1726 VINE ST / 1728 VINE ST / 1730 VINE ST / 1675 HAMER ST

CINCINNATI, OHIO, 45202

FINDLAY FLATS **RENOVATION**

STRUCTURAL ENGINEER

ADVANTAGE GROUP

1527 MADISON ROAD, FL 2

CINCINNATI, OH 45206

(513) 396-8900

MEP ENGINEER

ENGINEERED BUILDING SYSTEMS, INC. 515 MONMOUTH STREET, SUITE 201 NEWPORT, KY 41071 (859) 261-0585

CIVIL ENGINEER

BAYER BECKER 1404 RACE STREET, SUITE 204 CINCINNATI, OH 45202 (513) 336-6600

ARCHITECT CLIENT/DEVELOPER

PLATTE DESIGN

1810 CAMPBELL ALLEY, STE 300

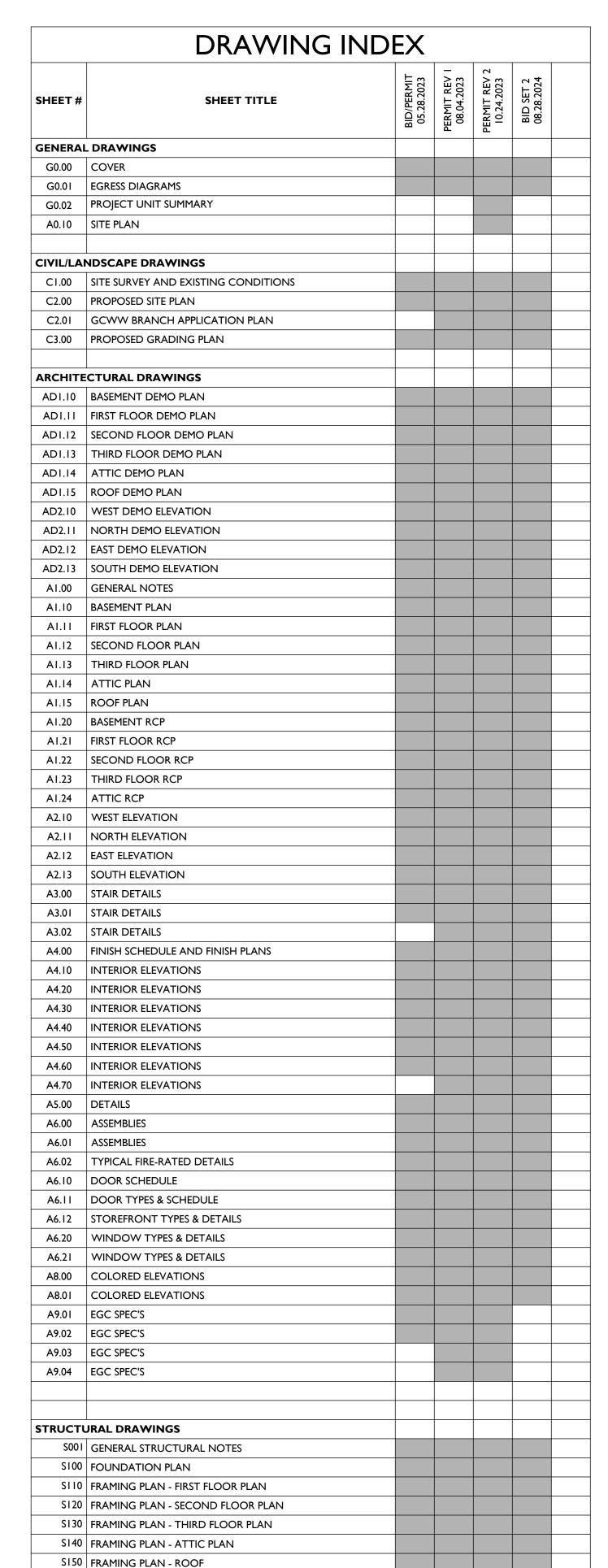
CINCINNATI, OH 45202

(513) 871-1850

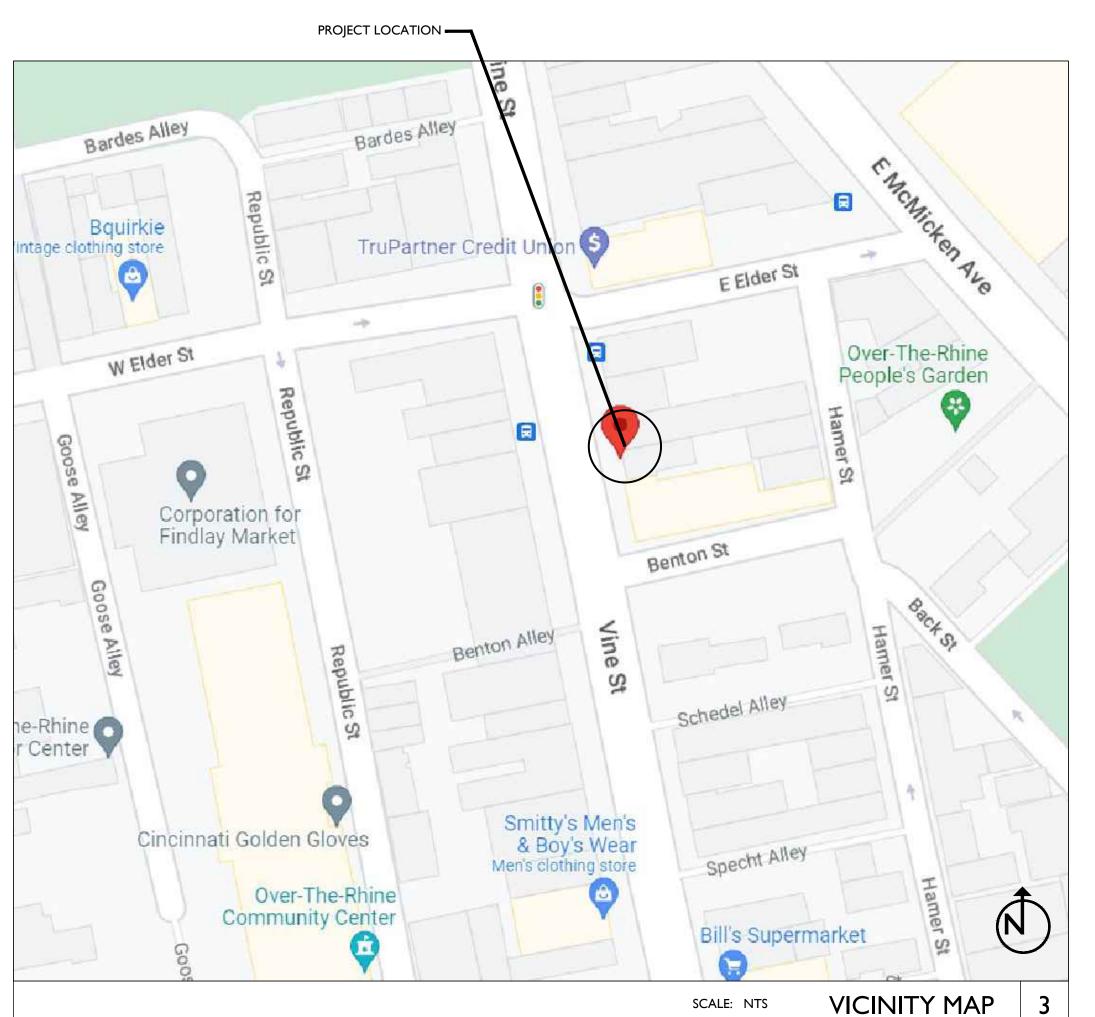
3CDC 1203 WALNUT STREET CINCINNATI, OH 45202 (513) 621-4400

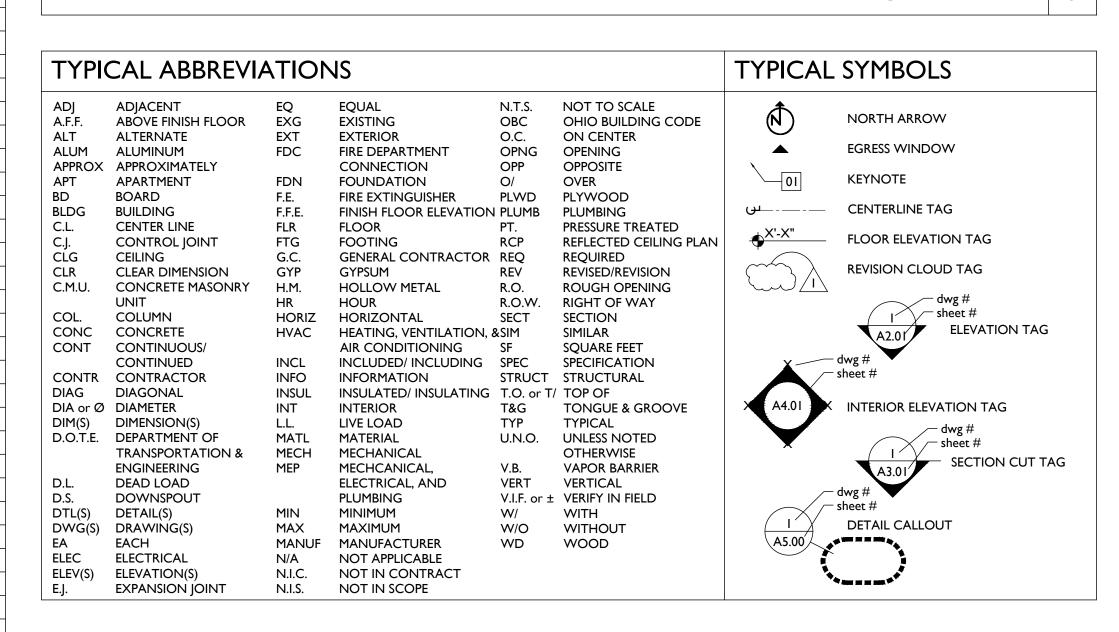
PROJECT DESCRIPTION

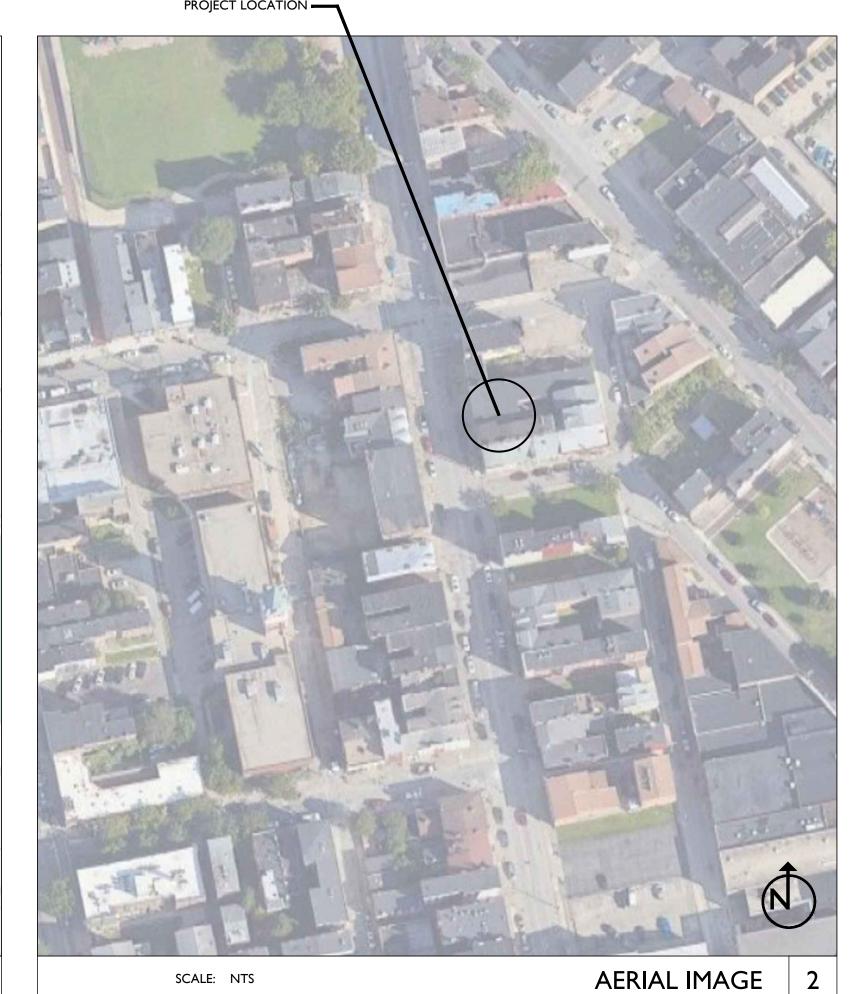
WITH B/M/A-2 USES, PLUS TWO R-2 APARTMENTS. THE SECOND AND THIRD FLOORS WILL BE R-2 APARTMENTS. THE ATTIC SPACES WILL REMAIN UNOCCUPIED.



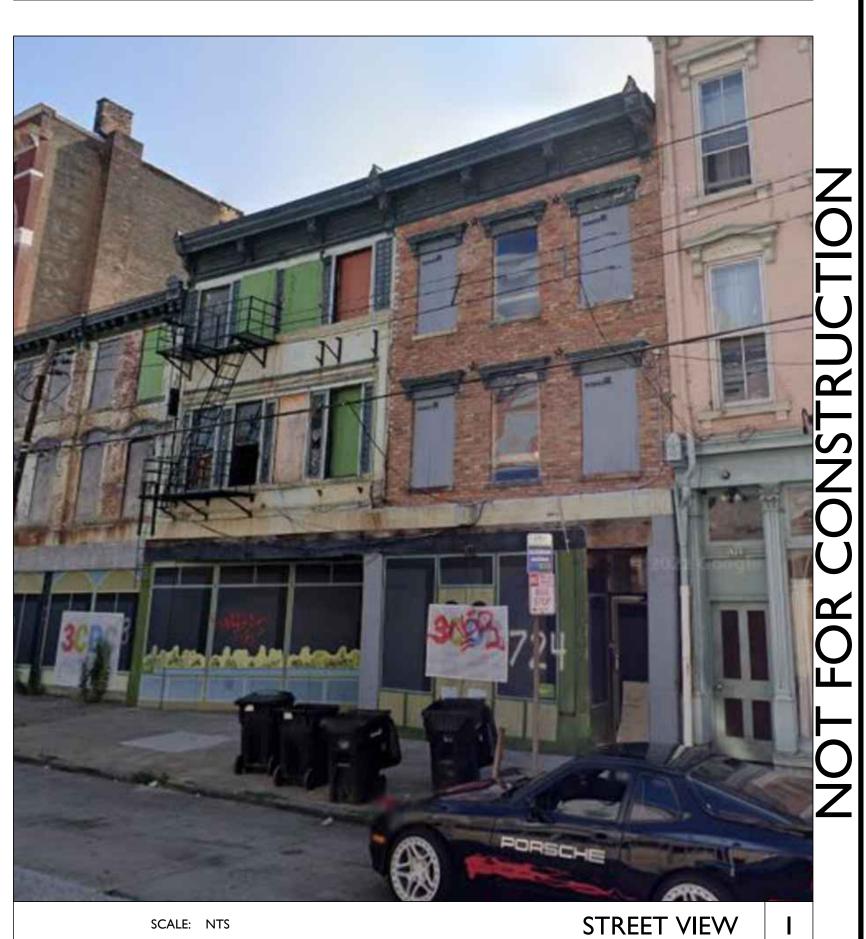






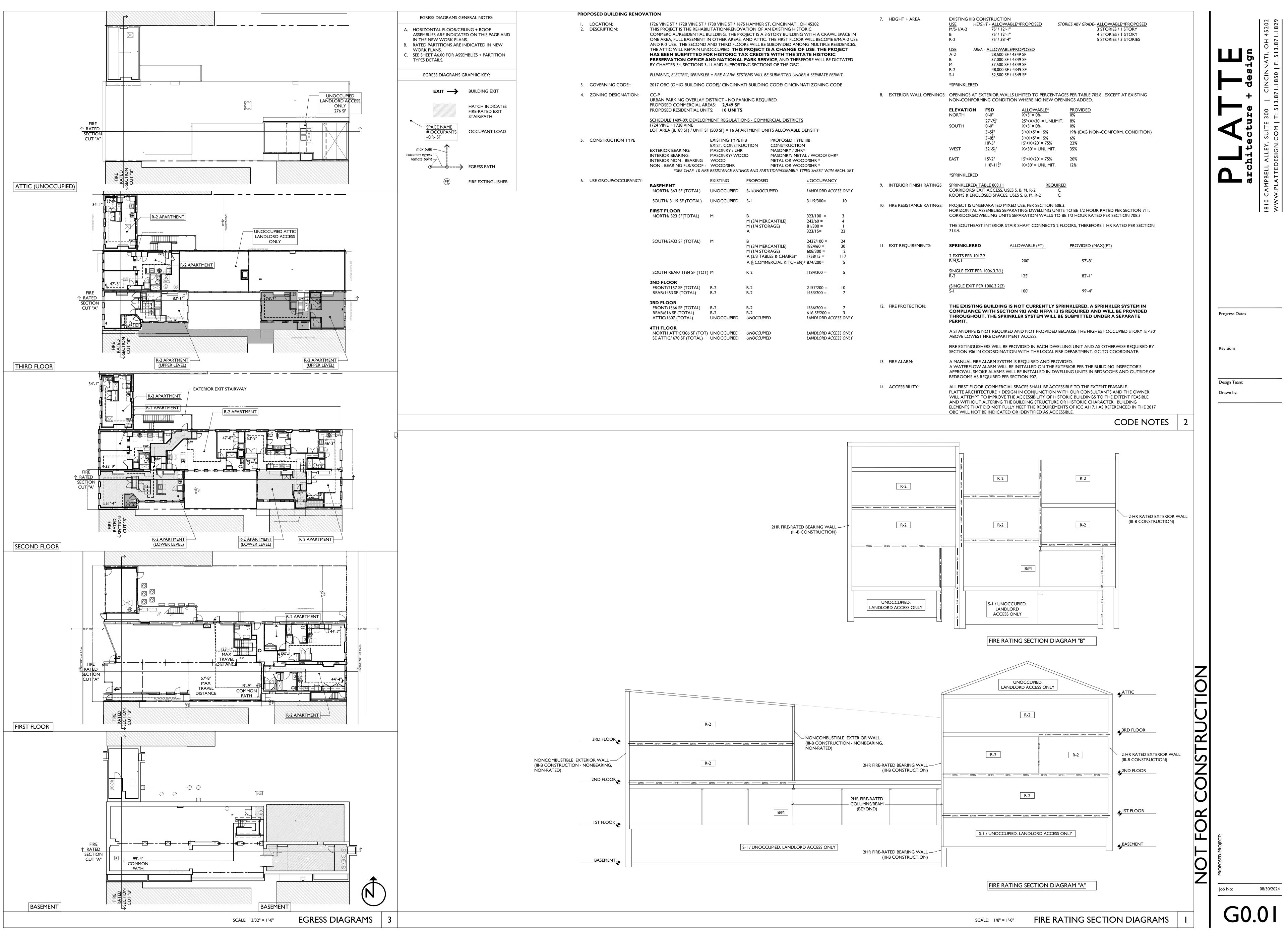


SCALE: NTS



Progress Dates

Design Team:





Progress Dates 05.15.2023 - 50% CD 05.26.2023 - BID/PERMIT 08.30.2024 - BID SET 2

Revisions

Design Team: Drawn by: EFS

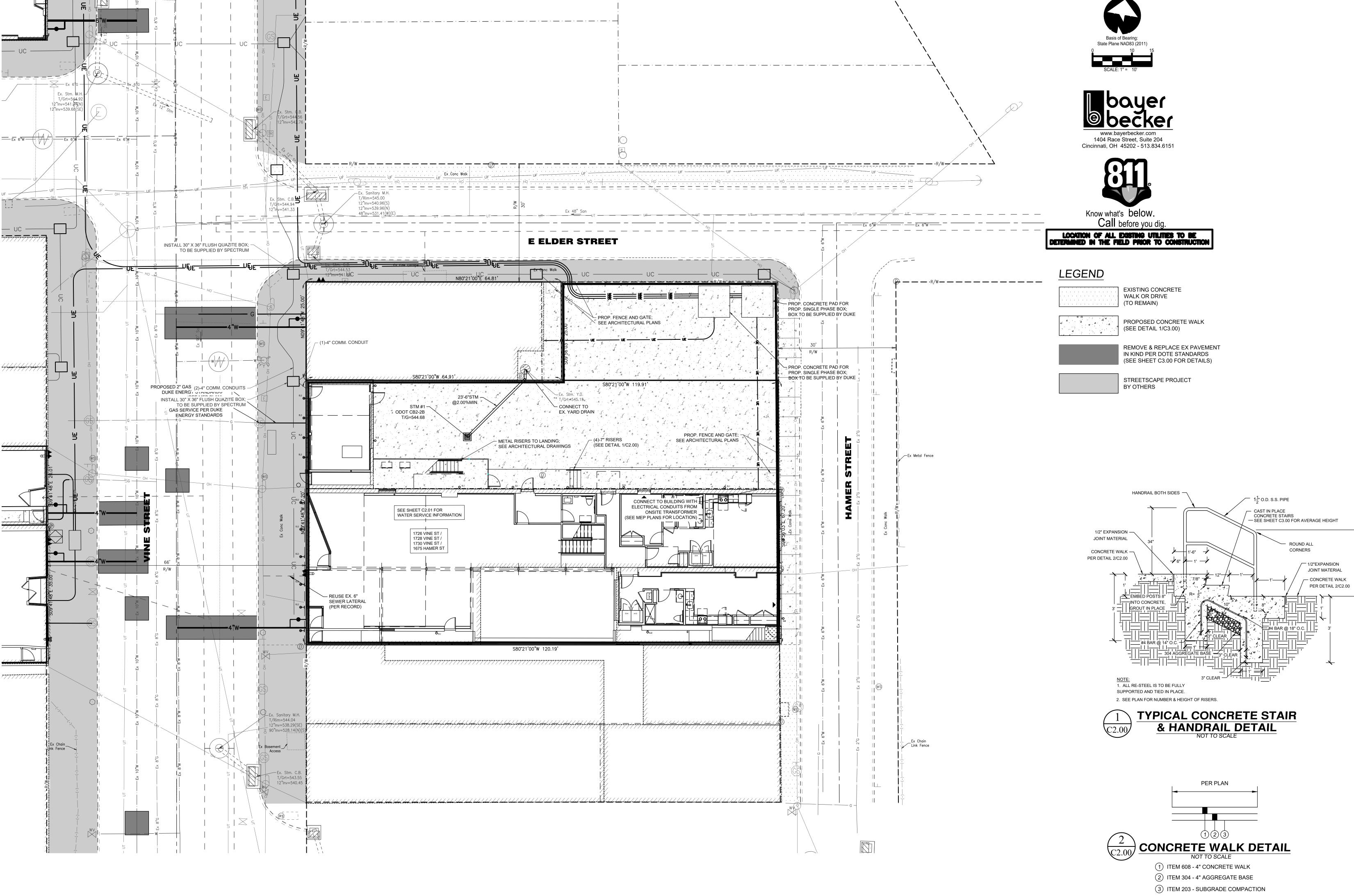
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Job No: 22042 05/26/2023

EFS

Job No: 22042 05/26/2023



MAINTENANCE OF TRAFFIC NOTES ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF OHIO DEPARTMENT OF

MT-99.10.

- TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS, AND CURRENT STANDARD DRAWINGS, UNLESS OTHERWISE NOTED. . ALL WORK SHALL BE DONE IN ACCORDANCE WITH ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE C&M SPECIFICATIONS AS WELL AS IN ACCORDANCE WITH PART 7 OF OMUTCD. LANE CLOSURES SHALL BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWINGS MT-97.10,
- 3. LOCAL TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGH THE USE OF FLAGGERS AND SAFETY CONES, AS DIRECTED BY THE CITY ENGINEER.
- 4. THE CONTRACTOR MUST COORDINATE THE WORK SO AS TO NOT INTERRUPT INGRESS AND
- EGRESS FROM AFFECTED PROPERTIES. 5. IF THE CONTRACTOR SO ELECTS, HE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THAT THE INTENT OF THE ABOVE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THEREFROM. NO ALTERNATE PLAN WILL BE PUT INTO EFFECT UNTIL THE APPROVAL HAS BEEN
- GRANTED, IN WRITING, BY THE CITY OF CINCINNATI DOTE. 6. THE OPEN TRENCH SHALL BE ADEQUATELY MAINTAINED AND PROTECTED WITH DRUMS OR BARRICADES AT ALL TIMES.
- 7. NO TRENCH SHALL BE LEFT OPEN OVERNIGHT. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE TRENCH FOR THE UNCOMPLETED WORK SHALL BE PLATED OR BACKFILLED AT THE DIRECTION OF THE COUNTY ENGINEER.
- 8. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED PRIOR TO BEGINNING CONSTRUCTION.

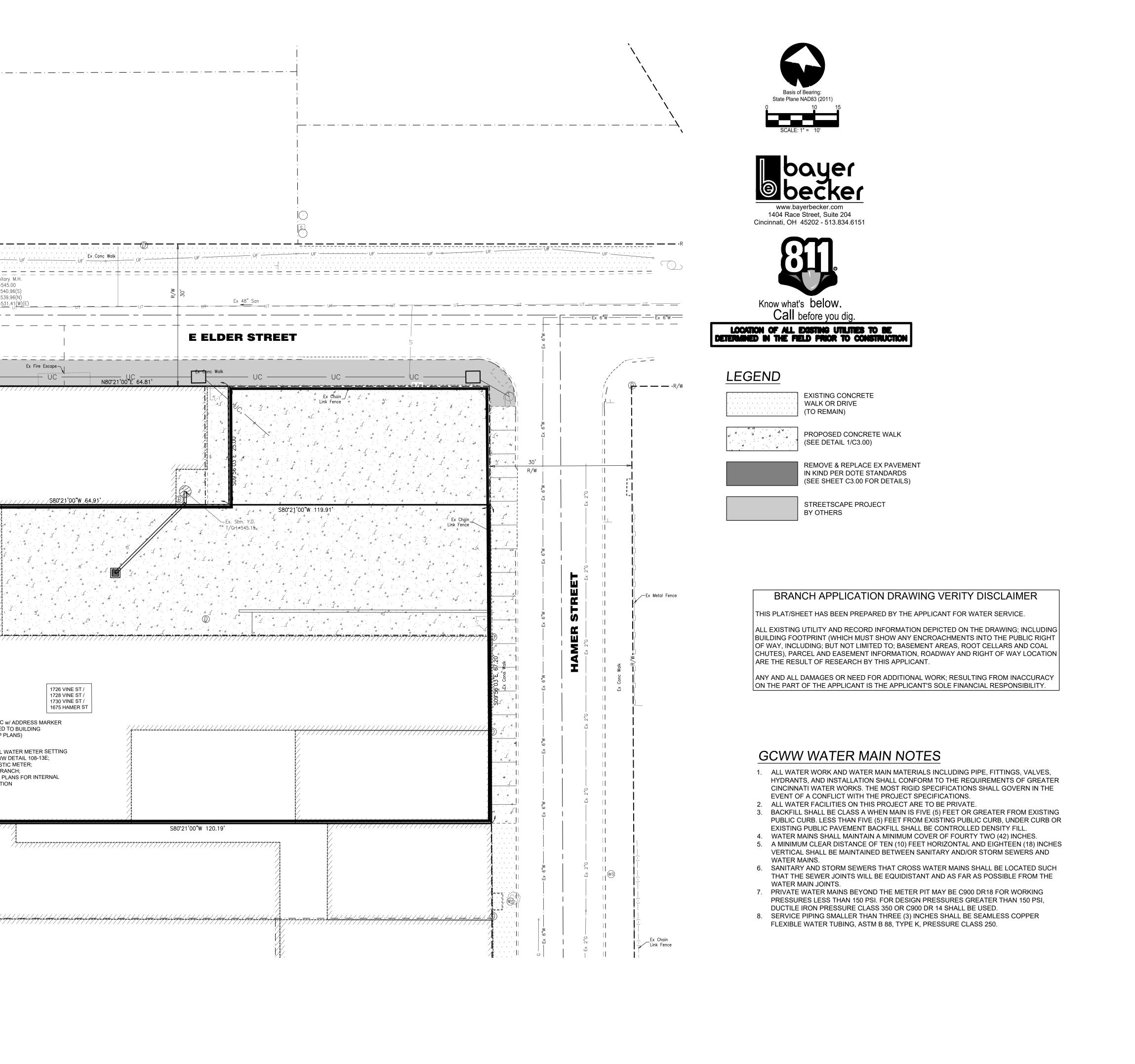
MSD SEWER NOTES

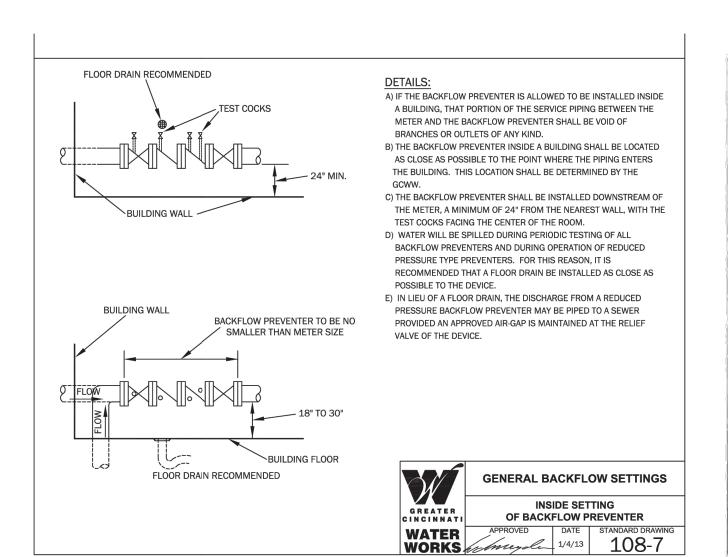
1. SANITARY PIPE MATERIAL SHALL BE 6" PVC SDR-35 @2.00% MINIMUM. . IF LOWEST LEVEL ELEVATION IS BELOW RIM ELEVATION OF UPSTREAM MANHOLE, THEN TAP MUST INCLUDE BACKFLOW PREVENTION OR BE PUMPED TO GRAVITY.

SITE PERMITS NOTES

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CITY OF CINCINNATI PERMITS FOR PROPOSED SITE WORK, INCLUDING (BUT NOT LIMITED TO): GCWW BRANCH APPLICATION, MSD TAP PERMIT, DOTE RIGHT-OF-WAY PERMIT (FOR UTILITY CONNECTIONS, STREET/WALK CLOSURE, AND PAVEMENT INSTALLATION), DOTE BARRICADE PERMIT, DOTE REVOCABLE STREET PERMIT (IF APPLICABLE).

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BRANCH MATERIAL 1 - 8" SOLID SLEEVE, 2 M.J.

2 - 8" MEGALUG ASSEMBLY

3 - 4" MEGALUG ASSEMBLY

5 - 2" MEGALUG ASSEMBLY

1 - 4" FLG TYTE RUBBER GASKET

1 - 8"x4" TEE, 2 M.J. x FLG

1 - 4" VALVE, FLG x M.J.

2 - VALVE BOX COMPLETE

2 - VALVE BOX FROST PLUG

2 - BOXLOX ALIGNMENT DEVICE

1 - 4"x2" TEE, 3 M.J.

1 - 2" VALVE, 2 M.J. 1 - 2" 90 BEND, 2 M.J.

FOD EX 3/4" WATER SERVICE BRANCH #33258, -

CONTRACTOR TO SUBMIT FOD RECEIPT TO MSD FOR

AT 1728 VINE ST (FIELD VERIFY LOCATION);

CREDIT TO PROPOSED TAP FEE

INSTALL 30" X 36" FLUSH QUAZITE BOX; TO BE SUPPLIED BY SPECTRUM

(2)-4" COMM. CONDUITS -

←E SIDE OF VINE STREET 68 L.F. S OF 1ST FIRE

HYDRANT S OF E ELDER

PROP 2" DOMESTIC —

PROP 4" DUAL SERVICE -

CONNECT TO EX. 8"-

WATER MAIN

FIRE BRANCH

PROP 4" FIRE -

-Ex. Sanitary M.H. T/Rim=544.04

12"Inv=538.29(SE)

INSTALL 30" X 36" FLUSH QUAZITE BOX; -

TO BE SUPPLIED BY SPECTRUM

- (1)-4" COMM. CONDUIT

─1ST FIRE HYDRANT

S OF E ELDER STREET

– PROP FDC w/ ADDRESS MARKER ATTACHED TO BUILDING (SEE MEP PLANS)

— INTERNAL WATER METER SETTING

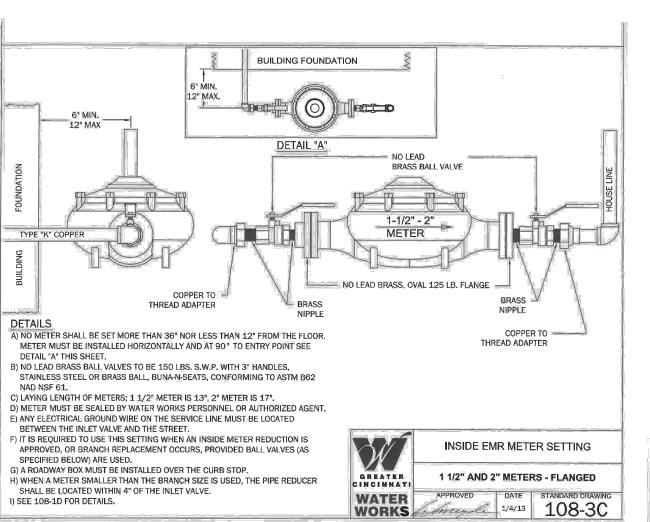
SEE MEP PLANS FOR INTERNAL

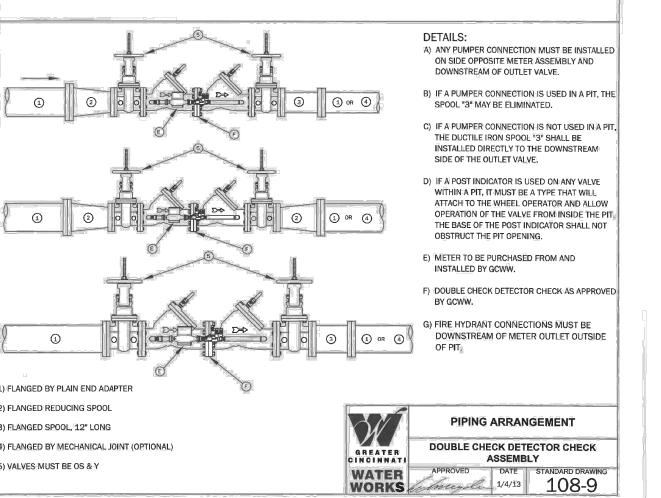
PER GCWW DETAIL 108-13E;

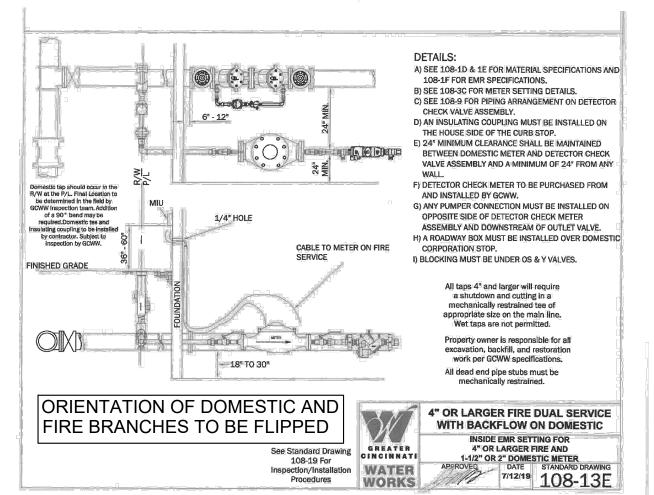
2" DOMESTIC METER;

4" FIRE BRANCH;

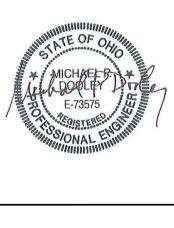
CONNECTION







PLATTE TERMINATI, OH



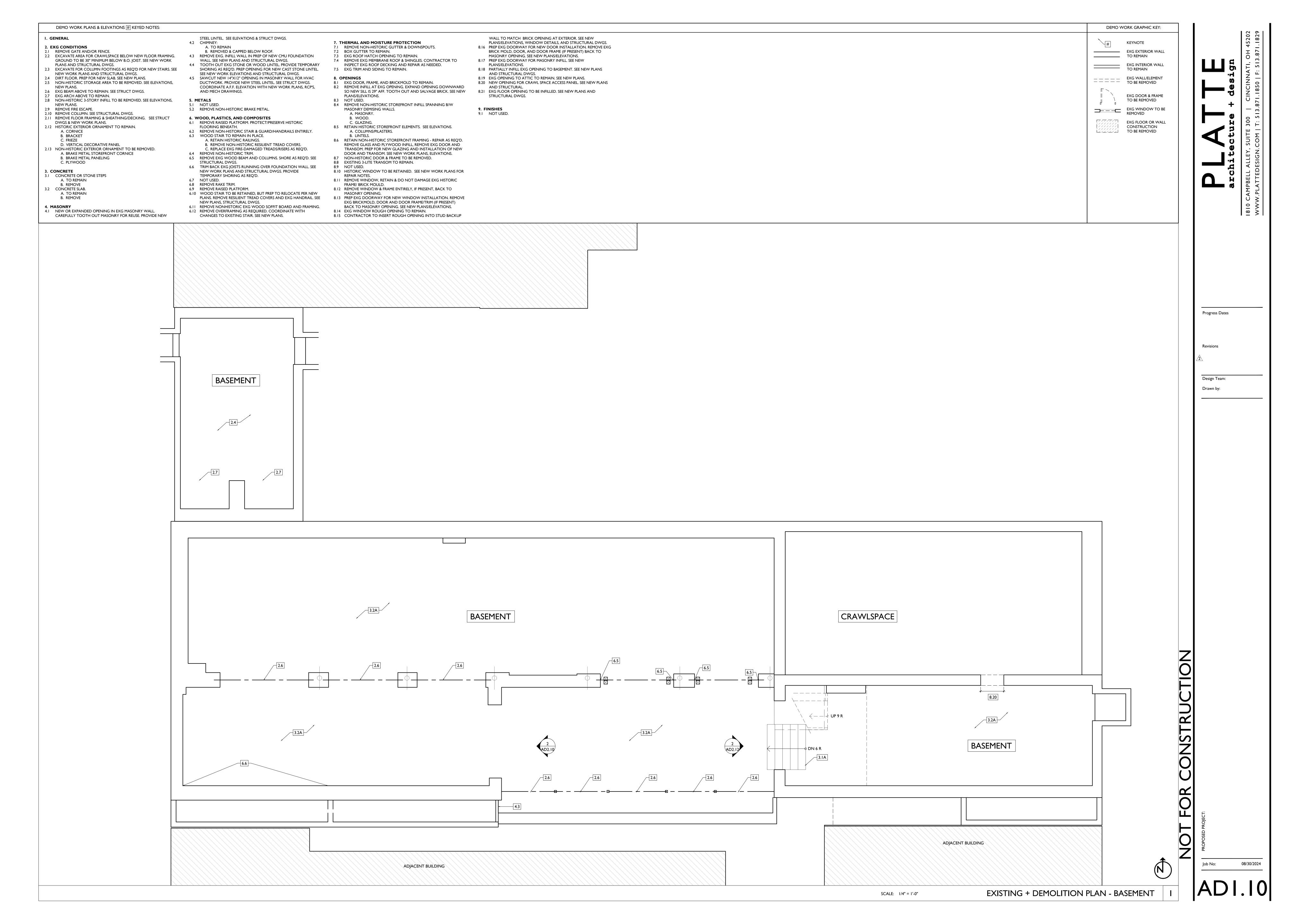
Progress Dates
05.15.2023 - 50% CD
05.26.2023 - BID/PERMIT
08.30.2024 - BID SET 2

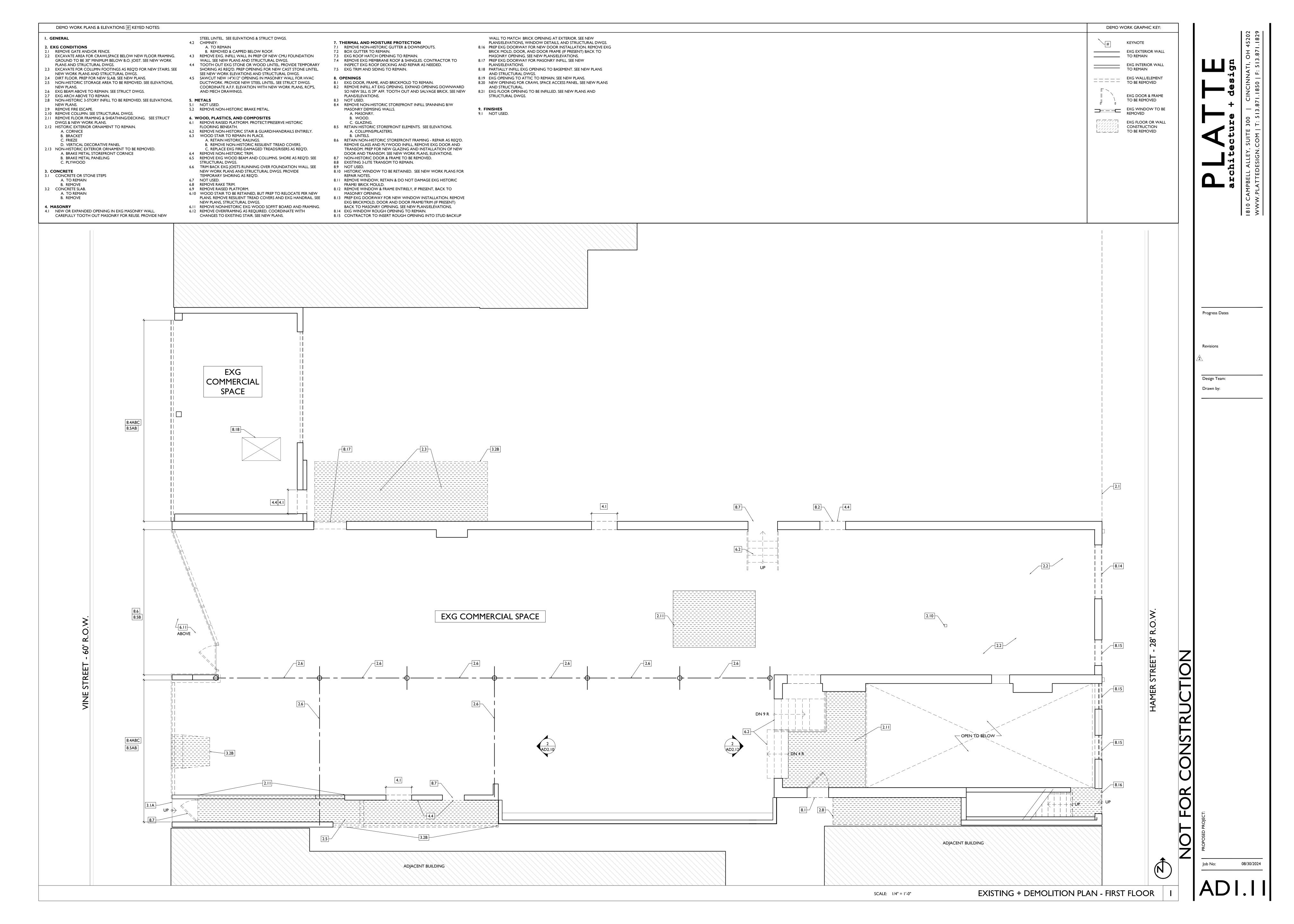
Revisions

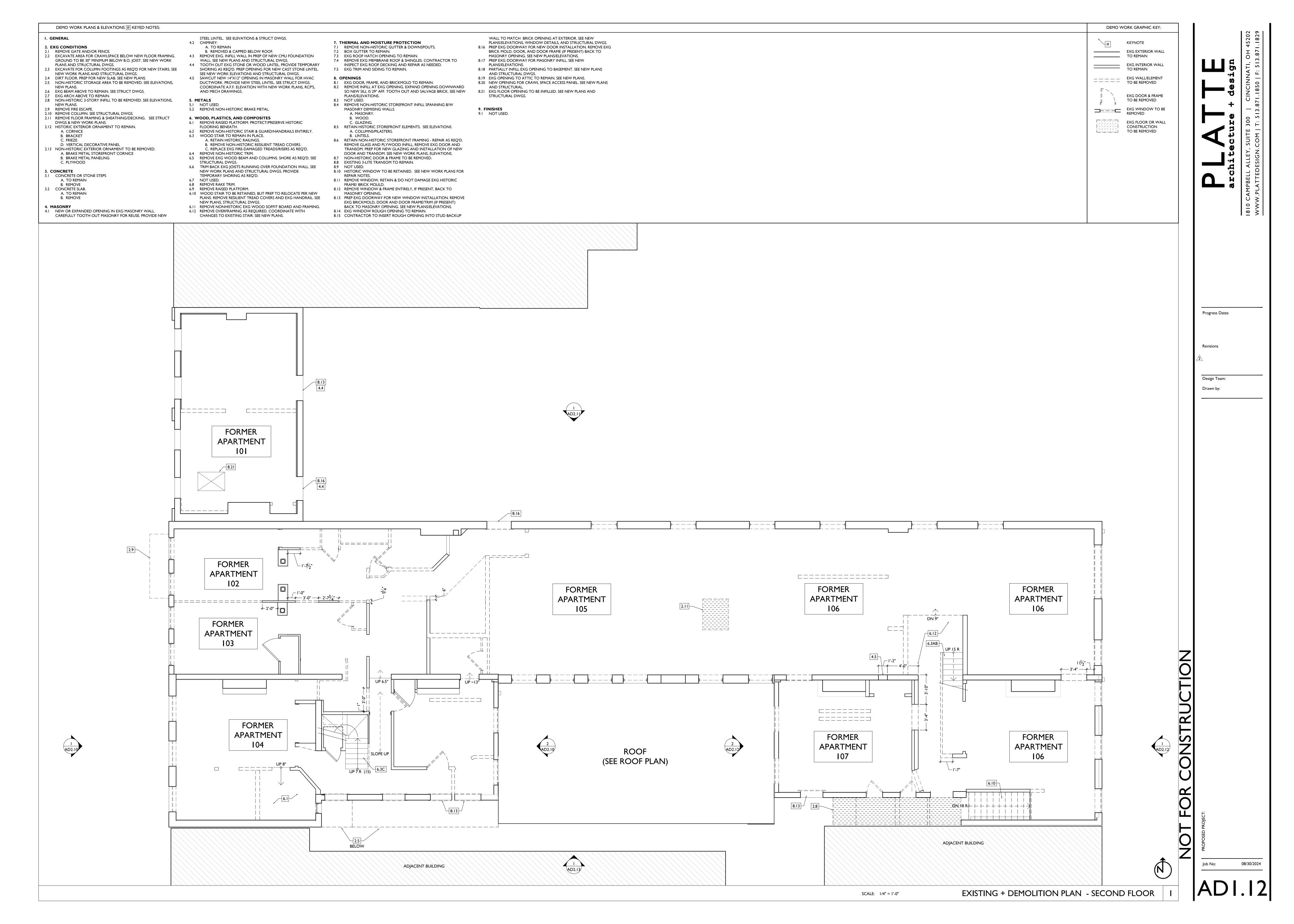
esign Team:

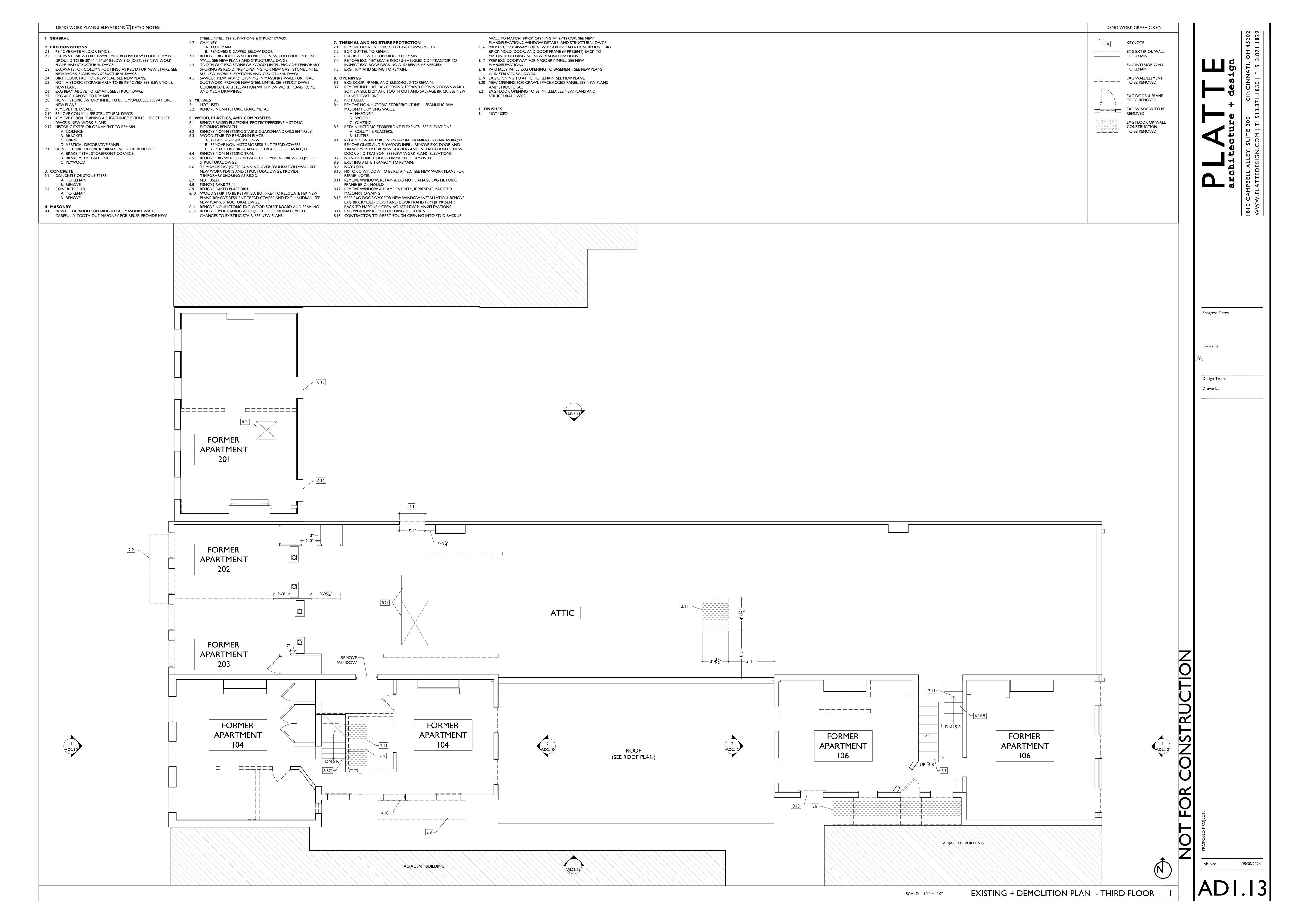
T / 1728 VINE ST / 1730 VINE ST / 1675 HAMER S

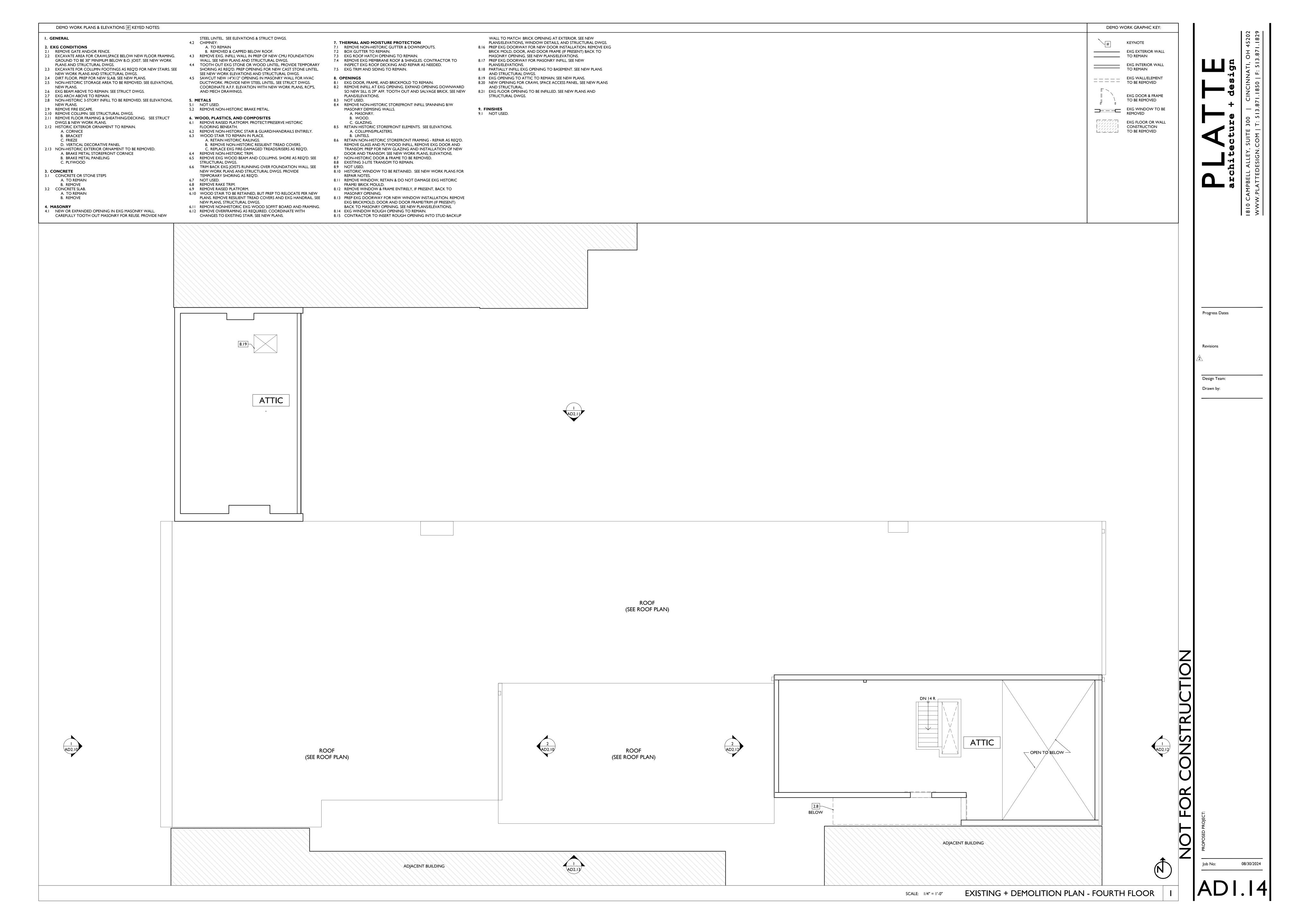
RENOVATION FOR 1726 VINE ST / 1

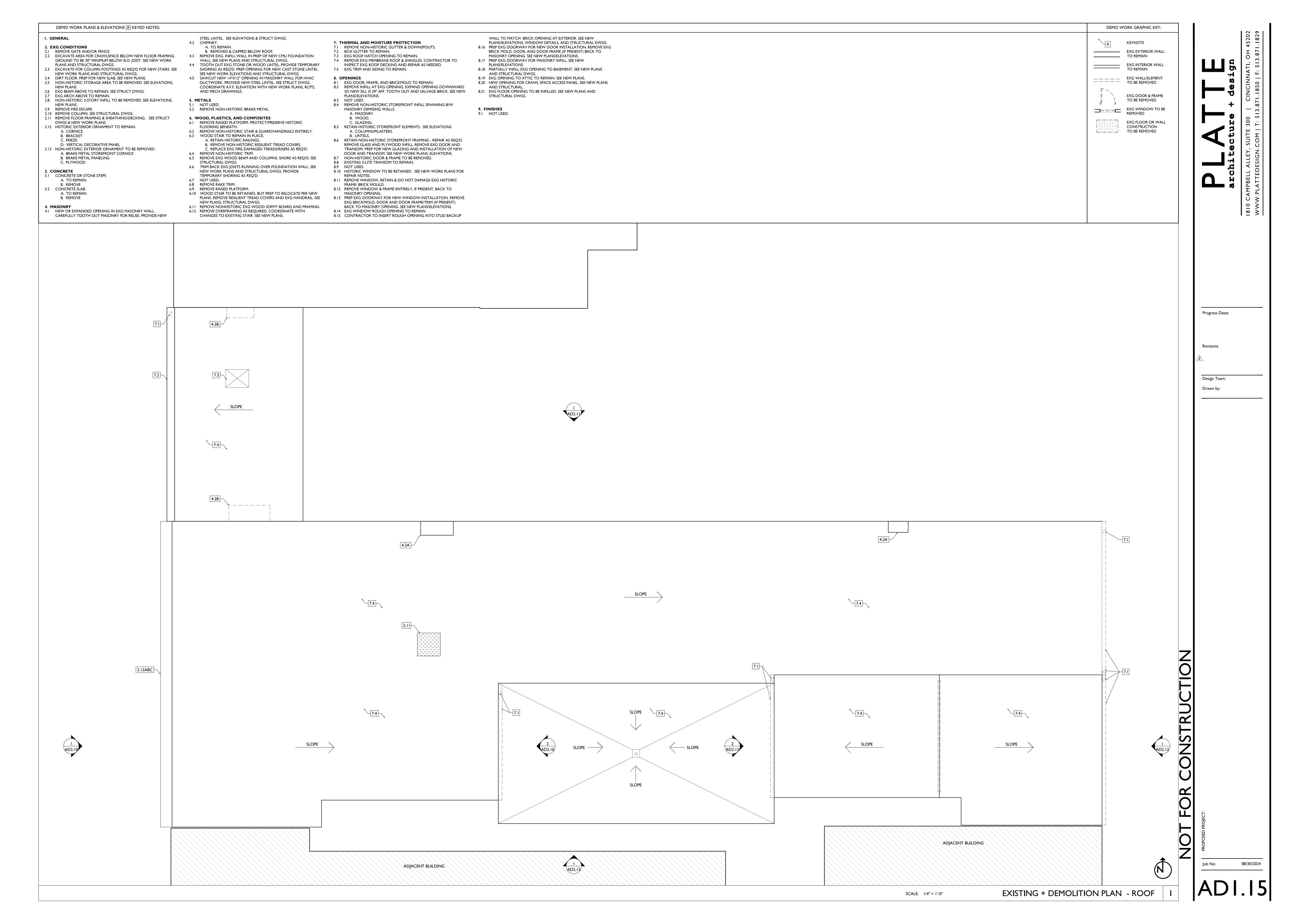


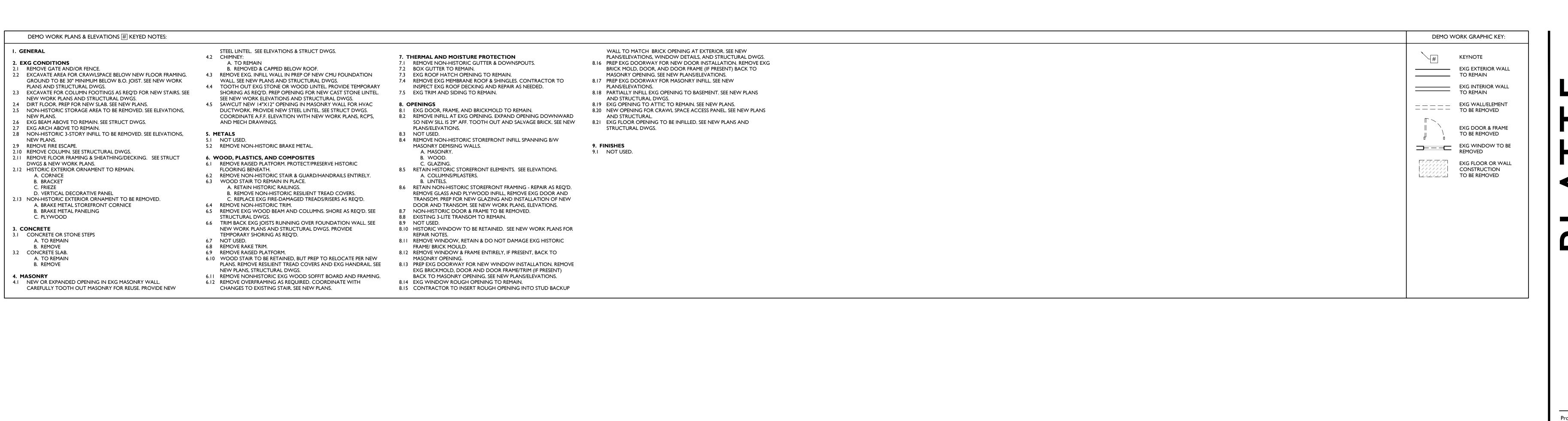


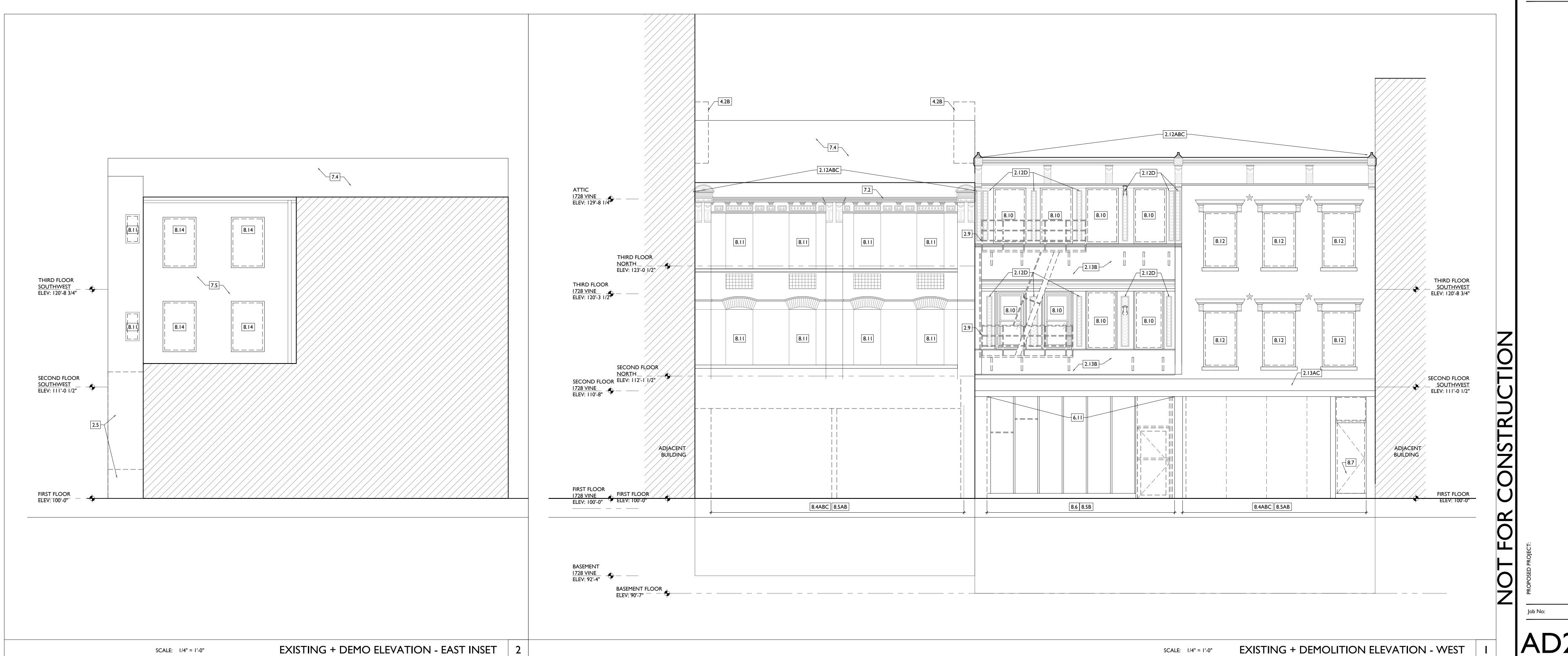








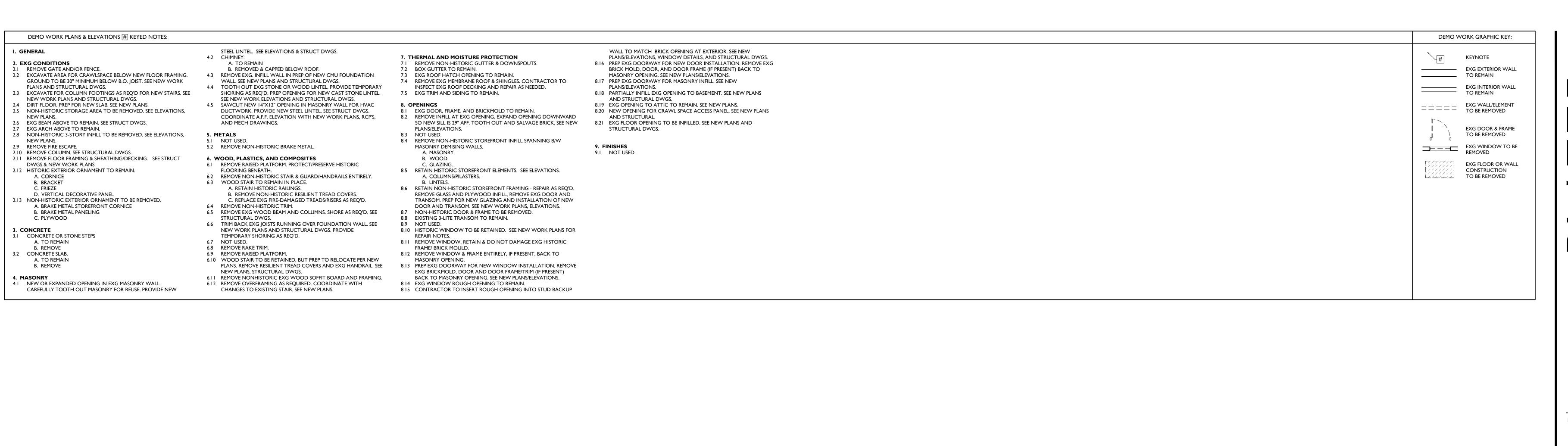


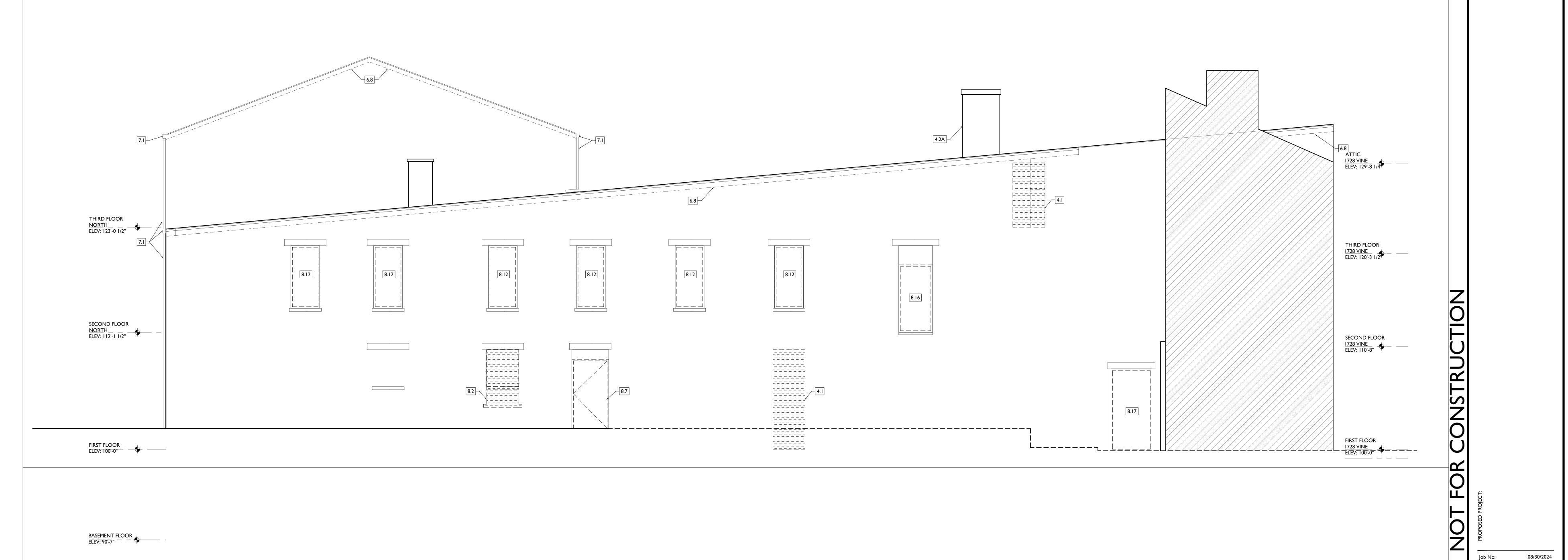


Progress Dates Revisions Design Team: Drawn by:

Job No: 08/30/2024

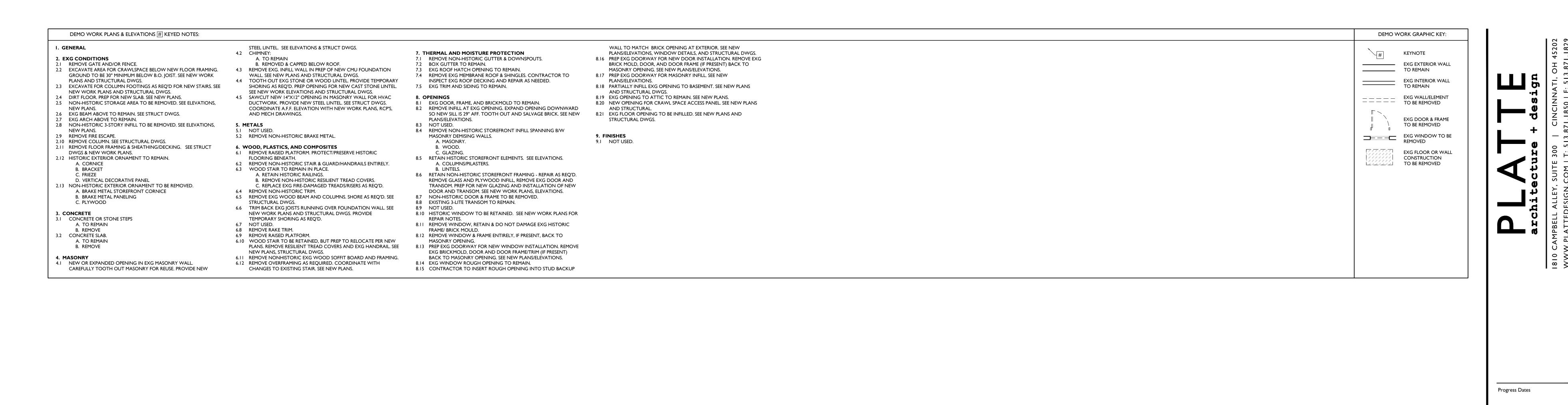
AD2.10





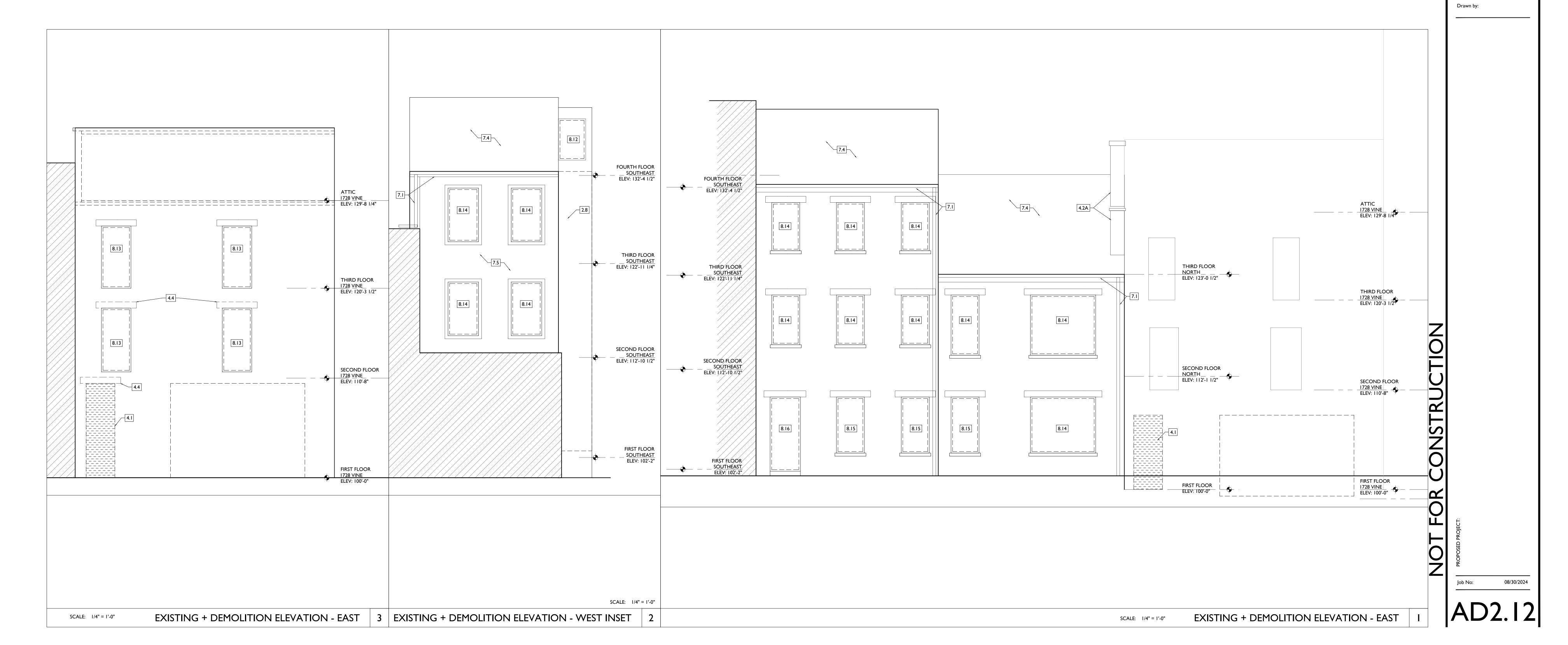
Progress Dates Revisions Design Team:

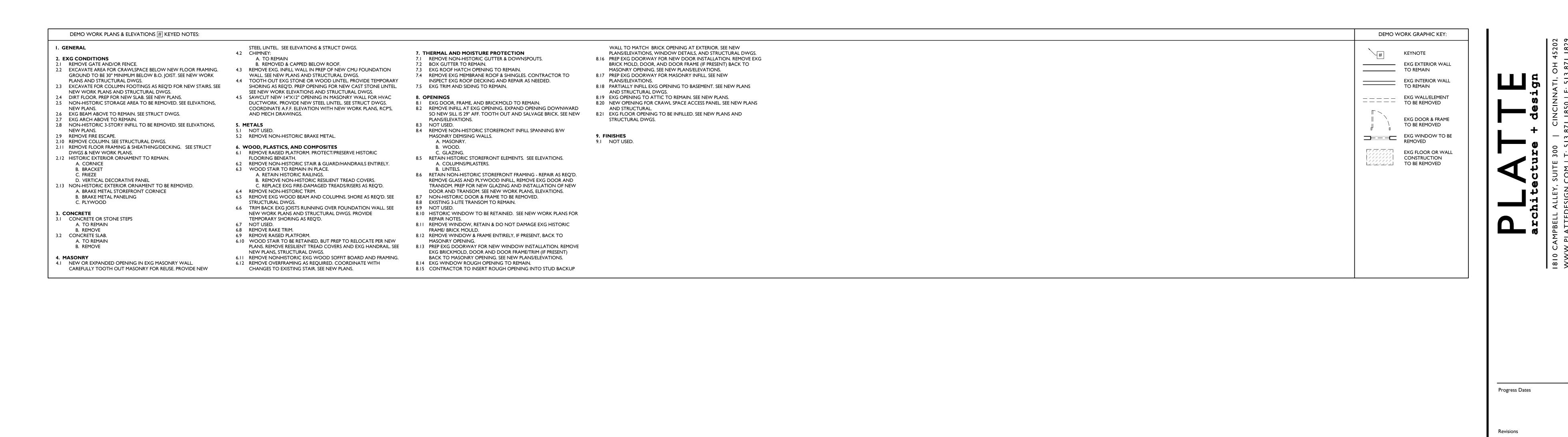
EXISTING + DEMOLITION ELEVATION - NORTH

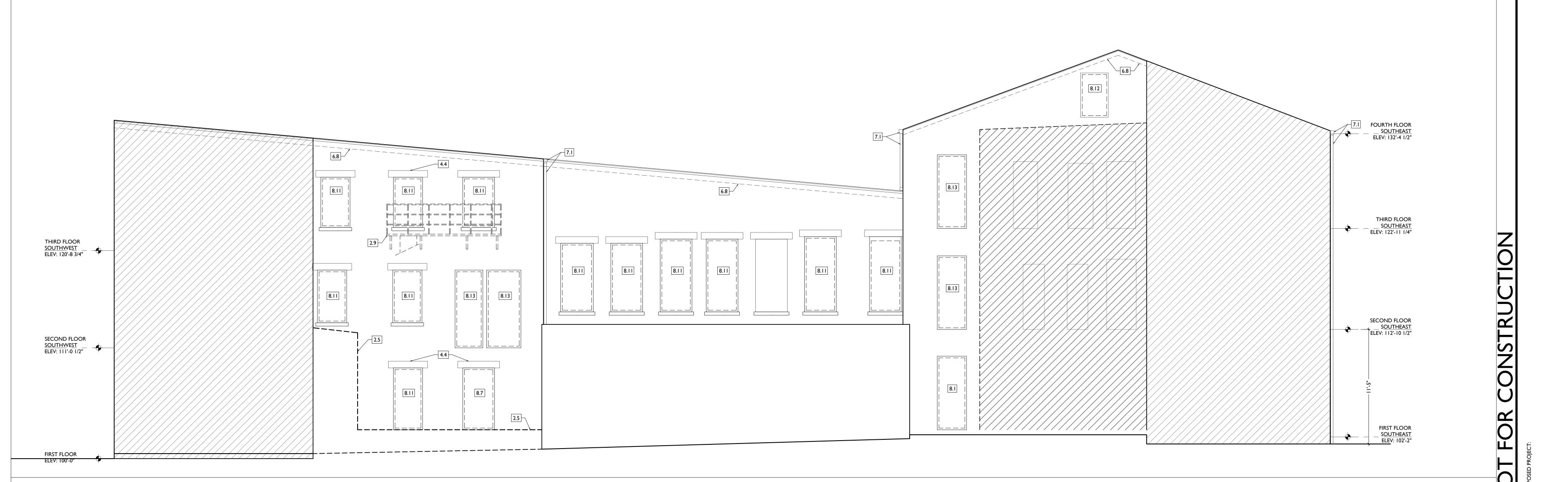


Revisions

Design Team:







Design Team:

EXISTING + DEMOLITION ELEVATION - SOUTH

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

GENERAL NOTES:

INFORMATION IN THESE DRAWINGS.

INCLUDING SITE CONDITIONS. ALL ERRORS, OMISSIONS, AND INCONSISTENCIES ARE TO BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. FAILURE TO DO SO WILL RELEASE THE ARCHITECT OF ALL RESPONSIBILITY. ANY CHANGES FROM THESE DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR, THESE DRAWINGS ARE NOT TO BE SCALED. IF INSUFFICIENT INFORMATION BEFORE PROCEEDING WITH THE WORK. EACH CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AS MAY EFFECT HIS OWN WORK, DESIGN/BUILD OR OTHERWISE.

ANY WATER WELLS OR SEPTIC SYSTEMS IDENTIFIED DURING SITE DEVELOPMENT SHALL BE ABANDONED AS

DEPARTMENT.

DEFINITIONS:

THE DESIGNATED WORK.

AND REPRESENTATIVES.

REQUIRED BY OAC 3745-9-10 OR 3701-29-21, AS APPLICABLE,

"CONTRACTOR": THE PERSON OR ENTITY CONSTRUCTING

AND AFTER CONSULTATION W/ THE LOCAL HEALTH

"OWNER": THE PERSON OR ENTITY THAT OWNS THE

BUILDING BEING RENOVATED. THE TERM "OWNER" INCLUDES HIS DESIGNATED AND AUTHORIZED AGENTS

"WORK": THE TERM "WORK" MEANS OBLIGATIONS

CONTRACT DOCUMENTS. WORK INCLUDES THE

SUPPLIES, TOOLS, SCAFFOLDING, SUPERVISION,

FURNISHING OF ALL MATERIAL, LABOR, EQUIPMENT,

THE FULL PERFORMANCE AND COMPLETION OF THE

REQUIREMENTS OF THE CONTRACT DOCUMENTS.

OF WHICH THE WORK PERFORMED UNDER THE

"CONTRACT DOCUMENTS": THE INTENT OF THE

CONTRACT DOCUMENTS IS TO INCLUDE ALL ITEMS

DRAWINGS AND SPECIFICATIONS. ALTHOUGH THE

CARE AND DILIGENCE, PERFECTION CANNOT BE

ELECTRICAL DWGS SHALL BE WORKED TOGETHER,

SHALL BE REPORTED TO THE ARCHITECT BEFORE

INFORMATION AND COORDINATION ONLY.

INCLUDING THE LOCATION OF DEPRESSED SLABS, SLOPES,

REQUIRED TO SUPPLEMENT THE CONTRACT DOCUMENTS.

SUCH DWGS ARE FURNISHED FOR THE CONTRACTOR'S

INCOMPLETE CONDITION.

DRAWINGS PREPARED BY OTHERS:

PROCEEDING WITH THE WORK.

UNDERTAKEN BY THE CONTRACTOR PURSUANT TO THE

TRANSPORTATION, INSURANCE, TAXES AND ALL OTHER

SERVICES, INCIDENTALS AND EXPENSES NECESSARY FOR

"PROJECT": THE PROJECT IS THE TOTAL CONSTRUCTION

CONTRACT DOCUMENTS MAY BE THE WHOLE OR A PART.

REQUIRED FOR COMPLETION OF THE WORK, INCLUDING

CONTRACT DOCUMENTS HAVE BEEN PREPARED WITH DUE

WORK SO THAT NO PART SHALL BE IN AN UNFINISHED OR

GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR

THE COORDINATION OF THE VARIOUS PARTS OF THE

CONTRACTOR DURING DEMOLITION TO PREVENT RELEASE OF LEAD-CONTAMINATED DUST SHALL BE ASSUMED TO CONTAIN LEAD BASED PAINT SHALL BE COVERED TO PREVENT ACCESS TO OR RELEASE OF LEAD-CONTAMINATED DUST OR DEBRIS.

4. IT SHALL BE THE RESPONSIBILITY OF THE BUILDING OWNER TO SUPERVISE CONSTRUCTION AND INSURE THAT THESE DRAWINGS ARE COMPLIED WITH IN THE EVENT THAT THIS ARCHITECT IS NOT RETAINED FOR SUCH SERVICES.

5. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS, INCLUDING THE AMERICANS WITH DISABILITIES ACT, HAVING AUTHORITY BEARING ON THE PERFORMANCE OF THE WORK, AND SHALL BE DONE TO THE HIGHEST STANDARDS OF CRAFTSMANSHIP BY EACH RESPECTIVE

7. CONTRACTOR SHALL SUPERVISE THE WORK DURING PROGRESS AND SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION SAFETY; COMPLIANCE TO BE IN ACCORDANCE WITH ALL STATE, FEDERAL AND O.S.H.A. REGULATIONS.

8. CONTRACTOR AND ALL SUB-CONTRACTORS SHALL MAINTAIN THE JOB CLEAR OF TRASH AND DEBRIS. ALL WASTE MATERIAL, TOOLS, CONSTRUCTION EQUIPMENT AND SURPLUS MATERIAL SHALL BE REMOVED FROM THE SITE PRIOR TO

SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE.

9. CONTRACTOR SHALL PRESENT THE PROJECT TO THE OWNER FOR ACCEPTANCE, CLEAN AND READY FOR USE. ALL GLASS TO BE CLEANED, FLOORS SWEPT BROOM CLEAN, FIXTURES WASHED AND LABELS REMOVED FROM ALL ITEMS.

10. ANY CONTRACTOR OF SUBCONTRACTOR WHO PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO APPLICABLE LAWS, ORDINANCES OR REGULATION, AND WITHOUT WRITTEN NOTICE TO THE ARCHITECT ATTRIBUTABLE COSTS.

II. IN THE EVENT OF ANY CONFLICT BETWEEN ARCHITECTURAL DRAWINGS OR SPECIFICATIONS AND STRUCTURAL DRAWINGS OR SPECIFICATIONS, STRUCTURAL SHALL GOVERN.

THE CONSTRUCTION PHASES.

2. ALL WORK SHALL CONFORM TO APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. EACH TESTS AND INSPECTIONS FOR HIS OWN WORK AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.

3. PERFORM ALL TESTS, ADJUSTMENTS, ETC. AS REQUIRED BY EQUIPMENT MANUFACTURER OR AUTHORITIES HAVING JURISDICTION.

4. CONTRACTORS SHALL VISIT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AS MAY EFFECT HIS OWN WORK. EACH CONTRACTOR SHALL COORDINATE HIS OWN WORK WITH THAT OF OTHER TRADES. 5. EACH CONTRACTOR SHALL FURNISH ALL CUTTING AND PATCHING REQUIRED FOR HIS OWN WORK. NO CUTTING SHALL BE PERFORMED WITHOUT PRIOR APPROVAL OF GENERAL CONTRACTOR.

GENERAL CONDITIONS

CONTRACT DOCUMENTS: INCLUDE THESE GENERAL CONDITIONS FOR CONSTRUCTION, DRAWINGS, SCHEDULES, AND SPECIFICATIONS PREPARED BY THE ARCHITECT AND CONTAINED HEREIN, AND ALL WRITTEN ADDENDA OR OTHER MODIFICATIONS ISSUED SUBSEQUENTLY BY THE ARCHITECT. THE CONTRACT DOCUMENTS SHALL NOT BE CONSTRUED TO CREATE ANY CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.

CONTRACT MODIFICATIONS: THESE CONTRACT TERMS OR CONDITIONS OTHER THAN THOSE LISTED AND SUBCONTRACTORS.

THE CURRENT EDITION OF AIA DOCUMENT A101 SHALL BE THE FORM OF AGREEMENT TO BE SIGNED BY THE OWNER AND GENERAL CONTRACTOR, UNLESS THE OWNER AND CONTRACTOR MUTUALLY AGREE OTHERWISE. GENERAL CONDITIONS CONTAINED IN AIA DOCUMENT A201 SHALL

BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO CONTROL EROSION DURING CONSTRUCTION AND UNTIL FINAL COVER IS ESTABLISHED.

OF CONTAMINATION (FILL OTHER THAN "CLEAN FILL", ARE IDENTIFIED DURING CONST. TO ALLOW FOR A THE LOT AND MAKE RECOMMENDATIONS REGARDING APPROPRIATE ACTIONS.

I. CONTRACTOR TO VERIFY ALL DIMENSIONS AND

EXISTS, CONTACT THE ARCHITECT FOR CLARIFICATION

2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS,

3. BEST MANAGEMENT PRACTICES SHALL BE USED BY THE EMITTED FROM DEMOLITION ACTIVITIES. ALL PAINT CHIPS AND OTHER DEBRIS OR RESIDUE SHALL BE REMOVED FROM THE PROJECT SITE AT THE COMPLETION OF DEMOLITION. STORAGE AND TRANSPORT OF MATERIALS KNOWN OR

6. GUARANTEES SHALL BE REQUIRED OF ALL BRANCHES OF THE WORK. CONTRACTORS TO REMEDY ANY DEFECTS IN THEIR WORK AND PAY FOR ANY RESULTANT DAMAGES TO OTHER WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE.

SHALL ASSUME FULL RESPONSIBILITY AND SHALL BEAR ALL

12. PROJECT IS TO RECEIVE HISTORIC TAX CREDITS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE WELL VERSED IN THE APPROVED PART 2 AND SUBSEQUENT AMENDMENTS, AND TO INFORM SUBCONTRACTORS OF ANY CHANGES /APPROVALS DURING THE BIDDING AND

GENERAL NOTES: ALL TRADES

I. FURNISH ALL LABOR, MATERIAL AND APPURTENANCES NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM AS SHOWN OR REQUIRED.

CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS,

6. WORKMANSHIP SHALL REPRESENT THE HIGHEST STANDARD OF THE INDUSTRY. GUARANTEE ALL MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR AFTER ACCEPTANCE.

DOCUMENTS SHALL NOT BE FURTHER MODIFIED BY ANY HEREIN OR IN THE SPECIFICATIONS, OR IN ANY WRITTEN AGREEMENTS EXECUTED BY THE OWNER, CONTRACTOR

NOTES WRITTEN IN THE IMPERATIVE MOOD REFER TO ACTION TO BE PERFORMED BY THE CONTRACTOR. THE WORDS "THE CONTRACTOR SHALL" ARE ALWAYS IMPLIED, IF NOT STATED, UNLESS OTHERWISE NOTED. THE TERM "CONTRACTOR" SHALL ALSO APPLY TO ALL SUBCONTRACTORS OF THE CONTRACTOR.

THE CONTRACTOR SHALL BE NOTIFIED, BOTH VERBALLY AND THROUGH NOTATIONS ON THE FINAL CONST. DWG, THAT WORK SHALL BE HALTED AT A LOT IF INDICATORS DISCOLORED SOILS OR CHEMICAL/ PETROLEUM ODORS) QUALIFIED ENVIRONMENTAL PROFESSIONAL TO INSPECT

GENERAL NOTES: PROPOSED WORK

- THIS IS A HISTORIC TAX CREDIT PROJECT. WORK MUST COMPLY W/ APPROVED PART 2, **INCLUDING AMENDMENTS**
- B. NO HISTORIC ELEMENTS SHALL BE REMOVED/MODIFIED UNLESS SPECIFICALLY INDICATED IN ARCH PLANS C. REPAIR OR REPLACE EXG DAMAGED OR DETERIORATED FLOOR FRAMING &/OR WOOD
- SUBFLOOR PER STRUCT DWGS. HISTORIC TRIM TO BE RETAINED, U.N.O. SEE DEMO & PROPOSED PLANS.
- E. RETAIN ANY REMAINING HISTORIC WOOD WINDOW SASH, FRAMES, BRICKMOLD & SHUTTER HARDWARE, U.N.O. SEE DEMO & EXTERIOR ELEVATIONS. REPAIR MATERIALS THAT ARE DETERIORATED OR HAVE MOISTURE/FIRE DAMAGE AS REQ. IF DAMAGE IS SEVERE AND HISTORIC ELEMENTS ARE NON-SALVAGEABLE, COORDINATE
- REPLACEMENT ELEMENTS WITH ARCHITECT. G. SEE CODE SHEETS FOR ROOF/FLOOR/CEILING ASSEMBLY LOCATIONS & PARTITION SCHEDULE FOR TYPES.
- H. PENETRATIONS OF RATED ASSEMBLIES TO BE PROTECTED PER SECTION 713.3 & 713.4 OBC. COORD W/ MEP DWGS. PROVIDE FIRE BLOCKING PER 717.2 OBC.
- PROVIDE DRAFTSTOPPING IN FLOORS, CLGS/ROOFS & ATTICS PER OBC. PROVIDE BLOCKING FOR SHELVING, CABINETS AND BATHROOM ACCESSORIES AND GRAB BARS. SEE PLANS AND INTERIOR ELEVATIONS.
- L. USE PRESSURE TREATED WOOD IN THE FOLLOWING LOCATIONS: - EXTERIOR APPLICATIONS.
- WOOD IN CONTACT WITH MASONRY, STONE, OR CONCRETE. - AT ANY NEW FRAMING IN CONTACT W/ MASONRY OR FOUNDATION WALL, PROVIDE
- SEPARATION/ JOIST & BEAM END WRAPS. EXTERIOR TRIM, SOFFITS, CORNICE AND STOREFRONT ELEMENTS TO BE REPAIRED/RETAINED/REPLACED AND PAINTED AS NOTED IN DRAWINGS. EXG.
- UN-PAINTED BRICK AND STONE TO REMAIN UNPAINTED. SEE EXTERIOR ELEVATIONS FOR SCOPE OF WORK. COORD COLORS DIRECTLY W/ ARCHITECT. AF. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATION AND
- CONNECTIONS OF ALL MEP EQUIPMENT. AG. PROVIDE SLEEVES THROUGH EXG. BRICK WALL IN ATTIC AS REQUIRED FOR HVAC LINE-SET INSTALLATION.
- AH. ADDITIONAL OPENINGS IN EXTERIOR WALLS WILL BE REQUIRED FOR VARIOUS MEP DUCTS/PIPES/ETC, AND ARE NOT SHOWN ON ARCH & STRUCT PLANS. COORD W/ MEP PLANS. CONTACT ARCHITECT FOR PLACEMENT.
- AI. PROVIDE FIRE EXTINGUISHERS PER CODE SUMMARY & NFPA REQS. COORD W/ FIRE MARSHALL.
- AJ. FASTENERS INTO EXISTING HISTORIC MASONRY WALLS ARE TO BE FASTENED INTO MORTAR JOINTS. ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND
 - AK. EXTERIOR STEEL TO BE DUPLEX-FINISH (GALVANIZED, WITH HIGH-PERFORMANCE COMPATIBLE EPOXY PAINT).
 - AL. REPAIR & RESEAL AROUND EXG. CHIMNEYS, TYP. AS REQ. PROVIDE NEW ALUM CAP, TYP. AM. EXTERIOR WOOD TO BE PRESSURE TREATED.
- DRAINS, REGLETS, BOLT SETTINGS, ETC. ANY DISCREPANCY AN. WHERE INFILLING EXISTING OPENINGS IN, OR EXTENDING THE LENGTH OF AN EXISTING WOOD FRAMED PARTITION, FINISH FACES OF THE NEW CONSTRUCTION ARE TO ALIGN WITH ADJACENT EXISTING FINISH FACES ON BOTH SIDES. AO. SHEET METAL WORK TO COMPLY WITH SMACNA ARCHITECTURAL SHEET METAL MANUAL. SHOP DWGS PREPARED BY OTHER CONTRACTORS MAY BE
 - INSTALLERS ACCEPTABLE TO EXISTING ROOF MANUFACTURER AND COMPLY WITH EXISTING ROOF MANUFACTURER REQUIREMENTS TO MAINTAIN EXISTING ROOF AQ. BASEMENTS TO BE TESTED FOR RADON EXPOSURE. PROVIDE VAPOR MITIGATION SYSTEM BELOW BASEMENT SLAB AS REQUIRED. CONNECT TO VERTICAL VENTS INDICATED IN

AP. FLASH AND SEAL NEW ROOF PENETRATIONS THROUGH EXISTING ROOF. EMPLOY

- FLOOR PLANS. AR. MASONRY WORK: REFER TO PART 2 SHPO NARRATIVES AND STRUCTURAL DRAWINGS FOR FULL EXTENT AND SCOPE FOR MASONRY CLEANING, TUCK-POINTING, REPAIR,
- REPLACEMENT, AND PAINTING. AS. MASONRY CLEANING: CONTRACTOR SHALL PERFORM MASONRY CLEANING WORK IN ACCORDANCE WITH PRESERVATION BRIEF 6 - "DANGERS OF ABRASIVE CLEANING TO HISTORIC BUILDINGS." CONTRACTOR SHALL CLEAN EXISTING MASONRY THROUGHOUT USING THE GENTLEST MEANS POSSIBLE AND SHALL START EACH NEW METHOD OF CLEANING (E.G. BY BRUSH, WITH DETERGENT, WITH WATER PRESSURE, ETC.) IN DISCRETE AREA OF EACH WALL. CONTRACTOR SHALL BEGIN BY CLEANING WITH WATER AND NATURAL BRISTLE BRUSHES. CONTRACTOR SHALL THEN CLEAN ANY AREAS THAT REQUIRE FURTHER CLEANING USING NON-ABRASIVE, NON-ACIDIC DETERGENTS WITH NATURAL BRISTLE BRUSHES. CONTRACTOR SHALL THEN CLEAN ANY AREAS THAT REQUIRE FURTHER CLEANING USING NON-ABRASIVE, NON-ACIDIC DETERMENTS WITH LOW PRESSURE WATER (STARTING AT 20 PSI AT TIP). UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE PRESSURE WASHING WITH GREATER THAN 40 PSI AT TIP. CLEANING SHALL BE PERFORMED EVENLY THROUGHOUT THE ENTIRETY OF EACH WALL. WALLS WHERE STUCCO / PARGING IS TO REMAIN SHALL NOT BE CLEANED WITH PRESSURE WASHING. REMOVE EXISTING LOOSE STUCCO / PARGING BY HAND WITH BRUSHES. PRESERVATION BRIEF 6 - "DANGERS OF ABRASIVE CLEANING TO HISTORIC BUILDINGS:
- HTTPS://WWW.NPS.GOV/TPS/HOW-TO-PRESERVE/BRIEFS/6-DANGERS-ABRASIVE-CLEANING.HTM AT. PARGING: CONTRACTOR TO TEST AND ASSESS THE INTEGRITY OF EXISTING STUCCO / PARGING ON EXISTING MASONRY WALLS. ANY STUCCO / PARGING TO REMAIN MUST BE SECURELY HELD TO EXISTING MASONRY WALL. ANY STUCCO / PARGING THAT IS NOT SECURELY HELD TO MASONRY WALL SHALL BE REMOVED THROUGH GENTLEST MEANS POSSIBLE (SEE MASONRY CLEANING ABOVE). NEW STUCCO / PARGING SHALL BE INSTALLED WHERE EXISTING STUCCO / PARGING HAS BEEN REMOVED, AND AS INDICATED ON THE DRAWINGS, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S HIGHEST RECOMMENDATIONS USING ALL ASSOCIATED COMPONENTS FOR FLASHING, PENETRATIONS, ETC. STUCCO / PARGING SHALL BE INSTALLED ON MASONRY JAMB SURFACES OF NEW DOOR AND WINDOWS OPENINGS UP TO THE WINDOW / DOOR UNIT. NEW STUCCO/ PARGING SHALL MATCH EXISTING IN TEXTURE AND COLOR. NEW STUCCO / PARGING SHALL BE A THREE-COAT SYSTEM (SCRATCH COAT, BROWN COAT AND FINISH COAT) WITH A GLASS FIBER REINFORCED LATH. BASIS-OF-DESIGN IS "SENERGY" BRAND, "SENERGY SENTRY STUCCO WALL SYSTEM PERMALATH 1000" WITH PRE-MIXED "SENTRY STUCCO BASE" AND "SENERLASTIC" FINISH COAT WITH TEXTURE TO
- MATCH EXISTING. CONTROL JOINTS TO BE ALIGNED WITH OPENINGS. AU. GYPSUM BOARD: SEE PARTITION SCHEDULE. MOLD & MOISTURE RESISTANT GYPSUM BOARD IN ALL WET AREAS - RESTROOMS, KITCHENS, LAUNDRY, BASEMENTS. AV. STORM WINDOWS: FRAME WIDTH CANNOT REDUCE THE DAYLIGHT OPENING OF THE
- WINDOW & THE CENTER CHECK RAIL MUST ALIGN WITH THE WINDOW CENTER CHECK RAIL. NO SCREENS. AW.PROVIDE UNIT ENTRY SIGNAGE PER FINISH SCHEDULE AT EACH RESIDENTIAL UNIT ENTRY. FINAL LOCATION TO BE DETERMINED BY OWNER. IF MOUNTING ON DOOR, ENSURE INSTALLATION DOES NOT VOID RATING OF DOOR ASSEMBLY.
- AX. PROVIDE BLINDS AT RESIDENTIAL UNITS PER FINISH SCHEDULE. QUANTITY AND LOCATIONS BY OWNER. AY. SUBCONTRACTOR TO PROVIDE RECOMMENDED ALLOWANCE FOR PLASTER REPAIR.

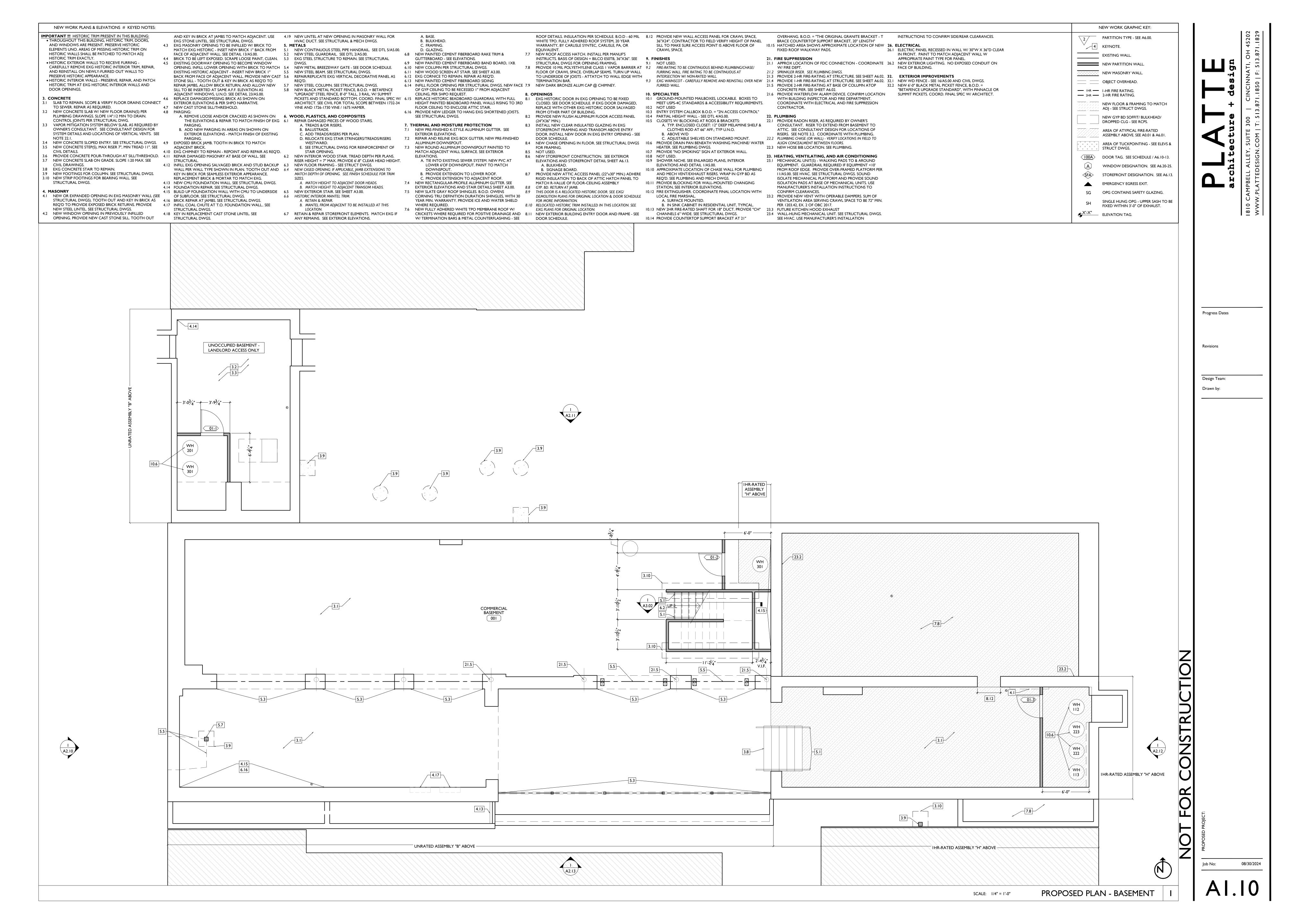
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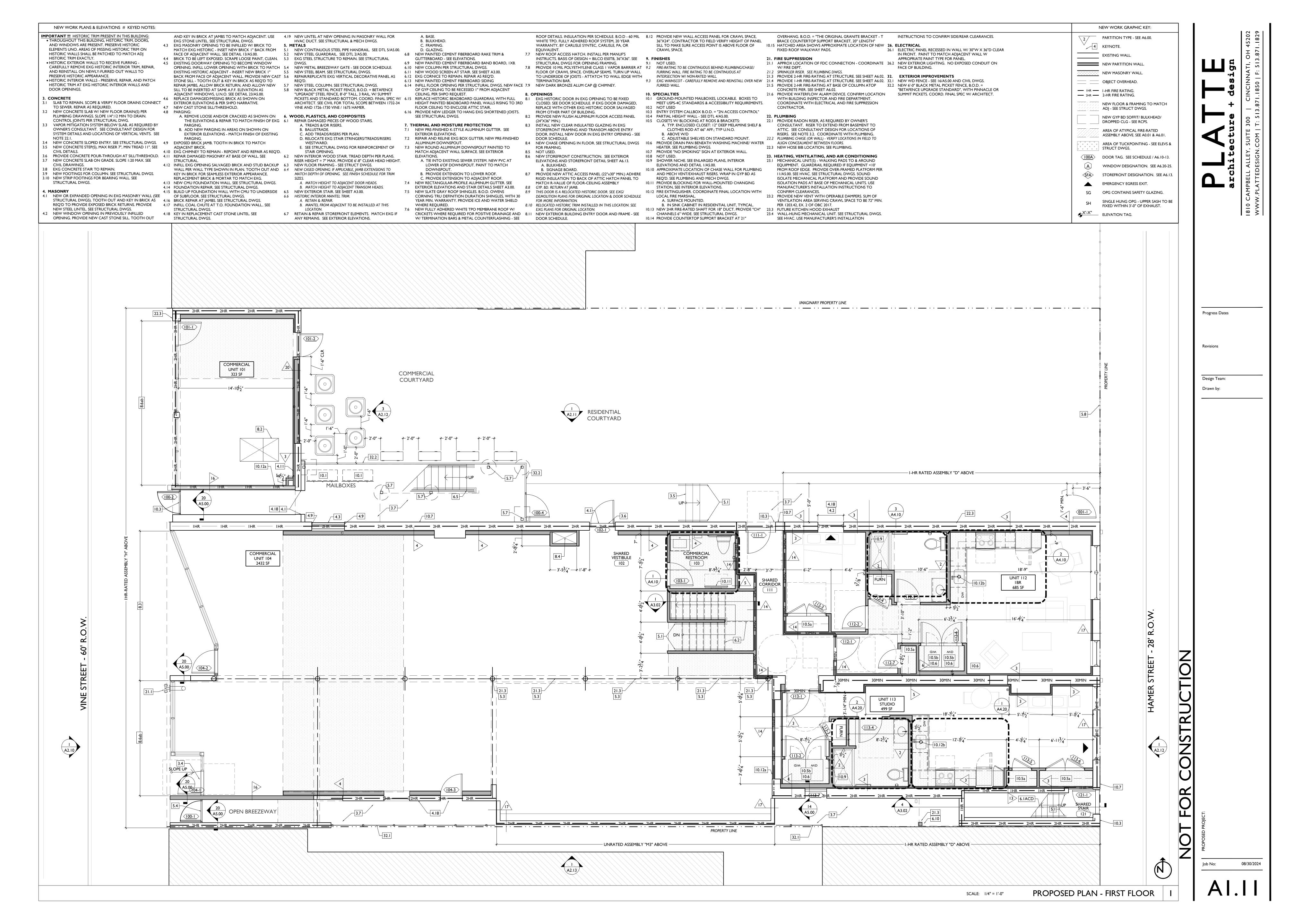
Revisions

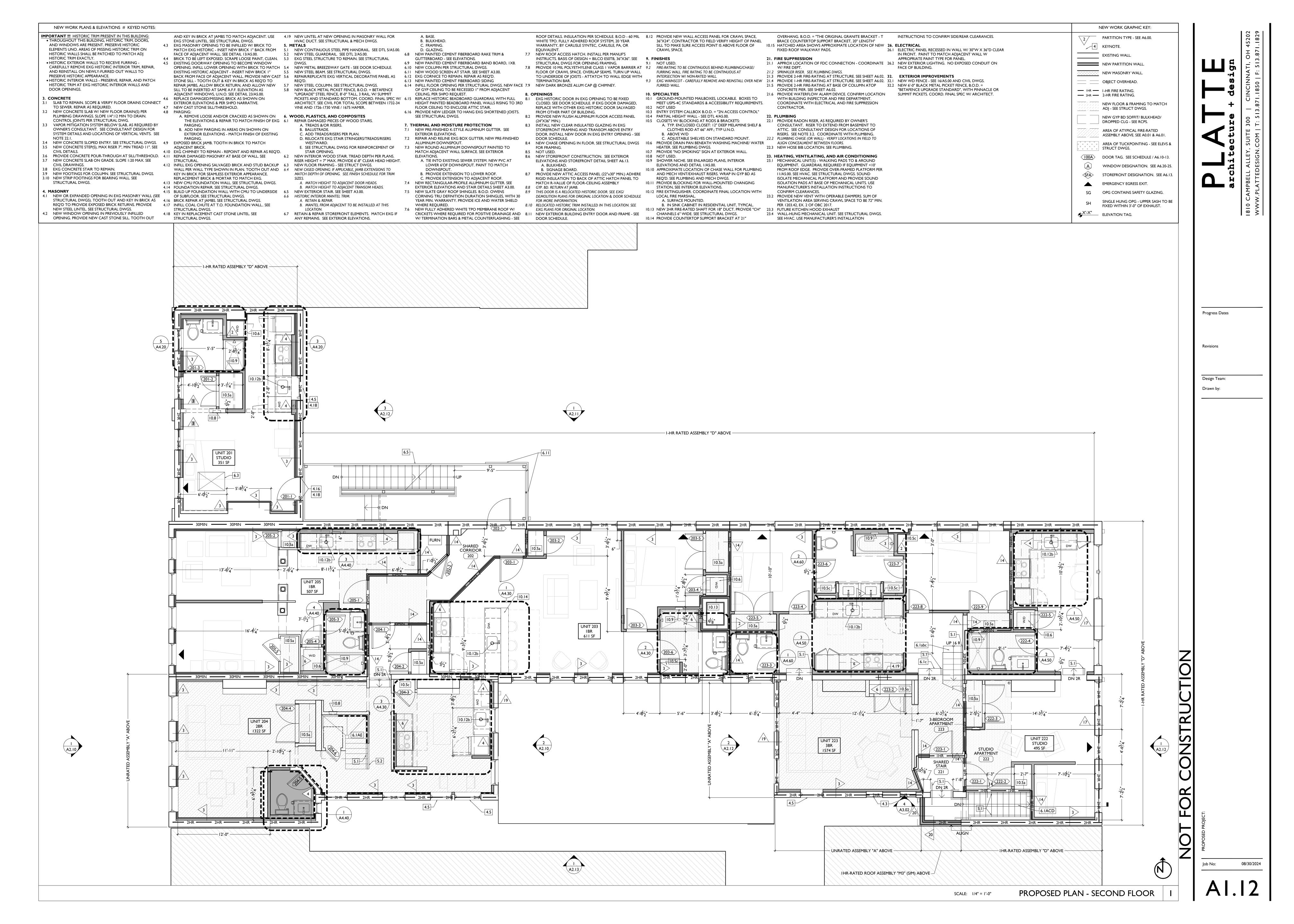
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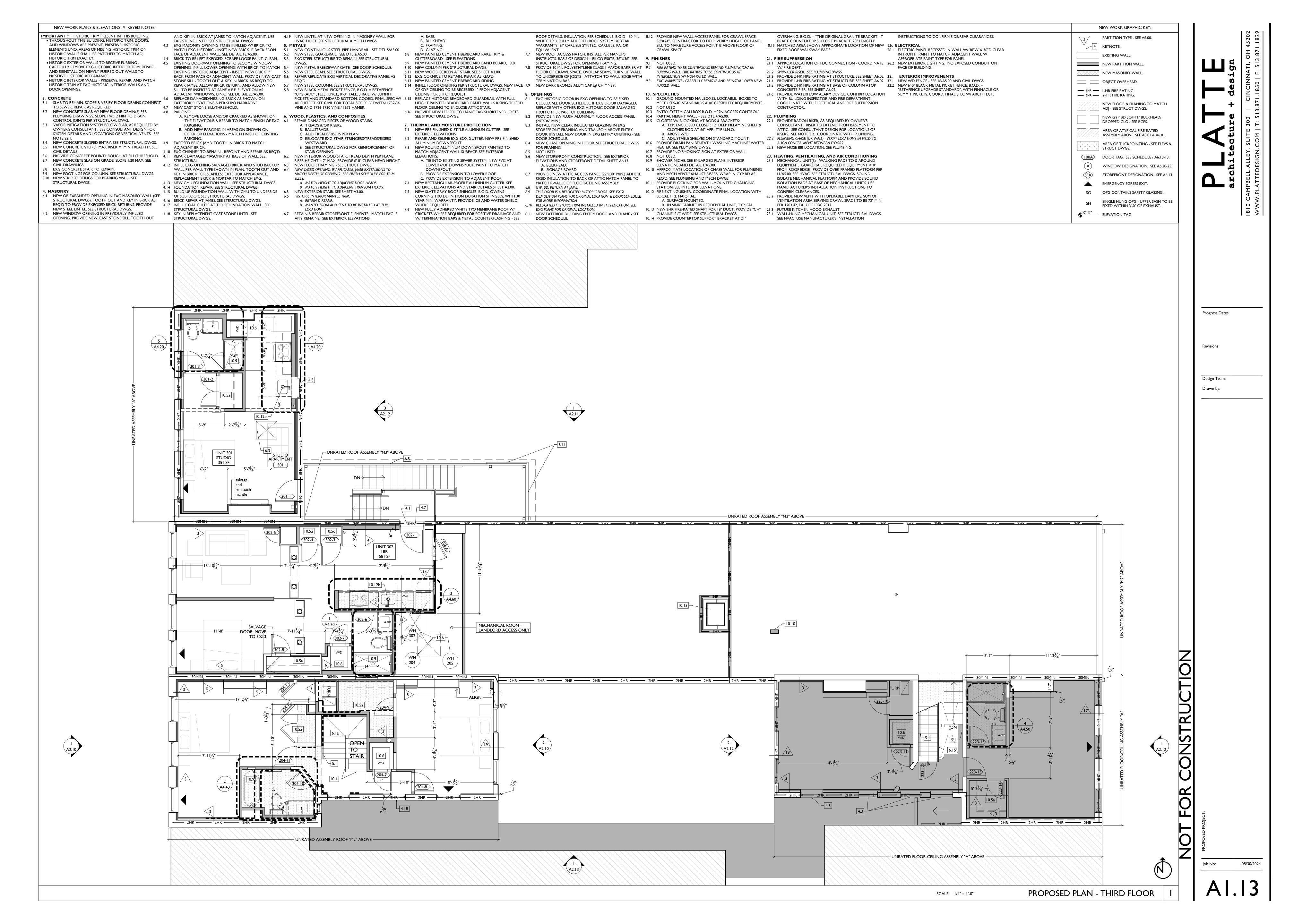
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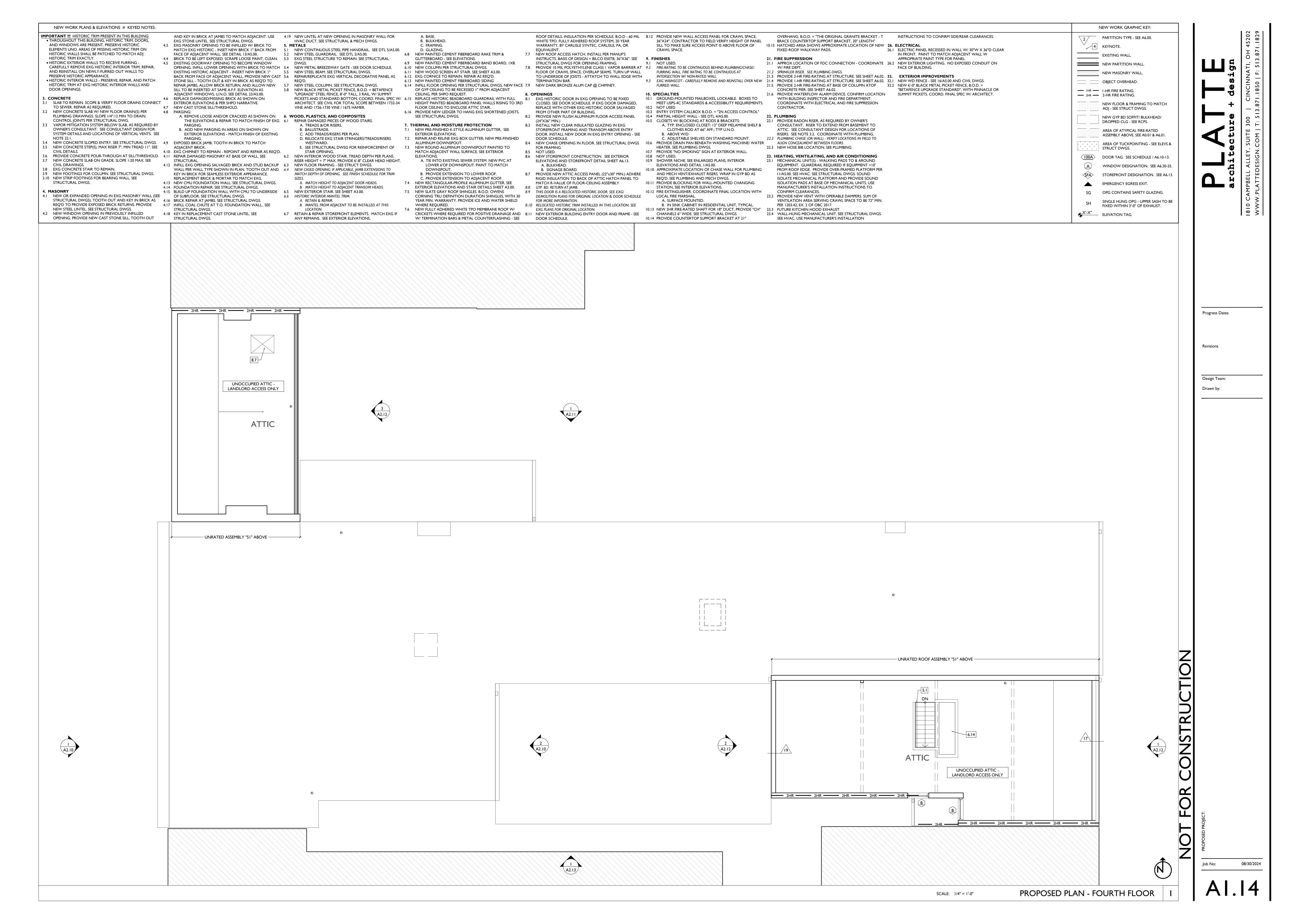
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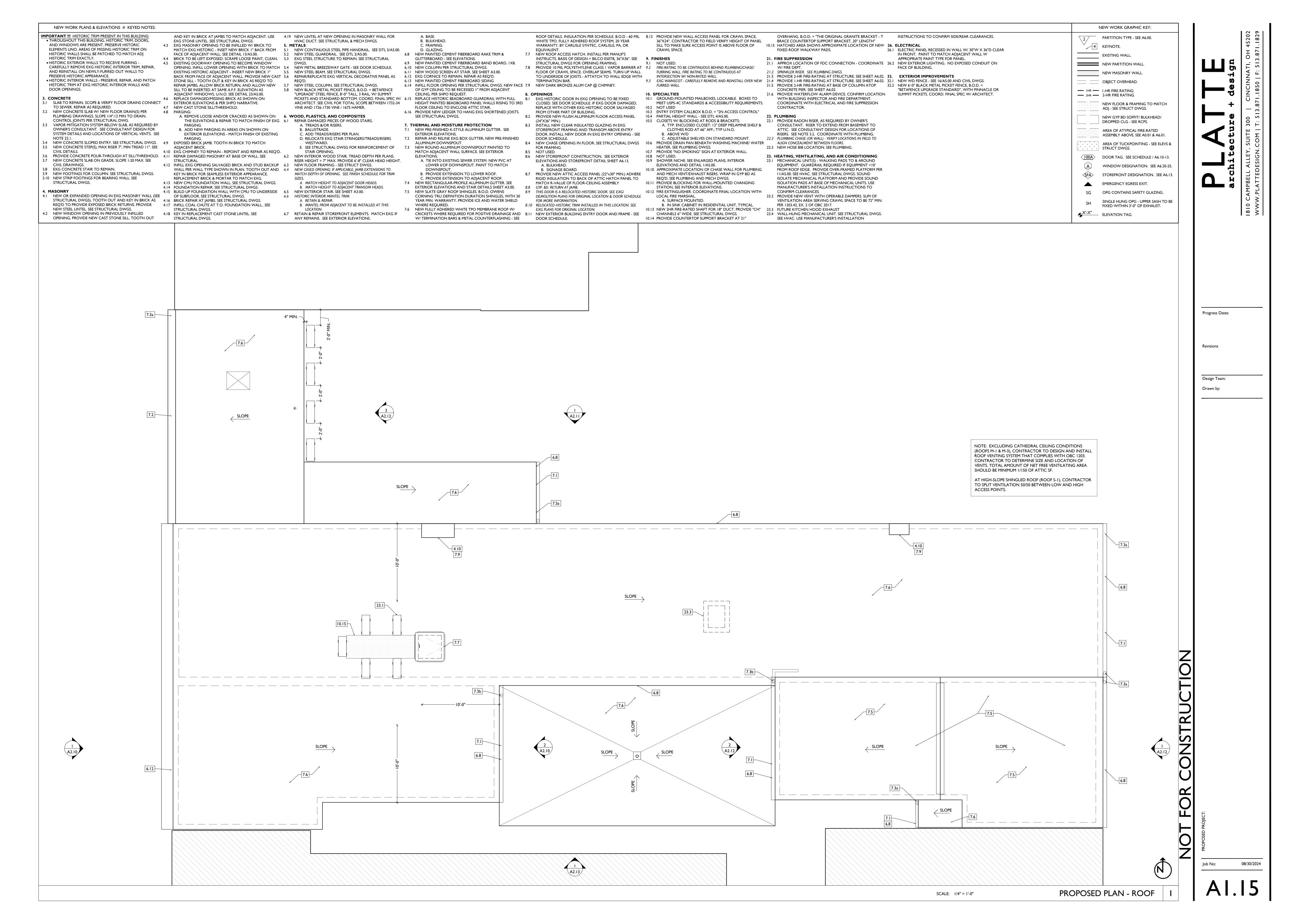


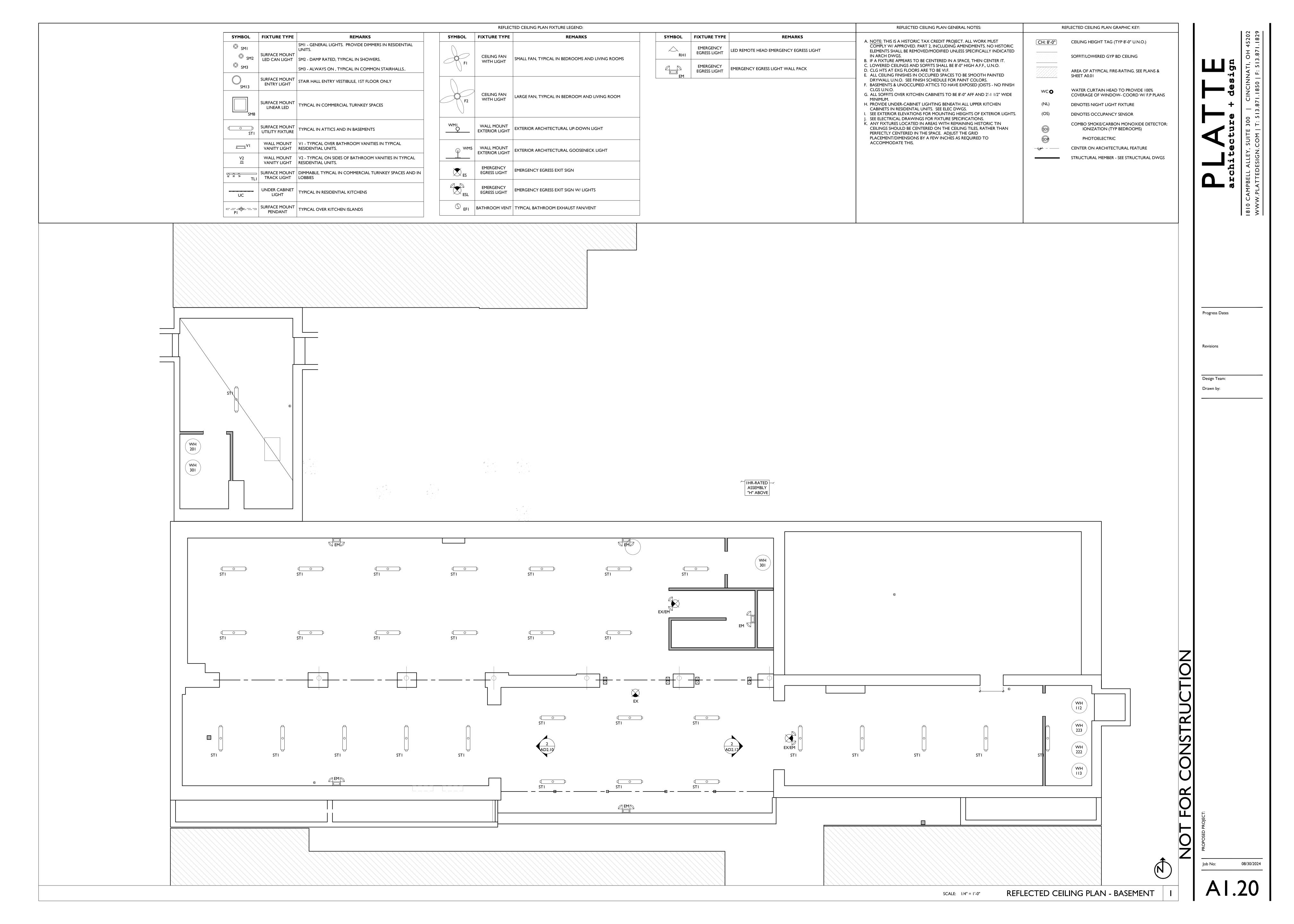


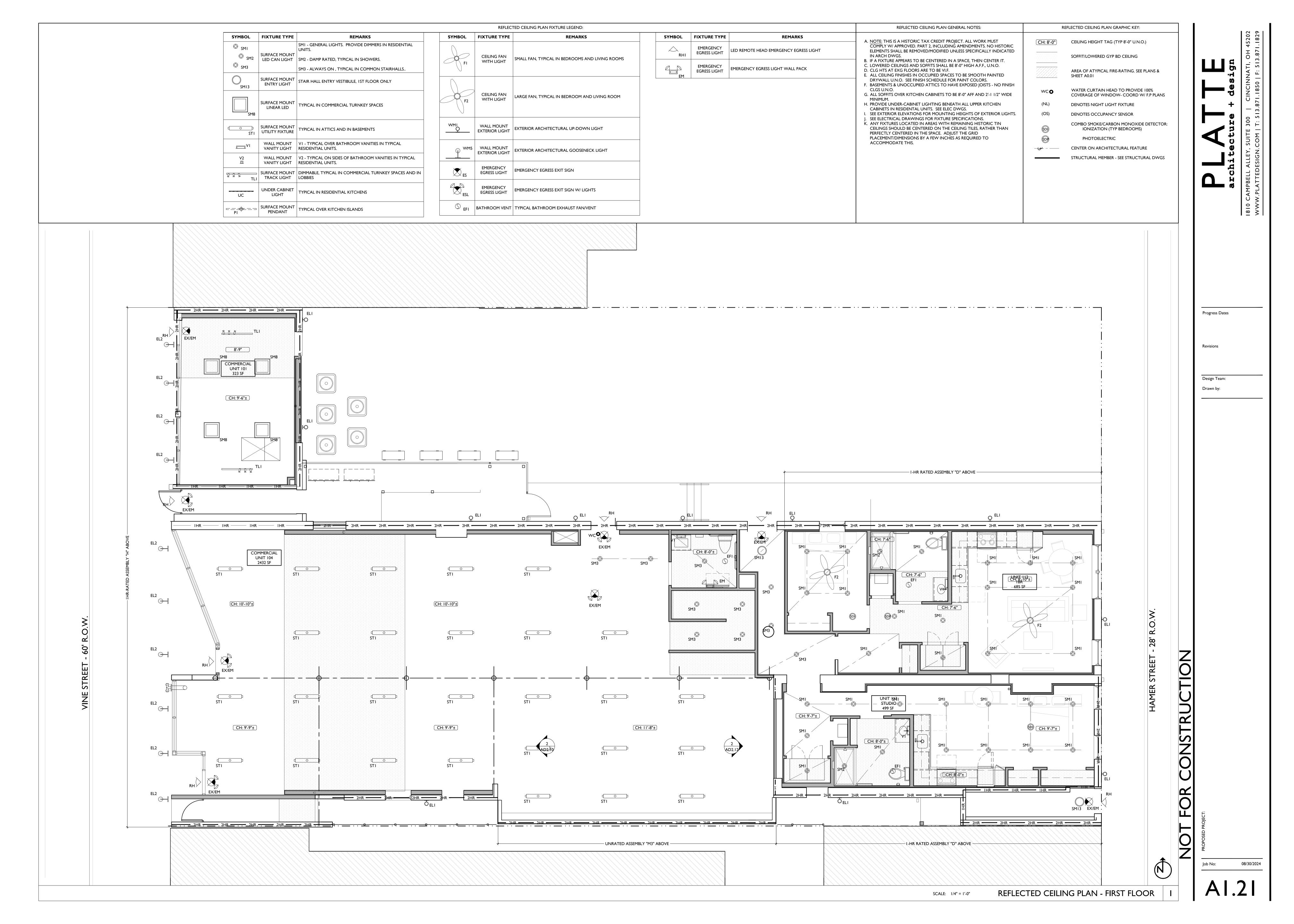


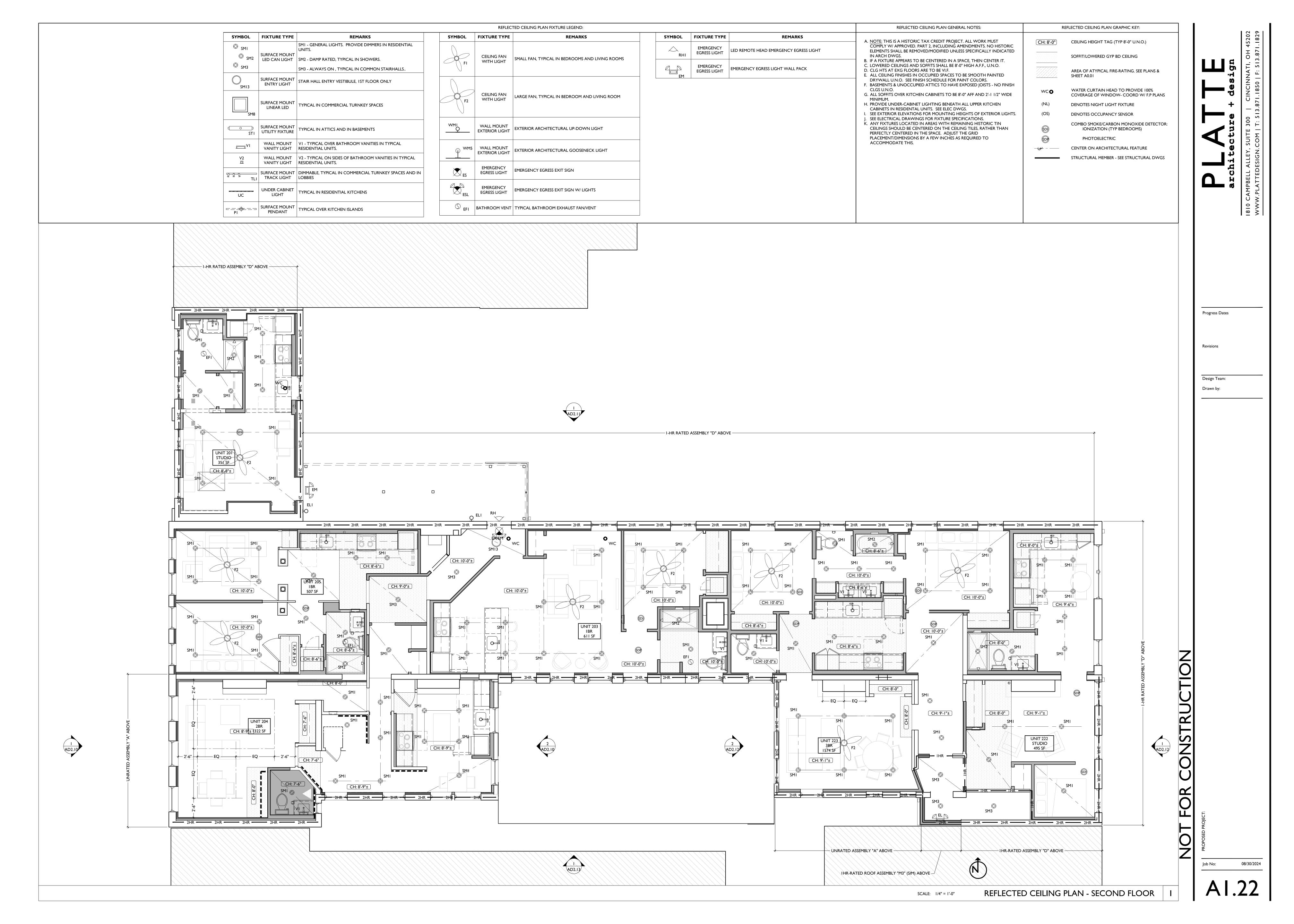


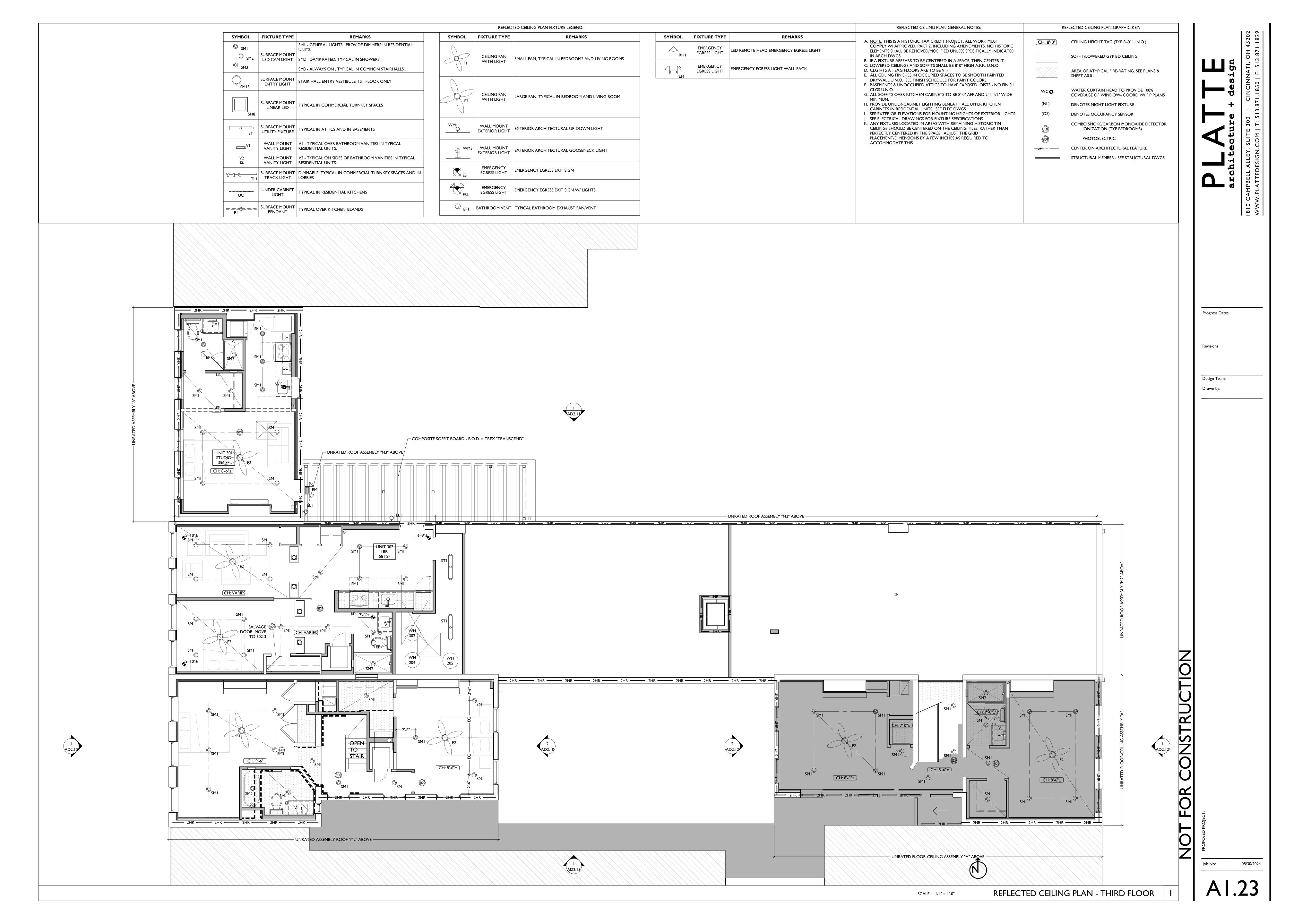


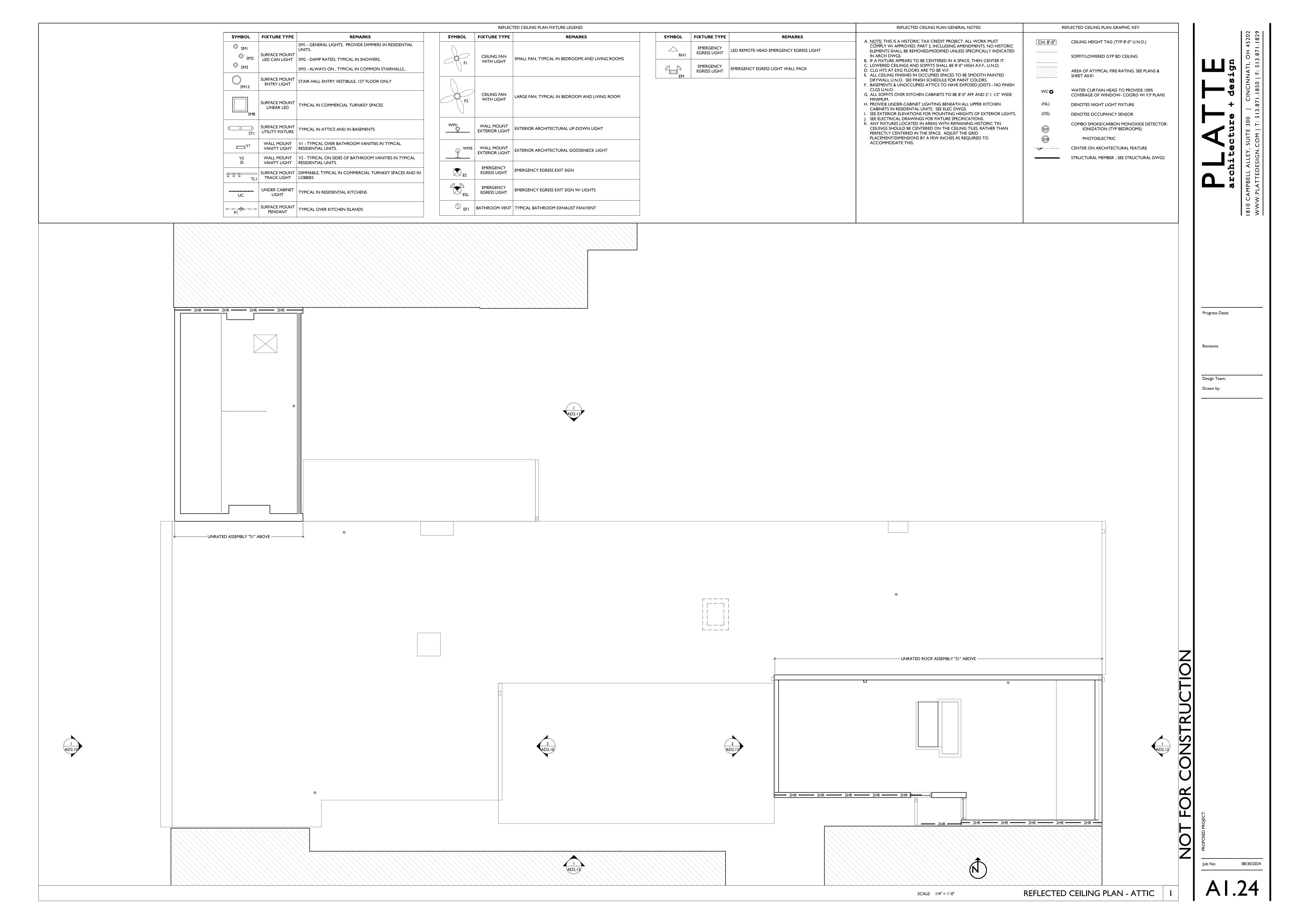


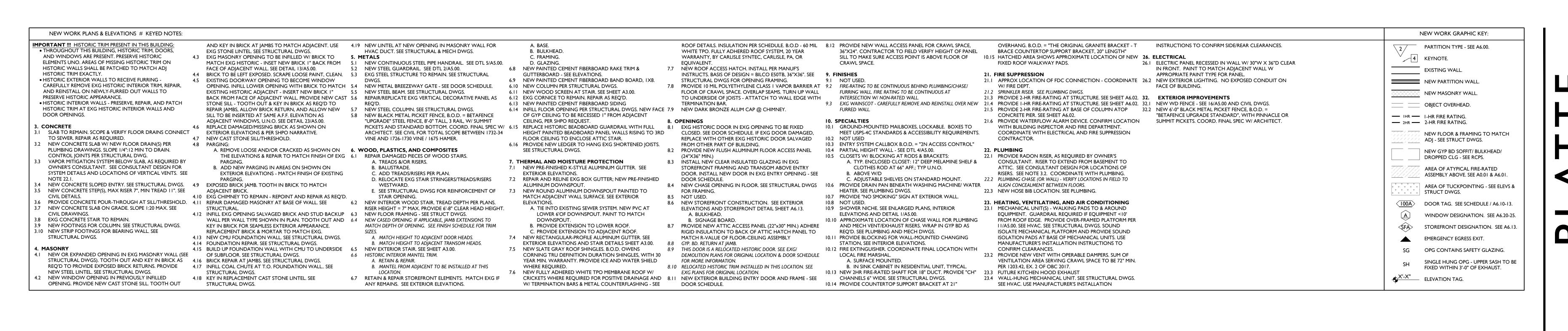














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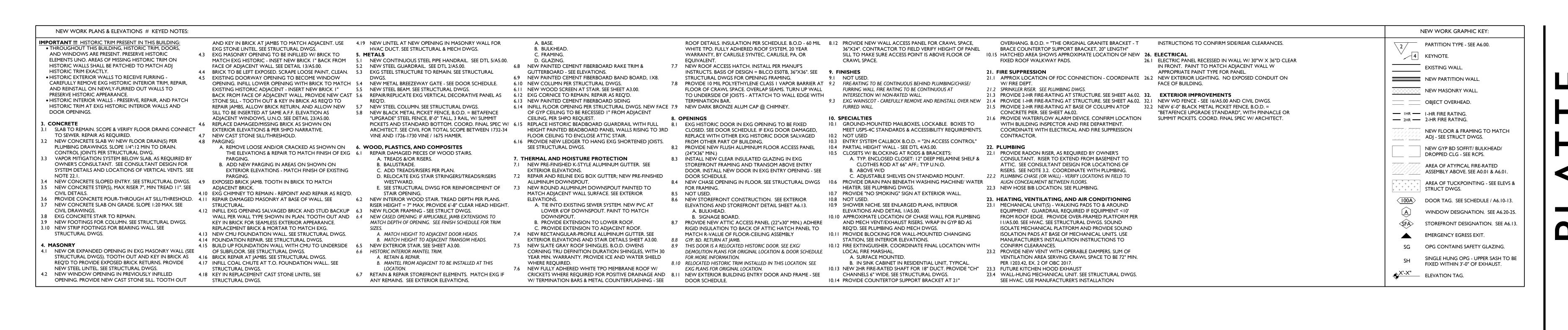
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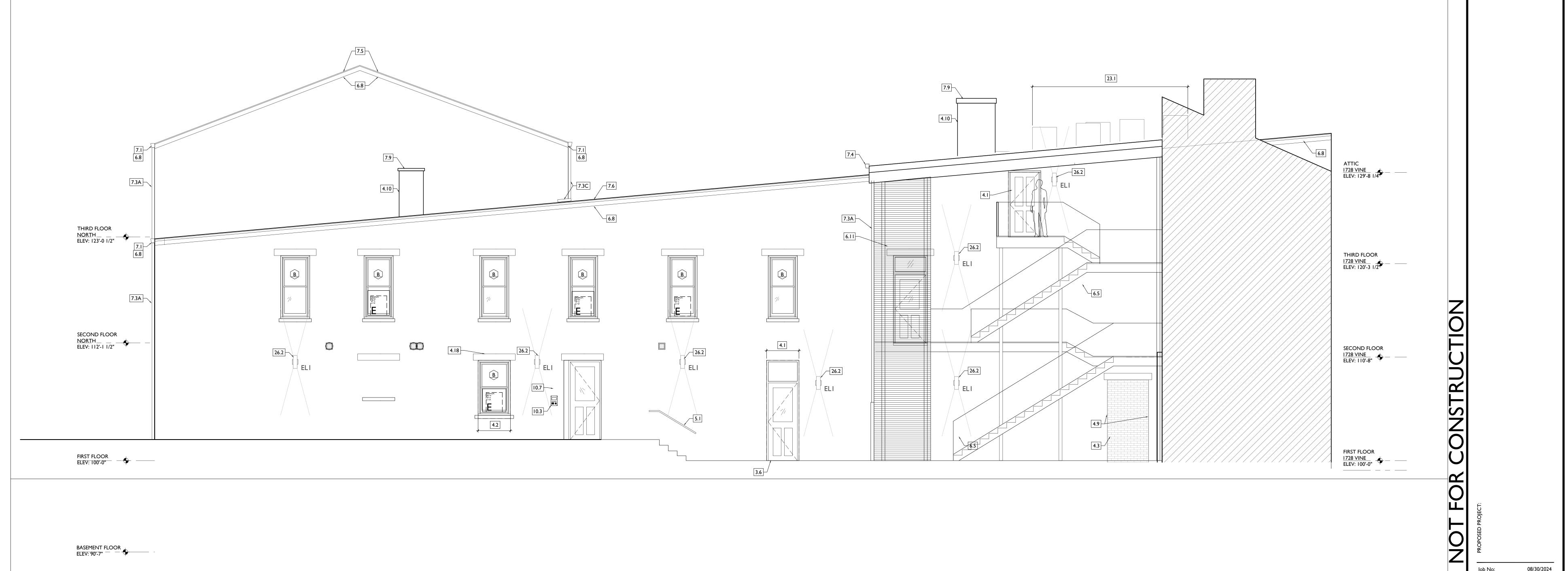
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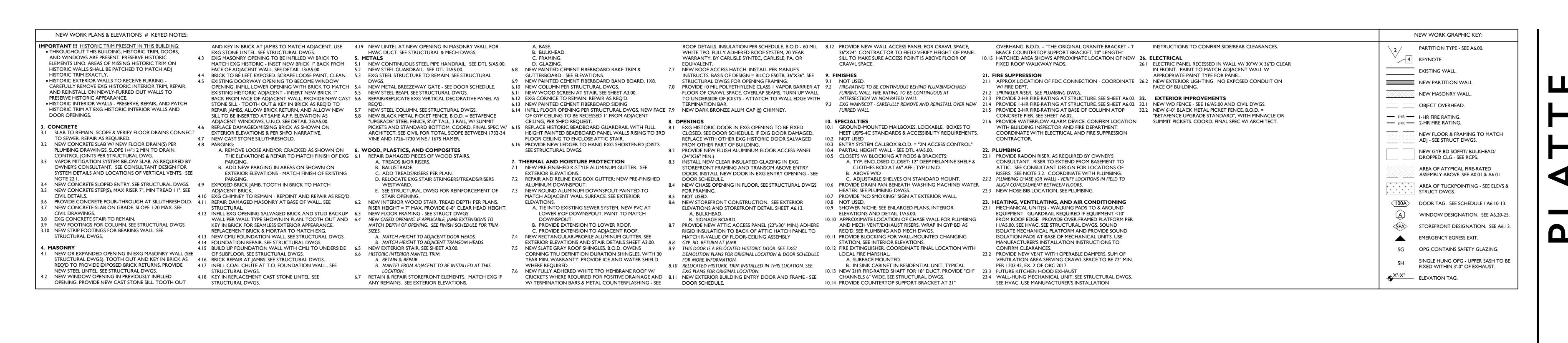
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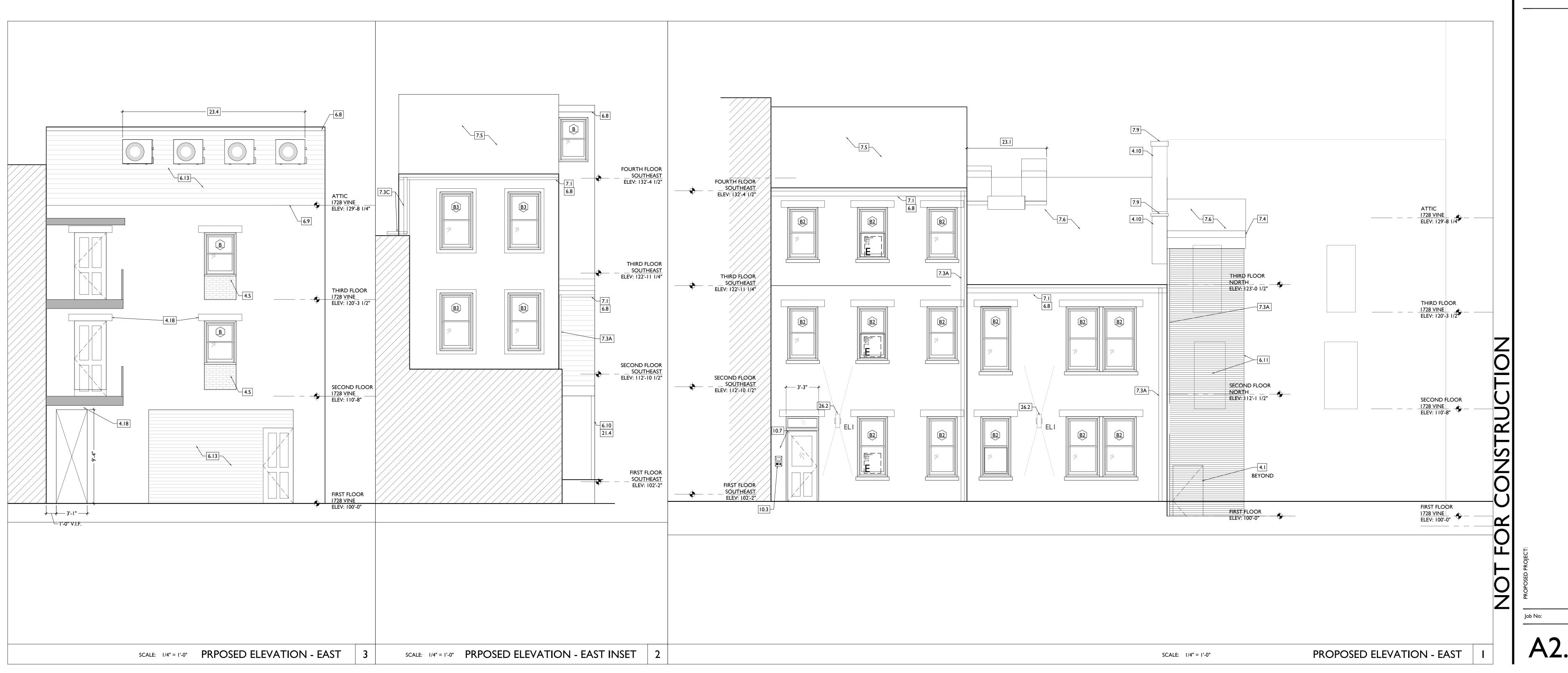
Revisions

Design Team: Drawn by

PROPOSED ELEVATION - NORTH

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

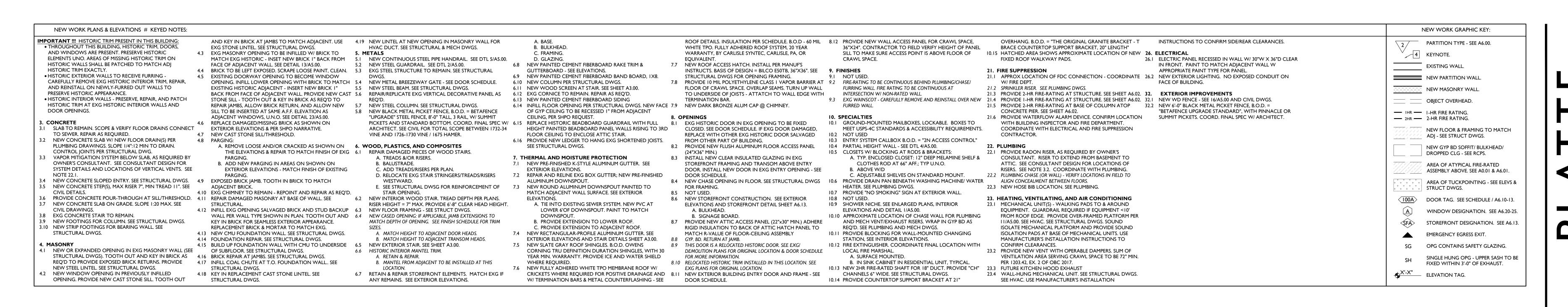




Progress Dates

Revisions

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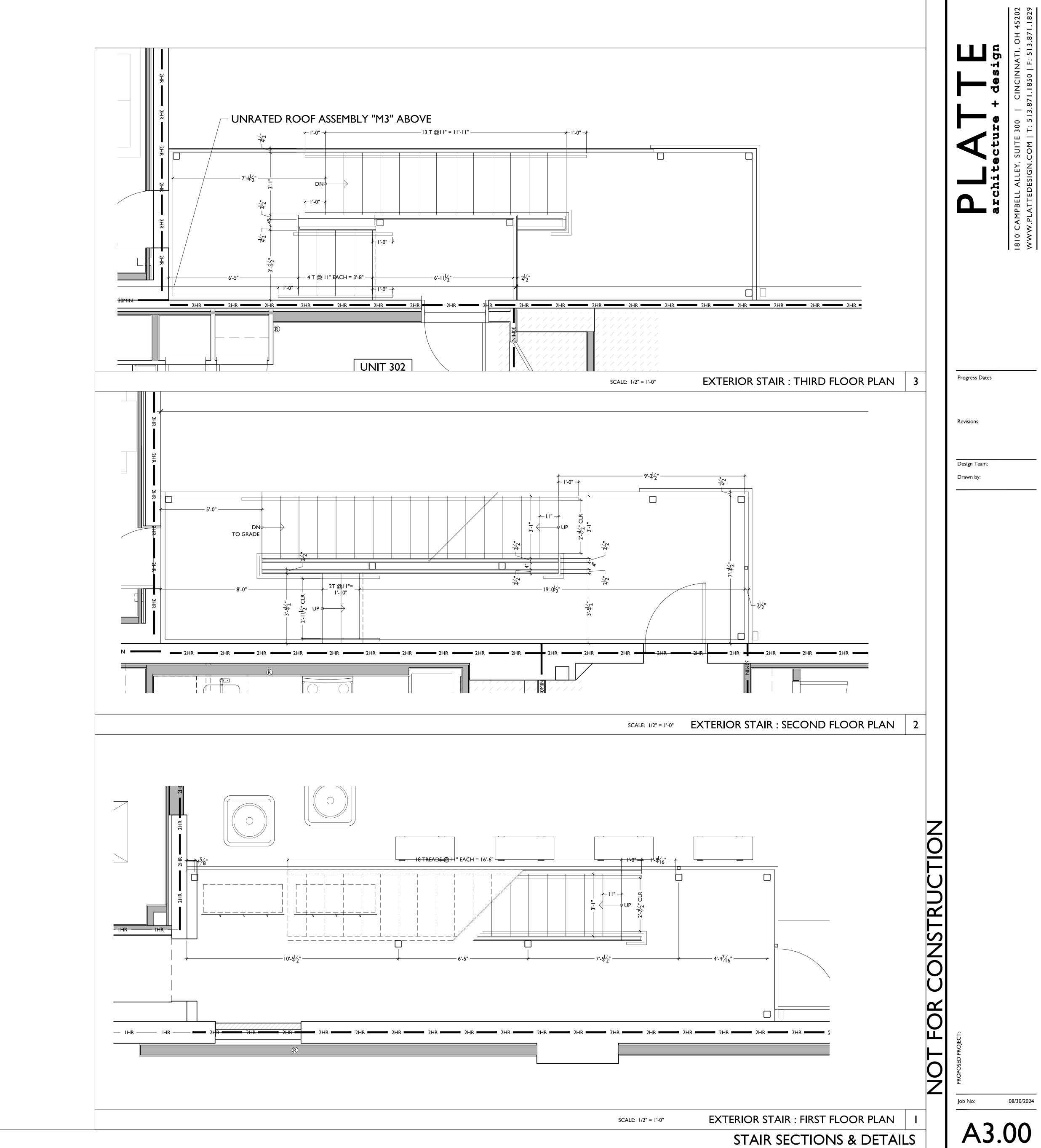
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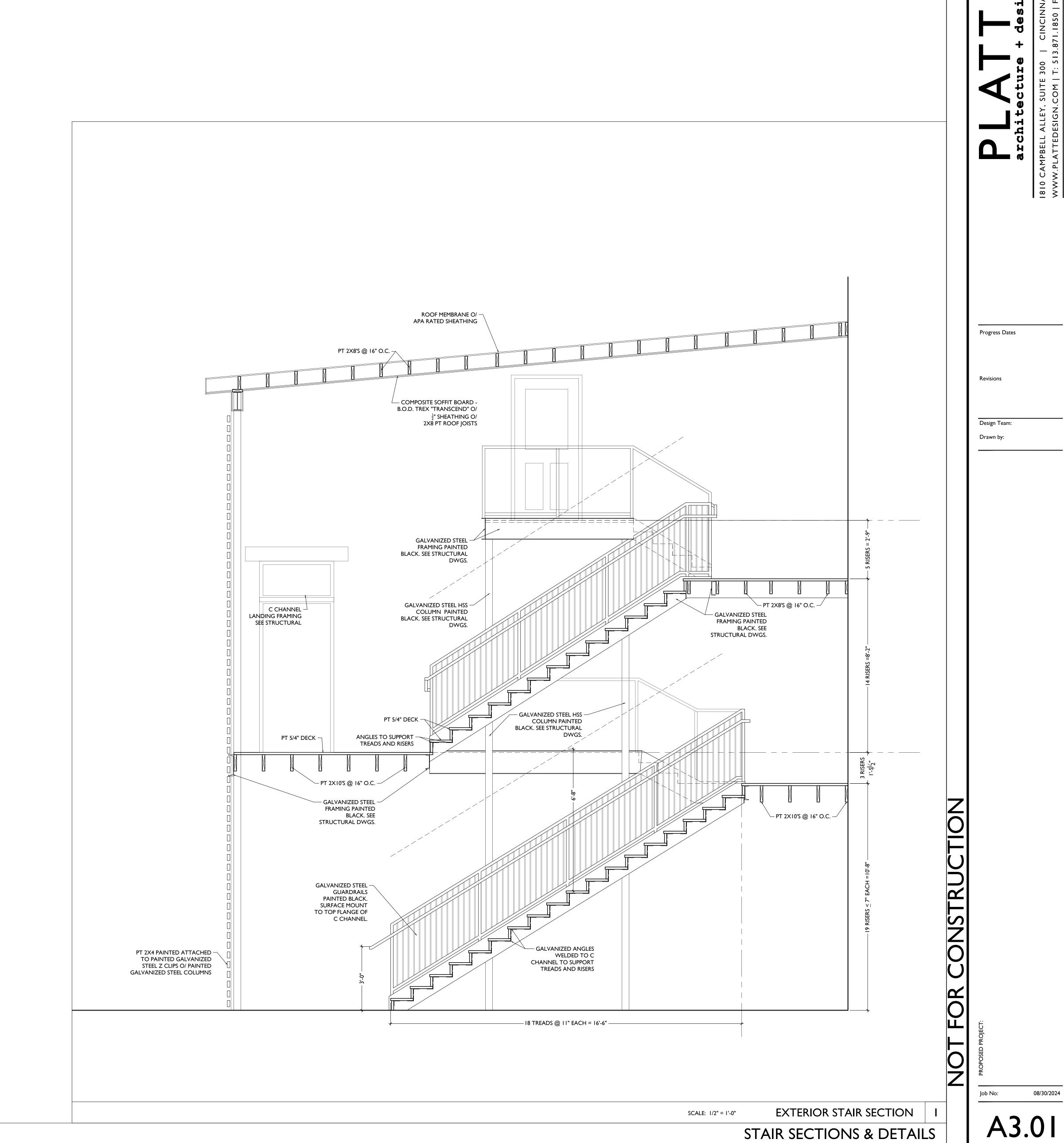
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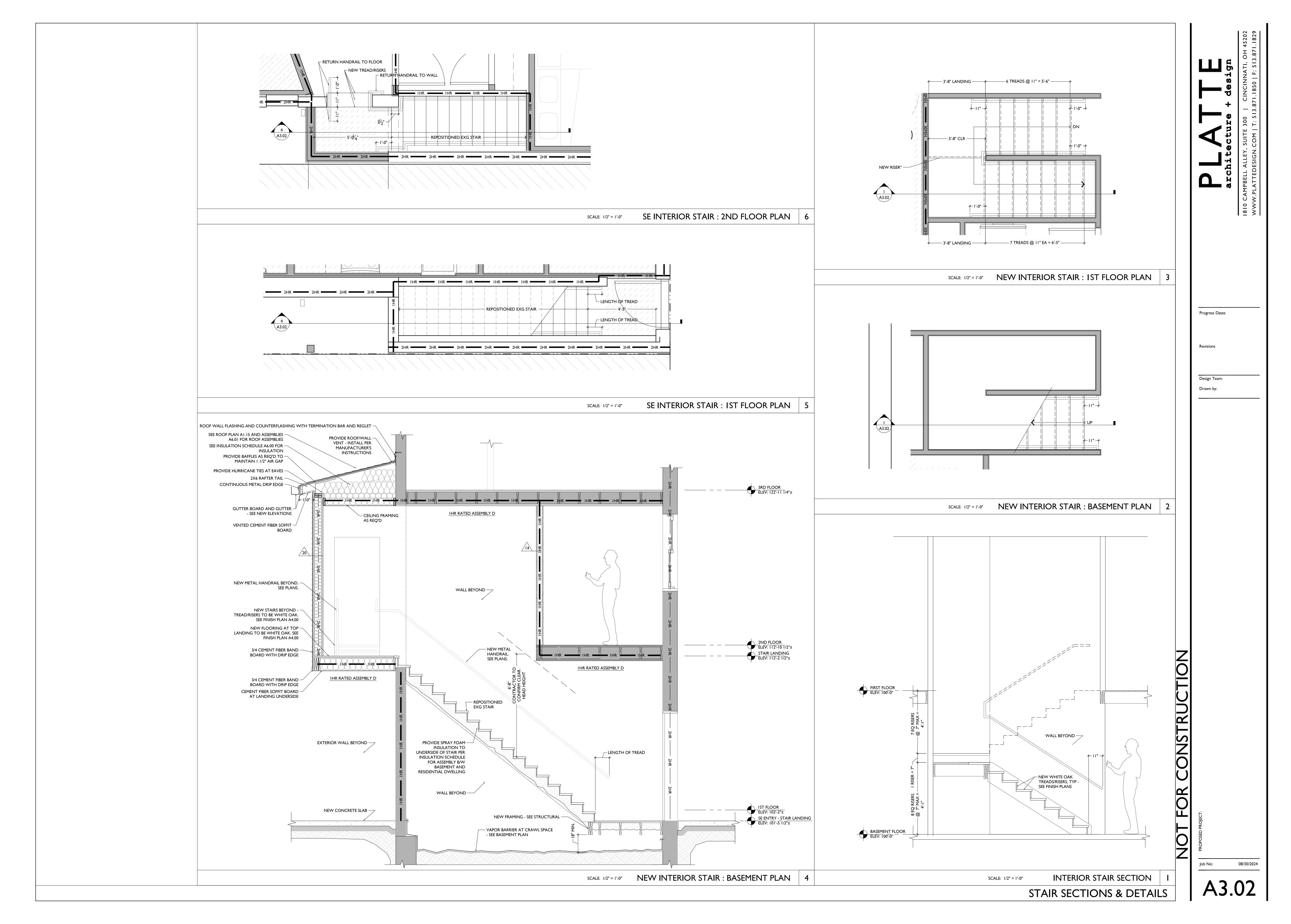
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PROPOSED ELEVATION - SOUTH

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







FL-3 RESTROOMS
FL-4 RESIDENTIAL LAUNDRY/ MECH ROOMS BUILDING STORAGE ROOMS

FLOOR GENERAL NOTES

WHERE EXG. HEARTH IS CONCRETE, PATCH / PROVIDE SOME SKIM COAT. PAINT CONCRETE.

3.2. PROVIDE NEW WOOD TRANSITIONS WHERE NEW WOOD FLOOR MEETS HISTORIC

3.3. WHERE FLOOR TILE TRANSITIONS TO WOOD PROVIDE ALUMINUM TILE EDGE. B.O.D

INFILL WOOD TO MATCH SPECIES, WIDTH, AND STAIN OF EXISTING WOOD FLOORS.

FLOOR FINISH LEGEND (SEE FINISH SCHEDULES A4.00-A4.02 FOR DETAILS)

WHERE EXG. HEARTH TILE IS PRESENT. PROTECT AND MAINTAIN AS IS.

3.1. PROVIDE TRANSITION STRIPS WHERE CHANGES IN MATERIAL OCCUR.

BENGARD-SHUR-TRIM. THICKNESS TO BE DETERMINED IN THE FIELD.

TRANSITION TYPES:

QUARTZ - KITCHEN

CABINETS - IN UNITS/

COMMERCIAL RR

GLASS SHOWER

BATHROOMS

BLINDS

CODE

ENCLOSURE - UNIT

UNIT ENTRY SIGNAGE

CI

C2

GRAB BARS

MEDICINE CABINET

TOILET TISSUE

TOWEL HOOK

ROBE HOOK

MIRROR

TOILET PARTITION

DISPENSER

DOOR

COUNTERTOPS &

COUNTERTOPS

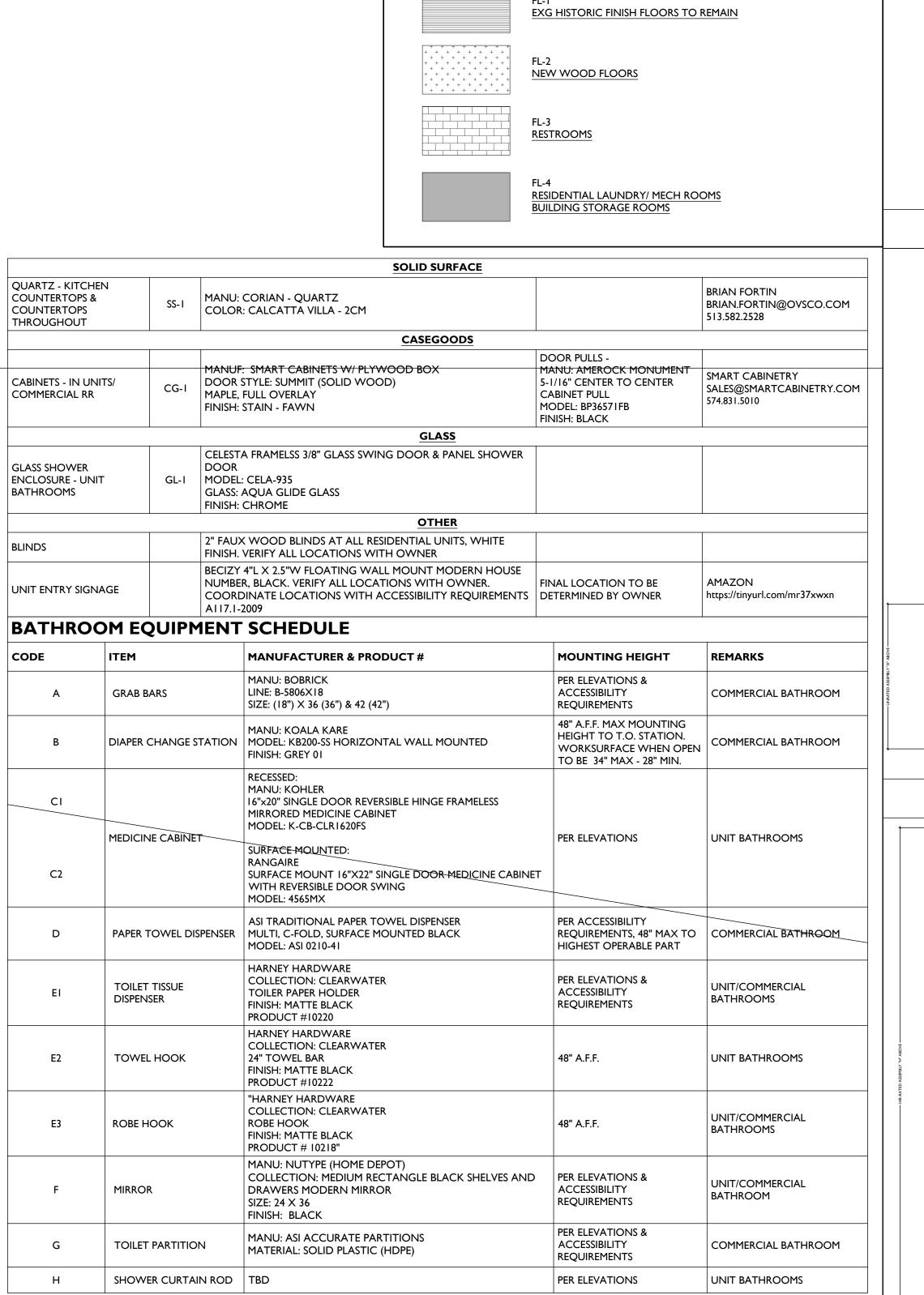
THROUGHOUT

WOOD FLOOR

TOOTH-IN TO EXISTING WHERE POSSIBLE.

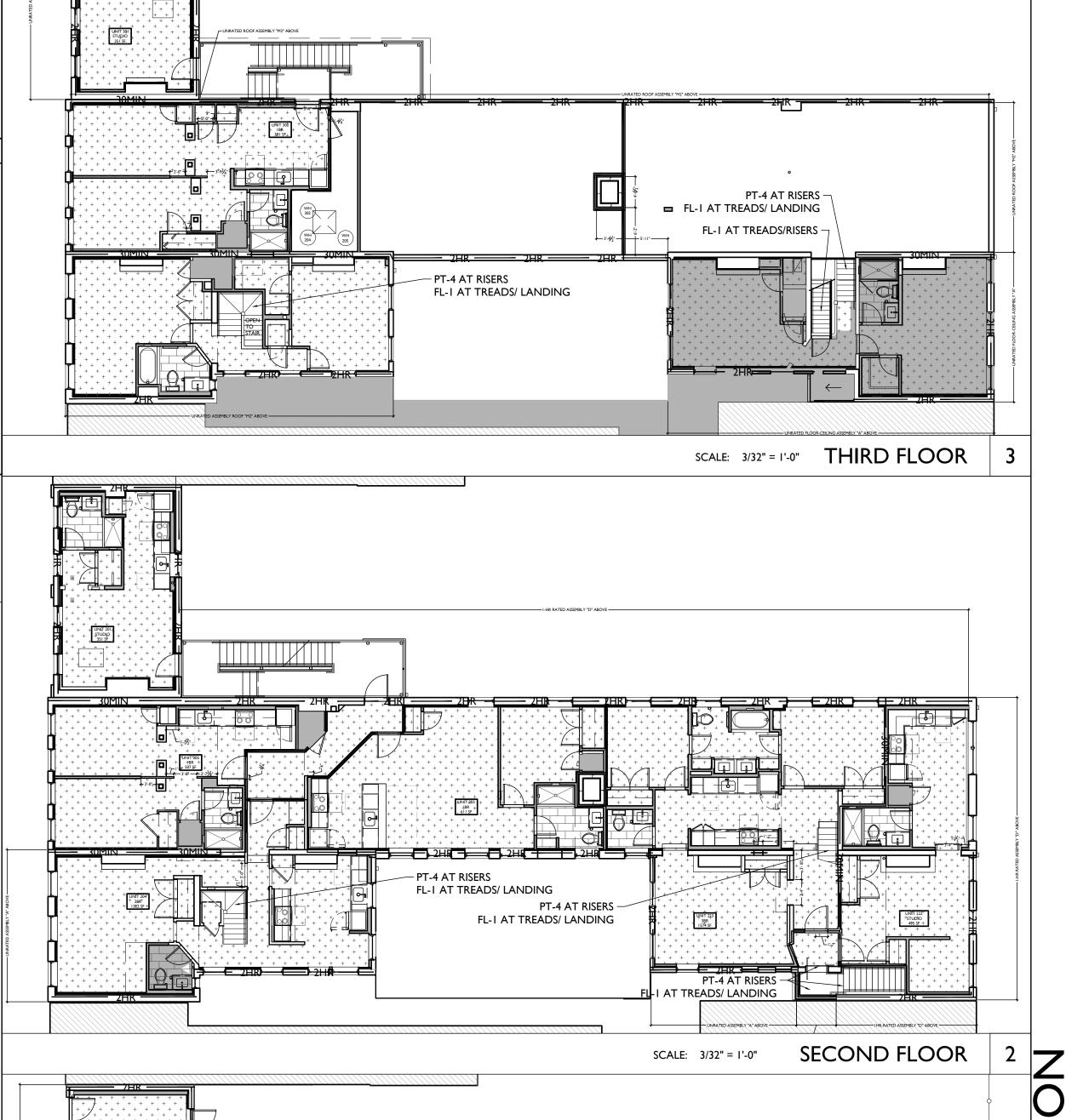
ITEM/ LOCATION	CODE	DESCRIPTION	FINISH	NOTES
MICROWAVE HOOD, RESIDENTIAL KITCHENS	EQ-I	MANU: GE - 1.7 CU.FT. OVER-THE-OVEN MICROWAVE OVEN OUTSIDE EXHAUST - VERTICAL VENT MODEL: JVM3162RJSS	STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.
RANGE/OVEN, RESIDENTIAL KITCHENS	EQ-2	MANU: GE-PROFILE-30" WIDE 5.3 CU.FT. FREE STANDING ELECTRIC FINGERPRINT RESISTANT RANGE WITH CONVECTION OVEN MODEL: PB935TPFS	STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.
DISHWASHER, RESIDENTIAL KITCHENS	EQ-3	MANU: GE-24" WIDE DISHWASHER WITH FRONT CONTROLS MODEL: GDF510PSRSS	STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.
REFRIGERATOR, I BEDROOM & EFFICIENCY UNITS	EQ-4	MANU: GE - 24" WIDE SMALL SPACE TOP-FREEZER REFRIGERATOR - 11.6 CU.FT MODEL: GPE12FSKSB	STAINLESS WITH BLACK HANDLES	MOUNTING HEIGHT, SEE ELEVATIONS.
REFRIGERATOR 2&3 BEDROOM UNITS	EQ- 5	MANU: GE - 30" WIDE TOP-FREEZER REFRIGERATOR - 19.2 CU.FT. MODEL: GPE12FSKB	FINGERPRINT RESISTANT STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.
WASHER, RESIDENTIAL UNITS	EQ-6	MANU: GE - 27" WIDE FRONT LOAD WASHER 4.5 DOE CU.FT. MODEL: GFW430SSMWW	WHITE	MOUNTING HEIGHT,SEE PLANS
DRYER, RESIDENTIAL UNITS	EQ-7	MANU: GE - 27" WIDE FRONT LOAD DRYER 7.5 CU.FT. CAPACITY	WHITE	MOUNTING HEIGHT,SEE PLANS
WASHER, SHARED LAUNDRY FACILITIES EQ-8		MANU: SPEED QUEEN QUANTUM GOLD FRONT CONTROL FRONT LOAD WASHER	WHITE	MOUNTING HEIGHT,SEE PLANS
DRYER, SHARED LAUNDRY FACILITIES EQ-9		MANU: SPEED QUEEN QUANTUM GOLD PRO FRONT CONTROL SINGLE DRYER	WHITE	MOUNTING HEIGHT, SEE PLANS
MICROWAVE, ACCESSIBLE RESIDENTIAL KITCHENS	CCESSIBLE BELOW COUNTERTOP BUILT-I SIDENTIAL MICROWAVE OVEN (#GMBS30		STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.
RANGE HOOD, ACCESSIBLE RESIDENTIAL KITCHENS		MANU: GE - 30" WIDE OVER THE RANGE CONVERTIBLE HOOD	FINGERPRINT RESISTANT STAINLESS	MOUNTING HEIGHT, SEE ELEVATIONS.

MATERIAL / LOCATION	CODE	DESCRIPTION	NOTES	SOURCE
		FLOORING		
		EXISTING WOOD FLOORING		
EXISTING WOOD		FINISH: MINWAX STAIN COLOR: HEIRLOOM OAK MW441	STRIP, SAND AND STAIN PER	
FLOORING - WHERE	FL-I	COLOR, HEIREGON OAR MW441	MANUFACTURER'S	
MAINTAINED	INFILL WOOD TO MATCH SPECIES, WIDTH, AND STAIN OF EXISTING WOOD FLOORS TOOTH INTO EXISTING WHERE POSSIBLE	SPECIFICATIONS		
NEW WOOD FLOORING -	_	MANU: WOODWARD FLOORING	SEE FINISH PLANS FOR INSTALL	
WHERE REQUIRED	FL-2	FINISH: NATURAL WHITE OAK PLANK WIDTH: 3.25" MANU: FLORIDA TILE	DIRECTION.	
FLOOR TILE - BATHROOMS		COLLECTION: AURA	PROVIDE LIQUID APPLIED WATERPROOF MEMBRANE	FLORIDA TILE EMILY FISCHER
AND ADJACENT	FL-3	COLOR: EARTH BEIGE SIZE: 12 X 24 - 3/8" THICKNESS	BELOW TILE AND FIRESTOP SEALANT AT FLOOR	EMILY.FISCHER@FLORIDATILE.C
MEP/LAUNDRY ROOMS		GROUT: LATICRETE; COLOR: 97 IRON		OM
		INSTALL: RUNNING BOND WITH 1/3 OFFSET	PENETRATIONS	513.824.1791
VOT - MED// 41101220V		MANU: ARMSTRONG	USE IN LAUNDRY AND MEP	PAUL MCKAY
VCT - MEP/LAUNDRY ROOM FLOORS	FL-4	COLLECTION: EXCELON VCT	ONLY IF ROOM IS NOT ADJACENT TO BATHROOM.	PAMCKAY@ARMSTRONGFLOO RING.COM
		COLOR: 51861 SOFT WARM GRAY	UNDERLAYMENT AS REQ'D.	513.515.0228
		MANU: FLORIDA TILE	PROVIDE LIQUID APPLIED	FLORIDA TILE
FLOOR TILE - KITCHENS		COLLECTION: AURA COLOR: EARTH BEIGE	WATERPROOF MEMBRANE	EMILY FISCHER
WHERE REQUIRED	FL-5	SIZE: 12 X 24 - 3/8" THICKNESS	BELOW TILE AND FIRESTOP SEALANT AT FLOOR	EMILY.FISCHER@FLORIDATILE.C OM
		GROUT: LATICRETE; COLOR: 97 IRON INSTALL: RUNNING BOND WITH 1/3 OFFSET	PENETRATIONS	513.824.1791
		MANU: FIRE EARTH		
FLOOR TILE - RECESSED		COLOR: BLACK, PORCELAIN	SEE FINISH PLANS FOR	
EXTERIOR ENTRY	FL-6	FINISH: MATTE SIZE:: IXI	LOCATION. SEE DETAILS. INSTALL PER MANUFACTURER'S	THE TILE SHOP ITEM #615819
WHERE REQUIRED		GROUT: LATICRETE; COLOR: 24 NATURAL GRAY	INSTRUCTIONS.	11 211 #613617
		STRAIGHT JOINT		
	_	WALL TILE		
		MANU: FLORIDA TILE		1 01 110 41 1 5 711 5
		COLLECTION: ALUSTRA SIZE: 12x24		LOUISVILLE TILE ROBYN VIDIC
TILE - SHOWER WALLS	WT-I	COLOR: MAJESTIC WHITE	BLACK SCHLUTER EDGE	RVIDIC@LOUISVILLE-TILE.COM
		GROUT: MAPEI II; COLOR: 93 WARM GREY INSTALL: HORIZONTAL RUNNING BOND		513-276-4840
		MANU: MOSA		
TU 5 1/1701 151 1		COLLECTION: COLORS		
TILE - KITCHEN BACKSPLASH	WT-2	SIZE: 6X6 COLOR: ACCENT WHITE		
		GROUT: MAPEL II; COLOR: WARM GREY		
		INSTALL: HORIZONTAL RUNNING BOND PAINT		
GENERAL PAINT - UNIT		MANU: PPG ARCHITECTURAL COATINGS	WALL FINISH: SATIN	
AND CORRIDOR WALLS AND CEILING	PT-I	COLOR: SILVER FEATHER - PPG 1002-1	CEILING FINISH: FLAT	
PAINT - UNIT TRIM	PT-2	MANU: PPG ARCHITECTURAL COATINGS COLOR: IN THE CLOUD - PPG 0999-I	BASE, TRIM, MILLWORK FINISH: SEMI-GLOSS	
PAINT - UNIT ENTRY				
DOORS CORRIDOR: HISTORIC	PT-3	MANU: PPG ARCHITECTURAL COATINGS	FINISH: SEMI-GLOSS	
MILLWORK & STAIR RISERS	3	COLOR: IN THE CLOUD - PPG 0999-I		
AS REQ'D PER BUILDING				
PAINT - STAIR TREADS AND/OR RISERS, AND		MANU: PPG ARCHITECTURAL COATINGS	FINISH: SEMI-GLOSS	
RAILING BALUSTER AS	PT-4	COLOR: STONEHENGE GREIGE - PPG 1024-5	SEE FINISH FLOOR PLANS	
REQ'D PER BUILDING				
		WALL BASE		T
		IN-UNIT: PT-2	KEEP ALL HISTORIC BASE -	
HISTORIC WOOD BASE - WHERE ABLE TO RETAIN	WB-I		REPAIR/RETAIN WHEN PRESENT. PATCH TO MATCH ADJACENT.	
WHERE ABLE TO RETAIN		STAIR HALL: PT-3	CLEAN, SAND, AND PAINT.	
		MANU: FLORIDA TILE		1 01 110 /// - = =
TILE BASE - BATHROOMS		COLLECTION: AURA	TILE TO ALIGN WITH WALL BASE	LOUISVILLE TILE ROBYN VIDIC
	WB-2	COLOR: EARTH BEIGE SIZE: 12 X 24 - 3/8" THICKNESS	3 X 24"	RVIDIC@LOUISVILLE-TILE.COM
		GROUT: LATICRETE - 97 IRON	BLACK SCHLUTER EDGE	513-276-4840
		CONTRACTOR PROVIDED 1X6 POPLAR W/ TOE MOLDING		
TYPICAL NEW DAINTED				
TYPICAL NEW PAINTED WOOD BASE - WHERE	WB-3	IN-UNIT: PT-2		
_	WB-3	IN-UNIT:		



FINISH SCHEDULE

SCALE: 3/8" = 1'-0"



21R 21R

PT-4 AT RISERS —1:HR/RATED ASSEMBLY "D" ABOVE

SCALE: 3/32" = 1'-0" FIRST FLOOR

FINISH FLOOR PLANS

FL-I AT TREADS

Progress Dates Revisions Design Team: STRUCTIO

> 08/30/2024 Job No:

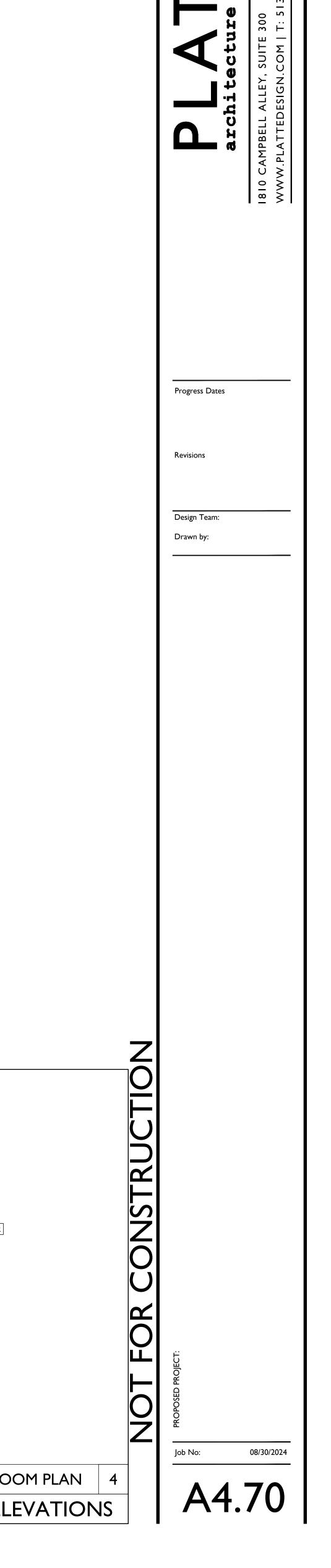


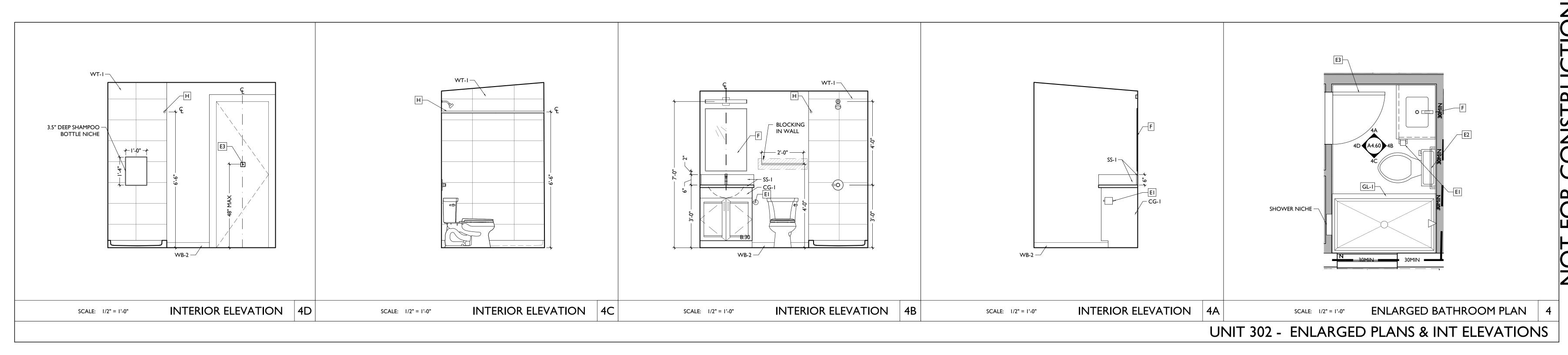


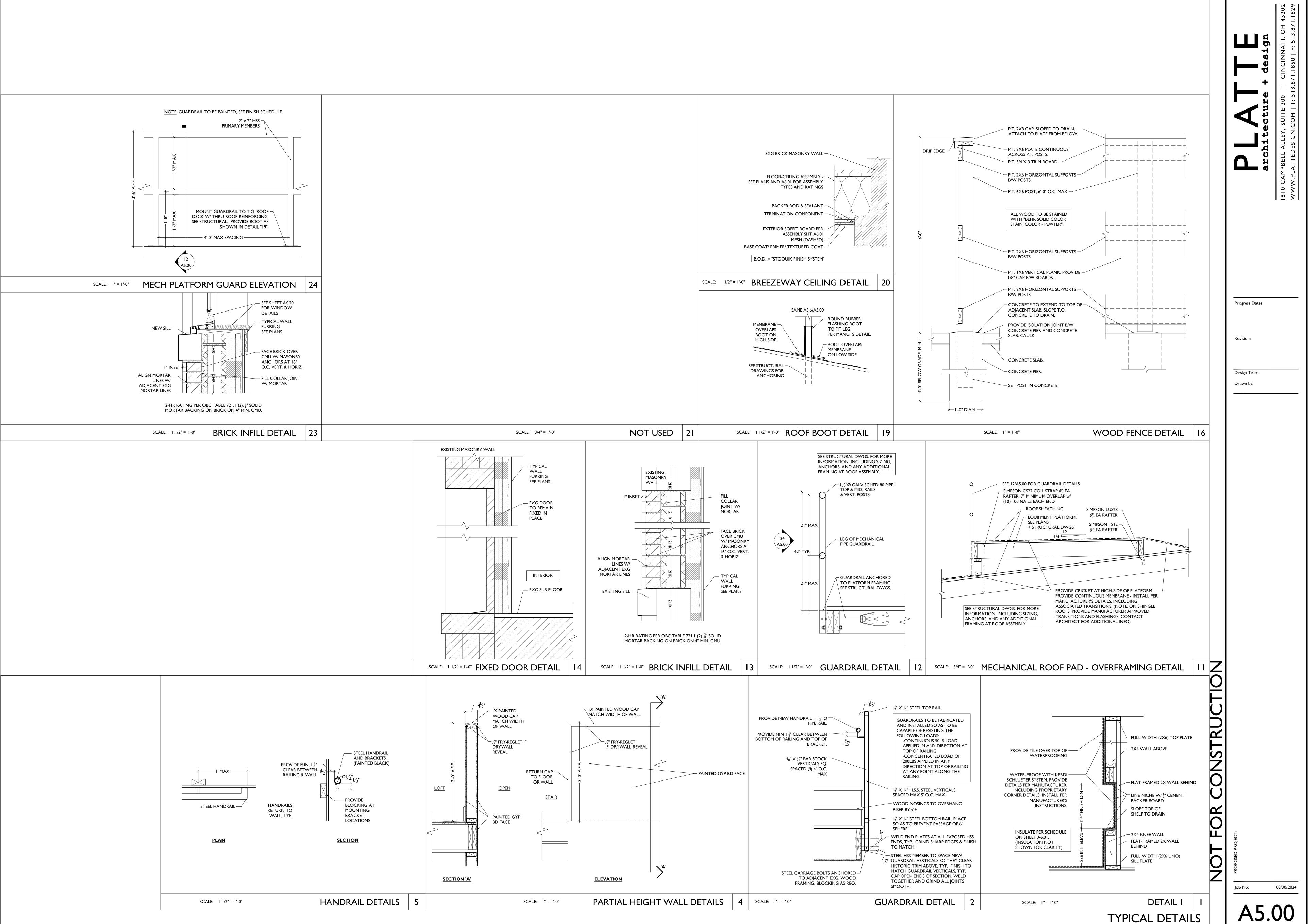


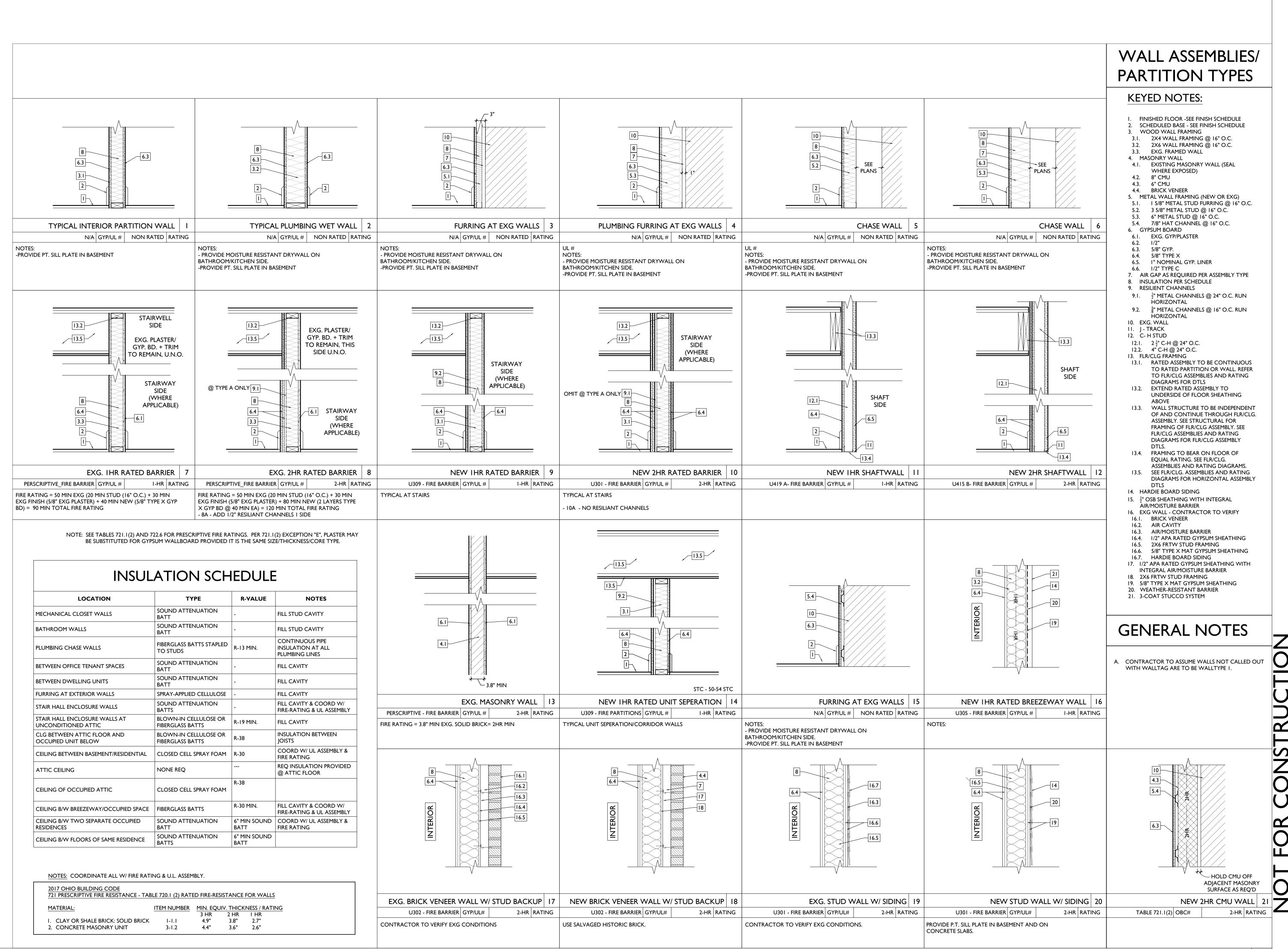












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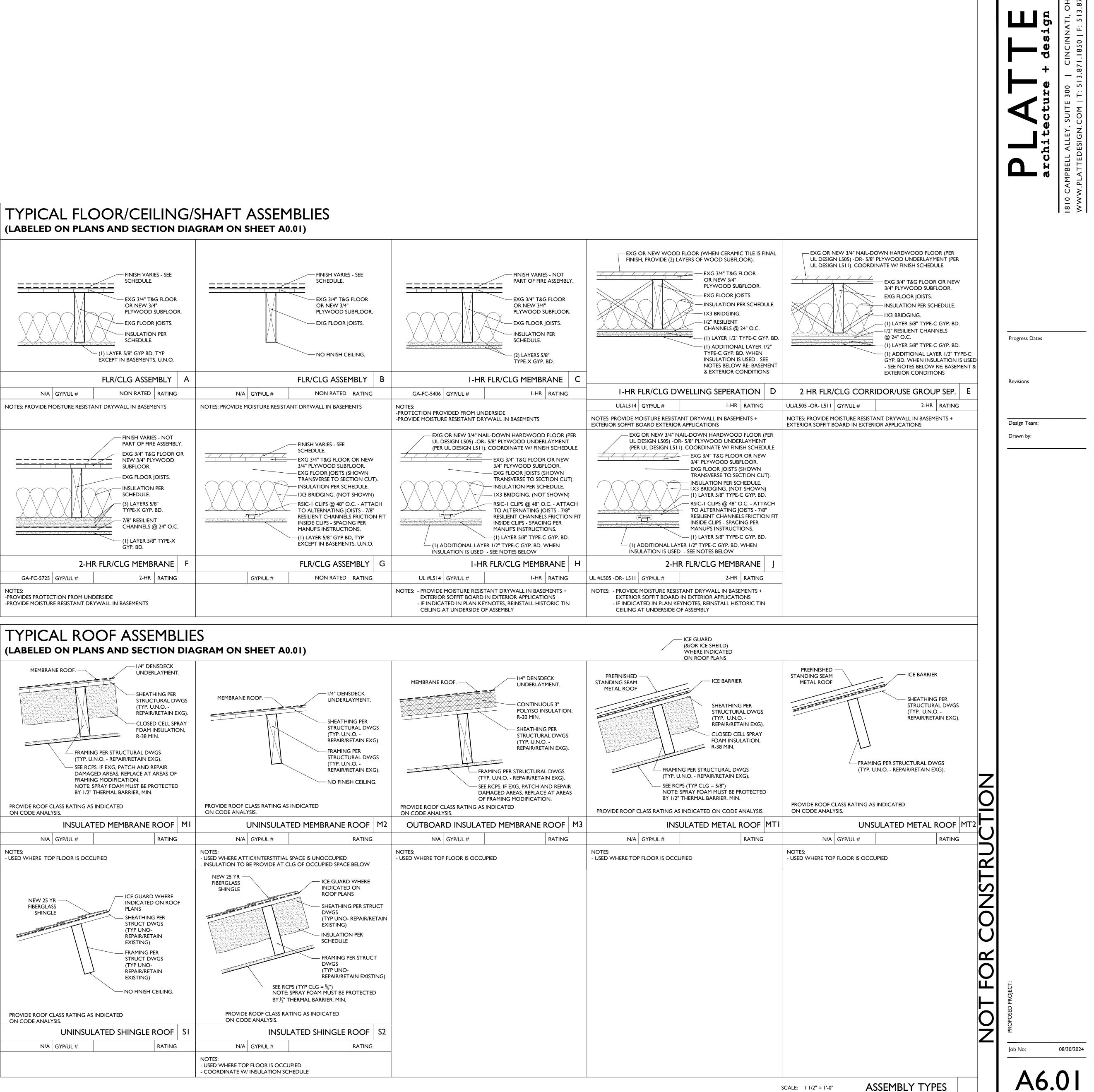
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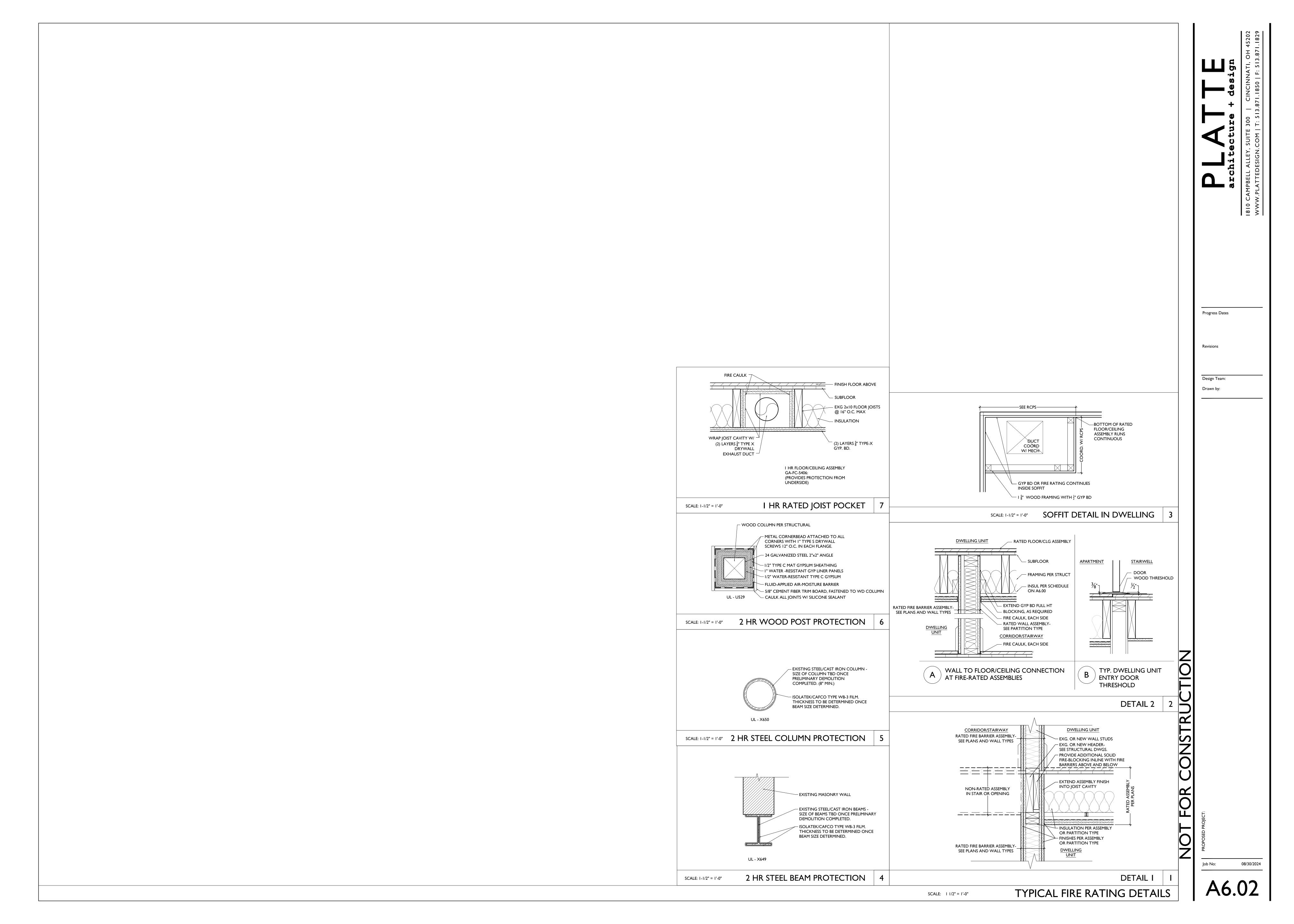
ASSEMBLY TYPES

SCALE: I" = I'-0"

Job No: 08/30/2024

A6.00





HDWR	М	DESCRIPTION
	OORS / GATES	DESCRIPTION
G01	BREEZEWAY GATE	ENTRY LOCKSET OUTSIDE KEYLOCK (LOCKED FROM OUTSIDE) LEVER HANDLES INSIDE ALWAYS UNLOCKED. MEETS EMERGENCY EGRESS REQUIREMENT. ELECTRONIC ACCESS CONTROL (INTERCOM OR KEY FOB ELECTRIC STRIKE (3) HINGES (1) CLOSER WALL/FLOOR STOP
	OORS TO REMAIN	EVICTING HARDWARE CET TO DEMAIN
H01	EXISTING TO REMAIN ERCIAL DOORS	EXISTING HARDWARE SET TO REMAIN
H02	EXTERIOR COMMERCIAL DOOR (TYPICAL)	ENTRY LOCKSET OUTSIDE KEYLOCK (LOCKED FROM OUTSIDE) LEVER HANDLES INSIDE KEYLOCK W/ SINGLE ACTION LEVER RELEASE: MECHANISM RELEASES DEADBOLT WHEN INTERIOR HANDI IS TURNED. MEETS EMERGENCY EGRESS REQUIREMENT. I-1/2 PAIR HINGES (I) CLOSER WALL/FLOOR STOP WEATHER SEALS
H03	INTERIOR COMMERCIAL DOOR	ENTRY LOCKSET OUTSIDE KEYLOCK (LOCKED FROM OUTSIDE) LEVER HANDLES INSIDE KEYLOCK W/ SINGLE ACTION LEVER RELEASE: MECHANISM RELEASES DEADBOLT WHEN INTERIOR HANDI IS TURNED. MEETS EMERGENCY EGRESS REQUIREMENT. I-1/2 PAIR HINGES (I) CLOSER SMOKE SEAL WALL/FLOOR STOP
H05	COMMERCIAL RESTROOM (SINGLE USER)	PRIVACY LOCKSET • INSIDE THUMB LOCK • LEVER HANDLES • (3) HINGES • KICK/MOP PLATE • WALL/FLOOR STOP
H06	DOOR TO BASEMENT/MECHANICAL CLOSET	STORAGE LOCKSET RATED HARDWARE WHERE REQUIRED OUTSIDE KEY LOCK, INSIDE ALWAYS UNLOCKED ACCESSIBLE BY LANDLORD ONLY (3) HINGES WALL/FLOOR STOP
H06A	COMMERCIAL TENANT STORAGE	STORAGE LOCKSET OUTSIDE KEY LOCK, INSIDE ALWAYS UNLOCKED ACCESSIBLE BY COMMERCIAL TENANT (3) HINGES WALL/FLOOR STOP
IEW COMM	ON RESIDENTIAL DOORS	
H09	FIXED DOOR	FIX DOOR CLOSED BLANK ESCUTCHEON PLATE ON EXPOSED SIDE PROVIDE WEATHER STRIPPING WHERE DOOR IS EXPOSED TO THE EXTERIOR.
Н10	DOOR FROM STAIR/CORRIDOR TO EXTERIOR	EGRESS LOCKSET W/ ELECTRONIC ACCESS CONTROL OUTSIDE ALWAYS LOCKED, INSIDE ALWAYS UNLOCKED LEVER HANDLES ELECTRONIC ACCESS CONTROL (INTERCOM OR KEY FOB ELECTRIC STRIKE I LOCKSET I-1/2 PAIR HINGES (I) CLOSER WALL/FLOOR STOP WEATHER SEALS
HIOAB	DOOR FROM STAIR/CORRIDOR TO ATTIC	STORAGE LOCKSET RATED HARDWARE OUTSIDE KEY LOCK, INSIDE ALWAYS UNLOCKED (3) HINGES (1) CLOSER SMOKE SEAL WALL/FLOOR STOP
IEW PRIVAT	ΓΕ RESIDENTIAL DOORS	
HR01	RESIDENTIAL UNIT ENTRY DOOR	ENTRY LOCKSET RATED HARDWARE I LOCKSET THUMB TURN DEADBOLT. (3) HINGES (1) SPRING CLOSER WIDE ANGLE VIEWER WALL/FLOOR STOP SMOKE SEAL DOOR SWEEP RUBBER THRESHOLD (LOW PROFILE)
HROIA	RESIDENTIAL UNIT ENTRY DOOR (EXTERIOR)	ENTRY LOCKSET • I LOCKSET • THUMB TURN DEADBOLT. • (3) HINGES • (1) SPRING CLOSER • WIDE ANGLE VIEWER • WALL/FLOOR STOP • WEATHER SEALS • DOOR SWEEP • RUBBER THRESHOLD (LOW PROFILE)
HR02	TYPICAL BEDROOM AND BATHROOM	PRIVACY LOCKSET • (1) LOCKSET • (3) HINGES • WALL/FLOOR STOP • WOOD "T" THRESHOLD
HR03	DOOR TO MECHANICAL CLOSET	STORAGE LOCKSET OUTSIDE KEY LOCK, INSIDE ALWAYS UNLOCKED ACCESSIBLE BY LANDLORD ONLY (3) HINGES WALL/FLOOR STOP WOOD "T" THRESHOLD
HR04	SINGLE DOOR TO CLOSET/STORAGE/LAUNDRY/ BEDROOM EGRESS	PASSAGE LOCKSET • (3) HINGES • WALL/FLOOR STOP
HR04A	DOUBLE SWINGING DOOR TO CLOSET/STORAGE	CLOSET PULLS • DUMMY LEVER HANDLES • BALL CATCHES • 3 PAIR HINGES
ALL HARDW PINCHING C ALL HARDW EXTERIOR H TO BE POWI A. LOCKSETS COORDIN (ND SERIE FORMAT I B. EXIT DEVI SERIES), VC C. DOOR CL	CLOSET/STORAGE ARDWARE NOTES: YARE TO BE OPERABLE IN THE DIRECTION OR GRASPING THE DEVICE. YARE TO BE SATIN CHROME, STAINLESS S'INGES, KICK PLATES TO BE US32D, INTERDER COAT TO MATCH. YARE TO BE AS SPECIFIED OR APPROVED IS ARE BASED ON BEST CYLINDRICAL GRANATE KEYING REQUIREMENTS WITH OWN S), SARGENT (10 LINE). KEY SYSTEM - PROKEY SYSTEM), 5 MASTER KEYS, 3 CHANGE CES ARE BASED ON PRECISION 2100 SERIED ON DUPRIN (98 SERIES)	• 3 PAIR HINGES N OF EGRESS ALWAYS WITHOUT KNOWLEDGE, KEY OR TIG TEEL AND POWDER COAT TO MATCH. EXIT DEVICES, IOR HINGES, LOCKSETS, WALL STOPS US26D, DOOR CLOSEI EQUAL. ADE I (MORTISE LOCK FOR TOILETS WITH INDICATOR). NER. APPROVED MANUFACTURERS: BEST (9K3 SERIES), SCHLIVIDE MASTER SYSTEM (KEY INTO OWNER'S EXISTING SMALL KEYS PER CYLINDER. ES GRADE I. APPROVED MANUFACTURERS: PRECISION (2100) ES GRADE I. PROVIDE WITH FULL COVER. APPROVED

5. COORDINATE KEYING REQUIREMENTS WITH OWNER. 6. COORDINATE ELECTRONIC ACCESS CONTROL REQUIREMENTS WITH OWNER

7. PROVIDE INTERCHANGEABLE CORES

CALL OUT LEGENDS **DOOR FINISHES** (ALSO SEE A4.00 AND A8.00-8.01) FF DOOR TO BE FACTORY FINISHED AS PART OF NEW STOREFRONT SYSTEM. SEE STOREFRONT TYPES ON A6.12. PT AT EXTERIOR DOORS: SEE EXTERIOR PAINT SCHEDULE ON A8.00-A8.01. AT INTERIOR DOORS: SEE FINISH SCHEDULE ON A4.00. WL WOOD LOOK ST STAINED FRAME TYPES (ALSO SEE A6.11) FI HISTORIC FRAME/TRIM TO REMAIN - REPAIR/REPLICATE MISSING PIECES AS REQ F2 NEW METAL FRAME - SEE DTLS I-5/A6.11 AND TYPICAL TRIM DTLS A6.11 F3 NEW METAL FRAME - SEE DTLS 1-5/A6.11 - TRIM TO MATCH EXG ADJ. HISTORIC TRIM F4 NEW WOOD FRAME - SEE DTLS 7-8/A6.11 AND TYPICAL DOOR TRIM DTLS A6.11 F5 NEW WOOD FRAME - SEE DTLS 7-8/A6.11 - TRIM TO MATCH EXG ADJ. HISTORIC TRIM SF PART OF STOREFRONT SYSTEM - SEE A6.12 NOTE: FRAMES TO BE PAINTED, UNO. SEE FINISH SCHEDULE AND EXTERIOR PAINT SCHEDULE FOR MORE INFORMATION. TRANSOM TYPES TRI NEW HOLLOW METAL FRAMED TRANSOM TR2 HISTORIC TRANSOM TRIM & GLAZING TO REMAIN. REPAIR/REPLICATE MISSING PIECES AS TR3 NEW WOOD TRANSOM TRIM TO MATCH EXG ADJACENT HISTORIC TRIM OF DOOR WITH NEW TEMPERED GLAZING TR4 HISTORIC TRANSOM TRIM TO REMAIN. REPAIR/REPLICATE MISSING PIECES AS REQ'D. INSTALL NEW CLEAR GLAZING. SF NEW TRANSOM TO BE PART OF STOREFRONT SYSTEM. SEE STOREFRONT TYPES. GA NEW TRANSOM TO BE PART OF METAL BREEZEWAY GATE. SEE A6.11

SCHEDULE NOTES

I. EXISTING HISTORIC OPENING:

I.A. EXISTING HISTORIC DOOR (& TRANSOM, IF APPLICABLE) TO REMAIN IN SITU. REPAIR AS REQ. CONTRACTOR TO PROVIDE ALLOWANCE FOR DOOR REPAIR FOR ALL EXG.

I.B. EXISTING HISTORIC DOOR IS TO BE FIXED IN PLACE. SEE PLANS.

I.C. OPENING TO HAVE RELOCATED HISTORIC DOOR. SEE EXISTING PLANS FOR PREVIOUS LOCATION AND NEW WORK PLANS FOR NEW LOCATION.

OPENING TO HAVE RELOCATED HISTORIC FRAME/TRIM. SEE EXISTING PLANS FOR PREVIOUS LOCATION AND NEW WORK PLANS FOR NEW LOCATION. NEW OPERABLE DOOR IN HISTORIC OPENING.

HISTORIC POCKET DOORS TO BE RESTORED TO ORIGINAL FUNCTION AND OPERATION.

2. EXISTING TRANSOM TO BE INFILLED BEHIND WITH GYP. BD. TO MAINTAIN FIRE RATING. SEE DETAILS ON A6.02.

3. PROVIDE HOLD OPEN FOR THIS DOOR - SEE HARDWARE SCHEDULE.

4. PROVIDE HINGES THAT ALLOW FOR EASY DOOR REMOVAL DURING LAUNDRY UNIT INSTALLATION & MAINTENANCE.

DOOR TO BE UNDERCUT. SEE MECHANICAL DRAWINGS. 6. DOOR(S) TO BE FIXED IN PLACE AND INOPERABLE

7. PROVIDE VIEW HOLE AT 48" A.F.F., CENTERED IN DOOR. 8. TIME DELAY FOR ELECTRIC STRIKE TRIGGERED BY INTERCOM OR KEY FOB AT EXTERIOR

9. GATE TO BE PART OF SPECIFIED FENCE SYSTEM. SEE PLANS FOR KEYNOTE WITH B.O.D.

GENERAL NOTES

THIS IS A HISTORIC TAX CREDIT PROJECT WITH SENSITIVE HISTORIC MATERIALS, INCLUDING DOORS & TRIM. DO NOT REMOVE ANY HISTORIC DOORS OR TRIM UNLESS INDICATED IN THESE DRAWINGS & IN THE SHPO NARRATIVE.

DOOR FRAMES

A. FURNISH AND INSTALL ALL DOOR FRAMES AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH FINAL SHOP DRAWINGS AND MANUFACTURER'S DATA AND

B. SUBMIT SHOP DRAWINGS FOR FABRICATION AND INSTALLATION OF FRAMES, INCLUDE DETAILS OF EACH FRAME TYPE, CONDITIONS AT OPENINGS, DETAILS OF CONSTRUCTION, LOCATION, AND INSTALLATION REQUIREMENTS OF FINISH HARDWARE AND REINFORCEMENTS, AND DETAILS OF JOINTS AND CONNECTIONS. SHOW ANCHORAGE AND ACCESSORY ITEMS. PROVIDE SCHEDULE OF FRAMES USING SAME REFERENCE FOR DETAILS AND OPENINGS AS THOSE ON CONTRACT DRAWINGS.

C. NEW FRAMES SHALL HAVE UL LABELS TO MATCH RATING NOTED IN DOOR SCHEDULE. D. SET AND BRACE ALL DOOR FRAMES. FRAMES SHALL BE PREPARED FOR HARDWARE PER

TEMPLATES FURNISHED BY HARDWARE SUPPLIER.

E. COORDINATE LOCATIONS FOR OTHER TRADES TO BUILD IN THEIR WORK AS REQUIRED.

F. FURNISH AND INSTALL ALL DOORS AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH FINAL SHOP DRAWINGS AND MANUFACTURER'S DATA AND INSTRUCTIONS.

G. SUBMIT DOOR MANUFACTURER'S PRODUCT DATA SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR EACH TYPE OF DOOR. PROVIDE SCHEDULE OF DOORS USING SAME REFERENCE FOR DETAILS AND OPENINGS AS THOSE ON CONTRACT DRAWINGS.

H. EXTERIOR DOORS TO BE INSULATED, WITH WEATHERSTRIPPING, AND PROVIDED WITH ACCESSIBLE THRESHOLD. ALL EXTERIOR STOREFRONT DOORS TO BE INSULATED, THERMALLY BROKEN AND WITH WEATHER STRIPPING AND PROVIDED WITH ACCESSIBLE THRESHOLD.

GLAZING IN DOOR LITES AND SIDE LITES SHALL BE CLEAR TEMPERED GLASS, 1/4" THICKNESS, UNLESS OTHERWISE NOTED. WIRED GLASS, IS NOT ALLOWED. GLASS FRAMES IN DOORS SHALL HAVE FLUSH STOPS.

SEE DOOR SCHEDULE FOR REQUIRED FIRE RATINGS.

K. FIT DOORS TO FRAMES WITH MINIMUM UNIFORM CLEARANCES AND BEVELS. DOORS SHALL BE PREPARED FOR HARDWARE AS REQUIRED BY HARDWARE SCHEDULE. SEAL DOOR EDGE SURFACES AFFECTED BY FITTING AND MACHINING. PROVIDE DOOR CLEARANCES SO THAT DOOR MAY FREELY MOVE ABOVE FINISH FLOOR MATERIAL.

VERIFY SIZE OF ALL EXISTING DOORS AND DOOR OPENINGS IN FIELD. WHERE HISTORIC DOORS ARE BEING RELOCATED, VERIFY DOOR FITS IN NEW LOCATION. IF DOOR DOES NOT FIT, CONTACT ARCHITECT

223-6

223-7

223-8

223-9

BATHROOM

BATHROOM

BEDROOM

2'-6" | 6'-8" | DWI | PT | F4

2'-6" | 6'-8" | DWI | PT | F4

2'-8" | 6'-8" | DWI | PT | F4

5'-0" | 6'-8" | DWI | PT | F4

M. ALL MECHANICAL CLOSETS ARE TO BE LOCKED AT ALL TIMES WITH MECHANICAL ACCESS BY LANDLORD ONLY. CLOSET SHALL BE USED FOR MECHANICAL/WATER HEATING

EQUIPMENT ONLY. NO STORAGE OF ANY KIND IS TO BE PERMITTED WITHIN.

DOOR SCHEDULE DOOR LOCATION DOOR FRAME HARDWARE REMARKS NO. **BASEMENT** PT 3'-0 6'-8 DM6 PT F2 01-1 MECHANICAL H06 01-2 3'-0 6'-8 DM4 PT F2 PT MECHANICAL H06 01-3 PT MECHANICAL 3'-0 6'-8 DM4 PT F2 H06 FIRST FLOOR G02 E01-1 EXTERIOR 3'-0" 8'-0" --- --- ---2'-8" | 7'-8" | GA | PT | GA | GA G01 100-I 100-2 G01 2'-10" | 7'-0" | GA | PT | GA GA 100-4 **GATE ENTRY** 3'-0" | 8'-0" | GA | PT | GA G01 STOREFRONT 101-1 H02 ENTRY 101-2 H02 COMMERCIAL ENTRY SHARED VESTIBULE 102-1 3'-0" | 8'-0" | DM3 | PT | F2 | TRI H02 ENTRY 103-I RESTROOM 3'-0" | 7'-0" | DWI | PT | F4 H05 STOREFRONT 104-1 3'-0" 8'-0" DA2 FF SF SF H02 ENTRY STOREFRONT 104-2 3'-0" 8'-0" DAI FF SF SF H02 ENTRY SIDE COMMERCIAL OPG. DM3 PT F2 TRI OPG. H02 ENTRY V.I.F. V.I.F. 104-4 RESIDENTIAL OPG. DM3 HI0 CORRIDOR ENTRY 112-1 UNIT ENTRY PT HR01 20 MIN 3'-0" | 6'-8" | DM4 | PT | F2 112-2 BEDROOM PT HR02 112-3 CLOSET 5'-0" | 6'-8" | DWI | PT | F4 PT HR04A 112-4 PT HR03 MECHANICAL 112-5 BATHROOM PT HR02 PT 112-6 LAUNDRY HR04A 112-7 COAT CLOSET PT HR04 113-1 **UNIT ENTRY** PT HR01 20 MIN 113-2 LAUNDRY PT HR04A 5'-4" | 6'-8" | DWI | PT | F4 113-3 PT HR03 MECHANICAL 113-4 BATHROOM 3'-0" | 6'-8" | DWI | PT | F4 PT HR02 113-5 COAT CLOSET PT HR04 2'-6" | 6'-8" | DWI | PT | F4 113-6 PT COAT CLOSET 5'-0" | 6'-8" | DWI | PT | F4 HR04 IC, 6 EXTERIOR ENTRY H09 RESIDENTIAL OPG. 7'-0" DM3 PT F2 TRI HI0 CORRIDOR ENTRY SECOND FLOOR EXG. EXG. OPG. OPG. DM4 PT F2 HR01A 90 MIN V.I.F. V.I.F. 4'-0" | 6'-8" | DWI | PT | F4 201-2 CLOSET PT HR04A 2'-6" | 6'-8" | DWI | PT | F4 BATHROOM PT HR02 201-3 202-I OPG. 7'-0" DM3 PT F2 HI0 CORRIDOR ENTRY 202-2 MECH. 3'-0" 6'-8" DM4 PT F2 H06 20 MIN 203-I UNIT ENTRY 3'-0" | 6'-8" | DM4 | PT | F2 20 MIN 203-2 PT CLOSET 2'-4" | 6'-8" | DWI | PT | F4 203-3 PT BEDROOM 2'-8" | 6'-8" | DWI | PT | F4 PT 203-4 LAUNDRY 2'-4" | 6'-8" | DWI | PT | F4 203-5 PT CLOSET 4'-8" | 6'-8" | DWI | PT | F4 203-6 PT BATHROOM 2'-6" | 6'-8" | DWI | PT | F4 204-I PT 20 MIN UNIT ENTRY 3'-0" | 6'-8" | DM4 | PT | F2 HR01 PT 204-2 COAT CLOSET 2'-6" | 6'-8" | DWI | PT | F4 PT 204-3 PANTRY CLOSET EXG EXG IA COAT CLOSET OPG. OPG. DWI PT F4 V.I.F. V.I.F. 204-5 POWDER 2'-4" | 6'-8" | DWI | PT | F4 PT HR02 204-6 CLOSET EXG EXG PT HR04 205-I UNIT ENTRY PT 3'-0" | 6'-8" | DM4 | PT | F2 HR01 COAT CLOSET OPG. BATHROOM 2'-6" | 6'-8" | DWI | PT | F4 205-4 LAUNDRY 2'-6" 6'-8" PT HR04 PT 205-5 CLOSET EXG EXG IC 222-I PT UNIT ENTRY 3'-0" | 6'-8" | DM4 | PT | F2 HR01 222-2 COAT CLOSET 2'-6" | 6'-8" | DWI | PT | F4 PT 222-3 CLOSET 5'-0" | 6'-8" | DWI | PT | F4 PT HR04A 222-4 BATHROOM 2'-6" | 6'-8" | DWI | PT | F4 PT 222-5 2'-4 6'-8" DWI PT F4 PT LAUNDRY 223-I UNIT ENTRY 3'-0" 6'-8" DM4 PT F2 PT HR01 EXG EXG 223-2 CLOSET OPG. OPG. 223-3 PT POWDER 2'-6" | 6'-8" | DWI | PT | F4 HR02 223-4 PT BEDROOM 2'-8" | 6'-8" | DWI | PT | F4 223-5 5'-0" | 6'-8" | DWI | PT | F4 PT CLOSET HR04A

PT

PT

PT

PT

HR02

HR04A

DOOR NO.	LOCATION	DOOR			FRAME			HARDWARE	REMARKS		
		WIDTH	HEIGHT	TYPE	FINISH	TYPE	TRANSM	FINISH	ТҮРЕ	RATING	OH CIV
THIRD FI	LOOR	1	ı	I	I		1				
301-1	UNIT ENTRY	EXG. OPG. V.I.F.	EXG. OPG. V.I.F.	DM4	PT	F2	-	PT	HR01A	90 MIN	7
301-2	CLOSET	4'-0"	6'-8"	DWI	PT	F4	-	PT	HR04A		
301-3	BATHROOM	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR02		
302-I	UNIT ENTRY	3'-0"	6'-8"	DM4	PT	F2	-	PT	HR01A		7
302-2	MECHANICAL	3'-0"	6'-8"	DM4	PT	F2	-	PT	HR03	20 MIN	
302-3	COAT CLOSET	EXG. OPG. V.I.F.	EXG. OPG. V.I.F.	DWI	PT	FI	-	PT	HR04		
302-4	CLOSET	2'-0"	6'-8"	DWI	PT	F4	-	PT	HR04		
302-5	CLOSET	2'-0"	EXG. OPG. V.I.F.	DWI	PT	FI	-	PT	HR04		
302-6	BATHROOM	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR02		
302-7	LAUNDRY	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR04		
302-8	CLOSET	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR04		
204-7	CLOSET	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR04		
204-8	BEDROOM	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR02		
204-9	CLOSET	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR04		
204-10	BATHROOM	2'-4"	6'-8"	DWI	PT	F4	-	PT	HR02		
204-11	BEDROOM	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR02		
204-12	CLOSET	EXG	EXG	-	PT	FI	-	PT	H0I		
204-13	CLOSET	EXG	EXG	-	PT	FI	-	PT	HR04		
223-10	MECHANICAL	2'-4"	6'-8"	DWI	PT	F4	-	PT	HR03		
223-11	LAUNDRY	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR04		
223-12	ATTIC STAIR	2'-4"	6'-8"	DWI	PT	F4	-	PT	HIOAB		
223-13	BEDROOM	EXG. OPG. V.I.F.	EXG. OPG. V.I.F.	DWI	PT	FI	-	PT	HR02		
223-14	CLOSET	2'-4"	6'-8"	DWI	PT	F4	-	PT	HR04		
224-15	BATHROOM	2'-6"	6'-8"	DWI	PT	F4	-	PT	HR02		

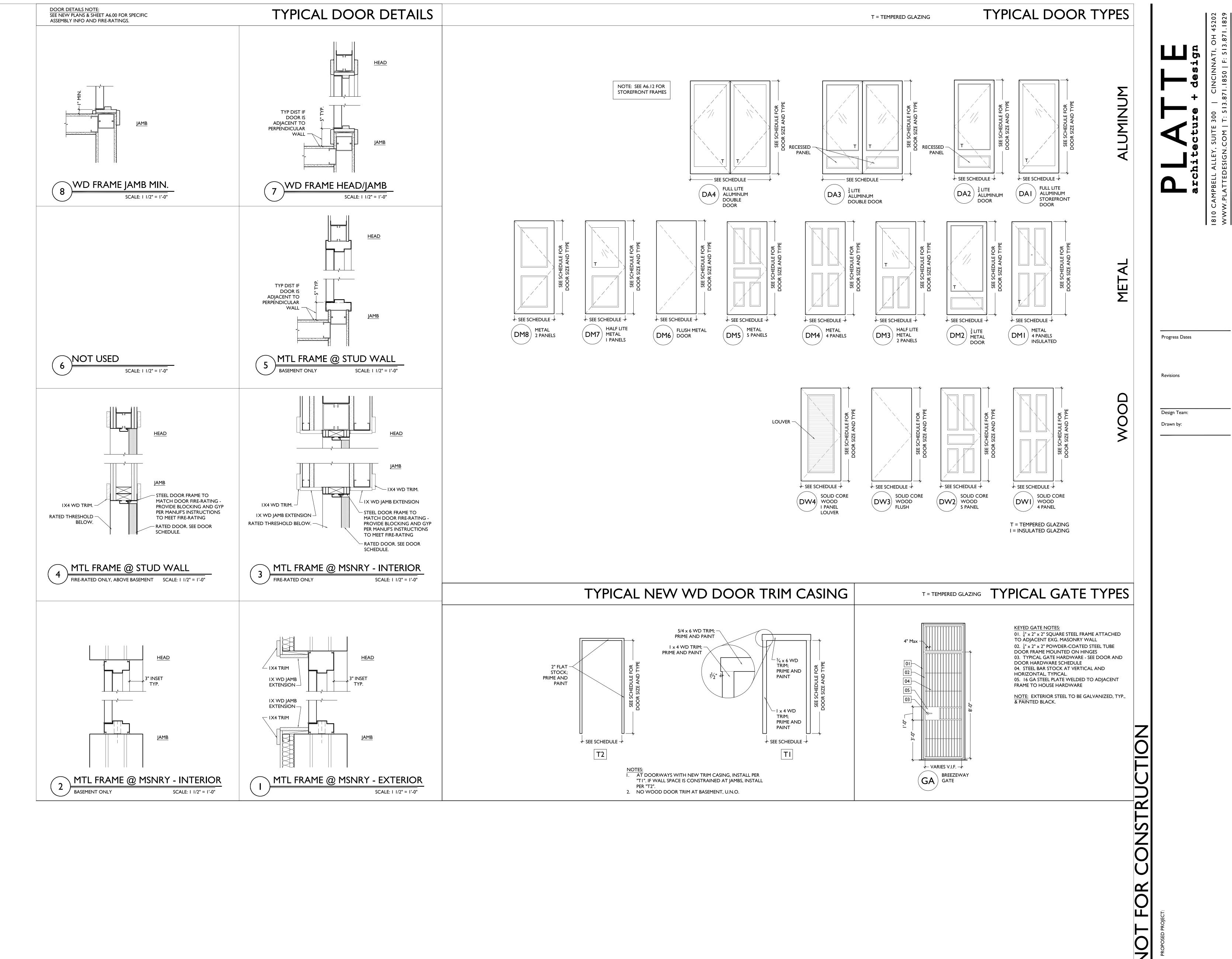
Progress Dates

Revisions

Design Team:

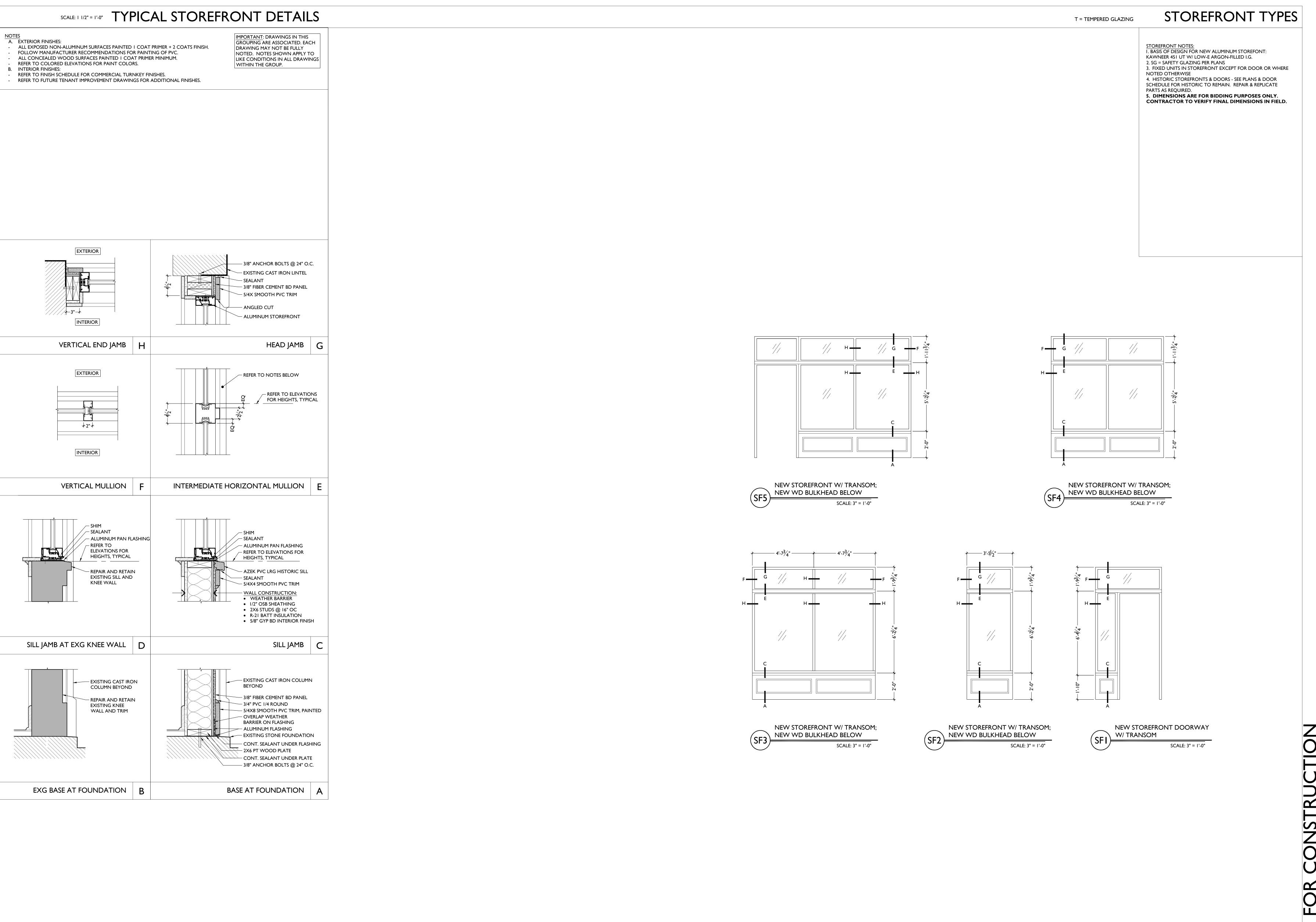
Drawn by:

DOOR SCHEDULE



No: 08/30/202

A6.11

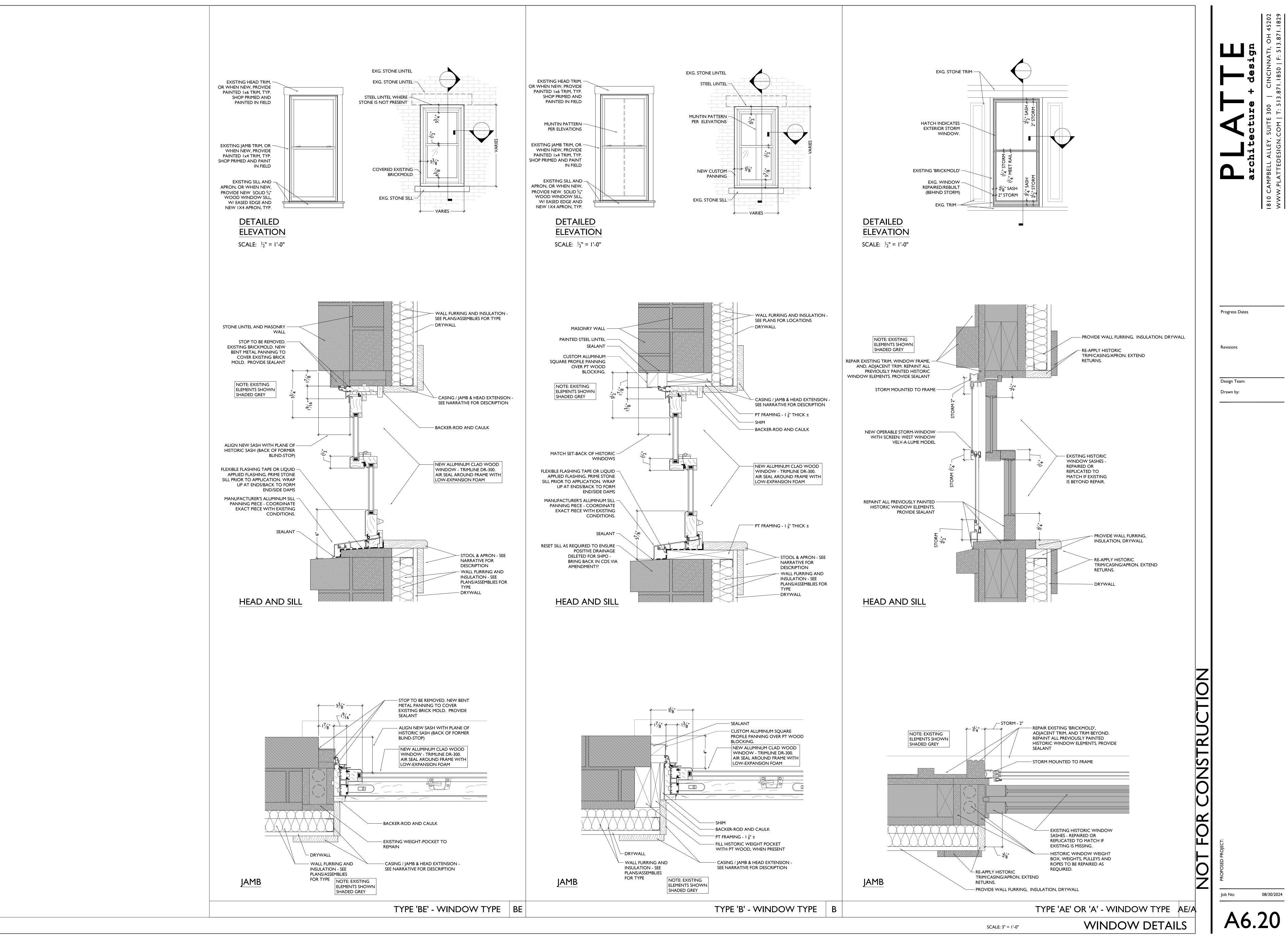


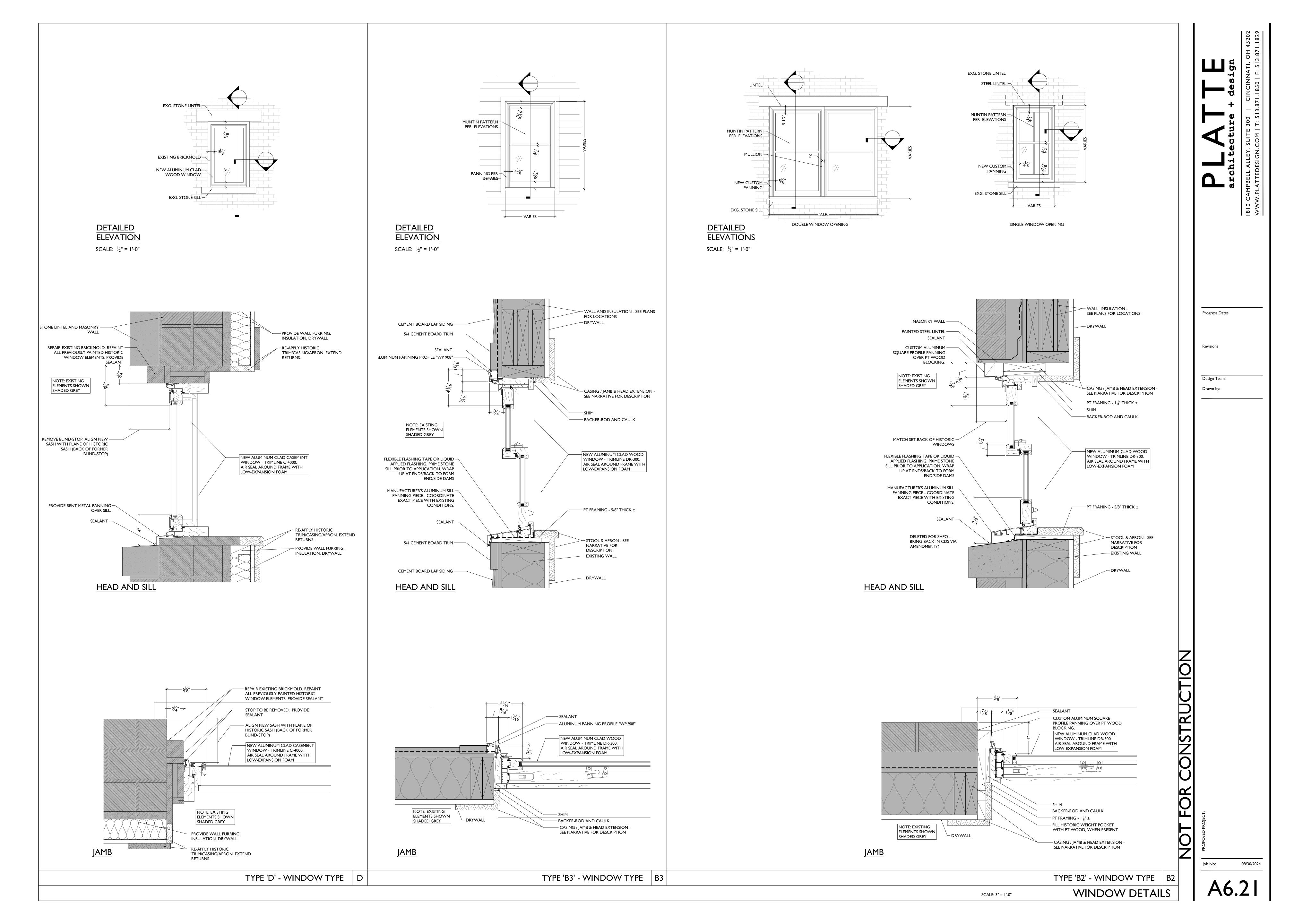
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Revisions

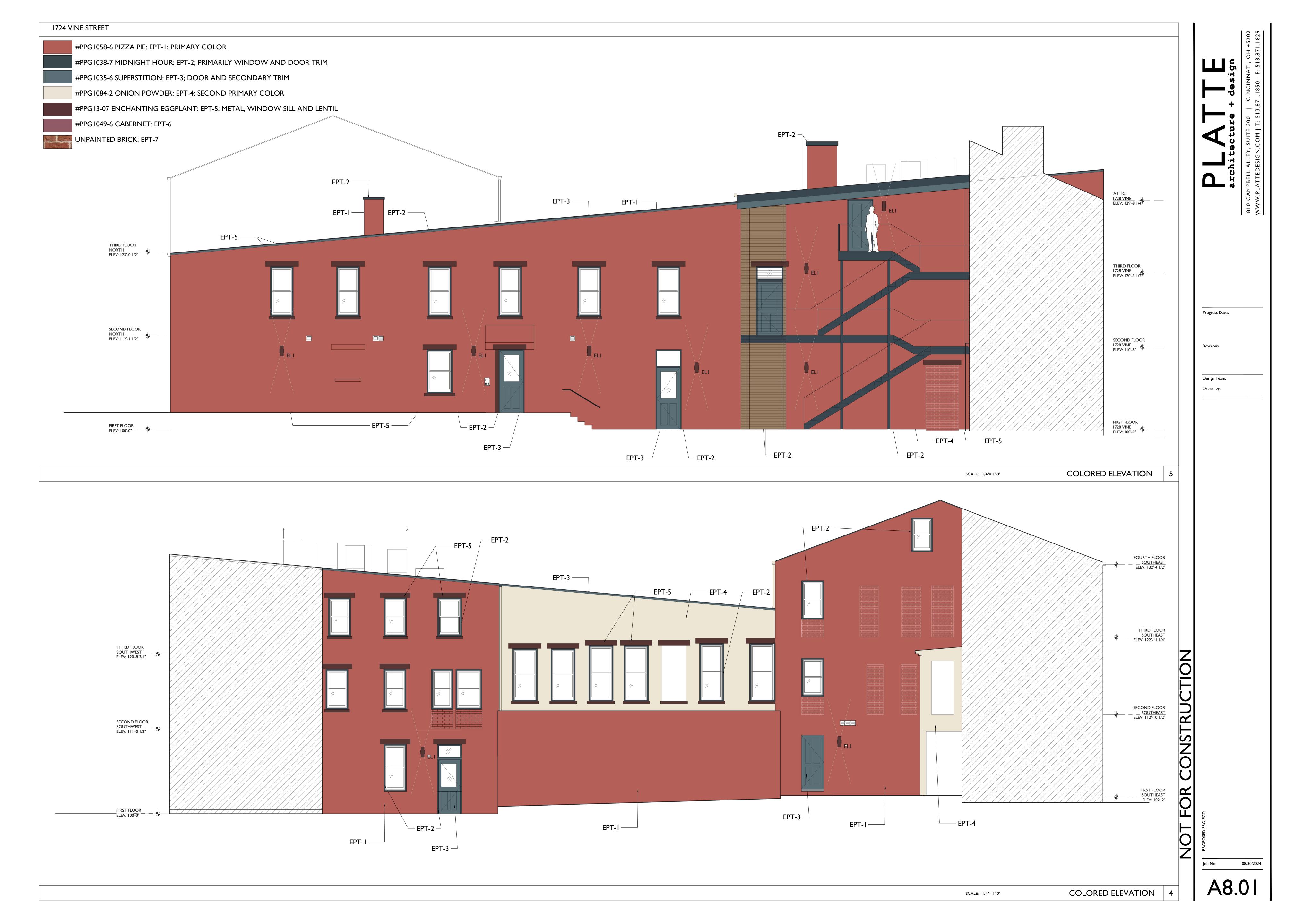
Design Team:

Drawn by:









GENERAL STRUCTURAL NOTES

COPIES OF PUBLICATIONS REFERENCED IN THESE GENERAL STRUCTURAL NOTES ARE AVAILABLE FOR REVIEW AT ADVANTAGE GROUP ENGINEERS, INC. CONTRACTORS UNFAMILIAR WITH THESE PUBLICATIONS MUST REVIEW THEM PRIOR TO CONSTRUCTION.

GOVERNING CODE

OHIO BUILDING CODE – 2017, BASED ON 2015 IBC

CLASSIFICATION OF THE BUILDING STRUCTURE: RISK CATEGORY II, TABLE 1604.5

<u>DESIGN LOADS</u>

ROOF LOAD:

A. MINIMUM LIVE LOAD OR SNOW LOAD: 20 PSF B. DEAD LOAD ALLOWNACE: 15 PSF

2. SNOW LOAD:

A. GROUND SNOW LOAD, $P_g = 20$ PSF B. FLAT ROOF SNOW LOAD, Pf = 14 PSF MODIFIED BY APPLICABLE

BUILDING COEFFICIENTS.

C. MINIMUM ROOF SNOW LOAD, $P_m = 20 \text{ PSF}$. D. SNOW LOAD IMPORTANCE FACTOR, I_s = 1.0 E. SNOW EXPOSURE FACTOR, C_e = 1.0

F. THERMAL FACTOR, $C_t = 1.0$ G. COORDINATE ROOF FRAMING WITH FINAL SELECTION OF ROOF SUPPORTED MECHANICAL EQUIPMENT AND ASSOCIATED OPENINGS. ITEMS TO BE COORDINATED INCLUDE SIZE, LOCATION, TOTAL WEIGHT,

WEIGHT DISTRIBUTION, AND SUPPORT FRAME REQUIREMENTS.

FLOOR LOAD:

A. LIVE LOAD: a. FIRST FLOOR: 100 PSF (ASSEMBLY) b. FIRST FLOOR- THIRD FLOOR: 40 PSF (RESIDENTIAL UNITS/COORIDOORS SERVING PRIVATE UNITS)

B. DEAD LOAD: a. ALLOWANCE AT WOOD FRAMED FLOORS: 10 PSF i. JOIST FRAMING: ii. SHEATHING: iii. CEILING (5/8" DRYWALL):

iv. DUCTS, LIGHTS, MISC MECH:

WIND LOAD:

A. MAIN WIND FORCE RESISTING SYSTEM: 115 MPH PER ASCE 7-10 (3-SECOND GUST - LOAD AND RESISTANCE FACTOR DESIGN). B. WIND EXPOSURE: B

C. BASIC WIND VELOCITY PRESSURE, q_h= 24 PSF D. INTERNAL GUST PRESSURE COEFFICIENT, GCp = 0.18 (ENCLOSED BUILDING).

5. SPECIAL LOADS:

A. INTERIOR FINISH: 5 PSF HORIZONTAL LOAD. B. HANDRAILS: 200 POUND CONCENTRATED LOAD AT ANY POINT, IN ANY DIRECTION, OR 50 PLF UNIFORM LOAD IN ANY DIRECTION.

C. GUARDRAILS: a. TOP RAIL: 200 POUNDS CONCENTRATED AT ANY POINT IN ANY DIRECTION, OR 50 PLF UNIFORM LOAD IN ANY DIRECTION. b. IN-FILL AREAS: 50 POUNDS APPLIED OVER A 1 SQUARE FOOT AREA.

6. SPECIAL INSPECTION REQUIREMENTS PER SECTION 1704. SEE CONSTRUCTION SPECIFICATIONS AND OR SPECIAL INSPECTION BOOKLET ADDENDUM REQUIREMENTS.

SPECIAL INSPECTIONS

PER THE REQUIREMENTS OF CHAPTER 17 SECTION 1704.1 OF THE REFERENCED BUILDING CODE, A SPECIAL INSPECTION IS REQUIRED FOR THE PROPOSED BUILDING CONSTRUCTION. SPECIAL INSPECTION INVOLVES THE VERIFICATION OF COMPLIANCE OF MATERIALS, INSTALLATION, FABRICATION, ERECTION AND OR PLACEMENT OF COMPONENTS WITH THE OFFICIAL SET OF CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. SPECIAL INSPECTION IS PART OF THE PERMIT APPLICATION PROCESS FUNDED BY THE OWNER OR THE OWNER'S AGENT.

A STATEMENT OF SPECIAL INSPECTION LISTING THE REQUIREMENTS ALONG WITH A SCHEDULE OF TESTING, SUBMITTAL REVIEWS, AND FIELD OBSERVATION REQUIREMENTS HAS BEEN PREPARED BY THE STRUCTURAL ENGINEER OF RECORD IN ACCORDANCE WITH SECTION 106.1 OF THE BUILDING CODE. THIS STATEMENT INCLUDES A COMPLETE LIST OF MATERIAL AND ACTIVITY REQUIRING INSPECTION. IT IS THE RESPONSIBILITY OF ALL PARTIES TO BECOME FAMILIAR WITH THIS REQUIREMENT AND UNDERSTAND THE GUIDELINES AND REQUIREMENTS OF EACH PARTY INVOLVED WITH THE CONSTRUCTION. A COPY OF THE STATEMENT OF SPECIAL INSPECTION IS AVAILABLE UPON REQUEST. THE SPECIAL INSPECTOR COORDINATOR SHALL COORDINATE WITH THE OWNER, CONTRACTOR AND THE DESIGN PROFESSIONALS AND SCHEDULE THE INSPECTIONS ACCORDINGLY.

SUBSTITUTIONS, SUBMITTALS, AND RFI'S

1. CONTRACTOR SHALL SUBMIT ALL SUBSTITUTIONS FOR APPROVAL PRIOR TO CONSTRUCTION WITH THE FOLLOWING INFORMATION:

A. THE SCOPE, EXTENT, AND ALL LOCATIONS AFFECTED BY THE PROPOSED SUBSTITUTION. B. SPECIFIC DRAWING OR SPECIFICATION REFERENCES FOR THE

 THE REASON FOR THE PROPOSED CHANGE D. COST SAVINGS AND/OR IMPACT ON THE SCHEDULE

ORIGINAL PRODUCT OR SYSTEM SPECIFIED.

E. IMPACT ON ANY GUARANTEES OR WARRANTIES ASSOCIATED WITH THE PRODUCT OR SYSTEM.

F. COORDINATION REQUIRED WITH OTHER TRADES OR ADJACENT

G. ANY AND ALL DEVIATIONS FROM THE SPECIFIED REQUIREMENTS.

2. REQUESTS FOR INFORMATION (RFI'S) SHALL BE SUBMITTED IN A TIMELY

MANNER WHEN INFORMATION IS MISSING FROM THE CONSTRUCTION DOCUMENTS, INFORMATION IS CONFLICTING WITHIN THE CONSTRUCTION DOCUMENTS, OR IS AMBIGUOUS.

A. THE CONTRACTOR MUST USE DUE DILIGENCE IN ATTEMPTING TO FIND

ANY ANSWER PRIOR TO SUBMITTING AN RFI. B. IF THE INFORMATION REQUESTED IN AN RFI IS APPARENT FROM FIELD OBSERVATION, IS CONTAINED IN THE CONSTRUCTION DOCUMENTS, OR IS REASONABLY INFERABLE FROM THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE TO THE OWNER FOR ALL REASONABLE COSTS CHARGED RELATED TO ADDITIONAL SERVICES INCURRED DUE TO ANSWERING THE RFI.

CONSTRUCTION AND SAFETY

 THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS. METHODS. TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR.

2. 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 NOT BE LIMITED TO NORMAL WORKING HOURS. WHEN ON SITE, THE ENGINEER IS RESPONSIBLE FOR HIS OWN SAFETY BUT HAS NO RESPONSIBILITY FOR THE SAFETY OF OTHER PERSONNEL OR SAFETY CONDITIONS AT THE SITE.

3. THE CONTRACTOR SHALL ONLY USE STRUCTURAL PLANS ISSUED AS "FOR CONSTRUCTION" OR ISSUES THEREAFTER. PRIOR ISSUES SHALL ONLY BE USED FOR PERMITTING OR BIDDING PURPOSES.

4. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS, SHOULD ANY DISCREPANCY BE FOUND, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY OF THE

5. THE CONTRACTOR SHALL BRACE ENTIRE STRUCTURE AS REQUIRED DURING DEMOLITION AND CONSTRUCTION TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE AND FUNCTIONING AS THE DESIGNED UNIT.

6. THE OWNER AND ENGINEER HAS MADE NO INVESTIGATION TO DETERMINE IF ASBESTOS OR ANY OTHER HAZARDOUS MATERIAL IS PRESENT IN EXISTING CONSTRUCTION AND ASSUMES NO RESPONSIBILITY WITH REGARD TO ASBESTOS OR ANY OTHER HAZARDOUS MATERIAL.

7. THE CONTRACTOR IS TO REVIEW THESE DRAWINGS AND VISIT THE SITE BEFORE COMMENCING THE PROJECT IN ORDER TO FAMILIARIZE HIM OR HERSELF WITH THE PROPOSED WORK.

8. THE CONTRACTOR IS TO PROTECT AND SAVE BUILDING ELEMENTS 10. LAP SPLICE REINFORCING BARS 48 BAR DIAMETERS UNLESS NOTED CONNECTED TO, OR ADJACENT TO, THOSE ELEMENTS WHICH ARE SLATED TO BE REMOVED.

9. THE CONTRACTOR SHALL NOT REMOVE ANY ELEMENTS WHICH MAY CAUSE THE STRUCTURE TO BECOME UNSTABLE, OR THAT WILL POSE A RISK TO PERSONS OR PROPERTY, EVEN IF INDICATED IN PLANS. IF ANY ELEMENTS BECOME UNSTABLE, CONTRACTOR IS TO STABILIZE AND SHALL INFORM THE ENGINEER/OWNER IMMEDIATELY.

10. IT IS UP TO THE CONTRACTOR TO CONTINUALLY EVALUATE THE STRUCTURAL STABILITY OF THE BUILDING AND THE INTEGRITY OF ELEMENTS BOTH STRUCTURAL AND NON-STRUCTURAL THAT ARE SHOWN TO REMAIN. IF THE CONTRACTOR DETERMINES THAT SOME OF THESE ELEMENTS SHOULD BE REMOVED, HE/SHE MUST FIRST RECEIVE PERMISSION FROM THE ENGINEER/ OWNER, OR MAY BE FINANCIALLY RESPONSIBLE FOR THE REPLACEMENT OF THESE ELEMENTS.

11. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL TRASH AND DEBRIS THROUGHOUT THE WORK. ALL DEBRIS MUST BE REMOVED AND DISCARDED IN A SAFE AND LEGAL MANNER.

12. CONTRACTOR IS TO PROTECT THE BUILDING FROM THE ELEMENTS, THEFT AND VANDALISM AT ALL TIMES DURING WORK.

MISCELLANEOUS STRUCTURAL NOTES

 THESE STRUCTURAL DRAWINGS DEPICT A STRUCTURAL SYSTEM AND THE MAJOR COMPONENTS OF THAT SYSTEM. MINOR ITEMS, INCLUDING BUT NOT LIMITED TO, POURSTOPS, DECK SUPPORT ANGLES, FRAMES AT FLOOR AND ROOF DECK OPENINGS, CFS AT ARCHITECTURAL FEATURES, ETC. SHALL BE SUPPLIED BY THE CONTRACTOR AS NEEDED TO PROVIDE A COMPLETE SYSTEM.

2. WHERE DETAILS ARE CALLED FOR IN ONE AREA OF THE BUILDING, THEY SHALL BE DUPLICATED AT SIMILAR CONDITIONS UNLESS NOTED

3. STRUCTURAL AND ARCHITECTURAL PLANS SHOW DIMENSIONS AND ELEVATIONS TO SIGNIFICANT WORKING POINTS. CONTRACTORS, DETAILERS AND SUPPLIERS ARE RESPONSIBLE FOR THE DETERMINATION OF ALL DIMENSIONS, PITCHES, ELEVATIONS, ETC. BEYOND THOSE NOTED AS NECESSARY TO THOROUGHLY DETAIL/FABRICATE THEIR WORK. CONTACT ARCHITECT WITH ANY DISCREPANCIES FOUND.

FOUNDATIONS

A. PER THE CLIENT'S REQUEST, THE FOUNDATION DESIGN AND GENERAL FOUNDATION NOTES ARE BASED ON THE ASSUMPTION OF FAVORABLE SOIL CONDITIONS. THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL CONSULTANT TO VERIFY THE DESIGN ASSUMPTIONS OF NATIVE UNDISTURBED SOILS PRIOR TO THE FOUNDATION INSTALLATION. THE COST FOR THIS DOCUMENTATION SHALL BE IDENTIFIED AS A SEPARATE ITEM ON THE CONTRACTOR'S BID. THE CONTRACTOR SHALL SUBMIT COPIES OF ALL FIELD-TESTING DOCUMENTATION TO ADVANTAGE GROUP ENGINEERS.

2. THE BOTTOM OF FOUNDATION ELEVATION INDICATED ARE FOR BIDDING PURPOSES AND MAY BE LOWERED TO SUIT SUB-SURFACE SOIL CONDITION. BEARING STRATA SHALL BE APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE. PROVIDE ENGINEERED FILL OR FLOWABLE FILL CONCRETE (500 PSI) UNDER FOUNDATIONS AT SOFT SPOTS AND FOR EXTENDING EXCAVATION TO ADEQUATE BEARING MATERIAL. INSTALL FOUNDATIONS AT DESIGNED ELEVATIONS.

3. FOOTINGS AND GRADE BEAMS MAY BE PLACED WITHOUT SIDE FORMS IF EXCAVATED WALLS STAND APPROXIMATELY VERTICAL.

4. ALL FOOTINGS SHALL BEAR ON LEVEL (WITHIN 1 IN 12) UNDISTURBED SOIL OR APPROVED ENGINEERED FILL. FOUNDATIONS HAVE BEEN DESIGNED FOR A MAXIMUM SOIL BEARING PRESSURE OF 1500 PSF BELOW STRIP

5. CONTRACTOR SHALL CONTACT UTILITY COMPANIES FOR LOCATING UNDERGROUND SERVICES AND IS RESPONSIBLE FOR THEIR PROTECTION AND SUPPORT.

6. ALL AREAS WITHIN THE FOOTPRINT OF THE BUILDING, INCLUDING UTILITY TRENCHES, MUST BE FREE OF ANY WET AND/OR SOFT AREAS PRIOR TO THE PLACEMENT OF FILL MATERIAL OR SLAB.

7. FINISHED GRADE SHALL SLOPE AWAY FROM THE PERIMETER FOUNDATION. **CONCRETE**

. CONCRETE WORK AND TESTING SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED BY THE SUPPLEMENTAL REQUIREMENTS BELOW. REPORTS FROM TESTS REQUIRED BY SECTION 1.6 OF ACI 301 SHALL BE SUBMITTED TO STRUCTURAL ENGINEER, ARCHITECT, OWNER, CONTRACTOR, CONCRETE SUPPLIER, AND BUILDING OFFICIAL.

2. CONCRETE WORK IN COLD WEATHER SHALL CONFORM TO ALL REQUIREMENTS OF ACI 306.1 "STANDARD SPECIFICATION FOR COLD

WEATHER CONCRETING" AND ACI 306R "COLD WEATHER CONCRETING". 3. CONCRETE WORK IN HOT WEATHER SHALL CONFORM TO ALL REQUIREMENTS OF ACI 305R "HOT WEATHER CONCRETING". THE AIR TEMPERATURE, RELATIVE HUMIDITY, CONCRETE TEMPERATURE, AND WIND VELOCITY SHALL BE ENTERED INTO THE NOMOGRAPH OF THIS REFERENCE TO DETERMINE IF PRECAUTIONS AGAINST PLASTIC SHRINKAGE ARE REQUIRED.

4. CONCRETE MIX DESIGNS SHALL BE SUBMITTED FOR EACH TYPE OF CONCRETE TO THE STRUCTURAL ENGINEER FOR APPROVAL IN ACCORDANCE WITH ACI 301 SECTION 4.2.3.4 FIELD TEST DATA OR TRIAL

5. SUBMIT SHOP DRAWINGS OF REINFORCING STEEL.

6. MATERIALS (ALSO SEE CONCRETE MIX SCHEDULE):

A. REINFORCING STEEL: ASTM A615 OR ASTM 996 (AXLE ONLY) 60 KSI YIELD DEFORMED BARS AND ASTM A1064 MESH, FLAT SHEETS ONLY.

B. FLY ASH: ASTM C618, TYPE F OR C. FLY ASH-TO-TOTAL CEMENTITIOUS RATIO SHALL NOT EXCEED 25% MAXIMUM.

C. GROUND GRANULATED BLAST FURNACE SLAG: ASTM C989. TOTAL GROUND GRANULATED BLAST FURNACE SLAG-TO-TOTAL CEMENTITIOUS RATIO SHALL NOT EXCEED 50% MAXIMUM.

D. HIGH RANGE WATER REDUCER (HRWR) ADMIXTURE: ASTM C494. E. CHLORIDE CONTENT OF CONCRETE: LIMIT TOTAL CHLORIDE ION CONTENT TO AMOUNT INDICATED IN TABLE 4.2.2.6 OF ACI 318. ADMIXTURES CONTAINING CHLORIDE ARE NOT PERMITTED IN REINFORCED CONCRETE OR CONCRETE CONTAINING METALS.

7. CONCRETE MIX SCHEDULE:

Application	days (psi)	Content ¹	ratio ²	Size ¹ (in)	Class	Class	Class	Class
Footings	3000	N/a	0.55	3/4	F0	S0	W0	CO
Foundation and Retaining Walls	4500	6% ± 1.5%	0.45	3/4	F2	S0	W1	C1
Interior Floor Slab on Grade ³	4000	N/a	0.5	3/4	F0	S0	W0	C0
Exterior Flatwork ⁵ (with steel reinf.)	5000	6% ± 1.5%	0.4	3/4	F3	S0	W1	C2
Exterior Flatwork (Plain Concrete)	4500	6% ± 1.5%	0.45	3/4	F3	S0	W1	C1
[1] - Where 3/8" maximum aggregate is preferred, adjust air entrainment to 7.5% ± 1.5% (if required).								

2] - Where air entrainment is not required by design, the contractor/supplier may choose to include air entrainment to improve placement or finish characteristics. Air entrainment is not permitted in normal weight concrete to receive a hard trowel finish and entrapped air shall not exceed 3%. [3] - f'c = 1800 psi @ 3 days. [5] - Cortec MCI required.

8. SLUMP SHALL BE MEASURED PRIOR TO THE ADDITION OF HRWR.

9. ALL REINFORCING BARS, EMBEDS, AND ANCHOR RODS SHALL BE PLACED. WITHIN THE REQUIRED TOLERANCES AND SUPPORTED TO PREVENT DISPLACEMENT DURING CONCRETE PLACEMENT. WORKING REINFORCING BARS, EMBEDS, AND ANCHOR RODS INTO WET CONCRETE (KNOWN AS "WET STICKING") IS PROHIBITED. IF NECESSARY, CONTRACTOR MAY PROVIDE ADDITIONAL REINFORCING BARS TO SECURELY TIE REINFORCING BARS, EMBEDS, AND ANCHOR RODS.

OTHERWISE. 11. BAR CLEARANCES BETWEEN ADJACENT BARS AND FORMWORK SHALL BE

AS NOTED ON THE DRAWINGS OR A MINIMUM AS PER ACI REQUIREMENTS.

12. AT CORNERS AND INTERSECTIONS OF FOOTINGS PROVIDE BENT BARS OF EQUAL SIZE AND AT SAME SPACING AS TYPICAL REINFORCING AROUND CORNER AND/OR INTO ABUTTING WALL OR GRADE BEAM. BARS SHALL HAVE EMBEDMENT OF 30 BAR DIAMETERS (18" MINIMUM).

13. MACHINE TROWEL FINISH FLOOR SLAB AND CURE USING A METHOD RECOMMENDED BY ACI 302.1R (GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION) INCLUDING WATER CURING, WET COVERING, APPLICATION OF IMPERVIOUS SHEETING OR APPLICATION OF "CURE AND SEAL" TYPE CURING COMPOUND MEETING ASTM C-1315. FOR APPLICATIONS EXPOSED TO SUNLIGHT USE CLASS A (NON-YELLOWING) CURING COMPOUND. COORDINATE CURING METHOD WITH ARCHITECTURAL FLOOR FINISHES THAT REQUIRE ADHESION TO THE SLAB (SUCH AS TILE) TO INSURE PROPER BOND.

14. FLOOR SLAB-ON-GRADE SHALL CONFORM TO THE FOLLOWING SURFACE PROFILE TOLERANCES PER ASTM E-1155 AND ACI 117: F_f (FLATNESS) / F_I (LEVELNESS)

A. SPECIFIED OVERALL VALUE: 25 / 20

B. MINIMUM LOCAL VALUE: 18 / 13 C. MAXIMUM GAP UNDER 10 FT. UNLEVELED STRAIGHTEDGE = 1/4".

BARRIER REQUIREMENTS. VAPOR BARRIER, WHERE REQUIRED, SHALL BE

MINIMUM OF 2'-0" PAST EDGE OF OPENING. THIS STEEL MAY BE OMITTED IF

PLACED OVER COMPACTED GRANULAR SUBBASE. 16. AT SLAB AND WALL OPENING CORNERS AND REENTRANT CORNERS, PROVIDE (1) #5 BAR IN EACH FACE PARALLEL TO EACH EDGE EXTENDING A

TYPICAL REINFORCING STEEL EXCEEDS THIS MINIMUM REQUIREMENT.

15. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR VAPOR

17. REINFORCE ALL INTERIOR SLABS ON GROUND WITH 6x6-W2.9xW2.9 (42#) MESH. LOCATE MESH 2" CLEAR BELOW TOP OF SLAB.

18. FINISH OF CONCRETE HANDICAP RAMPS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). COORDINATE LOCATION AND PATTERN WITH ARCHITECTURAL DRAWINGS.

19. CONTROL JOINTS IN SLABS ON GROUND SHALL BE LOCATED AT 12'-0" MAXIMUM SPACING AND SHALL CREATE SECTIONS OF SLAB WITH A MAXIMUM ASPECT RATIO OF 1½ TO 1. CONTROL JOINTS SHALL BE SAWN AND SHALL BE A MINIMUM OF 1/4 OF THE SLAB THICKNESS DEEP. THE CONTROL JOINT SHALL BE SAWN AS SOON AS THE SAW BLADE CAN CUT THE CONCRETE WITHOUT DISPLACING THE AGGREGATE. CUT EVERY OTHER MESH WIRE AT THE CONTROL JOINT LOCATION PRIOR TO PLACING CONCRETE. IF AN EARLY-CUTTING SAW IS BE USED AND A SHALLOWER DEPTH OF THE CUT IS DESIRED, CONTACT THE ENGINEER IN ADVANCE FOR

20. CONSTRUCTION JOINTS IN SLABS ON GROUND MAY BE LOCATED AT ANY CONTROL JOINT LOCATION. CONSTRUCTION JOINTS SHALL HAVE A KEY FORMED AT MID-DEPTH OF THE FIRST CAST SECTION. THE KEY SHALL BE 11/2" DEEP AND SHALL BE 1/3 OF THE SLAB THICKNESS HIGH. THE TOP AND BOTTOM OF THE KEY SHALL HAVE 1 VERTICAL TO 3 HORIZONTAL SLOPE.

21. FILL CONTROL AND CONSTRUCTION JOINTS IN TRAFFIC AREAS WITH SEMI-RIGID EPOXY JOINT FILLER WITH A DUROMETER SHORE A-SCALE HARDNESS NUMBER OF APPROXIMATELY 80. FILL CONTROL AND CONSTRUCTION JOINTS IN NON-TRAFFIC AREAS WITH ELASTOMERIC SEALANT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

22. PROVIDE 3/4" CHAMFER AT CORNERS OF EXPOSED CONCRETE.

23. WHERE BRITTLE FLOOR FINISHES ARE TO BE APPLIED TO FLOOR SLABS, COORDINATE CONTROL JOINT LOCATIONS WITH FLOOR FINISH JOINT LOCATIONS AND ARCHITECT.

EXPANSION AND EPOXY ADHESIVE ANCHORS

EPOXY ADHESIVE ANCHORS:

A. EPOXY ADHESIVE SHALL BE HIT-HY 200 V3 EPOXY ADHESIVE MANUFACTURED BY THE HILTI COMPANY AT CONCRETE AND HIT-HY 270 ADHESIVE AT MASONRY/STONE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SUBSTITUTES MAY BE CONSIDERED; SUBMIT MANUFACTURER'S DATA PRIOR TO INSTALLATION.

B. THREADED RODS SHALL BE ASTM A36. SIZES AND EMBEDMENT AS INDICATED ON THE DRAWINGS. C. CONDUCT JOB-SITE TRAINING OF ALL CONTRACTOR'S PERSONNEL INSTALLING THIS PRODUCT FOR SAFE AND PROPER INSTALLATION.

HANDLING, AND STORAGE OF THE EPOXY SYSTEM.

1. MASONRY CONSTRUCTION AND MATERIALS SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602)" EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.

2. SUBMITTALS SHALL BE MADE FOR THE FOLLOWING:

A. COLD WEATHER CONSTRUCTION PROCEDURE. B. HOT WEATHER CONSTRUCTION PROCEDURE. C. PROPORTIONS OF MATERIAL IN ACCORDANCE WITH REFERENCED SPECIFICATIONS OF MORTAR AND GROUT.

a. MINIMUM UNIT COMPRESSIVE STRENGTH, f'm = 2000 PSI.

MATERIALS:

6. MASONRY WALL REPAIR:

A. CONCRETE MASONRY UNITS: ASTM C90 TYPE I BELOW GRADE: NORMAL WEIGHT AGGREGATE PER ASTM C33.

B. FACING BRICK: SALVAGED BRICK FROM SIMILAR ERA COMPATITBLE WITH EXISTING COMPOSITION OF BRICK WITH RESPECT TO HARDNESS C. MORTAR: ASTM C270 TYPE 'O' TO MATCH WITH EXISTING MODIFIED

ACCORDINGLY. a. PORTLAND CEMENT-LIME MORTAR: PORTLAND CEMENT: TYPE I. HYDRATED LIME: TYPE N. b. MASONRY CEMENT MORTAR: AT CONTRACTOR'S OPTION.

D. GROUT: ASTM C476. f'c = 2000 PSI, SLUMP 8" TO 10". E. REINFORCING STEEL: ASTM A615, 60 KSI YIELD. F. HORIZONTAL JOINT REINFORCING FOR SINGLE WYTHE CONCRETE MASONRY: 9 GAUGE LADDER TYPE. HOT DIPPED GALVANIZED PER ASTM A153 CLASS B. PLACE HORIZONTAL JOINT REINFORCING AT 16" CENTERS VERTICALLY FOR CONCRETE MASONRY. LAP HORIZONTAL JOINT REINFORCING 6" MINIMUM. HORIZONTAL JOINT REINFORCING

SHALL BE DISCONTINUOUS ACROSS MOVEMENT JOINTS. 4. MORTAR PROPORTIONS MUST BE ACCURATELY MEASURED PRIOR TO MIXING. ADD CEMENT TO MIX IN FULL BAG QUANTITIES. MEASURE SAND IN BOX WITH VOLUME OF ONE CUBIC FOOT AS OFTEN AS NECESSARY TO MAINTAIN CONSISTENT PROPORTIONS AND AT LEAST ONCE DAILY AND **EVERY 4 HOURS OF MIXING.**

5. MINIMUM VERTICAL REINFORCEMENT REQUIREMENTS FOR ALL MASONRY

a. AS A MINIMUM, ALL MASONRY SHALL BE REINFORCED PER SECTION ACI 530 1.14.2.2.2.1. b. #4 VERTICAL BARS SHALL BE PLACED AT ALL CORNERS, WITHIN 16 INCHES OF EACH WALL OPENINGS, WITHIN 8 INCHES OF EACH WALL MOVEMENT JOINT AND WITHIN 8 INCHES OF THE END OF

c. HORIZONTAL JOINT REINFORCEMENT SHALL BE SPACED AT 16" MAX. WALL OPENINGS SHALL BE REINFORCED TOP AND BOTTOM OF OPENINGS AND SHALL EXTEND NOT LESS THAN 24 INCHES BEYOND PAST THE ROUGH OPENING

d. SPACING OF VERTICAL REINFORCEMENT SHALL NOT EXCEED 4'-

a. EXTERIOR MASONRY AND STONE IS TO BE REPAIRED,

REPLACED, AND CLEANED AS NECESSARY AT ALL EXPOSED EXTERIOR SIDES OF THE BUILDING AS NEEDED. b. REPAIR DAMAGED JOINTS IN MASONRY WHERE MORTAR IS DAMAGED OR MISSING. CUT OUT JOINTS TO A DEPTH OF 2X THE WIDTH OF THE JOINT OR UNTIL SOUND MORTAR. REMOVE DUST AND LOOSE MATERIAL BY HAND BRUSHING. MORTAR TO MATCH

EXISTING IN COMPOSITION, COLOR, TOOLING, PROFILE AND

c. REPLACE MISSING, ERODED, SPALLED OR CRACKED MASONRY UNITS. CUT OUT UNITS, INCLUDING ENTIRE MORTAR JOINT AROUND MASONRY UNIT. REMOVE UNITS BY HAND USING CARE SO AS NOT TO DAMAGE ADJACENT MASONRY. TURN EXISTING BRICKS AROUND AND/OR USE SALVAGED BRICK IF POSSIBLE BUILD-IN NEW MASONRY AND JOINTS TO MATCH EXISTING. ALIGN WITH EXISTING JOINTS AND COURSING TRUE AND LEVEL FACES PLUMB AND IN-LINE. INSTALL ANY ANCHORS, FLASHING, OR REINFORCEMENTS AS NECESSARY, ALL NEW WORK SHALL

MATCH THAT OF THE SURROUNDING MASONRY. d. REMOVE CRACKED, DAMAGED AND SEVERELY SPALLED STONE LINTELS AND SILLS WITH CARE IN A MANNER TO PREVENT DAMAGE TO ADJACENT REMAINING MATERIALS. BUILD-IN NEW LINTELS AND SILLS. ALIGN WITH EXISTING JOINTS AND COURSING TRUE AND LEVEL. FACES PLUMB AND IN-LINE.

INSTALL ANY ANCHORAGES, FLASHINGS, OR REINFORCEMENTS AS NECESSARY, WHERE APPLICABLE, NEW LINTELS AND SILLS TO BE PRECAST CONCRETE TO MATCH EXISTING IN COLOR AND TEXTURE. THE CONTRACTOR SHALL PROVIDE SAMPLES FOR APPROVAL PRIOR TO ORDERING MATERIAL. ALL STONE REPLACEMENT WORK WILL BE DONE WITHOUT DAMAGE, TO MATCH THE EXISTING HISTORIC STONE AND MASONRY.

e. UNPAINTED MASONRY AND STONE IS TO REMAIN UNPAINTED.

7. RUNNING BOND PATTERN SHALL BE USED FOR ALL MASONRY WORK UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL

1. THE CONTRACTOR SHALL SUBMIT AS PART OF THE BIDDING PROCEDURE A UNIT COST FOR MISCELLANEOUS STRUCTURAL STEEL REQUIREMENTS THAT MAY HAVE BEEN OMITTED FROM THE CONSTRUCTION BID DOCUMENTS. PROVIDE A UNIT COST PER POUND FOR EACH OF THE FOLLOWING HOT ROLLED SECTIONS: WF BEAM, WF COLUMN, HSS, C-CHANNELS, L-LINTELS (GALVANIZED) AND L-LINTELS (PAINTED).

2. NO OPENING OR HOLE SHALL BE PLACED IN ANY STRUCTURAL MEMBER (OTHER THAT WHAT IS INDICATED ON THE DRAWINGS) UNLESS THE LOCATION HAS BEEN APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.

3. ALL FLOOR OR ROOF BEAMS SHALL BE FABRICATED WITH THE NATURAL

4. FIELD CONNECTIONS SHALL BE BOLTED EXCEPT WHERE WELDED CONNECTIONS ARE INDICATED ON THE STRUCTURAL DRAWINGS.

5. WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS D1.1).

6. MATERIALS:

A. ROLLED SHAPES AND PLATES UNLESS NOTED: ASTM A36.

B. TUBULAR SHAPES: ASTM A500 GRADE C. C. PIPE SHAPES: ASTM A53, TYPES E OR S GRADE B. D. BOLTS: ASTM A325-N, 3/4" DIAMETER UNLESS NOTED.

INTERIOR AND EXTERIOR APPLICATIONS.

E. ANCHOR RODS: ASTM F1554 GRADE 36 KSI MATERIAL FULLY THREADED RODS HAVING A NUT TACK WELDED IN PLACE ON BOTTOM. MINIMUM EMBEDMENT AS NOTED ON THE DRAWINGS. F. FIELD WELDS: AWS E70XX, LOW HYDROGEN ELECTRODES.

G. NON-SHRINK NON-METALLIC GROUT: CRD-C-621 AND ASTM C1107 FOR

7. PAINT AND PROTECTION:

A. STRUCTURAL STEEL UNLESS NOTED: FABRICATOR'S STANDARD PRIME COAT. TOUCH UP AFTER ERECTION. B. LINTELS SUPPORTING EXTERIOR MASONRY WYTHES AND MEMBERS EXPOSED TO WEATHER IN FINISHED STRUCTURES: HOT DIP GALVANIZE PER ASTM A123 AFTER FABRICATION. COATING WEIGHT PER PARAGRAPH 5.1 OF ASTM A123 AND A153. FABRICATE ASSEMBLIES PER ASTM A143, A384, AND A385. TOUCH UP AFTER ERECTION WITH ORGANIC ZINC RICH PAINT COMPLYING WITH DOP-P-21035 OR MIL-P-

26915, MULTIPLE COATS TO DRY FILM THICKNESS OF 8 MILS. 8. CONTRACTOR SHALL SUBMIT ERECTION AND SHOP DRAWINGS FOR REVIEW BY ENGINEER PRIOR TO FABRICATION. ANY DEVIATIONS FROM THE ORIGINAL DESIGN INTENT SHALL BE APPROVED PRIOR TO SUBMITTING ANY SHOP SUBMITTALS. SUCH DRAWINGS WILL BE

9. CONTRACTOR SHALL SUBMIT MISCELLANEOUS STEEL SHOP DRAWINGS FOR REVIEW BY ENGINEER PRIOR TO FABRICATION. MISCELLANEOUS STEEL SHOP DRAWINGS SHALL INCLUDE STAIRS AND GUARDRAILS. MISCELLANEOUS STEEL SHOP DRAWINGS SHALL BEAR THE SEAL OF A REGISTERED PROFESSIONAL ENGINEER WHO IS PROVIDING SERVICES AS A SPECIALTY ENGINEER.

METAL DECKING

REJECTED.

1. THE DESIGN, FABRICATION, AND ERECTION OF ALL STEEL DECKING SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE.

2. MATERIALS:

A. DECK FOR CONCRETE FORM: 18 GAUGE x1 1/2", GALVANIZED COATING CONFORMING TO ASTM A653 G60.

CONNECT 1½" AND 3" ROOF DECK TO SUPPORTS WITH 5/8" ROUND PUDDLE WELDS OR HILTI FASTENERS (USE X-HSN FASTENERS FOR 3/8" THICK OR THINNER STEEL AND X-ENP-19 POWDER-ACTUATED FASTENERS WHERE BASE STEEL THICKNESS IS GREATER THAN OR EQUAL TO 1/4"). FASTEN 11/4" DECK AT 10" ON CENTER AT SUPPORTS FOR 30" WIDE DECK AND 12" ON CENTER AT SUPPORTS FOR 36" WIDE DECK AND AT 6" ON CENTER AT ENDS OF SHEETS AND PERIMETER. FOR 3" DECK, USE 8" ON CENTER PATTERN. SCREW SIDE LAPS AT 3'-0" MAXIMUM SPACING WITH #10 TEK SCREWS OR

CONNECT METAL DECK TO STRUCTURAL MEMBERS, INCLUDING PERIMETER

LAP ENDS OF ROOF DECK AND CONCRETE FORM DECK 2" MINIMUM.

WELDING OF METAL DECK SHALL BE IN ACCORDANCE WITH AWS D1.3. WOOD

MATERIALS:

A. FRAMING LUMBER:

 a. 2x8 AND LARGER: NO.1 GRADE OR BETTER SOUTHERN PINE KILN b. 2x4: STUD GRADE OR BETTER SPRUCE PINE FIR KILN DRIED c. 2x6: NO.2 GRADE OR BETTER SPRUCE PINE FIR KILN DRIED. d. ACQ-C (ALT CA-B OR SBX-DOT) PRESSURE TREAT PIECES IN

CONTACT WITH FOUNDATION OR EXPOSED TO WEATHER. SHEATHING AND SUBFLOORING:

A. 48/24 APA RATED TONGUE AND GROOVE SUBFLOOR EXPOSURE 1. B. 32/16 APA RATED ROOF SHEATHING EXPOSURE 1. C. 24/16 APA RATED STRUCTURAL WALL SHEATHING EXPOSURE 1 D. ALL SHEATHING TO BE NAILED WITH 8d NAILS AT 6" ON CENTER AT PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS

E. ROOF AND WALL SHEATHING SHALL BE SPACED A MINIMUM 1/8" AT PANEL EDGES AND ENDS OF SHEETS. USE APPROPRIATE PLYWOOD CLIPS AS RECOMMENDED BY THE APA.

F. ALL PLYWOOD SUBFLOORING SHALL BE GLUED AND NAILED. NAIL SIZES AS CALLED OUT IN THE STRUCTURAL DRAWINGS AND FOR SIMPSON CONNECTORS ARE LISTED BELOW. NAIL GUN NAILS SHALL MEET DIAMETER AND LENGTH OF NAILS LISTED BELOW, OR ELSE NAILS SHALL BE

A. 6d NAILS ARE 0.120"Ø x 1¾" LONG (MIN 3/8" HEAD) B. 8d NAILS ARE 0.131"Ø x 2½" LONG 10d NAILS ARE 0.148"Ø x 3" LONG

D. 16d NAILS ARE 0.162"Ø x 3½" LONG SIMPSON HANGERS:

UNLESS NOTED OTHERWISE

DRIVEN WITH A HAMMER.

AS FOLLOWS:

B. WHEN FASTENING TO A SINGLE PLY 11/2" OR 13/4" MEMBER, 11/2" FLANGE NAILS ARE ACCEPTABLE. USE FULL LENGTH NAILS FOR DIAGONAL NAILS OF DOUBLE SHEAR HANGERS. ADHESIVE FOR PLYWOOD SUBFLOORING SHALL CONFORM TO

A. ALWAYS USE THE NAIL OR FASTENER AS SPECIFIED BY SIMPSON.

PERFORMANCE SPECIFICATION AFG-01 DEVELOPED BY APA.

INCLUDING THE CORRECT DIAMETER AND LENGTH.

LVL (LAMINATED VENEER LUMBER) BEAMS: DISTRIBUTED AS TRUSS JOIST MACMILLAN, MICRO-LAM OR GEORGIA-PACIFIC CORPORATION, G-P LAM INSTALL PER MANUFACTURER'S RECOMMENDATIONS. A. LVL BEAMS SHALL HAVE MINIMUM DESIGN STRESS VALUES AS

FOLLOWS: a. F_b = 2600 PSI BENDING b. F_v = 285 PSI HORIZONTAL SHEAR c. F_{G⊥} = 750 PSI COMPRESSION PERPENDICULAR TO GRAIN

d. E = 2,000,000 PSI MODULUS OF ELASTICITY

a. 12" AND SMALLER MEMBERS: TWO-PIECE MEMBERS: 2 ROWS OF 16d COMMON NAILS AT 12" ON

B. MULTIPLE LVL BEAMS AND HEADERS SHALL BE FASTENED TOGETHER

 THREE-PIECE MEMBERS: 2 ROWS OF 1/2" DIAMETER BOLTS AT 24" ON CENTER STAGGERED.

b. 14" AND LARGER MEMBERS:

 TWO-PIECE MEMBERS – 3 ROWS OF 16d COMMON NAILS AT 12* ON CENTER. THREE-PIECE MEMBERS – 2 ROWS OF 1/2" DIAMETER BOLTS AT 16" ON CENTER STAGGERED.

 INSTALL TYPICAL FLOOR CROSS BRIDGING AT 8'-0" MAXIMUM INTERVALS IN EVERY JOIST SPACE TO AID IN LOAD SHARE DISTRIBUTION AND CONTROL POTENTIAL VIBRATION PROBLEMS.

8. UNLESS NOTED OTHERWISE, CONNECTORS SHALL BE MADE PER TABLE 2304.10.1, "RECOMMENDED FASTENING SCHEDULE", IN REFERENCED BUILDING CODE. STAPLES NOT PERMITTED FOR FASTENING APA RATED

ALL PLYWOOD SUBFLOORING SHALL BE GLUED AND NAILED.

SHEATHING AND SUBFLOORING.

THAT RUN PARALLEL WITH THE JOISTS.

 ALL CONNECTION HARDWARE SPECIFIED ON THE STRUCTURAL DRAWINGS SHALL BE MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY AND SHALL BE FASTENED AS SPECIFIED IN THE SIMPSON PRODUCT AND INSTRUCTION MANUAL

11. BRIDGING IN ALL FLOOR AND CEILING JOISTS, SHALL BE 1"x3" CROSS BRIDGING (DOUBLE NAILED) AT 8'-0" ON CENTER MAXIMUM.

PROVIDE SOLID BLOCKING IN FLOOR CONSTRUCTION UNDER POSTS, MULTIPLE STUDS OR BEAM BEARINGS. 13. DOUBLE JOISTS SHALL BE PROVIDED BELOW ALL INTERIOR PARTITIONS

14. NOTCHES IN JOISTS SHALL NOT EXCEED ONE-SIXTH THE JOIST DEPTH IN HEIGHT AND LENGTH AND SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE JOIST SPAN. HOLES BORED IN JOISTS SHALL BE NO MORE THAN ONE-FOURTH THE JOIST DEPTH AND SHALL NOT BE LOCATED WITHIN 2 FEET OF EITHER JOIST END. HOLES AND NOTCHES SHALL BE SPACED A MINIMUM OF 18" APART.

15. EXTERIOR OR LOAD BEARING STUDS MAY BE CUT OR NOTCHED TO A DEPTH NOT TO EXCEED ONE-FOURTH OF THE WIDTH. EXTERIOR OR LOAD BEARING STUDS MAY BE BORED OR DRILLED TO A DIAMETER NOT TO EXCEED ONE-FOURTH ITS WIDTH AND THE EDGE OF ANY HOLE SHALL BE 1/2" CLEAR FROM THE STUD EDGE.

DRAWING INDEX

S001 GENERAL STRUCTURAL NOTES AND SPECIAL INSPECTIONS

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S320 FRAMING SECTIONS

S200 ELEVATIONS

S201 ELEVATIONS

S202 ELEVATIONS

513 396 8900 www.advantageSE.com

SCHEDULE OF SPECIAL INSPECTION SERVICES

Inspection of Structural Steel Construction per Section 1705.2 Hot Rolled Steel Framing Agent: CONSULTING SERVICES INC

 Special inspections of the fabrication process of all hot rolled steel structural components shall be in accordance with Section 1704.2.5. a. Material verification of high-strength bolts, nuts and washers, Structural Steel and Weld filler material per ASTM A 6, ASTM A568: (Ref. Code Section 1705.2.1) b. Identification markings to conform to ASTM standards specified in the contract documents per AISC ASD Section A3.4 or AISC LRFD: Section A3.3.

c. Manufacturer's certificate of compliance and or Mill reports. Periodic inspection of field welding per AWS D1.1: (Ref. Code Section 1705.2.2.1) Applicable for Structural Steel connections having a single pass fillet welds 5/16" and

a. Verify prior to the start of work all materials, welding procedures and qualification of all welders.

Check length, size and type of weld performed c. Visual inspection of all floor and roof deck welds. Verify design intent and spacing of welds and welded members. Check for side lap fasteners and welded

connections along edge of sheets and perimeter and drag strut collectors. Periodic visual inspection of steel frame joint details for compliance with approved construction documents for: (Ref. Code Section 1705.2.1)

a. Verify the installation of all structural members and locations as noted on the b. Verify the use of the proper connection methods as noted on the structural

Expansion / Adhesive Anchors

 Periodic Inspection of post installed anchor rods: Verify the embedment depths and drilling procedure used to create hole. Verify that hole has been cleaned and dust removed properly. Document outside temperature and installation method use to install the epoxy

Inspection of Concrete Construction per Section 1705.3

Periodic Inspection of reinforcing steel size, spacing and placement, per ACI 318: Chapters 3.5, 7.1-7.7. (Ref. Code Section 1901)

per ACI 318: Chapters 4, 5.2-5.4. (Ref. Code Section 1904.2, 1910.2,1910.3). Continuous sampling of fresh concrete and performing slump, air content and determining the temperature of fresh concrete at the time of making specimens for strength tests per ASTM C 172, ASTM C 31 & ACI 318: Chapters 5.6 & 5.8. (Ref. Code Section 1910.10).

Periodic Verification of the use of the required design mix per project specifications

shall be taken at least once per shift, but not less than one sample for each 50 cubic Continuous Inspection of concrete placement for proper application techniques per ACI 318: Chapters 5.9 & 5.10. (Ref. Code Section 1910.6, 1910.7, 1910.8).

techniques per ACI 318: Chapters 5.11 - 5.13. (ref. Code Section 1910.9). Curing of concrete shall be maintained above 40-degree F and in a moist environment for seven days after placement or cured by (1910.9) accelerated means

Verify intent, configuration, and location of specified structural member being formed.

Verify size and dimensions of structural members being formed.

 Special inspections of the fabrication process of wood structural elements shall be in accordance with Section 1704.2.5. Periodic Inspection of wood framed joint details for compliance with approved

a. Member locations and supports. b. Verification of member grade and specie.

AEF = Alternate Each Face

Inspection of Soil Conditions per Section 1705.6 Agent: CONSULTING SERVICES INC Evaluation of site preparation in accordance with the approved soils report or as

report or as specified on the contract documents. Verification that the material being used, and the maximum lift thickness comply with the approved soils report or as specified on the contract documents. Evaluation of in-place-density, the special inspector shall determine that the in-place-

TYPICAL ABBREVIATION LIST

ARCH	=	Architect	LL	=	Live Load
BLDG	=	Building	LLH	=	Long Leg Horizontal
BM	=	Beam	LLV	=	Long Leg Vertical
B/FTG	=	Bottom of Footing	LSL	=	Laminated Strand Lumber
B/DECK	=	Bottom of Deck	LVL	=	Laminated Veneer Lumber
BRG	=	Bearing	MAX	=	Maximum
CIP	=	Cast In Place	MECH	=	Mechanical
CJ	=	Control Joint	MIN	=	Minimum
CL	=	Center Line	ML	=	Micro Laminated
CLR	=	Clear	NS	=	Non Shrink
CMU	=	Concrete Masonry Unit	NTS	=	Not to Scale
CONC	=	Concrete	O.C.	=	On Center
CONT	=	Continuous	PAF	=	Powder Actuated Fastener
DL	=	Dead Load	PC	=	Piece
DWG	=	Drawings	PEMB	=	Pre-Engineered Metal Building
EJ	=	Expansion Joint	PL	=	Plate
EL	=	Elevation	psf	=	Pounds Per Square Foot
EMBD	=	Embedment	RD	=	Roof Drain
ENGR	=	Engineer	REINF	=	Reinforcement
EQ	=	Equal Distance	RTU	=	Roof Top Unit
EW	=	Each Way	SDS	=	Self Drilling Screw
EF	=	Each Face	SF	=	Step Footing
EX	=	Existing	SW	=	Step Wall
EXT	=	Exterior	SB	=	Solid Bearing
FTG	=	Footing	SCH	=	Schedule
FND	=	Foundation	SIM	=	Similar
ga	=	Gauge	STL	=	Steel
~					

NOT ALL ABBREVIATIONS APPLY. INCLUDED FOR REFERENCE ONLY

STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

HSS

Hollow Structural Section

= Kips



b. Visual inspection of field welded joint details per the construction documents.

c. Verify the installation of all column anchorage and proper bolt spacing as per the submitted placement drawings. Confirm proper bolt projection for installation of

Agent: CONSULTING SERVICES INC

Verify method of bar support and ties.

Agent: CONSULTING SERVICES INC

Scope to include: Reviewing and documenting the size, grade, spacing and clearance of all embedded reinforcing bars prior to placement of concrete. Verify bars are free of dirt and excessive rust, oil, or damage of any kind.

Verify specified lap splices in field with information on the drawings.

Minimum frequency (1910.10) Samples for strength tests of each class of concrete

 Verify the application of Cold Weather concrete and or Hot Weather concrete techniques per ACI 318: Chapters 5.12-5.13. Periodic Inspection for maintenance of specified curing and temperature and

that comply with ACI 318, section 5.11.3. Periodic Inspection of Formwork construction: (This inspection is not to address the means or methods of forming / shoring but to verify the geometry affecting the

structural integrity of such form).

Inspection of Wood Construction per Section 1705.5 Agent: CONSULTING SERVICES INC

construction documents for:

c. Application of joint details at each connection. d. Grades, thickness, and fastening of APA rated wood sheathing.

specified on the contract documents.

Confirm existing soils load-bearing capacity with requirements of the approved soils

density of the existing soils and compacted fill complies with the approved soils report or as specified on the contract documents.

D/1 1 C		Bottom or rooting	LOL		Laminated Ottana Lambon
B/DECK	=	Bottom of Deck	LVL	=	Laminated Veneer Lumber
BRG	=	Bearing	MAX	=	Maximum
CIP	=	Cast In Place	MECH	=	Mechanical
CJ	=	Control Joint	MIN	=	Minimum
CL	=	Center Line	ML	=	Micro Laminated
CLR	=	Clear	NS	=	Non Shrink
CMU	=	Concrete Masonry Unit	NTS	=	Not to Scale
CONC	=	Concrete	O.C.	=	On Center
CONT	=	Continuous	PAF	=	Powder Actuated Fastener
DL	=	Dead Load	PC	=	Piece
DWG	=	Drawings	PEMB	=	Pre-Engineered Metal Building
EJ	=	Expansion Joint	PL	=	Plate
EL	=	Elevation	psf	=	Pounds Per Square Foot
EMBD	=	Embedment	RD	=	Roof Drain
ENGR	=	Engineer	REINF	=	Reinforcement
EQ	=	Equal Distance	RTU	=	Roof Top Unit
EW	=	Each Way	SDS	=	Self Drilling Screw
EF	=	Each Face	SF	=	Step Footing
EX	=	Existing	SW	=	Step Wall
EXT	=	Exterior	SB	=	Solid Bearing
FTG	=	Footing	SCH	=	Schedule
FND	=	Foundation	SIM	=	Similar
ga	=	Gauge	STL	=	Steel
GALV	=	Galvanized	SRD	=	Secondary Roof Drain
GC	=	General Contractor	T/FTG	=	Top Of Footing
GRAN	=	Granular	TS	=	Tube Steel
HORZ	=	Horizontal	TYP	=	Typical
HD	=	Hold Down Anchor	UNO	=	Unless Noted Otherwise

WF = Kips Per Square Foot Wide Flange WP = Work Point = Pounds

= Vertical

Welded Wire Fabic

VERT

Drawing No.

0 **M**

Design Team: NFB / SI

S

Date: 05/26/2023

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Design Team: NFB / SJ Date: 05/26/2023

STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING

MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING

Drawing No.

5. VERIFY INFILL DESIGN PARAMETERS WITH DOT REQUIREMENTS COORD w/E.O.R. FOR DISCREPANCIES WITH STATED REQUIREMENTS.

15. REPLACE COMPROMISED JOISTS WITH 1 3/4"x11 1/4" LVL @16"o.c.

FAILURE OF THE INFILL WALL.

16. EX (5) PLY 2"x12" (10"x12") WD BEAM. REPLACE (2) ROTTED PLYS WITH (2) 1 3/4"x11 7/8" LVL's. FASTEN WITH (2) ROWS OF 1/2" DIA THRU BOLTS AT 16"o.c.

GROUT ENTIRE WALL SOLID. SEE INFILL DESIGN NOTES FOR INFILL PROCEDURE. INFILL MUST BE PLACED IN LIFTS AND ALLOWED TO CURE BETWEEN LIFTS TO PREVENT

SIMPSON FACE MOUNT HANGERS EA END.

FAILURE OF THE INFILL WALL.

DRAWINGS. SUBMIT STEEL SHOP DRAWINGS FOR ENGR REVIEW.

15. REPLACE COMPROMISED JOISTS WITH 1 3/4"x11 1/4" LVL @16"o.c.

13. ALL NEW STEEL AT EXTERIOR STAIR TO BE PAINTED PER OWNER. COORD w/ARCH.

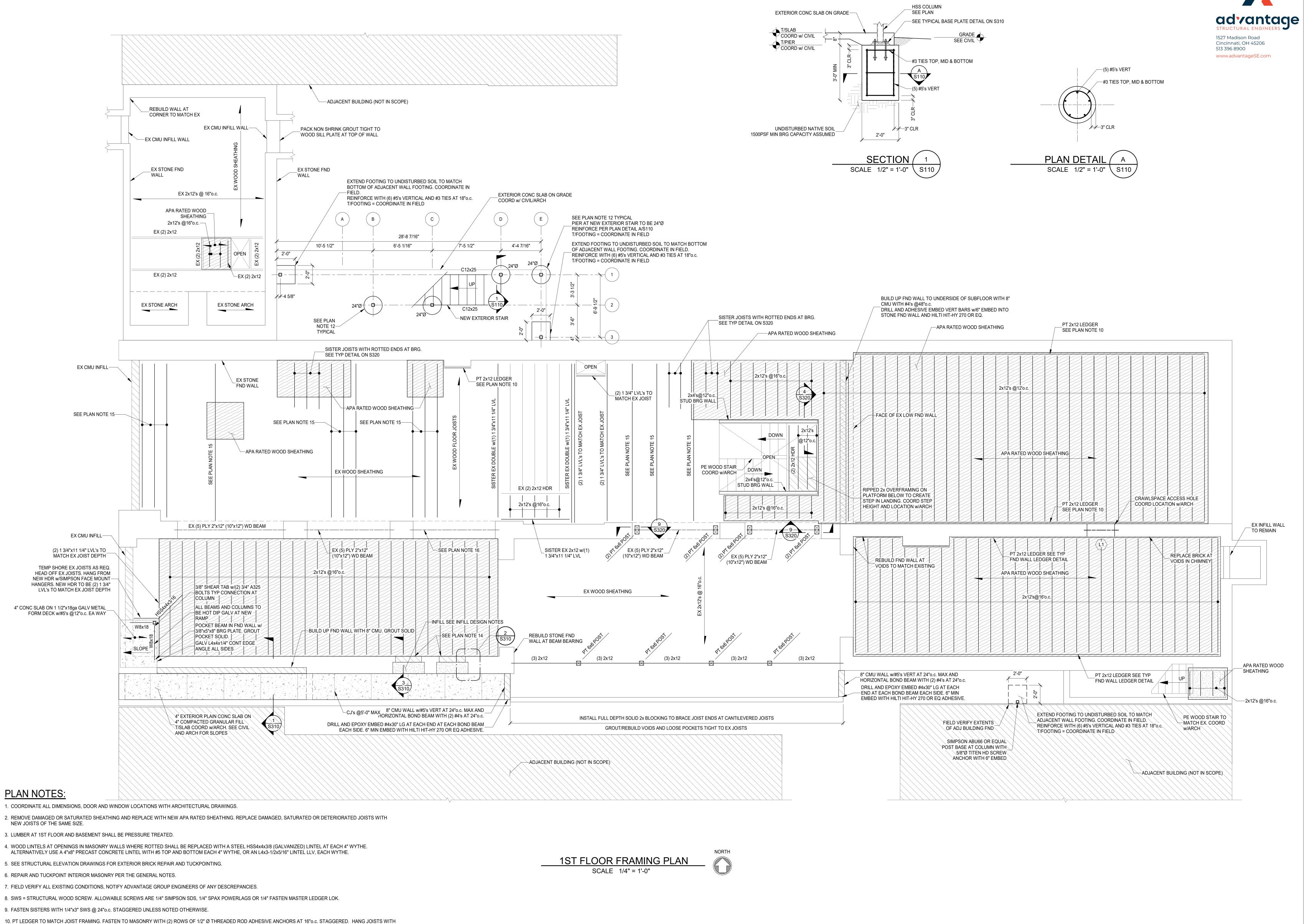
12. CONCRETE PIER AT NEW EXTERIOR STAIR TO BE 24"Ø REINFORCE PER PLAN DETAIL A/S110. T/FTG=COORD IN FIELD.

11. ALL NEW STRINGERS AT EXTERIOR STAIR TO BE MC12 PER PLANS. COORD LANDING ELEVATIONS, RISE, RUN AND GUARDRAIL/HANDRAIL REQUIREMENTS WITH ARCH

14. SEE PLAN DETAIL 2/S310 FOR TYPICAL WALL DETAILS AT 8" CMU INFILL WALL. REINFORCE WALL WITH #5 VERT @32"o.c. AND HORIZ BOND BEAMS WITH (2) #5's AT 24"o.c.

16. EX (5) PLY 2"x12" (10"x12") WD BEAM. REPLACE (2) ROTTED PLYS WITH (2) 1 3/4"x11 7/8" LVL's. FASTEN WITH (2) ROWS OF 1/2" DIA THRU BOLTS AT 16"o.c.

GROUT ENTIRE WALL SOLID. SEE INFILL DESIGN NOTES FOR INFILL PROCEDURE. INFILL MUST BE PLACED IN LIFTS AND ALLOWED TO CURE BETWEEN LIFTS TO PREVENT



INFILL DESIGN NOTES: 1. INFILL TO BE LEAN CONCRETE PLACED IN 24" MAX LIFTS.

2. INFILL TO BE PLACED AFTER EACH LIFT HAS BEEN GIVEN TIME TO CURE AND SET UP PRIOR TO PLACING NEXT LIFT. 3. INFILL AREA TO BE RELATIVELY DRY AND FREE OF DELETERIOUS MATERIAL PRIOR TO INFILL PLACEMENT.

4. INFILL IS TO BE PLACED UP TO THE UNDERSIDE OF THE CONCRETE SLAB. 5. VERIFY INFILL DESIGN PARAMETERS WITH DOT REQUIREMENTS COORD w/E.O.R. FOR DISCREPANCIES WITH STATED REQUIREMENTS.

STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

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Design Team: NFB / SI

Date: 05/26/2023

EXISTING STEEL LINTEL

OUTLINE OF EXTERIOR

PROPOSED STOREFRONT

EXISTING CAST IRON BOX

CONDITION UPON DEMO

PROPOSED STOREFRONT

EXISTING CAST IRON BOX

CONDITION UPON DEMO

NEW JOISTS OF THE SAME SIZE.

FAILURE OF THE INFILL WALL.

15. REPLACE COMPROMISED JOISTS WITH 1 3/4"x11 1/4" LVL @16"o.c.

16. EX (5) PLY 2"x12" (10"x12") WD BEAM. REPLACE (2) ROTTED PLYS WITH (2) 1 3/4"x11 7/8" LVL's. FASTEN WITH (2) ROWS OF 1/2" DIA THRU BOLTS AT 16"o.c.

COORD w/ ARCH

BEAM ASSUMED

ENGINEER TO FIELD-

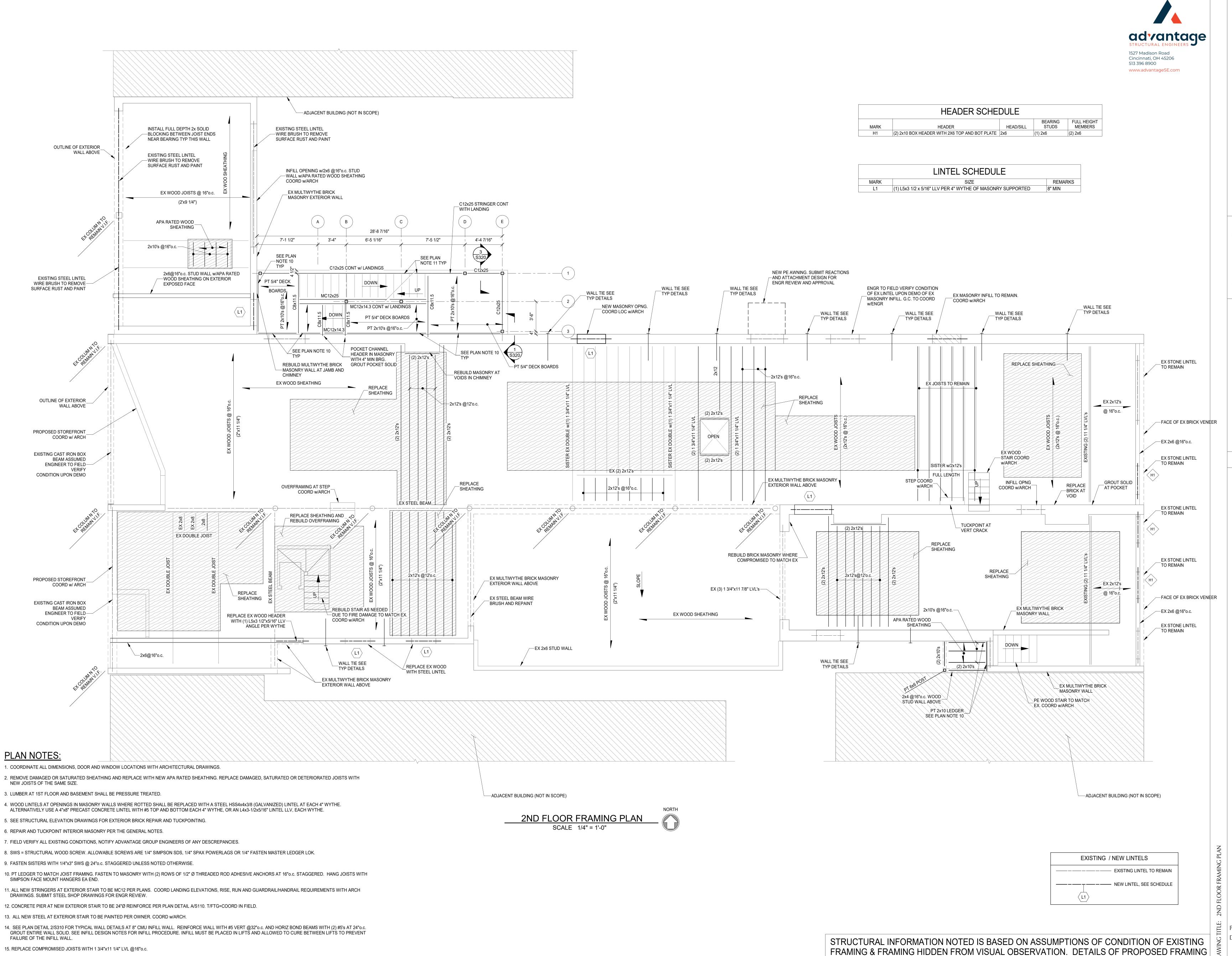
WALL ABOVE

COORD w/ ARCH

BEAM ASSUMED

ENGINEER TO FIELD-

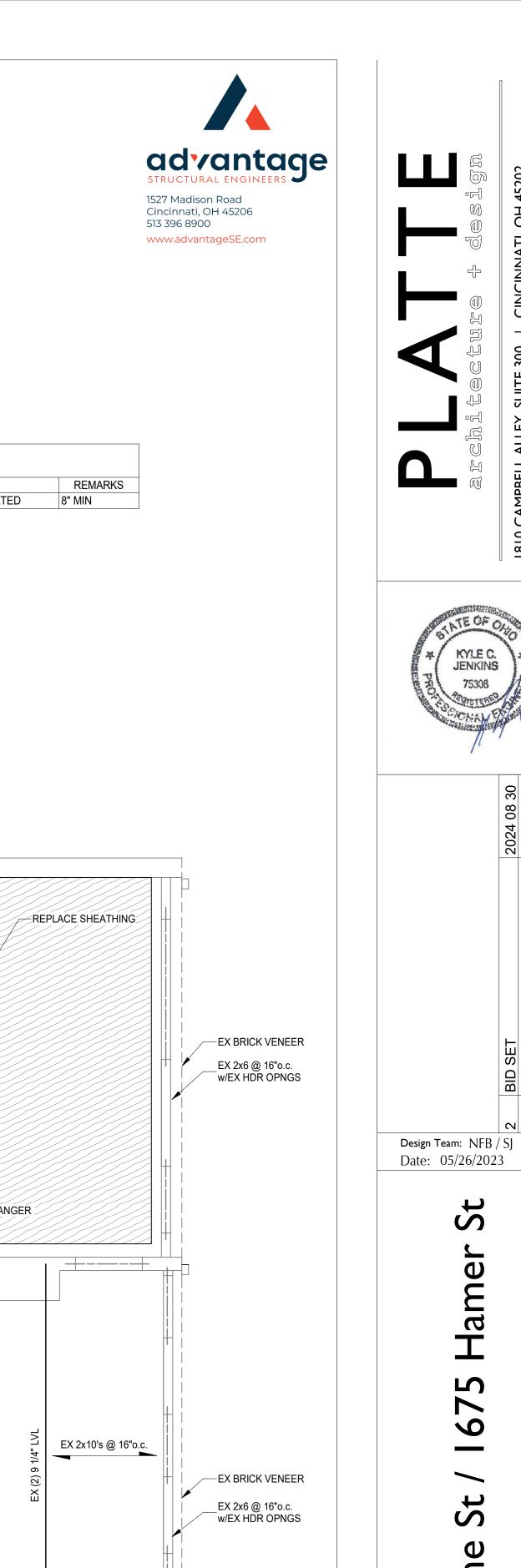
WIRE BRUSH TO REMOVE— SURFACE RUST AND PAINT

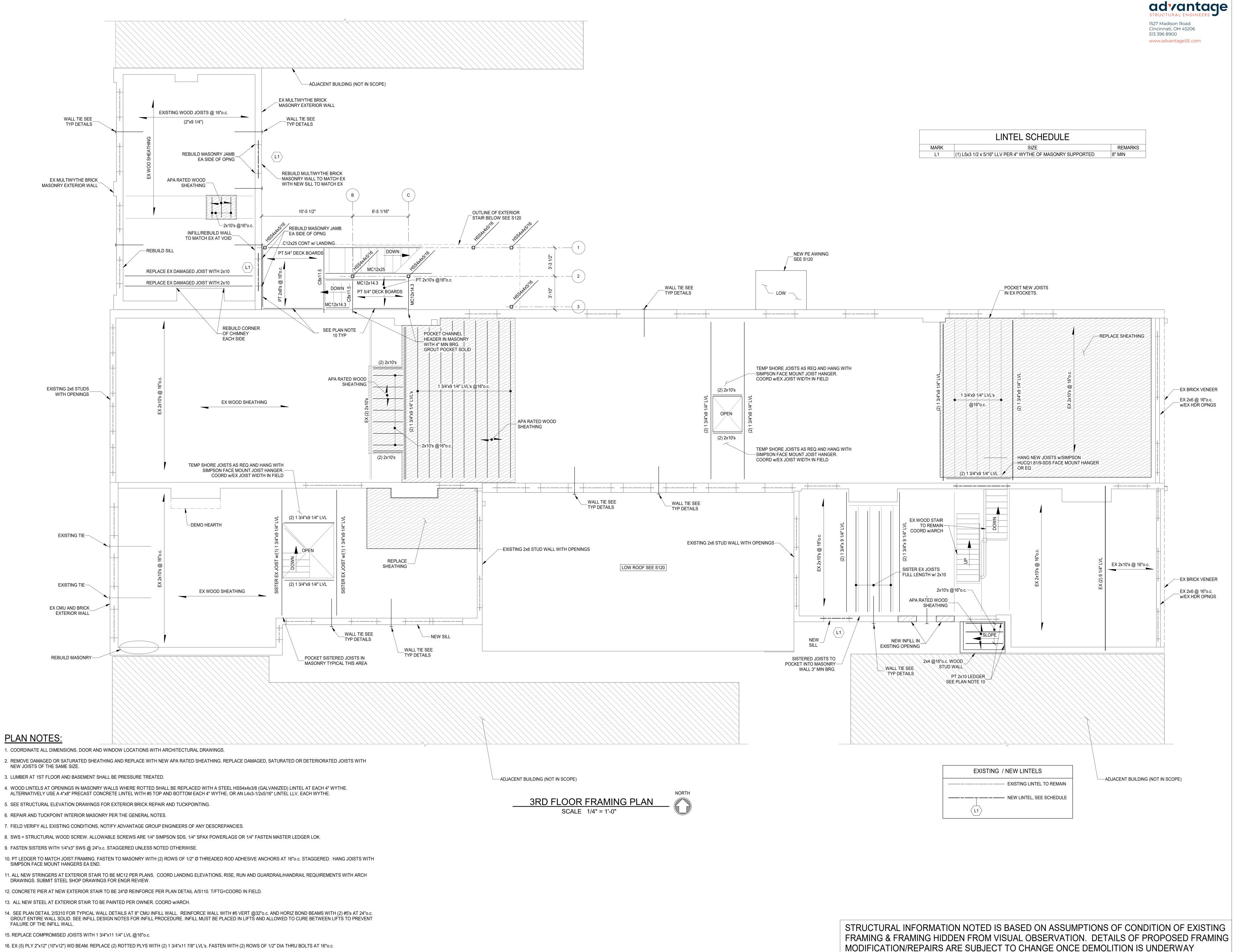


Design Team: NFB / SJ Date: 05/26/2023

MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

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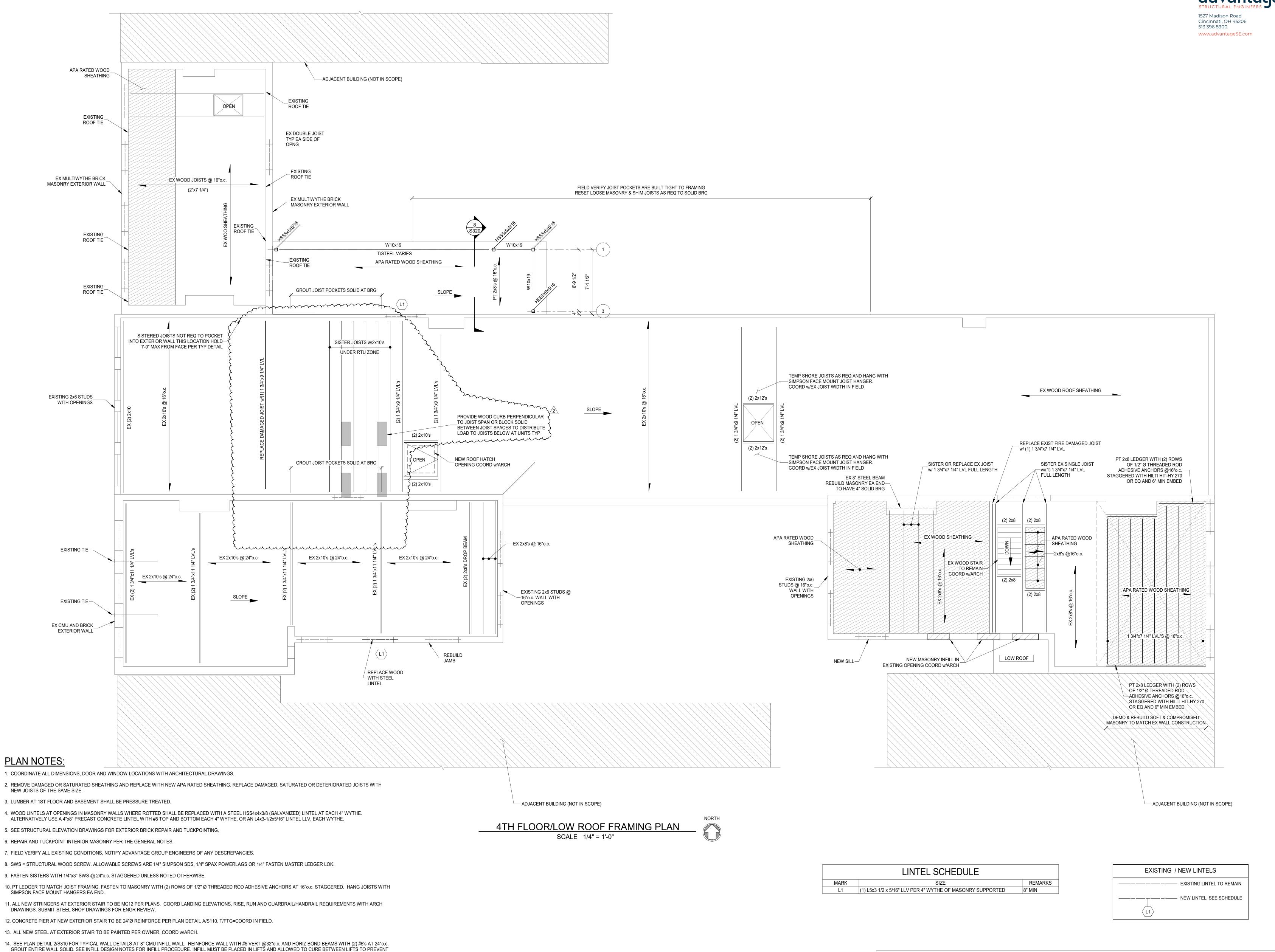


FAILURE OF THE INFILL WALL.

15. REPLACE COMPROMISED JOISTS WITH 1 3/4"x11 1/4" LVL @16"o.c.

16. EX (5) PLY 2"x12" (10"x12") WD BEAM. REPLACE (2) ROTTED PLYS WITH (2) 1 3/4"x11 7/8" LVL's. FASTEN WITH (2) ROWS OF 1/2" DIA THRU BOLTS AT 16"o.c.





Drawing No.

Design Team: NFB / SJ

Date: 05/26/2023

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NEW JOISTS OF THE SAME SIZE.

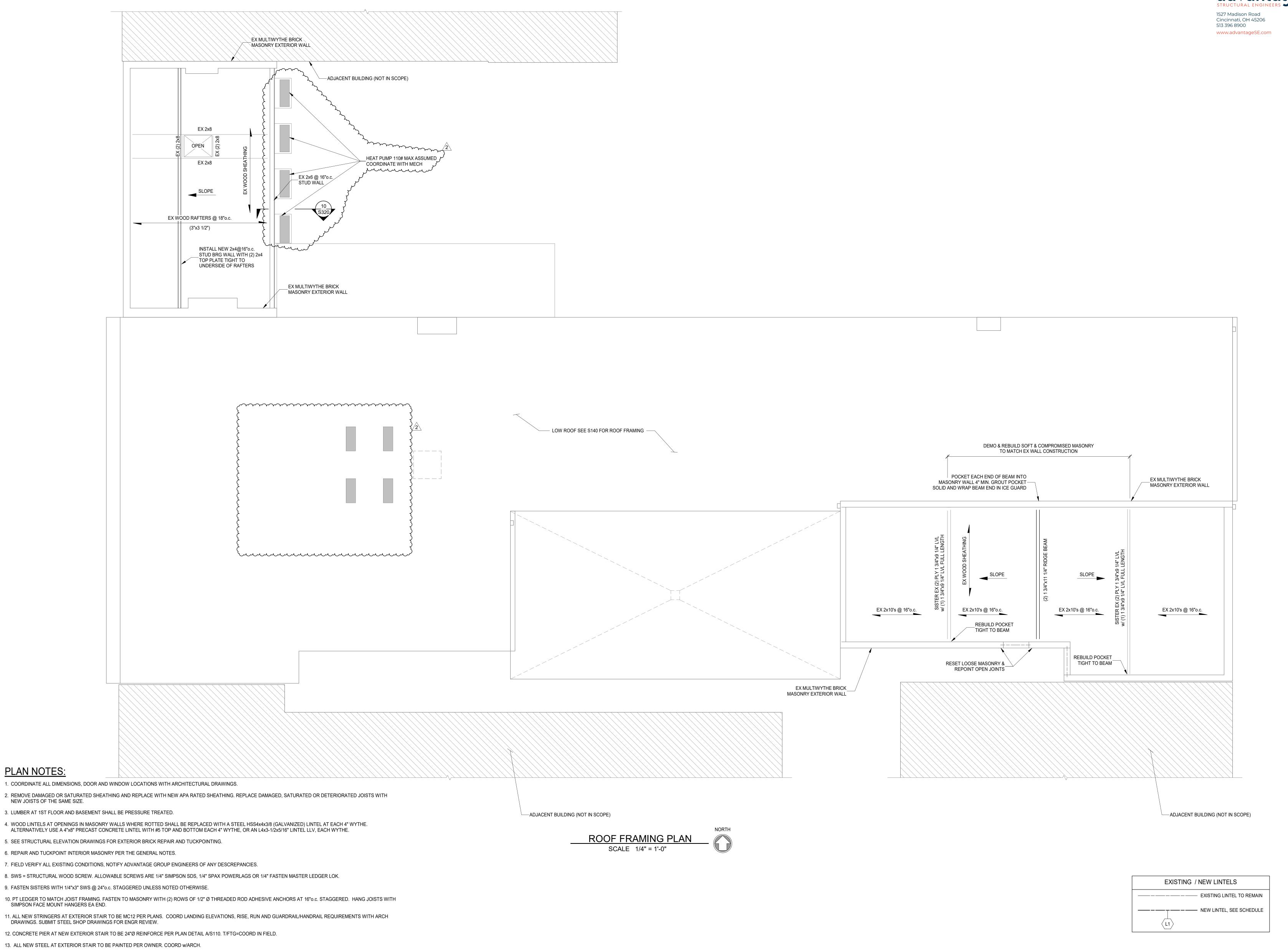
FAILURE OF THE INFILL WALL.

15. REPLACE COMPROMISED JOISTS WITH 1 3/4"x11 1/4" LVL @16"o.c.

14. SEE PLAN DETAIL 2/S310 FOR TYPICAL WALL DETAILS AT 8" CMU INFILL WALL. REINFORCE WALL WITH #5 VERT @32"o.c. AND HORIZ BOND BEAMS WITH (2) #5's AT 24"o.c. GROUT ENTIRE WALL SOLID. SEE INFILL DESIGN NOTES FOR INFILL PROCEDURE. INFILL MUST BE PLACED IN LIFTS AND ALLOWED TO CURE BETWEEN LIFTS TO PREVENT

16. EX (5) PLY 2"x12" (10"x12") WD BEAM. REPLACE (2) ROTTED PLYS WITH (2) 1 3/4"x11 7/8" LVL's. FASTEN WITH (2) ROWS OF 1/2" DIA THRU BOLTS AT 16"o.c.





Drawing No.

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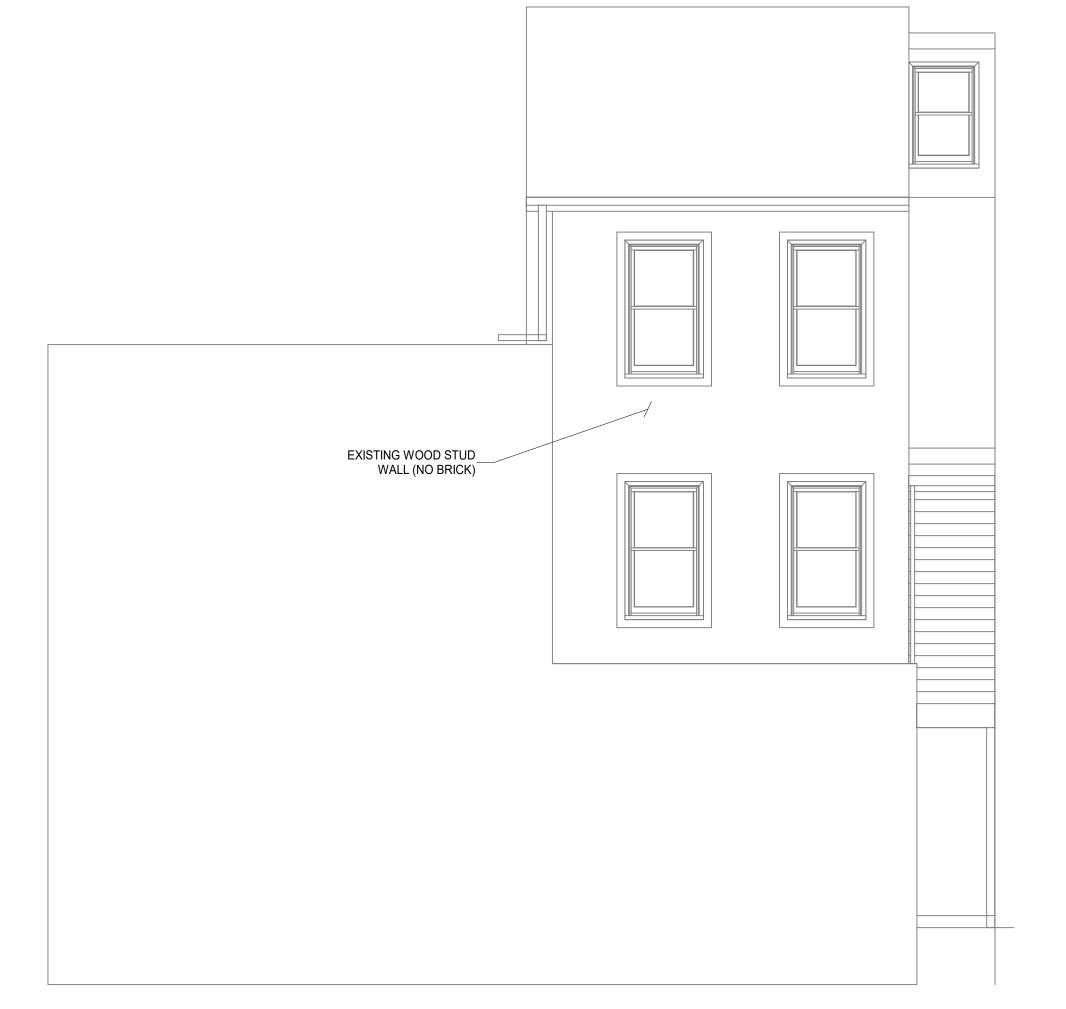
Design Team: NFB / SJ

Date: 05/26/2023

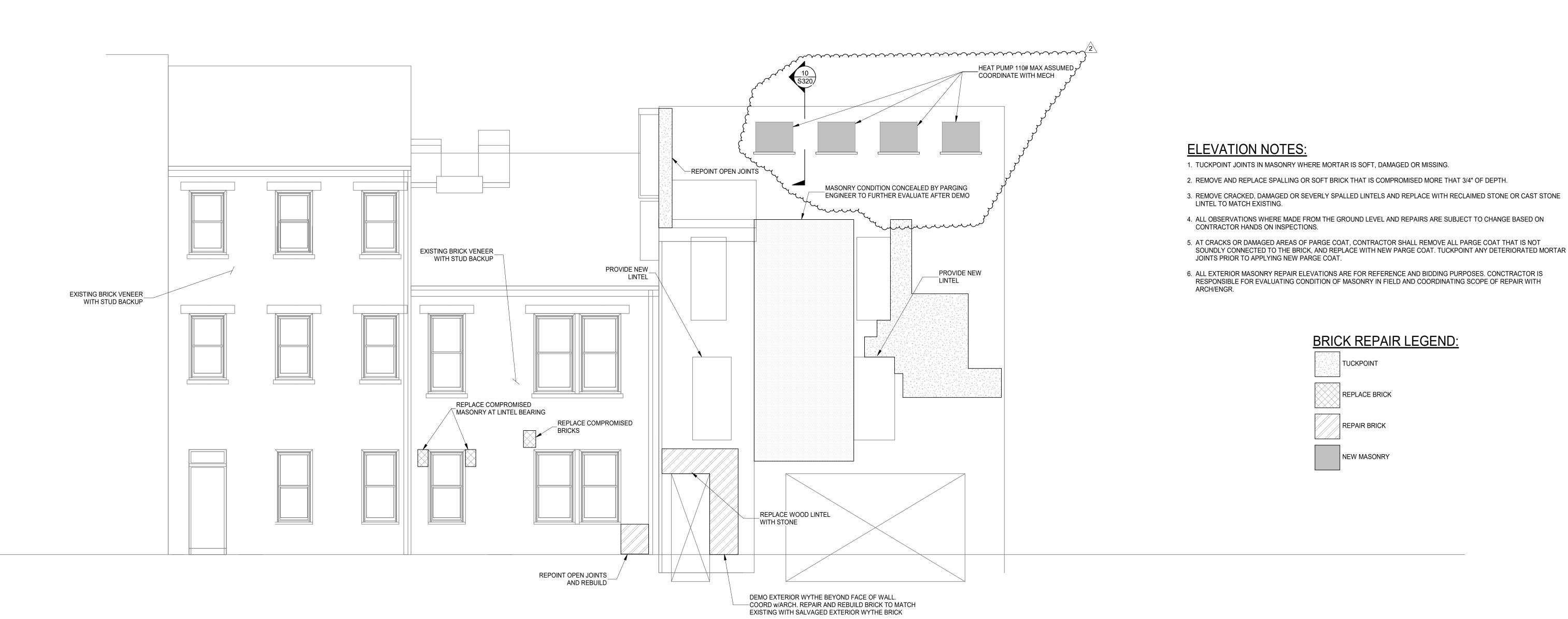
__EXISTING WOOD STUD WALL (NO BRICK)

SCALE 1/4" = 1'-0"





SCALE 1/4" = 1'-0"



EAST ELELVATION SCALE 1/4" = 1'-0"

> STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY



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SOUTH ELELVATION SCALE 1/4" = 1'-0"

ELEVATION NOTES:

ARCH/ENGR.

1. TUCKPOINT JOINTS IN MASONRY WHERE MORTAR IS SOFT, DAMAGED OR MISSING.

2. REMOVE AND REPLACE SPALLING OR SOFT BRICK THAT IS COMPROMISED MORE THAT 3/4" OF DEPTH.

3. REMOVE CRACKED, DAMAGED OR SEVERLY SPALLED LINTELS AND REPLACE WITH RECLAIMED STONE OR CAST STONE LINTEL TO MATCH EXISTING.

4. ALL OBSERVATIONS WHERE MADE FROM THE GROUND LEVEL AND REPAIRS ARE SUBJECT TO CHANGE BASED ON CONTRACTOR HANDS ON INSPECTIONS.

5. AT CRACKS OR DAMAGED AREAS OF PARGE COAT, CONTRACTOR SHALL REMOVE ALL PARGE COAT THAT IS NOT SOUNDLY CONNECTED TO THE BRICK, AND REPLACE WITH NEW PARGE COAT. TUCKPOINT ANY DETERIORATED MORTAR JOINTS PRIOR TO APPLYING NEW PARGE COAT.

6. ALL EXTERIOR MASONRY REPAIR ELEVATIONS ARE FOR REFERENCE AND BIDDING PURPOSES. CONCTRACTOR IS RESPONSIBLE FOR EVALUATING CONDITION OF MASONRY IN FIELD AND COORDINATING SCOPE OF REPAIR WITH



REPLACE BRICK REPAIR BRICK

NEW MASONRY

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Design Team: NFB / SJ Date: 05/26/2023

EXISTING MULTI-WYTHE

BRICK MASONRY-

EXTERIOR WALL

SHEATHING

COORD w/ARCH

EX STONE FND WALL

PT CONT 2x6 SILL PLATE FASTEN
W/(1) 1/2" DIA 5" LG TITEN HD
SCREW ANCHOR @32"o.c.

INFILL SEE INFILL_

BUILD UP FND WALL AT DEMOED
JOISTS w/(2) COURSES OF 8" CMU.
GROUT SOLID BELOW GRADE

PI CONT 2x6 SILL PLATE F/
W/(1) 1/2" DIA 5" LG TIT
SCREW ANCHOR @

EXTERIOR CONC SLAB
SEE PLAN

INFILL SEE INFILL
DESIGN NOTES

PT LEDGER WITH (2) ROWS OF 1/2" DIA THREADED ROD

-ADHESIVE ANCHORS AT 16"o.c. STAGGERED WITH HILTI

WOOD SHEATHING

SHORE AS REQ

EX WOOD JOISTS. TEMP

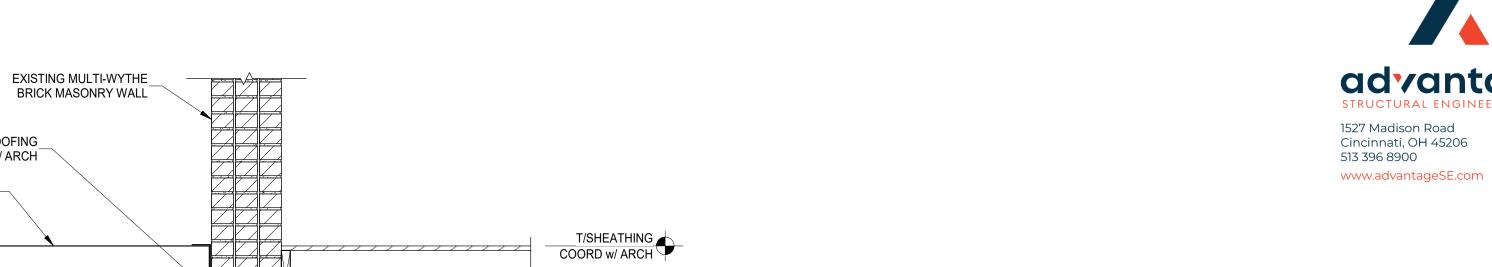
SEE PLAN

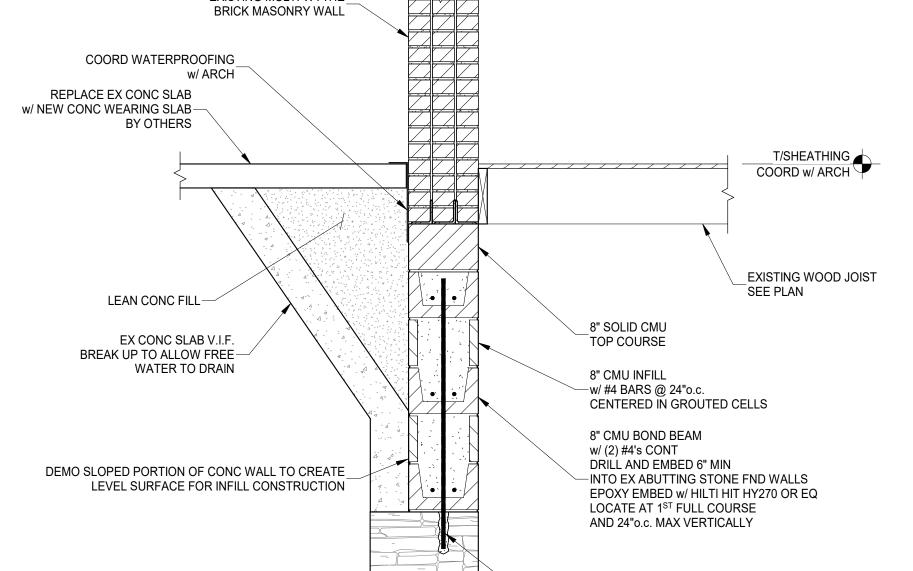
HIT-HY 270 OR EQ AND 6" EMBED

SIMPSON FACE MOUNT HANGER.

COORD IN FIELD WITH JOIST WIDTH

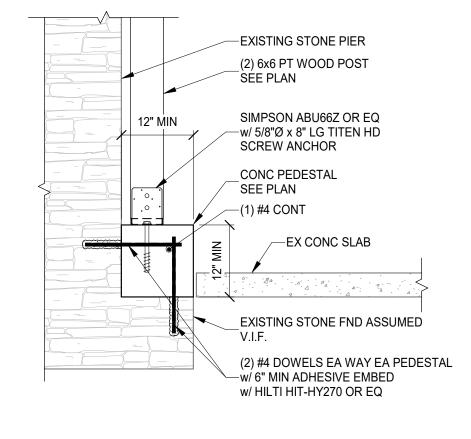
EX STONE FND WALL





SCALE 3/4" = 1'-0" \ S310

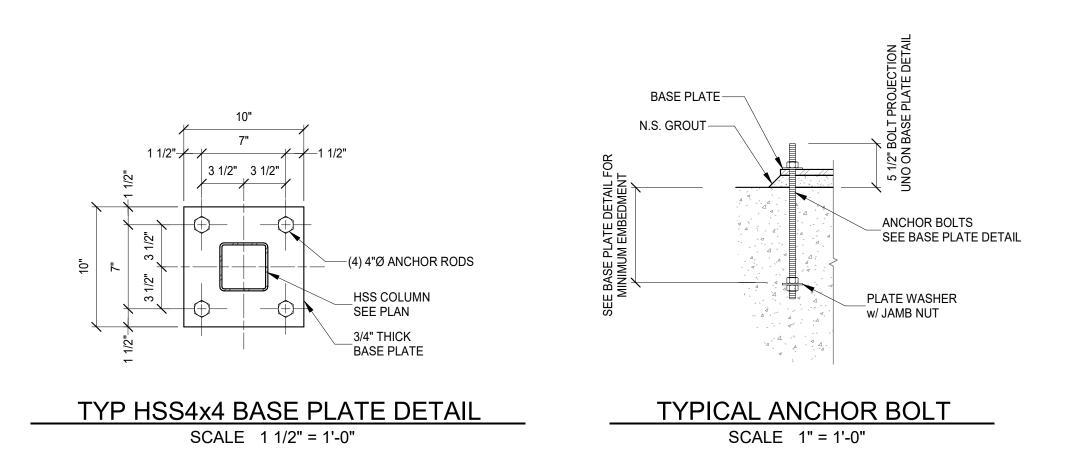
DRILL AND EPOXY 6" MIN w/ HILTI HIT HY270 OR EQ



#4x30" LONG DOWELS @ EACH BOND BEAM WITH 6" MIN EPOXY EMBED INTO EXISING STONE FND WALL ─6" MINIMUM EMBED 8" CMU WALL WITH #5 VERTICAL BARS AT 32"o.c. (2) #5's BOND BEAM REINFORCEMENT ___ LOCATE BOND BEAM AT 24"o.c. VERTICALLY #4 VERTICAL BAR CENTERED IN FULLY GROUTED CELLS_ LOCATE BAR AT LAST CELL AND 24"o.c. MAX BETWEEN EXISTING STONE/MASONRY WALL TYP CONC COLUMN AT SIM u INFILL SIDE OF WALL -

Design Team: NFB / SJ Date: 05/26/2023

Drawing No.



STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

SCALE 3/4" = 1'-0"

LENGTH

30 .07

Design Team: NFB / SJ Date: 05/26/2023

S

M

STRUCTURAL INFORMATION NOTED IS BASED ON ASSUMPTIONS OF CONDITION OF EXISTING

FRAMING & FRAMING HIDDEN FROM VISUAL OBSERVATION. DETAILS OF PROPOSED FRAMING

MODIFICATION/REPAIRS ARE SUBJECT TO CHANGE ONCE DEMOLITION IS UNDERWAY

Proj. No.: Drawing No.

★ KEYED SHEET NOTES

- ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN MECHANICAL CLOSET, SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
- RETURN DUCT UP TO FIRST FLOOR. . SUPPLY DUCT UP TO FIRST FLOOR.
- ALL BASEMENTS SHALL BE VENTILATED AS STORAGE/WAREHOUSE SPACE IN ACCORDANCE WITH TABLE 403.3 OF THE 2017 OHIO MECHANICAL CODE AT A RATE OF 0.06 CFM PER SQUARE FOOT. PROVIDE NEW FAN IN BASEMENT FOR CODE MINIMUM OSA LISTED ABOVE.
- FRESH AIR INTAKE THRU WALL TO WALL CAP. DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP. . 4" EXHAUST DUCT TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER
- WITHIN WALL CAVITY FOR FULL LENGTH. FIRE CAULK AROUND ALL PENETRATIONS. REFER TO DETAIL. 6" EXHAUST TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER OBC 714.4.1

717.6.1 EXCEPTION. DUCT MUST BE MINIMUM 26 GA. AND BE CONTAINED

- EXCEPTION 1. UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN/MAKE UP AIR.
- 1. DUCTED RETURN BETWEEN TRANSFER GRILLES TO AVOID EXPOSED WALL 2. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE
- COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS. 12.1. 3' FROM PROPERTY LINE. 12.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
- 12.3 10' FROM MECHANICAL AIR INTAKE. 13. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN BASEMENT. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE

ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR

- PUMP AS REQUIRED. 4. DUCTED RETURN SLEEVE TO AVOID EXPOSED WALL CAVITY. 15. ROUTE EXHAUST DUCT UP IN JOIST POCKET. RATING SHALL BE MAINTAINED
- AROUND JOIST TO PREVENT FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR DETAILS. 6. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL LINE-SET COVERS FOR
- ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE PIPING. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN WASHER/ DRYER CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED EQUAL TO LITTLE GIANT EC-1K-DV SERIES ALL CONDENSATE PUMPS, PIPING ETC. MUST BE
- CONCEALED FROM SIGHT. 18. RETURN DUCT DOWN TO FLOOR BELOW. 19. SUPPLY DUCT DOWN TO FLOOR BELOW.
- 20. MECHANICAL CONTRACTOR TO COORDINATE DUCT ROUTING WITH PLUMBING CONTRACTOR.

20x18

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

STEEL 2-WAY REGISTER, MS DAMPER,

CRAWLSPACE IHR

BASEMENT

1/3" FIN SPACING

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTES
DVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED DRYER VENT.	6x7	4Ø	FAMCO DWVP	BACKDRAFT DAMPER/ANGLED HOOD.
EVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	6x7	4Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
EVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	8x9	6Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
FR-2	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x6	12x4	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-6	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x8	12x6	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-8	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	16x10	14x8	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FRG-1	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	26x10	24x8	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
FRG-3	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	32x14	30x12	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
IVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	8x9	6Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
IVH-8	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	10x11	8Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
RG-1	EGGCRATE RETURN GRILLE	12x12	10x10	TITUS 50F	#26 WHITE FINISH.
RG-7	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x12	20x10	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-8	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x16	20x14	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-11	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x27	20x25	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
SDG1W-2	ALUMINUM SINGLE DEFLECTION SPIRAL DIFFUSER	14x5	12x3	HART AND COOLEY/ SV	ADJUSTABLE DAMPER, BRIGHT WHITE FINISH
SR1W-1	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-1C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-2C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR2W-2	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
SR2W-3	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
SR2W-3C	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
SR2W-4	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	14x8	12x6	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH

HART AND COOLEY/ 661

ADJUSTABLE DAMPER IN FACE, BRIGHT

WHITE FINISH

MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

MECHANICAL SCOPE OF WORK IS TO PROVIDE NEW HVAC EQUIPMENT TO RESIDENTIAL AND COMMERCIAL SPACES. MECHANICAL CONTRACTOR SHALL REFERENCE ALL DISCIPLINE DRAWING, ETC. TO REVEAL FULL SCOPE OF WORK. REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS.

HVAC DESIGN CONDITIONS

RESIDENTIAL

COOLINGHEATINGCOOLINGHEATINGOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DBOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DB INDOOR: 70 INDOOR: 75 INDOOR: 70

- A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL
- B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO
- F. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER
- G. IN DWELLING UNITS, ROUTE ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ABOVE DROP CEILING OR IN BULKHEADS. COORDINATE ROUTING WITH ARCHITECTURAL DRAWINGS. DUCTS SHALL BE RUN BELOW THE RATED
- PROVIDE MINIMUM SLOPE OF 1/8 " PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ADA UNITS 40" ABOVE FINISHED FLOOR.
- J. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING
- J.A. EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL A MINIMUM OF 28 GAGE.
- J.C. DUCTS SHALL BE SUPPORTED AT 4-FOOT INTERVALS AND SECURED IN
- J.E. PROTECTIVE SHIELD PLATES SHALL BE PLACED WHERE NAILS OR SCREWS FROM FINISH OR OTHER WORK ARE LIKELY TO PENETRATE THE CLOTHES DRYER EXHAUST DUCT.SHIELD PLATES SHALL BE PLACED ON THE FINISHED FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4 INCHES BETWEEN THE DUCT AND THE FINISHED FACE OF THE FRAMING MEMBER. SHIELD PLATES SHALL BE CONSTRUCTED OF STEEL, HAVE A THICKNESS OF 0.062 INCHES, AND EXTEND NOT LESS THAN 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES.
- TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE A SINGLE LENGTH THAT IS LISTED AND LABELED IN THAN 8 FEET IN LENGTH AND SHALL NOT BE CONCEALED WITHIN
- J.G. PROVIDE DRYER WALL BOX EQUAL TO DUNDAS JAFINE MODEL DRB4XZW

SYMBOLS LE	EGEND — HVAC
Ŧ	THERMOSTAT
\boxtimes	CEILING DIFFUSER
→	SIDE WALL GRILL
\	RETURN WALL GRILL
~ \	AIR FLOW DIRECTION
14x10	DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
ردرج	TURNING VANES
∑	FLEXIBLE DUCT, 8'-0" LONG MAX.
Ø	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
DS	DUCT SMOKE DETECTOR





GENERAL NOTES

- ALL MECHANICAL EQUIPMENT.
- D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN.
- MOUNT THERMOSTATS 60" ABOVE FINISHED FLOOR. MOUNT THERMOSTATS IN
- K. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABLED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
- J. THE FOLLOWING GUIDELINES MUST BE FOLLOWED FOR THE DOMESTIC DRYER
- J.B. DUCT SIZE SHALL BE 4 INCHES NOMINAL DIAMETER.
- PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING DUCT OR FITTING IN THE DIRECTION OF AIRFLOW.
- J.D. DUCTS SHALL NOT BE JOINED WITH SCREWS OF SIMILAR FASTENERS THAT PROTRUDE MORE THAN & INCH INTO THE INSIDE OF THE DUCT.
- ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL BE NOT GREATER CONSTRUCTION.
- NEAR DRYER. J.H. PROVIDE A PERMANENT LABEL OR TAG (EQUAL TO DRYERPLACARD) INDICATING ACTUAL EQUIVALENT LENGTH OF EXHAUST DUCT. LENGTH SHALL INCLUDE 5' FOR 90 . LABEL/TAG MUST BE WITHIN 6' OF DRYER EXHAUST CONNECTION. DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH SHALL BE 2'-6" FOR A RADIUS MITERED 45-DEGREE ELBOW AND 5 FEET FOR A RADIUS MITERED 90-DEGREE ELBOW.

\boxtimes	CEILING DIFFUSER
→	SIDE WALL GRILL
-\-	RETURN WALL GRILL
← _	AIR FLOW DIRECTION
14x10	DUCTWORK
\boxtimes	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
N N	TYPICAL EXHAUST DUCT
رده	TURNING VANES
X ~~~	FLEXIBLE DUCT, 8'-0" LONG MAX.
<u> </u>	TYPICAL ROUND DUCT DN
O	ROUND DUCT UP
	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
DS	DUCT SMOKE DETECTOR

8/10/2022

Job No: 22042

SEVERT

E-77755

Progress Dates

Revisions

Checked By: SSS

ENGINEERED

TEAMWORK • COLLABORATION

SHARED SUCCESS

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Drawn by: RPG

05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

- ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN MECHANICAL CLOSET, SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
- RETURN DUCT UP TO FIRST FLOOR. SUPPLY DUCT UP TO FIRST FLOOR.
- ALL BASEMENTS SHALL BE VENTILATED AS STORAGE/WAREHOUSE SPACE IN ACCORDANCE WITH TABLE 403.3 OF THE 2017 OHIO MECHANICAL CODE AT A RATE OF 0.06 CFM PER SQUARE FOOT. PROVIDE NEW FAN IN BASEMENT FOR CODE MINIMUM OSA LISTED ABOVE. FRESH AIR INTAKE THRU WALL TO WALL CAP.
- DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP. . 4" EXHAUST DUCT TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER 717.6.1 EXCEPTION. DUCT MUST BE MINIMUM 26 GA. AND BE CONTAINED WITHIN WALL CAVITY FOR FULL LENGTH. FIRE CAULK AROUND ALL
- PENETRATIONS. REFER TO DETAIL. 6" EXHAUST TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER OBC 714.4.1 EXCEPTION 1.
- UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN/MAKE UP AIR. I. DUCTED RETURN BETWEEN TRANSFER GRILLES TO AVOID EXPOSED WALL
- 2. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
- 12.1. 3' FROM PROPERTY LINE. 12.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
- 12.3 10' FROM MECHANICAL AIR INTAKE. 13. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN BASEMENT. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED.
- 4. DUCTED RETURN SLEEVE TO AVOID EXPOSED WALL CAVITY. 5. ROUTE EXHAUST DUCT UP IN JOIST POCKET. RATING SHALL BE MAINTAINED AROUND JOIST TO PREVENT FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- 6. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL LINE-SET COVERS FOR ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE PIPING. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN WASHER/ DRYER CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT.

PROVIDE CONDENSATE PUMP AS REQUIRED EQUAL TO LITTLE GIANT

EC-1K-DV SERIES ALL CONDENSATE PUMPS, PIPING ETC. MUST BE

CONCEALED FROM SIGHT. 18. RETURN DUCT DOWN TO FLOOR BELOW.

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2HR 2HR 2HR 2HR 2HR

19. SUPPLY DUCT DOWN TO FLOOR BELOW. 20. MECHANICAL CONTRACTOR TO COORDINATE DUCT ROUTING WITH PLUMBING CONTRACTOR

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

STEEL 2-WAY REGISTER, MS DAMPER,

1/3" FIN SPACING

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTES
DVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED DRYER VENT.	6x7	4Ø	FAMCO DWVP	BACKDRAFT DAMPER/ANGLED HOOD.
EVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	6x7	4Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
EVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	8x9	6Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
FR-2	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x6	12x4	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-6	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x8	12x6	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-8	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	16x10	14x8	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FRG-1	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	26x10	24x8	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
FRG-3	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	32x14	30x12	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
IVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	8x9	6Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
IVH-8	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	10x11	8Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
RG-1	EGGCRATE RETURN GRILLE	12x12	10x10	TITUS 50F	#26 WHITE FINISH.
RG-7	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x12	20x10	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-8	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x16	20x14	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-11	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x27	20x25	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
SDG1W-2	ALUMINUM SINGLE DEFLECTION SPIRAL DIFFUSER	14x5	12x3	HART AND COOLEY/ SV	ADJUSTABLE DAMPER, BRIGHT WHITE FINISH
SR1W-1	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-1C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-2C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT
SR2W-2	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGI WHITE FINISH
SR2W-3	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGI WHITE FINISH
SR2W-3C	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGI WHITE FINISH
SR2W-4	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	14x8	12x6	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGI WHITE FINISH

HART AND COOLEY/ 661

ADJUSTABLE DAMPER IN FACE, BRIGHT

WHITE FINISH

MECHANICAL SCOPE OF WORK IS TO PROVIDE NEW HVAC EQUIPMENT TO RESIDENTIAL AND COMMERCIAL SPACES. MECHANICAL CONTRACTOR SHALL REFERENCE ALL DISCIPLINE DRAWING, ETC. TO REVEAL FULL SCOPE OF WORK.

RESIDENTIAL

COOLING HEATING COOLING HEATING OUTDOOR: 0 DB OUTDOOR: 93 DB / 75 WB OUTDOOR: 0 DB INDOOR: 70 INDOOR: 75 INDOOR: 70

GENERAL NOTES

- A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL
- C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO
- D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- ABOVE DROP CEILING OR IN BULKHEADS. COORDINATE ROUTING WITH ARCHITECTURAL DRAWINGS. DUCTS SHALL BE RUN BELOW THE RATED
- H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8 " PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- ADA UNITS 40" ABOVE FINISHED FLOOR.
- J. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING
- J. THE FOLLOWING GUIDELINES MUST BE FOLLOWED FOR THE DOMESTIC DRYER
- J.A. EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL A MINIMUM OF 28 GAGE.
- J.C. DUCTS SHALL BE SUPPORTED AT 4-FOOT INTERVALS AND SECURED IN
- J.D. DUCTS SHALL NOT BE JOINED WITH SCREWS OF SIMILAR FASTENERS THAT
- J.E. PROTECTIVE SHIELD PLATES SHALL BE PLACED WHERE NAILS OR SCREWS FROM FINISH OR OTHER WORK ARE LIKELY TO PENETRATE THE CLOTHES DRYER EXHAUST DUCT.SHIELD PLATES SHALL BE PLACED ON THE FINISHED FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4 INCHES BETWEEN THE DUCT AND THE FINISHED FACE OF THE FRAMING MEMBER. SHIELD PLATES SHALL BE CONSTRUCTED OF STEEL, HAVE A THICKNESS OF 0.062 INCHES, AND EXTEND NOT LESS THAN 2 INCHES ABOVE SOLE PLATES
- J.G. PROVIDE DRYER WALL BOX EQUAL TO DUNDAS JAFINE MODEL DRB4XZW NEAR DRYER.

SYMBOLS LI	SYMBOLS LEGEND — HVAC						
Ð	THERMOSTAT						
\boxtimes	CEILING DIFFUSER						
→	SIDE WALL GRILL						
«\- «\-	RETURN WALL GRILL						
← √−	AIR FLOW DIRECTION						
14x10	DUCTWORK						
\boxtimes	TYPICAL SUPPLY DUCT DN						
	TYPICAL RETURN DUCT DN						
M	TYPICAL EXHAUST DUCT						
ردره	TURNING VANES						
$\boxtimes \sim \sim$	FLEXIBLE DUCT, 8'-0" LONG MAX.						
<u> </u>	TYPICAL ROUND DUCT DN						
	ROUND DUCT UP						
	MVD MANUAL VOLUME DAMPER						
	DROPPED CEILING/SOFFIT						
DS	DUCT SMOKE DETECTOR						



MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS. HVAC DESIGN CONDITIONS

- B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- ALL MECHANICAL EQUIPMENT.

- F. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- G. IN DWELLING UNITS, ROUTE ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK
- MOUNT THERMOSTATS 60" ABOVE FINISHED FLOOR. MOUNT THERMOSTATS IN
- K. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABLED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
- J.B. DUCT SIZE SHALL BE 4 INCHES NOMINAL DIAMETER.
- PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING DUCT OR FITTING IN THE DIRECTION OF AIRFLOW.
- PROTRUDE MORE THAN & INCH INTO THE INSIDE OF THE DUCT.
- AND BELOW TOP PLATES.
- TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE A SINGLE LENGTH THAT IS LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL BE NOT GREATER THAN 8 FEET IN LENGTH AND SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.
- J.H. PROVIDE A PERMANENT LABEL OR TAG (EQUAL TO DRYERPLACARD) INDICATING ACTUAL EQUIVALENT LENGTH OF EXHAUST DUCT. LENGTH SHALL INCLUDE 5' FOR 90 . LABEL/TAG MUST BE WITHIN 6' OF DRYER EXHAUST CONNECTION. DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH SHALL BE 2'-6" FOR A RADIUS MITERED 45-DEGREE ELBOW AND 5 FEET FOR A RADIUS MITERED 90-DEGREE ELBOW.

	· · · · · · · · ·
Ŧ	THERMOSTAT
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→	SIDE WALL GRILL
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]	MVD MANUAL VOLUME DAMPER
	DROPPED CEILING/SOFFIT
DS	DUCT SMOKE DETECTOR
	-



8/10/2022

Job No: 22042

SEVERT

E-77755

Progress Dates

Revisions

Checked By: SSS

ENGINEERED

TEAMWORK • COLLABORATION

SHARED SUCCESS

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Drawn by: RPG

05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

- ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN MECHANICAL CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
- RETURN DUCT UP TO FIRST FLOOR. SUPPLY DUCT UP TO FIRST FLOOR. ALL BASEMENTS SHALL BE VENTILATED AS STORAGE/WAREHOUSE SPACE IN ACCORDANCE WITH TABLE 403.3 OF THE 2017 OHIO MECHANICAL CODE AT A RATE OF 0.06 CFM PER SQUARE FOOT. PROVIDE NEW FAN IN BASEMENT FOR
- CODE MINIMUM OSA LISTED ABOVE. FRESH AIR INTAKE THRU WALL TO WALL CAP. DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP. . 4" EXHAUST DUCT TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER 717.6.1 EXCEPTION. DUCT MUST BE MINIMUM 26 GA. AND BE CONTAINED
- PENETRATIONS. REFER TO DETAIL. 6" EXHAUST TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER OBC 714.4.1

WITHIN WALL CAVITY FOR FULL LENGTH. FIRE CAULK AROUND ALL

- UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN/MAKE UP AIR. I. DUCTED RETURN BETWEEN TRANSFER GRILLES TO AVOID EXPOSED WALL
- 2. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS. 12.1. 3' FROM PROPERTY LINE.
- 12.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
- 12.3 10' FROM MECHANICAL AIR INTAKE. 13. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN BASEMENT. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED.
- 4. DUCTED RETURN SLEEVE TO AVOID EXPOSED WALL CAVITY. 5. ROUTE EXHAUST DUCT UP IN JOIST POCKET. RATING SHALL BE MAINTAINED AROUND JOIST TO PREVENT FIRE DAMPER. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- 6. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL LINE-SET COVERS FOR ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE PIPING. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN WASHER/ DRYER CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED EQUAL TO LITTLE GIANT EC-1K-DV SERIES ALL CONDENSATE PUMPS, PIPING ETC. MUST BE CONCEALED FROM SIGHT.
- 18. RETURN DUCT DOWN TO FLOOR BELOW. 19. SUPPLY DUCT DOWN TO FLOOR BELOW.
- 20. MECHANICAL CONTRACTOR TO COORDINATE DUCT ROUTING WITH PLUMBING CONTRACTOR.

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

STEEL 2-WAY REGISTER, MS DAMPER,

STEEL 2-WAY REGISTER, MS DAMPER,

2HR 2HR 2HR 2HR 2HR

1/3" FIN SPACING

1/3" FIN SPACING

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTES
DVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED DRYER VENT.	6x7	4Ø	FAMCO DWVP	BACKDRAFT DAMPER/ANGLED HOOD.
EVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	6x7	4Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
EVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	8x9	6Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
FR-2	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x6	12x4	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-6	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x8	12x6	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-8	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	16x10	14x8	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FRG-1	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	26x10	24x8	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
FRG-3	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	32x14	30x12	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
IVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	8x9	6Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
IVH-8	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	10x11	8Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
RG-1	EGGCRATE RETURN GRILLE	12x12	10x10	TITUS 50F	#26 WHITE FINISH.
RG-7	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x12	20x10	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-8	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x16	20x14	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-11	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x27	20x25	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
SDG1W-2	ALUMINUM SINGLE DEFLECTION SPIRAL DIFFUSER	14x5	12x3	HART AND COOLEY/ SV	ADJUSTABLE DAMPER, BRIGHT WHITE FINISH
SR1W-1	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-1C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-2C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR2W-2	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
SR2W-3	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
SR2W-3C	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH
		1	1		

HART AND COOLEY/ 661

HART AND COOLEY/661

MECHANICAL SCOPE OF WORK IS TO PROVIDE NEW HVAC EQUIPMENT TO RESIDENTIAL AND COMMERCIAL SPACES. MECHANICAL CONTRACTOR SHALL REFERENCE ALL DISCIPLINE DRAWING, ETC. TO REVEAL FULL SCOPE OF WORK.

COOLINGHEATINGCOOLINGHEATINGOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DBOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DB INDOOR: 70 INDOOR: 75 INDOOR: 70

GENERAL NOTES

- A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL
- B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.
- F. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- G. IN DWELLING UNITS, ROUTE ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ABOVE DROP CEILING OR IN BULKHEADS. COORDINATE ROUTING WITH ARCHITECTURAL DRAWINGS. DUCTS SHALL BE RUN BELOW THE RATED
- H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8 " PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- MOUNT THERMOSTATS 60" ABOVE FINISHED FLOOR. MOUNT THERMOSTATS IN ADA UNITS 40" ABOVE FINISHED FLOOR.
- J. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING
- K. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABLED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
- J. THE FOLLOWING GUIDELINES MUST BE FOLLOWED FOR THE DOMESTIC DRYER
- J.A. EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL A MINIMUM OF 28 GAGE.
- J.B. DUCT SIZE SHALL BE 4 INCHES NOMINAL DIAMETER. J.C. DUCTS SHALL BE SUPPORTED AT 4-FOOT INTERVALS AND SECURED IN PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING DUCT OR FITTING IN THE DIRECTION OF AIRFLOW.
- J.D. DUCTS SHALL NOT BE JOINED WITH SCREWS OF SIMILAR FASTENERS THAT PROTRUDE MORE THAN 1 INCH INTO THE INSIDE OF THE DUCT.
- J.E. PROTECTIVE SHIELD PLATES SHALL BE PLACED WHERE NAILS OR SCREWS FROM FINISH OR OTHER WORK ARE LIKELY TO PENETRATE THE CLOTHES DRYER EXHAUST DUCT.SHIELD PLATES SHALL BE PLACED ON THE FINISHED FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4 INCHES BETWEEN THE DUCT AND THE FINISHED FACE OF THE FRAMING MEMBER. SHIELD PLATES SHALL BE CONSTRUCTED OF STEEL, HAVE A THICKNESS OF 0.062 INCHES, AND EXTEND NOT LESS THAN 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES.
- TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE A SINGLE LENGTH THAT IS LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL BE NOT GREATER THAN 8 FEET IN LENGTH AND SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.
- J.G. PROVIDE DRYER WALL BOX EQUAL TO DUNDAS JAFINE MODEL DRB4XZW
- NEAR DRYER. J.H. PROVIDE A PERMANENT LABEL OR TAG (EQUAL TO DRYERPLACARD) INDICATING ACTUAL EQUIVALENT LENGTH OF EXHAUST DUCT. LENGTH SHALL INCLUDE 5' FOR 90 . LABEL/TAG MUST BE WITHIN 6' OF DRYER EXHAUST CONNECTION. DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH SHALL BE 2'-6" FOR A RADIUS MITERED 45-DEGREE ELBOW AND 5 FEET FOR A RADIUS MITERED 90-DEGREE ELBOW.

SYMBOLS LEGEND — HVAC				
T	THERMOSTAT			
\boxtimes	CEILING DIFFUSER			
→	SIDE WALL GRILL			
-	RETURN WALL GRILL			
← √-	AIR FLOW DIRECTION			
14×10	DUCTWORK			
\boxtimes	TYPICAL SUPPLY DUCT DN			
	TYPICAL RETURN DUCT DN			
N N	TYPICAL EXHAUST DUCT			
ردر	TURNING VANES			
⊠ ~~~	FLEXIBLE DUCT, 8'-0" LONG MAX.			
Ø_	TYPICAL ROUND DUCT DN			
	ROUND DUCT UP			
	MVD MANUAL VOLUME DAMPER			
	DROPPED CEILING/SOFFIT			
DS	DUCT SMOKE DETECTOR			



MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS. HVAC DESIGN CONDITIONS RESIDENTIAL

SEVERT E-77755

202

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: SSS

Drawn by: RPG



TEAMWORK • COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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Job No: 22042

8/10/2022

ADJUSTABLE DAMPER IN FACE, BRIGHT

ADJUSTABLE DAMPER IN FACE, BRIGHT

WHITE FINISH

WHITE FINISH

RETURN DUCT UP TO FIRST FLOOR.

FRESH AIR INTAKE THRU WALL TO WALL CAP.

- ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN MECHANICAL CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
- SUPPLY DUCT UP TO FIRST FLOOR. ALL BASEMENTS SHALL BE VENTILATED AS STORAGE/WAREHOUSE SPACE IN ACCORDANCE WITH TABLE 403.3 OF THE 2017 OHIO MECHANICAL CODE AT A RATE OF 0.06 CFM PER SQUARE FOOT. PROVIDE NEW FAN IN BASEMENT FOR CODE MINIMUM OSA LISTED ABOVE.
- 717.6.1 EXCEPTION. DUCT MUST BE MINIMUM 26 GA. AND BE CONTAINED WITHIN WALL CAVITY FOR FULL LENGTH. FIRE CAULK AROUND ALL PENETRATIONS. REFER TO DETAIL.

. 4" EXHAUST DUCT TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER

DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.

- 6" EXHAUST TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER OBC 714.4.1 UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN/MAKE UP AIR.
- I. DUCTED RETURN BETWEEN TRANSFER GRILLES TO AVOID EXPOSED WALL 2. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR

COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.

- 12.1. 3' FROM PROPERTY LINE. 12.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
- 12.3 10' FROM MECHANICAL AIR INTAKE. 13. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN BASEMENT. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED.
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DIFFUSER, GRILLE, AND REGISTER SCHEDULE

STEEL 2-WAY REGISTER, MS DAMPER,

STEEL 2-WAY REGISTER, MS DAMPER,

2HR 2HR 2HR 2HR 1HR

1/3" FIN SPACING

1/3" FIN SPACING

2HR — 2HR

14x8

	,				
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EVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	8x9	6Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
FR-2	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x6	12x4	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-6	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x8	12x6	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
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FRG-1	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	26x10	24x8	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
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SR1W-1	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-1C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
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		+	+	+	

HART AND COOLEY/ 661

HART AND COOLEY/661

30MIN - 30MIN - 30MIN -

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HVAC DESIGN CONDITIONS

RESIDENTIAL

COOLINGHEATINGCOOLINGHEATINGOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DBOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DB INDOOR: 70 INDOOR: 75 INDOOR: 70

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SYMBOLS LEGEND — HVAC				
T	THERMOSTAT			
\boxtimes	CEILING DIFFUSER			
->	SIDE WALL GRILL			
«\- «\-	RETURN WALL GRILL			
←√ -	AIR FLOW DIRECTION			
14x10	DUCTWORK			
\boxtimes	TYPICAL SUPPLY DUCT DN			
	TYPICAL RETURN DUCT DN			
M	TYPICAL EXHAUST DUCT			
رره	TURNING VANES			
$\boxtimes \sim \sim$	FLEXIBLE DUCT, 8'-0" LONG MAX.			
Ø_	TYPICAL ROUND DUCT DN			
	ROUND DUCT UP			
	MVD MANUAL VOLUME DAMPER			
	DROPPED CEILING/SOFFIT			
DS	DUCT SMOKE DETECTOR			



MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

SEVERT E-77755

202 **W**

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: SSS

Drawn by: RPG



TEAMWORK • COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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Job No: 22042

8/10/2022

ADJUSTABLE DAMPER IN FACE, BRIGHT

ADJUSTABLE DAMPER IN FACE, BRIGHT

WHITE FINISH

WHITE FINISH

RETURN DUCT UP TO FIRST FLOOR.

- ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN MECHANICAL CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
- SUPPLY DUCT UP TO FIRST FLOOR. ALL BASEMENTS SHALL BE VENTILATED AS STORAGE/WAREHOUSE SPACE IN ACCORDANCE WITH TABLE 403.3 OF THE 2017 OHIO MECHANICAL CODE AT A
- RATE OF 0.06 CFM PER SQUARE FOOT. PROVIDE NEW FAN IN BASEMENT FOR CODE MINIMUM OSA LISTED ABOVE FRESH AIR INTAKE THRU WALL TO WALL CAP. DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
- WITHIN WALL CAVITY FOR FULL LENGTH. FIRE CAULK AROUND ALL PENETRATIONS. REFER TO DETAIL.

3. 4" EXHAUST DUCT TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER

717.6.1 EXCEPTION. DUCT MUST BE MINIMUM 26 GA. AND BE CONTAINED

- 6" EXHAUST TO BE ROUTED DIRECTLY TO ROOF, AS ALLOWED PER OBC 714.4.1 EXCEPTION 1. UNDERCUT DOOR 1" ABOVE FINISHED FLOOR FOR RETURN/MAKE UP AIR.
- 1. DUCTED RETURN BETWEEN TRANSFER GRILLES TO AVOID EXPOSED WALL 2. ROUTE EXHAUST TO EXTERIOR WALL. INSTALL A LOUVERED VENT. SEE ARCHITECT BEFORE PENETRATION FOR EXACT LOCATION AND COLOR COORDINATION. ALL EXHAUST SHALL MEET THE FOLLOWING REQUIREMENTS.
- 12.1. 3' FROM PROPERTY LINE. 12.2. 3' FROM OPERABLE OPENINGS INTO BUILDING.
- 12.3 10' FROM MECHANICAL AIR INTAKE. 13. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN BASEMENT. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT. PROVIDE CONDENSATE PUMP AS REQUIRED.
- 4. DUCTED RETURN SLEEVE TO AVOID EXPOSED WALL CAVITY. 5. ROUTE EXHAUST DUCT UP IN JOIST POCKET. RATING SHALL BE MAINTAINED AROUND JOIST TO PREVENT FIRE DAMPER. REFER TO ARCHITECTURAL PLANS
- FOR DETAILS. 6. MECHANICAL CONTRACTOR TO PROVIDE AND INSTALL LINE-SET COVERS FOR ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE PIPING. ROUTE 3/4" CONDENSATE DRAIN LINE TO FLOOR DRAIN IN WASHER/ DRYER CLOSET. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT.
- EC-1K-DV SERIES ALL CONDENSATE PUMPS, PIPING ETC. MUST BE CONCEALED FROM SIGHT. 18. RETURN DUCT DOWN TO FLOOR BELOW.

2HR 2HR 2HR 2HR 2HR

<u>₹</u>7

- 19. SUPPLY DUCT DOWN TO FLOOR BELOW.
- 20. MECHANICAL CONTRACTOR TO COORDINATE DUCT ROUTING WITH PLUMBING CONTRACTOR.

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

CALLOUT	DESCRIPTION	FACE SIZE (IN)	INLET SIZE (IN)	MODEL	NOTES
DVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED DRYER VENT.	6x7	4Ø	FAMCO DWVP	BACKDRAFT DAMPER/ANGLED HOOD.
EVH-4	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	6x7	4Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
EVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED EXHAUST VENT.	8x9	6Ø	FAMCO SDWVP	BACKDRAFT DAMPER/ANGLED HOOD. 1/4 INCH INSECT SCREEN.
FR-2	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x6	12x4	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-6	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	14x8	12x6	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FR-8	FLOOR REGISTER, ALL-STEEL CONSTRUCTION, 75% FREE AREA, TOE-OPERATED VALVE CONTROL	16x10	14x8	HART AND COOLEY/ 210	GOLDEN SAND ENAMEL FINISH
FRG-1	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	26x10	24x8	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
FRG-3	RETURN AIR FILTER GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	32x14	30x12	HART AND COOLEY/ 265	GOLDEN SAND ENAMEL FINISH
IVH-6	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	8x9	6Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
IVH-8	28 GAUGE GALVANIZED STEEL. PRE-PAINTED INTAKE VENT.	10x11	8Ø	FAMCO SWVP	ANGLED HOOD.1/4 INCH INSECT SCREEN.
RG-1	EGGCRATE RETURN GRILLE	12x12	10x10	TITUS 50F	#26 WHITE FINISH.
RG-7	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x12	20x10	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-8	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x16	20x14	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
RG-11	RETURN AIR GRILLE, ALL-STEEL CONSTRUCTION, 1/3" SPACED FINS AT 20 DEGREES	22x27	20x25	HART AND COOLEY/ 650	BRIGHT WHITE FINISH
SDG1W-2	ALUMINUM SINGLE DEFLECTION SPIRAL DIFFUSER	14x5	12x3	HART AND COOLEY/ SV	ADJUSTABLE DAMPER, BRIGHT WHITE FINISH
SR1W-1	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-1C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	10x6	8x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR1W-2C	STEEL 1-WAY REGISTER, PLATE DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 651	ADJUSTABLE PLATE DAMPER, BRIGHT WHITE FINISH
SR2W-2	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	12x6	10x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGH WHITE FINISH
SR2W-3	STEEL 2-WAY REGISTER, MS DAMPER, 1/3" FIN SPACING	16x6	14x4	HART AND COOLEY/ 661	ADJUSTABLE DAMPER IN FACE, BRIGH WHITE FINISH

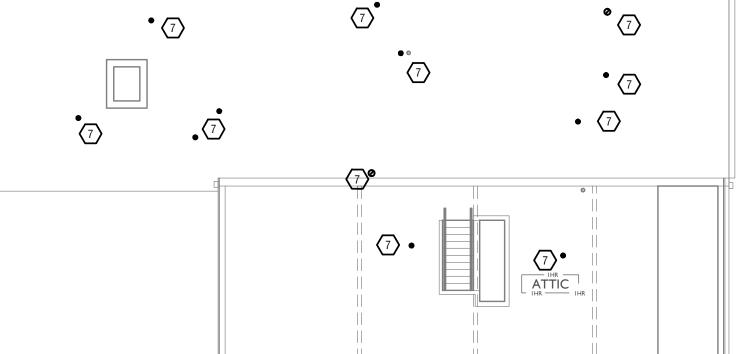
INDOOR: 70 INDOOR: 75 **GENERAL NOTES**

PROVIDE CONDENSATE PUMP AS REQUIRED EQUAL TO LITTLE GIANT

STEEL 2-WAY REGISTER, MS DAMPER,

14x4 HART AND COOLEY/ 661 ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH STEEL 2-WAY REGISTER, MS DAMPER, HART AND COOLEY/ 661 ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH

STEEL 2-WAY REGISTER, MS DAMPER, HART AND COOLEY/ 661 ADJUSTABLE DAMPER IN FACE, BRIGHT WHITE FINISH



1/3" FIN SPACING

1/3" FIN SPACING

1/3" FIN SPACING

2HR — 2HR — 2HR — 2HR — 2HR

MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

MECHANICAL SCOPE OF WORK IS TO PROVIDE NEW HVAC EQUIPMENT TO RESIDENTIAL AND COMMERCIAL SPACES. MECHANICAL CONTRACTOR SHALL REFERENCE ALL DISCIPLINE DRAWING, ETC. TO REVEAL FULL SCOPE OF WORK. REFER TO MECHANICAL SPECIFICATIONS FOR ADDITIONAL DETAILS.

HVAC DESIGN CONDITIONS

RESIDENTIAL
 COOLING
 HEATING

 OUTDOOR: 93 DB / 75 WB
 OUTDOOR: 0 DB

 COOLING
 HEATING

 OUTDOOR: 93 DB / 75 WB
 OUTDOOR: 0 DB

A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL

INDOOR: 70

- B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.
- C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.
- E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING
- DIFFUSER LOCATIONS.
- F. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.
- G. IN DWELLING UNITS, ROUTE ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ABOVE DROP CEILING OR IN BULKHEADS. COORDINATE ROUTING WITH ARCHITECTURAL DRAWINGS. DUCTS SHALL BE RUN BELOW THE RATED
- H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8 " PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE OHIO MECHANICAL CODE.
- MOUNT THERMOSTATS 60" ABOVE FINISHED FLOOR. MOUNT THERMOSTATS IN ADA UNITS 40" ABOVE FINISHED FLOOR.
- I. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING
- K. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABLED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
- I. THE FOLLOWING GUIDELINES MUST BE FOLLOWED FOR THE DOMESTIC DRYER EXHAUST SYSTEMS.
- J.A. EXHAUST DUCTS SHALL HAVE A SMOOTH INTERIOR FINISH AND BE CONSTRUCTED OF METAL A MINIMUM OF 28 GAGE.
- J.B. DUCT SIZE SHALL BE 4 INCHES NOMINAL DIAMETER. J.C. DUCTS SHALL BE SUPPORTED AT 4-FOOT INTERVALS AND SECURED IN PLACE. THE INSERT END OF THE DUCT SHALL EXTEND INTO THE ADJOINING
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- PROTRUDE MORE THAN & INCH INTO THE INSIDE OF THE DUCT. J.E. PROTECTIVE SHIELD PLATES SHALL BE PLACED WHERE NAILS OR SCREWS FROM FINISH OR OTHER WORK ARE LIKELY TO PENETRATE THE CLOTHES DRYER EXHAUST DUCT.SHIELD PLATES SHALL BE PLACED ON THE FINISHED FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4 INCHES BETWEEN THE DUCT AND THE FINISHED FACE OF THE FRAMING MEMBER. SHIELD PLATES SHALL BE CONSTRUCTED OF STEEL, HAVE A THICKNESS OF 0.062 INCHES, AND EXTEND NOT LESS THAN 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES.
- TRANSITION DUCTS USED TO CONNECT THE DRYER TO THE EXHAUST DUCT SYSTEM SHALL BE A SINGLE LENGTH THAT IS LISTED AND LABELED IN ACCORDANCE WITH UL 2158A. TRANSITION DUCTS SHALL BE NOT GREATER THAN 8 FEET IN LENGTH AND SHALL NOT BE CONCEALED WITHIN CONSTRUCTION.
- J.G. PROVIDE DRYER WALL BOX EQUAL TO DUNDAS JAFINE MODEL DRB4XZW
- NEAR DRYER. J.H. PROVIDE A PERMANENT LABEL OR TAG (EQUAL TO DRYERPLACARD) INDICATING ACTUAL EQUIVALENT LENGTH OF EXHAUST DUCT. LENGTH SHALL INCLUDE 5' FOR 90 . LABEL/TAG MUST BE WITHIN 6' OF DRYER EXHAUST CONNECTION. DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH SHALL BE 2'-6" FOR A RADIUS MITERED 45-DEGREE ELBOW AND 5 FEET FOR A RADIUS MITERED 90-DEGREE ELBOW.

SYMBOLS LEGEND - HVAC				
T	THERMOSTAT			
\boxtimes	CEILING DIFFUSER			
→	SIDE WALL GRILL			
~ ~	RETURN WALL GRILL			
← √_	AIR FLOW DIRECTION			
14x10	DUCTWORK			
\boxtimes	TYPICAL SUPPLY DUCT DN			
	TYPICAL RETURN DUCT DN			
N N	TYPICAL EXHAUST DUCT			
ردره	TURNING VANES			
X ~~~	FLEXIBLE DUCT, 8'-0" LONG MAX.			
<u> </u>	TYPICAL ROUND DUCT DN			
	ROUND DUCT UP			
	MVD MANUAL VOLUME DAMPER			
	DROPPED CEILING/SOFFIT			
DS	DUCT SMOKE DETECTOR			



STILKEY E-77755

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: SSS

Drawn by: RPG



TEAMWORK • COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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BUILDING SYSTEMS, INC.

Job No: 22042 8/10/2022

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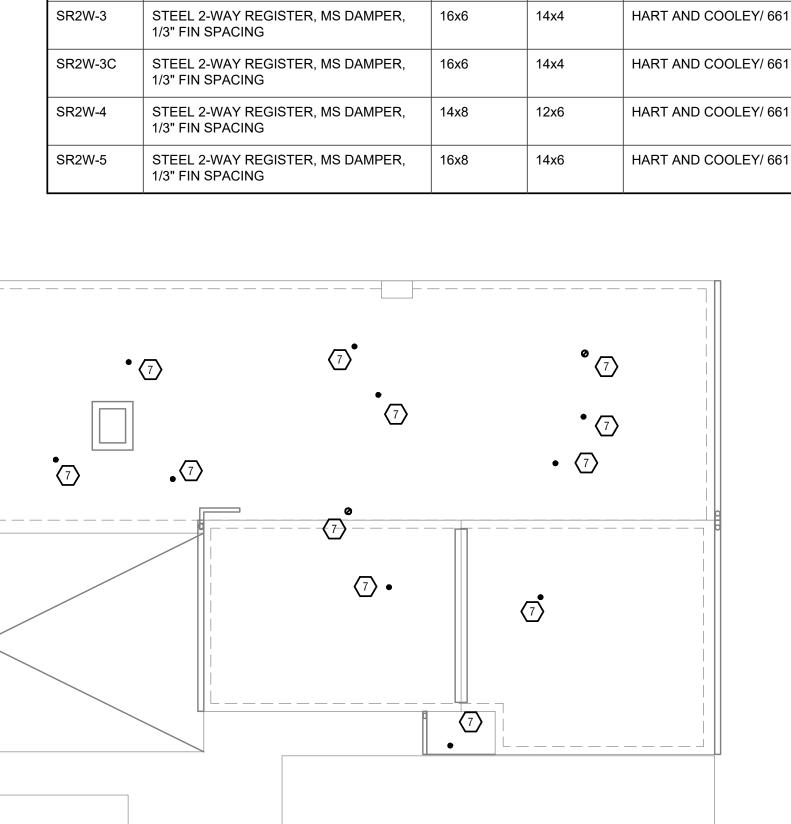
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COOLINGHEATINGCOOLINGHEATINGOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DBOUTDOOR: 93 DB / 75 WBOUTDOOR: 0 DB INDOOR: 70 INDOOR: 75 INDOOR: 70

GENERAL NOTES

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ADJUSTABLE DAMPER IN FACE, BRIGHT

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NEAR DRYER. J.H. PROVIDE A PERMANENT LABEL OR TAG (EQUAL TO DRYERPLACARD) INDICATING ACTUAL EQUIVALENT LENGTH OF EXHAUST DUCT. LENGTH SHALL INCLUDE 5' FOR 90 . LABEL/TAG MUST BE WITHIN 6' OF DRYER EXHAUST CONNECTION. DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH SHALL BE 2'-6" FOR A RADIUS MITERED 45-DEGREE ELBOW AND 5 FEET FOR A RADIUS MITERED 90-DEGREE ELBOW.

SYMBOLS LEGEND — HVAC ① THERMOSTAT □ CEILING DIFFUSER □ → SIDE WALL GRILL □ ←					
CEILING DIFFUSER → SIDE WALL GRILL ← ← RETURN WALL GRILL ← ← AIR FLOW DIRECTION 14x10 DUCTWORK X TYPICAL SUPPLY DUCT DN YPICAL RETURN DUCT DN YPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. YPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	SYMBOLS LEGEND — HVAC				
SIDE WALL GRILL RETURN WALL GRILL AIR FLOW DIRECTION DUCTWORK TYPICAL SUPPLY DUCT DN TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	T	THERMOSTAT			
RETURN WALL GRILL AIR FLOW DIRECTION DUCTWORK TYPICAL SUPPLY DUCT DN TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	\boxtimes	CEILING DIFFUSER			
TYPICAL SUPPLY DUCT DN TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	→	SIDE WALL GRILL			
TYPICAL SUPPLY DUCT DN TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT		RETURN WALL GRILL			
TYPICAL SUPPLY DUCT DN TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	←√ −	AIR FLOW DIRECTION			
TYPICAL RETURN DUCT DN TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	14x10	DUCTWORK			
TYPICAL EXHAUST DUCT TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT		TYPICAL SUPPLY DUCT DN			
TURNING VANES FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT		TYPICAL RETURN DUCT DN			
FLEXIBLE DUCT, 8'-0" LONG MAX. TYPICAL ROUND DUCT DN ROUND DUCT UP MYD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	N N	TYPICAL EXHAUST DUCT			
TYPICAL ROUND DUCT DN ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	(درو	TURNING VANES			
ROUND DUCT UP MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	\boxtimes ~~	FLEXIBLE DUCT, 8'-0" LONG MAX.			
MVD MANUAL VOLUME DAMPER DROPPED CEILING/SOFFIT	<u>a</u>	TYPICAL ROUND DUCT DN			
DROPPED CEILING/SOFFIT		ROUND DUCT UP			
		MVD MANUAL VOLUME DAMPER			
DS DUCT SMOKE DETECTOR		DROPPED CEILING/SOFFIT			
	DS	DUCT SMOKE DETECTOR			



MECHANICAL SCOPE OF WORK (PLAN REVIEW ONLY)

HVAC DESIGN CONDITIONS RESIDENTIAL

> SEVERT E-77755

> > Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: SSS

Drawn by: RPG



TEAMWORK • COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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Job No: 22042 8/10/2022

					FAN S	CHEDULE							
4G	TYPE	AREA SERVED	MANUFACTURER	MODEL	DRIVE	CFM	ESP	WATTS	RPM	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
-1	EXHAUST	TYPICAL RESTROOM	PANASONIC	FV-05-11VKS2	DIRECT	30/40-80	0.25	17	1131	115/60/1	CEILING	12	1,2,3,4
-2	EXHAUST	TYPICAL RESTROOM	PANASONIC	FV-05-11VKS2	DIRECT	50	0.25	17	1131	115/60/1	CEILING	12	2,3,4,5
-3	EXHAUST	RESTROOM	PANASONIC	FV-05-11VQ1	DIRECT	83	0.25	10.8	1185	115/60/1	CEILING	12	2
-4	EXHAUST	RESTROOM	PANASONIC	FV-05-11VQ1	DIRECT	53	0.25	7.2	1093	115/60/1	CEILING	12	2
AN SH	ALL BUIN CONTINUO	MOLTA V ISLIC	SPEED (30 CEM) AN	ND SHALL BAME	D LID TO H	ICH SPEED (50.80	CEM) M/	JENI SWIT	CH IS TH	BNED ON BB	OVIDE ALL R	FLE\/ΔNT	

E-4	EXHAUST	RESTROOM	PANASONIC	FV-05-11VQ1	DIRECT	53	0.25	1.2	1093	115/60/1	CEILING	12
. FAN SH	HALL RUN CONTINUC	DUSLY AT LOW	SPEED (30 CFM) AI	ND SHALL RAMI	P UP TO H	IGH SPEED (50,80	CFM) WI	HEN SWIT	CH IS TU	RNED ON. PF	ROVIDE ALL F	RELEVAN
COECC	ODICO											

2. INSTALL RADIATION DAMPER PC-RD05C5

PROVIDE FV-CSVK1 CONDESNSATION SENSOR
 REFER TO FAN SPEED SCHEDULE FOR FAN SPEED SETTINGS

4. KEF	EKIUF	AN SHEED	20HEDOI	EFURF	AN SPEEL) SELLINGS
5. FAN	SHALL F	RUN CONTII	NUOUSLY	AT LOW	SPEED (5)	O CFM)

TYPICAL	ROOMNAME	MINIMUM SPEED	MAXIMUM SPEED	SCHEDULE * (ASHRAE 6	32.2 LEED	PURPOSES C	NLY)
UNIT		SETTING	SETTING			NUMBER		ACTUAL
112	BATHROOM	30	80		AREA (SQ.	OF	VENT. AIR REQ.	WHOLE
113	BATHROOM	30	80	UNIT	FT.)	BEDROOM		BUILDING
201	BATHROOM	30	80		' ' ' '	S	Qiair (Eq. 4. 1a)	VENTILATION
203	BATHROOM	30	80	112	663	1	22	30
204	BATHROOM	40	80	113	488	1	20	30
205	BATHROOM	30	80		400	'	20	30
222	BATHROOM	30	80	201	349	1	18	30
223	BATHROOM	50	80	203	605	1	21	30
301	BATHROOM	30	80	204	1244	2	35	40
302	BATHROOM	30	80	205	481	1	20	30
				222	476	1	20	30
				223	1490	3	45	50
				301	346	1	18	30
				302	574	1	21	30

RESIDENTIAL UNITS: MECHANICAL VENTILATION CALCULATION

												Spl	it Syst	tem So	chedu	ıle													
Unit	Tag	Furnace AFUE	Htg Cap In	Heating Cap	Air Flow	Statio	hp -	MCA MOCP	Unit Weight	Outside Air	Out DB	Indoor Coil	Ent DB	Ent WB	Lv DB	Lv WB	Cool Cap	Sens Cap	Latent Cap	Total Weight	Tag	Model	Volte	Phase	MCA	МОСР	SEER	SEER EER 2	
Onit	rag	rumace Aroc	Btuh	Btuh	cfm	in wg.		Amps Amps	lb	CFM	°F	illuool Coll	°F	°F	°F	°F	Btuh	Btuh	Btuh	lb	ray	Woder	Voits	Filase	Amps	Amps	JLLK	9	Accessories
SYS-01	GF-1.5	N96MSN0802120A 96%	40,000	39,000	620	0.50	1	10.2 15	130	-	93.0	EAM4X60L24A	80	67	59.8	58.1	17,891	13,492	4,399	126	CU-1.5	N4A5S18AKAWA	208/230	1	11.4	20	15	14.3 12.5 11.7 1	1,5,6,7,8,9,10
SYS-01	GF-5	N96MSN0802120A 96%	80,000	78,000	2003	0.50	1	17.3 20	158	350	93.0	EAM4X60L24A	80	67	59.8	58.1	57,439	43,772	13,667	215	CU-5	N4A5S60AKAWA	208/230	1	33.4	50	14.5	13.8 12 11.2 1,	1,5,6,7,8,9,10

ACCESSORIES:

1 EXTERNAL TRAP KIT 2 CONDENSATE NEUTRALIZER KIT 3 CONCENTRIC VENT KIT

5 CRANKCASE HEATER 6 EVAPORATOR FREEZE THERMOSTAT 7 WINTER START KIT 8 HARD START KIT 9 LOW AMBIENT PRESSURE SWITCH

12 HARD START KIT

10 LOW PRESSURE SWITCH LONG LINE APPLICATIONS 11 CRANKCASE HEATER

									Lou	ver Schedule					
MODEL	PRODUCT TYPE	TAG	WIDTH	HEIGHT	AIR FLOW(C	FM) FLOW DIR.	FREE AREA	F	REE AREA %	FREE AREA VEL(FPM)	PRESSURE DROP (W.G.)	STILL WATER PEN VEL (FPM)	WATER PEN SAFETY FACTOR	SECT. WIDTH	SECT. HEIGHT
ELF6375DFL	STATIONARY	LV-1		18	16	700 INTAKE		1.31	6	6 534	0.05	1023	1.92	2 12"-120"	12"-120"

				INDOOR SPLIT S	SYSTEM SCHEDULI	Ξ					
TAG	AREA SERVED	MANUFACTURER	MODEL	COOLING CAPACITY BTH/H	HEATING CAPACITY BTH/H	CFM	ESP	VOLT/PHASE	AMPS	WEIGHT	NOTE
IDU-1	REFER TO DRAWINGS	LG	LMN079HVT	7,000	8,100	254/204/148	-	208-230/1	0.4	19	1

1. WIRED REMOTE CONTROLLER PREMTA200 (7-DAY PROGRAMMABLE)

					OUTE	OOR MII	NI SPLIT S	SYSTEM SCHE	DULE						
TAG	AREA SERVED	MANUFACTURER	MODEL	CLG-MBH	NOMINAL TONS	MIN SEER	HEAT-MBH	COOLING OPERATING RANGE (F)	HEATING OPERATING RANGE (F)	VOLT/PHASE	MCA	МОСР	REFRIGERANT	WEIGHT	NOTES
ODU-1	REFER TO DRAWINGS	LG	LMU240HHV	24	2	20.5	26	14~118	-13~75	208-230/1	19	30	R410A	152	1-3

1. PROVIDE ADJUSTABLE EQUIPMENT SUPPORTS

2. LOW AMBIENT WIND BAFFLE

3. PROVIDE/INSTALL PRE-FABRICATED HONEYWELL JACKETED METAL CLAD MINI-SPLIT CABLE FOR INDOOR/OUTDOOR UNIT CONNECTION

				HIGH WA	LL STYLE II	NDOOR				
TAG	AREA SERVED	MANUFACTURER	SERIES	MODEL	CFM	BTUH COOLING	BTUH HEATING	VOLT/PHASE	WEIGHT	NOTES
IDU-2	REFER TO DRAWINGS	LG	HSV5	LSN090HSV5	268/218/168	9,000	10,900	240/60/1	23.4	1-3

1. SELF CLEANING INDOOR COIL. 2. INVERTER (VARIABLE SPEED FAN).

3. 3M MICRO DUST FILTER.

								LG HIGH \	NALL STYL	_E (OUTDC	OR)								
TAG	TAG AREA SERVED MANUFACTURER SERIES MODEL CLG-MBH NOMINAL TONS MIN. SEER EER HSPF HEAT-MBH MAX HEAT @5 DEGREES/ MBH NOMINGE RANGE (F) WOLT/PHASE MCA MOCP REFRIDGERANT WEIGHT NOTE																		
ODU-2	REFER TO DRAWINGS	LG	HHV	LMU180HHV	19,987	2	21	13.5	10	24,000	22,000	14~118	-13~75	240/1	18.6	30	R410A	163	1-6

 LOW AMBIENT OPERATION TO 14F. 2. FACTORY INSTALLED DRAIN PAN HEATER.

3. DEFROST/DEICING

4. INVERTER VARIABLE SPEED COMPRESSOR.

5. PROVIDE EQUIPMENT SUPPORT EQUAL TO DIVERSITECH MODEL QSMS WITH VIBRATION ISOLATION PADS.

6. TWO INDOOR UNITS.

			Z	one 1	04- CO	MN	1ERC	CIAL Ventilat	ion			
System Primary Airflow: V_{ps}	:	4,000	CFM		Zone Air D E_z	istribu	tion Effe	ectiveness:				0.8
Average Outdoor Air Fra X_s	ection:	0.175			Primary Air E_p	Fract	ion to Zo	one:				1
Occupant Diversity: D		1			Secondary E_r	Air Fra	ection to	Zone:				1
Uncorrected Air Intake: V_{ou}		699 C	FM		Fraction of F_a	Suppl	y Air to 2	Zone from Outside Z	one:			1
System Ventilation Efficiency E_{v}	iency:	1			Fraction of F_b	Suppl	y Air to 2	Zone from Fully Mix	ed Primary Air:			1
Outdoor Air Intake: V_{ot}		699 C 0.175			Fraction of F_c	Outdo	or Air to	Zone from Outside 2	Zone:			1
					I	Room	Informa	ntion				
		People O	utdoor 1	Air	Area O	utdoo	r Air	Breathing Zone	Zone	Zone	Discharge	77 37 47 - 47 -
Room	Room Type	Rate (CFM/person R _p	People P_z	Total (CFM) R_p*P_z	(CFM/ft ²)		Total (CFM) R_a*A_z	Outside Airflow	Outdoor Airflow (CFM) V_{oz}	Discharge Airflow (CFM) V _{dz}	Outdoor Air Fraction Z_d	Zone Ventilation Efficiency E_{vz}
102- SHARED VESTIBULE	Public Spaces- Corridors	(0	O	0.06	87.4	6	6	8	121	0.0661	1.1
103- COMMERICAL RESTROOM	Public Spaces- Toilet rooms - public		0	O	0	57.9	0	0	0	70	0	1.1
104- COMMERCIAL WHITE BOX	Retail-Sales	7.5	36	270	0.12	2,350	283	553	691	3,810	0.181	

*VENTILATION CALCULATIONS PER OMC 2017 TABLE 403.3.1.1

		NATUF	RAL VENTILA	ATION SCHE	DULE			
			1724-28	VINE ST.				
UNIT	ROOM NAME	AREA	DOOR OPENABLE AREA [SQ. FT]	OPENABLE	UNOBSTRUCED OPENING	TOTAL OPENABLE AREA	4% OF FLOOR AREA	8% OF FLOOR AREA
COMMERCIAL SPACE	101	328	42	0	N/A	42	13	N/A
113	LIVING/BEDROOM	296	0	18	N/A	18	12	N/A
112	LIVING	366	0	30	N/A	30	15	N/A
112	BEDROOM	132	0	9	N/A	9	5	N/A
222	LIVING	63	0	9	N/A	9	3	N/A
222	BEDROOM	263	0	24	N/A	24	11	N/A
223	LIVING/3RD FLR LIVING	704	0	44	N/A	44	28	N/A
223	BEDROOM1	153	0	24	N/A	24	6	N/A
223	BEDROOM2	126	0	9	N/A	9	5	N/A
223	BEDROOM3	236	0	22	N/A	22	9	N/A
203	LIVING	317	0	67	N/A	67	13	N/A
203	BEDROOM	142	0	9	N/A	9	6	N/A
204	LIVING 1/LIVING 2	564	0	53	N/A	53	23	N/A
204	BEDROOM1	244	0	22	N/A	22	10	N/A
204	BEDROOM2	221	0	22	N/A	22	9	N/A
205	LIVING	184	0	15	N/A	15	7	N/A
205	BEDROOM	177	0	15	N/A	15	7	N/A
201	LIVING/BEDROOM	221	0	22	N/A	22	9	N/A
301	LIVING/BEDROOM	223	21	22	N/A	43	9	N/A
302	BEDROOM	158	0	15	N/A	15	6	N/A
302	LIVING	297	21	15	N/A	36	12	N/A

NATURAL VENTILATION CALCULATIONS PER SEC 402.1 OF 2017 OMC

NATURAL VENILATION OF THE OCCUPIED SPACE SHALL BE THROUGH WINDOWS, DOORS, OR OTHER OPENINGS TO THE SPACE. THE OPERATING MECHANISIM FOR SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS SO THAT THE OPENINGS ARE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS.

*VENTILATION CALCULATIONS PER OMC 2017 TABLE 403.3.1.1

BATHROOM FAN SPEED SETTING SCHEDULE

		MECHANICAL EXH	AUST	SCHEDULE -	2017 OHIO M	ECHANICAL	CODE			
						FIXT	JRES		TOTAL	TOTAL
ROOM NUMBER/UNIT TYPICAL	ROOMNAME	OCCUPANCY CLASSIFICATION	AREA (ft2)	EXHAUST AIRFLOW RATE (CFMft2)	EXHAUST RATE PER FIXTURE (CFM)	LOWER CONTINUOUS RATE?	HIGHER INTERMITTENT RATE?	QTY. OF FIXTURES	EXHAUST AIRFLOW REQ. (CFM)	EXHAUST AIRFLOW ACT. (CFM)
	RESTROOM	PUBLIC SPACES - TOILET ROOM	-	-	50/70	NO	YES	1	70	80
	BATHROOM	PRIVATE DWELLING - TOILET ROOMS	-	-	30/80	YES	NO	1	30	80
	BATHROOM	PRIVATE DWELLING - TOILET ROOMS	-	-	40/80	YES	NO	1	35	80
	BATHROOM	PRIVATE DWELLING - TOILET ROOMS	-	-	50/80	YES	NO	1	45	80
	BATHROOM	PRIVATE DWELLING - TOILET ROOMS	-	-	25/50	NO	YES	1	50	50

*EXHAU	ST CALCULATION:	S PER OMC 2017 TA	ABLE 403.3.1.1		·	·					·		·	
COMMON AREAS:MECH	HANICAL VEN	TILATION CAL	CULATION				DEF	IUMIDIFIER S	CHEDUL	.E				
SCHEDULE * (ASHR	RAE 62.1 LEEI	PURPOSES	ONLY)	TAG	AREA SERVED	MANUFACTURER	MODEL	CAPACITY - PINTS/24 HR	AMPS	FUSE	VOLT/PHASE	MOUNTING	WEIGHT	NOTES
UNIT	AREA (SQ. FT.)	VENT. AIR REQ. CFM	WHOLE BUILDING	DE-1	BASEMENT GY STAR RATE	APRILAIRE	1850	95	8	15	120/1	FLOOR	70	1,2,3,4
ENTRY/STAIRWELL/CORRIDOR	118	7	VENTILATION 30	2. DEHU	MIDICATION CO	LTROL								
ENTRY/STAIRWELL/CORRIDOR	106	6	30) AND PLUG COI IDE LOW PROF	NNECTION. ILE CONDENSATE PL	JMP							

				HEATE	RS							
TAG	TYPE	AREA SERVED	MANUFACTURER	MODEL	HEAT-MBH	FUEL	HEAT-KW	VOLT/PHASE	FLA	MOUNTING	WEIGHT	NOTES
DH-1	DUCT HEATER	REFER TO PLANS	HOTPOD	HP6-1000120-2T	3.4	ELECTRIC	1	120/1/60		INLINE	7	3,4
H-1	WALL HEATER	REFER TO PLANS	BERKO	FRA4020	6.8	ELECTRIC	2	208/1/60		IN WALL	30	1,2
H-3	BASEBOARD	REFER TO PLANS	BERKO	2542W	1	ELECTRIC	0.3	208/1/60		BASEBOARD	30	1,2

2. INTEGRAL THERMOSTAT

3. DUCT STAT INCLUDED

4. REPLACEABLE FILTER INCLUDED

								,	APARTME	NT SPLI	T SYST	EM SCH	EDULE										
System	Outdoor Unit Tag	Model	Volts	Phase	MCA	МОСР	Outdoor Unit Weight	Indoor Unit Tag	Indoor Coil	Static	Air Flow CFM	Cool Cap Total	Cool Cap Sens	SEER	EER	Elect Heat Kw (240)	Elect Heat Kw (208)	Htg Cap 47 deg	Htg Cap 17 deg	HSPF	MCA	МОСР	Indoor Unit Weight
					Amps	Amps	lb			in wg.	cfm	Btuh	Btuh			kW	kW	Btuh	Btuh		Amps	Amps	lb
1.5 Ton 8KW	HP-1.5	DLCSRBH18AAK	208/230	1	16	25	101	AHU-A-1.5 (8KW)	FMA4X1800AL	0.50	650	18000	12690	17	11.8	8	5.6	19,200	15,000	11	36.3	50	103

**Requires Piping Adaptor Kit 1174192 and 24V interface KSAIC0401230

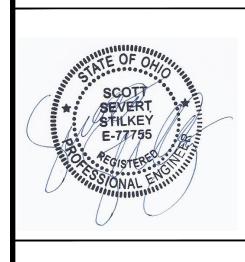
								TEMPS	STAR RESI	DENTIA	L AHU F	IP SPLIT	SYSTE	EM SCI	HEDUL	.E									
System	Outdoor Unit Tag	Model	Volts	Phase	MCA 208	МОСР	Outdoor Unit Weight	Indoor Unit Tag	Indoor Coil	ESP	Air Flow CFM	Cool Cap Total	•			Htg Cap 47 deg			Elec Heat Model	Elec Heat KW	Elec Heat KW (208)	208 MCA	MOCP 208	Indoor Unit Weight	Notes
					Amps	Amps	lb			in wg.	cfm	Btuh	Btuh			Btuh	Btuh			KW	KW	Amps	Amps	lb	
2.5 Ton 10KW	HP-R-2.5	N4H5S30AKAAA	208/230	1	18.2	30	176	AHU-R-2.5 (10KW)	FJMA4X30	0.50	1009	28400	21960	14.3	12	28600	17300	75	EHC10BKB1	10	7.5	53.8	60	152	
2.0 1011 101(44	111 1(2.0				10.2		170	AHU-R-3	1 0100 (4)(00	0.00	1000	20400	21000	14.5	12	20000	17000	7.0	LITO TOBRET	10	7.0	00.0	1	102	
3 Ton 10KW	HP-R-3	N4H5S36AKAAA	208/230	1	20.3	30	178	(10KW)	FJMA4X36	0.50	1207	34200	26400	14.3	12	34000	20400	7.5	EHC10BKB1	10	7.5	53.8	60	152	.

1 Adjustable Support Feet 2 Hard Start Kit (Capacitor and Relay 3 Crankcase Heater for Scroll Compressor

4 Low Ambient Isolation Relay Kit

5 Low Ambient Pressure Switch 6 Evaporator Freeze Thermostat

MECHANICAL DETAILS



Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Checked By: SSS

Drawn by: RPG



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General

a. Refer to architectural drawings, general notes, instructions to bidders, general conditions, supplementary general conditions, base building specifications and drawings, shop drawing manuals and as-built plans, except as noted herein. which apply in all respects to this section. The contractor shall visit the site and familiarize himself with all existing conditions prior to bidding the work

2. Use of Drawings And Specifications

a. EBS drawings and specifications are intended to convey design intent only. All means and methods sequences, techniques, and procedures of construction as well as any associated safety precautions and programs, and all incidental and temporary devices required to construct the project, and to provide a complete and fully operational mechanical system are the responsibility of the mechanical contractor.

a. Equipment and materials shall conform with appropriate provisions of AGA, ARI, ASME, ASTM, CISPI, UL. NEMA, ANSI, SMACNA, ASHRAE, NFPA, NEC, as applicable to each individual unit or assembly. All equipment must bear UL label.

4. License / Experience a. Contractor must be licensed by the state to install HVAC systems/equipment. Contractor must also have a minimum of 5 years of experience and have installed at least (5) successful project installations of similar size and scope. References

must be provided upon request. Codes

a. All work shall be performed in strict accordance with all applicable state and local codes and ordinances. The mechanical contractor shall satisfy code requirements at a minimum without any extra cost to the owner. In case of conflict between the drawings/specifications and the codes and ordinances, the highest standard shall apply

Permits and Fees a. The mechanical contractor shall procure and pay for all permits, fees, taxes, and inspections necessary to complete the

mechanical work. Furnish certificate of approval for work from inspection authority to owner before final acceptance for work. Certificate of final inspection and approval shall be submitted with the contractor's request for payment. No final payment will be approved without this certificate.

7. Site Examination

a. The mechanical contractor shall thoroughly examine all areas of work where equipment, ductwork, and piping will be installed and shall report any condition that, in his opinion, prevents the proper installation of the mechanical work prior to bid. Contractor shall also examine the drawings and specifications of other branches of work, making reference to them for details of new or existing building conditions. No extras will be allowed for failure to include all required work in bid.

b. All work shall be done at times convenient to the owner and only during normal working hours, unless specified otherwise. c. Mechanical contractor shall take their own measurements and be responsible for them.

d. Access panels are not shown on drawings. During site examination, contractor shall identify all areas where access panels are required, and report to general contractor. Designation of who furnishes and who installs access panels must be coordinated with general contractor prior to starting work.

8. Contractor Coordination

a. Coordination drawings showing system and component installation layout, routing, details, etc. Shall be produced by the mechanical contractor and under the supervision of the general contractor/construction manager, or appropriate party as

b. All systems installed by each sub-contractor shall be coordinated with one another and approved by general

contractor/construction manager, etc. prior to installation and/or fabrication. c. If questions concerning design intent arise during coordination, EBS can assist where appropriate.

d. The architectural drawings shall take precedence over all other drawings. Do not scale distances off the mechanical

drawings; use actual building dimensions. 9. Shop Drawings / Submittals

a. Submit to the architect electronic copies of complete and certified shop drawings, descriptive data, performance data and ratings, diagrams and specifications on all specified equipment, including accessories, and materials for review. The make, model number, type, finish and accessories of all equipment and materials shall be reviewed and approved by the mechanical contractor and general contractor prior to submitting to the architect for their review and approval. Approval of shop drawings does not relieve the mechanical contractor/vendor from compliance with the requirements of the contract drawings, specifications and applicable codes.

b. Shop drawings shall be required for the following:

- HVAC equipment
- •Diffusers, registers, grilles, dampers, louvers, and all sheet metal accessories
- Temperature controls
- Sheet metal coordination drawings
- Duct Sealants

c. Products installed by the mechanical contractor and provided by others must be submitted for review prior to purchasing. Products shall not be selected based on permit drawings without express permission - products shall be selected based on construction drawings.

Record Drawing

a. The mechanical contractor shall be responsible for creating record drawings where required. Drawings shall be produced in Autocad 2004 format or later

b. The mechanical contractor shall be responsible for creating record drawings in a format agreed upon by 3CDC, ZHx, and the contracting parties.

11. Testing a. All mechanical systems shall be tested for proper operation.

Fire Stopping

a. Provide fire stopping at all penetrations through rated separations per local codes & regulations & per UL recommendations for assemblies encountered in project.

b. The fire stopping material shall meet the integrity of the fire rated wall, floor, ceiling & roof being penetrated. Refer to architect's drawings for wall, floor, ceiling & roof fire ratings prior to bidding work.

c. Refer to architect's drawings for wall, floor, ceiling, and roof fire ratings prior to bidding work.

a. Provide ceiling and wall access panel quantities & locations to the general contractor prior to bidding. Access panels are required for all concealed appliances, controls devices, heat exchangers and HVAC system components that utilize energy. Where access panels are used, the access panel should be sized to allow accessibility for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, venting systems or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. There shall be no extras for having to add access panels after bids are

Cutting and Patching

a. Neatly do all cutting as required and patch all cut surfaces to match building construction. The contractor shall employ and pay a trade trained and qualified to perform the required patching work. All surfaces disturbed shall be restored with like materials to the satisfaction of the owner. All penetrations through roof shall be made by bonded roofer. Mechanical contractor shall pay all fees required.

Flashing & Counterflashing a. Roof flashing shall be furnished and installed by the roofing contractor. Roof counterflashing shall be furnished and installed by the mechanical contractor. Coordinate work with roofing contractor and pay all fees

b. Obtain approval from general contractor, construction manager, owner and/or roofing contractor prior to making any penetrations so that warranties are not compromised or voided.

Warrantv a. The mechanical contractor shall unconditionally warrant all work to be free of defects in equipment, material and

workmanship for a period of one (1) year from the date of final acceptance by owner. The mechanical contractor will repair or replace any defective work promptly and without charge to the owner. b. Restore any other existing work damaged in the course of repairing defective equipment, materials and workmanship.

17. Mechanical Work a. The mechanical contractor shall provide new hyac equipment, fans, ductwork, piping, air devices, controls as indicated on drawings and as specified. Startup and 1st year parts and labor warranty shall be included and manufacturer's extended warranties. Equipment and appliances shall be installed as required by the terms of their approval, in accordance with the

conditions of the listing, the manufacturer's installation instructions, and the applicable code. 18. Owner's Instructions

19. Finale

a. Provide two sets of complete operating and maintenance instructions with drawings, typewritten instructions and operating sequences and descriptive data sheets. Assemble each set in a hard-bound cover. Provide pdf files of all documentation.

a. Put all equipment in service and demonstrate that all conditions of the contract have been fulfilled. Remove all tools. debris, etc. occasioned by work under this contract. Mechanical Contractor to provide a new set of filters in all HVAC units prior to turnover. Submit all warranties, test reports, operating and maintenance manuals for HVAC systems, log sheets and charts, and guarantees as previously specified. Provide all reports, forms, etc. required by inspectors to the satisfaction of the owner. Provide as-built record drawings (in Autocad 2007 or later) showing an accurate account of the final installed systems. Systems including but not limited to all equipment and associated controls, ductwork/piping, air devices, etc.

20. Sheetmetal Ductwork

a. All sizes of ducts shown on the drawings are interior duct dimensions. All ductwork shall be rigid sheetmetal constructed from galvanized sheet steel in accordance with SMACNA low velocity duct construction standards. All exposed ductwork shall be round, spiral, or rectangular lock-seam type, as shown on HVAC drawings. Assemble and install ductwork in accordance with recognized industry practice for achieving air tight (5% leakage) and noiseless (no objectionable noise) systems, capable of performing each indicated service. Furnish all required dampers, transitions, offsets, connections to air devices, and other accessories necessary for a complete operating system. Flexible ductwork shall not exceed 8'-0"

b. All 90-degree duct turns must be 1.5 radius elbows. If a 1.5 radius elbow will not fit, square elbows with turning vanes can be provided in lieu of radius but should be limited to only areas where there are space constraints.

c. All takeoff/branch ductwork must utilize boot or conical tee fittings.

a. Seal all longitudinal and transverse duct joints with a UL 181A or 181B non-hardening, non-migrating mastic or liquid elastic sealant of a type recommended by the manufacturer for sealing joints and seams in sheet metal ductwork. Cover all field joints, joints around spin-in fittings and fastening screws with mastic. All sealants and gaskets shall have

- surface-burning characteristics with a maximum flame-spread index of 25 and a maximum smoke-developed index of 50 when tested according to UL 723
- b. Exposed Ductwork: trim duct sealants flush with metal. Create a smooth and uniform exposed bead. Do not use two-part tape sealing system.
- c. All duct boots sealed to drywall/finished floor (any interface with another material).

22. Duct Supports a. Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim, and angles for support of

23. Flexible Connections

a. Furnish and install neoprene flexible duct connections at the inlet and discharge of units and fans.

24. Duct Manual Volume Dampers

a Furnish and install opposed-blade leak-proof volume control dampers where indicated on drawings and locations in supply, return and exhaust ducts where branches are taken from larger ducts or at each individual duct register in order to achieve system air balance quantities. Balancing devices must be provided in accordance with IMC 603.18. All manual volume dampers must be shown on coordination drawings when submitted for review. 25. Duct Access Doors

A. Furnish and install conveniently located duct access doors of ample size and quantity for servicing the dampers.

26. Diffusers, Grilles and Registers

A.Diffusers, grilles and registers shall be manufactured by titus, price, or engineered approved equal and shall be furnished and installed by the mechanical contractor. Diffusers shall be installed as indicated on the drawings and schedules. The mechanical contractor shall provide all miscellaneous items necessary for a complete and proper installation in the type of ceiling and walls used in this project.

A.Fan manufacturer shall be Broan, Cook, Panasonic, Greenheck, or engineered approved equal. Refer to drawings and schedules for unit location, technical data, and any applicable accessories.

28. Ducted Split Systems a. Split systems shall consist of high efficient air handling unit and associated heat pump. Equipment shall have manufacturer's standard warranty.

b. Split system manufacturer shall be Tempstar, Carrier, Goodman, or engineered equal. 29. Indoor Furnace

27. Exhaust Fan

A. Split systems shall consist of high efficient condensing gas furnace and associated condensing unit. Furnace shall be a 4-way multipoise design and installed per manufacturer's requirements. Refer to drawings and schedules for unit location,

A. The mechanical contractor shall furnish and install condensate drains, p-traps with removable cleanout caps for air equipment per manufacturer's recommendations. The p-trap depth shall be at least the depth specified for the respective pressure drop of the unit. Condensate drain piping shall be schedule 40 CPVC pipe with solvent weld fittings [Insulate condensate walls of pipe with Armaflex AP, flexible closed cell elastomeric foam, self-sealing insulation. Provide 1/2" thick insulation on piping < 1" in diameter and 1" thick insulation on piping between 1" and 1-1/2" in diameter. Pipe insulation shall not exceed 25/50 flame-smoke ratings]. All condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut. For condensate pumps located in uninhabitable spaces (i.e. attics and crawl spaces), provide controls that will shut down the equipment if the condensate

B. All cooling equipment shall have a wet switch in the primary drain line, the overflow drain line, or in the equipment-supplied drain pan (located at a point higher than the primary drain line connection and below the overflow rim of the pan) that will shut down the unit when the condensate is clogged.

31. Piping Supports (Metal Pipe)

A.Furnish and install hot-dipped galvanized steel fasteners, hangers, anchors, rods, straps, trim and angles for support of piping.

32. Piping Supports (Plastic Pipe) A. Furnish and install hangers for plastic piping per manufacturer's requirements.

33. Temperature Controls and Control Wiring

A. The mechanical contractor shall provide all control wiring necessary for the complete and proper operating temperature control system. Programmable thermostats shall be provided with equipment packages unless otherwise noted. B. Exposed wiring: All wiring exposed to the space shall be run in conduit. Coordinate requirements with architectural

Commissioning

a. 3CDC has hired ZHCx to act as their commissioning provider. The commissioning process will be implemented on the HVAC systems.

b. ZHCx will conduct onsite observations throughout construction. ZHCx shall be notified prior to any ductwork being c. ZHCx shall be notified prior to any equipment start up. ZHCx will witnedd start up of all split systems. If a start up occurs

without notifying ZHCx the responsible contractor is required to perform another start up in the presence of ZHCx. d. ZHCx will conduct functional performance testing on all HVAC equipment. Any findings will be reported to 3CDC, project architect, mechanical contractor, and the engineer of record. The responsible party is required to document the correction so that ZHCx can verify the correction has been made. ZHCx will perform one back check of the correction to ensure it has been implemented in its entirety.

35. Sequence of Operation

•H-1/3: heater shall be controlled from the integral thermostat. When the temperature of the space drops below the thermostat setpoint, the heater fan shall run and the electric heating element shall engage to maintain temperature

Exhaust Fans

•E-X: exhaust fan shall run on a wall switch (provided by the electrical contractor).

• AHU-A/HP-1.5:

•Heating mode - indoor air handler shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the heat pump in heating mode shall run to maintain temperature setpoint. If the heat pump cannot maintain temperature in the space, the electric heat kit shall energize until set point is reached. When the setpoint is reached the unit shall shut off.

•Cooling mode - when the thermostat calls for cooling the heat pump unit shall run in cooling mode, the air handler fan shall run, and the dx cooling coil shall cool the air to maintain temperature setpoint.

•Heating mode - indoor air handler shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the heat pump in heating mode shall run to maintain temperature setpoint. If the heat pump cannot maintain temperature in the space, the electric heat kit shall energize until set point is reached. When the setpoint is reached the unit shall shut off.

•Cooling mode - when the thermostat calls for cooling the heat pump unit shall run in cooling mode, the air handler fan shall run, and the dx cooling coil shall cool the air to maintain temperature setpoint.

•Heating mode - indoor furnaces shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the gas fired heat exchanger shall fire to maintain temperature setpoint. When the setpoint is reached the unit shall shut off.

•Cooling mode - when the thermostat calls for cooling the condensing unit shall engage, the furnace fan shall run, and the dx cooling coil shall cool the air to maintain temperature setpoint.

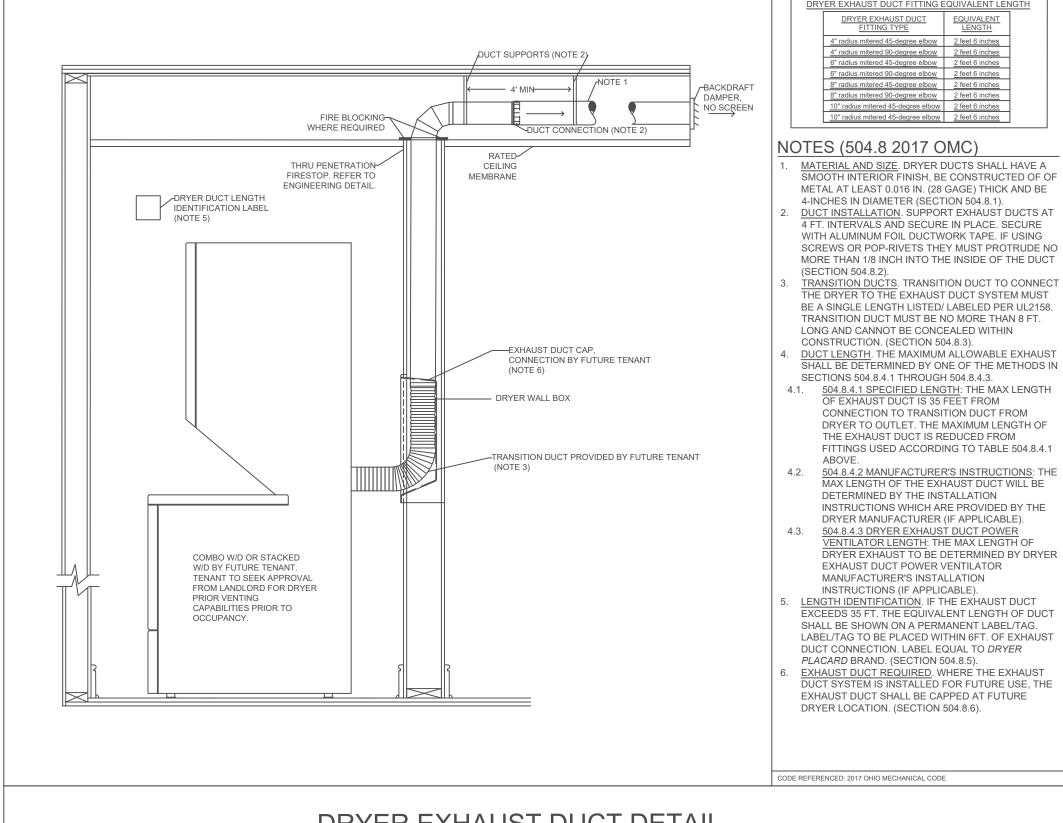
•Heating mode - indoor furnaces shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the gas fired heat exchanger shall fire to maintain temperature setpoint. When the setpoint is reached the unit shall shut off.

•Cooling mode - when the thermostat calls for cooling the condensing unit shall engage, the furnace fan shall run, and the dx cooling coil shall cool the air to maintain temperature setpoint. •IDU/ODU-1/2:

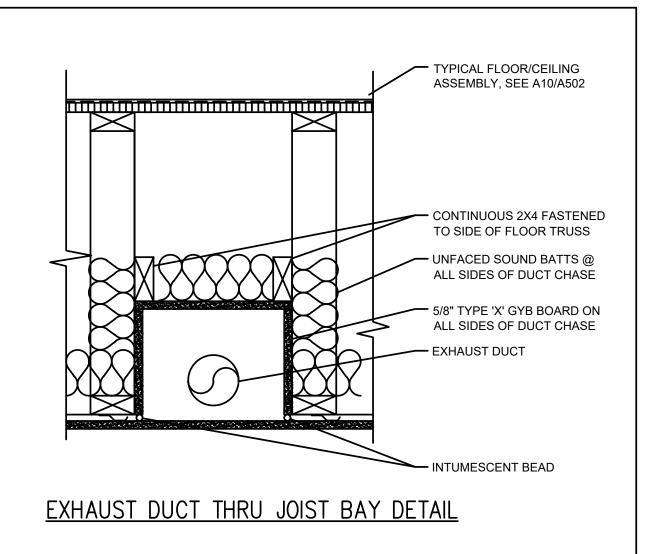
•Heating mode - indoor unit shall be controlled from a thermostat in the space. When the thermostat calls for heating the fan shall run and the heat pump in heating mode shall run to maintain temperature setpoint. •Cooling mode - when the thermostat calls for cooling the heat pump unit shall run in cooling mode, the unit fan shall

run, and the dx cooling coil shall cool the air to maintain temperature setpoint. Dehumidifier

•Dehumidifier shall be controlled from an integral humidistat. When the humidity of the space rises above set point the dehumidifier shall energize and begin to dehumidify the space. When the humidity setpoint is reached the dehumidifier shall shut off.



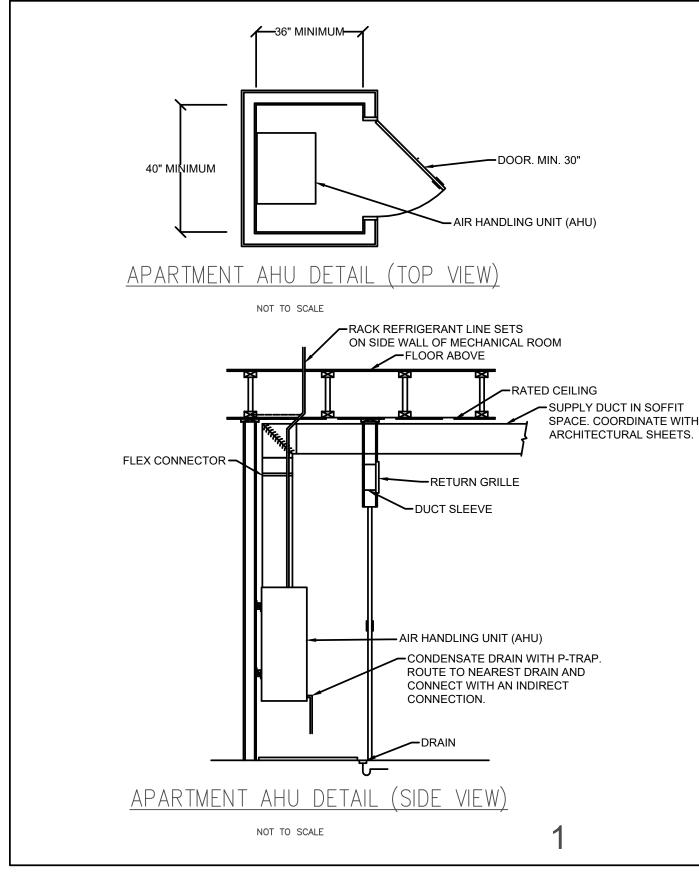
DRYER EXHAUST DUCT DETAIL



	DUC	ΓINSULAT	TON SCH	EDULE
		AIR DIS	TRIBUTION T	YPE
	SA	SA (EXPOSED)	RA	ADDITIONAL NOTES
GF-1.5	R-3.5	R-3.5	NONE	-
GF-5	R-3.5	R-3.5	NONE	-
AHU-A-1.5	R-3.5	N/A	NONE	-
AHU-R-2.5	R-3.5	N/A	NONE	-
AHU-R-3	R-3.5	N/A	NONE	-
	AHU-R-3 AHU-R-2.5 AHU-A-1.5 GF-5	AHU-R-3. AHU-R-2.5 AHU-A-1.5 GF-5 GF-1.5 BY STANDAR ST	AIR DIST SA SA (EXPOSED) 8-1-4-1-8-3.5 R-3.5 8-3.5 R-3.5 8-3.5 N/A 8-3.5 N/A 8-3.5 N/A	SA (EXPOSED) RA 91-4-0-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1

T INSULATION REQUIREMENTS ARE BASED ON TABLE 6.8.2B OF ASHRAE 90.1 2010 ENERGY CODE. PROVIDE DUCTWORK OF SUFFICIENT THICKNESS TO MEET THE INSTALLED R-VALUE REQUIREMENTS LISTED ABOVE.

ITEMS NOT REQUIRED TO BE INSULATED: FIBROUS-GLASS DUCTS, DUCTS WITH LINER THAT MEETS ASHRAE 90.1, FACTORY-INSULATED FLEXIBLE DUCTS, FACTORY-INSULATED PLENUMS AND CASINGS, FLEX CONNECTORS, VIBRATION-CONTROL DEVICES, FACTORY-INSULATED ACCESS PANELS AND DOORS.



Job No: 22042

8/10/2022

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STILKEY

E-77755

05/26/2023 BID/PERMIT

08/30/2024 BID SET 2

Progress Dates

Revisions

Checked By: SSS

PR-09757

ENGINEERED

TEAMWORK • COLLABORATION

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POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

GENERAL NOTES-OVERALL PROJECT

A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

- B. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC.
- C. PROVIDE MOTOR STARTERS FOR EQUIPMENT AS INDICATED ON DRAWINGS. COORDINATE ANY INTERLOCKING WIRING WITH HVAC CONTRACTOR AND PROVIDE WIRING, COILS, AND AUXILIARY CONTACTS AS NECESSARY. SIZE
- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT BEING CONNECTED PRIOR TO ROUGH-IN, OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.
- G. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR ALL DEVICE MOUNTING
- H. CONTRACTOR TO PROVIDE GROUNDING AND BONDING AS REQUIRED FOR ELECTRICAL SYSTEMS. GROUNDING AND BONDING IS CONSIDERED MEANS AND METHODS OF CONSTRUCTION, AND SHOULD BE COMPLETED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC 250. GAS PIPING SYSTEMS MUST BE BONDED PER UTILITY PROVIDER'S INSTALLATION GUIDELINES WHERE REQUIRED.
- ELECTRICAL RECEPTACLES ON OPPOSITE SIDES OF A WALL ARE TO BE SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD

- COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA CONTAINED ON DRAWINGS. RESPONSIBILITY FOR PROVIDING A COMPLIANT, OPERATIONAL FIRE ALARM SYSTEM LIES WITH THIS CONTRACTOR. REFER TO ARCHITECT'S CODE SHEET FOR USE GROUP AND OCCUPANT INFORMATION WHEN PROVIDING THE FIRE ALARM DESIGN. VERIFY REQUIREMENTS SPECIFIC TO PROJECT LOCALITY AND INCLUDE IN SCOPE.
- THESE FIRE ALARM DRAWINGS SHOW THE INTENDED DEVICE LOCATIONS COORDINATED WITH ARCHITECT/OWNER, AND DEMONSTRATE COMPLIANCE WITH BUILDING CODES. INSTALLING CONTRACTOR SHALL FURNISH ALL REQUIRED DRAWINGS AND CALCULATIONS REQUIRED FOR FIRE ALARM PERMIT. DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN INDIVIDUAL CARRYING ALL CERTIFICATIONS REQUIRED BY THE AGENCY RESPONSIBLE FOR REVIEW AND APPROVAL.
- REQUIRED COMPONENTS THAT ARE NOT SHOWN ON DRAWINGS SUCH AS; RELAY MODULES MONITOR MODULES, BOOSTER PANELS, ANNUNCIATORS, ETC. ARE THE RESPONSIBILITY OF THIS CONTRACTOR AND ARE INCLUDED IN THIS SCOPE OF WORK.

- MECHANICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- 2. PLUMBING EQUIPMENT PROVIDED BY PLUMBING CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH PLUMBING REQUIREMENTS PRIOR TO ROUGH-IN.
- DEDICATED QUAD RECEPTACLE AS SHOWN.
- 4. HOT WATER CIRCULATION PUMP HARDWIRED CIRCUIT CONNECTION. COORDINATE LOCATION WITH PLUMBING CONTRACTOR. PRIOR TO ROUGH-IN. 5. UNIT WIRED TO TYPICAL "0B1" REFER TO PANEL SCHEDULE FOR LOAD DATA.
- 6. COORDINATE LOCATION AND REQUIREMENTS OF BUILDING CALL BOX, 2N
- 7. LOCATION OF FUTURE RADON, PROVIDE JUNCTION BOX FOR FUTURE RADON
- 8. 1732 VINE STREET MECHANICAL UNIT SHOWN FOR REFERENCE ONLY, REFER



RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION,

GENERAL NOTES-POWER

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- ALL CIRCUITS FOR ACTUAL EQUIPMENT TO BE CONNECTED.

FIRE ALARM - DELEGATED DESIGN

- 1. MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH
- 3. LOCATION OF BUILDING UTILITY DATA DEMARC. PROVIDE A 4'X4'X\frac{3}{4}" PLYWOOD
- BACKBOARD FOR DATA/PHONE UTILITIES. COORDINATE ALL REQUIREMENTS WITH OWNER, ARCHITECT, AND ALTA FIBER PRIOR TO ROUGH-IN. PROVIDE
- SEE UNIT 201 FOR CIRCUITRY LAYOUT.
- INTERCOM SYSTEM, WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- FAN, FAN NOT TO BE INSTALLED AT THIS TIME.
- TO 1732 VINE STREET ELECTRICAL PERMIT FOR CIRCUITRY INFORMATION.

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: PRS

Drawn by: AJW

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RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION, POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

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- FAN, FAN NOT TO BE INSTALLED AT THIS TIME.

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

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RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION, POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

GENERAL NOTES-OVERALL PROJECT

CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

GENERAL NOTES-POWER

- A. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONDUIT/CABLE ROUTING. COORDINATE ROUTING WITH ALL OTHER TRADES AND BUILDING
- B. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL SIZE REQUIRED BY NEC.
- C. PROVIDE MOTOR STARTERS FOR EQUIPMENT AS INDICATED ON DRAWINGS. COORDINATE ANY INTERLOCKING WIRING WITH HVAC CONTRACTOR AND PROVIDE WIRING, COILS, AND AUXILIARY CONTACTS AS NECESSARY. SIZE ALL CIRCUITS FOR ACTUAL EQUIPMENT TO BE CONNECTED.
- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.

FIRE ALARM - DELEGATED DESIGN

- A. COMPLY WITH PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA CONTAINED ON DRAWINGS. RESPONSIBILITY FOR PROVIDING A COMPLIANT. OPERATIONAL FIRE ALARM SYSTEM LIES WITH THIS CONTRACTOR. REFER TO ARCHITECT'S CODE SHEET FOR USE GROUP AND OCCUPANT INFORMATION WHEN PROVIDING THE FIRE ALARM DESIGN. VERIFY REQUIREMENTS
- THESE FIRE ALARM DRAWINGS SHOW THE INTENDED DEVICE LOCATIONS COORDINATED WITH ARCHITECT/OWNER, AND DEMONSTRATE COMPLIANCE WITH BUILDING CODES. INSTALLING CONTRACTOR SHALL FURNISH ALL REQUIRED DRAWINGS AND CALCULATIONS REQUIRED FOR FIRE ALARM PERMIT. DRAWINGS AND CALCULATIONS SHALL BE PREPARED BY AN INDIVIDUAL CARRYING ALL CERTIFICATIONS REQUIRED BY THE AGENCY RESPONSIBLE FOR REVIEW AND APPROVAL.

- 1. MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH MECHANICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH PLUMBING REQUIREMENTS PRIOR TO ROUGH-IN.
- BACKBOARD FOR DATA/PHONE UTILITIES. COORDINATE ALL REQUIREMENTS DEDICATED QUAD RECEPTACLE AS SHOWN.
- 4. HOT WATER CIRCULATION PUMP HARDWIRED CIRCUIT CONNECTION. COORDINATE LOCATION WITH PLUMBING CONTRACTOR. PRIOR TO ROUGH-IN.
- 6. COORDINATE LOCATION AND REQUIREMENTS OF BUILDING CALL BOX, 2N
- 7. LOCATION OF FUTURE RADON, PROVIDE JUNCTION BOX FOR FUTURE RADON
- 8. 1732 VINE STREET MECHANICAL UNIT SHOWN FOR REFERENCE ONLY, REFER



A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF

- CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM
- BEING CONNECTED PRIOR TO ROUGH-IN. OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER
- G. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR ALL DEVICE MOUNTING
- H. CONTRACTOR TO PROVIDE GROUNDING AND BONDING AS REQUIRED FOR ELECTRICAL SYSTEMS. GROUNDING AND BONDING IS CONSIDERED MEANS AND METHODS OF CONSTRUCTION, AND SHOULD BE COMPLETED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC 250. GAS PIPING SYSTEMS MUST BE BONDED PER UTILITY PROVIDER'S INSTALLATION GUIDELINES WHERE REQUIRED.
- ELECTRICAL RECEPTACLES ON OPPOSITE SIDES OF A WALL ARE TO BE SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD BETWEEN BOXES.

- SPECIFIC TO PROJECT LOCALITY AND INCLUDE IN SCOPE.
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- 2. PLUMBING EQUIPMENT PROVIDED BY PLUMBING CONTRACTOR, WIRED BY
- 3. LOCATION OF BUILDING UTILITY DATA DEMARC. PROVIDE A 4'X4'X³/₄" PLYWOOD
- WITH OWNER, ARCHITECT, AND ALTA FIBER PRIOR TO ROUGH-IN. PROVIDE
- 5. UNIT WIRED TO TYPICAL "0B1" REFER TO PANEL SCHEDULE FOR LOAD DATA. SEE UNIT 201 FOR CIRCUITRY LAYOUT.
- INTERCOM SYSTEM, WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.
- FAN, FAN NOT TO BE INSTALLED AT THIS TIME.
- TO 1732 VINE STREET ELECTRICAL PERMIT FOR CIRCUITRY INFORMATION.

Job No: 22042 8/10/2022

Progress Dates

Revisions

Checked By: PRS

Drawn by: AJW

ENGINEERED

TEAMWORK COLLABORATION SHARED SUCCESS

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Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: PRS

Drawn by: AJW

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SCOPE OF WORK

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GENERAL NOTES-LIGHTING

- A. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR DIMENSIONED LOCATIONS OF LIGHT FIXTURES.
- B. PROVIDE HOLD-ON-TYPE BREAKERS FOR EGRESS/EMERGENCY LIGHTING CIRCUITS. WIRE ALL EGRESS/EMERGENCY FIXTURES AHEAD OF ANY LOCAL SWITCHING.
- C. LIGHT FIXTURES CONTROLLED BY SWITCH IN SAME ROOM UNLESS OTHERWISE NOTED.
- D. WHERE DIMMERS AND/OR DIMMING SYSTEMS ARE REQUIRED, CONTRACTOR TO FURNISH DIMMERS THAT ARE COMPATIBLE WITH FIXTURE SOURCE AND RATED FOR THE WATTAGE OF THE DIMMING ZONE. PROVIDE ADDITIONAL DIMMERS AS REQUIRED TO MEET ZONE LOAD REQUIREMENTS.
- E. ELECTRICAL SWITCHES ON OPPOSITE SIDES OF A WALL ARE TO BE SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD BETWEEN
- WHERE APPLICABLE, PROVIDE TOGGLE STYLE LIGHT SWITCHES.

★ KEYED SHEET NOTES

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- 2. CORRIDOR LIGHTS TO BE CONTROLLED BY OCCUPANCY SENSOR UNLESS OTHERWISE NOTED.
- 3. EXTERIOR LIGHTING ON PHOTOCELL. CONFIRM LOCATION OF PHOTOCELL DEVICE WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

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A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

GENERAL NOTES-LIGHTING

- A. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR DIMENSIONED LOCATIONS OF LIGHT FIXTURES.
- B. PROVIDE HOLD-ON-TYPE BREAKERS FOR EGRESS/EMERGENCY LIGHTING CIRCUITS. WIRE ALL EGRESS/EMERGENCY FIXTURES AHEAD OF ANY LOCAL SWITCHING.
- C. LIGHT FIXTURES CONTROLLED BY SWITCH IN SAME ROOM UNLESS OTHERWISE NOTED.
- D. WHERE DIMMERS AND/OR DIMMING SYSTEMS ARE REQUIRED, CONTRACTOR TO FURNISH DIMMERS THAT ARE COMPATIBLE WITH FIXTURE SOURCE AND RATED FOR THE WATTAGE OF THE DIMMING ZONE. PROVIDE ADDITIONAL DIMMERS AS REQUIRED TO MEET ZONE LOAD REQUIREMENTS.
- E. ELECTRICAL SWITCHES ON OPPOSITE SIDES OF A WALL ARE TO BE SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD BETWEEN
- WHERE APPLICABLE, PROVIDE TOGGLE STYLE LIGHT SWITCHES.

★ KEYED SHEET NOTES

- MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH MECHANICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- 2. CORRIDOR LIGHTS TO BE CONTROLLED BY OCCUPANCY SENSOR UNLESS OTHERWISE NOTED.
- 3. EXTERIOR LIGHTING ON PHOTOCELL. CONFIRM LOCATION OF PHOTOCELL DEVICE WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: PRS

Drawn by: AJW **ENGINEERED**

TEAMWORK COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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itecture + design

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Progress Dates

05/26/2023 BID/PERMIT
08/30/2024 BID SET 2

Revisions

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FOR | 1730 Vine St / 1730 Vine St /

RENOVATION FOR 1726 Vine St / 1728 Vi 1675 Hamer St

Job No: 22042 8/10/2022

E2.02

RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION, POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

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+ design

LDER STREET 4TH FLOOR | CINCIN

Progress Dates

05/26/2023 BID/PERMIT
08/30/2024 BID SET 2

Revisions

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ENGINEERED BUILDING SYSTEMS INC.

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St / 1728 Vine St / 1730 Vine St / St

ENOV. 726 Vi 675 Ha

Job No: 22042 8/10/2022

E2.03



GENERAL NOTES-DWELLING UNITS

- A. PROVIDE AFCI PROTECTION IN ACCORDANCE WITH NEC 210.12. AFCI PROTECTION MUST BE PROVIDED WHERE EXISTING BRANCH CIRCUIT WIRING IS MODIFIED, OR RECEPTACLES ARE REPLACED, IN ACCORDANCE WITH NEC AND LOCAL ELECTRICAL INSPECTION REQUIREMENTS. REFER TO NEC 406.4 (D) AND NEC 210.12 (D)
- B. FURNISH AND INSTALL SMOKE DETECTORS AS REQUIRED BY CODE. SMOKE DETECTORS SHOWN ON EBS DRAWINGS ARE INTENDED TO CONVEY GENERAL COMPLIANCE FOR BUILDING DEPARTMENT SUBMITTALS. PROVIDE INTERWIRING BETWEEN SMOKE DETECTORS LOCATED IN THE SAME UNIT. SMOKE DETECTORS SHALL BE HARD WIRED WITH BATTERY BACK-UP. FIRE ALARM AND/OR SMOKE DETECTOR SYSTEMS ARE FURNISHED ON A DESIGN-BUILD BASIS BY THE ELECTRICIAN.
- C. WHERE CIRCUITING IS SHOWN TYPICAL FOR MULTIPLE UNITS, COORDINATE BREAKER/WIRE SIZES FOR EQUIPMENT FURNISHED BY OTHERS WITH SHOP DRAWINGS PROVIDED BY THE CONTRACTOR SUPPLYING THE EQUIPMENT. VERIFY BREAKER/WIRE SIZES FOR EQUIPMENT OR APPLIANCE FOR EACH UNIT PRIOR TO ROUGH-IN.
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SCOPE OF WORK

RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION, POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

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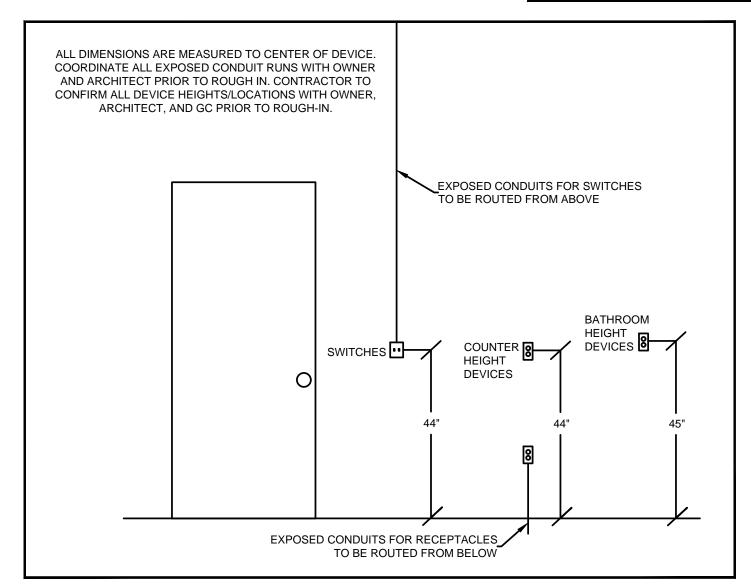
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- PROVIDE HARD-WIRED SMOKE DETECTORS WITH BATTERY BACK-UP AS REQUIRED. ONE SMOKE DETECTOR IN EACH UNIT MUST BE A SMOKE/CO
- 6. DISHWASHER MUST BE GFCI PROTECTED PER NEC 210.8(D) RECEPTACLE
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LOCATION WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN.

- 10. COORDINATE LOCATION OF UNIT PANEL WITH BATHROOM MEDICINE CABINET
- 11. ADA UNITS SHALL HAVE SINGLE HOOD CONTROLLED BY SWITCH, COORDINAT SWITCH LOCATION WITH GENERAL CONTRACTOR AND ARCHITECT.
- 12. ADA UNIT MICROWAVE SHALL BE MOUNTED UNDER THE COUNTER. REFER TO CABINET DETAIL SHEET FOR REQUIRED DEVICE LOCATION.

GENERAL NOTES-POWER

- A. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONDUIT/CABLE ROUTING. COORDINATE ROUTING WITH ALL OTHER TRADES AND BUILDING
- B. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC.
- C. PROVIDE MOTOR STARTERS FOR EQUIPMENT AS INDICATED ON DRAWINGS. COORDINATE ANY INTERLOCKING WIRING WITH HVAC CONTRACTOR AND PROVIDE WIRING, COILS, AND AUXILIARY CONTACTS AS NECESSARY. SIZE ALL CIRCUITS FOR ACTUAL EQUIPMENT TO BE CONNECTED.
- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT BEING CONNECTED PRIOR TO ROUGH-IN, OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.
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STANDARD MOUNTING HEIGHTS



Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

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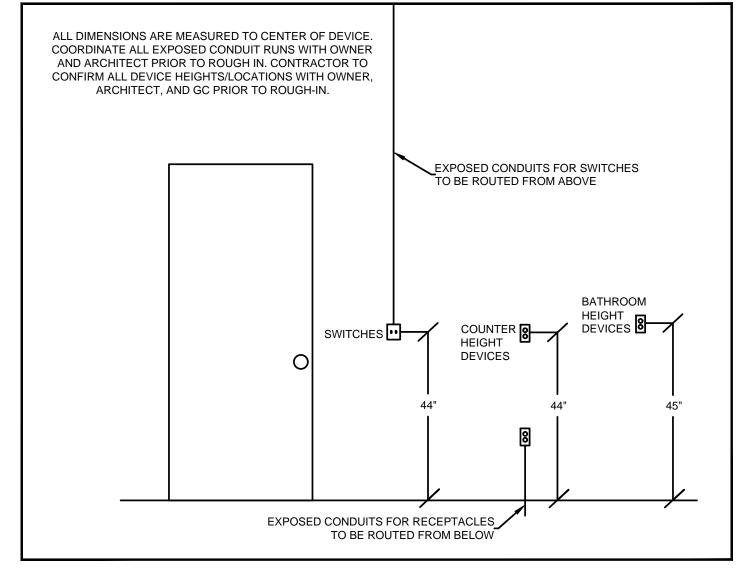
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STANDARD MOUNTING HEIGHTS



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202 W FIDER ST

Progress Dates

05/26/2023 BID/PERMIT
08/30/2024 BID SET 2

Revisions

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TEAMWORK COLLABORATION
SHARED SUCCESS
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IN FOR: / 1728 Vine St / 1730 Vine St / St L OH, 45202

RENOVATION FO 1726 Vine St / 172 Hamer St

Job No: 22042

E3.01A

STANDARD MOUNTING HEIGHTS

KEYED SHEET NOTES

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- 2. DUCTLESS INDOOR UNIT POWERED FROM OUTDOOR UNIT. CONFIRM LOCATION AND DISCONNECTING MEANS WITH INSTALLING CONTRACTOR.
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- 4. PROVIDE SWITCH AND CONNECTION FOR CONTINUOUSLY RUNNING 2-SPEED BATHROOM FAN. VERIFY REQUIREMENTS WITH MECHANICAL CONTRACTOR 5. PROVIDE HARD-WIRED SMOKE DETECTORS WITH BATTERY BACK-UP AS
- REQUIRED. ONE SMOKE DETECTOR IN EACH UNIT MUST BE A SMOKE/CO DETECTOR COMBO.
- 6. DISHWASHER MUST BE GFCI PROTECTED PER NEC 210.8(D) RECEPTACLE
- SHALL BE LOCATED IN AN ACCESSIBLE LOCATION. 7. MICROWAVE RECEPTACLE LOCATED IN CABINET ABOVE, COORDINATE
- LOCATION WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN.
- 8. UNIT WIRED TO TYPICAL "0B1" REFER TO PANEL SCHEDULE FOR LOAD DATA. SEE UNIT 201 FOR CIRCUITRY LAYOUT.
- 9. INSTALL FIOPTIC 4-GANG AND QUAD OUTLET IN CABINET ABOVE REFRIGERATOR AS SHOWN.
- 10. COORDINATE LOCATION OF UNIT PANEL WITH BATHROOM MEDICINE CABINET AND ARCHITECT.
- 11. ADA UNITS SHALL HAVE SINGLE HOOD CONTROLLED BY SWITCH, COORDINATE SWITCH LOCATION WITH GENERAL CONTRACTOR AND ARCHITECT.
- 12. ADA UNIT MICROWAVE SHALL BE MOUNTED UNDER THE COUNTER. REFER TO CABINET DETAIL SHEET FOR REQUIRED DEVICE LOCATION.

GENERAL NOTES-DWELLING UNITS

- A. PROVIDE AFCI PROTECTION IN ACCORDANCE WITH NEC 210.12. AFCI PROTECTION MUST BE PROVIDED WHERE EXISTING BRANCH CIRCUIT WIRING IS MODIFIED, OR RECEPTACLES ARE REPLACED, IN ACCORDANCE WITH NEC AND LOCAL ELECTRICAL INSPECTION REQUIREMENTS. REFER TO NEC 406.4 (D) AND NEC 210.12 (D)
- B. FURNISH AND INSTALL SMOKE DETECTORS AS REQUIRED BY CODE. SMOKE DETECTORS SHOWN ON EBS DRAWINGS ARE INTENDED TO CONVEY GENERAL COMPLIANCE FOR BUILDING DEPARTMENT SUBMITTALS. PROVIDE INTERWIRING BETWEEN SMOKE DETECTORS LOCATED IN THE SAME UNIT. SMOKE DETECTORS SHALL BE HARD WIRED WITH BATTERY BACK-UP. FIRE ALARM AND/OR SMOKE DETECTOR SYSTEMS ARE FURNISHED ON A DESIGN-BUILD BASIS BY THE ELECTRICIAN.
- C. WHERE CIRCUITING IS SHOWN TYPICAL FOR MULTIPLE UNITS, COORDINATE BREAKER/WIRE SIZES FOR EQUIPMENT FURNISHED BY OTHERS WITH SHOP DRAWINGS PROVIDED BY THE CONTRACTOR SUPPLYING THE EQUIPMENT. VERIFY BREAKER/WIRE SIZES FOR EQUIPMENT OR APPLIANCE FOR EACH UNIT PRIOR TO ROUGH-IN.
- D. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR DIMENSIONED LOCATIONS OF ALL LIGHT FIXTURES.
- E. PROVIDE CONDUIT AND PULL STRING TO APPROVED LOCATION FOR VOICE, DATA, AND CATV CABLES.
- F. CIRCUITING ON DRAWINGS AND PANEL SCHEDULE IS SHOWN TYPICAL FOR SIMILAR UNITS. REFER TO DWELLING UNIT LOAD SUMMARIES FOR INDIVIDUAL DWELLING UNIT LOAD CALCULATIONS
- G. COORDINATE RECEPTACLE, PHONE, AND TV DEVICE PLACEMENT WITH FURNITURE LOCATIONS. VERIFY WITH ARCHITECT PRIOR TO ROUGH IN. LOCATIONS SHOWN ON DRAWINGS ARE INTENDED TO CONVEY DESIGN INTENT, AND DEMONSTRATE GENERAL COMPLIANCE WITH CODE. WHERE ACTUAL STUD LOCATIONS REQUIRE DEVICE LOCATIONS TO BE ADJUSTED, ADDED OR MINOR VARIATIONS AMONG UNITS THAT ARE SHOWN AS "TYPICAL" ETC. OCCUR, CONTRACTOR, UNDER HIS BASE BID, TO MAKE NECESSARY ADJUSTMENTS / ADDITIONS IN THE FIELD TO MAINTAIN NEC DWELLING UNIT RECEPTACLE SPACING REQUIREMENTS. WHERE ACTUAL WINDOW CONSTRUCTION PROHIBITS THE INSTALLATION OF A WALL RECEPTACLE, PROVIDE FLOOR RECEPTACLE WITHIN 18 INCHES OF THE BASE OF THE WALL PROVIDE TAMPER PROOF RECEPTACLES AS REQUIRED BY NEC ART. 406.12

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SCOPE OF WORK

RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION. POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

GENERAL NOTES-OVERALL PROJECT

A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

GENERAL NOTES-LIGHTING

- A. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR DIMENSIONED LOCATIONS OF LIGHT FIXTURES.
- B. PROVIDE HOLD-ON-TYPE BREAKERS FOR EGRESS/EMERGENCY LIGHTING CIRCUITS. WIRE ALL EGRESS/EMERGENCY FIXTURES AHEAD OF ANY LOCAL SWITCHING
- . LIGHT FIXTURES CONTROLLED BY SWITCH IN SAME ROOM UNLESS OTHERWISE NOTED.
- D. WHERE DIMMERS AND/OR DIMMING SYSTEMS ARE REQUIRED, CONTRACTOR TO FURNISH DIMMERS THAT ARE COMPATIBLE WITH FIXTURE SOURCE AND RATED FOR THE WATTAGE OF THE DIMMING ZONE. PROVIDE ADDITIONAL DIMMERS AS REQUIRED TO MEET ZONE LOAD REQUIREMENTS.
- E. ELECTRICAL SWITCHES ON OPPOSITE SIDES OF A WALL ARE TO BE SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD BETWEEN
- F. WHERE APPLICABLE, PROVIDE TOGGLE STYLE LIGHT SWITCHES.

GENERAL NOTES-POWER

- A. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONDUIT/CABLE ROUTING. COORDINATE ROUTING WITH ALL OTHER TRADES AND BUILDING CONDITIONS.
- C. PROVIDE MOTOR STARTERS FOR EQUIPMENT AS INDICATED ON DRAWINGS. COORDINATE ANY INTERLOCKING WIRING WITH HVAC CONTRACTOR AND PROVIDE WIRING, COILS, AND AUXILIARY CONTACTS AS NECESSARY. SIZE ALL CIRCUITS FOR ACTUAL EQUIPMENT TO BE CONNECTED.
- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT BEING CONNECTED PRIOR TO ROUGH-IN, OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER
- G. REFER TO ARCHITECT'S PLANS AND ELEVATIONS FOR ALL DEVICE MOUNTING
- H. CONTRACTOR TO PROVIDE GROUNDING AND BONDING AS REQUIRED FOR ELECTRICAL SYSTEMS. GROUNDING AND BONDING IS CONSIDERED MEANS AND METHODS OF CONSTRUCTION, AND SHOULD BE COMPLETED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC 250. GAS PIPING SYSTEMS MUST BE BONDED PER UTILITY PROVIDER'S INSTALLATION GUIDELINES WHERE REQUIRED.
- ELECTRICAL RECEPTACLES ON OPPOSITE SIDES OF A WALL ARE TO BE

- B. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC.

- MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER
- SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.
- SPACED SO THAT THEIR ELECTRICAL BOX ARE A MINIMUM OF ONE STUD BETWEEN BOXES.

Job No: 22042

Progress Dates

Checked By: PRS

ENGINEERED

COLLABORATION

SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH

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Drawn by: AJW

TEAMWORK

05/26/2023 BID/PERMIT

08/30/2024 BID SET 2

RANGE GFCI

FRIG. 0

I-BEDROOM APARTMENT

203

2HR - 2HR -

3-BEDROOM APARTMENT

UNIT 222

APARTMENT

SCALE: 1/4" = 1'-0" ELECTRICAL POWER UNIT PLAN - PARTIAL SECOND FLOOR

GENERAL NOTES-DWELLING UNITS

- A. PROVIDE AFCI PROTECTION IN ACCORDANCE WITH NEC 210.12. AFCI PROTECTION MUST BE PROVIDED WHERE EXISTING BRANCH CIRCUIT WIRING IS MODIFIED, OR RECEPTACLES ARE REPLACED, IN ACCORDANCE WITH NEC AND LOCAL ELECTRICAL INSPECTION REQUIREMENTS. REFER TO NEC 406.4 (D) AND NEC 210.12 (D)
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 C. WHERE CIRCUITING IS SHOWN TYPICAL FOR MULTIPLE UNITS, COORDINATE BREAKER/WIRE SIZES FOR EQUIPMENT FURNISHED BY OTHERS WITH SHOP DRAWINGS PROVIDED BY THE CONTRACTOR SUPPLYING THE EQUIPMENT. VERIFY BREAKER/WIRE SIZES FOR EQUIPMENT OR APPLIANCE FOR EACH UNIT
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- C. LIGHT FIXTURES CONTROLLED BY SWITCH IN SAME ROOM UNLESS OTHERWISE NOTED.
- D. WHERE DIMMERS AND/OR DIMMING SYSTEMS ARE REQUIRED, CONTRACTOR TO FURNISH DIMMERS THAT ARE COMPATIBLE WITH FIXTURE SOURCE AND RATED FOR THE WATTAGE OF THE DIMMING ZONE. PROVIDE ADDITIONAL DIMMERS AS REQUIRED TO MEET ZONE LOAD REQUIREMENTS.
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AND ARCHITECT.

PRIOR TO ROUGH-IN.

- MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH MECHANICAL REQUIREMENTS PRIOR TO ROUGH-IN.
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- 6. DISHWASHER MUST BE GFCI PROTECTED PER NEC 210.8(D) RECEPTACLE SHALL BE LOCATED IN AN ACCESSIBLE LOCATION.
- 7. MICROWAVE RECEPTACLE LOCATED IN CABINET ABOVE, COORDINATE LOCATION WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN.

8. UNIT WIRED TO TYPICAL "0B1" REFER TO PANEL SCHEDULE FOR LOAD DATA.

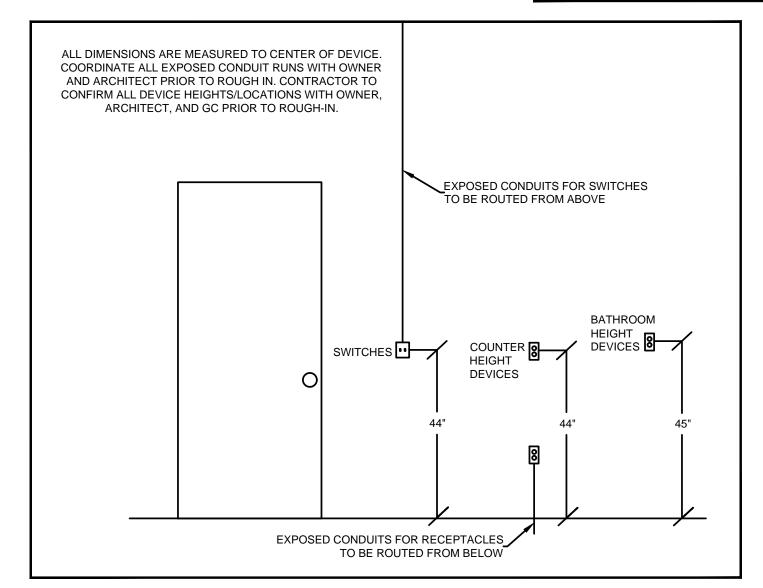
- SEE UNIT 201 FOR CIRCUITRY LAYOUT.

 9. INSTALL FIOPTIC 4-GANG AND QUAD OUTLET IN CABINET ABOVE
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- D. ALL PANELS AND DISCONNECTS LOCATED OUTDOORS SHALL BE LABELED NEMA 3R.
- E. ROOF MOUNTED AND OUTDOOR EQUIPMENT SHALL HAVE 120V RECEPTACLE MOUNTED WITHIN 25' OF EACH PIECE. RECEPTACLES SHALL BE IN WEATHER PROOF BOX AND HAVE GFCI PROTECTION.
- F. FOR ITEMS FURNISHED BY OTHER TRADES, ELECTRICAL CONTRACTOR TO FULLY COORDINATE BREAKER AND WIRE SIZES WITH ACTUAL EQUIPMENT BEING CONNECTED PRIOR TO ROUGH-IN, OR INSTALLATION. THE SIZES ON PANEL SCHEDULES REFER TO BASIS OF DESIGN SELECTIONS, AND ACTUAL ITEMS MAY DEVIATE FROM BASIS OF DESIGN. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONFIRM REQUIRED WIRE AND BREAKER SIZES WITH THE CONTRACTOR FURNISHING THE EQUIPMENT.
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STANDARD MOUNTING HEIGHTS



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202 W. ELDER STREET 4TH

Progress Dates

05/26/2023 BID/PERMIT
08/30/2024 BID SET 2

Revisions

Checked By: PRS

Drawn by: AJW



TEAMWORK COLLABORATION
SHARED SUCCESS
515 Monmouth Street, Suite 204
Newport, KY 41071 (859) 261-0585
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FOR 1728 Vine St / 1730 Vine St /

ENOVATION FOR 726 Vine St / 1728 675 Hamer St

Job No: 22042

E3.02A

GENERAL NOTES-DWELLING UNITS

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SCOPE OF WORK

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- D. WHERE DIMMERS AND/OR DIMMING SYSTEMS ARE REQUIRED, CONTRACTOR TO FURNISH DIMMERS THAT ARE COMPATIBLE WITH FIXTURE SOURCE AND RATED FOR THE WATTAGE OF THE DIMMING ZONE. PROVIDE ADDITIONAL
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- F. WHERE APPLICABLE, PROVIDE TOGGLE STYLE LIGHT SWITCHES.

⟨𝔻⟩ KEYED SHEET NOTES

- MECHANICAL EQUIPMENT PROVIDED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH MECHANICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- 2. DUCTLESS INDOOR UNIT POWERED FROM OUTDOOR UNIT. CONFIRM LOCATION AND DISCONNECTING MEANS WITH INSTALLING CONTRACTOR.
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- LOCATION WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN.

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 10. COORDINATE LOCATION OF UNIT PANEL WITH BATHROOM MEDICINE CABINET
- AND ARCHITECT.

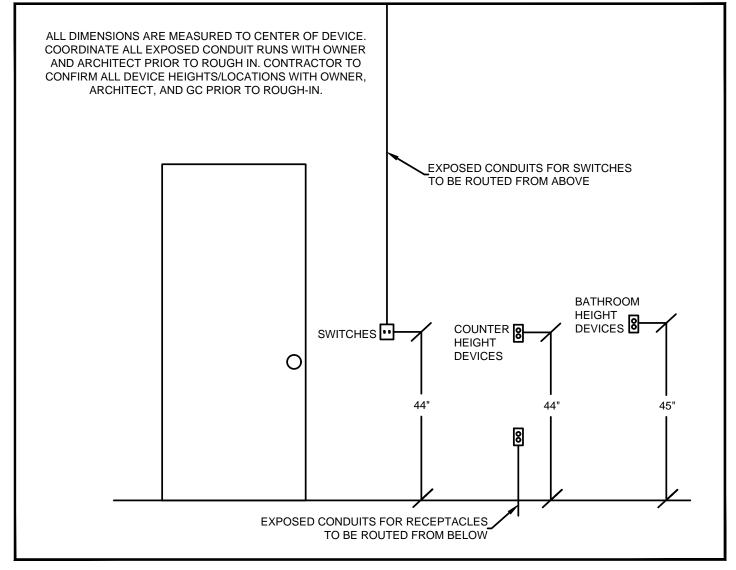
 11. ADA UNITS SHALL HAVE SINGLE HOOD CONTROLLED BY SWITCH, COORDINATE
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STANDARD MOUNTING HEIGHTS



05/26/2023 BID/PERMIT

08/30/2024 BID SET 2

Progress Dates

Revisions

Checked By: PRS

Drawn by: AJW



SHARED SUCCESS
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> ON FOR St / 1728 Vine St / 1730 Vine St / · St

RENOVATION FOR 1726 Vine St / 1716 Hamer St

Job No: 22042

E3.02B

General Demolition

a. Refer to architectural drawings, general notes, instructions to bidders, general conditions, supplementary general conditions, base building specifications and drawings, shop drawing manuals and as-built plans, except as noted herein, which apply in all respects to this section. The contractor shall visit the site and familiarize himself with all existing conditions prior to bidding the work

2. Use of Drawings And Specifications

a. EBS drawings and specifications are intended to convey design intent only. All means and methods sequences, techniques, and procedures of construction as well as any associated safety precautions and programs, and all incidental and temporary devices required to construct the project, and to provide a complete and fully operational electrical system are the responsibility of the electrical

Standards

a. Materials equipment and materials shall conform with appropriate provisions of NEC, ASTM, UL, ETL, NEMA, ANSI, as applicable to each individual unit or

4. Codes

a. All work shall be performed in strict accordance with all applicable state and local codes and ordinances. In case of conflict between the drawings/specifications and the codes and ordinances, the highest standard shall apply. The electrical contractor shall satisfy code requirements as a minimum standard without any extra cost to owner.

5. Permits and Fees

a. The electrical contractor shall procure and pay for all permits, fees and inspections necessary to complete the electrical work. Warrantv

a. The electrical contractor shall unconditionally warrant all work to be free of defects in material and workmanship for a period of one (1) year from the date of final acceptance, and will repair or replace any defective work promptly and without charge and restore any other existing work damaged in the course of repairing defective materials and workmanship.

7. Site Examination

- a. The electrical contractor shall thoroughly examine all areas of work where equipment will be installed and shall report any condition that, in his opinion, prevents the proper installation of the electrical work prior to bid. He shall also examine the drawings and specifications of other branches of work making reference to them for details of new or existing building conditions.
- b. All work shall be done at times convenient to the owner and only during normal working hours, unless specified otherwise.
- c. Electrical contractor shall take his own measurements and be responsible for
- d. Access panels are not shown on drawings. During site examination, contractor

shall identify all areas where access panels are required, and report to general contractor. Designation of who furnishes and who installs access panels must be coordinated with general contractor prior to starting work.

8. Contractor Coordination

a. The electrical drawings and specifications convey design intent only. Means and methods, sequences, techniques, and procedures of construction as well as any associated safety precautions and programs, and all incidental and temporary devices required to construct the project are the responsibility of the electrical

b. All systems installed by each sub-contractor shall be coordinated with one another and approved by general contractor/construction manager, etc. prior to installation and/or fabrication. Where the electrical contractor is making a connection to equipment/components that are furnished by others, electrical contractor to verify all connection requirements with actual equipment being connected, including but not limited to OCP size, means of disconnect, special connection requirements, or other items indicated on shop drawings, or manufacturer's installation instructions and/or installation diagrams, and furnish all labor and materials required for the installation and operation of the equipment. No allowances will be made for failure to coordinate, after electrical connections have been installed.

- c. If questions concerning design intent arise during coordination, EBS can assist where appropriate.
- d. The architectural drawings shall take precedence over all other drawings. Do not scale distances off the electrical drawings; use actual building dimensions.
- e. Coordination drawings showing system and component installation layout, routing, details, etc. shall be produced by the electrical contractor and under the supervision of the general contractor/construction manager, or appropriate party as applicable. All systems installed by each sub-contractor shall be coordinated with one another and approved by general contractor/construction manager, etc. prior to installation and/or fabrication. If questions concerning design intent arise during coordination, EBS can assist where appropriate.

9. Utility Coordination

a. Electrical contractor to verify installation of metering and utility demarcation equipment with utility provider prior to start of work and furnish and install required items per utility company's installation requirements and/or manuals.

10. Submittals

a. Products installed by the electrical contractor and provided by others must be submitted for review prior to purchasing. Products shall not be selected based on permit drawings without express permission - products shall be selected based on construction drawings.

11. Record Drawing

a. The electrical contractor shall be responsible for creating record drawings where required. Drawings shall be produced in Autocad 2004 format or later.

Shop Drawings

a. Submit to the architect pdf file copies of complete & certified shop drawings, descriptive data, performance data & ratings, diagrams and specifications on all specified equipment, including accessories, and materials for review.

b. The make, model number, type, finish & accessories of all equipment and materials shall be reviewed & approved by the electrical contractor & general contractor prior to submitting to the architect for their review & approval. c. Review of shop drawings does not relieve the electrical contractor/vendor from

compliance with the requirements of the contract drawings, specifications & applicable codes.

a. All electrical systems shall be tested for proper operation. Balance all branch circuit loads between the phases of the system to within 10% of the highest phase load in each panelboard.

14. Temporary Power

a. The electrical contractor shall provide temporary electrical wiring for construction. The temporary service shall be a minimum of 60 amps, single phase, three wire, 120/208 volts fused at main disconnect. All receptacles on this temporary service shall be protected by a GFI breaker.

a. All final connections to mechanical equipment shall be done by the electrical

contractor. 16. Demolition

demolition areas to insure a safe condition. Electrical devices and associated wiring located within the demolition area that will no longer be used shall be

removed and properly disposed of at contractor's expense unless otherwise 17. Power Outages a. The electrical contractor shall schedule all electrical system(s) outages with the

a. The electrical contractor shall be responsible for deenergizing circuits in

otherwise all outages shall occur between 11:00pm and 5:00am.

18. Grounding and Bonding a. Contractor to provide grounding and bonding as required for electrical systems. Grounding and bonding is considered means and methods of construction, and should be completed by the electrical contractor in accordance with NEC 250.

b. Any gas piping systems must be bonded per utility provider's installation

general contractor and owner at least 24 hours in advance. Unless approved

guidelines where required.

a. Provide all new material and equipment unless noted otherwise. All equipment shall be UL approved and labeled, or other approved testing organization which has acceptance by the local jurisdiction, for the purpose for which they are used, in addition to meeting all requirements of the current applicable codes and regulations. No substitution to materials specified will be allowed unless approved

b. Electrical contractor shall not order or purchase any materials or equipment until permit drawings have been approved. No allowances will be made for any changes that occur if permit drawings have not been approved prior to ordering.

a. Perform cutting, coring, fitting, repairing and finishing of the work necessary for the installation of the equipment of this section. However, no cutting of the work of other trades or of any structural member shall be done without the consent of the owner. Properly fill, seal, fireproof, and waterproof all openings, sleeves, and holes in slabs, walls, and casework.

21. Wiring Methods

20. Cutting and Fitting

a. Provide code approved wiring methods for branch circuiting indoors, such as NM cable (only where permitted by NEC 334), EMT conduit, or MC cable for mechanical equipment, lighting, and power.

- b. Conduit runs on exterior of building shall be rigid steel conduit with weather tight, corrosion-resistant fittings. Schedule 40 PVC is acceptable where permitted by code and or underground runs or concrete encasement where not exposed to physical damage.
- c. The minimum size of conduit shall be 3/4" unless otherwise noted. Conduit connectors shall be double locknut type, UL listed and labeled, with compression or set screw fittings.

d. Rigid conduit shall be hot dipped galvanized.

e. Where raceways are installed for others to use, or for future use, provide nylon

f. Penetrations through fire rated construction shall be sealed using 3M fire barrier caulk, Nelson Electric Flameseal or T&B Flamesafe or other approved method. 22. Conductors and Terminations

a. Branch conductors shall be copper, feeders as indicated on riser diagram. Conductors shall be insulated for 600v number 12 AWG minimum. Provide wires and cables as indicated listed and suitable for temperature, conditions, and location where installed.

23. Motors and Other Wiring

- a. The electrical contractor shall provide all required conduit, wiring, and safety switches for all motors, and other electrical equipment, even though the motors and electrical equipment may be supplied by others. The electrical contractor shall include all work and connections required to make the system complete and operational. Provide magnetic starters for equipment as indicated on the
- b. The electrical equipment may include but not be limited to such items as grille motors and interlocks, exterior and interior signage, starting devices, motor controllers, float switches, alarm devices or systems, push buttons, exhaust fans, data systems, intercoms and stereo systems. The electrical contractor shall verify equipment location and sizes with the trade supplying the equipment before installing the conduit or outlets.

a. Hubbell, Leviton, or approved equal with matching coverplates.

b. Provide specification grade wiring devices, in types, characteristics, grades, colors, and electrical ratings for applications indicated, which are UL-listed and which comply with NEMA WD1 and other applicable UL and NEMA standards. Verify color selections with architect. Provide device plates to match device

c. Provide GFCI protection for all kitchen 15 and 20-amp receptacles. Where the receptacle is rendered inaccessible by equipment provide GFCI protection at the

25. Service entrance and distribution equipment

a. Electrical contractor must submit drawings for permit and receive approval prior to ordering equipment. No allowances will be made for equipment changes that occur prior to receipt of approved plans.

26. Disconnects and Fused Switches

a. Heavy duty type, horsepower rated with interlocking cover. NEMA 1 typical. Outdoor and wet location switches shall be raintight type NEMA 3Rr. All switches shall be lockable. Fuses in circuits rated at 600 amperes or less shall be UL class RK1 dual-element, time-delay, current limiting fuses. Fuses in circuits rated at 601 amperes or larger shall be UL class I time-delay, current limiting fuses.

27. Nameplates

a. Provide permanent nameplate labeling on all disconnects. Include load served, voltage, phase, horsepower, fuse size, and type.

28. Mounting

a. Mount independent of the mechanical unit housing unless specifically accepted by the local code authority. Provide Unistrut support channels mounted in coordination with roof penetration and patching work. Coordinate with general contractor.

29. Grounding and bonding for electrical systems and equipment

a. Provide grounding and bonding for electrical service in accordance with NEC article 250.

b. All major parts not carrying current, including but not limited to, secondary feeder circuit, equipment and panelboard enclosures, pull and junction boxes, shall be properly grounded. Metallic raceways shall utilize double locknuts and other fittings as required to provide ground continuity.

30. Multi-tenant Meter Centers

a. Provide meter centers(s) as shown on the drawings and as specified herein. Meter centers shall have main lugs only or main breakers as required, and shall have branch breaker installed for each meter socket. Meter centers shall be Eaton, Square D, GE by ABB, or equal, and shall be of the same manufacture as load centers or panelboards served. Meter centers shall be enclosed NEMA 1, NEMA 3R as required. Final configuration (number of meters per section, end-main/center-main, etc. shall be determined by contractor. All bussing must be rated for the loads served. Meter centers shall be rated to withstand the available fault current.

31. Panelboards

a. Provide branch circuit panelboard(s) as shown on the drawings and as specified herein. Panelboards shall have bolted, thermal and magnetic breakers with main

lugs only or main breakers as required. Panelboards shall be Eaton, Square D, GE by ABB, or equal, and be enclosed in NEMA 1 type housing unless noted otherwise. Enclosure(s) shall be complete with a hinged door, cylinder lock, and a neatly typed directory under plastic cover in each panel door. All multiple pole breakers shall have a common trip handle. All panels and breakers shall be rated to withstand available fault current.

32. Residential Load Centers

a. Provide load centers as shown on drawings and as specified herein. Load centers shall be Eaton, Square D, GE by ABB, or equal. Load centers shall contain a neatly typed directory in each door. All multiple pole breakers shall have a common trip handle. All panels and breakers shall be rated to withstand available fault current. Load centers may be used in areas other than dwelling units where appropriate and where approved by Owner's representative.

- a. Provide a new lighting system complete and fully operational and in conformance with code and UL listing requirements. Clean all fixtures at time of job completion utilizing manufacturers approved or recommended cleaning solutions. All fixtures and lamps are provided by this contractor as scheduled unless noted otherwise. Contractor shall furnish all boxes, mounting kits, transformers, controllers, and other components necessary for a complete and fully functional installation.
- b. Where dimmers and/or dimming systems are required, contractor to furnish dimmers that are compatible with fixture source and rated for the wattage of the dimming zone. Provide additional dimmers as required to meet zone load requirements.

34. Telephone System

a. Telephone wiring and system provided by owner. Verify system requirements and rough-in locations with owner prior to start of construction. Electrical contractor shall provide plaster ring and pull string from each device location to above accessible ceiling.

35. Security System Notes a. Security wiring and system provided by owner. Verify system requirements and rough-in locations with owner prior to start of construction. Provide power for owner's head-end equipment and remote power for secure doors as required.

36. Data/Pos/A-V/System Notes a. Data, POS and/or A-V wiring and systems provided by owner. Verify system

requirements and rough-in locations with owner prior to start of construction. Electrical contractor shall provide plaster ring and pull string from each device location to above accessible ceiling.

a. Fire alarm system to be design-build by contractor. Contractor shall provide all required drawings and submit to authorities. Refer to architect's code sheet for relevant design criteria. Submit drawings to Owner/Architect for review prior to submitting to authorities. Provide required items including but not limited to relay modules, monitor modules, return-air detectors, elevator recall, etc. Provide remote annunciator panel(s) at location(s) approved by Architect and authorities.

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Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Revisions

Checked By: PRS

Drawn by: AIW



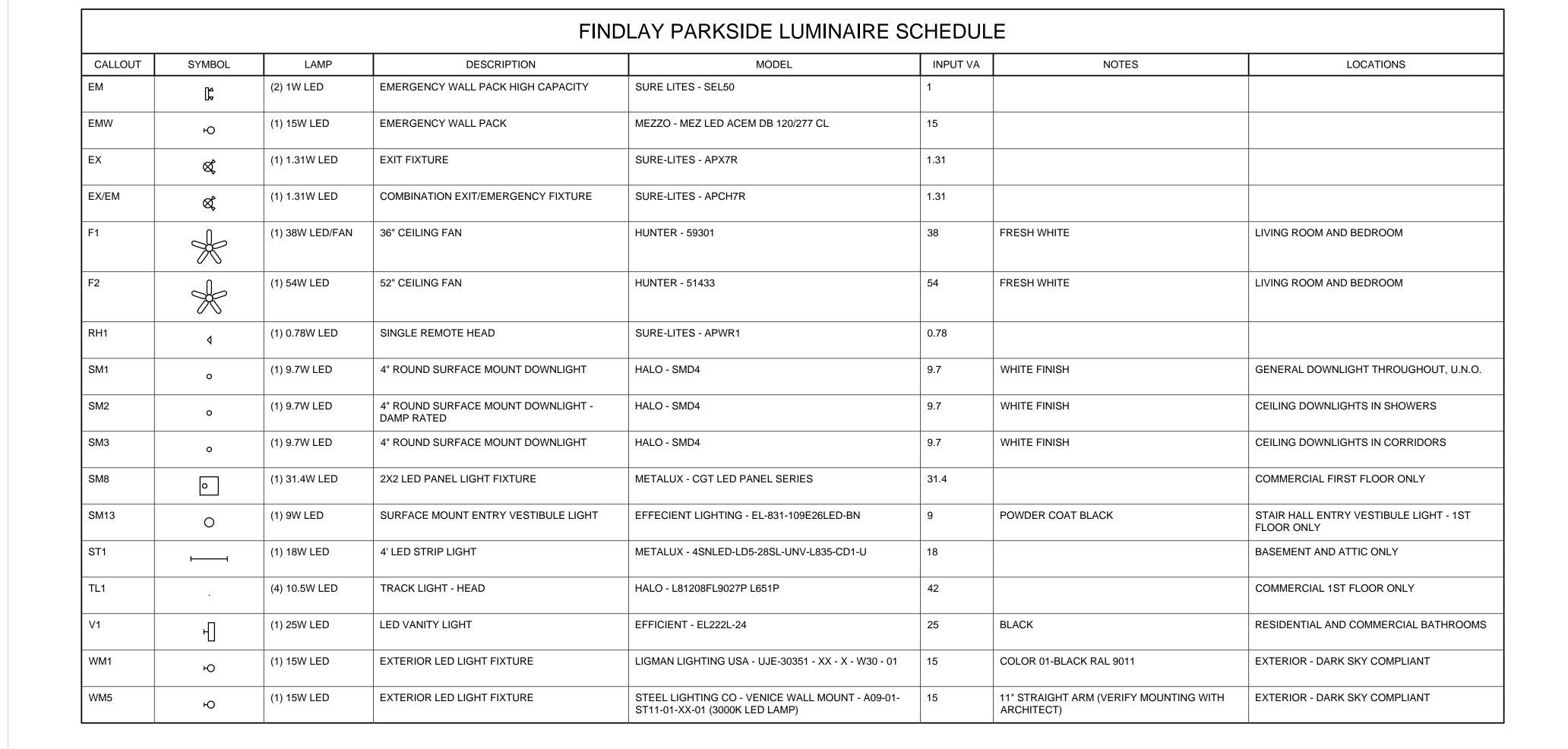
COLLABORATION TEAMWORK SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH Copyright © 2015

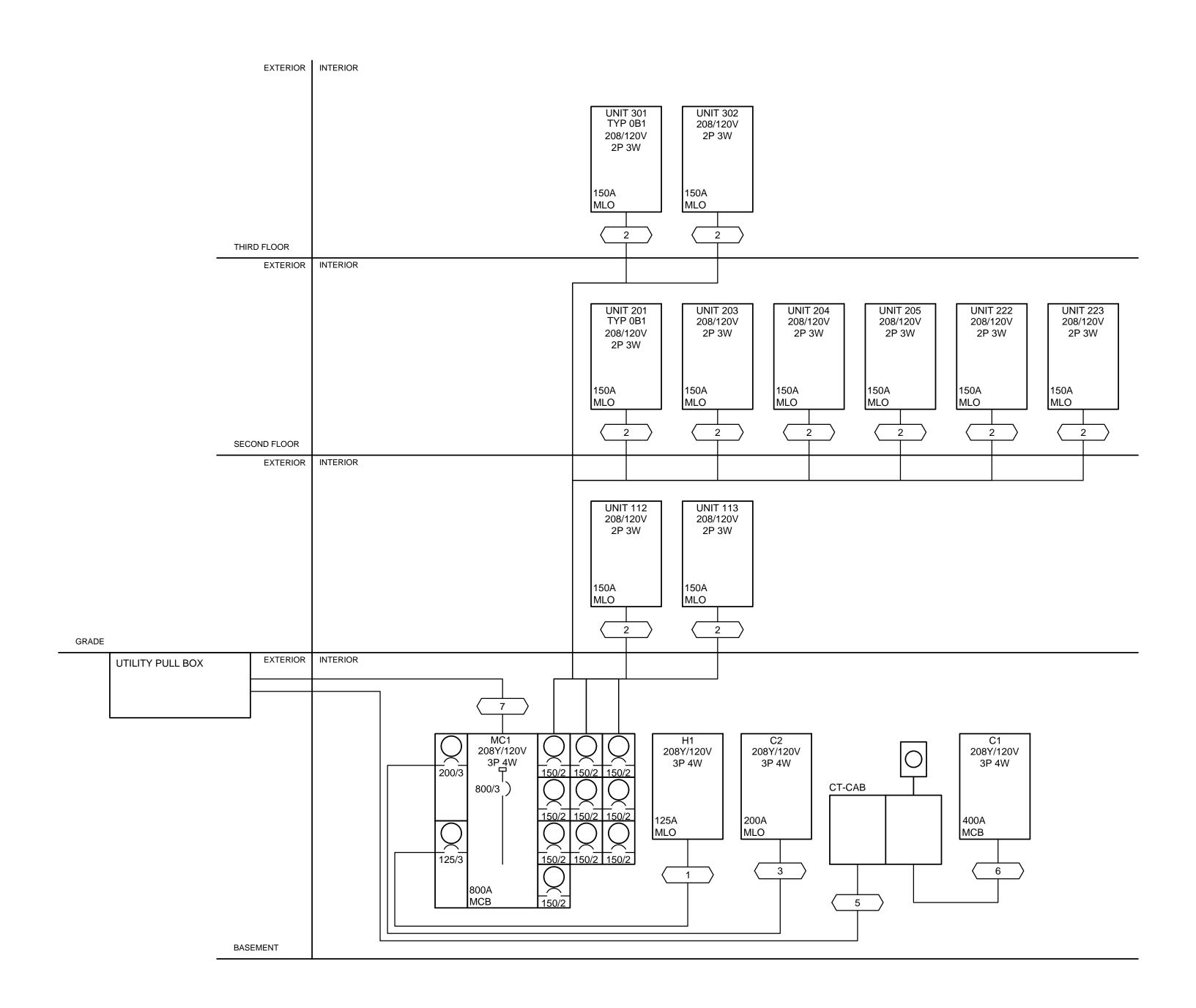
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Job No: 22042

ELECTRICAL DETAILS





RENOVATION OF EXISTING BUILDING MULTIFAMILY BUILDING WITH COMMERCIAL FIRST FLOOR. PROVIDE NEW ELECTRICAL DISTRIBUTION, POWER AND LIGHTING. SEE SINGLE LINE DIAGRAM FOR MORE DETAILS.

GENERAL NOTES-OVERALL PROJECT

A. EBS DRAWINGS INDICATE DESIGN INTENT AND REQUIRED OUTCOMES. IF CONDITIONS ARISE IN THE FIELD THAT REQUIRE DEVIATIONS FROM THE DRAWINGS IT IS ASSUMED THAT THE CONTRACTOR WILL DETERMINE THE APPROPRIATE DEVIATION WITH APPROVAL FROM THE OWNER. EBS IS AVAILABLE TO ASSIST WHEN REQUIRED IF ISSUES ARISE.

GENERAL NOTES-SINGLE LINE DIAGRAM

- ALL BREAKERS SHALL BE RATED TO WITHSTAND THE AVAILABLE FAULT CURRENT AT THEIR LOCATION. WHERE SERIES- RATED COMBINATIONS ARE USED IN ACCORDANCE WITH NEC 240.86 (B) AND (C) THE CONTRACTOR AND/OR HIS EQUIPMENT SUPPLIER MUST PROVIDE APPROPRIATE DOCUMENTATION AND LABELING.
- PROJECT. THE MANUFACTURER'S REP SHALL IDENTIFY AND PROVIDE THE APPROPRIATE SETTINGS TO THE ELECTRICAL CONTRACTOR FOR HIS USE IN PANEL SCHEDULES INDICATE BREAKER SIZE ONLY. PROVIDE AFCI/GFCI

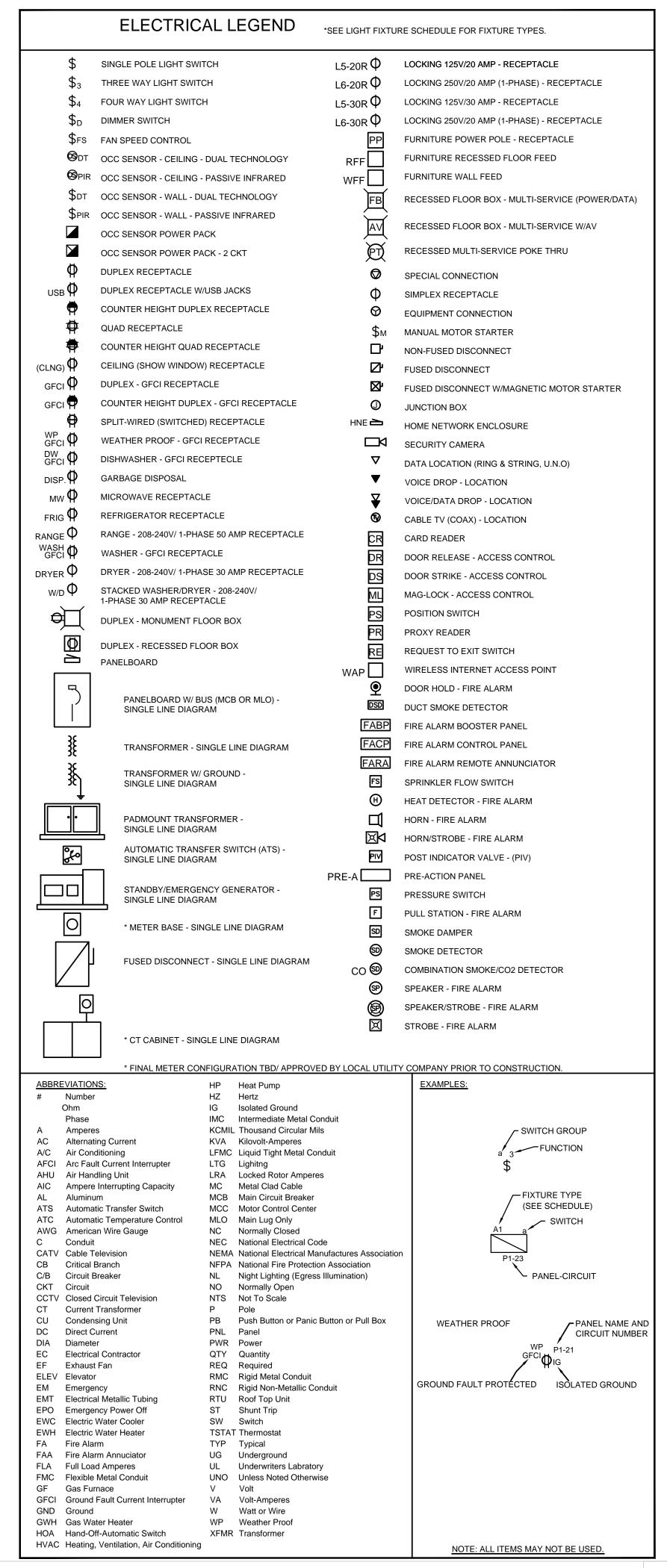
WHERE BREAKERS WITH ADJUSTABLE SETTINGS ARE FURNISHED TO THE

- PROTECTION AS REQUIRED BY NEC. COORDINATE FINAL BREAKER SIZES/TYPES FOR ITEMS FURNISHED BY OTHERS WITH SHOP DRAWINGS OR PRODUCT INFORMATION FOR ACTUAL EQUIPMENT BEING CONNECTED
- OR EQUIPMENT UNTIL PERMIT DRAWINGS HAVE BEEN APPROVED BY AHJ.
- PROVIDE SELECTIVE COORDINATION FOR EMERGENCY SYSTEM OVERCURRENT PROTECTION DEVICES IN ACCORDANCE WITH NEC 700.27.
- PROVIDE GROUND-FAULT PROTECTION FOR EQUIPMENT IN ACCORDANCE
- WITH NEC 240.13 AND NEC 230.95.
- OVERCURRENT PROTECTION DEVICES SUPPLYING TRANSFORMERS WHICH ARE NOT LOCATED WITHIN SIGHT OF THEIR OVERCURRENT PROTECTION SHALL BE LOCKABLE AND THE TRANSFORMER SHALL BE FIELD MARKED WITH THE LOCATION OF THE OVERCURRENT PROTECTION DEVICE.

D. ELECTRICAL CONTRACTOR SHALL NOT ORDER OR PURCHASE ANY MATERIALS

FEEDER SCHEDULE CONDUIT AND FEEDER ID 2"C,3#2/0 AL,#2/0 AL N,#4 AL G 2#2/0 AL,#2/0 AL N,#4 AL G 2-1/2"C,3#250kcmil AL,#250kcmil AL N,#4 AL G (4)4"C,(2)3#250kcmil AL, #250kcmil AL N,(2) SPARE (2)2-1/2"C,3#250kcmil AL,#250kcmil AL N (3)3"C,3#400kcmil AL,#400kcmil AL N

SIZING METHOD: COMPACT AL 75°C 100A AND ABOVE, CU 75°C



202 **W**

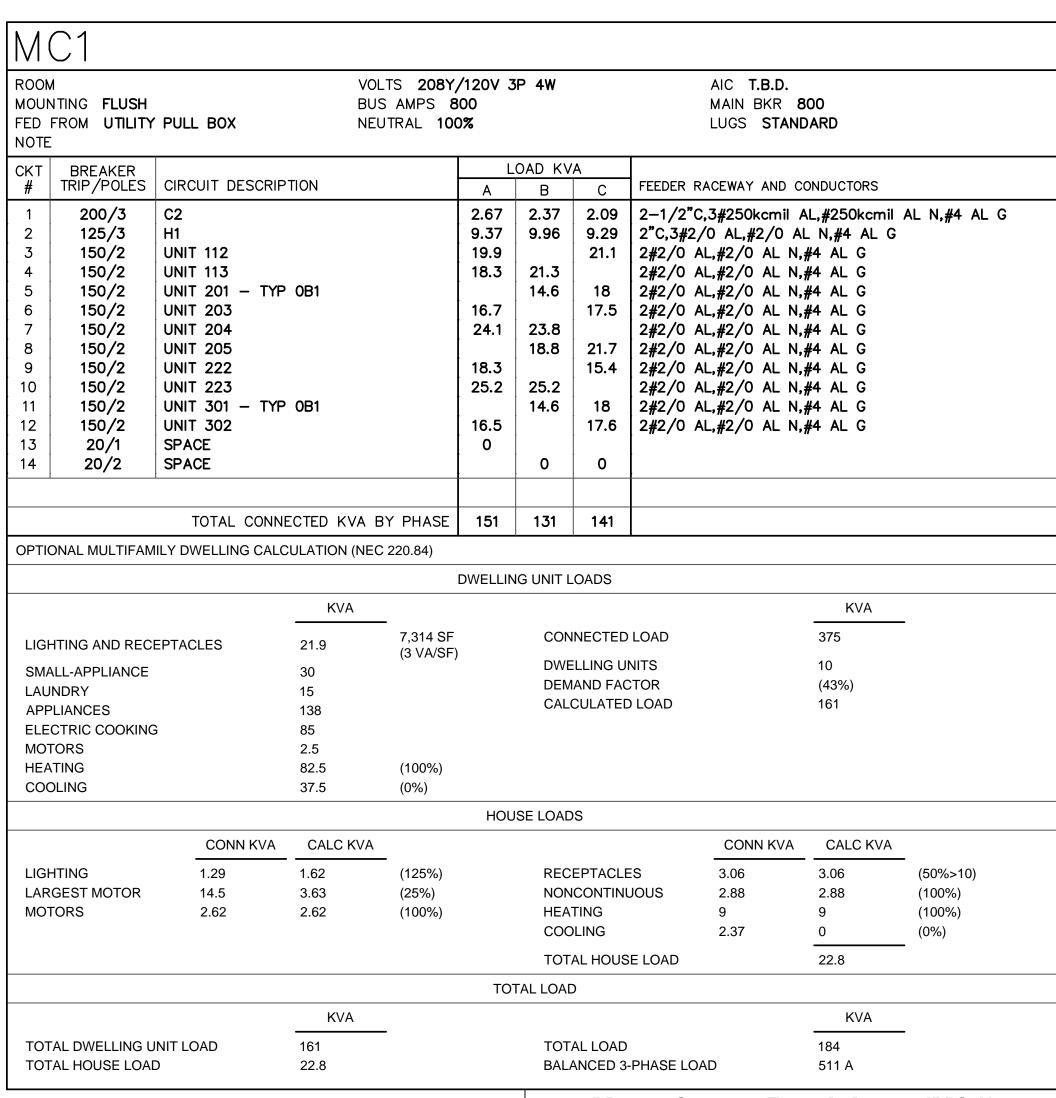
Revisions Checked By: PRS Drawn by: AJW **ENGINEERED** BUILDING SYSTEMS INC. TEAMWORK COLLABORATION SHARED SUCCESS 515 Monmouth Street, Suite 204 Newport, KY 41071 (859) 261-0585 MEP Consulting Services, Inc. in OH Copyright © 2015 THIS DOCUMENT IS THE PRODUCT AND EXCLUSIVE PROPERTY OF ENGINEERED BUILDING SYSTEMS, INC NEITHER THE DOCUMENT NOR THE INFORMATION I CONTAINS MAY BE USED FOR OTHER THAN THE SPECIFIC PURPOSE FOR WHICH IT WAS PREPARED WITHOUT WRITTEN CONSENT OF ENGINEERED BUILDING SYSTEMS, INC.

Progress Dates

05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Job No: 22042

8/10/2022



er E	3rea	ıkd	own	(MC1)
KV	<u>'</u> Α	Ī	Qty	Total KVA
40.3	30		1	40.30
39.7	78		1	39.78
32.9	94		1	32.94
46.3	36		1	46.36
39.4	46		1	39.46
32.4	48		1	32.48
46.3	37		1	46.37
32.8	31		1	32.81
32.2	26		2	64.52
Load =	=		10	375.00

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TYPE		LIANCE BR	EAKDOWN	KVA				PH/	HVAC Loa	ad Cal		on	97.5%	KVA 10.88	NEC Co
DISH DISP	RIGERATOR IWASHER OSAL ROWAVE			0.5 1.2 0.75 1.8			100	0/ of N		ooling ini Spl	it	and Co	poling	3.33 0.00	220.82

WATER HEATER

HOT WATER RECIRC PUMP

0.25

14.25

DRYER

TOTAL

Пп	NIIT	. 1	1 7												1
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	FROM	MC1				TRAL 10	00%	6				UGS STAN			
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3 5 7 9 11 13 15 17 19 21	15/1 15/1 20/1 20/1 30/2 25/2 50/2 20/1	0.451 0.9 0.18 1.5 5 3.33 7.55	E-1, LIG RECEPTA BATH LAUNDRY DRYER HP-1.5 AHU-A-	CLE	RECEP	TACLE	арарарара.	4 6 8 10 12 14 16 18 20 22	20/1 20/1 15/1 15/1 15/1 20/1 50/2 30/2 15/1	1.5 1.5 0.5 1.2 0.75 1.8 8.5 4.5	SMAL FRIG. DISHV DISPO MICRO RANG EWH	OWAVE SE			
25 27	20/1 20/1 20/1 20/1	0 0 0	SPACE SPACE SPACE SPACE				рара	26 28	20/1 20/1 20/1 20/1	0 0 0	SPAC SPAC SPAC	E E			,
OPT	IONAL DW	ELLING (JNIT CALC	ULATION CONN KVA	(NEC 2	220.82)					DNN VA	CALC KVA			
R SM LAI AP	GHTING AN ECEPTAC IALL-APPL UNDRY PLIANCES	LES IANCE	:	1.65 3 1.5 14	550 S (3 VA			U O MAX	ERAL LOAI P TO 10 KV VER 10 KV HEATING (OLING	/A 10 A 18.9		10 7.56 8.24	(100%) (40%) (220.8) 2(C)(3))	
МС	ECTRIC CO DTORS DTAL GENE		_	8.5 0.25 28.9	-			BALA PHA	AL LOAD ANCED LOA SE A SE B	AD		25.8 124 A 93.5% 106%			
	APPL	IANCE BRE	AKDOWN	Linia					HVAC Load	Calculatio	n		KVA	NEC Code	Ī
TYPE REFR	IGERATOR			KVA 0.5						ating			10.88		1
DISHV	WASHER			1.2						oling			3.33		-
DISPO				0.75						Split			0.00		4
	OWAVE			1.8		1	1009	% of N	lameplate R	ating of AC	and Co	oling	3.33	220.82 C(1)	
DRYE	R HEATER			4.5		100% of N	lam	eplat	e Rating of H	eat Pump	w/o Sup	plm ental Heat	0.00	220.82 C(2)	
HOOD				0.25			He	at Pur	np plus 65%	of Suppler	mental F	leat	8.24	220.82 C(3)	
	VATER REC	IRC PUMP)	0.25				Lar	gest Heating	or Cooling	Load		10.88	220.84 C(5)	1
TOTAI	L			14.25											•

	рарар	14 16 18 20 22 24	50/2 30/2 15/1 20/1 20/1 20/1 20/1	8.5 4.5 0.25 0.25 0	EWH HWRF HOOD SPAC	o) CE CE				
220.82)		!	<u>I</u>		ONN VA	CALC KVA				
SF A/SF)		U O MAX CO	ERAL LOA P TO 10 K\ VER 10 K\ HEATING OLING	VA 10 /A 19.4	ļ	10 7.77 8.24	(100% (40%) (220.8) 2(C)(3))		
			AL LOAD			26			Multi-Family Dwelling Unit Calc	KVA
			ANCED LO	AD		125 A			Total General Load	29.42
			ASE A ASE B			103% 97.5%			Largest Heating or Cooling Load 220.84	10.88
		1 1 17	IOL B			37.070			220.84 CONNECTED LOAD CALC	40.30
			HVAC Load	d Calculatio	on		KVA	NEC Code		
			Не	ating			10.88			
			Сс	oling			3.33			
			Min	i Split			0.00			
	100	% of N	lameplate R	Rating of AC	and Co	oling	3.33	220.82 C(1)		
100% of	Nam	eplat	e Rating of H	leat Pump	w/o Sup	plmental Heat	0.00	220.82 C(2)		
	Не	at Pur	np plus 65%	6 of Supple	mental l	Heat	8.24	220.82 C(3)		
		Lar	gest Heating	g or Coolin	g Load		10.88	220.84 C(5)		

Multi-Family Dwelling Unit Calc

Total General Load

Largest Heating or Cooling Load 220.84 | 10.88 220.84 CONNECTED LOAD CALC 39.78

KVA

28.90

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Job No: 22042 8/10/2022

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Progress Dates

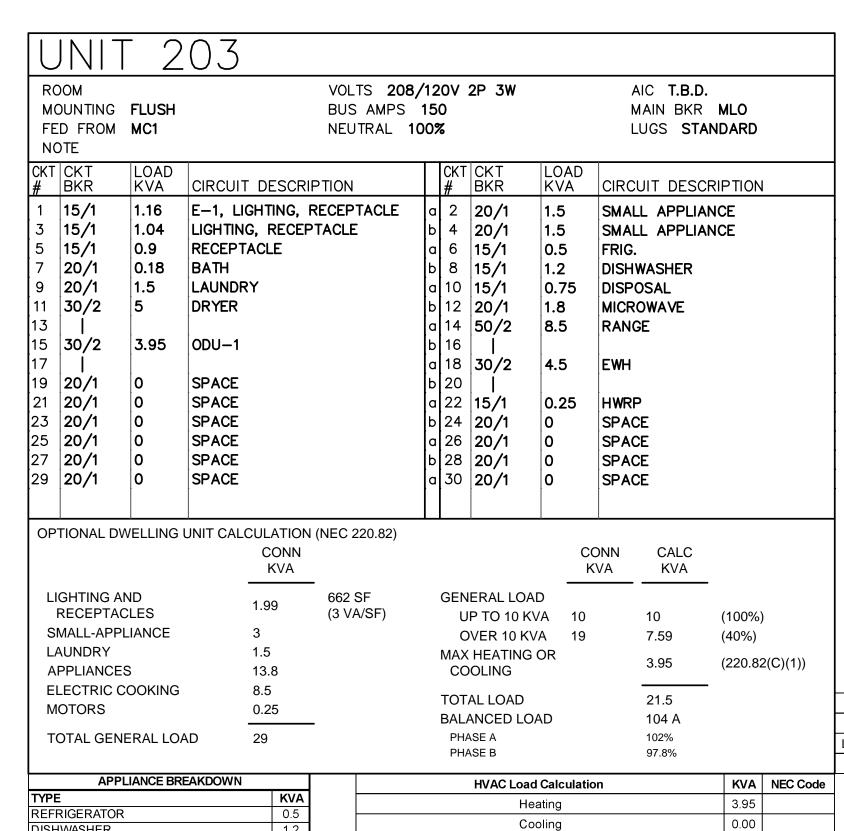
Revisions

05/26/2023 BID/PERMIT

08/30/2024 BID SET 2

202 W. ELDER STREET www.plattedesign.

ELECTRICAL DETAILS



Mini Split

100% of Nameplate Rating of AC and Cooling

Heat Pump plus 65% of Supplemental Heat

Heat Pump plus 65% of Supplemental Heat

Largest Heating or Cooling Load

Largest Heating or Cooling Load

100% of Nameplate Rating of Heat Pump w/o Supplmental Heat | 0.00 | 220.82 C(2)

3.95

3.95 220.82 C(1)

0.00 220.82 C(3)

3.95 220.84 C(5)

8.24 | 220.82 C(3)

10.88 220.84 C(5)

DISHWASHER DISPOSAL

WATER HEATER

HOT WATER RECIRC PUMP

HOT WATER RECIRC PUMP

4.5

14.00

MICROWAVE

Multi-Family Dwelling Unit Calc	KVA
Total General Load	28.99
Largest Heating or Cooling Load 220.84	3.95
220.84 CONNECTED LOAD CALC	32.94

DRYER
HOT WATER RECIRC PUMP

0.25

14.00

M(FE	DOM DUNTING D FROM DTE	FLUSH MC1			BUS A	208/ MPS 1 RAL 10	50	2P 3W		N	AIC T.B.D. MAIN BKR LUGS STA				
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRI	PTION		CKT #	CKT BKR	LOAD KVA	CIRC	UIT DESCI	RIPTION	l		
1 1 3 5 7 9 11 11 11 11 11 11 11 11 11 11 11 11 1	15/1 15/1 20/1 20/1 30/2 25/2 50/2 20/1 20/1 20/1 20/1	1.16 1.21 0.18 1.5 5 3.33 7.55 0 0 0	E-1, LIG LIGHTING BATH LAUNDRY DRYER HP-1.5 AHU-A- SPACE SPACE SPACE SPACE SPACE SPACE	HTING, B, RECEF	RECEPTA		a 2 b 4 a 6 b 8 a 10 b 12 a 14 b 16 a 18 b 20 a 22 b 24 a 26 b 28	20/1 20/1 15/1 15/1 15/1 20/1 50/2 30/2 15/1 20/1 20/1 20/1	1.5 1.5 0.5 1.2 0.75 1.8 8.5 4.5 0.25 0	SMAI SMAI FRIG DISH	L APPLIAN L APPLIAN WASHER OSAL OWAVE GE CE CE	NCE			
OP	TIONAL DV	VELLING	UNIT CALC	ULATION CONN KVA	(NEC 220	0.82)				ONN (VA	CALC KVA				
S L/ A	GHTING AI RECEPTAC MALL-APPI AUNDRY PPLIANCE	CLES LIANCE S		1.58 3 1.5 13.8	525 SF (3 VA/S		U C MAX	ERAL LOA P TO 10 K VER 10 K HEATING OOLING	VA 10 VA 18.		10 7.43 8.24	(100%) (40%) (220.8) 2(C)(3))		
	LECTRIC C OTORS	OOKING		8.5 0.25				AL LOAD			25.7			Multi-Family Dwelling Unit Calc	KVA
	OTAL GEN	ERAL LO	-	28.6	-		PHA	ANCED LC ASE A ASE B	OAD		123 A 93.9% 106%			Total General Load Largest Heating or Cooling Load 220.84 220.84 CONNECTED LOAD CALC	28.58 10.88 39.46
	APPI	LIANCE BR	EAKDOWN					HVAC Loa	d Calculati	on		KVA	NEC Code		
TYPE				KVA					eating			10.88			
	RIGERATOR			0.5					ooling			3.33			
	IWASHER OSAL			1.2 0.75					ni Split			0.00			
	ROWAVE			1.8		11)0% of N	Nameplate F	•	and Co	noling	_	220.82 C(1)		
	ER HEATER			4.5	1				-		oplmental Hea	_	220.82 C(1)		
DRY				5	[]	00% OT N	иперіат	e Kaung of	neal rump	w/o oup	Dimental Hea	at U.UU	[ZZU.OZ U(Z)		

ROOM MOUNTING FLUSH FED FROM MC1 NOTE			VOLTS 208/120V 2P 3 V BUS AMPS 150 NEUTRAL 100%							MLO ANDARD		
CKT # 1 3 5 7 9 11 13 15 17 19 21 23	CKT BKR 15/1 15/1 15/1 15/1 20/1 20/1 30/2 30/2 60/2	LOAD KVA 1.36 1.17 0.437 1.31 1.32 0.36 1.5 5 3.79 11.2	LIGHTING,	RECEPT RECEPT TING, R RECEPT TING, R	TACLE TACLE ECEPTACLE	σοσοσοσο	4 6 8 10 12 14 16 18 20 22 24	BKR 20/1 20/1 15/1 15/1 15/1 20/1 50/2 30/2 15/1 20/1	LOAD KVA 1.5 1.5 0.5 1.2 0.75 1.8 8.5 4.5 0.25 0	SMA SMA FRIG DISH DISP MICE RAN EWH HWR	IWASHER POSAL ROWAVE GE P CE	NCE
25 27 29	20/1 20/1 20/1	0	SPACE SPACE			Ь	26 28 30	20/1 20/1 20/1	0 0	SPA SPA	CE	
				LATION (CONN KVA	(NEC 220.82)		OEN			CONN KVA	CALC KVA	-
LIGHTING AND RECEPTACLES SMALL-APPLIANCE LAUNDRY APPLIANCES ELECTRIC COOKING		3 1.	5 3.8	1,455 SF (3 VA/SF)		U O MAX	ERAL LOA P TO 10 K' VER 10 K\ HEATING OLING	VA 10 /A 21		10 8.55 11.1	(100%) (40%) (220.82(C)(3))	
ELECTRIC COOKING MOTORS TOTAL GENERAL LOAD			0.	.5 .25 1.4			BALA PHA	AL LOAD ANCED LO ASE A ASE B	AD		29.6 142 A 100% 99.5%	

					Total Ocheral Load	01.07
TOTAL GENERAL LOAD	31.4	PHASE A 100% PHASE B 99.5%			Largest Heating or Cooling Load 220.84	14.99
		PHASE B 99.5%			220.84 CONNECTED LOAD CALC	46.36
APPLIANCE BREAKDOW!	N	HVAC Load Calculation	KVA	NEC Code		
TYPE	KVA	Heating	14.99			
REFRIGERATOR	0.5	Ü				
DISHWASHER	1.2	Cooling	3.79			
DISPOSAL	0.75	Mini Split	0.00			
MICROWAVE	1.8	100% of Nameplate Rating of AC and Cooling	3.79	220.82 C(1)		
WATER HEATER	4.5	100% of Nameplate Rating of Heat Pump w/o Supplmental Heat	0.00	220.82 C(2)		
DRYER	5		+	, ,		
HOT WATER RECIRC PUMP	0.25	Heat Pump plus 65% of Supplemental Heat	11.07	220.82 C(3)		
TOTAL	14.00	Largest Heating or Cooling Load	14.99	220.84 C(5)		

	NIT	2	22															
МС	D FROM	FLUSH MC1			BUS	S 208/ AMPS RAL 10	150)	2P 3W			N	AIC T.B.D. MAIN BKR .UGS STA	MLO	D			
CKT #	CKT BKR	LOAD KVA	CIRCUIT D	ESCRI	PTION			CKT #	CKT BKR	LO	AD /A	CIRC	UIT DESCI	RIPTIO	 N			
1 3 5 7 9 11 13 15 17 19 21 23 25 27	15/1 15/1 20/1 20/1 30/2 30/2 20/1 20/1 20/1 20/1 20/1 20/1 20/1	1.27 1.34 0.18 1.5 5 3.87 0 0 0 0	LIGHTING, E-1, LIGH' BATH LAUNDRY DRYER ODU-2 SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE	RECEP	TACLE	ACLE	<u>a </u>	2 4 6 8 10 12 14 16 18 20 22 24 26 28	20/1 20/1 15/1 15/1 15/1 20/1 50/2 30/2 15/1 20/1 20/1 20/1	1.5 1.5 0.1 1.2 0.7 1.8 8.1 4.1 0.0 0 0	5 5 5 2 75 3 5	SMAI FRIG. DISH DISP	WASHER OSAL OWAVE SE CE CE CE					
OP ⁻	FIONAL DW	 /ELLING (_ATION CONN KVA	(NEC 22	(0.82)						ONN VA	CALC KVA					
SI LA	GHTING AN RECEPTAC MALL-APPL JUNDRY PPLIANCES	LES	1.6 3 1.5	5	535 SI (3 VA/			U O MAX	ERAL LOA P TO 10 K' VER 10 K\ HEATING OLING	VA /A	10 18.6		10 7.44 3.87	(100% (40% (220.	5)	(C)(1))		
M	ECTRIC C OTORS OTAL GENE		8.9 0.2 AD 28					BALA PHA	AL LOAD ANCED LO ASE A ASE B	AD			21.3 102 A 92.5% 108%				Multi-Family Dwelling Unit Calc Total General Load Largest Heating or Cooling Load 220.84 220.84 CONNECTED LOAD CALC	KVA 28.61 3.87 32.48
	APPL	IANCE BRE	EAKDOWN						HVAC Load	l Cal	culatio	n		KVA	ΔΤ	NEC Code		32.70
TYPE				KVA										3.87	-	1120 0000		
	EFRIGERATOR 0.5				Heating Cooling								0.00	-				
DISH	WASHER			1.2 0.75		Mini Split								3.87	-+			
	OWAVE			1.8		1		of N	lameplate R			and Co	olina	_	\rightarrow	220.82 C(1)		
	R HEATER			4.5									plmental Hea	_	-			

Heat Pump plus 65% of Supplemental Heat

Largest Heating or Cooling Load

0.00 220.82 C(3)

3.87 220.84 C(5)

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4⊤H **ΩοΩ**

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1730 Vine Vine FOR 1728

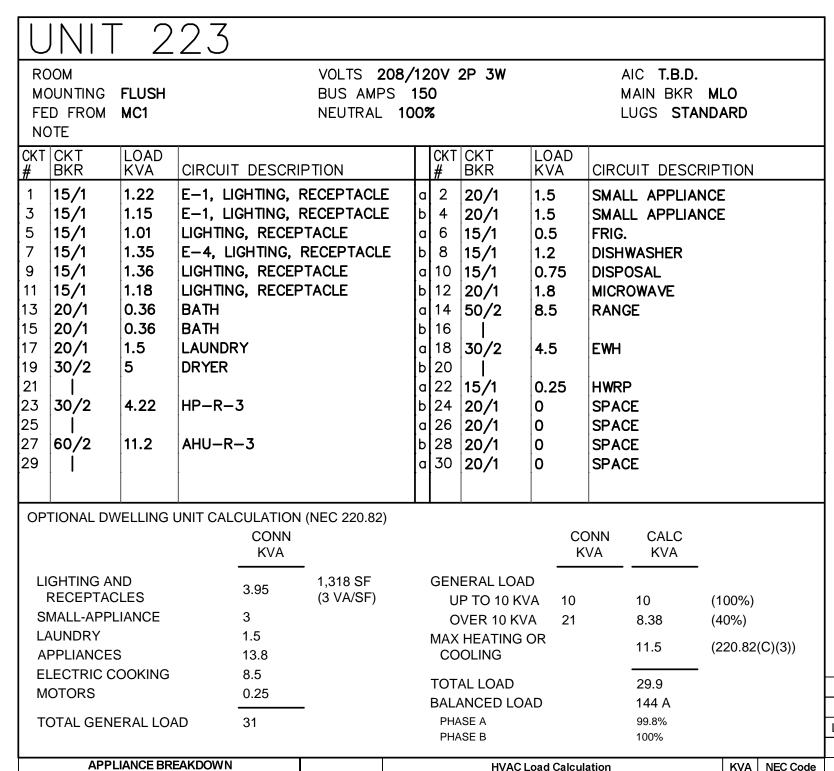
Job No: 22042 8/10/2022

E4.03

Multi-Family Dwelling Unit Calc

Total General Load

31.37



REFRIGERATOR

DISHWASHER

WATER HEATER

HOT WATER RECIRC PUMP

APPLIANCE BREAKDOWN

4.5

0.25

14.00

REFRIGERATOR

DISHWASHER DISPOSAL MICROWAVE

WATER HEATER

HOT WATER RECIRC PUMP

DISPOSAL

MICROWAVE

AL LOAD	29.9			Multi-Family Dwelling Unit Calc	KVA
ANCED LOAD	144 A			Total General Load	30.95
ASE A ASE B	99.8% 100%			Largest Heating or Cooling Load 220.84	15.42
AGL B	100 /6			220.84 CONNECTED LOAD CALC	46.37
HVAC Load Calculation		KVA	NEC Code		
Heating		15.42			
Cooling		4.22			

4.22 220.82 C(1

11.50 220.82 C(3)

15.42 220.84 C(5)

0.00

Mini Split

100% of Nameplate Rating of AC and Cooling

Heat Pump plus 65% of Supplemental Heat

Largest Heating or Cooling Load

HVAC Load Calculation

Mini Split

100% of Nameplate Rating of AC and Cooling

Heat Pump plus 65% of Supplemental Heat

Largest Heating or Cooling Load

100% of Nameplate Rating of Heat Pump w/o Supplmental Heat | 0.00 |220.82 C(2)|

100% of Nameplate Rating of Heat Pump w/o Supplmental Heat | 0.00 | 220.82 C(2) |

T	YP	OE	31										
M(FE	DOM DUNTING ED FROM DTE	FLUSH	VOLTS 208/120V 2P 3W BUS AMPS 150 NEUTRAL 100%						AIC T.B.D. MAIN BKR MLO LUGS STANDARD				
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRI	PTION		CKT #	CKT BKR	LOA		RCUIT DES	CRIPTIC	 DN
1 3 5 7 9 11 13 15 17 19 21 23	15/1 15/1 20/1 20/1 30/2 30/2 20/1 20/1 20/1 20/1 20/1 20/1	0.491 1.08 0.18 1.5 5 3.87 0 0 0 0		GHTING, F ACLE	RECEPTACLE	9999999	2 4 6 8 10 12 14 16 18 20 22 24 26 28	20/1 20/1 15/1 15/1 15/1 20/1 50/2 30/2 15/1 20/1 20/1 20/1	1.5 1.5 0.5 1.2 0.75 1.8 8.5 4.5 0 0	SM SM FR DIS MI RA EV SF SF	MALL APPLI MALL APPLI RIG. SHWASHER SPOSAL CROWAVE ANGE	ANCE	
LI	TIONAL DV IGHTING AI RECEPTAC MALL-APPI	ND CLES	JNIT CALO	CULATION CONN KVA 1.39	(NEC 220.82) - 464 SF (3 VA/SF)		U	ERAL LOA P TO 10 K	(VA	CONN KVA 10 18.4		— (100 (40%	•
L/ A	AUNDRY PPLIANCE LECTRIC C	S		1.5 13.8 8.5			MAX CO	HEATING OLING AL LOAD		10.4	3.87	,	.82(C)(1))
	IOTORS OTAL GEN	ERAL LO	√D	28.4	-		BAL/ PH/	ANCED LO ASE A ASE B	DAD		102 A 90.9% 109%		

4.5

0.25

14.00

		Total General Load	28.39
		Largest Heating or Cooling Load 220.84	3.87
		220.84 CONNECTED LOAD CALC	32.26
KVA	NEC Code		
3.87			
0.00			
3.87			
3.87	220.82 C(1)		

0.00 220.82 C(3)

3.87 220.84 C(5)

Multi-Family Dwelling Unit Calc

KVA 28.39

M(FE	OOM DUNTING D FROM DTE	FLUSH MC1			VOLTS 208 , BUS AMPS NEUTRAL 1 0	15	0	2P	3W			AIC T.B.D MAIN BKR LUGS STA	MLO)
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRI	PTION		CKT #	CK BK		LOA KVA		CUIT DESC	RIPTIO	N
1 3 5 7 9 11 13 15 17 19 22 22 22 27	15/1 15/1 15/1 20/1 20/1 30/2 30/2 20/1 20/1 20/1 20/1 20/1 20/1	0.992 0.813 1.14 0.18 1.5 5 3.95 0 0 0	LIGHTIN	G, RECEP G, RECEP		арарарарара	2 4 6 8 10 12 14 16 18 20 22 24 26		/1 /1 /1 /1 /2 /2 /1 /1 /1	1.5 1.5 0.5 1.2 0.75 1.8 8.5 4.5 0.25 0	SMA FRIG DISH DISH MICH RAN	HWASHER POSAL ROWAVE IGE RP CE CE CE		
LI SI L/ A EI M	GHTING A RECEPTAG MALL-APP AUNDRY PPLIANCE LECTRIC G OTORS OTAL GEN	ND CLES LIANCE S COOKING		1.86 3 1.5 13.8 8.5 0.25 28.9	(NEC 220.82) - 619 SF (3 VA/SF)		U C MAX CC TOT BAL	P TO VEI (HE (OLI AL I	LOAD SED LOA	/A 1 A 1 OR	CONN KVA	CALC KVA 10 7.54 3.95 21.5 103 A 103% 97.1%	(100% (40%) (220.8	,

Multi-Family Dwelling Unit Calc KVA
Total General Load 28.86
Largest Heating or Cooling Load 220.84 3.95
220.84 CONNECTED LOAD CALC 32.81

APPLIANCE BREAKDOW	N
TYPE	KVA
REFRIGERATOR	0.5
DISHWASHER	1.2
DISPOSAL	0.75
MICROWAVE	1.8
WATER HEATER	4.5
DRYER	5
HOT WATER RECIRC PUMP	0.25
TOTAL	14.0

			Largest Heating or Co.
			220.84 CONNECTE
	KVA	NEC Code	
	3.95		
	0.00		
	3.95		
	3.95	220.82 C(1)	
eat	0.00	220.82 C(2)	
	0.00	220.82 C(3)	
	3.95	220.84 C(5)	

Cooling

100% of Nameplate Rating of AC and Cooling

Heat Pump plus 65% of Supplemental Heat

Largest Heating or Cooling Load

100% of Nameplate Rating of Heat Pump w/o Supplmental He

PLATTE architecture + design

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Revisions

Checked By: PRS

Drawn by: AJW

PR-09757

ENGINEERED BUILDING SYSTEMS INC.

TEAMWORK COLLABORATION SHARED SUCCESS
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Progress Dates

ATION FOR ne St / 1730 Vine St / Imer St

Job No: 22042 8/10/2022

E4.04

M(DOM DUNTING D FROM		 B		VOLTS 20 BUS AMPS NEUTRAL	40	0	3P 4W		М	IC T.B.D AIN BKR JGS STA	400
KT	OTE CKT BKR	LOAD KVA	CIRCUI	T DESCRII	PTION		CKT #	CKT BKR	LOAD KVA	CIRCU	JIT DESC	RIPTION
1357913579135793135791	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	0 0.549 0.72 0.36 0 0 0 0 0 0 0 0 0 0 0	SPACE LIGHTIN RECEPT SPACE	TACLE		ο σ ο ο σ ο ο σ ο ο σ ο ο σ ο	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40	20/1 20/1 50/2 50/2 30/2 20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	2.08 2.08 6.95 6.95 4.5 0 0 0 0 0 0 0 0	GF-5 GF-5 CU-5 CU-5 EWH SPACI SPACI SPACI SPACI SPACI SPACI SPACI SPACI SPACI SPACI SPACI SPACI	E E E E E E E E E E E	
L	GHTING ARGEST MOTOR		CONN KVA 0.549 6.95	CALC KVA 0.687 1.74	(125%) (25%)		REC CON COC TOT BAL/ LO PH/	ORS EPTACLES ITINUOUS PLING AL LOAD ANCED 3-PI AD ASE A ASE B ASE C	4.15 1.08 4.5 13.9		CALC KVA 4.15 1.08 5.63 13.9 27.2 75.4 A 101% 104% 94.9%	(100%) (50%>10) (125%) (100%)

M(FE	2 DOM DUNTING D FROM DTE	FLUSH MC1			VOLTS 208 BUS AMPS NEUTRAL 1	20	0	3P 4W			MAIN	T.B.D. BKR S STAN	
CKT # 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41	CKT BKR 20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	LOAD KVA 0.239 0.18 0.9 0.96 1 0 0 0 0 0 0 0 0 0 0	CIRCUIT RECEPT RECEPT DE-1 DH-1 SPACE	ACLE	PTION	арсарсарсарсарс	16 18 20 22 24 26 28 30 32 34 36 38 40	CKT BKR 15/1 20/2 20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	1.22 2.3 0.2 0 0 0 0 0 0 0 0 0 0 0	A CIRC 2 GF- 7 CU-	1.5 1.5 CE CE CE CE CE CE CE CE CE CE CE CE	DESCR	RIPTION
	GHTING ARGEST MOTOR OTORS	2	CONN KVA 0.239 2.37 1.47	CALC KVA 0.298 0.593 1.47	(125%) (25%) (100%)		NON HEA COC TOT BAL LO PHA PHA	EPTACLES ICONTINUE TING PLING AL LOAD ANCED 3-F AD ASE A ASE B ASE C	OUS	CONN KVA 1.08 0.96 1 2.37		6 7 8 8 A %	(50%>10) (100%) (0%) (100%)

M(FE	OOM DUNTING D FROM DTE	FLUSH MC1	VOLTS 208Y/120V 3P 4W BUS AMPS 125 NEUTRAL 100%							AIC T.B.D. MAIN BKR MLO LUGS STANDARD				
KT	CKT BKR	KT LOAD KR KVA CIRCUIT DESCRIPTION				CKT CKT # BKR			LOAD KVA	CIRC	CIRCUIT DESCRIPTION			
1 3 5 7 9 1 3 5 7 9 1 3 5 7 9 1 3 5 7 9 1 3 5 7 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	20/1 20/1 20/1 15/1 15/1 15/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1 20	/1				сарсарсар	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	20/2 20/2 20/2 60/3 20/1 20/1 20/1 20/1 20/1 20/1	2 2 14.5 0 0 0 0	H-1 H-1 (BP) BOOSTER PUMP SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE				
LIGHTING LARGEST MOTOR			CONN KVA .06 4.5	CALC KVA 1.32 3.63	(125%) (25%)	 - -	REC NON HEA TOT. BAL/ BAL/ PH/	TING AL LOAD ANCED 3-F	OUS 1.92 8		CALC KVA 15.7 (100%) 1.98 (50%>10) 1.92 (100%) 8 (100%) 32.5 90.3 A 104% 97.4% 98.2%			

PLATTE architecture + design

Progress Dates

05/26/2023 BID/PERMIT
08/30/2024 BID SET 2

Revision

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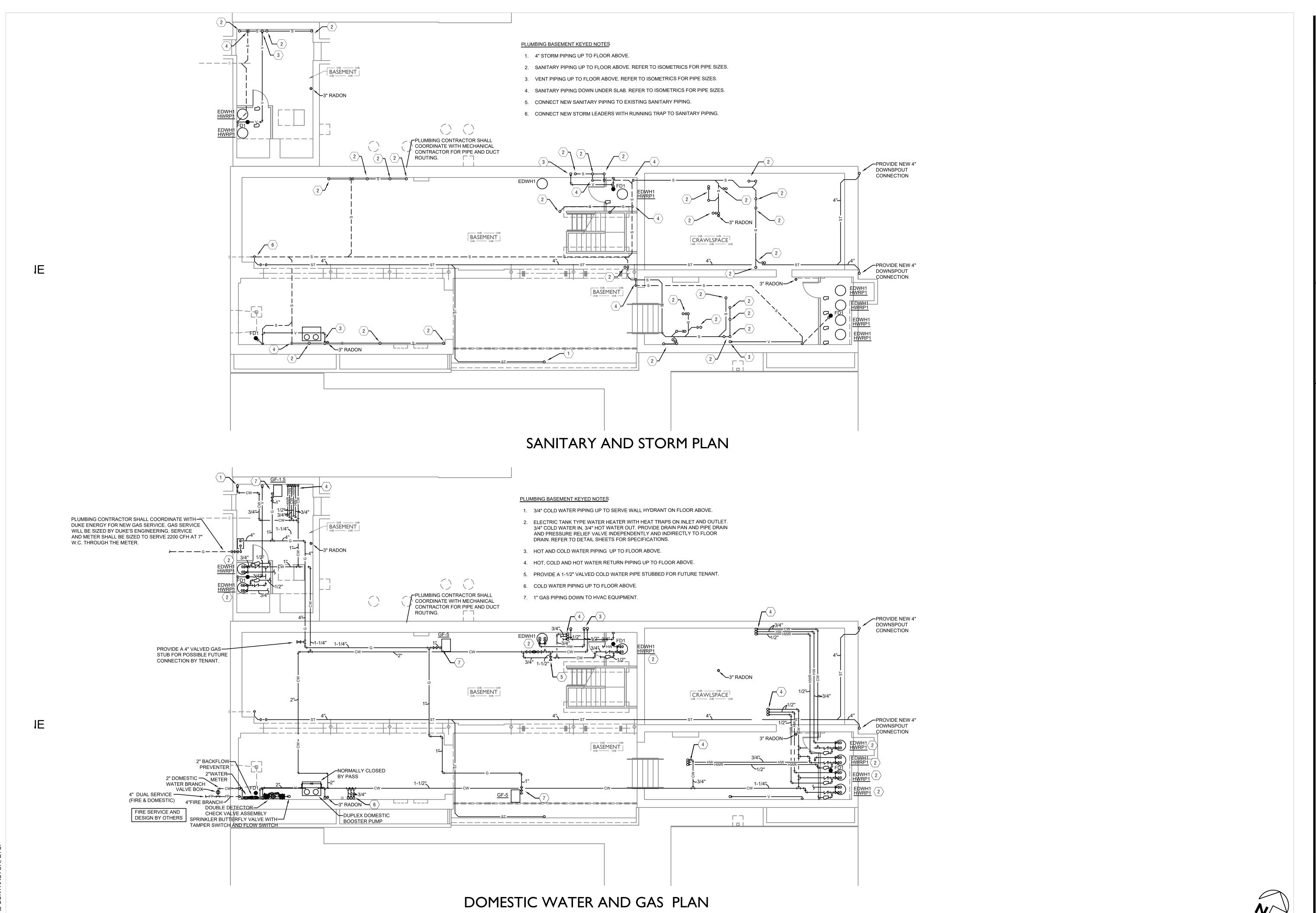
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FOR 1728 Vine St / 1730 Vine St / 0H, 45202

RENOVATION FO 1726 Vine St / 173 1675 Hamer St CINCINNATI. OH

Job No: 22042 8/10/2022

E4.04



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Progress Dates

05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

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PR-09757

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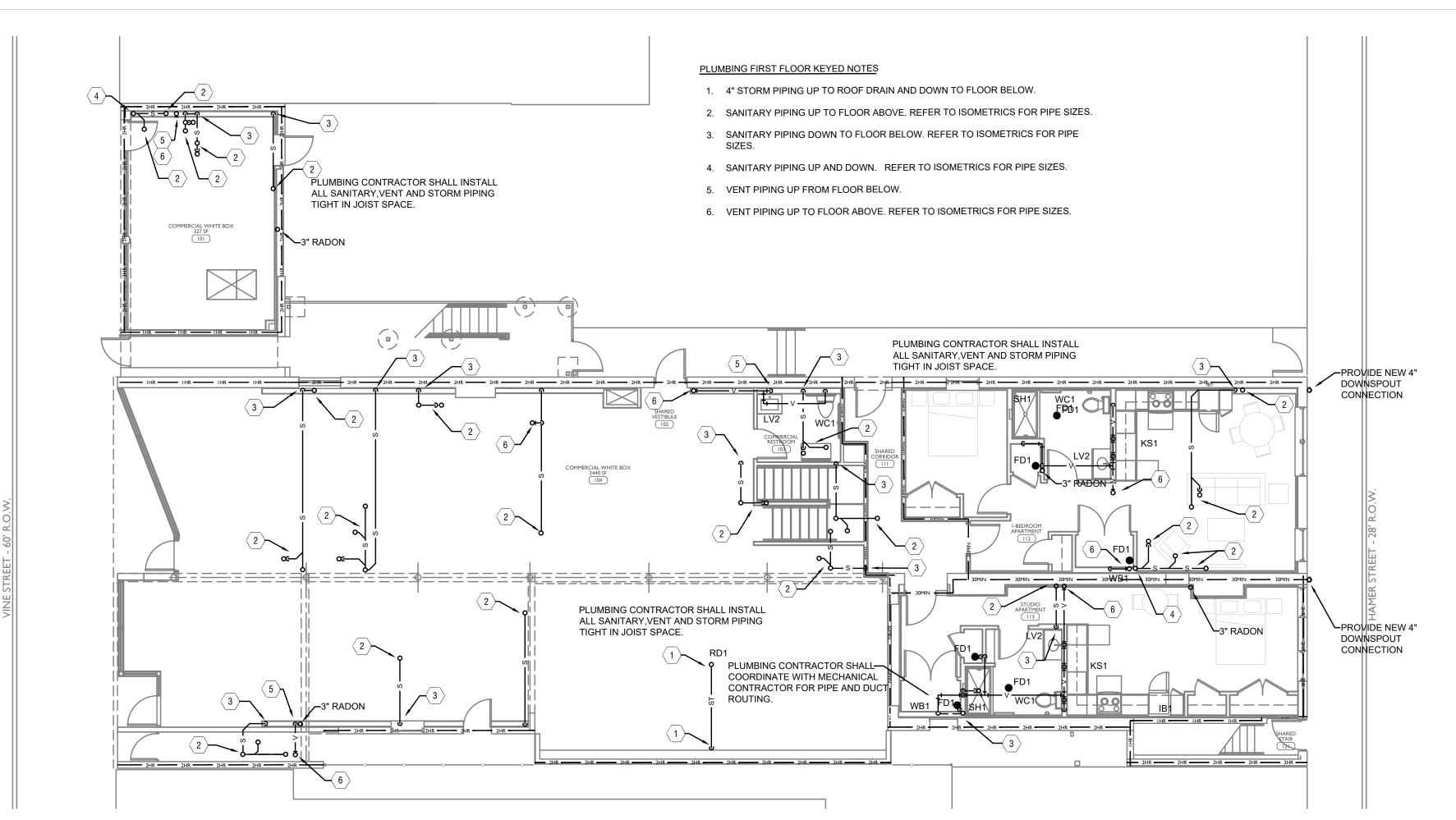
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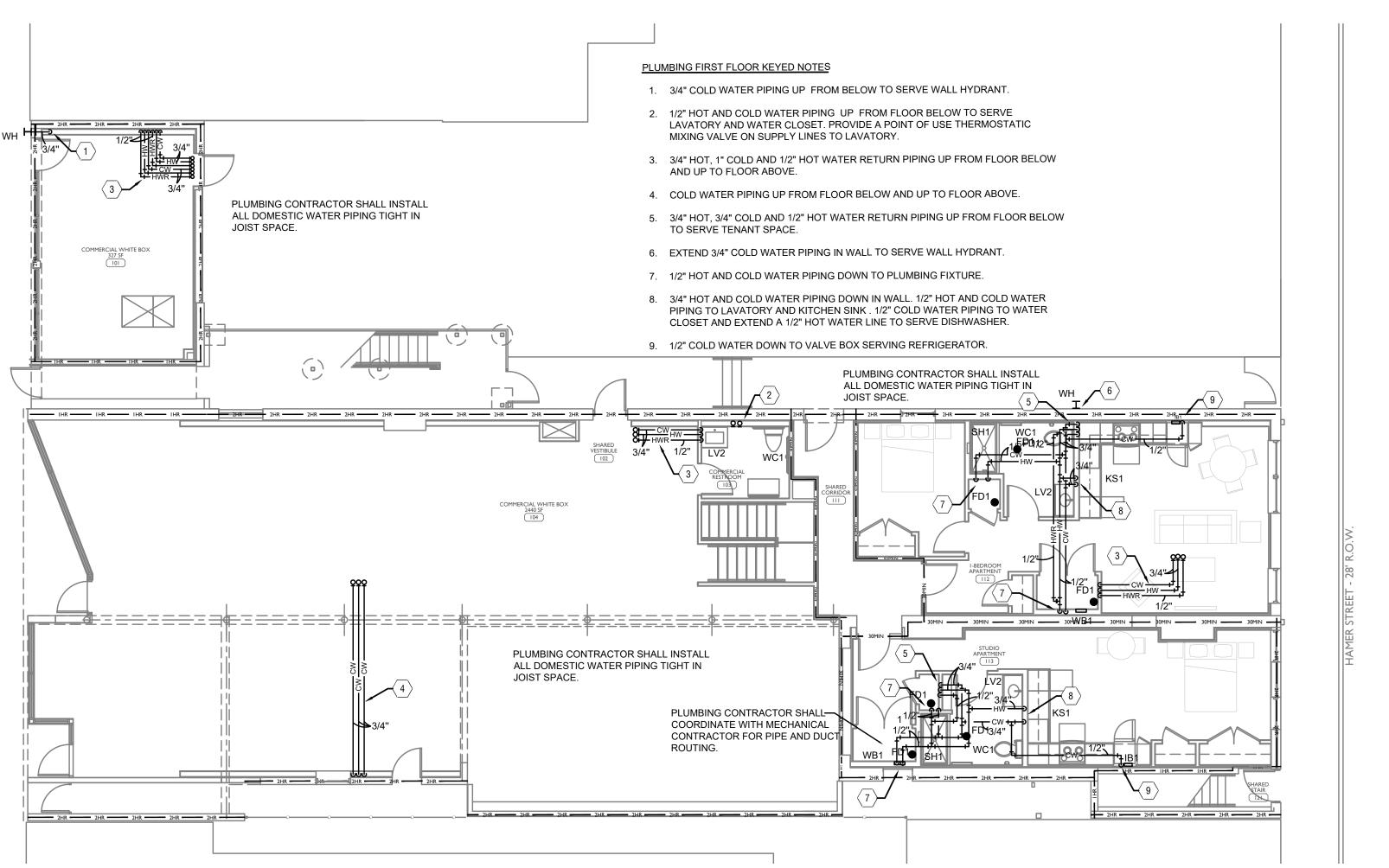
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Job No: 22042 8/10/2022

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SANITARY AND STORM PLAN



DOMESTIC WATER AND GAS PLAN



Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

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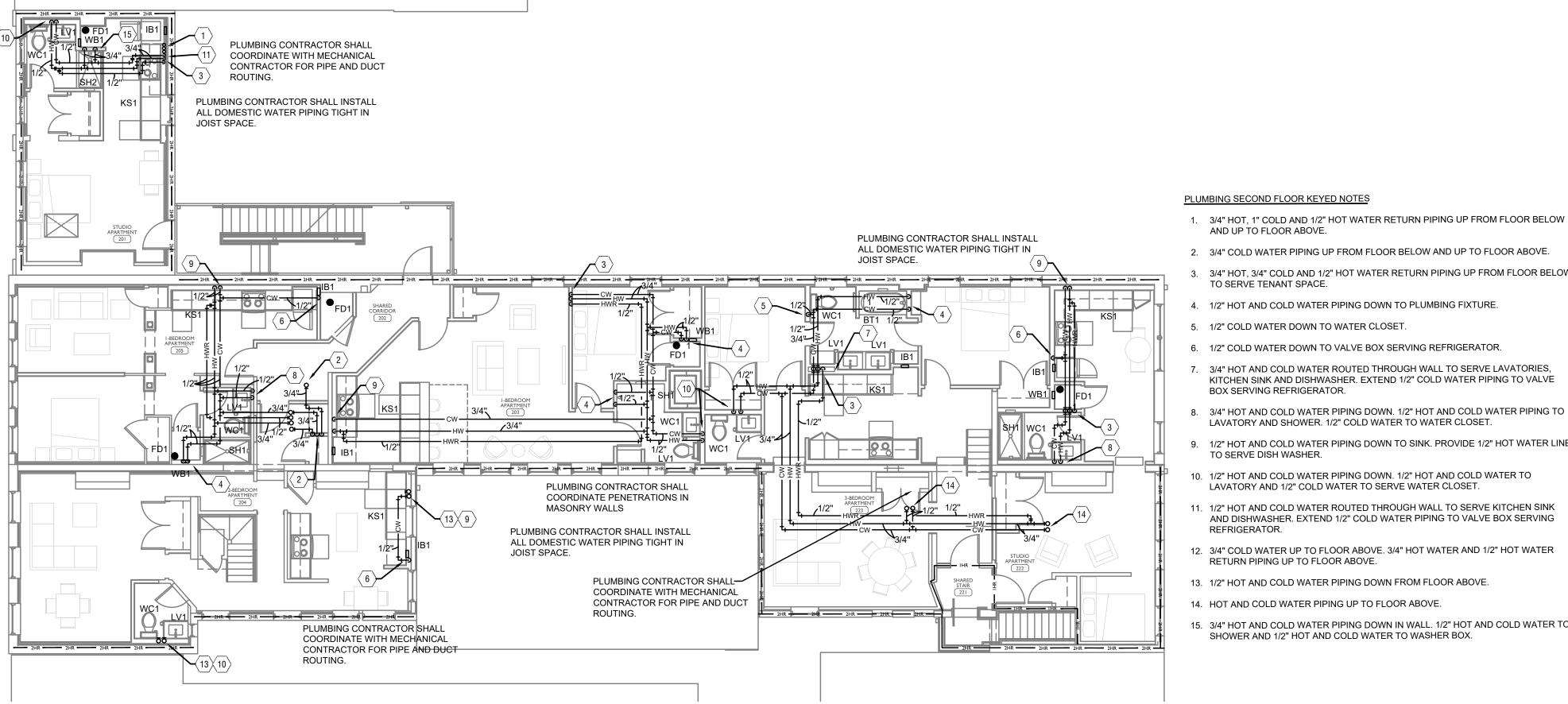
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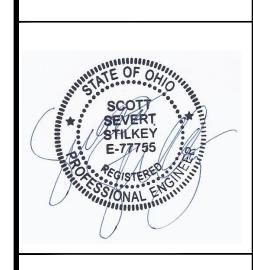


PLUMBING SECOND FLOOR KEYED NOTES

- 1. 3/4" HOT, 1" COLD AND 1/2" HOT WATER RETURN PIPING UP FROM FLOOR BELOW AND UP TO FLOOR ABOVE.
- 2. 3/4" COLD WATER PIPING UP FROM FLOOR BELOW AND UP TO FLOOR ABOVE.
- 3. 3/4" HOT, 3/4" COLD AND 1/2" HOT WATER RETURN PIPING UP FROM FLOOR BELOW
- 4. 1/2" HOT AND COLD WATER PIPING DOWN TO PLUMBING FIXTURE.
- 5. 1/2" COLD WATER DOWN TO WATER CLOSET.
- 6. 1/2" COLD WATER DOWN TO VALVE BOX SERVING REFRIGERATOR.
- 7. 3/4" HOT AND COLD WATER ROUTED THROUGH WALL TO SERVE LAVATORIES, KITCHEN SINK AND DISHWASHER. EXTEND 1/2" COLD WATER PIPING TO VALVE
- BOX SERVING REFRIGERATOR.
- 9. 1/2" HOT AND COLD WATER PIPING DOWN TO SINK. PROVIDE 1/2" HOT WATER LINE
- 10. 1/2" HOT AND COLD WATER PIPING DOWN. 1/2" HOT AND COLD WATER TO LAVATORY AND 1/2" COLD WATER TO SERVE WATER CLOSET.
- 11. 1/2" HOT AND COLD WATER ROUTED THROUGH WALL TO SERVE KITCHEN SINK AND DISHWASHER. EXTEND 1/2" COLD WATER PIPING TO VALVE BOX SERVING
- 12. 3/4" COLD WATER UP TO FLOOR ABOVE. 3/4" HOT WATER AND 1/2" HOT WATER RETURN PIPING UP TO FLOOR ABOVE.
- 13. 1/2" HOT AND COLD WATER PIPING DOWN FROM FLOOR ABOVE.
- 14. HOT AND COLD WATER PIPING UP TO FLOOR ABOVE.
- 15. 3/4" HOT AND COLD WATER PIPING DOWN IN WALL. 1/2" HOT AND COLD WATER TO SHOWER AND 1/2" HOT AND COLD WATER TO WASHER BOX.

DOMESTIC WATER AND GAS PLAN





Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

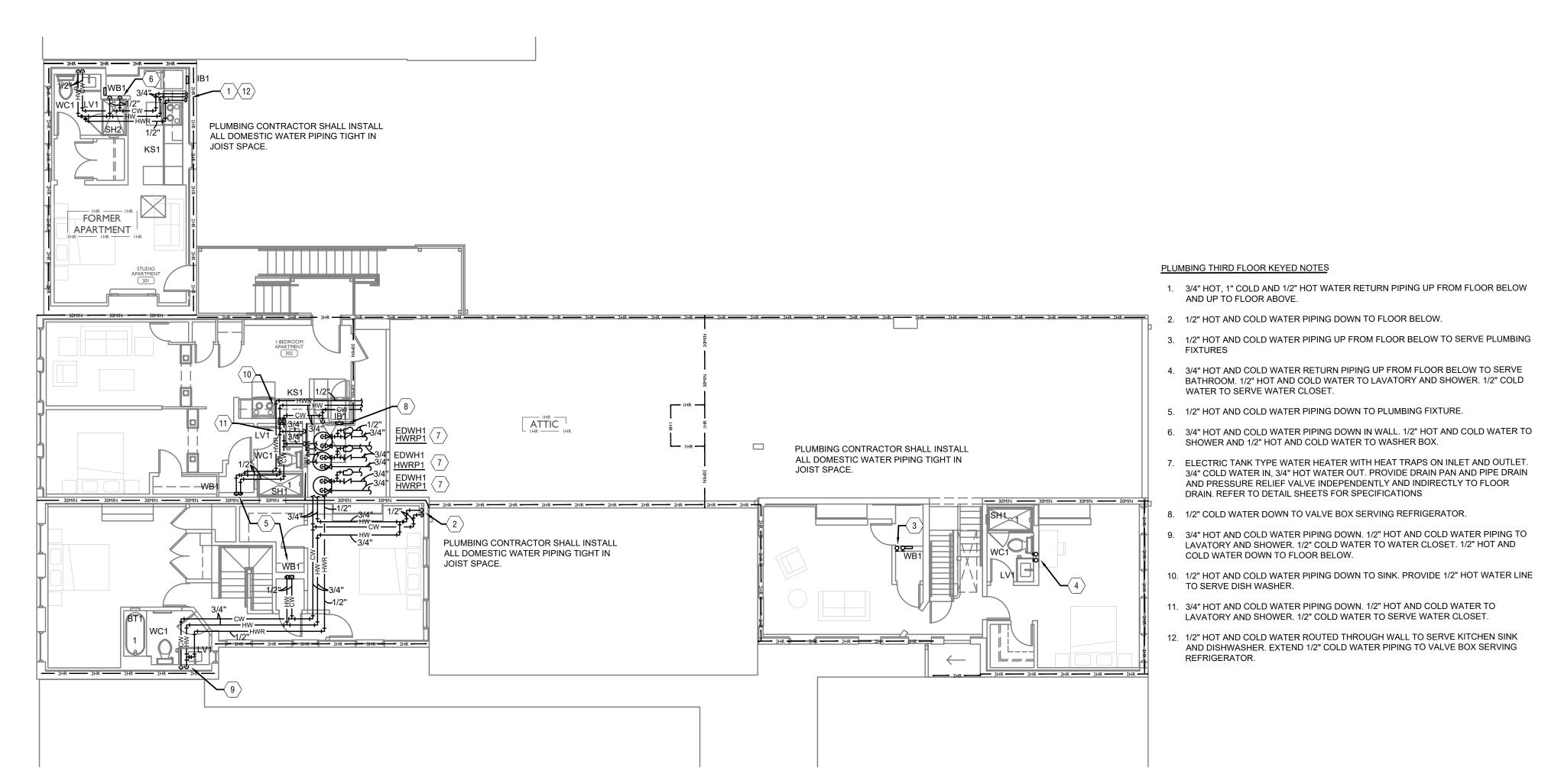
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DOMESTIC WATER AND GAS PLAN



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Z:\~Project Directories\9700-9799\9757 - Findlay Flats Findlay Parkside (Willkommen ? Phase II)\~Construction Documents\~Phase 1 (8 Buildings)\1724 VINE\XREF-ART.dwg-Model. Plot Date/Time: Aug 29, 2024-10:49am - By: derek.grundy
THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONSTRUCTION ARE INSTALLED IN ACCORDANCE WITH ANY CONTRACTOR, ETC.



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1. GENERAL PLUMBING REQUIREMENTS

- a. THE PLUMBING CONTRACTOR MUST REFER TO SITE PLANS, ARCHITECTURAL PLANS AND ELEVATIONS, AND PRICING INSTRUCTIONS FROM THE GENERAL CONTRACTOR TO DEVELOP THEIR PRICE. THE PLUMBING CONTRACTOR'S PRICE (INCLUDING TAXES) SHOULD INCLUDE ALL LABOR AND MATERIAL NECESSARY TO PROVIDE A COMPLETE AND FULLY OPERATIONAL PLUMBING SYSTEM.
- b. THE PLUMBING CONTRACTOR SHALL BE LICENSED BY THE STATE OF OHIO TO INSTALL PLUMBING SYSTEMS.
- c. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE, LOCAL CODES AND ORDINANCES, THE PLUMBING CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM
- d. SUBMIT TO THE ARCHITECT PDF FILE COPIES OF COMPLETE AND CERTIFIED SHOP DRAWINGS, DESCRIPTIVE DATA, PERFORMANCE DATA AND RATINGS, DIAGRAMS AND SPECIFICATIONS ON ALL SPECIFIED EQUIPMENT INCLUDING ACCESSORIES, AND MATERIALS FOR REVIEW. e. REFER TO ARCHITECTURAL DRAWINGS, GENERAL NOTES, INSTRUCTIONS
- TO BIDDERS, GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, SPECIFICATIONS, AND DRAWINGS EXCEPT AS NOTED HEREIN WHICH APPLY IN ALL RESPECTS TO THIS SECTION. f. COORDINATE PIPING CHASES, SHAFTS, ABOVE CEILING WORK, ETC. WITH
- ARCHITECT. ALL DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR g. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL
- NECESSARY PLUMBING PIPING PENETRATIONS. THIS INCLUDES CORING HOLES IN SLABS, ETC
- h. EQUIPMENT AND MATERIALS SHALL CONFORM WITH APPROPRIATE PROVISIONS OF AGA, ARI, ASME, ASTM, CISPI, UL, NEMA, ANSI, SMACNA, ASHRAE, NFPA, NEC, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY. ALL EQUIPMENT MUST BEAR UL LABEL.
- i. INSTALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES. . WHERE NOT PROVIDED BY OTHERS, PROCURE AND PAY FOR ALL PERMITS,
- FEES, TAXES AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK. FURNISH CERTIFICATE OF APPROVAL FOR WORK FROM INSPECTION AUTHORITY TO OWNER BEFORE FINAL ACCEPTANCE FOR WORK CERTIFICATE OF FINAL INSPECTION AND APPROVAL SHALL BE SUBMITTED WITH THE CONTRACTOR'S REQUEST FOR PAYMENT. NO FINAL PAYMENT WILL BE APPROVED WITHOUT THIS CERTIFICATE.
- k. ALL WORK SHALL BE ACCURATELY LAID-OUT WITH OTHER TRADES, PRIOR TO INSTALLATION & FABRICATION, TO AVOID ALL CONFLICTS AND OBTAIN A NEAT AND WORKMANLIKE INSTALLATION WHICH WILL AFFORD MAXIMUM ACCESSIBILITY FOR EQUIPMENT OPERATION, MAINTENANCE CLEARANCES AND HEADROOM.
- 2. USE OF INFORMATION PROVIDED BY EBS
- a. THE INFORMATION PROVIDED IS INTENDED TO CONVEY DESIGN INTENT ONLY. ALL MEANS AND METHODS, SEQUENCES, TECHNIQUES, AND PROCEDURES OF CONSTRUCTION AS WELL AS ANY ASSOCIATED SAFETY PRECAUTIONS AND PROGRAMS. AND ALL INCIDENTAL AND TEMPORARY DEVICES REQUIRED TO CONSTRUCT THE PROJECT, AND TO PROVIDE A COMPLETE AND FULLY OPERATIONAL PLUMBING SYSTEM ARE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
- 3. CONTRACTOR COORDINATION
- a. COORDINATION DRAWINGS SHOWING SYSTEM AND COMPONENT INSTALLATION LAYOUT, ROUTING, DETAILS, ETC. SHALL BE PRODUCED BY THE PLUMBING CONTRACTOR AND UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER. OR APPROPRIATE PARTY AS APPLICABLE. ALL SYSTEMS INSTALLED BY EACH SUB-CONTRACTOR SHALL BE COORDINATED WITH ONE ANOTHER AND APPROVED BY GENERAL CONTRACTOR/CONSTRUCTION MANAGER, ETC. PRIOR TO INSTALLATION AND/OR FABRICATION. IF QUESTIONS CONCERNING DESIGN INTENT ARISE DURING COORDINATION, EBS CAN ASSIST WHERE APPROPRIATE.
- 4. PLUMBING FIXTURES a. SHUT OFF VALVES/STOPS SHALL BE PROVIDED AT ALL LAVATORIES, SINKS AND WATER CLOSETS.
- b. ALL WALL-HUNG PLUMBING FIXTURES, INCLUDING, BUT NOT LIMITED TO WATER CLOSETS, URINALS, LAVATORIES, AND SINKS SHALL BE ANCHORED TO THE FLOOR WITH CONCEALED IN-WALL CARRIERS. WALL-HUNG FIXTURES SHALL NOT BE SIMPLY BOLTED TO THE WALL OR ANCHORED TO WOOD BLOCKING.
- c. COORDINATE COLOR OF FIXTURES WITH ARCHITECT. FIXTURES SHALL BE WHITE UNLESS OTHERWISE NOTED.
- d. PROVIDE ADA COMPLIANT FIXTURES WHERE INDICATED ON THE ARCHITECTURAL PLANS. PROVIDE OFFSET FIXTURE TAILPIECES AND TRAPS 8. BACKFLOW PREVENTION WHERE REQUIRED TO MEET ADA LEG CLEARANCES.
- e. FIXTURES SHALL BE SECURELY FASTENED TO PREVENT ANY MOVEMENT OF FIXTURE DURING NORMAL USE. SEAL TO WALL, FLOOR OR COUNTERTOP WITH SILICONIZED ACRYLIC-LATEX CAULK.

5. DRAIN PANS

- a. PROVIDE DRAIN PAN UNDER WATER HEATERS. PIPE WATER HEATER DRAIN AND PRESSURE RELIEF VALVE SEPARATELY AND INDIRECTLY TO FLOOR DRAIN (NOT TO DRAIN PAN) b. DRAIN PANS SHALL BE PROVIDED UNDER WASHERS AND SHALL BE SIZED
- TO ACCOMMODATE A STANDARD WASHER OR STACKABLE WASHER/DRYER AS APPLICABLE. BASIS OF DESIGN SHALL BE DRIPTITE 30-5/8" WIDE X 34-5/8" DEEP TRANSLUCENT PAN. DRILL 3/4" OUTLET IN VERTICAL SIDEWALL FOR SIDE-OUTLET OR IN BOTTOM OF PAN DIRECTLY OVER DRAIN IF DRAIN IS UNDER THE PAN. DRAIN CONNECTION SHALL BE MADE WITH MANUFACTURER PROVIDED DRAIN OUTLET CONNECTION. PANS ARE AVAILABLE IN CUSTOM SIZES IF NECESSARY (COORDINATE SIZES AND LOCATIONS OF THE PAN WITH ROOM DIMENSIONS AND EQUIPMENT SIZES AS PROVIDED BY THE ARCHITECT/OWNER).

6. DOMESTIC WATER SYSTEMS

- a. PROVIDE A NEW DOMESTIC WATER SERVICE TO THE BUILDING b. PROVIDE SEPARATE VALVE AND TAB METER FOR EACH APARTMENT AND TENANT SPACE.
- c. INTERIOR DOMESTIC WATER PIPING:
- i. WHERE ALLOWED BY CODE, CPVC PIPING CAN BE USED. a. CPVC PIPING 2" AND SMALLER SHALL BE EQUAL TO FLOW GUARD GOLD - THIS SPECIFICATION COVERS COPPER TUBE SIZE (CTS) CPVC MANUFACTURED TO STANDARD DIMENSIONAL RATIO (SDR) 11 FOR HOT AND COLD DOMESTIC WATER DISTRIBUTION. THIS SYSTEM IS INTENDED FOR PRESSURE APPLICATIONS WHERE THE OPERATING TEMPERATURE WILL NOT EXCEED 180°F AT 100 PSI. PIPE AND FITTINGS SHALL BE MANUFACTURED FROM VIRGIN RIGID CPVC (CHLORINATED POLYVINYL CHLORIDE) VINYL COMPOUNDS WITH A CELL CLASS OF 24448 AS IDENTIFIED IN ASTM D 1784. CTS CPVC PIPE AND FITTINGS SHALL CONFORM TO ASTM D 2846. PIPE AND FITTINGS SHALL BE MANUFACTURED AS A SYSTEM AND BE THE PRODUCT OF ONE MANUFACTURER. ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES. PIPE AND FITTINGS SHALL CONFORM TO NATIONAL SANITATION FOUNDATION (NSF) STANDARDS 14 AND 61. INSTALLATION SHALL COMPLY WITH LATEST INSTALLATION PROVIDED BY THE MANUFACTURER AND SHALL CONFORM TO ALL LOCAL PLUMBING, BUILDING AND FIRE CODE REQUIREMENTS. BURIED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM F 1668. SOLVENT WELD JOINTS SHALL BE MADE USING CPVC CEMENT CONFORMING TO ASTM F 493. YELLOW ONE-STEP CEMENT MAY BE USED WITHOUT PRIMER. IF A PRIMER IS REQUIRED BY LOCAL PLUMBING OR BUILDING CODES, THEN A PRIMER CONFORMING TO ASTM F 656 SHOULD BE USED. THE SYSTEM SHALL BE PROTECTED FROM CHEMICAL AGENTS. FIRE STOPPING MATERIALS. THREAD SEALANT, PLASTICIZED VINYL PRODUCTS OR OTHER AGGRESSIVE CHEMICAL AGENTS NOT COMPATIBLE WITH CPVC COMPOUNDS. SYSTEMS SHALL BE HYDROSTATICALLY TESTED AFTER INSTALLATION. NEVER TEST

WITH OR TRANSPORT/STORE COMPRESSED AIR OR GAS IN CPVC PIPE OR

b. CPVC PIPING LARGER THAN 2" SHALL BE EQUAL TO CORZAN - THIS SPECIFICATION COVERS THE MANUFACTURING REQUIREMENTS FOR CPVC

SCHEDULE 80 IRON PIPE SIZE (IPS) PIPE AND FITTINGS. BOTH THE PIPE AND

THE REQUIREMENTS SET FORTH BY THE AMERICAN SOCIETY FOR TESTING

COMPOUND MEETS CELL CLASS 24448 AND THE FITTING COMPOUND MEETS

PROPERTIES MEET OR EXCEED THE REQUIREMENTS OF ASTM STANDARDS

MATERIALS (ASTM) AND ANSI/NSF STANDARDS 14 AND 61. CPVC PIPE AND

FITTINGS ARE FXTRUDED/MOLDED FROM CPVC COMPOUNDS. THE PIPE

CELL CLASS 23447 AS DEFINED BY ASTM D1784. BOTH THE PIPE AND THE

FITTING COMPOUNDS ARE CERTIFIED BY NSF INTERNATIONAL FOR USE

F441 FOR PIPE, F439 FOR SOCKET FITTINGS AND ASTM F437 OR F439 FOR

THREADED FITTINGS. THREADED FITTINGS HAVE TAPER PIPE THREADS IN

ACCORDANCE WITH ASTM F1498. UNIONS AND FLANGES MEET OR EXCEED

THE REQUIREMENTS OF ASTM F1970. ALL SOCKET TYPE JOINTS SHALL BE

HANDLING OF SOLVENT CEMENTS SHALL BE IN ACCORDANCE WITH ASTM

REQUIREMENTS OF ASTM F493. THE STANDARD PRACTICE FOR SAFE

ASSEMBLED EMPLOYING SOLVENT CEMENTS THAT MEET OR EXCEED THE

F402. SOLVENT CEMENT SHALL BE LISTED BY NSF INTERNATIONAL FOR USE

WATER FILLED PIPE AND FITTINGS (1/2" THROUGH 6") TESTED IN GENERAL

ACCORDANCE WITH UL 723/ASTM E 84 (NFPA 255 AND UBC 8-1) MEETS THE

25/50 FLAME AND SMOKE REQUIREMENT AND SHALL BE PERMITTED TO BE

TESTING LABORATORY SHALL BE OBTAINED AND MADE AVAILABLE UPON

OF ASTM STANDARDS F437, F438 OR F1970. THE PIPE AND FITTINGS

MARKINGS STATE THE PIPE/FITTING MANUFACTURE'S NAME OR

SHALL BE PEX-A TYPE AND FITTINGS SHALL BE EQUAL TO UPONOR

AQUAPEX. TUBING AND FITTINGS MUST CONFORM TO ASTM

ALLOW TUBING TO COME IN CONTACT WITH PIPE THREAD

POTABLE WATER AND THE ASTM DESIGNATION.

REQUEST. THE MARKING ON THE CPVC PIPE MEET THE REQUIREMENTS OF

TRADEMARK, THE MATERIAL DESIGNATION, THE SIZE, THE NSF MARK FOR

ii. WHERE ALLOWED BY CODE, PEX TUBE AND FITTINGS CAN BE USED. TUBING

F876 "STANDARD SPECIFICATION FOR CROSSLINKED POLYETHYLENE, ASTM

F877 "STANDARD FOR CROSSLINKED POLYETHYLENE PLASTIC HOT AND

COLD WATER DISTRIBUTION SYSTEMS". PROVIDE ENGINEERED PLASTIC

FITTINGS WITH PLASTIC COLLARS WHICH CONFORM TO ASTM F1960

STANDARD SPECIFICATION FOR COLD EXPANSION FITTINGS WITH PEX

REINFORCING RINGS FOR USE WITH CROSSLINKED POLYETHYLENE PIPING

PEX TUBING AND CONNECTIONS SHALL BE WARRANTED FOR A PERIOD OF

25 YEARS. DO NOT WELD, GLUE, TAPE OR ALLOW OTHER SOLVENT BASED

ADHESIVES OR PAINTS TO COME INTO CONTACT WITH TUBING. DO NOT

COMPOUNDS, FIREWALL PENETRATION SEALING COMPOUNDS, AND

FIXTURES. DO NOT EXPOSE TUBING TO OPEN FLAME. DO NOT SOLDER

WITHIN 18" OF TUBING. DO NOT INSTALL TUBING BETWEEN TUB SPOUT AND

SHOWER VALVE. RADIUS OF BENDS MUST NOT EXCEED SIX TIMES OUTSIDE

TUBE DIAMETER. REPAIR KINKS IN TUBING USING HEAT AS RECOMMENDED

BY MANUFACTURER. TUBING SHALL BE INSTALLED IN MAXIMUM PRACTICAL

FITTINGS. TUBING SHALL BE SUPPORTED IN A MATTER THAT DOES NOT

WITHIN 6" OF FITTINGS OR BENDS. USE BEND SUPPORTS AT 90 DEGREE

PLATES WHERE TUBING PENETRATES STUDS AT FACE OF STUDS. REMOTE

WHERE TUBING IS TERMINATED (MODIFIED HOME-RUN INSTALLATION TYPE).

CONNECTION OF TUBING TO FITTINGS. DO NOT OVER EXPAND TUBING. PIPE

SHALL BE SUPPORTED AT FITTINGS AND FIXTURES AS RECOMMENDED BY

MANUFACTURER. PIPING SHALL BE INSTALLED WITH MINIMUM AMOUNT OF

FITTINGS. USE MANUFACTURER APPROVED VALVES, FITTINGS, HOSE BIBS

d. CONTROL VALVES SHALL BE MANUFACTURED BY OR APPROVED BY PIPING

f. PROVIDE HOT WATER RETURN PUMP EQUAL TO BELL AND GOSSETT SERIES

3. PROVIDE AUTOMATIC TIMER KIT EQUAL TO BELL AND GOSSETT MODEL TC-1

AND PROGRAM PUMP TO OPERATE TO ACCOMMODATE THE OWNER'S

a. PROVIDE VALVE AND TAB METERS TO ISOLATE WATER USAGE FOR EACH

OF METER AND LOCATE IN AN ACCESSIBLE LOCATION.

b. BACKFLOW PREVENTERS FOR 2" AND SMALLER WATER

EDWH1 A.O SMITH

BT1 BATH TUB

KS1 KITCHENETTE SINK

WB1 WASHER SUPPLY/DRAIN BOX

SHALL BE CONBRACO AND WILKINS.

DWELLING UNIT AND TENANT SPACE. PROVIDE SHUT-OFF VALVE UPSTREAM

a. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER ON WATER SERVICE

SERVICES - PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER ON THE

WATER SERVICE MAIN WHERE THE WATER SERVICE ENTERS THE BUILDING.

MANUFACTURER

FIXTURE DESCRIPTION

SHOWER CONTROLS AND SHOWER

SHOWER CONTROLS AND SHOWER

DESCRIPTION

OOWNSPOUT NOZZL

ON-GRADE FLOOR DRAIN (UNFINISHED AREAS)

OVERFLOW ROOF DRAIN

ROOF DRAIN

FD2 ABOVE-GRADE FLOOR DRAIN (UNFINISHED AREAS)

WATER CLOSET DESCRIPTION

WC1 | FLOOR-SET TANK

AAV1 AIR ADMITTANCE VALVE

IB1 | ICE MAKER WATER SUPPLY BOX

MODEL

FIXTURE MANUFACTURER

AMERICAN STANDARD

BASE MANUEACTURES

OATEY

OATEY

SIOUX CHIEF

SIOUX CHIEF

| FIXTURE MANUFACTURER |

REDUCED PRESSURE BACKELOW PREVENTER TO BE FOUND TO WATTS

SERIES LF919QT. APPROVED MANUFACTURERS OF EQUAL PRODUCTS

100 OR EQUAL PUMP MANUFACTURED BY ARMSTRONG, GRUNDFOS, OR

e. ADJUST ALL STOPS AND VALVES PROPERLY PRIOR TO PROJECT

MANUFACTURER.

HOURS OF OPERATION.

7. TAB METERS FOR DOMESTIC WATER

COMPLETION.

DAMAGE TUBING AND ALLOWS FOR THERMAL EXPANSION. SUPPORTS

BENDS. PROTECT INSTALLED TUBING FROM DAMAGE. INSTALL METAL

MANIFOLD TYPE FITTINGS SHALL BE UTILIZED AT BRANCHES IN ROOMS

UTILIZE EXPANDER TOOLS RECOMMENDED BY MANUFACTURER FOR

LENGTHS, AS DIRECTLY AS POSSIBLE TO REMOTE MANIFOLD WITH MINIMUM

SHALL BE SPACED AT 32" MINIMUM HORIZONTALLY AND 60" VERTICALLY AND

PETROLEUM BASED SEALANTS. DO NOT ALLOW TUBING TO COME

WITHIN 6" OF GAS APPLIANCE VENTS OR 12" OF RECESSED LIGHT

ASTM F441 AND THE MARKING ON THE FITTINGS MEETS THE REQUIREMENTS

INSTALLED IN RETURN AIR PLENUMS. TEST REPORTS FROM A THIRD PARTY

WITH POTABLE WATER, AND APPROVED BY THE FITTINGS MANUFACTURERS.

WITH POTABLE WATER. DIMENSIONS, TOLERANCES AND PHYSICAL

FITTINGS ARE MANUFACTURED IN NORTH AMERICA AND MEET OR EXCEED

- 9. HOSE BIBS AND HYDRANTS a. PROVIDE FROST-PROOF EXTERIOR WALL HYDRANTS ON EACH ELEVATION
- OF THE BUILDING. b. WALL HYDRANTS TO BE EQUAL TO 3/4" WOODFORD MODEL B-67, WITH CHROME FINISH ON BRASS CASTING, WITH BOX AND HINGED DOOR, AND LOOSE-TEE KEY. CONCEAL WITHIN INTERIOR PARTITIONS AND/OR INSTALL IN A MANNER THAT PREVENTS FREEZING. FURNISH TO OWNER, ONE VALVE KEY FOR EACH KEY OPERATED WALL HYDRANT INSTALLED. APPROVED MANUFACTURERS OF EQUAL PRODUCTS SHALL BE ZURN, WADE, JOSAM, SMITH, OR WATTS.

10. SANITARY AND VENT SYSTEMS

- a. CONNECT NEW SANITARY PIPING TO THE EXISTING SANITARY STACKS AND/OR UNDERGROUND SANITARY BUILDING SEWER. CONTRACTOR SHALL CLEAN AND INSPECT EXISTING UNDERGROUND BUILDING SEWER, SEWER LATERAL AND ALL PIPING INTENDED TO BE REUSED TO DETERMINED CONDITION FOR REUSE. PROVIDE INSPECTION REPORT AND
- RECOMMENDATION TO OWNER. b. CUT AND PATCH BASEMENT SLAB AS REQUIRED TO INSTALL NEW SANITARY 17. VALVES FOR DOMESTIC WATER

c. INTERIOR SANITARY, WASTE, AND VENT PIPING:

- i. WHERE NOT INSTALLED IN A PLENUM, SANITARY, WASTE, AND VENT PIPING WITHIN BUILDING TO BE SCHEDULE 40 PVC PIPING AND FITTINGS CONFORMING TO ASTM D 2665, SOLID-WALL DRAIN PIPING WITH PVC SOCKET SOLVENT WELD FITTINGS CONFORMING TO ASTM D2665, MADE TO ASTM D3311, DRAIN, WASTE, AND VENT PATTERNS
- ii. WHERE PIPING SHALL BE INSTALLED IN A PLENUM, SANITARY, WASTE, AND VENT PIPING WITHIN BUILDING TO BE NO-HUB, CAST-IRON PIPE WITH NO-HUB COUPLINGS CONSISTING OF A STAINLESS STEEL SHIELD, CLAMP. AND NEOPRENE GASKET. COUPLINGS SHALL BE TESTED AND CERTIFIED TO CISPI 310, ASTM C1277, ASTM C564, AND NSF. IDEAL CLAMP PRODUCTS' HEAVY DUTY POW'R GEAR (RED SHIELD) COUPLINGS ARE ALSO APPROVED AND ACCEPTABLE. THESE COUPLINGS ARE LISTED WITH NSF
- INTERNATIONAL AND CONFORM WITH ASTM C1540 PERFORMANCE REQUIREMENTS (SHEAR, DEFLECTION AND UNRESTRAINED THRUST TESTS). d. COORDINATE WITH LOCAL AUTHORITIES FOR DRAINAGE REQUIREMENTS FOR EQUIPMENT DESIGNATED WITH INDIRECT WASTE TO FLOOR DRAINS. PROVIDE PIPED DRAIN TO SANITARY IF REQUIRED BY LOCAL JURISDICTION.

- a. PROVIDE FLOOR DRAINS IN ALL TOILET ROOMS THAT HAVE MORE THAN ONE WATER CLOSET OR URINAL.
- b. PROVIDE FLOOR DRAINS FOR ALL EQUIPMENT PRODUCING CONDENSATE AND THAT HAVE DRAIN CONNECTIONS.

FLANGE, WEEP HOLES, WITH 9" DIAMETER HEAVY-DUTY DUCTILE IRON

- c. FLOOR DRAINS IN FINISHED AREAS TO BE PVC BODY, DOUBLE DRAINAGE FLANGE, WEEP HOLES, WITH 6" DIAMETER NICKEL BRONZE STRAINER. d. FLOOR DRAINS IN MECHANICAL SPACE TO BE PVC BODY, DOUBLE DRAINAGE
- STRAINER. e. PROVIDE CAST IRON BODIED FLOOR DRAINS WHERE DRAINS ARE INSTALLED IN A PLENUM (MECHANICAL ROOMS THAT ARE USED AS

- 12. TRAP SEAL PROTECTION a. TRAP SEALS SUBJECT TO EVAPORATION SHALL BE PROTECTED BY ONE OF THE METHODS BELOW, AS APPROVED BY THE LOCAL PLUMBING AUTHORITY
- HAVING JURISDICTION: b. BARRIER-TYPE TRAP SEAL PROTECTION DEVICE - A BARRIER-TYPE TRAP SEAL PROTECTION DEVICE MUST PROTECT THE TRAP SEAL FROM EVAPORATION. BARRIER-TYPE TRAP SEAL PROTECTION DEVICES MUST CONFORM TO ASSE 1072. THE DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- a. CONNECT NEW STORM PIPING TO EXISTING SEWER LATERAL. b. CUT AND PATCH BASEMENT SLAB AS REQUIRED TO INSTALL NEW STORM
- c. PROVIDE NEW PRIMARY AND SECONDARY ROOF DRAINS AND ASSOCIATED PRIMARY AND SECONDARY STORM PIPING SYSTEMS WHERE INTERIOR DRAINS ARE SHOWN ON ARCHITECTURAL ROOF PLAN. SECONDARY ROOF DRAINS SHALL BE PIPED INDEPENDENTLY FROM THE PRIMARY SYSTEM AND MUST DISCHARGE THROUGH DOWNSPOUT NOZZLES LOCATED IN THE

EXTERIOR WALL AT GRADE. d. INTERIOR STORM PIPING:

i. WHERE NOT INSTALLED IN A PLENUM, ABOVEGROUND STORM PIPING WITHIN BUILDING SHALL BE SCHEDULE 40 PVC PIPING AND FITTINGS CONFORMING TO ASTM D 2665. SOLID-WALL DRAIN PIPING WITH PV0 SOCKET SOLVENT WELD FITTINGS CONFORMING TO ASTM D2665, MADE TO ASTM D3311, DRAIN, WASTE, AND VENT PATTERNS.

14. STORM PIPING SPECIALTIES

CONNECTION

FIXTURE MODEL

MODA WITH SURE-VENT

PRINSTON 60"

LOMOSA 24"

K-8459-0 LEFT - K8458-0 RIGHT | PERRLESS

K-8639-0 LEFT - K8638-0 RIGHT PEERLESS

MODEL#

TRUE SET ON-GRADE TP SERIES

TRUE SET FLANGED TP SERIES

868-E-S-U

FIXTURE MODEL #

AMERICAN STANDARD CADET 3 WITH CONCEALED TRAPWAY NOT APPLICABLE

PEERLESS

PEERLESS

- a. PRIMARY ROOF DRAINS MUST HAVE PVC BODY AND POLYETHYLENE DOME. b. SECONDARY ROOF DRAINS MUST HAVE PVC BODY, POLYETHYLENE DOME, AND INTERNAL WATER DAM/EXTENSION COLLAR.
- c. DOWNSPOUT NOZZLES FOR SECONDARY DRAINAGE DISCHARGING TO GRADE MUST HAVE NICKEL-BRONZE BODY AND REMOVABLE STAINLESS-STEEL SCREEN EQUAL TO ZURN Z199-SS.

WATER HEATER SCHEDUL

PTT188782-BL

PTT188782-BL

PTT188792-BL

188152LF

FINISH

NICKEL-BRONZE BODY

PVC BODY, 5" NICKEL-BRONZE STRAINER WITH RING

PVC BODY, 5" NICKEL-BRONZE STRAINER WITH RING

PVC BODY, POLYETHYLENE DOM

PVC BODY, POLYETHYLENE DOMI

FLUSH VALVE

MANUFACTURER

DRAIN SCHEDULE

lelkay. Just

FLUSH VALVE MODEL

NOT APPLICABLE

a. PROVIDE FLOOR AND WALL CLEANOUTS WHERE REQUIRED IN ALL SOIL, WASTE, DRAIN AND STORM PIPING. IN AREAS WITH CERAMIC TILE OR CARPETED FLOORING. PROVIDE CLEANOUTS WITH SQUARE. ADJUSTABLE NICKEL BRONZE TOP. IN AREAS WITH RESILIENT FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH TILE RECESS. CLEANOUTS SHALL BE SAME SIZE AS PIPE EXCEPT THAT CLEANOUTS LARGER THAN 4" WILL NOT BE REQUIRED. WHERE CLEANOUTS OCCUR IN WALLS OF FINISHED AREAS, THEY SHALL BE CONCEALED BEHIND CHROME PLATED ACCESS COVERS.

16. VALVES - GENERAL

- a. PLUMBING CONTRACTOR MUST PROVIDE VALVES AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. INSTALL VALVES FOR EACH ISOLATED FIXTURE OR GROUP OF FIXTURES, AND EACH CONNECTION TO EQUIPMENT.
- b. LOCATE SHUT-OFF VALVES ADJACENT TO EQUIPMENT FOR EASY ACCESS SUCH THAT VALVES CAN BE REACHED WITHOUT MOVING EQUIPMENT.

- a. VALVES FOR DOMESTIC WATER MUST MEET THE REQUIREMENTS OF THE LEAD-FREE LAW S.3874. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE LEAD-FREE PRODUCTS AS MANDATED BY THE LAW AND AS
- REQUIRED/INTERPRETED BY THE AUTHORITY HAVING JURISDICTION. b. PROVIDE VALVES FOR WORKING PRESSURE IN WATER PIPING OF 125 PSI OR
- c. GENERAL DUTY SHUT-OFF BALL VALVES
- . PROVIDE TWO-PIECE, FULL PORT, SILICON BRONZE BALL VALVES WITH THE CAPABILITY OF ACCEPTING EXTENDED OPERATING HANDLES (FOR INSULATED PIPING). VALVES SHALL BE NIBCO MODEL T/S/PC-595-Y-66-LF (-NS) OR EQUAL PRODUCT MANUFACTURED BY AMERICAN VALVE CO, CRANE, HAMMOND, MILWAUKEE, RED-WHITE VALVE CORPORATION, OR
- d. BALANCING VALVES
- . BALANCING VALVES SHALL BE EQUAL TO CIRCUITSOLVER, THERMOSTATIC, SELF-ACTUATING BALANCING VALVES WITH UNIONS, THERMOMETER AND TWO INTEGRATED BALL VALVES.
- e. THERMOSTATIC MIXING VALVES
- i. TEMPERED WATER SHALL BE DELIVERED FROM PUBLIC HAND-WASHING FACILITIES (LAVATORIES AND SINKS) THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070. SET OUTLET TEMPERATURE OF THERMOSTATIC MIXING VALVE TO 110 DEGREES F. POINT-OF-USE THERMOSTATIC MIXING VALVES SHALL BE EQUAL TO WATTS SERIES USG-B. ROUTE TEMPERED WATER TO HOT WATER SIDE OF SINK/LAVATORY. ACCEPTABLE MANUFACTURERS INCLUDE SYMMONS, LAWLER, LEONARD, POWERS, BRADLEY, AND WATTS.

18. EXPANSION COMPENSATION

- a. PROVIDE EXPANSION COMPENSATION ON ALL PIPING PER PIPING MANUFACTURER'S RECOMMENDATIONS. ACCOUNT FOR PIPE MATERIAL PIPE SIZE, PIPE LENGTHS, TEMPERATURE OF FLUIDS, AND ALL OTHER VARIABLES PERTAINING TO THE INSTALLATION.
- b. INSTALL PIPING TO PREVENT STRAINS AND STRESSES THAT EXCEED THE STRUCTURAL STRENGTH OF THE PIPE. WHERE NECESSARY, PROVISIONS SHALL BE MADE TO PROTECT PIPING FROM DAMAGE RESULTING FROM EXPANSION, CONTRACTION, AND STRUCTURAL SETTLEMENT.
- c. EXPANSION JOINT FITTINGS SHALL BE USED ONLY WHERE NECESSARY TO PROVIDE EXPANSION AND CONTRACTION OF THE PIPES. EXPANSION JOINT FITTINGS SHALL BE OF THE TYPICAL MATERIAL SUITABLE FOR USE WITH THE TYPE OF PIPING IN WHICH SUCH FITTINGS ARE INSTALLED.
- d. IN LIEU OF PROVIDING EXPANSION JOINTS, PIPING OFFSETS SHALL BE PERMITTED WHEN INSTALLED PER THE PIPING MANUFACTURER'S RECOMMENDATIONS.

19. HANGERS & SUPPORTS

a. THE PLUMBING CONTRACTOR MUST FURNISH ALL PIPE SUPPORTS REQUIRED FOR THEIR WORK. ALL PIPING SHALL BE SUPPORTED PER CODE. ADDITIONAL SUPPORTS SHALL BE PROVIDED WHERE REQUIRED TO PREVENT SAGGING, WHERE ALTERNATIVE PIPING MATERIALS ARE USED. HANGER SPACING CAN BE REDUCED AS RECOMMENDED BY THE MANUFACTURER AND WHERE ALLOWED BY CODE.

GPH @ 90

CCOR, GUY GRAY, SIOUX CHIEF, OATEY

ACCOR, GUY GRAY, SIOUX CHIEF, OATEY

YMMONS, GUY GRAY, SIOUX CHIEF, OATEY N/A

MATERIAL

USE

GENERAL/ADA FLOOR

APPROVED FIXTURE MANUFACTURERS | APPROVED FAUCET MANUFACTURER

- a. PROVIDE THERMAL INSULATION ON ALL METALLIC DOMESTIC COLD WATER, DOMESTIC HOT WATER, DOMESTIC HOT WATER RETURN PIPING WITH SELE-SEALING CLOSED CELL ELASTOMERIC FOAM PROVIDE A CONTINUOUS VAPOR TIGHT SEAL. INSULATION SHALL BE CONTINUOUS THRU ALL WALLS AND FLOORS. NFPA FIRE HAZARD RATING FOR INSULATION, ADHESIVES, SEALERS, AND COATINGS MUST NOT EXCEED 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED, UNLESS OTHERWISE REQUIRED BY THE LOCAI AUTHORITY OR ENERGY CODES. THE MINIMUM INSULATION LEVELS SHALL BE AS FOLLOWS:
- . PROVIDE 1" THICK ELASTOMERIC INSULATION ON HOT AND HOT WATER RETURN PIPING
- b. PROVIDE INSULATION ON ALL PEX PIPING WHEN USED IN PLENUMS AND WHERE REQUIRED TO MAINTAIN THE REQUIRED FLAME AND SMOKE RATINGS MOST PEX PIPING 3/7 AND SMALLER SHALL BE INSULATED TO MAINTAIN ITS PLENUM RATED PROPERTY IF 18" SEPARATION BETWEEN THE PIPING CANNOT BE PROVIDED.

ADDITIONAL INFORMATION

KOHLER, AMERICAN STANDARD

KOHLER, AMERICAN STANDARD,

SYMMONS, POWERS, DELTA

SYMMONS, POWERS, DELTA

YMMONS, POWERS, DELTA

ELKAY, JUST, MOEN, DELTA

ADDITIONAL FEATURES

REMOVABLE STAINLESS STEEL SCREEN

TRAP PRIMER, SQUARE STRAINER IF INSTALLED IN TILE FLOOR

FLANGED DRAIN, TRAP PRIMER, SQUARE STRAINER IF INSTALLED IN TILE FLOOR

EXTENSION, ROOF SUMP, UNDERDECK CLAMI

EXTENSION, ROOF SUMP, UNDERDECK CLAMI

MOUNTING

KOHLER, AMERICAN STANDARD

21. INSULATION FOR HANDICAP ACCESSIBLE FIXTURES (WHERE NOT PROTECTED

- a. ALL HANDICAP LAVATORY P-TRAP AND ANGLE STOP ASSEMBLIES SHALL BE INSULATED WITH TRAP WRAP PROTECTIVE KIT MANUFACTURED BY PROFLO MODEL PF200 SERIES OR EQUAL. PROVIDE OFFSET TRAPS FOR HANDICAP ACCESSIBLE FIXTURES WHERE REQUIRED. ABRASION RESISTANT ANTI-MICROBIAL VINYL EXTERIOR COVER SHALL BE SMOOTH. FOR TRAPS THE INSULATION MUST HAVE A CLEANOUT NUT CAP TO ALLOW SERVICE TO THE TRAP WITHOUT DISASSEMBLY. FOR STOPS, THE INSULATION MUST HAVE A LOCK LID THAT PREVENTS TAMPERING BUT ALLOWS ACCESS WITHOUT REMOVAL OF THE INSULATION. FASTENERS MUST REMAIN SUBSTANTIALLY OUT OF SIGHT. ACCEPTABLE MANUFACTURERS INCLUDE PROFLO, TRUEBRO, PLUMBEREX, AND DEARBORN.
- 22. CONCRETE HOUSEKEEPING PADS
 - a. ALL FLOOR-MOUNTED EQUIPMENT SHALL BE INSTALLED LEVEL AND PLUMB ON 4" THICK CONCRETE HOUSEKEEPING PAD.
- 23. ESCUTCHEON PLATES a. INSTALL ONE-PIECE CHROME PLATED BRASS WALL PLATE EQUIPPED WITH SET SCREW AROUND ALL EXPOSED PIPE PASSING THROUGH WALLS IN
- 24. ACCESS PANELS

a. LOCATE VALVES IN READILY ACCESSIBLE LOCATIONS. WHERE VALVES SHALL BE INSTALLED ABOVE NON-ACCESSIBLE CEILINGS, PROVIDE ACCESS PANELS. ACCESS PANELS SHALL BE PAINTABLE METAL. COORDINATE

ACCESS PANEL SIZES AND LOCATIONS WITH THE ARCHITECT. 25. FIRE STOPPING

a. PROVIDE FIRE STOPPING AT ALL PENETRATIONS THROUGH RATED

SEPARATIONS PER LOCAL CODES & REGULATIONS & PER UL RECOMMENDATIONS FOR ASSEMBLIES ENCOUNTERED IN PROJECT. b. THE FIRE STOPPING MATERIAL MUST MEET THE INTEGRITY OF THE FIRE RATED WALL, FLOOR, CEILING & ROOF BEING PENETRATED. REFER TO ARCHITECT'S DRAWINGS FOR WALL, FLOOR, CEILING & ROOF FIRE RATINGS

PRIOR TO BIDDING WORK. 26. FLASHING & COUNTERFLASHING

a. PROVIDE ROOF FLASHING AND COUNTERFLASHING FOR ALL ROOF PENETRATIONS. b. OBTAIN APPROVAL FROM GENERAL CONTRACTOR, CONSTRUCTION

MANAGER, OWNER AND/OR ROOFING CONTRACTOR PRIOR TO MAKING ANY

PENETRATIONS SO THAT WARRANTIES ARE NOT COMPROMISED OR

27. CATHODIC PROTECTION a. PROVIDE DIELECTRIC INSULATION AT POINTS WHERE COPPER OR BRASS PIPE COMES IN CONTACT WITH FERROUS PIPING, REINFORCING STEEL OR OTHER DISSIMILAR METAL IN STRUCTURE.

28. EXCAVATION, TRENCHING & BACKFILL

- a. DO ALL EXCAVATION, TRENCHING & BACKFILL REQUIRED FOR THE INSTALLATION OF PLUMBING WORK.
- b. ALL BACKFILL SHALL BE COMPACTED & BROUGHT TO FINISHED GRADE AND MUST MATCH SURROUNDING CONDITIONS
- c. RESTORE ALL DISTURBED FLOORING TO ORIGINAL CONDITION. d. ALL PIPING SHALL BE LAID ON A BED OF SAND. 6" THICK MINIMUM. BACKFILI UNDER BUILDING AND ALL DRIVES, ROADS AND WALKS WITH BANK-RUN

29. CUTTING AND PATCHING

ADDITIONAL INFORMATION

PROVIDE FIRE-RATED BOX IF INSTALLED IN FIRE-RATED

PROVIDE FIRE-RATED BOX IF INSTALLED IN FIRE-RATED

PULL DOWN HEAD STAINLES STEEL FINISH 1.5 GPM

PROVIDE FIRE-RATED BOX IF INSTALLED IN FIRE-RATED

ACCEPTABLE MANUFACTURERS

ZURN, SMITH, WATTS, WADE, JOSAM, MIFAB

SIOUX CHIEF, OATEY, NSF, JUMBO

CONTROL

FLOW RATE

SEAT-TYPE

COMFORT SEAT #C1011

ACCEPTABLE MANUFACTURERS

AMERICAN STANDARD, KOHLER, ZURN

ROVIDE WITH LOUVERED FACEPLATE # 37534.

..75 GPM MATTE BLACK FINISH

1.75 GPM MATTE BLACK FINISH

MATTE B;ACK FINSH

FLUSH VALVE TYPE

NOT APPLICABLE MANUAL

V/CRUMB CUP STRAINER

a. CUT AND PATCH WALLS AND FLOORS TO MATCH BUILDING CONSTRUCTION WHERE REQUIRED TO INSTALL ALL PLUMBING.

a. INSTALL UNIONS AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC COUPLINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS

31. INSTALLATION

a. INSTALL PIPING FREE OF SAGS AND BENDS. INSTALL FITTINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS. INSTALL SLEEVES FOR PIPES PASSING THROUGH CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, CONCRETE FLOOR, AND ROOF SLABS. SEAL PIPE PENETRATIONS THROUGH RATED CONSTRUCTION WITH FIRESTOPPING SEALANT MATERIAL. UNDERGROUND WATER AND SEWER LINES SHALL BE LAID IN SEPARATE TRENCHES WITH A MINIMUM HORIZONTAL SPACING AS REQUIRED BY CODE, EXCAVATED TO THE PROPER DEPTH AND GRADED TO PRODUCE THE REQUIRED FALL.

a. ALL PLUMBING WORK SHALL BE TESTED & APPROVED BY INSPECTOR PRIOR TO BEING BACKFILLED, CONCEALED & PUT INTO SERVICE. AFTER TESTING IS COMPLETE & APPROVED, THE PLUMBING CONTRACTOR MUST DISINFECT THE POTABLE WATER SYSTEM AS REQUIRED BY LOCAL AUTHORITY. TEST WATER PURITY ACCORDING TO LOCAL REQUIREMENTS AND SUBMIT CERTIFIED TEST RESULTS TO OWNER FOR REVIEW AND APPROVAL.

- a. SUBMIT TO THE ARCHITECT PDF FILE COPIES OF COMPLETE & CERTIFIED SHOP DRAWINGS, DESCRIPTIVE DATA, PERFORMANCE DATA & RATINGS, DIAGRAMS AND SPECIFICATIONS ON ALL SPECIFIED EQUIPMENT, INCLUDING ACCESSORIES, AND MATERIALS FOR REVIEW.
- b. THE MAKE, MODEL NUMBER, TYPE, FINISH & ACCESSORIES OF ALL EQUIPMENT AND MATERIALS SHALL BE REVIEWED & APPROVED BY THE PLUMBING CONTRACTOR & GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT FOR THEIR REVIEW & APPROVAL.
- c. REVIEW OF SHOP DRAWINGS DOES NOT RELIEVE THE PLUMBING CONTRACTOR/VENDOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS & APPLICABLE CODES.

34. OWNER'S INSTRUCTIONS

a. PROVIDE TWO SETS OF COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS WITH DRAWINGS, TYPEWRITTEN INSTRUCTIONS AND OPERATING SEQUENCES AND DESCRIPTIVE DATA SHEETS. ASSEMBLE EACH SET IN A HARD-BOUND COVER.

- a. THE PLUMBING CONTRACTOR MUST UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN EQUIPMENT, MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER AND THE PLUMBING CONTRACTOR WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE TO
- b. RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE EQUIPMENT, MATERIALS AND WORKMANSHIP. END OF DIVISION 22 - PLUMBING

SYMBOL DESCRIPTION s SANITARY/WASTE PIPING BELOW FLOOR s SANITARY/WASTE PIPING ABOVE CEILING v VENT PIPING cw COLD WATER PIPING hw HOT WATER PIPING hwR HOT WATER RETURN PIPING st STORM PIPING FD● FLOOR DRAIN RD● ROOF DRAIN BALL VALVE CHECK VALVE BALANCING VALVE CO• CLEANOUT WH H FROST PROOF WALL HYDRANT	PLUMBING LEGEND									
S SANITARY/WASTE PIPING ABOVE CEILING V V VENT PIPING COULD WATER PIPING HOT WATER PIPING HOT WATER RETURN PIPING HOT WATER RETURN PIPING ST STORM PIPING FD FLOOR DRAIN ROOF DRAIN BALL VALVE CHECK VALVE BALANCING VALVE CO CLEANOUT WH H FROST PROOF WALL HYDRANT	SYMBOL	DESCRIPTION								
— V VENT PIPING — CW COLD WATER PIPING — HW HOT WATER PIPING — HWR HOT WATER RETURN PIPING — G NATURAL GAS PIPING — ST STORM PIPING FD ● FLOOR DRAIN RD ● ROOF DRAIN — W BALL VALVE — W CHECK VALVE — BALANCING VALVE CO ● CLEANOUT WH H FROST PROOF WALL HYDRANT	s	SANITARY/WASTE PIPING BELOW FLOOR								
— CW— COLD WATER PIPING — HW— HOT WATER PIPING — HWR— HOT WATER RETURN PIPING — G — NATURAL GAS PIPING — ST — STORM PIPING FD ● FLOOR DRAIN RD ● ROOF DRAIN — BALL VALVE — CHECK VALVE — BALANCING VALVE CO ● CLEANOUT WH H FROST PROOF WALL HYDRANT	— s —	SANITARY/WASTE PIPING ABOVE CEILING								
—HW— HOT WATER PIPING —HWR— HOT WATER RETURN PIPING —G NATURAL GAS PIPING —ST— STORM PIPING FD FLOOR DRAIN RD ROOF DRAIN BALL VALVE —H CHECK VALVE —BALANCING VALVE CO CLEANOUT WH H FROST PROOF WALL HYDRANT	v	VENT PIPING								
—HWR— HOT WATER RETURN PIPING —G NATURAL GAS PIPING —ST— STORM PIPING FD ● FLOOR DRAIN RD ● ROOF DRAIN BALL VALVE —H CHECK VALVE BALANCING VALVE CO CLEANOUT WH H FROST PROOF WALL HYDRANT		COLD WATER PIPING								
—————————————————————————————————————	——нw——	HOT WATER PIPING								
—ST— STORM PIPING FD ● FLOOR DRAIN RD ● ROOF DRAIN BALL VALVE CHECK VALVE BALANCING VALVE CO ● CLEANOUT WH H FROST PROOF WALL HYDRANT	HWR	HOT WATER RETURN PIPING								
FD FLOOR DRAIN RDO ROOF DRAIN BALL VALVE CHECK VALVE BALANCING VALVE COO CLEANOUT WH H FROST PROOF WALL HYDRANT	—— G ——	NATURAL GAS PIPING								
RD● ROOF DRAIN BALL VALVE CHECK VALVE BALANCING VALVE CO● CLEANOUT WH H FROST PROOF WALL HYDRANT	st	STORM PIPING								
BALL VALVE CHECK VALVE BALANCING VALVE COO CLEANOUT WH H FROST PROOF WALL HYDRANT	FD●	FLOOR DRAIN								
CHECK VALVE BALANCING VALVE COO CLEANOUT WH H FROST PROOF WALL HYDRANT	<u>rd</u> ©	ROOF DRAIN								
BALANCING VALVE COO CLEANOUT WH H FROST PROOF WALL HYDRANT	─ ×	BALL VALVE								
COO CLEANOUT WH H FROST PROOF WALL HYDRANT	── ⊁	CHECK VALVE								
WH H FROST PROOF WALL HYDRANT		BALANCING VALVE								
	CO •	CLEANOUT								
A VENT TURQUOU ROOF SIGNS WITHOUT	WH H FROST PROOF WALL HYDRANT									
VENT THROUGH ROOF RISER INDICATOR	#	VENT THROUGH ROOF RISER INDICATOR								
HOT WATER RETURN PUMP	O	HOT WATER RETURN PUMP								

COMMERCIAL ELECTRIC(1 UNIT) TO FIXTURES 2. THE TEMPERATURE AND PRESSURE RELEF VILLE SETTING SHALL NOT EXCEED PRESSURE RATING OF AN ANY COMPONENT IN THE SYSTEM.

	LAVATORY SCHEDULE														
MARK	LAVATORY DESCRIPTION	FIXTURE MANUFACTURER	FIXTURE MODE	EL FAUCET MANUFACTURER	R FAUCET MODEL	MATERIAL	USE	MOUNTING	STYLE	CONTROL	FLOW RATE	DRAIN	APPROVED FIXTURE MANUFACTURERS	APPROVED FAUCET MANUFACTURERS	ADDITIONAL INFORMATION
LV1	UNDERMOUNT	KOHLER	K-2000	DELTA	MODERN BLACK FINISH	CHINA	GENERAL	UNDERMOUNT	UNDERMOUNT	MANUAL	1	POP-UP	AMERICAN STANDARD, KOHLER, ZURN	AMERICAN STANDARD, KOHLER, ZURN, BRADLEY, CHICAGO FAUCET, SPEAKMAN, T&S, SYMMONS, POWERS, MOEN, DELTA	INSULATE SUPPLIES & DRAIN WHERE NOT PROTECTED WITH SHROUD
LV2	UNDERMOUNT	DURAVIT	316530017	DELTA	MODERN BLACK FINISH	CHINA	ADA	UNDERMOUNT	N/A	MANUAL	1	GRID	AMERICAN STANDARD, KOHLER, ZURN	AMERICAN STANDARD, KOHLER, ZURN, BRADLEY, CHICAGO FAUCET, SPEAKMAN, T&S, SYMMONS, POWERS, MOEN, DELTA	INSULATE SUPPLIES & DRAIN WHERE NOT PROTECTED WITH SHROUD
	WATER CLOSET SCHEDULE														

STYLE

ELONGATED

Progress Dates 05/26/2023 BID/PERMIT 08/30/2024 BID SET 2

Checked By: SSS Drawn by: DAG



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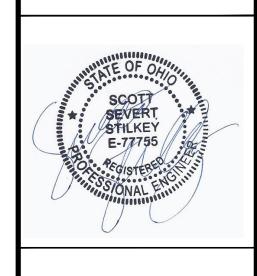
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8/10/2022 Job No: 22042

PLUMBING DETAILS

APPROVED FLUSH VALVE MANUFACTURERS | ADDITIONAL INFORMATION

Z:\~Project Directories\9700-9799\9757 - Findlay Flats Findlay Parkside (Willkommen ? Phase II)\~Construction Documents\~Phase 1 (8 Buildings)\1724 VINE\XREF-ART.dwg-Model. Plot Date/Time: Aug 29, 2024-10:49am - By: derek.grundy
THESE DRAWINGS AND SPECIFICATIONS ARE NOT AUTHORIZED TO BE USED AS CONTRACT DOCUMENTS. THESE DRAWINGS HAVE BEEN PREPARED TO DEMONSTRATE COMPLIANCE WITH APPLICABLE CODES, AND ARE INSTALLING CONTRACTOR IS RESPONSIBLE TO ENSURE THAT MEANS, METHODS, AND MATERIALS USED IN CONTRACTOR, ETC.
GENERAL CONTRACTOR, ETC.



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