party device or equipment to the Covered System(s), Company shall not be responsible for any damage to or failure of the Covered System(s) caused in whole or in part by such device or equipment.

22. Reports. Where inspection and/or test services are selected, such inspection and/or test services are selected, such inspection and/or test services are selected, such inspection and/or test services applicable, Company may submit a copy thereof to the local authority having jurisdiction. The Report and recommendations by Company are only advisory in nature and are intended to assist Customer in reducing the risk of loss to property by indicating obvious defects or impairments noted to the system and equipment inspected and/or tested. They are not intended to imply that no other defects or hazards exist or that all aspects of the Covered System(s), equipment, and components are under control at the time of inspection. Final responsibility for the condition

intended to imply that no other defects or hażards exist or that all aspects of the Covered System(s), equipment, and components are under control at the time of inspection. Final responsibility for the condition and operation of the Covered System(s) and equipment and components lies with Customer.

23. Limited Warranty. Subject to the limitations below, Company warrants any equipment (as distinguished from the Software) installed pursuant to this Agreement to be free from defects in material and workmanship under normal use for a period of one (1) year from the date of first beneficial use or all or any part of the Covered System(s) or 18 months after Equipment shipments, whichever is earlier, provided however, that Company's sole liability, and Customer's sole remedy, under this limited warranty shall be limited to the repair or replacement of the Equipment or any part thereof, which Company determines is defective, at Company's sole option and subject to the availability of service personnel and parts, as etermined by Company. Company warrants expendable items, including, but not limited to, video and print heads, television camera tubes, video monitor displays tubes, batteries and certain other products in accordance with the applicable

and print heads, television camerar tubes, video monitor displays tubes, batteries and certain other products in accordance with the applicable manufacturer's warranty. Company does not warrant devices designed to fail in protecting the System, such as, but not limited to, fuses and circuit breakers. Company warrants that any Company software described in this Agreement, as well as software contained in or sold as part of any Equipment described in this Agreement, will reasonably conform to its published specifications in effect at the time of delivery and for ninety (90) days after delivery. However, Customer agrees and acknowledges that the software may have inherent defects because of its complexity. Company's sole obligation with respect to software, and Customer's sole remedy, shall be to make available published modifications, designed to correct inherent defects hecome available during the warranty period. If Repair Services are included in this Agreement, Company warrants that its workmanship and material for repairs made pursuant to this Agreement will be tree from defects for a period of hipsty (70) days from for repairs made pursuant to this Agreement will be free from defects for a period of ninety (90) days from the date of furnishing.

EXCEPT AS EXPRESSLY SET FORTH HEREIN,

EXCEPT AS EXPRESSEY SET FOR IT HEREIN, COMPANY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES PERFORMED OR THE PRODUCTS, SYSTEMS OR EQUIPMENT, IF ANY, SUPPORTED HEREININGER HEREUNDER.

HEKEUNDER.

Warranty service will be performed during Company's normal working hours. If Customer requests warranty service at other than normal working hours, service will be performed at Company's then current rates for



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after ours services. All repairs or adjustments that are or may become necessary shall be performed by and authorized representative of Company. Any repairs, adjustments or interconnections performed by Customer or any third party shall void all warranties. Company makes no and specifically disclaims all representations or warranties that the services, products, software or third party product or software will be secure from cyber threats, hacking or other similar malicious activity, or will detect the presence of, or eliminate, treat, or mitigate the spread transmission, or outbreak of any pathogen, disease, virus or other contagion, including but not limited to COVID-19. Unless agreed to in writing by the parties, any technical support") provided by Company, such as suggestions as to design use and suitability of the products for the customer's application, is provided in good faith, but Customer acknowledges and agrees that Company is not the designer, engineer, or installer of record. Any Technical Support is provided for informational purposes only and shall not be construed as a representation or warranty, express or implied, concerning the proper selection, use, and/or application of products. Customer assumes exclusive responsibility for determining if the equipment and products supplied by Company are suitable for its intended application and all risk and liability, whether based in contract, tort or otherwise, in connection with its application and use of the products.

intended application and all risk and liability, whether based in contract, tort or otherwise, in connection with its application and use of the products.

24 . Indemnity. Customer agrees to indemnify, hold harmless and defend Company against any and all losses, damages, costs, including expert fees and costs, and expenses including reasonable defense costs, arising from any and all third party claims for personal injury, death, property damage or economic loss, including specifically any damages resulting from the exposure of workers to Hazardous Conditions whether or not Customer pre-notifies Company of the existence of said hazardous conditions, arising in any way from any act or omission of Customer or Company relating in any way to this Agreement, including but not limited to the Services under this Agreement, whether such claims are based upon Agreement, whether such claims are based upon

Company relating in any way to this Agreement, including but not limited to the Services under this Agreement, whether such claims are based upon contract, warranty, tort (including but not limited to active or passive negligence), strict liability or otherwise. Company reserves the right to select counsel to represent it in any such action.

25. Insurance. Customer shall name Company, its officers, employees, agents, subcontractors, suppliers, and representatives as additional insureds on Customer's general liability and auto liability policies.

26. Termination. Any termination under the terms of this Agreement shall be made in writing. In the event Customer terminates this Agreement prior to completion for any reason not arising solely from Company's performance or failure to perform, Customer understands and agrees that Company will incur costs of administration and preparation that are difficult to estimate or determine. Accordingly, should Customer terminate this Agreement as described above, Customer agrees to pay all charges incurred for products and equipment installed and services performed, and in addition pay an amount equal to twenty (20%) percent of the price of products and equipment not yet delivered and Services not yet performed, return all products and equipment delivered and pay a restocking fee of twenty (20%) percent the price of products or equipment returned. Company may terminate this Agreement immediately at its sole discretion upon the occurrence of any Event of Default as hereinafter defined. If Company's performance of its obligations becomes impracticable due to obsolescence or unavailability of systems, equipment, or products (including component parts and/or materials) or because the Company or its supplier(s) has discontinued the manufacture or the sale of the equipment tand/or products or is no longer in the business of providing the Services, Company may terminate this Agreement, or the affected portions, at its sole discretion upon notice to the Customer if Company's performa

27. Default. An Event of Default shall be (a) failure of Customer to pay any amount when due and payable, (b) abuse of the System or the Equipment, (c) dissolution, termination, discontinuance, insolvency or business failure of Customer. Upon the occurrence of an Event of Default, Company may pursue one or more of the following remedies: (i) discontinue furnishing Services and delivering Equipment, (iii)) by written notice to Customer declare the balance of unpaid amounts due and to become due under this Agreement to be immediately due and payable; (iii) receive immediate possession of any Equipment for which Customer has not paid; (iv) proceed at law or equity to enforce performance by proceed at law or equity to enforce performance by

Customer or recover damages for breach of this Agreement, and (v) recover all costs and expenses, including without limitation reasonable attorneys' fees, in connection with enforcing or attempting to enforce this Agreement.

28. Exclusions. Unless expressly included in the

this Agreement.

28. Exclusions. Unless expressly included in the Scope of Work, this Agreement expressly excludes, without limitation, testing inspection and repair of duct detectors, beam detectors, and UV/IR equipment; provision of fire watches; clearing of ice blockage; draining of improperly pitched piping; replacement of batteries; recharging of chemical suppression systems; reloading of, upgrading, and maintaining computer software; system upgrades and the replacement of obsolete systems, equipment, components or parts; making repairs or replacements necessitated by reason of negligence or misuse of components or equipment or changes to Customer's premises, vandalism, corrosion (including but not limited to micro-bacterially induced corrosion ("MIC")), power failure, current fluctuation, failure due to non-Company installation, lightning, electrical storm, or other severe weather, water, accident, fire, acts of God or any other cause external to the Covered System(s). Repair Services provided pursuant to this Agreement do not cover and specifically excludes system upgrades and the replacement of obsolete systems, equipment, components or parts. All such services may be provided by Company at Company's sole discretion at an additional charge. If Emergency Services are expressly included in the scope of work section, the Agreement price does not include travel expenses.

expenses.

29. No Option to Solicit. Customer shall not, directly or indirectly, on its own behalf or on behalf of any other person, business, corporation or entity, solicit or employ any Company employee, or induce any Company employee to leave his or her employment, for a period of two years after termination of this Agreement.

for a períod of two years after termination of this Agreement.

30. Force Majeure; Delays. Company shall not be liable, nor in breach or default of its obligations under this Agreement, for delays, interruption, failure to render services, or any other failure by Company to perform an obligation under this Agreement, where such delay, interruption or failure is caused, in whole or in part, directly or indirectly, by a Force Majeure Event. A "Force Majeure Event" is a condition or event that is beyond the reasonable control of Company, whether foreseeable or unforeseeable, including, without limitation, acts of God, severe weather (including but not limited to hurricanes, tornados, severe snowstorms or severe rainstorms), wildfires, floods, earthquakes, seismic disturbances or other natural disasters, acts or omissions of any wildtires, floods, earthquakes, seismic disturbances, or other natural disasters, acts or omissions of any governmental authority (including change of any applicable law or regulation), epidemics, pandemics, disease, viruses, quarantines, or other public health risks and/or responses thereto, condemnation, strikes, lock-outs, labor disputes, an increase of 5% or more in tariffs or other excise taxes for materials to be used on the project fires explosions or other casualties on the project, fires, explosions or other casualties, thefts, vandalism, civil disturbances, insurrection, mobiviolence, riots, war or other armed conflict (or the serious threat of same), acts of terrorism, electrical violence, riots, war or other armed conflict (or the serious threat of same), acts of terrorism, electrical power outages, interruptions or degradations in telecommunications, computer, network, or electronic communications, systems, data hereach, cyber-attacks, ransomware, unavailability or shortage of parts, materials, supplies, or transportation, or any other cause or casualty beyond the reasonable control of Company. If Company's performance of the work is delayed, impacted, or prevented by a Force Majeure Event or its continued effects, Company shall be excused from performance under the Agreement. Without limiting the generality of the foregoing, if Company is delayed in achieving one or more of the scheduled milestones set forth in the Agreement due to a Force Majeure Event, Company will be entitled to extend the relevant completion date by the amount of time that Company was delayed as a result of the Force Majeure Event, plus such additional time as may be reasonably necessary to overcome the effect of the delay. To the extent that the Force Majeure Event directly or indirectly increases Company's cost to perform the services, Customer is obligated to reimburse Company for such increased costs, including, without limitation, costs incurred by Company for additional labor, inventory storage, expedited shipping fees, trailer and equipment rental fees, subcontractor fees, compliance with vaccination requirements, or other costs and expenses incurred by Company in connection with the Force Majeure requirements, or other costs and expenses incurred by Company in connection with the Force Majeure

31. One-Year Claims Limitation; Forum; Choice of 31. One-Year Liams Limitation; Forum; choice of Law.Company shall have the sole and exclusive right to determine whether any dispute, controversy or claim arising out of or relating to the Agreement, or the breach thereof, shall be submitted to a court of law or arbitrated. For Customers located in the United

States, the laws of Delaware shall govern the validity, enforceability, and interpretation of this Agreement, without regard to conflicts of law principles thereof, and the exclusive venue for any such litigation or arbitration shall be in Milwaukee, Wisconsin. For customers located in Canada, this agreement shall be governed by and be construed in accordance with the laws of Ontario, without regard to conflicts of law principles thereof, and the exclusive venue for any such litigation or arbitration shall be in Ontario, Canada. The parties waive any objection to the Canada. The parties waive any objection to the exclusive jurisdiction of the specified forums, including any objection based on forum non conveniens. In the event the matter is submitted to a court, Company any objection based on forum non conveniens. In the event the matter is submitted to a court, Company and Customer hereby agree to waive their right to trial by jury. In the event the matter is submitted to a court, Company and Customer hereby agree to waive their right to trial by jury. In the event the matter is submitted to arbitration by Company, the costs of arbitration shall be borne equally by the parties, and the arbitrator's award may be confirmed and reduced to judgment in any court of competent jurisdiction. Except as provided below, no claim or cause of action, whether known or unknown, shall be brought by either party against the other more than one year after the claim first arose. Claims not subject to the one-year limitation include claims for unpaid: (1) contract amounts, (2) change order amounts (approved or requested) and (3) delays and/or work inefficiencies. Customer will pay all of Company's reasonable collection costs (including legal fees and expenses).

32. Assignment. This Agreement is not assignable by the Customer except upon written consent of Company first being obtained. Company shall have the right to assign this Agreement, in whole or in part, or to subcontract any of its obligations under this Agreement without notice to Customer.

33. Entire Agreement. The parties intend this Agreement, together with any attachments or Riders (collectively the "Agreement) to be the final, complete and exclusive expression of their Agreement and the terms and conditions thereof. This Agreement supersedes all prior representations, understandings or agreements between the parties, written or oral, and shall constitute the sole terms and conditions of sale for all equipment and services. No waiver, change, or modification of any terms or conditions of

and shall constitute the sole terms and conditions of sale for all equipment and services. No waiver, change, or modification of any terms or conditions of this Agreement shall be binding on Company unless made in writing and signed by an Authorized Representative of Company.

34. Severability. If any provision of this Agreement is held by any court or other competent authority to be void or unenforceable in whole or in part, this Agreement will continue to be valid as to the other provisions and the remainder of the affected provision.

Agreement will continue to be valid as to the other provisions and the remainder of the affected provision.

35. Legal Fees. Company shall be entitled to recover from the customer all reasonable legal fees incurred in connection with Company enforcing the terms and conditions of this Agreement.

36. Software and Digital Services.
Digital Enabled Services. Data. If Company provides Digital Enabled Services under this Agreement, these Digital Enabled Services require the collection, transfer and ingestion of building, equipment, system time series, and other data to Company's cloud-hosted software applications. Customer consents to and grants Company the right to collect, transfer, ingest and use such data to enable Company and its affiliates and agents to provide, maintain, protect, develop and improve the Digital Enabled Services and Company products and services. Customer acknowledges that, while Digital Enabled Services generally improve equipment performance and services. Digital Enabled Services do not prevent all potential malfunction, insure against all loss, or guarantee a certain level of performance. Customer shall be solely responsible for the establishment, operation, maintenance, access, security and other aspects of its computer network ("Network"), shall guarantee a certain level of performance. Customer shall be solely responsible for the establishment, operation, maintenance, access, security and other aspects of its computer network ("Network"), shall appropriately protect hardware and products connected to the Network and will supply Company secure Network access for providing its Digital Enabled Services. As used herein, "Digital Enabled Services. As used herein, "Digital Enabled Services mean services provided hereunder that employ Company software and related equipment installed at Customer facilities and Company cloud-hosted software offerings and tools to improve, develop, and enable such services. Digital Enabled Service may include, but are not limited to, (a) remote servicing and inspection, (b) advanced equipment fault detection and diagnostics, and (c) data dashboarding and health reporting. If Customer accesses and uses Software that is used to provide the Digital Enabled Services, the Software Terms (defined below) will govern such access and use. Digital Solutions. Use, implementation, and deployment of the software and hosted software products ("Software") offered under these terms shall be subject to, and governed by, Company's standard terms for such Software and Software related professional services in effect from time to time at



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www.johnsoncontrols.com/techterms (collectively, the "Software Terms"). Specifically, the Company General EULA set forth at www.johnsoncontrols.com/buildings/ legal/digital/generateula governs access to and use of software installed on Customer's premises or systems and the Company Terms of Service set forth at www.johnsoncontrols.com/buildings/legal/digital/generaltos

generalitos
govern access to and use of hosted software
products. The applicable Software Terms are
incorporated herein by this reference. Other than the
right to use the Software as set forth in the Software
Terms, Company and its licensors reserve all right,
title, and interest (including all intellectual property
rights) in and to the Software and improvements to
the Software. The Software that is licensed hereunder
is licensed subject to the Software Terms and not
sold. If there is a conflict between the other terms
herein and the Software Terms, the Software Terms
shall take precedence and govern with respect to
rights and responsibilities relating to the Software, its
implementation and deployment and any

rights and responsibilities relating to the Software, its implementation and deployment and any improvements thereto.

Notwithstanding any other provisions of this Agreement and unless otherwise agreed to by the parties in writing, the following terms apply to Software that is provided to Customer on a subscription basis (i.e., a time limited license or use right), (each a "Software Subscription"): Each Software Subscription provided hereunder will commence on the date the initial credentials for the Software are made available (the "Subscription Start Date") and will continue in effect until the expiration of the subscription of the subscription to the results of the subscription of the subscription term noted herein. At the expiration of Software are made available (the "Subscription Start Date") and will continue in effect until the expiration of the subscription term noted herein. At the expiration of the Software Subscription, such Software Subscription, such Software Subscription will automatically renew for consecutive one (1) year terms (each a "Renewal Subscription Term"), unless either party provides the other party with a notice of non-renewal at least ninety (90) days prior to the expiration of the then-current term. To the extent permitted by applicable law, Software Subscriptions purchases are non-cancelable and the sums paid nonrefundable. Fees for Software Subscriptions purchases are non-cancelable and the sums paid nonrefundable. Fees for Software Subscriptions shall be paid annually in advance, invoiced on the Subscription Start Date and each subsequent anniversary thereof. Unless otherwise agreed by the parties in writing, the subscription fee for each Renewal Subscription Term will be priced at Company's then-applicable list price for that Software offering. Any use of Software that exceeds the scope, metrics or volume set forth in this Agreement will be subject to additional fees based on the date such excess use began.

37. Electronic Media. Either party may scan, fax, email, image, or otherwise convert this Agreement into an electronic fermat of any type of form now.

sacyes use began.

37. Electronic Media. Either party may scan, fax, email, image, or otherwise convert this Agreement into an electronic format of any type or form, now known or developed in the future. Any unaltered or unadulterated copy of this Agreement produced from such an electronic format will be legally binding upon the parties and equivalent to the original for all purposes, including litigation. Company may rely upon Customer's assent to the terms and conditions of this Agreement, if Customer has signed this Agreement or demonstrated its intent to be bound whether by electronic signature or otherwise.

38. Lien Legislation. Notwithstanding anything to the contrary contained herein, the terms of this Agreement shall be subject to the lien legislation applicable to the location where the work will be performed, and, in the event of conflict, the applicable lien legislation shall prevail.

39. Privacy. Company as: Where Company factually acts as Processor of Personal Data on behalf of Customer (as such terms are defined in the DPA) the terms at www.johnsoncontrols.com/dpa ("DPA") shall apply. Company as: Company will collect, process and transfer certain personal data of Customer and its personnel related to the business relationship between it and Customer (for example names, email addresses, telephone numbers) as controller and in accordance with Company's Privacy Notice and strictly to the extent consent is mandatorily required under applicable law, Customer consents to such collection, processing and transfer. To the extent consent to such

to the extent consent is mandatorily required under applicable law, Customer consents to such collection, processing and transfer. To the extent consent to such collection, processing and transfer by Company is mandatorily required from Customer's personnel under applicable law, Customer warrants and represents that it has obtained such consent.

40. FAR. Company supplies "commercial items" within the meaning of the Federal Acquisition Regulations (FAR), 48 CFR Parts 1-53. As to any customer order for a U.S. Government contract, Company will comply only with those mandatory flow-downs for commercial item and commercial services subcontracts listed either at FAR 52.244-6, or 52.212-5(e)(1), as applicable.

applicable.
41. License Information (US Security System Customers): AL Alabama Electronic Security Board

of Licensure 7956 Vaughn Road, Pmb 392, Montgomery, Alabama 36116 (334) 264-9388: AR Regulated by: Arkansas Board of Private Investigators And Private Security Agencies, #1 State Police Plaza Drive, Little Rock 72209 (501) 618-8600: CA Alarm company operators are licensed and regulated by the Bureau of Security and Investigative Services, Department of Consumer Affairs, Sacramento, CA, 95814. Upon completion of the installation of the alarm system, the alarm company shall thoroughly instruct the purchaser in the proper use of the alarm system. Failure by the licensee, without legal excuse, to substantially commence work within 20 days from the approximate date specified in the agreement when the work will begin is a violation of the Alarm Company Act: NY Licensed by N.Y.S. Department of the State: TX Texas Commission on Private Security, 5805 N. Lamar Blvd., Austin, 78752-4422, 512-424-7710. License numbers available at www.johnsoncontrols.com or contact your local Johnson Controls office.



SECTION 01 1000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - Project information.
 - 2. Work covered by Contract Documents.
 - 3. Owner-furnished products.
 - Access to site.
 - 5. Coordination with occupants.
 - 6. Work restrictions.
 - 7. Specification and Drawing conventions.
 - 8. Miscellaneous provisions.
- B. Related Requirements:
 - 1. Section 01 5000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: Graduate Dormitory
 - 1. Project Location: 1205 Hopkinsville Street, Princeton, KY 42445.
- B. Owner: University of Kentucky.
 - Owner's Representative: Brian Hoerr, Capitol Project Management Division, 222
 Peterson Service Building, Lexington, KY 40506.
- C. Owner's Program Manager: Lemoine Program Services
 - 1. Charla Steele, 600 Luckie Drive, Suite 424, Birmingham, AL 35223
- D. Architect: JRA Architects, 3225 Summit Square Place, Suite 200, Lexington, KY 40509.
- E. Architect's Consultants: Architect has retained the following design professionals who have prepared designated portions of the Contract Documents:
 - 1. Mechanical, Electrical, Plumbing Engineers: CMTA, Inc. 220 Lexington Green Circle, Suite 600, Lexington, KY 40503.
 - 2. Structural and Civil Engineering: Bacon Farmer Workman, 500 S. 17th Street, Paducah, KY 42002

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

- 1. Graduate Dormitory type VB construction with NFPA 13R sprinklers on the first floor.
- B. Type of Contract:
 - 1. Project will be constructed under single prime contract.

1.5 OWNER-FURNISHED PRODUCTS

A. Owner will furnish products indicated on the Drawings. The Work includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products and making building services connections.

1.6 ACCESS TO SITE

- A. General: Each Contractor shall have full use of Project site for construction operations during construction period. Contractor's use of Project site is limited only by Owner's right to perform work or to retain other contractors on portions of Project.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Driveways, Walkways and Entrances: Keep driveways, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Condition of Existing Grounds: Maintain portions of existing grounds, landscaping, and hardscaping affected by construction operations throughout construction period. Repair damage caused by construction operations.

1.7 COORDINATION WITH OCCUPANTS

- A. Owner Limited Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed portions of the Work, prior to Substantial Completion of the Work, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and limited occupancy shall not constitute acceptance of the total Work.
 - 1. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner acceptance of the completed Work.
 - 2. Obtain a Certificate of Occupancy from authorities having jurisdiction before limited Owner occupancy.
 - 3. Before limited Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed. On occupancy, Owner will operate and maintain mechanical and electrical systems serving occupied portions of Work.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for occupied portions of Work.

1.8 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in occupied areas of the existing building to times outside normal business working hours of 7 a.m. to 5 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Hours for Utility Shutdowns: Refer to General Conditions .
 - 2. Hours for noisy activity: During work hours.
- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Restricted Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- F. Employee Identification: Owner will provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- G. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.9 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.

3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

ALTERNATES 012300 - 1

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 (Front Lawn):
 - 1. Base Bid: Base bid work includes a stair connecting the building to existing pavement. Refer to the drawings for additional information.
 - 2. Alternate Bid: Alternate work includes the removal of existing parking lot and placement of appropriate fill of the area to the front porch. Stair and handrails removed from porch in alternate. Refer to the drawings for additional information.
- B. Alternate No. 2 (Additional Resident Wing):
 - 1. Base Bid: Base bid work includes the construction of eight resident rooms, two ADA resident rooms, living, and storage spaces. Refer to the drawings for additional information.
 - 2. Alternate Bid: Alternate work includes the construction of 4 additional resident rooms in a separate wing. Refer to the drawings for additional information.
- C. Alternate No. 3 (Reduced Schedule):
 - Base Bid: Base bid prescribes the construction of the Project within the Construction Time (schedule) listed in the Special Conditions. Refer to the Specifications and Special Conditions for additional information. Base bid working hours shall be restricted to 7AM – 5PM Monday through Friday per UK's normal policy
 - 2. Alternate Bid: Alternate prescribes the construction of the Project within the Construction Time (schedule) listed in the Special Conditions, **less ninty (90) days**. Refer to the Specifications and Special Conditions for additional information. Alternate working hours shall be 6AM 8PM Monday through Saturday. When the building is dried in, the hours are opened up to 6AM 9PM seven days a week.

END OF SECTION 012300

ALTERNATES 012300 - 2

SECTION 03 5416 - HYDRAULIC CEMENT UNDERLAYMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Polymer-modified, self-leveling, hydraulic cement underlayment for application below interior floor coverings.

1.2 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Hydraulic cement underlayment.
 - 2. Reinforcement.
 - 3. Primer.
 - 4. Corrosion-resistant coating.
 - 5. Surface sealer.
 - 6. Sound control mat.
- B. Sustainable Design Submittals:
 - 1. Product Data: For coatings, indicating VOC content.
- C. Shop Drawings: Include plans indicating substrates, locations, and average depths of underlayment based on survey of substrate conditions.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Test Reports:
 - 1. For fire-resistant ratings, from a qualified testing agency.
 - 2. For STC-rated assemblies, from a qualified testing agency.
 - 3. For IIC-rated assemblies, from a qualified testing agency.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Installer who is approved by manufacturer for application of underlayment products required for this Project.

1.5 FIELD CONDITIONS

- A. Environmental Limitations: Comply with manufacturer's written instructions for substrate temperature, ventilation, ambient temperature and humidity, and other conditions affecting underlayment performance.
 - 1. Place hydraulic cement underlayments only when ambient temperature and temperature of substrates are between 50 and 80 deg F.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Fire-Resistance Ratings: Comply with ASTM E119; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.
- B. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated, according to ASTM E90 and classified according to ASTM E413 by an independent testing agency.
 - 1. STC Rating: 50.
- C. IIC-Rated Assemblies: For IIC-rated assemblies, provide materials and construction identical to those tested in assembly indicated, according to ASTM E492 and classified according to ASTM E989 by an independent testing agency.
 - 1. IIC Rating: 50.

2.2 HYDRAULIC CEMENT UNDERLAYMENTS

- A. Hydraulic Cement Underlayment: Polymer-modified, self-leveling, hydraulic cement product that can be applied in minimum uniform thickness of 1/4 inch and that can be feathered at edges to match adjacent floor elevations.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. ARDEX Americas.
 - b. Custom Building Products.
 - c. H.B. Fuller Construction Products Inc. / TEC.
 - d. Hacker Industries, Inc.
 - e. Laticrete International, Inc.
 - f. MAPEI Corporation.
 - g. Schonox HPS North America, Inc.
 - h. USG Corporation.
 - 2. Cement Binder: ASTM C150/C150M, portland cement, or hydraulic or blended hydraulic cement as defined by ASTM C219.

- 3. Compressive Strength: Not less than 4000 psi at 28 days when tested according to ASTM C109/C109M.
- 4. Underlayment Additive: Resilient-emulsion product of underlayment manufacturer, formulated for use with underlayment when applied to substrate and conditions indicated.
- B. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch; or coarse sand as recommended by underlayment manufacturer.
 - 1. Provide aggregate when recommended in writing by underlayment manufacturer for underlayment thickness required.
- C. Water: Potable and at a temperature of not more than 70 deg F.
- D. Reinforcement: For underlayment applied to wood substrates, provide galvanized metal lath or other corrosion-resistant reinforcement recommended in writing by underlayment manufacturer.
- E. Primer: Product of underlayment manufacturer recommended in writing for substrate, conditions, and application indicated.
 - 1. <u>VOC Content</u>: Provide coating with VOC content of 100 g/L or less.
 - 2. Low-Emitting Materials: Verify coating complies with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- F. Corrosion-Resistant Coating: Recommended in writing by underlayment manufacturer for metal substrates.
 - 1. VOC Content: Provide coating with VOC content of 100 g/L or less.
 - 2. Low-Emitting Materials: Verify coating complies with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."
- G. Surface Sealer: Designed to reduce porosity as recommended by manufacturer for type of floor covering to be applied to underlayment.

2.3 ACCESSORIES

- A. Sound Control Mat: As required to meet STC and IIC ratings, manufactured by gypsum cement underlayment manufacturer.
 - 1. Thickness: 3/8 inch.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for conditions affecting performance of the Work.
- B. Proceed with application only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare and clean substrate according to manufacturer's written instructions.
 - 1. Treat nonmoving substrate cracks according to manufacturer's written instructions to prevent cracks from telegraphing (reflecting) through underlayment.
 - 2. Fill substrate voids to prevent underlayment from leaking.
- B. Wood Substrates: Mechanically fasten loose boards and panels to eliminate substrate movement and squeaks. Sand to remove coatings that might impair underlayment bond and remove sanding dust.
 - 1. Install underlayment reinforcement recommended in writing by manufacturer.
- C. Adhesion Tests: After substrate preparation, test substrate for adhesion with underlayment according to manufacturer's written instructions.
- D. Sound Control Mat install sound control materials according to manufacturer's written instructions.
 - 1. Do not install mechanical fasteners that penetrate through the sound control materials.

3.3 INSTALLATION

- A. Mix and install underlayment components according to manufacturer's written instructions.
 - 1. Close areas to traffic during underlayment installation and for time period after installation recommended in writing by manufacturer.
 - 2. Coordinate installation of components to provide optimum adhesion to substrate and between coats.
 - 3. At substrate expansion, isolation, and other moving joints, allow joint of same width to continue through underlayment.
- B. Apply primer over prepared substrate at manufacturer's recommended spreading rate.
- C. Install underlayment to produce uniform, level surface.
 - 1. Install a final layer without aggregate to product surface.
 - 2. Feather edges to match adjacent floor elevations.
- D. Cure underlayment according to manufacturer's written instructions. Prevent contamination during installation and curing processes.
- E. Do not install floor coverings over underlayment until after time period recommended in writing by underlayment manufacturer.
- F. Apply surface sealer at rate recommended by manufacturer.
- G. Remove and replace underlayment areas that evidence lack of bond with substrate, including areas that emit a "hollow" sound when tapped.

3.4 INSTALLATION TOLERANCES

A. Finish and measure surface, so gap at any point between gypsum cement underlayment surface and an unleveled, freestanding, 10-foot-long straightedge resting on two high spots and placed anywhere on the surface does not exceed 3/16 inch.

3.5 PROTECTION

A. Protect underlayment from concentrated and rolling loads for remainder of construction period.

END OF SECTION 03 5416

SECTION 10 2800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Public-use washroom accessories.
- 2. Private-use bathroom accessories.
- Custodial accessories.

1.2 COORDINATION

- A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.
- B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

1.3 ACTION SUBMITTALS

A. Product Data:

- 1. Public-use washroom accessories.
- 2. Private-use bathroom accessories.
- 3. Custodial accessories.
- B. Product Data Submittals: For each product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 2. Include anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
 - 3. Include electrical characteristics.
- C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.
 - 1. Identify locations using room designations indicated.
 - 2. Identify accessories using designations indicated.

1.4 INFORMATIONAL SUBMITTALS

A. Sample Warranty: For manufacturer's special warranties.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For accessories to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 OWNER-FURNISHED MATERIALS

A. Owner-Furnished Materials: As indicated on Drawings.

2.2 PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Structural Performance: Design accessories and fasteners to comply with the following requirements:
 - 1. Grab Bars: Installed units are able to resist 250 lbf concentrated load applied in any direction and at any point.
 - 2. Shower Seats: Installed units are able to resist 360 lbf concentrated load applied in any direction and at any point.

2.3 PUBLIC-USE WASHROOM ACCESSORIES

A. Source Limitations: Obtain public-use washroom accessories from single source from single manufacturer.

B. Grab Bar:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-5806 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brev-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Mounting: Flanges with concealed fasteners.
- 3. Material: Stainless steel, 0.05 inch thick.
 - a. Finish: Smooth, ASTM A480/A480M No. 4 finish (satin).
- 4. OD: 1-1/2 inches.
- 5. Configuration and Length: As indicated on Drawings.
- C. Hook:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-76727or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Description: Double-prong unit.
- 3. Mounting: Concealed.
- 4. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

D. Toilet Tissue (Roll) Dispenser:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-2888 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Description: Roll-in-reserve dispenser with hinged front secured with tumbler lockset.
- 3. Mounting: Surface mounted.
- 4. Operation: Noncontrol delivery with theft-resistant spindle.
- 5. Capacity: Designed for 6-inch-diameter tissue rolls.
- 6. Material and Finish: Stainless steel, No. 4 finish (satin)

2.4 PRIVATE-USE BATHROOM ACCESSORIES

- A. Source Limitations: Obtain private-use bathroom accessories from single source from single manufacturer.
- B. Private-Use Shower Curtain Rod:
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-207 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
 - 2. Description: 1-inch- OD, straight rod.

- 3. Configuration: As indicated on Drawings.
- 4. Mounting Flanges: Concealed fasteners; in material and finish matching rod.
- 5. Rod Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
- 6. Features: Integral chrome-plated brass glide hooks.

C. Private-Use Folding Shower Seat:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-5191 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - q. HEWI
- 2. Configuration: Rectangular seat.
- 3. Seat: Phenolic or polymeric composite of slat-type or one-piece construction in color as selected by Architect.
- 4. Mounting Mechanism: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

D. Private-Use Towel Hook:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-76727or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties. Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Description: Double-prong unit.
- 3. Mounting: Concealed.
- 4. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).

E. Private-Use Towel Bar:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-6737; or a comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Description: Surface-mounted, towel bar with stainless steel tubes, 3/4 inch square, mounted in support arms.

- 3. Length: 18 inches.
- 4. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish.

F. Lighted Mirror Unit:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Electric Mirror Bela Radius LED Lighted Mirror or comparable product.
- 2. Size: As indicated on Drawings.
- 3. Lumens: 5688
- 4. Wattage: 51
- 5. Color Temperature: 3000
- 6. Voltage: 120/240.
- 7. Hangers: Manufacturer's standard rigid, tamper and theft resistant.

G. Toilet Tissue (Roll) Dispenser:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-9547or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Description: Double toilet roll holder.
- 3. Mounting: Surface mounted.
- 4. Capacity: Designed for 6-inch-diameter tissue rolls.
- 5. Material and Finish: Stainless steel, No. 4 finish (satin)

H. Grab Bar:

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-5806 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
- 2. Mounting: Flanges with concealed fasteners.
- 3. Material: Stainless steel, 0.05 inch thick.
 - a. Finish: Smooth, ASTM A480/A480M No. 4 finish (satin).
- 4. OD: 1-1/2 inches.
 - a. Configuration and Length: Provide L-Shaped Grab Bar meeting the requirements of ANSI A117.1 at each shower and as shown on the Drawings.

2.5 CUSTODIAL ACCESSORIES

- A. Source Limitations: Obtain custodial accessories from single source from single manufacturer.
- B. Custodial Mop and Broom Holder:
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Bobrick Washroom Equipment, Inc B-224x36 or comparable product by one of the following:
 - a. AJW Architectural Products.
 - b. ASI-American Specialties, Inc.
 - c. Bradley Corporation.
 - d. Brey-Krause Manufacturing Co.
 - e. Gamco Commercial Restroom Accessories; Bobrick Washroom Equipment, Inc.
 - f. Tubular Specialties Manufacturing, Inc.
 - g. HEWI
 - 2. Description: Unit with shelf, hooks, holders, and rod suspended beneath shelf.
 - 3. Length: 36 inches.
 - 4. Hooks: Three.
 - 5. Mop/Broom Holders: Four, spring-loaded, rubber hat, cam type.
 - 6. Material and Finish: Stainless steel, ASTM A480/A480M No. 4 finish (satin).
 - a. Shelf: Not less than nominal 0.05-inch-thick stainless steel.
 - b. Rod: Approximately 1/4-inch-diameter stainless steel.

2.6 MATERIALS

- A. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, 0.031-inch-minimum nominal thickness unless otherwise indicated.
- B. Galvanized-Steel Sheet: ASTM A653/A653M, with G60 hot-dip zinc coating.
- C. Galvanized-Steel Mounting Devices: ASTM A153/A153M, hot-dip galvanized after fabrication.
- D. Fasteners: Screws, bolts, and other devices of same material as accessory unit, unless otherwise recommended by manufacturer or specified in this Section, and tamper and theft resistant where exposed, and of stainless or galvanized steel where concealed.
- E. Mirrors: ASTM C1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

2.7 FABRICATION

- A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
- B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install accessories in accordance with manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
 - 1. Remove temporary labels and protective coatings.
- B. Grab Bars: Install to comply with specified structural-performance requirements.
- C. Shower Seats: Install to comply with specified structural-performance requirements.

3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
- B. Clean and polish exposed surfaces in accordance with manufacturer's written instructions.

END OF SECTION 10 2800

SECTION 11 3013 - RESIDENTIAL APPLIANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Cooking appliances.
- 2. Refrigeration appliances.
- 3. Cleaning appliances.

1.2 ACTION SUBMITTALS

A. Product Data:

- 1. Cooking appliances.
- 2. Kitchen exhaust ventilation.
- 3. Refrigeration appliances.
- 4. Cleaning appliances.

B. Product Data Submittals: For each product.

- 1. Include installation details, material descriptions, dimensions of individual components, and finishes for each appliance.
- 2. Include rated capacities, operating characteristics, electrical characteristics, and furnished accessories.

C. Sustainable Design Submittals:

- 1. <u>ENERGY STAR</u>: Product Data for indicated products, showing compliance with requirements for ENERGY STAR product labeling.
- D. Product Schedule: For appliances. Use same designations indicated on Drawings.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Product Certificates: For each type of appliance.
- C. Field quality-control reports.
- D. Sample Warranties: For manufacturers' special warranties.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For each residential appliance to include in operation and maintenance manuals.

1.5 WARRANTY

- A. Electric Cooktop and Range: Full warranty, including parts and labor, for on-site service on surface-burner elements.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- B. Microwave Oven: Full warranty, including parts and labor, for on-site service.
 - 1. Warranty Period: Two years from date of Substantial Completion.
- C. Refrigerator/Freezer, Freezer, and Icemaker, Sealed System: Full warranty, including parts and labor, for on-site service on the product.
 - 1. Warranty Period for Sealed Refrigeration System: Five years from date of Substantial Completion.
 - 2. Warranty Period for Other Components: Two years from date of Substantial Completion.
- D. Dishwasher: Full warranty, including parts and labor, for on-site service on the product.
 - 1. Warranty Period for Deterioration of Tub and Metal Door Liner: Five years from date of Substantial Completion.
 - 2. Warranty Period for Other Components: Two years from date of Substantial Completion.
- E. Clothes Washer: Full warranty, including parts and labor, for on-site service on the product.
 - 1. Warranty Period: Three years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Electrical Appliances: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- B. Accessibility: Where residential appliances are indicated to comply with accessibility requirements, comply with applicable provisions in the DOJ's 2010 ADA Standards for Accessible Design and ICC A117.1.

2.2 COOKING APPLIANCES

- A. Electric Range: Freestanding range with one oven(s) and complying with AHAM ER-1.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bosch US; BSH Home Appliances Corporation.
 - b. Frigidaire.
 - c. GE Appliances; Haier Group.
 - d. Kenmore; Transformco SR Brands LLC.
 - e. LG Electronics USA, Inc.; LG Electronics Inc.
 - f. Maytag; Whirlpool Corporation.

- g. Whirlpool Corporation.
- 2. Width: 30 inches.
- 3. Electric Burner Elements: Four.
 - a. Radiant Type: Two 1500 W and two 2000 W.
 - b. Controls: Digital panel controls, located on splash panel at rear of rangetop.
- 4. Oven Features:
 - a. Capacity: 3.3 cu. ft..
 - b. Operation: Baking.
 - c. Broiler: Located in top of oven.
 - d. Oven Door(s): Counterbalanced, removable, with observation window andfull-width handle.
 - e. Electric Power Rating:
 - 1) Oven(s): Manufacturer's standard.
 - 2) Broiler: Manufacturer's standard.
 - f. Controls: Digital panel controls and timer display, located on splash panel at rear of rangetop.
- 5. Anti-Tip Device: Manufacturer's standard.
- 6. Electric Power Supply: 240 V, 60 Hz, 1 phase, 30 A.
- 7. Material: Porcelain-enameled steel with ceramic-glass cooktop.
 - a. Color/Finish: Stainless.

B. Microwave Oven:

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bosch US; BSH Home Appliances Corporation.
 - b. Frigidaire.
 - c. GE Appliances; Haier Group.
 - d. Kenmore; Transformco SR Brands LLC.
 - e. LG Electronics USA, Inc.; LG Electronics Inc.
 - f. Maytag; Whirlpool Corporation.
 - g. Whirlpool Corporation.
- 2. Mounting: Undercabinet.
- 3. Type: Conventional.
- 4. Dimensions:
 - a. Width: 24 inches.
 - b. Depth: 19-1/2 inches.
 - c. Height: 14 inches.
- 5. Capacity: 2.0 cu. ft...
- 6. Oven Door: Door with observation window and pull handle.
- 7. Exhaust Fan: Variable-speed fan, nonvented, recirculating type with charcoal filter and with manufacturer's standard capacity.
- 8. Microwave Power Rating: 1000 W.

- 9. Electric Power Supply: 120 V, 60 Hz, 1 phase, 15 A.
- 10. Controls: Digital panel controls and timer display.
- 11. Other Features: Turntable.
- 12. Material: Porcelain-enameled steel.
 - a. Color/Finish: Stainless.

2.3 REFRIGERATION APPLIANCES

- A. Refrigerator/Freezer: Two-door, side-by-side refrigerator/freezer and complying with AHAM HRF-1. Basis of design LG 36" Mega Capacity French Door Refrigerator.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bosch US; BSH Home Appliances Corporation.
 - b. Frigidaire.
 - c. GE Appliances; Haier Group.
 - d. Kenmore: Transformco SR Brands LLC.
 - e. LG Electronics USA, Inc.; LG Electronics Inc.
 - f. Maytag; Whirlpool Corporation.
 - g. Whirlpool Corporation.
 - 2. Storage Capacity:
 - a. Total Volume: 30 cu. ft...
 - 3. General Features:
 - a. Door Configuration: Overlay.
 - b. Dispenser in door for ice and cold water.
 - c. Built-in water-filtration system.
 - d. Dual refrigeration systems.
 - e. Separate touch-pad temperature controls for each compartment.
 - 4. Refrigerator Features:
 - a. Interior light in refrigeration compartment.
 - b. Compartment Storage: vegetable crisper and meat compartment.
 - c. Door Storage: Modular compartments, 1 gal. milk-container storage.
 - d. Temperature-controlled meat/deli bin.
 - 5. Freezer Features: One freezer compartment(s).
 - a. Automatic defrost.
 - b. Interior light in freezer compartment.
 - c. Automatic icemaker and storage bin.
 - 6. Energy Star: Provide appliances that qualify for the EPA/DOE Energy Star product-labeling program.
 - 7. Front Panel(s): Manufacturer's standard.
 - a. Panel Color: Stainless.

8. Appliance Color/Finish: Stainless.

2.4 CLEANING APPLIANCES

- A. Dishwasher: Complying with AHAM DW-1.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Bosch US; BSH Home Appliances Corporation.
 - b. Frigidaire.
 - c. GE Appliances; Haier Group.
 - d. Kenmore; Transformco SR Brands LLC.
 - e. LG Electronics USA, Inc.; LG Electronics Inc.
 - f. Maytag; Whirlpool Corporation.
 - g. Whirlpool Corporation.
 - 2. Capacity:
 - a. International Place Settings of China: Eight.
 - b. Water Consumption for Full Load: 3.2 gal. per cycle.
 - 3. Sound Level: Maximum 42 dB.
 - 4. Tub and Door Liner: Stainless steel with sealed detergent and automatic rinsing-aid dispensers.
 - 5. Rack System: Nylon-coated sliding dish racks, with removable cutlery basket.
 - 6. Controls: Touch-pad controls with four wash cycles and hot-air and heat-off drying cycle options.
 - Features:
 - a. Waste food disposer.
 - b. Self-cleaning food-filter system.
 - c. Hot-water booster heater for 140 deg F wash water with incoming water at 100 deg F.
 - d. Lock-out feature.
 - e. Half-load option.
 - f. Delay-wash option.
 - g. Digital display panel.
 - h. Soil-sensing water use control system.
 - 8. Energy Star: Provide appliances that qualify for the EPA/DOE Energy Star product-labeling program.
 - 9. Front Panel: Manufacturer's standard.
 - a. Panel Color: Stainless.
 - 10. Appliance Color/Finish: Stainless.
- B. Clothes Washer/Dryer Combination: Complying with AHAM HLW-1.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide SpeedQueen SF7007WE or comparable product by one of the following:
 - a. Frigidaire.

- b. Kenmore; Transformco SR Brands LLC.
- c. LG Electronics USA. Inc.: LG Electronics Inc.
- d. Whirlpool Corporation.
- 2. Type: Freestanding washer/dryer unit with dual-drum design and electric dryer; washer is frontloading.
- 3. Dimensions:
 - a. Width: 27 inches.b. Depth: 28 inches.
 - c. Height: 78 inches.
- 4. Washer and Dryer Drums: Perforated stainless steel.
 - a. Washer-Drum Capacity: 3.5 cu. ft..
 - b. Dryer-Drum Capacity: 7.0 cu. ft..
- 5. Washer Controls: Touch-pad controls for water-fill levels, wash/rinse water temperatures, and variable-speed and fabric selectors.
- 6. Dryer Controls: Touch-pad controls for drying cycle, temperatures, and fabric selectors.
- 7. Electric Washer/Dryer Power: As indicated on Drawings.
- 8. Motor: Manufacturer's standard with built-in overload protector.
- 9. Washing Features:
 - a. Self-cleaning lint filter.
 - b. Unbalanced-load compensator.
 - c. Inlet Hoses: Minimum length 60 inches.
 - d. Drain Hoses: Minimum length 48 inches.
 - e. Self-leveling legs.
 - f. Automatic dispenser for bleach fabric softener and detergent.
 - g. Spin-cycle safety switch.
- 10. Drying Features:
 - a. Removable lint filter.
 - b. Electronic temperature and moisture-level-sensor controls.
 - c. End-of-cycle signal.
 - d. Interior drum light.
- 11. Energy Star: Provide appliances that qualify for the EPA/DOE Energy Star product-labeling program.
- 12. Water-Efficient Clothes Washer: Provide clothes washer with modified energy factor greater than or equal to 2.0 and water factor less than 5.5.
- 13. Appliance Finish: Enamel.
 - a. Color: White.
- C. Clothes Dryer: Complying with AHAM HLD-1.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide SpeedQueen DR7004WE or comparable product by one of the following:
 - a. Frigidaire.
 - b. Kenmore; Transformco SR Brands LLC.

- c. LG Electronics USA, Inc.; LG Electronics Inc.
- d. Whirlpool Corporation.
- 2. Type: Freestanding washer/dryer unit with dual-drum design and electric dryer; washer is frontloading.
- 3. Dimensions:
 - a. Width: 27 inches.b. Depth: 28 inches.
 - c. Height: 43inches.
- 4. Drver Drums: Perforated stainless steel.
 - a. Dryer-Drum Capacity: 7.0 cu. ft..
- 5. Dryer Controls: Touch-pad controls for drying cycle, temperatures, and fabric selectors.
- 6. Electric Dryer Power: As indicated on Drawings.
- 7. Motor: Manufacturer's standard with built-in overload protector.
- 8. Drying Features:
 - a. Removable lint filter.
 - b. Electronic temperature and moisture-level-sensor controls.
 - c. End-of-cycle signal.
 - d. Interior drum light.
- 9. Energy Star: Provide appliances that qualify for the EPA/DOE Energy Star product-labeling program.
- 10. Appliance Finish: Enamel.
 - a. Color: White.

2.5 GENERAL FINISH REQUIREMENTS

- A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, power connections, and other conditions affecting installation and performance of residential appliances.
- B. Examine roughing-in for piping systems to verify actual locations of piping connections before appliance installation.

- C. Examine walls, ceilings, and roofs for suitable conditions where overhead exhaust hoods will be installed.
- D. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install appliances according to manufacturer's written instructions.
- B. Built-in Equipment: Securely anchor units to supporting cabinets or countertops with concealed fasteners. Verify that clearances are adequate for proper functioning and that rough openings are completely concealed.
- C. Freestanding Equipment: Place units in final locations after finishes have been completed in each area. Verify that clearances are adequate to properly operate equipment.
- D. Range Anti-Tip Device: Install at each range according to manufacturer's written instructions.

3.3 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
 - 1. Perform visual, mechanical, and electrical inspection and testing for each appliance according to manufacturers' written recommendations. Certify compliance with each manufacturer's appliance-performance parameters.
 - 2. Leak Test: After installation, test for leaks. Repair leaks and retest until no leaks exist.
 - 3. Operational Test: After installation, start units to confirm proper operation.
 - 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and components.
- B. An appliance will be considered defective if it does not pass tests and inspections.
- C. Prepare test and inspection reports.

3.4 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain residential appliances.

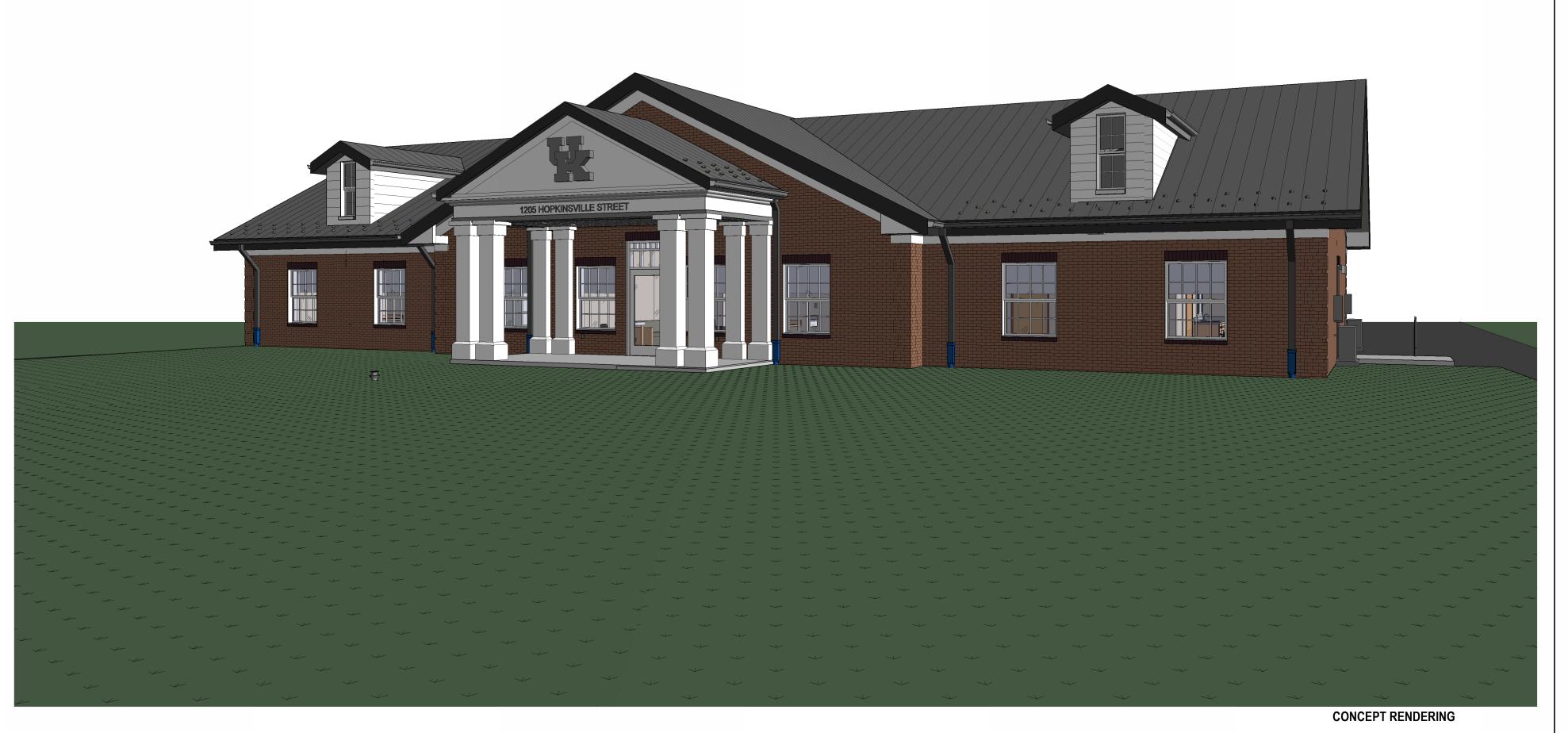
END OF SECTION 11 3013

UK PROJECT # 2603.0

GRADUATE DORMITORY

1205 HOPKINSVILLE ST. PRINCETON, KENTUCKY 42445





CONSTRUCTION DOCUMENTS

10/27/2023

UNIVERSITY OF KENTUCKY

Lexington, Kentucky 40506 Capital Project Management P: 859.257.5911 F: 859.323.1017

OWNER'S PROGRAM MANAGER

LEMOINE PROGRAM SERVICES 600 Luckie Drive, Suite 424

Birmingham, AL 35223 P: 615.428.1408

ARCHITECT

JRA ARCHITECTS

3225 Summit Square Place, Suite 200 Lexington, KY 40509 P: 859.252.6781 F: 859.255.5483

MECHANICAL / ELECTRICAL ENGINEER

CMTA CONSULTING ENGINEERS 115 Memorial Drive, Suite 115

Paducah, KY 42001 P: 270.984.0066

STRUCTURAL / CIVIL ENGINEER

BACON FARMER WORKMAN

500 S. 17th Street Paducah, KY 42002 P: 270.443.1995

DOOR HARDWARE CONSULTANT

CALVERT INDEPENDENT HARDWARE SPECIFICATIONS

307 Oakwood Circle Vine Grove, KY 41075 P: 502.930.2039

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GENERAL	
G-001	COVER SHEET
G-101	INFORMATION DRAWING
G-102	LOCATIONS AND LAYOUT RULES
G-103	LIFE SAFETY PLAN
G-104	LIFE SAFETY PLAN - ALTERNATE

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DEVELOPMENT PLAN (DORM) ALTERNATES DIMENSIONAL PLAN DIMENSIONAL PLAN (DORM) ALTERNATES GRADING PLAN

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SITE DETAILS

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BASEMENT FINISH PLAN FIRST FLOOR FINISH PLAN

ROOF PLAN - ALTERNATE **BUILDING ELEVATIONS** BUILDING ELEVATIONS - ALTERNATE BUILDING ELEVATIONS - ALTERNATE **BUILDING SECTIONS BUILDING SECTIONS**

WALL SECTIONS - ALTERNATE STAIR DETAILS

STAIRS DETAILS ENLARGED FLOOR PLANS AND STAIR DETAILS ENLARGED FLOOR PLANS INTERIOR ELEVATIONS AND CASEWORK DETAILS FOUNDATION DETAILS

ENLARGED SECTION AND ROOF DETAILS DOOR SCHEDULE AND DETAILS WINDOW TYPES AND DETAILS FINISH SCHEDULES AND DETAILS

UL DESIGNS - WALLS UL DESIGNS - FLOOR **UL DESIGNS - ROOF** UL DESIGNS - SHAFTWALL

FIRE PROTECTION LEGEND FP-200 FIRE PROTECTION PLANS FP-300 FIRE PROTECTION DETAILS

P-100

BASEMENT - PLUMBING PLAN FIRST FLOOR - PLUMBING PLAN FIRST FLOOR ALTERNATE - PLUMBING PLAN FIRST FLOOR - UNDERSLAB PLUMBING PLAN FIRST FLOOR ALTERNATE - UNDERSLAB PLUMBING PLAN PLUMBING ENLARGED PLANS PLUMBING DETAILS AND SCHEMATICS OVERALL SANITARY PLUMBING RISER ALTERNATE OVERALL SANITARY PLUMBING RISER

IC-101 MECHANICAL CONTROLS

MECHANICAL CONTROLS MECHANICAL LEGEND BASEMENT - AIR DISTRIBUTION PLAN FIRST FLOOR - AIR DISTRIBUTION PLAN FIRST FLOOR ALTERNATE - AIR DISTRIBUTION PLAN BASEMENT - HYDRONICS PLAN FIRST FLOOR - HYDRONICS PLAN FIRST FLOOR ALTERNATE - HYDRONICS PLAN

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MECHANICAL ENLARGED PLANS MECHANICAL DETAILS MECHANICAL SCHEDULES

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FIRST FLOOR - POWER FIRST FLOOR ALTERNATE - POWER PLAN BASEMENT - SYSTEMS FIRST FLOOR - SYSTEMS FIRST FLOOR ALTERNATE - SYSTEMS

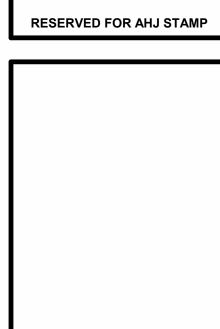
ELECTRICAL DETAILS RISER DIAGRAMS SYSTEMS RISER AND DETAILS ELECTRICAL PANEL SCHEDULES ELECTRICAL SITE UTILITY PLAN





Lexington, Kentucky 40509 859.252.6781





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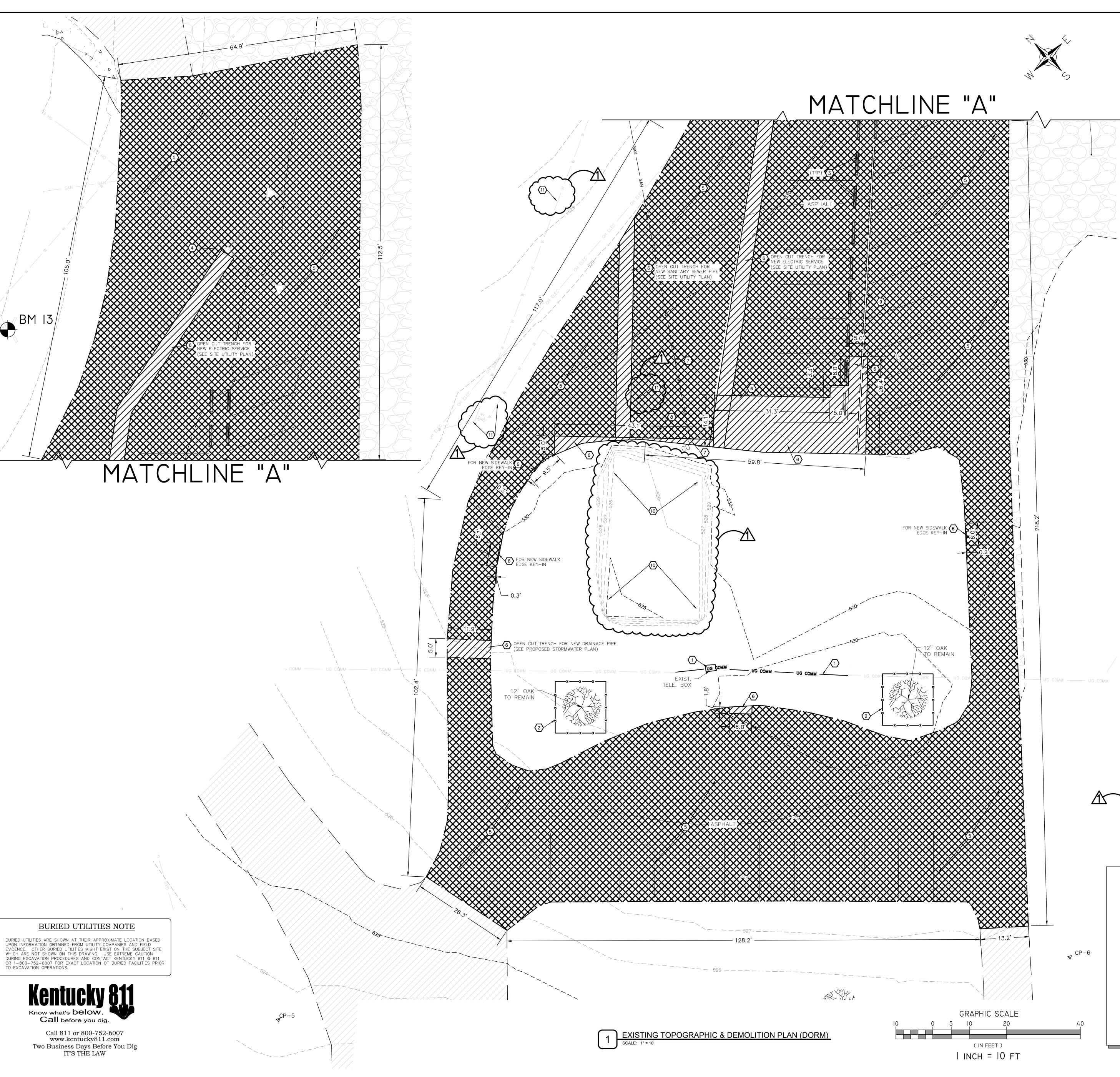
DATE 10/27/2023 **REVISIONS** CCK-2603.0-1-24 ADD 1

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COVER SHEET

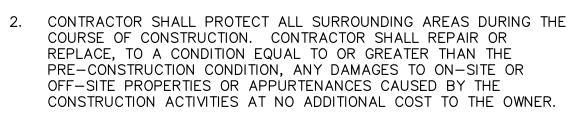
OTHER THAN THE ARCHITECT

G-001



GENERAL NOTES:

1. THIS DRAWING WAS PREPARED FROM A TOPOGRAPHIC SURVEY BY BFW ENGINEERING & TESTING, INC.. EXISTING SITE FEATURES TO BE REMOVED MAY BE PRESENT THAT WERE NOT READILY VISIBLE AT THE TIME OF SURVEY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL ITEMS THAT MUST BE REMOVED TO ACCOMMODATE THE PROPOSED CONSTRUCTION. THE CONTRACTOR MAY REMOVE ANY MISCELLANEOUS ITEMS LOCATED WITHIN THE CONSTRUCTION LIMITS THAT MUST BE REMOVED TO ACCOMMODATE THE NEW CONSTRUCTION AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR ENGINEER, PRIOR TO REMOVING ANY ITEMS PRESENT THAT WERE NOT DELINEATED ON THIS PLAN.



- UNDERGROUND UTILITIES ARE PRESENT WITHIN THE DEMOLITION AND NEW CONSTRUCTION LIMITS, INCLUDING SANITARY SEWER, STORM SEWER, WATER, UNDERGROUND AND ABOVEGROUND TELEPHONE AND ELECTRICITY. OTHER UTILITIES MAY BE PRESENT THAT WERE NOT VISIBLE OR ABLE TO BE IDENTIFIED BY THE SURVEY. CONTRACTOR SHALL USE EXTREME CAUTION DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. ALL SITE UTILITIES TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE PROJECT. ANY DAMAGE TO UTILITIES DURING THE COURSE OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR OR UTILITY COMPANY, AT THE EXPENSE OF THE CONTRACTOR, WITH NO ADDITIONAL COST TO THE
- ALL DEMOLITION AND CONSTRUCTION DEBRIS SHALL BE HAULED OFF—SITE AND DISPOSED OF IN A LEGAL MANNER. ALL HAULING AND DISPOSAL FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WITH NO ADDITIONAL COST TO THE OWNER.
- 5. CLEARING AND GRUBBING OF THE SITE WAS SPECIFIED IN THIS PLAN. ANY REMAINING ROOT ZONES SHALL BE FULLY GRUBBED TO ACCOMMODATE PLACEMENT AND COMPACTION OF FILL MATERIAL.
- SEE PROJECT SPECIFICATIONS FOR DEMOLITION AND CLEARING AND GRUBBING.
- 7. MULTIPLE SITE DEMOLITION ITEMS WERE SPECIFIED IN THIS PLAN. IF ITEMS REMAIN ON—SITE THAT ARE NOT SPECIFIED ON THIS DEMOLITION DRAWING, THAT INTERFERE WITH CONSTRUCTION, NOTIFY ARCHITECT OR ENGINEER IMMEDIATELY FOR COORDINATION ON REMOVAL OF SUCH ITEMS.
- 8. UPON COMPLETION OF DEMOLITION, SITE CONTRACTOR SHALL GRADE SITE TO DRAIN ELIMINATING ANY DEPRESSION/DRAINAGE OBSTRUCTIONS WITHIN LIMITS OF DEMOLITION. SILT FENCING SHALL BE INSTALLED AROUND PERIMETER OF SITE TO ELIMINATE SEDIMENT/EROSION.

BENCHMARK INFORMATION:

NOTE: ELEVATIONS ARE BASED FROM U.S.G.S. DATUM (NAVD 88)

BM 13 ARROW ON FIRE HYDRANT ELEVATION = 529.51

CONTROL POINT COORDINATES:

NORTHING: 3566419.965 EASTING: 4307104.865 &CP-8 NORTHING: 3566450.144 EASTING: 4306864.104

DEMOLITION PLAN KEY NOTES:

- EXISTING UNDERGROUND COMMUNICATION LINE AND PULL BOX TO BE REMOVED/ABANDONED. SEE MEP PLANS FOR DETAILS.
- 2) INSTALL TEMPORARY TREE PROTECTION. SEE DETAIL 7, SHEET C-801.
- EXISTING PARKING BUMPER CURB STOPS TO BE REMOVED AND STORED FOR LATER USE.
- EXISTING POWER POLE TO REMAIN. SEE MEP PLANS FOR ELECTRICAL SERVICE CONNECTION DETAILS.
- MILL & OVERLAY EXISTING ASPHALT PAVEMENT. SEE DETAIL 14, SHEET C-800.
 AREAS DEEMED TOO DAMAGED TO MILL SHALL BE SAWCUT FULL DEPTH BACK TO A POINT DEEMED CAPABLE OF MILLING.
- ASPHALT PAVEMENT SHALL BE SAWCUT FULL DEPTH AGAINST EXISTING PAVEMENT TO REMAIN, AND BE REMOVED FROM THE SITE. ALL DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER. EXISTING PAVEMENT REMAINING SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. IF ASPHALT PAVEMENT OR CONCRETE IS DAMAGED, CONTRACTOR SHALL SAWCUT AND REMOVE THE DAMAGED PORTION AS NECESSARY AND RESTORE TO A CONDITION EQUAL TO OR GREATER THAN THE PRE—CONSTRUCTION CONDITION.
- EXISTING SANITARY SEWER CLEANOUT TO BE REMOVED, AND EXISTING 8" PVC SANITARY SEWER LATERAL TO BE CAPPED AND ABANDONED TO A POINT WHERE PROPOSED SANITARY LATERAL CONNECTS. SEE SHEET C-701 UTILITY
- REFER TO MEP PLANS FOR BUILDING UTILITY CONNECTIONS. EXISTING UTILITY LINES IN THIS AREA TO BE LOCATED AND EXPOSED BY SITE CONTRACTOR IN ORDER FOR NEW BUILDING CONNECTIONS TO BE MADE. ONCE LINES ARE EXPOSED, CONTRACTOR SHALL FLUSH AND DISINFECT/STERILIZE LINES TO CLEAN THEM OF ANY MUD, DIRT, ETC. SITE CONTRACTOR TO CONNECT TO EXISTING LINES AND EXTEND WITH NEW PIPING TO WITHIN 5' OF BUILDING
- REMOVE EXISTING CONCRETE CURB.

PLAN FOR FURTHER INFORMATION.

- EXISTING PIT FROM FORMER BUILDING BASEMENT. EXCAVATE FOR NEW BASEMENT TO PROPOSED GRADES. SIDES OF EXISTING PIT SHALL BE SLOPED AT A 2:1 SLOPE PRIOR TO ANY NEW FILL PLACEMENT. SEE GEOTECHNICAL REPORT FOR ADDITIONAL EARTHWORK INFORMATION.
- CUT, CAP, & ABANDON EXISTING DOMESTIC WATER LINE. SEE SHEET C-701 UTILITY PLAN FOR FURTHER DETAILS.

		<u>LEGEND</u>
— UG СОММ —	—— UG СОММ —	UNDERGROUND COMMUNICATIONS TO BE DEMOLISHED
		EXISTING MAJOR CONTOUR
		EXISTING MINOR CONTOUR
		EXISTING STORM SEWER
		EXISTING OVERHEAD ELECTRIC
		EXISTING UNDERGROUND COMMUNICATIONS
		EXISTING SANITARY SEWER
		EXISTING WATER LINE PROPOSED FENCE
		EXISTING GRAVEL SURFACE EXISTING ASPHALT PAVEMENT
		ASPHALT PAVEMENT TO BE DEMOLISHED
		EXISTING ASPHALT TO BE MILLED & OVERLAID
ý	J	UTILITY POLE
CO		CLEAN OUT

J A architects

3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781



RESERVED FOR AHJ STAMP

BACON FARMER WORKMAN ENGINEERING & TESTING, INC.

STRUCTION DOCUMENTS

RADUATE DORMITORY



CIVIL

PROJECT 20225.04

DATE 10/27/2023

REVISIONS

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PLAN

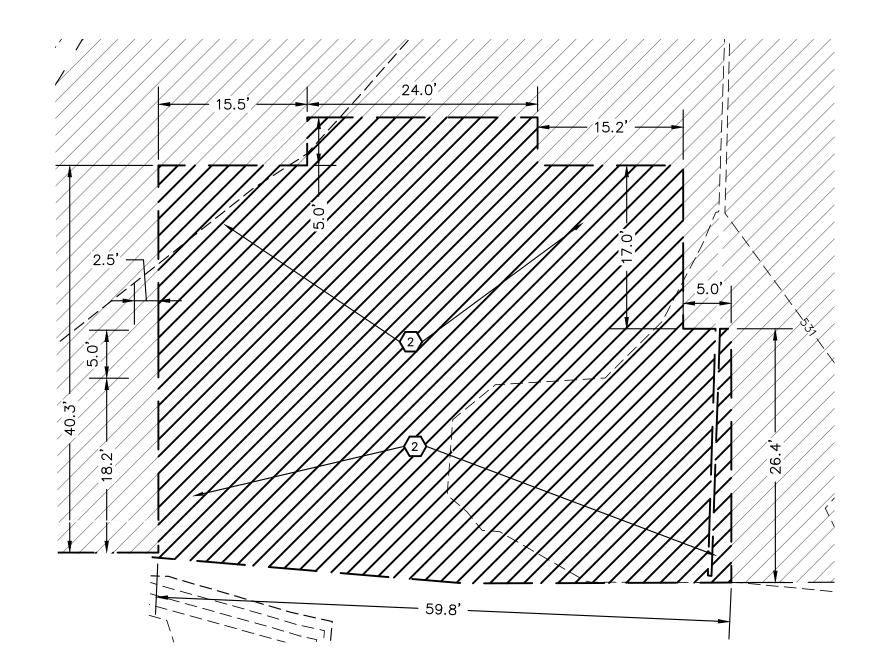
TOPOGRAPHIC

& DEMOLITION

C-101

BFW PROJECT # 23025





EXISTING TOPOGRAPHIC & DEMOLITION PLAN (DORM) ALT 2

128.2

EXISTING TOPOGRAPHIC & DEMOLITION PLAN (DORM) ALT 1

DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811
OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR
TO EXCAVATION OPERATIONS.

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED

UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE

WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION

Know what's below.
Call before you dig.

Call 811 or 800-752-6007 www.kentucky811.com Two Business Days Before You Dig IT'S THE LAW

GENERAL NOTES:

- 1. THIS DRAWING WAS PREPARED FROM A TOPOGRAPHIC SURVEY BY BFW ENGINEERING & TESTING, INC.. EXISTING SITE FEATURES TO BE REMOVED MAY BE PRESENT THAT WERE NOT READILY VISIBLE AT THE TIME OF SURVEY. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL ITEMS THAT MUST BE REMOVED TO ACCOMMODATE THE PROPOSED CONSTRUCTION. THE CONTRACTOR MAY REMOVE ANY MISCELLANEOUS ITEMS LOCATED WITHIN THE CONSTRUCTION LIMITS THAT MUST BE REMOVED TO ACCOMMODATE THE NEW CONSTRUCTION AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR ENGINEER, PRIOR TO REMOVING ANY ITEMS PRESENT THAT WERE NOT DELINEATED ON THIS PLAN.
- 2. CONTRACTOR SHALL PROTECT ALL SURROUNDING AREAS DURING THE COURSE OF CONSTRUCTION. CONTRACTOR SHALL REPAIR OR REPLACE, TO A CONDITION EQUAL TO OR GREATER THAN THE PRE—CONSTRUCTION CONDITION, ANY DAMAGES TO ON—SITE OR OFF—SITE PROPERTIES OR APPURTENANCES CAUSED BY THE CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
- 3. UNDERGROUND UTILITIES ARE PRESENT WITHIN THE DEMOLITION AND NEW CONSTRUCTION LIMITS, INCLUDING SANITARY SEWER, STORM SEWER, WATER, UNDERGROUND AND ABOVEGROUND TELEPHONE AND ELECTRICITY. OTHER UTILITIES MAY BE PRESENT THAT WERE NOT VISIBLE OR ABLE TO BE IDENTIFIED BY THE SURVEY. CONTRACTOR SHALL USE EXTREME CAUTION DURING DEMOLITION AND CONSTRUCTION ACTIVITIES. ALL SITE UTILITIES TO REMAIN SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE PROJECT. ANY DAMAGE TO UTILITIES DURING THE COURSE OF CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR OR UTILITY COMPANY, AT THE EXPENSE OF THE CONTRACTOR, WITH NO ADDITIONAL COST TO THE OWNER.
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 ANY REMAINING ROOT ZONES SHALL BE FULLY GRUBBED TO
 ACCOMMODATE PLACEMENT AND COMPACTION OF FILL MATERIAL.
- SEE PROJECT SPECIFICATIONS FOR DEMOLITION AND CLEARING AND GRUBBING.
- 7. MULTIPLE SITE DEMOLITION ITEMS WERE SPECIFIED IN THIS PLAN. IF ITEMS REMAIN ON—SITE THAT ARE NOT SPECIFIED ON THIS DEMOLITION DRAWING, THAT INTERFERE WITH CONSTRUCTION, NOTIFY ARCHITECT OR ENGINEER IMMEDIATELY FOR COORDINATION ON REMOVAL OF SUCH ITEMS.
- 8. UPON COMPLETION OF DEMOLITION, SITE CONTRACTOR SHALL GRADE SITE TO DRAIN ELIMINATING ANY DEPRESSION/DRAINAGE OBSTRUCTIONS WITHIN LIMITS OF DEMOLITION. SILT FENCING SHALL BE INSTALLED AROUND PERIMETER OF SITE TO ELIMINATE SEDIMENT/EROSION.

BENCHMARK INFORMATION:

NOTE: ELEVATIONS ARE BASED FROM U.S.G.S. DATUM (NAVD 88)

BM 13 ARROW ON FIRE HYDRANT ELEVATION = 529.51

CONTROL POINT COORDINATES:

△CP-5 NORTHING: 3566110.792 EASTING: 4306390.138

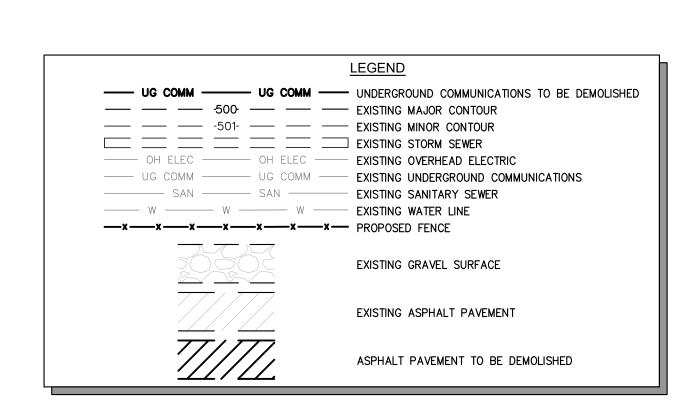
NORTHING: 3565968.921 EASTING: 4306551.877 ACP-7 NORTHING: 3566419.965 EASTING: 4307104.865

△CP-8 NORTHING: 3566450.144 EASTING: 4306864.104

DEMOLITION PLAN KEY NOTES:

ALTERNATE 1:
REMOVE ASPHALT PAVEMENT IMMEDIATELY SOUTH OF THE PROPOSED DORMITORY.
ASPHALT PAVEMENT SHALL BE SAWCUT FULL DEPTH AGAINST EXISTING PAVEMENT TO REMAIN, AND BE REMOVED FROM THE SITE. ALL DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER. EXISTING PAVEMENT REMAINING SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. IF ASPHALT PAVEMENT OR CONCRETE IS DAMAGED, CONTRACTOR SHALL SAWCUT AND REMOVE THE DAMAGED PORTION AS NECESSARY AND RESTORE TO A CONDITION EQUAL TO OR GREATER THAN THE PRE—CONSTRUCTION CONDITION.

ALTERNATE 2:
REMOVE ASPHALT PAVEMENT AS DIMENSIONED.
ASPHALT PAVEMENT SHALL BE SAWCUT FULL DEPTH AGAINST EXISTING PAVEMENT TO REMAIN, AND BE REMOVED FROM THE SITE. ALL DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER. EXISTING PAVEMENT REMAINING SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION. IF ASPHALT PAVEMENT OR CONCRETE IS DAMAGED, CONTRACTOR SHALL SAWCUT AND REMOVE THE DAMAGED PORTION AS NECESSARY AND RESTORE TO A CONDITION EQUAL TO OR GREATER THAN THE PRE—CONSTRUCTION



GRAPHIC SCALE

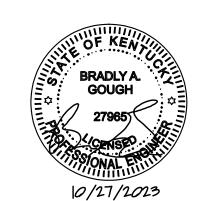
0 5 10 20

(IN FEET)

I INCH = 10 FT



3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781

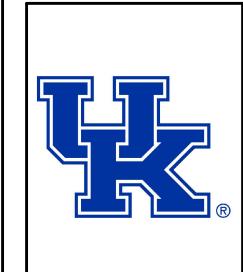


RESERVED FOR AHJ STAMP



CONSTRUCTION DOCUMENTS

GRADUATE DORMITORY



CIVIL

PROJECT 202225.04

DATE 10/27/2023

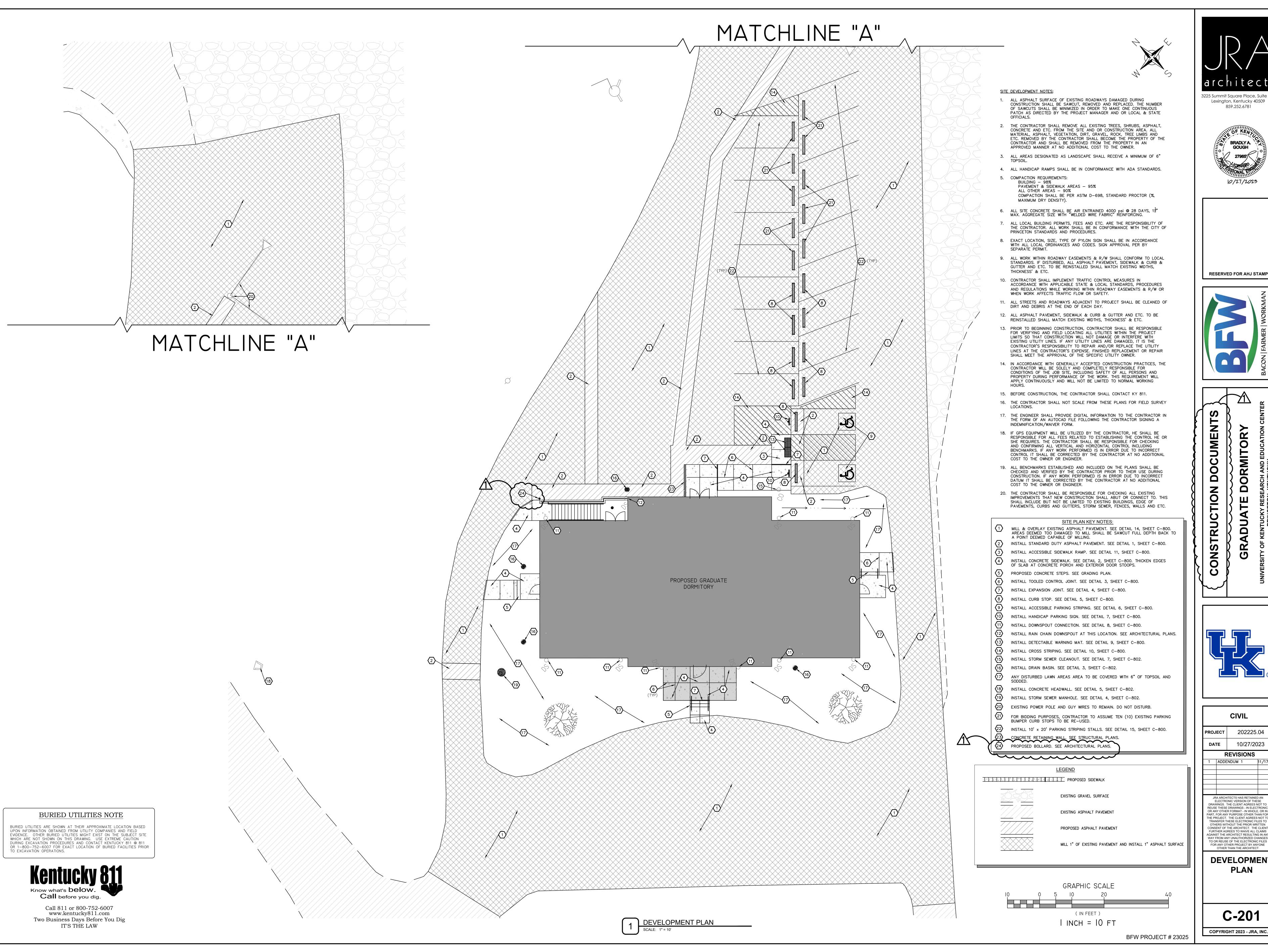
REVISIONS

1 ADDENDUM 1 11/17/23

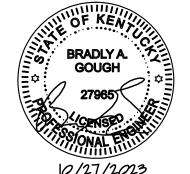
JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

TOPOGRAPHIC & DEMOLITION PLAN ALTERNATES

C-101A



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CIVIL 10/27/2023 REVISIONS ADDENDUM 1 ELECTRONIC VERSION OF THESE
DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN

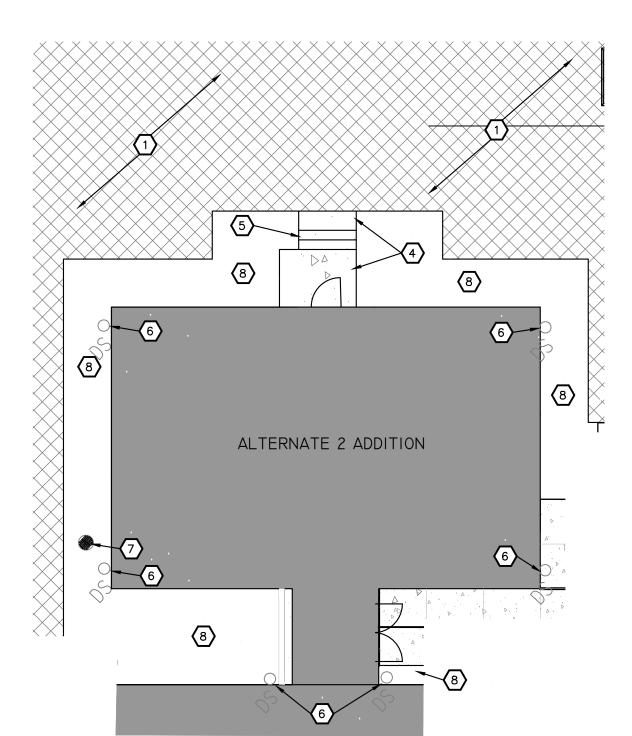
DEVELOPMENT

C-201

- 1. ALL ASPHALT SURFACE OF EXISTING ROADWAYS DAMAGED DURING CONSTRUCTION SHALL BE SAWCUT, REMOVED AND REPLACED. THE NUMBER OF SAWCUTS SHALL BE MINIMIZED IN ORDER TO MAKE ONE CONTINUOUS PATCH AS DIRECTED BY THE PROJECT MANAGER AND OR LOCAL & STATE
- 2. THE CONTRACTOR SHALL REMOVE ALL EXISTING TREES, SHRUBS, ASPHALT, CONCRETE AND ETC. FROM THE SITE AND OR CONSTRUCTION AREA. ALL MATERIAL, ASPHALT, VEGETATION, DIRT, GRAVEL, ROCK, TREE LIMBS AND ETC. REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROPERTY IN AN APPROVED MANNER AT NO ADDITIONAL COST TO THE OWNER.
- 3. ALL AREAS DESIGNATED AS LANDSCAPE SHALL RECEIVE A MINIMUM OF 6"
- 4. ALL HANDICAP RAMPS SHALL BE IN CONFORMANCE WITH ADA STANDARDS.
- 5. COMPACTION REQUIREMENTS: PAVEMENT & SIDEWALK AREAS - 95%

SEPARATE PERMIT.

- ALL OTHER AREAS 90% COMPACTION SHALL BE PER ASTM D-698, STANDARD PROCTOR (%, MAXIMUM DRY DENSITY).
- 6. ALL SITE CONCRETE SHALL BE AIR ENTRAINED 4000 psi @ 28 DAYS, 12" MAX. AGGREGATE SIZE WITH "WELDED WIRE FABRIC" REINFORCING.
- 7. ALL LOCAL BUILDING PERMITS, FEES AND ETC. ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL BE IN CONFORMANCE WITH THE CITY OF
- PRINCETON STANDARDS AND PROCEDURES. 8. EXACT LOCATION, SIZE, TYPE OF PYLON SIGN SHALL BE IN ACCORDANCE WITH ALL LOCAL ORDINANCES AND CODES. SIGN APPROVAL PER BY
- 9. ALL WORK WITHIN ROADWAY EASEMENTS & R/W SHALL CONFORM TO LOCAL STANDARDS. IF DISTURBED, ALL ASPHALT PAVEMENT, SIDEWALK & CURB & GUTTER AND ETC. TO BE REINSTALLED SHALL MATCH EXISTING WIDTHS, THICKNESS' & ETC.
- 10. CONTRACTOR SHALL IMPLEMENT TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH APPLICABLE STATE & LOCAL STANDARDS, PROCEDURES AND REGULATIONS WHILE WORKING WITHIN ROADWAY EASEMENTS & R/W OR
- WHEN WORK AFFECTS TRAFFIC FLOW OR SAFETY. 11. ALL STREETS AND ROADWAYS ADJACENT TO PROJECT SHALL BE CLEANED OF DIRT AND DEBRIS AT THE END OF EACH DAY.
- 12. ALL ASPHALT PAVEMENT, SIDEWALK & CURB & GUTTER AND ETC. TO BE REINSTALLED SHALL MATCH EXISTING WIDTHS, THICKNESS' & ETC.
- 13. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND FIELD LOCATING ALL UTILITIES WITHIN THE PROJECT LIMITS SO THAT CONSTRUCTION WILL NOT DAMAGE OR INTERFERE WITH EXISTING UTILITY LINES. IF ANY UTILITY LINES ARE DAMAGED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE UTILITY LINES AT THE CONTRACTOR'S EXPENSE. FINISHED REPLACEMENT OR REPAIR SHALL MEET THE APPROVAL OF THE SPECIFIC UTILITY OWNER.
- 14. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING
- 15. BEFORE CONSTRUCTION, THE CONTRACTOR SHALL CONTACT KY 811.
- 16. THE CONTRACTOR SHALL NOT SCALE FROM THESE PLANS FOR FIELD SURVEY
- 17. THE ENGINEER SHALL PROVIDE DIGITAL INFORMATION TO THE CONTRACTOR IN THE FORM OF AN AUTOCAD FILE FOLLOWING THE CONTRACTOR SIGNING A INDEMNIFICATION/WAIVER FORM.
- 18. IF GPS EQUIPMENT WILL BE UTILIZED BY THE CONTRACTOR, HE SHALL BE RESPONSIBLE FOR ALL FEES RELATED TO ESTABLISHING THE CONTROL HE OR SHE REQUIRES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND CONFIRMING ALL VERTICAL AND HORIZONTAL CONTROL INCLUDING BENCHMARKS. IF ANY WORK PERFORMED IS IN ERROR DUE TO INCORRECT CONTROL IT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR ENGINEER.
- 19. ALL BENCHMARKS ESTABLISHED AND INCLUDED ON THE PLANS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO THEIR USE DURING CONSTRUCTION. IF ANY WORK PERFORMED IS IN ERROR DUE TO INCORRECT DATUM IT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR ENGINEER.
- 20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING ALL EXISTING IMPROVEMENTS THAT NEW CONSTRUCTION SHALL ABUT OR CONNECT TO. THIS SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING BUILDINGS, EDGE OF PAVEMENTS, CURBS AND GUTTERS, STORM SEWER, FENCES, WALLS AND ETC.

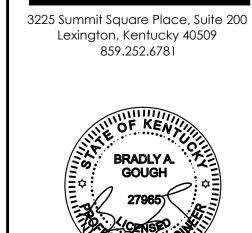


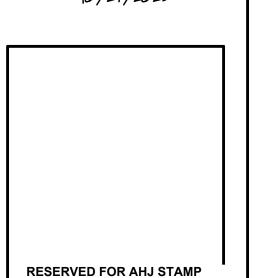
DEVELOPMENT PLAN (DORM) ALT 2

PROPOSED PORCH

1 DEVELOPMENT PLAN (DORM) ALT 1

SCALE: 1" = 10'







SITE PLAN KEY NOTES: MILL & OVERLAY EXISTING ASPHALT PAVEMENT. SEE DETAIL 14, SHEET C-800.
AREAS DEEMED TOO DAMAGED TO MILL SHALL BE SAWCUT FULL DEPTH BACK TO A POINT DEEMED CAPABLE OF MILLING.

THIS AREA TO BE RE-GRADED PER PROPOSED GRADING PLAN, COVERED WITH 6" OF TOPSOIL AND SODDED. (3) CONCRETE STEPS FROM FRONT PORCH TO BE OMITTED IN ALTERNATE 1.

INSTALL CONCRETE SIDEWALK. SEE DETAIL 2, SHEET C-800. THICKEN EDGES OF SLAB AT CONCRETE PORCH AND EXTERIOR DOOR STOOPS. 75 PROPOSED CONCRETE STEPS. SEE GRADING PLAN.

<u>LEGEND</u>

CP-6 **▼**

GRAPHIC SCALE

(IN FEET)

I INCH = 10 FT

INSTALL DOWNSPOUT CONNECTION. SEE DETAIL 8, SHEET C-800. INSTALL DRAIN BASIN. SEE DETAIL 3, SHEET C-802. SEE SHEET L-100 FOR LANDSCAPING PLAN FOR ALTERNATE 2 IN THESE AREAS.

PROPOSED SIDEWALK EXISTING GRAVEL SURFACE

EXISTING ASPHALT PAVEMENT PROJECT MILL 1" OF EXISTING PAVEMENT AND INSTALL 1" ASPHALT SURFACE 10/27/2023 DATE REVISIONS PROPOSED 6" TOPSOIL & SOD ADDENDUM 1

ELECTRONIC VERSION OF THESE
DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC
OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN AN'
WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE
OTHER THAN THE ARCHITECT.

DEVELOPMENT PLAN (DORM) **ALTERNATES**

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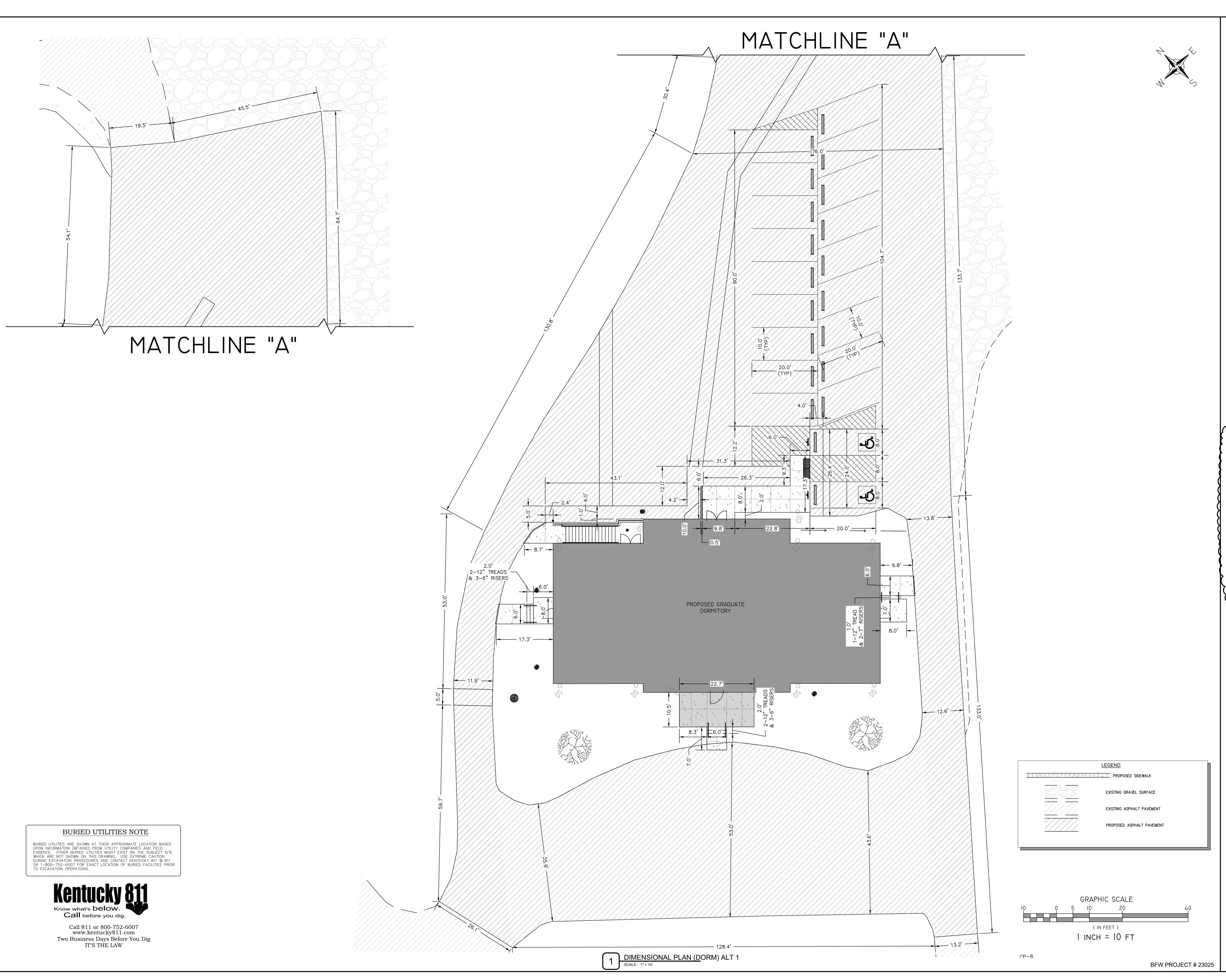
BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811 OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR TO EXCAVATION OPERATIONS.

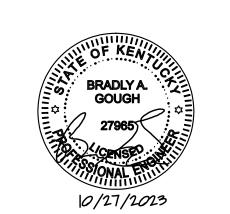
Call before you dig.

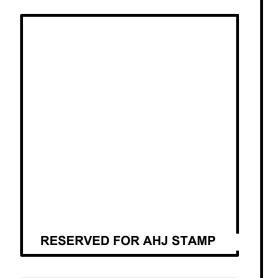
Call 811 or 800-752-6007 www.kentucky811.com Two Business Days Before You Dig IT'S THE LAW

BFW PROJECT # 23025





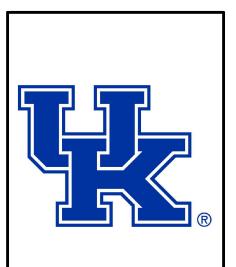






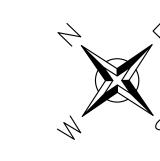
CONSTRUCTION DOCUMENTS

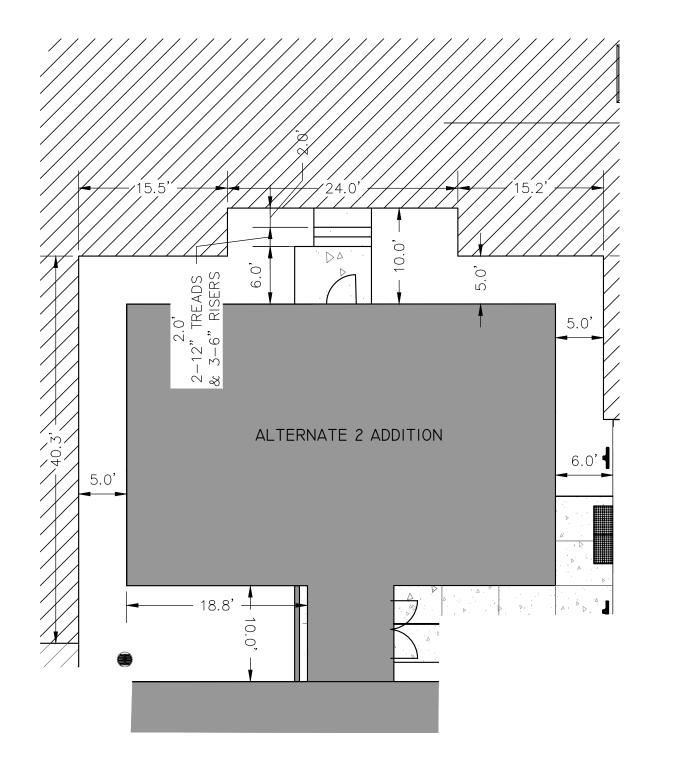
GRADUATE DORMITORY



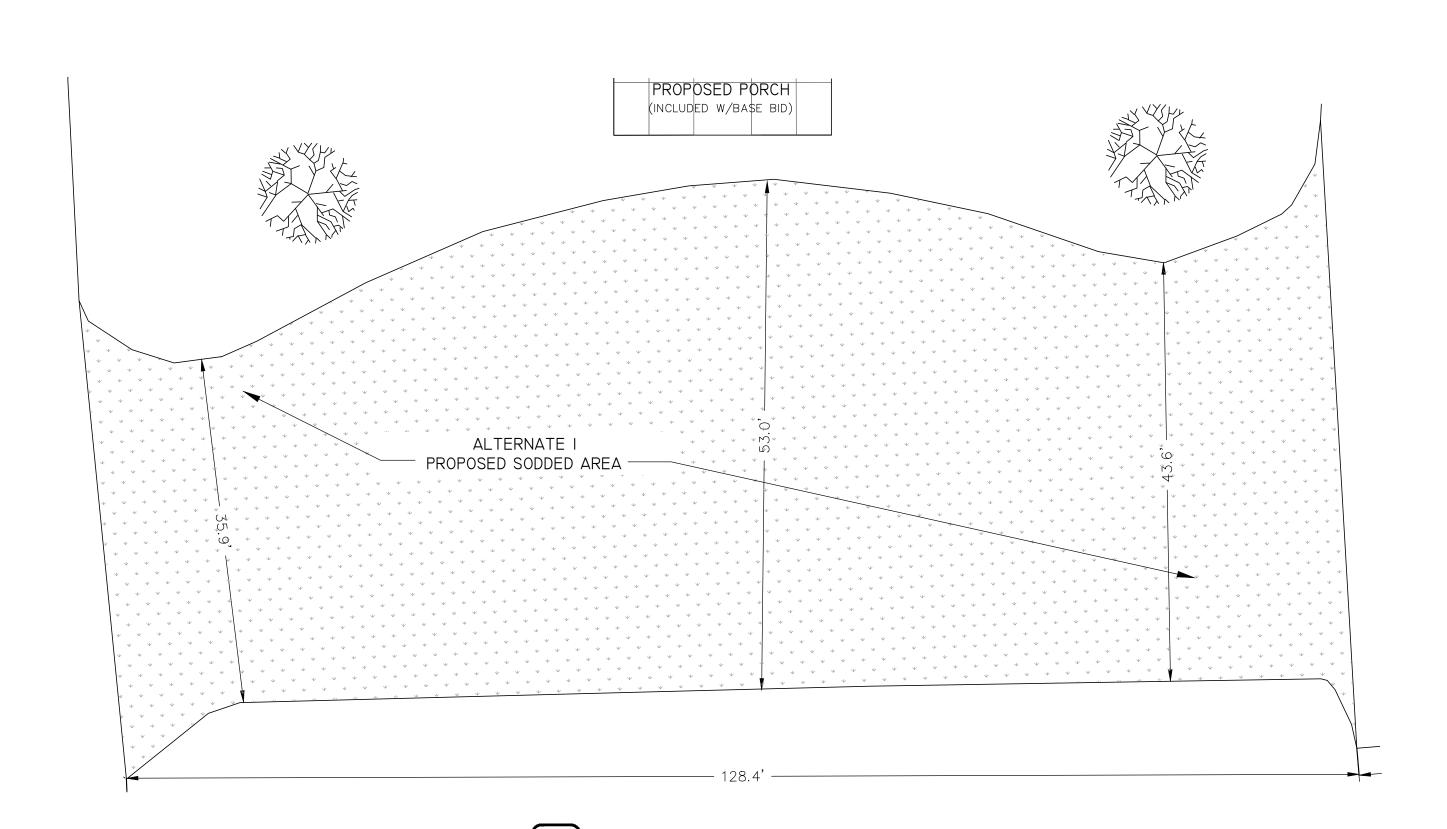
DIMENSIONAL PLAN (DORM) ALT 1

C-301





1 DIMENSIONAL PLAN (DORM) ALT 2
SCALE: 1" = 10'



LEGEND

PROPOSED SIDEWALK

EXISTING GRAVEL SURFACE

EXISTING ASPHALT PAVEMENT

PROPOSED STANDARD DUTY ASPHALT PAVEMENT

BURIED UTILITIES NOTE

BURIED UTILITIES NOTE

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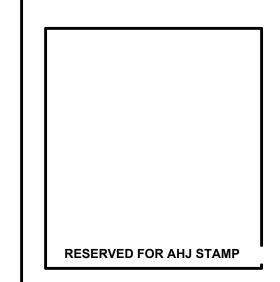


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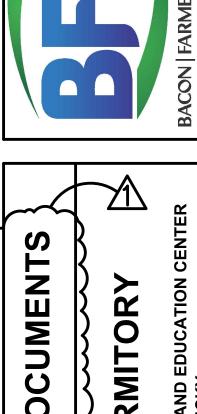
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Lexington, Kentucky 40509
859.252.6781









GRADUATE DORMITOR

UNIVERSITY OF KENTUCKY RESEARCH AND EDUCATI



		CIVIL		
PROJ	ECT	202225	.04	
DAT	ΓΕ	10/27/20	23	
1		REVISIONS ENDUM 1	11/17/23	
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DIMENSIONAL PLAN (DORM) ALTERNATES

C-301A

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EX: 531.04 ⊬ÉX: 531.05/√// ∠EX: 531.06-√ T/GRATE 530.50 ÉX: 530.30 //EX: 530.61/ 531.80 531.78 FL: 530.92 ________<u>530.70</u> 530.47 T/STEPS FFE BASEMENT 521.30 521.30 B/STEPS PROPOSED GRADUATE DORMITORY EX: 529.79 ITST FLOOR FFE = 531.80 B/STEPS 3 RISERS @ 6" EA. = 1.5' VERTICAL DROP T/GRATE 529.20 BURIED UTILITIES NOTE BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811 OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR 1 GRADING PLAN SCALE: 1" = 10'

Call before you dig.

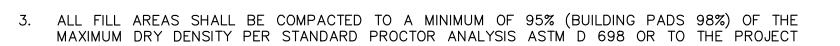
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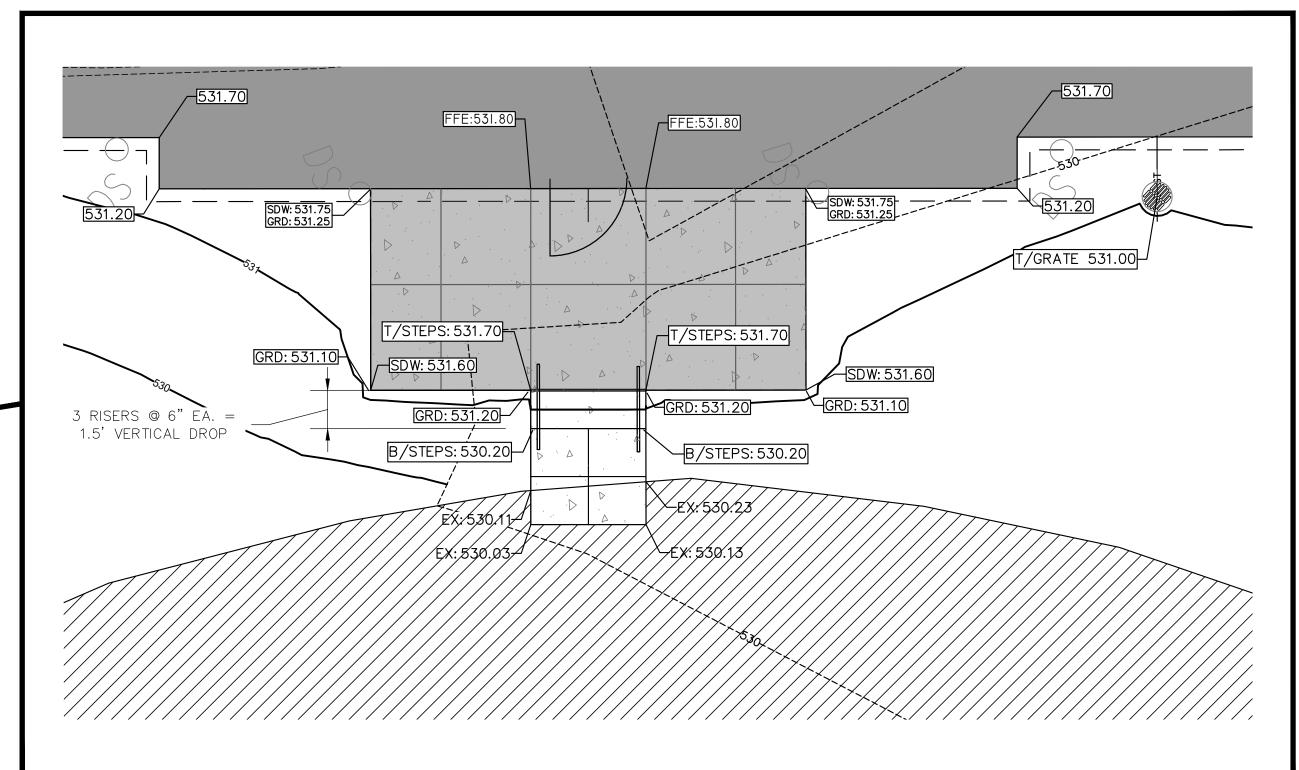
IT'S THE LAW

SITE GRADING NOTES:

- 1. ALL CONTOURS AND SPOT ELEVATIONS INDICATE FINISH GRADE, ON EARTH, ASPHALT OR CONC. SINGLE SPOT ELEVATIONS INDICATE PAVEMENT SURFACE ELEVATION OR GUTTER FLOW LINE ELEVATION.
- 2. PRIOR TO COMPLETING A BID AND BEGINNING CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND FIELD LOCATING ALL UTILITIES WITHIN THE PROJECT LIMITS SO THAT CONSTRUCTION WILL NOT DAMAGE OR INTERFERE WITH EXISTING UTILITY LINES. IF ANY UTILITY LINES ARE DAMAGED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE UTILITY LINES AT THE CONTRACTOR'S EXPENSE. FINISHED REPLACEMENT OR REPAIR SHALL MEET THE APPROVAL OF THE SPECIFIC UTILITY OWNER.



- 4. EXISTING ELEVATIONS AND CONTOURS ON THIS PLAN ARE PROVIDED FROM SITE SURVEY BY BFW ENGINEERING & TESTING, INC.. CONTRACTOR SHALL COORDINATE HORIZONTAL AND VERTICAL CONTROL WITH ENGINEER OR SURVEYOR PRIOR TO COMPLETING A BID AND COMMENCEMENT OF CONSTRUCTION.
- 5. IMPROPER GRADING/FINISHING OF ALL EXCAVATION AND FILL PLACEMENT WITHIN THE PROJECT LIMITS OR ADJACENT RIGHT-OF-WAYS THAT RESULTS IN DRAINAGE PROBLEMS SHALL BE REMOVED AND REINSTALLED TO IMPLEMENT POSITIVE DRAINAGE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR SEDIMENTATION CONTROL OF ONSITE RUNOFF IN ACCORDANCE WITH THE ACCEPTED EROSION AND SEDIMENTATION CONTROL PRACTICES FOR CONSTRUCTION ACTIVITIES IN THE STATE OF KENTUCKY AND/OR CITY OF PRINCETON.
- 7. THE IMPROVEMENT OF THIS SITE SHALL NOT OBSTRUCT THE NECESSARY DRAINAGE REQUIRED.
- 8. THE DRAINAGE PATTERN CREATED BY THE DEVELOPMENT OF THIS SITE SHALL BE CONSISTENT WITH THE PREVIOUS STORMWATER DRAINAGE PATTERNS. THE ADJACENT PROPERTY OWNERS SHALL NOT REALIZE ANY CHANGE IN RUNOFF TO THEIR PROPERTY.
- 9. ALL POTENTIAL EROSION SHALL BE CONTROLLED IN SUCH A MANNER SO AS TO PREVENT ANY DISPLACEMENT OF SILT TO THE ADJACENT PROPERTY OWNERS OR RIGHT-OF-WAY.
- 10. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.
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- 12. ALL DISTURBED AREAS NOT TO RECEIVE PAVEMENT SHALL BE BACKFILLED WITH MINIMUM 6" TOPSOIL, FINE GRADED TO DRAIN, SEEDED, SODDED OR LANDSCAPED, FERTILIZED, AND
- 13. THE CONTRACTOR SHALL NOT SCALE FROM THESE PLANS FOR FIELD SURVEY LOCATIONS.
- 14. ALL SOFT AND UNSUITABLE MATERIAL IN AREAS TO RECEIVE FILL MUST BE OVER-EXCAVATED TO A STABLE SUB-BASE, AND BACKFILLED WITH AN APPROVED ENGINEERED BACKFILL. ALL BACKFILL MUST MEET THE COMPACTION REQUIREMENTS OF THE SPECIFICATIONS OR AS SHOWN ON THIS DRAWING, WHICHEVER IS THE MORE STRINGENT REQUIREMENT.
- 15. AT PROPOSED ENTRANCES CONTRACTOR IS TO CUT AND REMOVE EXISTING CURB. CONTRACTOR IS TO MATCH PROPOSED CURB WITH EXISTING CURB USING RECOMMENDED RADIUS. CONTRACTOR IS TO MATCH PROPOSED PAVEMENT WITH EXISTING PAVEMENT TO MEET CITY STANDARDS.



2 ENLARGED GRADING PLAN SCALE: 1" = 5'

SPOT ELEVATION LABELS

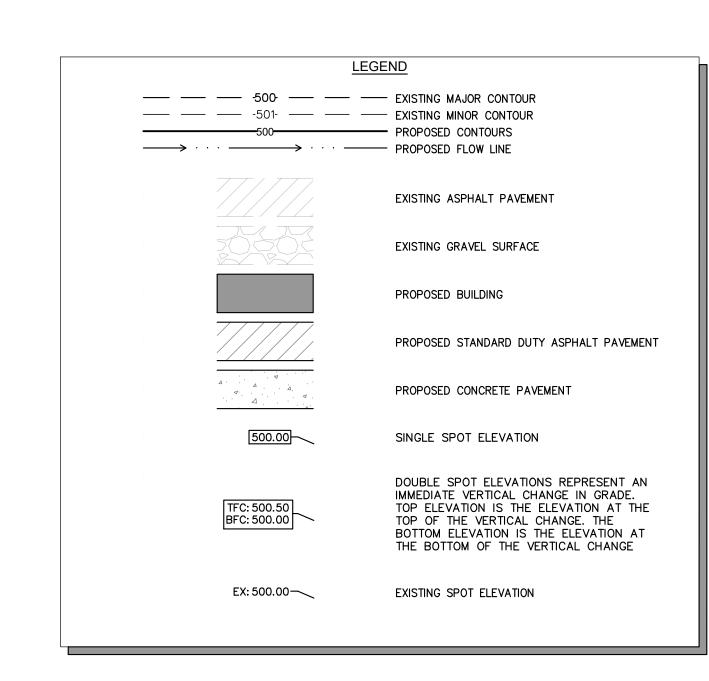
FINISH FLOOR ELEVATION

FFE: FINISH FLOOR ELE
FL: FLOWLINE
GRD: GROUND
PVT: PAVEMENT
SDW: SIDEWALK
EX: EXISTING GRADE

GRAPHIC SCALE

(IN FEET)

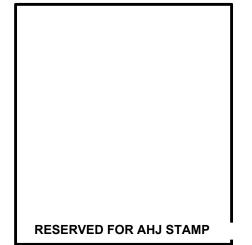
I INCH = 10 FT





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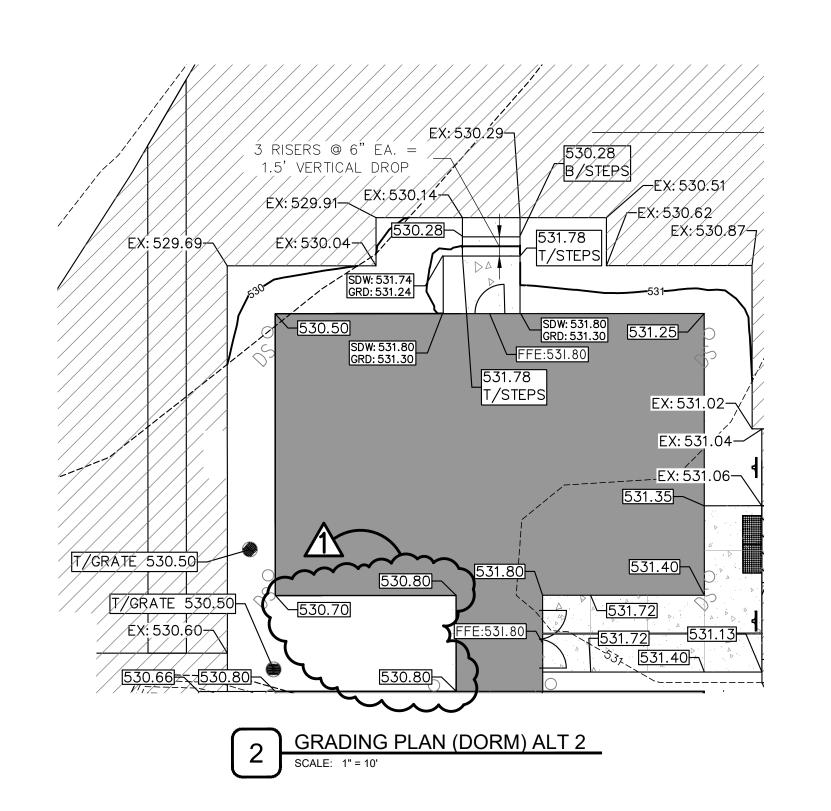




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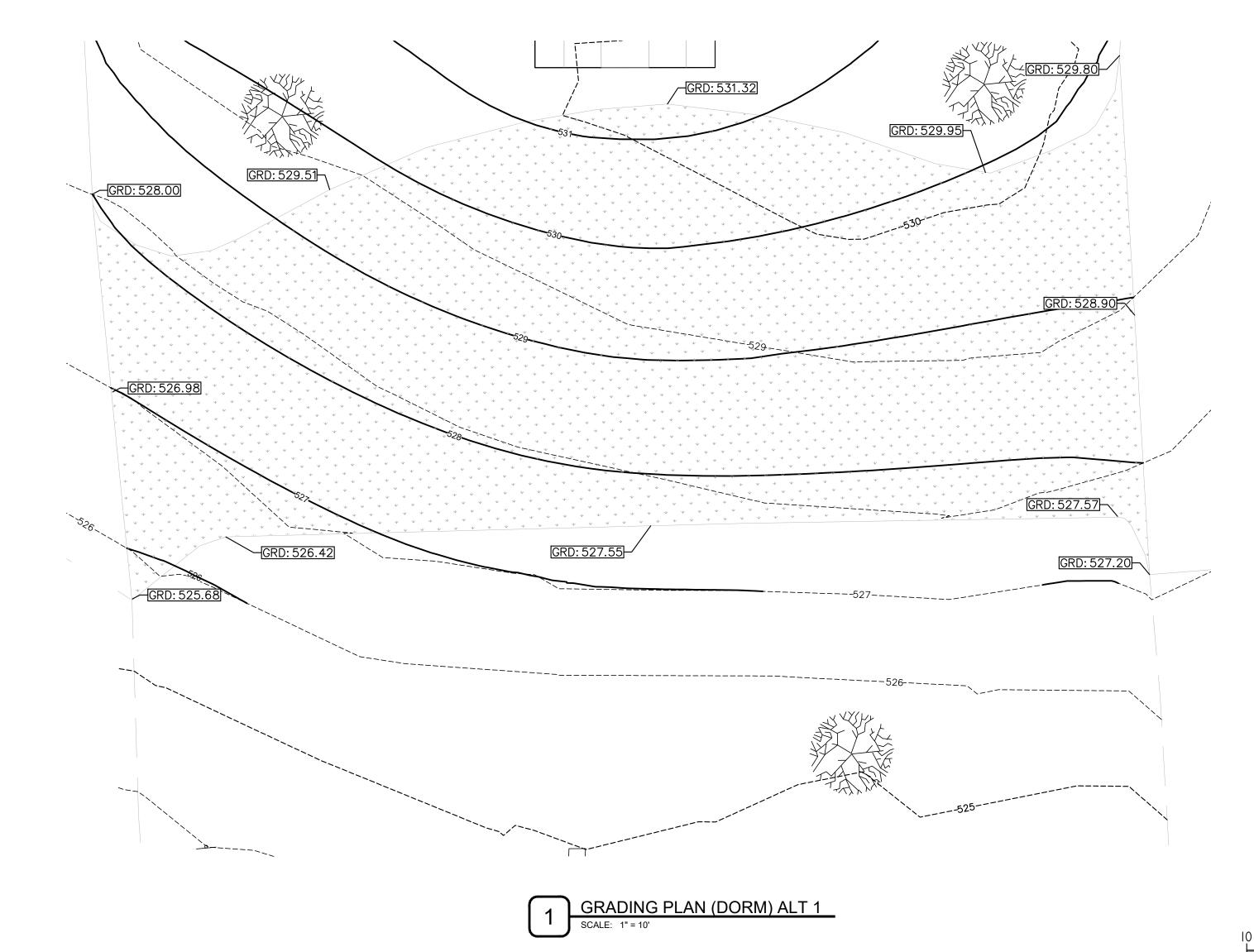


C-401

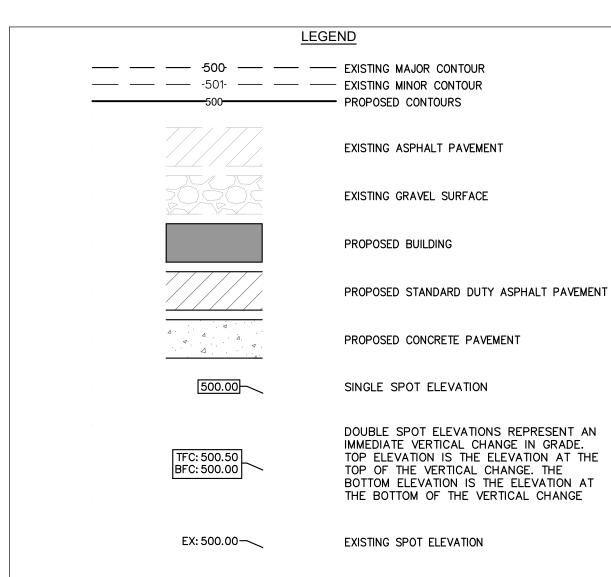


SITE GRADING NOTES:

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- REPAIR SHALL MEET THE APPROVAL OF THE SPECIFIC UTILITY OWNER. 3. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% (BUILDING PADS 98%) OF THE MAXIMUM DRY DENSITY PER STANDARD PROCTOR ANALYSIS ASTM D 698 OR TO THE PROJECT
- 4. EXISTING ELEVATIONS AND CONTOURS ON THIS PLAN ARE PROVIDED FROM SITE SURVEY BY BFW ENGINEERING & TESTING, INC.. CONTRACTOR SHALL COORDINATE HORIZONTAL AND VERTICAL CONTROL WITH ENGINEER OR SURVEYOR PRIOR TO COMPLETING A BID AND COMMENCEMENT OF CONSTRUCTION.
- 5. IMPROPER GRADING/FINISHING OF ALL EXCAVATION AND FILL PLACEMENT WITHIN THE PROJECT LIMITS OR ADJACÉNT RIGHT-OF-WAYS THAT RESULTS IN DRAINAGE PROBLEMS SHALL BE REMOVED AND REINSTALLED TO IMPLEMENT POSITIVE DRAINAGE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR SEDIMENTATION CONTROL OF ONSITE RUNOFF IN ACCORDANCE WITH THE ACCEPTED EROSION AND SEDIMENTATION CONTROL PRACTICES FOR CONSTRUCTION ACTIVITIES IN THE STATE OF KENTUCKY AND/OR CITY OF PRINCETON.
- 7. THE IMPROVEMENT OF THIS SITE SHALL NOT OBSTRUCT THE NECESSARY DRAINAGE REQUIRED.
- 8. THE DRAINAGE PATTERN CREATED BY THE DEVELOPMENT OF THIS SITE SHALL BE CONSISTENT WITH THE PREVIOUS STORMWATER DRAINAGE PATTERNS. THE ADJACENT PROPERTY OWNERS SHALL NOT REALIZE ANY CHANGE IN RUNOFF TO THEIR PROPERTY.
- 9. ALL POTENTIAL EROSION SHALL BE CONTROLLED IN SUCH A MANNER SO AS TO PREVENT ANY DISPLACEMENT OF SILT TO THE ADJACENT PROPERTY OWNERS OR RIGHT-OF-WAY.
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SPOT ELEVATION LABELS FFE: FINISH FLOOF FL: FLOWLINE GRD: GROUND PVT: PAVEMENT SDW: SIDEWALK FINISH FLOOR ELEVATION FLOWLINE GROUND PAVEMENT



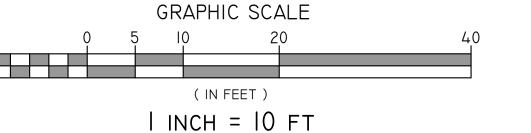
BURIED UTILITIES NOTE

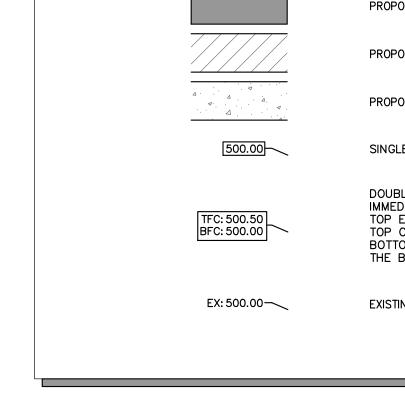
BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SOLUTION OF THE SOLUTION OF THE SOLUTION OF T WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811 OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR



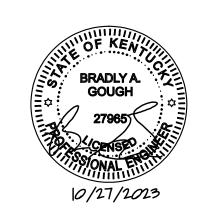
TO EXCAVATION OPERATIONS.

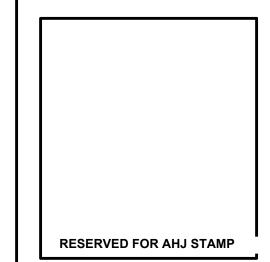
Call 811 or 800-752-6007 www.kentucky811.com Two Business Days Before You Dig IT'S THE LAW













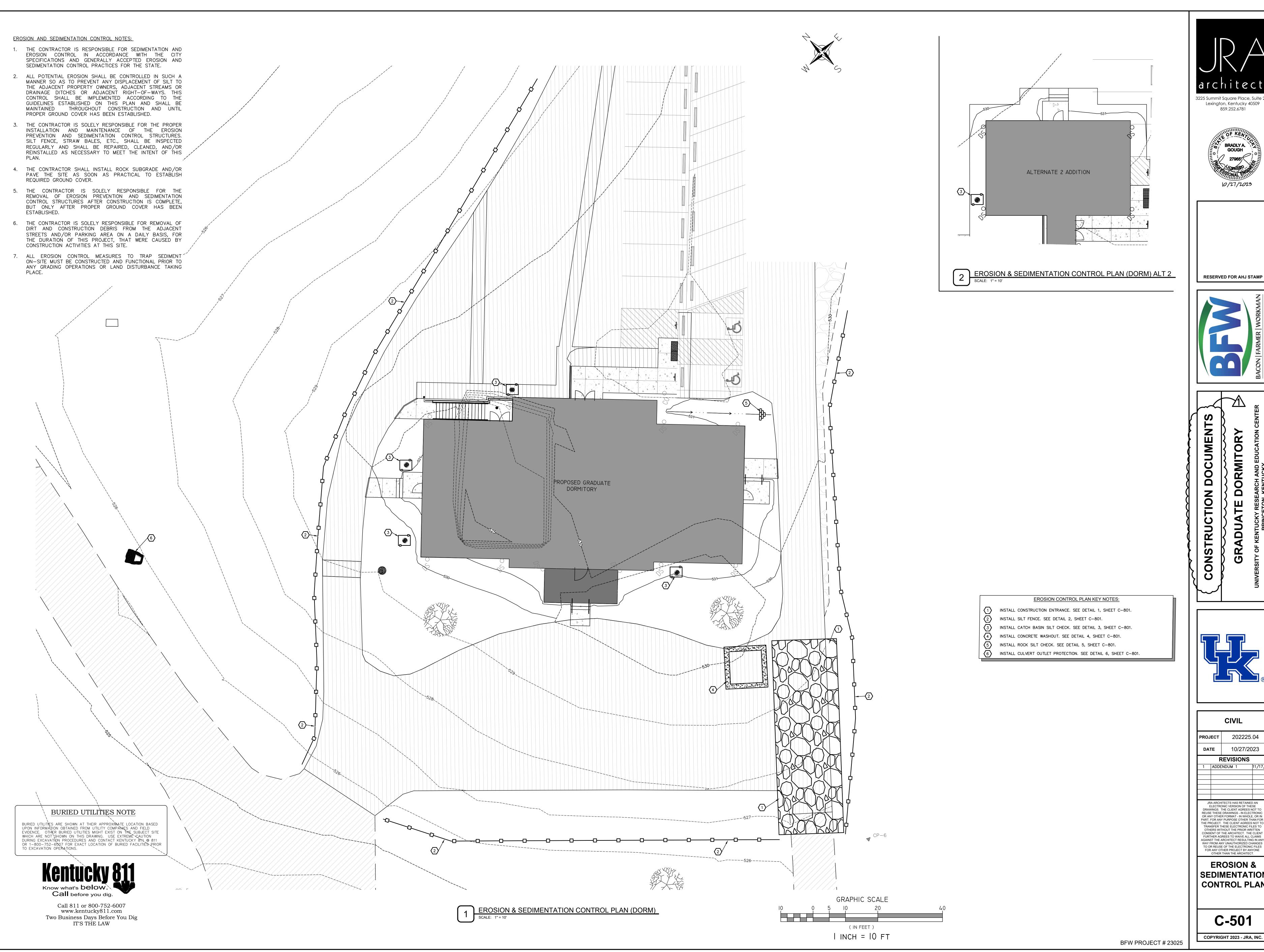
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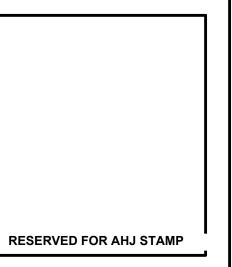
C-401A COPYRIGHT 2023 - JRA, INC.





3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781









CIVIL 202225.04 PROJECT 10/27/2023 REVISIONS ADDENDUM 1 11/17 JRA ARCHITECTS HAS RETAINED AN
ELECTRONIC VERSION OF THESE
DRAWINGS. THE CLIENT AGREES NOT TO
REUSE THESE DRAWINGS - IN ELECTRONIC
OR ANY OTHER FORMAT - IN WHOLE, OR IN
PART, FOR ANY PURPOSE OTHER THAN FOR
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TRANSFER THESE ELECTRONIC FILES TO
OTHERS WITHOUT THE PRIOR WRITTEN
CONSENT OF THE ARCHITECT. THE CLIENT
FURTHER AGREES TO WAIVE ALL CLAIMS
AGAINST THE ARCHITECT RESULTING IN ANY
WAY FROM ANY UNAUTHORIZED CHANGES
TO OR REUSE OF THE ELECTRONIC FILES TO OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE
OTHER THAN THE ARCHITECT.

EROSION & SEDIMENTATION CONTROL PLAN

C-501

STORMWATER NOTES:

- 1. ALL BACKFILL MATERIALS SHALL BE AS SPECIFIED ON THE DETAILS. SEE SITE DETAIL SHEETS FOR SPECIFIC INFORMATION.
- 2. ALL STORM WATER PIPE SHALL HAVE A MINIMUM COVER OF 12" OVER THE TOP OF PIPE (NOT INCLUDING PAVEMENT SECTIONS). CONTRACTOR SHALL PROVIDE MINIMUM COVER IN ALL CASES. IF DISCREPANCIES EXIST IN THE GRADING PLAN OR IF UNSEEN SITE CONDITIONS EXIST THAT WILL NOT ALLOW THIS COVER AS DESIGNED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
- 3. ALL STORM WATER PIPE BENEATH PAVEMENT SHALL BE BACKFILLED FULL DEPTH WITH DENSE GRADED AGGREGATE (DGA).
- 4. STORM WATER STRUCTURES SHALL BE PRE-CAST CONCRETE, UNLESS SPECIFIED OTHERWISE, AND SHALL MEET ALL THE SPECIFICATIONS FOR DRAINAGE STRUCTURES AS OUTLINED IN THE LOCAL STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
- 5. PIPE FITTINGS ARE NOT DESIGNATED ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND INSTALLING ALL FITTINGS TO COMPLETE THE STORM WATER PIPING INSTALLATION AS PART OF THEIR CONTRACT WITH NO ADDITIONAL COST TO THE OWNER. ALL CONNECTIONS REQUIRE FITTINGS. PARTICULARLY, ALL DOWNSPOUTS SHALL BE CONNECTED TO THE MANIFOLD LINES WITH APPROPRIATE FITTINGS. FITTINGS INCLUDE, BUT NOT LIMITED TO, TEE'S, WYE'S, ELBOWS, CROSSES, CONNECTING BANDS, GASKETS, ETC.
- 6. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING PIPE AND DRAINAGE STRUCTURE MATERIAL CERTIFICATIONS, SIZES AND QUANTITIES TO THE ENGINEER FOR WRITTEN APPROVAL PRIOR TO CONSTRUCTION.
- 7. STORM WATER PIPE AND DRAINAGE STRUCTURES SHALL BE INSTALLED IN PROPER CONSTRUCTION SEQUENCE SUCH THAT SITE DRAINAGE IS ALLOWED TO DRAIN FROM THE SITE. IT IS CRITICAL THAT THE STORM WATER RUNOFF BYPASS AND/OR EXIT THE AREAS OF CONSTRUCTION TO PREVENT DEGRADATION OF THE SITE CAUSED BY PRECIPITATION AND/OR PONDING WATER.
- 8. ALL STORM WATER PIPE AND DRAINAGE STRUCTURES SHALL BE PROTECTED DURING THE COURSE OF CONSTRUCTION. SPECIAL PROVISIONS MAY BE NECESSARY TO ACCOMMODATE CONSTRUCTION TRAFFIC AND ASSOCIATED LOADING. CONTRACTOR SHALL REPAIR OR REPLACE ANY PIPE OR DRAINAGE STRUCTURES DAMAGED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE

BURIED UTILITIES NOTE

BURIED UTILITIES ARE SHOWN AT THEIR APPROXIMATE LOCATION BASED

UPON INFORMATION OBTAINED FROM UTILITY COMPANIES AND FIELD EVIDENCE. OTHER BURIED UTILITIES MIGHT EXIST ON THE SUBJECT SITE WHICH ARE NOT SHOWN ON THIS DRAWING. USE EXTREME CAUTION DURING EXCAVATION PROCEDURES AND CONTACT KENTUCKY 811 @ 811

OR 1-800-752-6007 FOR EXACT LOCATION OF BURIED FACILITIES PRIOR

Call before you dig.

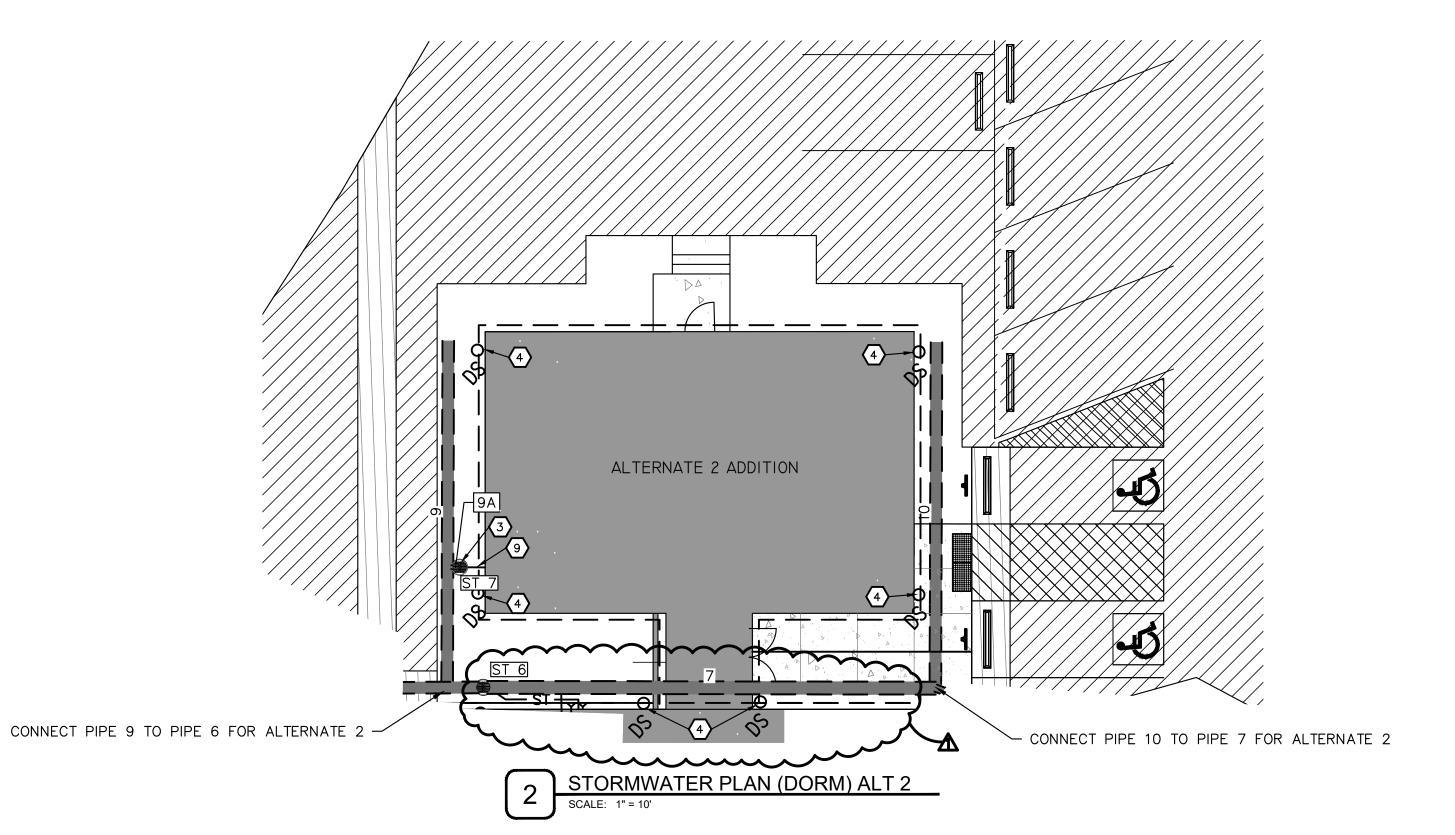
Call 811 or 800-752-6007 www.kentucky811.com Two Business Days Before You Dig

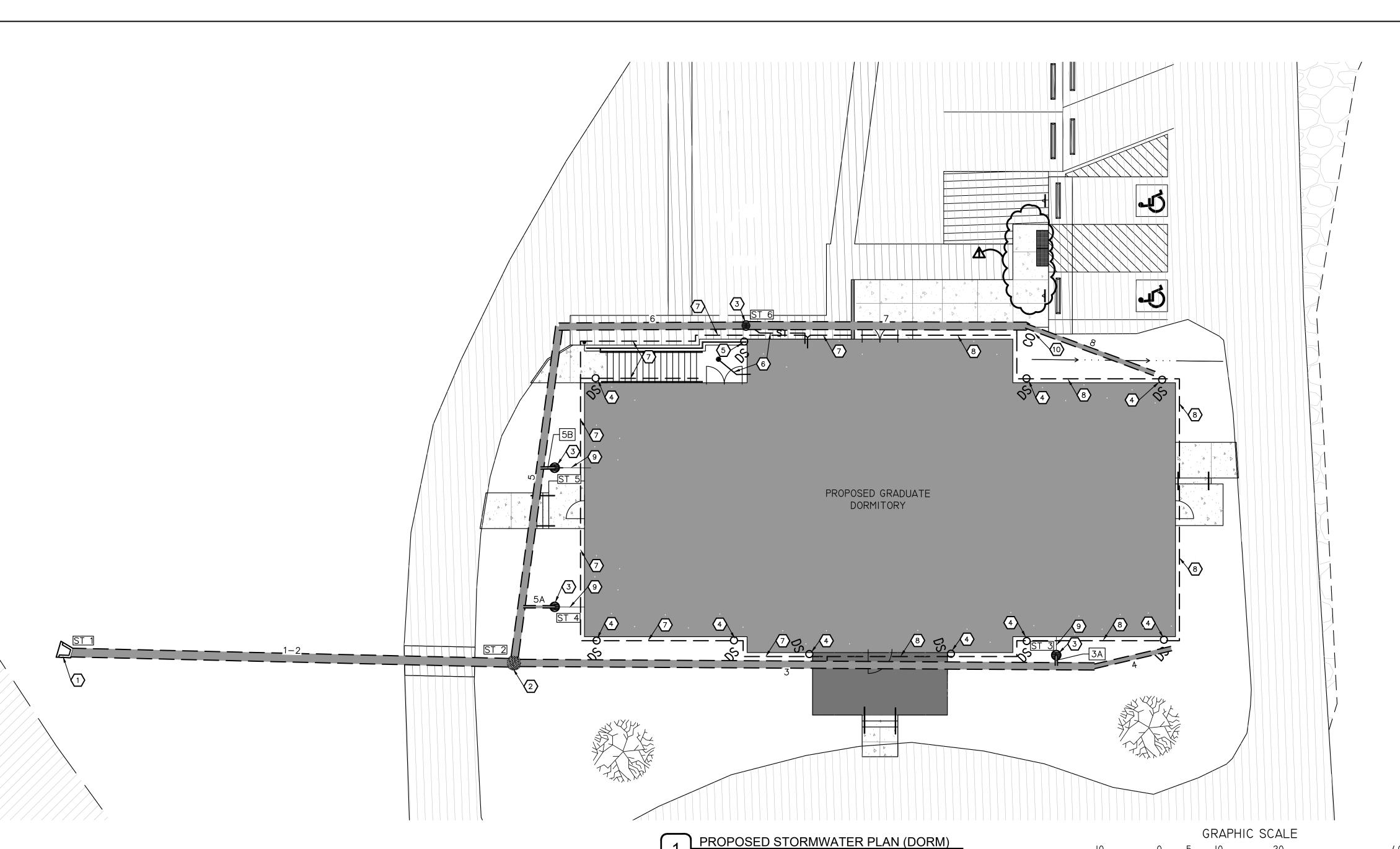
IT'S THE LAW



STRUCTURE TABLE						
DESCRIPTION	INVERT ELEVATION	PIPES IN	PIPES OUT			
CONCRETE HEADWALL	525.50	1-2 (INV: 525.50)	_			
JUNCTION MANHOLE	526.25 526.35 526.35	3 (INV: 526.35) 5 (INV: 526.35)	1-2 (INV: 526.25)			
DRAIN BASIN	527.76	HVAC (527.76)	3A (INV: 527.76)			
DRAIN BASIN	527.24	HVAC (527.24)	5A (INV: 527.24)			
DRAIN BASIN	527.08	HVAC (527.08)	5B (INV: 527.08)			
DRAIN BASIN	526.80 526.80	7 (INV: 526.80)	6 (INV: 526.80)			
DRAIN BASIN	527.29	HVAC (527.29)	9A (INV: 527.29)			
	CONCRETE HEADWALL JUNCTION MANHOLE DRAIN BASIN DRAIN BASIN DRAIN BASIN DRAIN BASIN	DESCRIPTION CONCRETE HEADWALL JUNCTION MANHOLE DRAIN BASIN 527.24 DRAIN BASIN 526.80 DRAIN BASIN	DESCRIPTION INVERT ELEVATION PIPES IN CONCRETE HEADWALL 525.50 1-2 (INV: 525.50) JUNCTION MANHOLE 526.25 526.35 526.35 526.35 526.35 3 (INV: 526.35) 5 (INV: 526.35) DRAIN BASIN 527.76 HVAC (527.76) DRAIN BASIN 527.24 HVAC (527.24) DRAIN BASIN 527.08 HVAC (527.08) DRAIN BASIN 526.80 526.80 7 (INV: 526.80)			

PIPE TABLE						
NAME	SIZE	MATERIAL	LENGTH	SLOPE	UPSLOPE STRUCTURE	DOWNSLOPE STRUCTURE
1-2	15"	HDPE	74.68'	1.00%	ST 2 (INV: 526.25)	ST 1 (INV: 525.50)
3A	4"	HDPE	1.71'	5.00%	ST 3 (INV: 527.76)	(INV: 527.67)
3	12"	HDPE	97.53	1.00%	(INV: 527.33)	ST 2 (INV: 526.35)
4	8"	HDPE	13.28'	1.00%	(INV: 527.46)	(INV: 527.33)
5B	4"	HDPE	2.32'	9.93%	(INV: 527.08)	(INV: 526.85)
5A	4"	HDPE	5.22'	10.00%	(INV: 527.24)	(INV: 526.72)
5	12"	HDPE	57.03	0.50%	(INV: 526.64)	ST 2 (INV: 526.35)
6	12"	HDPE	31.40'	0.50%	ST 6 (INV: 526.80)	(INV: 526.64)
7	12"	RCP	47.11	0.50%	(INV: 527.04)	ST 6 (INV: 526.80)
8	8"	HDPE	22.94'	0.50%	(INV: 527.15)	(INV: 527.04)
9A	4"	HDPE	0.89'	5.00%	ST 7 (INV: 527.29)	(INV: 527.25)
9	12"	HDPE	35.60'	1.00%	(INV: 527.14)	(INV: 526.78)
10	12"	HDPE	35.60'	1.00%	(INV: 527.40)	(INV: 527.04)





STORMWATER PLAN KEY NOTES:

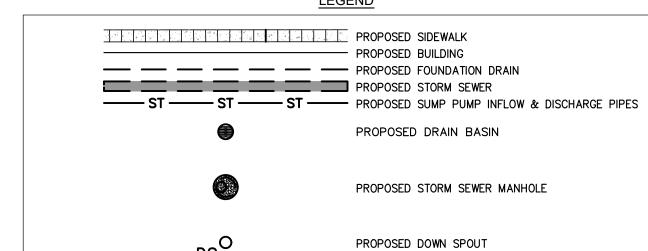
INSTALL CONCRETE HEADWALL. SEE DETAIL 5, SHEET C-802 INSTALL STORM MANHOLE. SEE DETAIL 4, SHEET C-802 INSTALL STORM DRAIN BASIN. SEE DETAIL 3, SHEET C-802 INSTALL DOWNSPOUT CONNECTION. SEE DETAIL 8, SHEET C-800. INSTALL DRAIN CHAIN DOWNSPOUT. SEE ARCHITECTURAL PLANS. STAIRWELL FLOOR DRAIN WILL DRAIN TO SUMP PIT INSIDE BUILDING. SUMP PUMP

WILL PUMP STORMWATER UP TO STORM STRUCTURE ST-6. FLOOR DRAIN, 4" PVC PIPING TO SUMP PIT, SUMP PUMP, AND 1½" PVC PUMP DISCHARGE PIPE TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR. SEE MEP PLANS. INSTALL BASEMENT FOOTING FOUNDATION DRAIN. SEE DETAIL 13, SHEET C-800. FOUNDATION DRAINS AT BASEMENT FOOTINGS TO DRAIN TO SUMP PIT IN

MECHANICAL ROOM 005. INSTALL FIRST FLOOR FOOTING FOUNDATION DRAIN. SEE DETAIL 13, SHEET C-800. FOUNDATION DRAINS AT 1ST FLOOR FOOTINGS TO BE CONNECTED TO

PROPOSED STORM SEWER PIPING. PROPOSED 3/4" HVAC CONDENSATE LINE BY PLUMBING CONTRACTOR. SEE DETAIL 3, SHEET C-802 FOR DETAIL OF CONNECTION TO DRAIN BASIN.

INSTALL STORM SEWER CLEANOUT. SEE DETAIL 7, SHEET C-802.



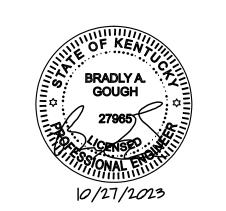
(IN FEET) I INCH = 10 FT

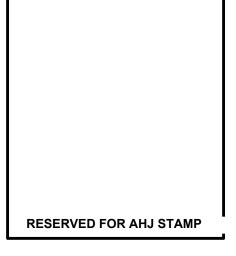
TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT. **STORMWATER**

PLAN

C-601

3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781









CIVIL

REVISIONS ADDENDUM 1 11/17

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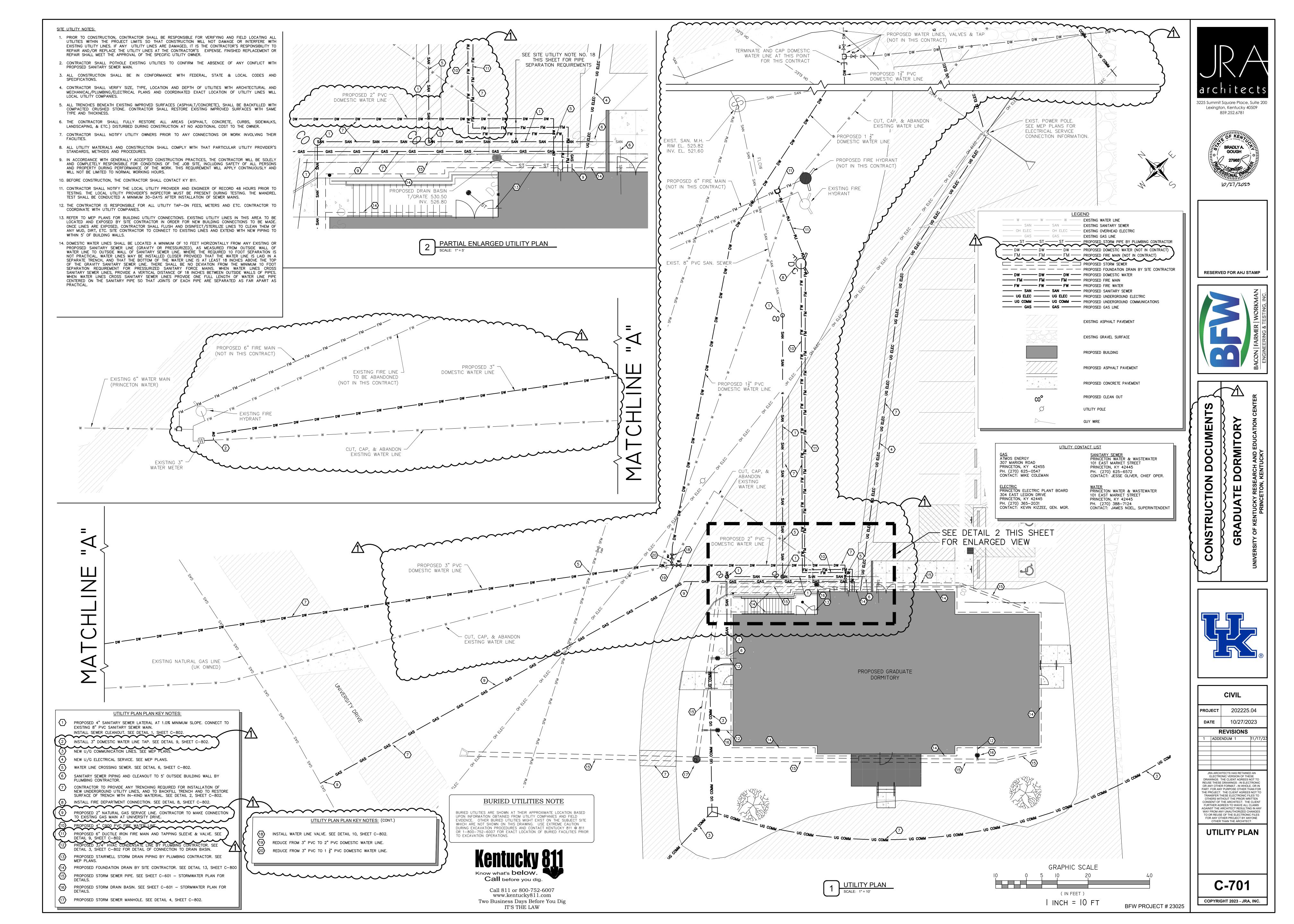
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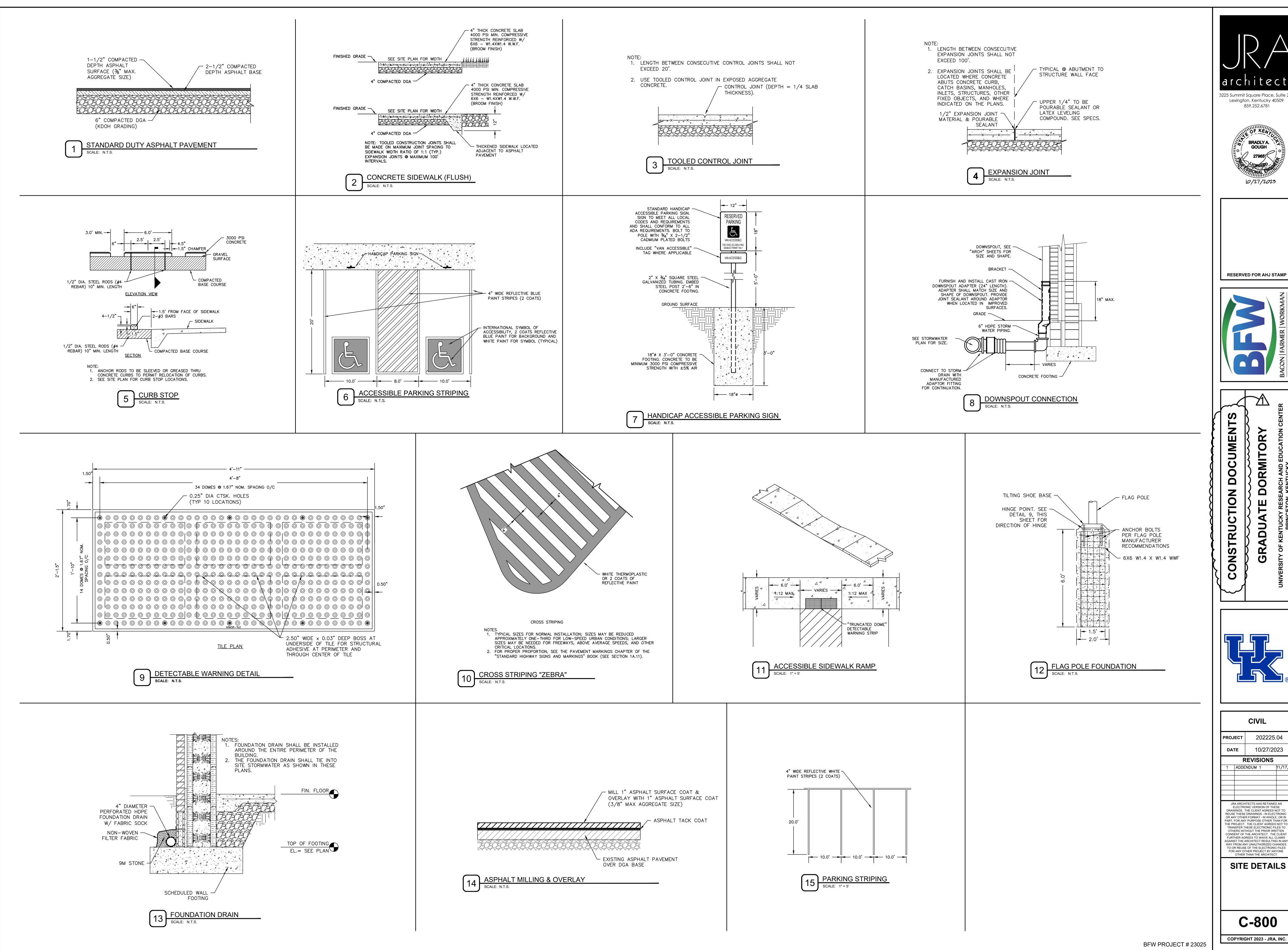
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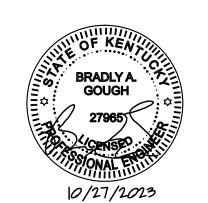
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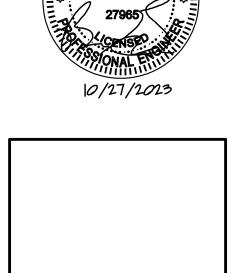
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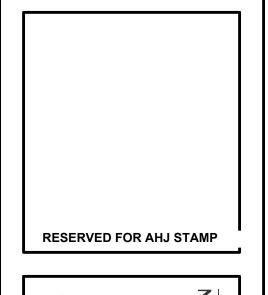




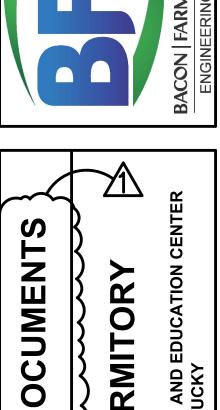
3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509







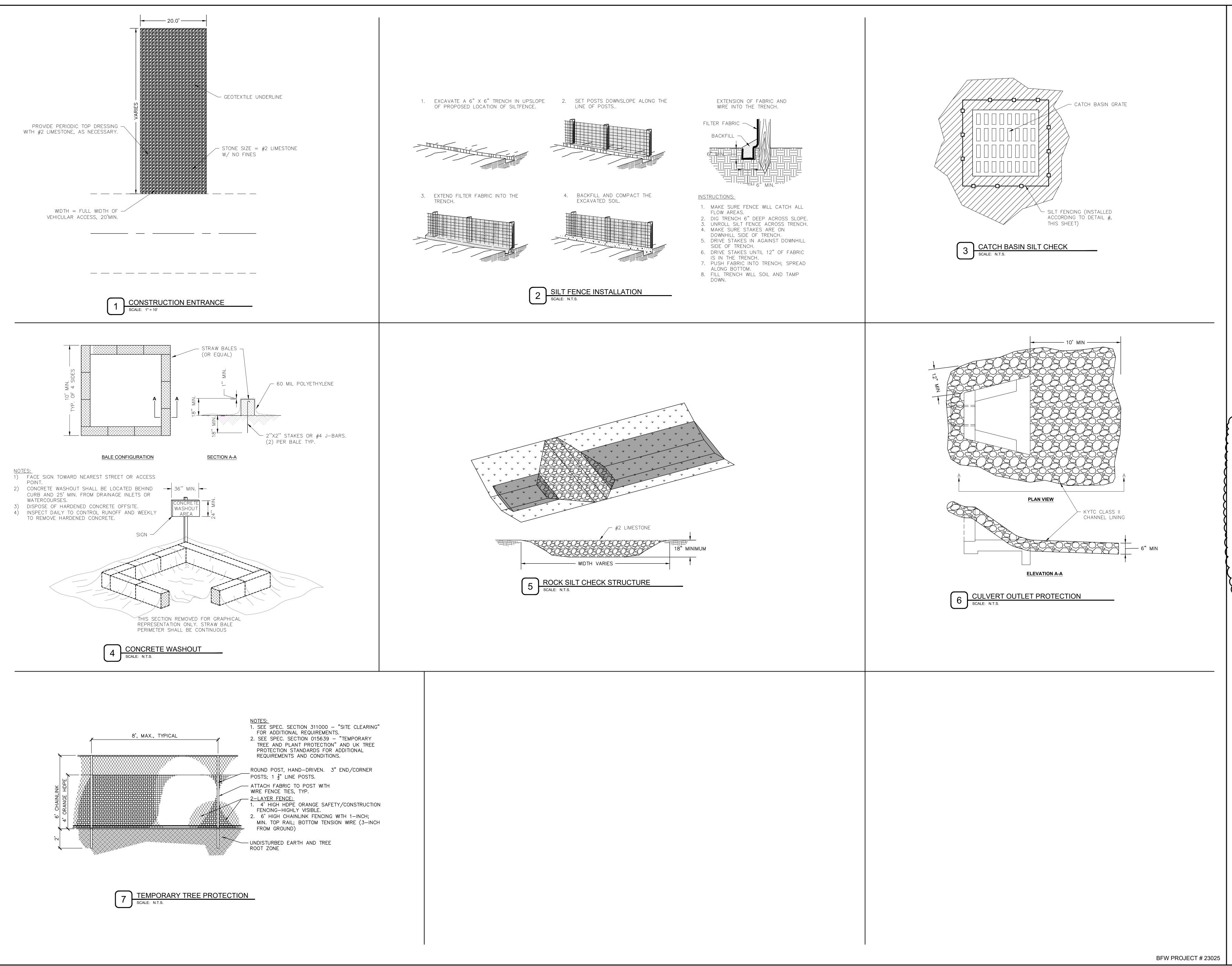




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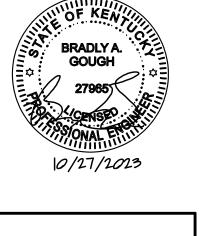
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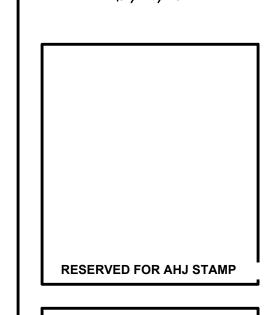






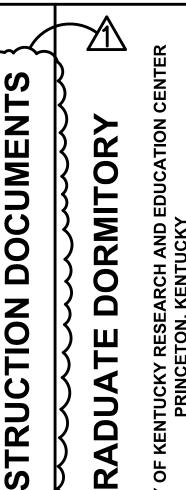


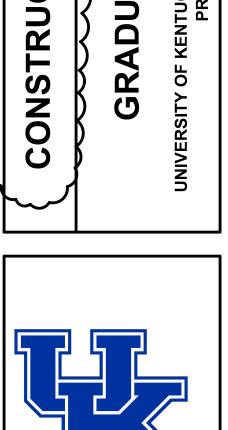










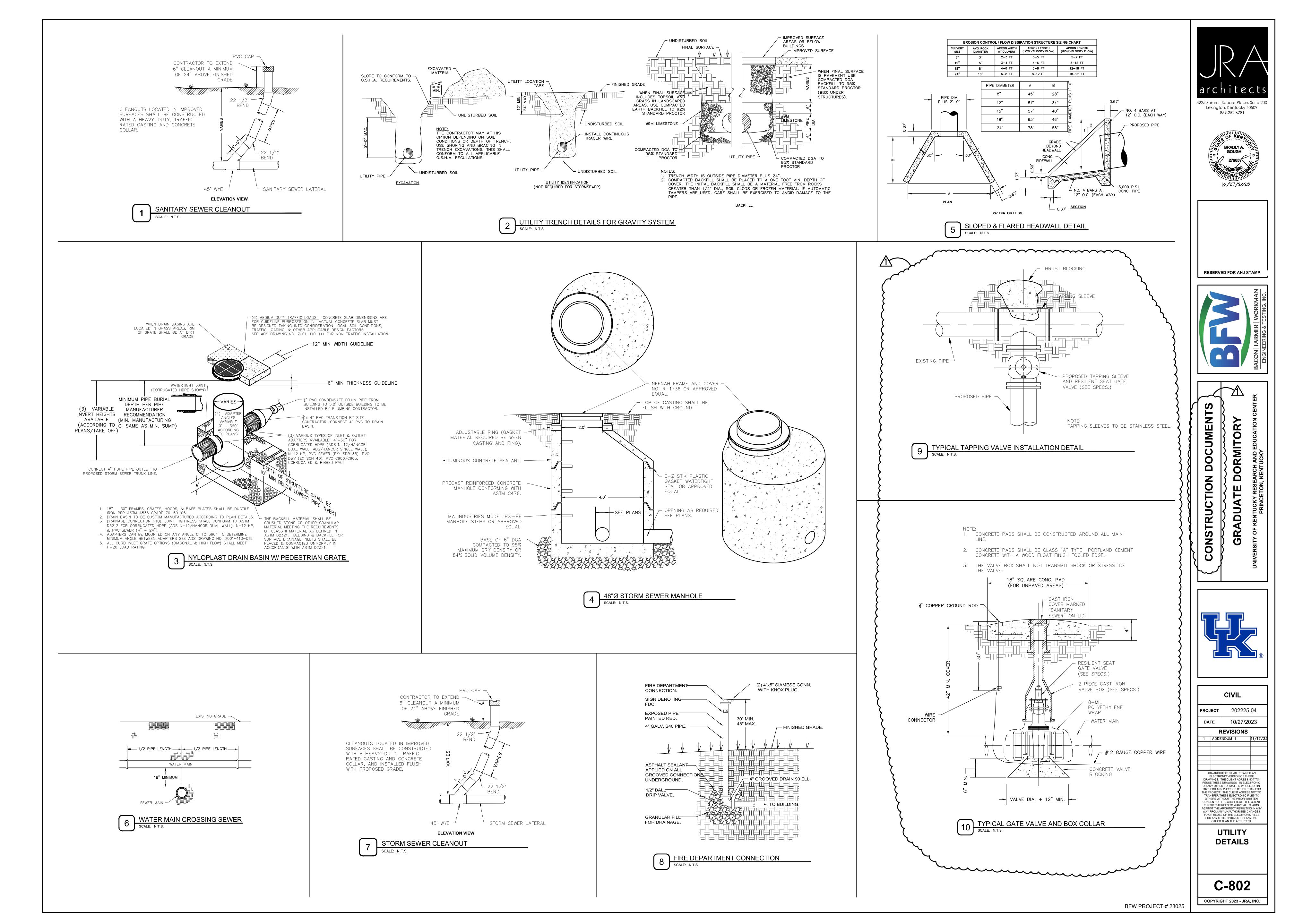


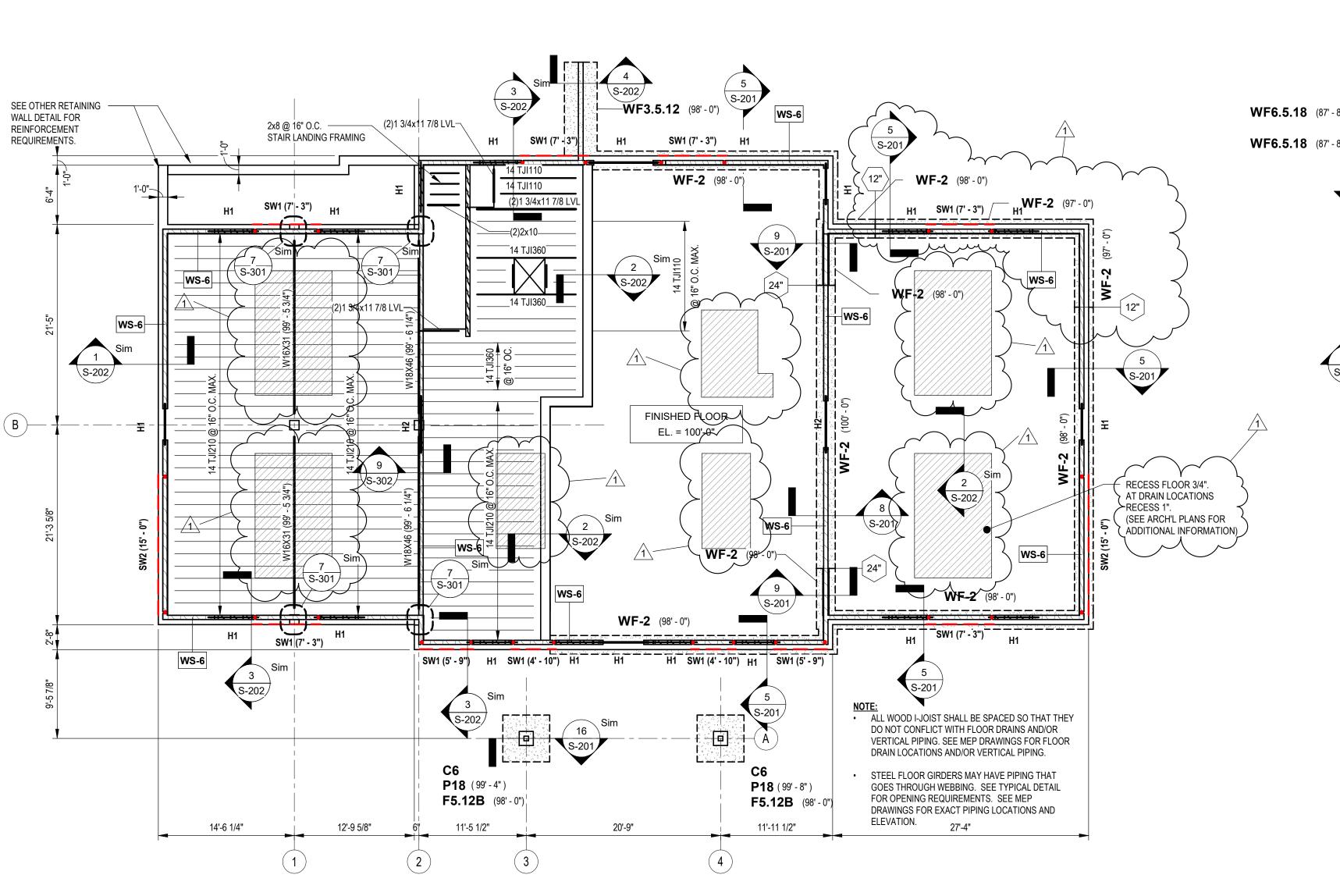
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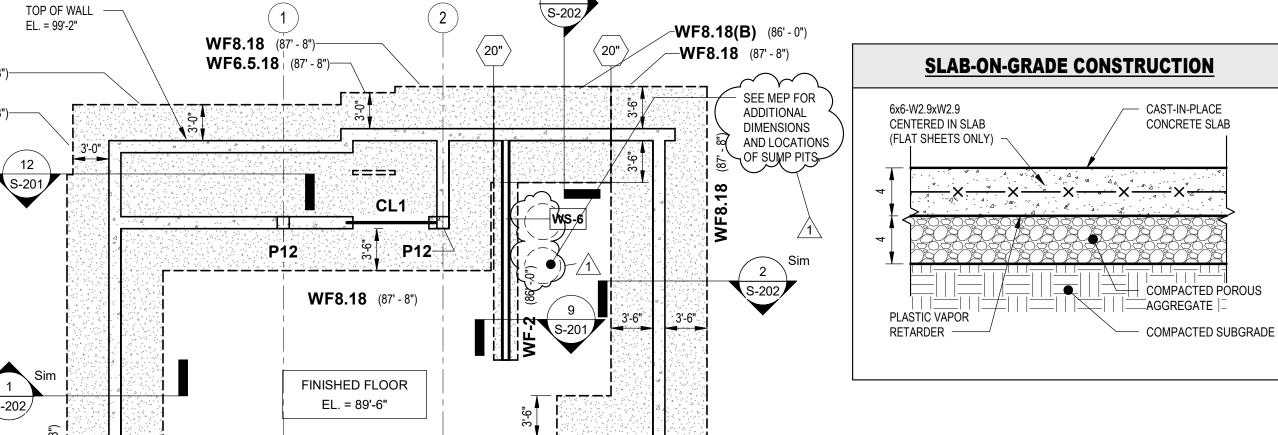
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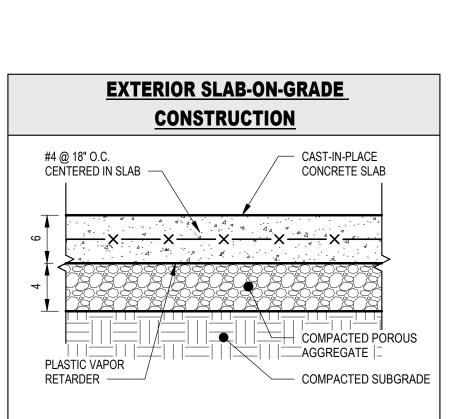
SITE DETAILS

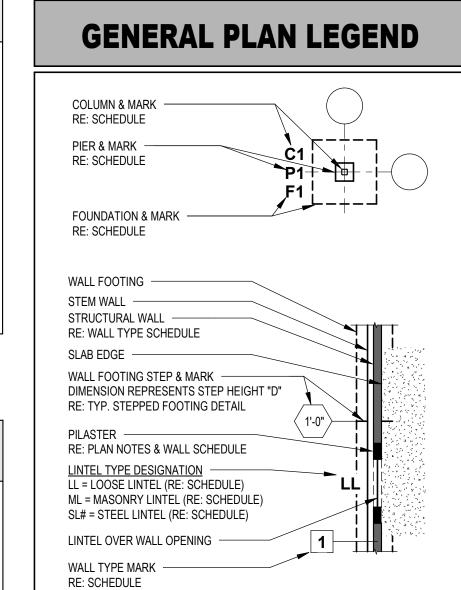
C-801

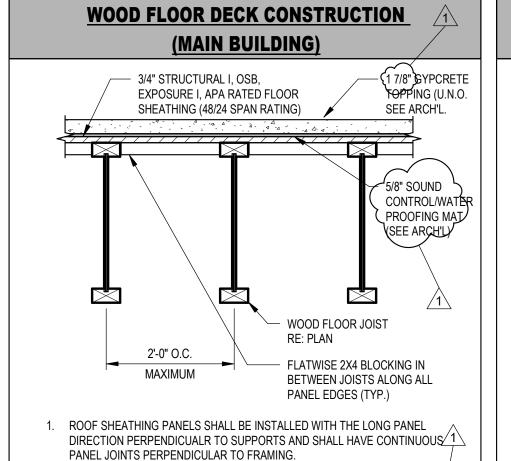












PROVIDE SINGLE 2" NOMINAL MEMBERS @ ABUTTING PANEL EDGES, OR

THE DIAPHRAM SHALL BE FULLY BLOCKED AND SHALL CONFIRM THE THE

PROVIDE CROSS BRIDGING (MIN. 1X3 OR 2X10 SOLID BLOCKING) TO

FOLLOWING FASTENING REQUIREMENTS:

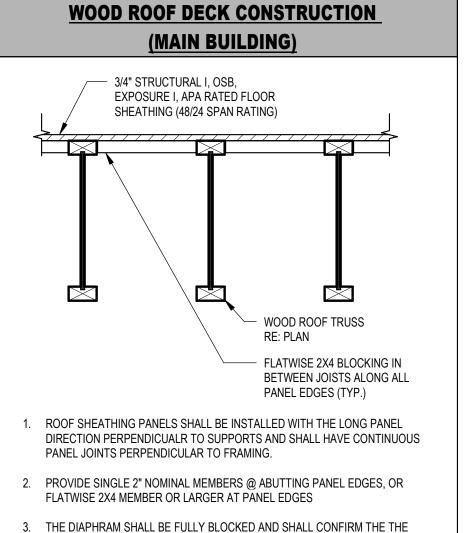
• DIAPHRAGM BOUNDARIES: 10D NAILS @ 4" O.C.

 ALL OTHER PANEL EDGES: 10D NAILS @ 6" O.C. • INTERMEDIATE FRAMING: 10D NAILS @ 12" O.C.

CONFORM WITH UL505 ASSEMBLY REQUIREMENTS.

F5.12 (88' - 6")

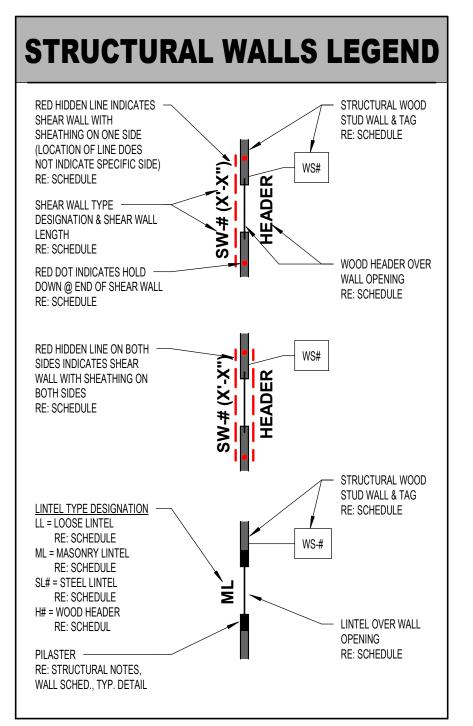
WF8.18 (87' - 8")

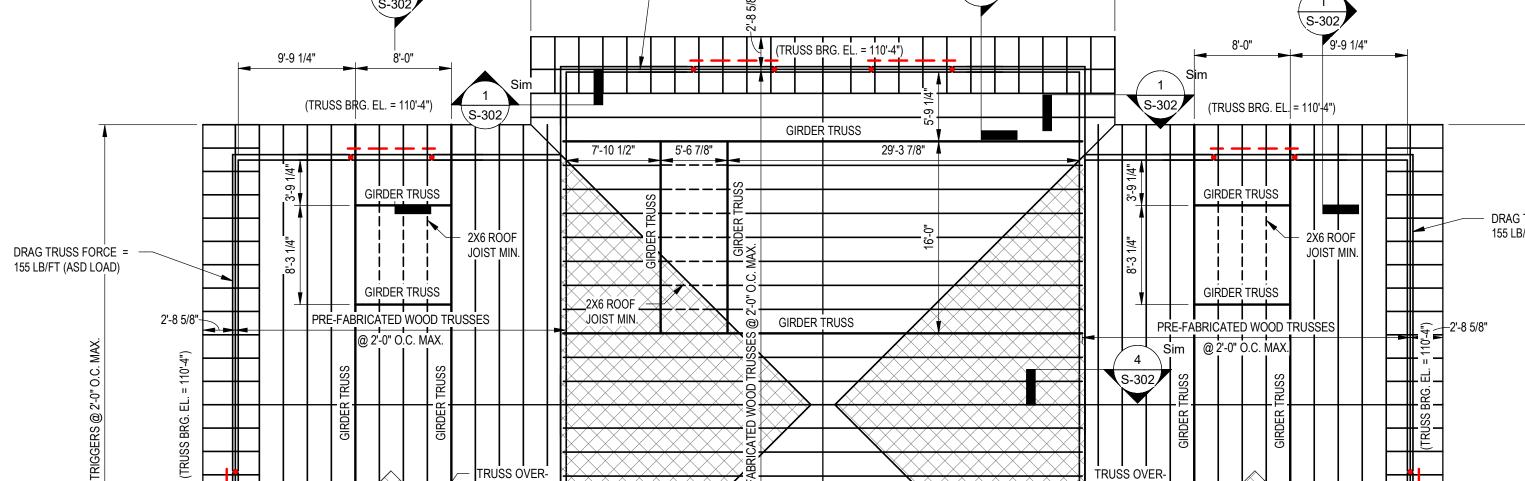


FOLLOWING FASTENING REQUIREMENTS:

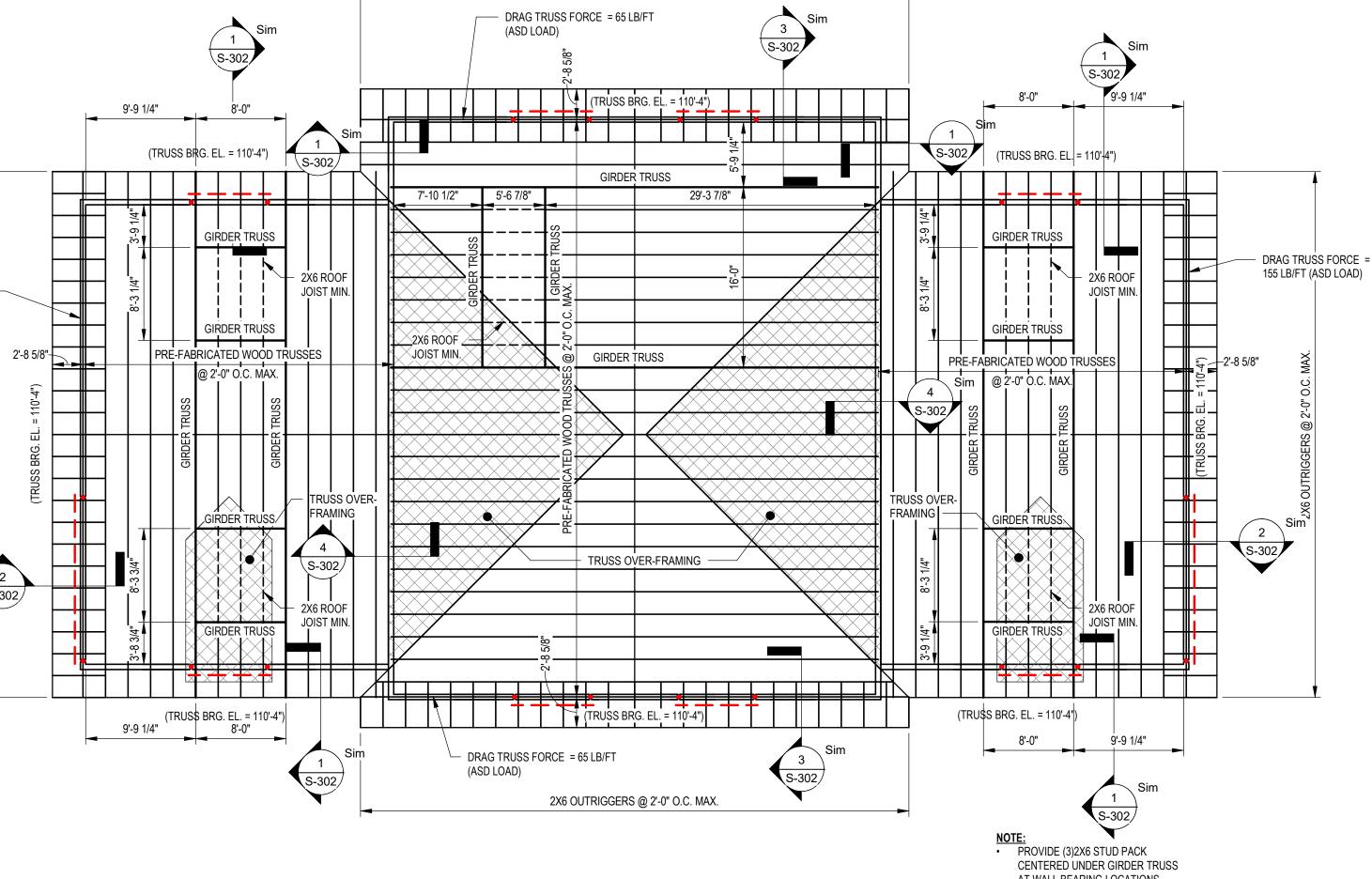
DIAPHRAGM BOUNDARIES: 10D NAILS @ 6" O.C.
ALL OTHER PANEL EDGES: 10D NAILS @ 6" O.C.

INTERMEDIATE FRAMING: 10D NAILS @ 12" O.C.



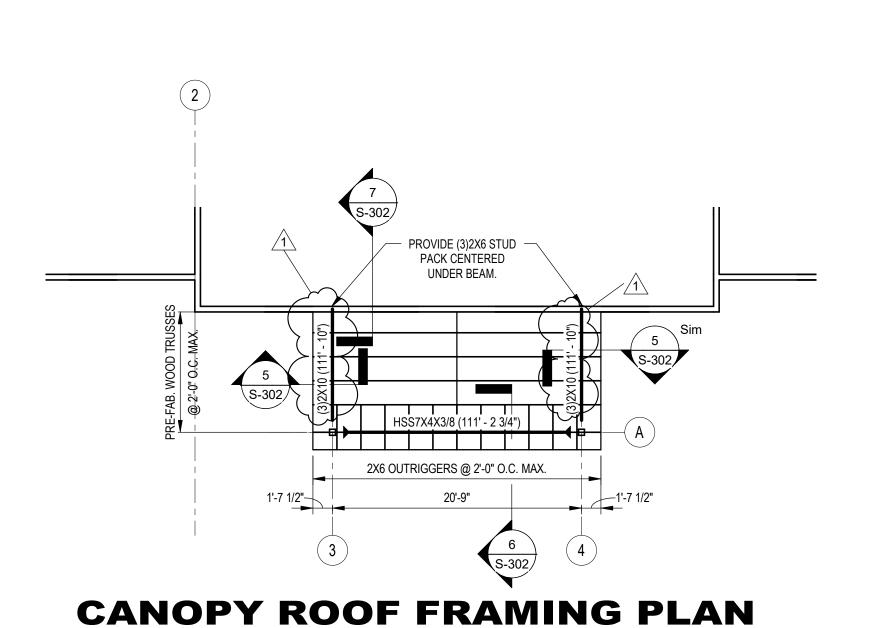


2X6 OUTRIGGERS @ 2'-0" O.C. MAX.





FIRST FLOOR FOUNDATION PLAN





Lexington, Kentucky 40509

859.252.6781

EXPIRES: 06/30/2025

RESERVED FOR AHJ STAMP

DOCUMEN

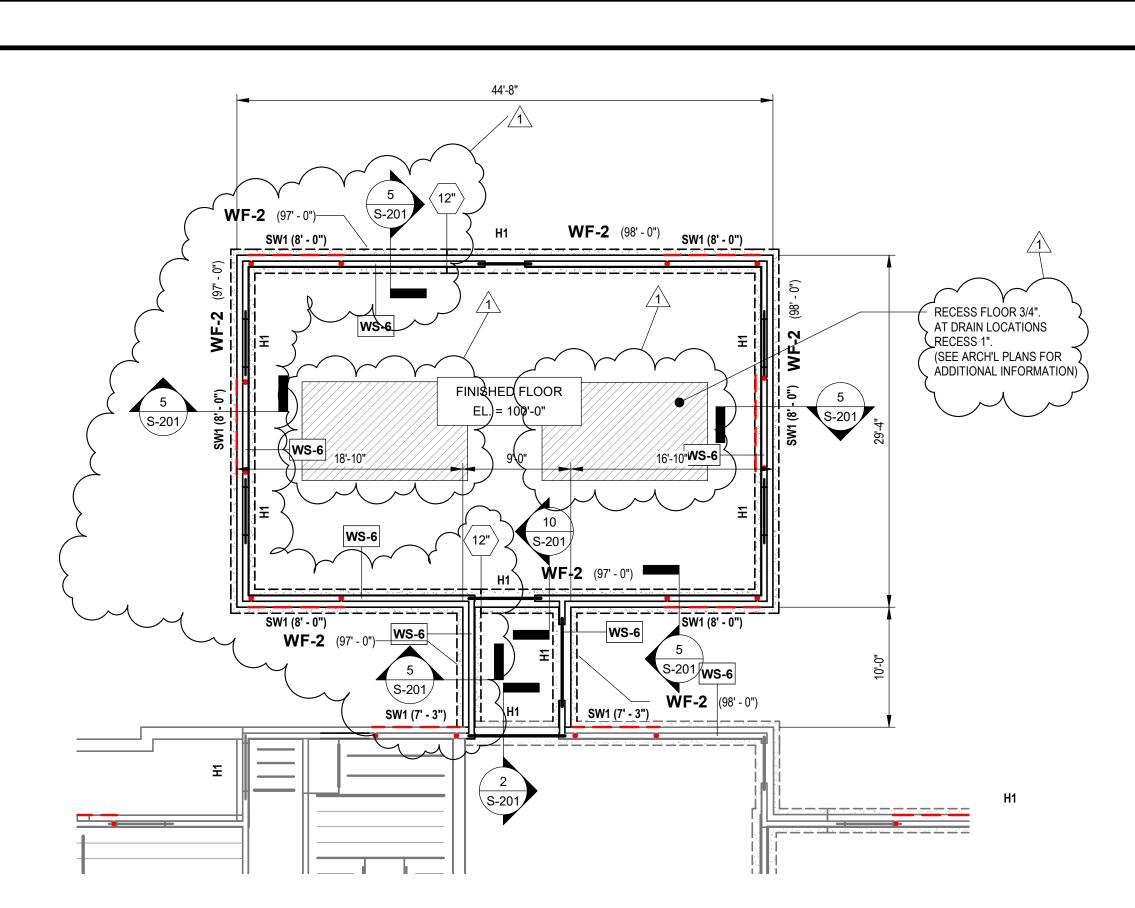
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JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.				

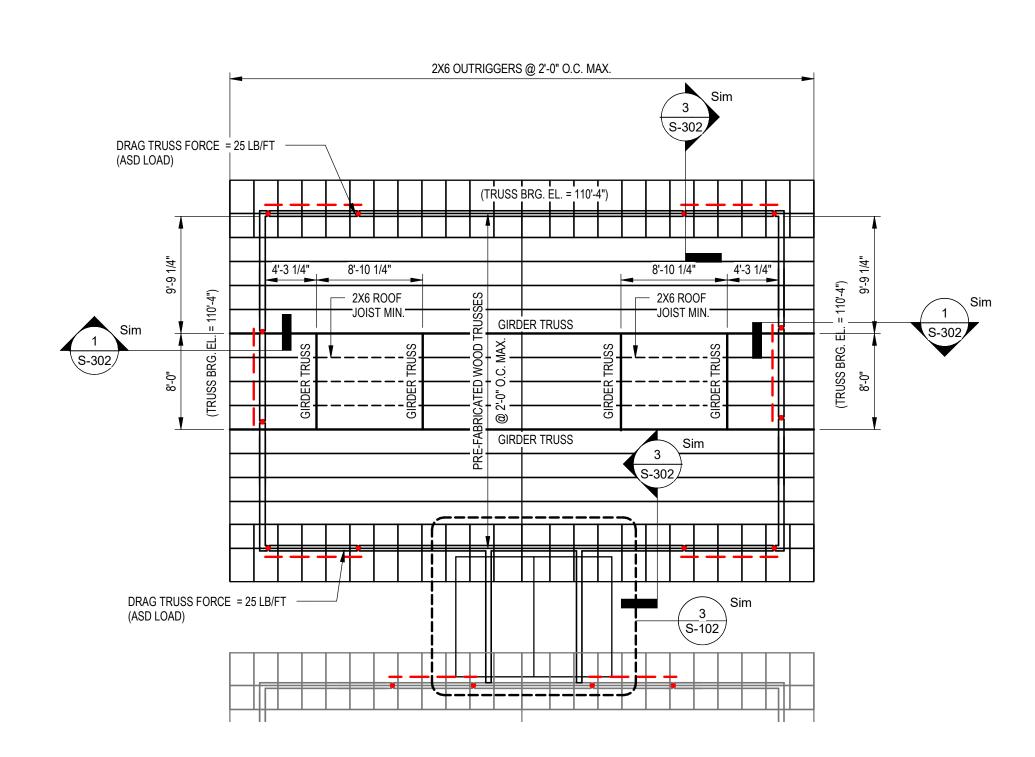
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STRUCTURAL **PLANS**

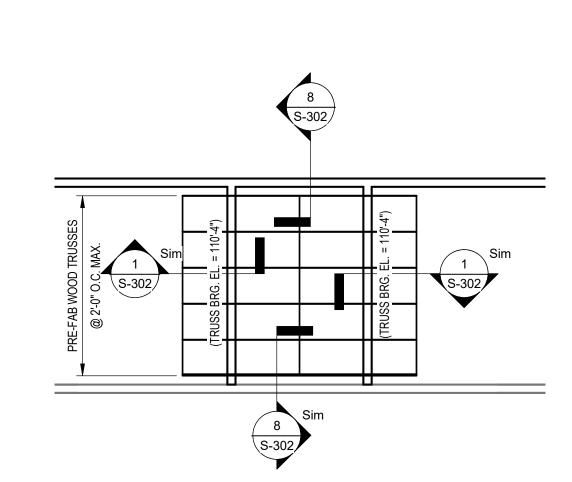
S-101



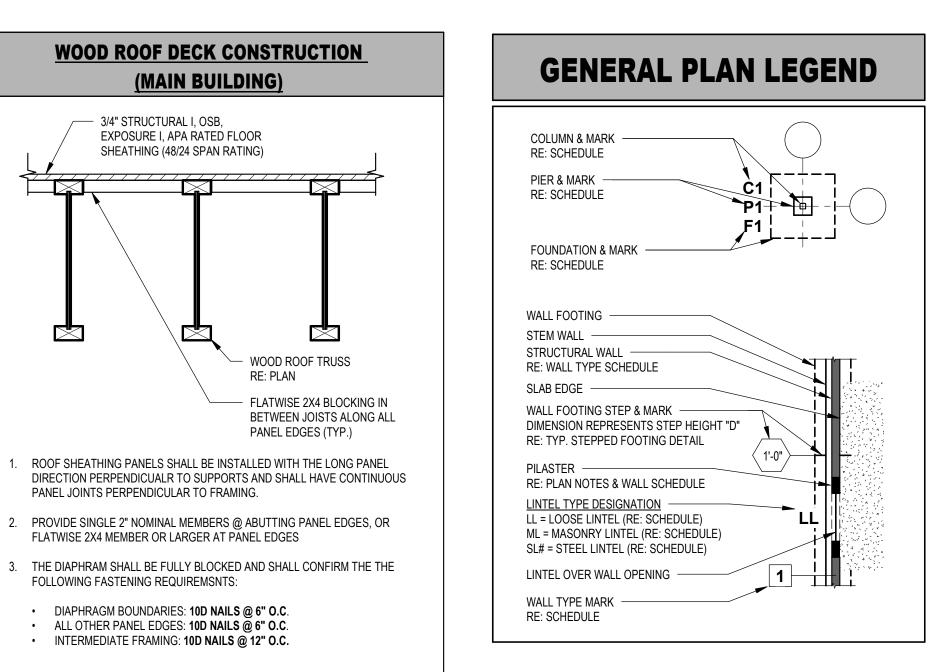
ALT. FOUNDATION PLAN

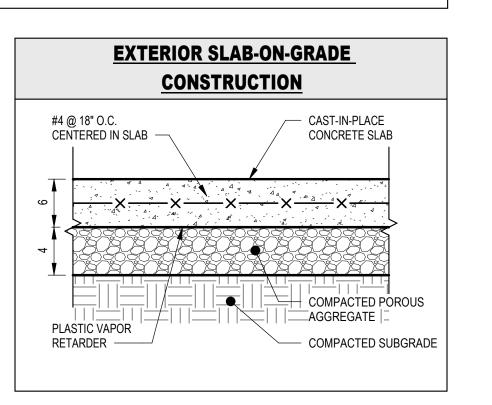


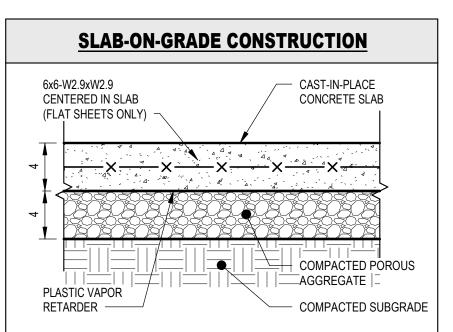
ALT. ROOF FRAMING PLAN

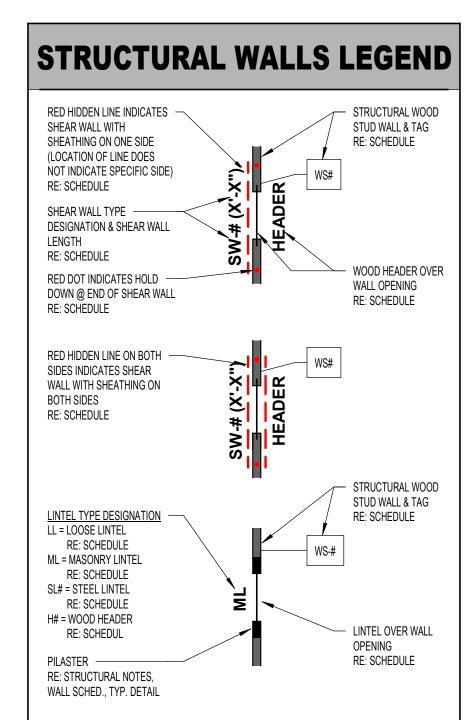


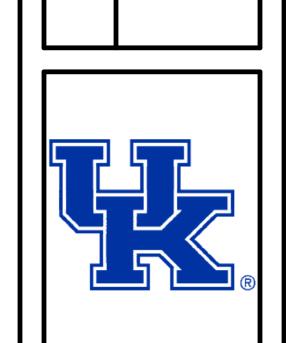
ALT. LOW ROOF FRAMING PLAN
3/16" = 1'-0"











CONSTRUCTION DOCUMENTS

3225 Summit Square Place, Suite 200

Lexington, Kentucky 40509

859.252.6781

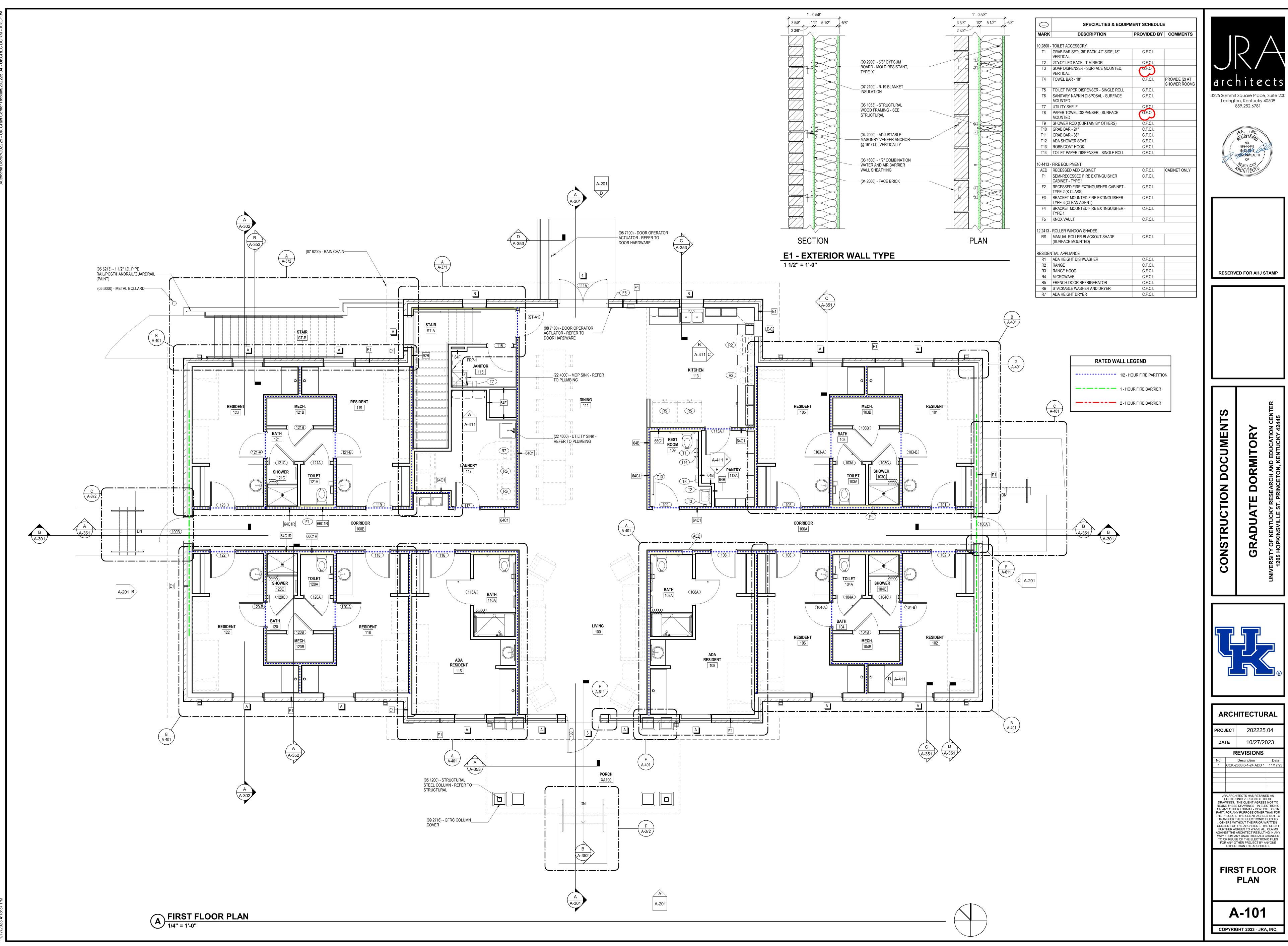
EXPIRES: 06/30/2025

RESERVED FOR AHJ STAMP

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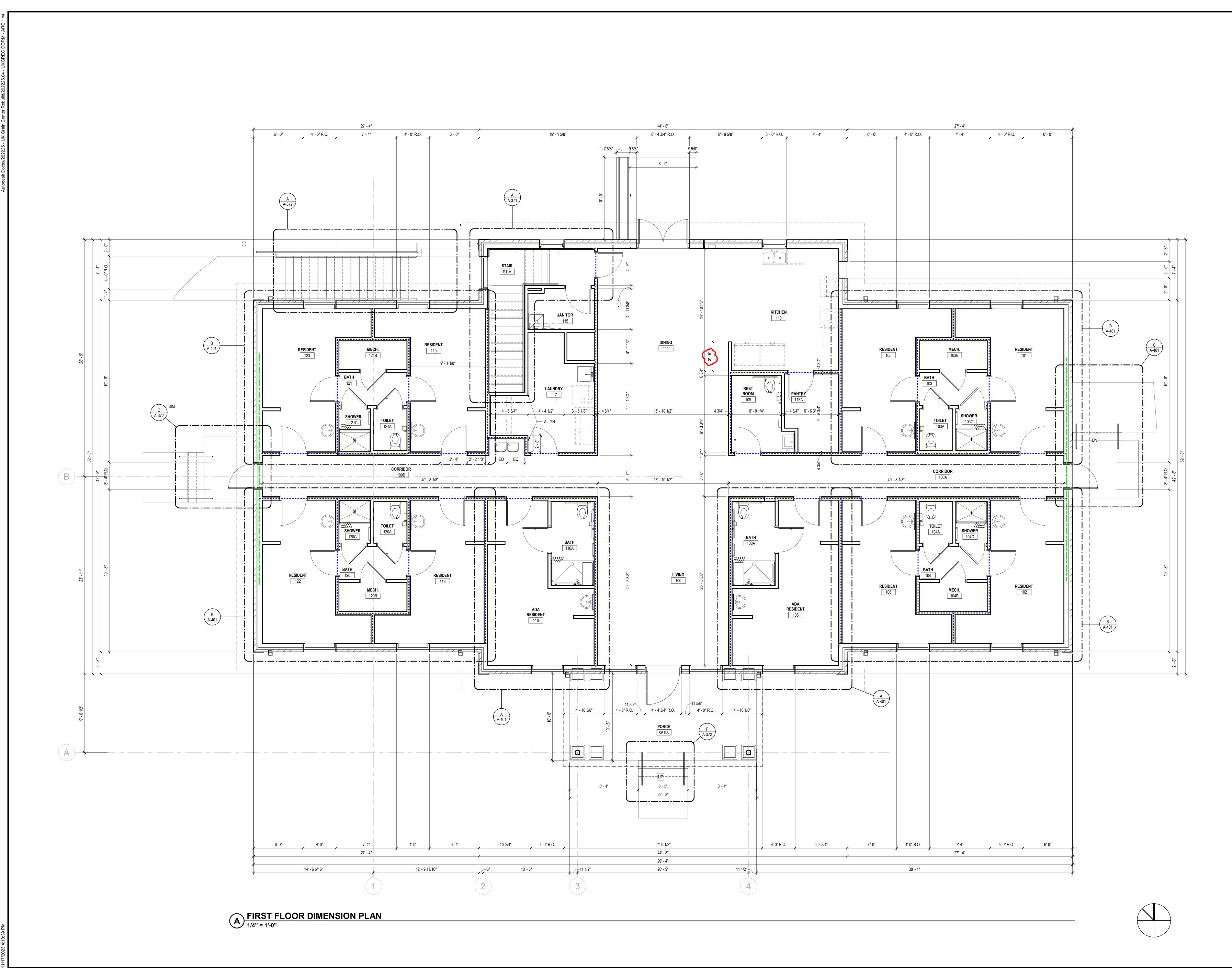
RESERVED FOR AHJ STAMP

ARCHITECTURAL PROJECT 202225.04 10/27/2023 REVISIONS CCK-2603.0-1-24 ADD 1 JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY

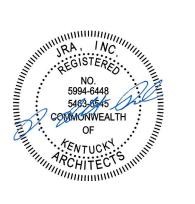
AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

PLAN

A-101







RESERVED FOR AHJ STAMP

UATE DORMITORY

ARCHITECTURAL

PROJECT

202225.04

DATE

10/27/2023

REVISIONS

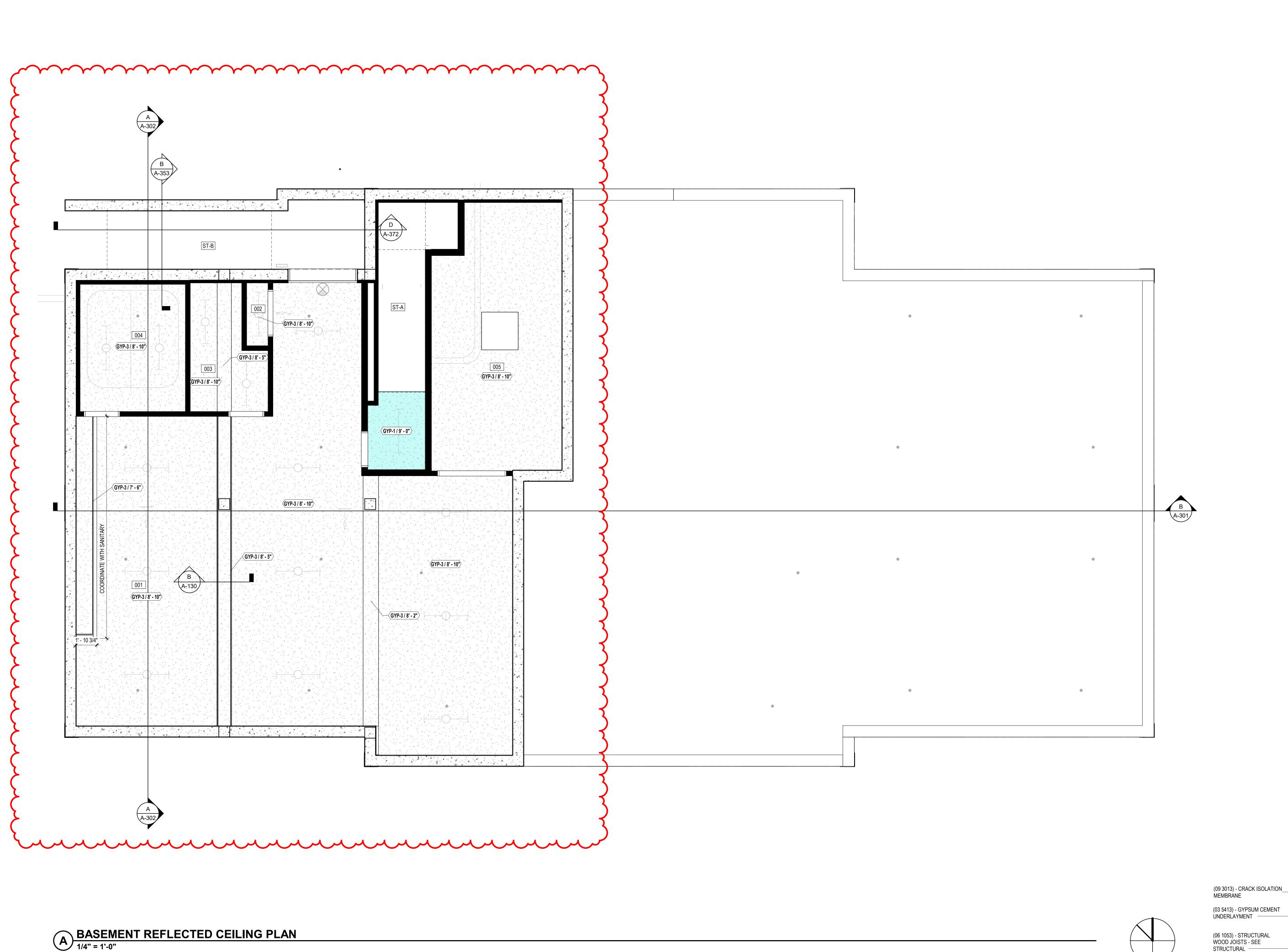
No. Description Date

1 CCK-2603.0-1-24 ADD 1 11/17/23

LECTRONIC VERSION OF THESE
DRAWINGS. THE CLIENT AGREES NOT TO
REUSE THESE DRAWINGS - IN ELECTRONIC
OR ANY OTHER FORMAT - IN WHOLE, OR IN
PART, FOR ANY PURPOSE OTHER THAN FOR
THE PROJECT. THE CLIENT AGREES NOT TO
TRANSFER THESE ELECTRONIC FILES TO
OTHERS WITHOUT THE PRIOR WRITTEN
CONSENT OF THE ARCHITECT. THE CLIENT
FURTHER AGREES TO WAIVE ALL CLAIMS
AGAINST THE ARCHITECT RESULTING IN ANY
WAY FROM ANY UNAUTHORIZED CHANGES
TO OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE
OTHER THAN THE ARCHITECT.

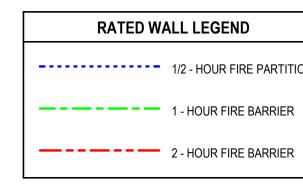
FIRST FLOOR DIMENSION PLAN

A-121



SPECIALTIES & EQUIPMENT SCHEDULE DESCRIPTION PROVIDED BY COMMENTS 10 2800 - TOILET ACCESSORY T1 GRAB BAR SET: 36" BACK, 42" SIDE, 18" C.F.C.I. VERTICAL C.F.C.I. O.F.O.I. T2 24"x42" LED BACKLIT MIRROR T3 SOAP DISPENSER - SURFACE MOUNTED, VERTICAL C.F.C.I. PROVIDE (2) AT T4 TOWEL BAR - 18" SHOWER ROOMS T5 TOILET PAPER DISPENSER - SINGLE ROLL T6 SANITARY NAPKIN DISPOSAL - SURFACE C.F.C.I. MOUNTED T7 UTILITY SHELF T8 PAPER TOWEL DISPENSER - SURFACE 0.F.O.I. MOUNTED T9 SHOWER ROD (CURTAIN BY OTHERS) T10 GRAB BAR - 24" T11 GRAB BAR - 36" C.F.C.I. T12 ADA SHOWER SEAT C.F.C.I. T13 ROBE/COAT HOOK T14 TOILET PAPER DISPENSER - SINGLE ROLL 10 4413 - FIRE EQUIPMENT C.F.C.I. CABINET ONLY AED RECESSED AED CABINET F1 SEMI-RECESSED FIRE EXTINGUISHER C.F.C.I. CABINET - TYPE 1 F2 RECESSED FIRE EXTINGUISHER CABINET -C.F.C.I. TYPE 2 (K CLASS) F3 BRACKET MOUNTED FIRE EXTINGUISHER -TYPE 3 (CLEAN AGENT) F4 BRACKET MOUNTED FIRE EXTINGUISHER -C.F.C.I. TYPE 1 F5 KNOX VAULT 12 2413 - ROLLER WINDOW SHADES C.F.C.I. RS MANUAL ROLLER BLACKOUT SHADE (SURFACE MOUNTED) RESIDENTIAL APPLIANCE R1 ADA HEIGHT DISHWASHER R3 RANGE HOOD C.F.C.I. C.F.C.I. C.F.C.I. R4 MICROWAVE R5 FRENCH-DOOR REFRIGERATOR R6 STACKABLE WASHER AND DRYER R7 ADA HEIGHT DRYER

	CEILING TYPES
TYPE	DESCRIPTION
ADC 4	DIV DI ACCULCTICAL DANIEL OVCTEM (00 5442)
APC-1	2' X 2' ACOUSTICAL PANEL SYSTEM (09 5113)
APC-2	2' X 2' ACOUSTICAL PANEL SYSTEM - HUMIDITY RESIST. (09 5113)
GYP-1	5/8" GYPSUM BOARD ON WOOD STUD - PAINT
GYP-2	1 HOUR RATED CONTINUOUS GYPSUM CEILING ASSEMBLY UL #P531 - P/
GYP-3	2 HOUR RATED GYPSUM CEILING ASSEMBLY UL #L538 - PAINT



(2) 2x10 WOOD FRAMING

_ (03 5413) - SOUND CONTROL

__ (06 1600) - 3/4" PLYWOOD SHEATHING

(05 1200) - STRUCTURAL

— STEEL BEAM - REFER TO STRUCTURAL

- (05 1200) WOOD HANGER -REFER TO STRUCTURAL

T.O. STEEL 99' - 5 3/4"

FINISHED BULKHEAD

(09 0000) - REFER TO

REFLECTED CEILING PLANS FOR CEILING TYPE AND

HEIGHT

97' - 11"

CONSTRUCTION DOCUMENTS

3225 Summit Square Place, Suite 200

Lexington, Kentucky 40509

859.252.6781

NO. 5994-6448 5463-6545 COMMONWEALTH

RESERVED FOR AHJ STAMP



AF	RCF	HITECTUR	RAL
PROJ	ECT	202225.	.04
DA	ΓΕ	10/27/20)23
	R	EVISIONS	
No.	CCK-2	Description 2603.0-1-24 ADD 1	Date 11/17/23
DRAV REUSI OR AN PART, THE PF TRAN OTH CONS FURT AGAINS WAY I	LECTRO VINGS. THESE YOTHE FOR AN ROJECT ISFER THE ERS WI ERS WI ERS THE FROM A R REUS ANY O	IITECTS HAS RETAINE ONIC VERSION OF TH THE CLIENT AGREES E DRAWINGS - IN ELEER FORMAT - IN WHO! IN THE CLIENT AGREE HESE ELECTRONIC FOR THOUT THE PRIOR WHO THE ARCHITECT RESULTIN NY UNAUTHORIZED CE OF THE ERCHITECT BY AITHER PROJECT BY AITHAN THE ARCHITECT	ESE NOT TO CTRONIC LE, OR IN HAN FOR S NOT TO ILES TO RITTEN E CLIENT CLAIMS NG IN ANY HANGES IC FILES VYONE

BASEMENT REFLECTED **CEILING PLAN**

A-130

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INSULATION

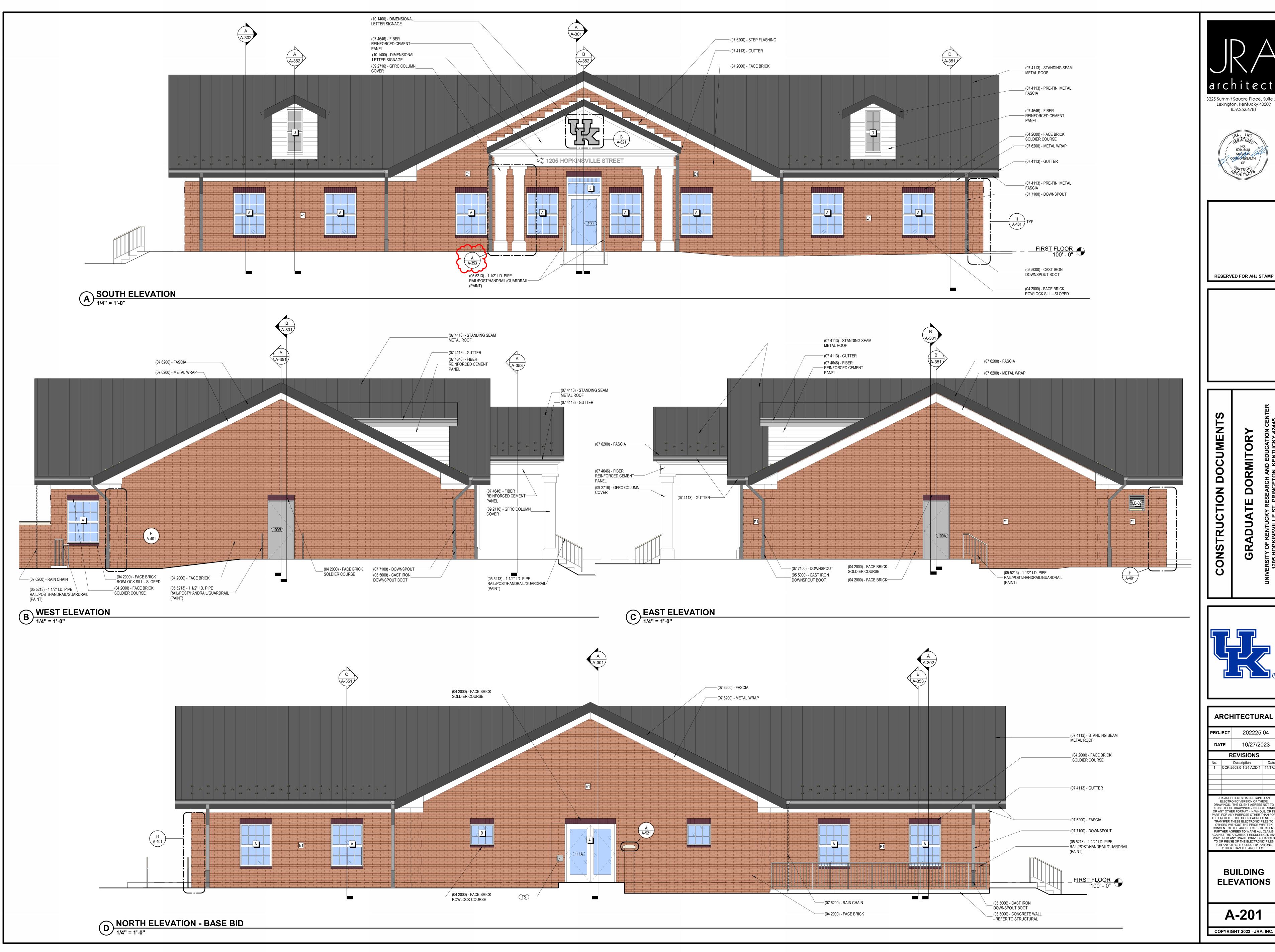
(03 5413) - GYPSUM CEMENT UNDERLAYMENT — (06 1053) - STRUCTURAL WOOD JOISTS - SEE STRUCTURAL (07 2100) - MINERAL WOOL

(09 0000) - REFER TO REFLECTED CEILING PLANS_ FOR CEILING TYPE AND HEIGHT

(06 1053) - CONTINUOUS WOOD BLOCKING

B TYP. 2 HR BULKHEAD CEILING DETAIL
1 1/2" = 1'-0"

1' - 4"





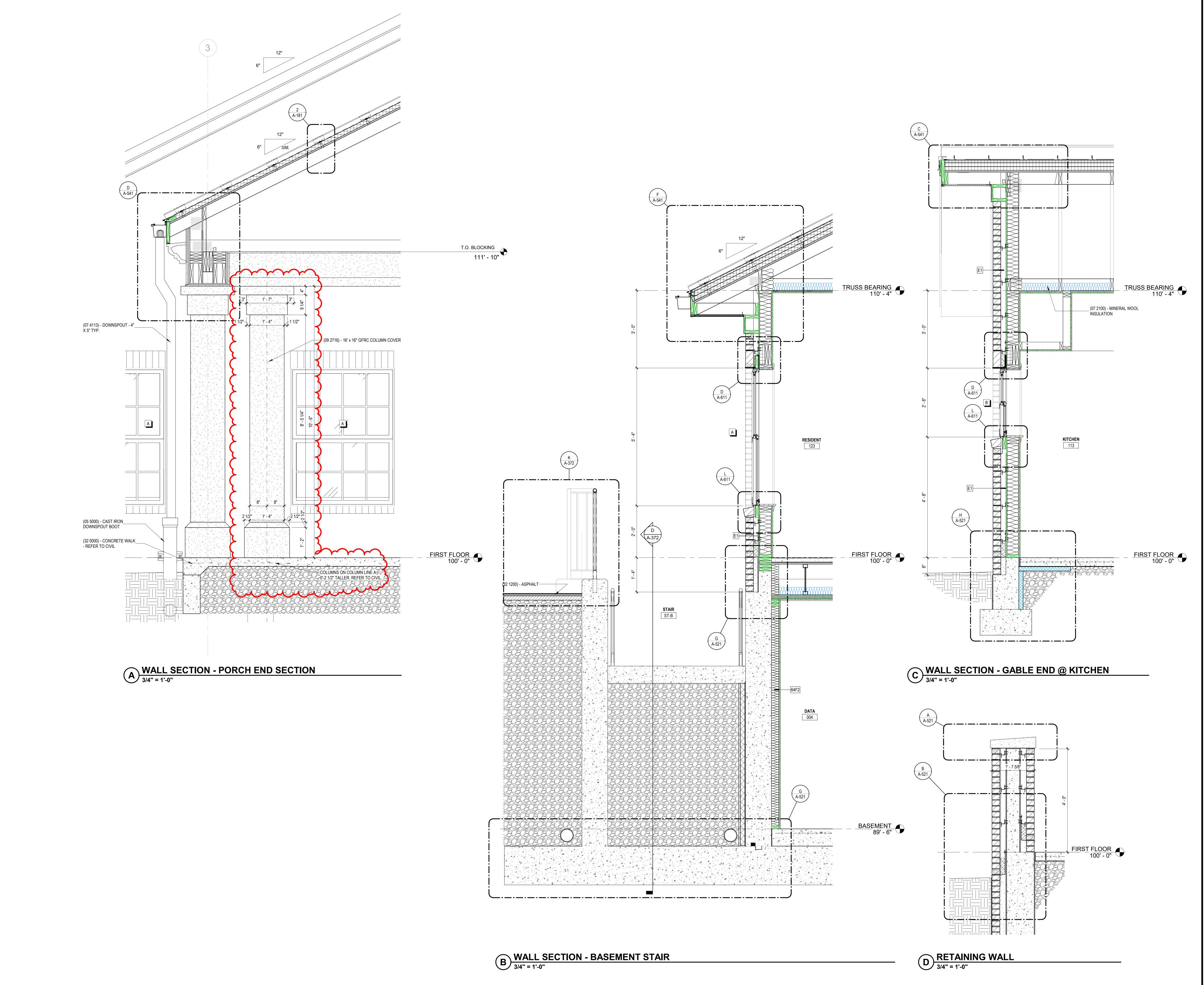


RESERVED FOR AHJ STAMP

ARCHITECTURAL PROJECT 202225.04 DATE 10/27/2023 **REVISIONS** Description CCK-2603.0-1-24 ADD 1 JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

> **BUILDING ELEVATIONS**

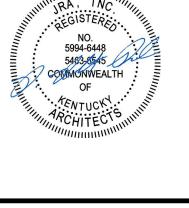
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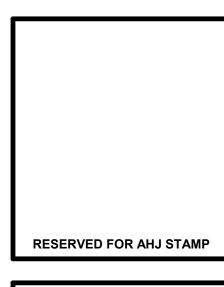


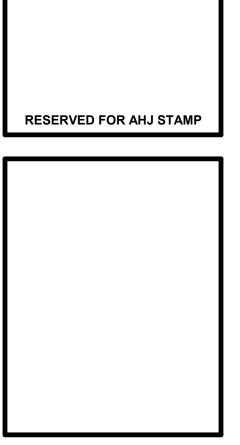


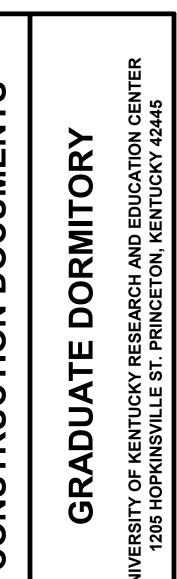












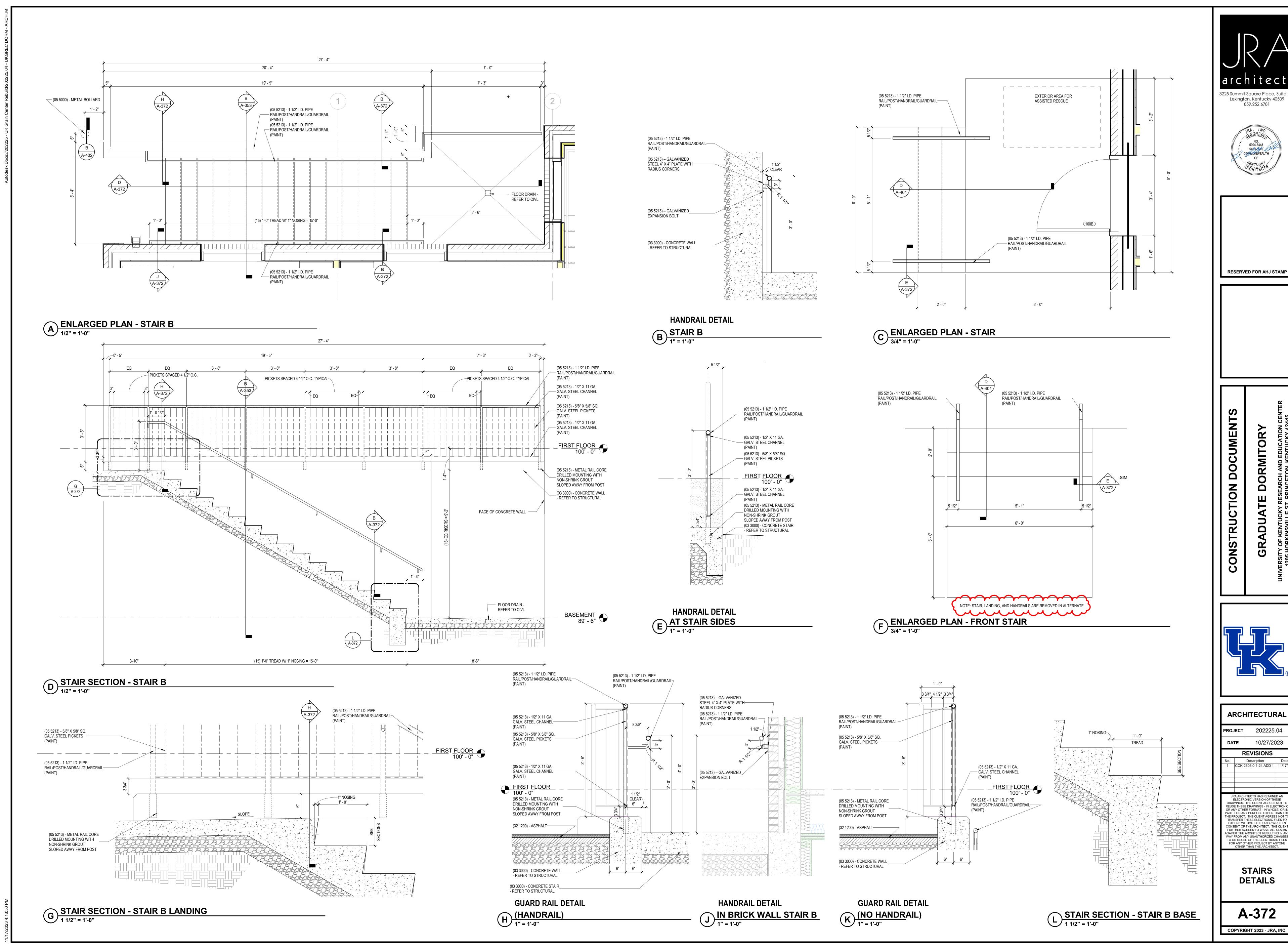


AF	RCH	HITECTUR	RAL
PROJ	ECT	202225.	04
DA	ΓE	10/27/20)23
	F	REVISIONS	
No. 1	CCK-2	Description 2603.0-1-24 ADD 1	Date 11/17/23
DRAV REUS OR AN PART, THE PI TRAN OTH CONS FURT AGAIN	ELECTR VINGS. E THESI Y OTHE FOR AN ROJECT NSFER THERS WI ENT OF THER AG ST THE	HITECTS HAS RETAINE ONIC VERSION OF THI THE CLIENT AGREES E DRAWINGS - IN ELEC ER FORMAT - IN WHOL IY PURPOSE OTHER T . THE CLIENT AGREES THESE ELECTRONIC F ITHOUT THE PRIOR WI THE ARCHITECT. THI GREES TO WAIVE ALL ARCHITECT RESULTIN NY UNAUTHORIZED C	ESE NOT TO CTRONIC LE, OR IN HAN FOR S NOT TO ILES TO RITTEN E CLIENT CLAIMS IG IN ANY

E PROJECT. THE CLIENT AGREES NOT TO RANSFER THESE ELECTRONIC FILES TO DTHERS WITHOUT THE PRIOR WRITTEN DNSENT OF THE ARCHITECT. THE CLIENT URTHER AGREES TO WAIVE ALL CLAIMS AINST THE ARCHITECT RESULTING IN ANY AY FROM ANY UNAUTHORIZED CHANGES O OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

WALL **SECTIONS**

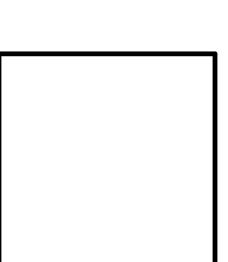
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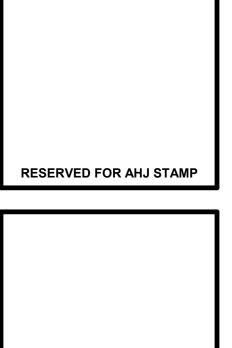




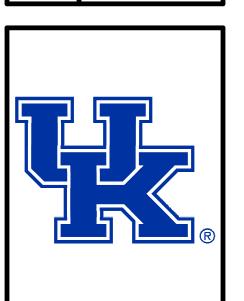


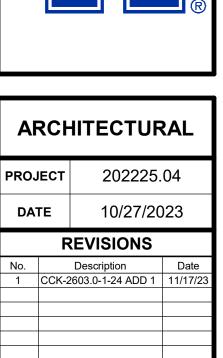
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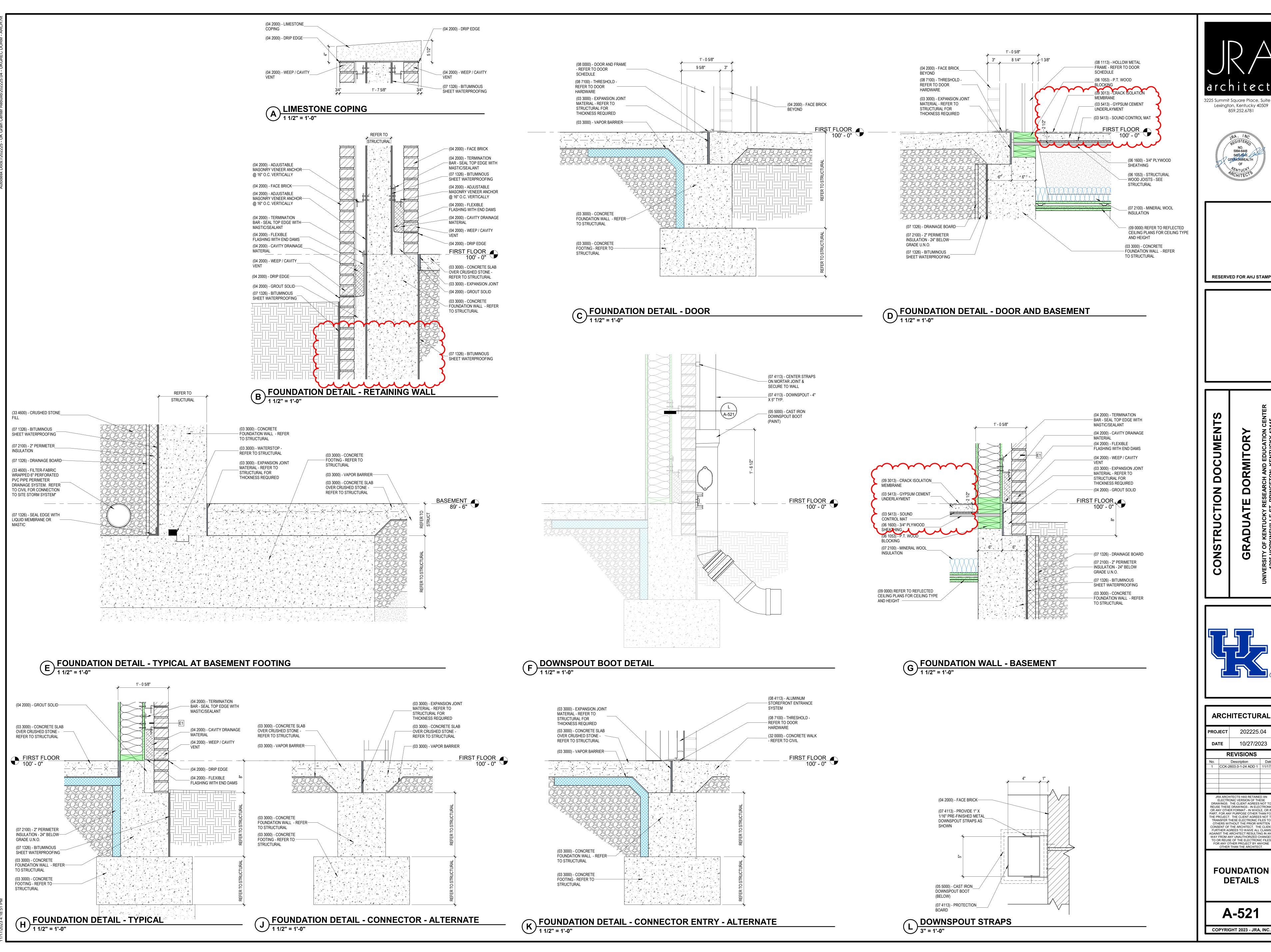




lo.	Description	Date
1	CCK-2603.0-1-24 ADD 1	11/17/23
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STAIRS DETAILS

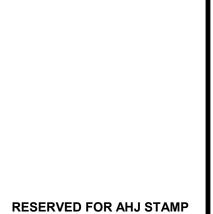
A-372









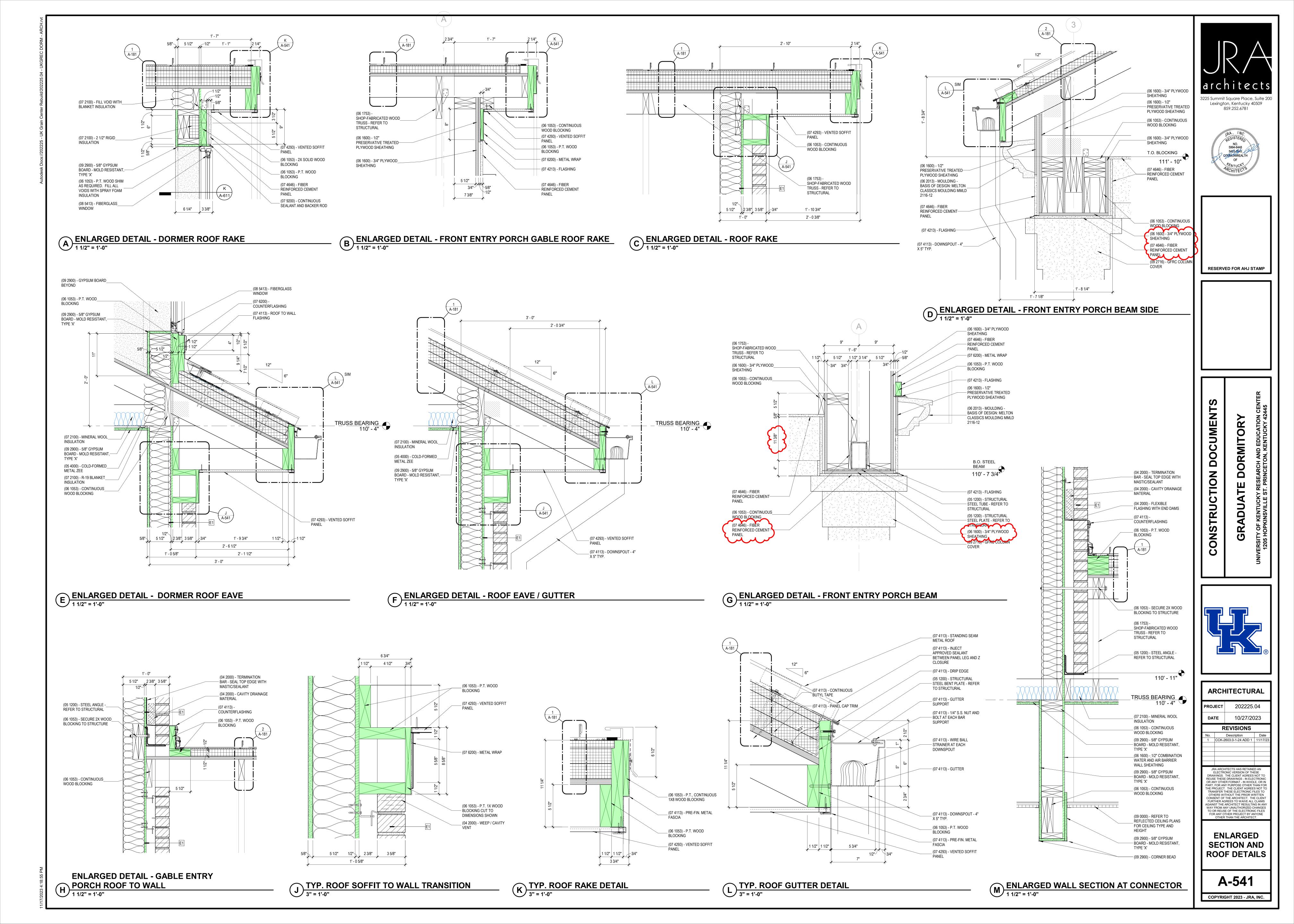


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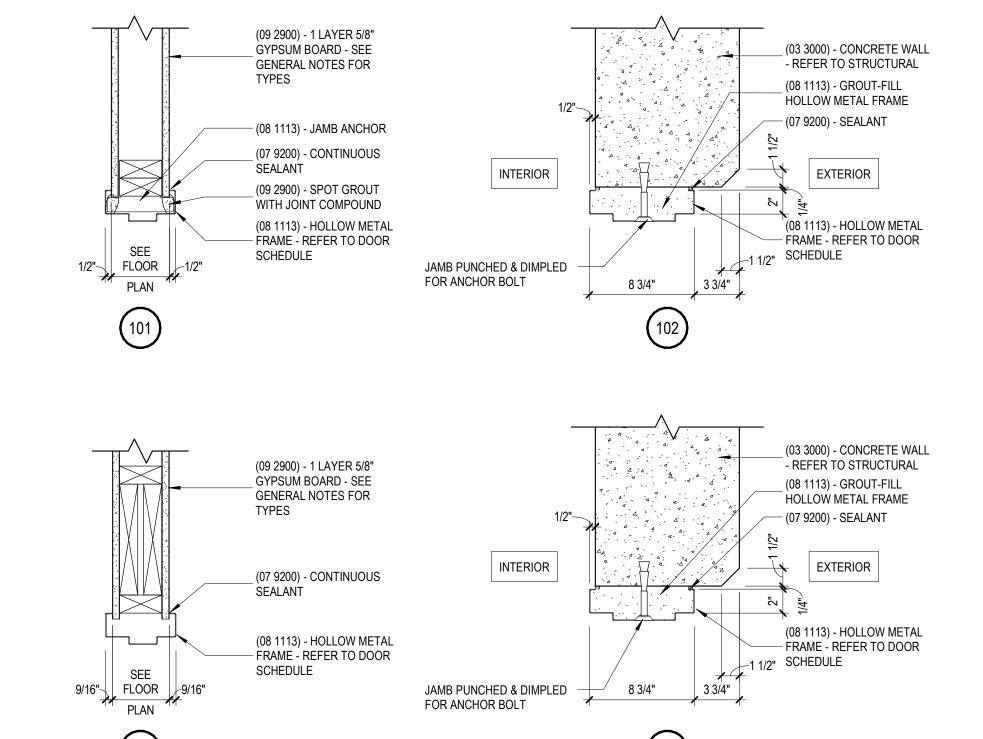
FOUNDATION **DETAILS**

A-521

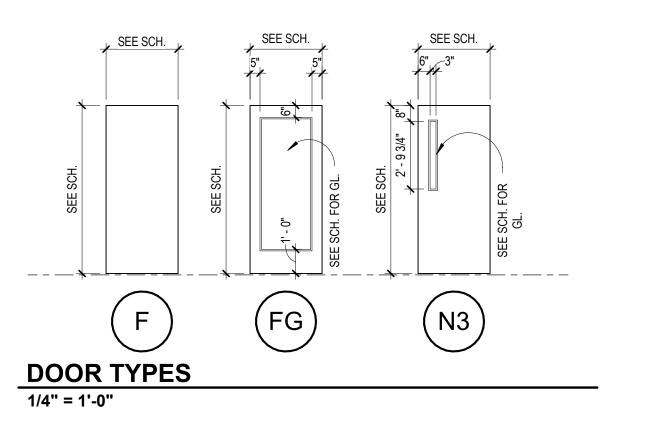


							D	OOR AND FRA	AME SCHED	ULE						
				DOOR	S					FRA	MES		HARD	WARE		
			SIZE									AILS				
NO.	PAIR	LEAF 1 WIDTH	LEAF 2 WIDTH	HEIGHT	THICK.	MAT'L.	TYPE	GLAZ.	MAT'L.	TYPE	JAMB	HEAD	CLOSER	SET NO.	RATING (MIN.)	REMARKS
001	PR.	2' - 0"	4' - 0"	7' - 2"	1 3/4"	НМ	N3	GL-3	HM	1	102	202	YES	CK01	45	
002	PR.	2' - 0"	2' - 0"	7' - 2"	1 3/4"	НМ	F		HM	1	101	201		CK03	0	
003		3' - 0"		7' - 2"	1 3/4"	HM	F		HM	1	101	201		01	0	
004		3' - 0"		7' - 2"	1 3/4"	НМ	F		HM	1	101	201		CK04	0	
005	PR.	3' - 0"	3' - 0"	7' - 2"	1 3/4"	HM	F		HM	1	101	201		02	0	
100		4' - 0"		7' - 0"	1 3/4"	ALUM.	FG	GL-3	ALUM	3	E/ A611	B/ A611		CEK01	0	
100A		3' - 0"		7' - 2"	1 3/4"	НМ	F		HM	1	F/ A611	C/ A611	YES	EK01	45	
100B		3' - 0"		7' - 2"	1 3/4"	HM	F		HM	1	F/ A611	C/ A611	YES	EK01	45	
101		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
102		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
103-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
103-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
103A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
103B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		05	0	
103C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
104-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
104-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
104A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
104B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		05	0	
104C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
105		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
106		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
108		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
108A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04A	0	
109		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	04B	20	
111A	PR.	3' - 0"	3' - 0"	7' - 2"	1 3/4"	ALUM.	FG	GL-3	ALUM	4	E/ A611	A/ A611		ACEK01	0	
113A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03A	20	
115		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		03B	0	
116		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
116A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04A	0	
117		3' - 0"		7' - 2"	1 3/4"	WD.	N3		HM	1	101	201	YES	M01	20	
118		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
119		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
120-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
120-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
120A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
120B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	05	20	
120C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
121-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
121-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
121A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
121B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		05	0	
121C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
122		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
123		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
ST-A0		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK02	90	
ST-A1		3' - 0"		7' - 2"	1 3/4"	WD.	N3		HM	1	101	201	YES	03	20	

				DOOR	S					FR/	AMES		HARD	WARE		
			SIZE								DET	AILS				
NO.	PAIR	LEAF 1 WIDTH	LEAF 2 WIDTH	HEIGHT	THICK.	MAT'L.	TYPE	GLAZ.	MAT'L.	TYPE	JAMB	HEAD	CLOSER	SET NO.	RATING (MIN.)	REMARK
100C-A	PR.	3' - 0"	3' - 0"	7' - 2"	1 3/4"	ALUM.	FG	GL-3	ALUM	4	E/ A611	C/ A611		ACEK02	0	
100C-B		3' - 0"		7' - 2"	1 3/4"	НМ	F		HM	F	F/ A611	A/ A611	YES	CEK01A	45	
124		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
125		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
126-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
126-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
126A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
126B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		05	0	
126C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
127-A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
127-B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	03	20	
127A		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
127B		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	05	20	
127C		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201		04	0	
128		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	
129		3' - 0"		7' - 2"	1 3/4"	WD.	F		HM	1	101	201	YES	CK05	20	



DOOR DETAILS 1 1/2" = 1'-0"



DOOR FRAME TYPES

1/4" = 1'-0"

TABLE 716.3 MARKING FIRE-RATED GLAZING ASSEMBLIES DEFINITION OF MARKING FIRE TEST STANDARD

ASTM E 119 OR UL 263 MEETS WALL ASSEMBLY CRITERIA. NFPA 257 OR UL 9 MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING HOSE STREAM TEST. NFPA 252 OR UL 10B OR UL 10C MEETS FIRE DOOR ASSEMBLY CRITERIA NFPA 252 OR UL 10B OR UL 10C MEETS FIRE DOOR ASSEMBLY "HOSE STREAM" TEST. NFPA 252 OR UL 10B OR UL 10C MEETS 450"F TEMPERATURE RISE CRITERIA FOR 30 MINUTES.

GLAZING SCHEDULE

GL-3 1" LOW-E FULLY TEMPERED INSULATING GLASS - CLEAR

WINDOW ELEVATIONS LEGEND

SF - STOREFRONT DOOR/WINDOW FRAME SYSTEM

HM - HOLLOW METAL

GL-1 1" LOW-E INSULATING GLASS - CLEAR GL-2 1" LOW-E INSULATING SPANDREL GLASS

THE TIME IN MINUTES OF THE FIRE RESISTANCE OR

FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY.

3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781



SHIM AROUND ALL FRAMES AS REQUIRED

ANSI DOOR HARDWARE LOCATIONS

ASSUMES 3/4" DOOR UNDERCUT

(5)———————

3 2 ----

RESERVED FOR AHJ STAMP

CONSTRUCTION DOCUMENTS

NOTE: DOORS OVER 90" TALL HAVE 2 PAIR OF HINGES

1 LOCKSETS, EXIT DEVICES, HOSPITAL LATCHES

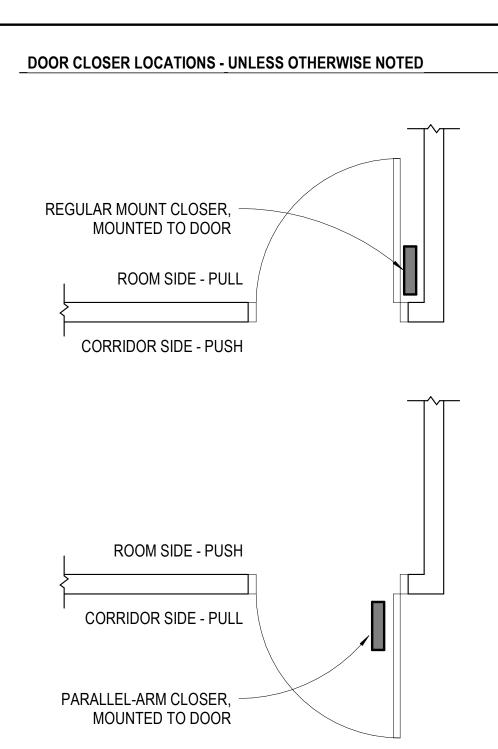
2 PULL PLATE, COMBINATION PUSH &

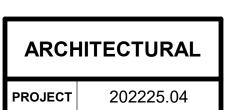
3 PUSH PLATE, HOSPITAL ARM PULLS

PULL BARS

(5) SECURITY VIEWER





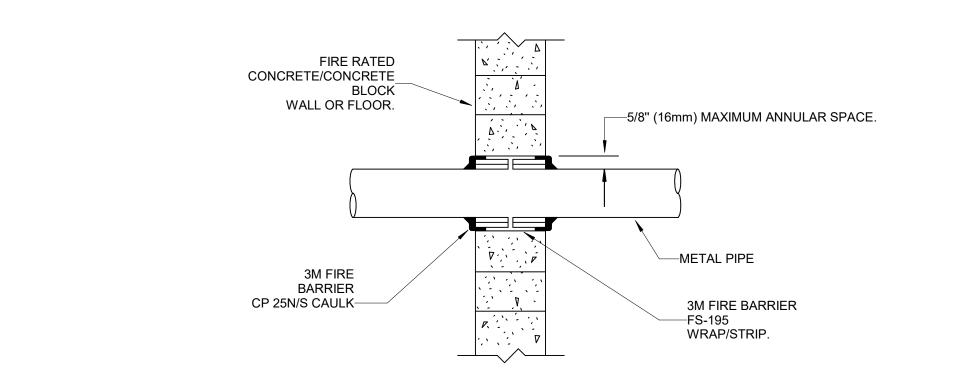


DATE 10/27/2023 **REVISIONS** Description

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

DOOR **SCHEDULE AND DETAILS**

A-601



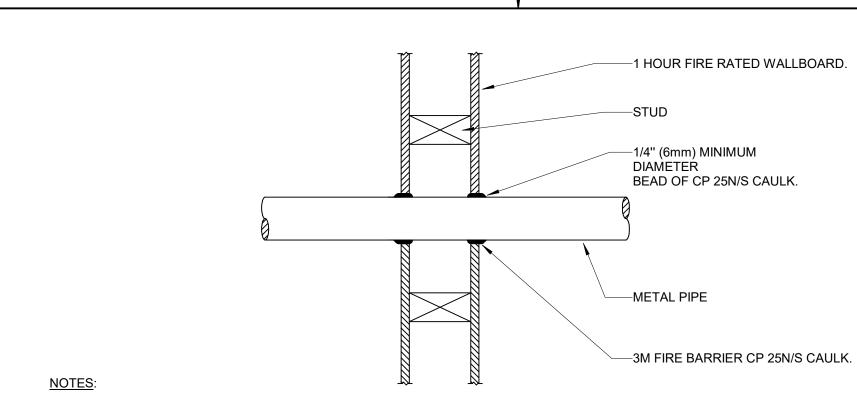
NOTES

- 1. THE MAXIMUM ANNULAR SPACE AROUND THE METAL PIPE OR CONDUIT IS 5/8" (16mm). (IF THE ANNULAR SPACE EXCEEDS 5/8" PATCH THE WALL AND PENETRATE WALL AT ANOTHER LOCATION).
- 2. WRAP THE 3M MODEL# FS-195 WRAP/STRIP AROUND THE PIPE/CONDUIT, FOIL SIDE OUT, TO FILL THE SPACE BETWEEN THE PIPE/CONDUIT AND THE WALL OPENING. THE 3M MODEL# FS-195 WRAP/STRIP SHOULD BE TIGHTLY SECURED WITH ALUMINUM FOIL TAPE OR STEEL TIE WIRE AND PUSHED INTO THE OPENING UNTIL THE TOP EDGE OF THE WRAP IS FLUSH WITH THE WALL SURFACE. THE IDENTICAL INSTALLATION SHOULD BE INSTALLED ON THE OTHER SIDE OF THE WALL.
- 3. USE 3M MODEL# CP 25N/S(NO SAG) CAULK TO FILL THE AREA BETWEEN THE FS-195 WRAP/STRIP AND THE EDGES OF THE OPENING AND ANY VOIDS IN THE 3M MODEL# FS-195 WRAP/STRIP. A FILL OF CP 25 CAULK SHOULD COAT ALL EXPOSED EDGES OF THE FS-195 WRAP/STRIP AND COMPLETELY SEAL THE AREA BETWEEN THE FS-195 WRAP/STRIP, THE PIPE/CONDUIT AND THE WALL SURFACE.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH A CONCRETE WALL

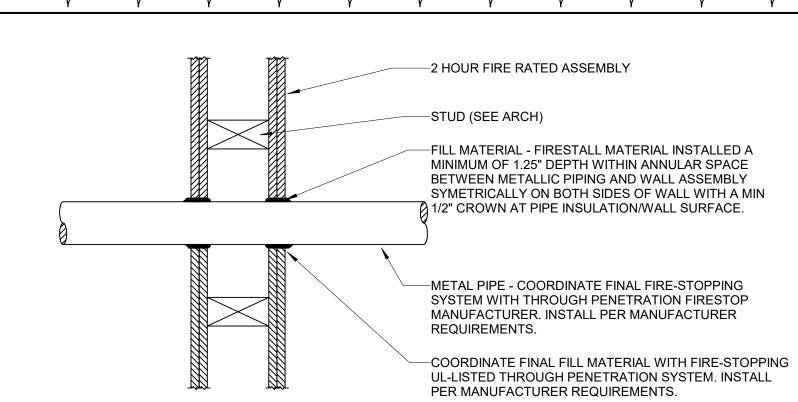
FIRE STOPPING NOTES:

- 1. FIRE STOPPING IS CRITICAL AND MUST BE ACCOMPLISHED. ALL PIPES MUST BE FIRESTOPPED WHERE THEY PENETRATE FIRE RESISTIVE, FIRE RATED, AND SMOKE RESISTIVE WALLS OR FLOORS. ALL FLOORS CORRIDOR WALLS, STAIR WALLS, MECHANICAL ROOM WALLS, STORAGE ROOM WALLS AND OTHER HAZARDOUS ROOM WALLS ARE ONE HOUR RATED.
- A FOUR-HOUR TRAINING SESSION SHALL BE CONDUCTED BY MANUFACTURER OF THE FIRESTOPPING MATERIAL. THIS SHALL BE DONE PRIOR TO THE INSTALLATION OF THE MATERIAL. CONTACT HOSPITAL ENGINEER AND CMTA TO ADVISE OF DATE AND TIME OF THIS MEETING.
- 3. ALL PENETRATIONS WILL BE REVIEWED BY THE HOSPITAL ENGINEER OR CMTA. PRIOR TO INSPECTION, ALL CEILING TILES BENEATH THE PENETRATIONS SHALL BE REMOVED BY THE CONTRACTOR.



- 1. FORCE THE 3M MODEL# CP 25N/S CAULK INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE, FLUSH WITH THE EXTERIOR OF THE PENETRATION SURFACE.
- 2. FINISH CAULKING WITH A 1/4" (6mm) MINIMUM BEAD OF CP 25N/S CAULK APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM THE WALL.
- 3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16" (5mm). (IF IT DOES PATCH WALL AND PENETRATE WALL AT ANOTHER LOCATION).
- 4. INSTALL THE 3M FIRESTOP ON BOTH SIDES OF THE WALL.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH ONE HOUR WALL



NOTE

- 1. FOLLOW ALL THROUGH-PENETRATION MANUFACTURER REQUIREMENTS BASED UPON PIPE/INSULATION TYPE. SUBMIT ALL THROUGH PENETRATION SYSTEMS TO ENGINEER FOR REVIEW AS PART OF SHOP DRAWING SUBMITTAL.
- 2. FIRESTOPPING MUST BE INSTALLED ON BOTH SIDES OF WALL PER MANUFACTURER REQUIREMENTS.

DEPENDING UPON FEILD CONDITIONS. COORDINATE WITH MANUFACTURER AND PROVIDE ACCORDINGLY.

3. CONTRACTOR MUST HOLD TO ALL MANUFACTURER REQUIRED MINIMUM AND MAXIMUM FILL DISTANCES AND COORDINATE OPENINGS IN WALLS WITH GENERAL TRADES CONTRACTOR ACCORDINGLY. DIFFERENT FIRESTOPPING PENETRATION ASSEMBLIES MAY BE REQUIRED

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH TWO HOUR WALL

FIRE PROTECTION GENERAL NOTES

- A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
- B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- C ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
 D COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
 E OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF KENTUCKY, ETC.)
- F CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.

G ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL

- BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.

 H ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE AND SHALL COMPLY.
- SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.

 I ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING
- J LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.

EXCEPT AS NOTED.

- K ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- INSTALL ALL PIPING AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.
- M SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.
- N THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
- O WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.

 P DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE
- RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

 Q VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT, ADDITIONALLY ALL SUCH ITEMS
- CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

 WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE

SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE

S WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR

TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND

ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

BBREVI	ATIONS	ABBREVIA	TIONS (CONT
ADJ	ADJUSTABLE	TE	TOP ELEVATION
AFF	ABOVE FINISHED FLOOR	TYP	TYPICAL
АНЈ	AUTHORITY HAVING JURISDICTION	UNO	UNLESS NOTED O
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE	WT	WEIGHT
CLG	CEILING		WITH
CLR	CLEAR		WITHOUT
DN	DOWN	%	PERCENT
ENGR	ENGINEER	<u> </u>	CENTERLINE
EQ	EQUAL		
ETR	EXISTING TO REMAIN		
EXT	EXTERIOR		
FVC	FIRE VALVE CABINET		
FL	FLOOR		
FLA	FULL LOAD AMPS	GENERAL	SYMBOLS
FOB	FLAT ON BOTTOM		TAGGED NOTE DE
FOT	FLAT ON TOP		REVISION TRIANG
FPC	FIRE PROTECTION CONTRACTOR	ROOM NAME	ROOM TAG
FT	FEET OR FOOT	TAG XXX-# INSTANCE XXXX	EQUIPMENT TAG
FUT	FUTURE	<u> </u>	POINT OF CONNE
GΔ	GAGE/GALIGE	<u></u>	POINT OF DEMOL

	TINE VALVE CADINET
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FT	FEET OR FOOT
FUT	FUTURE
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
LBS	POUNDS
LF	LINEAR FEET/FOOT
MAX	MAXIMUM
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA OR NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
PC	PLUMBING CONTRACTOR
PLBG	PLUMBING
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
SQ FT	SQUARE FEET OR FOOT
TBD	TO BE DETERMINED

	TIONS (CONTINUED)
TE	TOP ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
¢.	CENTERLINE
GENERAL	SYMBOLS
SENERAL #	SYMBOLS TAGGED NOTE DESIGNATOR
$\overline{}$	TAGGED NOTE DESIGNATOR
# NOOM NAME	TAGGED NOTE DESIGNATOR REVISION TRIANGLE
# ROOM NAME RM # TAG XXX-#	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG
ROOM NAME RM # TAG XXX-# TANCE XXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG EQUIPMENT TAG
ROOM NAME RM # TAG XXX-# STANCE XXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG EQUIPMENT TAG POINT OF CONNECTION / CONNECT TO EXISTING
ROOM NAME RM # TAG XXX-# INSTANCE XXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG
ROOM NAME RM # TAG XXXX-# INSTANCE XXXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG EQUIPMENT TAG POINT OF CONNECTION / CONNECT TO EXISTING
ROOM NAME RM # TAG XXX-# STANCE XXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG EQUIPMENT TAG POINT OF CONNECTION / CONNECT TO EXISTIN
ROOM NAME RM # TAG XXX-# ANCE XXXX	TAGGED NOTE DESIGNATOR REVISION TRIANGLE ROOM TAG EQUIPMENT TAG POINT OF CONNECTION / CONNECT TO EXISTIN

1ECHANIC	AL PIPING LEGEND
<u> </u>	PIPE ELBOW TURNING UP
 5	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
——FP——	FIRE PROTECTION PIPING
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
—E(XXX)—	EXISTING PIPING - (XXX) DENOTES SYSTEM
—A(XXX)—	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
- 	STRAINER
\longrightarrow	MANUAL ISOLATION VALVE
─ ₩─	GLOBE VALVE
_ _	OS&Y (GATE) VALVE
────	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	CHECK VALVE
1-1-	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
<u></u>	PIPING UNION
Fs	FLOW SWITCH
Ps	PRESSURE SWTICH
тѕ	TAMPER SWITCH
T	PETE'S PLUG; TEMPERATURE/PRESSURE PORT
•	SEMI-RECESSED SPRINKLER HEAD WITH REMOVABLE ESCUTCHEON PLATE
•	UPRIGHT TYPE SPRINKLER HEAD
—	SIDEWALL TYPE SPRINKLER HEAD

ANSI A117.1

STATE EDITION

NFPA 72

2018

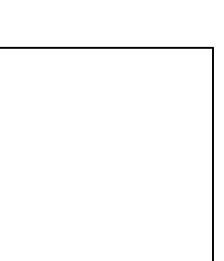
FLOW DATA - PRINCETON WATER					
STATIC PSI:	86				
RESIDUAL PSI:	14				
FLOW:	590 GPM				
DURATION:	CONTINUOUS				
DATE & TIME:	5/25/2023				
SOURCE OF WATER:	CITY SUPPLY				
SOURCE OF DATA:	PRINCETON WATER				
HAZARD:	LIGHT				
OCCUPANCY OF BUILDING:	DORM/RESIDENCE				

APPLICABLE BUILDING COL				
APPLICABLE BUILDING CODES				
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES				
FIRE SPRINKLER CODE				
INTERNATIONAL BUILDING CODE (IBC)	S			
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	S			
INTERNATIONAL FIRE CODE (IFC)	S			
INTERNATIONAL FUEL GAS CODE (IFGC)	S			
INTERNATIONAL MECHANICAL CODE (IMC)	S			
INTERNATIONAL PLUMBING CODE (IPC)	S			
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	S			
NATIONAL ELECTRIC CODE (NEC)				
NATIONAL FIRE ALARM & SIGNALING CODE				

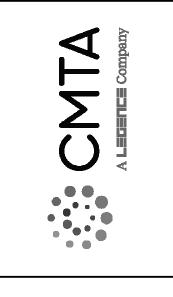
UNIFORM STATEWIDE BUILDING CODE







RESERVED FOR AHJ STAMP



GRADUATE DORMITORY
IIVERSITY OF KENTUCKY RESEARCH AND EDUCATION CEN
1205 HOPKINSVILLE ST. PRINCETON, KENTUCKY 42445



FIRE PROTECTION

PROJECT 202225.04

DATE 10/27/2023

REVISIONS

No. Description Date
1 CCK-2603.0-1-24 ADD 1 11/17/23

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PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

FIRE PROTECTION LEGEND

FP-100

_		PLUMBING GENERAL NOTES
	Α	COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS,
		ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT
		ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO
		COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE
		EXPENSE OF THE CONTRACTOR.

- B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN. PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS. F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND
- G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF KENTUCKY, ETC.)
- H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING. I IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS

TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND

- ALL FLOOR PENETRATIONS. J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW
- FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE. K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO

INSULATED PIPING PENETRATIONS.

- L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
- M ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.
- N IN ACCORDANCE WITH K.R.S. ALL PLUMBING WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH PLANS APPROVED BY AND BEARING THE APPROVAL STAMP OF THE KENTUCKY DIVISION OF PLUMBING AND/OR THE DIVISION OF WATER. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL HE HAS RECEIVED SUCH APPROVED PLANS.
- O LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- P ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY. Q THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR
- OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.). R INSTALL ALL PIPING AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED
- ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT. S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.
- T THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK. U WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.
- V DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.
- W ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
- X DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- Y VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.
- Z ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE

UNLESS SPECIFICALLY NOTED OTHERWISE.

- AA WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING
- WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

AB WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S

OPENING MANIFOLD, UN-USED MANIFOLD OPENING SHALL BE CAPPED. INSTALL UNITED AS REQUIRED BY MANUFACTURER.

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND
ASHRAE	AIR-CONDITIONING ENGINEERS
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
СО	CARBON MONOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EC ELEV	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
ΕΛ	EDEE ADEA

	TIONS (CONTINUED)	ABBREVI	ATIONS (CONTINUED)
FL	FLOOR	NO	NORMALLY OPEN OR NUMBER
FLA	FULL LOAD AMPS	NTS	NOT TO SCALE
FOB	FLAT ON BOTTOM	OC	ON CENTER
FOT	FLAT ON TOP	OD	OUTSIDE DI (-AMETER, -MENSION)
FPC	FIRE PROTECTION CONTRACTOR	CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
FPM	FEET PER MINUTE	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
FPS	FEET PER SECOND	OFOI	OWNER FURNISHED, OWNER INSTALLED
FT	FEET OR FOOT	OR	OPEN RECEPTACLE
FUT	FUTURE	OZ	OUNCE (-S)
FV	FACE VELOCITY	PC	PLUMBING CONTRACTOR
GA	GAGE/GAUGE	PD	PRESSURE DROP
GAL	GALLON (-S)	PH	PHASE [ELECTRICAL]
GC	GENERAL CONTRACTOR	PLBG	PLUMBING
GPD	GALLONS PER DAY	PPM	PARTS PER MILLION
GPH	GALLONS PER HOUR	PRS	PRESSURE REDUCING STATION
GPM	GALLONS PER MINUTE	PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
GR	GRAINS	PSF	POUNDS PER SQUARE FOOT
Н	HUMIDITY	PSI	POUNDS PER SQUARE INCH
HD	HEAD	PSIG	PSI GAUGE
HG	MERCURY	RLA	RUNNING LOAD AMPS
ORIZ	HORIZONTAL	RPM	REVOLUTIONS PER MINUTE
HP	H (-ORSEPOWER, -EAT PUMP)	SQ	SQUARE
HR	HOUR (-S)	SQ FT	SQUARE FEET OR FOOT
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING	SQ IN	SQUARE INCH OR INCHES
Hz	HERTZ	TAB	TESTING AND BALANCING
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)	TBD	TO BE DETERMINED
IN	INCH (-ES)	TE	TOP ELEVATION
NSUL	INSULAT (-ED, -ION)	TEMP	TEMPERATURE
INT	INTER (-IOR, -ERVAL)	TPA	TRAP PRIMER ADAPTER
IPS	IRON PIPE SIZE	TSP	TOTAL STATIC PRESSURE
kW	KILOWATT	TYP	TYPICAL
<wh< td=""><td>KILOWATT HOUR</td><td>UNO</td><td>UNLESS NOTED OTHERWISE</td></wh<>	KILOWATT HOUR	UNO	UNLESS NOTED OTHERWISE
LBS	POUNDS		VOLT (-AGE, -S)
LF	LINEAR FEET/FOOT		VARI (-ABLE, -IES)
LRA	LOCKED ROTOR AMPS	VAV	VARIABLE AIR VOLUME
 _WT	LEAVING WATER TEMPERATURE	VEL	VELOCITY
MAX	MAXIMUM	VFD	VARIABLE FEQUENCY DRIVE
MBH	BTU PER HOUR [THOUSANDS]		WATT (-AGE, -S)
MCA	MINIMUM CIRCUIT AMPS	WB	WET BULB
MFG	MANUFACTURER		WET BULB TEMPERATURE
MIN			WATER PRESSURE DROP
	MIN (-IMUM, -UTE)		+
MISC	MISCELLANEOUS MAYIMUM OVERCURRENT PROTECTION (AMRS)	WT	WEIGHT
IOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]	W/	WITH
MTG	MOUNTING	W/O	WITHOUT
N/A	NOT APPLICABLE		PERCENT
NC	NOISE CRITERIA OR NORMALLY CLOSED	<u>Δ</u> P	DIFFERENTIAL PRESSURE
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU	ΔΤ	TEMPERATURE DIFFERENCE

	TAGGED NOTE DESIGNATOR
\triangle	REVISION TRIANGLE
	ROOM TAG
TAG XXX-#	EQUIPMENT TAG
XXX ##	DOMESTIC WATER RISER TAG
XXX ##	SANITARY, WASTE, & VENT RISER TAG
XXX ##	FIRE SUPPRESSION RISER TAG
•	POINT OF CONNECTION / CONNECT TO EXISTING
\$	POINT OF DEMOLITION
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
-E(XXX)-	EXISTING PIPING - (XXX) DENOTES SYSTEM
-A(XXX)-	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
<u> </u>	TWO-WAY CONTROL VALVE
ALVE SII	TWO-WAY CONTROL VALVE
───	THREE-WAY CONTROL VALVE
<u> </u>	THREE-WAY CONTROL VALVE AUTOMATIC AIR VENT (AAV)
φ •	
•	AUTOMATIC AIR VENT (AAV)
	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV)
'	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV)
↑–––	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE
↑√√√√✓	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE
↑ - - - - - - - - - - - - -	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV)
↑	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV) STRAINER
↑ ↓ ↓ ↓ × × × × × × × × × ×	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV) STRAINER MANUAL ISOLATION VALVE
↑	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV) STRAINER MANUAL ISOLATION VALVE GLOBE VALVE
↑	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV) STRAINER MANUAL ISOLATION VALVE GLOBE VALVE OS&Y (GATE) VALVE
	AUTOMATIC AIR VENT (AAV) MANUAL AIR VENT (MAV) MANUAL BALANCING VALVE (BV) BALL VALVE BUTTERFLY VALVE TRIPLE DUTY VALVE (TDV) STRAINER MANUAL ISOLATION VALVE GLOBE VALVE OS&Y (GATE) VALVE PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)

—0	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
—	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
—AVT——	ACID VENT
AW	ACID WASTE
CA	COMPRESSED AIR
CAI/E	COMBUSTION AIR INTAKE/EXHAUST
—CBS/R—	CHILLED BEAM SUPPLY/RETURN
CD	CONDENSATE DRAIN
CO2	CARBON DIOXIDE
CST	CLEAN STEAM PIPING
DCW - —	DOMESTIC COLD WATER (DCW)
— – – — —DHW—— -DHW(#°F)—	DOMESTIC HOT WATER (DHW)
— — — -DHR- — -DHR(#°F)—	RECIRCULATED DOMESTIC HOT WATER (DHR)
——HPC——	HIGH PRESSURE STEAM CONDENSATE
—HPS(#)—	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
—HPS/R—	HEAT PUMP WATER SUPPLY/RETURN
—HRS/R—	HEAT RECOVERY SUPPLY/RETURN PIPING
HWS/R	HEATING WATER SUPPLY/RETURN
LPC	LOW PRESSURE STEAM CONDENSATE
—LPS(#)——	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
MPC	MEDIUM PRESSURE STEAM RETURN
—MPS(#)—	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
SPD	STEAM CONDENSATE PUMPED DISCHARGE
SVT	STEAM VENT PIPING
LUMBING	SYMBOL LEGEND
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
T FS	FLOW SWITCH
□ps	PRESSURE SWTICH
□ Trs	TAMPER SWITCH
 Д	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

APPLICABLE BUILDING CODES					
APPLICABLE BUILDING CODES	DOCUMENT	YEAR			
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009			
FIRE SPRINKLER CODE	NFPA 13	2013			
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2015			
INTERNATIONAL ENERGY CONSERVATION CODE (IECC) OR ASHRAE 90.1	STATE EDITION	2012			
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2015			
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2015			
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2015			
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2015			
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2009			
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2017			
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2013			
UNIFORM STATEWIDE BUILDING CODE	KBC	2018			

	PLUMBING FIXTURE SCHEDULE				
FD-1	FLOOR DRAIN - 6" DIA.: ZURN, ZN-415 OR EQUAL FLOOR DRAIN WITH 6" DIAMETER TOP, TYPE "B" NICKEL BRONZE STRAINER, 4" DRAIN OUTLET AND TRAP PRIMER CONNECTION.	-	-	2"	4"
FPWH	FREEZE-PROOF WALL HYDRANT : ZURN 1300 OR EQUIVALENT, 3/4", ENCASED, FLUSH, NON-FREEZE WALL HYDRANT WITH KEY LOCK AND COMBINATION BACKFLOW PREVENTER/VACUUM BREAKER. MOUNT HYDRANT AT A MINIMUM OF 20" ABOVE FINISHED GRADE. REFER TO MECHANICAL SPECIFICATION FOR ADDITIONAL REQUIREMENTS.	3/4"	-	-	-
НВ	HOSE BIBB: ZURN MODEL Z1350 OR EQUAL ENCASED MODERATE CLIMATE WALL HYDRANT FOR NARROW WALL INSTALLATION. WITH ALL BRONZE BODY, ALL BRONZE INTERIOR PARTS, REPLACEABLE SEAT WASHER, LOOSE KEY OPERATED CONTROL VALVE, VACUUM BREAKER AND 3/4" MALE HOSE CONNECTION. ADJUSTABLE STAINLESS STEEL BOX FURNISHED WITH HINGED COVER CYLINDER LOCK AND "WATER" STAMPED ON THE COVER. MOUNTED WITH HOSE CONNECTION AT 18" ABOVE FINISHED FLOOR ELEVATION OF AREA SERVED.	1/2"	-	-	-
P-1	WATER CLOSET - FLOOR MOUNTED, MANUAL FLUSH VALVE : VITREOUS CHINA, 15" HIGH FLOOR MOUNTED, ELONGATED BOWL, SIPHON JET 1.6 GPF FLUSH TANK WATER CLOSET WITH 3/8" ANGLE SUPPLY WITH STOP, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT. OUTLET ROUGH-IN SHAL	1-1/2"	_	2"	4"
P-1A	WATER CLOSET - FLOOR MOUNTED, MANUAL FLUSH VALVE - ADA COMPLIANT : VITREOUS CHINA, 15" HIGH FLOOR MOUNTED, ELONGATED BOWL, SIPHON JET 1.6 GPF FLUSH TANK WATER CLOSET WITH 3/8" ANGLE SUPPLY WITH STOP, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT. OUTLET ROUGH-IN SHAL	1-1/2"	-	2"	4"
P-3	LAVATORY - COUNTER TOP - ADA COMPLIANT : VITREOUS CHINA, 19"X16" OVAL COUNTERTOP LAVATORY, SELF-RIMMING WITH FRONT OVERFLOW. PROVIDE WITH A .5 GPM SINGLE LEVER FAUCET, GRID DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, KENTUCKY CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. INSTALL ON THE SUPPLY LINES AND P-TRAP AN INSULATION KIT WITH A VINYL PLASTIC COVERING.	1/2"	1/2"	2"	2"
P-3A	LAVATORY - COUNTER TOP - ADA COMPLIANT : VITREOUS CHINA, 19"X16" OVAL COUNTERTOP LAVATORY, SELF-RIMMING WITH FRONT OVERFLOW. PROVIDE WITH A .5 GPM SINGLE LEVER FAUCET, GRID DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, KENTUCKY CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. INSTALL ON THE SUPPLY LINES AND P-TRAP AN INSULATION KIT WITH A VINYL PLASTIC COVERING.	1/2"	1/2"	2"	2"
P-4	SHOWER UNIT (32"X48"): INPRO MODEL PRISM SOLID SURFACE SHOWER SYSTEM ONE PIECE SOLID SURFACE SHOWER; 32"x48"x84" O.D., 32"X48"X811/2" I.D., MOLDED SOAP TRAY, NON-SLIP FLOOR, CURTAIN ROD AND DOME LIGHT. PROVIDE SYMMON'S MODEL 25-1-X-CHKS TEMPROL 2000 OR EQUAL PRESSURE-BALANCING MIXING VALVE WITH ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN. SHALL HAVE INTEGRAL VOLUME CONTROL, CLEAR-FLO SHOWER HEAD WITH ARM AND FLANGE. PROVIDE CHECK VALVES IN THE HOT AND COLD WATER SUPPLIES.	3/4"	3/4"	2"	2"
P-4A	SHOWER UNIT (36"X60") - ADA COMPLIANT: INPRO MODEL PRISM SOLID SURFACE SHOWER SURROUND SYSTEM. ONE PIECE SOLID SURFACE TRANSFER TYPE BARRIER FREE SHOWER; 60"x36"x84" O.D., 60"x36"x811/2" I.D., "NO RECESS REQUIRED" THRESHOLD, ADA COMPLIANT GRAB BAR, MOLDED SOAP TRAY, NON-SLIP FLOOR, CURTAIN ROD, DOME LIGHT AND FOLD UP PHENOLIC SLAT SEAT. PROVIDE WITH TRENCH DRAIN OPTION AT FRONT OF SHOWER AND PIPE ACCORDINGLY. PROVIDE SYMMON'S MODEL 25-500-B30-V-X-CHKS TEMPTROL 2000 OR EQUAL PRESSURE-BALANCING MIXING VALVE WITH ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN. SHALL HAVE INTEGRAL VOLUME CONTROL, CLEAR-FLO SHOWER HEAD WITH ARM AND FLANGE AND PROVIDE WALL/HAND SHOWER, FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE AND A 30" SLIDE BAR FOR HAND SHOWER MOUNTING. HAND SHOWER SHALL BE CAPABLE OF DISCONNECT FROM SLIDE BAR. PROVIDE CHECK VALVES IN THE HOT AND COLD WATER SUPPLIES.	3/4"	3/4"	2"	2"
P-5	LAUNDRY/UTILITY TUB - MUSTEE MODEL 18F OR EQUAL, ONE PIECE MOLDED CONSTRUCTION, DURASTONE OR EQUAL FIBERGLASS/CURSHED STONE MATERIAL, 18 GALLON CAPACITY, EXTRA DEEP 13" TUB, INTEGRALLY MOLDED IN DRAIN WITH STOPPER, DUAL HANDLE FAUCES WITH 4" CENTERS, LARGE SELF-DRAINING BACK SHELF WITH RETAINER CURB, HEAVY GAUGE STEEL LEGS WITH ADJUSTABLE LEVELERS, MARBELIZED WHITE FINISH	1/2"	1/2"	2"	2"
P-6	LAVATORY - WALL HUNG W/ SINGLE LEVER FAUCET - ADA COMPLIANT: VITREOUS CHINA, 20"X18" WALL HUNG LAVATORY WITH 4" FAUCET CENTERS, CONCEALED ARMS AND 4" HIGH BACKSPLASH. PROVIDE WITH A 0.5 GPM SINGLE LEVER FAUCET, CHROME PLATED 3/8" SUPPLIES WITH STOPS, GRID DRAIN, A KENTUCKY CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. MOUNT LAVATORY AT A HEIGHT LEAVING A CLEARANCE OF AT LEAST 29" FROM THE FLOOR TO THE APRON AND THE RIM AT A MAXIMUM OF 34" AFF. PROVIDE WITH TRAP-WRAP KIT PER ADA REQUIREMENTS.	1/2"	1/2"	2"	2"
P-7	DOUBLE COMPARTMENT SINK W/SINGLE LEVER FAUCET: DOUBLE COMPARTMENT STAINLESS STEEL SINK, 20"X37" O.D., 14"X16" I.D., 18 GAUGE, 61/2" DEEP, REAR FAUCET LEDGE WITH 8" CENTERS. PROVIDE WITH SINGLE LEVER SWING SPOUT FAUCET. PROVIDE WITH CHROME SUPPLIES, STOPS, TAILPIECE, KENTUCKY CODE P-TRAP, CRUMB CUP STRAINER DRAINS, CONTINUOUS WASTE AND ESCUTCHEONS PROVIDE WITH DRAIN AND WATER SUPPLY CONNECTIONS TO ADJACENT DISHWASHER.	1/2"	1/2"	2"	2"
P-8	MOP BASIN: 24"X24"X10" HIGH MOLDED STONE MOP SERVICE BASIN, IN WHITE DRIFT COLOR, 3" DRAIN, SERVICE FAUCET, HOSE AND HOSE BRACKET, VINYL BUMPERGUARD AND STAINLESS STEEL WALL GUARDS. THE DRAIN SHALL BE LOCATED 12" TO THE CENTER. PROVIDE A CHECK VALVE IN THE HOT AND COLD WATER SUPPPLIES.	3/4"	3/4"	2"	2"
P-9	ELECTRIC WATER COOLER - BI LEVEL - ADA COMPLIANT: BI-LEVEL BARRIER FREE WATER COOLER WITH SINGLE COMPRESSOR, WATER SUPPLY, DRAIN AND ELECTRICAL CONNECTION. 8.0 GPH OF 50°F WATER AT 90°F AMBIENT AND 80°F INLET WATER, 18.8 GAUGE STAINLESS STEEL BASIN, 1/5 HP COMPRESSOR, 115V/1PH SURFACE MOUNTED TO THE WALL WITH CHILLER BELOW BOWL AND SIDE AND FRONT PUSH BAR OPERATORS. PROVIDE WITH RECEPTOR PRIMARY SENSOR ACTIVIATION BOTTLE FILLER. MOUNT SO THE BOTTOM OF THE LOWER COOLER IS AT 9" MINIMUM AFF WITH A CLEARANCE OF 27" MINIMUM FROM THE BOTTOM OF THE APRON OF THE BOWL TO THE FINISHED FLOOR. THE DIMENSION TO THE CENTERLINE OF THE LOWER COOLER BUBBLER SHALL BE 35". PROVIDE WITH STAINLESS STEEL CANE TOUCH APRON ATTACHED TO THE HI COOLER. PROVIDE UNIT WITH FILTER KIT AND FACTORY COVER (SIMILAR TO ELKAY MODEL EWF172 AND 98551C RESPECTIVELY SO THAT FILTER MAY BE MOUNTED IN A SEPARATE FACTORY COVERED ENCLOSURE BELOW THE DRINKING FOUNTAIN ITSELF.	3/4"	3/4"	2"	2"
P-10	WATER SUPPLY WALL BOX: 10"X 8-1/2" RECESSED WATER VALVE BOX, 18 GAUGE STEEL BOX WITH A SINGLE 1/2" WATER SUPPLY INLET, ANGLE STOP AND 1/4" COMPRESSION OUTLET.	3/4"	3/4"	2"	2"
P-11	WASHER BOX: GUY-GRAY MODEL NO. WB200HA, RECESSED 20 GAUGE METAL WASHER BOX WITH 1/2" HW AND CW BOTTOM HOSE CONNECTIONS AND 2" DRAIN. PROVIDE WITH WATER HAMMER ARRESTORS IN THE WATER SUPPLY LINES.	3/4"	3/4"	2"	2"
TP-1	TRAP PRIMER TYPE-1: PRECISIONS PLUMBING PRODUCTS PRIME-TIME OR EQUAL ELECTRONIC TRAP PRIMING MANIFOLD, WITH ATMOSPHERIC VACUUM BREAKER, PRE-SET 24 HOUR CLOCK, MANUAL OVERRIDE SWITCH, 120 VOLT SOLENOID VALVE WITH 120V/3WIRE CONNECTION. PROVIDE IN 12" X 12" X 4" SURFACE MOUNTED METAL CABINET. PROVIDE WITH 10 OPENING MANIFOLD, UNLISED MANIFOLD, DOPENING SHALL BE CAPPED. INSTALL UNITED AS REQUIRED BY MANUEACTURER.	3/4"	-	-	-

FA FREE AREA

	DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE									
					PRESS DROP					
MARK	MANUFACTURER	MODEL	SERVICE	GPM	(FT HEAD)	MOTOR HP	VOLTAGE	PHASE	RI	
RP-1	BELL AND GOSSET	PL-30	WH-1	5	25.00	0.083	115 V	1	ALL	

1. RATED FOR DOMESTIC WATER APPLICATIONS

2. TACO IS ACCEPTABLE 3. RATED FOR 225F AT 150 PSI.

				EXPANS	SION TAI	NK SCH	EDULE			
					PHYSICAL	SIZE (IN)		CAPACITY		
MARK	MANUFACTURER	MODEL#	TYPE	SERVICE	DIAMETER	HEIGHT	TANK VOLUME (GALS)	ACCEPTANCE VOLUME (GALS)	AIR CHARGE PRESSURE	REMARK
ET-1	BELL AND GOSSET	PT-12V	DIAPHRAGM	HOT WATER HEATER	12	15	4.4	3.20	66.00	ALL

1. RATED FOR DOMESTIC WATER APPLICATIONS 2. TACO IS ACCEPTABLE

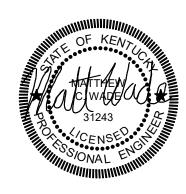
	SUMP PUMP SCHEDULE																
	MANUFACTUR				DIMENSION (IN)			INLET PIPE	OUTLET PIPE		MAXIMUM			ELECT	RICAL		
MARK	ER	MODEL	TYPE	LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	DIA (IN)	DIA (IN)	GPM	HEAD (FT)	MOTOR HP	FLA	MOCP	VOLTAGE	PHASE	REMARKS
SP-1	ZOELLER	6155	SUBMERSIBLE	7	10	12	37	4"	1.5"	77	44.00	0.5	10.5 A	15	115 V	1	ALL
✓ SP-2 ✓ ✓	ZOFITER	6155	SUBMERSTBLE		10	12	37	√ Ay √	1.5"	77	44.00	0.5	10.5 A	15	115 V	1	ALL

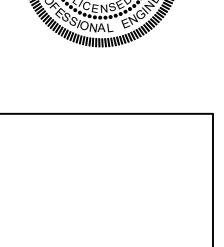
REMARKS: $\langle \uparrow \rangle$ 1. REFER TO DETAIL, SHEET M-401 FOR ADDITIONAL REQUIREMENTS FOR DUPLEX SUMP PUMPS AND ASSOCIATED REQUIRED SUMP BASIN.

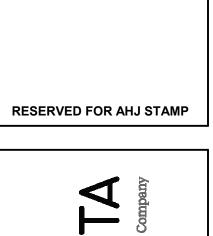
	TANKLESS WATER HEATER SCHEDULE - GAS														
	ALLOWABLE GAS PRESSURE RANGE ("														
MARK	MANUFACTURER	MODEL#	SERVICE	RECOVERY @ 100°F RISE (GPH)	NATURAL GAS INPUT (MBH)	✓ (WC) \	VOLTAGE	PHASE	REMARKS						
WH-1A	AO SMITH	ACT-199I-N	DOMESTIC HOT WATER	220	199.0	7-14	120 V	1	ALL						
WH-1B	AO SMITH	ACT-199I-N	DOMESTIC HOT WATER	220	199.0	7-14 //1	120 V	1	ALL						
WH-1C	AO SMITH	ACT-199I-N	DOMESTIC HOT WATER	220	199.0	7-14	120 V	1	ALL						
WH-1D	AO SMITH	ACT-199I-N	DOMESTIC HOT WATER	220	199.0	7-14	120 V	1	ALL						
DEMARKS.				•			•								

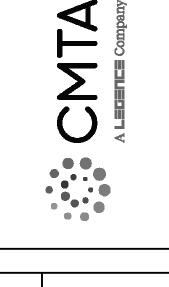
1. RATED FOR DOMESTIC WATER APPLICATIONS 2. PROVIDE WITH ACID NEUTRALIZATION KIT. 3. PROVIDE WITH ISOLATION VALVE KIT.

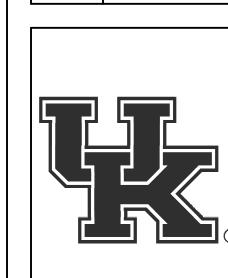








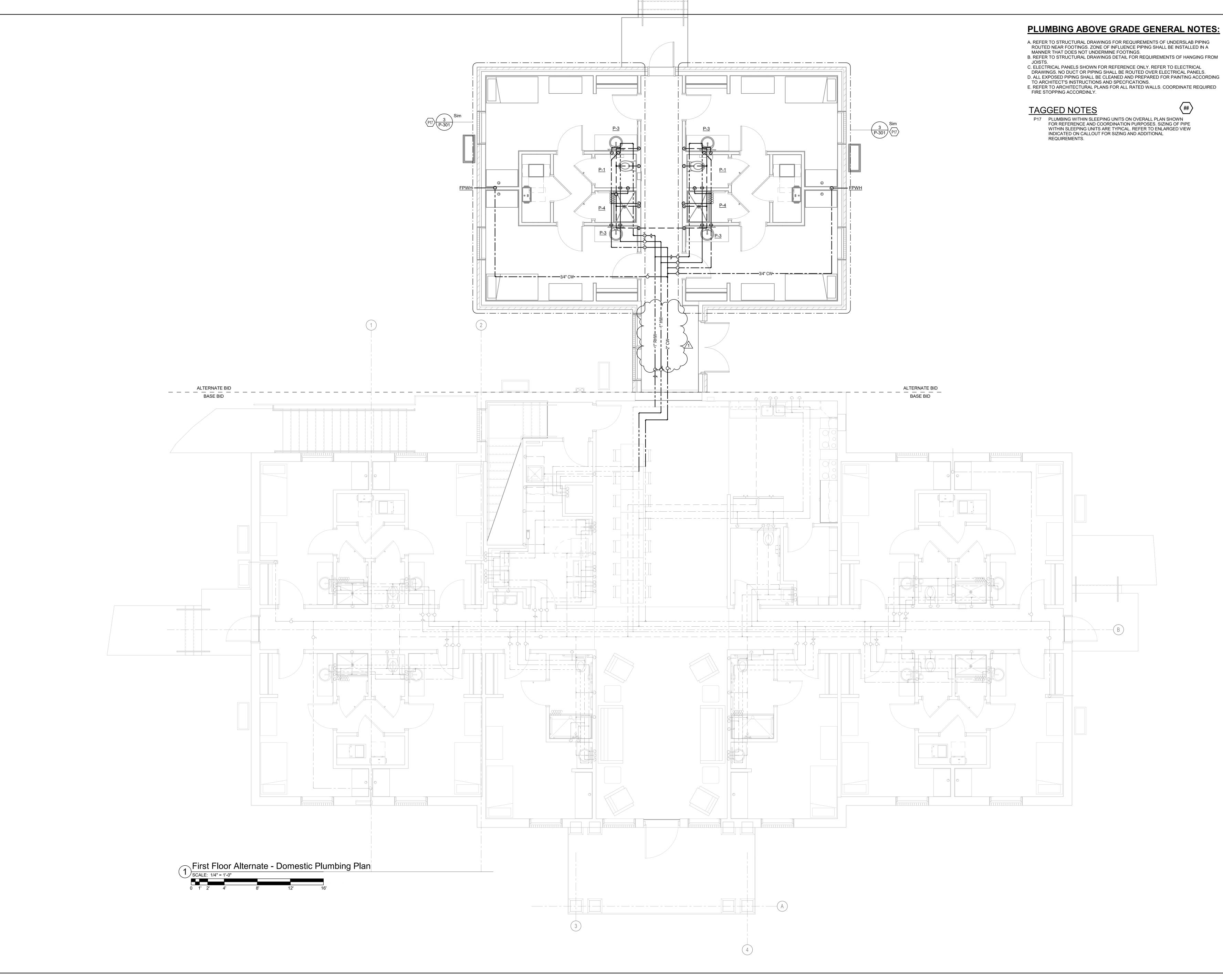




PLUMBING PROJECT 202225.04 10/27/2023 DATE **REVISIONS** CCK-2603.0-1-24 ADD 1 11/17/2

ELECTRONIC VERSION OF THESE
DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

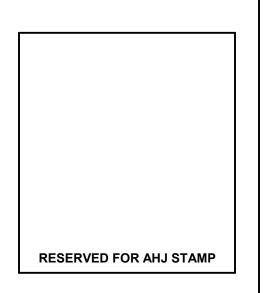
> **PLUMBING LEGEND**

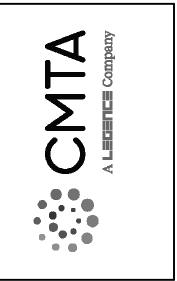














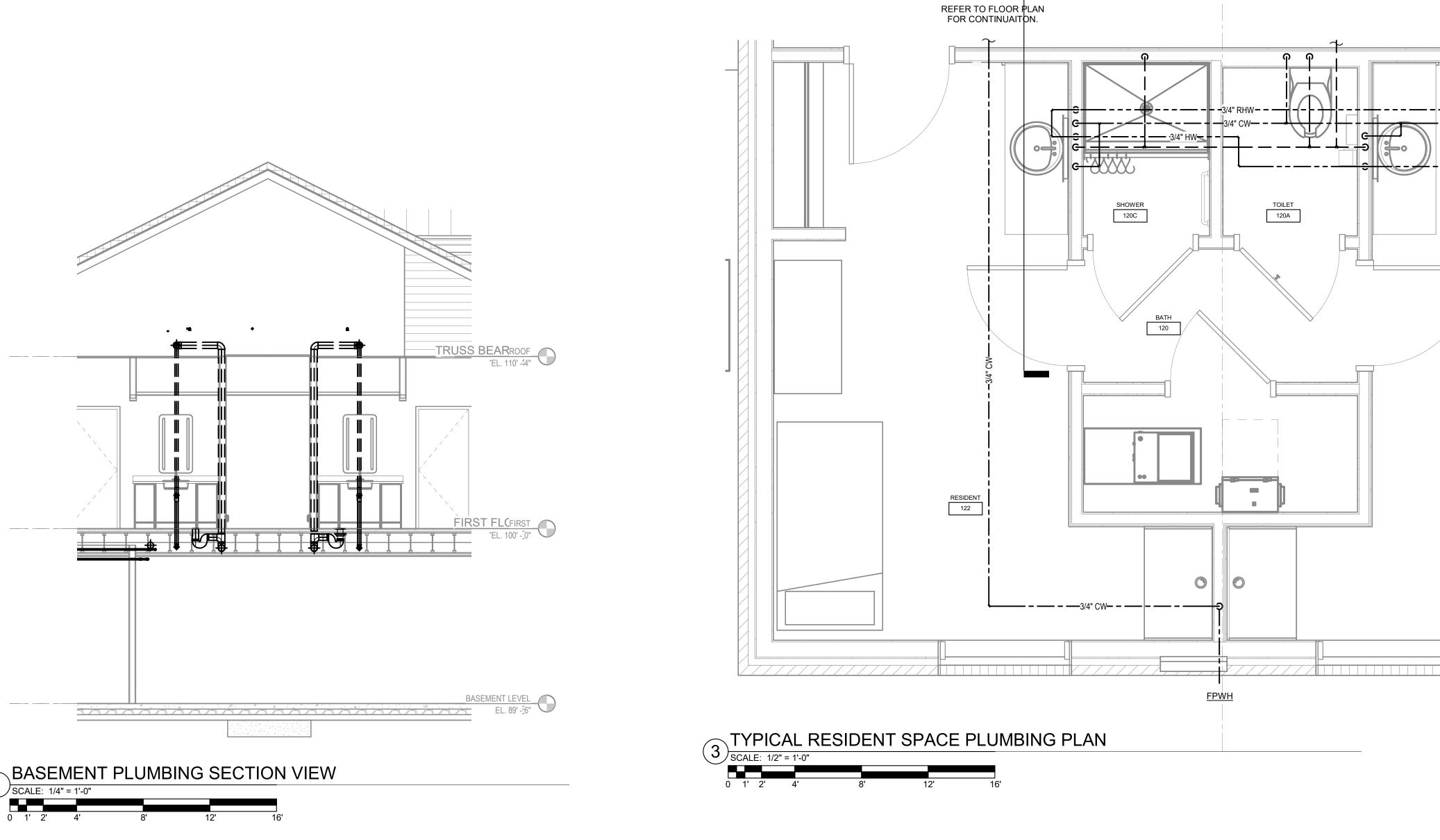
PLUMBING										
PROJECT	202225.04									
	40/07/0000									

DATE 10/27/2023 **REVISIONS** . Description Date CCK-2603.0-1-24 ADD 1 11/17/2

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FIRST FLOOR ALTERNATE -**PLUMBING PLAN**

P-201A





A. REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS OF UNDERSLAB PIPING ROUTED NEAR FOOTINGS. ZONE OF INFLUENCE PIPING SHALL BE INSTALLED IN A MANNER THAT DOES NOT UNDERMINE FOOTINGS.

B. REFER TO STRUCTURAL DRAWINGS DETAIL FOR REQUIREMENTS OF HANGING FROM

JOISTS.

C. ELECTRICAL PANELS SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS. NO DUCT OR PIPING SHALL BE ROUTED OVER ELECTRICAL PANELS.

D. ALL EXPOSED PIPING SHALL BE CLEANED AND PREPARED FOR PAINTING ACCORDING TO ARCHITECT'S INSTRUCTIONS AND SPECFICATIONS.

E. REFER TO ARCHITECTURAL PLANS FOR ALL RATED WALLS. COORDINATE REQUIRED FIRE STOPPING ACCORDINLY.

TAGGED NOTES

EQUIPMENT.

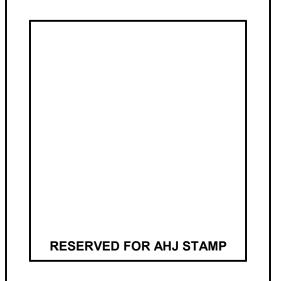
REFER TO FLOOR PLAN FOR CONTINUAITON.

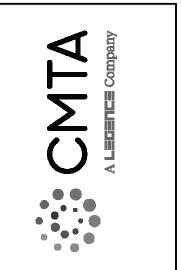
RESIDENT 118



P7 ELECTRONIC TRAP PRIMER MOUNTED ABOVE LAY-IN CEILING.
TRAP PRIMER TO SERVE FIXTURES INDICATED BY DASHED LINE.
P9 OWNER PROVIDED STACKABLE WASHER/DRYER. PROVIDE WITH
WASHER BOX AS INDICATED IN PLUMBING FIXTURE SCHEDULE.
COORDINATE FINAL MOUNTING HEIGHT WITH OWNER PROVIDED

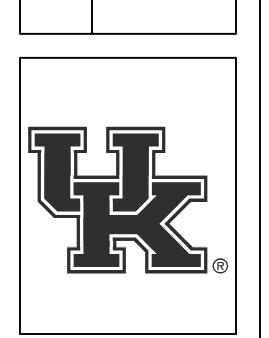






OORMITORY

GRADUATE DC



 PLUMBING

 PROJECT
 202225.04

 DATE
 10/27/2023

| 10/27/2023 | REVISIONS | No. | Description | Date | 1 | CCK-2603.0-1-24 ADD 1 | 11/17/2

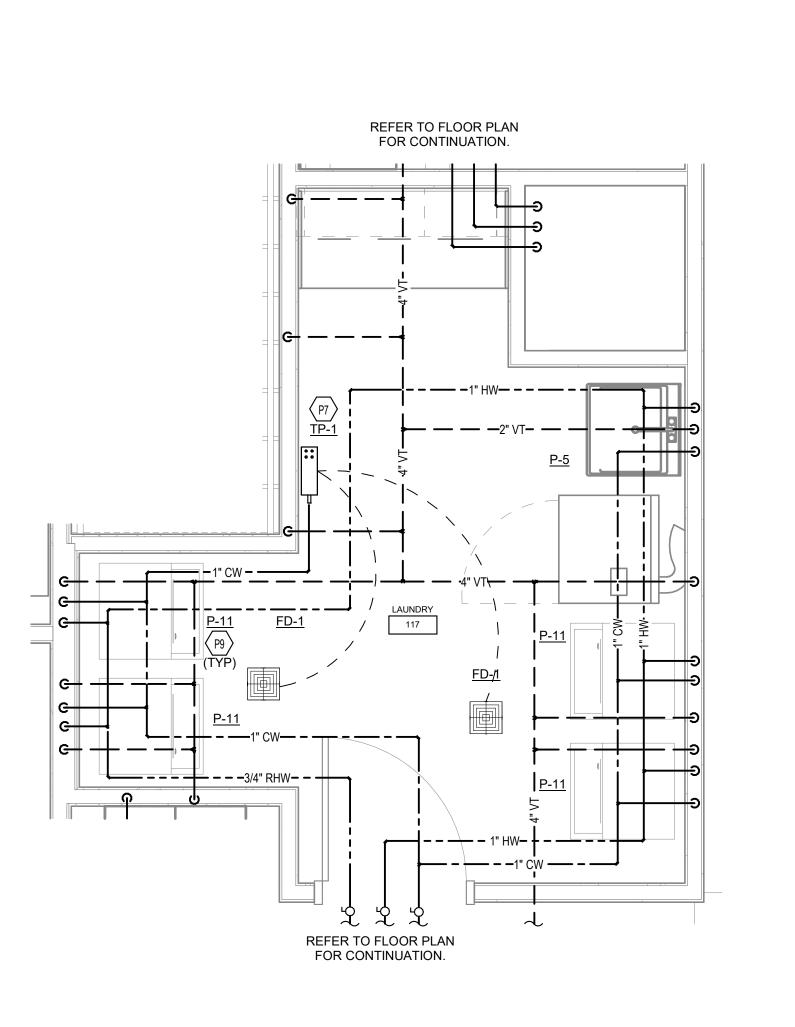
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PLUMBING
ENLARGED

P-301

PLANS

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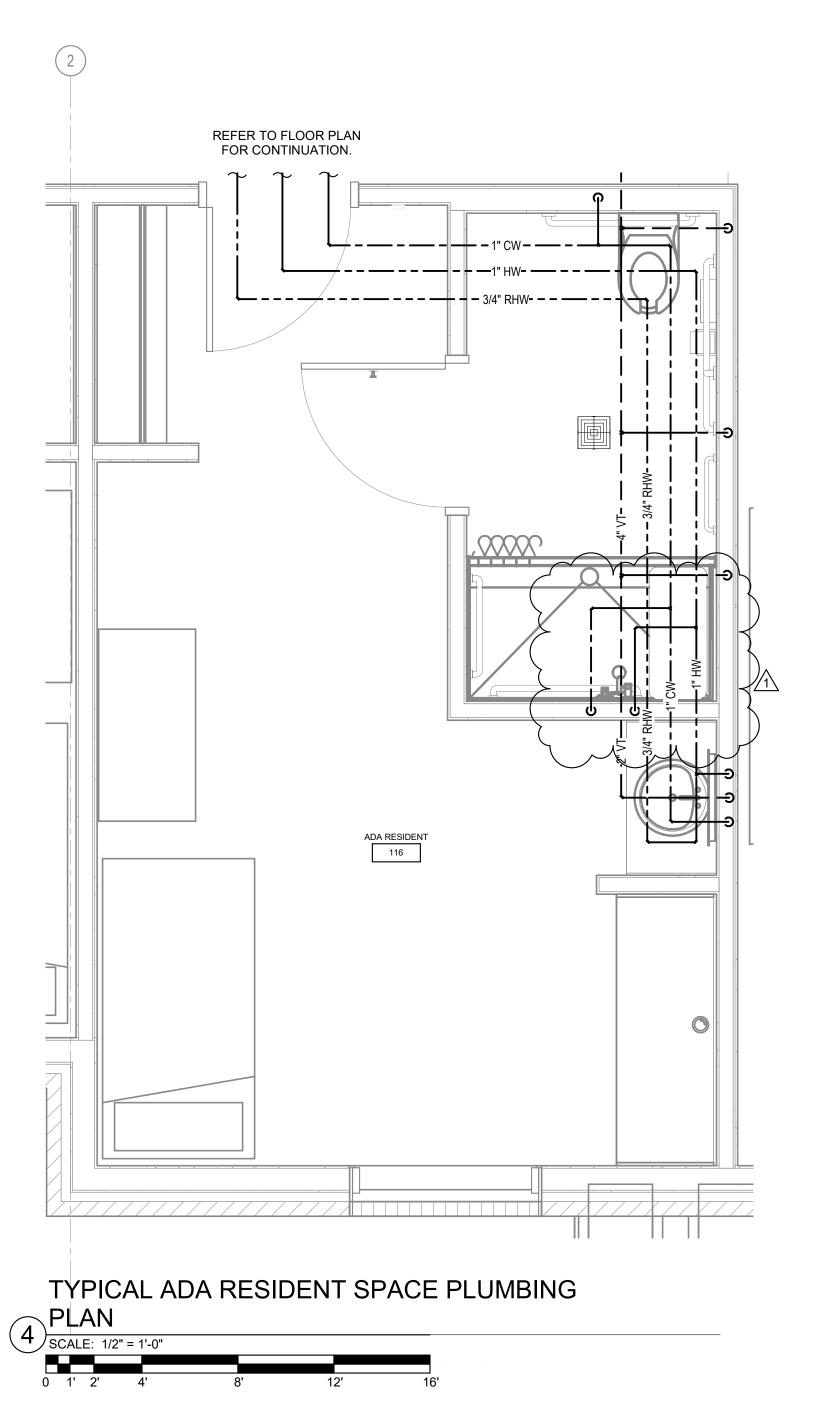


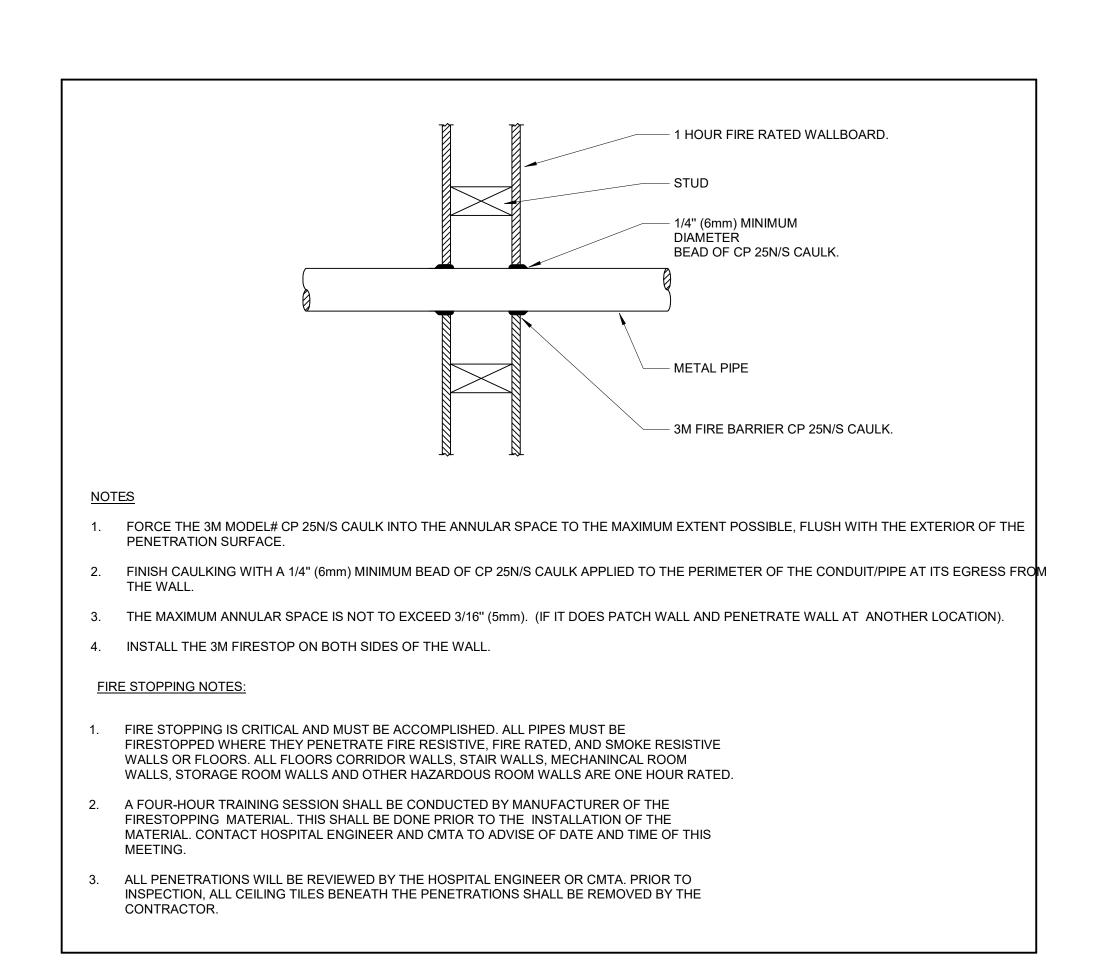
First Floor - Plumbing Plan - Enlarged Laundry

Room

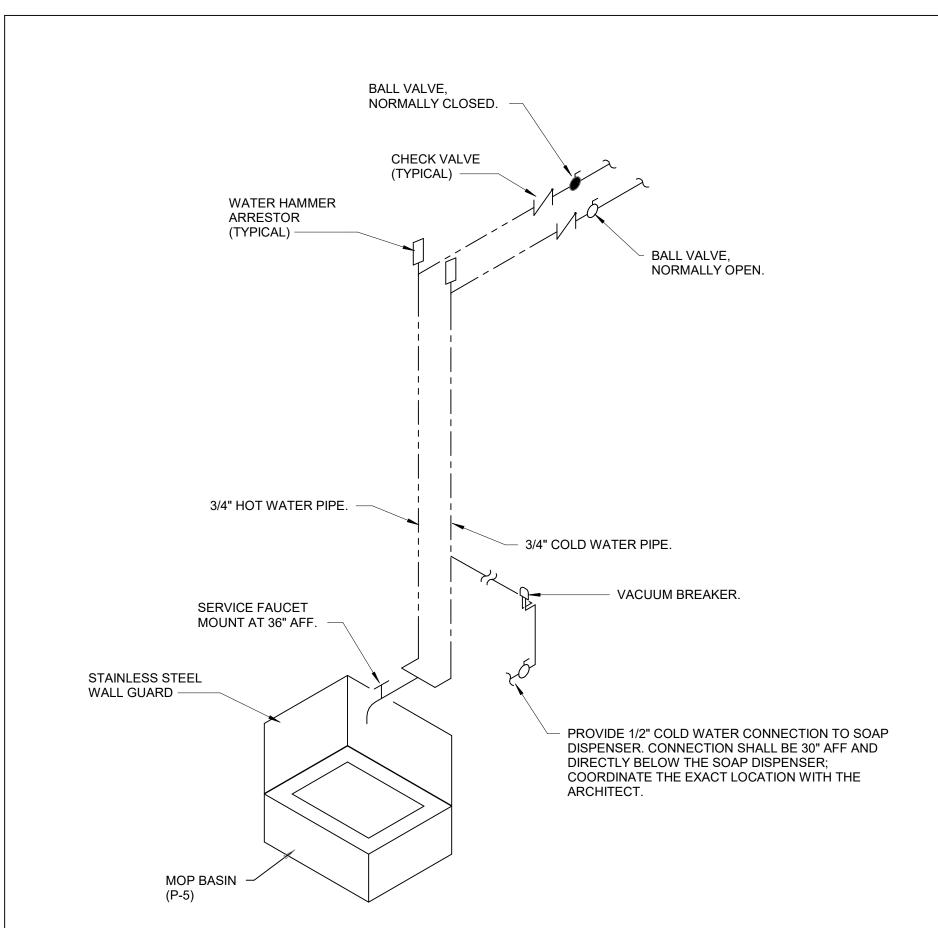
SCALE: 1/2" = 1'-0"

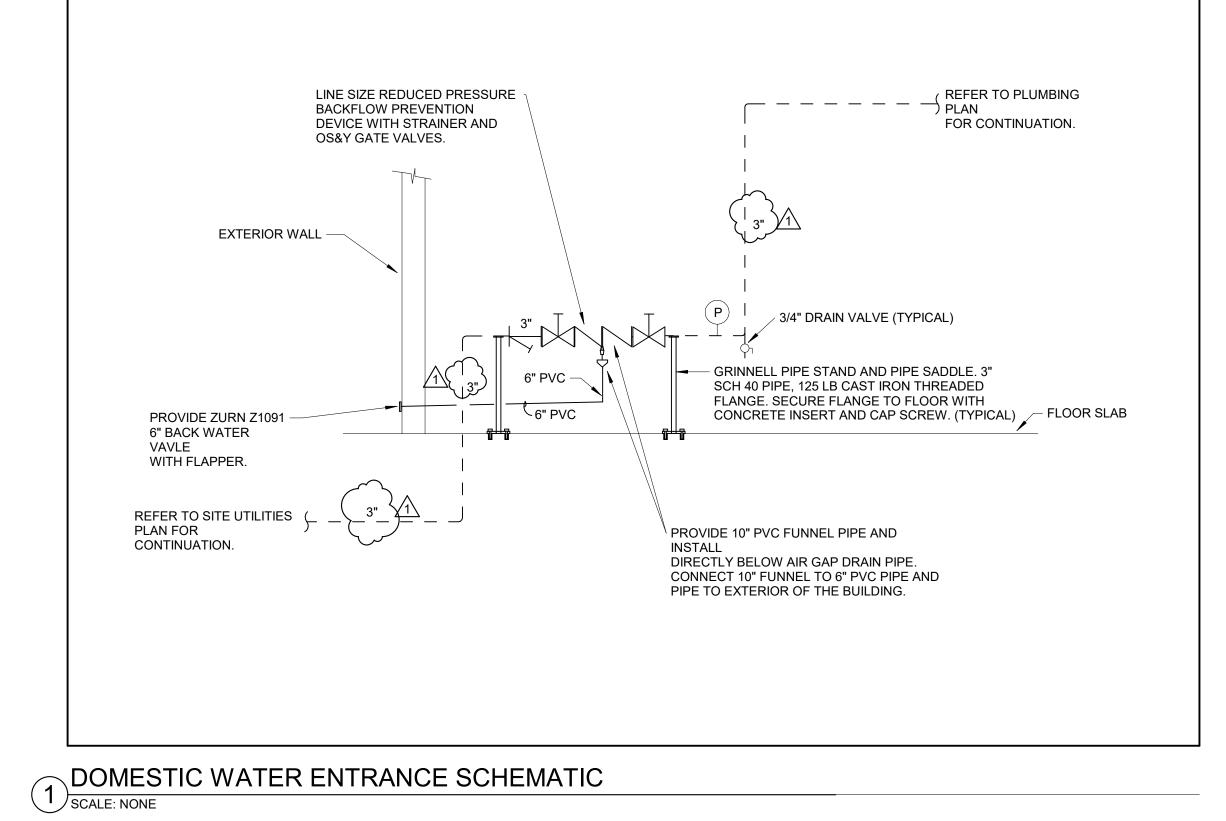
1 2' 4' 8' 12' 16'

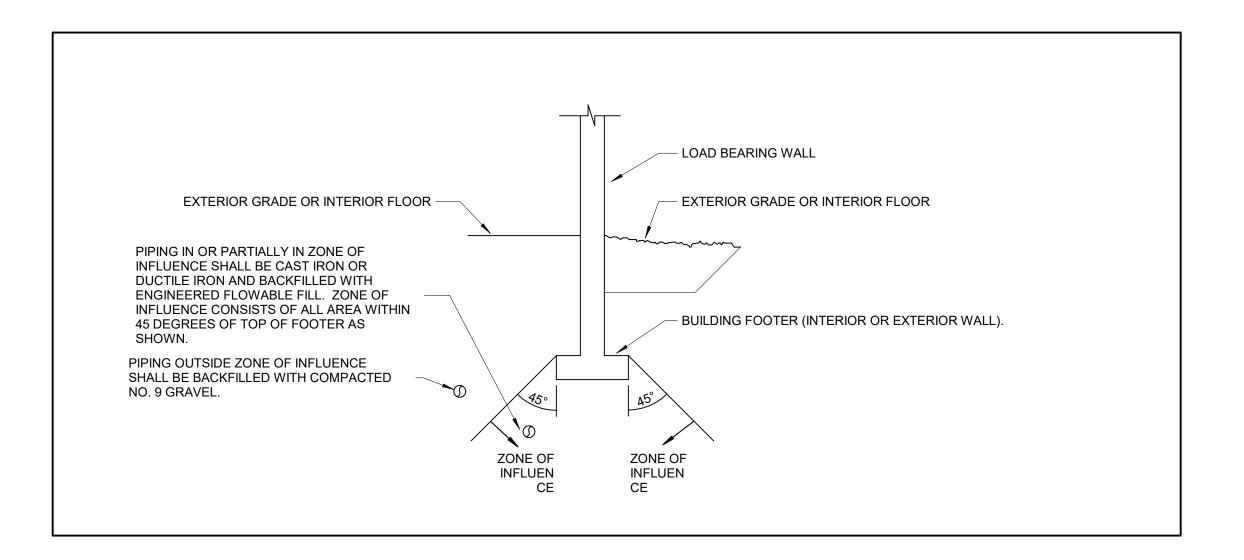




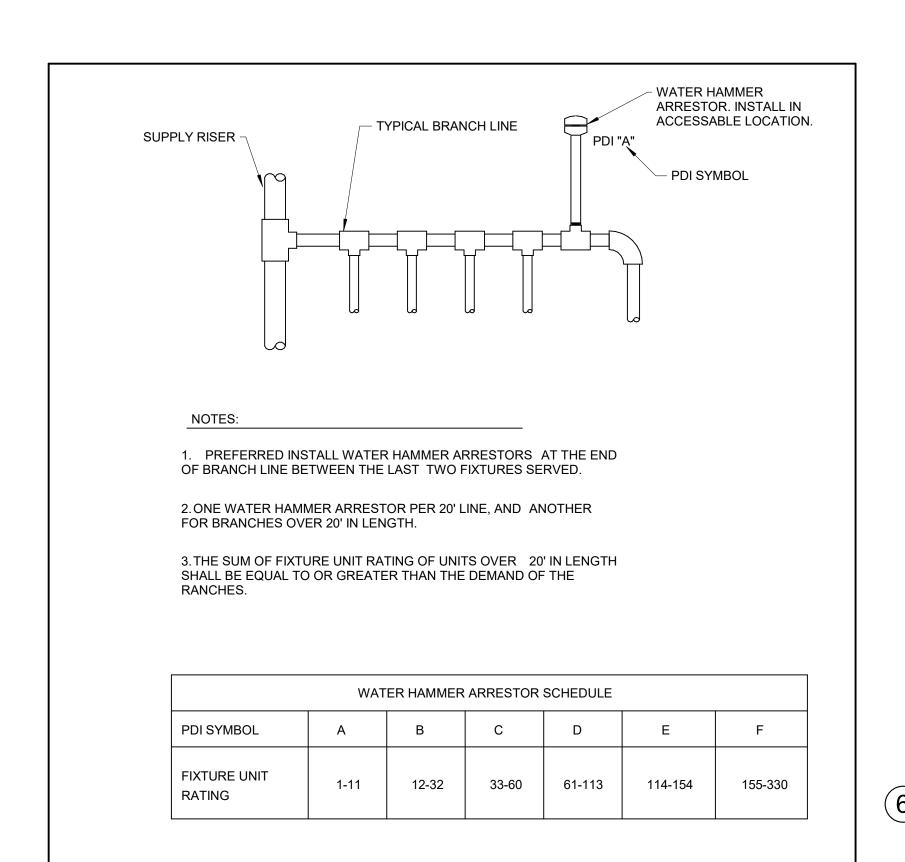


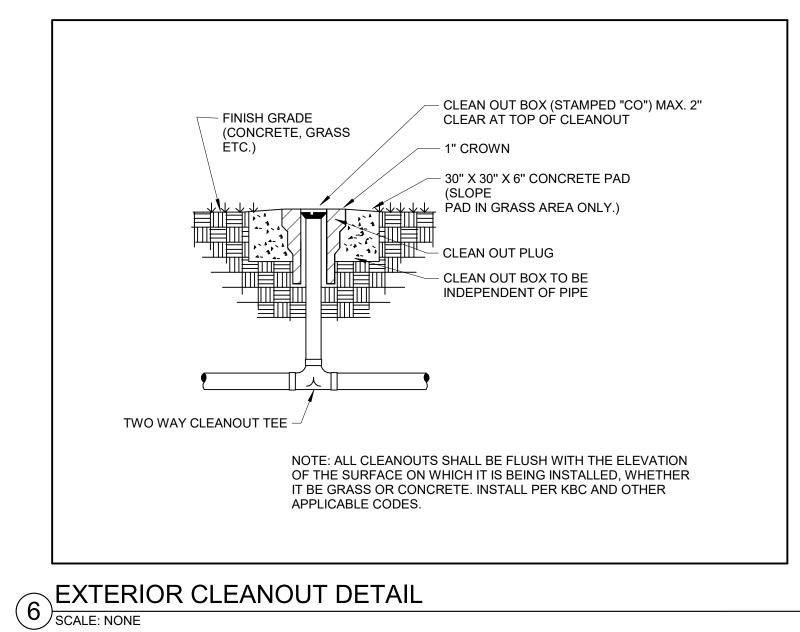






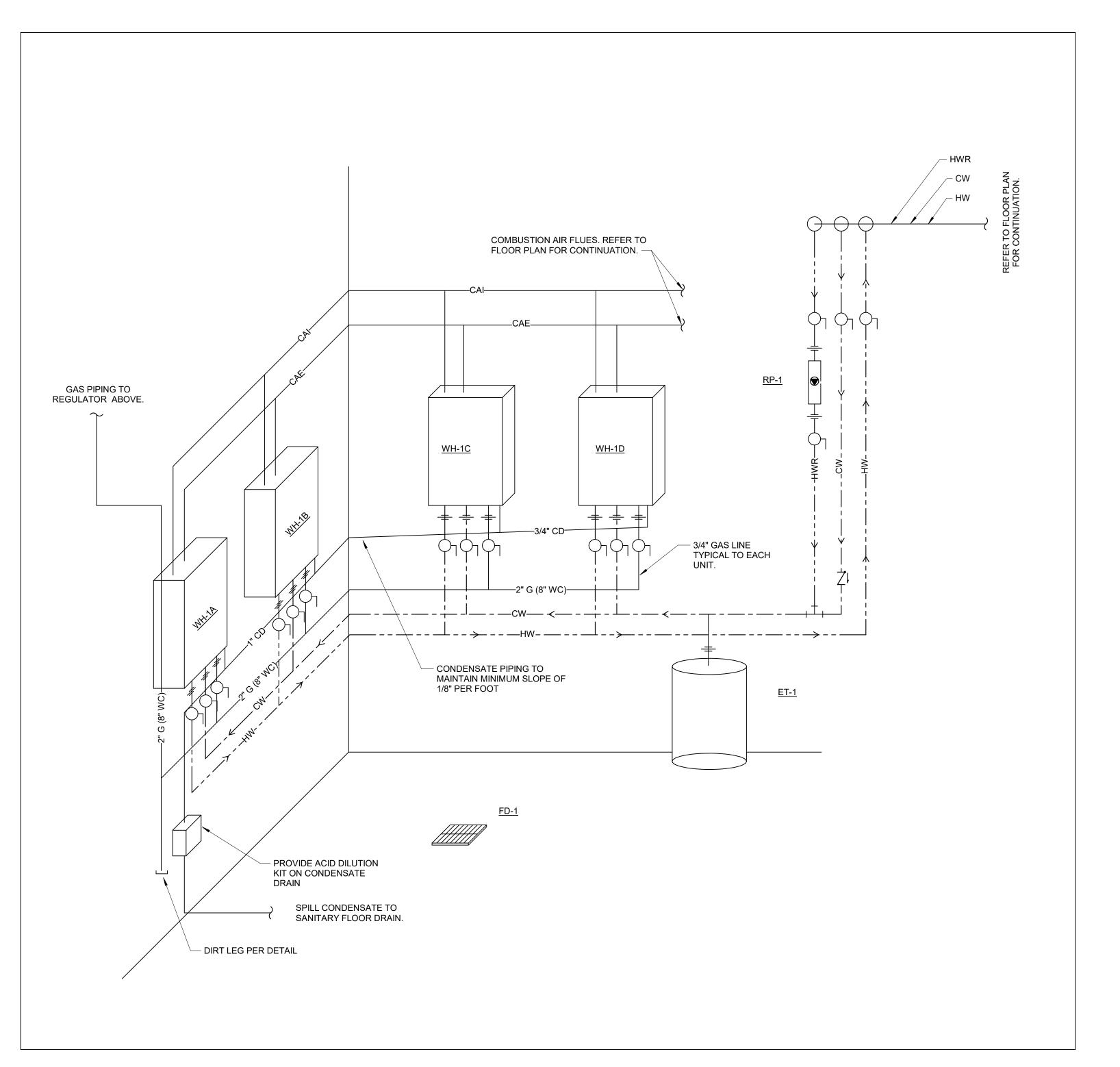
UNDERGROUND PIPING AND FOOTER COORDINATION 2 SCHEMATIC SCALE: NONE





MOP BASIC DETAIL

SCALE: NONE



OMESTIC HOT WATER HEATING DETAIL
SCALE: NONE

WATER HAMMER ARRESTOR INSTALLATION DETAIL

SCALE: NONE

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PLUMBING

10/27/2023

PROJECT 202225.04

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PLUMBING

DETAILS AND

SCHEMATICS

CCK-2603.0-1-24 ADD 1 | 11/17/2

RESERVED FOR AHJ STAMP

TYPICAL RESIDENT SPACE CONTROL SCHEMATIC SCALE: NONE

	ВІ	ВО	BV	AI	AO	AV	OVR	ALARMS	GRAPHIC	TREND
SF STATUS	X			/ "	7.0	7.0	OVIC	, LI II III C	YES	YES
SF COMMAND		X					Х		YES	NO
AUX. HEATING COMMAND		X					X		YES	NO
AUX. HEATING STATUS	X		X						YES	YES
AUX. HEATING ALARM	X		X						YES	YES
CU STATUS	X		X						YES	YES
CU COMMAND		X					X		YES	NO
ZONE DAMPER STATUS	X								YES	YES
ZONE DAMPER COMMAND		X					Х		YES	NO
BYPASS DAMPER STATUS				Х					YES	YES
BYPASS DAMPER COMMAND					Х		Х		YES	NO
DISCHARGE AIR TEMPERATURE				Х					YES	YES
OABR HUMIDITY				Х					YES	YES
OABR TEMPERATURE				Х					YES	YES
OAAR HUMIDITY				Х					YES	YES
OAAR TEMPERATURE				Х					YES	YES
EABR HUMIDITY				Х					YES	YES
EABR TEMPERATURE				Х					YES	YES
EAAR HUMIDITY				Х					YES	YES
EAAR TEMPERATURE				Х					YES	YES
RA HUMIDITY				Х					YES	YES
RA TEMPERATURE				Х					YES	YES
THERMOSTAT SETPOINT				Х					YES	YES
THERMOSTAT TEMPERATURE				Х					YES	YES
AHU FILTER PRESSURE DROP	Х								YES	YES
ERV OAF STATUS				Х					YES	YES
ERV OAF COMMAND		Х					Х		YES	NO
ERV EAF STATUS				Х					YES	YES
ERV EAF COMMAND		Х					Х		YES	NO
ERV DAMPER STATUS	Х								YES	YES
ERV DAMPER COMMAND		Х					Х		YES	NO
ERV FILTER PRESSURE DROP	Х								YES	YES

SEQUENCE OF OPERATION

6. Supply Air Temperature Controls - Emergency Heating

CU COMMAND

CU STATUS

A. The outlined system is the sole system responsible for conditioning and ventilating their respective spaces. The conditioning and ventilation system at hand is a split system unit with a coupled energy recovery ventilator. Each system will be equipped with a zone-damper control system to allow temperature control in each served space.

B. The split system's indoor unit (AHU) will be equipped with an auxiliary integral electric heating coil. The auxiliary heating coil is intended to serve as back-up heating only and is controlled exclusivly by its associated indoor unit (AHU) with manufacturer provided controls. It is the controls contractor's responsibility to ensure proper integration and functionality of the auxiliary heating coil as well as all field-installed wiring as required to meet factory sequence of operation.

C. The zone damper system package includes a manufacturer provided control module. The provided control module is responsible only for the modulation of the three (3) zone

ADDITIONAL REQUIREMENTS. NO INTERFACE

REQUIRED WITH LIGHTING CONTROL SYSTEM.

NOTE: THERMOSTATS TO BE PROVIDED BY EQUIPMENT MANUFACTURER.

dampers and the single (1) bypass damper based upon the satisfaction of the three (3) thermostats outlined in following sequence.

D. Manual overides shall be implemented to provide the owner full control over the current state of the system. The owner shall have the ability to command the system to enter any of the provided modes at will, overriding input from occupancy sensors (provided by controls contractor) or thermostat demand.

E. Each air handling unit is provided with variable speed compressors and different modes of capacity. The controls contractor shall coordinate with the manufacturer and test and balance contractor during equipment startup to ensure that the appropriate heat pump speed and airflows have been set to match the required load of each space. Unit speed setting shall be an available point pulled into the control system and made editable within the control system of user-input.

2. Zone Damper Control
A. The system is to operate based upon the satisfaction of three (3) thermostats placed within individual spaces indicated by the plan drawings. Each thermostat shall serve an individual and singular zone damper with binary (open/closed) functionality, where the damper's position is determined from the satisfaction of the respective space's thermostat setpoint. If a space's respective thermostat is satisfied, the zone damper serving the space shall move to the closed position. If a space's thermostat is not satisfied, the respective zone damper shall move to the open position.
B. The bypass damper is to modulate as required to accomdate the positions of each of the three (3) zone dampers. In the event that all three (3) zone dampers are in the opened position, the bypass damper shall be fully closed. If any of the three (3) zone dampers switch to the closed position, the bypass damper shall modulate to a proportionally opened position to accomodate the change in demand of flow. Therefore, the bypass damper shall be 33% open for the closure of one (1) zone damper, and 66% open for the closure of

two (2) zone dampers. In the event that all three (3) thermostats are satisfied, all zone dampers shall move to the opened position and the respective AHU shall follow the ventilation sequence outlined below. Coordinate the balance and operation of dampers with test and balance contractor.

C. All three (3) zone dampers and the singular bypass damper shall be controlled by the manufacturer provided control module. Said control module shall be responsible for modulating all dampers within the system in occordance to the sequence outlined above. It is the controls contractor's responsibility to ensure proper integration of the following sequences in conjunction to the provided control package.

sequences in conjunction to the provided control package.

3. Supply Air Temperature Controls - Cooling

A. Occupied temperature setpoint in cooling shall be 72 degrees (adj.) with a deadband of 2 degrees (adj.). Unoccupied temperature setpoint in cooling shall be 78 degrees (adj.) with a deadband of 2 degrees (adj.). Occupancy to be determined by occupancy sensor provided by controls contractor in the ceiling of each occupied space for each unit.

Provide occupancy sensor with user override.

B. If occupancy is detected for any room on an applicable zone, the fan shall run and all dampers shall be open unless modulating to maintain temperature control. If occupancy is not detected in any zone, the default mode for the fan shall be off.

C. The system shall utilize a tally system to choose its operating mode. If majority vote is cooling, the system shall enable the outdoor condensing unit to stage onboard compressors as required to meet the required unit discharge air temperature of 55°F (adj.).

E. If there is a demand opposing majority vote, the zone damper serving the respective space shall close until the space's thermostat is satisfied or proves majority vote.
4. <u>Dehumidification Mode</u>
A. The thermostat shall be provided with integral humidity sensor. When realtive humidity >65% (adj.), dehumidification mode shall be enabled per onboard factory sequence.
B. During dehumidification mode, fan speed shall be set to low.
C. Provide manual override for dehumidification mode from the building control graphics.

D. If majority demand for cooling is met, the individual spaces whose demand matches majority shall be served following the Zone Damper Control procedure.

5. Supply Air Temperature Controls - Heating
A. Occupied temperature setpoint in heating shall be 70 degrees (adj.) with a deadband of 2 degrees (adj.). Unoccupied temperature setpoint in cooling shall be 60 degrees (adj.) with a deadband of 2 degrees (adj.). Occupancy to be determined by occupancy sensor provided by controls contractor in the ceiling of each occupied space for each unit. Provide occupancy sensor with user override.

B. If occupancy is detected for any room on an applicable zone, the fan shall run and all dampers shall be open unless modulating to maintain temperature control. If occupancy is not detected in any zone, the default mode for the fan shall be off.

not detected in any zone, the default mode for the fan shall be off.

C. The system shall utilize a tally system to choose its operating mode. If majority vote is heating, the system shall enable the outdoor condensing unit to stage onboard compressors as required to meet the required unit discharge air temperature of 90°F (adj.).

D. If majority demand for heating is met, the individual spaces whose demand matches majority shall be served following the Zone Damper Control procedure.

E. If there is a demand opposing majority vote, the zone damper serving the respective space shall close until the space's thermostat is satisfied or proves majority vote.

A. In the event that the system is operating in heating mode and outside air temperature falls below -13°F (adj.), the system shall modulate the integrated auxiliary heating coil to reach a discharge air temperature of 90°F (adj.).
 B. If the auxiliary heating coil is activated, the system shall continue to follow standard heating and zone damper control procedures as outlined above and the energy recovery ventilator shall continue to operate at its full prescribed capacity.
 5. Energy Recovery Ventilator Control

A. The energy recovery ventilation unit utilizes two (2) independent fans, each with stand-alone controls. One fan shall serve as the exhaust fan and the remaining fan shall as the outside air fan.

B. The controls contractor is to provide an occupancy sensor ceiling mounted within the dorm room of each space. This occupancy sensor shall determine occupancy for each room. Should occupancy be established for any room within the applicable zone, the energy recovery unit shall be on. In the event that occupancy detects no occupancy for any room within the applicable zone, the energy recovery unit shall be off.

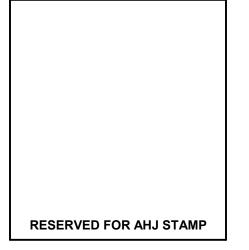
8. <u>Filter Monitoring</u>
A. The indoor unit shall be provided with an analog input which tracks the actual pressure drop across the filter. Coordinate alarm such that it is adjustable by the user. Initial setpoint to be at 0.5" WC (adj.) greater than the initial filter pressure drop with clean filters. Coordinate with test and balance contractor to obtain this setpoint and program accordingly.

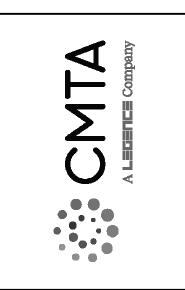
C. The energy recovery ventilator utilizes two (2) motorized control dampers that shall operate on binary functionality. Under any instance of demand for ventilation both control

dampers shall be in the open position. If the system enters unoccupied mode or is shut off, both control dampers shall close fully.

J architects







GRADUATE DORMITORY

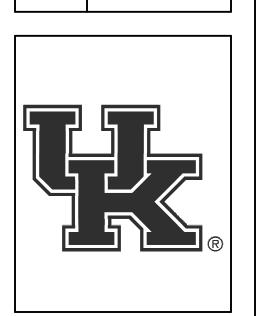
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MECHANICAL
PROJECT 202225.04

 DATE
 10/27/2023

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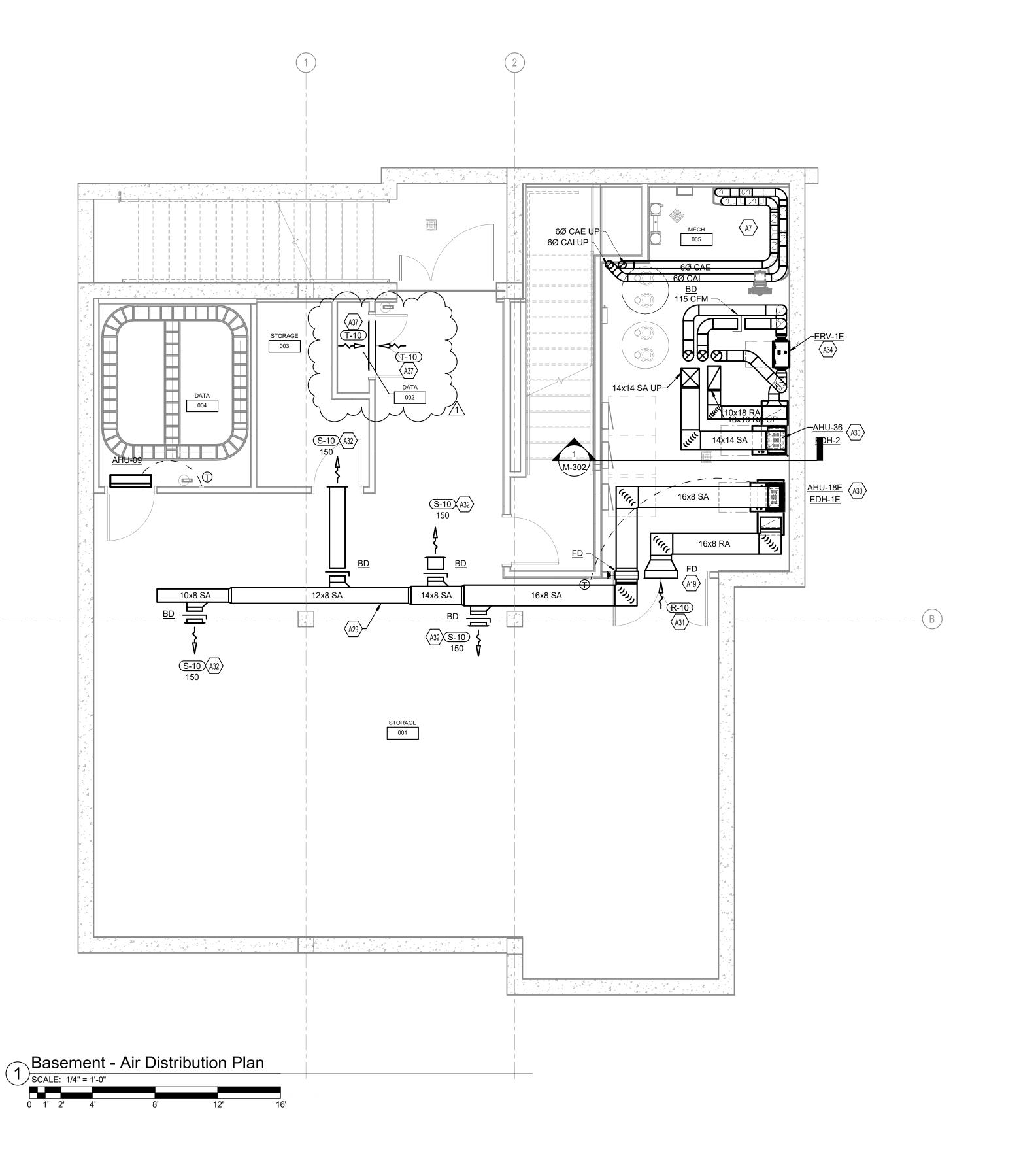
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MECHANICAL CONTROLS

IC-102



GENERAL NOTES:

A. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL MANUAL BALANCING DAMPERS IN THE DUCTWORK PER RUNOUT DETAIL FOR ALL GRILLES, REGISTERS, AND DIFFUSERS WHICH LIST A CFM. IN ALL CASES DAMPERS ARE TO BE INSTALLED IN AN ACCESSIBLE LOCATION. B. REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS OF HANGING FROM JOISTS.

C. ELECTRICAL PANELS SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS. NO DUCT OR PIPING SHALL BE ROUTED OVER ELECTRICAL PANELS. D. REFER TO ARCHITECTURAL PLANS FOR ALL RATED WALLS. COORDINATE REQUIRED FIRESTOPPING ACCORDINLY.

TAGGED NOTES



A7 PLUMBING EQUIPMENT SHOWN FOR REFERENCE AND COORDINATION PURPOSES ONLY. REFER TO PLUMBING DRAWINGS FOR CONTINUATION.

SCHEDULES FOR HEATER SELECTION.

RATED WALL PENETRATION. BALANCE RETURN GRILLED AS A29 SUPPLY AIR MAIN EXPOSED AND RAN AS TIGHTLY TO CEILING AS

POSSIBLE. A30 INDICATED AIR HANDLER SHALL BE PROVIDED WITH AUXILIARY DUCT HEATER MOUNTED INTEGRAL TO UNIT. AUXILIARY DUCT HEATER SHALL BE PROVIDED WITH A DEDICATED POWER SUPPLY SEPARATE FROM AIR HANDLER. REFER TO MECHANICAL

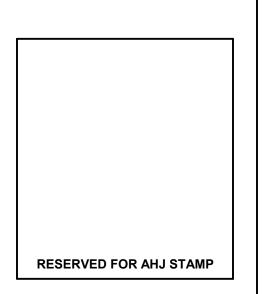
A19 PROVIDE FLUSH-MOUNTED FIRE DAMPER AND RETURN GRILLE AT

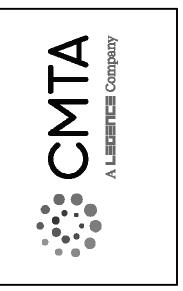
A31 BOTTOM OF RETURN GRILLE AT APPROXIMATLY 8'-0" A.F.F. A32 BOTTOM OF SUPPLY GRILLE AT APPROXIMATLY 7'-5" A.F.F.

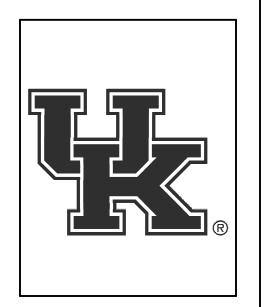
A34 WALL MOUNTED ERV. PROVIDE NECESSARY HARDWARE (FASTENERS, ETC) TO ENSURE PROPER AND SECURE MOUNTING. FIELD COORDINATE EXACT PLACEMENT WITH SURROUNDING STRUCTURE, EQUIPMENT, ETC. TYPICAL.

A37 MOUNT TRANSFER AIR GRILLE, BACK TO BACK, CENTERED ABOVE DOOR, 7'-6" AFF TO BOTTOM OF GRILLE.









MECHANICAL

PROJECT 202225.04

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BASEMENT -**DISTRIBUTION**

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RUNOUT SCHEDULE DUCT BRANCH SIZE E-01

E-01F E-10 REFER TO DRAWING R-10 REFER TO DRAWING S-1F S-2F S-3F S-10 T-10

KEY PLAN

GENERAL NOTES:

- A. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL MANUAL BALANCING DAMPERS IN THE DUCTWORK PER RUNOUT DETAIL FOR ALL GRILLES, REGISTERS, AND DIFFUSERS WHICH LIST A CFM. IN ALL CASES DAMPERS ARE TO BE INSTALLED IN AN ACCESSIBLE LOCATION. B. REFER TO STRUCTURAL DRAWINGS FOR REQUIREMENTS OF HANGING
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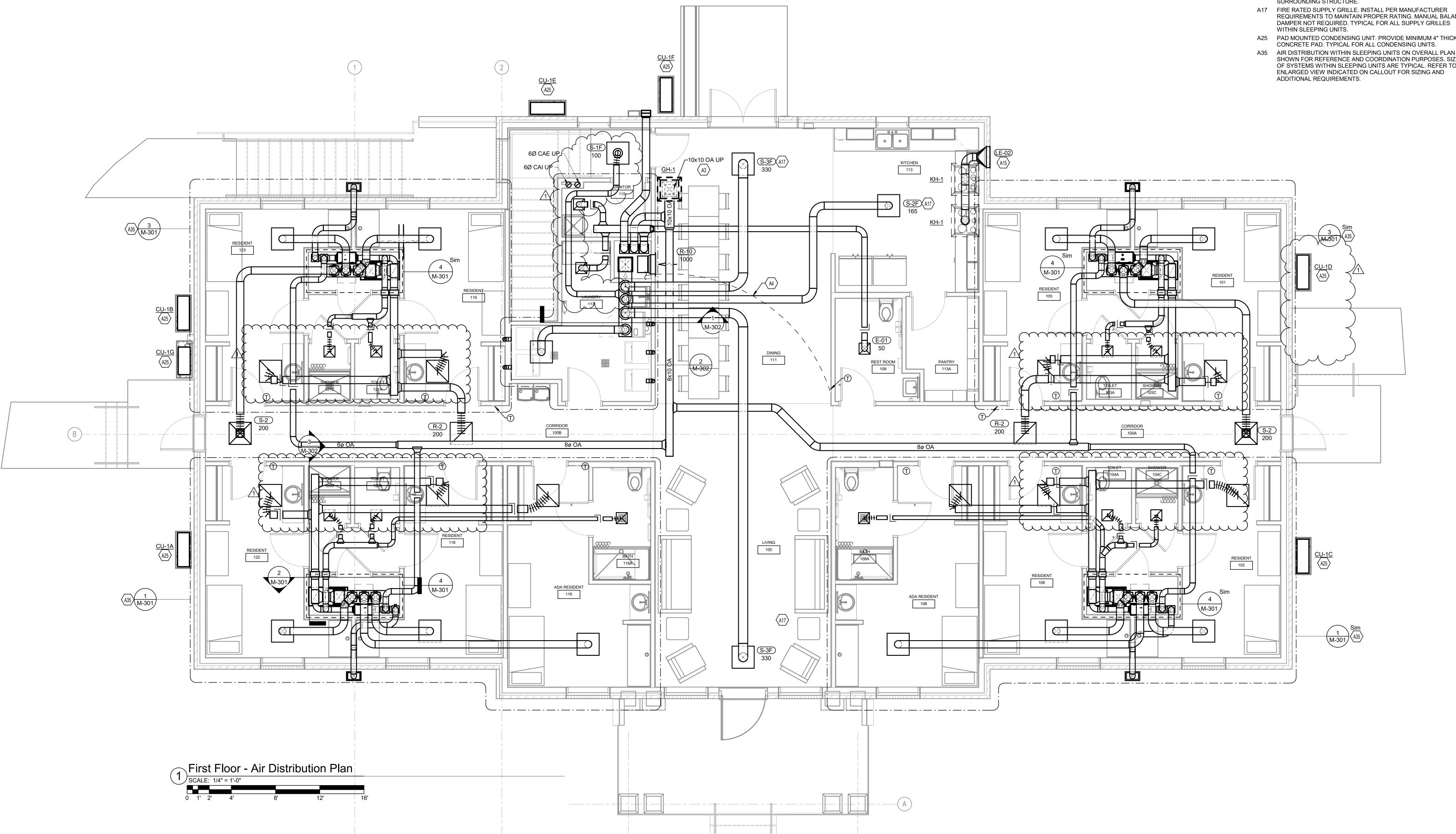
COORDINATE REQUIRED FIRESTOPPING ACCORDINLY.

TAGGED NOTES

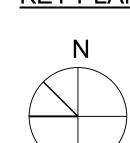
FROM JOISTS.



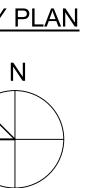
- A3 OUTSIDE AIR DUCT UP THRU ROOF TO GRAVITY HOOD. SEAL DUCT PENETRATION WEATHERTIGHT. A4 THERMOSTAT CONTROLS DOWN IN CHASE TO MECHANICAL ROOM BELOW. REFER TO BASEMENT AIR DISTRIBUTION PLAN FOR
- CONTINUATION. A11 CONDENSATE PIPING BELOW-GRADE TO CATCH BASIN. REFER TO SITE-CIVIL PLANS FOR CONTINUATION.
- A15 STOVE HOOD EXHAUST LOUVER TO BE MOUNTED AT APPROXIMATLY 7'-6" A.F.F. PROVIDE BACKDRAFT DAMPER AND BIRD SCREEN. FIELD VERIFY EXACT MOUNTING HEIGHT WITH SURROUNDING STRUCTURE.
- A17 FIRE RATED SUPPLY GRILLE. INSTALL PER MANUFACTURER REQUIREMENTS TO MAINTAIN PROPER RATING. MANUAL BALANCE
- WITHIN SLEEPING UNITS. A25 PAD MOUNTED CONDENSING UNIT. PROVIDE MINIMUM 4" THICK
- A35 AIR DISTRIBUTION WITHIN SLEEPING UNITS ON OVERALL PLAN SHOWN FOR REFERENCE AND COORDINATION PURPOSES. SIZING OF SYSTEMS WITHIN SLEEPING UNITS ARE TYPICAL. REFER TO ENLARGED VIEW INDICATED ON CALLOUT FOR SIZING AND



JNOI	UT SCHEDULE
ARK	DUCT BRANCH SIZE
-01	6"
01F	6"
-10	6"
E-02	REFER TO DRAWING
₹-2	8"
-10	REFER TO DRAWING
-1F	6"
S-2	8"
-2F	8"
-3F	10"

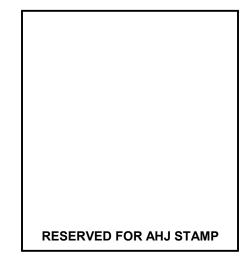


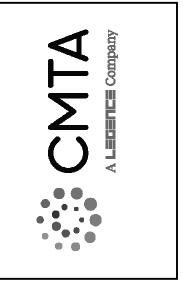
KEY PLAN











MECHANICAL

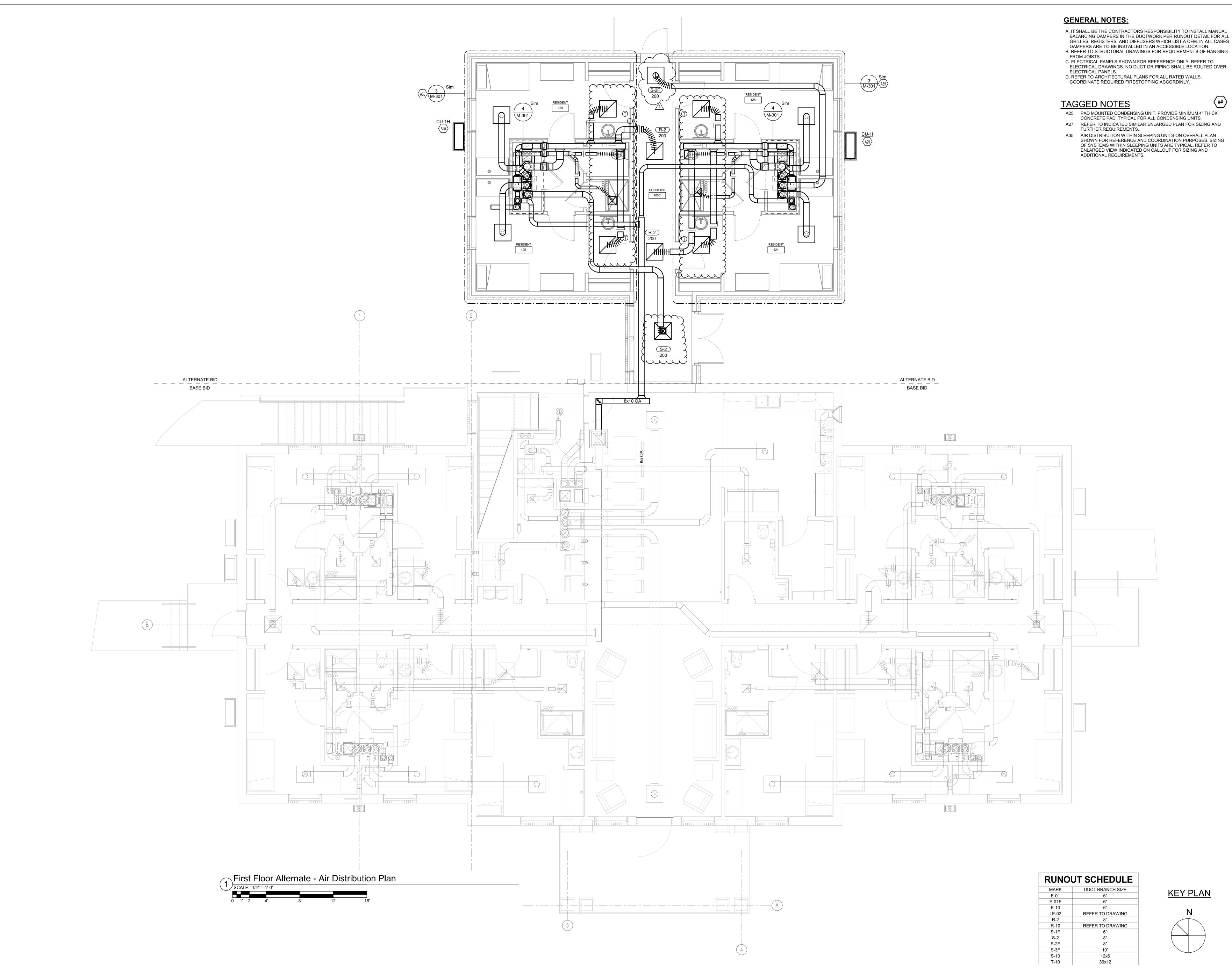
PROJECT 202225.04 DATE 10/27/2023

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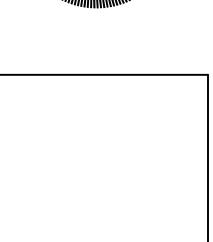
FIRST FLOOR -DISTRIBUTION

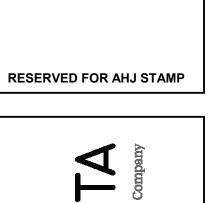
M-102

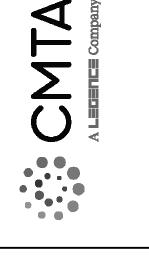


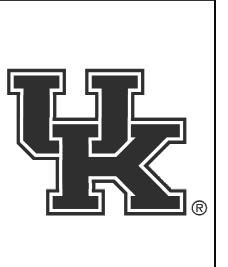
- C. ELECTRICAL PANELS SHOWN FOR REFERENCE ONLY. REFER TO









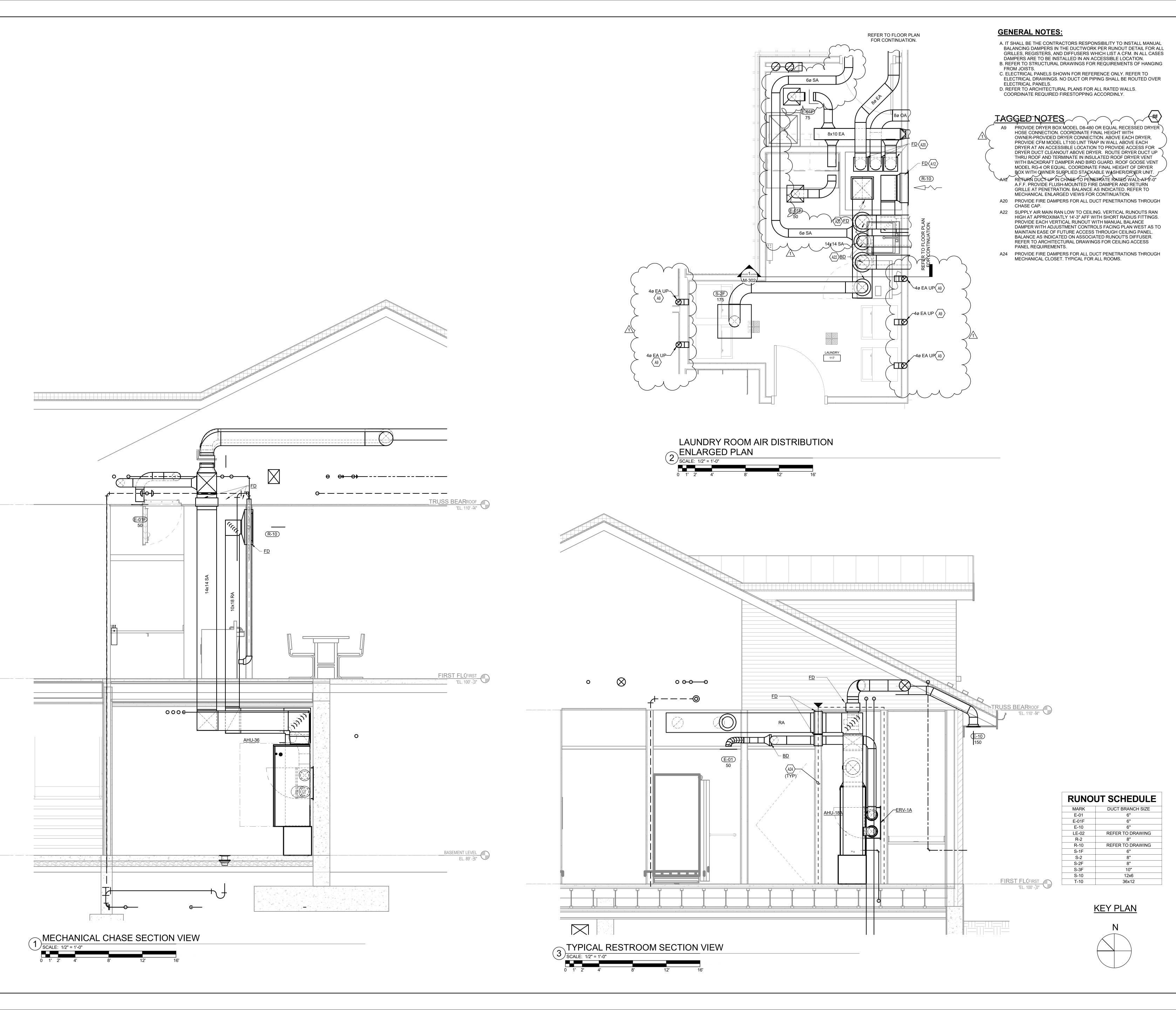


MECHANICAL PROJECT 202225.04

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO REUSE THESE DRAWINGS - IN ELECTRONIC OR ANY OTHER FORMAT - IN WHOLE, OR IN PART, FOR ANY PURPOSE OTHER THAN FOR THE PROJECT. THE CLIENT AGREES NOT TO TRANSFER THESE ELECTRONIC FILES TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ARCHITECT. THE CLIENT FURTHER AGREES TO WAIVE ALL CLAIMS AGAINST THE ARCHITECT RESULTING IN ANY WAY FROM ANY UNAUTHORIZED CHANGES TO OR REUSE OF THE ELECTRONIC FILES FOR ANY OTHER PROJECT BY ANYONE OTHER THAN THE ARCHITECT.

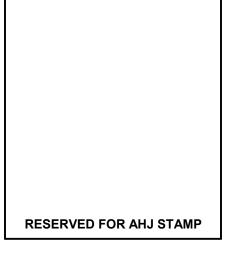
FIRST FLOOR **ALTERNATE -DISTRIBUTION**

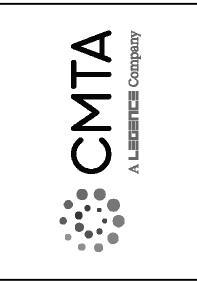
> **PLAN M-102A**











ADUATE DORMITORY

Representation of the contract of the contract

 MECHANICAL

 PROJECT
 202225.04

 DATE
 10/27/2023

 REVISIONS

 No.
 Description
 Date

 1
 CCK-2603.0-1-24 ADD 1
 11/17/2

JRA ARCHITECTS HAS RETAINED AN
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TO OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE
OTHER THAN THE ARCHITECT.

MECHANICAL ENLARGED PLANS

M-302

	SPLIT SYSTEM INDOOR UNIT SCHEDULE														
					DIN	MENSIONS	(IN.)	MINIMUM	ELECT	RICAL					
MARK	MANUF.	MODEL#	SERVICE	LOCATION	LENGTH	WIDTH	HEIGHT	AIRFLOW (CFM)	VOLTAGE	PHASE	REMARKS				
AHU-09	LG	LSN090HSV5	DATA 004	DATA 004	32	6	12	194	240 V	1	2,4,6				
AHU-18A	LG	LVN181HV4	101/103/105	MECH CLOSET 135B	18	21	49	480	240 V	1	1,2,4				
AHU-18B	LG	LVN181HV4	100W/102/104	MECH CLOSET 124B	18	21	49	480	240 V	1	1,2,4				
AHU-18C	LG	LVN181HV4	1107/109/111	MECH CLOSET 179B	18	21	49	480	240 V	1	1,2,4				
AHU-18D	LG	LVN181HV4	100E/106/108	MECH CLOSET 168B	18	21	49	480	240 V	1	1,2,4				
AHU-18E	LG	LVN181HV4	STORAGE 002/003	BASEMENT MECH	18	21	49	480	240 V	1	1,2,4				
AHU-18H	LG	LVN181HV4	100N/117/119	MECH CLOSET 135B	18	21	49	480	240 V	1	1,2,3,4				
AHU-18I	LG	LVN181HV4	100E/118/120	MECH CLOSET 135B	18	21	49	480	240 V	1	1,2,3,4				
AHU-36	LG	LVN361HV4	COMMON/KITCHEN	BASEMENT MECH	18	21	49	798	240 V	1	1,2,4				

REMARKS:

1. PROVIDE "COFFIN BOX" STYLE RETURN PLENUM.
2. DAIKIN, TRANE ARE ACCEPTABLE.
3. EQUIPMENT DENOTED H & I ARE PART OF ALTERNATE BID ONLY.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT.
5. PROVIDE WITH THERMOSTAT WITH INTEGRAL HUMIDITY SENSOR.
6. PROVIDE CONDENSATE PUMP.

	SPLIT SYSTEM OUTDOOR UNIT SCHEDULE														
				DIM	ENSIONS (IN.)		RATED			E	LECTRICAL			
MARK	MANUF.	MODEL#	SERVICE	LENGTH	WIDTH	HEIGHT	RATED COOLING (MBH)	HEATING (MBH)	MINIMUM SEER	MCA	MOC P	VOLTAGE	PHASE	REMARKS	
CU-1A	LG	LUU180HHV	AHU-18A	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,5	
CU-1B	LG	LUU180HHV	AHU-18B	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,5	
CU-1C	LG	LUU180HHV	AHU-18C	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,5	
CU-1D	LG	LUU180HHV	AHU-18D	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,5	
CU-1E	LG	LUU180HHV	AHU-18E	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,5	
CU-1F	LG	LUU360HHV	AHU-36	54	13	37	33000.0	37500.0	16.4	32 A	40	240 V	1	1,3,5	
CU-1G	LG	LSU090HSV5	AHU-09	37	13	33	9000.0	10900.0	23.2	10 A	15	240 V	1	1,2,3,5	
CU-1H	LG	LVN181HV4	AHU-18H	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,4,5	
CU-1I	LG	LVN181HV4	AHU-18I	37	13	33	18000.0	20000.0	17.05	22 A	30	240 V	1	1,3,4,5	

REMARKS:

1. PROVIDE HAIL GUARD.
2. LOW-AMBIENT COOLING MODE REQUIRED.
3. DAIKIN, TRANE ARE ACCEPTABLE.
4. EQUIPMENT DENOTED H & I ARE PART OF ALTERNATE BID ONLY.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT.

				GRAVITY H	OOD SCH	EDULE			
			MAXIMUM	THROAT LENGTH	THROAT WIDTH	THROAT VELOCITY			
MARK	MANUFACTURER	MODEL	CFM	(IN)	(IN)	(FPM)	PRESSURE DROP (IN WC)	WEIGHT (LBS.)	REMARKS
GH-1	GREENHECK	GRSI - 8	780	7.25	8.25	310	0.04	7	ALL

REMARKS:
1. PROVIDE WITH INSULATED ROOF CURB.
2. PROVIDE WITH BIRDSCREEN.

3. FINISH SELECTED BY ARCHITECT.

			REGISTERS, GF	RILLES, A	AND DIF	FUSERS					
MARK	MANUFACTUR ER	MODEL#	TYPE	GRILLE SIZE	DUCT INLET SIZE	DUCT BRANCH SIZE	MAX CFM	P.D.	NOISE CRITERIA	THROW PATTERN	REMA
E-01	TITUS	PAR-AA	PERFORATED EXHAUST DIFFUSER; ALUMINUM FACE WITH STEEL BACKPAN	12x12	6"	6"	100	0.05	25	-	ALL
E-01F	TITUS	PAR-FS	FIRE RATED PERFORATED EXHAUST DIFFUSER; ALUMINUM FACE WITH STEEL BACKPAN	12x12	6"	6"	100	0.05	25	-	ALL
E-10	TITUS		ROOF SOFFIT VENT		6"	6"	100	0.10	25	-	ALL
R-2	TITUS	PAR-AA	PERFORATED RETURN DIFFUSER; ALUMINUM FACE WITH STEEL BACKPAN	24x24	8"	8"	200	0.03	25	-	ALL
R-10	TITUS	350FL	ALUMINUM LOUVERED RETURN GRILLE; 3/4" BLADE SPACING; 35 DEGREE DEFLECTION; LONG BLADES	24x20	REFER TO DRAWING	REFER TO DRAWING	1000	0.10	25	-	ALL
S-1F	TITUS	TMSA-FR	FIRE RATED STEEL ADJUSTABLE HIGH PERFORMANCE SQAURE DIFFUSER	24x24	6"	6"	100	0.05	25	4-WAY	ALL
S-2	TITUS	TMSA-AA	ALUMINUM HIGH PERFORMANCE THREE CONE ADJUSTABLE DIFFUSER	24x24	8"	8"	200	0.08	25	4-WAY	ALL
S-2F	TITUS	TMSA-FR	FIRE RATED STEEL ADJUSTABLE HIGH PERFORMANCE SQAURE DIFFUSER	24x24	8"	8	200	0.06	25	4-WAY	ALL
S-3F	TITUS	TMSA-FR	FIRE RATED STEEL ADJUSTABLE HIGH PERFORMANCE SQAURE DIFFUSER	24x24	10"	10"	350	0.05	25	4-WAY	ALL
S-10	TITUS	300FL	ALUMINUM EGG-CRATE SUPPLY GRILLE; DOUBLE DEFLECTION; 3/4" BLADE SPACING, FRONT BLADES PARALLEL TO LONG DIMENSION	14x8	12x6	12x6	250	0.08	25	-	ALL
T-10	TITUS	350FL	ALUMINUM LOUVERED RETURN GRILLE; 3/4" BLADE SPACING; 35 DEGREE DEFLECTION; BLADES PARALLEL TO LONG DIMENSION	38x14	36x12	-	600	0.01	25	-	ALL

	LOUVER SCHEDULE														
MARK	MARK MANUFACTURER MODEL# SERVICE DEPTH (IN) CFM WIDTH (IN) HEIGHT (IN) FREE AREA (FPM) APD (IN. WG.) BIRD SCREEN BLADE REMARK														
LE-02	RUSKIN	ELF375DX	STOVE HOOD	4	2000	28	28	2.67	748	0.10	Yes	Yes	ALL		
DEMARKO															

REMARKS: 1. COLOR BY ARCHITECT. 2. PROVIDE WITH KYNAR FINISH.

3. GREENHECK IS ACCEPTABLE.
4. PROVIDE WITH BACKDRAFT DAMPER AND BIRDSCREEN.

	ENERGY RECOVERY VENTILATOR SCHEDULE																												
					SUF	PPLY AIR CONDIT	TIONS	FAN	STATIC			,	WINTER OPERA	TION					S	SUMMER OPERA	ATION				E	LECTRICAL DAT	A		
											OUTSIE	DE AIR		EXHAL	ST AIR	TOTAL		OUTSI	DE AIR		EXHA	UST AIR	TOTAL			FANS			
MARK	MANUFACTURER	MODEL#	WEIGHT (LB)	AIRFLOW (CFM)	SUMMER DB (°F)	SUMMER WB (°F)	WINTER D	OA FAN E.S.F	P. EA FAN E.S.P	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	EAT DB (°F)	EAT WB (°F)	EFFECTIVENESS (%)	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	EAT DB (°F)	EAT WB (°F)	EFFECTIVENESS (%)	VOLTAGE	PHASE	HP	MCA	MOCP	REMARKS
ERV-1A	RENEWAIRE	EV PREMIUM M	36	150	95	78	35	0.10	0.20	10	8	52	40	70	51	80.7	94	75	81	69	75	63	65.8	120 V	1	0.11	10 A	10	ALL
ERV-1B	RENEWAIRE	EV PREMIUM M	36	100	95	78	35	0.30	0.30	10	8	54	41	70	51	84.8	94	75	80	68	75	63	71.6	120 V	1	0.11	10 A	10	ALL
ERV-1C	RENEWAIRE	EV PREMIUM M	36	150	95	78	35	0.10	0.20	10	8	52	40	70	51	80.7	94	75	81	69	75	63	65.8	120 V	1	0.11	10 A	10	ALL
ERV-1D	RENEWAIRE	EV PREMIUM M	36	100	95	78	35	0.30	0.30	10	8	54	41	70	51	84.8	94	75	80	68	75	63	71.6	120 V	1	0.11	10 A	10	ALL
ERV-1E	RENEWAIRE	EV PREMIUM M	36	115	95	78	35	1.40	1.60	10	8	54	41	70	51	84.8	94	75	80	68	75	63	71.6	120 V	1	0.11	10 A	10	ALL
ERV-1H	RENEWAIRE	EV PREMIUM M	36	100	95	78	35	0.30	0.30	10	8	54	41	70	51	84.8	94	75	80	68	75	63	71.6	120 V	1	0.11	10 A	10	ALL
ERV-1I	RENEWAIRE	EV PREMIUM M	36	100	95	78	35	0.30	0.30	10	8	54	41	70	51	84.8	94	75	80	68	75	63	71.6	120 V	1	0.11	10 A	10	ALL

REMARKS:
1. PROVIDE TWO (2) 6" DIA. MOTORIZED DAMPERS.
2. EQUIPMENT DENOTED H & I ARE PART OF ALTERNATE BID ONLY.

SINGLE POINT CONNECTION PER SCHEDULE.
 AFTER FINAL CHANGE WHICH IS REQUIRED AT SUBSTANTIAL COMPLETION, IN ADDITION TO FILTERS CHANGED, PROVIDE NEW COMPLETE SET OF FILTERS FOR ATTIC STOCK.

	AUXILIARY ELECTRIC HEATER														
	MANUFACTUR						NO. OF	ELECTRIC	CAL DATA						
MARK	ER	MODEL#	SERVICE	TYPE	MINIMUM CFM	INPUT (KW)	STAGES	VOLTAGE	PHASE	REMARKS					
EDH-1A	LG	ANEH053B1	AHU-18A	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1B	LG	ANEH053B1	AHU-18B	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1C	LG	ANEH053B1	AHU-18C	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1D	LG	ANEH053B1	AHU-18D	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1E	LG	ANEH053B1	AHU-18E	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1H	LG	ANEH053B1	AHU-18H	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-1I	LG	ANEH053B1	AHU-18I	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					
EDH-2	LG	ANEH053B1	AHU-36	AUXILIARY ELECTRIC HEATER INTEGRAL TO UNIT	480	5	1	230 V	1	ALL					

POWER SUPPLY SEPERATE FROM INDOOR UNIT REQUIRED.
 ELECTRICAL CONTRACTOR TO PROVIDE DISCONNECT.

KITCHEN HOOD SCHEDULE													
					DIMENSIONS				ELECTRICAL				
MARK	MANUFACTURER	MODEL#	SERVICE	WEIGHT (LB)	LENGTH	DEPTH	HEIGHT	CFM	VOLTAGE	PHASE	MCA	MOCP	REMARKS
KH-1	CAPTIVEAIRE	WRH-30	KITCHEN	125	30	24	24	800	120 V	1	15	15	ALL
			1	-			-				1		-

1. TOUCH BUTTONS WTH LCD DISPLAY.

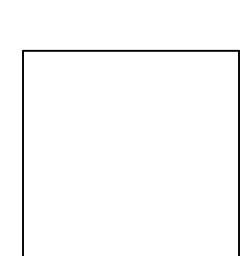
2. DISHWASHER SAFE BAFFLES.

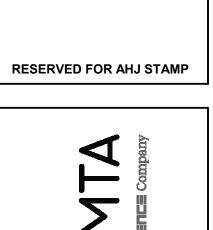
3. 2-SPEED FAN.

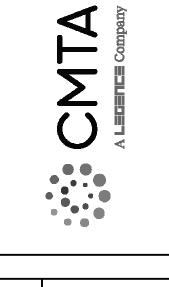
4. INTEGRAL CHEMICAL FIRE PROTECTION SYSTEM WITH CONTROLLER.
5. PROVIDE WITH REMOTE ADA CONTROLS FOR ADA STATION. REFER TO ARCHITECTURAL DRAWINGS.











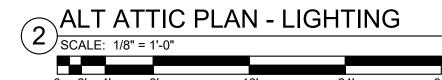


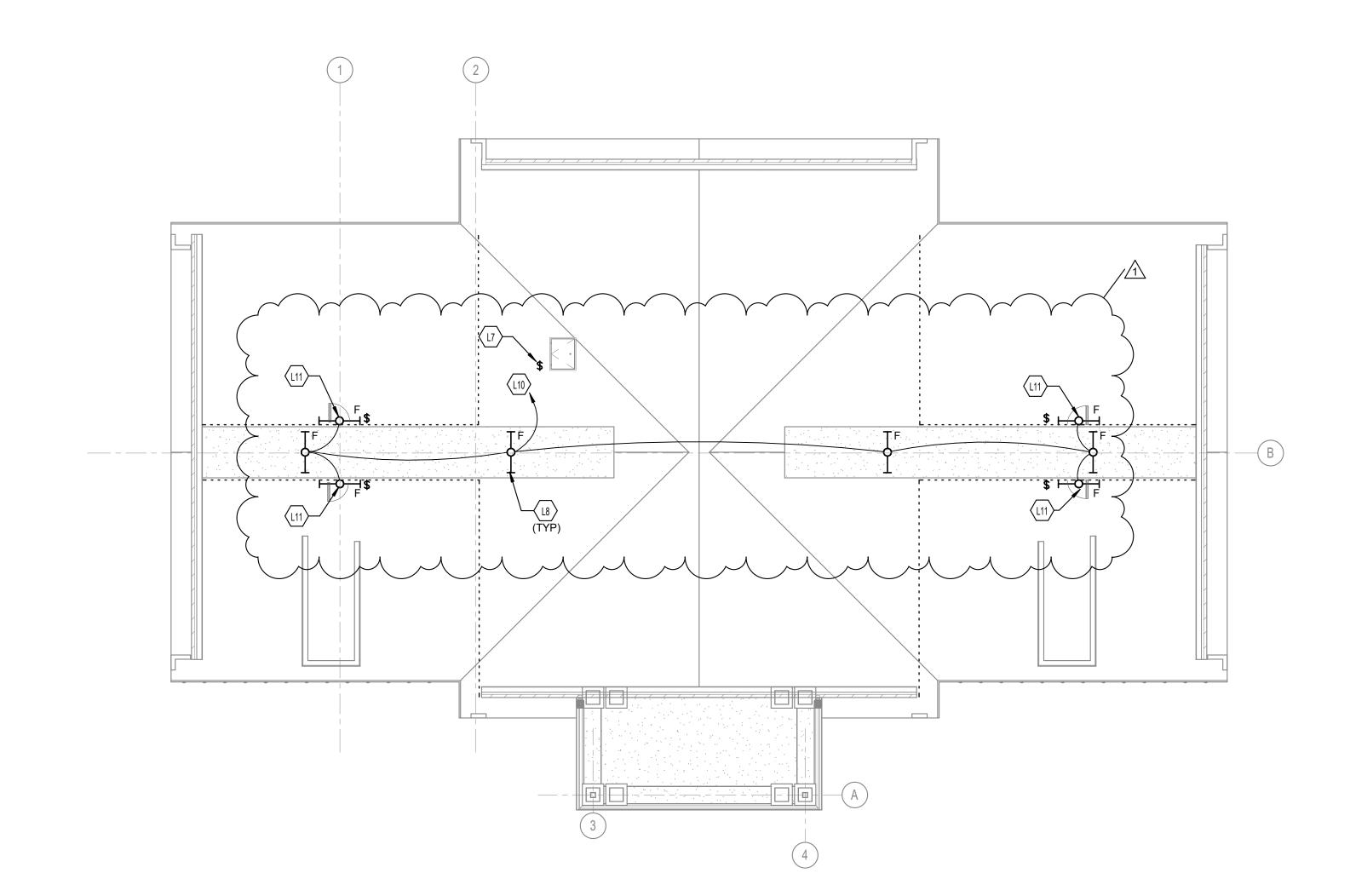
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MECHANICAL SCHEDULES

M-501





ATTIC PLAN - LIGHTING SCALE: 1/8" = 1'-0" 0 2' 4' 8' 16' 24' 32'

ELECTRICAL LIGHTING NOTES

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. ALSO, MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- PANEL AND CIRCUIT NUMBER.

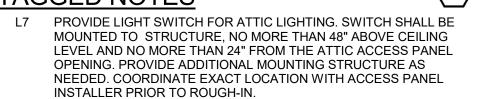
 D LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING, TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE LIGHTING TO ALL AREAS OF ROOM. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.
- E LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY
 EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS
 SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER
 TRADES DO NOT OBSTRUCT VIEW.

 F LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE
- F LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAV SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.

 G ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS,
- DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.
- H RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FRAMES DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION.

 I CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL
- CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY INVERTER BATTERY PACKS, AND NIGHT LIGHTS AS REQUIRED.

TAGGED NOTES



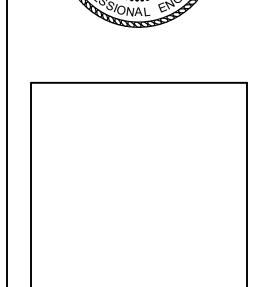
- L8 ATTIC LIGHT FIXTURES SHALL BE MOUNTED AS HIGH AS POSSIBLE WITHIN THE SPACE AND CENTERED OVER THE ATTIC WALKWAY. COORDINATE EXACT LOCATION WITH WALKWAY INSTALLER PRIOR TO ROUGH-IN.
- L9 LIGHT FIXTURES AND DEVICES SHOWN ON THIS PLAN SHALL ONLY BE PROVIDED IF ALTERNATE FLOOR PLAN IS ACCEPTED.

 L10 CONTINUE LIGHTING CIRCUIT FROM COORIDOR LIGHTING CIRCUIT
- L11 LIGHT FIXTURE SHALL BE WALL MOUNTED, A MINIMUM 12" ABOVE DRAFTSTOP ACCESS DOOR. COORDINATE EXACT LOCATION WITH DOOR INSTALLER PRIOR TO ROUGH-IN.

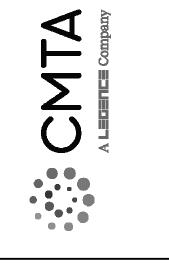


3225 Summit Square Place, Suite 200 Lexington, Kentucky 40509 859.252.6781









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RESEARCH AND EDUCATION CENTER

THE PRINCETON KENTILCKY 42445

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ELECTRICAL
PROJECT 202225.04

 DATE
 10/27/2023

 REVISIONS

 No.
 Description
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1 CCK-2603.0-1-24 ADD 1 11/17/2

JRA ARCHITECTS HAS RETAINED AN ELECTRONIC VERSION OF THESE DRAWINGS. THE CLIENT AGREES NOT TO

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ATTIC LIGHTING PLANS

E-104

FIRST FLOOR - POWER

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

0 1' 2' 4' 8' 12'

ELECTRICAL POWER NOTES

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF
- ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES. B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING
- A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED. C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION, PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D RECEPTACLES THAT ARE CONTROLLED BY AN AUTOMATIC MEANS SUCH AS OCCUPANCY SENSOR OR ENERGY MANAGEMENT SYSTEM
- SHALL BE MARKED IN ACCORDANCE WITH NEC 406.3(E). E LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER

TAGGED NOTES



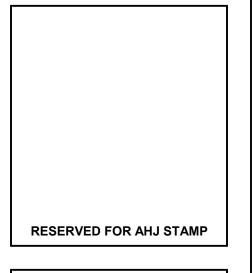
- E4 CONNECTION FOR TRAP PRIMER. COORDINATE EXACT LOCATION WITH TRAP PRIMER INSTALLER PRIOR TO ROUGH-IN.
- E13 CONNECTION FOR DISHWASHER. COORDINATE EXACT LOCATION WITH INSTALLER PRIOR TO ROUGH-IN.
- E14 CONNECTION FOR RANGE. COORDINATE EXACT LOCATION WITH INSTALLER PRIOR TO ROUGH-IN.
- E15 CONNECTION FOR OVERHEAD EXHAUST HOOD. COORDINATE EXACT LOCATION WITH INSTALLER PRIOR TO ROUGH-IN.
- E16 RECEPTACLE FOR UNDER COUNTER MICROWAVE. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH CASEWORK INSTALLER PRIOR TO ROUGH-IN.
- E18 PROVIDE CONNECTION FOR AUXILARY HEATER ON AIR HANDLING UNIT. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

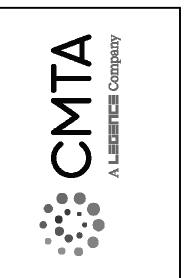


Lexington, Kentucky 40509

859.252.6781









ELECTRICAL

PROJECT 202225.04

JRA ARCHITECTS HAS RETAINED AN
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OR ANY OTHER FORMAT - IN WHOLE, OR IN
PART, FOR ANY PURPOSE OTHER THAN FOR
THE PROJECT. THE CLIENT AGREES NOT TO
TRANSFER THESE ELECTRONIC FILES TO
OTHERS WITHOUT THE PRIOR WRITTEN
CONSENT OF THE ARCHITECT. THE CLIENT
FURTHER AGREES TO WAIVE ALL CLAIMS
AGAINST THE ARCHITECT PESIL TING IN ANY AGAINST THE ARCHITECT RESULTING IN ANY
WAY FROM ANY UNAUTHORIZED CHANGES
TO OR REUSE OF THE ELECTRONIC FILES
FOR ANY OTHER PROJECT BY ANYONE
OTHER THAN THE ARCHITECT.

FIRST FLOOR -**POWER**

E-202

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KEY PLAN