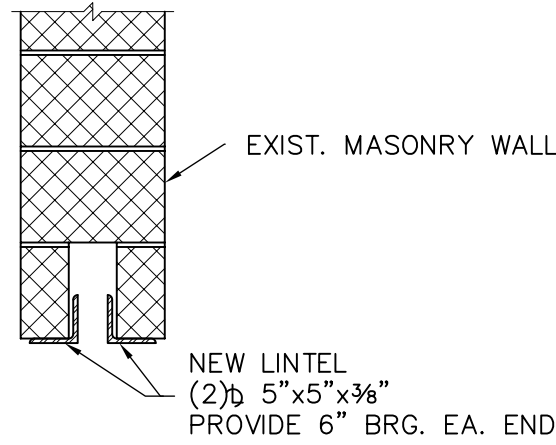


ROOF FRAMING PLAN
SCALE 1/4"=1'-0"



- NOTES:
- CUT & REMOVE INSIDE FACE OF WALL TO MID WALL. CUT HOLE LARGE ENOUGH TO INSTALL 1 CHANNEL.
 - INSTALL INSIDE ANGLE. GROUT ANGLE INTO PLACE & REPLACE MASONRY
 - CUT HOLE AT OUTSIDE FACE OF WALL & INSTALL ANGLE & REPLACE MASONRY
 - CUT OPENING.

SECTION
N.T.S.

A
S001

STRUCTURAL NOTES

- This project is designed in accordance with VUBC 2021
- Contractor shall conform with the provisions of the local building code and any other Local, State, or Federal Regulations.
- At the time of shop drawing submission, the general contractor shall inform the engineer in writing of any deviations or omissions from the contract document.
- Contractor shall verify all dimensions and conditions indicated on these drawings and shall notify the engineer in writing of any discrepancies prior to proceeding with constructions.
- "Typical Details" shown on these drawings apply to all conditions of the project similar to those shown in the details regardless of whether or not they are specifically referenced on the plans. Plans, sections, and details are not to be scaled for determination of quantities, lengths or fit of materials.
- Fabrication, erection and connections of structural steel shall be in accordance with the AISC "Specification for the Design, Fabrication and Erection of Steel Buildings"
- Steel framework is not designed to be laterally stable until floor and/or roof decks are installed. Temporary bracing must be provided for all construction loads and maintained until completion of structure.
- Unless otherwise noted, all angles, plates, rods and miscellaneous framing are to be welded at contact joints and supports by fillet welds sufficient to develop 50 % of the area of the smaller member in tension. In general, weld lengths should be equal to the sum of the legs of the angle or width of plate being connected if the weld size is 1/16" less than the material thickness.
- All structural steel shall conform to ASTM "Specification A-36". All steel shall be detailed, fabricated and erected in accordance with the AISC Manual. All connections shall develop the full strength of the beam.
- All exposed steel, such as, exterior columns, spandrel beams, lintels, hung plates mechanical supports, etc. shall be painted. All other steel shall not be painted.
- All masonry work shall be in accordance with the requirements of ACI 530.1 latest edition. Mortar shall be in accordance with the requirements of ASTM C270. Submit product data confirming that masonry products conform to these standards.
- Hollow masonry units shall be laid with full mortar coverage on horizontal and vertical face shells and webs.
- All masonry walls shall be temporarily braced during construction until mortar has attained its design strength and roof members have been placed and anchored.

CONTRACTOR NOTE:

VERIFY ALL DIMENSIONS & CONDIDIONTS SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION

NOTIFY GOUGHNOUR ENGINEERING OF ANY CONDITION THAT IS DIFFERENT FROM WHAT IS SHOWN ON THIS PLAN



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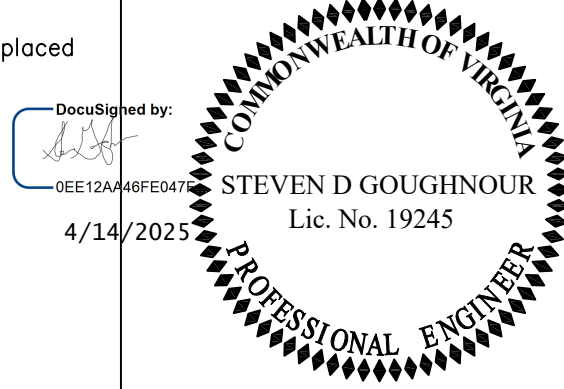
CONSULTANT:

GOUGHNOUR
ENGINEERING, PC
NORTHERN VIRGINIA - HAMPTON ROADS
CONSULTING STRUCTURAL ENGINEERS
P. O. BOX 1817
HENRICO, VA 23112
703.604.4115

PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303

PROFESSIONAL SEAL



ISSUED: 02.14.2025
FOR PERMIT: 04.14.2025
REVIEW COMMENTS:

DESIGNED/DRAWN BY: SDG
REVIEWED/APPROVED BY: SDG
PROJECT NO: 24-1XX

SHEET TITLE:

**STRUCTURAL PLAN
& DETAILS**

SHEET NUMBER:

S001

INTERIOR RENOVATIONS

6201, 6203 & 6205 RICHMOND HIGHWAY
ALEXANDRIA, VIRGINIA
22303

SCOPE OF WORK

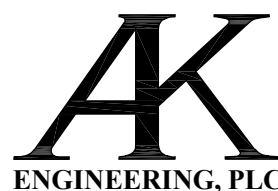
THE SCOPE OF WORK FOR THIS PERMIT IS FOR INTERIOR RENOVATIONS FOR THE REDUCTION OF AN EXISTING TENANT OFFICE SPACE. NEW DEMISE WALLS WILL CREATE TWO NEW SPACES FOR FUTURE TENANTS, EACH WITH NEW STOREFRONT ENTRY DOORS.
REFER TO ENGINEERING PLANS FOR SCOPE OF MECHANICAL, ELECTRICAL AND PLUMBING WORK.

ARCHITECT



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MPE ENGINEER



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CONTRACTOR



1531 SCANDIA CIR
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202-302-8465

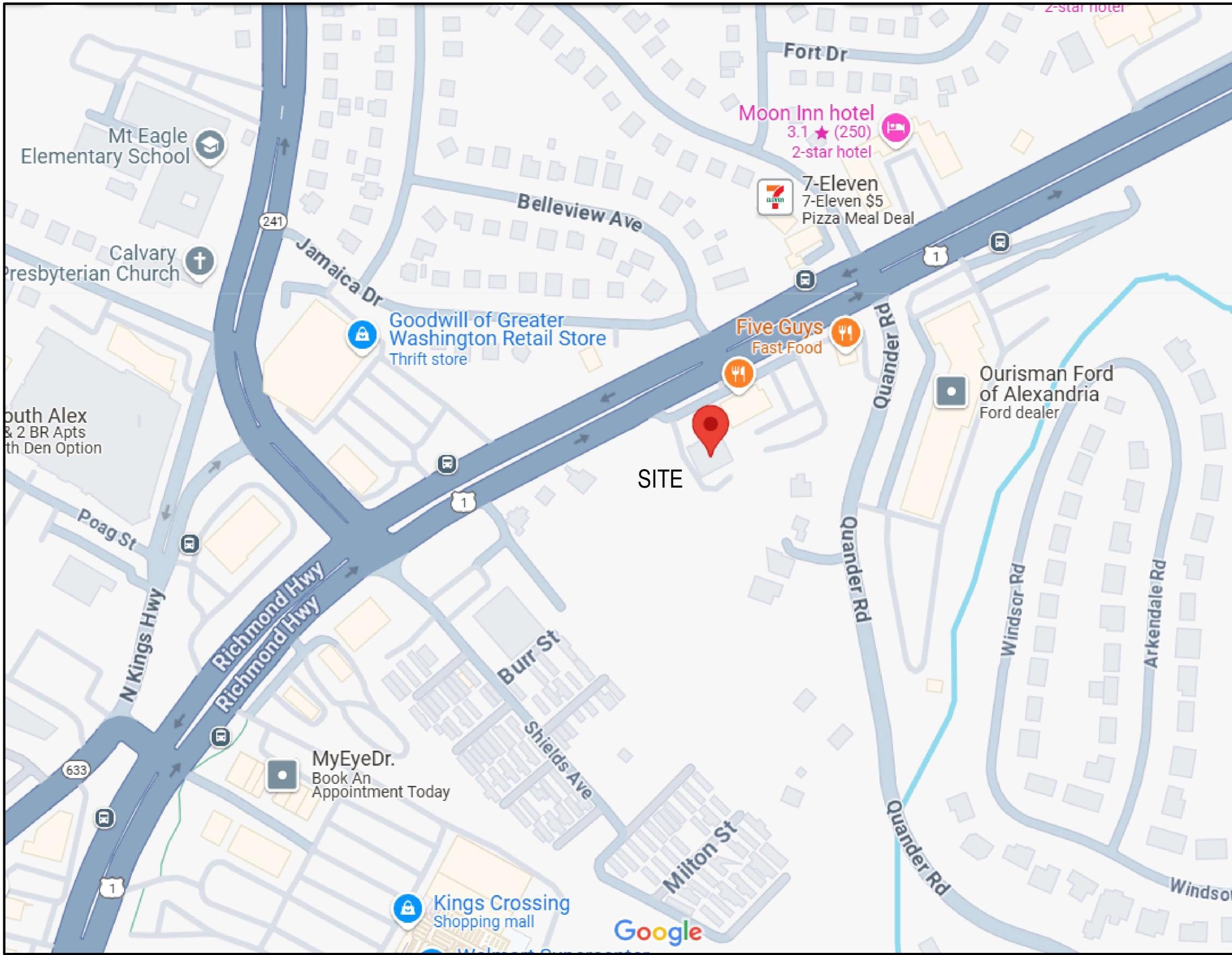
ARCHITECTURAL

- A000 COVER SHEET
- A001 CODE ANALYSIS AND KEY PLAN
- A101 DEMOLITION PLANS
- A102 NEW WORK PLANS
- A103 FINISH & POWER PLANS
- A401 ENLARGED PLANS AND INTERIOR ELEVATIONS
- A700 PARTITION TYPES AND TYPICAL DETAILS
- A701 GENERAL NOTES
- A702 GENERAL NOTES
- A703 SPECIFICATIONS

ENGINEERING

- S001 STRUCTURAL PLAN & DETAILS
- M001 GENERAL NOTES, SYMBOLS AND ABBREVIATIONS - MECHANICAL
- M002 GROUND FLOOR PLAN - DEMOLITION - MECHANICAL
- M003 GROUND FLOOR PLAN - NEW WORK - MECHANICAL
- M004 SCHEDULES - MECHANICAL
- M005 DETAILS - MECHANICAL
- P001 GENERAL NOTES, SYMBOLS AND ABBREVIATIONS - PLUMBING
- P002 GROUND FLOOR PLAN - EXISTING CONDITIONS AND NEW WORK - PLUMBING
- P003 ROOF PLAN - NEW WORK - PLUMBING
- P004 DETAILS - PLUMBING
- E001 GENERAL NOTES, SYMBOLS AND ABBREVIATIONS - ELECTRICAL
- E002 GROUND FLOOR PLAN DEMOLITION ELECTRICAL
- E003 GROUND FLOOR PLAN NEW WORK LIGHTING ELECTRICAL
- E004 GROUND FLOOR PLAN NEW WORK POWER ELECTRICAL
- E005 POWER RISER DIAGRAM, PANEL SCHEDULES & DETAILS - ELECTRICAL

VICINITY MAP



Paul
Elgin

Digitally signed
by Paul Elgin
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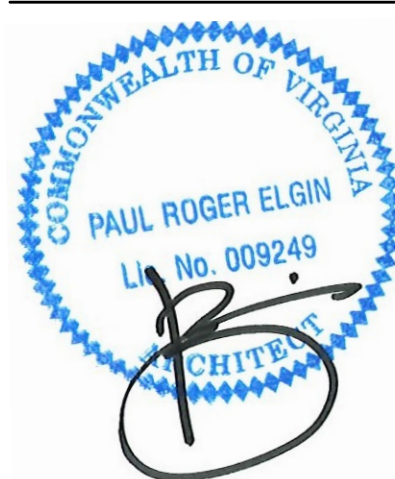
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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303



04/10/25

ISSUED FOR PERMIT DATE 03.21.2025

DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177
SHEET TITLE:

COVER SHEET

SHEET NUMBER:

A000



APPLICABLE CODES

BUILDING:	VIRGINIA CONSTRUCTION CODE (IBC)	2021
MECHANICAL:	VIRGINIA EXISTING BUILDING CODE	2021
PLUMBING/GAS:	VIRGINIA MECHANICAL CODE	2021
	VIRGINIA PLUMBING CODE	2021
	VIRGINIA FUEL GAS CODE	2021
ELECTRICAL:	NFPA NATIONAL ELECTRICAL CODE	2020
ENERGY:	VIRGINIA ENERGY CONSERVATION CODE	2021
LIFE SAFETY:	NFPA-13	2019
	NFPA-72	2019
FIRE ALARM:	INTERNATIONAL FIRE CODE	2021
	VIRGINIA STATEWIDE FIRE PREVENTION CODE	2021
ACCESSIBILITY:	ICC/ANSI A117.1	2017

CODE ANALYSIS (PER TABLE 601)

CONSTRUCTION TYPE:	II B
USE GROUP:	B - BUSINESS
BUILDING FOOTPRINT:	±4,959 SF
HEIGHT/STORIES:	1 FLOOR
SUPPRESSION:	NON-SPRINKLERED
CENTRAL MONITORING STATION:	NO
PRIMARY STRUCTURAL FRAME:	0 HR
BEARING WALLS (EXTERIOR):	0 HR
BEARING WALLS (INTERIOR):	0 HR
FLOOR CONSTRUCTION AND SECONDARY MEMBERS:	0 HR
ROOF CONSTRUCTION AND SECONDARY MEMBERS:	0 HR
TENANT SEPARATION WALLS:	1 HR - UL #J419

TENANT ANALYSIS

6201: FUTURE TENANT SPACE:	
TENANT AREA:	2,030 SF
USE GROUP:	B
OCCUPANT LOAD:	2,030 SF/150 SF/PERSON = 14 OCCUPANTS

6203: EXISTING TENANT REDUCTION:	
TENANT AREA:	1,486 SF
USE GROUP:	B
OCCUPANT LOAD:	1,486 SF/150 SF/PERSON = 10 OCCUPANTS

6205: FUTURE TENANT SPACE:	
TENANT AREA:	1,444 SF
USE GROUP:	B
OCCUPANT LOAD:	1,444 SF/150 SF/PERSON = 10 OCCUPANTS

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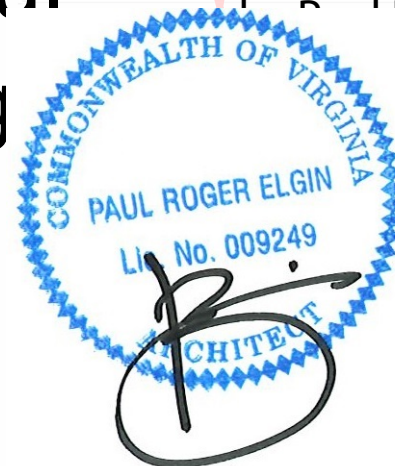
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PROJECT:

INTERIOR
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6201, 6203 & 6205 RICHMOND HWY
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Paul Elgin
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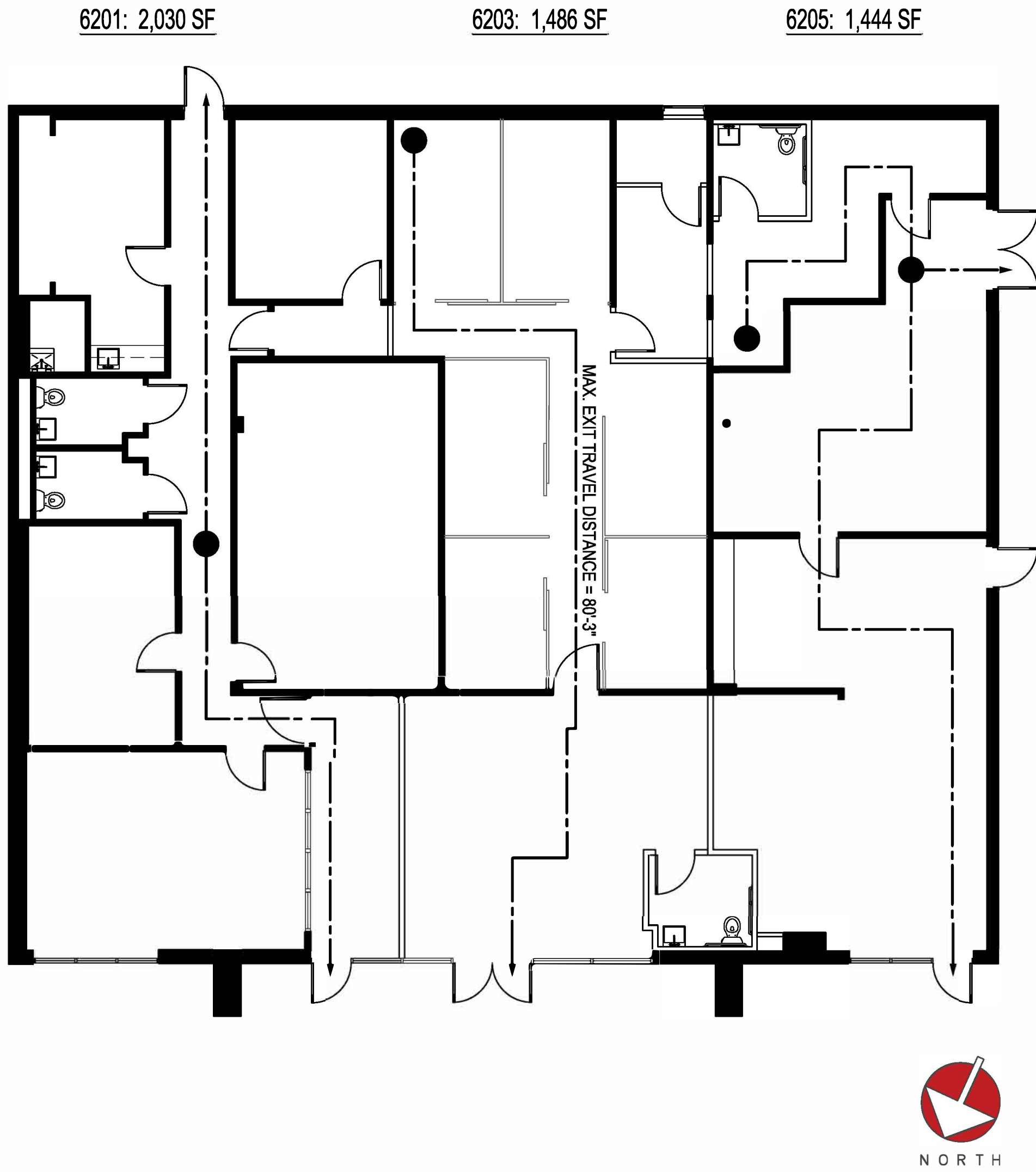
ISSUED	DATE
FOR PERMIT	03.21.2025
COUNTY COMMENTS	05.23.2025

DESIGNED/DRAWN BY:	SM
REVIEWED/APPROVED BY:	JR
PROJECT NO:	24-177
SHEET TITLE:	

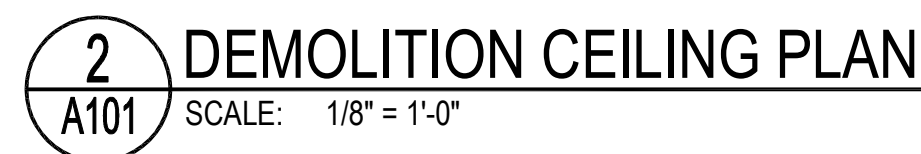
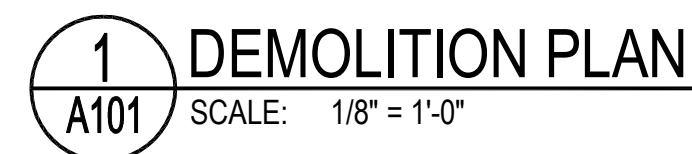
CODE ANALYSIS &
EGRESS PLAN

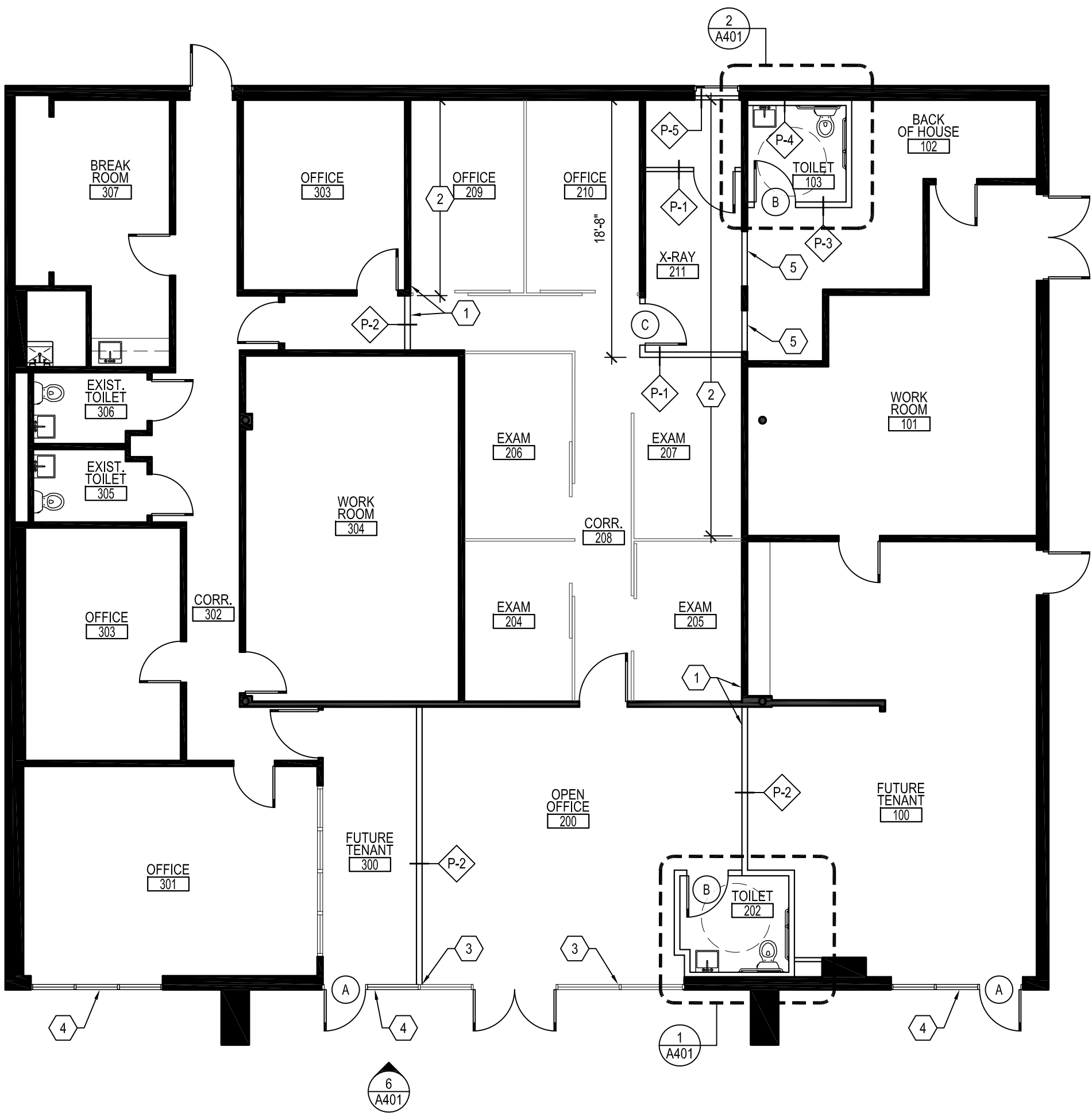
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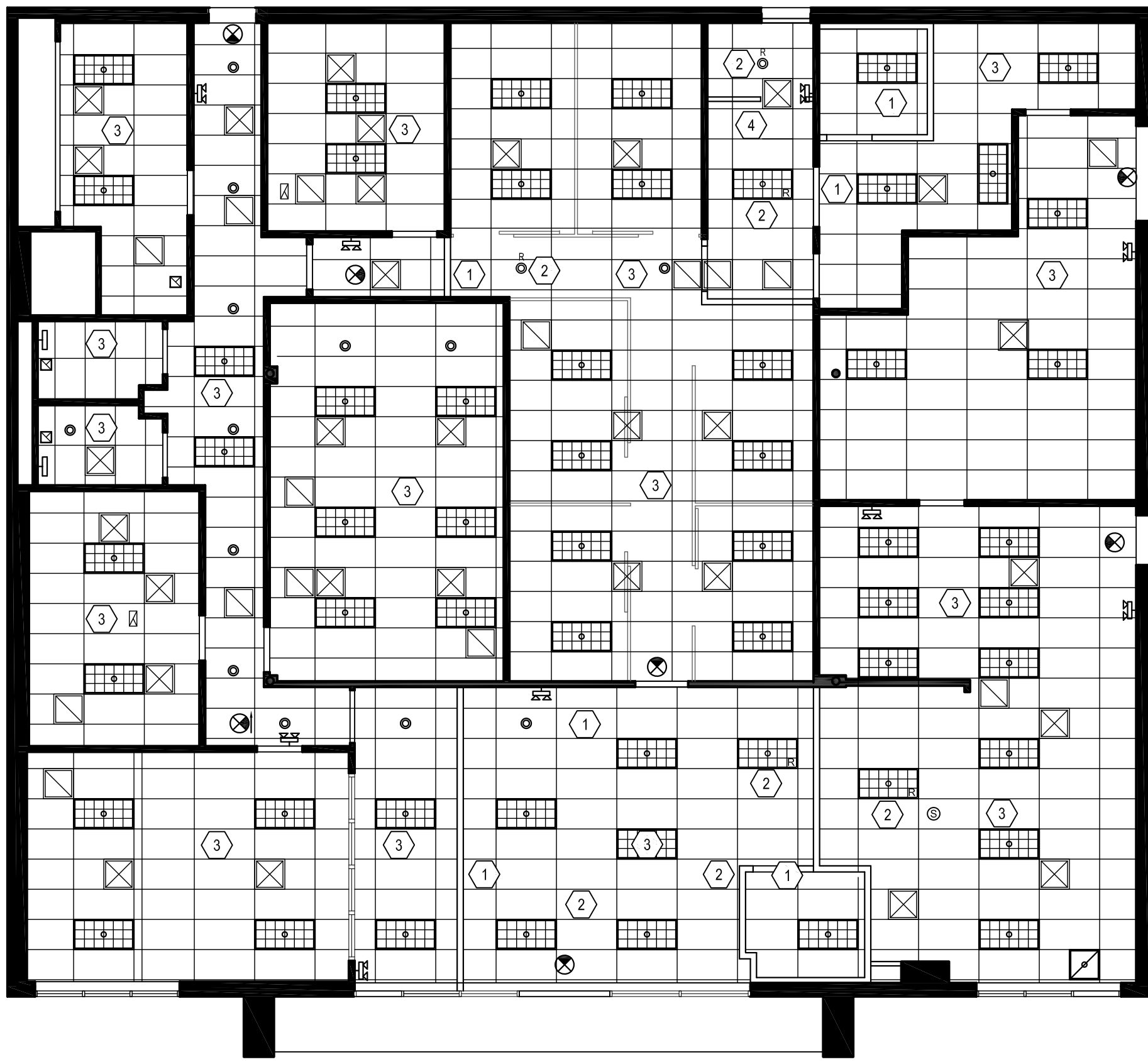


OCCUPANCY LOAD CALCULATIONS PER IBC 2021 TABLE 1004.5						
USAGE BY OCCUPANCY CLASSIFICATION		USF	SQUARE FOOT PER PERSON	TABULAR LOAD	BY SEAT OR TABULAR IF SAME	GREATER COMPARED LOAD
BUSINESS AREAS (UNCONCENTRATED):			150			
6203 RICHMOND HWY		1,486		10	SAME	10
TOTAL		1,486		10	SAME	10
BUSINESS AREAS (CONCENTRATED):			50			
TOTAL		0		0	SAME	0
ASSEMBLY AREAS (UNCONCENTRATED):			15			
TOTAL		0		0	SAME	0
ASSEMBLY AREAS (CONCENTRATED):			7			
TOTAL		0		0	SAME	0
STORAGE/UTILITY AREAS:			300			
TOTAL		0		0	SAME	0
TOTAL TENANT AREA		1,486				10
N.I.C. SPACE (CALCULATED AS B-USE)			150	0		0
TOTAL FLOOR OCCUPANCY						10
REQUIRED EGRESS WIDTH PER IBC 2021 SECTION 1005.3						
STAIR DOOR WIDTH						
DOOR #1	INCHES	RATIO	LOAD	ACTUAL		
	68	0.15	453	5		
TOTAL ALLOWED =			453	5		
PLUMBING FIXTURE CALCULATIONS PER IBC 2021 TABLE 2902.1						
USE GROUP	LOAD	WATER CLOSETS		LAVATORIES		DRINKING FOUNTAINS
		MALE	FEMALE	MALE	FEMALE	
BUSINESS	10	1 PER 25 FOR THE FIRST 50; 1 PER 50 THEREAFTER		1 PER 40 FOR THE FIRST 80; 1 PER 80 THEREAFTER		1 PER 100
		0.20	0.20	0.13	0.13	0.10
ASSEMBLY	0	1 PER 125 0.00	1 PER 65 0.00	1 PER 200 0.00		1 PER 500 0.00
STORAGE	0	1 PER 100 0.00		1 PER 100 0.00		1 PER 1000 0.00
TOTAL REQUIRED		0.20 (1)	0.20 (1)	0.13 (1)	0.13 (1)	0.00
TOTAL PROVIDED		1	1	1	1	0
PER IBC 2021 TABLE 2902.1, e: FOR BUSINESS AND MERCANTILE CLASSIFICATIONS WITH AN OCCUPANT LOAD OF 15 OR FEWER, A SERVICE SINK SHALL NOT BE REQUIRED.						
PER IBC 2021 SECTION 2902.2, EXCEPTION 4: SEPARATE FACILITIES SHALL NOT BE REQUIRED IN BUSINESS OCCUPANCIES IN WHICH THE MAXIMUM OCCUPANT LOAD IS 25 OR FEWER.						
PER IBC 2021 SECTION 2902.6 SMALL OCCUPANCIES: DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 15 OR FEWER.						





1 ARCHITECTURAL FLOOR PALN
SCALE: 1/8" = 1'-0"



2 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

ARCHITECTURAL GENERAL NOTES

- ALL EXPOSED EDGES AND CORNERS ON ALL GYPSUM BOARD CONSTRUCTION SHALL RECEIVE A METAL CORNER BEAD WHICH IS TO BE SPACKLED AND FLOATED SMOOTH.
- ALL DISSIMILAR MATERIALS SHALL BE CAULKED AT JOINTS.
- ALL EXISTING DAMAGE TO FIRE RATED CONSTRUCTION SHALL BE REPAIRED AND / OR REPLACED BY THE CONTRACTOR. PATCH ALL DRYWALL HOLES APPROPRIATELY AND SMOOTH ROUGH SURFACES.
- ANY EXISTING CONDITIONS THAT DO NOT MEET CODE SHALL BE REPORTED TO THE ARCHITECT.
- THE ARCHITECT, THE TENANT AND LANDLORD SHALL BE NOTIFIED WHEN FIELD CONDITIONS NECESSITATE CHANGES TO CRITICALLY DIMENSIONED PARTITIONS AND MILLWORK LOCATIONS. REVISED LOCATIONS SHALL BE CHALKED FOR SITE INSPECTION PRIOR TO FABRICATION & INSTALLATION.
- ALL WALLS AND FURRING TO BE LEVELED PLUMB STRAIGHT AND FREE OF NOTICEABLE JOINTS.
- NEW GYPSUM BOARD SHALL BE HELD NO MORE THAN 1/4" A.F.F.. AT EXISTING DRYWALL WHERE BASE HAS BEEN REMOVED, PROVIDE 6" A.F.F. SMOOTH SURFACE SKIM COAT FOR NEW BASE APPLICATION.
- ALL NEW OPENINGS RECEIVING DOOR FRAMES SHALL RECEIVE DOUBLE STUDS FLOOR TO BOTTOM OF STRUCTURE ABOVE, AT EACH SIDE OF OPENING.
- FLOOR SLAB SHALL BE FLASH PATCHED SMOOTH AS REQUIRED TO ACCEPT NEW FLOOR FINISHES. ANY ABANDONED OPENINGS AND EXISTING GAPS IN THE STRUCTURAL SLAB ABOVE AND BELOW SHALL BE STRUCTURALLY PATCHED AND PROPERLY SEALED TO MEET FIRE CODE.
- CONTRACTOR SHALL COORDINATE ALL DIMENSIONS, DETAILS, FINISHES, EQUIPMENT, POWER AND SPECIFICATIONS WITH MILLWORK, ELECTRICAL, AND COMMUNICATION SUBCONTRACTOR. DISCREPANCIES FOUND IN DRAWINGS BETWEEN ARCHITECTURE, ENGINEERING OR SITE CONDITIONS SHALL BE NOTIFIED TO FOCUS ARCHITECTURE + DESIGN PRIOR TO PROCEEDING WITH WORK.
- ALL PARTITIONS SHALL BE ERECTED AS INDICATED IN PARTITION TYPES USING SPECIFIED STUD SIZE, SPACING, BLOCKING, TRIM AND SEALERS AS REQUIRED.
- ALL EXISTING WALLS WILL BE REPAIRED FROM DEMOLITION AND PREPARED FOR APPLICATION OF NEW FINISHES.
- CONTRACTOR SHALL PROVIDE PLASTER SKIM COAT OR ADD DRYWALL SHEET TO EXISTING PARTITIONS TO REMAIN (IF AFTER DEMOLITION THEY ARE NOT SMOOTH AND READY TO ACCEPT SPECIFIED WALL FINISH).
- WHERE NEW WALLS ARE TO ALIGN WITH EXISTING WALLS AND / OR COLUMNS, REMOVE EXISTING CORNER BEAD. TAPE, SPACKLE, AND SAND SMOOTH JOINTS NECESSARY TO A POINT ALONG THE EXISTING WALL SO THAT NEW FINISH IS NOT OBVIOUS.
- ALL PENETRATIONS OF FIRE RATED ASSEMBLIES (FLOORS, WALLS AND / OR CEILINGS) SHALL BE FIRE STOPPED TO COMPLY WITH APPLICABLE CODES AND IN ACCORDANCE WITH UL STANDARDS.

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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303

ARCHITECTURAL KEY NOTES

- ALIGN FACE OF NEW PARTITION WITH EXISTING CONSTRUCTION AS SHOWN.
- EXTEND EXISTING PARTITION TO DECK ABOVE AS REQUIRED TO CREATE CONTINUOUS DEMISE WALL.
- CENTER NEW PARTITION ON WINDOW MULLION AS SHOWN. PROVIDE BREAK METAL AND NEOPRENE GASKET. REFER TO DETAIL 11A700 FOR ADDITIONAL INFORMATION.
- NEW ALUMINUM STOREFRONT SYSTEM W/ TEMPERED GLASS PANELS, STYLE AND FINISH TO MATCH EXISTING STOREFRONT. REFER TO ELEVATION FOR ADDITIONAL INFORMATION.
- INFILL EXISTING OPENING TO MATCH ADJACENT CONSTRUCTION.

DOOR SCHEDULE

DOOR TYPE	SPECIFICATION
(A) NEW ENTRY DOOR	LEAF: 3'-0" X 7'-0" ALUMINUM / GLASS STOREFRONT SYSTEM DOOR FRAME: ALUMINUM STOREFRONT SYSTEM (MATCH EXISTING) HINGES: TOP AND BOTTOM PIVOTS LOCKSET: PUSH PULLS WITH KEYED LOCK (MATCH EXISTING STANDARD) NOTES: PROVIDE OVERHEAD CLOSER
(B) PRIVACY DOOR	LEAF: 3'-0" X 7'-0" PAINT GRADE DOOR FRAME: HOLLOW METAL FRAME HINGES: 1.5 PAIR LOCKSET: LEVER HANDLE LOCK SET - PRIVACY FUNCTION STOP: FLOOR STOP NOTES: PROVIDE HINGE-MOUNTED CLOSER
(C) NON-LOCKING DOOR	LEAF: 3'-0" X 7'-0" PAINT GRADE DOOR FRAME: HOLLOW METAL FRAME HINGES: 1.5 PAIR LOCKSET: LEVER HANDLE PASSAGE SET STOP: FLOOR STOP

DOOR HARDWARE SPECIFICATIONS

ALL HARDWARE FINISHES TO BE SATIN/BRUSHED CHROME (626-US26D) U.O.N.

ALL CYLINDRICAL LATCH AND LOCKSETS TO HAVE SCHLAGE D-SERIES "07-ATHENS" LEVERS WITH INTERCHANGABLE CORES PER LANDLORD REQUIREMENTS U.O.N.

FRAME: 2" KNOCK DOWN HOLLOW METAL

DOOR HINGES: McKINNEY 4" x 4", BALL BEARING BUTT HINGES

DOOR SILENCERS: PROVIDE (3) PER DOOR.

DOOR CLOSER: LCN - 4000 SERIES (OR EQUAL)

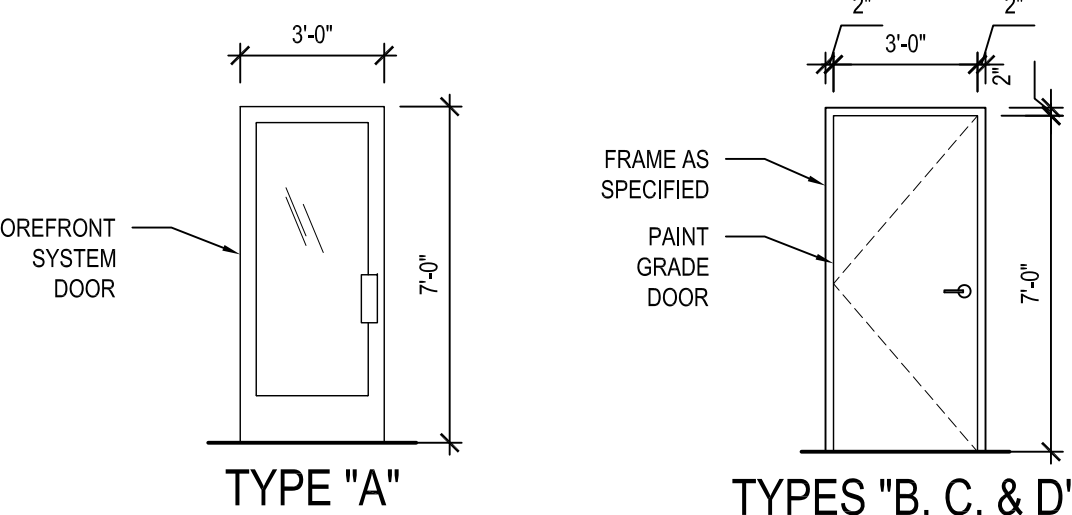
KEY DOORS TO TENANT AND OWNER'S DIRECTION - PROVIDE (3) COPIES OF EACH KEY TO OWNER - PROVIDE KEY BOX.

ALL DOORS NOT LABELED ARE EXISTING TO REMAIN.

HARDWARE SPECIFIED ABOVE IS FOR THE LATCH SET / CLOSER ARRANGEMENTS - THE GC IS TO PROCURE ALL NECESSARY ITEMS AS REQUIRED FOR NORMAL DOOR INSTALLATION INCLUDING STRIKE PLATES, ETC.

AT ALL NEW EXTERIOR SWING DOORS, THE GC IS TO PROVIDE A WEATHER STRIPPING KIT TO INCLUDE ALUMINUM THRESHOLD (BY PEMKO OR EQUAL) AND PERIMETER WEATHERSTRIPPING SEALS (BY PEMKO #29310V-PGOR EQUAL).

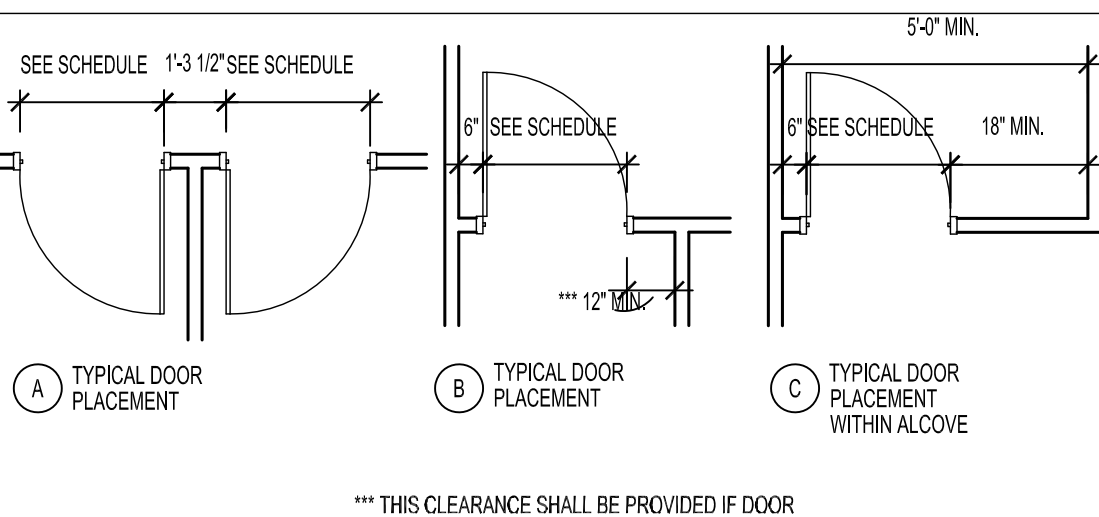
DOOR TYPES



CEILING KEY NOTES

- PROVIDE WALL ANGLE AS REQUIRED AT NEW DECK HEIGHT PARTITIONS (BOTH SIDES).
- PROVIDE RELOCATED LIGHT FIXTURES AS SHOWN.
- RE-CIRCUIT ALL LIGHT FIXTURES FOR INDIVIDUAL TENANT SUITES. REFER TO ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
- PATCH EXISTING CEILING GRID AS REQ'D AT REMOVED / RELOCATED LIGHT FIXTURES.

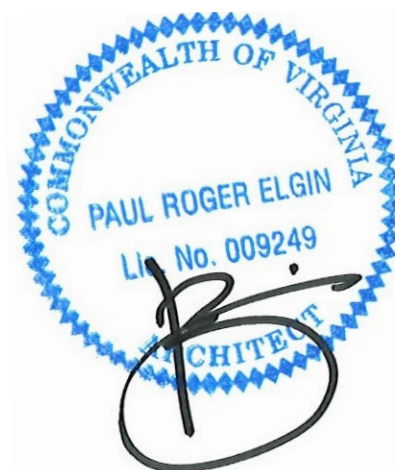
TYPICAL DOOR CLEARANCES



SYMBOLS LEGEND

- EXISTING WALL TO REMAIN.
- EXISTING DOOR TO REMAIN.
- NEW CEILING HEIGHT PARTITION AS SCHEDULED.
- NEW DOOR AS SCHEDULED.
- EXISTING ACOUSTICAL CEILING TILE AND GRID.
- EXISTING 2 X 4 LIGHT FIXTURE TO REMAIN.
- RELOCATED 2 X 4 LIGHT FIXTURE.
- EXISTING DOWNLIGHT TO REMAIN.
- RELOCATED DOWNLIGHT.

NOTE:
1. U.O.N. ALL NEW PARTITIONS (WITHOUT LABELS) SHALL BE PARTITION TYPE 1.
2. REFER TO A700 FOR PARTITION TYPE DETAILS.



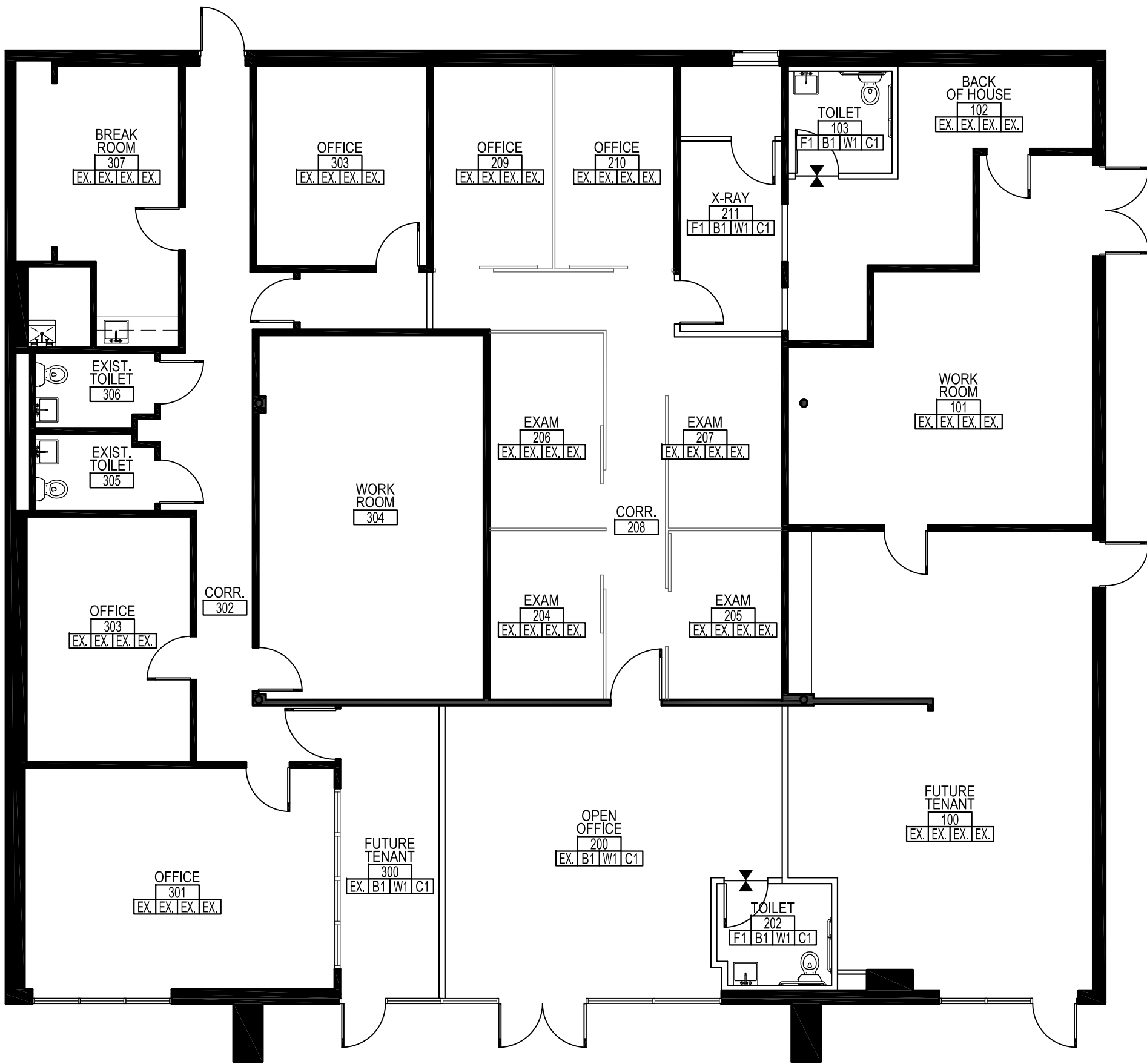
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DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177
SHEET TITLE:

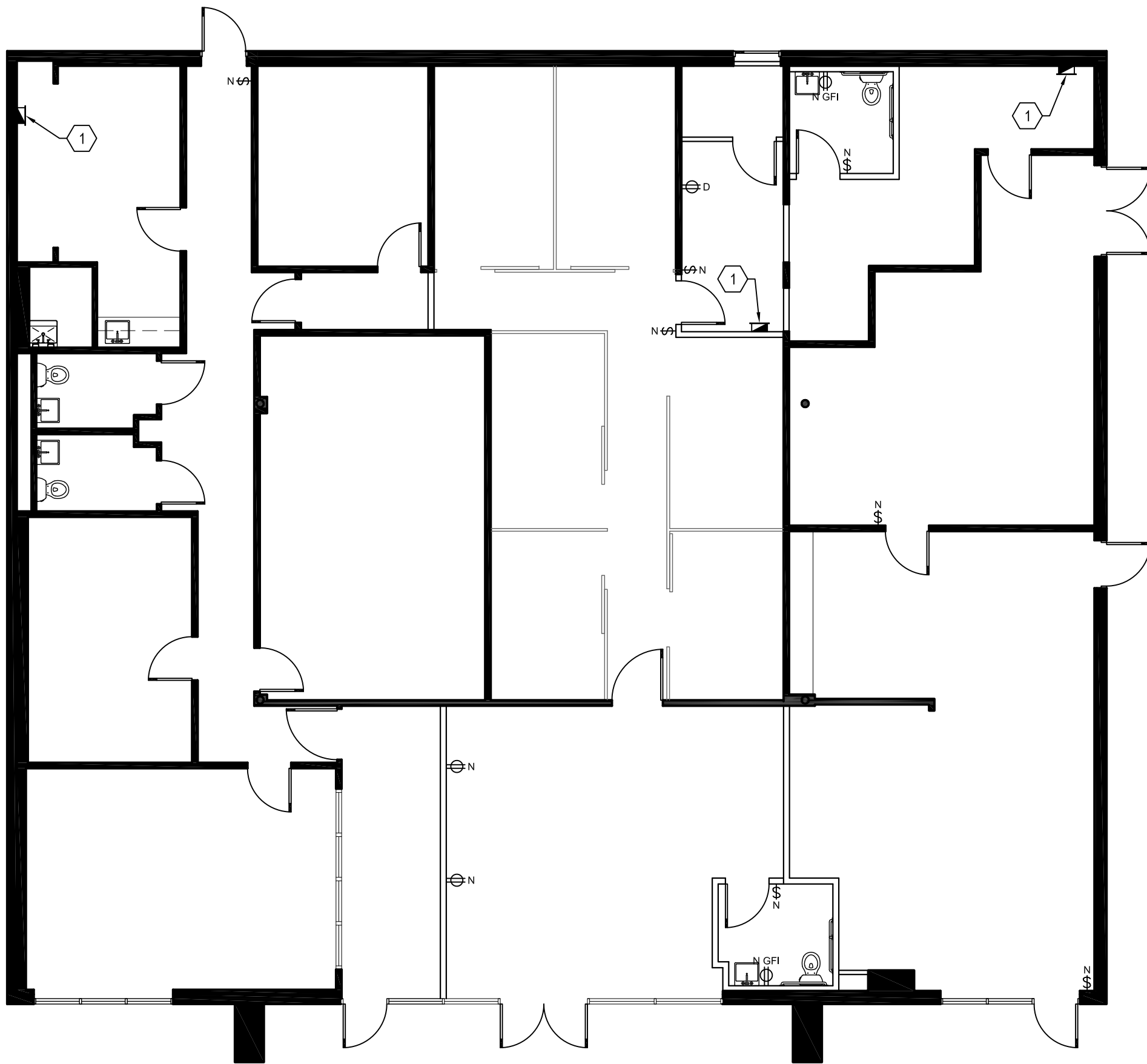
**NEW WORK
PLANS**

SHEET NUMBER:

A102



1
A103
FINISH PALN
SCALE: 1/8" = 1'-0"



2
A103
NEW POWER PLAN
SCALE: 1/8" = 1'-0"

POWER KEY NOTES

1 LOCATION OF NEW ELECTRICAL SERVICE PANEL. REFER TO ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.

SYMBOLS LEGEND

- BREAKOUT
FLOOR
CEILING
WALLS
BASE
FLOOR FINISH
- ACCENT FINISH TAG
- CHANGE IN FLOORING MATERIAL: TRANSITION TO OCCUR AT THE CENTERLINE OF THE DOOR IN THE CLOSED POSITION U.O.N.
- DUPLEX RECEPTACLE
- QUADRUPEX RECEPTACLE
- TELEPHONE/DATA RECEPTACLE



NOTES:
1. REFER TO A602 FOR FINISH SCHEDULE.

FINISH SCHEDULE

FLOORING			
F1	LUXURY VINYL TILE	MANUFACTURER:	TBD
		PRODUCT NO.:	-
		COLOR:	-
		SIZE:	-
		NOTE:	DIRECT GLUE
BASE			
B1	VINYL BASE	MANUFACTURER:	TBD
		PRODUCT NO.:	-
		COLOR:	-
		SIZE:	-
WALLS			
W1	FIELD PAINT	MANUFACTURER:	TBD
		PRODUCT NO.:	-
		COLOR:	-
		FINISH:	FLAT LATEX
W2	DOOR/TRIM	MANUFACTURER:	TBD
		PRODUCT NO.:	-
		COLOR:	-
		FINISH:	LATEX SEMIGLOSS
W3	ACCENT PAINT (OPEN)	MANUFACTURER:	TBD
		PRODUCT NO.:	-
		COLOR:	-
		FINISH:	-
CEILING			
C1	ACOUSTICAL CEILING TILE	TYPE:	EXISTING TO REMAIN
		PRODUCT NO.:	TBD - MATCH EXISTING
		COLOR:	WHITE
		SIZE:	2' X 4'
		NOTES:	REPLACE ANY DAMAGED OR STAINED CEILING TILE

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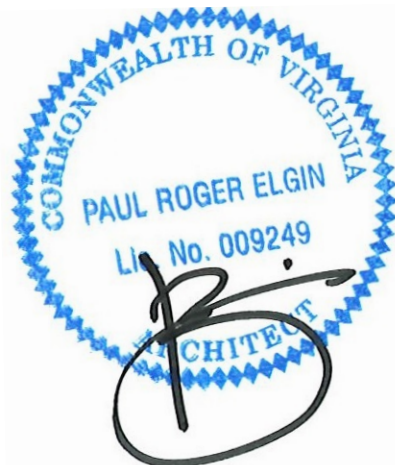
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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303



ISSUED FOR PERMIT DATE 03.21.2025

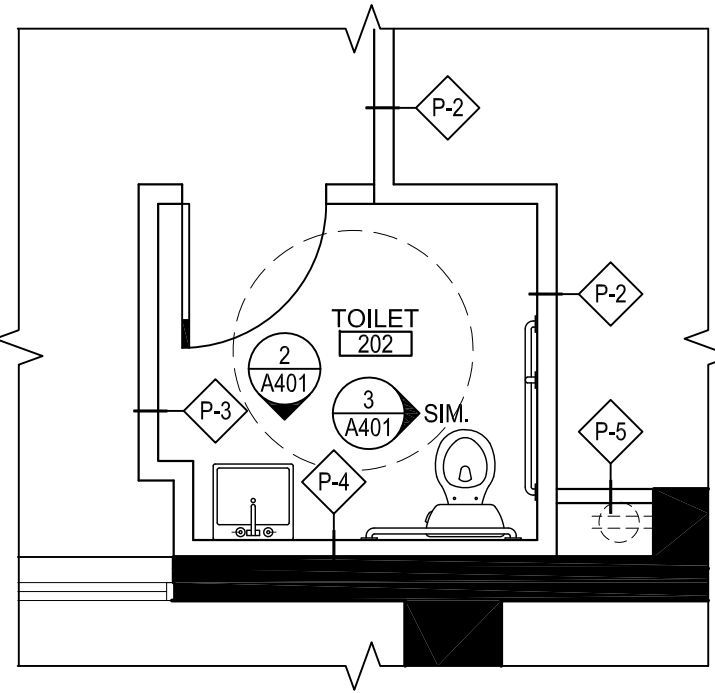
DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177

SHEET TITLE:

**FINISH &
POWER/DATA
PLANS**

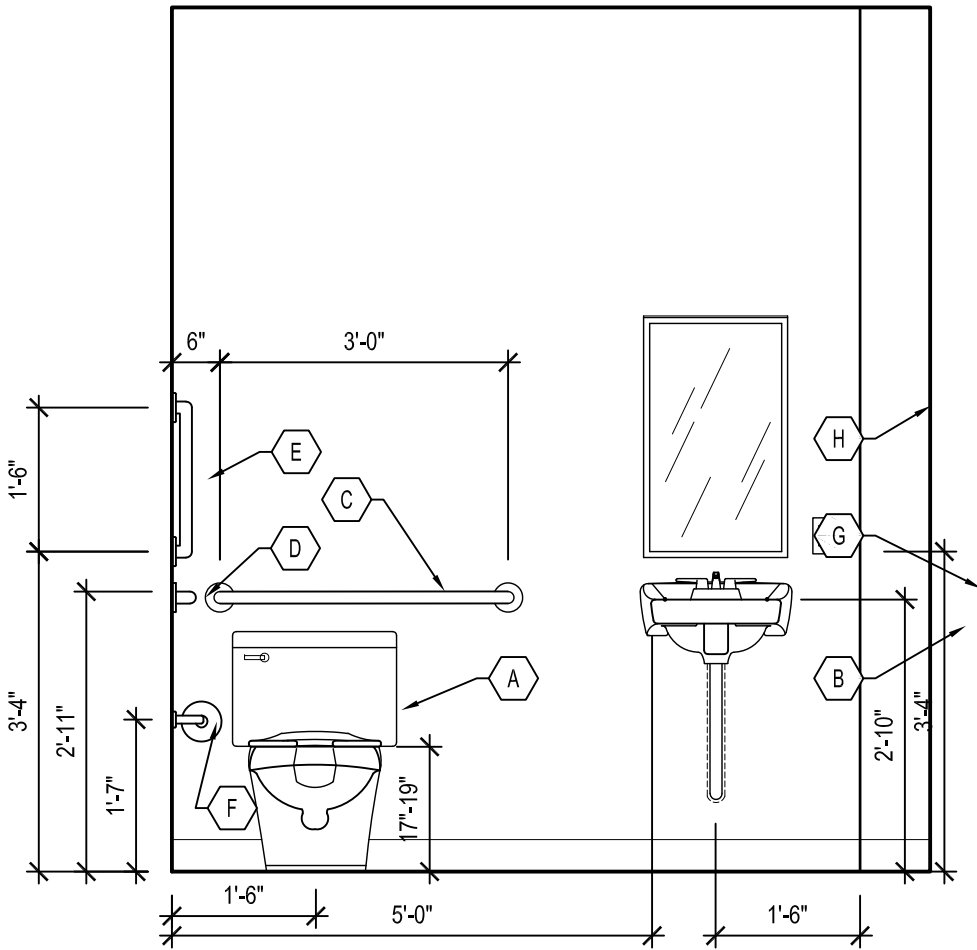
SHEET NUMBER:

A103



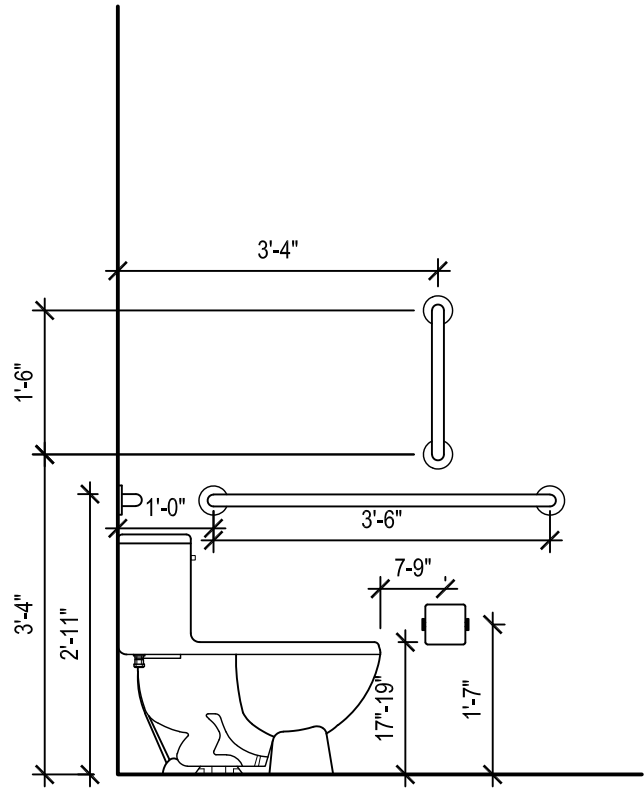
1
A401
SCALE: 1/4" = 1'-0"

DETAIL PLAN AT TOILET 202



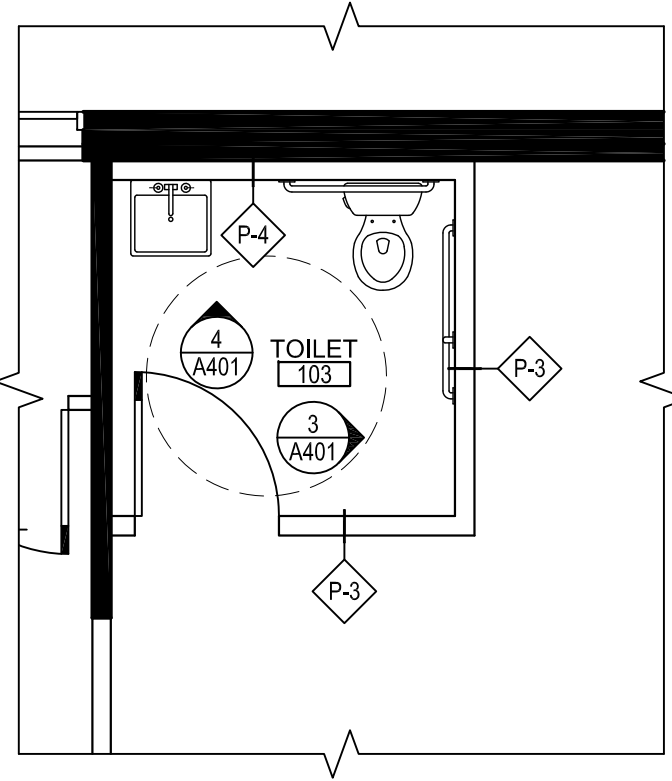
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A401
SCALE: 1/2" = 1'-0"

ELEVATION AT TOILET 202



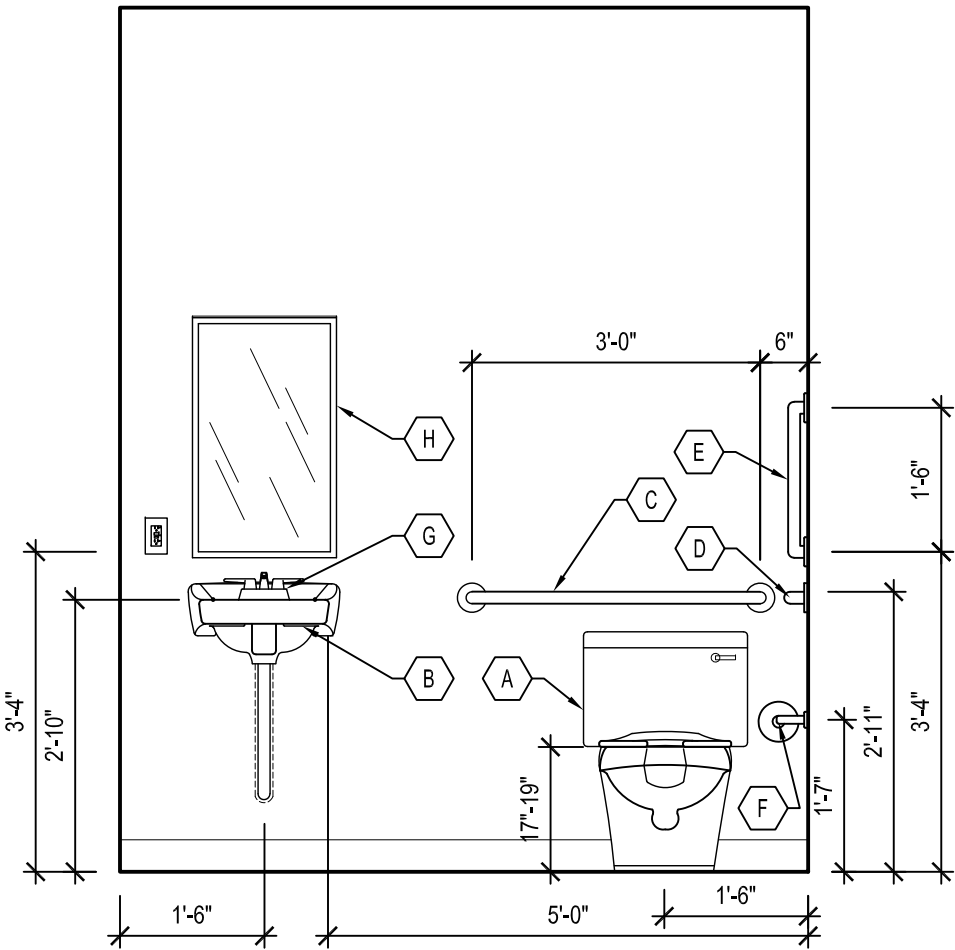
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A401
SCALE: 1/2" = 1'-0"

ELEVATION AT WATER CLOSET



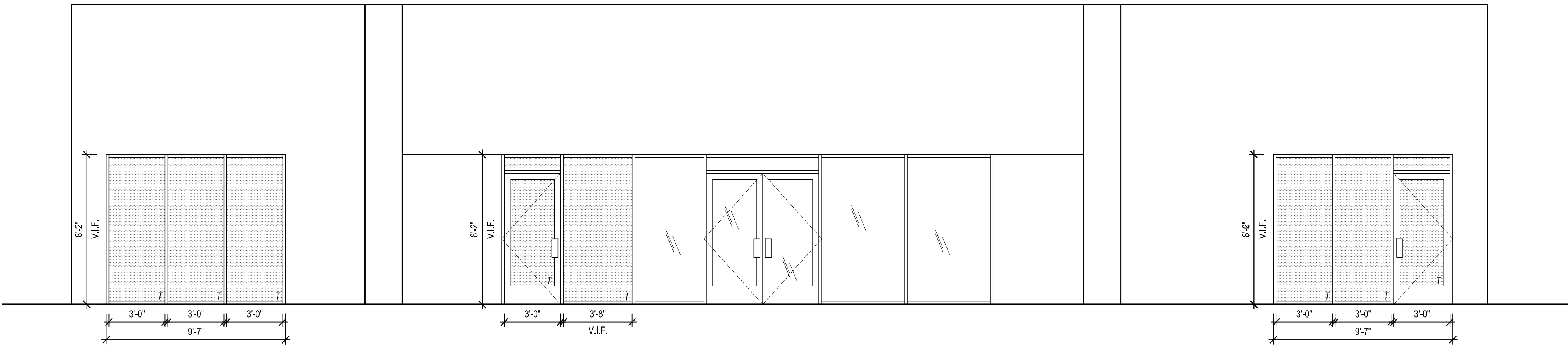
4
A401
SCALE: 1/4" = 1'-0"

DETAIL PLAN AT TOILET 103



5
A401
SCALE: 1/2" = 1'-0"

ELEVATION AT TOILET 103



6
A401
SCALE: 1/4" = 1'-0"

ELEVATION AT STOREFRONT

RESTROOM ACCESSORY SCHEDULE

A	WATER CLOSET	MANUFACTURER:	AMERICAN STANDARD
		MODEL #:	2467-100 CADET
		FINISH:	WHITE
		NOTES:	REFER TO ENGINEER'S DWGS. FOR ADD. INFO.
B	WALL HUNG ADA SINK	MANUFACTURER:	BLDG STANDARD / AMERICAN STANDARD
		MODEL #:	0321.026 - DECLYN WALL MTC.
		FINISH:	WHITE.
		NOTES:	EXPOSED UNDER LAVATORY PIPES TO BE PROTECTED PER ANSI SECTION 808.6
C	36" GRAB BAR	MANUFACTURER:	BOBRICK (OR EQUAL)
		MODEL #:	B-165 1836
		FINISH:	STAINLESS STEEL
		NOTES:	
D	42" GRAB BAR	MANUFACTURER:	BOBRICK (OR EQUAL)
		MODEL #:	B-5806 X 42
		FINISH:	STAINLESS STEEL
		NOTES:	
E	18" GRAB BAR	MANUFACTURER:	BOBRICK (OR EQUAL)
		MODEL #:	B-5806 X 18 (MOUNT VERTICALLY)
		FINISH:	STAINLESS STEEL
		NOTES:	
F	TOILET TISSUE DISPENSER	MANUFACTURER:	BOBRICK
		MODEL #:	B-2840
		FINISH:	STAINLESS STEEL
		NOTES:	MOUNT AT 22" AFF TO TOP OF UNIT
G	FAUCET	MANUFACTURER:	AMERICAN STANDARD
		MODEL #:	HERITAGE - 5400 W/ HANDLE 172H
		FINISH:	CHROME
		NOTES:	
H	MIRROR	MANUFACTURER:	BOBRICK OR APPROVED EQUAL
		MODEL #:	B - 165 1836
		FINISH:	STAINLESS STEEL
		NOTES:	MOUNT PER ADA GUIDELINES

- NOTES:
- ALL ITEMS TO BE SUPPLIED & INSTALLED BY GENERAL CONTRACTOR
 - ALL ITEMS TO BE INSTALLED PER ANSI A117.1 - 2009 IN REGARD TO HEIGHTS AND OFFSET DISTANCES - U.O.N.
 - PROVIDE AND INSTALL BLOCKING AS REQUIRED TO SUPPORT WALL HUNG EQUIPMENT AND/OR MILLWORK.

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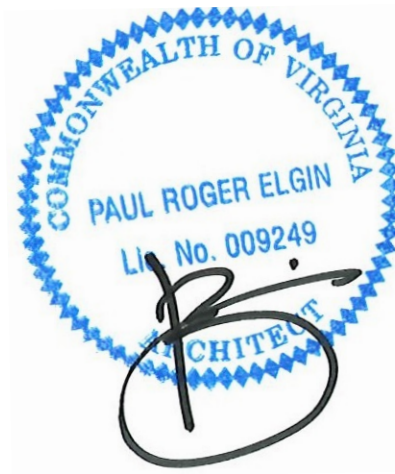
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MPE CONSULTANT:

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202-674-4481
akplc.com

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RENOVATIONS**
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04/10/25

ISSUED FOR PERMIT DATE 03.21.2025

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ENLARGED PLANS
AND ELEVATIONS

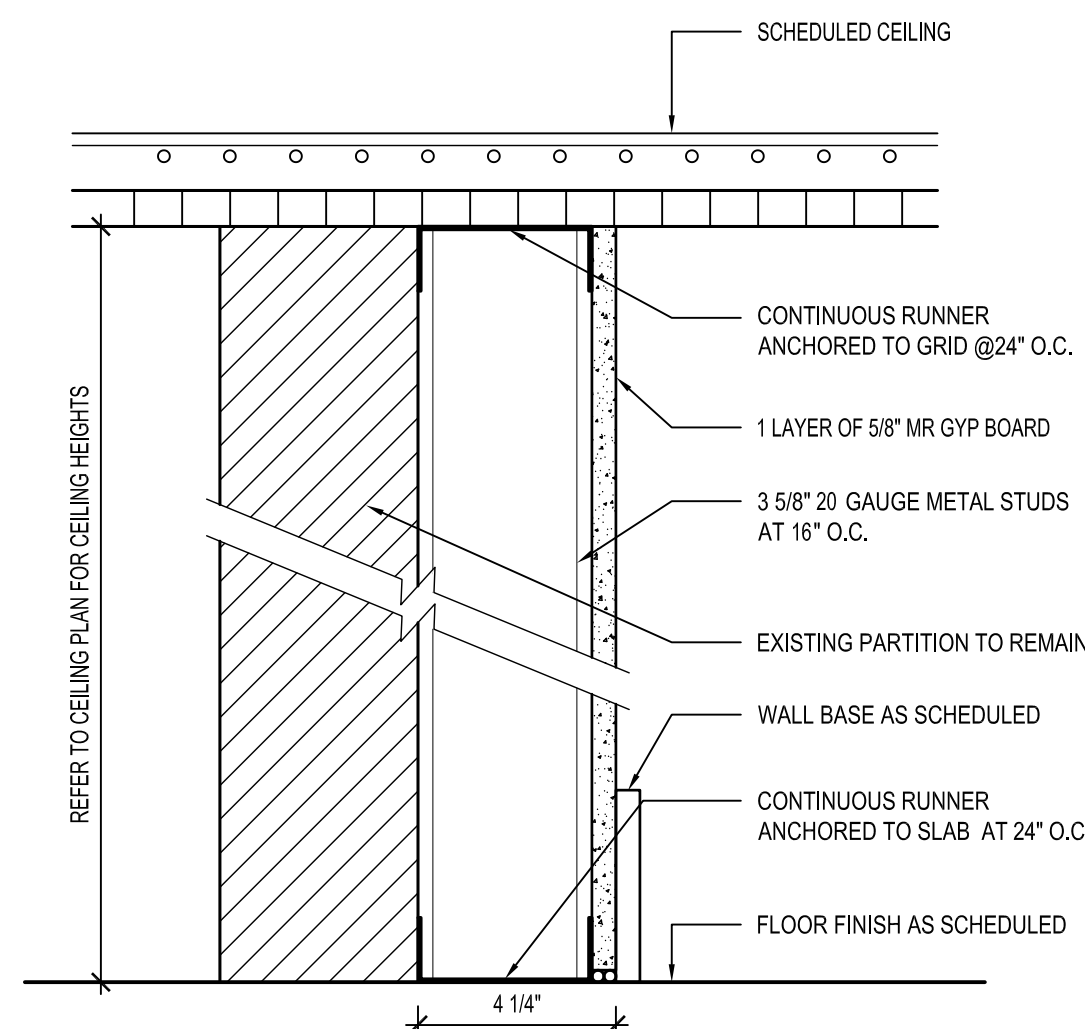
SHEET NUMBER:

A401

FAIRFAX COUNTY
APPROVED
6/20/2025
ALTC-2025-00578
BUILDING DIVISION

PARTITION TYPES

-



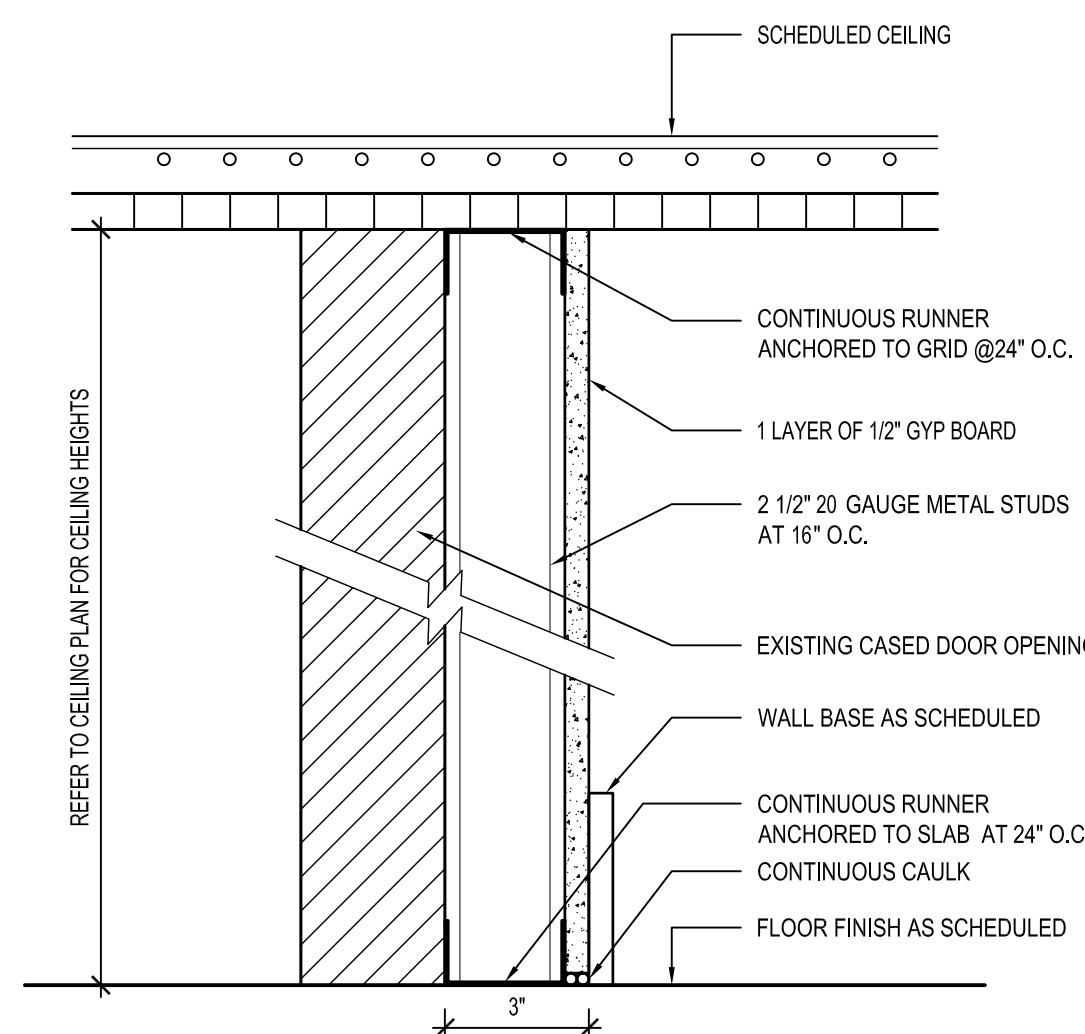
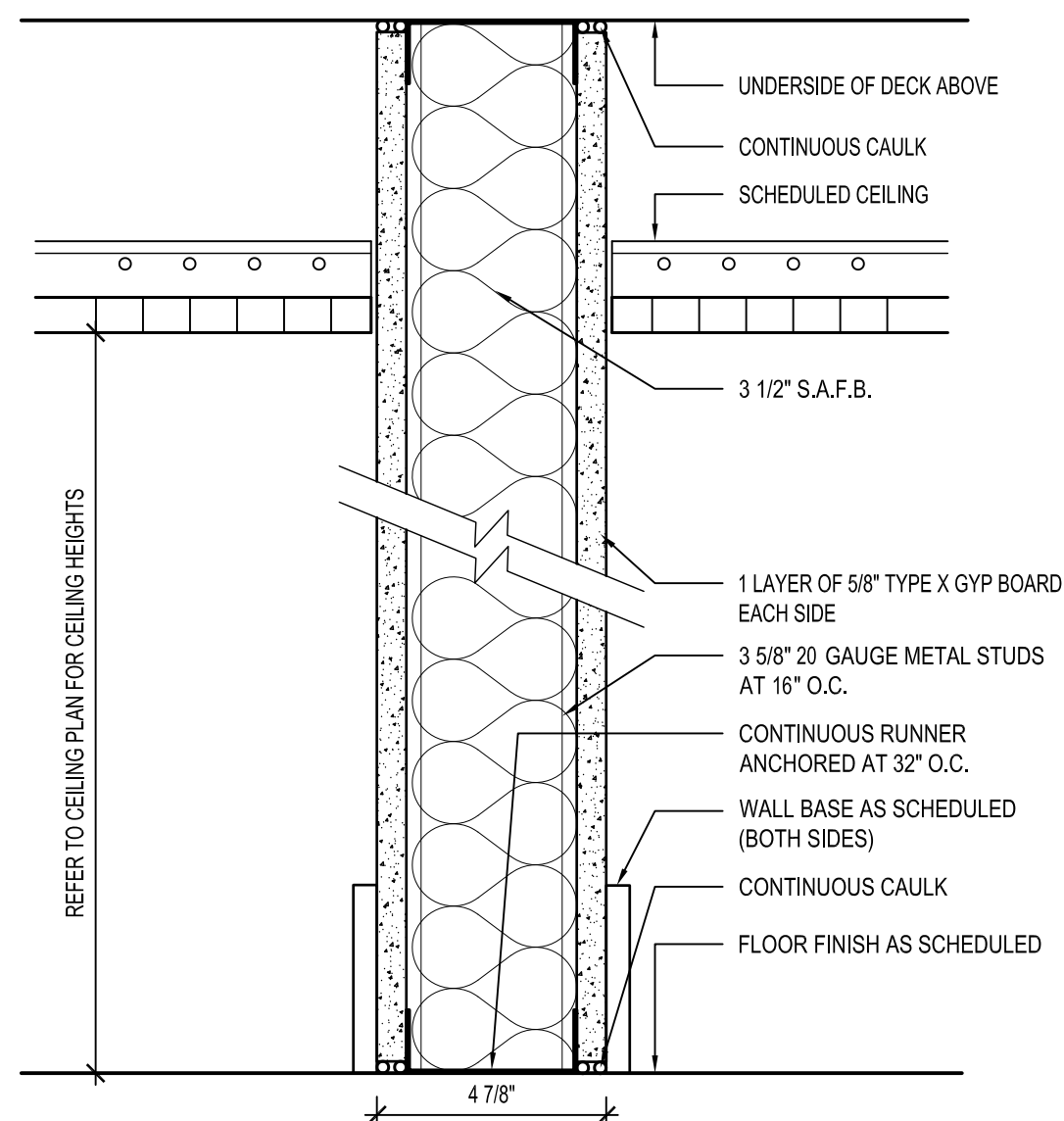
P-1

CEILING HEIGHT PARTITION

SCALE: 3"=1'-0"

P-4

SCALE: 3" = 1'-0"



P-2

SLAB TO DECK PARTITION - 1 HOUR RATED (UL #U419)

SCALE: 3" =1'-0"

P-5

CEILING HEIGHT FUR OUT PARTITION

SCALE: 3" = 1'-0"

1. ALL METAL STUDS TO BE I.C.S. ESR-2054, 2 1/2" X 20 GAUGE AT 16" O.C. THROUGHOUT UNLESS NOTED OTHERWISE. ALLOWABLE UN-BRACED HEIGHT AS PER CHART BELOW.
2. ALL CONNECTION AND FASTENER TO BE AS PER DETAILS, ALL MANUFACTURERS AND I.C.B.O.# TO BE STRICTLY ADHERED TO BY G.C. UNLESS APPROVAL FOR EQUAL SUBSTITUTION IS RECEIVED FROM THE BUILDING DEPARTMENT.
3. ALL GYP. WALL BOARD TO BE 1/2" THICKOUT UNLESS NOTED OTHERWISE. ATTACH WITH 1" TYPE S DRYWALL SCREWS 12" O.C. VERTICALLY AT STUDS AND 8" O.C. AROUND PERIMETER.

Technical drawing of a wall and ceiling assembly. The drawing shows a cross-section of a wall and ceiling. The wall is composed of several layers: a continuous caulk on the outside, a 3 1/2" S.A.F.B. (Structural Acoustic Fiberglass Board) core, a continuous runner anchored at 32" O.C., a wall base as scheduled (both sides), and a continuous caulk on the inside. The ceiling is composed of a 1 layer of 5/8" MR GYP BOARD (Medium Density Fiberboard) on each side, a 3 5/8" 20 GAUGE METAL STUDS at 16" O.C., and a continuous caulk on the underside of the deck above. The floor finish is as scheduled. The drawing includes dimensions: 47 1/8" for the wall thickness and a vertical dimension line on the left labeled "REFER TO CEILING PLAN FOR CEILING HEIGHTS".

Labels and dimensions:

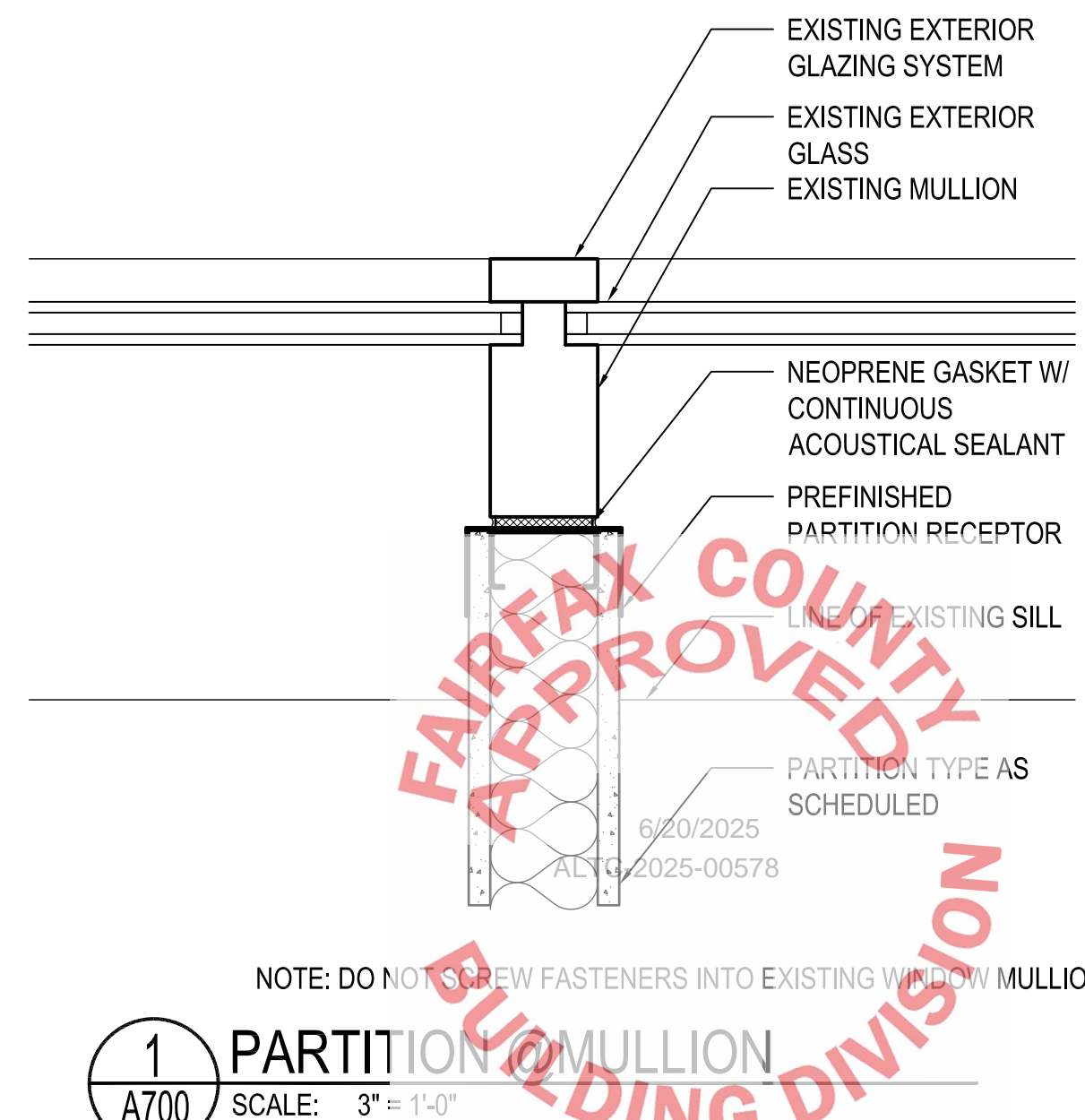
- UNDERSIDE OF DECK ABOVE
- CONTINUOUS CAULK
- SCHEDULED CEILING
- 3 1/2" S.A.F.B.
- 1 LAYER OF 5/8" MR GYP BOARD EACH SIDE
- 3 5/8" 20 GAUGE METAL STUDS AT 16" O.C.
- CONTINUOUS RUNNER ANCHORED AT 32" O.C.
- WALL BASE AS SCHEDULED (BOTH SIDES)
- CONTINUOUS CAULK
- FLOOR FINISH AS SCHEDULED
- 47 1/8"
- REFER TO CEILING PLAN FOR CEILING HEIGHTS

P-3

SLAB TO DECK PARTITION - PLUMBING WALL

SCALE: 3" = 1'-0"

	MINIMUM SIZE OF THE BRACING MEMBER				LIMITING WALL HEIGHTS															
	WALL HEIGHT		6'-0"		7'-0"		METAL STUD SIZE	MAX. UN-BRACED HEIGHT												
	UP TO 10'		12 GA WIRE		12 GA WIRE		2 1/2" X 20 GA.	11'-2"												
	12'-0"		10 GA WIRE		10 GA WIRE		3 5/8" X 20 GA.	14'-0"												
	14'-0"		10 GA WIRE		25 GA STUD		3 5/8" X 16 GA.	17'-0"												
	16'-0"		10 GA WIRE		25 GA STUD		6" X 25 GA.	16'-0"												
	*USE W/ 20 GA. HEAD RUNNERS						6" X 20 GA.	21'-0"												
							6" X 16 GA.	25'-0"												
TABLE NUMBER 2																				
ALLOWABLE SPACING FOR 1" LONG FASTENERS, INCHES																				
	TRACK																			
PARTITION HEIGHT	NO. 18 GAUGE				NO. 20 GAUGE				NO. 22 GAUGE				NO. 24 GAUGE				NO. 26 GAUGE			
	LOAD NORMAL TO WALL SURFACE (SPF)																			
	5	10	15	5	10	15	5	10	15	5	10	15	5	10	15	5	15			
6	42	42	42	42	42	42	42	42	33	42	37	42	37	42	42	23	15			
8	42	42	34	42	42	31	42	37	25	42	27	18	34	17	11	7	11			
10	42	41	27	42	38	25	42	30	20	42	22	14	27	13	9					
12	42	34	22	42	31	21	42	25	16	37	18	12	23	11	7.5					
14	42	29	19	42	27	18	42	21	14	31	15	10	17	9.5	6.5					
16	42	25	17	42	23	15	37	18	12	27	13	9	17	8.5	5.5					



NOTE: DO NOT SCREW FASTENERS INTO EXISTING WINDOW MULLION

1 PARTITION @ MILLION
A700 SCALE: 3" = 1'-0"

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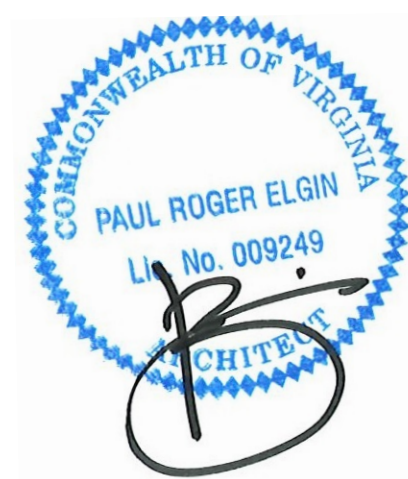
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PROJECT NO: 24-177

SHEET TITLE

PARTITION TYPES & TYPICAL DETAILS

SHEET NUMBER:

A700

GENERAL NOTES

1. GENERAL NOTES:
A. SYMBOLS AND ABBREVIATIONS LISTS ARE COMPOSITE. ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE USED ON THIS PROJECT.
B. WORK INDICATED ON THESE DRAWINGS IS DIAGRAMMATIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE DRAWINGS ARE INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENTS OF ENGINEERED SYSTEMS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS IN THE FIELD AND MAKING ALL ADJUSTMENTS AS NECESSARY TO COMPLETE THE WORK.
C. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS ON THE JOB. ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS.
D. FURNISH ALL LABOR, MATERIALS, SERVICES, AND SKILLED SUPERVISION NECESSARY FOR THE CONSTRUCTION, ERECTION, INSTALLATION, CONNECTIONS, TESTING, AND ADJUSTMENTS OF ALL ELECTRICAL EQUIPMENT SPECIFIED HEREIN OR SHOWN, OR NOTED ON THE DRAWINGS, AND ITS DELIVERY TO THE OWNER COMPLETE. IN ALL ASPECTS READY FOR USE.
E. FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES FOR ALL WORK, IN ACCORDANCE WITH PROVISIONS OF THE CONTRACT DOCUMENTS. ALTHOUGH SUCH WORK IS NOT SPECIFICALLY INDICATED, FURNISH AND INSTALL ALL SUPPLEMENTARY OR MISCELLANEOUS ITEMS, APPURTENANCES AND DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
F. IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ALL MATERIALS AND EQUIPMENT ARE NEW, OF FIRST CLASS QUALITY AND COMPATIBLE WITH EXISTING SYSTEMS OR MATERIAL WHERE THEY INTERFACE.
G. SHOULD THE CONTRACTOR ENCOUNTER ANY EXISTING PIPING, DUCTWORK, CONDUITS, OR OTHER OBSTRUCTIONS IN THE WAY OF NEW WORK, THEN THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, REARRANGING AND/OR RELOCATING SAME TO THE SATISFACTION OF THE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.
H. CLEAN UP ALL WASTE AND DEBRIS AT THE END OF EACH WORKING DAY AND AS REQUIRED TO KEEP ALL BUILDING AREAS CLEAN, CLEAR AND UNOBSTRUCTED. AT THE COMPLETION OF THE PROJECT, CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TOOLS, APPLIANCES, SURPLUS MATERIAL AND SCRAP FROM THE JOB SITE.
I. AT THE COMPLETION OF THE PROJECT, CONTRACTOR IS RESPONSIBLE FOR CLEANING THE ENTIRE JOB SITE, INCLUDING ALL NEW AND EXISTING SURFACES OF BUILDINGS, EQUIPMENT AND SYSTEMS, LEAVING THE AREA THOROUGHLY CLEAN, CLEAR AND READY FOR OCCUPANCY WITH THE SATISFACTION OF THE OWNER.
J. ALL SPECIFIED EQUIPMENT AND SYSTEMS ARE TO BE INSTALLED, TESTED AND COMMISSIONED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
K. CONSULT ARCHITECTURAL PLANS AND DETAILS FOR TYPES OF CONSTRUCTION, HEAD ROOM, ROOM FINISHES, FURRED CEILINGS, DOOR SWINGS, EXACT LOCATION OF FIXTURES, EQUIPMENT, OUTLETS, ETC...
L. ALL LIGHTS, SWITCHES, OCCUPANCY SENSORS, EXIT SIGNS, RECEPTACLES, TELE/ATA OUTLETS, WIRING, EQUIPMENT AND FIRE ALARM DEVICES SHOWN ON THE CONTRACT DOCUMENTS ARE NEW, UNLESS OTHERWISE INDICATED.
M. ELECTRICAL AND ARCHITECTURAL DRAWINGS ARE COMPLEMENTARY. THE GENERAL CONTRACTOR SHALL REVIEW AND BID ON THE ENTIRE BID SET, INCLUDING ARCHITECTURAL SHEETS. WHEN A DISCREPANCY BETWEEN THE ENGINEERING DRAWINGS AND ARCHITECTURAL DRAWINGS OCCURS, THE MORE STRINGENT REQUIREMENT SHALL APPLY TO THE BID. SHOULD A DISCREPANCY EXIST, THE CONTRACTOR SHALL SUBMIT AN RFI REQUESTING CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
2. COORDINATION AND SCHEDULING:
A. COORDINATE AND SCHEDULE WORK OF ALL TRADES. CONTRACTOR IS RESPONSIBLE FOR COMPENSATING FOR EXISTING CONDITIONS AFFECTING NEW WORK SO THAT CONFLICTS IN SCHEDULING AND LOCATION WILL NOT OCCUR.
B. CONTRACTOR IS RESPONSIBLE FOR COMPLETE COORDINATION BETWEEN ALL SUBCONTRACTORS, SUPPLIERS, GOVERNMENT AUTHORITIES HAVING JURISDICTION, BUILDING PERSONNEL, CODE ENFORCEMENT OFFICIALS, ARCHITECTS, ENGINEERS AND OWNERS.
C. CONTRACTOR IS RESPONSIBLE FOR REVIEWING AND COORDINATING THE INSTALLATION OF NEW SYSTEMS AND EQUIPMENT. NO WORK IS TO BE PERFORMED PRIOR TO CONTRACTOR OBTAINING EXACT FIELD DIMENSIONS OF EXISTING BUILDINGS, EXISTING CONDITIONS, STRUCTURAL OBSTRUCTIONS, EXISTING BUILDING SYSTEMS TO REMAIN, EXISTING FURNITURE TO REMAIN, ETC., WHICH, MAY AFFECT INSTALLATION OF NEW EQUIPMENT OR SYSTEMS.
D. CONTRACTOR'S ATTENTION IS DIRECTED TO THE IMPORTANCE OF PROPER SCHEDULING AND PHASING OF WORK SO AS TO CAUSE MINIMUM DISTURBANCE TO ACTIVITIES IN OTHER AREAS OF THE BUILDING, WHICH MAY REMAIN OCCUPIED THROUGHOUT THE DURATION OF THE CONTRACT. CONTRACTOR'S WORK SCHEDULE IS TO BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO CONSTRUCTION.
E. NOTIFY THE OWNER, IN WRITING, AT LEAST SEVEN DAYS IN ADVANCE OF ANY REQUIRED SHUTDOWN OF ANY UTILITY. OBTAIN OWNER'S WRITTEN APPROVAL PRIOR TO ANY SHUTDOWN.
F. CONTRACTOR IS RESPONSIBLE FOR THOROUGHLY EXAMINING PREMISES AND OBSERVING ALL CONDITIONS AND CIRCUMSTANCES UNDER WHICH THE WORK IS TO BE PERFORMED. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
G. CONTRACTOR IS RESPONSIBLE FOR INFORMING THE OWNER PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO COMPLETION OF CONSTRUCTION TO ALLOW SUFFICIENT TIME FOR COORDINATION OF EXISTING BUILDING ACTIVITIES WITH THE CONSTRUCTION WORK.
H. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND ADJUSTING INSTALLATION TO ACTUAL EQUIPMENT PURCHASED WHEN APPROVED EQUIPMENT DIFFERS FROM THAT IN ORIGINAL CONTRACT DRAWINGS.
I. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PROVIDING ALL SYSTEM VOLTAGE, WIRING, OUTLETS, AND CONNECTIONS TO MECHANICAL EQUIPMENT. (RATED VOLTAGES).
J. CONTRACTOR IS RESPONSIBLE FOR USING MEANS AND METHODS TO ACHIEVE THE ELECTRICAL DESIGN SHOWN ON THESE CONTRACT DOCUMENTS, CONDUIT ROUTING AND ANY OTHER ITEMS NECESSARY TO ACHIEVE THIS DESIGN ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
K. IN EXISTING BUILDINGS, THE CONTRACTOR IS RESPONSIBLE FOR THOROUGHLY SURVEYING THE AREAS IN WHICH THE CONSTRUCTION WILL OCCUR. IF, AFTER THE PRE-BID WALK THROUGH, ANY ISSUES REMAIN WHICH MAY AFFECT CONTRACTOR'S ABILITY TO INSTALL ANY ITEM THEN THESE ISSUES SHOULD BE BROUGHT TO BUILDING MANAGEMENT'S ATTENTION AND RESOLVED BEFORE A BID IS PLACED.
L. CONTRACTOR IS RESPONSIBLE FOR SURVEYING EXISTING CONDITIONS AND FOR BRINGING ANY POSSIBLE ISSUES WHICH MAY AFFECT CONSTRUCTION SCHEDULE AND/OR RESULT IN A CHANGE ORDER TO THE ENGINEER'S AND ARCHITECT'S ATTENTION BEFORE A BID HAS BEEN PLACED. ALL ISSUES NOTICED AND DISCOVERED AFTER A BID HAS BEEN PLACED WILL BE THE CONTRACTOR'S RESPONSIBILITY TO SOLVE AT NO ADDITIONAL COST TO THE OWNER. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
3. DEMOLITION:
A. MAINTAIN THE CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN. IDENTIFY AND CLEARLY TAG ALL EXISTING CIRCUITS AND EQUIPMENT TO REMAIN.
B. ALL EXISTING ELECTRICAL DEVICES INSTALLED IN EXISTING CEILINGS AND WALLS, SHOWN TO BE DEMOLISHED ON ARCHITECTURAL PLANS, SHALL BE REMOVED IN ITS ENTIRETY BACK TO NEAREST REMAINING SOURCE. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONTINUITY IS MAINTAINED BETWEEN CIRCUITS OUTSIDE THE AREA OF DEMOLITION.
C. ALL EQUIPMENT, MATERIAL AND DEVICES SHOWN AS EXISTING TO BE REMOVED, ARE TO BE REMOVED IN THEIR ENTIRETY INCLUDING ALL APPURTENANCES.
D. ALL DEMOLISHED EQUIPMENT AND MATERIAL IS TO BE PROMPTLY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR. ITEMS TO BE SALVAGED FOR REUSE OR DELIVERY TO OWNER ARE TO BE PROTECTED AND STORED, BY CONTRACTOR, UNTIL REUSED OR TRANSFERRED TO OWNER. CONTRACTOR IS RESPONSIBLE FOR VERIFYING WITH OWNER WHICH ITEMS ARE TO BE SALVAGED.
4. CODE, PERMITS AND INSPECTIONS:
A. PERFORM ALL WORK IN ACCORDANCE WITH LATEST APPLICABLE CODES, REGULATIONS AND STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY FEES FOR PERMITS AND IS RESPONSIBLE FOR ARRANGING FOR ALL INSPECTIONS BY AUTHORITIES HAVING JURISDICTION.
B. APPROVAL AND SIGN-OFF BY ALL AUTHORITIES HAVING JURISDICTION AND THE SECURING OF AN APPROVED OCCUPANCY PERMIT IS REQUIRED AT THE COMPLETION OF PROJECT. SECURE PERMIT AND INSPECTION CERTIFICATES AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE PROJECT.
C. PERFORM ALL WORK IN ACCORDANCE WITH THE FOLLOWING CODES, REGULATIONS, RULES AND STANDARDS:

STATE AND LOCAL BUILDING CODES
ALL FEDERAL REGULATORY AGENCIES
LOCAL UTILITY COMPANIES
NATIONAL ELECTRICAL CODE (NEC)
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
AMERICAN WITH DISABILITIES ACT (ADA)
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
ENVIRONMENTAL PROTECTION AGENCY (EPA)
INTERNATIONAL ENERGY CONSERVATION CODE
- D. CODES AND STANDARDS LISTED ARE MINIMUM STANDARDS. WHERE CONTRACT DOCUMENTS CALL FOR A HIGHER STANDARD, CODE/STANDARDS WILL TAKE PRECEDENCE OVER ALL REFERENCED CONTRACT DOCUMENTS. IF CONTRACT DOCUMENTS CONFLICT WITH CODES OR STANDARDS, CONTRACTOR IS TO INFORM ARCHITECT/ENGINEER, IN WRITING, PRIOR TO QUOTE.
E. COMPLY WITH ALL RULES, REGULATIONS, AND STANDARDS OF BUILDING OWNER.
F. ALL NEW EQUIPMENT SHALL BE UNDERWRITERS LABORATORIES (UL) LISTED.
5. WARRANTY:
A. ALL WORK SHALL BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS THAT DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD WILL BE REPAIRED BY THE CONTRACTOR, TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.

6. SUBMITTALS:
E. SUBMIT SIX SETS OF SHOP DRAWINGS, REVIEWED BY CONTRACTOR AND ARCHITECT/ENGINEER. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING:

LIGHTING FIXTURES
ELECTRICAL EQUIPMENT
WIRING AND WIRING DEVICES
FIRE ALARM DEVICES
- F. CONTRACTOR IS RESPONSIBLE FOR ORDERING OR INSTALLING ITEMS NOT APPROVED BY ARCHITECT/ENGINEER.
7. RECORD (AS-BUILT) DRAWINGS:
A. CONTRACTOR IS RESPONSIBLE FOR REPRODUCIBLE RECORD DRAWINGS, UPON WHICH CORRECTIONS SHALL BE MADE, TO PROVIDE AN ACCURATE AND COMPLETE RECORD OF THE WORK, AS INSTALLED. ALL DUCTWORK, EQUIPMENT, PIPING AND AIR DISTRIBUTION DEVICES SHALL BE SHOWN AND DIMENSIONED ON THE RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AUTOCAD AS-BUILT DOCUMENTS TO THE OWNER AT THE COMPLETION OF THE PROJECT, AS FOLLOWS:

- ONE HARD COPY AS-BUILT DRAWING INSTALLED IN DURABLE PLASTIC DRAWING TUBE, IN BRANCH'S ELECTRICAL CLOSET.
- TWO BINDERS OF THE OPERATION AND MAINTENANCE MANUALS AND WARRANTY INFORMATION.
- ALL DOCUMENTS LISTED ABOVE SHALL BE UPLOADED TO A CD OR USB JUMP DRIVE.
8. CUTTING, PATCHING AND REPAIR:
A. CONTRACTOR IS RESPONSIBLE FOR NOT PENETRATING CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE OWNER. SUBMIT DETAILS OF PROPOSED PENETRATION LOCATIONS TO OWNER FOR REVIEW. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE PRIOR TO ANY CORE DRILLING OR X-RAY.
B. PATCH TO MATCH EXISTING, ALL OPENINGS IN WALL, CEILING AND FLOOR SURFACES. EXTREME CARE IS TO BE EXERCISED WITH REGARD TO PROTECTION OF ALL EXISTING WORK. CORRECT ALL DAMAGES TO EXISTING WORK TO THE SATISFACTION OF THE ARCHITECT AND AT NO ADDITIONAL COST TO THE OWNER.
C. IF ANY EXISTING EQUIPMENT, DUCTS, PIPES, UTILITIES, ETC., ARE DAMAGED DURING CONSTRUCTION, WHETHER OR NOT DUE TO CONTRACTOR'S NEGLIGENCE, DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED AND LEFT IN A CONDITION SATISFACTORY TO THE OWNER AND AT NO ADDITIONAL COST TO THE OWNER. MAINTAIN AND PROVIDE PROPER SOUND, MOISTURE, AND FIRE STOPPING TO COMPLY WITH CODES.
D. FLOOR AND WALL PENETRATIONS SHALL BE SLEEVED. PROVIDE 18 GAUGE GALVANIZED SHEET METAL SLEEVES FOR DUCTS, STEEL PIPE SLEEVES FOR PIPES. PACK VOID SPACE WITH FIRE SAFING. PIPE SLEEVES IN MECHANICAL ROOM SHALL STAND 1" PROUD OF FLOOR SURFACE. SEAL ALL FLOOR PENETRATIONS WATER TIGHT. THROUGH-PENETRATIONS OF FIRE-RESISTANCE RATED ASSEMBLIES SHALL BE PROTECTED BY AN APPROVED THROUGH-PENETRATION FIRESTOP SYSTEM INSTALLED AND TESTED IN ACCORDANCE WITH ASTM E 814 OR UL 1479, WITH A MINIMUM POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH OF WATER. FIRESTOP SYSTEMS AT SLAB PENETRATIONS SHALL HAVE AN F RATING / I RATING OF NOT LESS THAN 2-HOURS. FIRESTOP SYSTEMS AT FIRE-RESISTANCE RATED WALLS, PARTITIONS AND SHAFT ENCLOSURES SHALL HAVE AN F RATING OF NOT LESS THAN THE REQUIRED FIRE-RESISTANCE RATING OF THE WALL PENETRATED.
9. IDENTIFICATION:
A. CIRCUIT NUMBERS ARE FOR IDENTIFICATION CONVENIENCE ONLY. CONTRACTOR IS RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELS. A MAXIMUM OF THREE SINGLE PHASE CIRCUITS SHALL BE INSTALLED IN ANY CONDUIT. ON COMPLETION OF THE INSTALLATION, CONTRACTOR IS RESPONSIBLE FOR BALANCING THE PANEL LOAD UNDER NORMAL OPERATING CONDITIONS AND PROVIDING A TYPED WRITTEN PANEL DIRECTORY ON INSIDE DOOR OF RESPECTIVE PANEL.
B. IDENTIFY ALL PANELS, EQUIPMENT, DISCONNECTS, AND MOTORS WITH PERMANENTLY AFFIXED IDENTIFICATION PLATES OF BLACK LAMINATED PLASTIC WITH 1" TALL ENGRAVED WHITE LETTERS MOUNTED ON THE FRONT OF EACH PIECE OF EQUIPMENT.
C. ELECTRICAL CONTRACTOR SHALL LABEL ALL RECEPTACLES WITH PANEL NAME AND CIRCUIT NUMBER PER NFPA STANDARDS.
10. WIRING METHODS:
A. CONDUCTORS SHALL BE COPPER. CONDUCTORS #10 AWG AND SMALLER ARE TO BE SOLID COPPER WITH NEC TYPE THHN/THWN HEAT-RESISTANT THERMOPLASTIC INSULATION AND CLEAR NYLON JACKET RATED 75 °C. CONDUCTORS #8 AND LARGER ARE TO BE STRANDED WITH NEC TYPE THHN/THWN HEAT-RESISTANT THERMOPLASTIC INSULATION RATED AT 75 °C.
B. ALL WIRING IS TO BE A MINIMUM OF #12 AWG, UNLESS OTHERWISE NOTED.
C. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SIZING EACH WIRE AS REQUIRED FOR BRANCH CIRCUIT TO LIMIT VOLTAGE DROP TO 3%.
D. WIRING SHALL BE INSTALLED IN A MINIMUM 3/4" CONDUIT. CONTRACTOR MAY USE TYPE MC CABLE IN LIEU OF CONDUIT AND WIRE IN INTERIOR DRY LOCATIONS WHERE PERMITTED BY ALL CODES, AUTHORITIES HAVING JURISDICTION, AND BUILDING STANDARDS. TYPE MC CABLE MAY NOT BE USED FOR FEEDERS BUT MAY BE USED FOR BRANCH CIRCUITS.
E. 20A SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING, RECEPTACLES, FANS, AND/OR SIMILAR LOADS ARE TO BE AT THE SIZE INDICATED BELOW, UNLESS A LARGER SIZE IS INDICATED ELSEWHERE.
- | FOR 120V CIRCUITS: | | FOR 277V CIRCUITS: | |
|--------------------|-----|--------------------|-----|
| CIRCUIT LENGTH | AWG | CIRCUIT LENGTH | AWG |
| 0'-75' | #12 | 0'-200' | #12 |
| 75'-150' | #10 | 200'-300' | #10 |
| 150'-200' | #8 | | |
| 200'-250' | #6 | | |
- F. RACEWAYS, WIRING, AND JUNCTION BOXES SHALL BE RUN CONCEALED IN WALLS AND CEILINGS, UNLESS OTHERWISE NOTED.
G. WIRING INSTALLED IN AIR HANDLING PLenums MUST BE PLenum RATED.
H. THE NUMBER OF WIRES ARE SHOWN ON THE DRAWINGS ONLY WHERE CLARIFICATION IS NECESSARY. HOWEVER, EACH WIRING MUST HAVE GROUND CONDUCTOR.
I. PROVIDE AN INSULATED COPPER GROUND WIRE WITH ALL CIRCUITRY. USE OF CONDUIT OR METALLIC SHEATH OF CABLE FOR GROUNDING SHALL NOT BE PERMITTED.
J. CONTRACTOR IS RESPONSIBLE FOR MAKING THE FINAL POWER CONNECTIONS TO ALL EQUIPMENT AND SYSTEMS FURNITURE. PROVIDE ALL REQUIRED FITTINGS, BUSHINGS, AND WIRE CONNECTORS FOR A COMPLETE SYSTEM. COORDINATE WITH OWNER AND HIS SYSTEMS FURNITURE VENDOR PRIOR TO ROUGH-IN.
K. ALL CONDUIT RUNS IN EXPOSED CEILING ARE TO HAVE 90° BENDS. INSTALLATION IN THESE AREAS SHALL BE AS NEAT AND SYMMETRIC AS POSSIBLE.
L. VERIFY THE EXISTENCE OF SPARE BRANCH CIRCUIT CAPACITY IN ALL PANELS:
- WHEN SPARES ARE SHOWN LABELED ON THE PANEL SCHEDULE.
- WHEN THERE IS NO PANEL SCHEDULE ON THE PANEL DOOR.
- WHEN THE PANEL SCHEDULE IS DAMAGED, OLD OR OUTDATED.
REPORT ALL DEFICIENCIES TO ENGINEER PRIOR TO CONSTRUCTION IF THE PANEL DOES NOT HAVE ENOUGH SPARE CAPACITY TO ACHIEVE DESIGN. TURN ALL SPARES ON TO THE 'OFF' POSITION.
11. ELECTRICAL FIRE ALARM:
A. INTEGRATE NEW, EXISTING, AND RELOCATED FIRE ALARM DEVICES TO EXISTING BASE BUILDING FIRE ALARM SYSTEM PER LOCAL CODES AND IN ACCORDANCE WITH BASE BUILDING SPECIFICATIONS. COORDINATE INSTALLATION WITH THE BUILDING ENGINEER AND HIS DESIGNATED CONTRACTOR. PROVIDE NEW ADA COMPLIANT VISUAL ALARM STROBES AS INDICATED ON THE DRAWINGS. PROVIDE BOOSTER PANELS COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM TO ACCOMMODATE INSTALLATION OF NEW VISUAL STROBE UNITS AS NECESSARY.
B. FIRE ALARM DISCONNECTS, TIE-INS, AND NECESSARY PROGRAMMING SHALL BE PERFORMED BY OWNER'S DESIGNATED CONTRACTOR AT CONTRACTOR'S EXPENSE.
C. PRIOR TO INSTALLATION, VERIFY THAT ALL FIRE ALARM APPLIANCES ARE NOT LOCATED WITHIN ANY ARCHITECTURAL ELEMENT (I.E. MILLWORK, CHALKBOARD, WHITE BOARD, ETC.). IF CONFLICT EXISTS, NOTIFY ARCHITECT AND ENGINEER FOR RESOLUTION OF AN ALTERNATE LOCATION.
D. REPLACE EXISTING VISUAL FIRE ALARM APPLIANCE WITH NEW IF CANDELA RATING OF EXISTING DEVICE IS LESS THAN REQUIRED BY NFPA 72.
12. LIGHTING FIXTURES:
A. EVERY LIGHTING FIXTURE SHALL BE THE TYPE REQUIRED FOR THE CONSTRUCTION IN WHICH IT IS TO BE INSTALLED ON OR IN AND IS TO BE COORDINATED WITH THE ARCHITECT'S CEILING LAYOUT.
B. VERIFY CEILING CONSTRUCTION AND SUSPENSION AND PROVIDE COMPATIBLE LIGHTING FIXTURES.
C. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING OPERATING VOLTAGES FOR ALL LIGHT FIXTURES, EXIT SIGNS, AND REQUIRED BALLASTS WITH EXISTING AVAILABLE SYSTEM VOLTAGE.
13. MOUNTING LOCATIONS:
A. MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, SHALL BE CENTERLINE OF EQUIPMENT, EXCEPT MOUNTING HEIGHTS OF LIGHTING FIXTURES, WHICH ARE TO THE BOTTOM OF FIXTURES.
B. DO NOT MOUNT OUTLET BOXES BACK-TO-BACK IN WALLS.
C. COORDINATE MOUNTING HEIGHT OF DEVICES ON PERFORATED WALLS TO PROVIDE A NEAT AND SYMMETRIC APPEARANCE.
D. INSTALL LIGHT SWITCHES TO AVOID DOOR SWINGS.
E. GANG MULTIPLE SWITCHES UNDER ONE COMMON COVER PLATE. PROVIDE A PERMANENT BARRIER BETWEEN ADJACENT LIGHTING SWITCHES WHERE THE VOLTAGE BETWEEN THE HOT (PHASE) LEGS OF ADJACENT SWITCHES EXCEEDS 300V.

SYMBOLS

- (E), X EXISTING - TO REMAIN, UNLESS NOTED
- (EX) EXISTING TO BE RELOCATED (EXISTING LOCATION OF A DEVICE MARKED FOR RELOCATION)
- (N) NEW - TO MATCH EXISTING, UNLESS NOTED
- (RL), R RELOCATED (NEW LOCATION OF AN EXISTING DEVICE)
- Ⓜ JUNCTION BOX - SIZE PER N.E.C.
- Ⓜ "MP" AT ANY DEVICE INDICATES A WEATHERPROOF NEMA 3R ENCLOSURE
- Ⓜ EMERGENCY WIRING - LIGHT FIXTURE USED FOR EMERGENCY LIGHTING. WHEN EMERGENCY POWER IS UNAVAILABLE, PROVIDE 90 MINUTE BATTERY BACKUP CONNECTED TO THE LOCAL LIGHTING CIRCUIT AHEAD OF ANY SWITCHING. EXTERIOR LIGHTS MUST BE CONNECTED TO THE LOCAL EXTERIOR LIGHTING CIRCUIT.
- Ⓜ 20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, SPECIFICATION GRADE DUPLEX RECEPTACLE, NEMA 5-20R WITH FACE PLATE. MOUNT AT 18" AFF, UNLESS NOTED. COLOR FOR ALL RECEPTACLES SHALL BE WHITE.
- Ⓜ 20A, 125V, 2 POLE, 3 WIRE, GROUNDING TYPE, SPECIFICATION GRADE DUPLEX RECEPTACLE, WITH DEDICATED CIRCUIT, NEMA 5-20R WITH FACE PLATE. MOUNT AT 18" AFF, UNLESS NOTED. COLOR FOR ALL RECEPTACLES SHALL BE WHITE.
- Ⓜ DOUBLE DUPLEX (QUADRUPLEX) RECEPTACLE SAME AS ABOVE
- Ⓜ DUPLEX RECEPTACLE SAME AS ABOVE, EXCEPT WITH GROUND FAULT CIRCUIT INTERRUPTER
- Ⓜ SWITCHED RECEPTACLE SAME AS ABOVE. THE TOP HALF OF THE RECEPTACLE IS CONTROLLED BY A SWITCH LOCATED WITHIN THE ROOM. THE BOTTOM HALF OF THE RECEPTACLE FUNCTIONS AS A STANDARD RECEPTACLE.
- Ⓜ SPECIAL PURPOSE SINGLE RECEPTACLE. COORDINATE EXACT NEMA RECEPTACLE TYPE WITH TENANT/OWNER PRIOR TO INSTALLATION.
- Ⓜ FLUSH CEILING MOUNTED GROUNDING TYPE DUPLEX RECEPTACLE SAME AS ABOVE. COORDINATE BOX AND FACE PLATE SELECTION WITH ARCHITECT.
- Ⓜ FLUSH FLOOR MOUNTED GROUNDING TYPE DUPLEX RECEPTACLE SAME AS ABOVE. PROVIDE WIREMOLD RC4 SERIES, UNLESS NOTED. COORDINATE BOX AND FACE PLATE SELECTION WITH ARCHITECT.
- Ⓜ FLUSH CEILING MOUNTED DATA/TELEPHONE OUTLET
- Ⓜ FLUSH FLOOR MOUNTED DATA/TELEPHONE OUTLET. PROVIDE WIREMOLD RC4 SERIES, UNLESS NOTED.
- Ⓜ DATA OUTLET MOUNTED AT 18" AFF, UNLESS NOTED. PROVIDE OUTLET BOX WITH 3/4" METAL CONDUIT WITH PULL RING AND STRING TO 6" ABOVE ACCESSIBLE CEILING.
- Ⓜ TELEPHONE OUTLET MOUNTED AT 6" AFF, UNLESS NOTED. PROVIDE OUTLET BOX WITH 3/4" METAL CONDUIT WITH PULL RING AND STRING TO 6" ABOVE ACCESSIBLE CEILING.
- Ⓜ COMBINATION DATA/TELEPHONE OUTLET MOUNTED AT 18" AFF, UNLESS NOTED. PROVIDE OUTLET BOX WITH 3/4" METAL CONDUIT WITH PULL RING AND STRING TO 6" ABOVE ACCESSIBLE CEILING.
- Ⓜ CEILING OR WALL MOUNTED, SINGLE OR DOUBLE FACED EXIT SIGN. SHADED AREA DENOTES ILLUMINATED FACE, ARROWS INDICATE DIRECTION OF EGRESS.
- Ⓜ 20A, 120/277V, SINGLE POLE WALL MOUNTED SWITCH SPECIFICATION GRADE WITH MATCHING FACE PLATE. MOUNT AT 48" AFF, UNLESS NOTED. COORDINATE EXACT SWITCH TYPE (TOGGLE, ROCKER, ETC.) AND COLOR WITH ARCHITECT PRIOR TO PURCHASING AND INSTALLATION.
- SUBSCRIPTS INDICATE:
S - 3-WAY SWITCH
M - MOTOR RATED SWITCH
A - (1) LOW VOLTAGE WALL MOMENTARY SWITCH - WIRE FOR AUTO ON CRESTRON 'ZUM' - #ZUMLINK-KP-R-W
B - (1) LOW VOLTAGE WALL MOMENTARY SWITCH - WIRE FOR MANUAL ON CRESTRON 'ZUM' - #ZUMLINK-KP-R-W
OS - WALL SWITCH OCCUPANCY SENSOR (WIRED FOR AUTO-ON) CRESTRON - #GLA-DT-WLS-1-W
VS - WALL SWITCH OCCUPANCY SENSOR (WIRED FOR MANUAL-ON) CRESTRON - #GLA-DT-WLS-1-W
- Ⓜ LIGHTING SWITCHBANK - SINGLE-GANG ALL SWITCHES, UNLESS NOTED
- Ⓜ STANDARD RANGE 360 OCCUPANCY SENSOR CRESTRON 'ZUM' #ZUMLINK-DT-QUATRO-DLS
- Ⓜ LARGE RANGE 360 OCCUPANCY SENSOR CRESTRON 'ZUM' #ZUMLINK-US-HALLWAY-DLS
- Ⓜ LIGHTING POWER PACK CONTROLLER CRESTRON 'ZUM' #ZUMNET-JBOX-16A-LV

ABBREVIATIONS

- A, AMP AMPERE
ALT ALTERNATING CURRENT
AFF ABOVE FINISHED FLOOR
AHU AIR HANDLING UNIT
AWG AMERICAN WIRE GAUGE
BATT BATTERY
BLDG BUILDING
C, COND CONDUIT
CB CIRCUIT BREAKER
Ckt CIRCUIT
CLG CEILING
CON CONDENSING UNIT
DISC DISCONNECT
DN DOWN
DWG DRAWING
EFT EXHAUST FAN
EQ EQUIPMENT GROUND
ELEC ELECTRICAL
EMERG EMERGENCY
ELECTRIC METAL TUBING
EPO EMERGENCY POWER 'OFF'
EQUIP EQUIPMENT
EW EMERGENCY LIGHTING/WIRING
EWC ELECTRIC WATER COOLER
EWH ELECTRIC WATER HEATER
EX EXISTING TO REMAIN
F/A, FA FIRE ALARM
FAFP FIRE ALARM ANNUNCIATOR PANEL
FLA FIRE ALARM CONTROL PANEL
FLU FULL LOAD AMPS
FSS FUSED SAFETY SWITCH
FT FOOT
G, GD GROUND
GFI GROUND FAULT INTERRUPTER
HFC HOUSEPOWER
HV ISOLATED GROUND
JB, JBOX JUNCTION BOX
KVA KILOVOLT AMPERE
KW KILOWATT
LED LIGHT EMITTING DIODE
LTD LIGHTING
LV LOW VOLTAGE
MCR MAIN CIRCUIT BREAKER
MECH MECHANICAL
MH MOUNTING HEIGHT
MN MINIMUM
MLO MAXIMUM
MOCP MAXIMUM OVERCURRENT PROTECTION
N/A, NA NOT APPLICABLE
NEUTRAL NATIONAL ELECTRIC CODE
NEC NATIONAL ELECTRICAL
NEMA MANUFACTURERS ASSOCIATION
NFPA NATIONAL FIRE PROTECTION ASSOCIATION
NFPA FEDERAL CREDIT UNION
NFSS NON-FUSED SAFETY SWITCH
NIC NOT IN CONTRACT
NL NIGHT LIGHT
NTS NOT TO SCALE
PH PHASE
Pole POLE
PBL PANELBOARD
QTY QUANTITY
REC RECEPTACLE
REQ REQUIRED
RM ROOM
RTU ROOF TOP UNIT
SC SPLIT CIRCUIT - WITH OTHER DEVICE(S)
SWBD SWITCHBOARD
TRF TRANSFORMER
TYP TO BE DETERMINED
TYP TYPICAL
UH UNIT HEATER
UNV UNIVERSAL VOLTAGE (120V/277V)
UNLESS OTHERWISE NOTED
VOLT VOLTAGE
VA VOLT AMPERE
VAV VARIABLE AIR VOLUME
W WATT OR WIRE
WH WALL HEATER
WP WEATHERPROOF ENCLOSURE
W/ WITH
NUMBER

NOT ALL ABBREVIATIONS ARE USED IN THIS PROJECT

DRAWING INDEX

DWG#	DRAWING TITLE
E001	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
E002	GROUND FLOOR PLAN DEMOLITION ELECTRICAL
E003	GROUND FLOOR PLAN NEW WORK LIGHTING
E004	GROUND FLOOR PLAN NEW WORK POWER
E005	POWER RISER DIAGRAM, PANEL SCHEDULES AND DETAILS

SYMBOLS (CONT.)

- Ⓜ CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR. PROVIDE HUBBEL #OMNI-DT2000. ALL OCCUPANCY SENSORS SHALL BE SET TO MAXIMUM SENSITIVITY AND MAXIMUM DELAY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING POWERPACK RELAYS TO ACHIEVE DESIGN.
- Ⓜ MOTOR CONNECTION
- Ⓜ HEATER CONNECTION
- Ⓜ DRAWING NOTE
- Ⓜ SAFETY DISCONNECT SWITCH, VOLTAGE AND AMPERAGE RATINGS AS REQUIRED.
- Ⓜ FUSED DISCONNECT SWITCH, VOLTAGE & AMPERAGE & NUMBER OF POLES AS REQUIRED.
- Ⓜ COMBINATION SAFETY SWITCH/MOTOR CONTROLLER, VOLTAGE RATING, AMPERAGE RATING, AND STARTER SIZE AS REQUIRED.
- Ⓜ CONSOLE TYPE HVAC UNIT
- Ⓜ MOTION DETECTOR/SWITCH COMBINATION. NOVITAS MODEL # 01-153, TWO LEVEL CONTROL. AUTO/MANUAL ON WALL SWITCH, MOUNT AT 48" AFF, UNLESS NOTED.
- Ⓜ PULL BOX. SIZE AS REQUIRED BY NEC.
- Ⓜ FRONT DOOR BUZZER BUTTON. MOUNT AT 48" AFF, UNLESS NOTED. COORDINATE EXACT TYPE WITH ARCHITECT.
- Ⓜ DOOR RELEASE BUTTON, COORDINATE EXACT TYPE WITH ARCHITECT.
- Ⓜ BUZZER. COORDINATE EXACT TYPE AND MOUNTING HEIGHT WITH ARCHITECT.
- Ⓜ CARD READER. PROVIDE OUTLET BOX WITH 3/4" EMPTY CONDUIT WITH PULL RING AND STRING TO ABOVE ACCESSIBLE CEILING. MOUNT AT 48" AFF, UNLESS NOTED.
- Ⓜ MECHANICAL EQUIPMENT ITEM
- Ⓜ TELEPHONE, ELECTRIC, AND DATA FURNITURE WHIP CONNECTION. FIELD VERIFY SYSTEM WIRING CONFIGURATION. PROVIDE 2 JUNCTION BOXES, 1 FOR POWER AND 1 WITH EMPTY CONDUIT AND PULL STRING TO ABOVE ACCESSIBLE CEILING. NUMBER INDICATES QUANTITY OF WORKSTATIONS. VERIFY ALL QUANTITIES WITH FURNITURE VENDOR PRIOR TO DOING ANY WORK.
- Ⓜ POWER POLE, TELEPHONE, ELECTRIC, AND DATA FURNITURE CONNECTION. FIELD VERIFY SYSTEM WIRING CONFIGURATION. COORDINATE EXACT TYPE WITH ARCHITECT.
- Ⓜ DUCT HEATER
- Ⓜ SERVICE OR EQUIPMENT GROUND
- Ⓜ NUMBER IN TRIANGLE INDICATES THE CURRENT REVISION NUMBER
- Ⓜ REVISION CLOUD INDICATES A DRAWING CHANGE
- Ⓜ CAMERA
- Ⓜ PHASE
- Ⓜ CONDUIT TURN. OPEN CIRCLE INDICATES A CONDUIT TURN UP, CLOSED CIRCLE INDICATES A CONDUIT TURN DOWN.

NOT ALL SYMBOLS ARE USED IN THIS PROJECT

FIRE ALARM SYMBOLS

- Ⓜ FIRE ALARM COMBINATION VISUAL/AUDIBLE DEVICE. STROBE SHALL BE 75 CANDELA, UNLESS NOTED. UNLESS OTHERWISE NOTED, COLOR TO BE WHITE. MOUNT AT 80" AFF OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER. LOCATE IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS. X = CANDELA RATING, C = CEILING MOUNTED.
- Ⓜ FIRE ALARM AUDIBLE DEVICE TO BE WHITE, UNLESS NOTED. MOUNT IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS.
- Ⓜ FIRE ALARM VISUAL STROBE DEVICE. SHALL BE 75 CANDELA, UNLESS NOTED. UNLESS OTHERWISE NOTED, COLOR TO BE WHITE. MOUNT AT 80" AFF OR 6" BELOW FINISHED CEILING, WHICHEVER IS LOWER. LOCATE IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS. X = CANDELA RATING, C = CEILING MOUNTED.
- Ⓜ FIRE ALARM PULL STATION, MOUNTED AT 48" ABOVE FINISHED FLOOR. MATCH EXISTING BUILDING FIRE ALARM MANUAL PULL STATIONS.
- Ⓜ FIRE ALARM HORN TO MATCH EXISTING HORNS, UNLESS NOTED. MOUNT IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS.
- Ⓜ FIRE ALARM SYSTEM MAGNETIC DOOR HOLDER, WALL MOUNTED, UNLESS NOTED.
- Ⓜ CEILING MOUNTED, SPEAKER TYPE, FIRE ALARM AUDIBLE DEVICE. SHALL MATCH EXISTING AUDIBLE DEVICES. LOCATE IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS.
- Ⓜ FIRE ALARM BELL TO MATCH EXISTING HORNS, UNLESS NOTED. MOUNT IN ACCORDANCE WITH ADA AND NFPA REQUIREMENTS.
- Ⓜ SMOKE DETECTOR
- Ⓜ DUCT SMOKE DETECTOR SHALL BE WIRED TO SHUT DOWN AIR HANDLER UNLESS ACTIVATION.
- Ⓜ HEAT DETECTOR
- Ⓜ FIRE ALARM CONTROL PANEL
- Ⓜ TAMPER SWITCH CONNECTION
- Ⓜ FLOW SWITCH CONNECTION

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**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
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PROFESSIONAL SEAL



ISSUED _____ DATE _____
FOR PERMIT _____ 03.21.2025

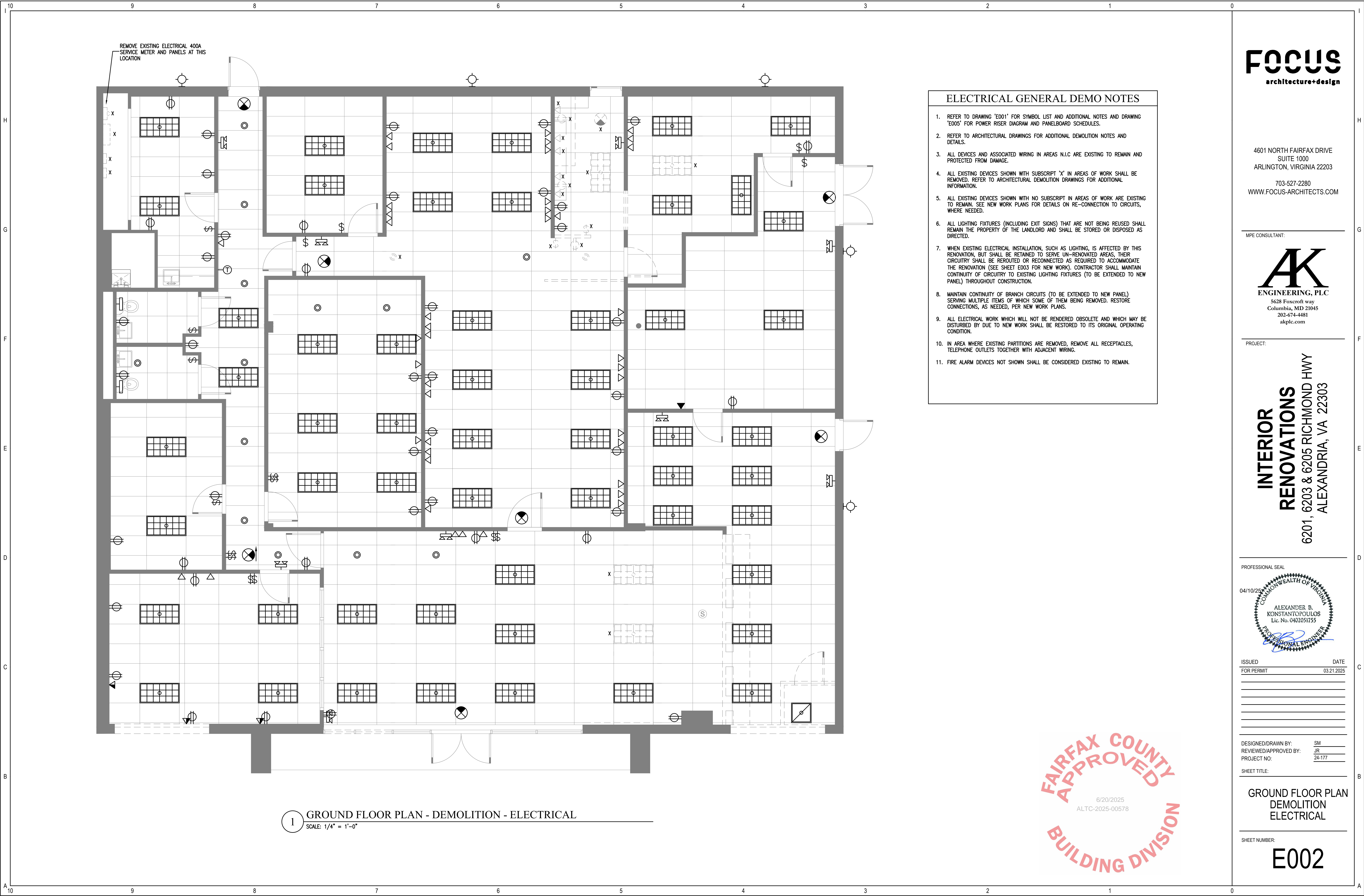
DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177

SHEET TITLE:

GENERAL NOTES,
SYMBOLS AND
ABBREVIATIONS -
ELECTRICAL

SHEET NUMBER:

E001



1 GROUND FLOOR PLAN - DEMOLITION - ELECTRICAL
SCALE: 1/4" = 1'-0"

- ELECTRICAL GENERAL DEMO NOTES
1. REFER TO DRAWING 'E001' FOR SYMBOL LIST AND ADDITIONAL NOTES AND DRAWING 'E005' FOR POWER RISER DIAGRAM AND PANELBOARD SCHEDULES.
 2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DEMOLITION NOTES AND DETAILS.
 3. ALL DEVICES AND ASSOCIATED WIRING IN AREAS N.I.C ARE EXISTING TO REMAIN AND PROTECTED FROM DAMAGE.
 4. ALL EXISTING DEVICES SHOWN WITH SUBSCRIPT 'X' IN AREAS OF WORK SHALL BE REMOVED. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR ADDITIONAL INFORMATION.
 5. ALL EXISTING DEVICES SHOWN WITH NO SUBSCRIPT IN AREAS OF WORK ARE EXISTING TO REMAIN. SEE NEW WORK PLANS FOR DETAILS ON RE-CONNECTION TO CIRCUITS, WHERE NEEDED.
 6. ALL LIGHTING FIXTURES (INCLUDING EXIT SIGNS) THAT ARE NOT BEING REUSED SHALL REMAIN THE PROPERTY OF THE LANDLORD AND SHALL BE STORED OR DISPOSED AS DIRECTED.
 7. WHEN EXISTING ELECTRICAL INSTALLATION, SUCH AS LIGHTING, IS AFFECTED BY THIS RENOVATION, BUT SHALL BE RETAINED TO SERVE UN-RENOVATED AREAS, THEIR CIRCUITRY SHALL BE REROUTED OR RECONNECTED AS REQUIRED TO ACCOMMODATE THE RENOVATION (SEE SHEET E003 FOR NEW WORK). CONTRACTOR SHALL MAINTAIN CONTINUITY OF CIRCUITRY TO EXISTING LIGHTING FIXTURES (TO BE EXTENDED TO NEW PANEL) THROUGHOUT CONSTRUCTION.
 8. MAINTAIN CONTINUITY OF BRANCH CIRCUITS (TO BE EXTENDED TO NEW PANEL) SERVING MULTIPLE ITEMS OF WHICH SOME OF THEM BEING REMOVED. RESTORE CONNECTIONS, AS NEEDED, PER NEW WORK PLANS.
 9. ALL ELECTRICAL WORK WHICH WILL NOT BE RENDERED OBSOLETE AND WHICH MAY BE DISTURBED BY DUE TO NEW WORK SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION.
 10. IN AREA WHERE EXISTING PARTITIONS ARE REMOVED, REMOVE ALL RECEPTACLES, TELEPHONE OUTLETS TOGETHER WITH ADJACENT WIRING.
 11. FIRE ALARM DEVICES NOT SHOWN SHALL BE CONSIDERED EXISTING TO REMAIN.



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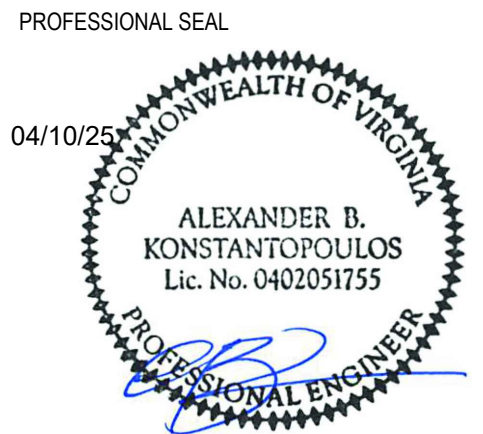
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ISSUED	DATE
FOR PERMIT	03.21.2025
DESIGNED/DRAWN BY:	SM
REVIEWED/APPROVED BY:	JR
PROJECT NO:	24-177
SHEET TITLE:	

GROUND FLOOR PLAN
DEMOLITION
ELECTRICAL

SHEET NUMBER:
E002

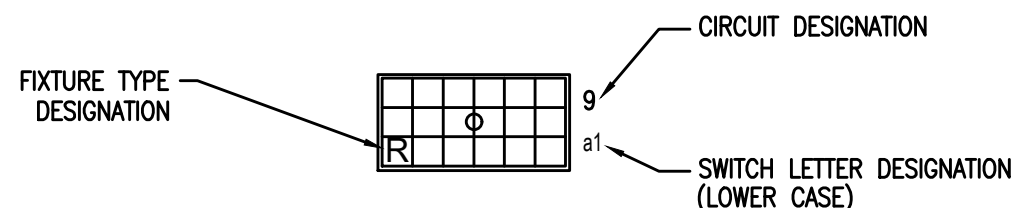
LIGHTING GENERAL NOTES

1. REFER TO DRAWING 'E001' FOR SYMBOL LIST AND ADDITIONAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHTING FIXTURES AND ADDITIONAL NOTES.
3. ALL LIGHTING FIXTURES SHOWN ON PLAN ARE NEW, UNLESS OTHERWISE NOTED.
4. THE EXIT SIGNS IN THE AREA OF SCOPE ARE NEW, UNLESS OTHERWISE INDICATED. COORDINATE TRIM AND FINISH OF NEW EXIT SIGNS WITH ARCHITECT PRIOR TO DOING ANY WORK.
5. FINAL LIGHTING CONTROL LOCATIONS & DESIGNATION TO BE DETERMINED BY ARCHITECT.
6. IN THE AREAS WITH CEILING MOUNTED OCCUPANCY SENSORS, THE LIGHTING SHALL BE CONTROLLED BY OCCUPANCY SENSORS AND 'OVERRIDE' WALL MOUNTED LIGHTING SWITCH. SEE SHEET E001 FOR LIGHTING SWITCH SPECIFICATIONS. SEE SHEET E005 FOR CONTROL DETAILS.
7. ALL LIGHTING FIXTURES IN AREAS OUT OF SCOPE ARE EXISTING TO REMAIN UNCHANGED FROM THE APPROVED PLANS.
8. CONTRACTOR SHALL PROVIDE DOCUMENTS CERTIFYING THAT INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA, WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.
9. CONTRACTOR SHALL PROVIDE EVIDENCE OF TESTING OF ALL LIGHTING CONTROLS TO THE ENGINEER, AS REQUIRED BY 2018 IECC 408.3.1, AT THE TIME OF FIELD INSPECTION (PUNCH LIST) BY THE ENGINEER.

④ LIGHTING PLAN NOTES

1. IN THIS ROOM, UPON DISCONNECTING EXISTING LIGHT FIXTURE FROM DEMOLISHED PANEL, CONNECT TO NEW PANEL SOURCE AS SHOWN, VIA EXISTING LIGHTING CONTROLS IN THE ROOM.
2. IN THIS ROOM, UPON DISCONNECTING EXISTING LIGHT FIXTURE FROM DEMOLISHED PANEL, CONNECT TO NEW PANEL SOURCE AS SHOWN, VIA NEW LIGHTING CONTROLS IN THE ROOM.
3. UPON REMOVAL OF EXISTING PANEL, EXISTING EMERGENCY LIGHTING FIXTURES SHALL BE CONNECTED TO NEW CIRCUIT SHOWN (ADJACENT NORMAL LIGHTING CIRCUIT) AS SHOWN. CONNECT TO UNSWITCHED SIDE (LINE SIDE) OF CIRCUIT.
4. CONNECT ALL NEW EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS TO ADJACENT NORMAL LIGHTING CIRCUIT, AS SHOWN. CONNECT TO UNSWITCHED SIDE (LINE SIDE) OF CIRCUIT.
5. EXISTING EXTERIOR LIGHTING AND ALL EXISTING ASSOCIATED AUTOMATIC CONTROLS TO REMAIN. RECONNECT TO NEW PANELBOARD AS SHOWN.

TYPICAL CIRCUIT LEGEND



- NOTES**
1. IN ROOMS WITH A SINGLE SWITCH SHOWN, ROUTE ALL CIRCUITING FOR FIXTURES IN THAT ROOM THROUGH SWITCH FOR CONTROL.

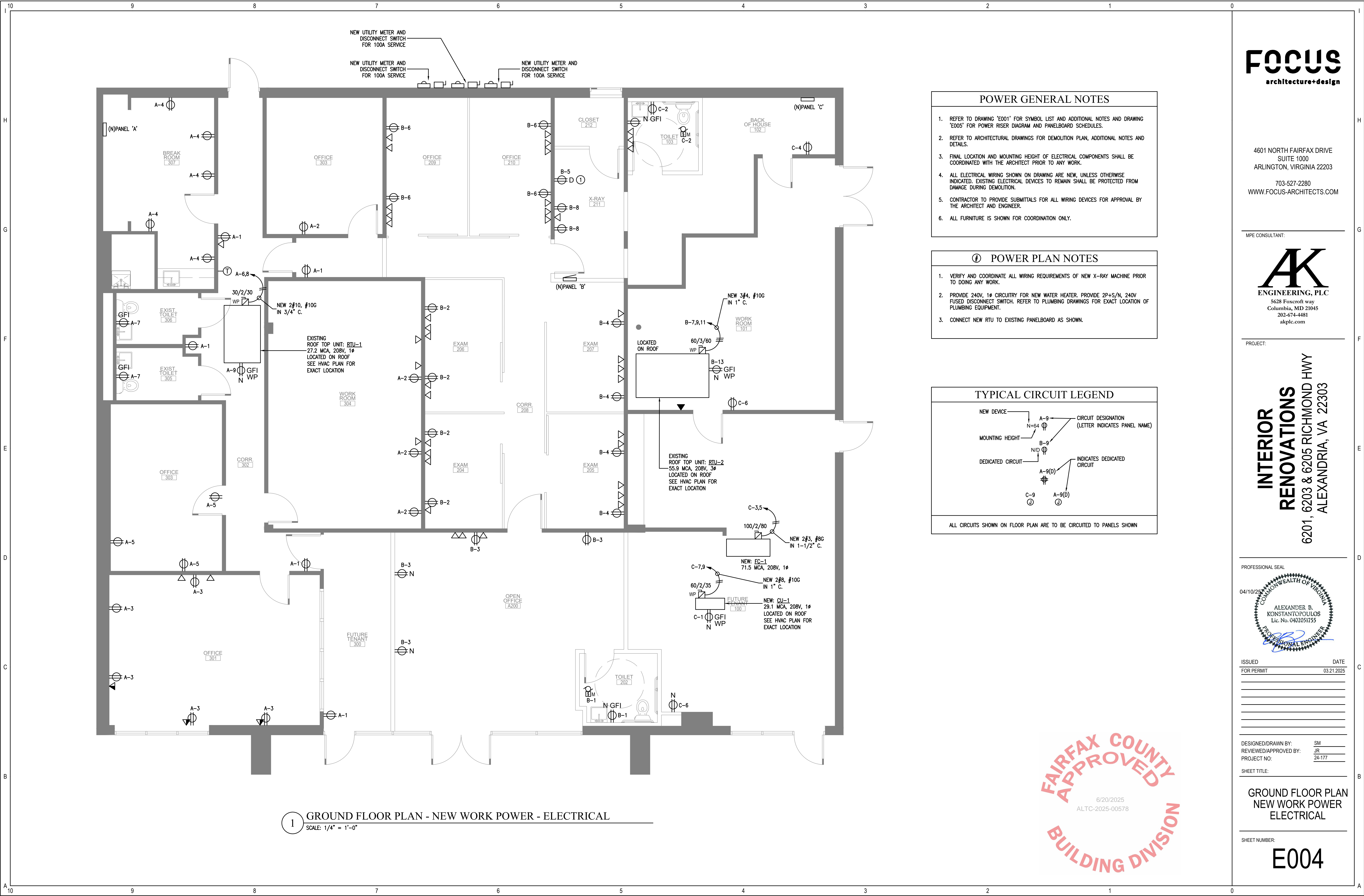
LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER & CAT. No.	LAMP			VOLT	MOUNTING	REMARKS
		No.	WATT	TYPE			
	EXISTING -- TO REMAIN 2X4 LIGHTING FIXTURE	2	32	T8	UNV	RECESSED CEILING	CLEAN AND RELAMP AS NEEDED
	EXISTING -- RELOCATED 2X4 LIGHTING FIXTURE	2	32	T8	UNV	RECESSED CEILING	CLEAN AND RELAMP AS NEEDED
	EXISTING -- TO REMAIN DOWNLIGHT FIXTURE	1	26	CF	UNV	RECESSED CEILING	CLEAN AND RELAMP AS NEEDED
	EXISTING -- RELOCATED DOWNLIGHT FIXTURE	1	26	CF	UNV	RECESSED CEILING	CLEAN AND RELAMP AS NEEDED
	EXISTING -- TO REMAIN DOWNLIGHT FIXTURE	1	26	CF	UNV	SURFACE WALL	CLEAN AND RELAMP AS NEEDED
	EXISTING -- TO REMAIN EXTERIOR WALL PACK EGRESS LIGHTING	1	50	HAL	UNV	SURFACE WALL	CLEAN AND RELAMP AS NEEDED
	NEW EXIT SIGNS SPECS TO MATCH BASE BLDG STANDARD	1	<5	LED	UNV	SURFACE CEILING	W/ 90 MINUTE BATTERY PACK
	EXISTING -- TO REMAIN EXIT SIGNS	1	<5	LED	UNV	SURFACE CEILING	W/ BATTERY PACK
	NEW EMERGENCY WALL PACK EGRESS LIGHTING -- MATCH SPECS OF EXISTING	2	4	LED	UNV	SURFACE WALL	VERIFY SPECS W/ ARCH PRIOR TO ORDERING
	EXISTING -- TO REMAIN WALL PACK EGRESS LIGHTING	2	4	LED	UNV	SURFACE WALL	

- NOTES:**
1. LIGHTING FIXTURES SHOWN AS EMERGENCY SHALL BE PROVIDED WITH 90 MINUTE BATTERY BACKUP OPTION.
 2. VERIFY GRID TYPE, MOUNTING LOCATIONS OF LIGHTING FIXTURES WITH WORK OF OTHER TRADES AND WITH THE ARCHITECT PRIOR TO ANY WORK.
 3. DIFFERENCES BETWEEN VOLTAGE AND/OR WATTAGE OF LIGHT FIXTURE SCHEDULE ON THE ELECTRICAL DRAWINGS AND THOSE SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BY THE CONTRACTOR. AS EXISTING LIGHTING FIXTURES ARE REUSED, REPAIR AS REQUIRED. RE-LAMP ALL NON-FUNCTIONING LAMPS AND PROVIDE THERMAL OVERLOAD PROTECTION AS REQUIRED.
 4. PROVIDE DIRECTIONAL ARROWS FOR EXIT SIGN AS SHOWN ON PLANS.

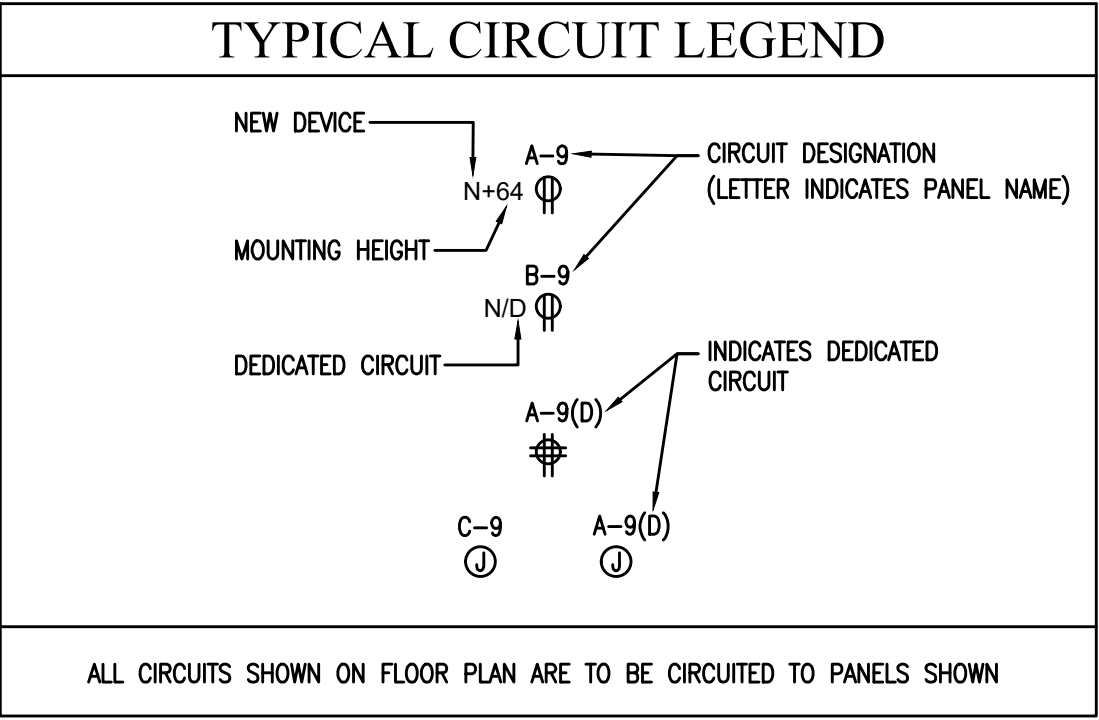
1 GROUND FLOOR PLAN - NEW WORK LIGHTING - ELECTRICAL

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



- POWER GENERAL NOTES**
- REFER TO DRAWING 'E001' FOR SYMBOL LIST AND ADDITIONAL NOTES AND DRAWING 'E005' FOR POWER RISER DIAGRAM AND PANELBOARD SCHEDULES.
 - REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION PLAN, ADDITIONAL NOTES AND DETAILS.
 - FINAL LOCATION AND MOUNTING HEIGHT OF ELECTRICAL COMPONENTS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ANY WORK.
 - ALL ELECTRICAL WIRING SHOWN ON DRAWING ARE NEW, UNLESS OTHERWISE INDICATED. EXISTING ELECTRICAL DEVICES TO REMAIN SHALL BE PROTECTED FROM DAMAGE DURING DEMOLITION.
 - CONTRACTOR TO PROVIDE SUBMITTALS FOR ALL WIRING DEVICES FOR APPROVAL BY THE ARCHITECT AND ENGINEER.
 - ALL FURNITURE IS SHOWN FOR COORDINATION ONLY.

- POWER PLAN NOTES**
- VERIFY AND COORDINATE ALL WIRING REQUIREMENTS OF NEW X-RAY MACHINE PRIOR TO DOING ANY WORK.
 - PROVIDE 240V, 1Ø CIRCUITRY FOR NEW WATER HEATER. PROVIDE 2P+S/N, 240V FUSED DISCONNECT SWITCH. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF PLUMBING EQUIPMENT.
 - CONNECT NEW RTU TO EXISTING PANELBOARD AS SHOWN.



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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303

PROFESSIONAL SEAL

04/10/25

ALEXANDER B.
KONSTANTOPOULOS
Lic. No. 0402051755
PROFESSIONAL ENGINEER

ISSUED _____ DATE _____
FOR PERMIT _____ 03.21.2025

DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177
SHEET TITLE:

**GROUND FLOOR PLAN
NEW WORK POWER
ELECTRICAL**

SHEET NUMBER:

E004

**FAIRFAX COUNTY
APPROVED**
6/20/2025
ALTC-2025-00578
BUILDING DIVISION

E005

SYMBOL LIST AND ABBREVIATIONS

24x24 CEILING SUPPLY AIR DEVICE WITH DESIGN CFM QUANTITY

24x24 CEILING SUPPLY AIR DEVICE WITH SHADED AREA INDICATING BLANK-OFF PORTION

24x24 CEILING RETURN AIR DEVICE

INDICATES SUPPLY, RETURN OR EXHAUST AIRFLOW, RESPECTIVELY

LINEAR SUPPLY DIFFUSER WITH SOUND INSULATED PLENUM

LINEAR RETURN DIFFUSER WITH SOUND INSULATED PLENUM EXISTING EQUIPMENT

DUCT WITH 1" ACOUSTIC LINER. DIMENSIONS GIVEN ARE INSIDE FREE AREA. DUCT MAY BE NOTED AS INTERNALLY SOUNDLINED ON PLANS BUT MAY NOT BE REPRESENTED BY THIS SYMBOL

EXISTING EQUIPMENT TO BE REMOVED. REMOVAL OF EQUIPMENT MAY ALSO BE INDICATED BY NOTES WITHOUT HATCHING.

FLEXIBLE DUCT CONNECTION

FLEXIBLE DUCT

DUCT WITH SPIN-IN FITTING WITH INTEGRAL VOLUME DAMPER.

FLEXIBLE DUCT

RIGID DUCT

DUCT WITH MANUAL VOLUME DAMPER.

DUCT TRANSITION, RECTANGULAR TO ROUND

SQUARE ELBOW WITH DOUBLE THICKNESS TURNING VANES

RADIUS ELBOW. MIN RADIUS EQUALS 1.5 x DUCT WIDTH

RIGID DUCTWORK SHOWN AS SINGLE LINE

RIGID DUCTWORK WITH 1" ACOUSTIC LINER SHOWN AS SINGLE LINE. DIMENSIONS GIVEN ARE INSIDE FREE AREA. DUCT MAY BE NOTED AS INTERNALLY SOUNDLINED ON PLANS BUT MAY NOT BE REPRESENTED BY THIS SYMBOL.

RIGID DUCTWORK SIZE TRANSITION

BALL VALVE SHUT-OFF

GATE VALVE SHUT-OFF

COMBINATION SHUT-OFF AND BALANCING VALVE

Y - TYPE STRAINER

PIPE UNION

CHECK VALVE

STRAINER WITH BLOWDOWN VALVE

PIPE TURNING DOWN

PIPE TURNING UP

VALVE IN THE VERTICAL PIPE

THERMOMETER

PRESSURE GAUGE

CONDENSATE DRAIN PIPING

CONDENSATE RETURN PIPING

REFRIGERANT PIPING, INDICATES BOTH LIQUID AND SUCTION LINES

THERMOSTAT, MOUNT @ 48" AFF.

SWITCH, MOUNT @ 48" AFF.

DIGITAL DISPLAY AND CONTROL, MOUNT @ 48" AFF.

POINT OF CONNECTION, NEW WORK TO EXISTING

TERMINATION POINT OF DEMOLITION

1/2" U/C

DOOR UNDERCUT, SIZE AS SHOWN

RETURN/EXHAUST AIR FLOW ARROW

DUCT DROP IN DIRECTION INDICATED

DUCT RISE IN DIRECTION INDICATED

SMOKE DAMPER

FIRE DAMPER

COMBINATION FIRE/SMOKE DAMPER

NOTE: NOT ALL SYMBOLS MAY BE USED.

ABBREVIATIONS

(E)	EXISTING TO REMAIN	GPM	GALLONS PER MINUTE
(N)	NEW	HP	HORSEPOWER
(R)	EXISTING TO BE REMOVED	IN.	INCHES
(RE)	NEW LOCATION OF EXISTING	KW	KILOWATT
(RR)	EXISTING TO BE REMOVED AND RELOCATED	LAT	LEAVING AIR TEMPERATURE
(XXX)	RETURN/EXHAUST AIR CFM	LRA	LOCKED ROTOR AMPS
ABV	ABOVE	MAX	MAXIMUM
ADJ	ADJUSTABLE	MFR	MANUFACTURER
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AHU	AIR HANDLING UNIT	NC	NOISE CRITERIA
AP	ACCESS PANEL	NTS	NOT TO SCALE
BD	BACKDRAFT DAMPER	OA	OUTSIDE AIR
BFP	BACK FLOW PREVENTER	POC	POINT OF CONNECTION
BS	BRANCH SELECTOR BOX	RA	RETURN AIR
CFM	CUBIC FEET (AIR) PER MINUTE	RG	RETURN GRILLE
CLG	CEILING	RLA	RATED LOAD AMPS
CSR	CONSTANT SUPPLY REGISTER	RPM	REVOLUTIONS PER MINUTE
CU	CONDENSING UNIT	SA	SUPPLY AIR
D	CONDENSATE DRAIN	SD	SMOKE DAMPER
DN	DOWN	SG	SUPPLY GRILLE
DWG	DRAWING	SL	SOUNDLINING
EA	EXHAUST AIR	SO	SQUARE
EAT	ENTERING AIR TEMPERATURE	TD	TRANSFER AIR DUCT
EF	EXHAUST FAN	TAO	TRANSFER AIR OPENING
EG	EXTERNAL GRILLE	TBD	TO BE DETERMINED
ESP	EXTERNAL STATIC PRESSURE	TYP	TYPICAL
FC	FAN COIL UNIT	UNO	UNLESS NOTED OTHERWISE
FD	FIRE DAMPER	VD	VOLUME DAMPER
FLA	FULL LOAD AMPS	VRV	VARIABLE REFRIGERANT VOLUME
FT	FEET	WMS	WIRE MESH SCREEN
		WPD	WATER PRESSURE DROP IN. W.G.

MECHANICAL NOTES

- GENERAL:
 - THE GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS AND APPLICABLE PROVISIONS OF OTHER DIVISIONS, FORM A PART OF THIS SPECIFICATION AND CONTRACT, AND SHALL BE CAREFULLY EXAMINED BY EACH BIDDER BEFORE SUBMITTING THEIR PROPOSAL.
 - COMPLIANCE WITH LOCAL JURISDICTIONS: ALL WORK PERFORMED UNDER THIS SECTION SHALL CONFORM TO THE REQUIREMENTS OF DRAWINGS, SPECIFICATIONS AND TO THE CODES, ORDINANCES AND STANDARDS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES FOR INSPECTIONS RELATED TO HIS WORK.
 - INSTALLATIONS SHALL BE GUARANTEED FOR WORKMANSHIP, MATERIALS AND EQUIPMENT AGAINST DEFECTS, LEAKS AND SYSTEM NON-OPERATION FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE OF WORK BY OWNER. WHERE MANUFACTURER'S STANDARD WARRANTY LONGER THAN ONE YEAR, THE LONGER WARRANTY PERIOD SHALL TAKE PRECEDENCE. FOR REFRIGERATION COMPONENTS, PROVIDE EXTENDED 100% PARTS AND LABOR WARRANTY FOR YEARS 2-5. CONTRACTOR SHALL PAY ALL COSTS INVOLVING THE GUARANTEE OF ALL SYSTEMS.
 - THE WORD "PROVIDE", AS USED IN SPECIFICATIONS AND ON PLANS, SHALL MEAN FURNISH AND INSTALL COMPLETE AND READY FOR USE.
 - ALL WORK SHALL BE COORDINATED WITH ALL TRADES PRIOR TO INSTALLATION.
 - IN GENERAL, THE DRAWINGS ARE DIAGRAMMATIC, MAY VARY FROM ACTUAL FIELD CONDITIONS AND SHOW THE GENERAL LOCATION, TYPE AND SIZE OF PIPING, DUCTWORK, EQUIPMENT, CONTROLS, ACCESSORY EQUIPMENT, ETC. THE CONTRACTOR SHALL MODIFY, EXTEND, RELOCATE AND REROUTE ANY DUCTWORK, PIPING, EQUIPMENT, CONTROLS, ACCESSORY EQUIPMENT, ETC. AS REQUIRED TO ACCOMMODATE THE CEILING LAYOUT, OBSTRUCTIONS, STRUCTURE, PARTITIONS, ETC. AND TO SATISFY THE INTENT OF THE NEW WORK.
 - THE CONTRACTOR SHALL FIELD VERIFY ALL NECESSARY DIMENSIONS BEFORE INSTALLING ANY OF THE WORK, AND SHALL CHECK HIS LAYOUTS TO ALLOW CLEARANCE REQUIRED FOR OTHER WORK AS SHOWN ON THE DRAWINGS. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL ALERT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
 - THE SCOPE OF WORK CONSISTS GENERALLY OF PROVIDING A COMPLETE SYSTEM FOR HEATING, VENTILATING AND AIR CONDITIONING AS INDICATED, AUTOMATIC TEMPERATURE CONTROLS AND FINAL TESTING, ADJUSTING, AND BALANCING OF ALL SYSTEMS AND EQUIPMENT. PROVIDE ALL MATERIALS, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO ACCOMPLISH THE WORK.
 - CONTRACTOR SHALL EXAMINE ALL DRAWINGS, SPECIFICATIONS AND ADDENDA, AND VISIT THE SITE PRIOR TO ISSUING BID. ANY QUESTIONS OR CLARIFICATIONS SHALL BE REFERRED TO THE ENGINEER AT LEAST 7 WORKING DAYS PRIOR TO BIDDING. ANY REQUEST BY THE CONTRACTOR FOR ADDITIONAL COSTS RELATED TO THE INSTALLATION, RELOCATION, MODIFICATION OR ADDITION OF EQUIPMENT REQUIRED TO SATISFY THE INTENT OF THIS PROJECT, DUE TO A LACK OF CLEAR UNDERSTANDING OF THE PROJECT REQUIREMENTS, WILL NOT BE ACCEPTED.
 - TO ELIMINATE CONFLICTS, CONTRACTOR TO PREPARE COMPLETE AND DETAILED 1/4" SCALE PLAN COMPOSITE COORDINATION DRAWINGS FOR ALL DUCT AND PIPING WORK INSTALLED IN THIS PROJECT. SUBMIT DRAWINGS TO THE ENGINEER FOR REVIEW, PRIOR TO CONSTRUCTION.
 - ALL WORK SHALL BE INSTALLED WITHIN CEILING AND SHALL BE DONE SO THAT ALL REQUIRED CLEARANCES ARE MAINTAINED. MAINTAIN MAXIMUM CEILING SPACE BY RUNNING WORK CLOSE TO THE UNDERSIDE OF STRUCTURE.
 - IN THE EVENT OF A CONFLICT BETWEEN CODES, DRAWINGS, AND/OR SPECIFICATIONS, THE MORE STRINGENT OR DEMANDING REQUIREMENT SHALL TAKE PRECEDENCE.
 - SUBMIT 7 SETS OF EQUIPMENT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION OF EQUIPMENT. SUBMIT DATA SHEETS TO ALLOW ADEQUATE TIME FOR REVIEW, INCLUDING RE-REVIEW OF ITEMS NOT APPROVED UPON FIRST SUBMISSION.
 - THE CONTRACTOR SHALL MAINTAIN THE PROPER OPERATION OF ALL EXISTING EQUIPMENT WITHIN THE WORK AREA. MODIFY ALL EQUIPMENT AS REQUIRED TO BE FULLY OPERATIONAL. IF UNABLE TO MODIFY EQUIPMENT TO BE FULLY OPERATIONAL, REPLACE IN KIND.
 - CUT, PATCH AND REPAIR ALL DISTURBED SURFACES IN KIND.
 - COORDINATE THE EXACT ROUTING OF ALL DUCTWORK AND PIPING IN THE FIELD WITH SITE CONDITIONS. MODIFY, EXTEND, REROUTE AND RELOCATE AS NECESSARY.
 - COORDINATE THE EXACT LOCATION OF ALL EQUIPMENT IN THE FIELD WITH SITE CONDITIONS. RELOCATE ANY EQUIPMENT AS REQUIRED. MODIFY, EXTEND, REROUTE AND RELOCATE ANY ASSOCIATED DUCTWORK AND PIPING AS NECESSARY.
 - ALL DUCTWORK SHALL BE SEALED WITH AN APPROPRIATE MATERIAL TO ELIMINATE ALL LEAKAGE EVIDENT TO THE SENSES.
 - THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS FOR THE COMPLETE AND PROPER INSTALLATION OF ALL NEW EQUIPMENT. CONFIRM THAT ALL NEW EQUIPMENT IS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S CLEARANCE REQUIREMENTS. MODIFY AND RELOCATE ANY EQUIPMENT AS NECESSARY TO ACCOMMODATE SITE CONDITIONS.
 - ALL DUCT TAPS/OPENINGS NOT INTENDED FOR RE-USE UNDER NEW WORK PLAN SHALL BE SEALED AIRTIGHT WITH SHEET METAL PATCH, SAME GAUGE AS EXISTING DUCT.
 - UNDER NO CIRCUMSTANCE SHALL THE WORK PERFORMED UNDER THIS CONTRACT ADVERSELY AFFECT ADJACENT AREAS, NOT PART OF THIS WORK.
 - IN THE EVENT THAT SUSPECTED ASBESTOS CONTAINING MATERIALS ARE ENCOUNTERED IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL CEASE WORK WITH THE SUSPECT MATERIALS AND SHALL REQUEST DIRECTION FROM THE OWNER BEFORE PROCEEDING FURTHER.
 - ANY OPERATIONS THAT WILL RESULT IN THE GENERATION OF NOISE OR VIBRATION, OR THAT MAY RESULT IN DUST EXTENDING BEYOND THE WORK AREA, SHALL BE PERFORMED AT TIMES AND IN ACCORDANCE WITH REQUIREMENTS STIPULATED BY BUILDING'S MANAGEMENT.
- PRODUCTS AND INSTALLATION:
 - ALL PRODUCTS SHALL BE FIRST QUALITY, SUITABLE FOR THE INTENDED INSTALLATION, AND SHALL BE PROVIDED COMPLETE WITH ALL NECESSARY APPURTENANCES FOR A COMPLETE SYSTEM, READY FOR BENEFICIAL USE.
 - ALL ELECTRICAL EQUIPMENT SHALL BE UL LABELED, OR EQUIVALENT BY COMPARABLE TESTING LAB.
 - REGISTERS, GRILLES AND DIFFUSERS:
 - DEVICES SHALL BE AS INDICATED ON SCHEDULES OR APPROVED EQUALS.
 - INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - COLORS/FINISHES SHALL BE AS DETERMINED BY ARCHITECT.
 - PROVIDE FRAME/BORDER TO SUIT INTENDED INSTALLATION SURFACE.
 - DUCTWORK:
 - ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA METAL DUCT STANDARDS. METAL DUCTS TO BE CONSTRUCTED OF GALVANIZED STEEL UNLESS NOTED OTHERWISE. MINIMUM SHEET METAL THICKNESS SHALL BE 24 GAUGE FOR GALVANIZED DUCTS. STAINLESS STEEL SHALL BE MINIMUM OF 0.0235" THICKNESS. FOLD FLAT ALL STANDING SEAMS ON TOP OF DUCT OF LOW PRESSURE DUCTS. HOLD ALL DUCTWORK TIGHT TO UNDERSIDE OF SLAB ABOVE.
 - SUPPLY DUCTWORK, EXHAUST DUCTWORK, OUTSIDE AIR INTAKE, RETURN AND RELIEF DUCTWORK SHALL BE CONSTRUCTED FOR A SMACNA 2" PRESSURE CLASSIFICATION. MEDIUM PRESSURE DUCTWORK SHALL BE CONSTRUCTED TO A 3" PRESSURE CLASS, DUCTMATE OR OTHER TDC TYPE DUCT. ALL DUCTS SHALL BE SEALED PER SMACNA SEAL CLASS 'A'.
 - FLEXIBLE INSULATED DUCTS SHALL BE UL-181-LISTED, CLASS '1', WITH HELICAL WIRE REINFORCEMENT, SECURED WITH ADJUSTABLE STAINLESS STEEL HOSE CLAMP.
 - PROVIDE FIRE DAMPERS AT ALL DUCT PENETRATIONS OF RATED ASSEMBLIES. DAMPERS TO BE UL LISTED, TYPE B, PREFCO OR APPROVED EQUAL.
 - PROVIDE SMOKE DAMPERS AT ALL DUCT PENETRATIONS OF RATED ASSEMBLIES AND AS SHOWN ON THE PLANS. DAMPERS TO BE UL555S LISTED. PROVIDE A CLASS 1 SMOKE DAMPER FOR SUPPLY AIR DUCT AND A CLASS 2 AIR DAMPER FOR TRANSFER DUCTS.
 - PROVIDE FLEXIBLE DUCT CONNECTORS FOR ALL CONNECTIONS TO MOTOR-OPERATED EQUIPMENT.
 - SUPPORT: MAIN DUCT SUPPORTED BY 1-1/2" DEEP, 16 MSG COLD-ROLLED CHANNELS SPACED 48" O.C. SUSPENDED BY 12 SWG GALVANIZED STEEL WIRE. BRANCH DUCTS SUPPORTED BY 1-1/2" DEEP, 16 MSG COLD-ROLLED CHANNELS SPACED AT 36" O.C. SUSPENDED BY 12 SWG GALVANIZED STEEL WIRE. DIFFUSERS TO BE SUPPORTED INDEPENDENTLY OF CEILING SYSTEM.
 - PIPING:
 - CONDENSATE PIPING SHALL BE SEAMLESS COPPER TUBING, ASTM B88, WITH SOLDER-JOINED WROUGHT COPPER FITTINGS OR SCHEDULE 40 PVC PLASTIC PIPE AND FITTINGS AND SOLVENT WELDED FITTINGS.
 - REFRIGERANT PIPING SHALL BE ACR TYPE COPPER, CLEANED AND CAPPED.
 - PROVIDE FLEXIBLE COUPLING TO ALL CONNECTIONS TO MOTOR OPERATED EQUIPMENT.
 - PIPES TO BE SUPPORTED INDEPENDENTLY SO NO WEIGHT IS SUPPORTED BY EQUIPMENT. SUPPORT SHALL BE SPACED IN ACCORDANCE WITH ANSI B31.1.0. OVERHEAD PIPING SHALL BE SUPPORTED FROM STRUCTURE WITH ADJUSTABLE CLEVIS HANGERS AND SUSPENSION RODS CONFORMING TO ANSI B31.1.0.
 - PROVIDE ONE SET OF TEMPERATURE AND PRESSURE TEST GAUGES FOR P-T ("PETE'S") PLUG.
 - ALL BALANCING VALVES SHALL BE DEZURK OR HOLMSTED ECCENTRIC PLUS TYPE WITH INTEGRAL GAUGE TAPPINGS.
 - INSULATION SHALL BE PROTECTED AT SUPPORTS WITH THE USE OF PROTECTION SADDLES OR SHIELDS THAT SUPPORT PIPE.
 - PROVIDE ALL VALVES, FITTINGS, ACCESSORIES, ETC AS REQUIRED TO EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS,

- COORDINATE EXACT LOCATION FOR ROOFTOP EQUIPMENT WITH BUILDING OWNER AND EXTEND PIPING AS REQUIRED.
- VALVES:
 - BALL VALVES SHALL BE TWO-PIECE COPPER ALLOY, BRONZE BODY WITH TEFLON SEAL AND STEM PACKING, 125 PSI WOG, APOLLO BRAND OR APPROVED EQUAL.
 - GATE VALVES SHALL BE THREADED IRON, 150 PSI WOG, HAMMOND OR APPROVED EQUAL.
- PIPE FITTINGS:
 - PROVIDE DIELECTRIC ISOLATOR BETWEEN ALL CONNECTIONS OF DISSIMILAR PIPING MATERIALS.
 - PROVIDE FLEXIBLE COUPLING TO ALL CONNECTIONS OF MOTOR OPERATED DEVICES, OR WHEN CROSSING BUILDING EXPANSION JOINTS.
 - AIR VENTS SHALL BE MANUAL TYPE, INSTALLED AT HIGH POINT OF PIPING, AND INSTALLED TO BE READILY ACCESSIBLE. EXTEND DISCHARGE PIPE TO NEAREST FLOOR DRAIN OR ACCEPTABLE RECEPTACLE.
 - STRAINERS SHALL BE "Y" TYPE, CAST BRASS OR CAST IRON TO MATCH PIPING, WITH 0.045 INCH PERFORATIONS STRAINER. PROVIDE BLOW-DOWN VALVE AND HOSE END CONNECTION.
 - CHECK VALVES SHALL BE SWING TYPE, CLASS 125 AND SUITABLE FOR INTENDED SERVICE.
- EQUIPMENT SHALL BE INSULATED AS FOLLOWS:
 - ANY DUCTWORK THAT IS LOCATED WITHIN AN ATTIC SHALL BE INSULATED WITH 3 INCH THICK FIBERGLASS INSULATION WITH A FRK BARRIER AS MANUFACTURED BY OWENS CORNING, SOFTR DUCT WRAP FRK, TYPE 75 (0.75 PCF), TO A MINIMUM OF R-8.
 - ANY DUCTWORK THAT IS LOCATED WITHIN AN UNCONDITIONED SPACE (AND NOT IN THE ATTIC) SHALL BE INSULATED WITH 2 INCH THICK FIBERGLASS INSULATION WITH A FRK BARRIER AS MANUFACTURED BY OWENS CORNING, SOFTR DUCT WRAP FRK, TYPE 100 (1.00 PCF), TO A MINIMUM OF R-6.
 - ANY DUCTWORK THAT IS LOCATED WITHIN A CONDITIONED SPACE (COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE) SHALL BE INSULATED WITH A 1-1/2 INCH THICK FIBERGLASS INSULATION WITH A FRK BARRIER AS MANUFACTURED BY OWENS CORNING, SOFTR DUCT WRAP FRK, TYPE 75 (0.75 PCF), TO A MINIMUM OF R-4.
 - ACOUSTIC INTERNAL DUCTLINER (SOUNDLINER) SHALL BE PROVIDED AS REQUIRED BY THE DRAWINGS IN LIEU OF EXTERNAL DUCT INSULATION. THIS SHALL ONLY BE WHERE DIRECTED BY THE DRAWINGS FOR DUCTWORK THAT IS LOCATED WITHIN A CONDITIONED SPACE (COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE). THE DUCTLINER SHALL BE A SINGLE LAYER OF 1 INCH ACOUSTIC LINER WITH COATED SURFACE FACING AIRSTREAM AS MANUFACTURED BY OWENS CORNING, KNAUF, OR APPROVED EQUAL, WITH A MINIMUM R-VALUE OF 4.0.
 - INDOOR AND OUTDOOR REFRIGERANT AND CONDENSATE PIPING SHALL BE INSULATED WITH 1/2 INCH PIPE INSULATION WITH MINIMUM R-VALUE OF 3.0. PROVIDE A SMOOTH ALUMINUM 0.016 INCH JACKET OR 30 MIL THICK PVC JACKET FOR ALL EXTERIOR PIPING.
 - ALL EQUIPMENT, FILTER BOXES, DUCTWORK JOINTS, SEAMS AND CONNECTIONS SHALL BE CONSTRUCTED AS SPECIFIED IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE AND NAMA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, LIQUID SEALANTS OR TAPES. ALL SEALING AND CONNECTIONS SHALL ALSO COMPLY WITH THE INTERNATIONAL MECHANICAL CODE.
 - BUTT TRANSVERSE JOINTS WITHOUT GAPS AND COAT JOINTS LIBERALLY WITH ADHESIVE. LONGITUDINAL JOINTS SHALL OCCUR ONLY AT CORNERS OF DUCTS. PROVIDE FULL COVERAGE ADHESIVE FASTENING OF LINERS. FOR DUCTS WHICH EXCEED 12" IN ANY DIMENSION, PROVIDE MECHANICAL FASTENERS IN ADDITION TO CHEMICAL ADHESIVE. PROVIDE METAL NOSING ON LEADING EDGES OF LINER. INSTALLATION TO COMPLY WITH SMACNA REQUIREMENTS. ADHESIVE TO BE FOSTER'S FOSTEX OR APPROVED EQUAL.
 - PROVIDE INSULATION ON ALL PVC PIPING LOCATED IN A RETURN AIR PLENUM.
 - ACOUSTIC DUCTLINER (SOUNDLINER): PROVIDE SINGLE LAYER OF 1" ACOUSTIC LINER WITH COATED SURFACE FACING AIRSTREAM. BUTT TRANSVERSE JOINTS WITHOUT GAPS AND COAT JOINTS LIBERALLY WITH ADHESIVE. LONGITUDINAL JOINTS SHALL OCCUR ONLY AT CORNERS OF DUCTS. PROVIDE FULL COVERAGE ADHESIVE FASTENING OF LINERS. FOR DUCTS WHICH EXCEED 12" IN ANY DIMENSION, PROVIDE MECHANICAL FASTENERS IN ADDITION TO CHEMICAL ADHESIVE. PROVIDE METAL NOSING ON LEADING EDGES OF LINER. INSTALLATION TO COMPLY WITH SMACNA REQUIREMENTS. LINERS TO BE KNAUF DUCT LINER M OR APPROVED EQUAL. ADHESIVE TO BE FOSTER'S FOSTEX OR APPROVED EQUAL.
 - ALL RETURN AIR IN ATTIC SHALL BE INSULATED AS ABOVE.
 - PROVIDE INSULATION ON ALL PVC PIPING LOCATED IN A RETURN AIR PLENUM.
 - MANUAL DAMPERS: PROVIDE MANUAL BALANCING DAMPERS, AS MANUFACTURED BY RUSKIN OR APPROVED EQUAL, WITH LOCKING INDEXED QUADRANT ON DUCTS AT LOCATIONS SHOWN. PROVIDE STAND-OUT LINKAGE FOR INSULATED DUCTS.
 - STARTERS FOR ALL MOTORS, INCLUDING VFD'S, SHALL BE FURNISHED BY MECHANICAL, INSTALLED BY ELECTRICAL.
 - CONTROLS: CONTROLS SHALL BE ELECTRIC/ELECTRONIC, SIMILAR TO HONEYWELL OR APPROVED EQUAL. TIME CLOCKS SHALL BE MULTI-CHANNEL MINIMUM TYPE WITH MINIMUM 72 HOUR INTERNAL MEMORY BACKUP, SUITABLE FOR 7 DAY PROGRAMMING WITH 4 EVENT SCHEDULES PER DAY, MANUAL OVER-RIDE. ALL CONTROLS SHALL MATCH THE EXISTING BASE BUILDING SYSTEM AND SHALL BE INTERLOCKED WITH THE BASE BUILDING SYSTEM AS REQUIRED.
 - ALL FLOOR PENETRATIONS SHALL BE CORE DRILLED OR SAW CUT. X-RAY SLAB PRIOR TO CUTTING. DO NOT CUT STRUCTURAL MEMBERS.
 - ALL FLOOR AND WALL PENETRATIONS SHALL BE SLEEVED. PROVIDE 18 GAUGE GALVANIZED SHEET METAL SLEEVES FOR DUCTS, STEEL PIPE SLEEVES FOR PIPES. PACK VOID SPACE WITH FIRE SATING. PIPE SLEEVES IN MECHANICAL ROOM SHALL STAND 1" PROUD OF FLOOR SURFACE. SEAL ALL FLOOR PENETRATIONS WATER TIGHT.
 - PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES, DAMPERS, ETC.
 - HANGERS AND SUPPORTS: DEVICES SHALL BE FACTORY PRE-FABRICATED.
 - COMPLY WITH MSS-58 FOR ACCEPTABLE TYPES.
 - INSTALL PER MSS-59 FOR SPACING AND MOUNTING.
 - PROVIDE SPRING-TYPE VIBRATION ISOLATORS FOR ALL MOTOR-OPERATED EQUIPMENT.
 - ALL CABLING AND PIPING SHALL BE PLENUM RATED.

3. EXECUTION:

- ALL WORK SHALL BE ACCOMPLISHED BY EXPERIENCED MECHANICS, SPECIALIZING IN THE PARTICULAR TRADE, UTILIZING APPROPRIATE TOOLS AND TECHNIQUES. ALL WORK SHALL BE FIRST QUALITY, CONSISTENT WITH INDUSTRY'S BEST STANDARDS. WORK DEEMED TO BE SUBSTANDARD SHALL BE REMOVED AND REMADE AT CONTRACTOR'S EXPENSE.
- PERFORM ALL OPERATIONS REQUIRED AND INSTALL ALL UNITS, DUCTWORK, EQUIPMENT, CONTROLS AND PIPING, WITH ALL REQUIRED ACCESSORIES, TO PRODUCE A COMPLETE INSTALLATION, READY FOR USE.
- TESTS: BEFORE ACCEPTANCE OF HVAC SYSTEM, THE SYSTEM SHALL BE TESTED, ADJUSTED AND BALANCED BY A NEBB OR AABC MEMBER BALANCING CONTRACTOR. SUBMIT FOR REVIEW 6 COPIES OF THE CERTIFIED FINAL REPORT. THE SYSTEM SHALL BE AIR BALANCED TO DELIVER MEASURED QUANTITIES WITHIN 10% OF SPECIFIED AMOUNT FOR EACH OUTLET, INLET OR DEVICE. EQUIPMENT AND CONTROLS ARE TO BE TESTED AND DETERMINED THAT ALL SYSTEMS AND OPERATIONS ARE SATISFACTORY AND PERFORMING AS INTENDED AND THAT CLEAN FILTERS ARE IN PLACE PRIOR TO BALANCING. ADJUST/REPLACE DRIVE SHEAVES AS REQUIRED TO ACHIEVE DESIRED AIRFLOW.
- ALL EQUIPMENT, DUCTWORK, CONTROLS AND PIPING SHALL BE PROTECTED DURING THE COURSE OF CONSTRUCTION. ANY DAMAGED EQUIPMENT SHALL BE REPLACED AT NO EXTRA COST TO THE OWNER.
- LOCATE THERMOSTATS AS INDICATED. ALL CONTROL WIRING SHALL BE PLENUM RATED AND INSTALLED CONCEALED IN OCCUPIED AREAS.
- SUBMIT ONE COMPLETE SET OF PLANS AND RELATED DOCUMENTS, APPROVED BY THE CITY, TO THE OWNER.
- PROVIDE TO OWNER 3 SETS OF MAINTENANCE AND OPERATING MANUALS AND MANUFACTURER'S WARRANTY DOCUMENTS FOR ALL EQUIPMENT IN INDEXED 3 RING BINDER.
- PROVIDE AS-BUILT DRAWINGS TO OWNER UPON COMPLETION OF THE PROJECT. SUBMIT ONE ELECTRONIC COPY (CD) AND TWO SETS OF HARD COPIES (BLUE PRINTS) OF THE AS-BUILT DRAWINGS, CORRECTED TO SHOW ALL FIELD MODIFICATIONS TO THE CONSTRUCTION DOCUMENTS.
- PROTECT AGAINST INJURY TO PERSONS AND DAMAGE TO PROPERTY AT ALL TIMES.
- CONTRACTOR SHALL CLEAN THE WORK SITE AFTER EACH DAY'S WORK.
- THE CONTRACTOR SHALL PROVIDE ALL REQUIRED INTERLOCKS, CONTROLS, ETC. TO MATCH THE EXISTING BASE BUILDING STANDARD AS NEEDED. ALL NEW EQUIPMENT INDICATED IN THESE DRAWINGS IS SHOWN AS A BASIS OF DESIGN. ALL NEW EQUIPMENT AND CONTROLS SHALL MATCH THE EXISTING BASE BUILDING STANDARD. PROVIDE ADDITIONAL ACCESSORIES AS REQUIRED TO MATCH THE REQUIREMENTS OF THE BASE BUILDING STANDARD.
- INTERLOCK DUCT AND EQUIPMENT SMOKE DETECTORS WITH THE FIRE ALARM SYSTEM AND THE ASSOCIATED EQUIPMENT. IN THE EVENT OF SMOKE DETECTION THE ASSOCIATED HVAC EQUIPMENT SHALL SHUT-DOWN AND CEASE OPERATION.
- FOLLOWING COMPLETION OF CONSTRUCTION AND PRIOR TO AIR BALANCING, PROVIDE NEW FILTERS IN ALL AIR HANDLING UNITS.
- CLEAN ALL AIR DEVICES UPON PROJECT COMPLETION.
- DEMONSTRATE OPERATION OF SYSTEM TO OWNER.
- PROVIDE INSTRUCTION TO OWNER DESIGNATED PERSONNEL, DEMONSTRATING NORMAL MAINTENANCE AND TROUBLESHOOTING PROCEDURES.

NOTE TO CONTRACTOR

- ADEQUATE EXISTING DRAWINGS WERE NOT AVAILABLE FOR THIS DESIGN.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS SHOWN ON THESE PLANS AND SHALL ALSO VERIFY ALL EXISTING CONDITIONS IN THE CEILING SPACE TO CONFIRM THAT THE PLANS DEPICT SITE CONDITIONS. IF ANY DISCREPANCIES EXIST FROM SITE CONDITIONS TO THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR COORDINATION AND POSSIBLE SITE VISIT PRIOR TO PURCHASING EQUIPMENT AND/OR PROCEEDING WITH THE WORK INDICATED.
- PRIOR TO DUCT FABRICATION AND EQUIPMENT PURCHASING, THE CONTRACTOR SHALL CONFIRM THAT THE DUCTWORK AND EQUIPMENT CAN BE INSTALLED IN THE FIELD SO THAT PROPER CLEARANCES AND ARCHITECTURAL CEILING HEIGHTS ARE ACHIEVED. IF ANY ISSUES ARE PRESENT ON SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR COORDINATION. THIS COORDINATION SHALL OCCUR PRIOR TO DUCT FABRICATION AND EQUIPMENT PURCHASING.
- NO WORK SHALL PROCEED UNTIL ALL EXISTING CONDITIONS ARE VERIFIED.
- THE CLIENT/OWNER SHALL NOT BE HELD ACCOUNTABLE FOR ANY COSTS ASSOCIATED ONCE CONSTRUCTION PROCEEDS DUE TO THE LACK OF VERIFICATION OF DISCREPANCIES BETWEEN SITE CONDITIONS AND DRAWINGS.
- THE CONTRACTOR SHALL VERIFY IN THE FIELD THAT THE LENGTH OF RUN OF THE REFRIGERANT PIPING IS WITHIN THE MAXIMUM MANUFACTURER DESIGNATED LENGTH FOR THE VERTICAL AND HORIZONTAL RUNS. THE CONTRACTOR SHALL VERIFY THIS PRIOR TO PURCHASING OF SUPPLEMENTAL EQUIPMENT OR ANY ASSOCIATED ACCESSORIES, PIPING, ETC. NOTIFY THE ENGINEER OF ANY ISSUES FOR COORDINATION PRIOR TO PROCEEDING WITH ANY WORK. OWNER SHALL NOT BE HELD LIABLE FOR ANY COSTS ASSOCIATED WITH THE CONTRACTOR PROCEEDING WITH WORK PRIOR TO VERIFYING THIS REFRIGERANT LENGTH REQUIREMENT.
- MECHANICAL, PLUMBING, ELECTRICAL AND ARCHITECTURAL DRAWINGS ARE COMPLEMENTARY TO EACH OTHER. THE GENERAL AND SUB-CONTRACTORS SHALL REVIEW AND BID ON THE ENTIRE BID SET, INCLUDING ARCHITECTURAL SHEETS AND ALL DISCIPLINES. WHEN A DISCREPANCY BETWEEN THE ENGINEERING DRAWINGS AND ARCHITECTURAL DRAWINGS OCCURS, THE MORE STRINGENT REQUIREMENT SHALL APPLY TO THE BID. SHOULD A DISCREPANCY EXIST, THE GENERAL CONTRACTOR SHALL SUBMIT AN RFI REQUESTING CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.
- THE HVAC CONTRACTOR MUST VISIT THE SITE TO CAREFULLY EXAMINE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO BIDDING. SUBMISSION OF A PROPOSAL WILL BE CONSIDERED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN PERFORMED. LATER CLAIMS FOR EXTRA LABOR OR MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED.

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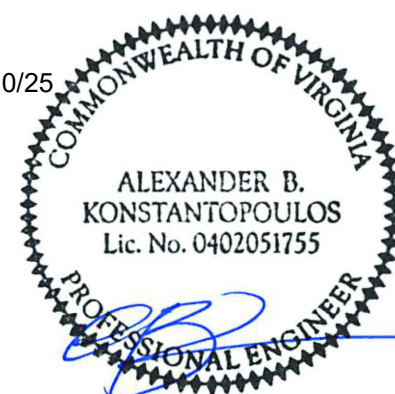
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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303

PROFESSIONAL SEAL

04/10/25



ISSUED

DATE

FOR PERMIT

03.21.2025

DESIGNED/DRAWN BY:

SM

REVIEWED/APPROVED BY:

JR

PROJECT NO:

24-177

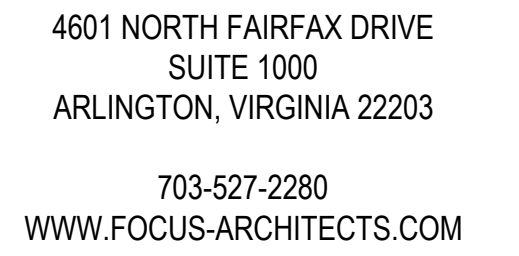
SHEET TITLE:

GENERAL NOTES,
SYMBOLS AND
ABBREVIATIONS -
MECHANICAL

SHEET NUMBER:

M001

FAIRFAX COUNTY
APPROVED
6/20/2025
ALTC-2025-00578
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**INTERIOR
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0/25

COMMONWEALTH OF VIRGINIA

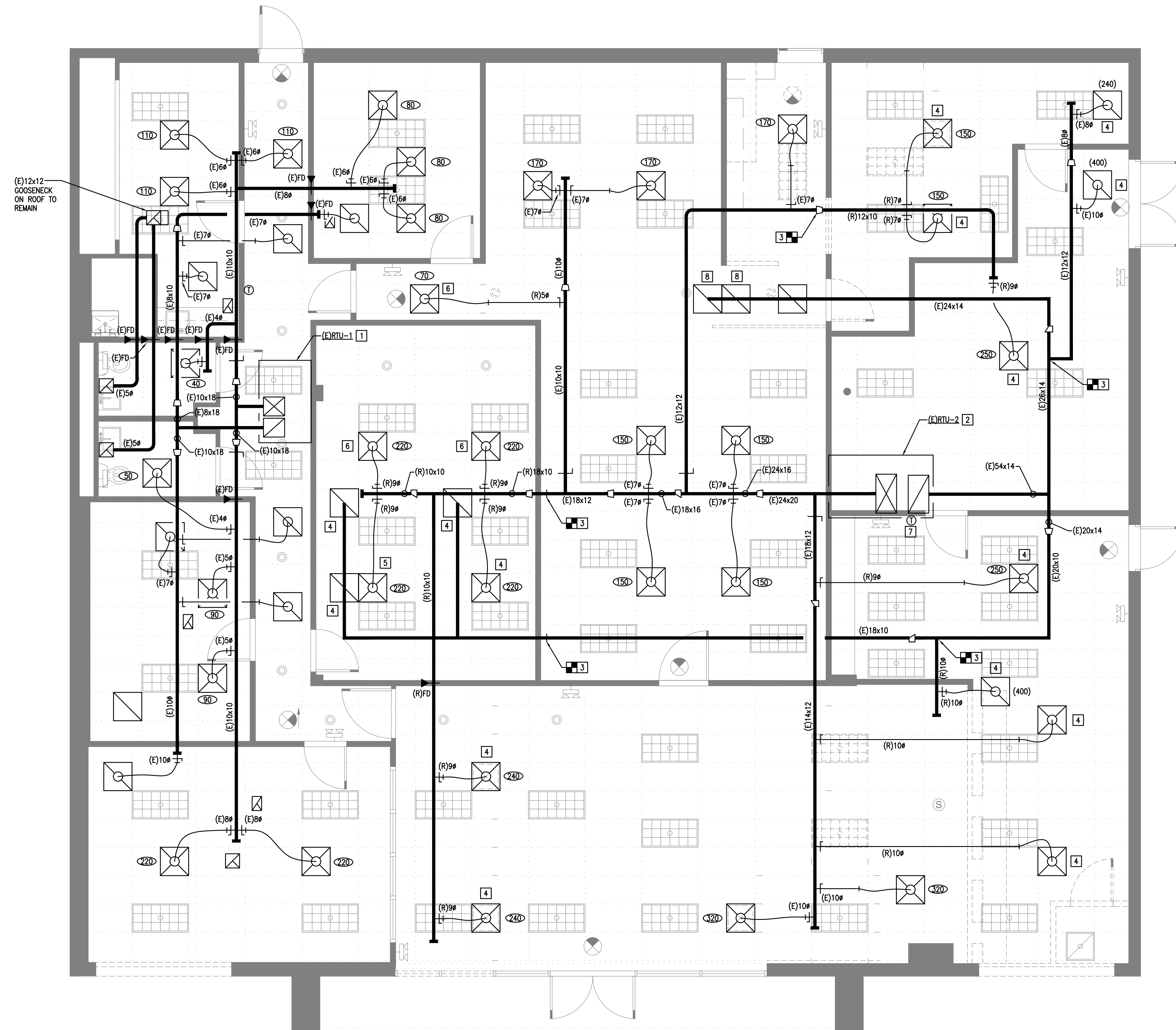
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PROFESSIONAL ENGINEER

DESIGNED/DRAWN BY:	SM
REVIEWED/APPROVED BY:	JR
PROJECT NO:	24-177
SHEET TITLE:	

SHEET NUMBER:

M002



1 GROUND FLOOR PLAN - DEMOLITION - MECHANICAL
SCALE: 1/4" = 1'-0"

1. EXAMINE NOTES ON SHEET M001 CAREFULLY FOR ADDITIONAL REQUIREMENTS.
2. COORDINATE ALL WORK WITH THE BUILDING ENGINEER AND THE RULES AND REGULATIONS OF THE BUILDING OWNER PRIOR TO PROCEEDING WITH ANY WORK.
3. THE LOCATION OF THE MECHANICAL EQUIPMENT SHOWN ON THESE PLANS IS DIAGRAMMATIC AND THEIR EXACT LOCATION SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR.

- 1 EXISTING 3 TON ROOF TOP UNIT TO REMAIN. TRANE MODEL YSC036E1EMA0000, 208V/19/60, 27.2 MCA, 40 MFS.
- 2 EXISTING 10.0 TON ROOF TOP UNIT TO REMAIN. TRANE MODEL YSC120C3EMB0000, 208V/3ø/60, 55.9 MCA, 60 MFS.
- 3 REMOVE THE EXISTING DUCTWORK UP TO THE POINT OF TERMINATION AS INDICATED. CAP AND SEAL DUCTWORK AIR TIGHT.
- 4 REMOVE THE EXISTING AIR DEVICE AND ALL ASSOCIATED DUCTWORK BACK TO THE MAIN AS INDICATED. CAP AND SEAL DUCTWORK AIR TIGHT.
- 5 REMOVE AND RELOCATE THE EXISTING DIFFUSER. REMOVE THE ASSOCIATED DUCTWORK BACK TO MAIN AND CAP AND SEAL DUCTWORK AIR TIGHT.
- 6 EXISTING DIFFUSER TO REMAIN. REMOVE THE ASSOCIATED DUCTWORK BACK TO MAIN AND CAP AND SEAL DUCTWORK AIR TIGHT.
- 7 RELOCATE THE EXISTING THERMOSTAT TO THE NEW LOCATION AS INDICATED UNDER THE NEW WORK PLAN. EXTEND WIRING AS NEEDED.
- 8 RELOCATE THE EXISTING RETURN. MODIFY AND EXTEND THE RIGID DUCTWORK TO THE NEW LOCATION AS INDICATED.



GENERAL NOTES

- FOR ALL PARTITIONS THAT EXTEND FULL HEIGHT (i.e., SLAB TO SLAB) PROVIDE RETURN AIR OPENING ABOVE CEILING EQUIVALENT TO 1 SQ. FT. FREE AREA FOR EVERY 350 CFM OF RETURN AIR - OBSERVE FIRE RATING OF ALL PARTITIONS. MAINTAIN CLEAR RETURN AIR PATH TO CENTRAL SYSTEM. VERIFY OPENINGS IN ALL DEMISING PARTITIONS.
- CONTRACTOR IS TO CONFIRM THAT RETURN AIR PATH REMAINS UNOBSTRUCTED BACK TO MAIN BUILDING SYSTEM. PROVIDE, AS NEEDED, TRANSFER AIR OPENINGS AS OUTLINED ABOVE. ALLOW PROPER CLEARANCE FOR ALL RETURN AIR INLETS TO AIR HANDLING EQUIPMENT.
- ARCHITECT AND OWNER SHALL CONFIRM T'STAT AND SWITCH LOCATIONS.
- FOR ALL DUCT TAPS PROVIDE A NEW AIR TIGHT TAP WITH VOLUME DAMPER.
- PROVIDE EQUIVALENT OVAL TAP FOR ALL DUCT SPIN-IN CONNECTIONS WHICH EXCEED DUCT DEPTH.
- ALL OPEN ENDED DUCTS ARE TO BE PROVIDED WITH 1" WIRE MESH SCREEN.
- SEE AIR DEVICE UNIT SCHEDULE FOR SIZE OF INLETS AND FLEXIBLE DUCTS FOR AIR DEVICES.
- MAKE NECESSARY ADJUSTMENTS TO AIR HANDLING EQUIPMENT AND BALANCE SYSTEM AS REQUIRED TO REFLECT NEW AIRFLOW REQUIREMENTS.
- ALL TRANSFER AIR DUCTS SHALL BE PROVIDED WITH 1" SOUND LINING.
- EXAMINE NOTES ON SHEET M001 CAREFULLY FOR ADDITIONAL REQUIREMENTS.
- ALL DIFFUSER RUNOUTS FROM THE MAIN TRUNK LINES THAT PASS THROUGH A FULL HEIGHT SLAB TO SLAB PARTITION SHALL BE RIGID DUCT.
- ALL NEW EXPOSED DUCTWORK INCLUDING DIFFUSER RUNOUTS SHALL BE RIGID INTERNALLY SOUNDED DUCT.
- INSTALL ALL NEW WORK IN EXPOSED AREAS IN A NEAT, CLEAN AND AESTHETICALLY PLEASING MANNER. REPAIR DAMAGED/MISSING INSULATION AS REQUIRED.
- COORDINATE PAINTING AND FINISHES OF ALL MECHANICAL EQUIPMENT, DUCTS, ACCESSORIES, ETC. IN EXPOSED CEILING AREAS WITH THE ARCHITECT.
- INSTALL AIR DEVICES IN AN AESTHETICALLY PLEASING AND SYMMETRICAL MANNER. COORDINATE THE LOCATION OF ALL AIR DEVICES WITH THE ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE ALL WORK WITH THE BUILDING ENGINEER AND THE RULES AND REGULATIONS OF THE BUILDING MANAGEMENT PRIOR TO PROCEEDING WITH ANY WORK.
- ALL NEW DUCTWORK SHALL BE INTERNALLY SOUNDED AS INDICATED ON THE PLANS BY THE 'SL' DESIGNATION. THE DUCT SIZES SHOWN ARE FREE AREA OPENINGS. ADJUST SHEET METAL SIZES AS REQUIRED TO ACCOMMODATE THE INTERNAL SOUNDING.
- THE LOCATION OF THE MECHANICAL EQUIPMENT SHOWN ON THESE PLANS IS DIAGRAMMATIC AND THEIR EXACT LOCATION SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO PURCHASING. INSTALLATION SHALL PROVIDE FOR PROPER MAINTENANCE AND ASSURE NECESSARY CLEARANCE REQUIREMENTS. CONFIRM THE LOCATIONS WITH THE BUILDING ENGINEER PRIOR TO INSTALLATION.
- THE LOCATION OF ALL PIPING ROUTING SHOWN ON THESE PLANS IS DIAGRAMMATIC AND THE PIPING ROUTING SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO PROCEEDING WITH ANY WORK. MODIFY THE FINAL LOCATION OF ANY EQUIPMENT AND PIPING ROUTING AS REQUIRED TO SATISFY FIELD CONDITIONS. ALL WORK SHALL BE COORDINATED WITH THE BUILDING ENGINEER DURING INSTALLATION TO ALLOW FOR PROPER MAINTENANCE AND ASSURE NECESSARY CLEARANCE REQUIREMENTS.
- THE LOCATION OF ALL DUCT ROUTING SHOWN ON THESE PLANS IS DIAGRAMMATIC AND THE DUCT ROUTING SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR PRIOR TO PROCEEDING WITH ANY WORK. MODIFY THE FINAL LOCATION OF ANY EQUIPMENT AND DUCT ROUTING AS REQUIRED TO SATISFY FIELD CONDITIONS. ALL WORK SHALL BE COORDINATED WITH THE BUILDING ENGINEER DURING INSTALLATION TO ALLOW FOR PROPER MAINTENANCE AND ASSURE NECESSARY CLEARANCE REQUIREMENTS.
- ALL ROOF TOP EQUIPMENT SHALL NOT BE INSTALLED LESS THAN 10 FEET FROM THE ROOF EDGE.
- COORDINATE ALL ROOF WORK WITH THE BUILDING OWNER AND THE RULES AND REGULATIONS OF THE BUILDING OWNER. ALL INSTALLATIONS SHALL MAINTAIN THE ROOF WARRANTY AS REQUIRED.
- PROVIDE A WEATHER PROOF ENCLOSURE FOR REFRIGERANT PIPING INSTALLED AT THE EXTERIOR. THE METHOD OF CONCEALMENT SHALL BE APPROVED BY THE ARCHITECT AND BUILDING OWNER.
- COORDINATE ALL EXTERIOR WORK, OUTDOOR UNIT LOCATION, REFRIGERANT PIPING ROUTING AND CONCEALMENT WITH SITE CONDITIONS, THE ARCHITECT AND THE BUILDING OWNER PRIOR TO INSTALLATION.

NEW WORK KEY NOTES

- EXISTING 3 TON ROOF TOP UNIT TO REMAIN. TRANE MODEL YSC036E1E0A0000, 208V/1 ϕ /60, 27.2 MCA, 40 MFS.
- EXISTING 10.0 TON ROOF TOP UNIT TO REMAIN. TRANE MODEL YSC120E3EMB00000, 208V/3 ϕ /60, 55.9 MCA, 60 MFS.
- EXISTING DIFFUSER TO REMAIN. PROVIDE A NEW AIR TIGHT DUCT TAP, VOLUME DAMPER, FLEXIBLE DUCT AND RIGID DUCT (IF INDICATED) AND CONNECT DIFFUSER AS REQUIRED.
- NEW LOCATION OF EXISTING DIFFUSER. PROVIDE A NEW AIR TIGHT DUCT TAP, VOLUME DAMPER, FLEXIBLE DUCT AND RIGID DUCT (IF INDICATED) AND CONNECT DIFFUSER AS REQUIRED.
- NEW RETURN. PROVIDE A NEW AIR TIGHT DUCT TAP, VOLUME DAMPER, FLEXIBLE DUCT AND RIGID DUCT (IF INDICATED) AND CONNECT RETURN AS REQUIRED.
- NEW DIFFUSER. PROVIDE A NEW AIR TIGHT DUCT TAP, VOLUME DAMPER, FLEXIBLE DUCT AND RIGID DUCT (IF INDICATED) AND CONNECT DIFFUSER AS REQUIRED.
- NEW LOCATION OF EXISTING THERMOSTAT. CONFIRM PROPER OPERATION. EXTEND WIRING AS REQUIRED. REPLACE AS NEEDED. NEW THERMOSTATS SHALL MATCH THE EXISTING BASE BUILDING SYSTEM. INTERLOCK WITH THE BASE BUILDING SYSTEM AS REQUIRED. COORDINATE THE EXACT LOCATION WITH THE NEW FURNITURE. CONFIRM THE FINAL LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- NEW LOCATION OF EXISTING THERMOSTAT. CONFIRM PROPER OPERATION. EXTEND WIRING AS REQUIRED. REPLACE AS NEEDED. NEW THERMOSTATS SHALL MATCH THE EXISTING BASE BUILDING SYSTEM. INTERLOCK WITH THE BASE BUILDING SYSTEM AS REQUIRED. COORDINATE THE EXACT LOCATION WITH THE NEW FURNITURE. CONFIRM THE FINAL LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
- NEW FAN COIL UNIT. COORDINATE THE EXACT INSTALLATION LOCATION IN THE FIELD. PROVIDE ALL NEW CONDENSATE AND REFRIGERANT PIPING. ROUTE REFRIGERANT PIPING THROUGH TO THE ROOF. TRANSITION FROM THE FULL SIZE SUPPLY AND RETURN AIR OPENINGS OF THE UNIT TO THE DUCT SIZES SHOWN. CONNECT THE OUTSIDE AIR DUCT TO THE RETURN PLENUM AS INDICATED. PROVIDE VOLUME DAMPERS ON THE RETURN DUCT AND OUTSIDE AIR DUCT CONNECTIONS AS SHOWN FOR BALANCING PURPOSES. EXTEND PUMPED 1 INCH CONDENSATE PIPING TO THE EXTERIOR AND DISCHARGE ONTO A SPLASH BLOCK AS SHOWN. FAN COIL UNITS SHALL RUN CONTINUOUSLY DURING OCCUPIED HOURS SO THAT PROPER VENTILATION IS PROVIDED TO THE SPACE.
- NEW OUTDOOR UNIT INSTALLED ON ROOF. CONFIRM THE EXACT LOCATION IN THE FIELD WITH SITE CONDITIONS AND THE BUILDING MANAGEMENT. ROUTE REFRIGERANT PIPING IS SUITABLE PATH TO THE INDOOR UNIT AS REQUIRED PER THE BASE BUILDING PATH. EQUIPMENT SHALL BE INSTALLED COMPLYING WITH THE MANUFACTURER INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
- NEW 10x10 OUTSIDE AIR GOOSENECK INTAKE WITH MOTORIZED DAMPER AT THE POINT OF CONNECTION BELOW THE ROOF. INTERLOCK THE MOTORIZED DAMPER WITH THE FAN COIL UNIT. PROVIDE AN INSECT AND BIRD SCREEN. CONNECT THE OUTSIDE AIR DUCT TO THE RETURN AIR PLENUM AS INDICATED. PROVIDE A VOLUME DAMPER AT THE POINT OF CONNECTION FOR BALANCING.
- NEW LOCATION OF EXISTING RETURN. MODIFY AND EXTEND THE RIGID DUCTWORK TO THE NEW LOCATION AS INDICATED.



1 GROUND FLOOR PLAN - NEW WORK - MECHANICAL
SCALE: 1/4" = 1'-0"

VENTILATION COMPLIANCE (FC-1)													
ROOM NUMBER	ROOM NAME	Az = FLOOR AREA S.F.	OCCUPANT DENSITY: PEOPLE PER 1000 SQUARE FEET	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Rp = CFM PER PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Ra = CFM/SQ.FT.	Pz = NUMBER OF PEOPLE	Vbz = O.A. REQUIRED = (Rp)(Pz)+ (Ra)(Az)	Ez = Zone Air Distributi on Effective ness = Table 403.3.1.2	Voz = Zone O.A. flow rate = Vbz / Ez	Vpz = SUPPLY CFM	Zp = Primary O.A. fraction = Voz / Vpz	Rp x Pz	Ra x Az
100	FUTURE TENANT (OFFICE)	654	5	5	0.06	4	59	0.8	74	800	0.09	20	39
101	WORK ROOM	399	5	5	0.06	2	34	0.8	43	400	0.11	10	24
102	BACK OF HOUSE	192	5	5	0.06	1	17	0.8	21	200	0.11	5	12
103	TOILET	50	0	0	0	0	0	0.8	0	50	0.00	0	0
	TOTALS	1295				7			138	1450		35	75
LARGEST Zp - VALUE =		0.11	<div>THE AIR HANDLING UNIT SHALL BE SET TO A MINIMUM OF 200 CFM OF OUTSIDE AIR (13%). THEREFORE, THE DESIGN IS IN COMPLIANCE WITH THE CODE REQUIREMENTS OF THE MECHANICAL CODE.</div>										
Ev from table 403.3.2.3.2		1											
Ps = Expected System Population =		7											
D = Occupant Density = Ps / Σ (Pz) =		1.00											
Vou = O.A. Uncorrected Rate = (D) [Σ(Rp x Pz)] + [Σ(Ra x Az)]		110											
Vot = O.A. Corrected Rate = Vou / Ev		110											
% Of Outside Air Required = Vot / Σ (Vpz) =		8%											

VENTILATION COMPLIANCE (RTU-1)													
ROOM NUMBER	ROOM NAME	Az = FLOOR AREA S.F.	OCCUPANT DENSITY: PEOPLE PER 1000 SQUARE FEET	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Rp = CFM PER PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Ra = CFM/SQ.FT.	Pz = NUMBER OF PEOPLE	Vbz = O.A. REQUIRED = (Rp)(Pz)+ (Ra)(Az)	Ez = Zone Air Distributi on Effective ness = Table 403.3.1.2	Voz = Zone O.A. flow rate = Vbz / Ez	Vpz = SUPPLY CFM	Zp = Primary O.A. fraction = Voz / Vpz	Rp x Pz	Ra x Az
300	FUTURE TENANT CORRIDOR	137	0	0	0.06	0	8	0.8	10	80	0.13	0	8
301	OFFICE	324	5	5	0.06	2	29	0.8	36	300	0.12	10	19
302	CORRIDOR	304	0	0	0	0	0	0.8	0	120	0.00	0	0
303	OFFICE	190	5	5	0.06	1	16	0.8	20	180	0.11	5	11
304	WORK ROOM	388	5	5	0.06	2	33	0.8	41	200	0.21	10	23
305	EXISTING TOILET	42	0	0	0	0	0	0.8	0	40	0.00	0	0
306	EXISTING TOILET	42	5	0	0	0	0	0.8	0	40	0.00	0	0
307	BREAK ROOM	147	5	5	0.06	1	14	0.8	18	200	0.09	5	9
308	OFFICE	162	5	5	0.06	1	15	0.8	19	150	0.13	5	10
	TOTALS	1736				7			144	1310		35	80
LARGEST Zp - VALUE =		0.21	THE AIR HANDLING UNIT SHALL BE SET TO A MINIMUM OF 150 CFM OF OUTSIDE AIR (11%). THEREFORE, THE DESIGN IS IN COMPLIANCE WITH THE CODE REQUIREMENTS OF THE MECHANICAL CODE.										
Ev from table 403.3.2.3.2		0.94											
Ps = Expected System Population =		7											
D = Occupant Density = Ps / Σ (Pz) =		1.00											
Vou = O.A. Uncorrected Rate = (D) [Σ(Rp x Pz)] + [Σ(Ra x Az)]		115											
Vot = O.A. Corrected Rate = Vou / Ev		122											
% Of Outside Air Required = Vot / Σ (Vpz) =		9%											

VENTILATION COMPLIANCE (RTU-2)													
ROOM NUMBER	ROOM NAME	Az = FLOOR AREA S.F.	OCCUPANT DENSITY: PEOPLE PER 1000 SQUARE FEET	PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Rp = CFM PER PERSON	AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE: Ra = CFM/SQ.FT.	Pz = NUMBER OF PEOPLE	Vbz = O.A. REQUIRED = (Rp)(Pz)+ (Ra)(Az)	Ez = Zone Air Distributi on Effective ness = Table 403.3.1.2	Voz = Zone O.A. flow rate = Vbz / Ez	Vpz = SUPPLY CFM	Zp = Primary O.A. fraction = Voz / Vpz	Rp x Pz	Ra x Az
A200	OPEN OFFICE	428	5	5	0.06	3	41	0.8	51	1400	0.04	15	26
202	TOILET	54	0	0	0	0	0	0.8	0	50	0.00	0	0
204	EXAM	93	5	5	0.06	2	16	0.8	20	200	0.10	10	6
205	EXAM	91	5	5	0.06	2	15	0.8	19	200	0.10	10	5
206	EXAM	107	5	5	0.06	2	16	0.8	20	200	0.10	10	6
207	EXAM	103	5	5	0.06	2	16	0.8	20	200	0.10	10	6
208	CORRIDOR	170	0	0	0.06	0	10	0.8	13	350	0.04	0	10
209	OFFICE	115	5	5	0.06	1	12	0.8	15	200	0.08	5	7
210	OFFICE	115	5	5	0.06	1	12	0.8	15	200	0.08	5	7
211	OFFICE	128	5	5	0.06	1	13	0.8	16	200	0.08	5	8
	TOTALS	1404				14			189	3200		70	81
LARGEST Zp - VALUE =		0.10	<div>THE AIR HANDLING UNIT SHALL BE SET TO A MINIMUM OF 300 CFM OF OUTSIDE AIR (9%). THEREFORE, THE DESIGN IS IN COMPLIANCE WITH THE CODE REQUIREMENTS OF THE MECHANICAL CODE.</div>										
Ev from table 403.3.2.3.2		1											
Ps = Expected System Population =		14											
D = Occupant Density = Ps / Σ (Pz) =		1.00											
Vou = O.A. Uncorrected Rate = (D) [Σ(Rp x Pz)] + [Σ(Ra x Az)]		151											
Vot = O.A. Corrected Rate = Vou / Ev		151											
% Of Outside Air Required = Vot / Σ (Vpz) =		5%											

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																							
UNIT TAG	TYPE	NOMINAL CAPACITY TONS	SUPPLY AIR CFM	OUTSIDE AIR MIN CFM	ESP IN. W.G.	COOLING				HEATING		ELECTRICAL						SEER	HSPF	EER	APPR. WEIGHT INDOOR UNIT LBS.	APPR. WEIGHT OUTDOOR UNIT LBS.	BASIS OF DESIGN
						TOTAL MBH	SENSIBLE MBH	EAT		REV. CYCLE HEAT AT 47°F MBH	ELECTRIC HEAT KW	INDOOR UNIT			OUT DOOR UNIT								
								DB °F	WB °F			MCA	MOCP	VOLTS/ØHz	MCA	MOCP	VOLTS/ØHz						
FC-1 CU-1	DUCTED HORIZONTAL	4.0	1450	200	0.9	48.0	32.1	80	67	54.0	15.0	71.5	80	208/1/60	29.1	35	208/1/60	14.8	9.0	9.5	150	225	DAKIN MODEL: INDOOR: FTQ48TAVJUD OUTDOOR: RZQ48T AVJUA HEATER: HKS15XC
NOTES:																							
1. PROVIDE WITH DISCONNECT SWITCH FOR EACH UNIT. PROGRAMMABLE THERMOSTAT, VIBRATION ISOLATION, CONCRETE PAD FOR OUTDOOR UNIT WITH SNOW LEGS, REFRIGERANT PIPING KIT, LOW AMBIENT COOLING, CRANKCASE HEATER, CONDENSATE PUMP WITH OVERFLOW SAFETY SWITCH (PROVIDE INDEPENDENTLY POWERED 120V CIRCUIT OF A CONDENSATE PUMP), SHORT CYCLE PROTECTION, TIME DELAY RELAY, DRAIN PAN LEVEL SENSOR (CONTROL FOR INDOOR UNIT TO SHUT OFF TO PREVENT DRAIN PAN OVERFLOW)																							
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS FOR COMPLETE INSTALLATION, CLEARANCE REQUIREMENTS AND REFRIGERANT PIPING INSTALLATION.																							
3. PROVIDE ALL INTERLOCKS FOR SAFETY SWITCHES, SENSORS, DETECTORS, ETC. TO SHUT DOWN UNIT AS REQUIRED. PROVIDE ADDITIONAL INTERLOCKING AS NECESSARY.																							

EXHAUST FAN SCHEDULE								
UNIT TAG	SERVING	TYPE	CFM	ESP	RPM	WATTS (HP)	VOLTS/HZ/PHASE	BASIS OF DESIGN
EF-1	103 TOILET	CEILING	100	0.125	745	34	120/1/60	COOK GC-168
EF-2	202 TOILET	CEILING	100	0.125	745	34	120/1/60	COOK GC-168
NOTES: 1. PROVIDE WITH DISCONNECT, BACKDRAFT DAMPER, SPRING ISOLATORS, VARIABLE FAN SPEED CONTROLLER MOUNTED ON FAN FOR BALANCING, BRICK VENT (FOR EF-1), GOOSENECK (FOR EF-2). 2. PROVIDE A WALL SWITCH AND INTERLOCK WITH EXHAUST FAN FOR THE RESTROOM FANS.								

EXISTING AIR DEVICES NOTES

- CONTRACTOR SHALL CONFIRM THE INLET SIZES SHOWN ON THE PLANS MATCH THE SITE CONDITIONS. NOTIFY THE ENGINEER IF THE INLET SIZES IN THE FIELD DO NOT MATCH THAT SHOWN ON THE PLANS.
- CONFIRM ALL QUANTITIES AND SIZES IN THE FIELD.
- CONFIRM PROPER OPERATION OF ALL EXISTING AIR DEVICES IN THE FIELD.
- ALL EXISTING AIR DEVICES SHALL BE WITHIN ACCEPTABLE NOISE LEVELS.
- MODIFY AND CLEAN EXISTING AIR DEVICES TO BE FULLY OPERATIONAL AND AS LIKE NEW CONDITION.
- IF ANY OF THE NOTES 2 THROUGH 5 ARE NOT MET BY ANY EXISTING TO BE REUSED AIR DEVICE PROVIDE A NEW AIR DEVICE AS INDICATED IN THE NEW AIR DEVICE UNIT SCHEDULE. NEW AIR DEVICES SHALL MATCH THE EXISTING AIR DEVICE STANDARD.
- THE CONTRACTOR SHALL USE THE AIR DEVICES THAT ARE IN THE BEST CONDITION WHERE THE RE-USED QUANTITY IS LESS THAN THE EXISTING QUANTITY.
- MODIFY THE EXISTING AIR DEVICES AS REQUIRED AND PROVIDE FRAMES SUITABLE FOR THE INTENDED CEILING INSTALLATION.
- THE CONTRACTOR SHALL REUSE EXISTING DIFFUSERS IN A MANNER SUCH THAT THE CFM QUANTITY INDICATED ON THE DRAWINGS COMPLIES WITH THE ALLOWABLE CFM RANGE IN THE NEW AIR DEVICE SCHEDULE FOR THAT PARTICULAR INLET SIZE. IF IT IS FOUND IN THE FIELD THAT AN EXISTING TO BE REUSED DIFFUSER HAS A CFM QUANTITY ASSIGNED TO IT ON THE DRAWINGS THAT IS HIGHER THAN THE ALLOWABLE MAXIMUM PER THE CFM RANGE SHOWN IN THE NEW AIR DEVICE SCHEDULES, PROVIDE A NEW DIFFUSER AS PER THE NEW AIR DEVICE SCHEDULE. THE CONTRACTOR SHALL CONFIRM ALL INLET SIZES IN THE FIELD.

AIR DEVICE UNIT SCHEDULE					
SYMBOL	CFM RANGE	DESCRIPTION	NECK OR INLET SIZE	BASIS OF DESIGN	REMARKS
	0 - 95	24"x24" PERFORATED DIFFUSER	6"	TITUS MODEL PAS OR APPROVED EQUAL	
	96 - 200	24"x24" PERFORATED DIFFUSER	8"	TITUS MODEL PAS OR APPROVED EQUAL	
	201 - 310	24"x24" PERFORATED DIFFUSER	10"	TITUS MODEL PAS OR APPROVED EQUAL	
	311 - 400	24"x24" PERFORATED DIFFUSER	12"	TITUS MODEL PAS OR APPROVED EQUAL	
	0 - 95	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	6"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	96 - 200	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	8"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	201 - 360	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	10"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	361 - 500	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	12"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	501 - 640	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	14"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	641 - 730	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	16"	TITUS MODEL PAR-AA OR APPROVED EQUAL	
	731 - 1180	PERFORATED FACE RETURN/EXHAUST AIR GRILLE	18"x18"	TITUS MODEL PAR-AA OR APPROVED EQUAL	18x18 DUCT PLENUM AT NECK. CONNECT 16" FLEX DUCT TO PLENUM.
NOTES: 1. RUNOUTS AND FLEXIBLE CONNECTIONS SHALL MATCH DIFFUSER NECK SIZE. 2. PROVIDE FRAME SUITABLE FOR INTENDED CEILING INSTALLATION. SEE ARCH. DWGS. FOR CEILING TYPES. 3. ALL FINISHES SHALL BE PER ARCHITECT. 4. ALL SELECTIONS SHALL NOT EXCEED NOISE CRITERIA, NC-25. 5. SEE PLANS FOR MISCELLANEOUS AIR DEVICES. 6. LINEAR SLOT DIFFUSERS AND RETURNS ARE TO BE EQUIPPED WITH FACTORY INSTALLED SOUND INSULATED PLENUM BOX. 7. PROVIDE BORDER FRAME TYPE 22 FOR LINEAR SLOT DIFFUSERS AND RETURNS IN A DRYWALL CEILING SO THAT THE FRAME IS COMPLETELY CONCEALED REVEALING ONLY THE SLOT. 8. FOR ALL AIR DEVICES WHICH DO NOT HAVE THEIR ASSOCIATED VOLUME DAMPERS ACCESSIBLE THROUGH THE ACoustICAL TILE CEILING, PROVIDE A REMOTE CABLE CONTROL DAMPER SYSTEM BY YOUNG REGULATOR APPLICABLE FOR THE AIR DEVICE AND INLET DUCT TYPE. THIS SHALL ALLOW FOR AIR BALANCING THROUGH THE FACE OF THE AIR DEVICE MINIMIZING THE REQUIREMENT FOR ACCESS PANELS THROUGHOUT THE DRY WALL CEILING. 9. LINEAR SLOT DIFFUSERS INSTALLED IN DRYWALL CEILINGS SHALL BE THE AIR DEVICES MARKED WITH THE 'D' DESIGNATION IN THE SCHEDULE.					



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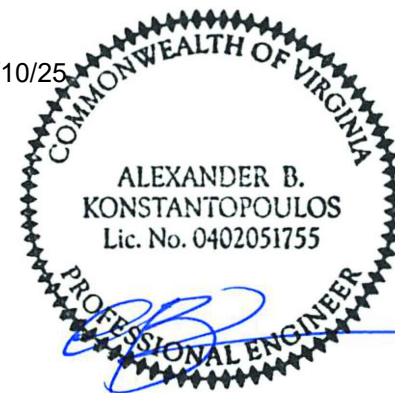
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PROJECT:

**INTERIOR
RENOVATIONS**
6201, 6203 & 6205 RICHMOND HWY
ALEXANDRIA, VA 22303

PROFESSIONAL SEAL

04/10/25



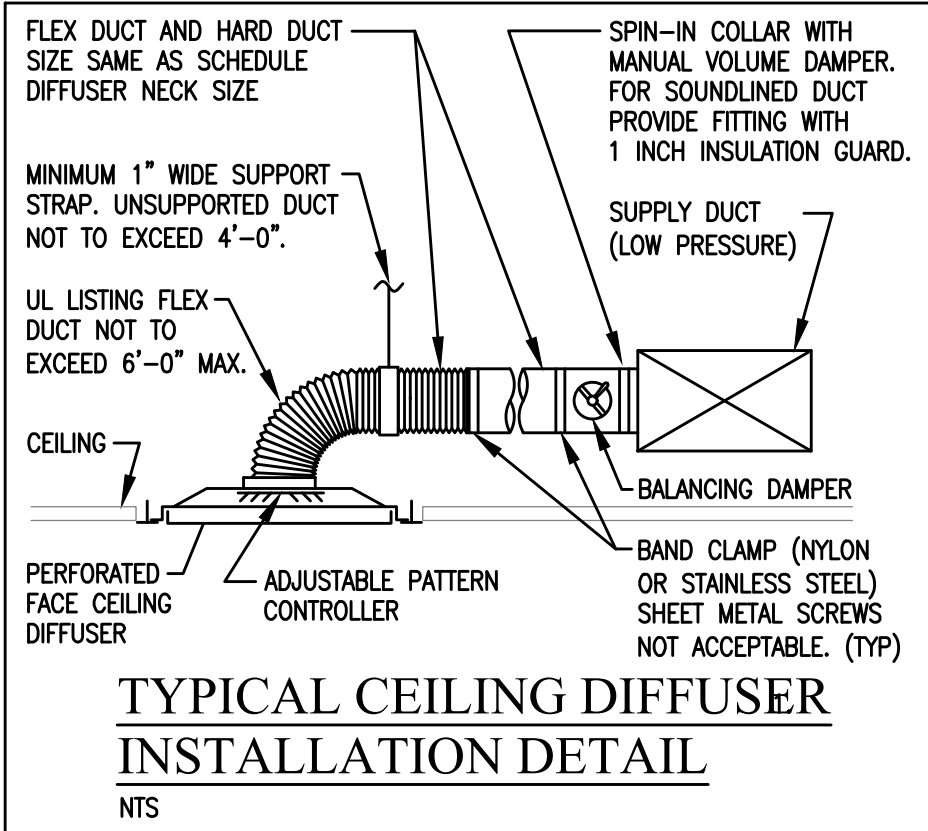
ISSUED _____ DATE _____
FOR PERMIT _____ 03.21.2025

DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177
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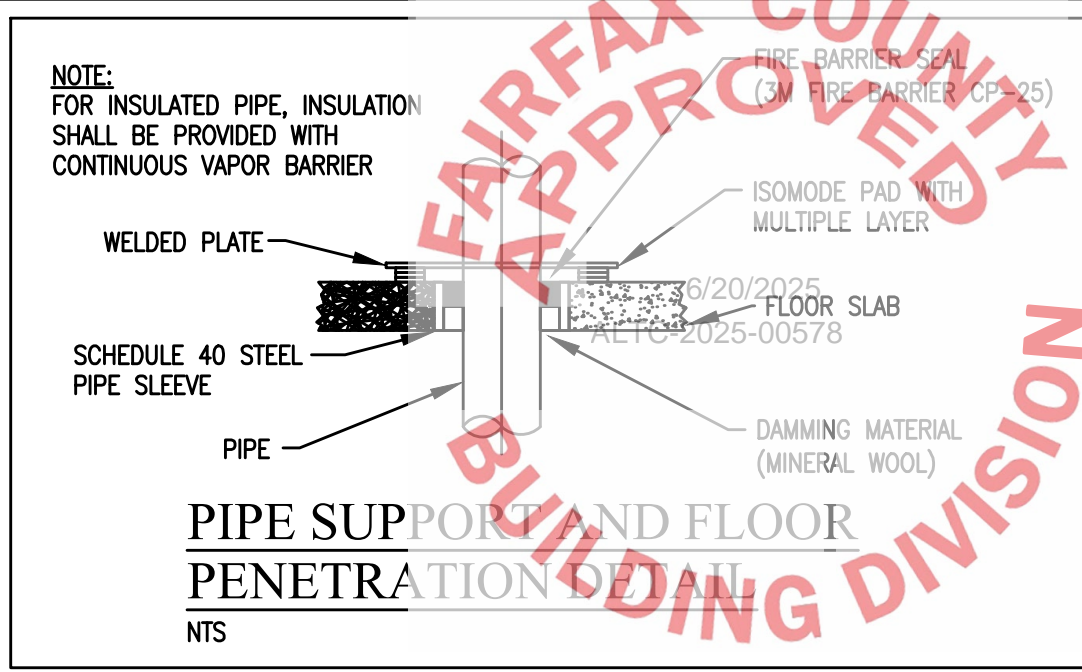
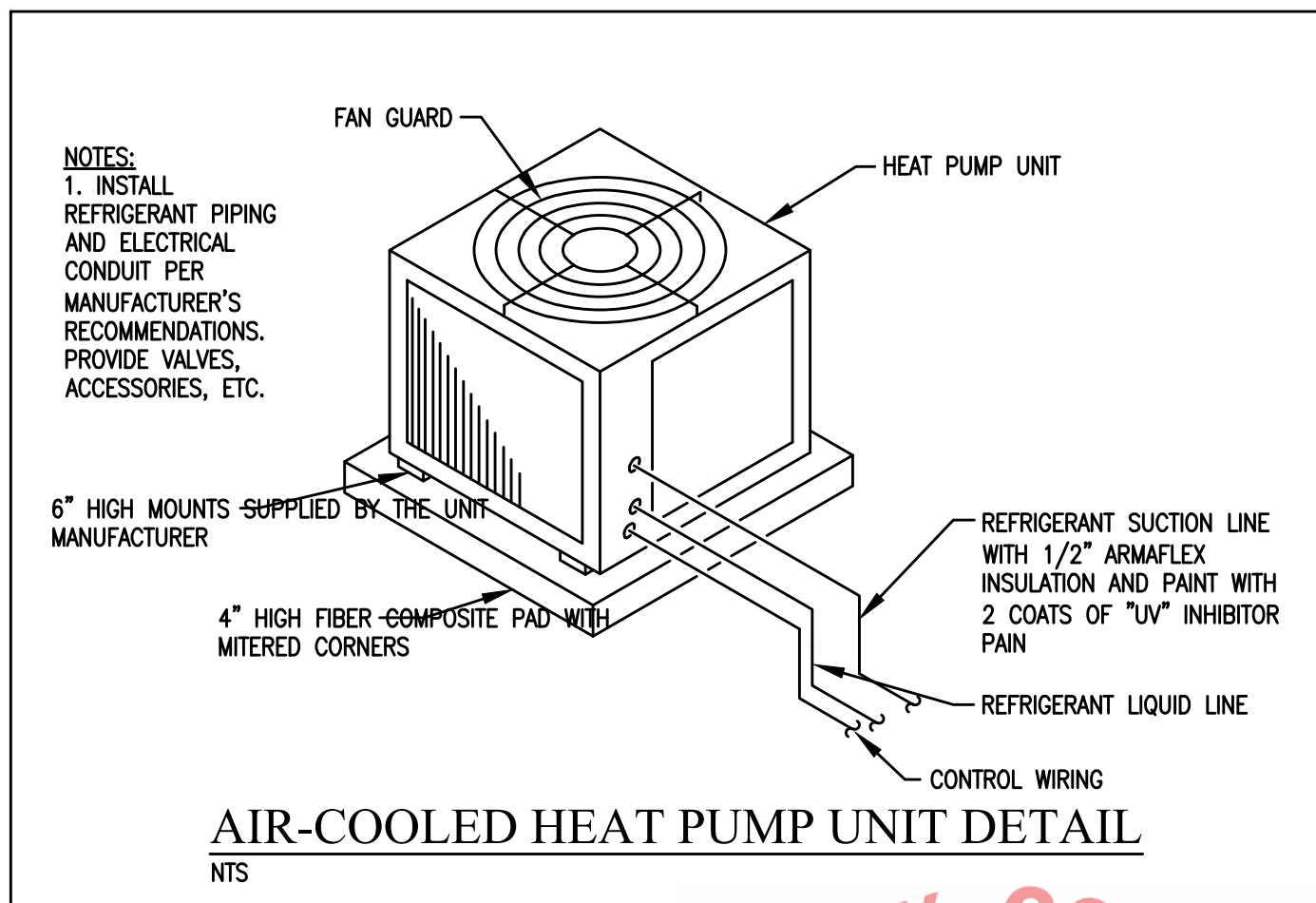
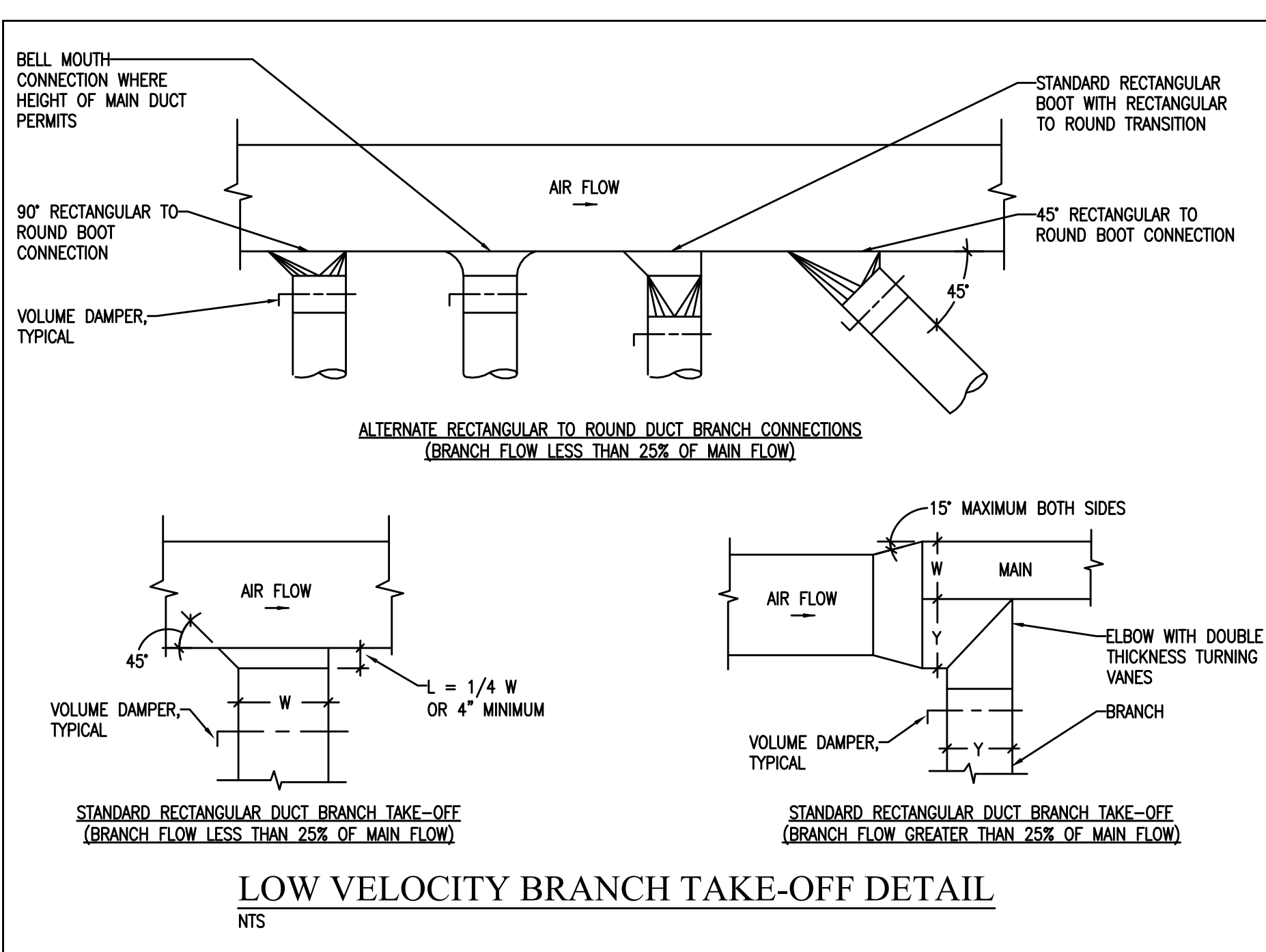
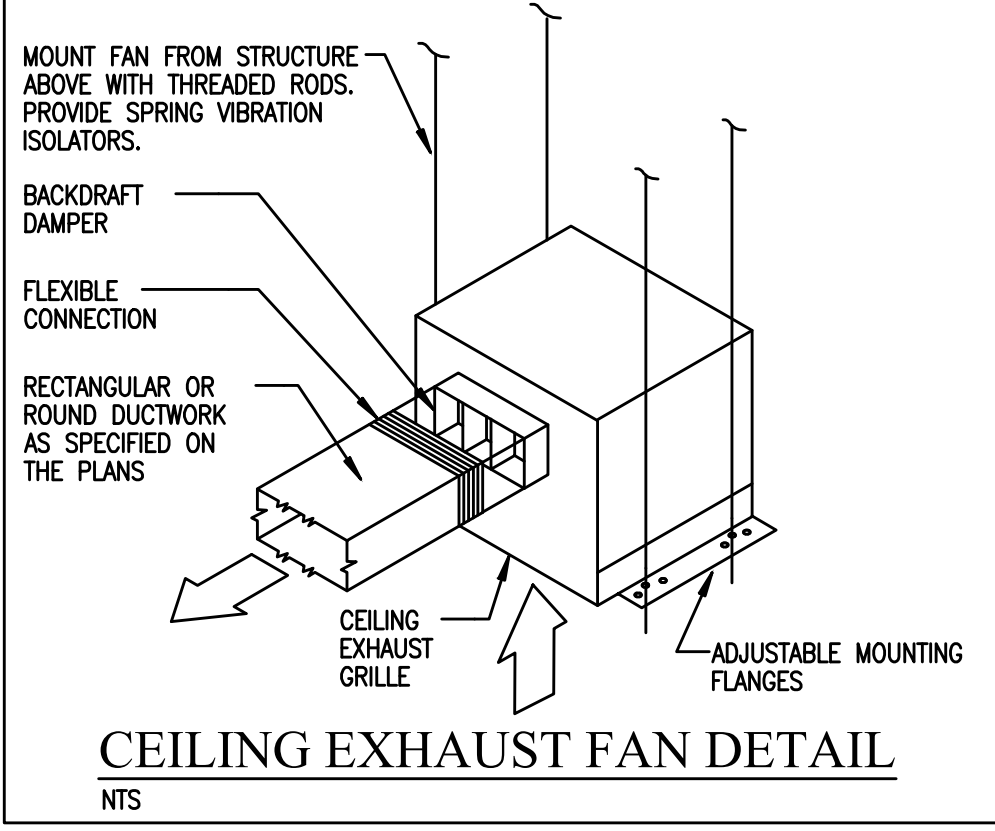
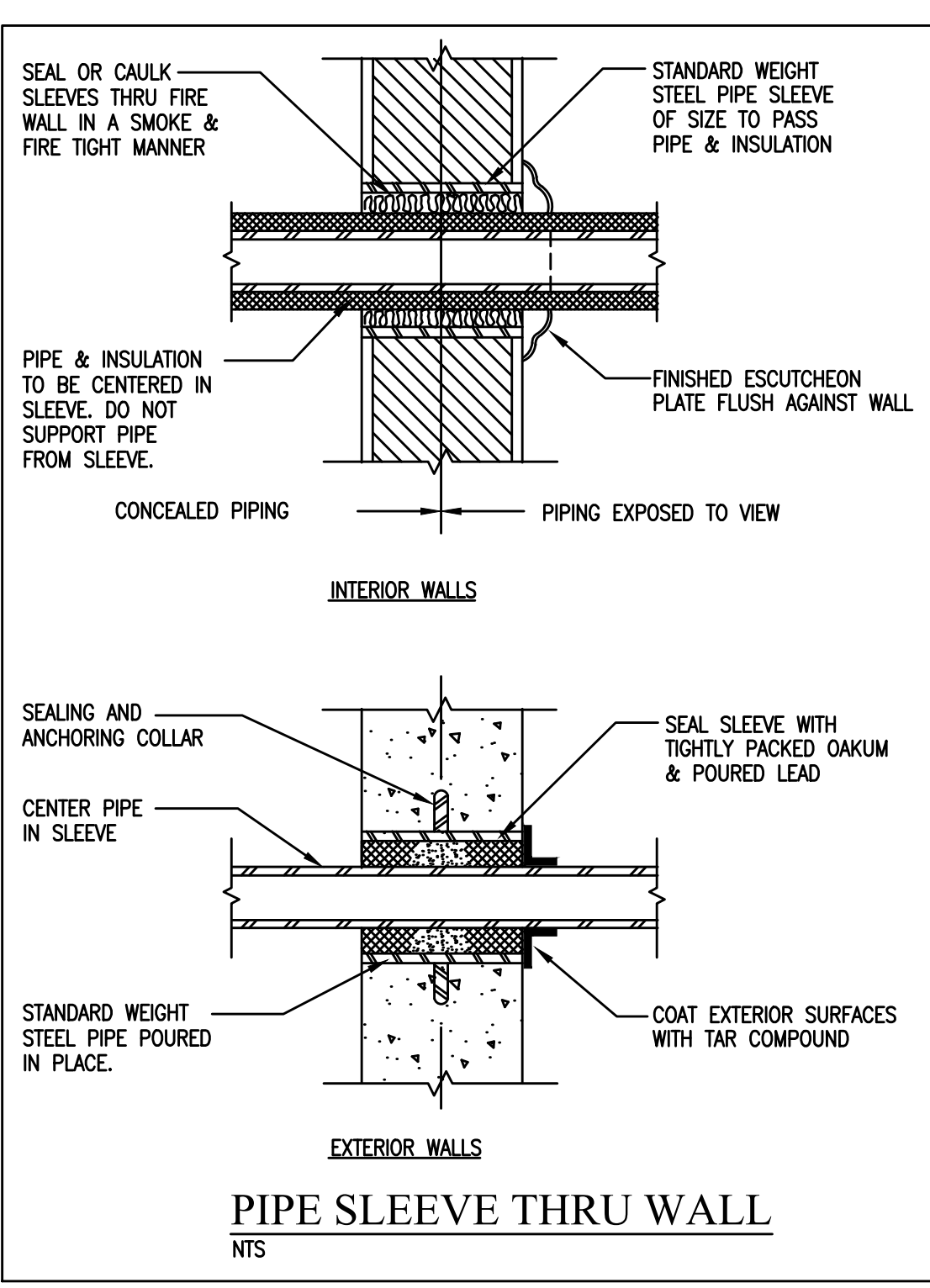
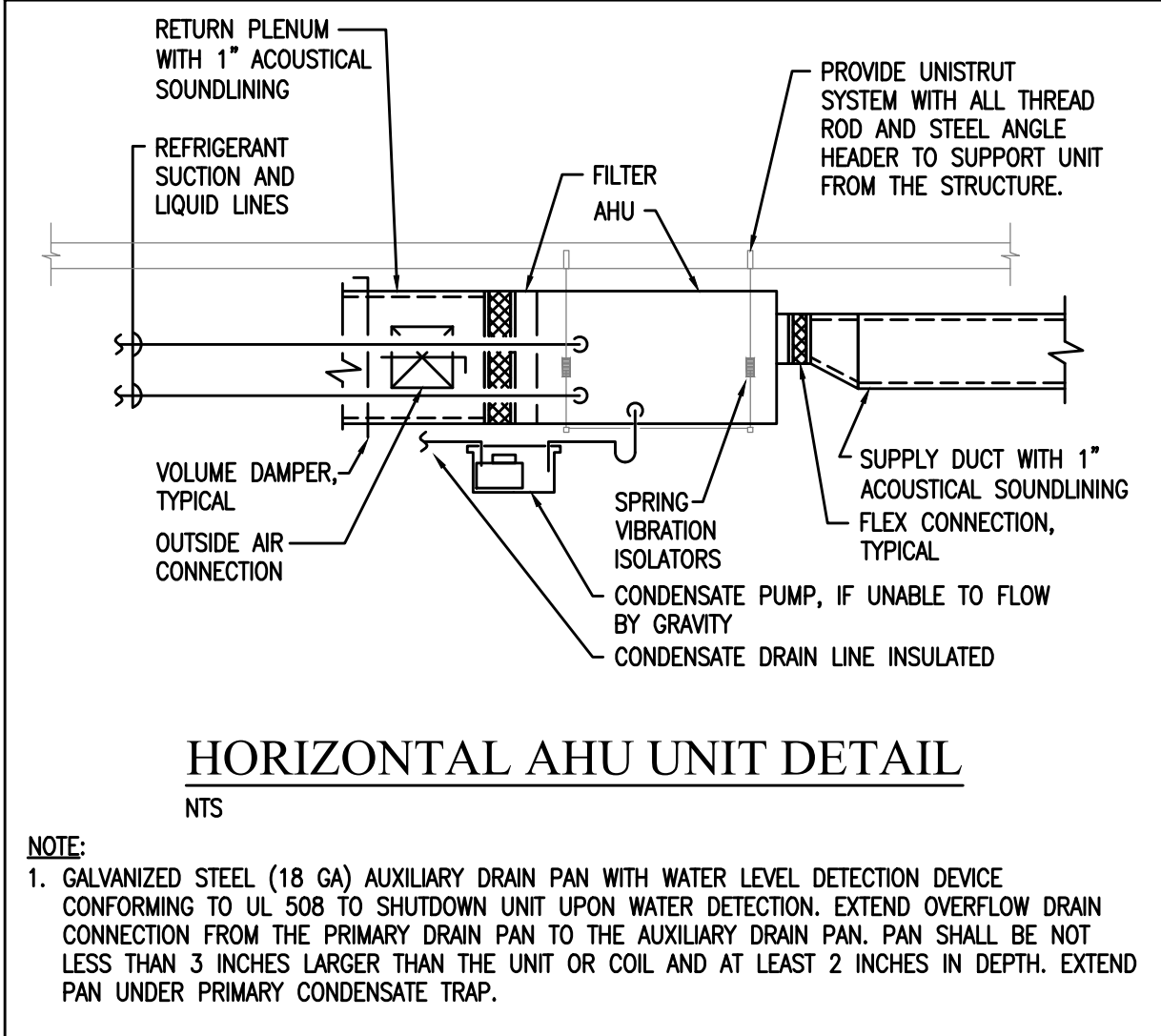
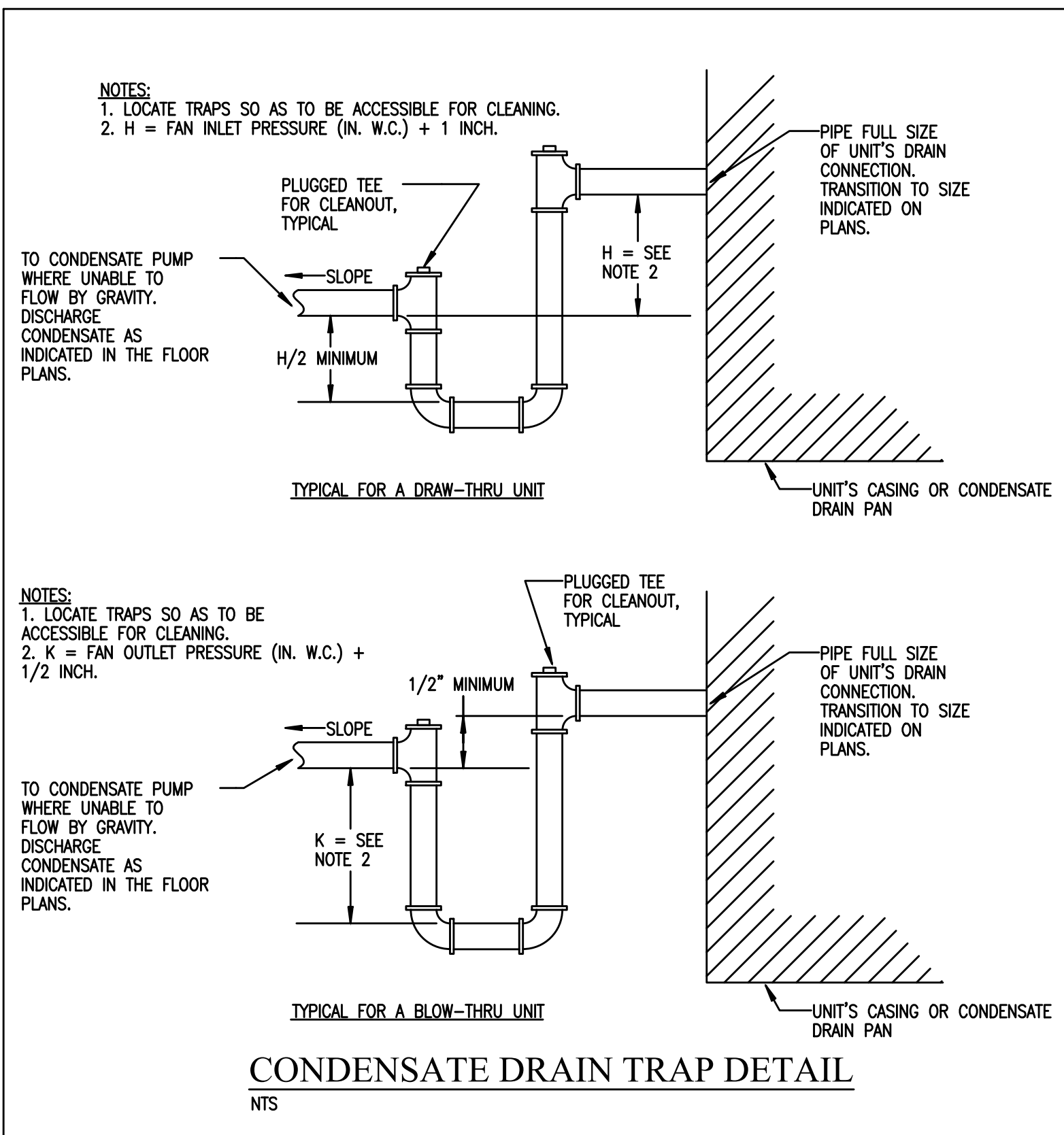
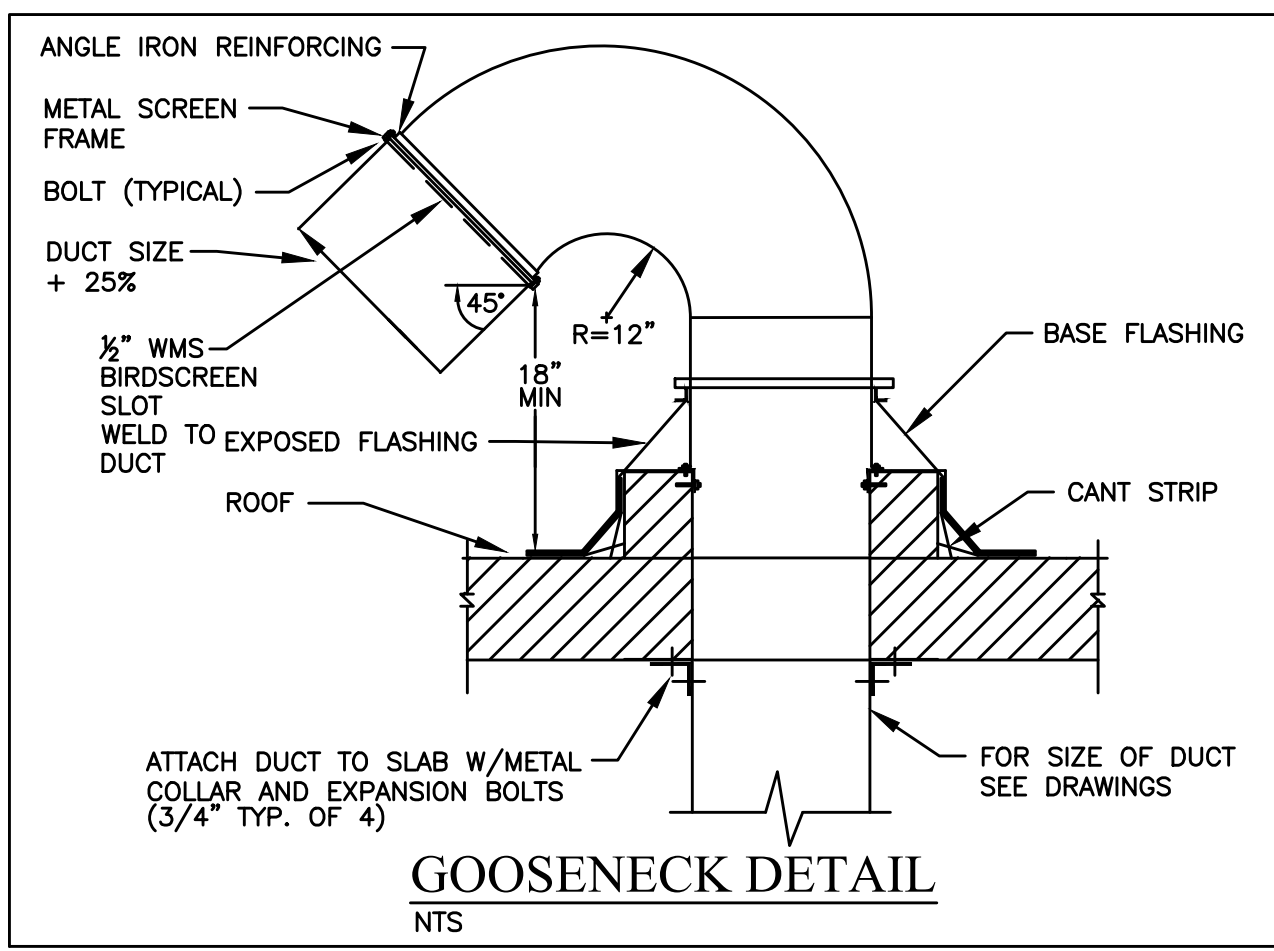
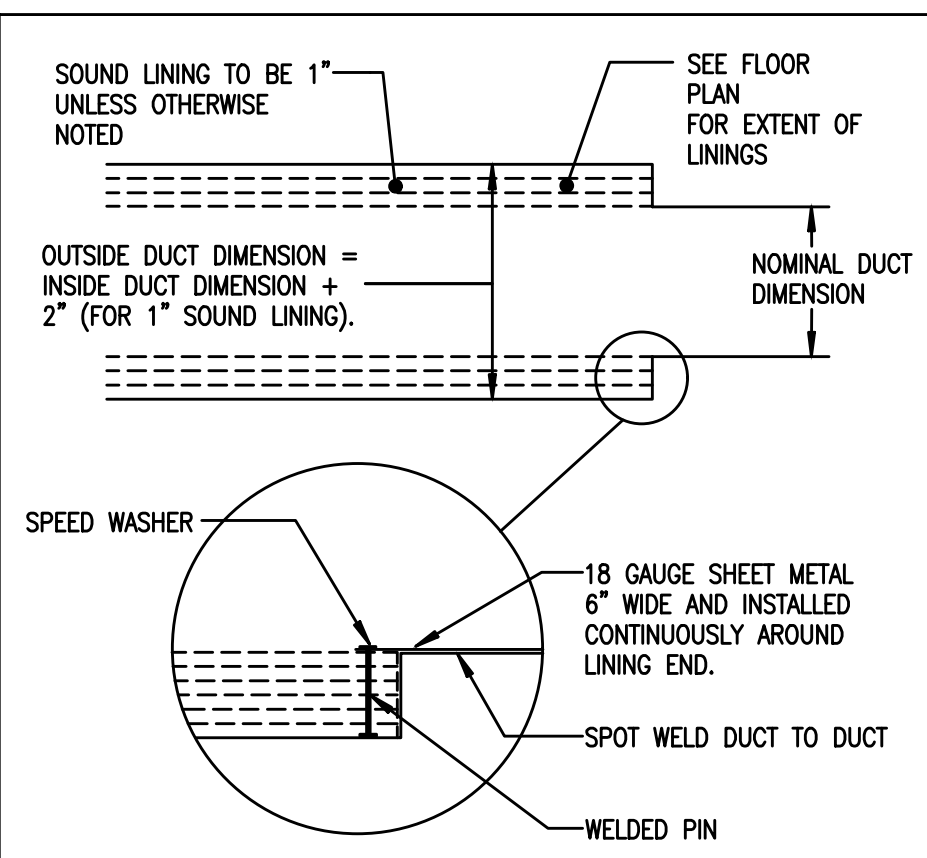
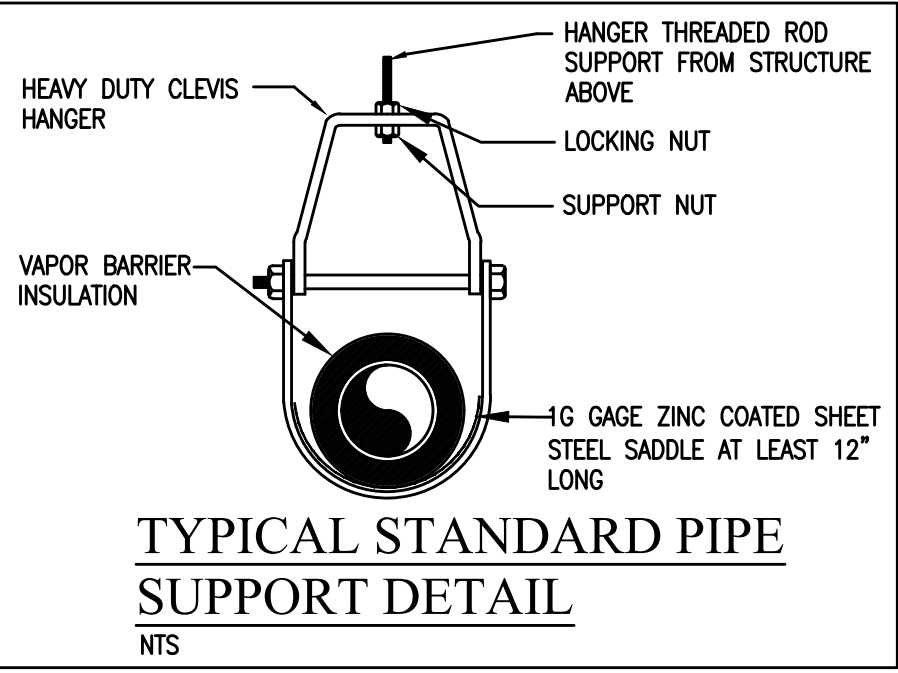
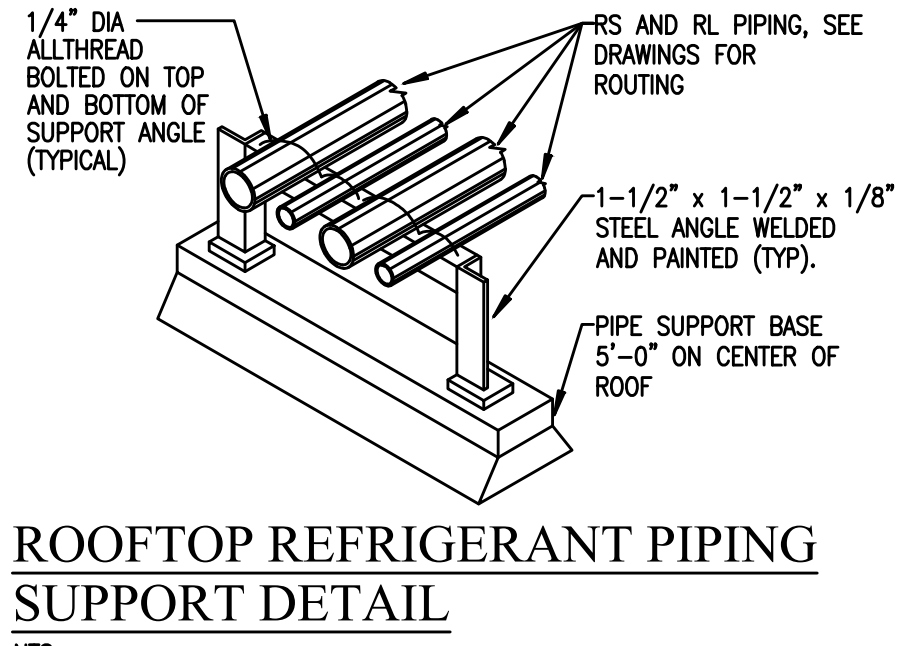
SCHEDULES -
MECHANICAL

SHEET NUMBER:

M004



NOTE:
FOR ALL AIR DEVICES WHICH DO NOT HAVE THEIR ASSOCIATED VOLUME DAMPERS ACCESSIBLE THROUGH THE ACOUSTICAL TILE CEILING, PROVIDE A REMOTE CABLE CONTROL DAMPER SYSTEM BY YOUNG REGULATOR APPLICABLE FOR THE AIR DEVICE AND INLET DUCT TYPE. THIS SHALL ALLOW FOR AIR BALANCING THROUGH THE FACE OF THE AIR DEVICE MINIMIZING THE REQUIREMENT FOR ACCESS PANELS THROUGHOUT THE DRY WALL CEILING.



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PROJECT:
INTERIOR RENOVATIONS
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ALEXANDRIA, VA 22303

PROFESSIONAL SEAL
04/10/25
COMMONWEALTH OF VIRGINIA
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PROJECT NO: 24-177
SHEET TITLE:

DETAILS -
MECHANICAL
SHEET NUMBER:
M005

SPRINKLER NOTES

- THE BUILDING/TENANT AREA IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM.
- MODIFY THE EXISTING SPRINKLER SYSTEM AND INSTALL NEW PIPING AND HEADS AS REQUIRED TO PROVIDE FULL, CODE COMPLIANT, SPRINKLER PROTECTION FOR THE AREA OF WORK IN ACCORDANCE WITH NFPA 13 AND ALL APPLICABLE CODES.
- IT IS THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO LAYOUT THE SPRINKLER HEAD LOCATIONS TO PROVIDE CODE COMPLYING COVERAGE FOR THE AREA OF WORK BY MODIFYING THE EXISTING SPRINKLER HEAD LOCATIONS AND BY ADDING NEW SPRINKLER PIPING AND HEADS AS REQUIRED.
- THE SPRINKLER CONTRACTOR SHALL COORDINATE LOCATIONS OF SPRINKLER HEADS WITH STRUCTURAL ELEMENTS, CEILING ELEVATIONS, DUCTWORK, LIGHTING, MECHANICAL DIFFUSERS AND RETURNS, ETC. FOR PROPER COVERAGE. SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF THE CEILING TILES. WHERE SPRINKLER HEADS ARE LOCATED IN DRY WALL CEILING, LOCATE HEADS IN AN ORGANIZED SYMMETRICAL PATTERN WITH RESPECT TO LIGHTS AS APPROVED BY THE ARCHITECT.
- IF AN EXISTING BASE BUILDING STANDARD EXISTS, PIPE MATERIALS/CONNECTIONS AND SPRINKLER HEADS SHALL MATCH THE BASE BUILDING STANDARD. FOR CONCEALED SPRINKLER HEADS, THE COVER PLATE FINISH SHALL BE REVIEWED APPROVED BY THE ARCHITECT AND WITH THE BASE BUILDING STANDARD.
- SPRINKLER MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13 AND LOCAL CODES.
- A CERTIFIED AND LICENSED SPRINKLER CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, COORDINATE ALL REQUIRED INSPECTIONS AND PERFORM ALL REQUIRED TESTS.
- DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.
- THE SPRINKLER CONTRACTOR SHALL PREPARE SHOP DRAWINGS, PERFORM HYDRAULIC CALCULATIONS, SIZE PIPING BASED ON THE NEW LAYOUT AND SHALL SUBMIT TO THE FIRE MARSHAL FOR FOR REVIEW AND APPROVAL. SHOP DRAWING LAYOUT SHALL BE COORDINATED WITH OTHER TRADES AND ALL NEW AND EXISTING WORK.

ABBREVIATIONS

(E)	EXISTING TO REMAIN
(N)	NEW
(R)	EXISTING TO BE REMOVED
(RE)	NEW LOCATION OF EXISTING
(RR)	EXISTING TO BE RELOCATED
ABV	ABOVE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BFP	BACKFLOW PREVENTER
CLG	CEILING
CO	CLEANOUT
DF	DOMESTIC COLD WATER PIPING
CW	DRINKING FOUNTAIN
DFU	DRAINAGE FIXTURE UNITS
DN	DOWN
DWG	DRAWING
EA	EACH
EWI	ELECTRIC WATER HEATER
FD	FIRE OR SPRINKLER LINE
FH	FLOOR DRAIN
FL	FIRE HOSE VALVE
FLR	FLOOR
FLA	FULL LOAD AMPS
FT	FEET
FS	FLOOR SINK
G	GALLONS
GAL	GALLONS
GPF	GALLONS PER FLUSH
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GWH	GAS WATER HEATER
HB	HOSE BIBB
HP	HORSEPOWER
HW	DOMESTIC HOT WATER
HWR	DOMESTIC HOT WATER RETURN
IN	INCHES
KL	KILOWATT
KS	KITCHEN SINK
LPG	PROPANE GAS
LV	LAVATORY
MAX	MAXIMUM
MFR	MANUFACTURER
MN	MINIMUM
NT	NOT TO SCALE
OD	OPEN HUB DRAIN
OSD	OPEN SITE DRAIN
POC	POINT OF CONNECTION
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
RP	REVOLUTIONS PER MINUTE
S	SANITARY OR WASTE PIPING
SA	SHOCK ABSORBER
SH	SHOWER
T	DOMESTIC TEMPERED WATER TO BE DETERMINED
TBD	TANKLESS ELECTRIC WTR. HTR.
TOWH	TANKLESS GAS WTR. HTR.
TMV	THERMOSTATIC MIXING VALVE
TPV	TRAP PRIMER VALVE
TP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
V	VENT PIPING
VTR	VENT THROUGH ROOF
WC	WATER CLOSET
WSFU	WATER SUPPLY FIXTURE UNITS
WH	WALL HYDRANT

DRAWING LIST

P001	GENERAL NOTES, SYMBOLS, ABBREVIATIONS - PLUMBING
P002	PARTIAL GROUND FLOOR PLAN - EXISTING CONDITIONS AND NEW WORK - PLUMBING
P003	ROOF PLAN - NEW WORK - PLUMBING
P004	DETAILS - PLUMBING

SYMBOL LIST

//////	DEMOLITION
→	SANITARY OR WASTE PIPE
→	VENT PIPE
→	COLD WATER PIPE
→	HOT WATER PIPE
→	TEMPERED WATER PIPE
→	HOT WATER RETURN PIPE
→	NATURAL GAS PIPING
→	STORM PIPING
→	FIRE OR SPRINKLER PIPING
→	BALL VALVE
→	GATE VALVE
→	BALANCING VALVE
→	BUTTERFLY VALVE
→	GLOBE VALVE
→	2-WAY CONTROL VALVE
→	3-WAY CONTROL VALVE
→	PRESSURE REDUCING VALVE
→	TEMPERATURE/PRESSURE RELIEF VALVE
→	PUMP
→	PIPE UNION
→	CHECK VALVE
→	STRAINER
→	STRAINER WITH BLOWDOWN VALVE
→	PIPE TURNING DOWN
→	PIPE TURNING UP
→	PIPE TAKEOFF FROM BOTTOM OF MAIN
→	CAPPED PIPE
→	VALVE IN THE VERTICAL PIPE
→	THERMOMETER
→	PRESSURE GAUGE
→	OPEN HUB DRAIN
→	FLOOR DRAIN
→	BACKFLOW PREVENTER
→	SHOCK ABSORBER
→	VACUUM RELIEF VALVE
→	SANITARY OR WASTE CLEANOUT
→	DIRECTION OF FLOW IN PIPE
→	GAS COCK
→	GAS PRESSURE REGULATOR
→	CONCENTRIC REDUCER
→	ECCENTRIC REDUCER
→	GATE ANGLE VALVE
→	FLOW SWITCH
W	CW, HW AND HWR RISER DESIGNATION
S	SANITARY RISER DESIGNATION
ST	STORM RISER DESIGNATION
G	NATURAL GAS RISER DESIGNATION
FSF	STANDPIPE RISER DESIGNATION
①	SWITCH
X	NEW WORK KEY NOTE
X	DEMOLITION KEY NOTE
○	POC, NEW TO EXISTING
○	TERMINATION POINT OF DEMOLITION

NOTE: NOT ALL SYMBOLS MAY BE USED.

PLUMBING NOTES

- GENERAL:
 - THE GENERAL CONDITIONS, SUPPLEMENTARY CONDITIONS AND APPLICABLE PROVISIONS OF OTHER DIVISIONS, FORM A PART OF THIS SPECIFICATION AND CONTRACT, AND SHALL BE CAREFULLY EXAMINED BY EACH BIDDER BEFORE SUBMITTING HIS PROPOSAL.
 - COMPLIANCE WITH LOCAL JURISDICTIONS: ALL WORK PERFORMED UNDER THIS SECTION SHALL CONFORM TO THE REQUIREMENTS OF DRAWINGS, SPECIFICATIONS AND TO THE CODES, ORDINANCES AND STANDARDS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES FOR INSPECTIONS RELATED TO THEIR WORK.
 - INSTALLATIONS SHALL BE GUARANTEED FOR WORKMANSHIP, MATERIALS AND EQUIPMENT AGAINST DEFECTS, LEAKS AND SYSTEM NON-OPERATION FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE OF WORK BY OWNER. WHERE MANUFACTURER'S STANDARD WARRANTY IS LONGER THAN ONE YEAR, THE LONGER WARRANTY PERIOD SHALL TAKE PRECEDENCE. CONTRACTOR SHALL PAY ALL COSTS INVOLVING THE GUARANTEE OF ALL SYSTEMS. ALL DEFECTS THAT DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD WILL BE REPAIRED BY THE CONTRACTOR, TO THE SATISFACTION OF THE ARCHITECT/OWNER AND AT NO ADDITIONAL COST TO THE OWNER.
 - THE WORD "PROVIDE", AS USED IN SPECIFICATIONS AND ON PLANS, SHALL MEAN FURNISH AND INSTALL COMPLETE AND READY FOR USE. PROVIDE ALL TRAPS, NIPPLES, CARRIERS, BOLT CAPS, ETC. AS REQUIRED TO COMPLETE THE WORK.
 - ALL WORK SHALL BE COORDINATED WITH ALL TRADES PRIOR TO INSTALLATION.
 - IN GENERAL, THE DRAWINGS ARE DIAGRAMMATIC, AND MAY VARY FROM ACTUAL FIELD CONDITIONS AND SHOW THE GENERAL LOCATION, TYPE AND SIZE OF PIPING, EQUIPMENT, CONTROLS, ACCESSORY EQUIPMENT, ETC. THE CONTRACTOR SHALL MODIFY, EXTEND, RELOCATE AND REROUTE ANY PIPING, EQUIPMENT, ACCESSORIES, ETC. AS REQUIRED TO ACCOMMODATE THE CEILING LAYOUT, OBSTRUCTIONS, STRUCTURE, PARTITIONS, ETC. AND TO SATISFY THE INTENT OF THE NEW WORK. WORK INDICATED ON THESE DRAWINGS SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE DRAWINGS ARE INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENTS OF ENGINEERED SYSTEMS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND MAKE ADJUSTMENTS AS NECESSARY TO COMPLETE THE WORK.
 - THE DRAWINGS DO NOT INDICATE ALL MISCELLANEOUS ITEMS, ACCESSORIES, FASTENERS, OFFSETS, ETC. NECESSARY TO SATISFY THE INTENT OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE ADDITIONAL VALVES, ACCESSORIES, MISCELLANEOUS ITEMS, ETC. AS REQUIRED TO SATISFY THE INTENT OF THE PROJECT.
 - THE CONTRACTOR SHALL FIELD VERIFY ALL NECESSARY DIMENSIONS BEFORE INSTALLING ANY OF THE WORK, AND SHALL CHECK THEIR LAYOUTS TO ALLOW CLEARANCE REQUIRED FOR OTHER WORK AS SHOWN ON THE DRAWINGS. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL ALERT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. FAILURE TO DO SO SHALL HOLD THE CONTRACTOR RESPONSIBLE FOR THE CHANGES WITHOUT ANY ADDITIONAL COSTS TO THE OWNER.
 - THE SCOPE OF WORK CONSISTS GENERALLY OF PROVIDING A COMPLETE PLUMBING SYSTEM AND FINAL TESTING, ADJUSTING, AND BALANCING OF ALL SYSTEMS AND EQUIPMENT. PROVIDE ALL MATERIALS, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO ACCOMPLISH THE WORK.
 - CONTRACTOR SHALL EXAMINE ALL DRAWINGS, SPECIFICATIONS AND ADDENDA, AND VISIT THE SITE PRIOR TO ISSUING BID. ANY QUESTIONS OR CLARIFICATIONS SHALL BE REFERRED TO THE ENGINEER AT LEAST 7 WORKING DAYS PRIOR TO BIDDING. ANY REQUEST FOR ADDITIONAL COSTS RELATED TO THE INSTALLATION, RELOCATION, MODIFICATION OR ADDITION OF EQUIPMENT REQUIRED TO SATISFY THE INTENT OF THIS PROJECT, DUE TO A LACK OF CLEAR UNDERSTANDING OF THE PROJECT REQUIREMENTS, WILL NOT BE ACCEPTED.
 - TO ELIMINATE CONFLICTS, CONTRACTOR TO PREPARE COMPLETE AND DETAILED 1/4" SCALE PLAN COMPOSITE COORDINATION DRAWINGS FOR ALL PIPING WORK INSTALLED IN THIS PROJECT. SUBMIT DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO BIDDING. ANY REQUEST FOR ADDITIONAL COSTS RELATED TO THE INSTALLATION, RELOCATION, MODIFICATION OR ADDITION OF EQUIPMENT REQUIRED TO SATISFY THE INTENT OF THIS PROJECT, DUE TO A LACK OF CLEAR UNDERSTANDING OF THE PROJECT REQUIREMENTS, WILL NOT BE ACCEPTED.
 - ALL DEMOLISHED EQUIPMENT AND MATERIAL SHALL BE PROMPTLY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR. ITEMS TO BE SALVAGED FOR REUSE OR DELIVERY TO THE OWNER SHALL BE PROTECTED AND STORED, BY THE CONTRACTOR, UNTIL REUSED OR TRANSFERRED TO THE OWNER. CONTRACTOR SHALL VERIFY WITH THE OWNER TO DETERMINE THE ITEMS TO BE SALVAGED.
 - ALL PIPES SHOULD BE CAPPED IMMEDIATELY UPON DEMOLITION WORK TO PREVENT ODORS AND EXPOSURE TO RODENTS AND PESTS.
- DEMOLITION:
 - UNDER NO CIRCUMSTANCE SHALL THE WORK PERFORMED UNDER THIS CONTRACT AFFECT ADJACENT AREAS, NOT PART OF THIS WORK.
 - IN THE EVENT THAT SUSPECTED ASBESTOS CONTAINING MATERIALS ARE ENCOUNTERED IN THE COURSE OF THE WORK, THE CONTRACTOR SHALL CEASE WORK WITH THE SUSPECT MATERIALS AND SHALL REQUEST DIRECTION FROM THE OWNER BEFORE PROCEEDING FURTHER.
 - ANY OPERATIONS THAT WILL RESULT IN THE GENERATION OF NOISE OR VIBRATION, OR THAT MAY RESULT IN DUST EXTENDING BEYOND THE WORK AREA, SHALL BE PERFORMED AT TIMES AND IN ACCORDANCE WITH REQUIREMENTS STIPULATED BY BUILDING'S MANAGEMENT.
 - ALL EQUIPMENT, MATERIAL AND DEVICES SHOWN AS EXISTING TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL APPURTENANCES.
 - ALL DEMOLISHED EQUIPMENT AND MATERIAL SHALL BE PROMPTLY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR. ITEMS TO BE SALVAGED FOR REUSE OR DELIVERY TO THE OWNER SHALL BE PROTECTED AND STORED, BY THE CONTRACTOR, UNTIL REUSED OR TRANSFERRED TO THE OWNER. CONTRACTOR SHALL VERIFY WITH THE OWNER TO DETERMINE THE ITEMS TO BE SALVAGED.
 - ALL PIPES SHOULD BE CAPPED IMMEDIATELY UPON DEMOLITION WORK TO PREVENT ODORS AND EXPOSURE TO RODENTS AND PESTS.
- CUTTING, PATCHING AND REPAIR:
 - THE CONTRACTOR SHALL NOT PENETRATE CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE OWNER. SUBMIT DETAILS OF PROPOSED PENETRATION LOCATIONS TO OWNER FOR REVIEW.
 - PATCH AND REPAIR ALL DISTURBED SURFACES IN KIND TO MATCH EXISTING AND SURROUNDING AREAS. EXTREME CARE SHALL BE EXERCISED WITH REGARD TO PROTECTION OF ALL EXISTING WORK. CORRECT ALL DAMAGE TO EXISTING WORK TO THE SATISFACTION OF THE ARCHITECT/OWNER AT NO ADDITIONAL COST TO THE OWNER.
 - IF ANY EXISTING EQUIPMENT, DUCTS, PIPES, UTILITIES, ETC. ARE DAMAGED DURING CONSTRUCTION, WHETHER OR NOT DUE TO CONTRACTOR'S NEGLIGENCE, DAMAGED ITEMS SHALL BE REPAIRED OR REPLACED AND LEFT IN A CONDITION SATISFACTORY TO THE ARCHITECT/OWNER AT NO ADDITIONAL COST TO THE OWNER.
- SUBMITTALS, RECORD AS-BUILT DRAWINGS AND O&M MANUALS:
 - SUBMIT ONE COMPLETE SET OF PLANS AND RELATED DOCUMENTS, APPROVED BY THE CITY, TO THE OWNER.
 - PROVIDE TO OWNER 3 SETS OF MAINTENANCE AND OPERATING MANUALS AND MANUFACTURER'S WARRANTY DOCUMENTS FOR ALL EQUIPMENT IN INDEXED, 3-RING BINDER.
 - PROVIDE "AS-BUILT" DRAWINGS TO OWNER UPON COMPLETION OF THE PROJECT. SUBMIT ONE ELECTRONIC COPY (CD) AND TWO SETS OF HARD COPIES (BLUE PRINTS) OF THE AS-BUILT DRAWINGS, CORRECTED TO SHOW ALL FIELD MODIFICATIONS TO THE CONSTRUCTIONS TO THE OWNER.
 - SUBMIT 3 SETS OF EQUIPMENT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO PURCHASE, FABRICATION OR INSTALLATION OF EQUIPMENT. SUBMIT DATA SHEETS TO ALLOW ADEQUATE TIME FOR REVIEW, INCLUDING RE-REVIEW OF ITEMS NOT APPROVED UPON FIRST SUBMISSION.
- EXECUTION:
 - ALL WORK SHALL BE ACCOMPLISHED BY EXPERIENCED MECHANICS, SPECIALIZING IN THE PARTICULAR TRADE, UTILIZING APPROPRIATE TOOLS AND TECHNIQUES. ALL WORK SHALL BE FIRST QUALITY, CONSISTENT WITH INDUSTRY'S BEST STANDARDS. WORK DEEMED TO BE SUBSTANDARD SHALL BE REMOVED AND REMADE AT CONTRACTOR'S EXPENSE.
 - PERFORM ALL OPERATIONS REQUIRED AND INSTALL ALL UNITS, EQUIPMENT, CONTROLS AND PIPING, WITH ALL REQUIRED ACCESSORIES, TO PRODUCE A COMPLETE INSTALLATION, READY FOR USE.
 - INSTALL FIXTURES LEVEL, PLUMB AND PARALLEL TO THE WALL.
 - CONTRACTOR SHALL CONFIRM ALL ROUGH-INS WITH ARCHITECTURAL PLANS PRIOR TO INSTALLATION.
 - PIPING SHALL HAVE ITS INTERIOR SLOPES AND INVERTS ESTABLISHED PRIOR TO INSTALLATION OF ANY PIPING. PROPER SLOPES MUST BE MAINTAINED COMPLYING WITH CODE REQUIREMENTS. LOCATE PIPING SUCH THAT THERE ARE NO CONFLICTS WITH OTHER TRADES. COORDINATE CLOSELY WITH THE BUILDING MANAGEMENT/ENGINEER.
 - IDENTIFY ALL PIPING FOR USE AND DIRECTION OF FLOW. PROVIDE VALVE TAG AND WALL-MOUNTED VALVE CHART FOR ALL VALVES. IDENTIFICATION SHALL BE PER ASME REQUIREMENTS.
 - PROTECT AGAINST INJURY TO PERSONS AND DAMAGE TO PROPERTY AT ALL TIMES.
 - CONTRACTOR SHALL CLEAN THE WORK SITE AFTER EACH DAY'S WORK. AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL CLEAN THE ENTIRE JOB SITE, INCLUDING ALL NEW AND EXISTING SURFACES OF THE BUILDING, EQUIPMENT AND SYSTEMS, LEAVING THE AREA THOROUGHLY CLEAN, CLEAR AND READY FOR OCCUPANCY TO THE SATISFACTION OF THE OWNER.
 - MAKE PROPER HOT, COLD, WASTE AND VENT PIPE CONNECTIONS TO ALL FIXTURES AND EQUIPMENT AS REQUIRED. ALL TIE-INS TO EXISTING SERVICES SHALL BE COORDINATED WITH THE BUILDING AND BE DONE AFTER HOURS IF REQUIRED.
 - SITE VERIFY EXACT LOCATION OF ALL EXISTING PIPING, POINT OF DISCONNECTION TO EXISTING, SIZES, DEMOLITION WORK, ETC. BEFORE THE START OF ANY WORK.
 - REFER TO RISER DIAGRAMS FOR PIPE SIZES
 - PROPERLY SUPPORT ALL PIPING FROM FLOOR OR SLAB ABOVE THAT HAS BEEN TEMPORARILY DISCONNECTED AND WILL BE RECONNECTED IN NEW INSTALLATION. PROPERLY LABEL PIPING PRIOR TO DISCONNECTION AS TO AVOID RECONNECTION TO AN IMPROPER SERVICE.
 - PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES, FITTINGS, ETC. AS REQUIRED FOR PROPER MAINTENANCE AND ACCESS.
 - FOLLOWING COMPLETION OF CONSTRUCTION AND PRIOR TO INSULATION, TEST PIPING IN ACCORDANCE WITH LOCAL REQUIREMENTS. REPAIR ALL LEAKS, RE-TEST SYSTEM. FLUSH AND STERILIZE PIPING AND ASSOCIATED EQUIPMENT PRIOR TO BENEVOLENT USE. BEFORE PLACING THE SYSTEM IN SERVICE, THE CONTRACTOR SHALL ENGAGE A QUALIFIED SERVICE ORGANIZATION TO STERILIZE THE NEW WATER LINES IN ACCORDANCE WITH APPLICABLE REGULATIONS. A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED TO THE OWNER.
 - DEMONSTRATE OPERATION OF SYSTEM TO OWNER. PROVIDE INSTRUCTION TO OWNER DESIGNATED PERSONNEL, DEMONSTRATING NORMAL MAINTENANCE AND TROUBLESHOOTING PROCEDURES.

NOTE TO CONTRACTOR

- EXISTING DRAWINGS WERE NOT AVAILABLE FOR THIS PROJECT.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS SHOWN ON THESE PLANS AND SHALL ALSO VERIFY ALL EXISTING CONDITIONS IN THE CEILING SPACE TO CONFIRM THAT THE PLANS DEPICT SITE CONDITIONS. IF ANY DISCREPANCIES EXIST FROM SITE CONDITIONS TO THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR COORDINATION AND POSSIBLE SITE VISIT PRIOR TO PURCHASING EQUIPMENT AND/OR PROCEEDING WITH THE WORK INDICATED.
- PRIOR TO PIPING AND EQUIPMENT PURCHASING, THE CONTRACTOR SHALL CONFIRM THAT THE PIPING AND EQUIPMENT CAN BE INSTALLED IN THE FIELD SO THAT PROPER CLEARANCES AND ARCHITECTURAL CEILING HEIGHTS ARE ACHIEVED. IF ANY ISSUES ARE PRESENT ON SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR COORDINATION. THIS COORDINATION SHALL OCCUR PRIOR TO PIPING AND EQUIPMENT PURCHASING.
- CONTRACTOR SHALL CONFIRM ALL PLUMBING FIXTURE SPECIFICATIONS AND LOCATIONS WITH THE OWNER AND ARCHITECT PRIOR TO PURCHASING AND PRIOR TO INSTALLATION.
- THE PLUMBING PIPING ROUTING AND CONNECTION POINTS SHOWN ON THESE DRAWINGS IS DIAGRAMMATIC. ALL PIPE ROUTING AND CONNECTIONS TO THE EXISTING BUILDING SYSTEMS SHALL BE CONFIRMED IN THE FIELD AND WITH THE BUILDING ENGINEER AND BUILDING MANAGEMENT PRIOR TO PROCEEDING WITH ANY WORK OR PURCHASING OF ANY EQUIPMENT.
- COORDINATE ALL WORK WITH THE BUILDING ENGINEER AND THE RULES AND REGULATIONS OF THE BUILDING MANAGEMENT PRIOR TO PROCEEDING WITH ANY WORK.
- NO WORK SHALL PROCEED UNTIL ALL EXISTING CONDITIONS ARE VERIFIED.
- THE CLIENT/OWNER SHALL NOT BE HELD ACCOUNTABLE FOR ANY COSTS ASSOCIATED ONCE CONSTRUCTION PROCEEDS DUE TO THE LACK OF VERIFICATION OF DISCREPANCIES BETWEEN SITE CONDITIONS AND DRAWINGS.
- MECHANICAL, PLUMBING, ELECTRICAL AND ARCHITECTURAL DRAWINGS ARE COMPLEMENTARY TO EACH OTHER. THE GENERAL AND SUB-CONTRACTORS SHALL REVIEW AND BID ON THE ENTIRE BID SET, INCLUDING ARCHITECTURAL SHEETS AND ALL DISCIPLINES. WHEN A DISCREPANCY BETWEEN THE ENGINEERING DRAWINGS AND ARCHITECTURAL DRAWINGS OCCURS, THE MORE STRINGENT REQUIREMENT SHALL APPLY TO THE BID. SHOULD A DISCREPANCY EXIST, THE GENERAL CONTRACTOR SHALL SUBMIT AN RFI REQUESTING CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.

PLUMBING FIXTURE CONNECTION SCHEDULE

ITEM IDENT	DESCRIPTION	SANITARY OR WASTE	VENT	WATER		BASIS OF DESIGN
				COLD	HOT	
WC	WATER CLOSET FLUSH TANK ADA COMPLIANT	4"	2"	½"	-	NEW TOILET: AMERICAN STANDARD MODEL 2467-100 CADET
LV	LAVATORY ADA COMPLIANT	1½"	1½"	½"	½"	NEW SINK AND FAUCET: SINK - SPEC: AMERICAN STANDARD MODEL 0321.026 DECLYN WALL MOUNT. FAUCET - SPEC: AMERICAN STANDARD HERITAGE 5400 WITH HANDLE 172H. PROVIDE WITH A TMV, THERMOSTATIC MIXING VALVE.
TMV	THERMOSTATIC MIXING VALVE	-	-	½"	½"	WATTS MODEL LFMV-UT-M1 WITH ACCESS PANEL, ASSE 1070 LISTED. PROVIDE ON HW/CW SUPPLIES UNDER SINK, SET @ 105° F. TEMP.
EW1 EW2	WATER HEATER TANK TYPE	-	-	¾"	¾"	STATE MODEL: #PCE-6, 6 GAL TANK, 120V, 10, 1.5 KW. INSTALL EXPANSION TANK. MODEL: WATERGUARD #ETC-2X ON CW SUPPLY.
FCO	FLOOR CLEAN OUT	-	-	-	-	CLEAN OUT WITH CLEAN OUT COVER BY ZURN ZS1400-T (SQUARE) POLISHED STAINLESS.

- NOTES:
- P-TRAP AND SUPPLY/STOPS FOR ADA COMPLIANT LAVATORIES AND SINKS SHALL BE INSTALLED WITH TRUEBRO INC. LAV-GUARD2 E-Z SERIES UNDER SINK PIPING COVER. PROVIDE CARRIER FOR FIXTURES.
 - PROVIDE INDIVIDUAL DEDICATED FULL SIZE SHUT-OFF VALVES ON ALL HOT AND COLD WATER PIPING TO ALL PLUMBING FIXTURES FOR SERVICING AND/OR REPLACEMENT. ALL VALVES ARE TO BE ACCESSIBLE.
 - OBTAIN APPROVAL AND COORDINATE THE FINAL SELECTIONS AND FINISHES OF ALL PLUMBING FIXTURES WITH THE ARCHITECT. IF THERE ARE DISCREPANCIES IN FIXTURE SPECIFICATIONS BETWEEN THIS SCHEDULE AND ARCHITECTURAL SCHEDULE ON SHEET A0401, THAT THE ARCHITECTURAL SCHEDULE SHALL RULE IN REGARDS TO BIDDING AND CONSTRUCTION.

PLUMBING DRAINAGE FIXTURE UNIT (DFU) SCHEDULE

FIXTURE TYPE	DFU'S PER FIXTURE	QUANTITY REMOVED	TOTAL DFU'S REMOVED	QUANTITY ADDED	TOTAL DFU'S ADDED
LAVATORY	1	0	0	2	2
WATER CLOSET	4	0	0	2	8
URINAL	4	0	0	0	0
HAND SINK	2	0	0	0	0
FLOOR DRAIN	2	0	0	0	0
MOP SINK	2	0	0	0	0
DRINKING FOUNTAIN	0.5	0	0	0	0
TOTALS:			0		10
TOTAL DFU'S INCREASED OR DECREASED:				+15	

FAIRFAX COUNTY
APPROVED
6/20/2025
ALTC-2025-00578
BUILDING DIVISION

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PROJECT:

**INTERIOR
RENOVATIONS**
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ALEXANDER B.
KONSTANTOPOULOS
Lic. No. 0402051755
Professional Engineer
05/30/25

ISSUED DATE
FOR PERMIT 03.21.2025
COUNTY COMMENTS 05.23.2025

DESIGNED/DRAWN BY: SM
REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177

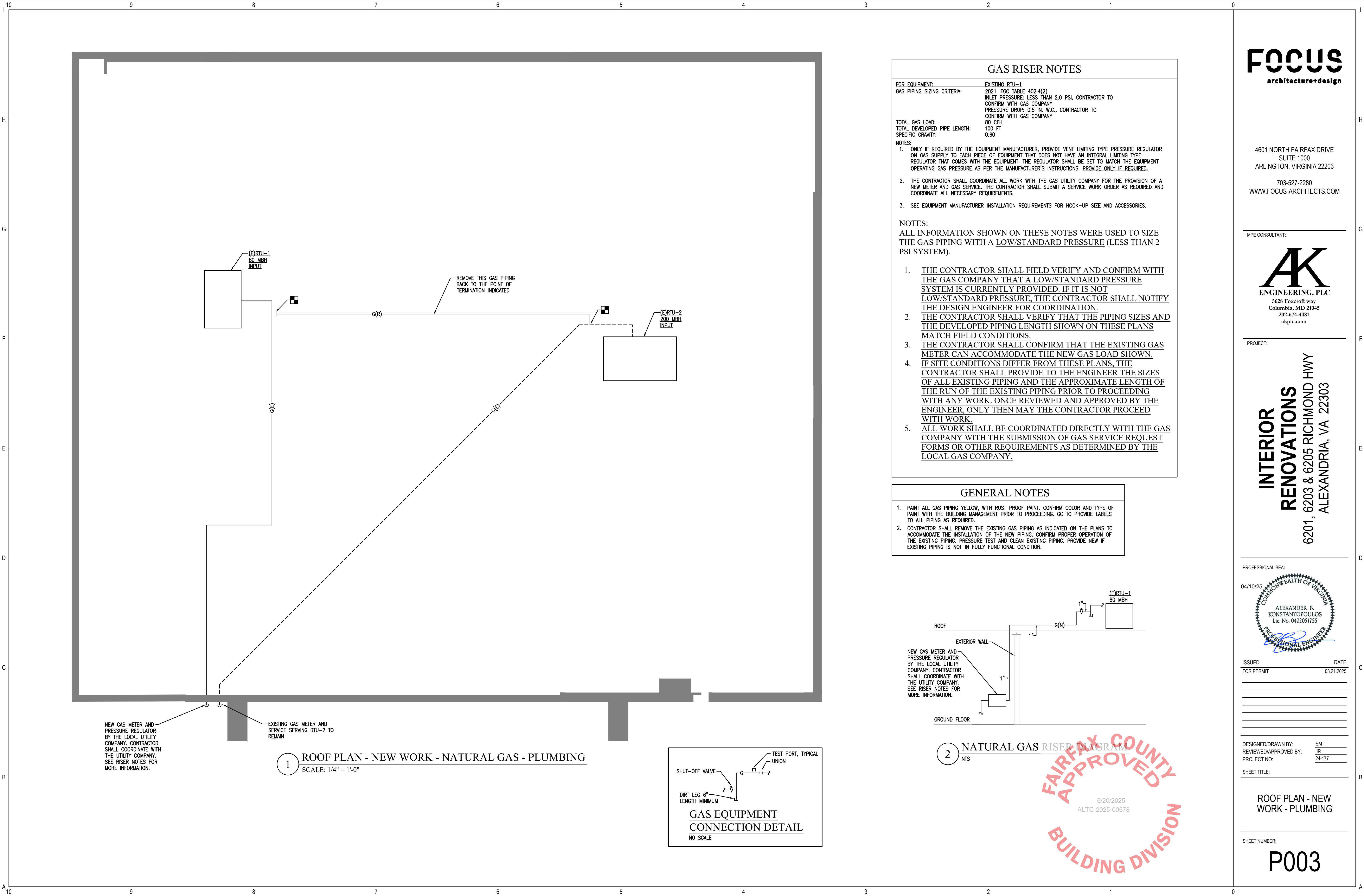
SHEET TITLE:

GENERAL NOTES,
SYMBOLS AND
ABBREVIATIONS -
PLUMBING

SHEET NUMBER:

P001

P002



GAS RISER NOTES

FOR EQUIPMENT: EXISTING RTU-1

GAS PIPING SIZING CRITERIA: 2021 IFGC TABLE 402.4(2)

TOTAL GAS LOAD: 80 CFH

TOTAL DEVELOPED PIPE LENGTH: 100 FT

SPECIFIC GRAVITY: 0.60

NOTES:

- ONLY IF REQUIRED BY THE EQUIPMENT MANUFACTURER, PROVIDE VENT LIMITING TYPE PRESSURE REGULATOR ON GAS SUPPLY TO EACH PIECE OF EQUIPMENT THAT DOES NOT HAVE AN INTEGRAL LIMITING TYPE REGULATOR THAT COMES WITH THE EQUIPMENT. THE REGULATOR SHALL BE SET TO MATCH THE EQUIPMENT OPERATING GAS PRESSURE AS PER THE MANUFACTURER'S INSTRUCTIONS. PROVIDE ONLY IF REQUIRED.
- THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE GAS UTILITY COMPANY FOR THE PROVISION OF A NEW METER AND GAS SERVICE. THE CONTRACTOR SHALL SUBMIT A SERVICE WORK ORDER AS REQUIRED AND COORDINATE ALL NECESSARY REQUIREMENTS.
- SEE EQUIPMENT MANUFACTURER INSTALLATION REQUIREMENTS FOR HOOK-UP SIZE AND ACCESSORIES.

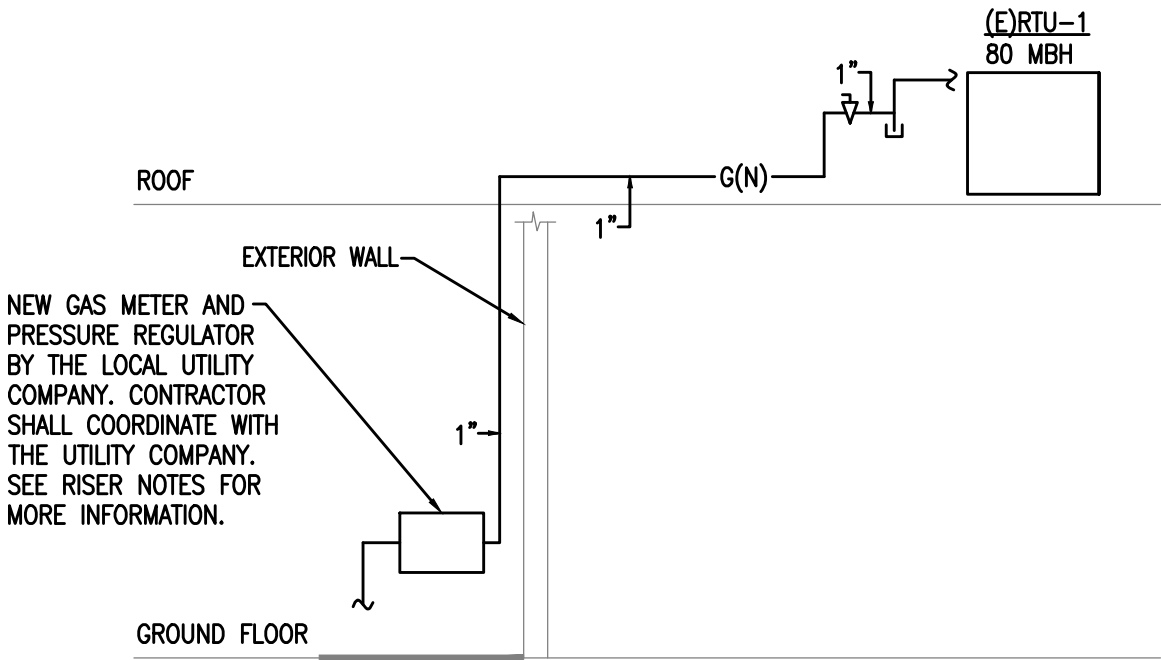
NOTES:

ALL INFORMATION SHOWN ON THESE NOTES WERE USED TO SIZE THE GAS PIPING WITH A LOW/STANDARD PRESSURE (LESS THAN 2 PSI SYSTEM).

- THE CONTRACTOR SHALL FIELD VERIFY AND CONFIRM WITH THE GAS COMPANY THAT A LOW/STANDARD PRESSURE SYSTEM IS CURRENTLY PROVIDED. IF IT IS NOT LOW/STANDARD PRESSURE, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER FOR COORDINATION.
- THE CONTRACTOR SHALL VERIFY THAT THE PIPING SIZES AND THE DEVELOPED PIPING LENGTH SHOWN ON THESE PLANS MATCH FIELD CONDITIONS.
- THE CONTRACTOR SHALL CONFIRM THAT THE EXISTING GAS METER CAN ACCOMMODATE THE NEW GAS LOAD SHOWN.
- IF SITE CONDITIONS DIFFER FROM THESE PLANS, THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE SIZES OF ALL EXISTING PIPING AND THE APPROXIMATE LENGTH OF THE RUN OF THE EXISTING PIPING PRIOR TO PROCEEDING WITH ANY WORK. ONCE REVIEWED AND APPROVED BY THE ENGINEER, ONLY THEN MAY THE CONTRACTOR PROCEED WITH WORK.
- ALL WORK SHALL BE COORDINATED DIRECTLY WITH THE GAS COMPANY WITH THE SUBMISSION OF GAS SERVICE REQUEST FORMS OR OTHER REQUIREMENTS AS DETERMINED BY THE LOCAL GAS COMPANY.

GENERAL NOTES

- PAINT ALL GAS PIPING YELLOW, WITH RUST PROOF PAINT. CONFIRM COLOR AND TYPE OF PAINT WITH THE BUILDING MANAGEMENT PRIOR TO PROCEEDING. GC TO PROVIDE LABELS TO ALL PIPING AS REQUIRED.
- CONTRACTOR SHALL REMOVE THE EXISTING GAS PIPING AS INDICATED ON THE PLANS TO ACCOMMODATE THE INSTALLATION OF THE NEW PIPING. CONFIRM PROPER OPERATION OF THE EXISTING PIPING. PRESSURE TEST AND CLEAN EXISTING PIPING. PROVIDE NEW IF EXISTING PIPING IS NOT IN FULLY FUNCTIONAL CONDITION.



2 NATURAL GAS RISER DIAGRAM
NTS



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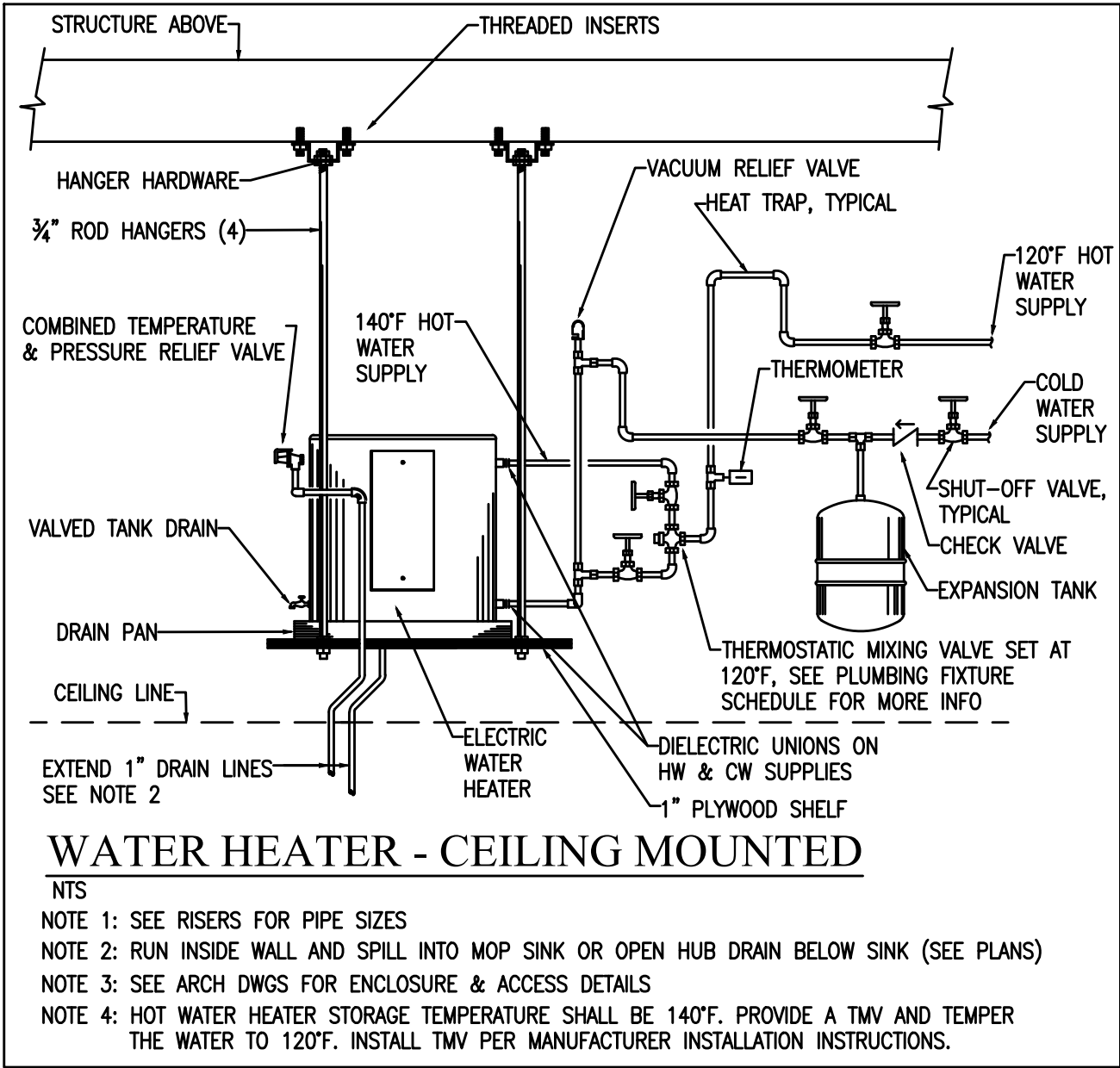
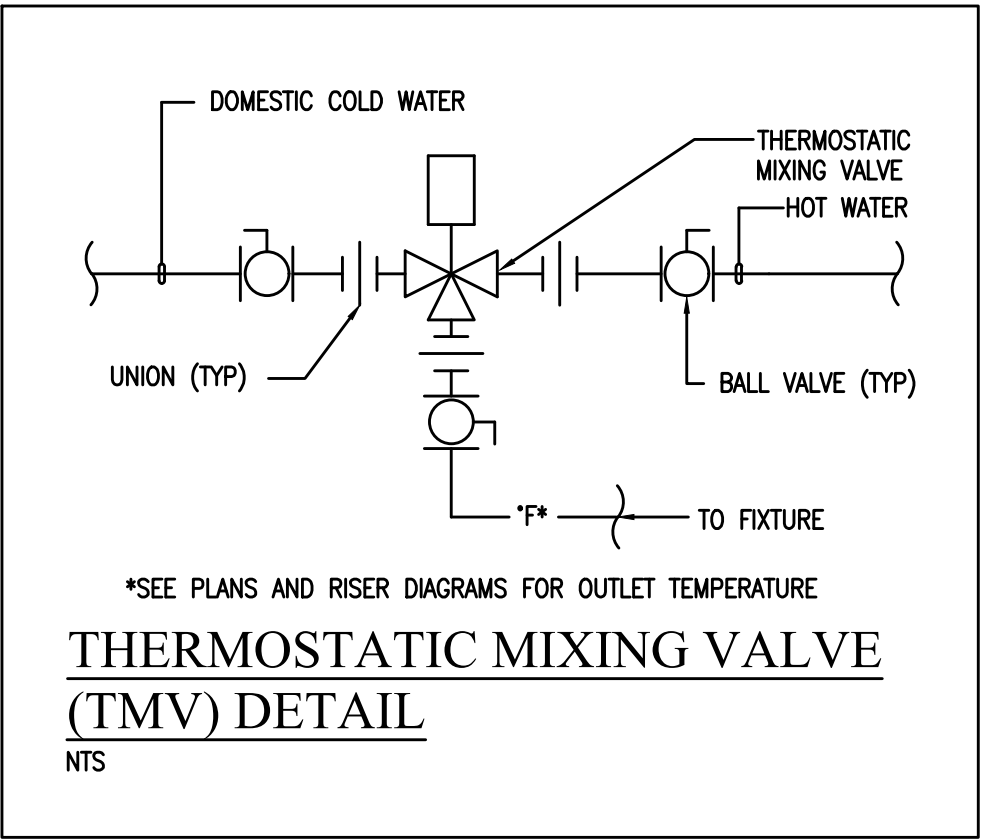
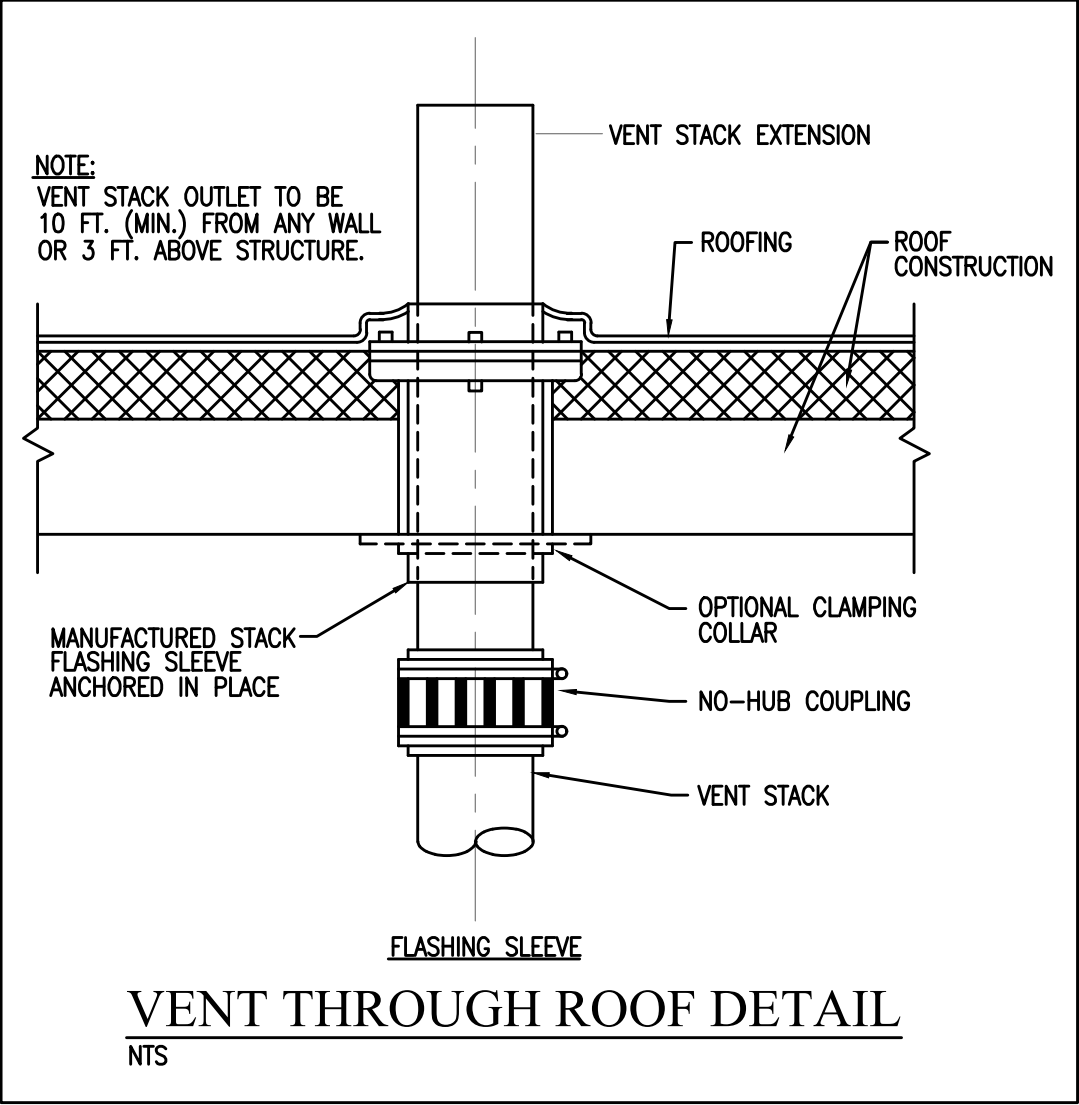
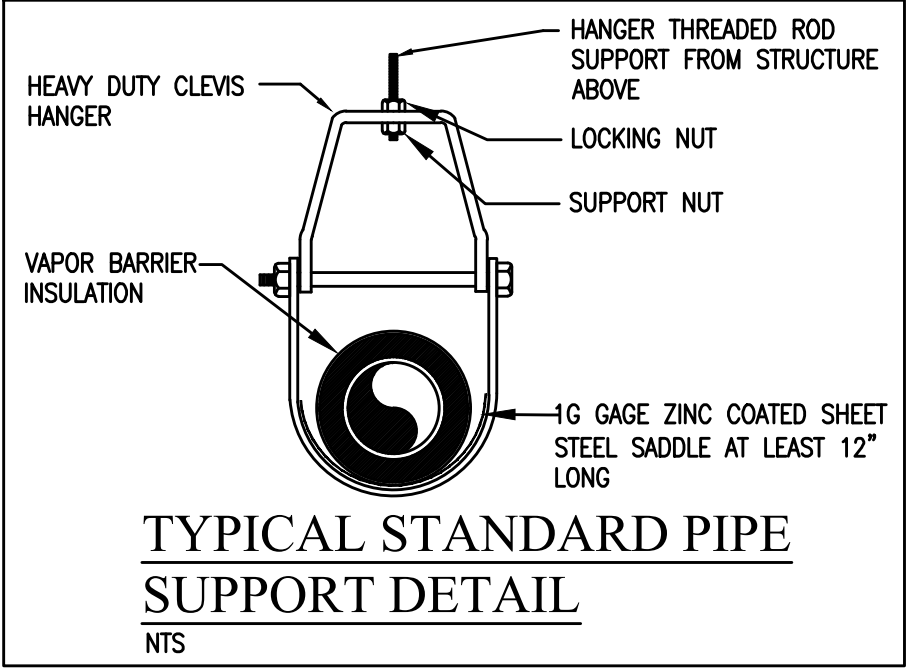
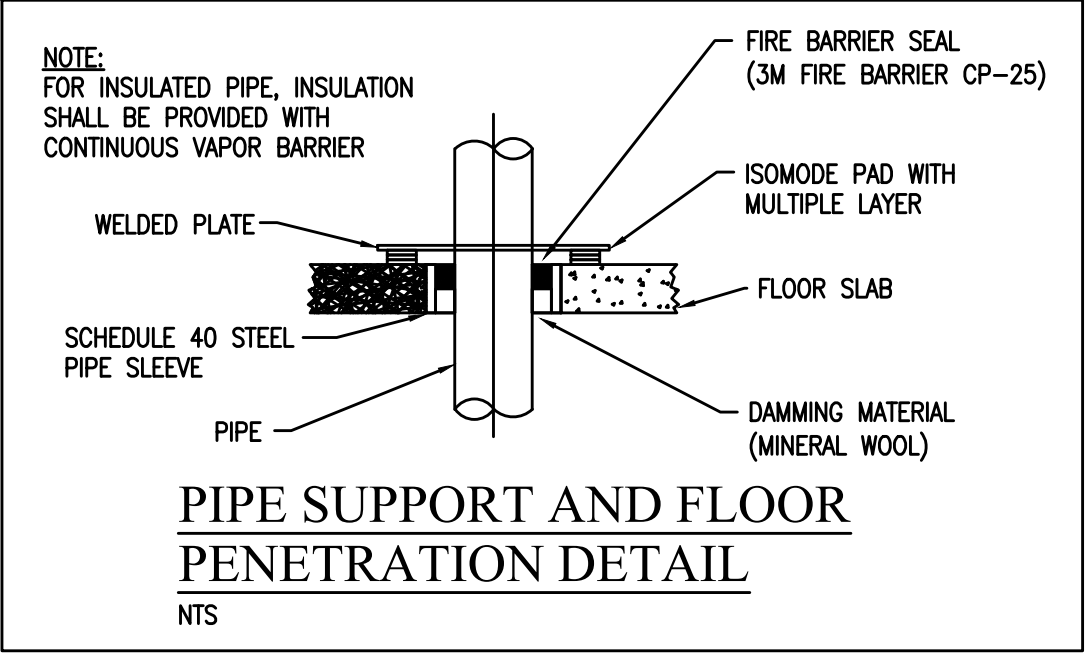
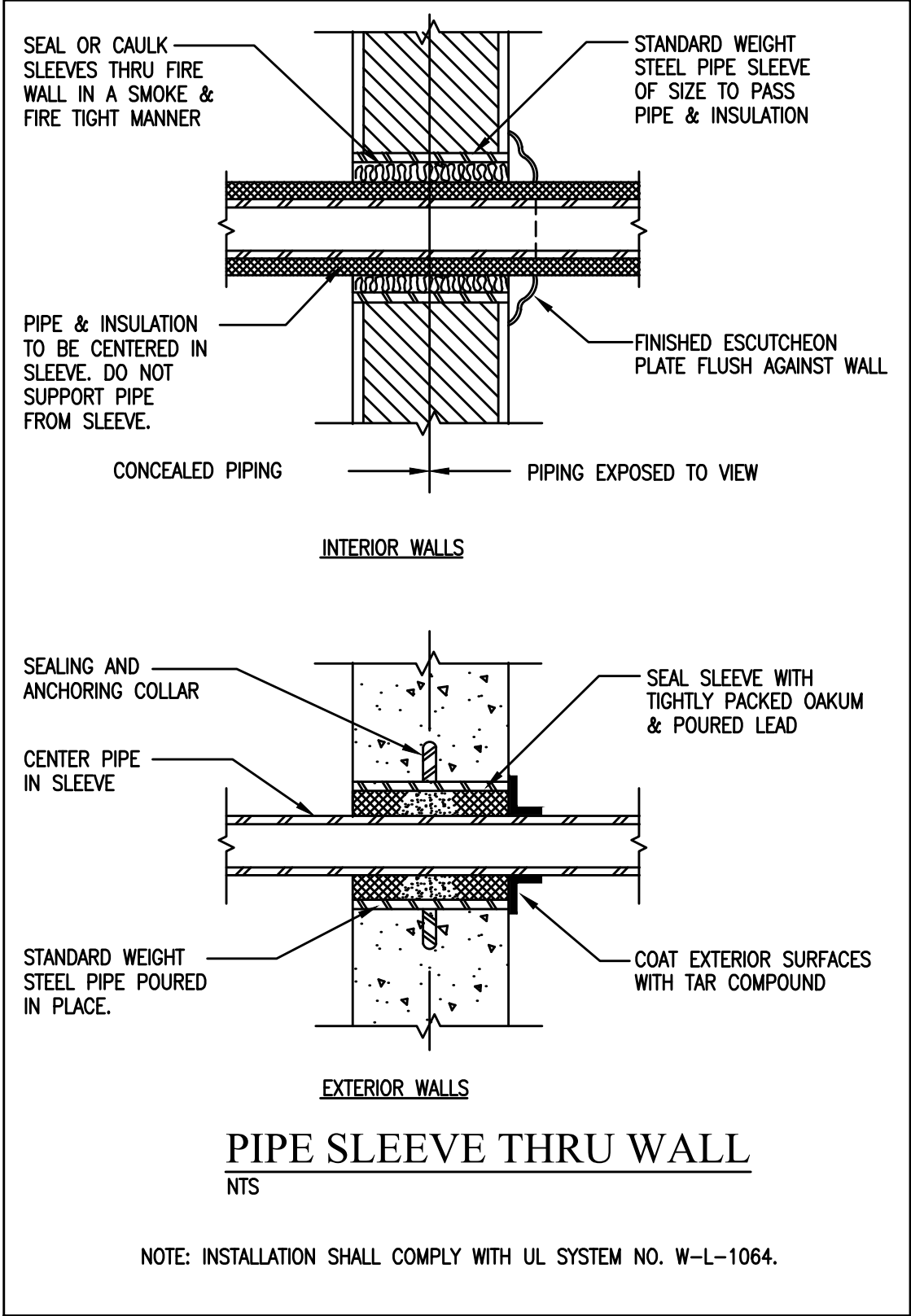
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REVIEWED/APPROVED BY: JR
PROJECT NO: 24-177
SHEET TITLE:

ROOF PLAN - NEW
WORK - PLUMBING

SHEET NUMBER:

P003



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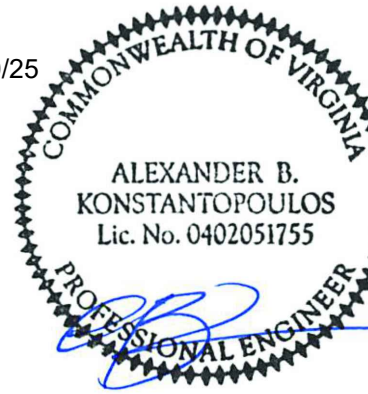
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DETAILS -
PLUMBING

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