

TRINITY METRO HEADQUARTERS

PROJECT NO.
R311653.01



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LEVELS 1, 4, & 5 - ISSUE FOR CONSTRUCTION
DECEMBER 28, 2020
TRINITY METRO RENOVATION
FORT WORTH, TEXAS 76102



TRINITY METRO®

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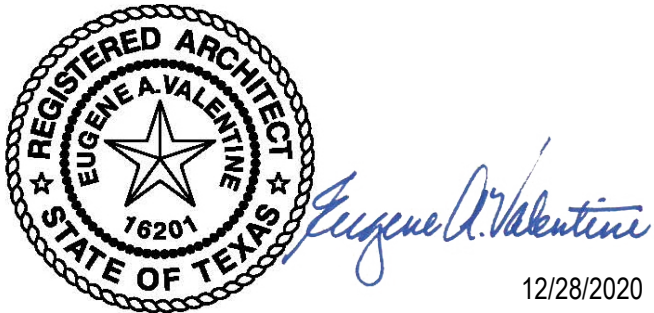
Eugene A. Valentine
12/28/2020

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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP	



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

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TRINITY METRO HEADQUARTERS SHEET LIST	
SHEET No.	G-002
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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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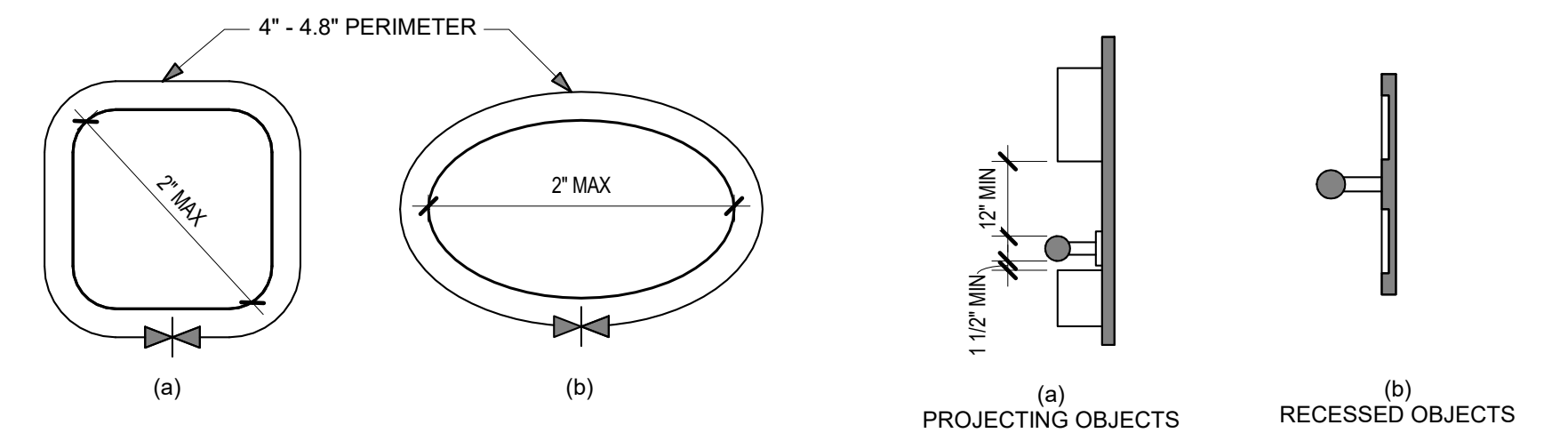


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TRINITY METRO HEADQUARTERS ACCESSIBILITY STANDARDS

SHEET No.	G-004	REV 0
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D



MOUNTING HEIGHTS - FIXTURES & ACCESSORIES

FIG. 609.2.2
GRAB BAR NON-CIRCULAR CROSS SECTION

FIG. 609.3
SPACING OF GRAB BARS

C

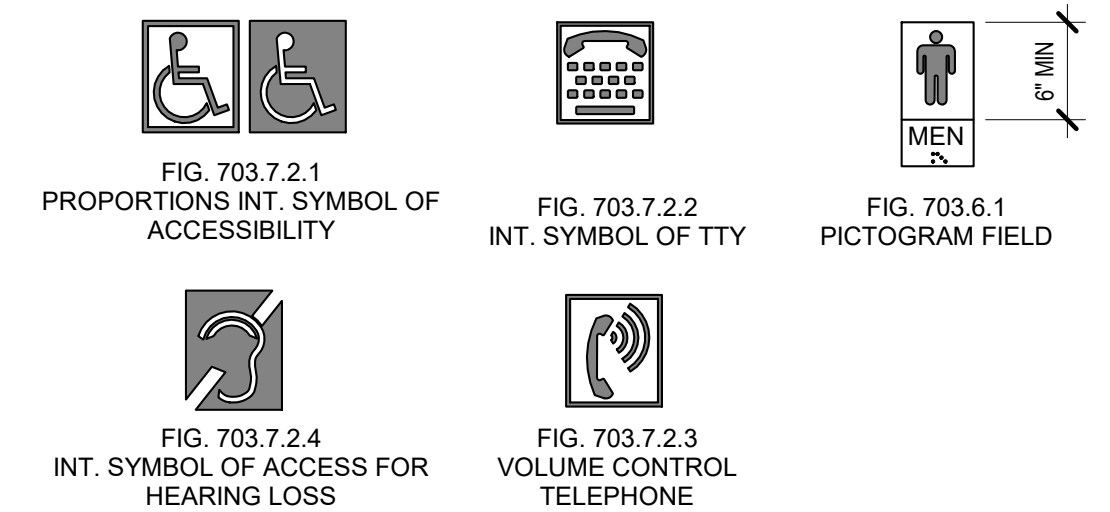


FIG. 703.7.2
INTERNATIONAL SYMBOLS

FIG. 703.4.2
LOCATION OF TACTILE SIGNS AT DOORS

B

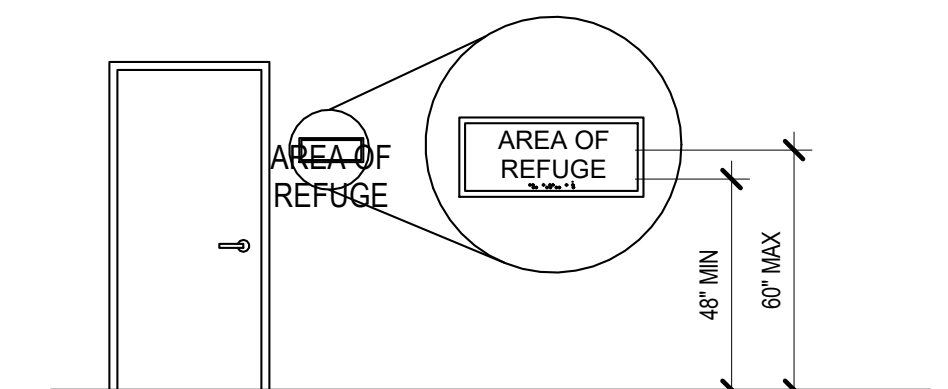


FIG. 703.4.1
HEIGHT OF TACTILE CHARACTERS ABOVE FINISH FLOOR OR GROUND

FIGURE 308.2.2 OBSTRUCTED HIGH FORWARD REACH

FIGURE 308.3.2
UNOBSTRUCTED HIGH SIDE
REACH

FORWARD OR SIDE REACH	AGES 3 AND 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
HIGH (MAXIMUM)	36 in. (915 mm)	40 in. (1015 mm)	44 in. (1120 mm)
LOW (MINIMUM)	20 in. (510 mm)	18 in. (455 mm)	16 in. (405 mm)

ADVISORY SPECIFICATIONS FOR WATER CLOSETS SERVING CHILDREN AGES 3 THROUGH 12

	AGES 3 & 4	AGES 5 THROUGH 8	AGES 9 THROUGH 12
WATER CLOSET CENTERLINE	12 IN. (305 MM.)	12 TO 15 IN. (305 TO 380 MM.)	15 TO 18 IN. (380 TO 455 MM.)
TOILET SEAT HEIGHT	11 TO 12 IN. (280 TO 305 MM)	12 TO 15 IN. (305 TO 380 MM.)	15 TO 17 IN. (380 TO 430 MM.)
GRAB BAR HEIGHT	18 TO 20 IN. (280 TO 305 MM.)	20 TO 25 IN. (510 TO 635 MM.)	25 TO 27 IN. (635 TO 685 MM.)
DISPENSER HEIGHT	14 IN. (355 MM.)	14 TO 17 IN. (355 TO 430 MM.)	17 TO 19 IN. (430 TO 485 MM.)

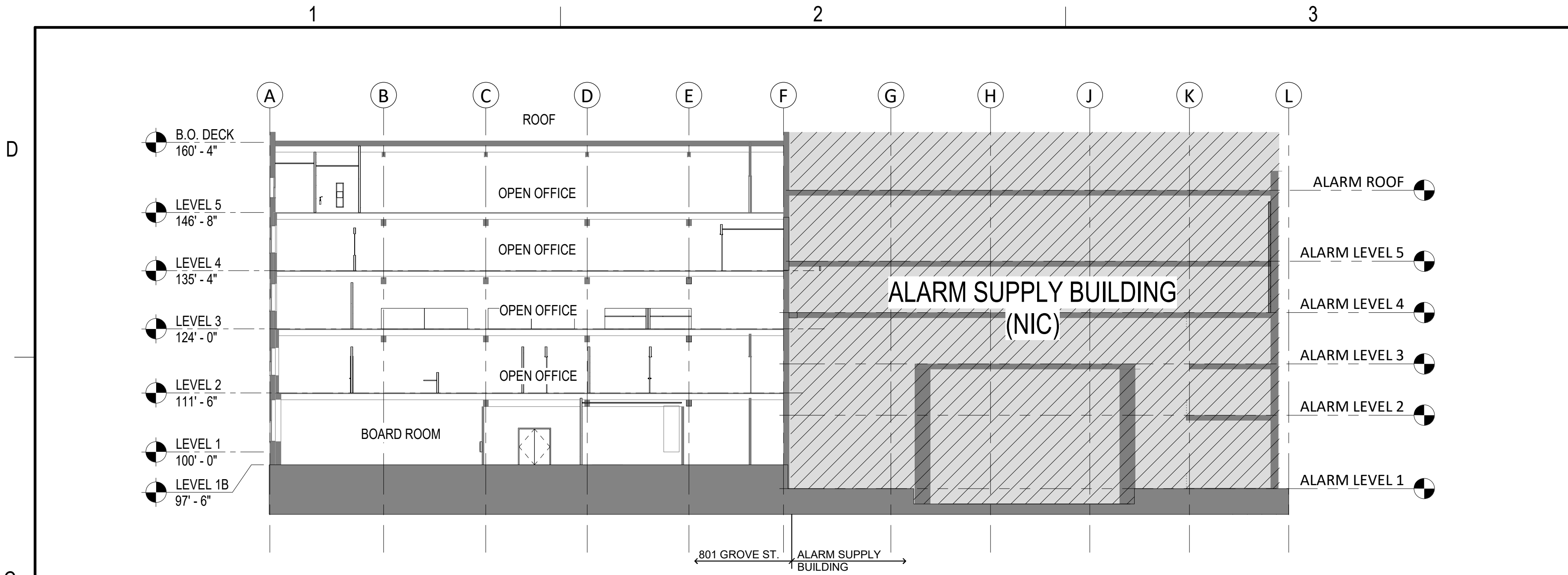
FIG. 604.8.2
AMBULATORY ACCESSIBLE
TOILET COMPARTMENT

FIG. 605.2
HEIGHT AND DEPTH OF URINALS

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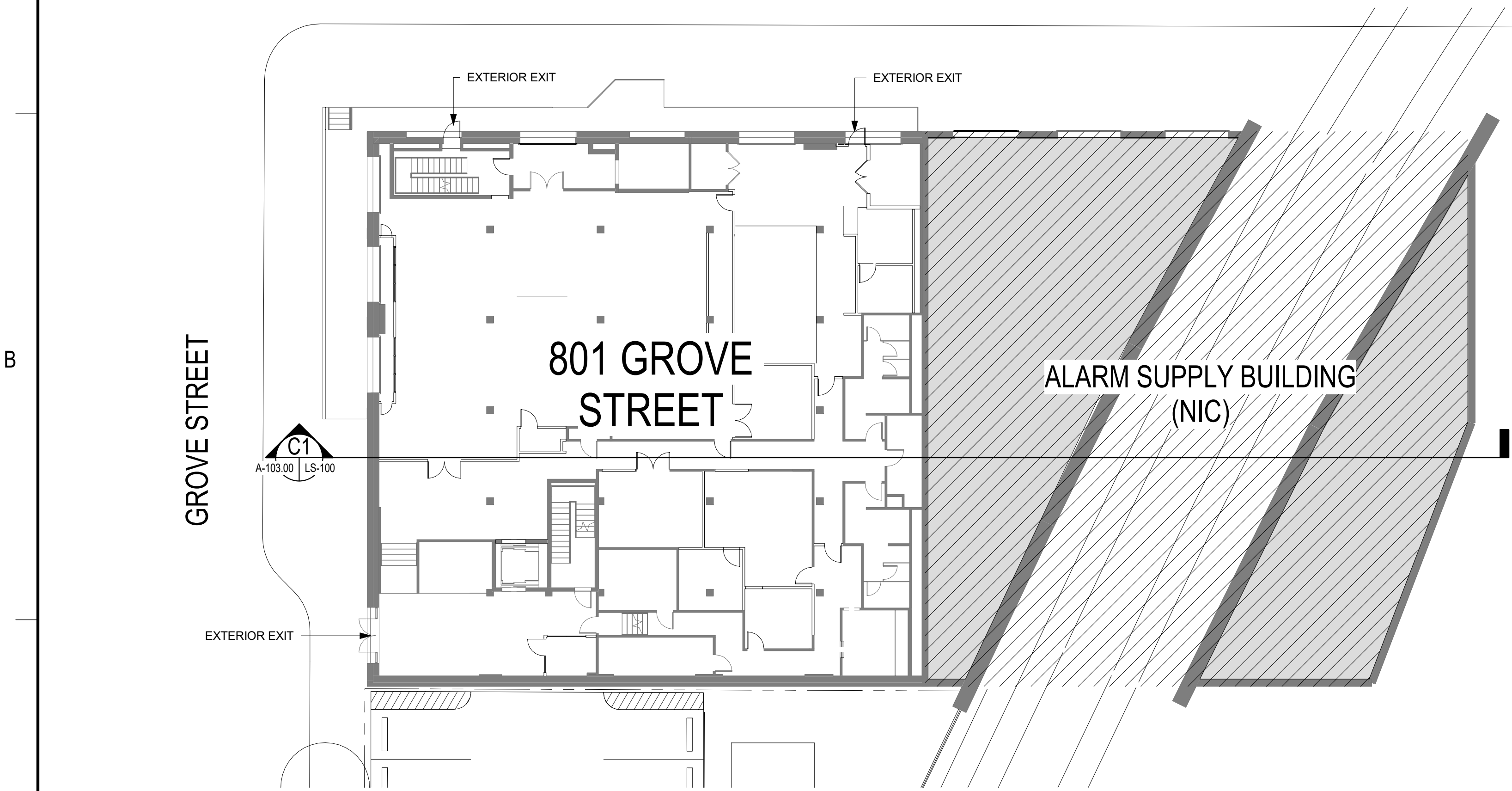
MUST MEET FTA BUY AMERICA REQUIREMENTS

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C1 LIFE SAFETY SECTION
1/16" = 1'-0"

7TH STREET



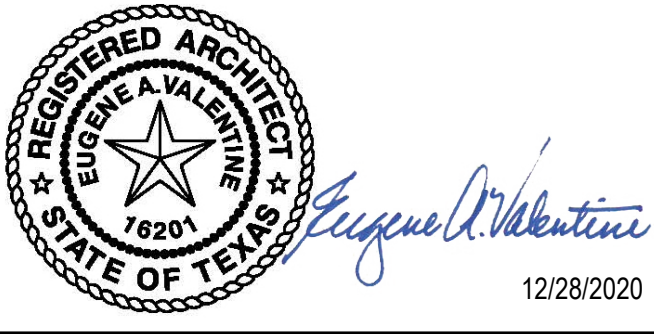
A1 EXTERIOR BUILDING EXITS
1/16" = 1'-0"

CODE ANALYSIS

PROJECT:	TRINITY METRO CORPORATE HEADQUARTERS
LOCATION:	801 GROVE STREET (GROVE BUILDING) 508 EAST 7TH STREET (ASB - ALARM SUPPLY BUILDING) FORT WORTH, TX 76133 PER CITY OF FORT WORTH FIRE, CONSIDERED ONE BUILDING
HISTORICAL SIGNIFICANCE:	801 GROVE STREET IS ON THE HISTORICAL REGISTER 508 EAST 7TH STREET IS NOT ON HISTORICAL REGISTER
APPLICABLE CODES:	2015 INTERNATIONAL FIRE CODE (IFC) 2015 INTERNATIONAL PLUMBING CODE (IPC) 2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2015 INTERNATIONAL EXISTING BUILDING CODE 2012 TEXAS ACCESSIBILITY STANDARD (TAS)
PROJECT SUMMARY DESCRIPTION	
OCCUPANCY GROUP (IBC SECTION 302):	B OFFICE
OCCUPANCY SEPARATION REQUIRED (B & A-3)	A-3 ASSEMBLY (1ST FLOOR BOARD ROOM) 1 HOUR SPRINKLERED
TYPE OF CONSTRUCTION (EXISTING) (IBC SECTION 601):	III-B III-B
CONSTRUCTION TYPE SEPARATION (SECTION 706):	NOT REQUIRED
FIRE SPRINKLERS REQUIRED (IBC SECTION 903.2.4):	YES
STANDPIPE SYSTEM REQUIRED (IBC SECTION 905.3.1):	YES
FIRE DEPARTMENT CONNECTION REQUIRED (IBC SECTION 912.1):	YES
FIRE RISER ROOM REQUIRED:	YES
ALLOWABLE HEIGHT IN STORIES (IBC SECTION 504.4):	4
ALLOWABLE HEIGHT IN FEET (IBC SECTION 504.3):	75'
PROPOSED NUMBER OF STORIES:	5
PROPOSED HEIGHT:	65'
EXISTING BUILDING ALTERATION LEVEL (IEBC SECTION 304):	LEVEL 3 (MORE THAN 50% OF BUILDING AREA)
ALLOWABLE AREA (IBC SECTION 506.2):	57,000 SF PER FLOOR
OPEN AREA INCREASE (IBC SECTION 506.3.3):	NOT NEEDED
PROPOSED BUILDING AREA:	801 GROVE (10,000 SF PER FLR)
TOTAL PROPOSED BUILDING AREA:	50,000 SF (THIS PROJECT)
OCCUPANT LOAD (INDUSTRIAL)(IBC SECTION 1004.1.2):	
1ST FLR GROVE	38 OCCUPANTS
OFFICE; 100 SF PER OCCUPANT (3737 SF)	246 OCCUPANTS
BOARD ROOM, CONF. ROOM A-3; 15 SF PER OCCUPANT (3678 SF)	2 OCCUPANTS
MECHANICAL, STORAGE; 300 SF PER OCCUPANT (595 SF)	0 OCCUPANTS
RESTROOMS, STAIRS, ELEVATOR; (1990 SF)	286 OCCUPANTS
TOTAL	
2ND FLR GROVE	79 OCCUPANTS
OFFICE; 100 SF PER OCCUPANT (7,890 SF)	1 OCCUPANTS
MECHANICAL, STORAGE; 300 SF PER OCCUPANT (120 SF)	0 OCCUPANTS
RESTROOMS, STAIRS, ELEVATOR; (1990 SF)	80 OCCUPANTS
TOTAL	
3RD FLR GROVE	85 OCCUPANTS
OFFICE; 100 SF PER OCCUPANT (8,430 SF)	1 OCCUPANTS
MECHANICAL, STORAGE; 300 SF PER OCCUPANT (120 SF)	0 OCCUPANTS
RESTROOMS, STAIRS, ELEVATOR; (1450 SF)	86 OCCUPANTS
TOTAL	
4TH FLR GROVE	74 OCCUPANTS
OFFICE; 100 SF PER OCCUPANT (7,360 SF)	3 OCCUPANTS
MECHANICAL, STORAGE; 300 SF PER OCCUPANT (650 SF)	0 OCCUPANTS
RESTROOMS, STAIRS, ELEVATOR; (1990 SF)	77 OCCUPANTS
TOTAL	
5TH FLR GROVE	76 OCCUPANTS
OFFICE; 100 SF PER OCCUPANT (7,540 SF)	2 OCCUPANTS
MECHANICAL, STORAGE; 300 SF PER OCCUPANT (470 SF)	0 OCCUPANTS
RESTROOMS, STAIRS, ELEVATOR; (1990 SF)	82 OCCUPANTS
TOTAL	
ALL FLOORS TOTAL:	611 OCCUPANTS
ACCESSORY OCCUPANCY ALLOWED (IBC SECTION 508.2.3):	10%
ACCESSORY OCCUPANCY PROVIDED: ASSEMBLY 4,560 SF / OFFICE 50,000 SF	9%
ACCESSORY OCCUPANCY SEPARATION REQUIRED (IBC SECTION 508.2.4):	NONE
NUMBER OF EXITS REQUIRED (IBC SECTION 1006.2.1):	2 EXITS PER FLOOR
MAXIMUM COMMON PATH OF TRAVEL (IBC SECTION 1006.2.1):	100' ON UPPER FLOORS, 75' ON 1ST FLOOR
MAXIMUM EXIT ACCESS TRAVEL DISTANCE (IBC SECTION 1017.2):	300' ON UPPER FLOORS, 250' ON 1ST FLOOR
EXIT WIDTH REQUIRED (IBC SECTION 1005.3.2) MAX ON UPPER FLOORS:	86 X .2 = 17.2" TOTAL
EXIT WIDTH PROVIDED:	(2) X 36" DOORS = 72"
PANIC HARDWARE (IBC SECTION 1010.1.10):	NOT REQUIRED
STAIRWAY WIDTH REQUIRED (IBC SECTION 1005.3.1 & 1011.2):	86 X .3 = 25.8" TOTAL
STAIRWAY WIDTH PROVIDED:	(2) X 44" CLEAR BETWEEN HANDRAILS
STAIRWAY LAYOUT (IBC SECTION 1011) 7" MAX RISE, 11" MIN. TREAD, 80" MIN. HEAD CLEARANCE, 12" MAX VERTICAL RISE, 36" WIDE LANDING, 42" GUARDRAIL, 36" HANDRAIL	
FIRE EXTINGUISHERS (IBC SECTION 906):	YES
VERTICAL OPENING FIRE RATING:	EXISTING: TO BE SMOKE TIGHT NEW STAIRS: 2 HOURS NEW SHAFTS < 4 STORIES: 1 HOUR
TOTAL BUILDING PLUMBING FIXTURES REQUIRED FOR 611 OCCUPANTS: (IBC SECTION 2902.1)	WATER CLOSETS (1:25 UP TO 50, THEN 1:50) = 12 LAVATORIES (1:40 UP TO 50, THEN 1:80) = 9 DRINKING FOUNTAIN (1:100) = 7 SERVICE SINK = 1
PLUMBING FIXTURES PROVIDED (IBC SECTION 2902.1):	W.C.'S = 7; LAV'S = 5; D.F. = 2; SERV. SINK = 1 W.C.'S = 6; LAV'S = 4; D.F. = 2; SERV. SINK = 1 W.C.'S = 4; LAV'S = 4; D.F. = 2; SERV. SINK = 0 W.C.'S = 4; LAV'S = 4; D.F. = 2; SERV. SINK = 1 W.C.'S = 7; LAV'S = 5; D.F. = 2; SERV. SINK = 1 W.C.'S = 28; LAV'S = 22; D.F. = 10; SERV. SINK = 5
TOTALS PROVIDED:	

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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI	TRINITY METRO HEADQUARTERS CODE ANALYSIS	
DESIGNED	CS		
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APPROVED	JMF		
DATE	12.28.2020	SHEET No. LS-100	REV 0

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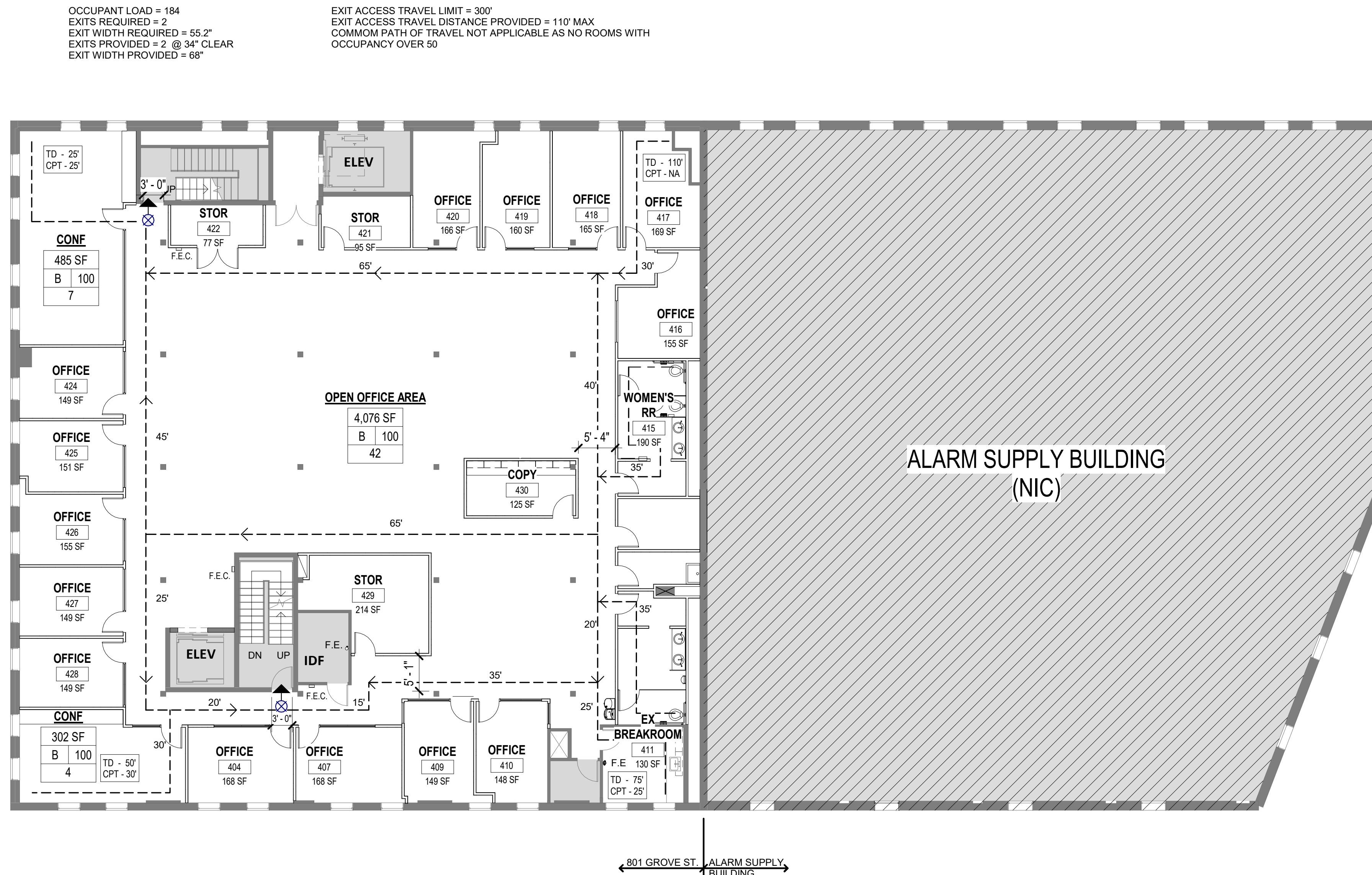
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GENERAL NOTES

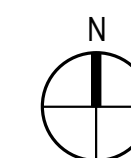
NOTE	DESCRIPTION
A.	ALL CONDUIT, PIPES, DUCTS, AND MISC PENETRATIONS THRU RATED WALLS, FLOOR, ROOF MUST BE PROTECTED WITH UL RATED THROUGH-PENETRATION FIRESTOPPING SYSTEMS.
B.	U.L. ASSEMBLIES INDICATED ON THE PARTITION TYPE DETAILS ESTABLISH A BASIS FOR PERFORMANCE. OTHER ASSEMBLIES MAY BE CONSIDERED AT THE DISCRETION OF THE ARCHITECT IF EQUIVALENT PERFORMANCE CRITERIA IS PROVIDED.
C.	SUBSTITUTION PROPOSALS SHALL INCLUDE CHANGES REQUIRED TO ALL COMPONENTS OF THE ASSEMBLY.
D.	WHERE RATED PARTITIONS ABUT EXTERIOR WALLS, FLOOR DECKS OR ROOF DECKS, JOINTS SHALL BE SEALED WITH UL RATED FIRE-RESISTIVE JOINT SYSTEMS.
E.	REFER TO PARTITION TYPE INFORMATION FOR WALL CONSTRUCTION AND RATED ASSEMBLY U.L. DESIGNS.
F.	IBC = INTERNATIONAL BUILDING CODE NFPA = NATIONAL FIRE PROTECTION ASSOCIATION
G.	PENETRATIONS OF FIRE-RATED PARTITIONS, WALLS OR FLOORS BY DATA AND COMMUNICATION WIRING OR CABLE SHALL BE MADE THROUGH MODULAR, RE-ENTERABLE FIRESTOPPING DEVICE(S) CONTAINING SELF-SEALING INTUMESCENT INSERTS PER SPECIFICATION.

LIFE SAFETY SYMBOL LEGEND

	LOCATION OF MAX. PATH OF TRAVEL
	LOCATION OF COMMON PATH OF TRAVEL
	NON-RATED
	NON-RATED SMOKE RESISTANT
	1 HR. FIRE RESISTANT
	FIRE EXTINGUISHER
	FIRE EXTINGUISHER AND CABINET
	EXIT SIGN



A1 LIFE SAFETY PLAN LEVEL 4 - 801 GROVE STREET
3/32" = 1'-0"



0' 8' 1'



SCALE 3/32" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
LIFE SAFETY PLAN LEVEL 4 - 801
GROVE STREET

SHEET No.	LS-104	REV 0
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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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	DESIGNED	CS
	CHECKED	GV
	APPROVED	JMF
	DATE	12.28.2020

GENERAL NOTES

NOTE	DESCRIPTION
A.	ALL CONDUIT, PIPES, DUCTS, AND MISC PENETRATIONS THRU RATED WALLS, FLOOR, ROOF MUST BE PROTECTED WITH UL RATED THROUGH-PENETRATION FIRESTOPPING SYSTEMS.
B.	U.L. ASSEMBLIES INDICATED ON THE PARTITION TYPE DETAILS ESTABLISH A BASIS FOR PERFORMANCE. OTHER ASSEMBLIES MAY BE CONSIDERED AT THE DISCRETION OF THE ARCHITECT IF EQUIVALENT PERFORMANCE CRITERIA IS PROVIDED.
C.	SUBSTITUTION PROPOSALS SHALL INCLUDE CHANGES REQUIRED TO ALL COMPONENTS OF THE ASSEMBLY.
D.	WHERE RATED PARTITIONS ABUT EXTERIOR WALLS, FLOOR DECKS OR ROOF DECKS, JOINTS SHALL BE SEALED WITH UL RATED FIRE-RESISTIVE JOINT SYSTEMS.
E.	REFER TO PARTITION TYPE INFORMATION FOR WALL CONSTRUCTION AND RATED ASSEMBLY U.L. DESIGNS.
F.	IBC = INTERNATIONAL BUILDING CODE NFPA = NATIONAL FIRE PROTECTION ASSOCIATION
G.	PENETRATIONS OF FIRE-RATED PARTITIONS, WALLS OR FLOORS BY DATA AND COMMUNICATION WIRING OR CABLE SHALL BE MADE THROUGH MODULAR, RE-ENTERABLE FIRESTOPPING DEVICE(S) CONTAINING SELF-SEALING INTUMESCENT INSERTS PER SPECIFICATION.

LIFE SAFETY SYMBOL LEGEND

ROOM NAME 2000 SF Oc LF # Oc	ROOM AREA OCCUPANCY TYPE OCCUPANT LOAD FACTOR OCCUPANT LOAD
TD - XX'XX" CPT - XX'XX"	EXIT ACCESS - MAXIMUM TRAVEL DISTANCE (APPROX.) EXIT ACCESS - MAXIMUM COMMON PATH OF TRAVEL (APPROX.)
	LOCATION OF MAX. PATH OF TRAVEL
	LOCATION OF COMMON PATH OF TRAVEL
	NON-RATED
	NON-RATED SMOKE RESISTANT
	1 HR. FIRE RESISTANT
	FIRE EXTINGUISHER
	FIRE EXTINGUISHER AND CABINET
	EXIT SIGN



A1 LIFE SAFETY PLAN LEVEL 5 - 801 GROVE STREET
3/32" = 1'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
LIFE SAFETY PLAN LEVEL 5 - 801
GROVE STREET

SHEET No.	LS-105
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REV	0
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REV	DATE	DESCRIPTION	BY	ENG	CHK APP



®	DRAWN	HZI
	DESIGNED	CS
	CHECKED	GV
	APPROVED	JMF
	DATE	12.28.2020



SITE INFORMATION	
LOCATION:	801 GROVE STREET 508 EAST 7TH STREET
HISTORICAL SIGNIFICANCE:	801 GROVE STREET IS ON HISTORICAL REGISTER 508 EAST 7TH STREET IS NOT ON HISTORICAL REGISTER
ZONING:	H
OVERLAY DISTRICT:	DOWNTOWN URBAN DESIGN DISTRICT
PROPOSED USE:	B (OFFICE BUILDING)
BUILDING AREAS THIS PROJECT:	
801 GROVE (10,000 SF PER FLR)	30,000 SF (1ST, 4TH, & 5TH FLR)
TOTAL BUILDING AREA:	50,000 SF
PARKING REQUIRED:	NO PARKING REQUIREMENT IN ZONING H
PARKING PROVIDED:	19 SPACES
ACCESSIBLE PARKING REQUIRED:	1 TOTAL, 1 VAN ACCESSIBLE
ACCESSIBLE PARKING PROVIDED:	1 TOTAL, 1 VAN ACCESSIBLE

TEXAS ACCESSIBILITY STANDARDS
CHAPTER 68 ADMINISTRATIVE RULES

68.104. Accessible Parking Spaces

(a) A paved accessible parking space must include:

(1) the International Symbol of Accessibility painted conspicuously on the surface in a color that contrasts the pavement;

(2) the words "NO PARKING" painted on any access aisle adjacent to the parking space. The words must be painted:

(A) in all capital letters;

(B) with a letter height of at least twelve inches, and a stroke width of at least two inches; and

(C) centered within each access aisle adjacent to the parking space; and

(3) a sign identifying the consequences of parking illegally in a paved accessible parking space. The sign must:

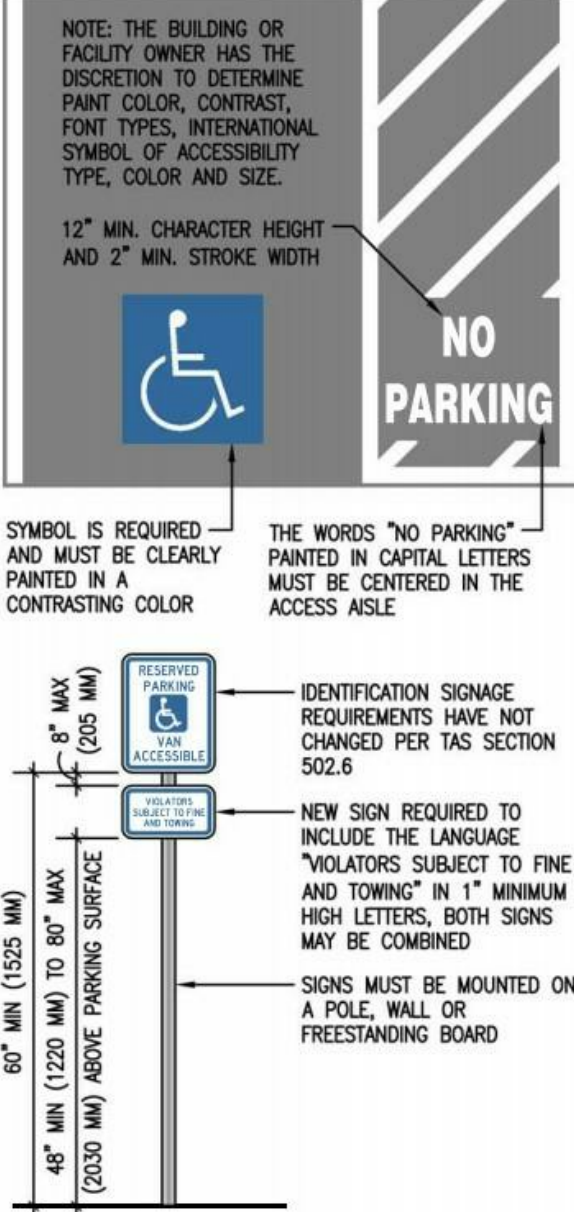
(A) at a minimum state "Violators Subject to Fine and Towing" in a letter height of at least one inch;

(B) be mounted on a pole, post, wall or freestanding board;

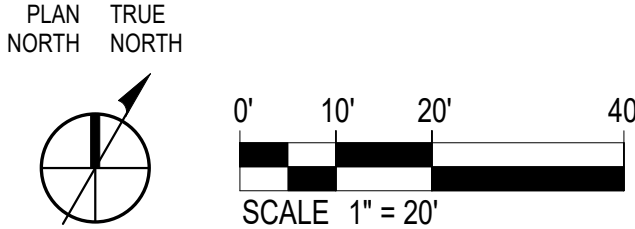
(C) be no more than eight inches below a sign required by Texas Accessibility Standards, 502.6; and

(D) be installed so that the bottom edge of the sign is no lower than 48 inches and no higher than 80 inches above ground level.

(b) A parking space identification sign that complies with Texas Accessibility Standards, 502.6, that includes the requirements in subsection (a)(3)(A) satisfies subsection (a)(3).



A3 SITE PLAN
1" = 20'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

Eugene A. Valentine

12/28/2020

KHK Group Ltd

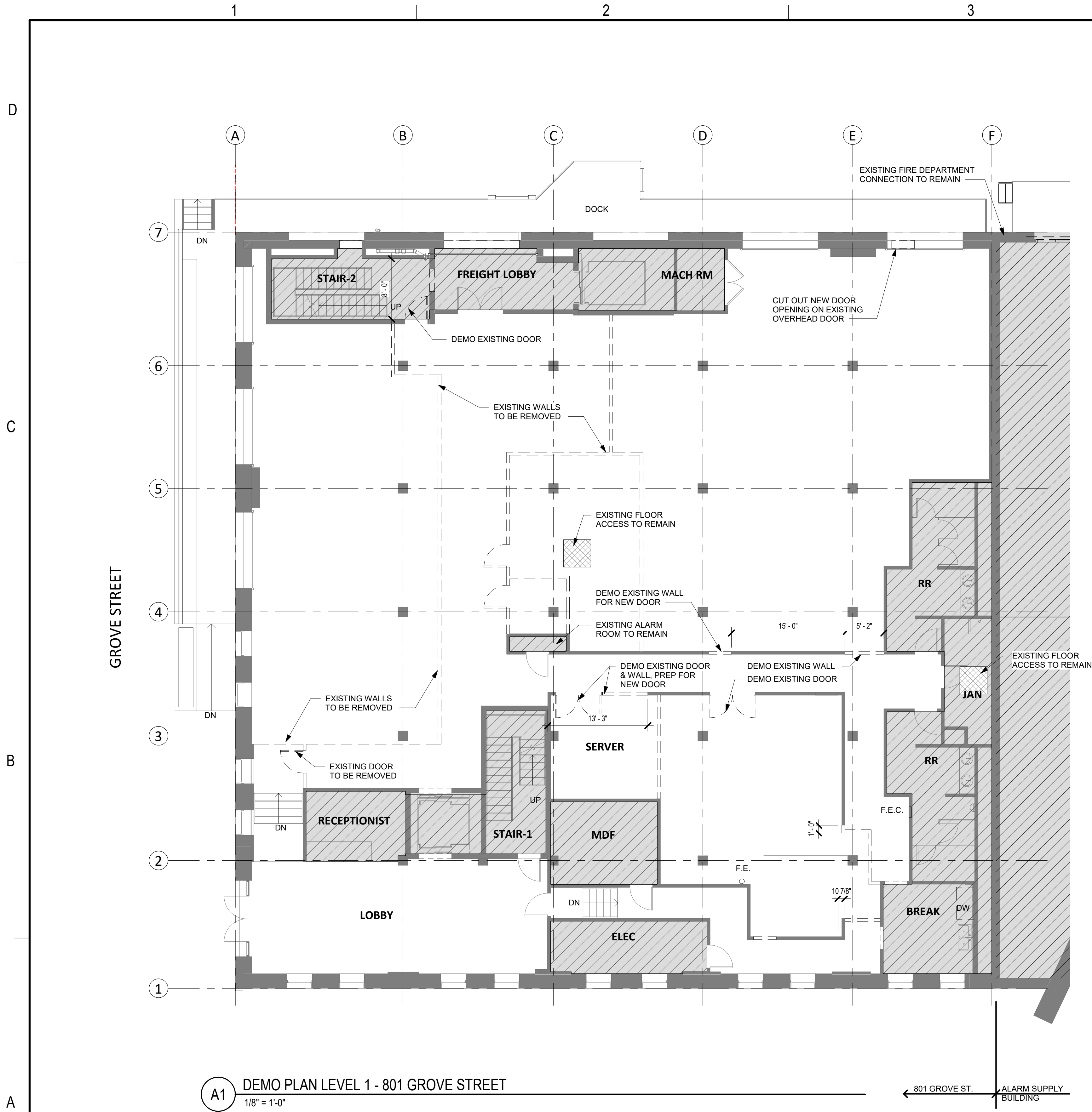
HUITT-ZOLLARS

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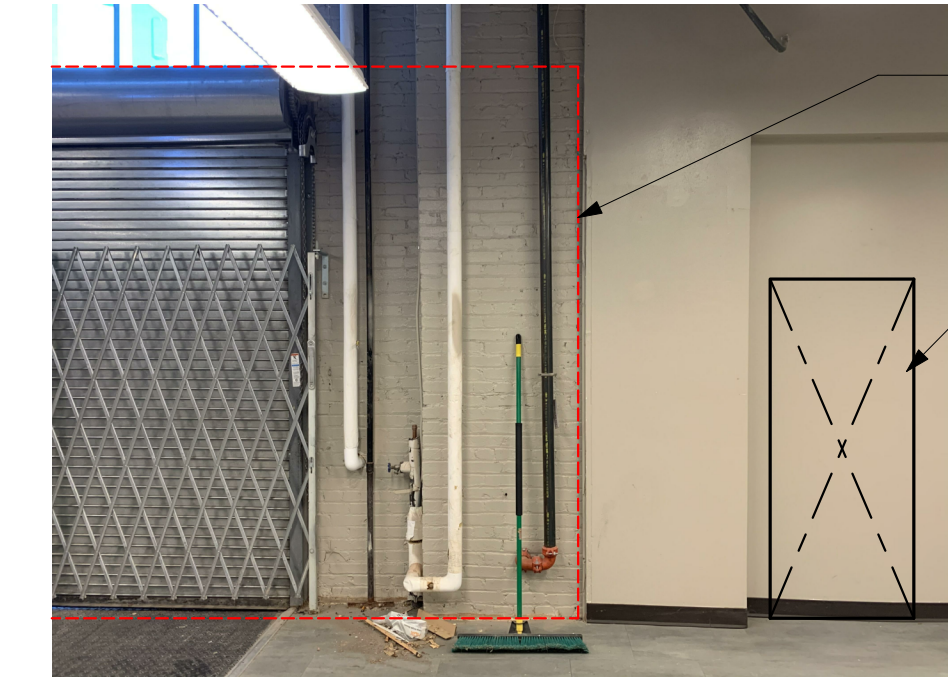
TRINITY METRO

DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS SITE PLAN	
SHEET No.	AS-101
REV	0



LEVEL FLOOR (TYPICAL AT OVERHEAD DOORS)



PREP FOR FURRING AROUND OH DOOR, LEAVING TRANSOM EXPOSED

DEMO AND PREP FOR NEW EXTERIOR DOOR AND FRAME

C4 OVERHEAD DOORS @ NORTH WALL NTS

GENERAL DEMOLITION NOTES	
NOTE	DESCRIPTION
A.	DRAWINGS SHOW THE GENERAL EXTENT OF DEMOLITION; HOWEVER IT IS IMPRACTICAL TO INDICATE EVERY ITEM. REMOVE ALL ITEMS NECESSARY TO ACHIEVE THE FINAL PRODUCT INDICATED ON THESE DRAWINGS.
B.	PATCH SURFACES ADJACENT TO DEMOLISHED ITEMS AND ANY EXISTING SURFACES DAMAGED DURING CONSTRUCTION.
C.	CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO AVOID DUST GENERATION DURING DEMOLITION.
D.	REMOVE ALL INTERIOR WALLS AND WINDOWS AS INDICATED.
E.	REMOVE ALL FLOORING AND WALL BASE. PREP FOR INSTALLATION OF NEW FLOOR FINISHES.
F.	REMOVE ALL ACOUSTICAL CEILING PANELS, AND CEILING GRID. PREP FOR INSTALLATION OF NEW CEILING.
G.	REMOVE ALL DOORS, FRAMES AND HARDWARE AS INDICATED.
H.	PROVIDE PERMANENT SUPPORT FOR EXISTING PIPING, CABLES, AND CONDUIT FROM STRUCTURE ABOVE AS REQUIRED BY CODE.
I.	REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DEMOLITION DRAWINGS FOR ADDITIONAL DEMOLITION OF EQUIPMENT, UTILITIES, AND SERVICES.
J.	REVIEW ALL FLOOR PLANS TO HAVE A FULL UNDERSTANDING OF THE DEMOLITION SCOPE. ELECTRICAL AND DATA OUTLETS TO BE REMOVED. COORDINATE REMOVAL OF THESE ITEMS SO THAT EXISTING CIRCUITS MAY BE REUSED WHEN POSSIBLE.
K.	EXISTING INTERIOR LIGHTING FIXTURES SHALL BE REMOVED. LIGHT FIXTURES SHALL BE SALVAGED FOR RE-USE.
L.	ASBESTOS MAY BE PRESENT. DEMOLITION, RENOVATION AND/OR MODIFICATIONS SHOULD PROCEED WITH CAUTION. CONTRACTOR TO COORDINATE ASBESTOS DETECTION/ ABATEMENT WITH OWNER.

801 GROVE STREET DEMOLITION GENERAL NOTES	
1.	DEMOLITION IS MINIMAL AT LEVELS 2, 3.
2.	LEVELS 1, 4, 5. a. RESTROOMS AND FINISHES WITHIN RESTROOM ARE TO REMAIN IF DEMOLITION AND NEW CONSTRUCTION PLANS MATCH. b. REMAINDER OF SPACE, TO RECEIVE ALL NEW FINISHES, DEMO EXISTING. c. REFERENCE MEP NARRATIVE FOR DEMOLITION SCOPE. d. REFERENCE STRUCTURAL NARRATIVE FOR DEMOLITION SCOPE.

DEMO PLAN LEGEND	
SYMBOL	DESCRIPTION
	EXISTING SPACE TO REMAIN, NOT INCLUDED IN WORK SCOPE
	EXISTING WALL TO REMAIN
	EXISTING DOOR TO REMAIN, REFER DOOR SCHEDULE
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO BE REMOVED

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

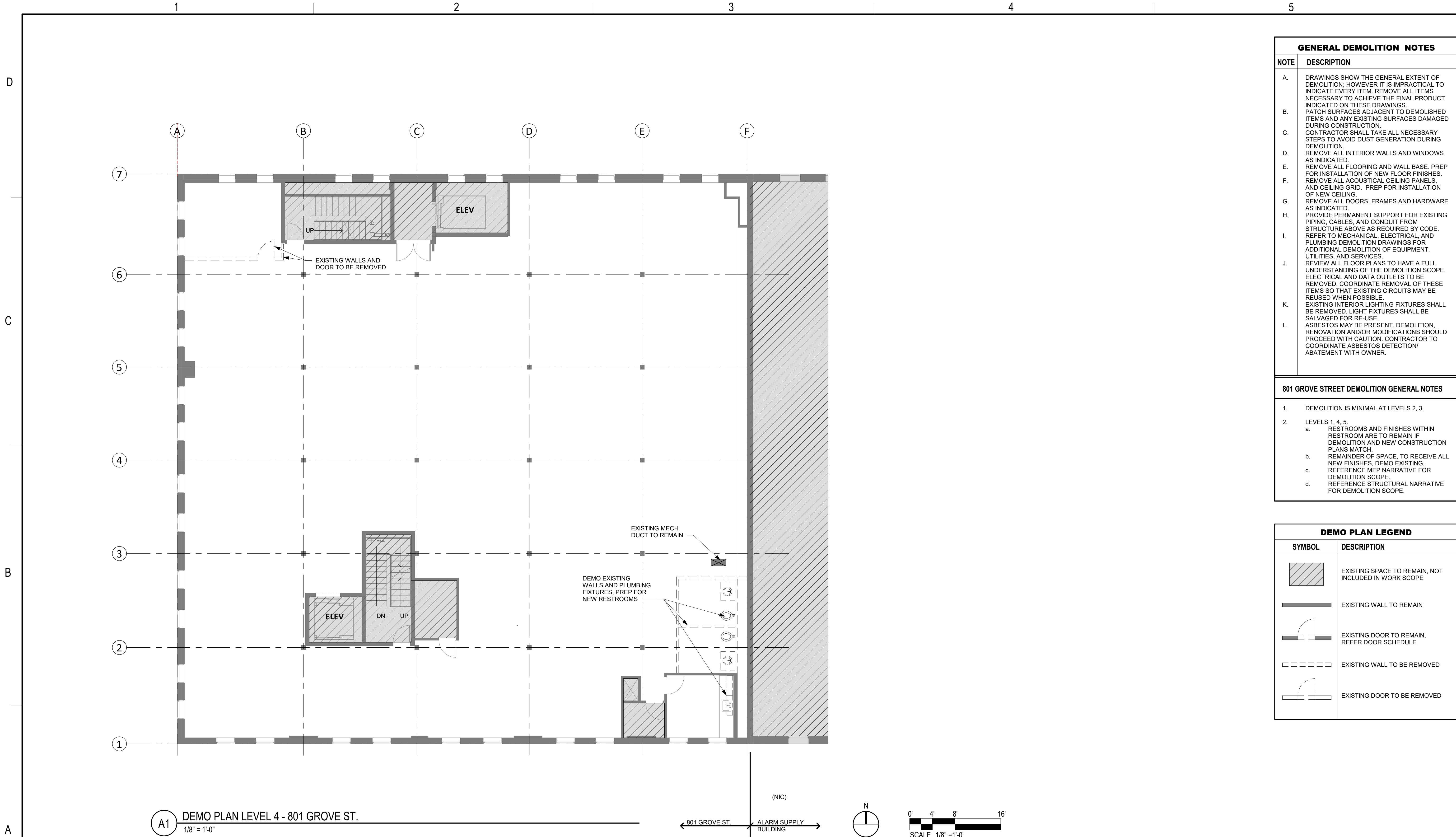
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TRINITY **METRO**

DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS DEMO PLAN LEVEL 1 - 801 GROVE STREET	
SHEET No.	AD-101
REV	0



GENERAL DEMOLITION NOTES	
NOTE	DESCRIPTION
A.	DRAWINGS SHOW THE GENERAL EXTENT OF DEMOLITION; HOWEVER IT IS IMPRACTICAL TO INDICATE EVERY ITEM. REMOVE ALL ITEMS NECESSARY TO ACHIEVE THE FINAL PRODUCT INDICATED ON THESE DRAWINGS.
B.	PATCH SURFACES ADJACENT TO DEMOLISHED ITEMS AND ANY EXISTING SURFACES DAMAGED DURING CONSTRUCTION.
C.	CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO AVOID DUST GENERATION DURING DEMOLITION.
D.	REMOVE ALL INTERIOR WALLS AND WINDOWS AS INDICATED.
E.	REMOVE ALL FLOORING AND WALL BASE. PREP FOR INSTALLATION OF NEW FLOOR FINISHES.
F.	REMOVE ALL ACOUSTICAL CEILING PANELS, AND CEILING GRID. PREP FOR INSTALLATION OF NEW CEILING.
G.	REMOVE ALL DOORS, FRAMES AND HARDWARE AS INDICATED.
H.	PROVIDE PERMANENT SUPPORT FOR EXISTING PIPING, CABLES, AND CONDUIT FROM STRUCTURE ABOVE AS REQUIRED BY CODE.
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J.	REVIEW ALL FLOOR PLANS TO HAVE A FULL UNDERSTANDING OF THE DEMOLITION SCOPE. ELECTRICAL AND DATA OUTLETS TO BE REMOVED. COORDINATE REMOVAL OF THESE ITEMS SO THAT EXISTING CIRCUITS MAY BE REUSED WHEN POSSIBLE.
K.	EXISTING INTERIOR LIGHTING FIXTURES SHALL BE REMOVED. LIGHT FIXTURES SHALL BE SALVAGED FOR RE-USE.
L.	ASBESTOS MAY BE PRESENT. DEMOLITION, RENOVATION AND/OR MODIFICATIONS SHOULD PROCEED WITH CAUTION. CONTRACTOR TO COORDINATE ASBESTOS DETECTION/ ABATEMENT WITH OWNER.

801 GROVE STREET DEMOLITION GENERAL NOTES	
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2.	LEVELS 1, 4, 5. a. RESTROOMS AND FINISHES WITHIN RESTROOM ARE TO REMAIN IF DEMOLITION AND NEW CONSTRUCTION PLANS MATCH. b. REMAINDER OF SPACE, TO RECEIVE ALL NEW FINISHES, DEMO EXISTING. REFERENCE MEP NARRATIVE FOR DEMOLITION SCOPE. c. REFERENCE MEP NARRATIVE FOR DEMOLITION SCOPE. d. REFERENCE STRUCTURAL NARRATIVE FOR DEMOLITION SCOPE.

DEMO PLAN LEGEND	
SYMBOL	DESCRIPTION
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	EXISTING WALL TO REMAIN
	EXISTING DOOR TO REMAIN, REFER DOOR SCHEDULE
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO BE REMOVED

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



Eugene A. Valentine
12/28/2020



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DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS DEMO PLAN LEVEL 4 - 801 GROVE STREET	
SHEET No.	AD-104
REV	0

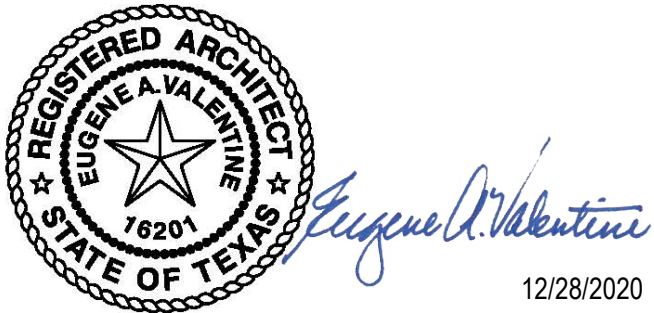


GENERAL DEMOLITION NOTES	
NOTE	DESCRIPTION
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801 GROVE STREET DEMOLITION GENERAL NOTES	
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2.	LEVELS 1, 4, 5.
a.	RESTROOMS AND FINISHES WITHIN RESTROOM ARE TO REMAIN IF DEMOLITION AND NEW CONSTRUCTION PLANS MATCH.
b.	REMAINDER OF SPACE, TO RECEIVE ALL NEW FINISHES, DEMO EXISTING. REFERENCE MEP NARRATIVE FOR DEMOLITION SCOPE.
c.	REFERENCE STRUCTURAL NARRATIVE FOR DEMOLITION SCOPE.
d.	REFERENCE STRUCTURAL NARRATIVE FOR DEMOLITION SCOPE.

DEMO PLAN LEGEND	
SYMBOL	DESCRIPTION
	EXISTING SPACE TO REMAIN, NOT INCLUDED IN WORK SCOPE
	EXISTING WALL TO REMAIN
	EXISTING DOOR TO REMAIN, REFER DOOR SCHEDULE
	EXISTING WALL TO BE REMOVED
	EXISTING DOOR TO BE REMOVED

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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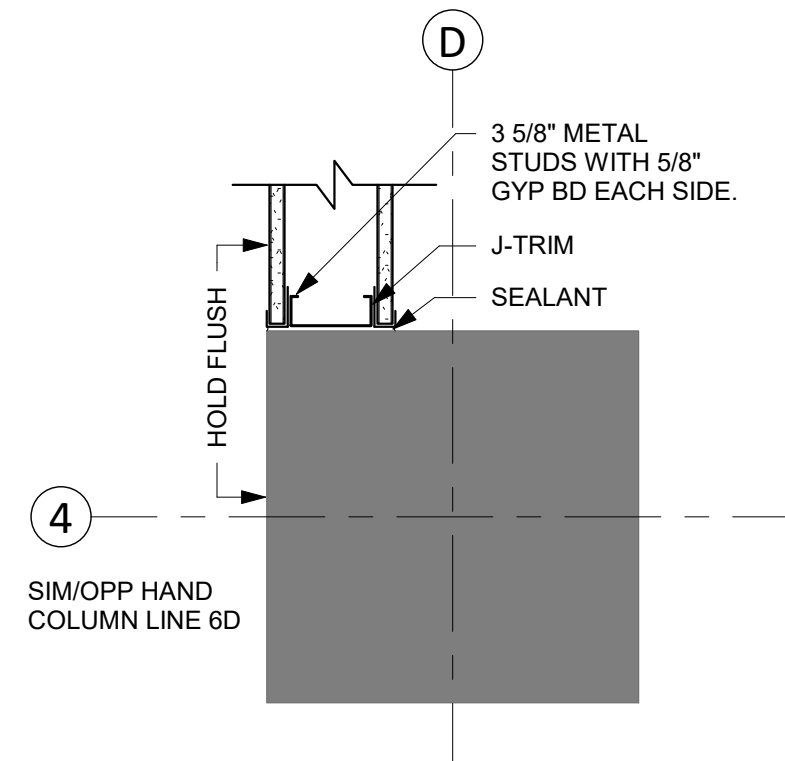
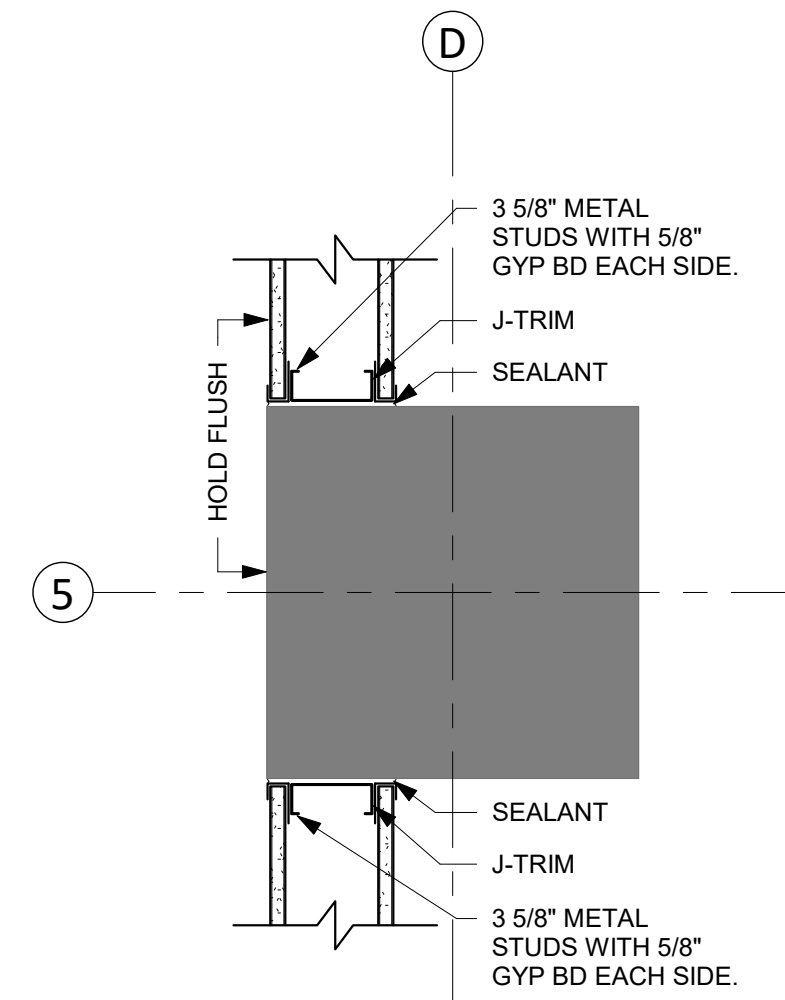
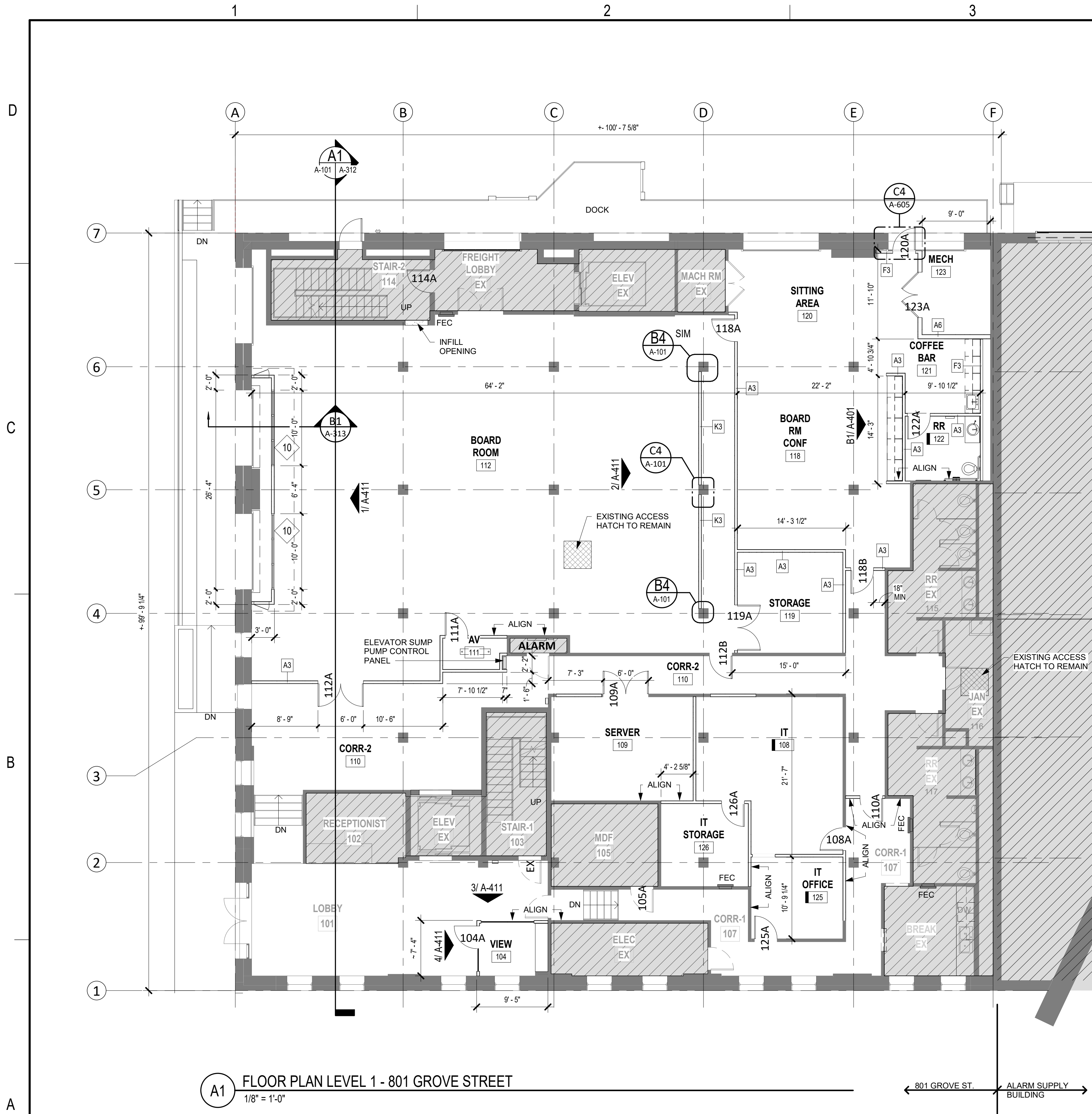


DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
DEMO PLAN LEVEL 5 - 801 GROVE STREET

SHEET No.	AD-105	REV 0
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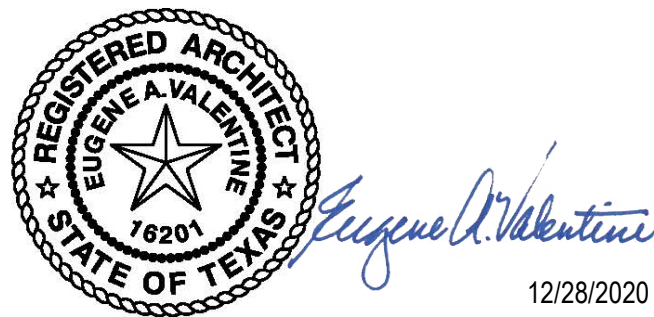
GENERAL FLOOR PLAN NOTES	
NOTE	DESCRIPTION
A.	ALL DIMENSIONS ARE GIVEN TO: A. FACE OF CONCRETE OR MASONRY. B. CENTER LINE OF COLUMNS WHERE INDICATED. C. FACE OF FINISH. D. CONCRETE FLOOR LINE.
B.	REFER TO LIFE SAFETY PLAN FOR LOCATION OF FIRE EXTINGUISHER CABINETS (FEC).
C.	ALL DRYWALL PARTITIONS THAT DO NOT EXTEND TO DECK SHALL BE BRACED TO STRUCTURE AT 4'-0" O.C. REFER TO A-601
D.	REFER TO SHEET G-003 FOR GENERAL NOTES AND ABBREVIATIONS
E.	ALL NEW PARTITIONS ARE "K3" PARTITION TYPE. U.N.O. REFER TO SHEETS A-601 AND A-602 FOR PARTITION. ROOM TAG DESIGNATES WALLS REQUIRED TO HAVE SOUND BATT INSULATION.
F.	ALL INTERIOR WALLS ARE DIMENSIONED TO FACE OF GWB U.N.O.
G.	FURNISHINGS SHOWN FOR INFORMATION ONLY. NOT INDISEIGN BUILD SCOPE OF WORK.
H.	WHERE WALLS OR OTHER ELEMENTS ARE REMOVED, PATCH, REPAIR, PREP, AND FINISH WALL TO MATCH ADJACENT WALL SURFACES. TYPICAL REPAIR, PATCH AND PREP EXISTING FLOOR AS REQUIRED TO INSTALL NEW FLOOR FINISHES. REF A-603 ROOM FINISH SCHEDULE.
I.	OFFSET STUD TRACKS AS REQUIRED TO ALIGN FACES OF GYP BOARD WHEN DIFFERENT PARTITIONS ARE ADJACENT TO EACH OTHER. TYPICAL
J.	PROVIDE CONTROL JOINTS BETWEEN INTERIOR AND EXTERIOR WALLS. TYPICAL
K.	PROVIDE BLOCKING FOR WALL AND CEILING-MOUNTED CONSTRUCTION. TYPICAL
L.	PROVIDE NEW WALLS AS INDICATED, REF A-601 FOR PARTITION TYPES.
N.	REFER TO A-XXX FOR TYPICAL PENETRATION DETAILS.
O.	REFER TO A-XXX FOR SIGNAGE DETAILS.
P.	PROVIDE CONTROL JOINTS AT DOOR OPENINGS, REFER TO DETAIL A4/A-605.
Q.	ALL CEILINGS ARE AT 8'-0" A.F.F. U.N.O.
R.	ALL GYP. BD. FURR DOWNS AT MILLWORK ARE AT 7'-2" A.F.F. U.N.O.
S.	NO ACOUSTICAL CEILING TILE PANELS LESS THAN 6" IN WIDTH. REVIEW ALL POTENTIAL CONDITIONS PRIOR TO GRID INSTALLATION.
T.	COORDINATE WITH SUBCONTRACTORS REGARDING SECURITY, FIRE SPRINKLERS, LIGHTING, AND MECHANICAL PRIOR TO INSTALLATION OF GRID.
U.	REFER TO SHEET A-603 FOR ALL CEILING FINISHES.

FLOOR PLAN LEGEND	
SYMBOL	DESCRIPTION
	EXISTING SPACE TO REMAIN, NOT INCLUDED IN SCOPE OF WORK
	EXISTING WALL TO REMAIN
	EXISTING DOOR TO REMAIN, REFER DOOR SCHEDULE
	NEW WALL, REFER PARTITION TYPES
	NEW DOOR, REFER DOOR SCHEDULE

#	NOTES BY SYMBOL - LEVEL 1
NOTE	DESCRIPTION
1.	EXISTING FLOOR ACCESS TO REMAIN.
2.	REMODEL EXISTING DOOR FOR SMOKE-TIGHT CONSTRUCTION.
3.	NEW DOOR CUT INTO EXISTING OVERHEAD DOOR, REFER DOOR SCHEDULE.
4.	INSTALL NEW STOREFRONT AT OVERHEAD DOOR.
5.	INFILL EXISTING OPENING IN WALL.
6.	INSTALL NEW DOORS., REFER DOOR SCHEDULE.
7.	EXISTING FIRE DEPARTMENT CONNECTION TO REMAIN.
8.	EXISTING FIRE ALARM PULL TO REMAIN.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

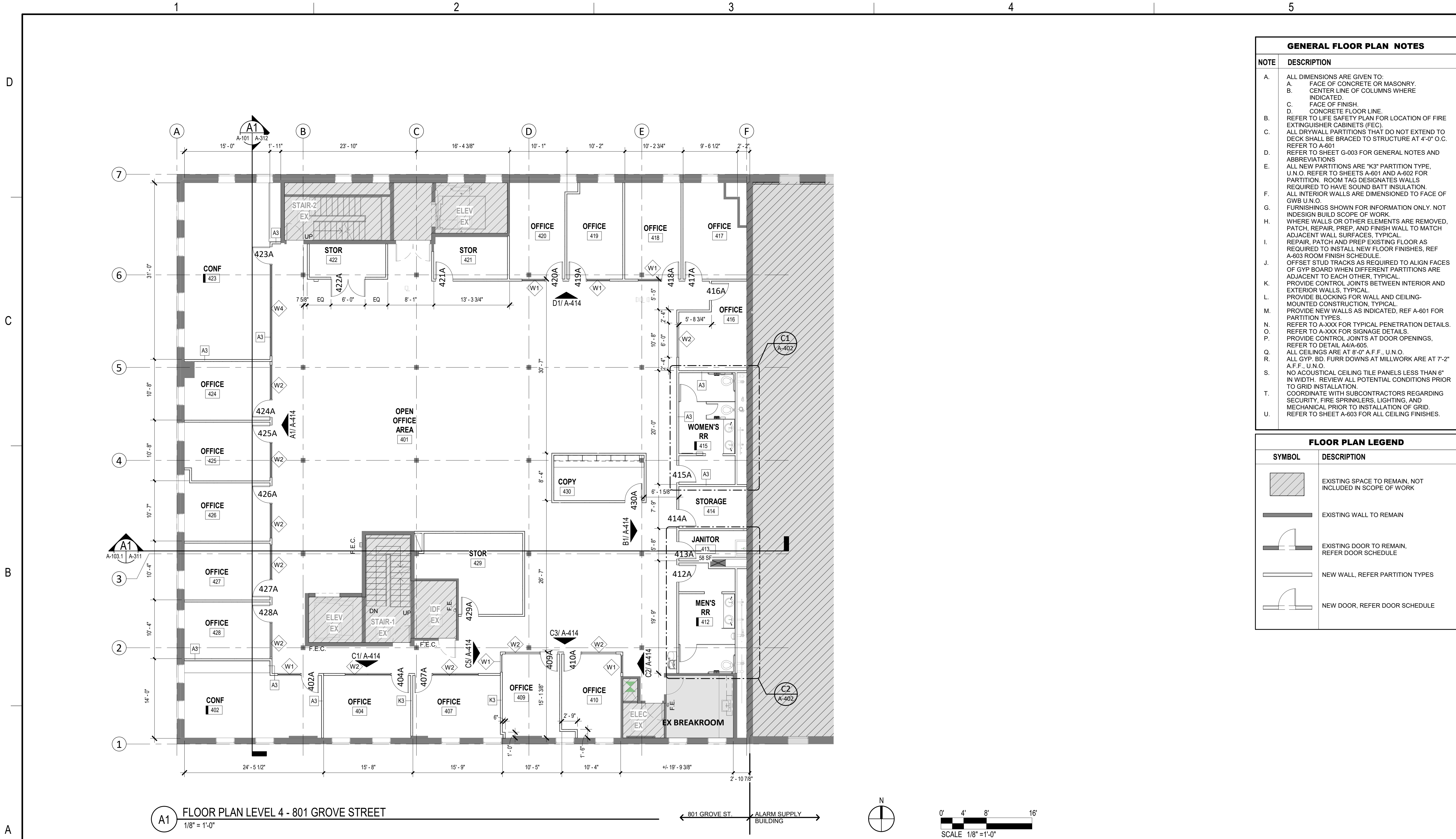


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Phone (817)335-3000 Fax (817)335-1025



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS FLOOR PLAN LEVEL 1 - 801 GROVE STREET	
SHEET No.	A-101
REV	0



GENERAL FLOOR PLAN NOTES	
NOTE	DESCRIPTION
A.	ALL DIMENSIONS ARE GIVEN TO: A. FACE OF CONCRETE OR MASONRY. B. CENTER LINE OF COLUMNS WHERE INDICATED. C. FACE OF FINISH. D. CONCRETE FLOOR LINE.
B.	REFER TO LIFE SAFETY PLAN FOR LOCATION OF FIRE EXTINGUISHER CABINETS (FEC).
C.	ALL DRYWALL PARTITIONS THAT DO NOT EXTEND TO DECK SHALL BE BRACED TO STRUCTURE AT 4'-0" O.C. REFER TO A-601
D.	REFER TO SHEET G-003 FOR GENERAL NOTES AND ABBREVIATIONS
E.	ALL NEW PARTITIONS ARE "K3" PARTITION TYPE. U.N.O. REFER TO SHEETS A-601 AND A-602 FOR PARTITION. ROOM TAG DESIGNATES WALLS REQUIRED TO HAVE SOUND BATT INSULATION.
F.	ALL INTERIOR WALLS ARE DIMENSIONED TO FACE OF GWB U.N.O.
G.	FURNISHINGS SHOWN FOR INFORMATION ONLY. NOT IN DESIGN BUILD SCOPE OF WORK.
H.	WHERE WALLS OR OTHER ELEMENTS ARE REMOVED, PATCH, REPAIR, PREP, AND FINISH WALL TO MATCH ADJACENT WALL SURFACES. TYPICAL REPAIR, PATCH AND PREP EXISTING FLOOR AS REQUIRED TO INSTALL NEW FLOOR FINISHES. REF A-603 ROOM FINISH SCHEDULE.
I.	OFFSET STUD TRACKS AS REQUIRED TO ALIGN FACES OF GYP BOARD WHEN DIFFERENT PARTITIONS ARE ADJACENT TO EACH OTHER. TYPICAL
J.	PROVIDE CONTROL JOINTS BETWEEN INTERIOR AND EXTERIOR WALLS. TYPICAL
K.	PROVIDE BLOCKING FOR WALL AND CEILING-MOUNTED CONSTRUCTION. TYPICAL
L.	PROVIDE NEW WALLS AS INDICATED. REF A-601 FOR PARTITION TYPES.
M.	REFER TO A-XXX FOR TYPICAL PENETRATION DETAILS. REFER TO A-XXX FOR SIGNAGE DETAILS.
N.	PROVIDE CONTROL JOINTS AT DOOR OPENINGS. REFER TO DETAIL A4/A-605.
O.	ALL CEILINGS ARE AT 8'-0" A.F.F., U.N.O.
P.	ALL GYP. BD. FURR DOWNS AT MILLWORK ARE AT 7'-2" A.F.F., U.N.O.
Q.	NO ACUSTICAL CEILING TILE PANELS LESS THAN 6" IN WIDTH. REVIEW ALL POTENTIAL CONDITIONS PRIOR TO GRID INSTALLATION.
R.	COORDINATE WITH SUBCONTRACTORS REGARDING SECURITY, FIRE SPRINKLERS, LIGHTING, AND MECHANICAL PRIOR TO INSTALLATION OF GRID.
S.	REFER TO SHEET A-603 FOR ALL CEILING FINISHES.

FLOOR PLAN LEGEND	
SYMBOL	DESCRIPTION
	EXISTING SPACE TO REMAIN, NOT INCLUDED IN SCOPE OF WORK
	EXISTING WALL TO REMAIN
	EXISTING DOOR TO REMAIN, REFER DOOR SCHEDULE
	NEW WALL, REFER PARTITION TYPES
	NEW DOOR, REFER DOOR SCHEDULE

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

12/28/2020

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TRINITY **METRO**

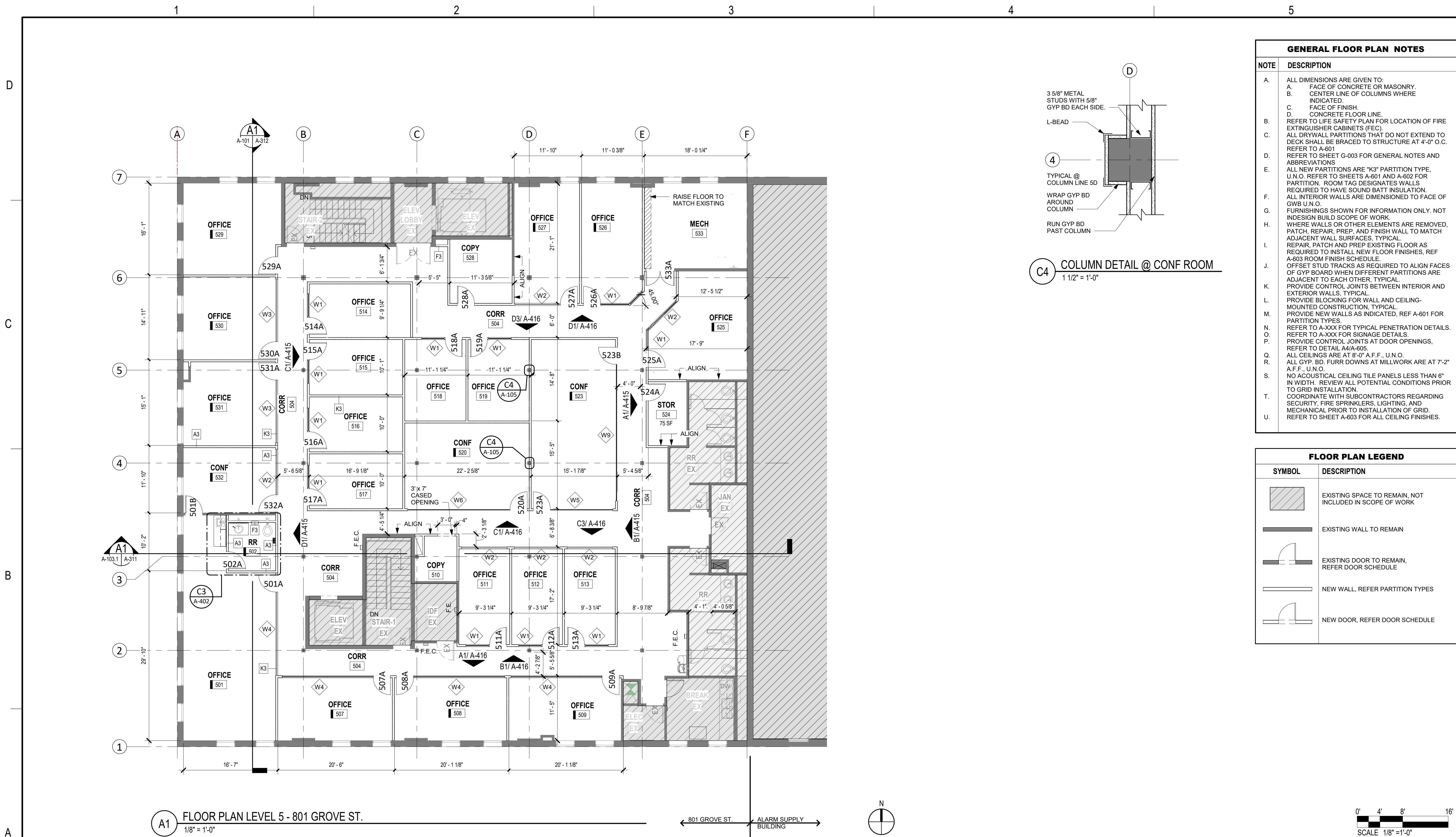
DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
FLOOR PLAN LEVEL 4 - 801 GROVE STREET

SHEET No. **A-104**

REV **0**



REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

REGISTERED ARCHITECT

EUGENE A. VALENTINE

18201

Eugene A. Valentine

12/28/2020

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HUITT-ZOLLARS

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TRINITY

METRO

DRAWN	HZI
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MUST MEET FTA BUY AMERICA REQUIREMENTS

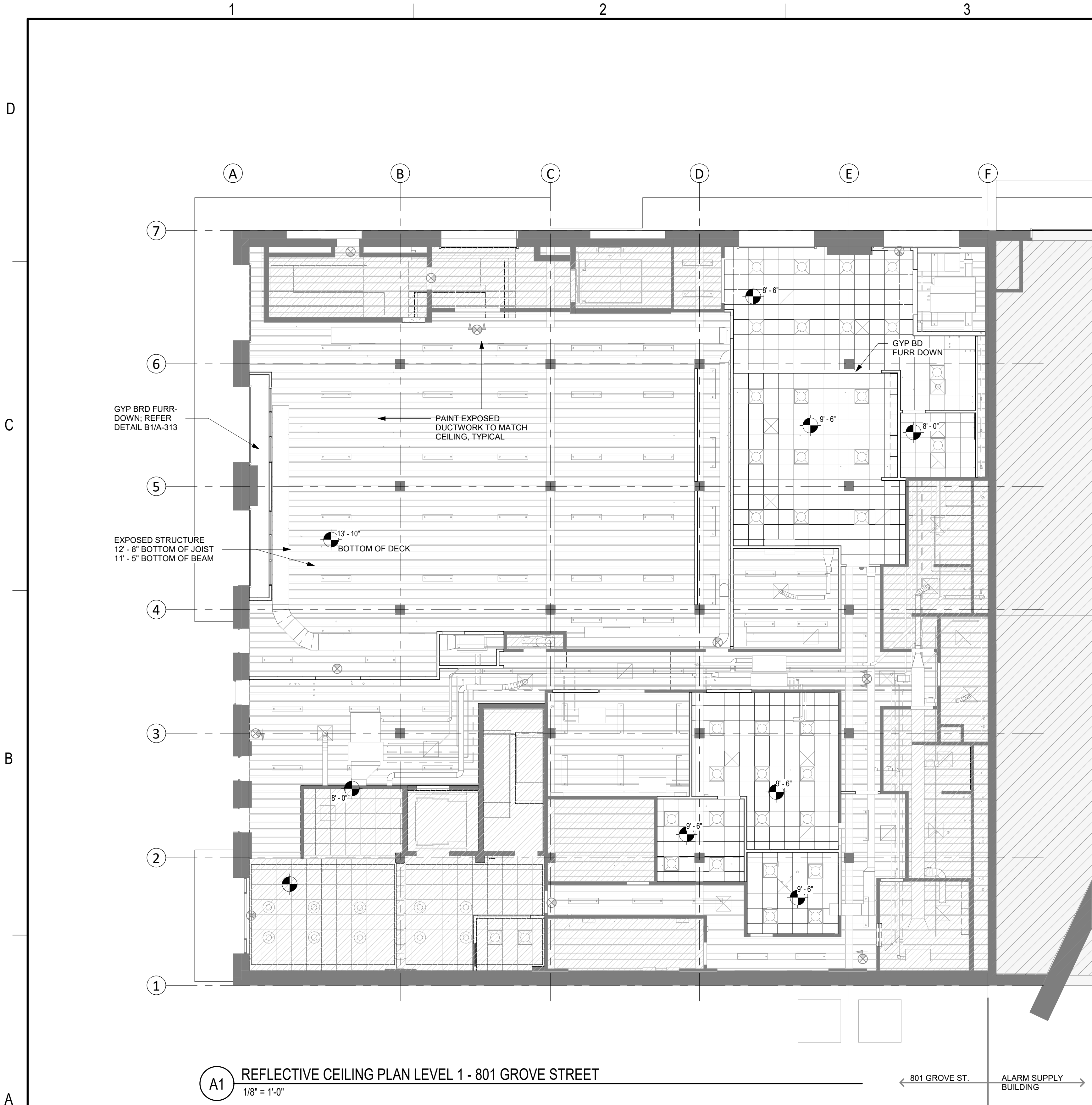
TRINITY METRO HEADQUARTERS

FLOOR PLAN LEVEL 5 - 801 GROVE STREET

SHEET No.

A-105

REV
0



CEILING PLAN NOTES	
NOTE	DESCRIPTION
A.	ALL CEILINGS ARE AT 8'-0" A.F.F., U.N.O.
B.	ALL GYP. BD. FURR DOWNS AT MILLWORK ARE AT 7'-2" A.F.F., U.N.O.
C.	NO ACOUSTICAL CEILING TILE PANELS LESS THAN 6" IN WIDTH. REVIEW ALL POTENTIAL CONDITIONS PRIOR TO GRID INSTALLATION.
D.	COORDINATE WITH SUBCONTRACTORS REGARDING SECURITY, FIRE SPRINKLERS, LIGHTING, AND MECHANICAL PRIOR TO INSTALLATION OF GRID. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS.
E.	REFER TO SHEET A-603 FOR ALL CEILING FINISHES.

CEILING PLAN LEGEND	
SYMBOL	DESCRIPTION
	NO SCOPE
	2x2 ACOUSTIC CEILING TILE (ACT)
	EXPOSED STRUCTURE (ES)
	GYP. BOARD CEILING
	CEILING MOUNTED SUPPLY AIR DIFFUSER
	CEILING MOUNTED RETURN AIR GRILLE
	CEILING MOUNTED EXHAUST AIR GRILLE
	2' x 2' LED FIXTURE
	LED STRIP LIGHT FIXTURE
	RECESSED DOWNLIGHT FIXTURE
	WALL MOUNTED FIXTURE
	EXIT SIGN WITH DIRECTIONAL ARROWS CEILING MOUNTED
	EXIT SIGN WITH DIRECTIONAL ARROWS WALL MOUNTED
	OCCUPANCY SENSOR - CEILING
	CEILING HEIGHT

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



Eugene A. Valentine
12/28/2020



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TRINITY **METRO**

DRAWN	HZI
DESIGNED	CS
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DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS REFLECTED CLG PLAN LEVEL 1 - 801 GROVE STREET	
SHEET No.	A-121
REV	0

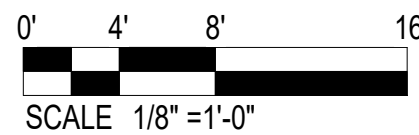
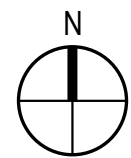


CEILING PLAN NOTES	
NOTE	DESCRIPTION
A.	ALL CEILINGS ARE AT 8'-0" A.F.F., U.N.O.
B.	ALL GYP. BD. FURR DOWNS AT MILLWORK ARE AT 7'-2" A.F.F., U.N.O.
C.	NO ACOUSTICAL CEILING TILE PANELS LESS THAN 6" IN WIDTH. REVIEW ALL POTENTIAL CONDITIONS PRIOR TO GRID INSTALLATION.
D.	COORDINATE WITH SUBCONTRACTORS REGARDING SECURITY, FIRE SPRINKLERS, LIGHTING, AND MECHANICAL PRIOR TO INSTALLATION OF GRID.
E.	REFER TO ELECTRICAL AND MECHANICAL DRAWINGS.
F.	REFER TO SHEET A-603 FOR ALL CEILING FINISHES.

CEILING PLAN LEGEND	
SYMBOL	DESCRIPTION
	NO SCOPE
	2x2 ACOUSTIC CEILING TILE (ACT)
	EXPOSED STRUCTURE (ES)
	GYP. BOARD CEILING
	CEILING MOUNTED SUPPLY AIR DIFFUSER
	CEILING MOUNTED RETURN AIR GRILLE
	CEILING MOUNTED EXHAUST AIR GRILLE
	2' x 2' LED FIXTURE
	LED STRIP LIGHT FIXTURE
	RECESSED DOWNLIGHT FIXTURE
	WALL MOUNTED FIXTURE
	EXIT SIGN WITH DIRECTIONAL ARROWS CEILING MOUNTED
	EXIT SIGN WITH DIRECTIONAL ARROWS WALL MOUNTED
	OCCUPANCY SENSOR - CEILING
	X-XX" CEILING HEIGHT

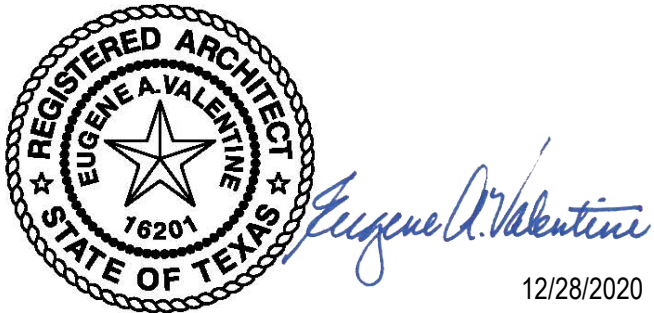
A1 REFLECTED CEILING PLAN LEVEL 5 - 801 GROVE ST.
1/8" = 1'-0"

← 801 GROVE ST. ALARM SUPPLY BUILDING →



MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



**KHK Group Ltd**

**HUITT-ZOLLARS**

Huitt-Zollars, Inc. Engineering / Architecture
500 W. 7th St. Ste. 300 Fort Worth, Texas 76102
Phone (817)335-3000 Fax (817)335-1025



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

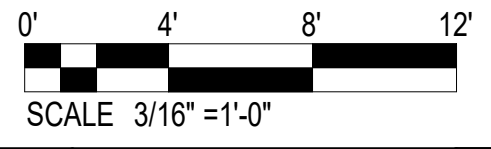
TRINITY METRO HEADQUARTERS
REFLECTED CLG PLAN LEVEL 5 -
801 GROVE STREET

SHEET No. **A-125**

REV
0



A1 BUILDING SECTION
3/16" = 1'-0"



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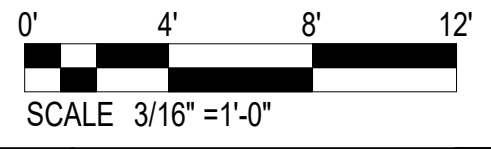


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DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS BUILDING SECTIONS	
SHEET No.	A-311
REV	0

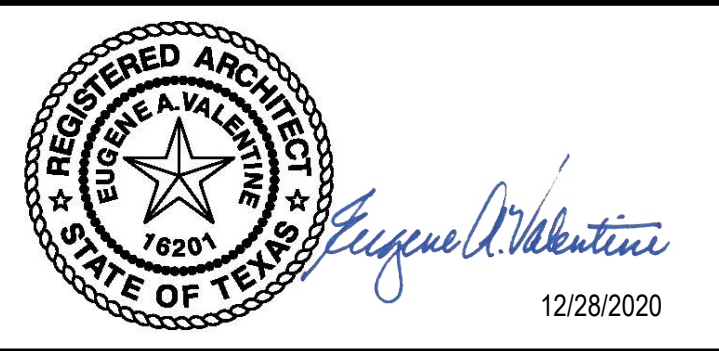


A1 BUILDING SECTION GROVE NORTH TO SOUTH
3/16" = 1'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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DRAWN	HZI
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DATE	12.28.2020

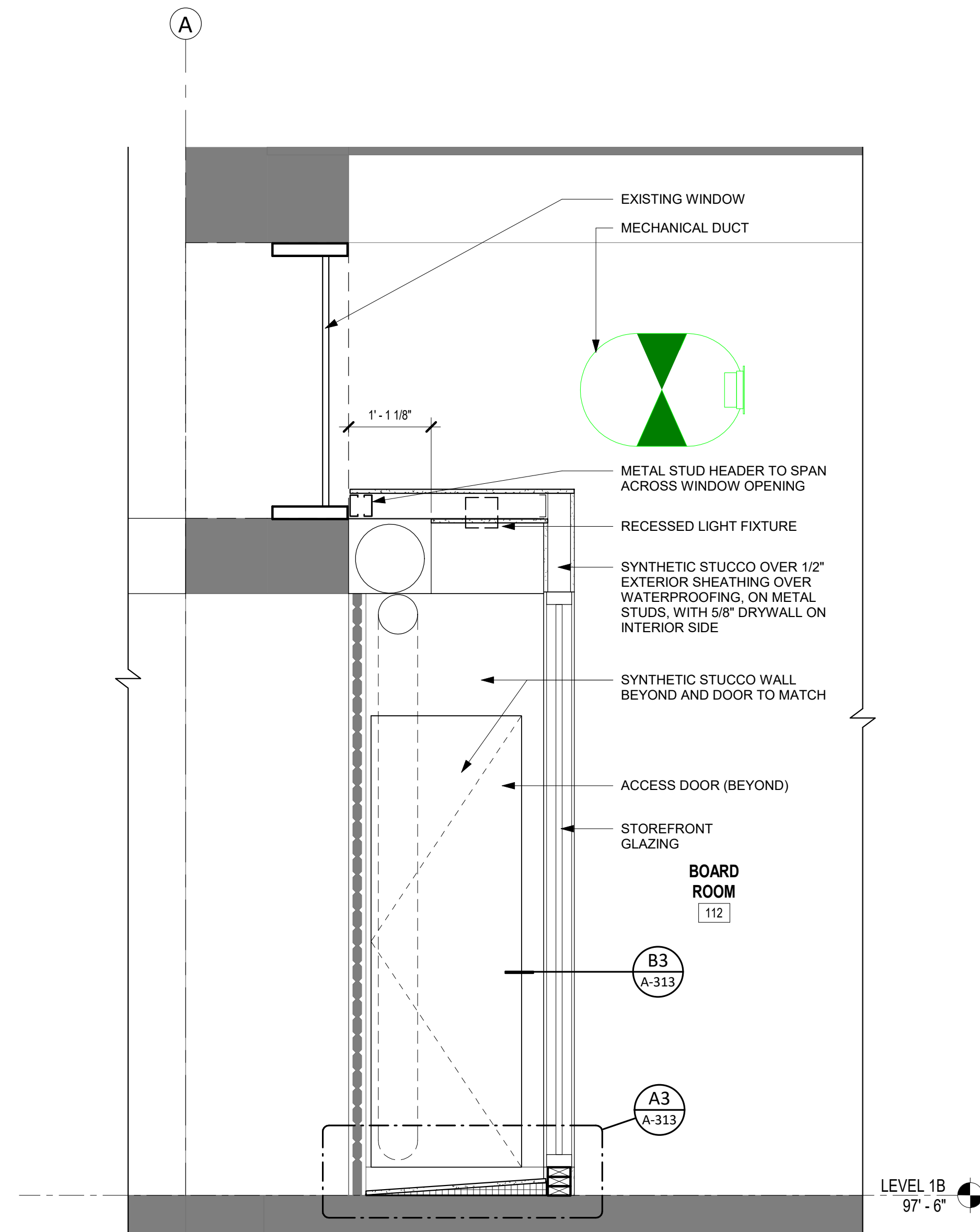
TRINITY METRO HEADQUARTERS BUILDING SECTIONS	
SHEET No.	A-312
REV	0

D

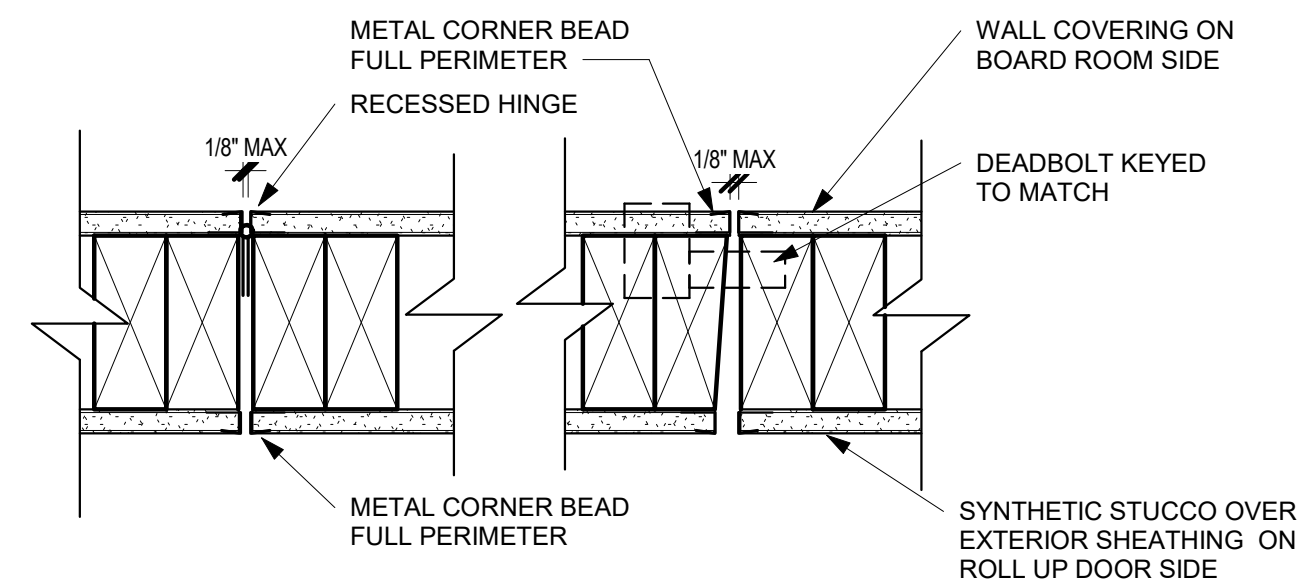
C

B

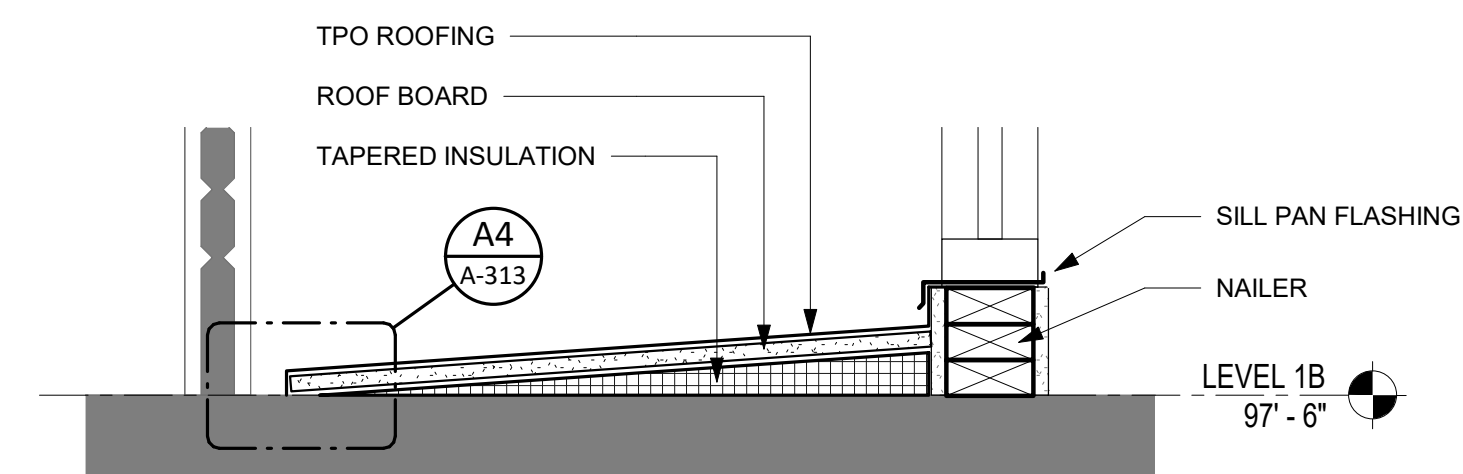
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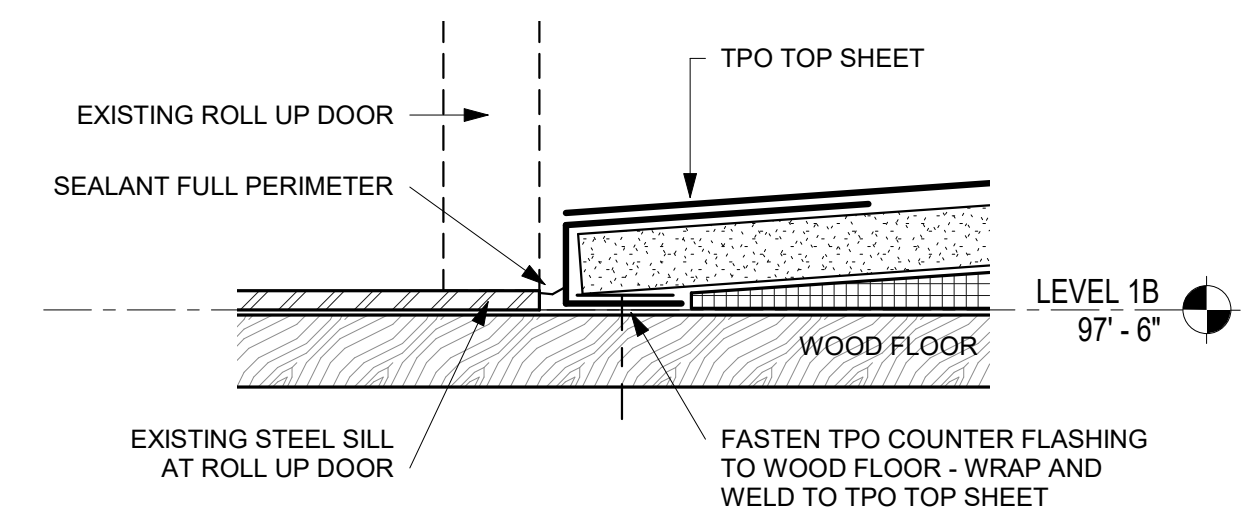
B1 SECTION THRU STOREFRONT
3/4" = 1'-0"



B3 ACCESS DOOR DETAIL
3" = 1'-0"



A3 **DETAIL AT BOARD ROOM STOREFRONT SILL**
1 1/2" = 1'-0"



A4 **EDGE DETAIL**
6" = 1'-0"

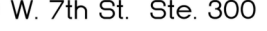
MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



Eugene A. Valentine
12/28/2020

12/28/2020



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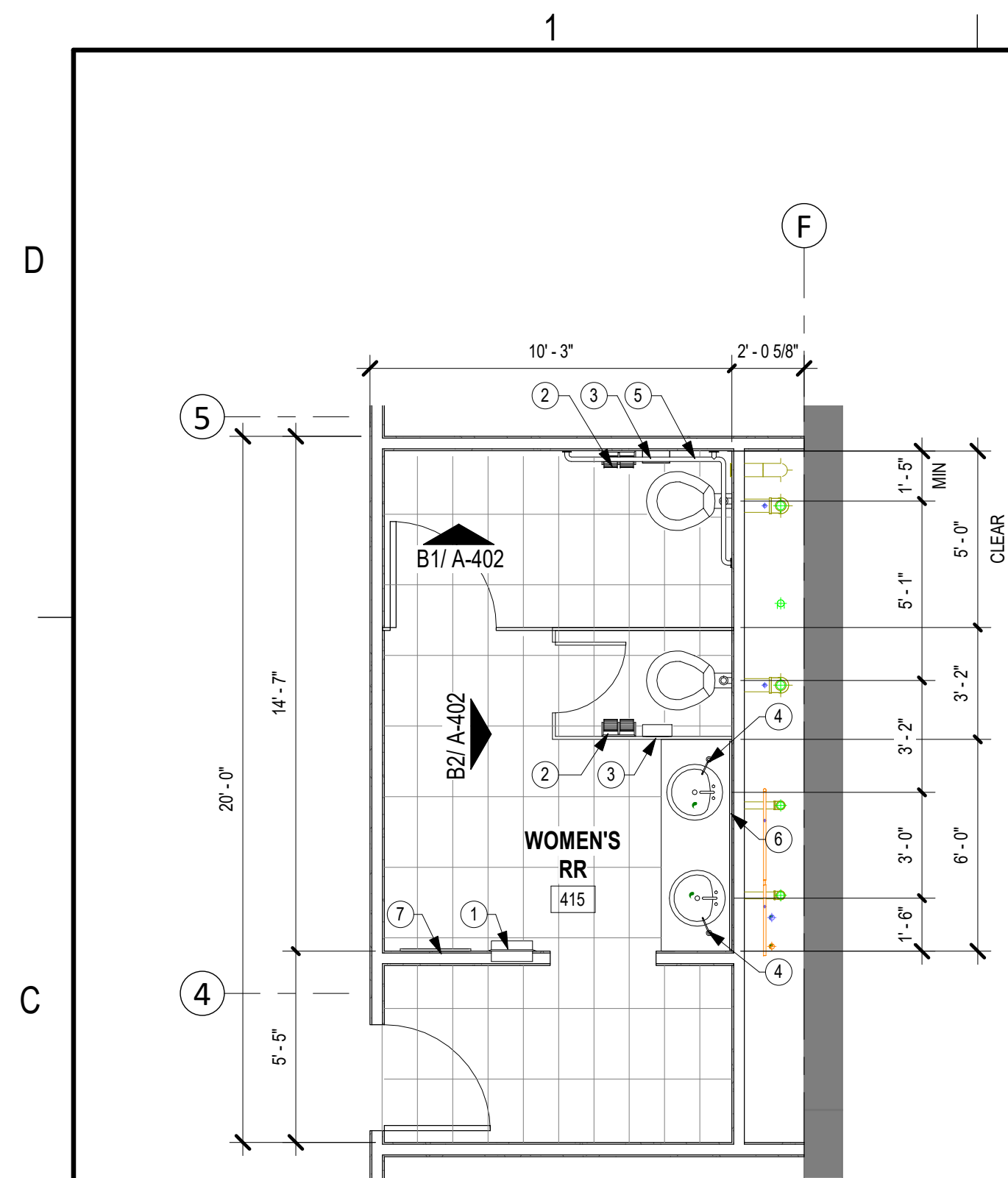
DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS WALL SECTIONS

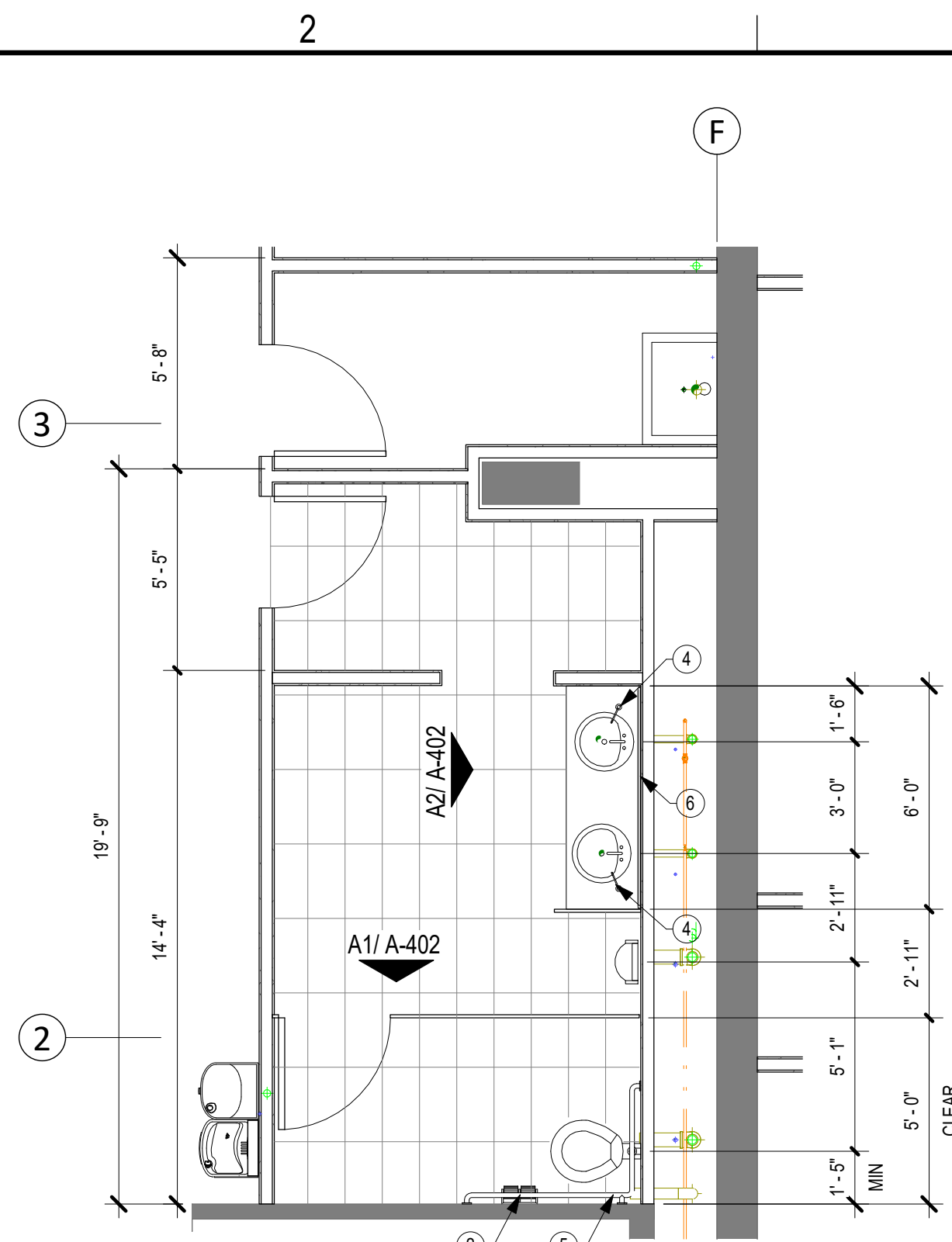
SHEET No.

A-313

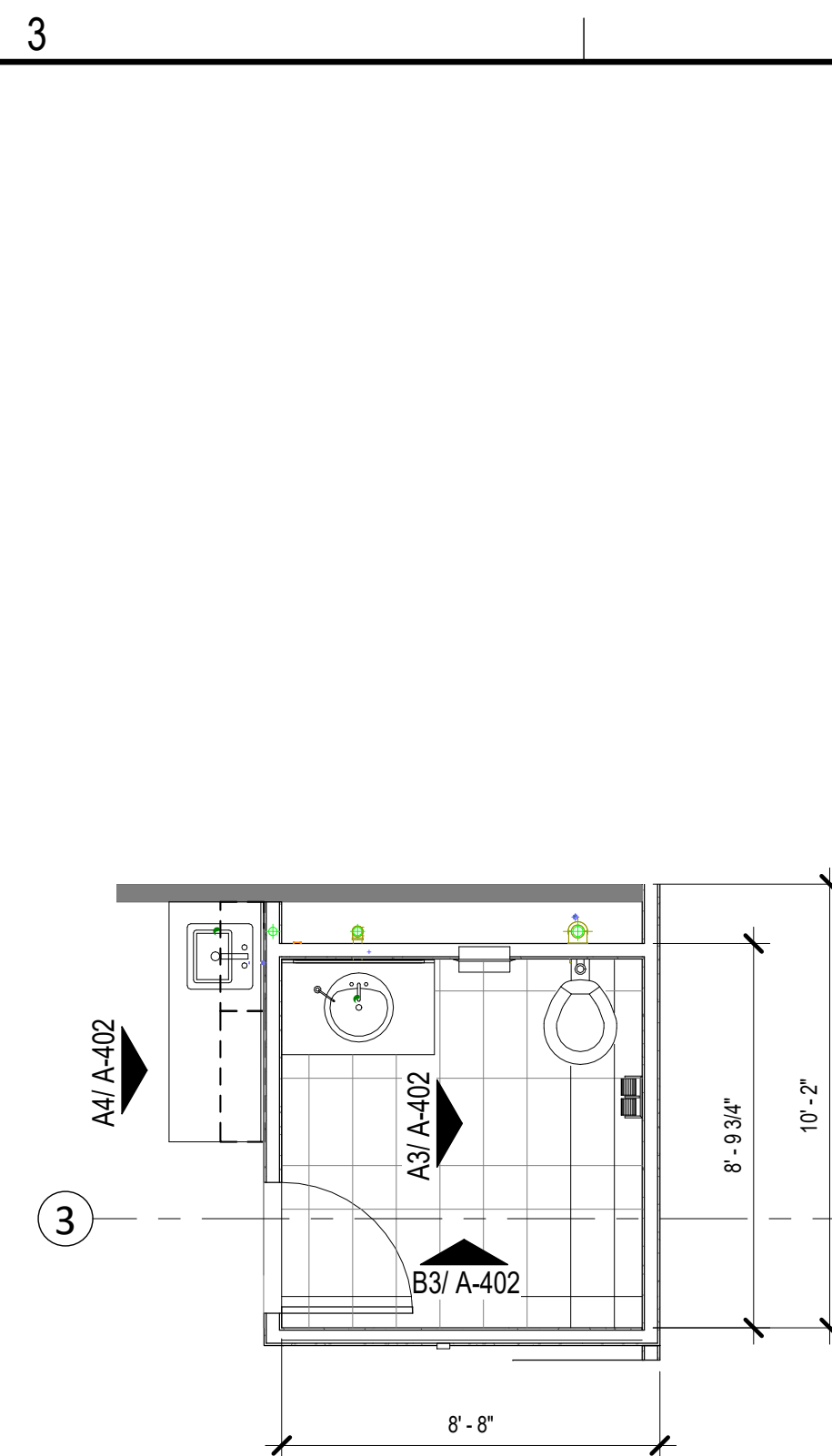
REV
0



C1 LEVEL 4 - WOMENS RESTROOM - ENLARGED PLAN
1/4" = 1'-0"



C2 LEVEL 4 - MENS RESTROOM - ENLARGED PLAN
1/4" = 1'-0"

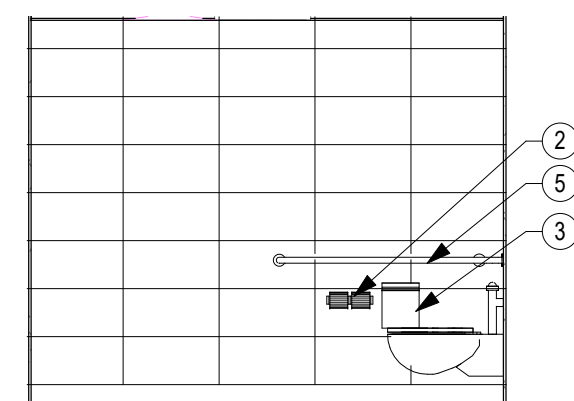


C3 LEVEL 5 - EXEC RESTROOM - ENLARGED PLAN
1/4" = 1'-0"

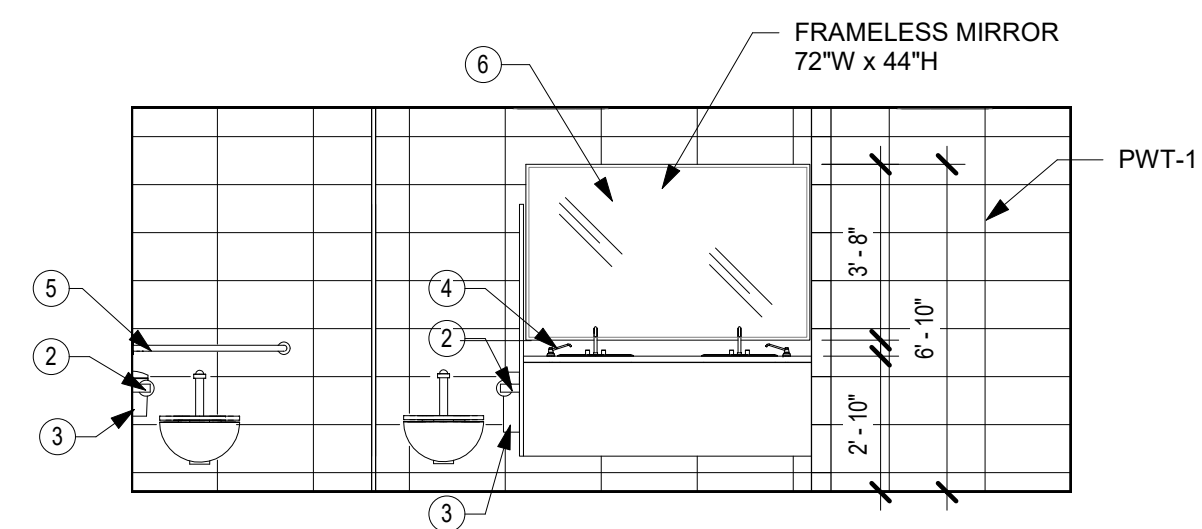
TOILET ACCESSORIES SCHEDULE					
DESIGNATION	NUMBER	PRODUCT DESCRIPTION	MANUFACTURER	MODEL #	SPEC #
PTD-R	1	PAPER TOWEL DISPENSER, AUTOMATED, BLACK, 0641479 WASTE RECEPTACLE - RECESSED STAINLESS STEEL	CLEAR CHOICE BOBRICK		-
TTD	2	TOILET TISSUE DISPENSER - JUMBO CORE 1 ROL (SMOKE)	GEORGIA-PACIFIC	B-6867	-
SND	3	SANITARY NAPKIN DISPOSAL TOILET - SURFACE MOUNTED	BOBRICK	B-270	-
SD	4	SOAP DISPENSER - SURFACE MOUNTED	BOBRICK	B-2012	-
GB-L	5	TWO WALL HORIZONTAL GRAB BAR	BOBRICK	B-68137	-
MG	6	MIRROR - FRAMELESS, BEVELED EDGE (SEE INT ELEV FOR SIZE)	-	-	08 83 00
MG	7	MIRROR - CHANNEL FRAME - FULL LENGTH	BOBRICK	B-2908-2460	-
			-	-	-
			-	-	-

TOILET ROOM & ACCESSORY NOTES

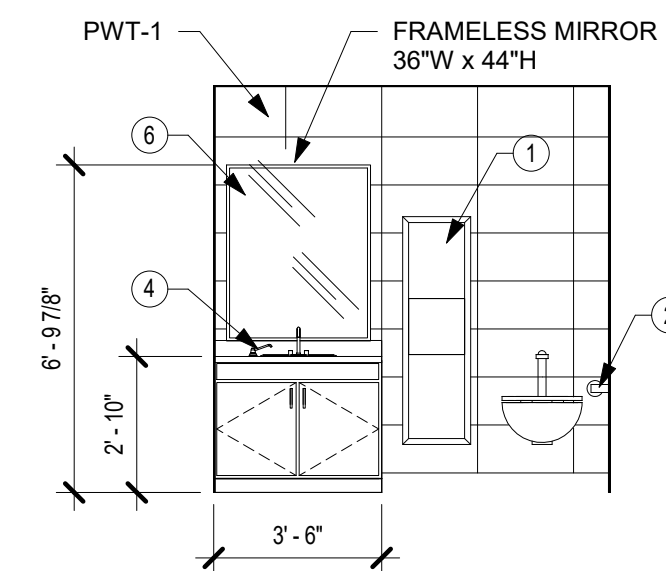
1. ALL FIXTURE HEIGHTS AND MOUNTING DIMENSIONS SHALL COMPLY WITH REQUIREMENTS OF TAS (ADA). CONTRACTOR MUST VERIFY EACH DIMENSION. (REFER G-005 FOR TYPICAL DIMENSIONS, LOCATIONS OF ACCESSORIES, SPECIALTIES AND REQUIRED CLEARANCES)
2. PROVIDE METAL OR FIRE TREATED BLOCKING AS REQUIRED TO SUPPORT ALL MILLWORK AND ACCESSORIES AS SHOWN ON A-602.
3. GRAB BARS AND ASSOCIATED BLOCKING, ANCHORS, AND FASTENERS SHALL BE CAPABLE OF RESISTING A DOWNWARD FORCE OF 250 LBS. APPLIED AT ANY POINT ALONG THE HANDRAIL.
4. DIMENSIONS SHOWN FOR WALLS AND OPENINGS ARE FROM FACE OF FINISH.
5. DIMENSIONS SHOWN FOR ACCESSORIES AND EQUIPMENT ITEMS AND CLEAR FLOOR SPACE ARE FROM FACE OF ROOM FINISH (SUCH AS TILE).
6. ANGLE STOPS, RISERS, TAIL PIECES & P-TRAPS NOT OTHERWISE ENCLOSED BY CABINETS OR OTHER ENCLOSURES SHALL HAVE PROTECTIVE COVERS.
7. NOTE THAT PLUMBING FIXTURES SHOWN HERE ARE GENERIC - SEE PLUMBING DRAWINGS/SPECS FOR SCHEDULED FIXTURES.



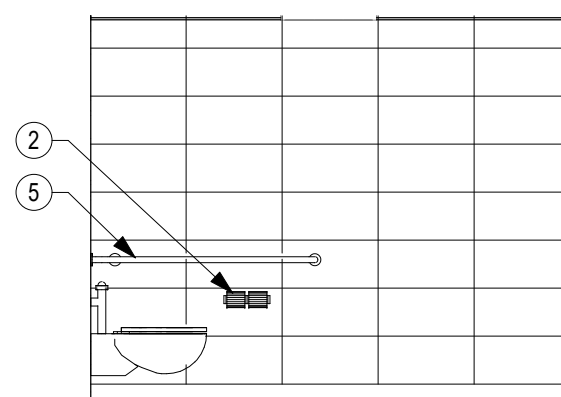
B1 LEVEL 4 - WOMEN'S RESTROOM - NORTH ELEVATION
1/4" = 1'-0"



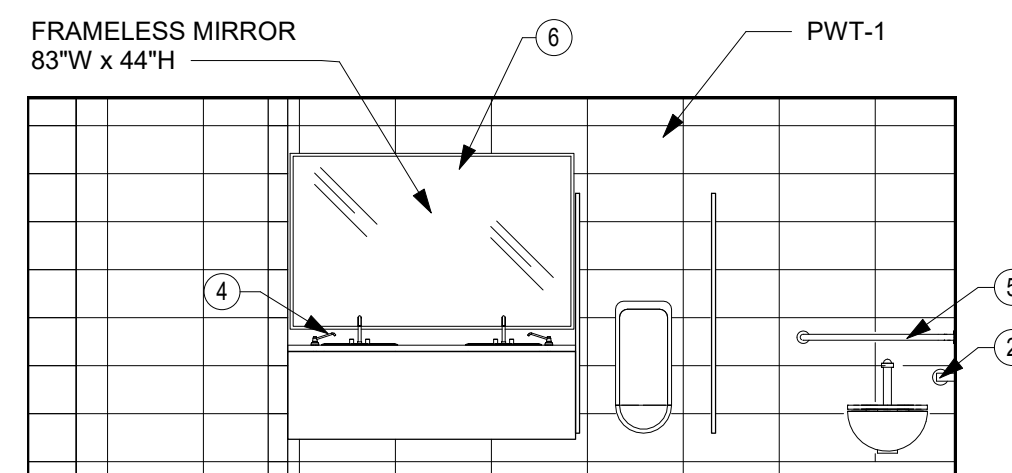
B2 LEVEL 4 - WOMENS RESTROOM - EAST ELEVATION
1/4" = 1'-0"



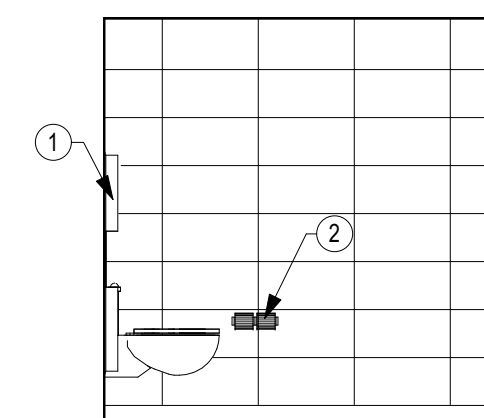
B3 LEVEL 5 - EXEC RESTROOM - NORTH ELEVATION
1/4" = 1'-0"



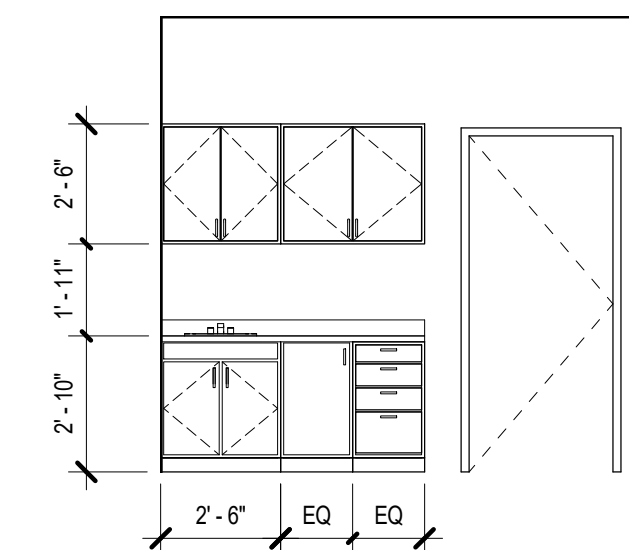
A1 LEVEL 4 -MEN'S RESTROOM - SOUTH ELEVATION
1/4" = 1'-0"



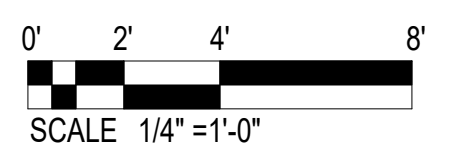
A2 LEVEL 4 -MEN'S RESTROOM - EAST ELEVATION
1/4" = 1'-0"



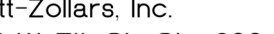
A3 LEVEL 5 - EXEC RESTROOM - EAST ELEVATION
1/4" = 1'-0"



A4 LEVEL 5 - EXEC COFFEE BAR - EAST ELEVATION
1/4" = 1'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

[illegible]

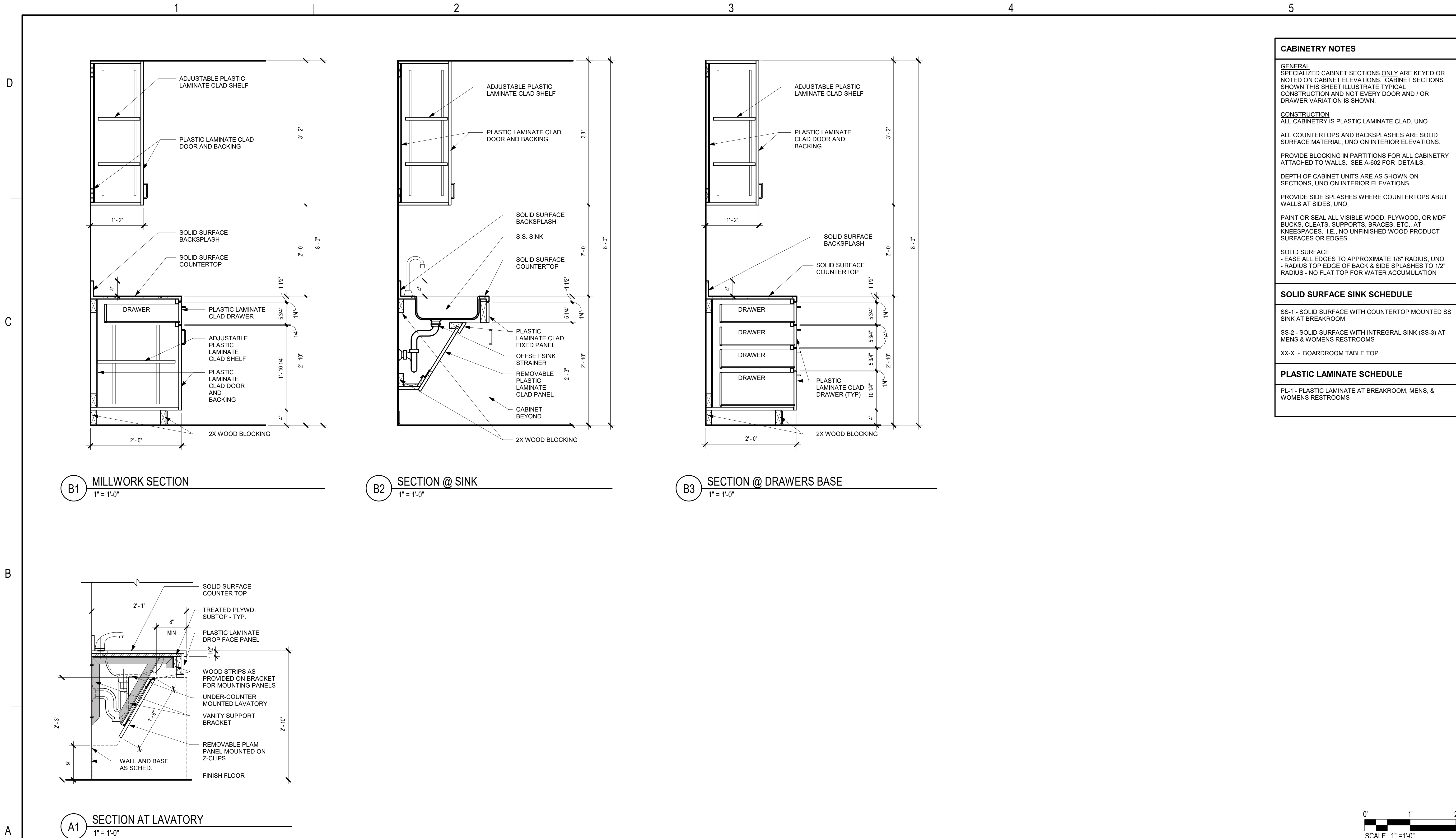
KHK Group Ltd.
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 500 W. 7th St. Ste. 300 Fort Worth, Texas 76102
 Phone (817)335-3000 Fax (817)335-1025



®	DRAWN	HZI
	DESIGNED	CS
	CHECKED	GV
	APPROVED	JMF
	DATE	12.28.2020

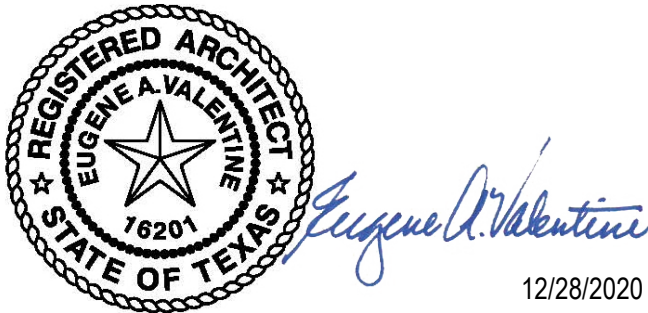
TRINITY METRO HEADQUARTERS ENLARGED PLANS & INTERIOR ELEVATIONS

SHEET No.	A-402	REV 0
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MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	Author
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
MILLWORK SECTIONS & DETAILS

SHEET No. **A-405** REV 0

D

C

B

A

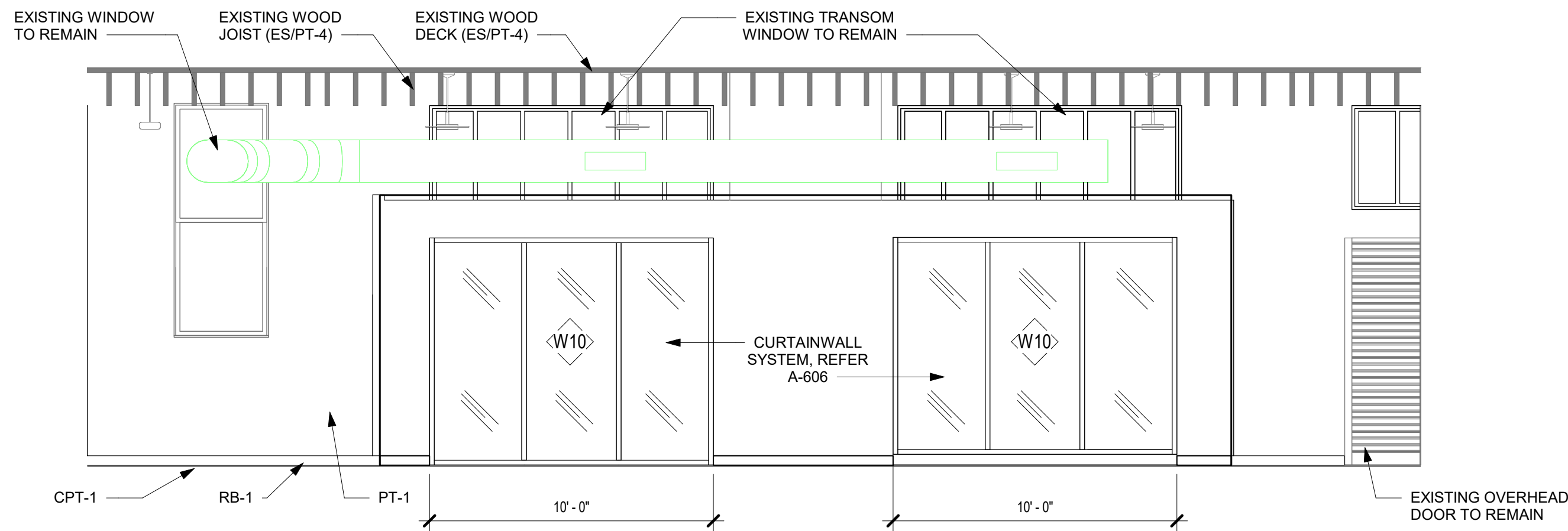
1

2

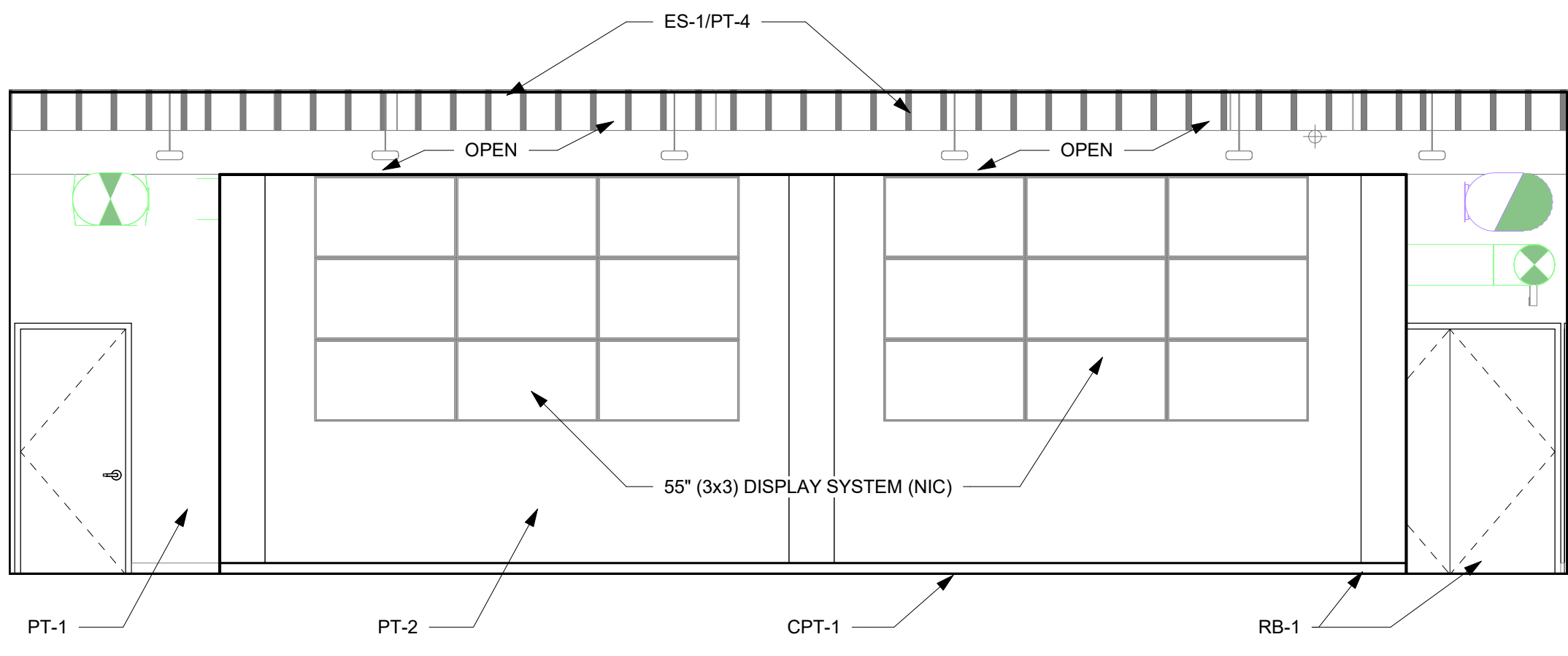
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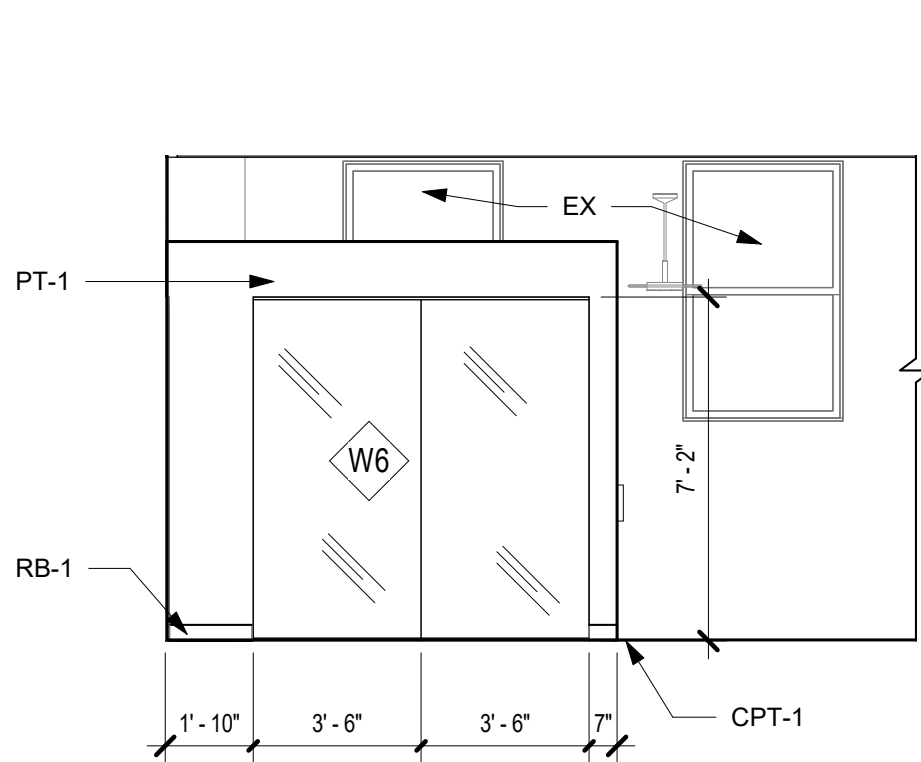
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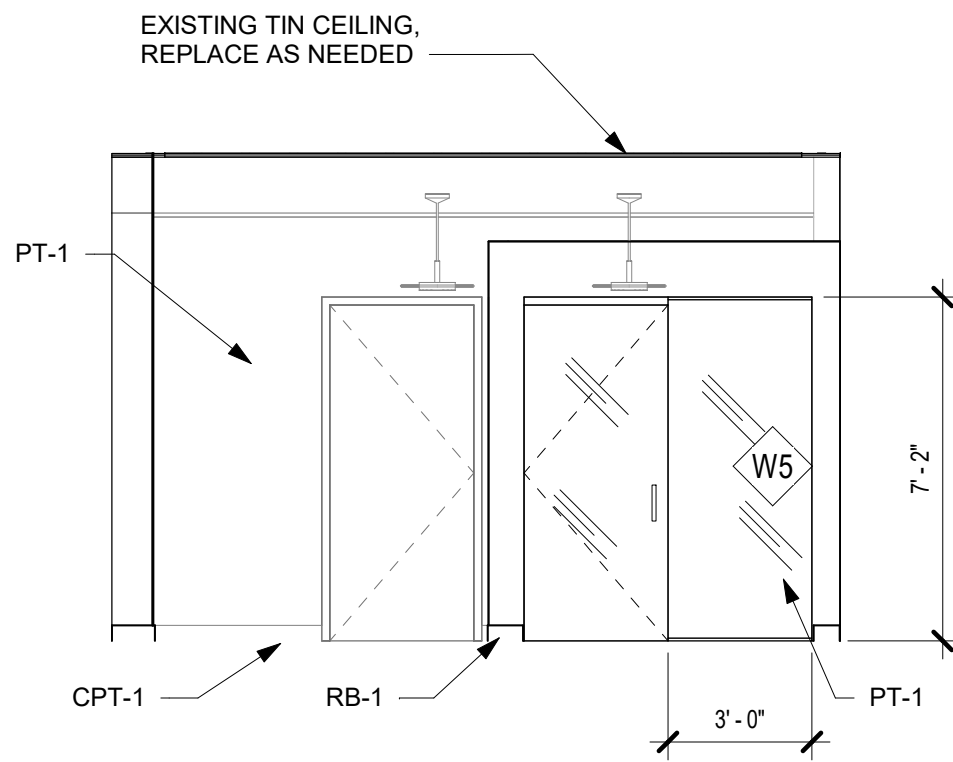
1 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 1 BOARD ROOM LOOKING WEST
1/4" = 1'-0"



2 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 1 BOARD ROOM LOOKING EAST
1/4" = 1'-0"



3 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 1
1/4" = 1'-0"



4 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 1
1/4" = 1'-0"

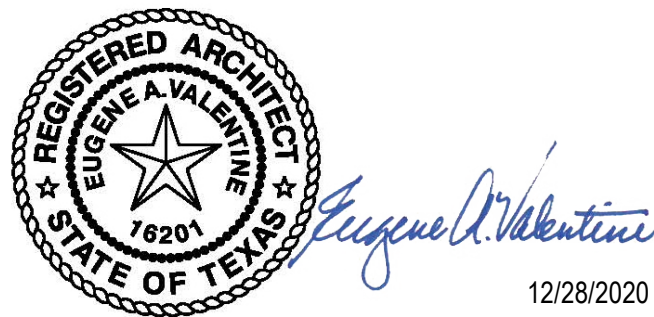
GENERAL NOTES

1. REFER TO A-601 & A-602 FOR PARTITION TYPES.
2. REFER TO A-603 FOR ROOM FINISH SCHEDULE AND FINISHES.
3. REFER TO A-604 & A-605 FOR DOOR & FRAME SCHEDULE.
4. REFER TO A-606 FOR WINDOW & GLAZING SCHEDULES.
5. ALL FIXTURES DIMENSIONED TO FINISH FACE OF WALL (TILE). ALL WALLS DIMENSIONED TO FACE OF GWB.

0' 2' 4' 8'
SCALE 1/4" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



12/28/2020



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
INTERIOR ELEVATIONS LEVEL 1

SHEET No. A-411

REV 0



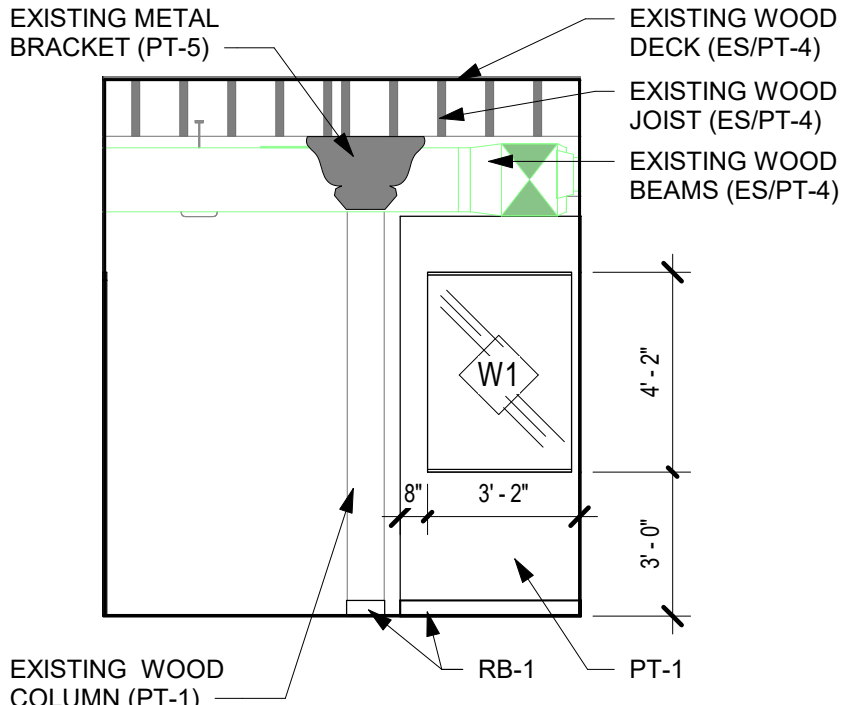
GENERAL NOTES

1. REFER TO A-601 & A-602 FOR PARTITION TYPES.
2. REFER TO A-603 FOR ROOM FINISH SCHEDULE AND FINISHES.
3. REFER TO A-604 & A-605 FOR DOOR & FRAME SCHEDULE.
4. REFER TO A-606 FOR WINDOW & GLAZING SCHEDULES.
5. ALL FIXTURES DIMENSIONED TO FINISH FACE OF WALL (TILE). ALL WALLS DIMENSIONED TO FACE OF GWB.



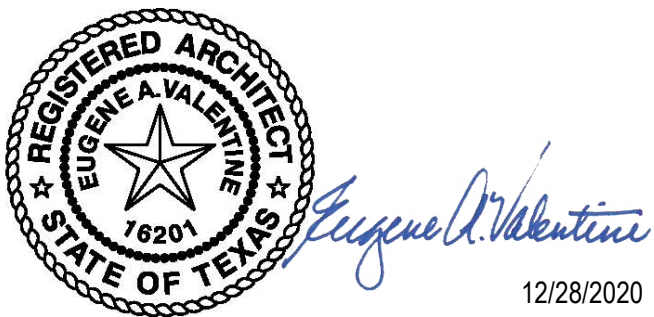
- PREP AND PAINT EXISTING WOOD JOIST (PT-4)
- PREP AND PAINT EXISTING METAL BRACKETS (PT-5) AS NEEDED, TYPICAL
- PREP AND PAINT EXISTING WOOD BEAMS (PT-4)
- PREP AND PAINT ALL EXISTING WOOD COLUMNS (PT-1) AT LEVELS 4 & 5
- PREP AND PAINT EXISTING HORIZONTAL STRUCTURE AND EXPOSED DECK (PT-4)

D4 TYPICAL AT EXISTING COLUMNS - LEVELS 4 AND 5
NTS



C5 INTERIOR ELEVATION
1/4" = 1'-0"

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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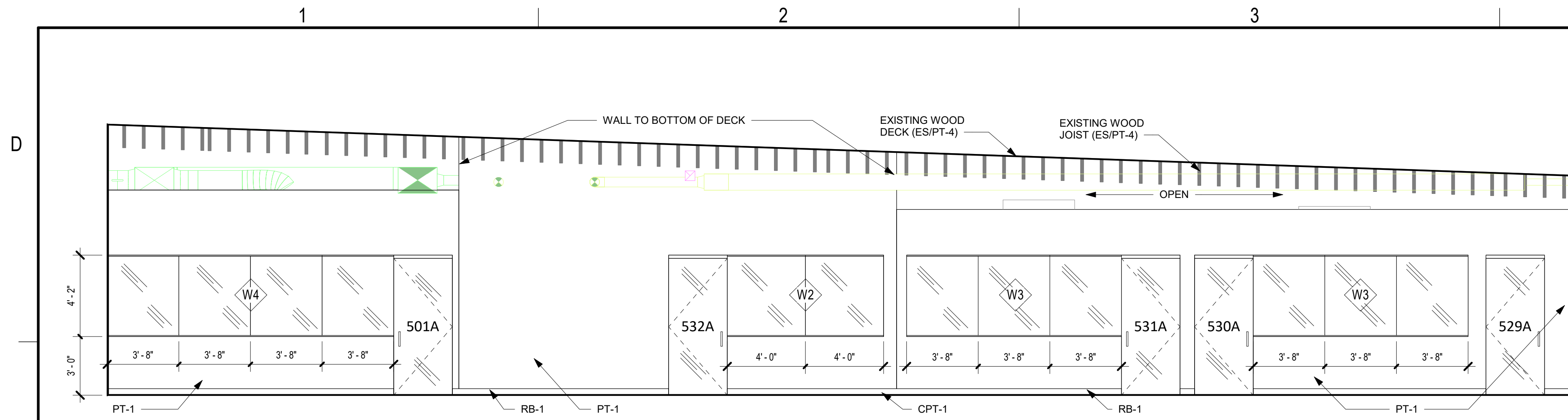


DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

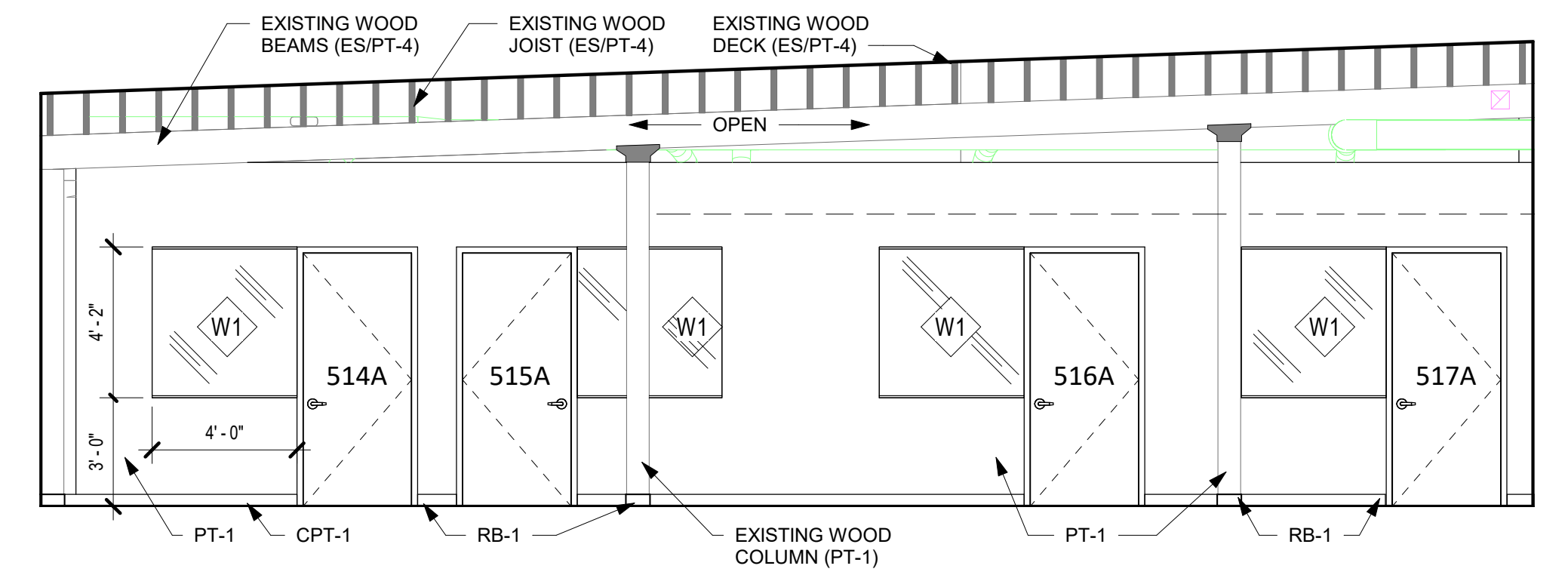
MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
INTERIOR ELEVATIONS

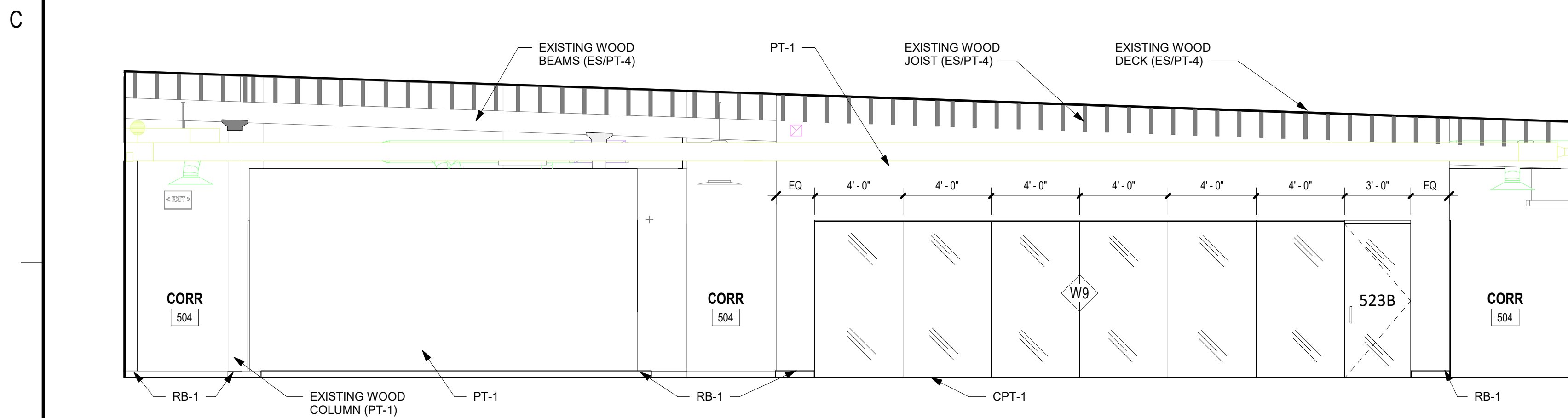
SHEET No.	A-414	REV 0
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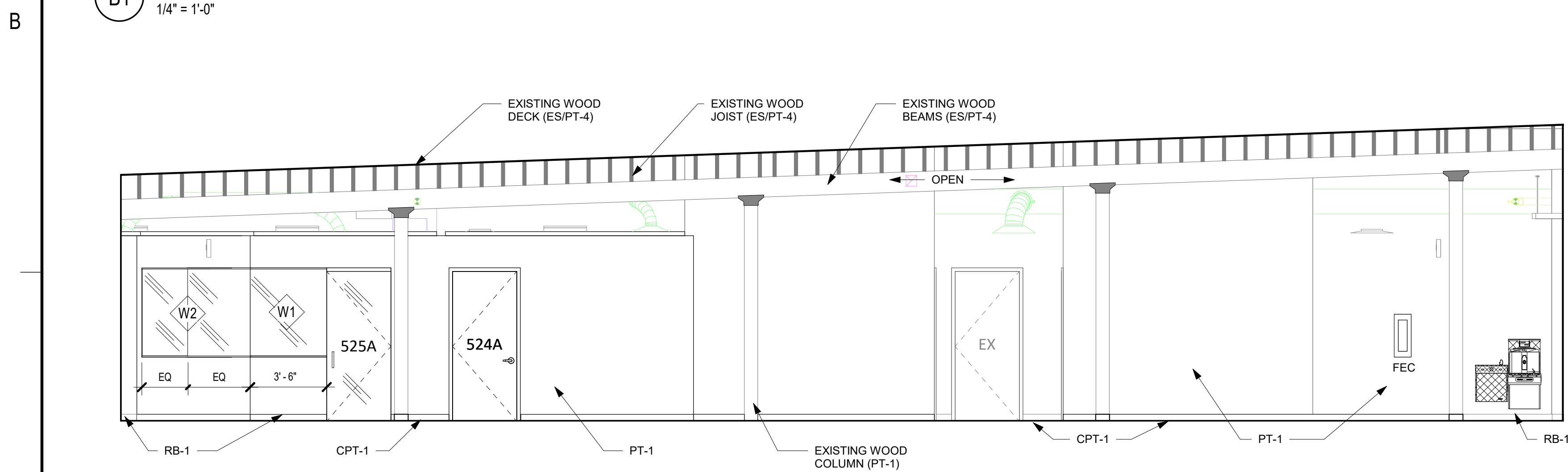
D1 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 5 WEST CORRIDOR
1/4" = 1'-0"



C1 INTERIOR ELEVATION - 801 GROVE ST. - LEVEL 5 WEST CORRIDOR LOOKING EAST
1/4" = 1'-0"



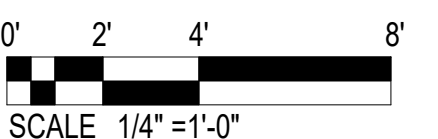
B1 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 5 EAST CORRIDOR LOOKING WEST
1/4" = 1'-0"



A1 INTERIOR ELEVATION - 801 GROVE ST. LEVEL 5 - CORR - EAST
1/4" = 1'-0"

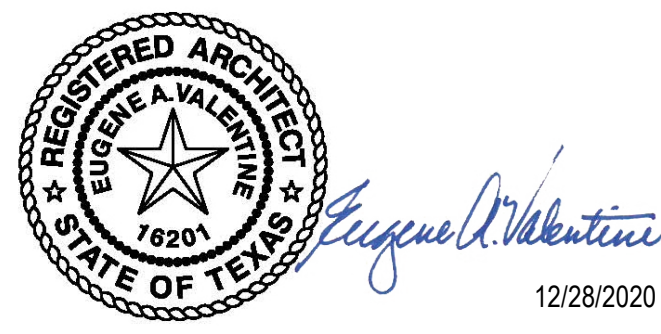
GENERAL NOTES

1. REFER TO A-601 & A-602 FOR PARTITION TYPES.
2. REFER TO A-603 FOR ROOM FINISH SCHEDULE AND FINISHES.
3. REFER TO A-604 & A-605 FOR DOOR & FRAME SCHEDULE.
4. REFER TO A-606 FOR WINDOW & GLAZING SCHEDULES.
5. ALL FIXTURES DIMENSIONED TO FINISH FACE OF WALL (TILE). ALL WALLS DIMENSIONED TO FACE OF GWB.



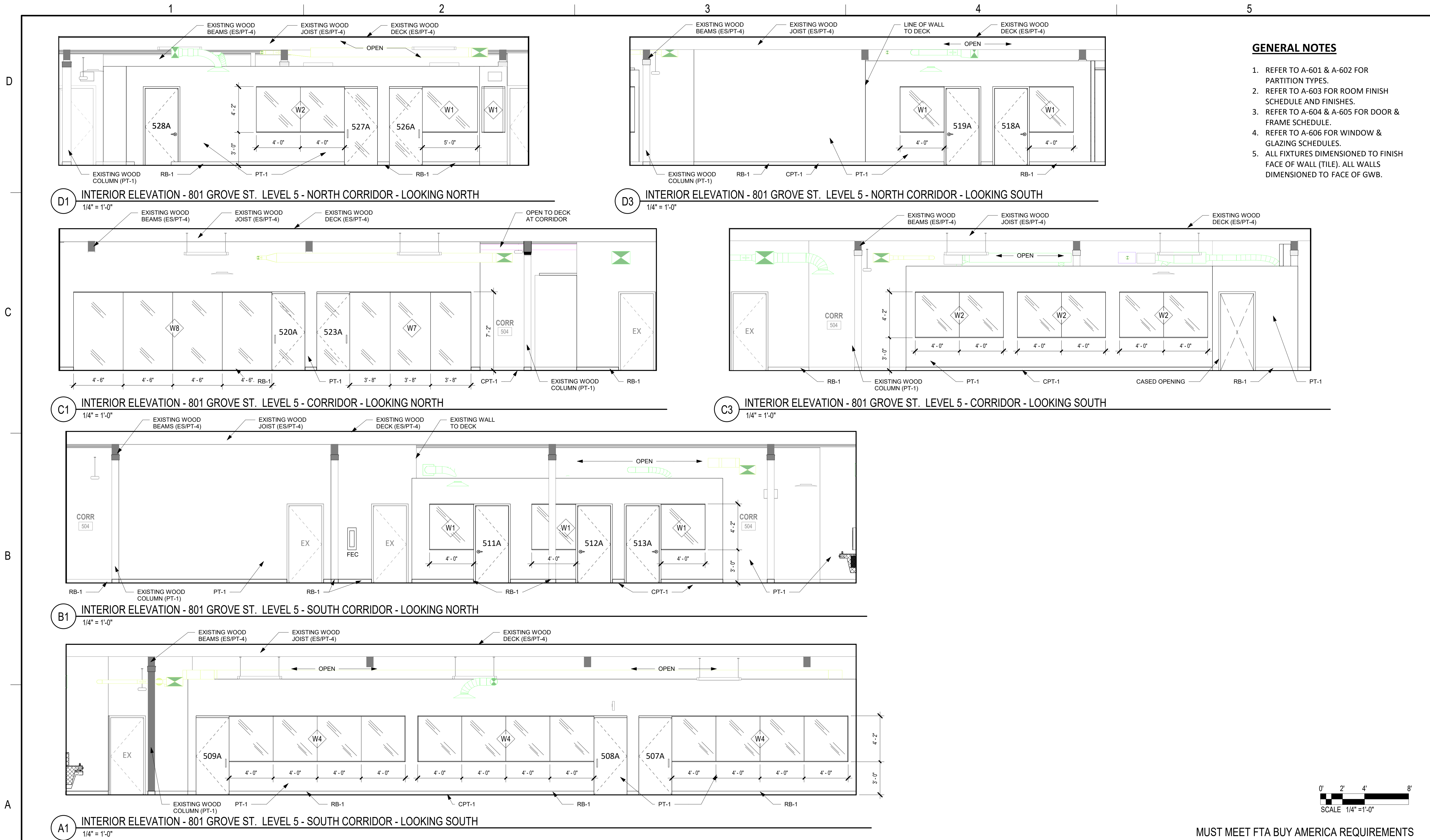
MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

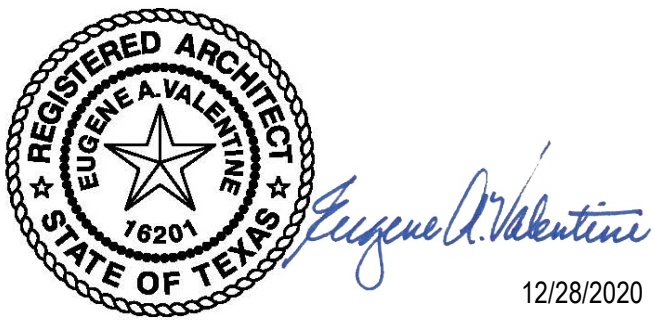
TRINITY METRO HEADQUARTERS INTERIOR ELEVATIONS	
SHEET No.	A-415
REV	0



GENERAL NOTES

1. REFER TO A-601 & A-602 FOR PARTITION TYPES.
2. REFER TO A-603 FOR ROOM FINISH SCHEDULE AND FINISHES.
3. REFER TO A-604 & A-605 FOR DOOR & FRAME SCHEDULE.
4. REFER TO A-606 FOR WINDOW & GLAZING SCHEDULES.
5. ALL FIXTURES DIMENSIONED TO FINISH FACE OF WALL (TILE). ALL WALLS DIMENSIONED TO FACE OF GWB.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
INTERIOR ELEVATIONS

SHEET No.	A-416	REV 0
-----------	-------	----------

D

C

B

A

ROOM FINISH SCHEDULE LEVEL 1 - 801 GROVE ST.								
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING
				NORTH	EAST	SOUTH	WEST	
101	LOBBY	CPT-1	RB-1	EX	PT-1	PT-2	EX	EXTN
102	RECEPTIONIST	EX	EX	EX	EX	EX	EX	EX
103	STAIR-1	EX	EX	EX	EX	EX	EX	EX
104	VIEW	CPT-1	RB-1	TG/PT-1	PT-1	PT-2	TG/PT-1	ES/PT-4
105	MDF	EX	EX	EX	EX	EX	EX	EX
107	CORR-1	LVT-1	RB-1	EX/PT-1	EX	EX	EX/PT-1	ES/PT-4
108	IT	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-2	ACT-1
109	SERVER	EX	EX/RB-1	EX	PT-1	EX/PT-1	EX	EX
110	CORR-2	EX/LVT-1	RB-1	PT-1	PT-1	PT-1	EX	ES/PT-4
111	AV	EX	RB-1	PT-1	PT-1	PT-1	EX/PT-1	ES
112	BOARD ROOM	CPT-1	RB-1	EX/PT-1	PT-1 *	PT-1 *	PT-1	ACT-1
114	STAIR-2	EX	EX	EX	EX	EX	EX	EX
118	BOARD RM CONF	CPT-1	RB-1	-	PT-1 *	PT-1	PT-1	ACT-1
119	STORAGE	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
120	SITTING AREA	CPT-1	RB-1	PT-2	PT-1	PT-1	PT-1	ACT-1
121	COFFEE BAR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
122	RR	PFT-1	PB (PWT-1)	PWT-1	PWT-1	PWT-1	PWT-1	ACT-1
123	MECH	EX	RB-1	PT-1	PT-1	PT-1	PT-1	ES
125	IT OFFICE							
126	IT STORAGE							

* REFER TO FLOOR PLANS FOR LOCATION OF PAINTED ACCENT WALLS (PT-2)

ROOM FINISH SCHEDULE LEVEL 4 - 801 GROVE ST								
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING
				NORTH	EAST	SOUTH	WEST	
401	OPEN OFFICE AREA	CPT-1	RB-1	TG/PT-1	PT-1	TG/PT-1	TG/PT-1	ES/PT-4
402	CONF	CPT-1	RB-1	TG/PT-1	PT-1	PT-2	PT-1	ACT-1
404	OFFICE	CPT-1	RB-1	TG/PT-1	PT-1	PT-2	PT-1	ACT-1
407	OFFICE	CPT-1	RB-1	TG/PT-1	PT-1	PT-2	PT-1	ACT-1
409	OFFICE	CPT-1	RB-1	TG/PT-1	PT-1	PT-2	TG/PT-1	ACT-1
410	OFFICE	CPT-1	RB-1	TG/PT-1	TG/PT-1	PT-2	PT-1	ACT-1
411	EX BREAKROOM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
412	MEN'S RR	PFT-1	PB (PWT-1)	PWT-1	PWT-1	PWT-1	PWT-1	ACT-1
413	JANITOR	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
414	STORAGE	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
415	WOMEN'S RR	PFT-1	PB (PWT-1)	PWT-1	PWT-1	PWT-1	PWT-1	ACT-1
416	OFFICE	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ES/PT-4
417	OFFICE	CPT-1	RB-1	PT-2	PT-1	TG/PT-1	PT-1	ACT-1
418	OFFICE	CPT-1	RB-1	PT-2	PT-1	TG/PT-1	PT-1	ACT-1
419	OFFICE	CPT-1	RB-1	PT-2	PT-1	TG/PT-1	PT-1	ACT-1
420	OFFICE	CPT-1	RB-1	PT-2	PT-1	TG/PT-1	PT-1	ACT-1
421	STOR	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ES/PT-4
422	STOR	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1
423	CONF	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
424	OFFICE	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
425	OFFICE	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
426	OFFICE	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
427	OFFICE	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
428	OFFICE	CPT-1	RB-1	PT-1	TG/PT-1	PT-1	PT-2	ACT-1
429	STOR	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ES/PT-4
430	COPY	VCT-1	RB-1	PT-1	PT-1	PNT-1	PT-1	ACT-1

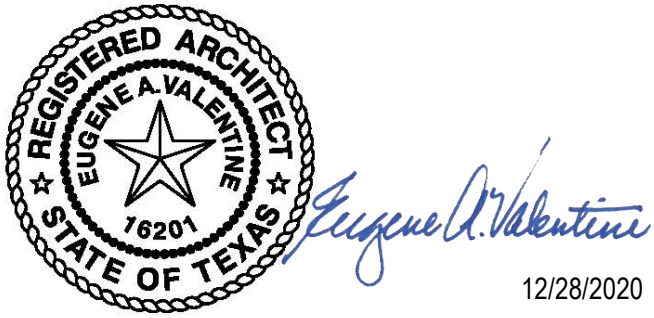
ROOM FINISH SCHEDULE LEVEL 5 - 801 GROVE ST.								
ROOM NO.	ROOM NAME	FLOOR	BASE	WALL FINISH				CEILING
				NORTH	EAST	SOUTH	WEST	
501	OFFICE	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
502	RR	PFT-2	PB	PWT-1	PWT-1	PWT-1	PWT-1	ACT-1
504	CORR	CPT-1	RB	TG/PT-1	TG/PT-1	TG/PT-1	TG/PT-1	ES/PT-4
507	OFFICE	CPT-1	RB	PT-1	PT-1	PT-2	PT-1	ACT-1
508	OFFICE	CPT-1	RB	PT-1	PT-1	PT-2	PT-1	ACT-1
509	OFFICE	CPT-1	RB	PT-1	PT-1	PT-2	PT-1	ACT-1
510	COPY	VCT-1	RB	PT-1	PT-1	PT-1	PT-1	ACT-1
511	OFFICE	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
512	OFFICE	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
513	OFFICE	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
514	OFFICE	CPT-1	RB	PT-1	PT-2	PT-1	PT-1	ACT-1
515	OFFICE	CPT-1	RB	PT-1	PT-2	PT-1	PT-1	ACT-1
516	OFFICE	CPT-1	RB	PT-1	PT-2	PT-1	PT-1	ACT-1
517	OFFICE	CPT-1	RB	PT-1	PT-2	PT-1	PT-1	ACT-1
518	OFFICE	CPT-1	RB	TG/PT-1	PT-1	PT-2	PT-1	ACT-1
519	OFFICE	CPT-1	RB	TG/PT-1	PT-1	PT-2	PT-1	ACT-1
520	CONF	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
523	CONF	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
524	STOR	VCT-1	RB	PT-1	PT-1	PT-1	PT-1	ES/PT-4
525	OFFICE	CPT-1	RB	PT-1	PT-2	PT-1	PT-1	ACT-1
526	OFFICE	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
527	OFFICE	CPT-1	RB	PT-2	PT-1	PT-1	PT-1	ACT-1
528	COPY	VCT-1	RB	PT-1	PT-1	PT-1	PT-1	ES/PT-4
529	OFFICE	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
530	OFFICE	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
531	OFFICE	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
532	CONF	CPT-1	RB	PT-1	PT-1	PT-1	PT-2	ACT-1
533	MECH	EX	RB	PT-1	PT-1	PT-1	PT-1	ACT-1

INTERIOR FINISH GENERAL NOTES	
NOTE	DESCRIPTION
A.	ALL FLOORING TRANSITIONS ARE TO OCCUR AT THE CENTERLINE OF DOOR OR OPENING UNLESS NOTED OTHERWISE.
B.	REPAIR EXISTING FLOORS, PARTITIONS AND CEILINGS, ETC. AS NEEDED TO ACCOMMODATE NEW CONSTRUCTION AND FINISHES.
C.	PROVIDE NEW PAINT AT EXISTING PAINTED SURFACES IN PROJECT AREA, UNLESS NOTED OTHERWISE.
D.	FOR INTERIOR GYPSUM DRYWALL SYSTEMS: TWO FINISH COASTS OVER PRIMER. FINISH COATS LATEX INTERIOR EGGSHELL ENAMEL.
E.	ALL PAINTS, PRIMER, AND COATINGS APPLIED TO INTERIOR WALLS AND CEILINGS MUST NOT EXCEED VOC CONTENT LIMITS ESTABLISHED IN GREEN SEAL STANDARD GS-11.
F.	CONTRACTOR MUST SUBMIT FINISH SUBMITTALS FOR ARCHITECTS' APPROVAL PRIOR TO ORDERING.
G.	ALL INTERIOR FINISH MATERIALS, INCLUDING WALLS, FLOORS, AND ACOUSTIC CEILINGS, SHALL MEET THE REQUIREMENTS AND LIMITATIONS AS SET FORTH PER SECTIONS 803 THROUGH 805, AND AS LISTED IN SECTION 803.5 AND TABLE 803.5 IN THE 2008 IBC. WALL AND CEILING MATERIAL MUST MEET CLASS B AT EXISTING ENCLOSURES AND PASSAGEWAYS AND TYPE C AT CORRIDORS, ROOMS AND ENCLOSED SPACES. FLOORING MATERIAL MUST MEET CLASS II.
H.	SUBMIT CARPET SEAMING DIAGRAM TO ARCHITECT FOR REVIEW.
I.	ENSURE SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE, AND FREE OF IRREGULARITIES. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

INTERIOR MATERIALS FINISH SCHEDULE				
ABBREVIATION	MATERIAL	MANUFACTURER / PRODUCT STYLE & NUMBER	COLOR	COMMENTS
FLOORING				
CONC	CONCRETE			SEALED, EPOXY
CPT-1	CARPET	MOHAWK, SKETCH EFFECT, #979	PENCIL LEAD	24" X 24" CARPET TILES
PFT-1	PORCELAIN TILE	FLORIDA TILE, TIDES #28110	SEA SALT	12" X 24"
PFT-2	PORCELAIN TILE	FLORIDA TILE, TIDES #28155	WATERS EDGE	12" X 24"
LVT-1	LUXURY VINYL TILE	PRESTIGE, BPI, #PRES3972	CAROLINA ASH	12" X 24"
VCT-1	VINYL COMPOSITION TILE	ARMSTRONGFLOORING #51903	BLUE GRAY	12" X 12"
BASE				
RB-1-1	RUBBER BASE	JOHNSONITE, #63	BURNT UMBER	
PB	PORCELAIN TILE	FLORIDA TILE, TIDES #28110		SEE INTERIOR ELEVATIONS
WALL				
PT-1	PAINT	SHERWIN WILLIAMS, SW 7672	KNITTING NEEDLES	REFER TO ROOM FINISH SCHEDULE
PT-2	ACCENT PAINT	SHERWIN WILLIAMS, SW 6531	INDIGO	REFER TO ROOM FINISH SCHEDULE
PWT-1	PORCELAIN TILE	FLORIDA TILE, TIDES #28110	SEA SALT	12" X 24"
TG	TEMPERED GLASS			
CEILING				
ACT-1	ACOUSTICAL TILE	ARMSTRONG CIRRUS ANGLED TEGULAR	WHITE	
ES/PT-4	EXPOSED STRUCTURE	SHERWIN WILLIAMS, SW	tbd	
PT-1	GYP BOARD	SHERWIN WILLIAMS, SW 7672	KNITTING NEEDLES	
EXTN	EXISTING TIN			REPLICATE AS NEEDED
GROUT				
G-1	GROUT	LATICRETE SPECTRALOCK	TBD	STANDARD 1/8" WIDTH GROUT JOINT
MILLWORK				
PL-1	PLASTIC LAMINATE	WILSONART, LINEARITY FINISH, #7949K-18	ASIAN NIGHT	CABINETS
SS-1	SOLID SURFACE	WILSONART, #9223SS	ANGEL FALLS	COUNTERTOPS
CASEWORK				
ST-1	STAIN		TBD	CABINETS
ER-1	EPOXY RESIN	KEWAUNEE KEMRESIN	BLACK	COUNTERTOPS
DOORS				
ST-2	STAIN	VT, MAHOGANY #SA07	SAVANNA	TO MATCH EXISTING DOORS
PT-3	PAINT - DOOR FRAMES	SHERWIN WILLIAMS, SW 7635	PALISADE	

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
ROOM FINISH SCHED. LEVEL 1, 4 & 5
- 801 GROVE STREET

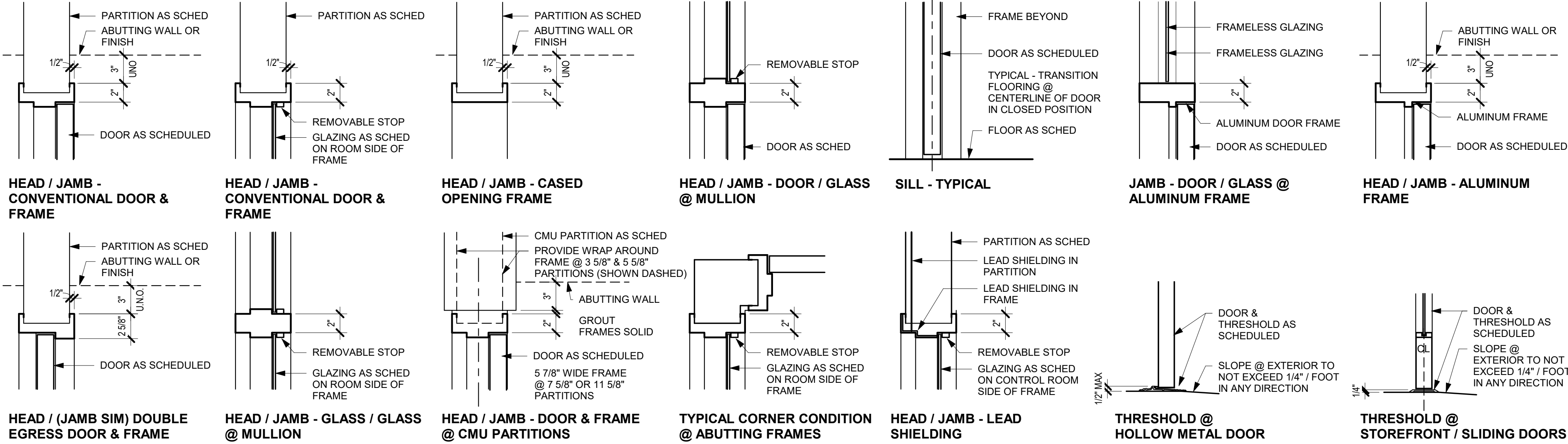
SHEET No.	A-603	REV 0
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D

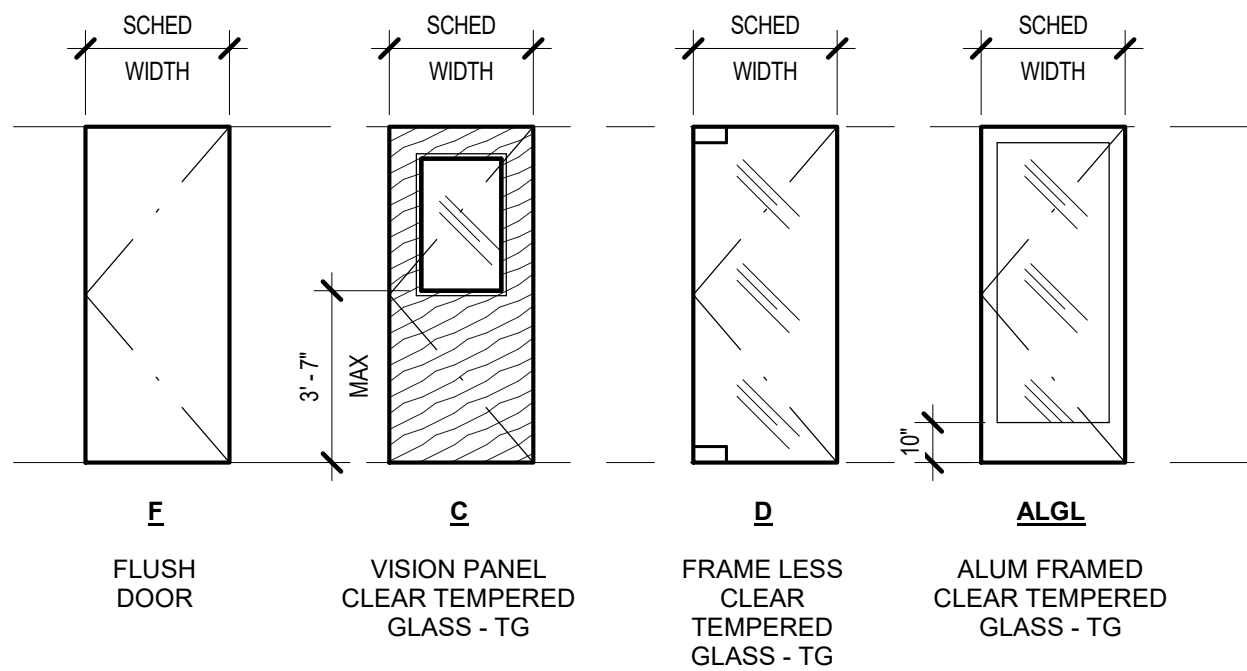
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B

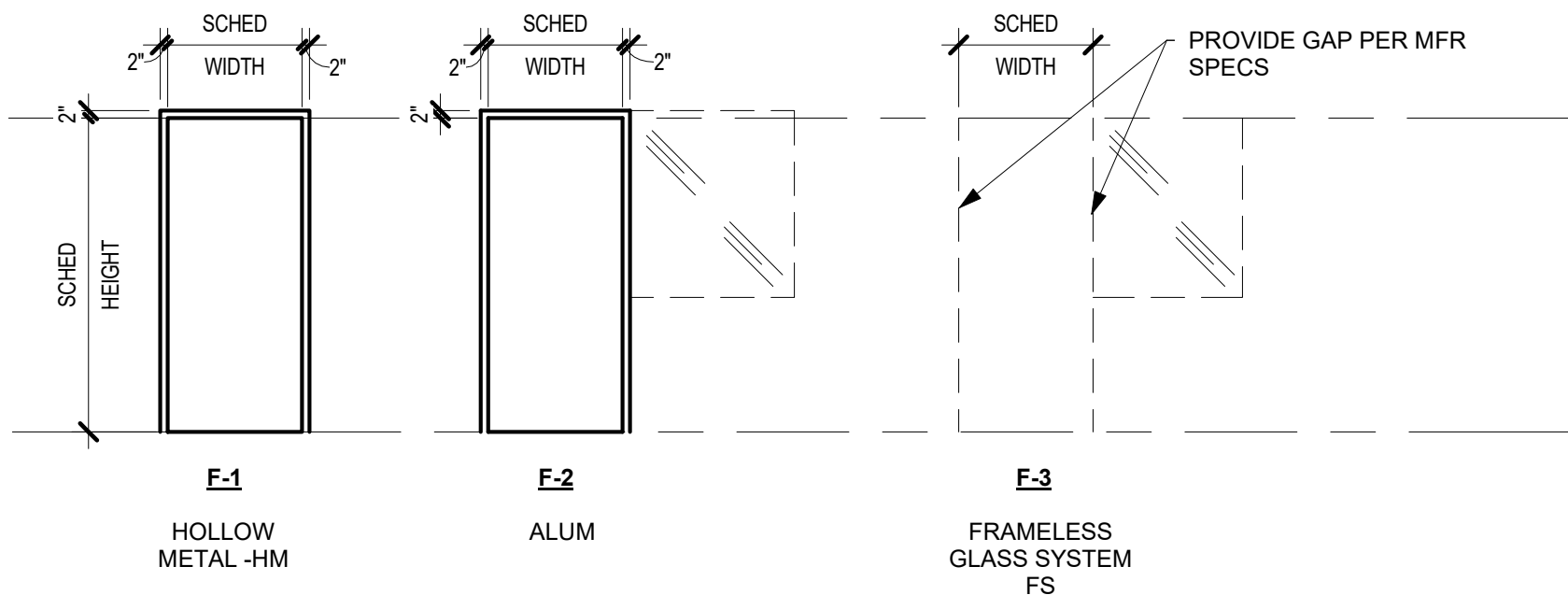
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TYPICAL DETAILS



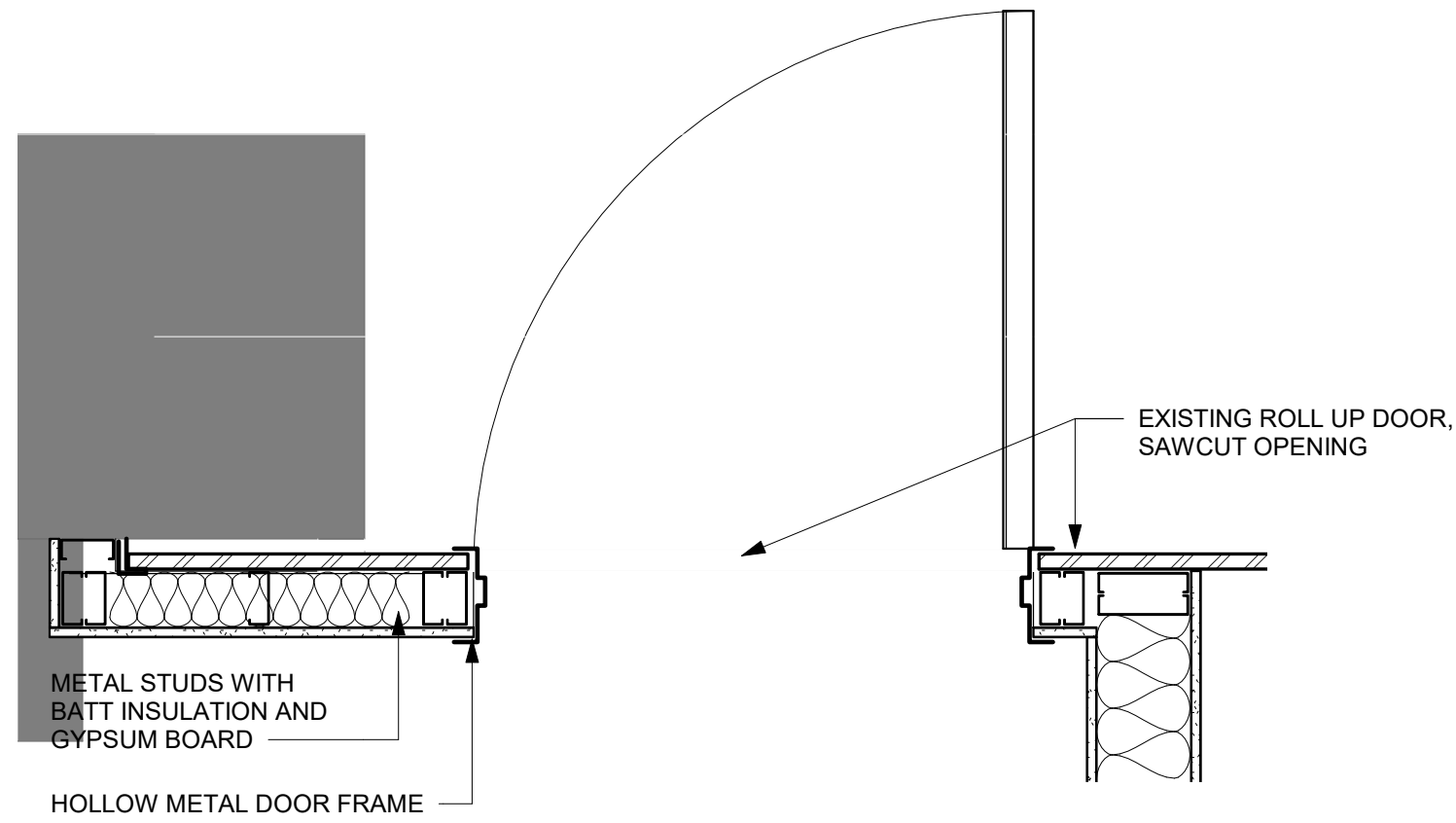
B1 TYPICAL DOOR TYPES
1/4" = 1'-0"



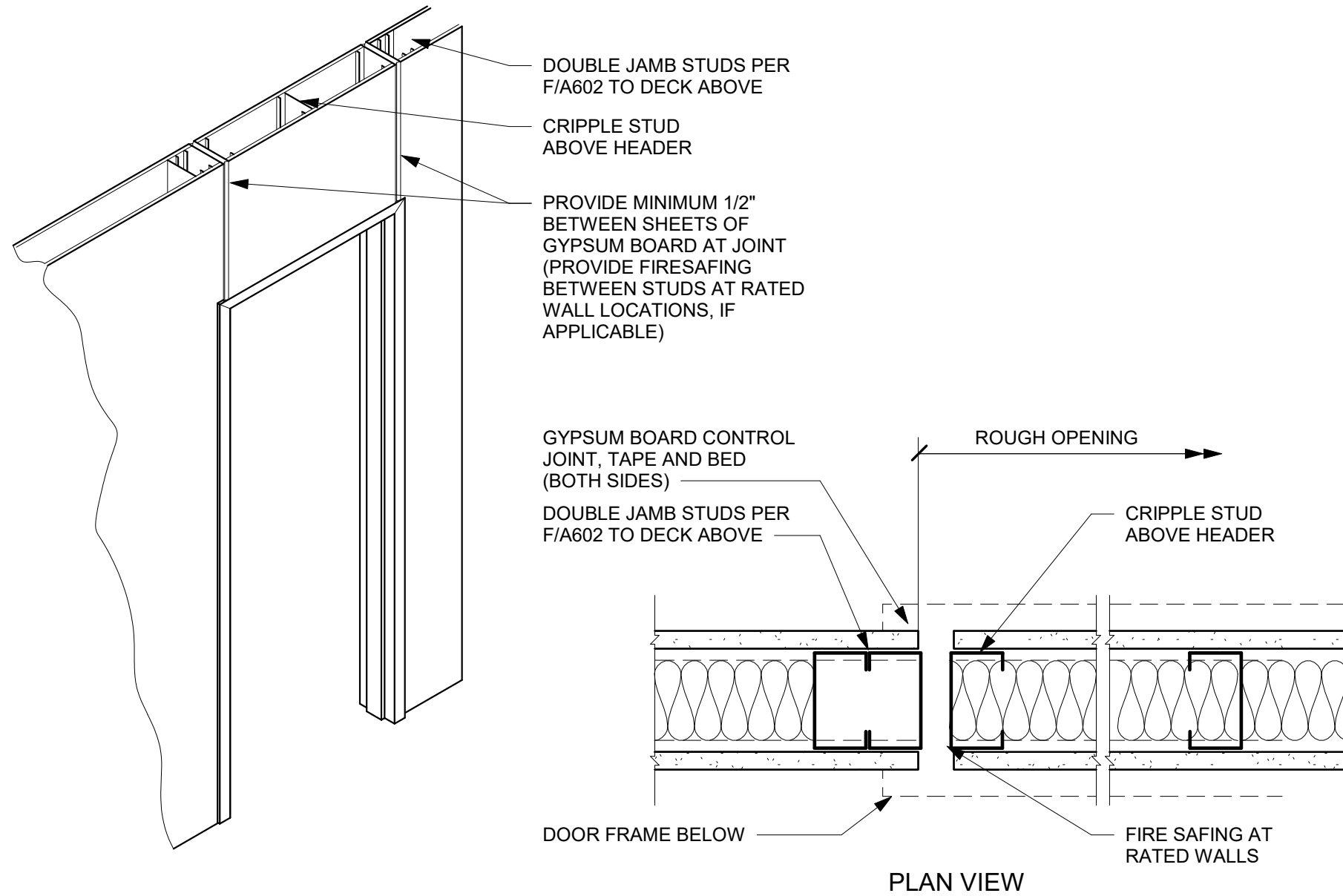
B3 TYPICAL FRAME TYPES
1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET A-6XX FRAME & DOOR TYPES.
2. PANIC HARDWARE TO MATCH DOOR FRAME.
3. ALL FRAMES TO BE A1 U.N.O.
4. CONTRACTOR MUST VERIFY EACH SUCH DIMENSION.
5. ALL DOOR DIMENSIONS ARE CLEAR, FROM EDGE OF DOOR STOP TO EDGE OF DOOR IN 90° OPEN POSITION.
6. EXIST DOORS ANNOTATED AS 'SMOKE-TIGHT CONSTRUCTION' SHALL HAVE SEALS AND ACCESSORIES UPGRADED TO PREVENT THE PASSAGE OF SMOKE. EXIST DOOR TO REMAIN.



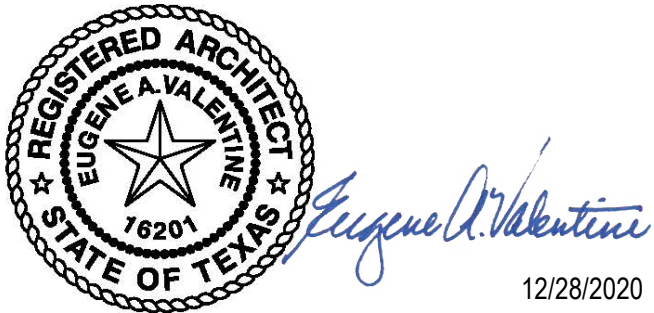
C4 DETAIL - MAN DOOR IN ROLL UP DOOR
1" = 1'-0"



A4 CONTROL JOINT AT DOORS (TYPICAL)
NTS

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



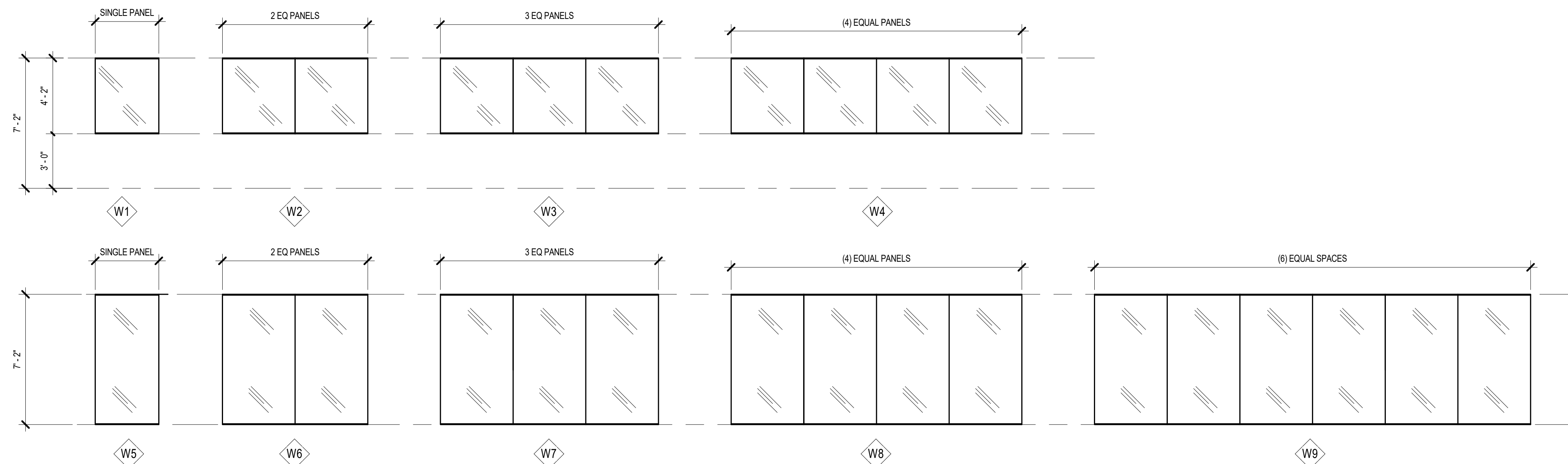
DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
DOOR DETAILS

SHEET No.	A-605	REV 0
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GENERAL NOTES

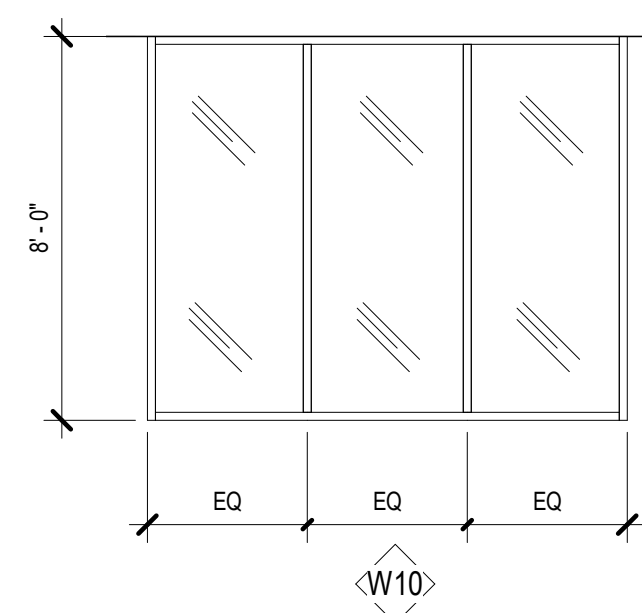
1. IT SHALL BE THE DESIGN-BUILDER'S RESPONSIBILITY TO GET APPROVAL FROM THE TEXAS HISTORIC COMMISSION FOR ALL EXTERIOR WINDOW REPLACEMENT.
2. ALL STOREFRONT FRAMES TO BE ALUMINUM, U.N.O.
3. FOR MORE INFO. ON EXTERIOR WINDOW GLAZING, REF: BUILDING ELEVATIONS FOR LOCATION OF SINGLE FLOAT GLASS & INSULATING GLASS UNIT TYPES.
4. ALL INTERIOR GLAZING SHALL BE CLEAR TEMPERED GLASS.



REFER TO INTERIOR ELEVATIONS / FLOOR PLANS FOR DIMENSIONS OF EACH UNIT

C1 WINDOW TYPES

$1/4'' = 1'-0''$



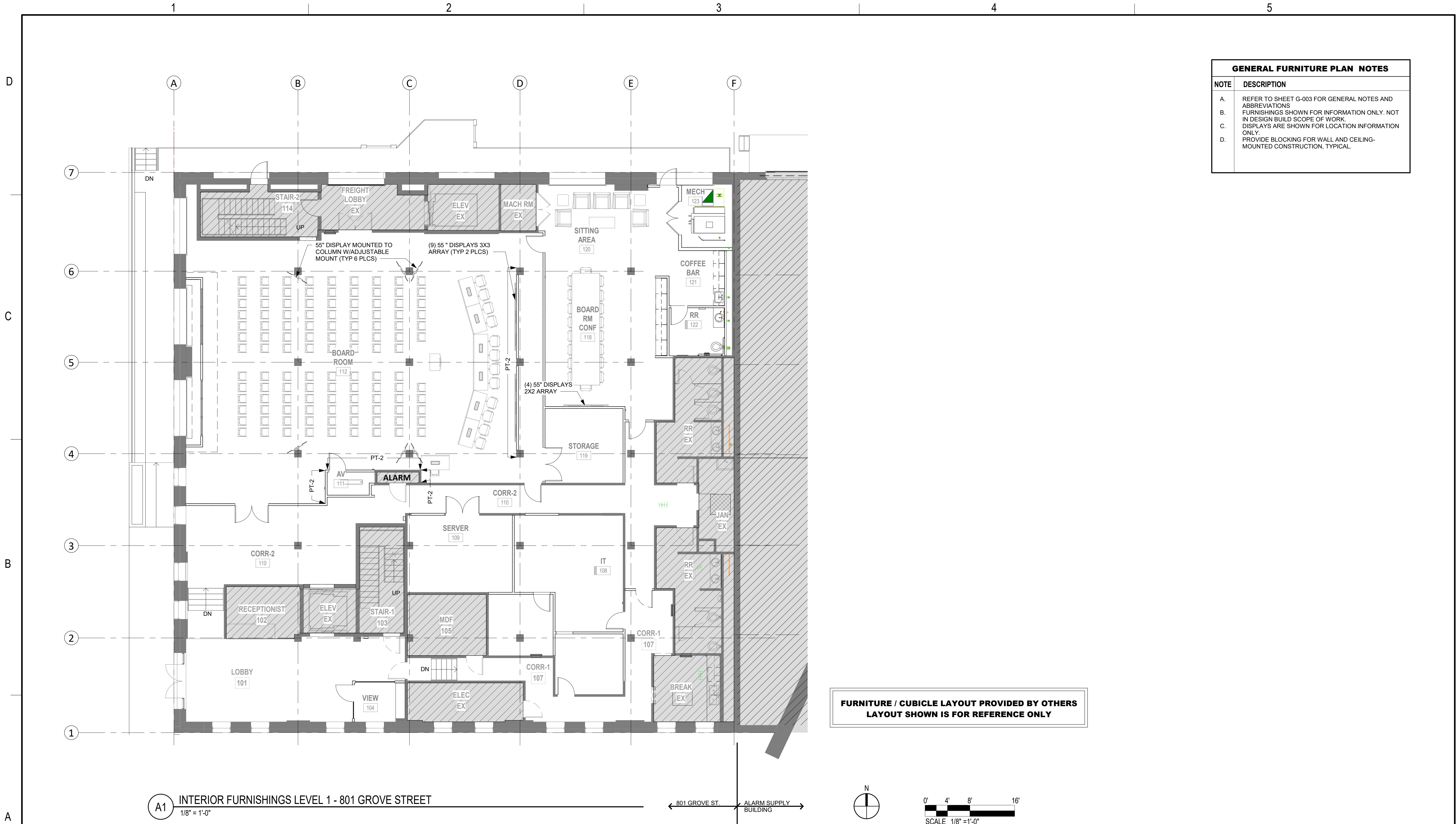
ALUMINUM CURTAINWALL SYSTEM

B4 CURTAINWALL SYSTEM

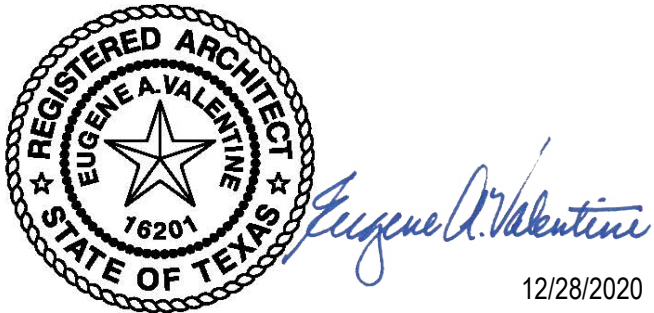
1/4" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

[illegible]



REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

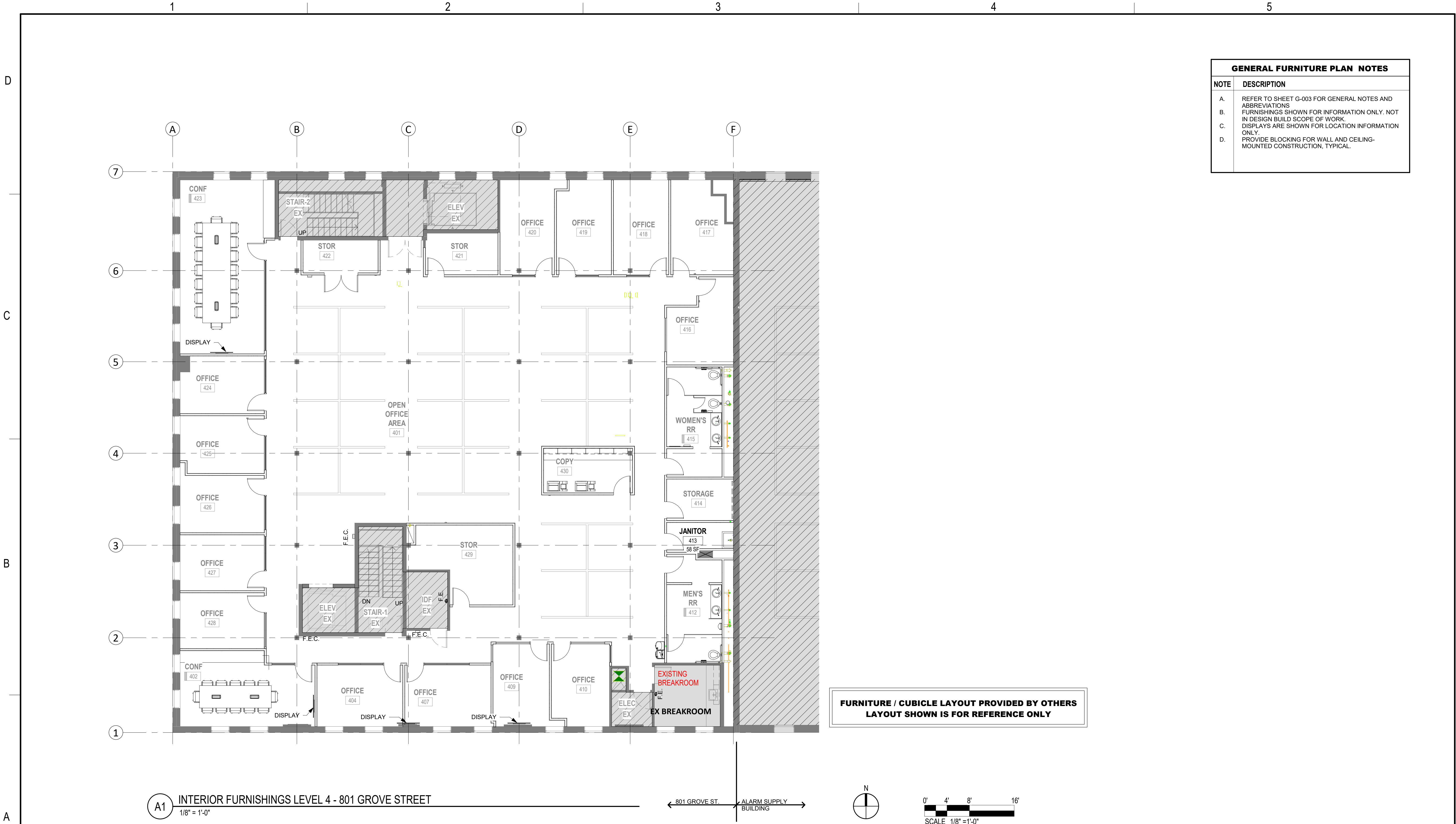


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DESIGNED	CS
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APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

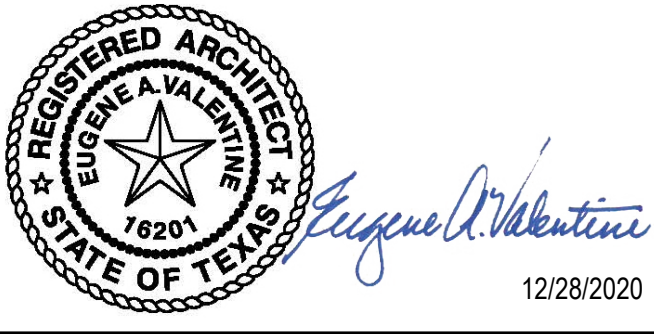
**TRINITY METRO HEADQUARTERS
INTERIOR FURNISHINGS LEVEL 1 -
801 GROVE ST**

SHEET No.	I-101	REV 0
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MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
INTERIOR FURNISHINGS LEVEL 4 -
801 GROVE ST

SHEET No. **I-104**

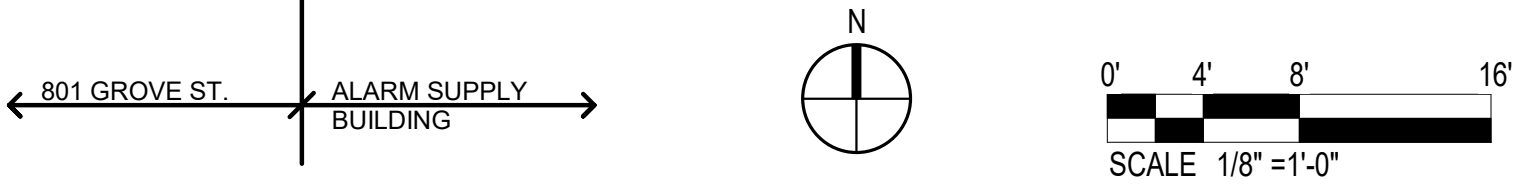
REV
0



GENERAL FURNITURE PLAN NOTES	
NOTE	DESCRIPTION
A.	REFER TO SHEET G-003 FOR GENERAL NOTES AND ABBREVIATIONS
B.	FURNISHINGS SHOWN FOR INFORMATION ONLY. NOT IN DESIGN BUILD SCOPE OF WORK.
C.	DISPLAYS ARE SHOWN FOR LOCATION INFORMATION ONLY.
D.	PROVIDE BLOCKING FOR WALL AND CEILING-MOUNTED CONSTRUCTION, TYPICAL.

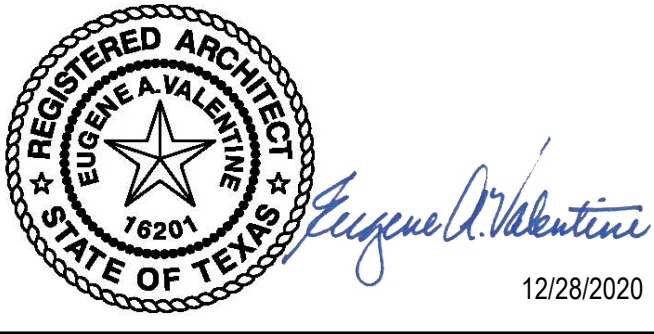
FURNITURE / CUBICLE LAYOUT PROVIDED BY OTHERS
LAYOUT SHOWN IS FOR REFERENCE ONLY

A1 INTERIOR FURNISHINGS LEVEL 5 - 801 GROVE STREET
1/8" = 1'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

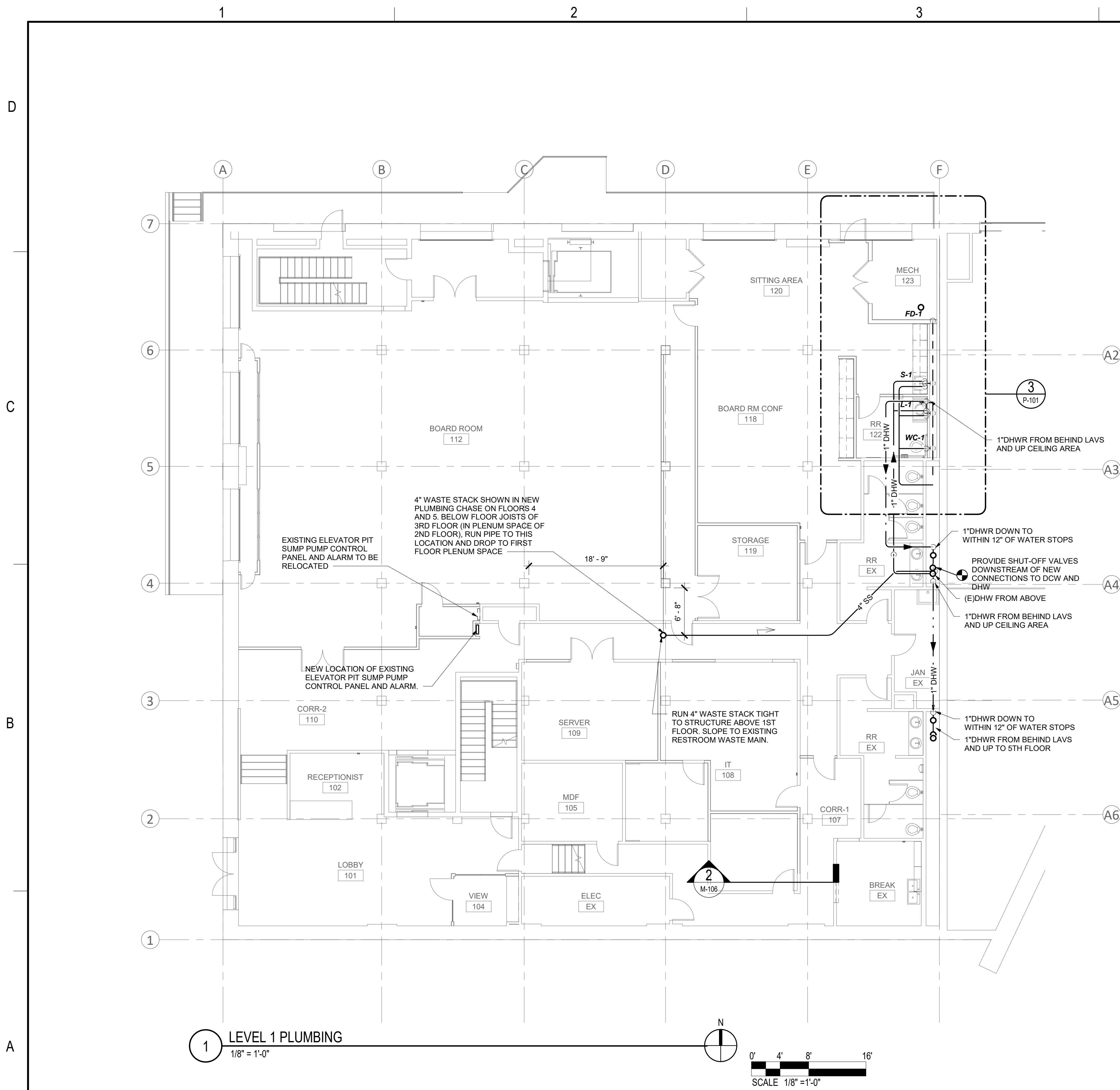


K H K Group Ltd
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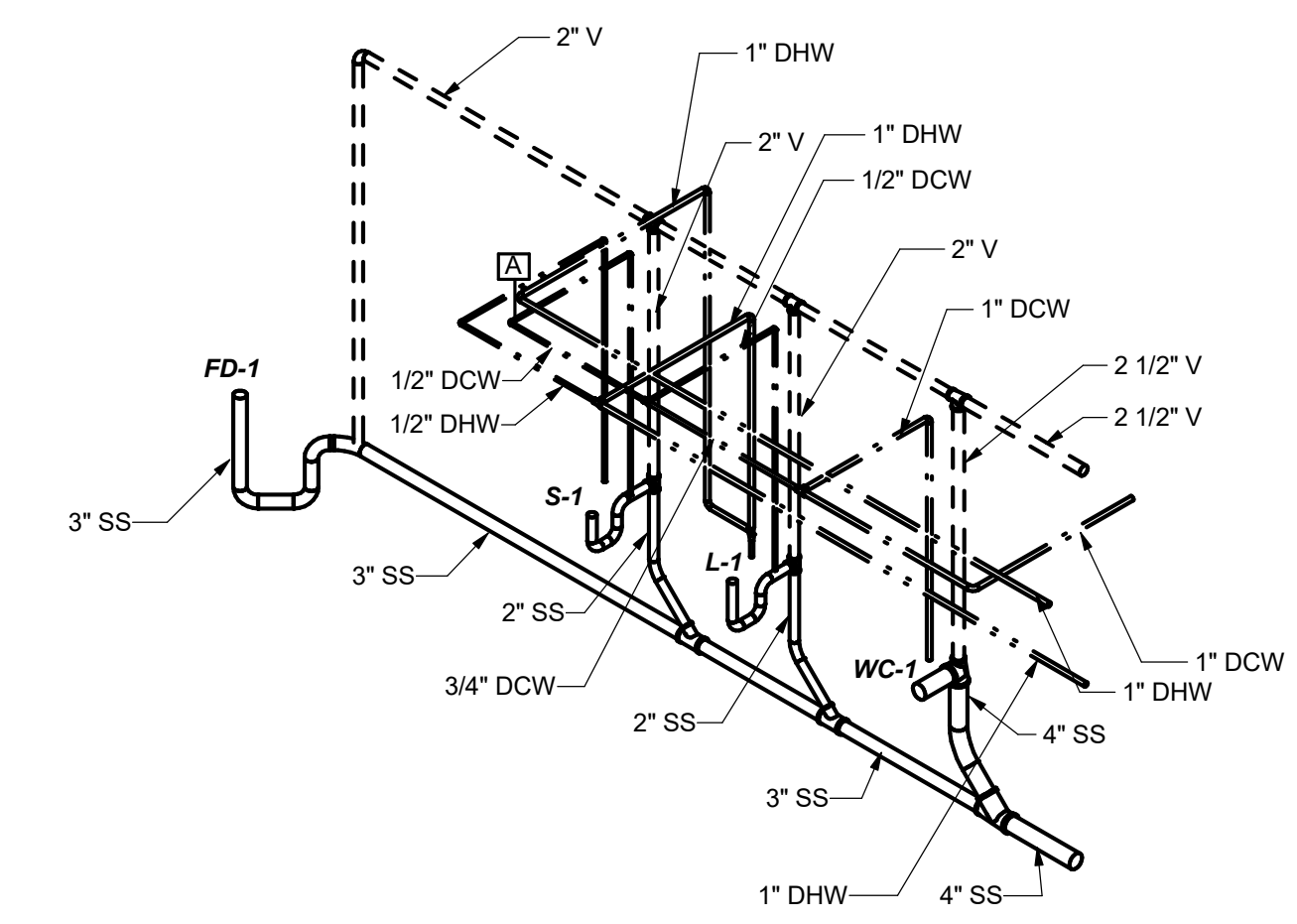
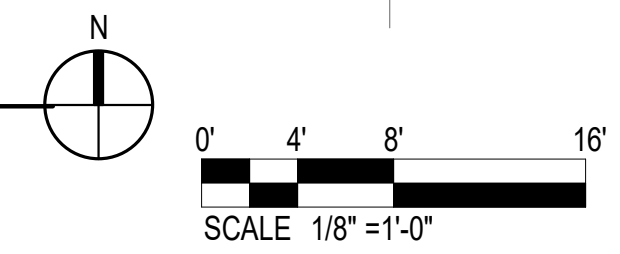


DRAWN	HZI
DESIGNED	CS
CHECKED	GV
APPROVED	JMF
DATE	12.28.2020

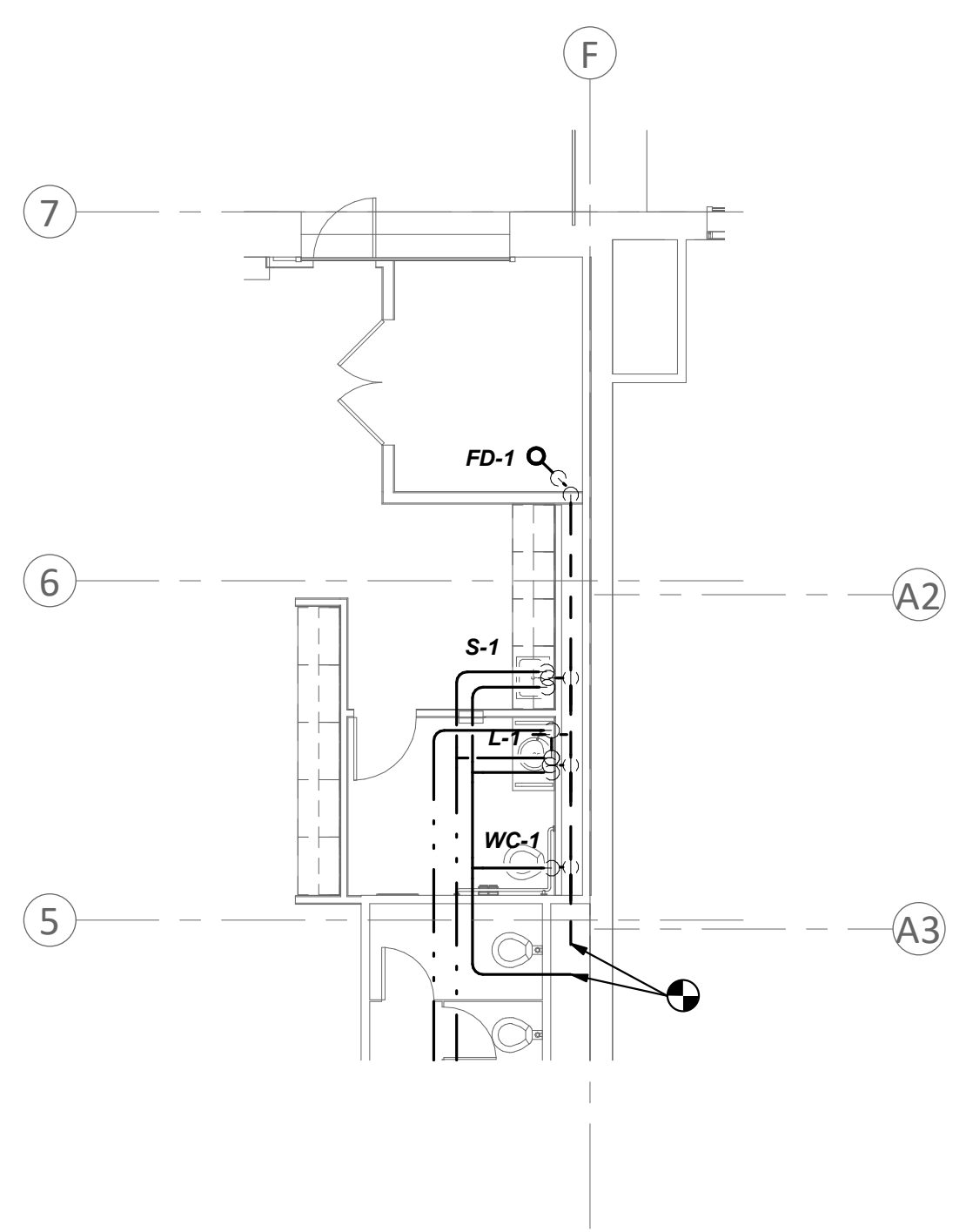
TRINITY METRO HEADQUARTERS INTERIOR FURNISHINGS LEVEL 5 - 801 GROVE ST	
SHEET No.	I-105
REV	0



1 LEVEL 1 PLUMBING
1/8" = 1'-0"



2 LEVEL 1 RESTROOM PLUMBING RISER



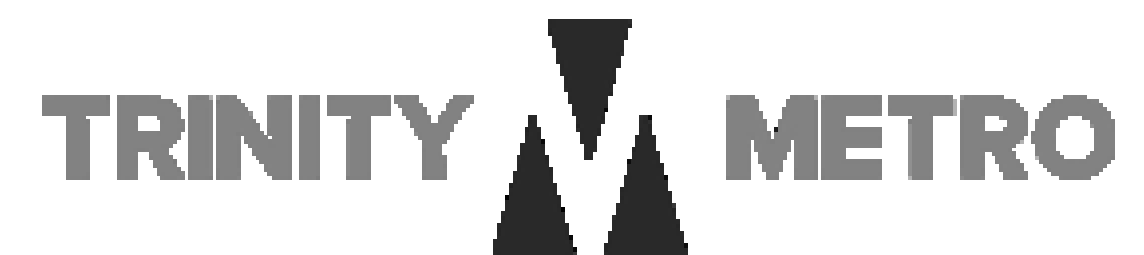
3 LEVEL 1 PLUMBING ENLARGED PLAN
1/8" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

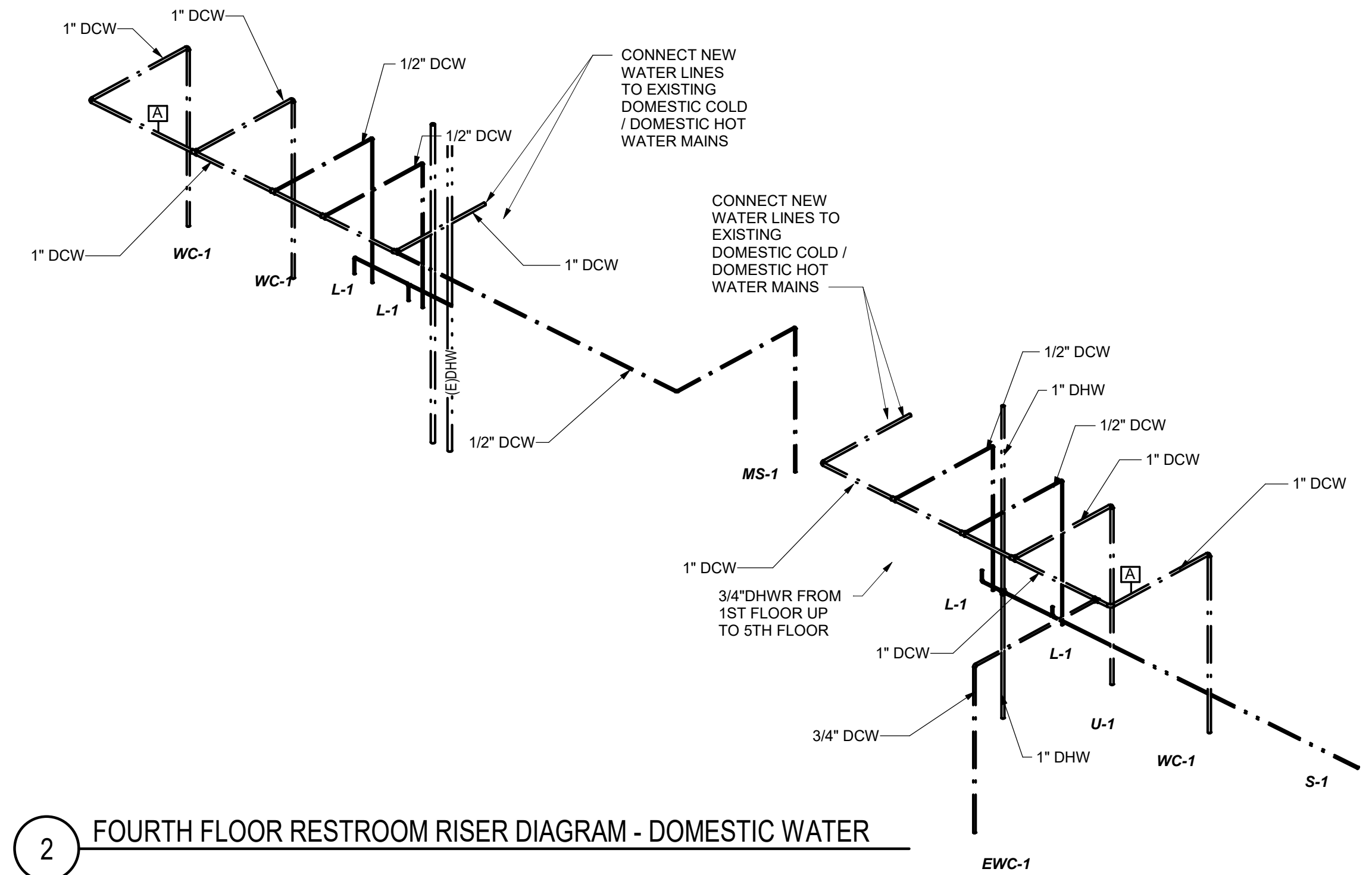
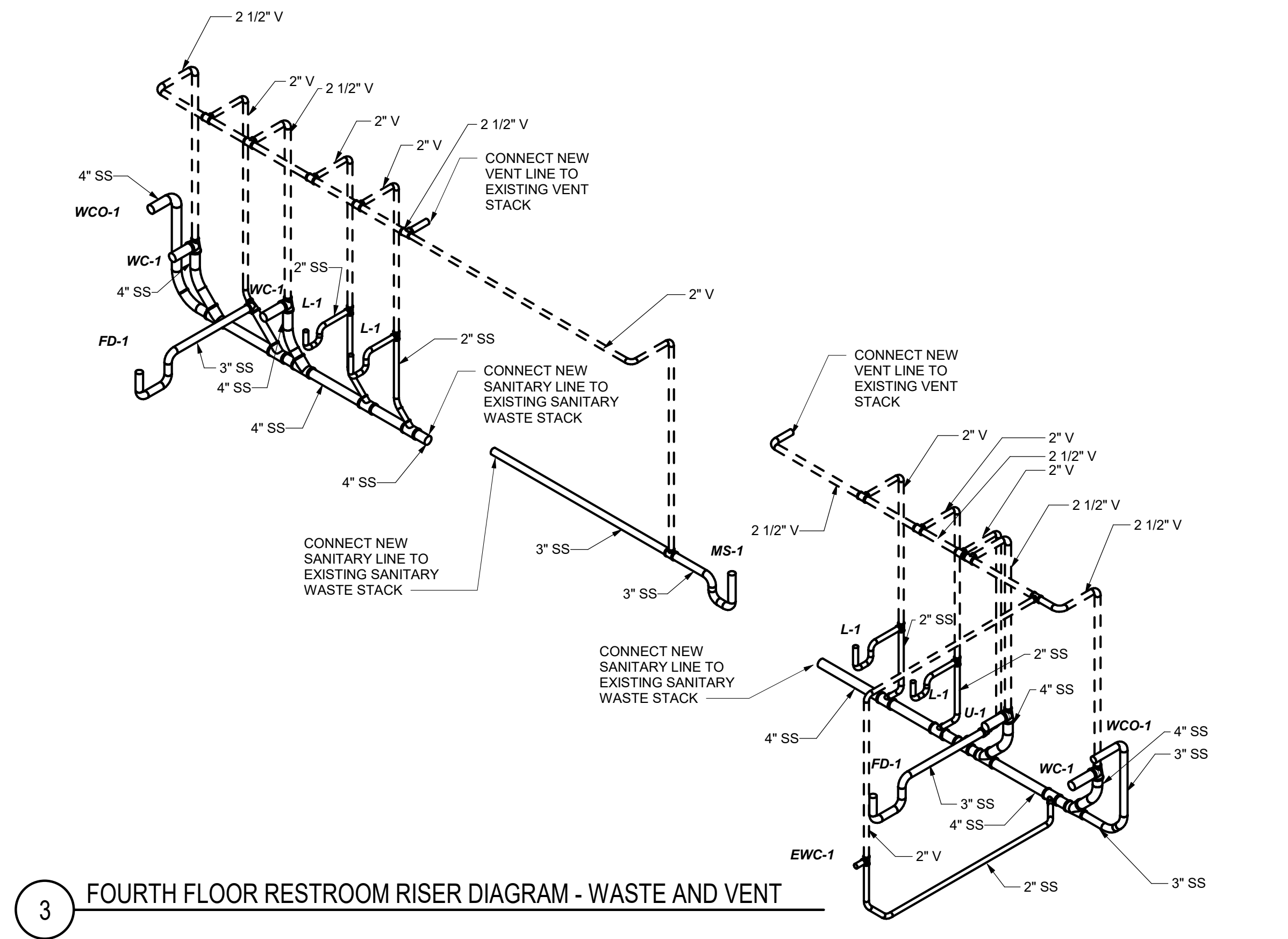
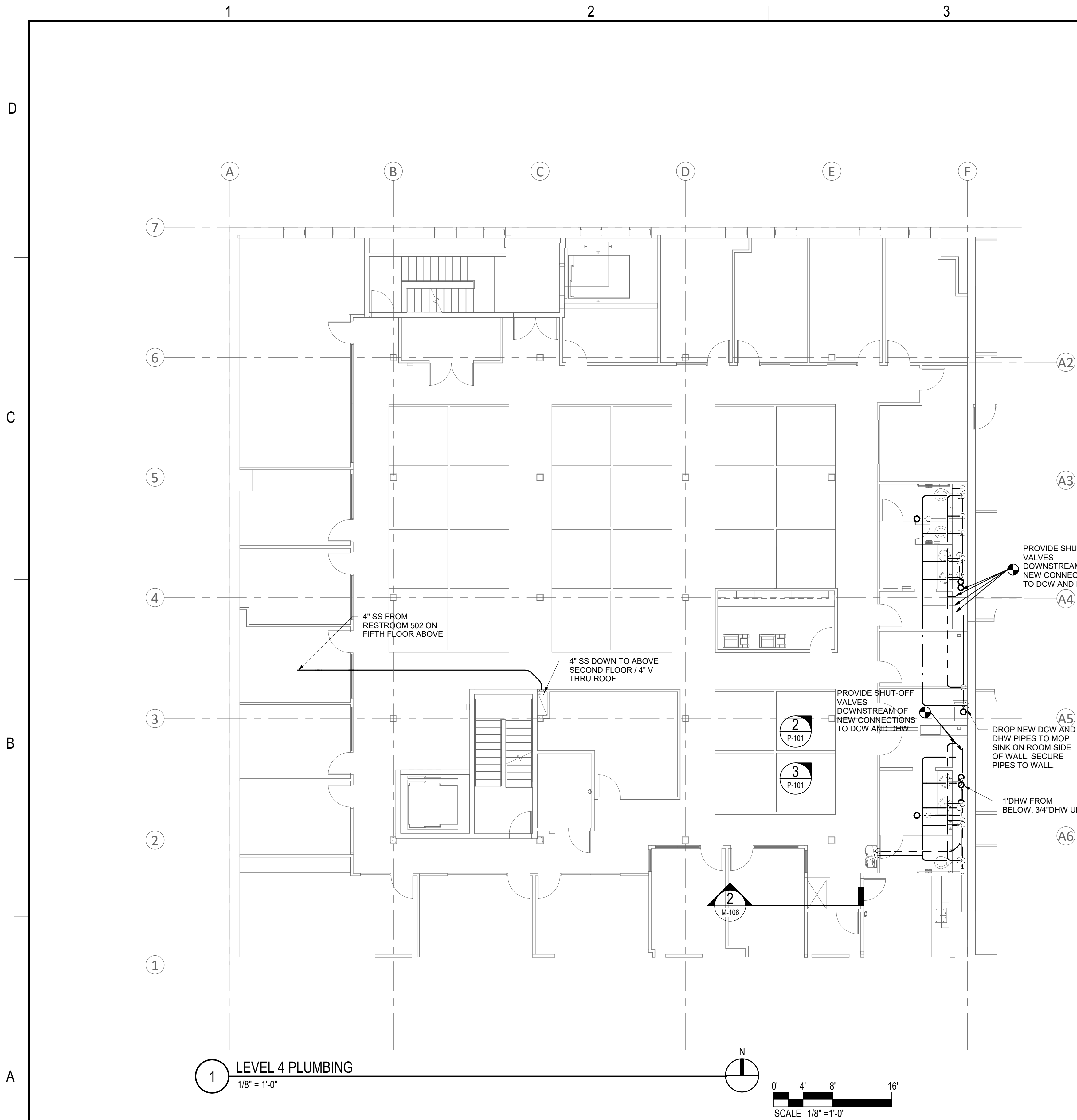


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DRAWN	HZI
DESIGNED	KNN
CHECKED	DGM
APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS		
LEVEL 1 PLUMBING PLAN		
SHEET No.	P-101	REV 0

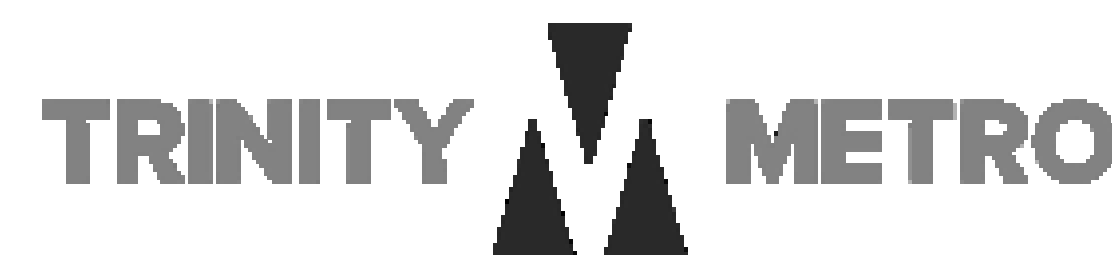


MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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DRAWN	HZI
DESIGNED	KNN
CHECKED	DGM
APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS	
LEVEL 4 PLUMBING PLAN	
SHEET No.	P-104
REV	0

D

C

B

A

PLUMBING FIXTURE SCHEDULE							
FIXTURE TAG	DESCRIPTION	ROUGH-IN SIZE (INCHES)				MAXIMUM FLOW	
		WASTE	VENT	DCW	DHW	GPF	GPM
WC-1	WATER CLOSET - HANDICAPPED WALL-MOUNT - FLUSH VALVE	4	2	1	-	1.28	-
U-1	URINAL - HANDICAPPED WALL-MOUNT BATTERY POWERED SENSOR FLUSH VALVE	2	2	3/4	-	0.125	-
L-1	LAVATORY - HANDICAPPED SEMI-COUNTERTOP MOUNT	1 1/2	1 1/2	1/2	1/2	-	0.5
S-1	SINK - SINGLE COMPARTMENT - HANDICAPPED COUNTER-MOUNT	2	1 1/2	1/2	1/2	-	-
JS-1	JANITOR'S SINK FLOOR MOUNT	3	2	1/2	1/2	-	-
EW-1	ELECTRIC WATER COOLER - HANDICAPPED WALL-MOUNT - HIGH/LOW BLEVEL	1 1/2	1 1/2	1/2	-	-	-
FD-1	FLOOR DRAIN	3	2	-	-	-	-

PUMP SCHEDULE													
GENERAL										MOTOR			NOTES
UNIT TAG	SERVICE	MANUFACTURER AND MODEL	TYPE	VOLUME CONTROL	FLUID	FLOW RATE (GPM)	PUMP HEAD (FT)	MIN. FLOW RATE (GPM)	EFFICIENCY (%)	MOTOR POWER (HP)	VOLTS/ PHASE	SPEED (RPM)	
CP5-1	DOMESTIC HOT WATER	GRUNDFOS, UP43-75-BF	IN-LINE CLOSE-COUPLED	CONSTANT	WATER	2	25	1.5	65	1/6	115 / 1	1,760	1,2
NOTES: 1. PROVIDE 7-DAY TIME CLOCK FOR OPERATION OF CIRCULATION PUMP (SET TO OPERATE BETWEEN 5:00 AM TO 9:00 PM, ADJUSTABLE). 2. PUMPS SHALL BE RATED FOR CONTINUOUS OPERATION AT WATER TEMPERATURES OF WATER SYSTEM													

THERMOSTATIC MIXING VALVE SCHEDULE									
UNIT TAG	SERVICE / LOCATION	MANUFACTURER AND MODEL	INLET WATER PRESSURE (PSIG)	CAPACITY (GPM)		PRESSURE DROP (PSIG)	HOT WATER INLET TEMP (°F)	COLD WATER INLET TEMP (°F)	DELIVERED WATER TEMP (°F)
				HIGH RANGE	LOW RANGE				
TSMV5-1	DOMESTIC HOT WATER	ARMSTRONG RADA 425R	50	27	1.0	10	140	55 TO 85	110

DOMESTIC WATER HEATER SCHEDULE - ELECTRIC						
GENERAL						
UNIT TAG	MANUFACTURER AND MODEL	SERVICE	INPUT POWER (kW)	INLET WATER FLOW (GPM)	WATER TEMP RISE (°F)	VOLTS / PHASE
EW-1	EEMAX AM004120T	OFFICE 501	3.5	0.3	50	120 / 1

WATER HAMMER ARRESTOR SCHEDULE						
PDI UNIT	A	B	C	D	E	F
FIXTURE UNITS	1 - 11	12 - 32	33 - 60	61 - 113	114 - 154	155 - 330
NOTE: WATER HAMMER ARRESTORS SHALL COMPLY WITH PDI WH-201. WATER HAMMER ARRESTORS SHALL BE PROVIDED WITH AN ACCESS DOOR UNLESS PROVIDED WITH A LIFETIME WARRANTY.						

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP	

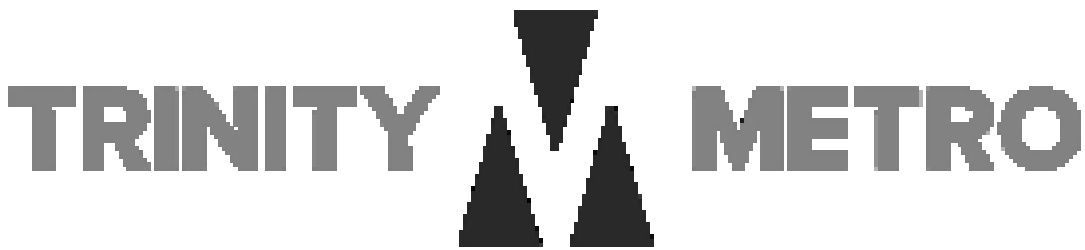


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DESIGNED	KNN
CHECKED	DGM
APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS
PLUMBING SCHEDULES

SHEET No.	P-601	REV 0
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1

2

D	HVAC ABBREVIATIONS											
	A			F			N					
	AF	AIRFOIL		*F	DEGREES FAHRENHEIT		N/A	NOT APPLICABLE				
	AFF	ABOVE FINISHED FLOOR		FC	FORWARD CURVED		NC	NORMALLY CLOSED				
	AHU	AIR HANDLING UNIT		FCU	FAN COIL UNIT		NO	NORMALLY OPEN				
	AI	ANALOG INPUT		FD	FIRE DAMPER		No.	NUMBER (QUANTITY)				
	AO	ANALOG OUTPUT		FD	FLOOR DRAIN		NPSHR	NET POSITIVE SUCTION HEAD REQUIRED				
	B			FLA	FULL LOAD AMPS		NTS	NOT TO SCALE				
				FPS	FEET PER SECOND							
	B	BOILER		G				O				
BAS	BUILDING AUTOMATION SYSTEM						OA	OUTSIDE AIR				
BCU	BLOWER COIL UNIT		GPM	GALLONS PER MINUTE		OBD	OPPOSED BLADE VOLUME DAMPER					
BI	BACKWARD INCLINED (FANS)		H				OD	OUTSIDE DIAMETER				
BI	BINARY INPUT (CONTROLS)						ODP	OPEN DRIP PROOF MOTOR				
BO	BINARY OUTPUT		HP	HORSEPOWER		P						
BOP	BOTTOM OF PIPE		HVAC	HEATING, VENTILATION, AND AIR CONDITIONING		P	PRESSURE					
BTUH	BRITISH THERMAL UNITS PER HOUR		HWP	HEATING WATER PUMP		PH	PHASE (ELECTRICAL)					
C			HWR	HEATING WATER RETURN		PSC	PERMANENT SPLIT-CAPACITOR MOTOR					
C	COMMON		HWS	HEATING WATER SUPPLY		PSI	POUNDS PER SQUARE INCH (GAUGE)					
CD	CONDENSATE DRAIN		HZ	HERTZ		R						
CFM	CUBIC FEET PER MINUTE		I				RA	RETURN AIR				
CL	CENTER LINE		ID	INSIDE DIAMETER		REF	REFERENCE					
CHWP	CHILLED WATER PUMP		IEER	INTEGRATED ENERGY EFFICIENCY RATIO		REV	REVISION					
CHR	CHILLED WATER RETURN		IN	INCHES		RG	REFRIGERANT GAS					
CHS	CHILLED WATER SUPPLY		IN H2O	INCHES OF WATER (PRESSURE)		RH	RADIANT HEATER					
COP	COEFFICIENT OF PERFORMANCE		IN WC	INCHES WATER COLUMN (PRESSURE)		RH	RELATIVE HUMIDITY					
CRAC	COMPUTER ROOM AIR-CONDITIONER		IN WG	INCHES WATER GAUGE (PRESSURE)		RL	REFRIGERANT LIQUID					
CT	COOLING TOWER		IPLV	INTEGRATED PART-LOAD VALUE		RPM	REVOLUTIONS PER MINUTE					
CU	CONDENSING UNIT		K				RTU	ROOFTOP UNIT				
CV	CONSTANT VOLUME						S					
CWP	CONDENSER WATER PUMP		kBTU/H	ONE THOUSAND BRITISH THERMAL UNITS PER HOUR		SA	SUPPLY AIR					
CWR	CONDENSER WATER RETURN		KW	KILOWATTS		SEER	SEASONAL ENERGY EFFICIENCY RATIO					
CWS	CONDENSER WATER SUPPLY		L				T					
D			LAT	LEAVING AIR TEMPERATURE		TEFC	TOTALLY-ENCLOSED FAN-COOLED MOTOR					
DB	DRY BULB		LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN		TOD	TOP OF DUCT					
dB	DECIBELS		M				TSP	TOTAL STATIC PRESSURE				
DDC	DIRECT DIGITAL CONTROLS						TU	TERMINAL UNIT				
DWH	DOMESTIC WATER HEATER						TYP	TYPICAL				
DWG	DRAWING						U					
DX	DIRECT EXPANSION		MAU	MAKEUP AIR UNIT		V						
E			MAX	MAXIMUM		W						
(E)	EXISTING		MBH	ONE THOUSAND BRITISH THERMAL UNITS PER HOUR		UH	UNIT HEATER					
EA	EXHAUST AIR						V					
EAT	ENTERING AIR TEMPERATURE		MCA	MINIMUM CIRCUIT AMPS								
ECM	ELECTRONICALLY COMMUTATED MOTOR		MECH	MECHANICAL		VAV	VARIABLE AIR VOLUME					
EER	ENERGY EFFICIENCY RATIO		MERV	MINIMUM EFFICIENCY REPORTING VALUE		VFD	VARIABLE FREQUENCY DRIVE					
EF	EXHAUST FAN		MIN	MINIMUM		VRF	VARIABLE REFRIGERANT FLOW					
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM		MOCP	MAXIMUM OVER CURRENT PROTECTION		W						
ESP	EXTERNAL STATIC PRESSURE		MZ	MULTIZONE								
ET	EXPANSION TANK						WB	WET BULB				
EUH	ELECTRIC UNIT HEATER											
NOTE:												
NOT ALL OF THE ABBREVIATIONS ON THIS SHEET ARE NECESSARILY USED IN THIS PROJECT.												

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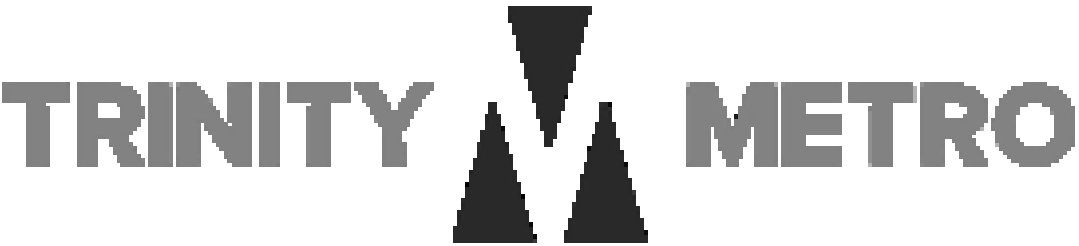
GENERAL SYMBOLS		AIRSIDE SYMBOLS		PIPING SYMBOLS	
	NEW OR RELOCATED MECHANICAL EQUIPMENT		SUPPLY AIR DUCT RISER		NEW OR RELOCATED PIPING
	EXISTING MECHANICAL EQUIPMENT TO REMAIN		RETURN AIR DUCT RISER		EXISTING PIPING TO REMAIN
	EXISTING MECHANICAL EQUIPMENT TO BE REMOVED		EXHAUST AIR DUCT RISER		EXISTING PIPING TO BE REMOVED
	POINT OF NEW CONNECTION		NEW OR RELOCATED CEILING-MOUNTED SUPPLY AIR DIFFUSER		ELBOW DOWN
	NOTE BY SYMBOL (DEMOLITION)		NEW OR RELOCATED CEILING-MOUNTED RETURN AIR GRILLE		ELBOW UP
	NOTE BY SYMBOL (NEW WORK)		NEW OR RELOCATED CEILING-MOUNTED EXHAUST AIR GRILLE		PIPE CAP CLEANOUT
	3/4" UNDERCUT DOOR		EXISTING CEILING-MOUNTED SUPPLY AIR DIFFUSER TO REMAIN		DIRECTION OF FLOW
	ISOMETRIC VIEW		EXISTING CEILING-MOUNTED RETURN AIR GRILLE TO REMAIN		DIRECTION OF PIPE PITCH (DOWN)
	EQUIPMENT TAGS		EXISTING CEILING-MOUNTED EXHAUST AIR GRILLE TO REMAIN		CHILLED WATER SUPPLY
	EQUIPMENT NUMBER ON FLOOR		EXISTING CEILING-MOUNTED EXHAUST AIR GRILLE TO BE REMOVED		CHILLED WATER RETURN
	TERMINAL UNIT TAGS		EXISTING CEILING-MOUNTED EXHAUST AIR GRILLE TO BE REMOVED		HEATING WATER SUPPLY
	VAV BOX NUMBER SEQUENCE		EXISTING CEILING-MOUNTED EXHAUST AIR GRILLE TO BE REMOVED		HEATING WATER RETURN
	AHU NUMBER ASSOCIATED WITH VAV		EXISTING CEILING-MOUNTED EXHAUST AIR GRILLE TO BE REMOVED		CONDENSATE DRAIN PIPING
	FLOOR NUMBER SERVED BY VAV BOX		NEW OR RELOCATED DUCTWORK		CONDENSER WATER SUPPLY
 TRUE NORTH NORTH ARROW			EXISTING DUCTWORK TO REMAIN		CONDENSER WATER RETURN
			EXISTING DUCTWORK TO BE REMOVED		VALVE (GENERAL)
CONTROLS SYMBOLS			RECTANGULAR DUCT - FIRST FIGURE IS SIDE SHOWN IN INCHES		CHECK VALVE
			ROUND DUCT (FIGURE=SIZE IN INCHES)		BALL VALVE
	TEMPERATURE SENSOR (DDC) (FIGURE NOTES UNIT SERVED)		OVAL DUCT (FIGURE=SIZE IN INCHES)		BUTTERFLY VALVE
	THERMOSTAT (FIGURE NOTES UNIT SERVED)		ACOUSTICALLY LINED DUCT. FIGURES ARE INSIDE CLEAR DIMENSIONS IN INCHES. INCREASE SHEET METAL SIZE		VALVE IN RISER
	SMOKE DETECTOR		ELBOW WITH TURNING VANES		BALANCING VALVE
	CARBON DIOXIDE SENSOR		RADIUS ELBOW		UNION OR FLANGE
	DUCT AIRFLOW STATION		MANUAL VOLUME DAMPER (WITH LOCKING QUADRANT)		WYE-STRAINER (PROVIDE SHUTOFF VALVE AND HOSE CONNECTION)
	PRESSURE SENSOR		DIFFUSER/GRILLE TYPE AND AIRFLOW		GAS PRESSURE REGULATOR
	HUMIDITY SENSOR OR HUMIDISTAT		FIRE DAMPER		SAFETY RELIEF VALVE
	CARBON MONOXIDE SENSOR		COMBINATION FIRE/SMOKE DAMPER		WATER PRESSURE REDUCING VALVE
	NITROGEN DIOXIDE SENSOR		CEILING RADIATION DAMPER		PIPE ANCHOR POINT
	DIFFERENTIAL PRESSURE SENSOR		CEILING SLOT DIFFUSER		PIPE GUIDE
	MOTORIZED ACTUATOR		FLEXIBLE DUCT		REFRIGERANT PIPING (LIQUID/GAS)
	OPPOSED-BLADE CONTROL DAMPER				HEAT TRACED PIPE
	PARALLEL-BLADE CONTROL DAMPER				UNDERGROUND PIPE (MAY ALSO INCLUDE SYSTEM TYPE LABEL)
	TWO-WAY CONTROL VALVE				EXISTING UNDERGROUND PIPE (MAY ALSO INCLUDE SYSTEM TYPE LABEL)
	THREE-WAY CONTROL VALVE				
NOTE:					
NOT ALL OF THE SYMBOLS ON THIS SHEET ARE NECESSARILY USED IN THIS PROJECT.					



REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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APPROVED	JMF
DATE	12/28/2020

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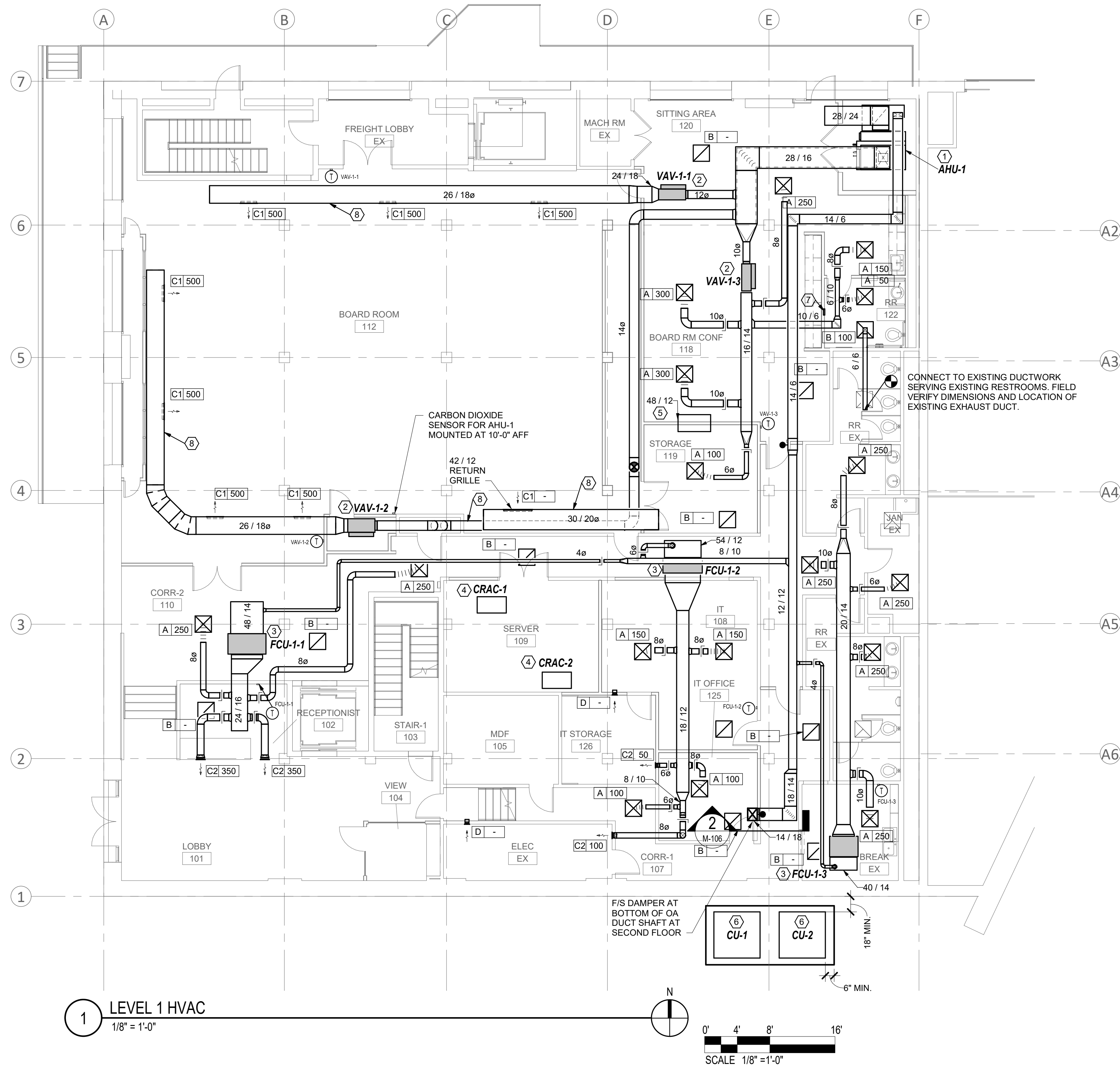
TRINITY METRO HEADQUARTERS
DEMOLITION - LEVEL 4 HVAC

SHEET No.	MD-101	REV 0
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NOTES BY SYMBOL

APPLIES TO SHEET M-101

NOTE	DESCRIPTION	DETAIL SHEET	SCHEDULE SHEET	CONTROLS SHEET
1	VERTICAL AIR-HANDLING UNIT SUPPLYING VAV BOXES. MOUNT ON 6"-HIGH HOUSEKEEPING PAD.		M-604	M-701
2	VAV BOX MOUNTED TIGHT TO STRUCTURE.		M-604	
3	NEW HYDRONIC FAN COIL UNIT SUSPENDED FROM STRUCTURE.	M-501	M-601	M-703
4	NEW IN-ROW COMPUTER ROOM AIR CONDITIONING UNIT.		M-602	M-702
5	RETURN AIR TRANSFER DUCT ABOVE BOARD CONFERENCE ROOM CEILING.			
6	CONDENSING UNIT SERVING CRAC UNIT IN SERVER ROOM. MOUNT ON 6"-HIGH EQUIPMENT PAD.		M-602	M-702
7	RECESSED ELECTRIC HEATER EQUAL TO DAYTON MODEL SZK69 (1.5 KW - 120/1). MOUNT AT 36" AFF.			
8	EXPOSED DUCTWORK IN BOARD ROOM TO BE INTERNALLY INSULATED. DIMENSIONS SHOWN ARE INTERIOR CLEAR DIMENSIONS TO BE MAINTAINED.		M-605	

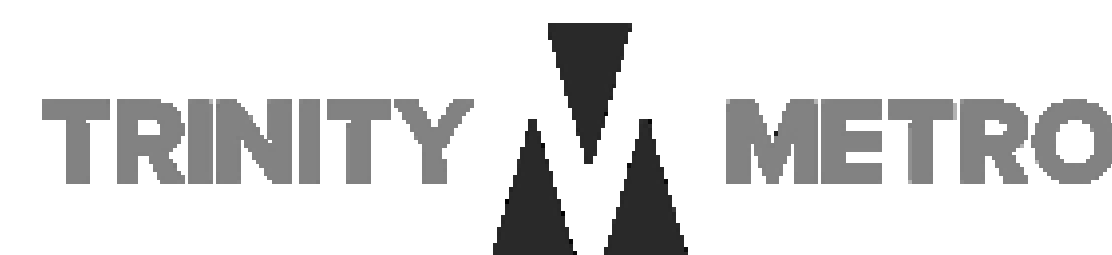


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TRINITY METRO HEADQUARTERS
LEVEL 1 HVAC PLAN

0	SHEET No.	M-101
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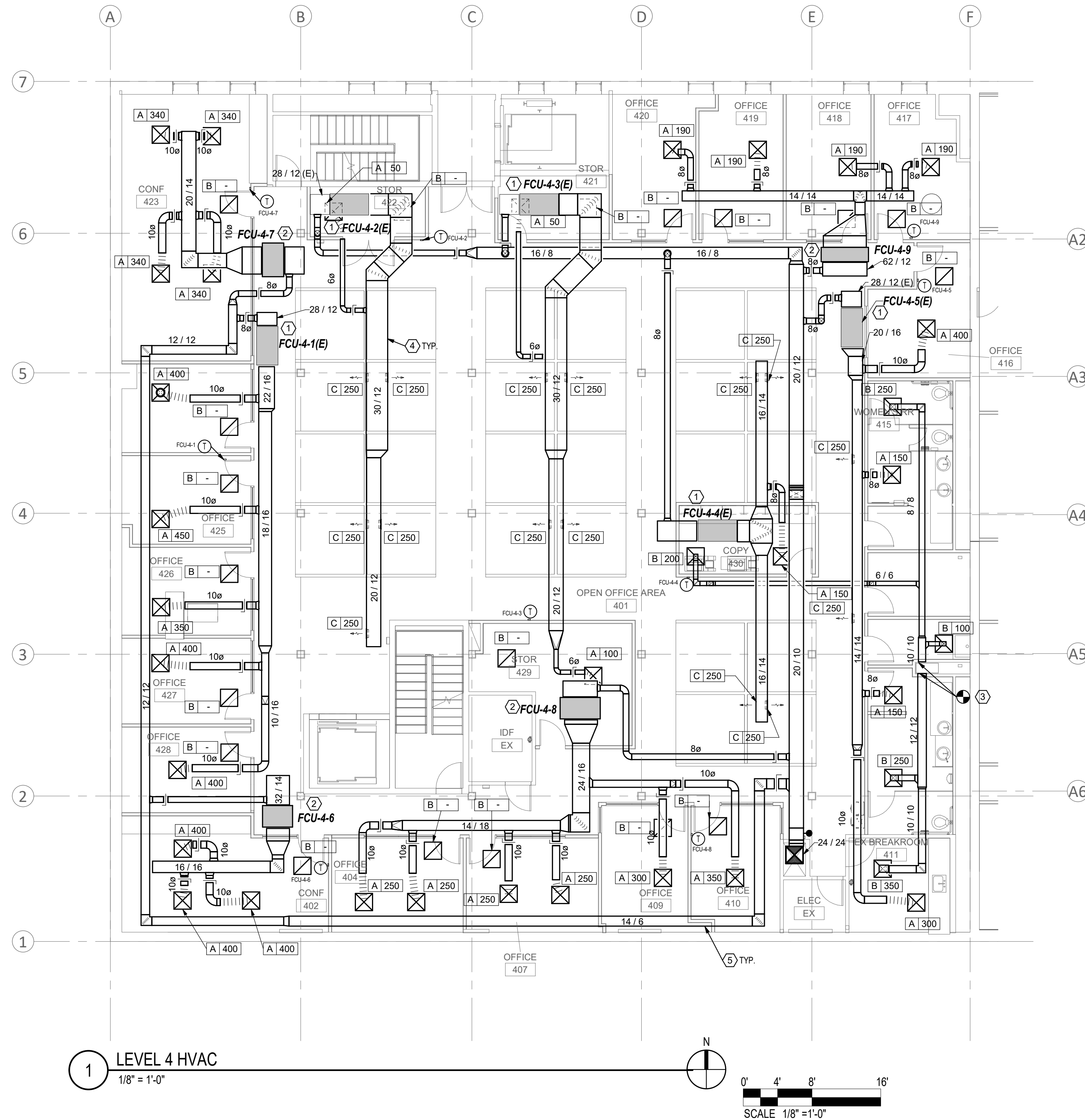
REV
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D

C

B

A



NOTES BY SYMBOL

APPLIES TO SHEET M-104

NOTE	DESCRIPTION	DETAIL SHEET	SCHEDULE SHEET	CONTROLS SHEET
1	NEW LOCATION OF EXISTING FAN COIL UNIT.		M-602	M-703
2	NEW FAN COIL UNIT SUSPENDED FROM STRUCTURE.		M-602	M-703
3	CONNECT NEW EXHAUST DUCTWORK TO EXISTING EXHAUST DUCT CHASE.			
4	SUPPLY AIR DUCT FROM FAN COIL UNIT. SUSPEND AS TIGHT TO STRUCTURE AS POSSIBLE.			
5	MOUNT OUTSIDE AIR DUCT RUNNING BETWEEN BEAM AND CEILING AS TIGHT TO STRUCTURE AS POSSIBLE.			

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS
LEVEL 4 HVAC PLAN

	SHEET No.
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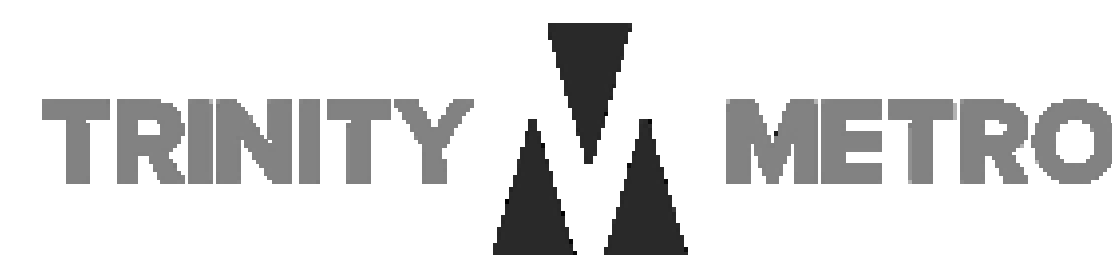
M-104

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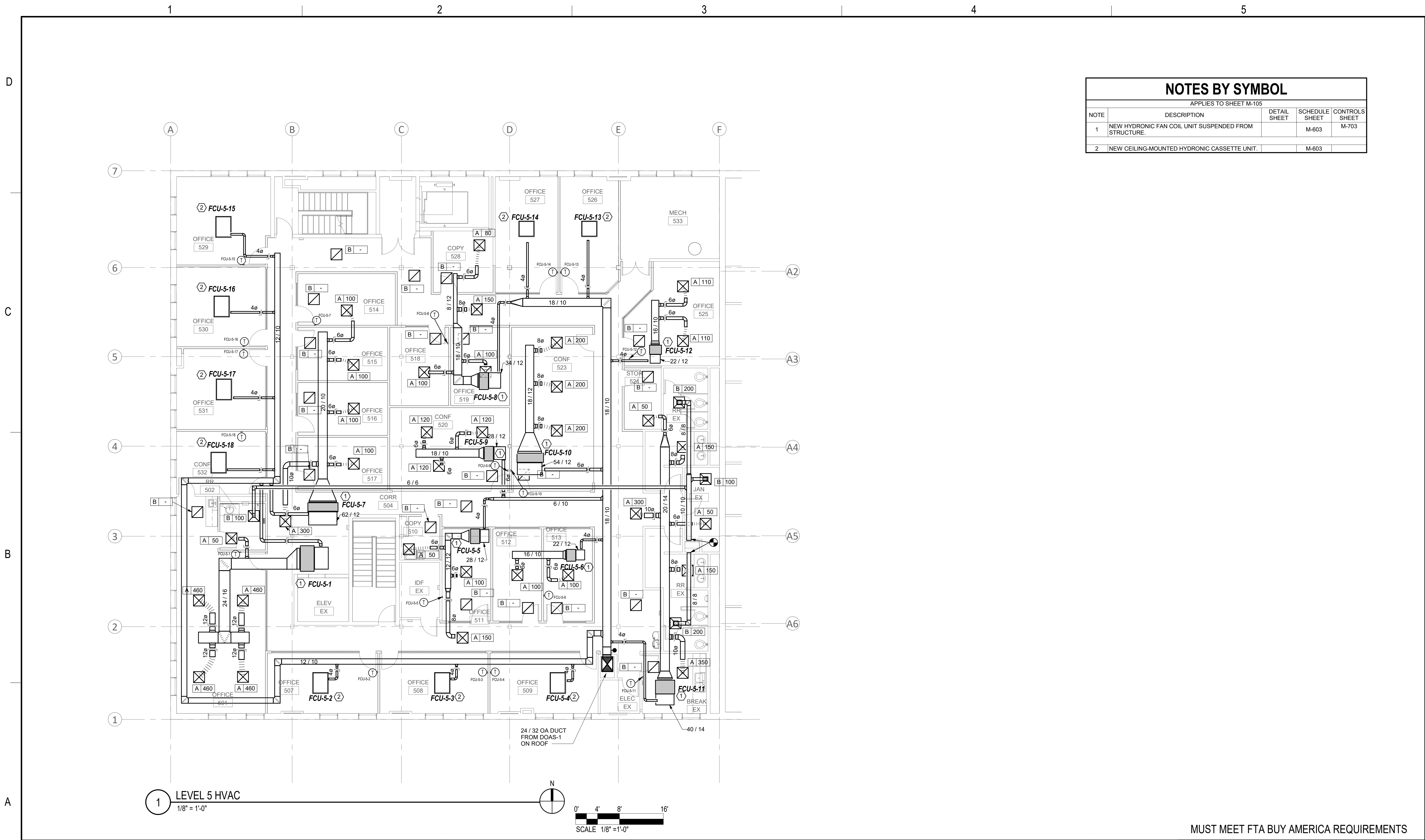
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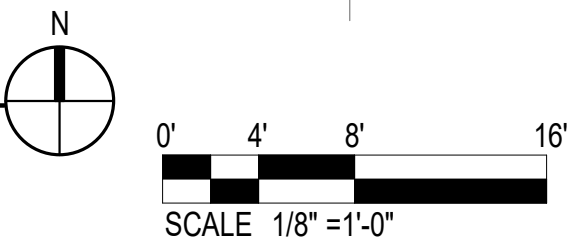


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NOTES BY SYMBOL				
APPLIES TO SHEET M-105				
NOTE	DESCRIPTION	DETAIL SHEET	SCHEDULE SHEET	CONTROLS SHEET
1	NEW HYDRONIC FAN COIL UNIT SUSPENDED FROM STRUCTURE.		M-603	M-703
2	NEW CEILING-MOUNTED HYDRONIC CASSETTE UNIT.		M-603	

1 LEVEL 5 HVAC
1/8" = 1'-0"

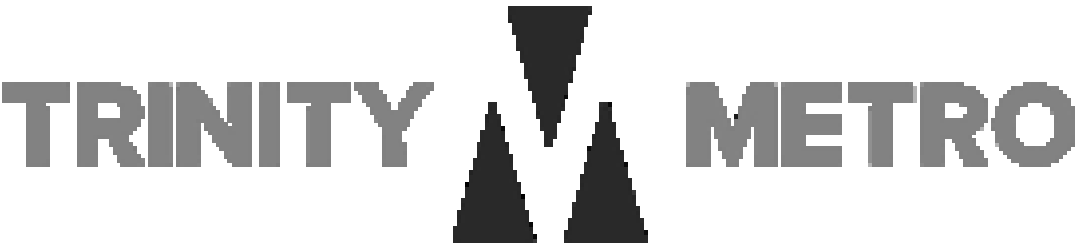


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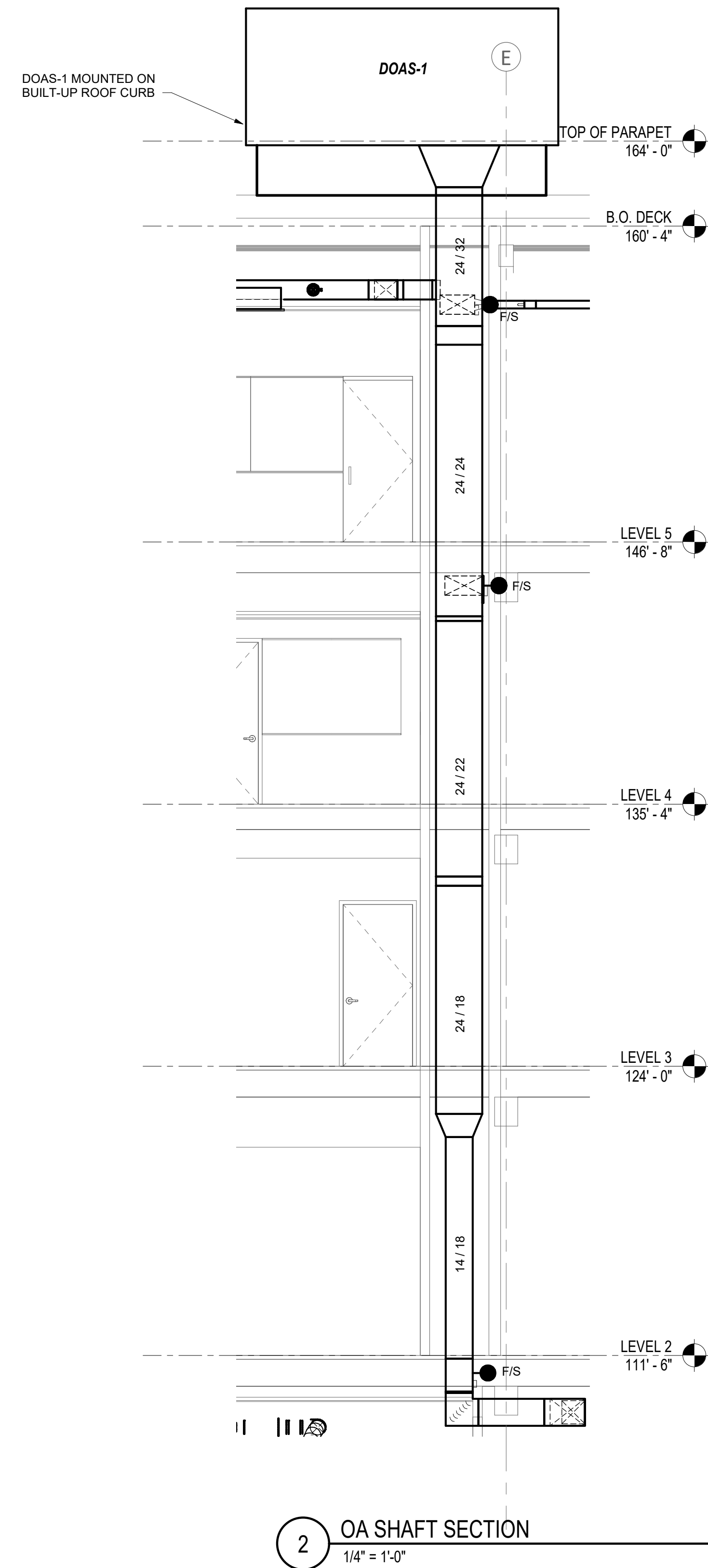


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TRINITY METRO HEADQUARTERS
LEVEL 5 HVAC PLAN

SHEET No. **M-105**

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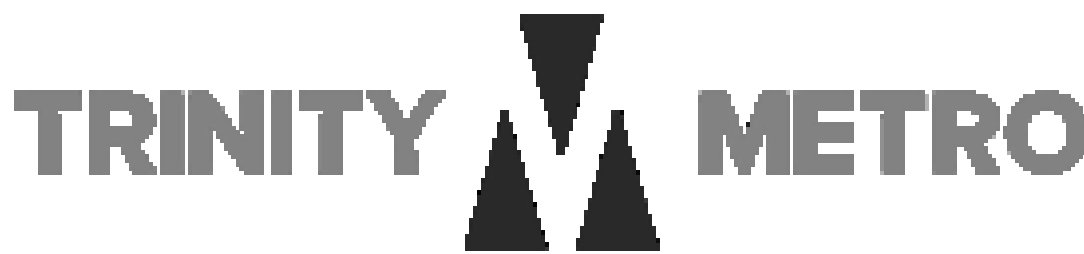


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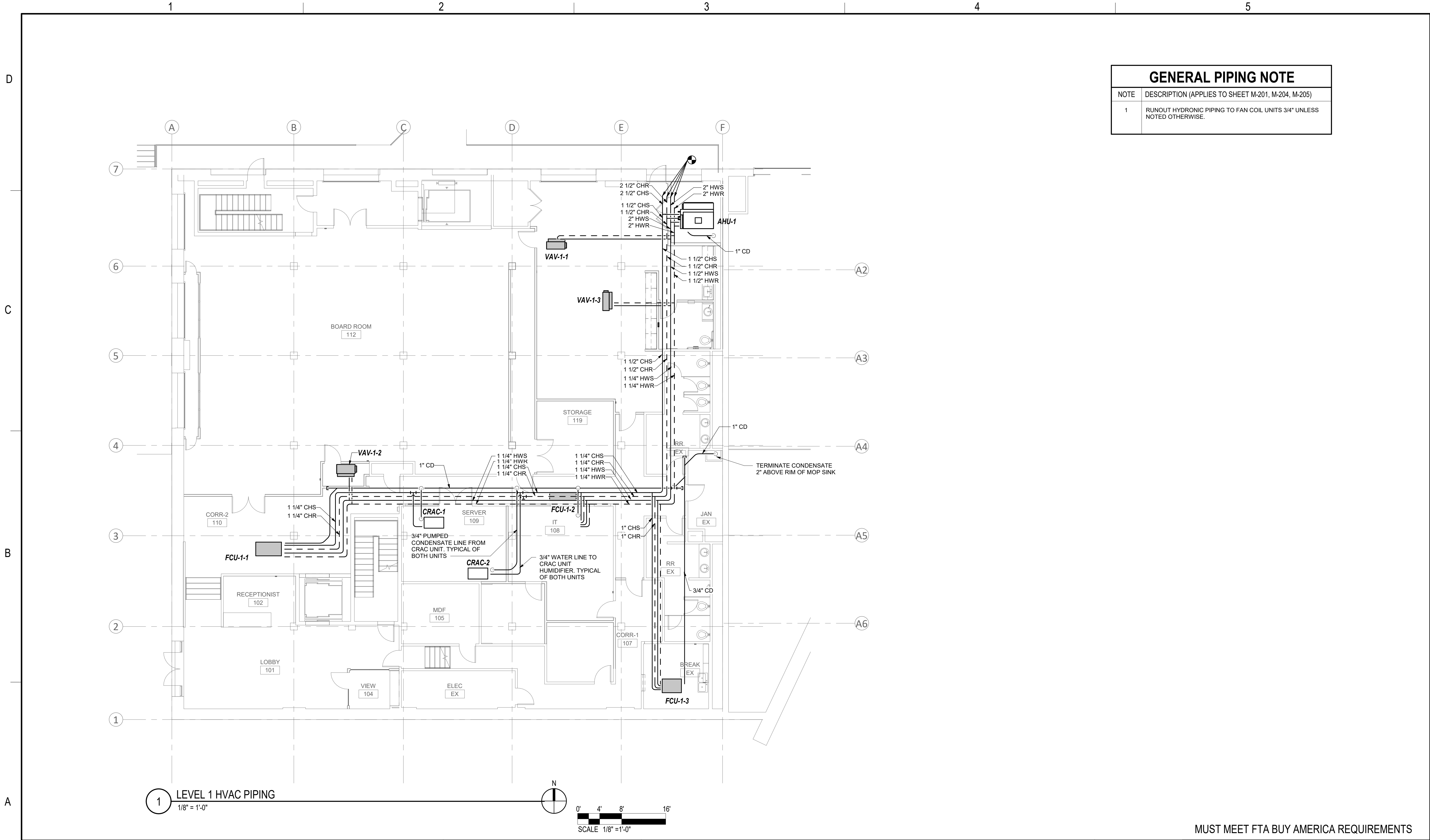


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TRINITY METRO HEADQUARTERS
ROOF PLAN HVAC

SHEET No. **M-106**

REV
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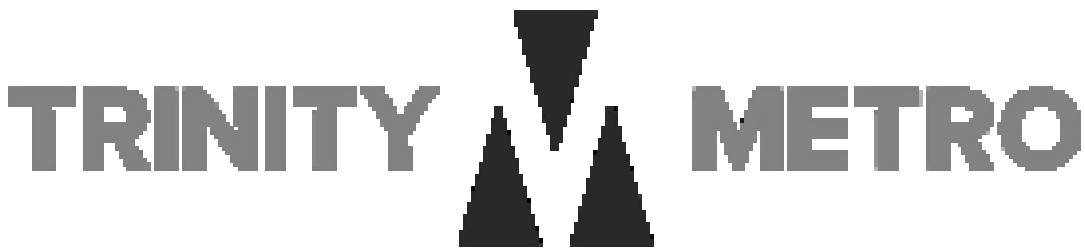
GENERAL PIPING NOTE	
NOTE	DESCRIPTION (APPLIES TO SHEET M-201, M-204, M-205)
1	RUNOUT HYDRONIC PIPING TO FAN COIL UNITS 3/4" UNLESS NOTED OTHERWISE.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



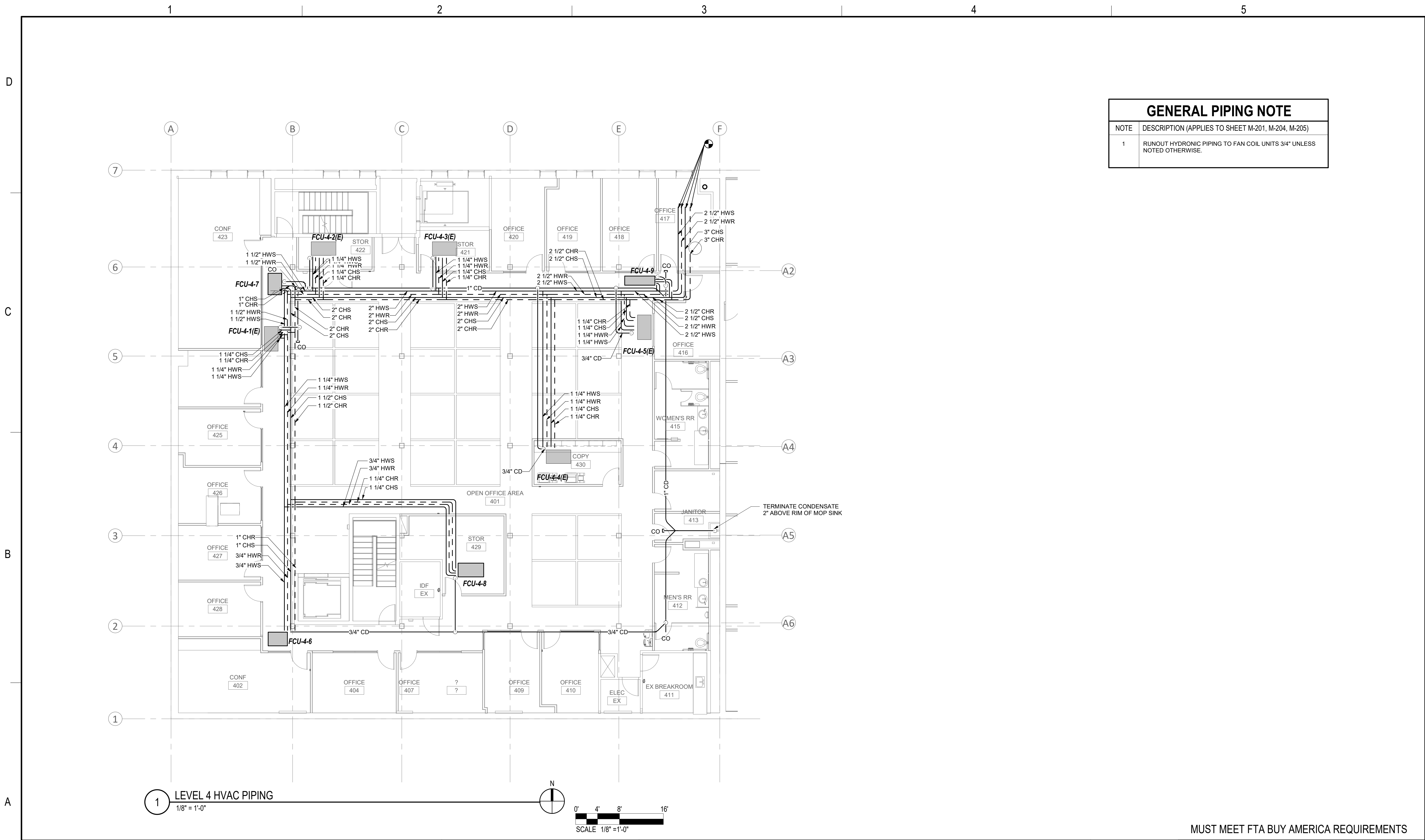
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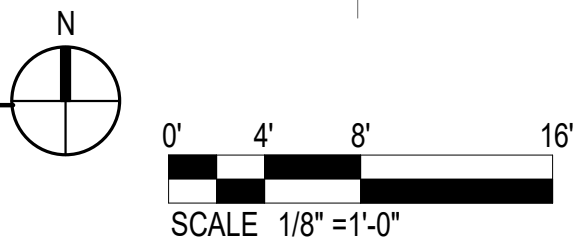
TRINITY METRO HEADQUARTERS
LEVEL 1 HVAC PIPING PLAN

SHEET No.	M-201	REV 0
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GENERAL PIPING NOTE	
NOTE	DESCRIPTION (APPLIES TO SHEET M-201, M-204, M-205)
1	RUNOUT HYDRONIC PIPING TO FAN COIL UNITS 3/4" UNLESS NOTED OTHERWISE.

1 LEVEL 4 HVAC PIPING
1/8" = 1'-0"



MUST MEET FTA BUY AMERICA REQUIREMENTS

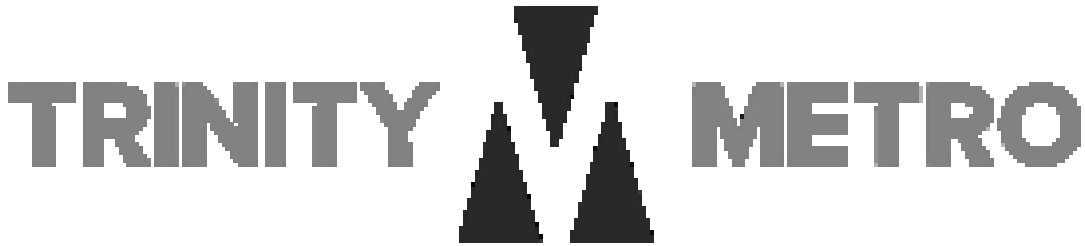
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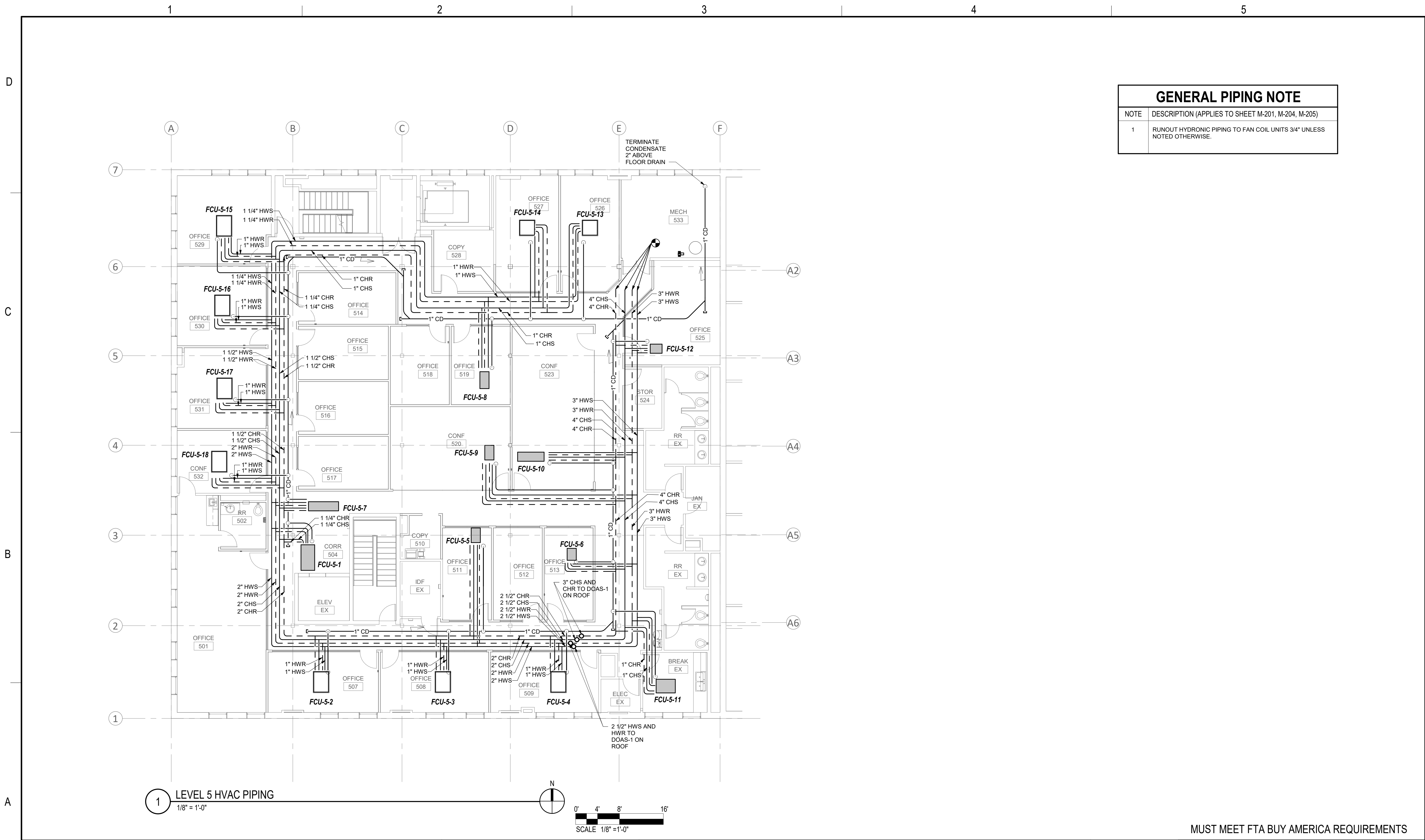
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**TRINITY METRO HEADQUARTERS
LEVEL 4 HVAC PIPING PLAN**

SHEET No.	M-204	REV 0
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GENERAL PIPING NOTE	
NOTE	DESCRIPTION (APPLIES TO SHEET M-201, M-204, M-205)
1	RUNOUT HYDRONIC PIPING TO FAN COIL UNITS 3/4" UNLESS NOTED OTHERWISE.

1 LEVEL 5 HVAC PIPING
1/8" = 1'-0"

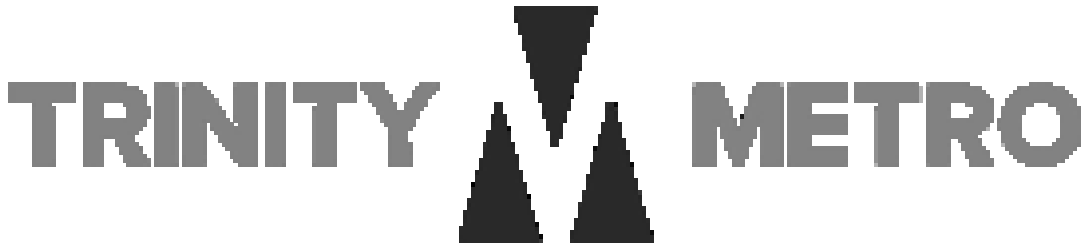
0' 4' 8' 16'
SCALE 1/8" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

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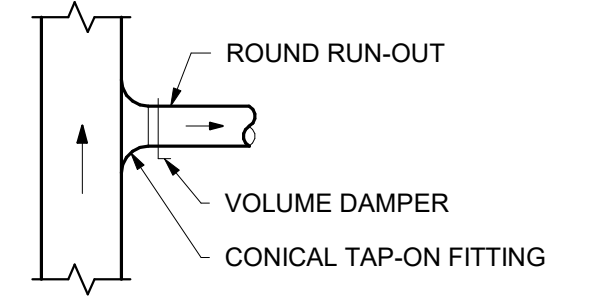
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**TRINITY METRO HEADQUARTERS
LEVEL 5 HVAC PIPING PLAN**

SHEET No. **M-205**

REV
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D



NOTES:

- ## TRANSITIONS

C

1 LAY-IN DIFFUSER DETAIL
NOT TO SCALE

NOT TO SCALE

2 DUCT FITTING STANDARDS

NOT TO SCALE

NOT TO SCALE

3 BRANCH DUCT CONNECTIONS

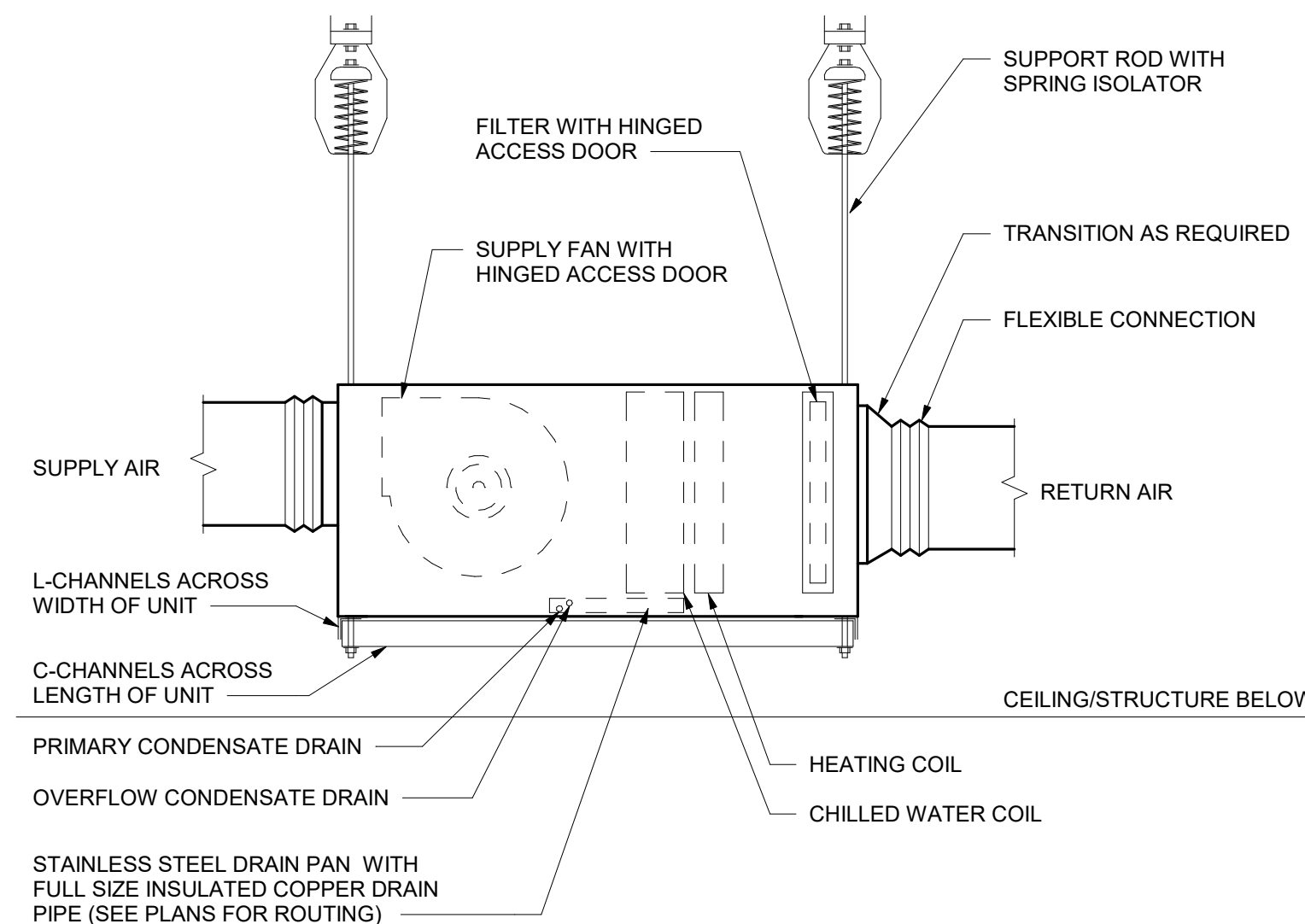
NOT TO SCALE

B

DRAW-THROUGH DRAIN TRAP

UNIT TOTAL STATIC PRESSURE	"A"	"B"
2 INCH WG	3"	1-1/2"
3 INCH WG	4"	2"
4 INCH WG	5"	2-1/2"
5 INCH WG	6"	3"
6 INCH WG	7"	3-1/2"
7 INCH WG	8"	4"

NOTE: ROUND UP TO NEXT LARGEST WHOLE NUMBER FOR UNITS SCHEDULED WITH FRACTIONAL TSP.



NOTE:
PROVIDE PRIMARY DRAIN PAN CONDENSATE SWITCH THAT DE-ENERGIZES THE UNIT
WHEN WATER DOES NOT DRAIN FROM CONDENSATE PAN.

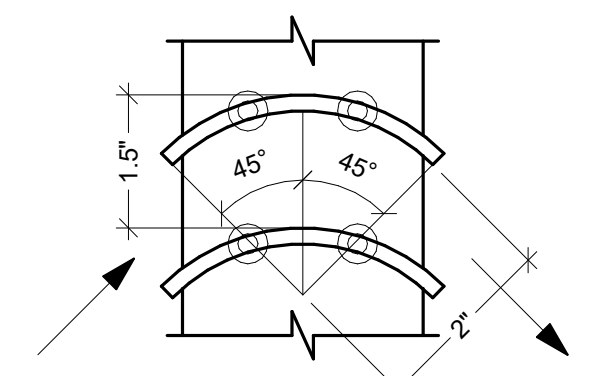
4 CONDENSATE DRAIN DETAIL

NOT TO SCALE

NOT TO SCALE

5 HORIZONTAL BCU INSTALLATION

NOT TO SCALE



RECTANGULAR OR OVAL DUCT ELBOW

TURNING VANE GEOMETRY
ASHRAE DUCT FITTING NO. CR3-9

6 TURNING VANE - SINGLE THICKNESS
NOT TO SCALE

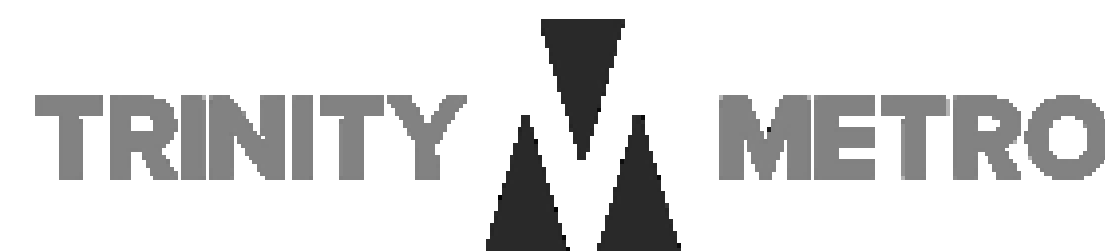
NOT TO SCALE

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REV	DATE	DESCRIPTION	BY	ENG	CHK APP



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DRAWN	HZI
DESIGNED	KNN
CHECKED	SAM
APPROVED	JMF
DATE	12/28/202

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS HVAC DETAILS

0	SHEET No.	M-501	REV 0
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FAN COIL UNIT SCHEDULE (1ST FLOOR)					
GENERAL	UNIT TAG	FCU-1-1	FCU-1-2	FCU-1-3	NOTES: 1. RATE MOTOR AND TOTAL STATIC PRESSURE FOR DIRTY FILTER CONDITION. 2. PROVIDE WITH FACTORY-WIRED SINGLE POINT OF POWER ELECTRICAL CONNECTION. 3. PROVIDE STAINLESS STEEL DRAIN PANS. 4. PROVIDE ELASTOMERIC UNIT INSULATION. 5. PROVIDE NEMA 1 DISCONNECT SWITCH. 6. PROVIDE PRIMARY DRAIN PAN CONDENSATE SWITCH THAT DE-ENERGIZES THE UNIT WHEN WATER DOES NOT DRAIN FROM CONDENSATE PAN.
	MANUFACTURER	CARRIER	CARRIER	CARRIER	
	MODEL NUMBER	42DCA20KR HYL CYER	42CEA10FR HYE CYER	42DCA14KR HYL CYER	
	AREA SERVED	LOBBY	IT OFFICES	BREAK RM / RESTROOMS	
	UNIT WEIGHT (LB)	250	200	200	
SUPPLY FAN	AIRFLOW (CFM)	1,200	650	1,250	
	OUTSIDE AIRFLOW (CFM)	50	70	80	
	EXTERNAL STATIC PRESSURE (IN WG)	0.5	0.5	0.5	
	TOTAL STATIC PRESSURE (IN WG)	1.0	1.0	1.0	
	MOTOR POWER (HP)	-	-	-	
	MOTOR FLA	10.8	2.6	8.0	
	MOTOR MCA	12.2	2.9	9.0	
	MOTOR TYPE	ECM	ECM	ECM	
	VOLTAGE / PHASE	208 / 1	208 / 1	208 / 1	
	DRIVE TYPE	DIRECT	DIRECT	DIRECT	
	VOLUME CONTROL	3-SPEED	3-SPEED	3-SPEED	
	FILTER TYPE (EFFICIENCY)	1" PLEATED (MERV 8)	1" PLEATED (MERV 8)	1" PLEATED (MERV 8)	
CHILLED WATER COIL	AIRFLOW (CFM)	1,200	650	1,250	
	TOTAL CAPACITY (BTU/H)	42,000	11,300	28,000	
	SENSIBLE CAPACITY (BTU/H)	35,500	10,700	23,300	
	ENTERING AIR TEMPERATURE DB / WB (°F)	73 / 62	73 / 62	73 / 62	
	LEAVING AIR TEMPERATURE DB / WB (°F)	56 / 54	56 / 54	56 / 54	
	MAX FACE VELOCITY (FPM)	500	500	500	
	AIR PRESSURE DROP (IN WG)	-	-	-	
	ROWS / FINS PER INCH	4 / -	3 / -	4 / -	
	WATER FLOW RATE (GPM)	7.6	2.0	5.0	
	WATER PRESSURE DROP (FT WATER)	3.5	0.5	4.1	
	TUBE WATER VELOCITY (FPS)	-	-	-	
	ENTERING WATER TEMPERATURE (°F)	44	44	44	
HEATING WATER COIL	AIRFLOW (CFM)	1,200	650	1,250	
	TOTAL CAPACITY (BTU/H)	68,200	26,800	44,000	
	ENTERING AIR TEMPERATURE - DB (°F)	60	60	60	
	LEAVING AIR TEMPERATURE - DB (°F)	93	93	93	
	MAX FACE VELOCITY (FPM)	500	500	500	
	AIR PRESSURE DROP (IN WG)	-	-	-	
	ROWS / FINS PER INCH	2 / -	2 / -	2 / -	
	WATER FLOW RATE (GPM)	3.4	1.3	2.2	
	WATER PRESSURE DROP (FT WATER)	6.97	1.0	2.7	
	TUBE WATER VELOCITY (FPS)	-	-	-	
	ENTERING WATER TEMPERATURE (°F)	140	140	140	
	LEAVING WATER TEMPERATURE (°F)	100	100	100	
	FOULING FACTOR (H-FT*°F/BTU)	0.00025	0.00025	0.00025	
NOTES		1,2,3,4,5,6	1,2,3,4,5,6	1,2,3,4,5,6	

DEDICATED OUTDOOR AIR UNIT SCHEDULE			
GENERAL	UNIT TAG	DOAS-1	NOTES: 1. RATE MOTOR AND TOTAL STATIC PRESSURE FOR DIRTY FILTER CONDITION. 2. PROVIDE PREMIUM EFFICIENCY, INVERTER DUTY-RATED MOTORS. 3. PROVIDE FACTORY-MOUNTED THERMAL DISPERSION AIRFLOW STATION 4. PROVIDE FACTORY-MOUNTED SENSORS AS NOTED ON CONTROL DRAWINGS. 5. PROVIDE WITH FACTORY-WIRED SINGLE POINT ELECTRICAL CONNECTION. 6. PROVIDE FACTORY-MOUNTED 120 V RECEPTACLE. PROVIDE SEPARATE 120 V CIRCUIT. 7. PROVIDE NON-FUSED DISCONNECT SWITCH. 8. PROVIDE UNIT WITH DOUBLE WALL CONSTRUCTION AND R-13 INSULATION BETWEEN PANELS. 9. PROVIDE UNIT WITH HINGED AND LATCHED ACCESS DOORS IN ALL SECTIONS REQUIRING SERVICE. REMOVABLE PANELS AS ONLY MEANS OF ACCESS IS NOT ACCEPTABLE. 10. PROVIDE STAINLESS STEEL DUAL-SLOPED DRAIN PAN. 11. PROVIDE DRAIN PAN OVERFLOW SWITCH AND SHUT-OFF UNIT BEFORE OVERFLOW. 12. PROVIDE FACTORY-MOUNTED UNIT CONTROLLER CAPABLE OF FUNCTIONS DESCRIBED ON CONTROL DRAWING.
	SYSTEM TYPE	100% OUTSIDE AIR	
	MANUFACTURER	DAIKIN	
	MODEL NUMBER	DAHA15A	
	AREA SERVED	BUILDING	
	UNIT WEIGHT - LBS	3,000	
	VOLTAGE / PHASE	208 / 3	
	FLA	22.2	
SUPPLY FAN	MCA	27.8	
	AIRFLOW (CFM)	6,000	
	EXTERNAL STATIC PRESSURE (IN WG)	1.0	
	TOTAL STATIC PRESSURE (IN WG)	3.0	
	BRAKE POWER (HP)	5.17	
	MOTOR POWER (HP)	7.5	
	FAN TYPE	DIRECT DRIVE - AF	
	MOTOR TYPE	INDUCTION	
PRE-HEAT COIL	SPEED CONTROL	VARIABLE - VFD	
	AIRFLOW (CFM)	6,000	
	TOTAL CAPACITY (BTU/H)	476,000	
	ENTERING / LEAVING AIR TEMP (°F)	12 / 85	
	MAX FACE VELOCITY	500	
	ROWS / FINS PER INCH	2 / 12	
	ENTERING / LEAVING WATER TEMP (°F)	140 / 100	
	WATER FLOW RATE (GPM)	48.0	
CHILLED WATER COOLING COIL	WATER PRESSURE DROP (FT H2O)	7.8	
	AIRFLOW (CFM)	6,000	
	TOTAL CAPACITY (BTU/H)	534,200	
	SENSIBLE CAPACITY (BTU/H)	247,200	
	ENTERING AIR TEMPERATURE DB / WB (°F)	92 / 79	
	LEAVING AIR TEMPERATURE DB / WB (°F)	54 / 54	
	MAX FACE VELOCITY (FPM)	400	
	AIR PRESSURE DROP (IN WG)	0.8	
	ROWS / FINS PER INCH	5 / 12	
	ENTERING / LEAVING WATER TEMP (°F)	44 / 56	
	WATER FLOW RATE (GPM)	108	
	WATER PRESSURE DROP (FT H2O)	20	
HUMIDIFIER	CAPACITY (LB/HR)	5.0	
	CAPACITY (KW)	1.79	
FILTER	TYPE (EFFICIENCY)	PLEATED (MERV 8)	
	FILTER QUANTITY	9	
	TYPE (EFFICIENCY)	PLEATED (MERV 14)	
	FILTER QUANTITY	9	
NOTES		1-12	

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION			BY	ENG	CHK APP

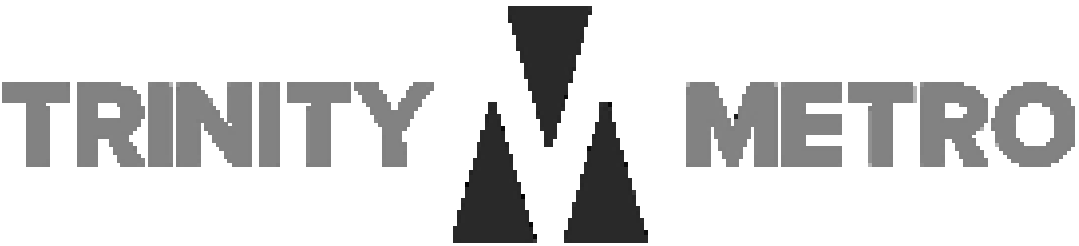


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DESIGNED	KNN
CHECKED	SAM
APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS
HVAC SCHEDULES

AIR-HANDLING UNIT SCHEDULE

GENERAL				SUPPLY FAN												FILTER			
UNIT TAG	AREA SERVED	MANUFACTURER AND MODEL	UNIT WEIGHT (LBS)	AIRFLOW (CFM)				STATIC PRESSURE (IN WG)		MOTOR				DRIVE TYPE	FAN SPEED (RPM)	WHEEL TYPE (CLASS)	VOLUME CONTROL	TYPE	MERV RATING (DUST SPOT EFFICIENCY)
				SUPPLY	MIN. SUPPLY	OA	MIN. OA	EXTERNAL	TOTAL	BHP	HP	VOLTS/ PHASE	TYPE / ENCLOSURE						
AHU-1-1	1ST FLOOR	DAIKIN CAH012GDAC	2,000	5,000	-	1,500	-	1.5	3.3	7.5	10	208 / 3	ODP	BELT	2,100	FORWARD CURVED (II)	VFD	4" PLEATED	MERV 13

AIR-HANDLING UNIT SCHEDULE (CONTINUED)

	COOLING COIL																HEATING COIL																NOTES
UNIT TAG	AIRFLOW (CFM)	TOTAL CAPACITY (BTU/H)	SENSIBLE CAPACITY (BTU/H)	ENTERING AIR TEMPERATURE		LEAVING AIR TEMPERATURE		MAX. FACE VELOCITY (FPM)	AIR PRESSURE DROP (IN WG)	ROWS/ FINS PER INCH	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FEET)	MIN. WATER VELOCITY(FPS)	ENTERING WATER TEMP (°F)	LEAVING WATER TEMP (°F)	FOULING FACTOR (H-FT²-°F/ BTU)	AIRFLOW (CFM)	TOTAL CAPACITY (BTU/H)	EAT (°F)	LAT (°F)	MAX. FACE VELOCITY (FPM)	AIR PRESSURE DROP (IN WG)	ROWS/ FINS PER INCH	WATER FLOW RATE (GPM)	WATER PRESSURE DROP (FEET)	MIN. WATER VELOCITY (FPS)	ENTERING WATER TEMP (°F)	LEAVING WATER TEMP (°F)	FOULING FACTOR (H-FT²-°F/ BTU)				
				DB (°F)	WB (°F)	DB (°F)	WB (°F)																										
AHU-1-1	5,000	203,900	120,000	76	67	55	54	400	0.6	5 / 9	34	10	4.1	44	56	0.00010	5,000	129,800	62	86	500	0.11	1 / 10	12.6	3	2.2	140	100	0.00025	1,2,3,4,5,6			

NOTES:

1. OUTER WALL PANELS SHALL BE XX GAGE G90 GALVANIZED STEEL.
2. INNER WALL PANELS SHALL BE XX GAGE G90 GALVANIZED STEEL.
3. FLOOR PANELS SHALL BE XX GAGE G90 GALVANIZED STEEL.
4. UNIT CONSTRUCTION SHALL LIMIT AIR LEAKAGE TO LESS THAN 1% OF TOTAL AIRFLOW AT A PRESSURE OF 8 INCHES WATER GAUGE.
5. UNIT PANEL INSULATION SHALL BE A MINIMUM R-12.
6. PROVIDE X INCH TALL BASE RAIL.
7. PROVIDE PREMIUM EFFICIENCY INVERTER-DUTY RATED MOTOR AND MOTOR SHAFT GROUNDING RING.
8. PROVIDE VFD FOR EACH UNIT SCHEDULED WITH VFD AND NEMA 12 DISCONNECTS.
9. RATE MOTOR AT DIRTY FILTER STATUS.
10. PROVIDE WITH FACTORY-WIRED SINGLE POINT ELECTRICAL CONNECTION.
11. PROVIDE STAINLESS STEEL EXTENDED LENGTH DRAIN PAN.
12. CHILLED WATER COOL BULKHEAD AND SUPPORTS SHALL BE STAINLESS STEEL.
13. REFER TO DETAIL X/MXXX FOR UNIT DIMENSIONS AND SECTION REQUIREMENTS.

VARIABLE AIR VOLUME TERMINAL UNIT SCHEDULE

GENERAL							AIRFLOW				HEATING COIL					NOTES
UNIT TAG	AREA SERVED	MANUFACTURER AND MODEL	UNIT WEIGHT (LBS)	AIR INLET SIZE (INCHES)	MAX NC. AT 1.5 IN WG INLET SP		DESIGN COOLING AIRFLOW (CFM)	MINIMUM COOLING AIRFLOW (CFM)	MAXIMUM HEATING AIRFLOW (CFM)	UNIT AIR PRESSURE DROP (IN WG)	HEATING CAPACITY (BTU/H)	ENTERING AIR TEMP (°F)	LEAVING AIR TEMP (°F)	NUMBER OF ROWS	MAX. FLOW (GPM)	
					RAD.	DIS.										
VAV-1-1	BOARD ROOM	ENVIRO-TEC SDR	100	14	20	20	1,500	700	1,500	0.54	76,500	55	88	2	4.0	1,2,3,4,5
VAV-1-2	BOARD ROOM	ENVIRO-TEC SDR	100	14	20	20	2,000	700	2,000	0.54	86,000	55	88	2	4.0	1,2,3,4,5
VAV-1-3	BOARD ROOM CONFERENCE ROOM	ENVIRO-TEC SDR	100	12	20	20	1,050	400	1,050	0.54	54,500	55	88	2	4.0	1,2,3,4,5

NOTES:

1. CONTROLS VENDOR SHALL PROVIDE DDC CONTROLLER.
2. PROVIDE UNIT WITH 120V/24V TRANSFORMER.
3. VAV TERMINAL SHALL BE CONFIGURED FOR COOLING/HEATING WITH AUTOMATIC CHANGEOVER CONTROLLED BY BUILDING AUTOMATION SYSTEM.
4. PROVIDE FOAM OR FLEXIBLE ELASTOMERIC INSULATION.
5. PROVIDE DISCONNECT SWITCH.
6. SOUND DATA IS BASED ON AHRI 885 APPENDIX E ATTENUATION METHOD. NC VALUES LESS THAN 15 ARE NOT SHOWN IN SCHEDULE.

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EXHAUST FAN SCHEDULE

EXHAUST FAN SCHEDULE																																	
GENERAL						FAN													OPTIONS & ACCESSORIES										NOTES				
UNIT TAG	AREA SERVED	MANUFACTURER AND MODEL	FAN TYPE	UNIT WEIGHT (LBS)	ROOF/ WALL OPENING	AIRFLOW (CFM)	STATIC PRESSURE (IN WG)	DRIVE TYPE	MOTOR					STARTUP TEMP (°F)	AIRSTREAM OPERATING TEMP (°F)	FAN SPEED (RPM)	WHEEL TYPE	SONES															
									BHP	MOTOR HP	VOLTS/ PHASE	FLA	ENCLOSURE						DISCONNECT	SPEED CONTROL	BACKDRAFT DAMPER	MOTORIZED DAMPER	BELT GUARD	BIRD SCREEN	DISCONNECT	HOUSING DRAIN	OSHA GUARD	PACKAGED ROOF CURB		SPECIAL COATING	VIBRATION ISOLATORS	WEATHER HOOD	SPEED CONTROL
EF-1	RESTROOMS	GREENHECK GB-220	CENTRIFUGAL ROOF MOUNTED EXHAUST	150	26.5 X 26.5	4,500	0.5	BELT	0.83	1.0	208 / 3	4.6	TEFC	NEMA 1	VFD	70	70	717	BI	14	●	●	●	●	●	●	●	●	●	●	●	●	1.2
NOTES:																																	
1. PROVIDE VFD AND PREMIUM EFFICIENCY INVERTER-DUTY RATED MOTOR, AND MOTOR SHAFT GROUNDING RING.																																	
2. PROVIDE MOTOR WITH THERMAL OVERLOAD PROTECTION.																																	

HVAC PIPING SCHEDULE

HVAC PIPING SCHEDULE															
				INDOOR				OUTDOOR							
SERVICE	NOMINAL PIPE SIZE (INCHES)	PIPE MATERIAL	JOINT	INSULATION MATERIAL	INSULATION WALL THICKNESS (INCHES)	INNER JACKET	OUTER JACKET	INSULATION MATERIAL	INSULATION WALL THICKNESS (INCHES)	INNER JACKET	OUTER JACKET	LEAK TEST PRESSURE (PSIG)	MAX HANGER SPACING (FT)	MIN HANGER ROD SIZE (INCH)	NOTES
CHILLED WATER / HEATING WATER	3/4	TYPE L COPPER	THREADED	MINERAL FIBER	1/2	ASJ	PVC	ELASTOMERIC	1	NONE					
								PHENOLIC	1/2	PVDC	ALUMINUM	125	5	1/4	1.2
	1	TYPE L COPPER	THREADED	MINERAL FIBER	1	ASJ	PVC	ELASTOMERIC	1-1/2	NONE					
								PHENOLIC	1	PVDC	ALUMINUM	125	6	1/4	1.2
	1-1/4	TYPE L COPPER	THREADED	MINERAL FIBER	1	ASJ	PVC	ELASTOMERIC	1-1/2	NONE					
								PHENOLIC	1	PVDC	ALUMINUM	125	6	3/8	1.2
	1-1/2	TYPE L COPPER	THREADED	MINERAL FIBER	1	ASJ	PVC	ELASTOMERIC	1-1/2	NONE					
								PHENOLIC	1	PVDC	ALUMINUM	125	8	3/8	1.2
	2	TYPE L COPPER	THREADED	MINERAL FIBER	1-1/2	ASJ	PVC	ELASTOMERIC	2	NONE					
								PHENOLIC	1-1/2	PVDC	ALUMINUM	125	8	3/8	1.2
	2-1/2	SCHEDULE 40 STEEL	WELDED OR FLANGED	MINERAL FIBER	1-1/2	ASJ	PVC	ELASTOMERIC	2	NONE					
								PHENOLIC	1-1/2	PVDC	ALUMINUM	125	10	3/8	1.2
	3	SCHEDULE 40 STEEL	WELDED OR FLANGED	MINERAL FIBER	1-1/2	ASJ	PVC	ELASTOMERIC	2	NONE					
								PHENOLIC	1-1/2	PVDC	ALUMINUM	125	10	3/8	1.2
CHILLED WATER CONDENSATE	3/4	TYPE L COPPER	SOLDERED OR PRESS	FLEXIBLE ELASTOMERIC	1/2	NO	NO	-	-	-	-	-	5	1/4	3
	1	TYPE L COPPER	SOLDERED OR PRESS	FLEXIBLE ELASTOMERIC	1/2	NO	NO	-	-	-	-	-	6	1/4	3
	1-1/2	TYPE L COPPER	SOLDERED OR PRESS	FLEXIBLE ELASTOMERIC	1	NO	NO	-	-	-	-	-	8	3/8	3
	2	TYPE L COPPER	SOLDERED OR PRESS	FLEXIBLE ELASTOMERIC	1	NO	NO	-	-	-	-	-	8	3/8	3
REFRIGERANT	3/4	TYPE ACR COPPER	BRAZED	FLEXIBLE ELASTOMERIC	1	NO	NO	FLEXIBLE ELASTOMERIC	1	NO	0.016-INCH ALUMINUM	550	5	1/4	3
	1	TYPE ACR COPPER	BRAZED	FLEXIBLE ELASTOMERIC	1	NO	NO	FLEXIBLE ELASTOMERIC	1	NO	0.016-INCH ALUMINUM	550	6	1/4	3
	1-1/2	TYPE ACR COPPER	BRAZED	FLEXIBLE ELASTOMERIC	1	NO	NO	FLEXIBLE ELASTOMERIC	1	NO	0.016-INCH ALUMINUM	550	6	3/8	3
	2	TYPE ACR COPPER	BRAZED	FLEXIBLE ELASTOMERIC	1	NO	NO	FLEXIBLE ELASTOMERIC	1	NO	0.016-INCH ALUMINUM	550	8	3/8	3
NOTES:															
1. INNER VAPOR BARRIER JACKET MAY BE OMITTED IF OUTER JACKET INCLUDES AN INTEGRAL VAPOR BARRIER WITH EQUIVALENT PERFORMANCE.															
2. ALL PIPE INSTALLED BELOW SIX FEET IN THE MECHANICAL ROOM SHALL BE JACKETED AS INDICATED, OTHERWISE OUTER JACKET IS NOT REQUIRED.															
3. ONE INCH THICK MINERAL FIBER IS ACCEPTABLE IF PROVIDED WITH ALL SERVICE JACKET AND VAPOR BARRIER.															
A. HANGER SPACING AND ROD SIZE ASSUME INDIVIDUAL PIPING SUPPORTS FOR EACH PIPE ALONG HORIZONTAL STRAIGHT LENGTHS. PIPING SECTIONS WITH ADDITIONAL COMPONENTS (E.G. VALVES, FITTINGS, AIR SEPARATOR) REQUIRE ADDITIONAL SUPPORT.															
B. WHERE MORE THAN ONE OPTION IS LISTED, THE CONTRACTOR MAY CHOOSE.															
C. PIPING ROUTED IN MECHANICAL ROOMS, CRAWL SPACES, AND ATTICS SHALL USE THE OUTDOOR PIPING TABLE, EXCEPT OUTER JACKET SHALL BE PVC.															

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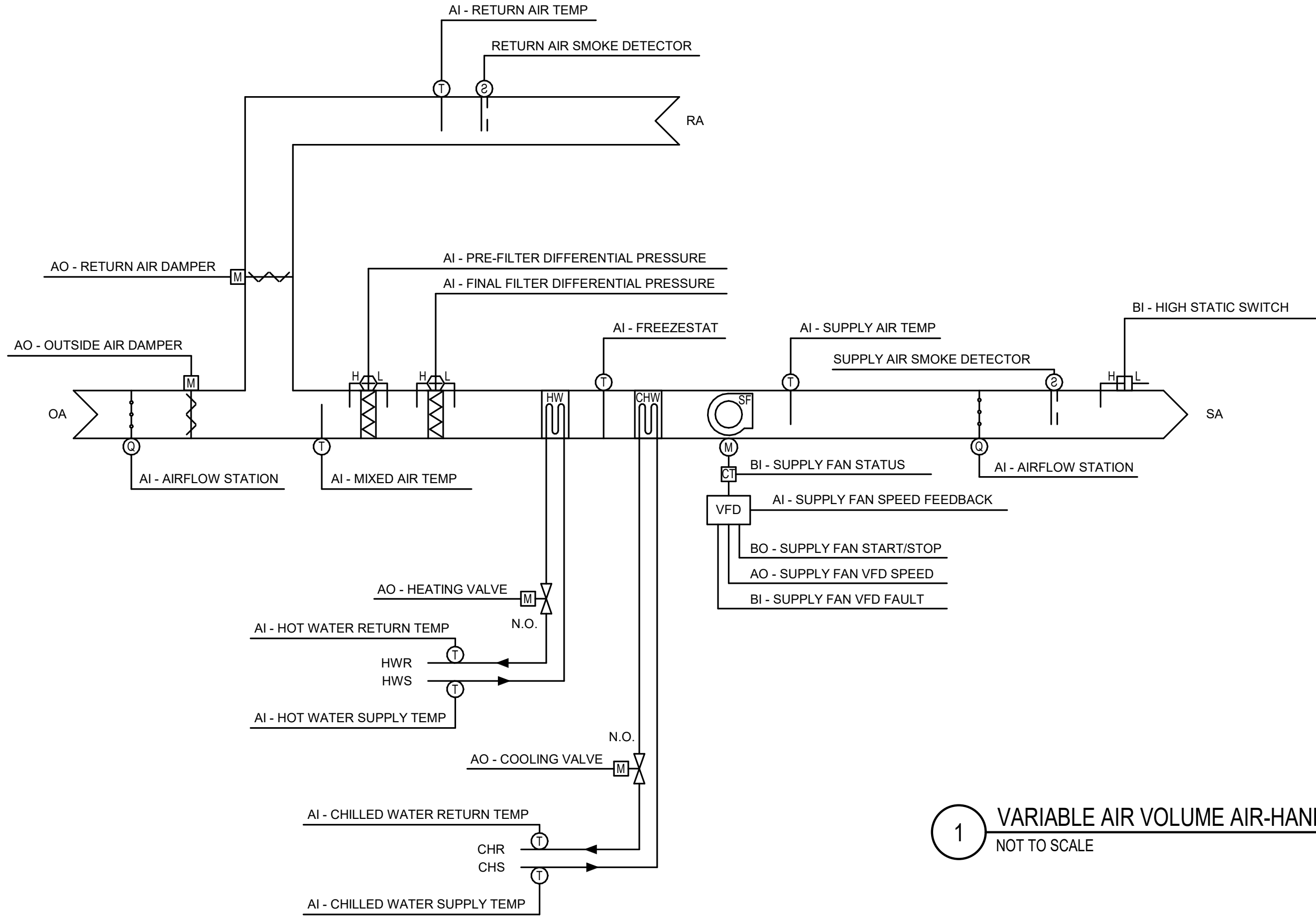
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VAV AHU SEQUENCE OF OPERATIONS

AHU-1	
A.	Coordination of Air-Handling Unit Sequences: Ensure that cooling-coil controls have common inputs and do not overlap in function.
B.	Mode of Operations: 1. Occupied mode: 6 AM through 8 PM (adj.) 2. Unoccupied mode: 8 PM through 5 AM (adj.) 3. Building warm-up: 5 AM through 6 AM (adj.)
C.	Supply Fan 1. While in occupied mode the supply fan shall operate continuously. a. The variable frequency drive shall modulate the supply fan speed to maintain duct static pressure setpoint (Pressure at supply fan discharge). Final duct static pressure setpoint shall be determined by Test, Adjust, Balance Contractor. b. Poll position of VAV terminal unit airflow valves every 5 minutes (adj.). i. Increase duct static pressure setpoint if any VAV airflow valve is greater than 95% (adj.) open. ii. Decrease duct static pressure setpoint if all VAV airflow valves are less than 90% (adj.) open.
D.	Damper Control Sequence 1. Minimum position for outside air damper shall correspond to minimum outside airflow shown on drawing M-604. 2. Return air damper shall modulate in opposite proportion to outside air damper in all modes of operation. 3. Demand Control Ventilation a. If any space carbon dioxide sensor records a concentration greater than 700 ppm (adj.) above ambient (e.g. 1,100 ppm if ambient is 400 ppm) then slowly modulate outside air damper open towards maximum position. b. Slowly modulate outside air damper back to minimum position when all space carbon dioxide sensors are equal to or lower than 600 ppm (adj.) above ambient. 4. Fail position for outside air damper is closed. Fail position for return air damper is open. When AHU-1 is shut-down due to scheduling or safety then outside air damper shall be closed and return air damper shall be open.
E.	Cooling Coil Control Sequence 1. Modulate cooling valve to maintain 54°F (adj.) supply air temperature.
F.	Cooling to Heating Changeover 1. Change from cooling mode to heating mode when mixed air temperature is less than 50°F (adj.).
G.	Heating Coil Control Sequence 1. Modulate heating valve to maintain 54°F (adj.) supply air temperature.
H.	The supply fan shall de-energize, and an alarm signal shall be sent to DDC system if any of the following conditions occur: 1. Freezestat records temperature of 37°F (adj.) or less. a. Open cooling coil control valve when freezestat activates. 2. Supply discharge air pressure is greater than 4 inches water gauge. 3. Smoke is detected in the return air duct 4. Smoke is detected in the supply air duct 5. Supply fan is commanded on, but status is off 6. Supply fan is commanded off, but status is on
J.	An alarm signal shall be sent to DDC system if any of the following conditions occur: 1. The supply air final filter differential pressure is greater than 0.6 inches water gauge. 2. The supply air pre-filter differential pressure is greater than 1.0 inches water gauge. 3. AHU-1 is de-energized on schedule or safety and outside air damper position is open. 4. AHU-1 is normal mode of operation and outside air damper position is closed. 5. Unit discharge air temperature is above 75°F (adj.).

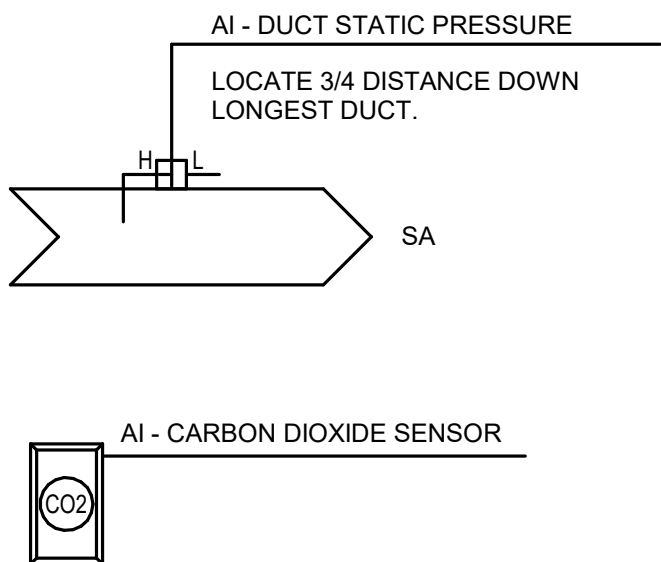
VAV AHU SEQUENCE OF OPERATIONS

AHU-1	
K.	Operator Station Display: Indicate the following on operator workstation display terminal: 1. DDC system graphic 2. DDC system occupied/unoccupied mode 3. Supply fan status 4. Supply fan airflow rate in cubic feet per minute 5. Supply fan speed in Hertz 6. Supply air pre-filter air pressure drop indication in inches of water 7. Supply air pre-filter high air pressure set point in inches of water 8. Supply air final filter air pressure drop indication in inches of water 9. Supply air final filter high air pressure set point in inches of water 10. Supply air temperature in degrees F 11. Supply air temperature set point in degrees F 12. Return air temperature in degrees F 13. Cooling coil control valve position in percent 14. Supply fan VFD fault 15. Supply fan pressure in inches of water 16. Chilled water supply temperature in degrees F 17. Chilled water return temperature in degrees F 18. Heating coil control valve position in percent 19. Heating water supply temperature in degrees F 20. Heating water return temperature in degrees F 21. Mixed air temperature in degrees F 22. Outdoor air damper position in percent 23. Return air damper position in percent 24. Outdoor airflow in cubic feet per minute



VAV AHU INPUT/OUTPUT POINTS SCHEDULE

UNIT TAG	POINT DESCRIPTION	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	CALCULATED VALUE	NOTES
AHU-1	SUPPLY FAN START/STOP				●		
	SUPPLY FAN SPEED COMMAND		●				
	SUPPLY FAN SPEED FEEDBACK	●					
	SUPPLY FAN STATUS			●			AIRFLOW PROOF
	SUPPLY AIRFLOW	●					
	SUPPLY AIR TEMPERATURE	●					
	SUPPLY AIR TEMPERATURE SETPOINT		●				
	SUPPLY AIR HIGH STATIC LIMIT			●			HARDWIRE SHUTDOWN
	SUPPLY FAN VFD FAULT			●			
	SUPPLY FAN PRESSURE	●					
	DUCT PRESSURE	●					
	COOLING COIL VALVE COMMAND		●				
	COOLING COIL VALVE POSITION	●					
	CHILLED WATER SUPPLY TEMPERATURE	●					
	CHILLED WATER RETURN TEMPERATURE	●					
	FREEZESTAT	●		●			HARDWIRE SHUTDOWN
	HEATING COIL VALVE COMMAND		●				
	HEATING COIL VALVE POSITION	●					
	HEATING WATER SUPPLY TEMPERATURE	●					
	HEATING WATER RETURN TEMPERATURE	●					
	FILTER PRESSURE SENSOR - SUPPLY AIR	●					PRE-FILTER
	FILTER PRESSURE SENSOR - SUPPLY AIR	●					FINAL FILTER
	MIXED AIR TEMPERATURE	●					
	RETURN AIR TEMPERATURE	●					
	RETURN AIR DAMPER POSITION	●					
	RETURN AIR DAMPER COMMAND		●				
	OUTSIDE AIR AIRFLOW	●					
	OUTSIDE AIR DAMPER POSITION	●					
	OUTSIDE AIR DAMPER COMMAND		●				
	SUPPLY AIR SMOKE ALARM			●			
	RETURN AIR SMOKE ALARM			●			
	CO2 SENSOR	●					



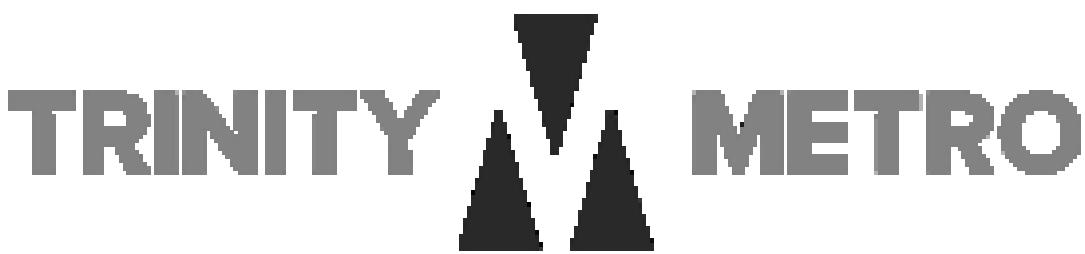
1 VARIABLE AIR VOLUME AIR-HANDLING UNIT (AHU-1) CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS
NOT TO SCALE

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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DRAWN	HZI
DESIGNED	KNN
CHECKED	SAM
APPROVED	JMF
DATE	12/28/2020

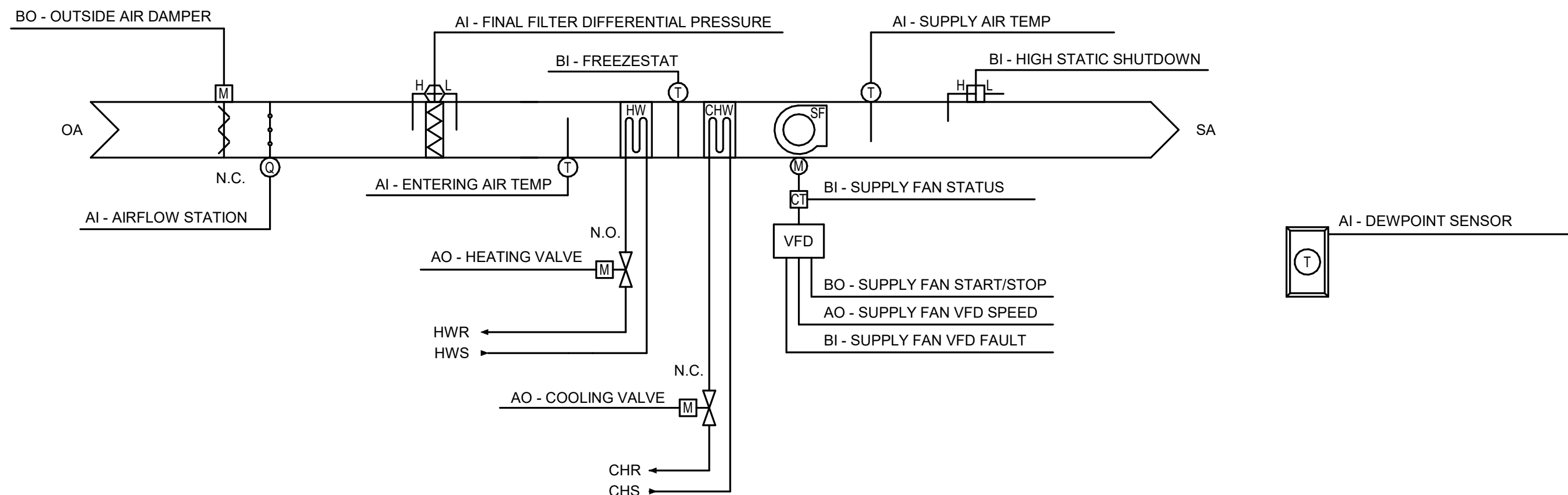
TRINITY METRO HEADQUARTERS
HVAC CONTROL DIAGRAMS

SHEET No.	M-701	REV 0
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DOAS SEQUENCE OF OPERATIONS

DOAS-1

- | | |
|----|--|
| | Coordination of Air-Handling Unit Sequences: Ensure that preheat coil and cooling-coil controls have common inputs and do not overlap in function. |
| B. | Mode of Operations: <ol style="list-style-type: none"> Occupied mode: 6 AM through 8 PM (adj.) |
| C. | Supply Fan <ol style="list-style-type: none"> While in occupied mode the supply fan shall operate continuously. When the supply fan is de-energized, the outside air damper shall close. <ol style="list-style-type: none"> The variable frequency drive shall modulate the supply fan speed to maintain constant supply airflow as filter pressure increases. |
| D. | Cooling Coil Control Sequence <ol style="list-style-type: none"> While outdoor air dewpoint is greater than 54°F, modulate cooling coil valve to maintain 54°F discharge air temperature. While outdoor air dewpoint is less than 54°F, modulate cooling valve to maintain space temperature set point of 78°F. Use return air temperature to maintain set point. Use wall temperature sensor for temperature adjustment and display only. |
| E. | Heating Mode Control Sequence <ol style="list-style-type: none"> Change from cooling mode to heating mode when: <ol style="list-style-type: none"> Outdoor air temperature is less than 68°F AND Outdoor air dewpoint is less than 57°F Modulate heating valve to maintain space temperature set point of 68°F. |
| F. | The supply fan and return fan shall de-energize, and an alarm signal shall be sent to DDC system if any of the following conditions occur: <ol style="list-style-type: none"> Freezestat records temperature of 37°F (adj.) or less. Open cooling coil control valve to 50% and energize chilled water pump to minimum flow rate if freezestat is on. Unit discharge air temperature is above 100°F (adj.) Unit discharge air temperature is below 50°F (adj.) Supply discharge air pressure is greater than 3 inches water gauge. Supply fan is commanded on, but status is off Supply fan is commanded off, but status is on |
| G. | An alarm signal shall be sent to DDC system if any of the following conditions occur: <ol style="list-style-type: none"> The supply air final filter differential pressure is greater than 1.5 inches water gauge. |
| H. | Install emergency shutoff switch for DOAS-1 that has priority over all other control inputs. Locate shutoff switch adjacent to the fire alarm annunciator panel. De-energize the supply fan, air-handling unit and send an alarm signal to DDC system when emergency switches are activated. |
| I. | Operator Station Display: Indicate the following on operator workstation display terminal: <ol style="list-style-type: none"> DDC system graphic. DDC system occupied/unoccupied mode. Outdoor air temperature indication (Global value). Outdoor air dew point indication (Global value). Supply fan on/off indication. Supply fan airflow rate. Supply air final filter air pressure drop indication. Supply air final filter high air pressure set point. Entering air temperature. |

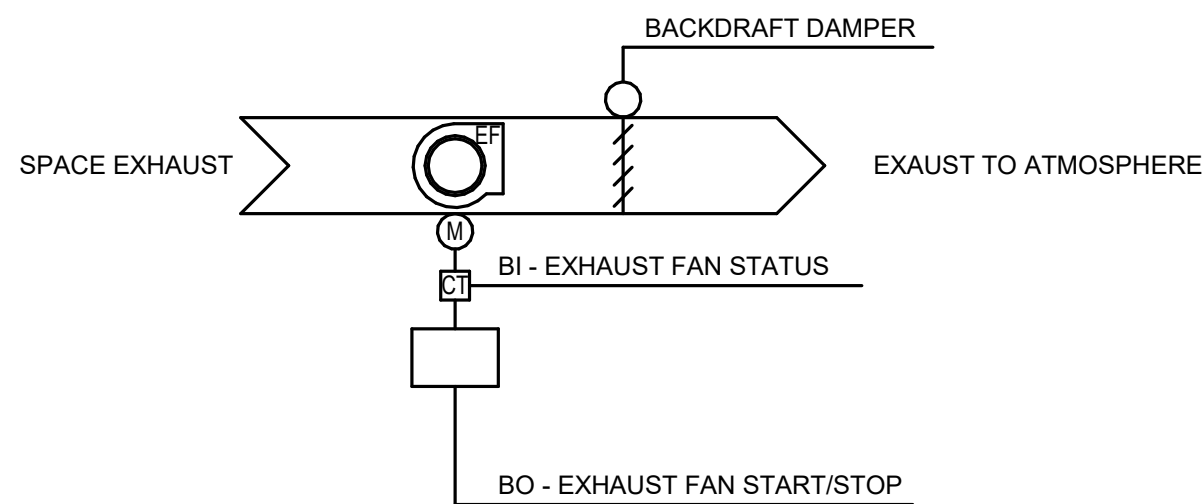


1 DOAS-1 CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS
NOT TO SCALE

EXHAUST FAN SEQUENCE OF OPERATIONS

EF-1

- A. EF-1 is a constant volume exhaust fan dedicated to exhausting Toilet Rooms, Janitor's Closets, and Copy Rooms.
- B. Exhaust Fan Control Sequence
1. The exhaust fan shall be energized according to a user defined schedule.
- C. EF-1 Control Sequence
1. EF-1 shall be operate continuously.
- D. The exhaust fan shall de-energize, and an alarm signal shall be sent to DDC system if any of the following conditions occur:
1. Exhaust fan is commanded on, but status is off
 2. Exhaust fan is commanded off, but status is on
- E. Operator Station Display: Indicate the following on operator workstation display terminal:
1. DDC system graphic.
 2. DDC system occupied/unoccupied mode.
 3. Exhaust fan status.



EF-1

2 EF-1 CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS
NOT TO SCALE

DOAS INPUT/OUTPUT POINTS SCHEDULE

UNIT TAG	POINT DESCRIPTION	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	CALCULATED VALUE	NOTES
DOAS-1	SUPPLY FAN START/STOP				●		
	SUPPLY FAN SPEED COMMAND		●				
	SUPPLY FAN SPEED FEEDBACK	●					
	SUPPLY FAN PRESSURE SWITCH			●			
	COOLING COIL VALVE COMMAND		●				
	COOLING COIL VALVE POSITION	●					
	PREHEAT COIL VALVE COMMAND		●				
	FILTER PRESSURE SENSOR - SUPPLY AIR	●					(1 POINT) - FINAL FILTER
	FREEZESTAT			●			HARDWIRE SHUTDOWN
	OUTSIDE AIR DAMPER ACTUATOR COMMAND				●		
	SUPPLY AIRFLOW	●					
	ENTERING AIR TEMPERATURE	●					
	SUPPLY AIR HIGH STATIC LIMIT			●			HARDWIRE SHUTDOWN
	RETURN AIR HIGH STATIC LIMIT			●			HARDWIRE SHUTDOWN
SUPPLY FAN VFD FAULT			●				
DEWPOINT SENSOR	●						

EXHAUST FAN INPUT/OUTPUT POINTS SCHEDULE

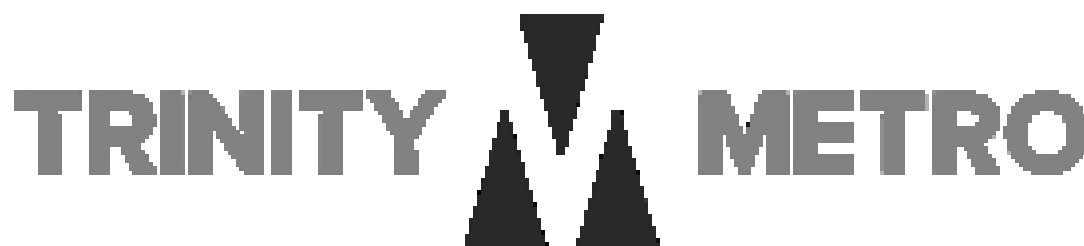
UNIT TAG	POINT DESCRIPTION	ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	CALCULATED VALUE	NOTES
EF-D13 EF-D20	EXHAUST FAN START/STOP				●		
	EXHAUST FAN STATUS			●			AIRFLOW PROOF
	EQUIPMENT INTERLOCK			●			

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TRINITY METRO HEADQUARTERS

HVAC CONTROL DIAGRAMS

SHEET No.	M-702
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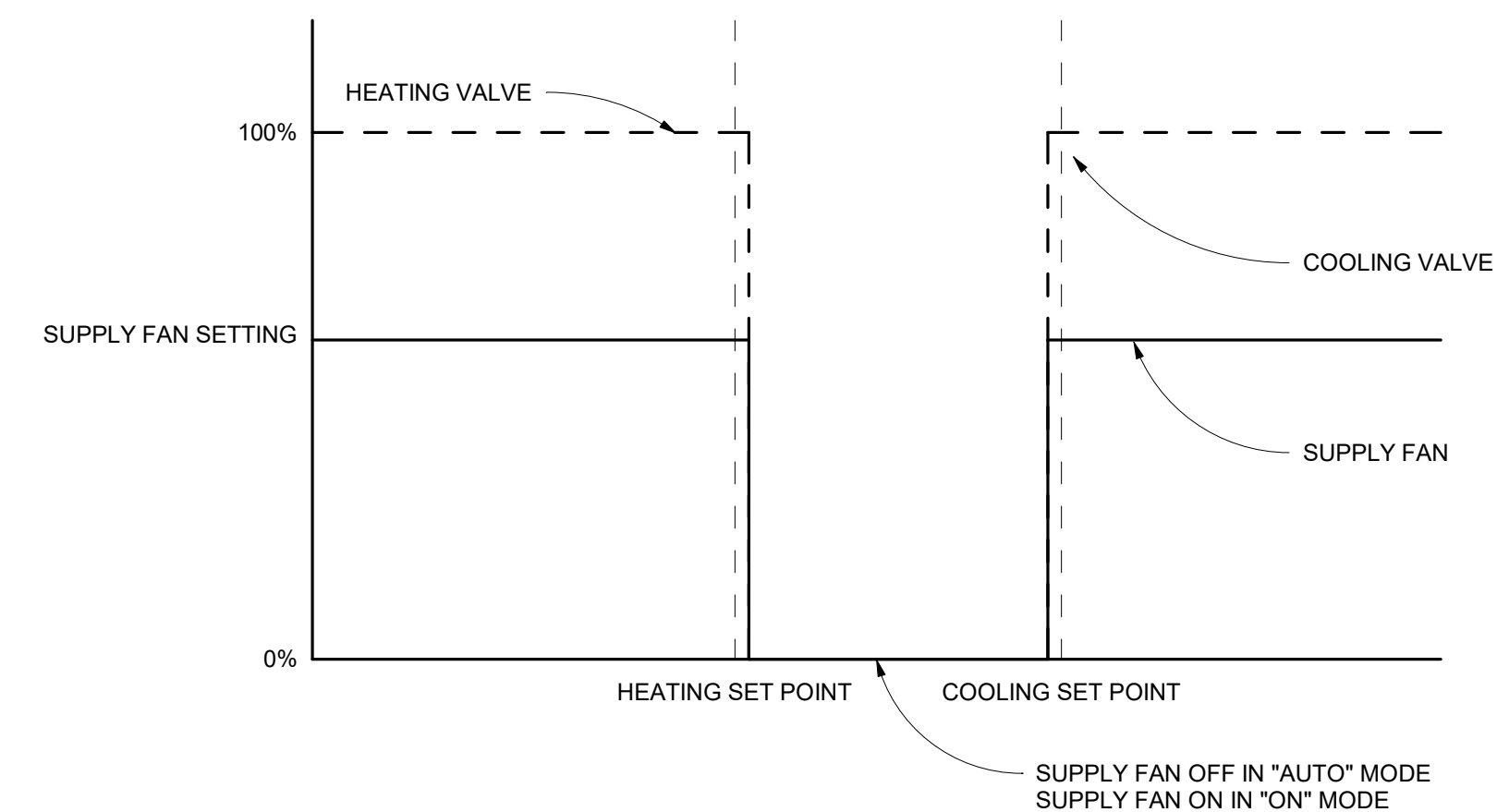
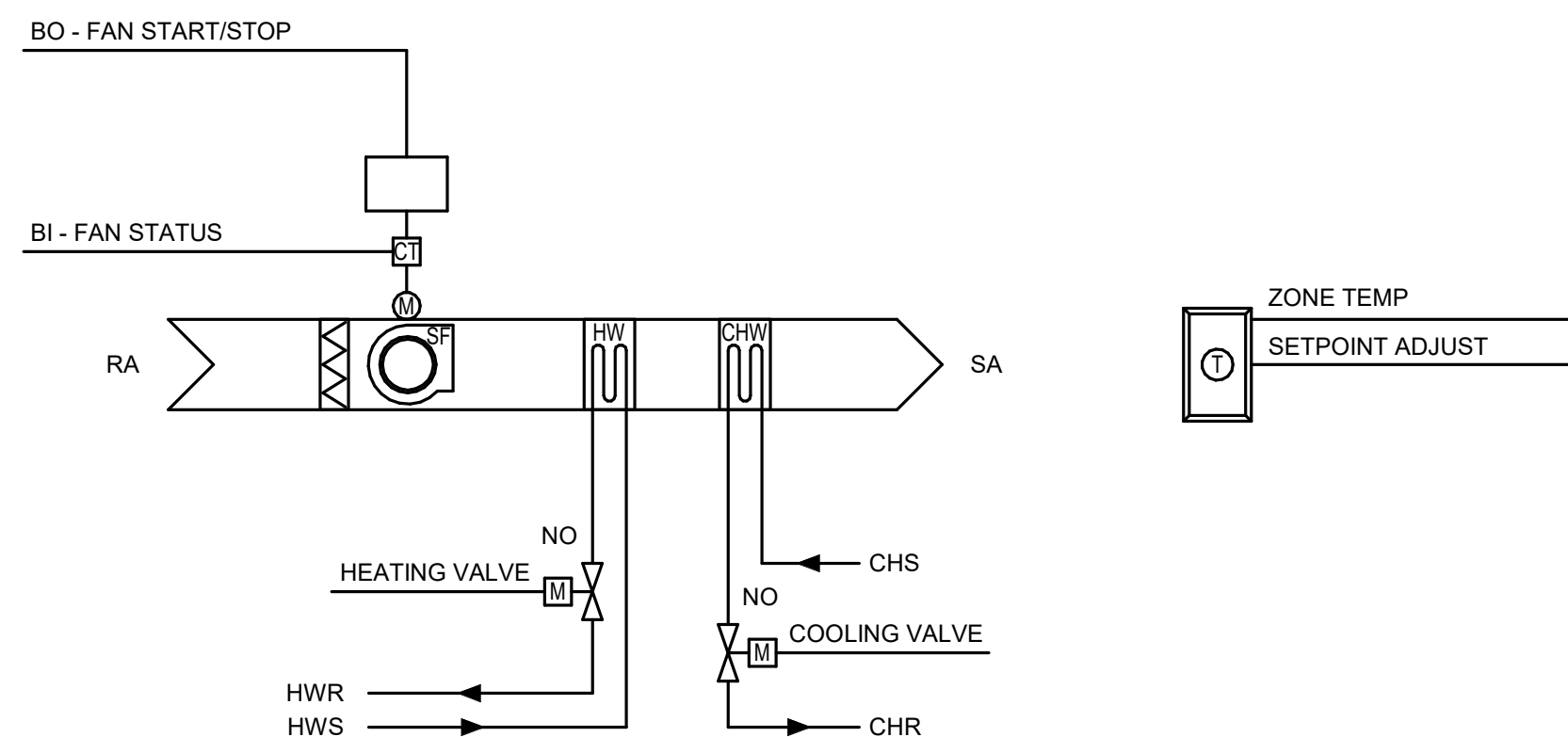
FAN COIL UNIT SEQUENCE OF OPERATIONS

FCU'S

- A. The wall-mounted thermostat shall control the functions of the fan coil unit. Temperature setting shall be accessible for each fan coil unit from the wall-mounted thermostat.
- B. Limits on setpoint temperature ranges shall be programmed at each fan coil thermostat. Adjustable setpoint range shall be in the following temperature range:
1. Greater than or equal to 70°F and less than or equal to 74°F.
- C. The cooling and heating valves shall be two-way, two-position valves. On a call for cooling the cooling valve shall open and the heating valve shall be closed. On a call for heating the heating valve shall open and the cooling valve shall be closed.
- D. Operator Station Display: Indicate the following on operator workstation display terminal:
1. DDC system graphic.
 2. Supply-fan on-off indication.

FAN COIL UNIT INPUT/OUTPUT POINTS SCHEDULE

UNIT TAG	POINT DESCRIPTION		ANALOG INPUT	ANALOG OUTPUT	BINARY INPUT	BINARY OUTPUT	CALCULATED VALUE	NOTES
FCU	1	SUPPLY FAN START/STOP				●		1st EAST (25 FCUs) SINGLE POINT
	2	ZONE TEMPERATURE						LOCAL CONTROL
	3	ZONE TEMPERATURE SETPOINT LIMITS						LOCAL CONTROL
	4	SUPPLY AIR TEMPERATURE						LOCAL CONTROL



1 FAN COIL UNIT CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS
NOT TO SCALE

SMOKE DAMPER SEQUENCE OF OPERATIONS

ALL FIRE / SMOKE DAMPERS

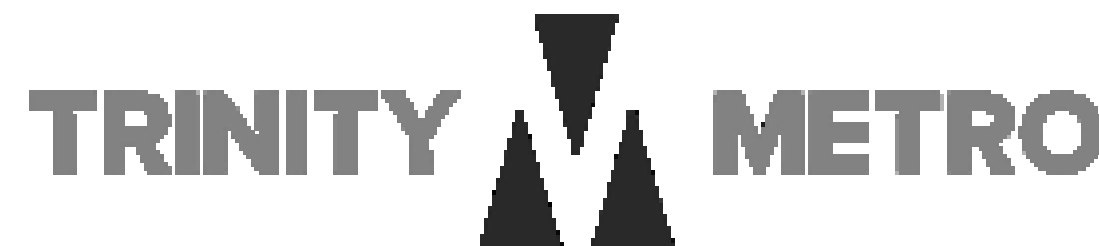
- | | |
|----|--|
| A. | Interlock |
| 1. | All fire / smoke damper smoke detectors shall be interlocked with the building fire alarm control panel. |
| B. | Normal Operation: |
| 1. | During normal operation all fire / smoke dampers shall be open. Fail position for these dampers shall be closed. |
| C. | Emergency Operation: |
| 1. | If smoke is detected at a local duct-mounted smoke detector, then the associated fire / smoke damper shall close. |
| 2. | If smoke is detected anywhere in the building, the fire alarm control panel shall de-energize all air-handling unit supply fans, exhaust fans, and energy recovery wheel, if applicable. |

2 FIRE/SMOKE DAMPER CONTROL DIAGRAM AND SEQUENCE OF OPERATIONS
NOT TO SCALE

REV	DATE				BY	ENG	CHK APP



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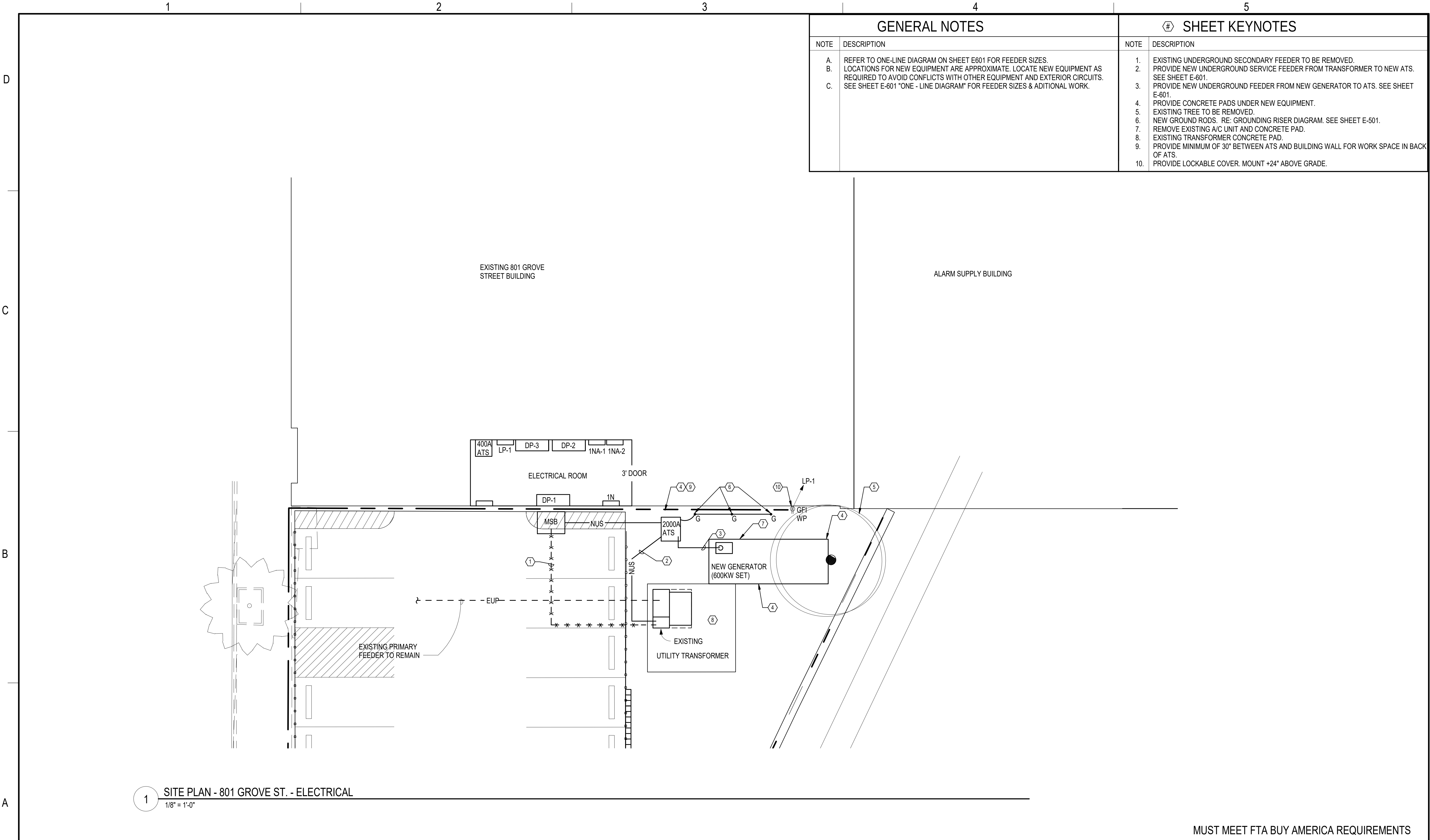
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DESIGNED	KNN
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APPROVED	JMF
DATE	12/28/2020

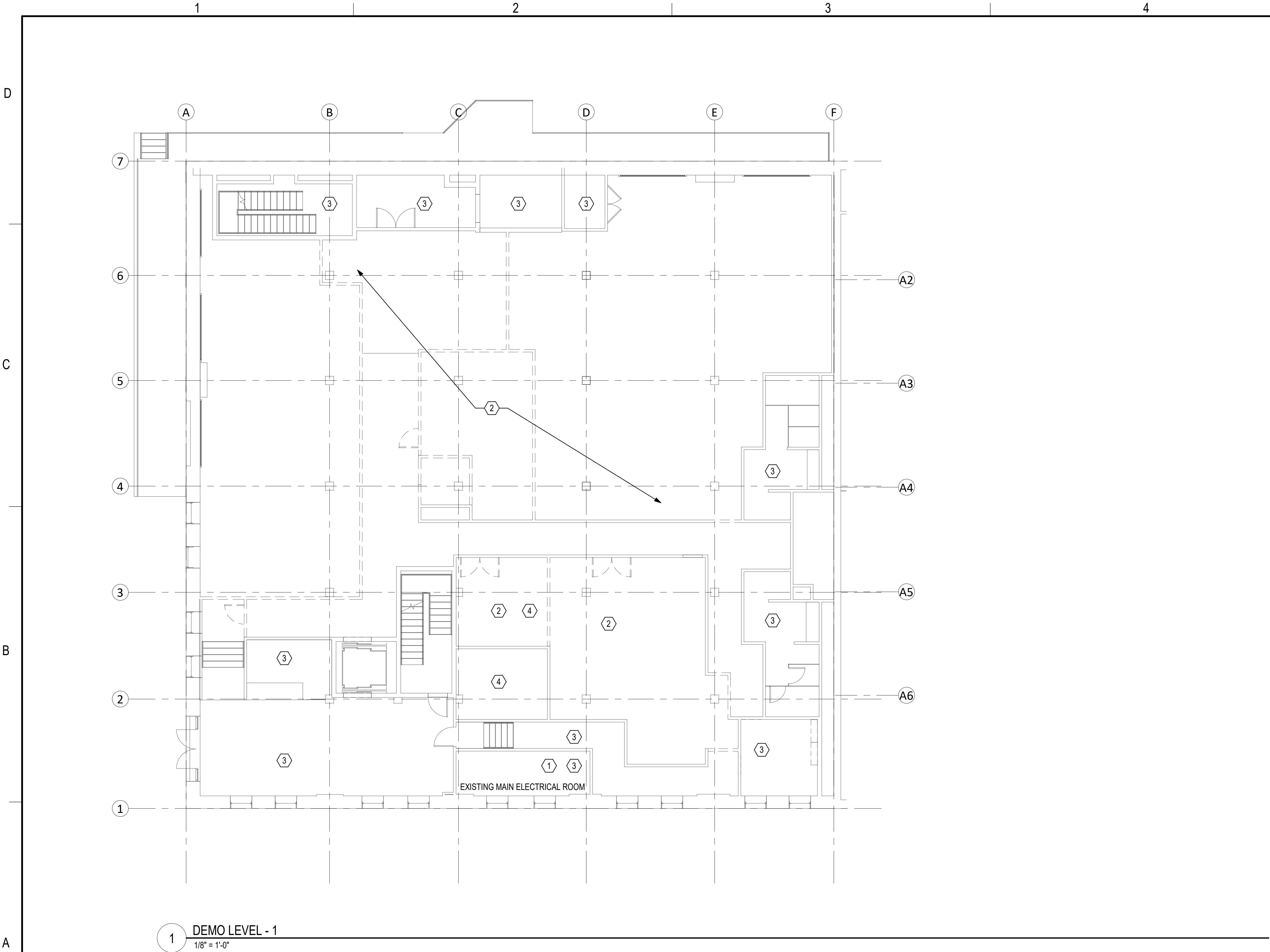
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TRINITY METRO HEADQUARTERS HVAC CONTROL DIAGRAMS

SHEET No.	M-703
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GENERAL DEMOLITION NOTES

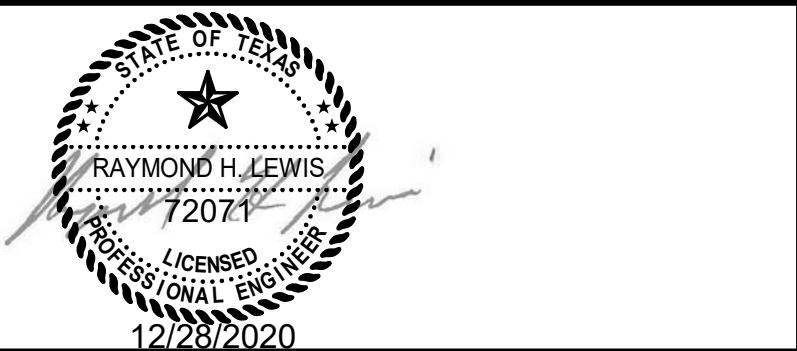
NOTE	DESCRIPTION
A.	IN WALLS TO BE REMOVED, DEENERGIZE AND REMOVE ALL ELECTRICAL DEVICES AND CIRCUITS BACK TO PANELBOARD OR THE NEXT DEVICE UPSTREAM THAT IS TO REMAIN.
B.	BRANCH CIRCUITS IN PANELBOARDS THAT ARE ABANDONED AND NOT REUSED SHALL BE LABELED "SPARE".
C.	REMOVE ALL COLUMN-MOUNTED ELECTRICAL/DATA OUTLETS.
D.	REMOVE ALL DATA AND SECURITY CABLE NOT BEING REUSED.
E.	EXISTING FIRE ALARM DEVICES CAN BE REUSED IF IN GOOD CONDITION.
F.	REUSE BREAKERS WHERE ABANDONED DUE TO DEMOLITION AND HAS CORRECT RATING FOR NEW CIRCUIT.

SHEET KEYNOTES

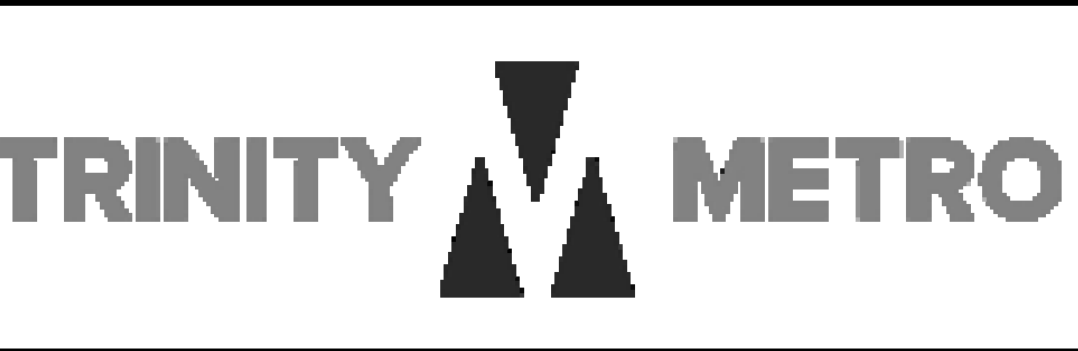
NOTE	DESCRIPTION
1.	EXISTING ELECTRICAL PANELS TO REMAIN.
2.	REMOVE ALL LIGHT FIXTURE TYPES IN THIS ROOM / AREA.
3.	EXISTING LIGHT FIXTURES IN THIS AREA TO REMAIN.
4.	SEE SHEET E-400 FOR ADDITIONAL NOTES FOR ITEMS TO REMAIN.

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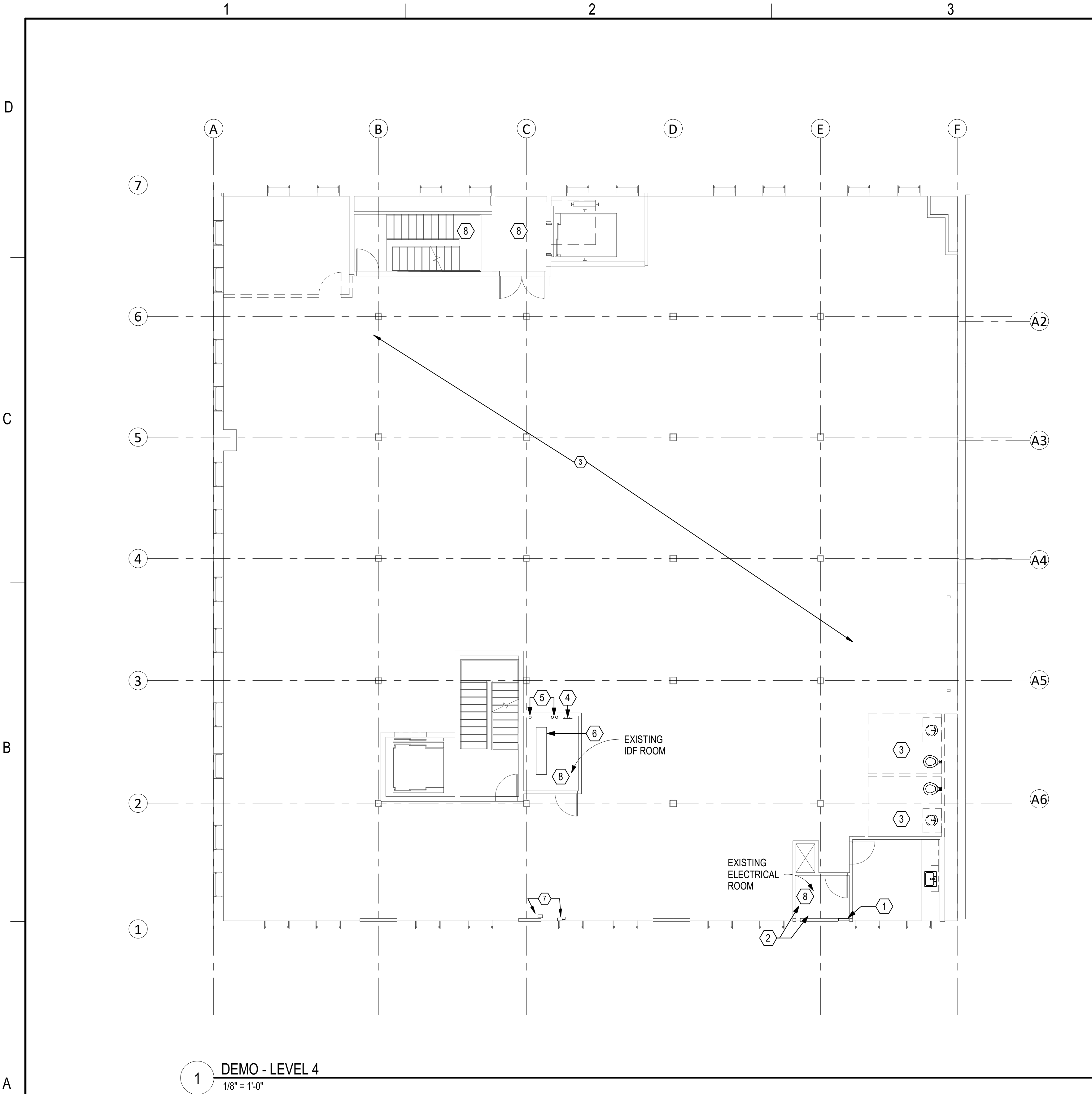


DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS
ELECTRICAL DEMOLITION PLAN -
LEVEL 1

SHEET No. **ED-101**

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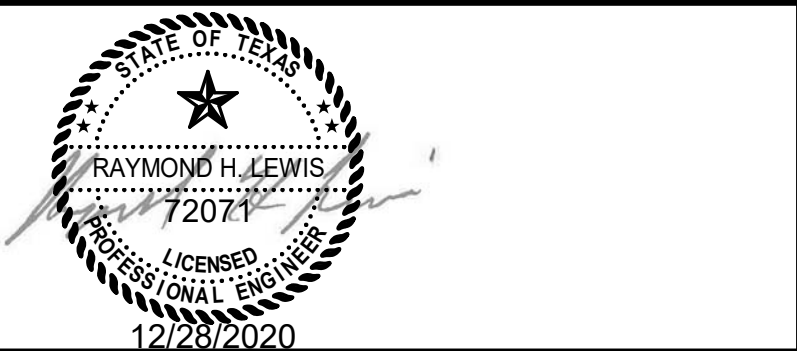


GENERAL DEMOLITION NOTES	
NOTE	DESCRIPTION
A.	IN WALLS TO BE REMOVED, DEENERGIZE AND REMOVE ALL ELECTRICAL DEVICES AND CIRCUITS BACK TO PANELBOARD OR THE NEXT DEVICE UPSTREAM THAT IS TO REMAIN.
B.	BRANCH CIRCUITS IN PANELBOARDS THAT ARE ABANDONED AND NOT REUSED SHALL BE LABELED "SPARE".
C.	REMOVE ALL COLUMN-MOUNTED ELECTRICAL/DATA OUTLETS.
D.	REMOVE ALL DATA AND SECURITY CABLE NOT BEING REUSED.
E.	EXISTING FIRE ALARM DEVICES CAN BE REUSED IF IN GOOD CONDITION.
F.	REUSE BREAKERS WHERE ABANDONED DUE TO DEMOLITION AND HAS CORRECT RATING FOR NEW CIRCUIT.

# SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING PANEL "LP4" TO REMAIN.
2.	EXISTING WALL-MOUNTED SECURITY EQUIPMENT & POWER SUPPLIES TO REMAIN.
3.	REMOVE ALL LIGHT FIXTURE TYPES.
4.	EXISTING GROUND BUS BAR TO REMAIN.
5.	EXISTING CONDUIT SLEEVES TO REMAIN.
6.	EXISTING RACKS & ASSOCIATED POWER OUTLETS AND CIRCUITS TO REMAIN.
7.	REMOVE EXISTING WALL-MOUNTED DISCONNECT SWITCH & PULLBOX. REMOVE WIRE AND CONDUIT BACK TO SOURCE.
8.	EXISTING LIGHT FIXTURES IN THIS AREA TO REMAIN.

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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

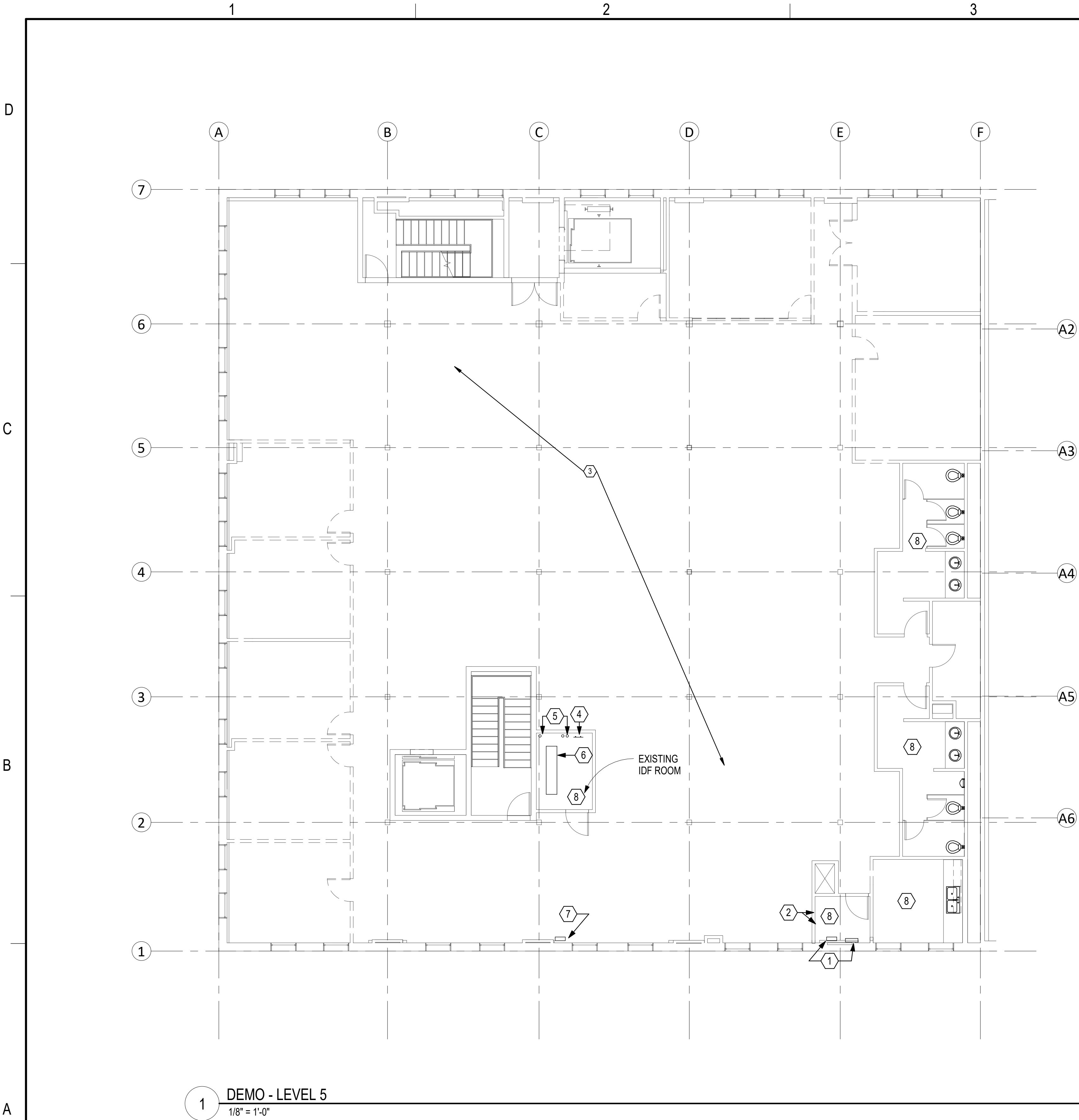


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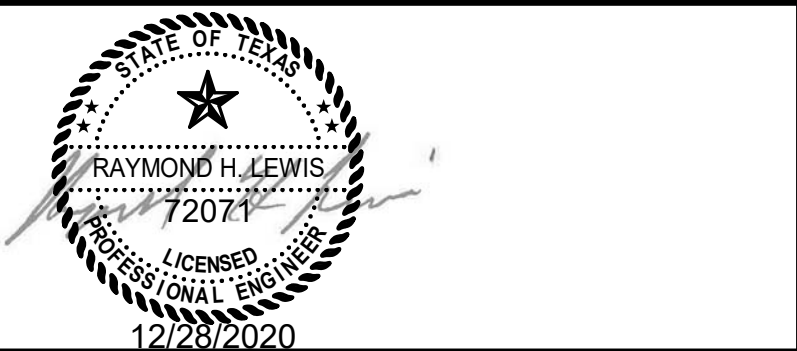
TRINITY METRO HEADQUARTERS ELECTRICAL DEMOLITION PLAN - LEVEL 4	
SHEET No.	ED-104
REV	0



GENERAL DEMOLITION NOTES	
NOTE	DESCRIPTION
A.	IN WALLS TO BE REMOVED, DEENERGIZE AND REMOVE ALL ELECTRICAL DEVICES AND CIRCUITS BACK TO PANELBOARD OR THE NEXT DEVICE UPSTREAM THAT IS TO REMAIN.
B.	BRANCH CIRCUITS IN PANELBOARDS THAT ARE ABANDONED AND NOT REUSED SHALL BE LABELED "SPARE".
C.	REMOVE ALL COLUMN-MOUNTED ELECTRICAL/DATA OUTLETS.
D.	REMOVE ALL DATA AND SECURITY CABLE NOT BEING REUSED.
E.	EXISTING FIRE ALARM DEVICE CAN BE REUSED IF IN GOOD CONDITION.
F.	REUSE BREAKERS WHERE ABANDONED DUE TO DEMOLITION. AND HAS CORRECT RATING FOR NEW CIRCUIT.

SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING PANELS "5NA" AND "5M" TO REMAIN.
2.	EXISTING WALL MOUNTED SECURITY EQUIPMENT AND POWER SUPPLIES TO REMAIN.
3.	REMOVE ALL LIGHT FIXTURE TYPES.
4.	EXISTING GROUND BUS BAR TO REMAIN.
5.	EXISTING CONDUIT SLEEVES TO REMAIN.
6.	EXISTING RACKS AND POWER OUTLETS TO REMAIN.
7.	REMOVE EXISTING PANEL & CIRCUITS BACK TO SOURCE.
8.	EXISTING LIGHT FIXTURES IN THIS AREA TO REMAIN.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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DATE	12.28.2020

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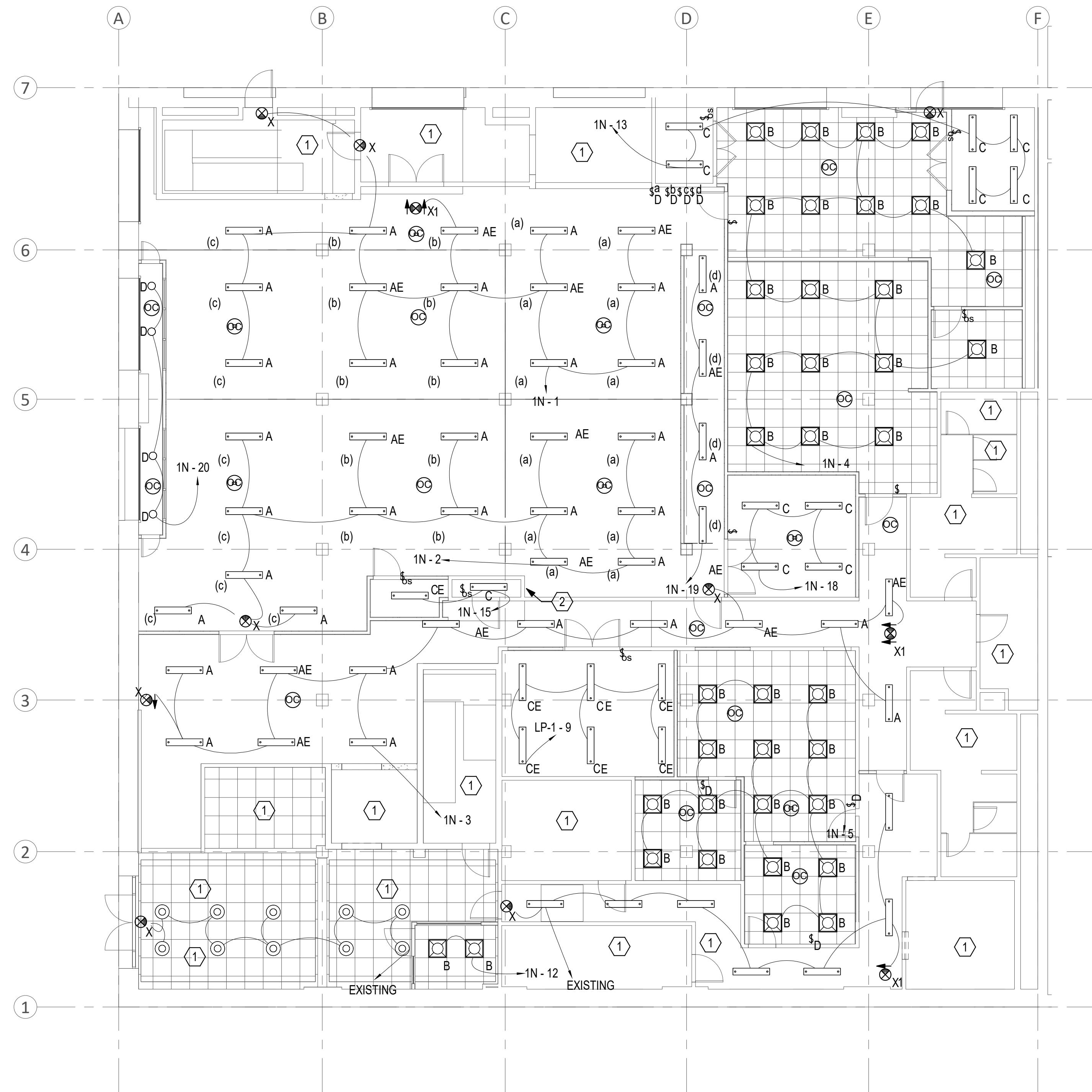
TRINITY METRO HEADQUARTERS ELECTRICAL DEMOLITION PLAN - LEVEL 5	
SHEET No.	ED-105
REV	0

GENERAL NOTES

NOTE	DESCRIPTION
A.	EXIT SIGNS NOT LOCATED AGAINST THE WALL NEED TO BE PENDANT MOUNTED.
B.	CONNECT FIXTURES WITH BATTERY PACKS TO UNSWITCHED PHASE CONDUCTOR OF CIRCUIT INDICATED. LIGHTS ARE TO STILL BE CONTROLLED WITH OTHER FIXTURES ON SAME CIRCUIT.
C.	PENDANT MOUNT COORIDORS AT 9'-0" AFF.
D.	PENDANT MOUNT NEW FIXTURES IN THE BOARDROOM TO 11'-5" AFF. EXCEPT FOR THE TOP-MOST ROW WHICH WILL BE MOUNTED AT 9'-0" AFF.
E.	EXISTING OUTSIDE LIGHTS AROUND THE PERIMETER OF THE BUILDING ARE TO REMAIN. CONTRACTOR TO ENSURE ALL LIGHTS ARE IN WORKING ORDER.
F.	THE FOLLOWING MANUFACTURERS ARE CONSIDERED ACCEPTABLE EQUALS. LIGHTOLIER, LITHONIA, DAYBRITE, COLUMBIA, METALUX.

SHEET KEYNOTES

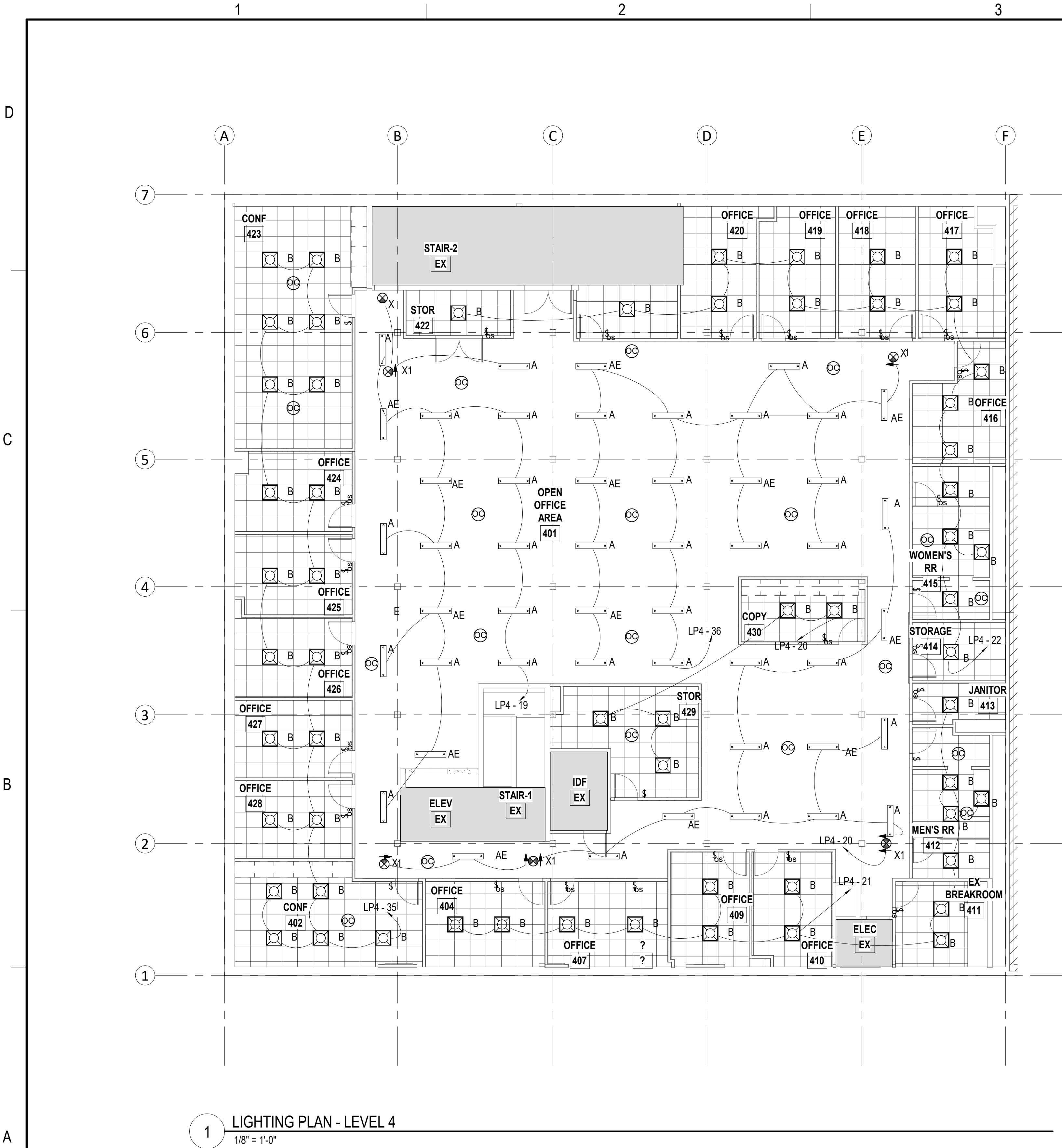
NOTE	DESCRIPTION
1.	LIGHTING IN THIS AREA TO REMAIN.
2.	ADD 4 DIMMING LIGHTING CONTROLS AT THIS LOCATION. IDENTICAL TO CONTROLS AT OTHER ENTRANCE OF BOARD ROOM.



1 LIGHTING PLAN - LEVEL 1
1/8" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

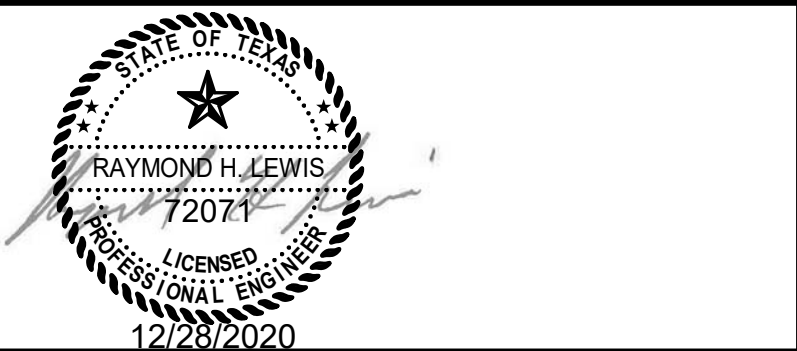
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GENERAL NOTES	
NOTE	DESCRIPTION
A.	EXIT SIGNS NOT LOCATED AGAINST THE WALL NEED TO BE PENDANT MOUNTED.
B.	
C.	CONNECT FIXTURES WITH BATTERY PACKS TO UNSWITCHED PHASE CONDUCTOR OF CIRCUIT INDICATED. LIGHTS ARE TO STILL BE CONTROLLED WITH OTHER FIXTURES ON SAME CIRCUIT.
D.	PENDANT MOUNT NEW FIXTURES TO 8'-0" AFF.
	THE FOLLOWING MANUFACTURERS ARE CONSIDERED ACCEPTABLE EQUALS.
	LIGHTOLIER, LITHONIA, DAYBRITE, COLUMBIA, METALUX.

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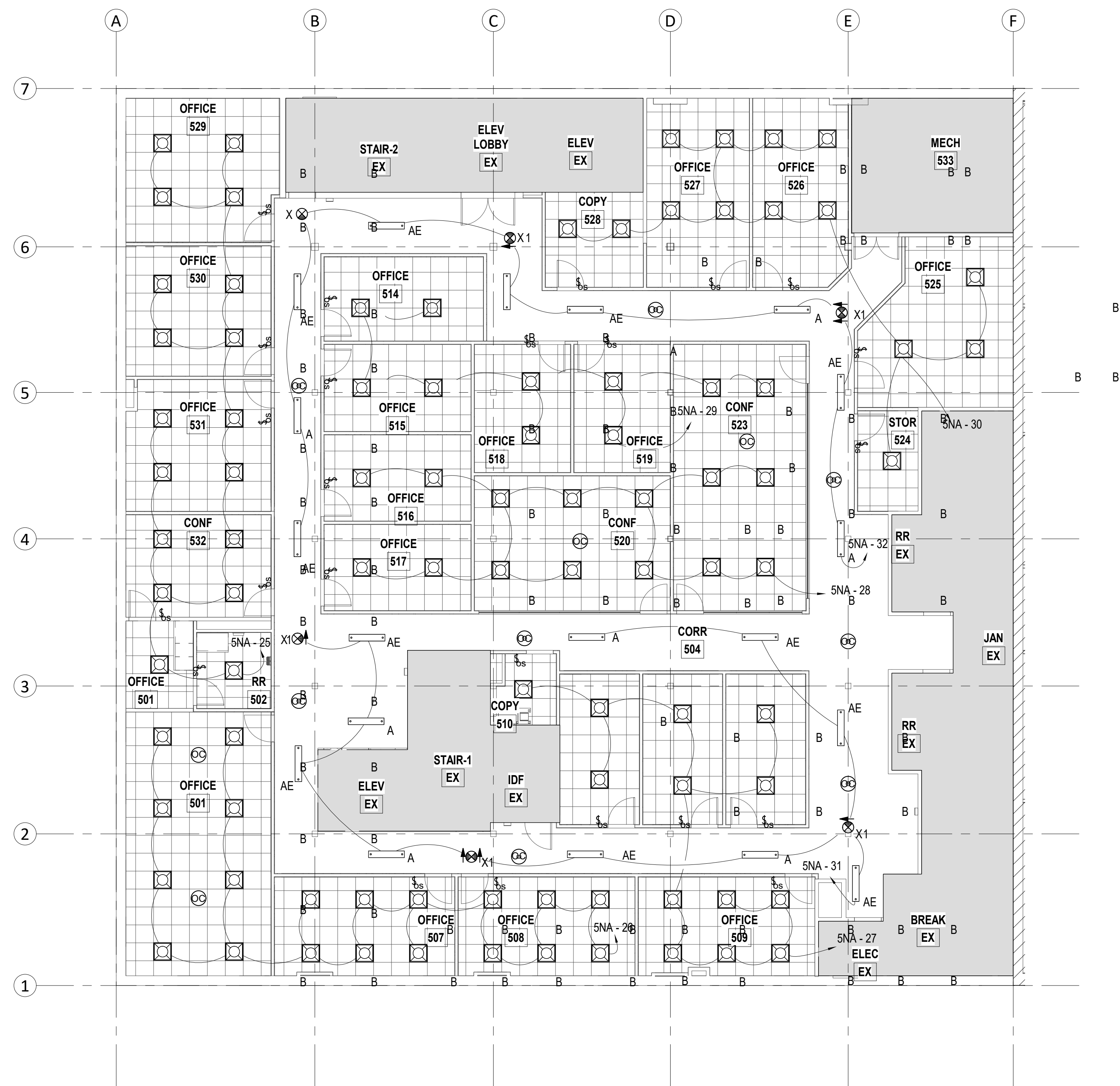


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APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS ELECTRICAL LIGHTING PLAN LEVEL 4	
SHEET No.	E-104
REV	0

GENERAL NOTES

NOTE	DESCRIPTION
A.	EXIT SIGNS NOT LOCATED AGAINST THE WALL NEED TO BE PENDANT MOUNTED.
B.	CONNECT FIXTURES WITH BATTERY PACKS TO UNSWITCHED PHASE CONDUCTOR OF CIRCUIT INDICATED. LIGHTS ARE TO STILL BE CONTROLLED WITH OTHER FIXTURES ON SAME CIRCUIT.
C.	PENDANT MOUNT NEW FIXTURES TO 8'-0" AFF.
D.	THE FOLLOWING MANUFACTURERS ARE CONSIDERED ACCEPTABLE EQUALS. LIGHTOLIER, LITHONIA, DAYBRITE, COLUMBIA, METALUX.

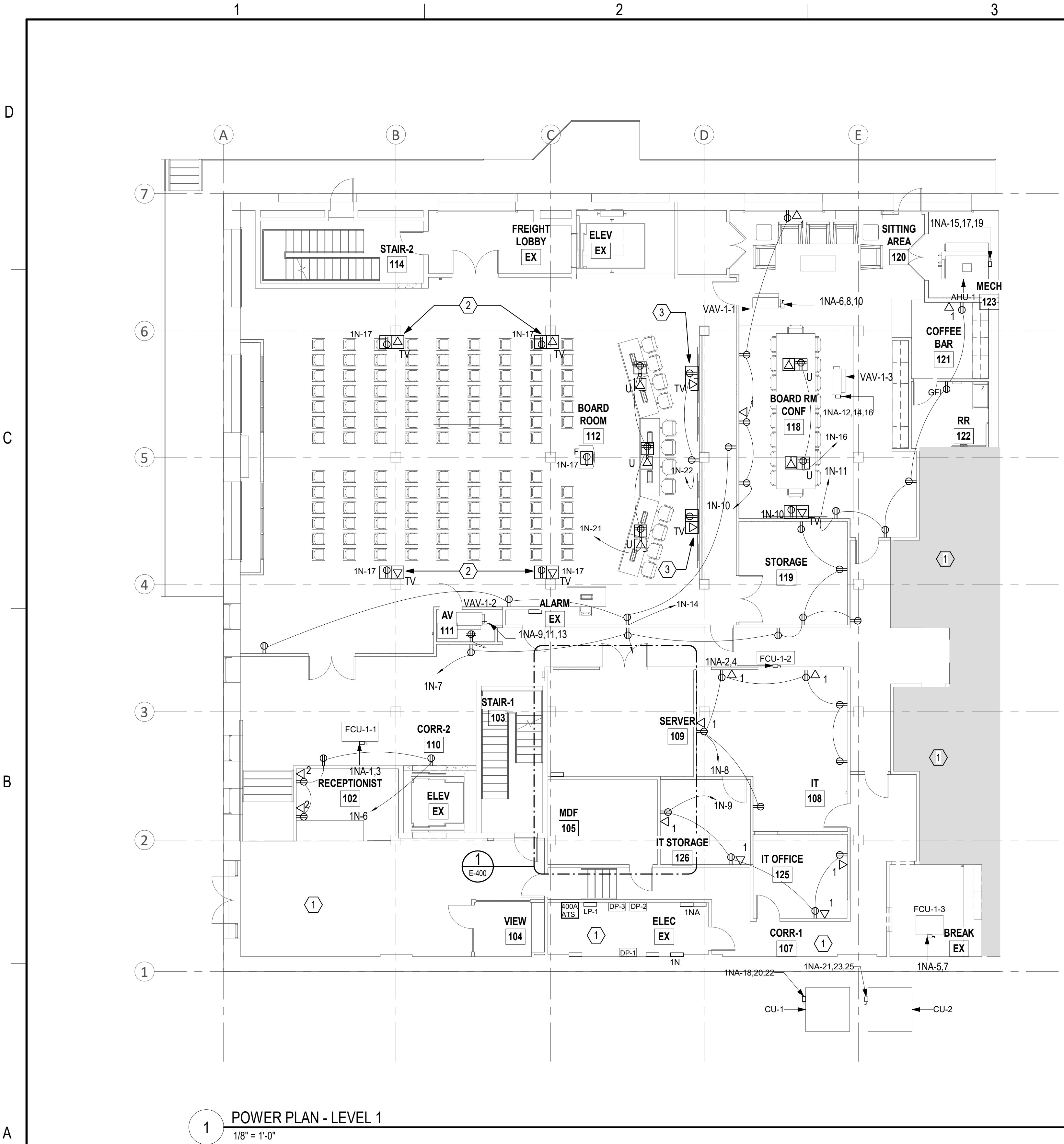


1 LIGHTING PLAN - LEVEL 5
1/8" = 1'-0"

$$1/8'' = 1'-0''$$

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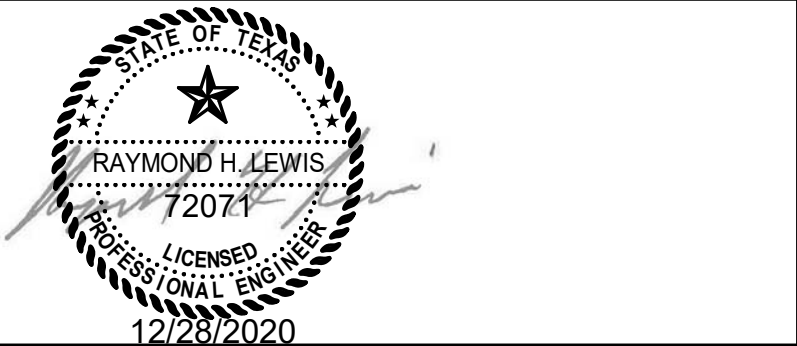


GENERAL NOTES	
NOTE	DESCRIPTION
A.	TELECOMMUNICATION OUTLETS ARE SHOWN ON THIS SHEET FOR COORDINATION. REFER TO "T" DRAWINGS FOR ADDITIONAL WORK.
B.	NEW BRANCH CIRCUITS ARE SERVED FROM EXISTING PANELS. SOME BRANCH CIRCUIT BREAKERS MAY BE OCCUPIED WITH EXISTING BRANCH CIRCUITS. IN SUCH CASES, USE THE NEXT AVAILABLE CIRCUIT BREAKER.
C.	PRIOR TO INSTALLATION OF FLOOR BOXES CHECK WITH OWNER FOR LOCATION IN COORDINATION WITH FURNITURE.

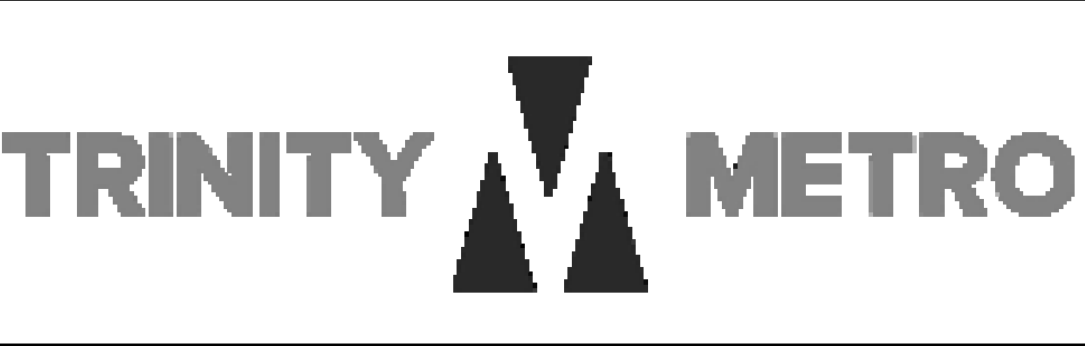
# SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING RECEPTACLES IN THIS AREA TO REMAIN. MAINTAIN SAME CIRCUIT OR EXTEND TO NEAREST NEW CIRCUIT.
2.	2 DISPLAYS MOUNTED AT +11'A.F.F. ONLY RUN 1 SET OF CONDUITS SPECIFIED BY DETAIL#2 ON SHEET-502.
3.	3X3 MATRIX DISPLAY WALL.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

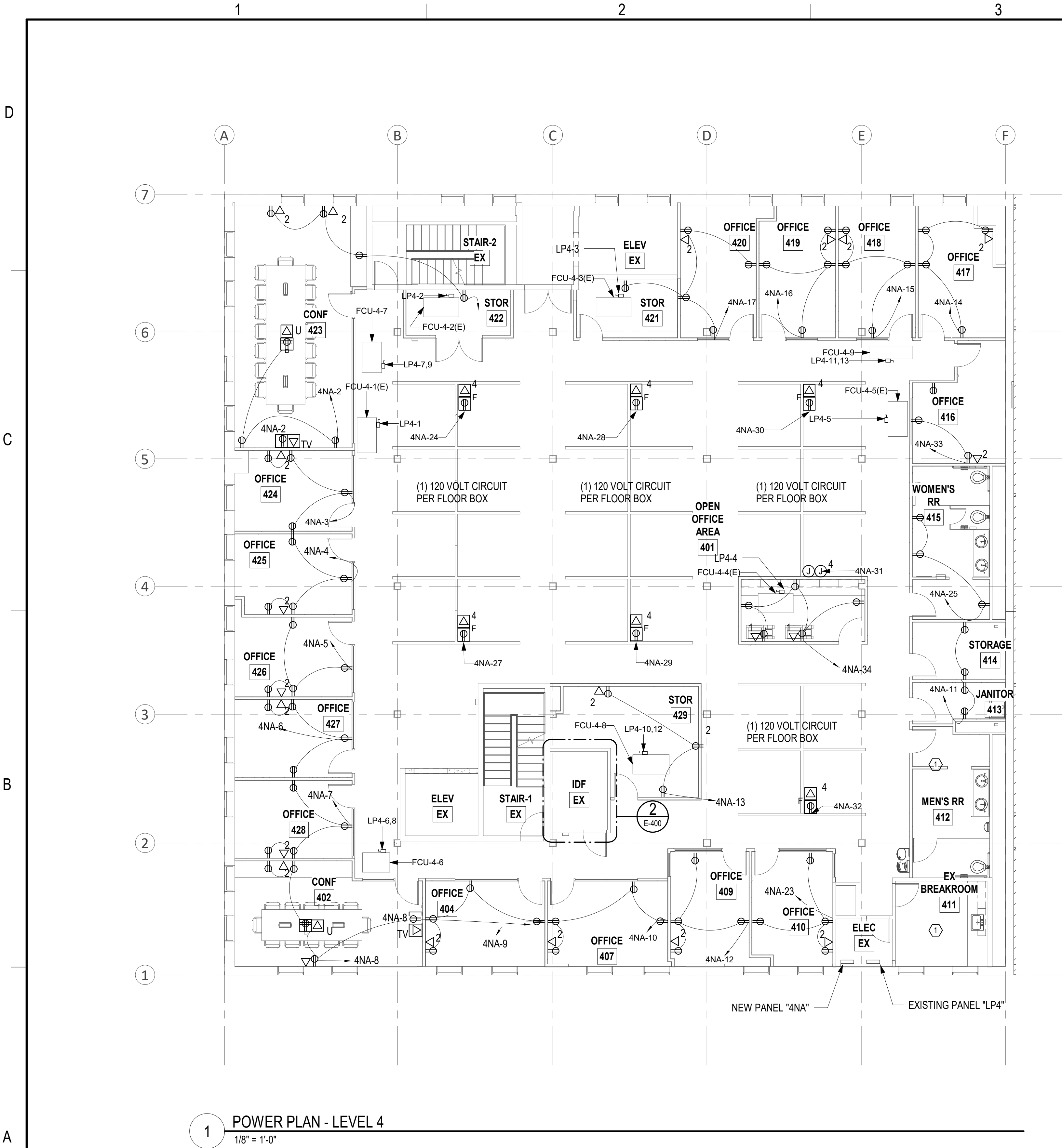


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500 W. 7th St. Ste. 300 Fort Worth, Texas 76102
Phone (817)335-3000 Fax (817)335-1025



DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS ELECTRICAL POWER PLAN LEVEL 1	
SHEET No.	E-201
REV	0

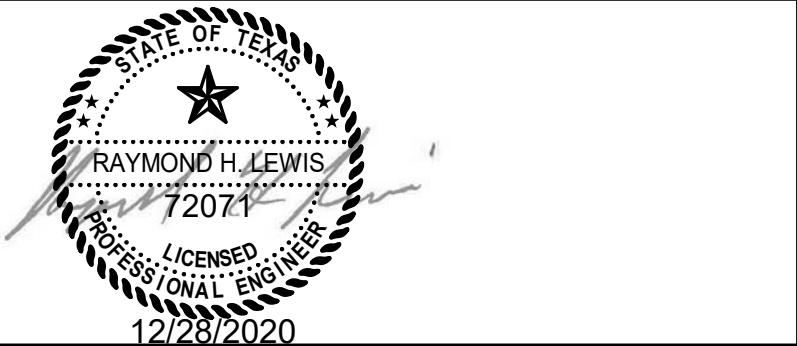


GENERAL NOTES	
NOTE	DESCRIPTION
A.	TELECOMMUNICATION OUTLETS ARE SHOWN ON THIS SHEET FOR COORDINATION. REFER TO "T" DRAWINGS FOR ADDITIONAL WORK.
B.	NEW BRANCH CIRCUITS ARE SERVED FROM EXISTING PANELS. SOME BRANCH CIRCUIT BREAKERS MAY BE OCCUPIED WITH EXISTING BRANCH CIRCUITS. IN SUCH CASES, USE THE NEXT AVAILABLE CIRCUIT BREAKER.
C.	PRIOR TO INSTALLATION OF FLOOR BOXES CHECK WITH OWNER FOR LOCATION IN COORDINATION WITH FURNITURE.

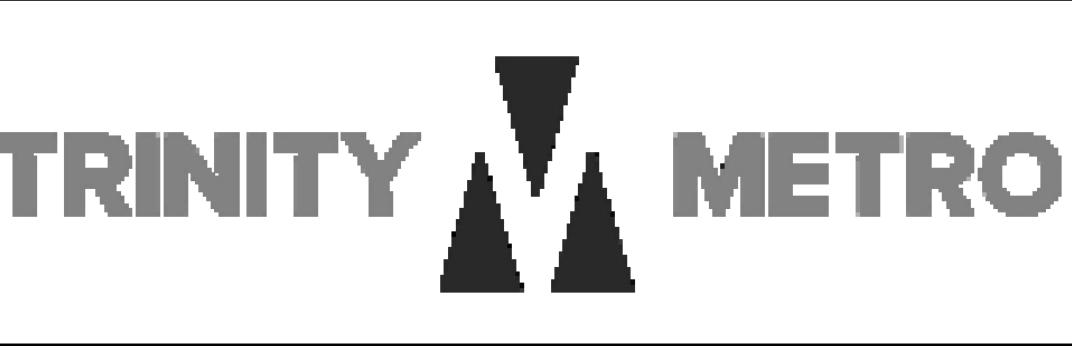
# SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING RECEPTACLES IN THIS AREA TO REMAIN. MAINTAIN SAME CIRCUIT OR EXTEND TO NEAREST NEW CIRCUIT.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

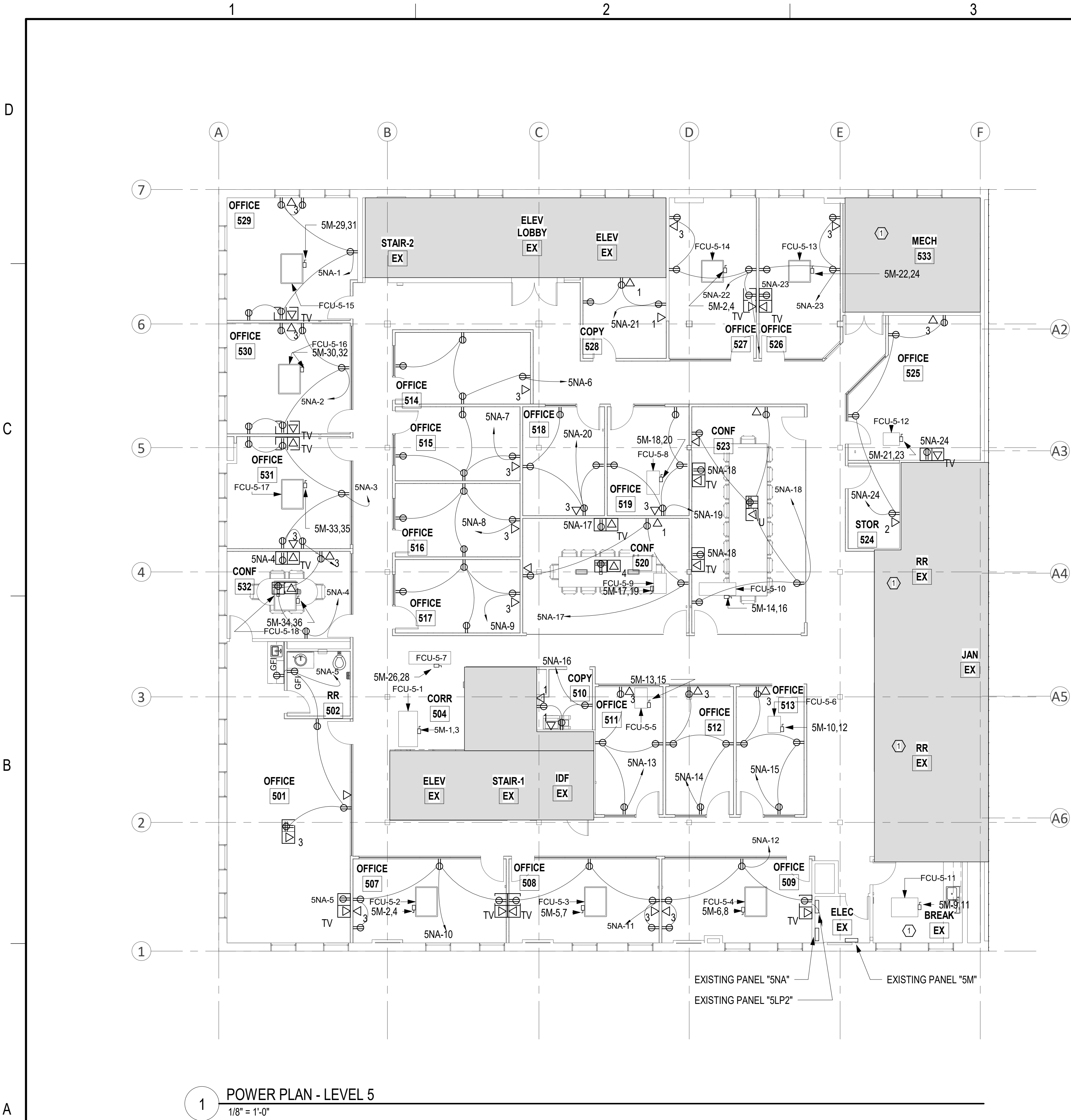


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DATE	12.28.2020

TRINITY METRO HEADQUARTERS ELECTRICAL POWER PLAN LEVEL 4	
SHEET No.	E-204
REV	0

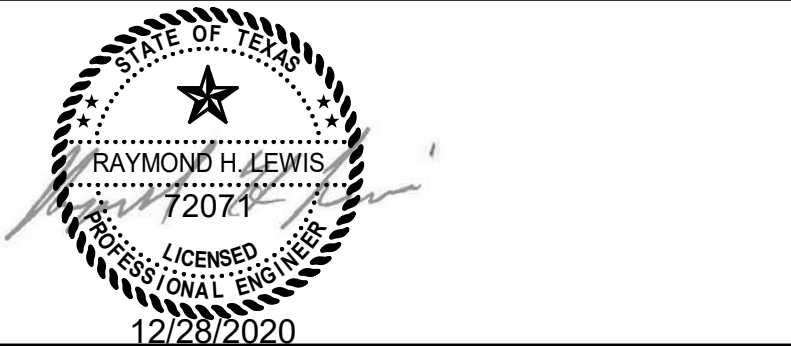


GENERAL NOTES	
NOTE	DESCRIPTION
A.	TELECOMMUNICATION OUTLETS ARE SHOWN ON THIS SHEET FOR COORDINATION. REFER TO "T" DRAWINGS FOR ADDITIONAL WORK.
B.	NEW BRANCH CIRCUITS ARE SERVED FROM EXISTING PANELS. SOME BRANCH CIRCUIT BREAKERS MAY BE OCCUPIED WITH EXISTING BRANCH CIRCUITS. IN SUCH CASES, USE THE NEXT AVAILABLE CIRCUIT BREAKER.
C.	PRIOR TO INSTALLATION OF FLOOR BOXES CHECK WITH OWNER FOR LOCATION IN COORDINATION WITH FURNITURE.

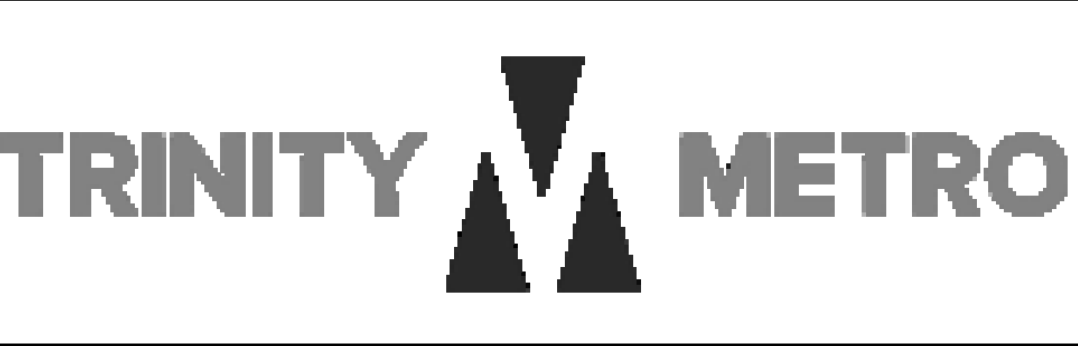
# SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING RECEPTACLES IN THIS AREA TO REMAIN. MAINTAIN SAME CIRCUIT AND EXTEND TO NEAREST NEW CIRCUIT.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

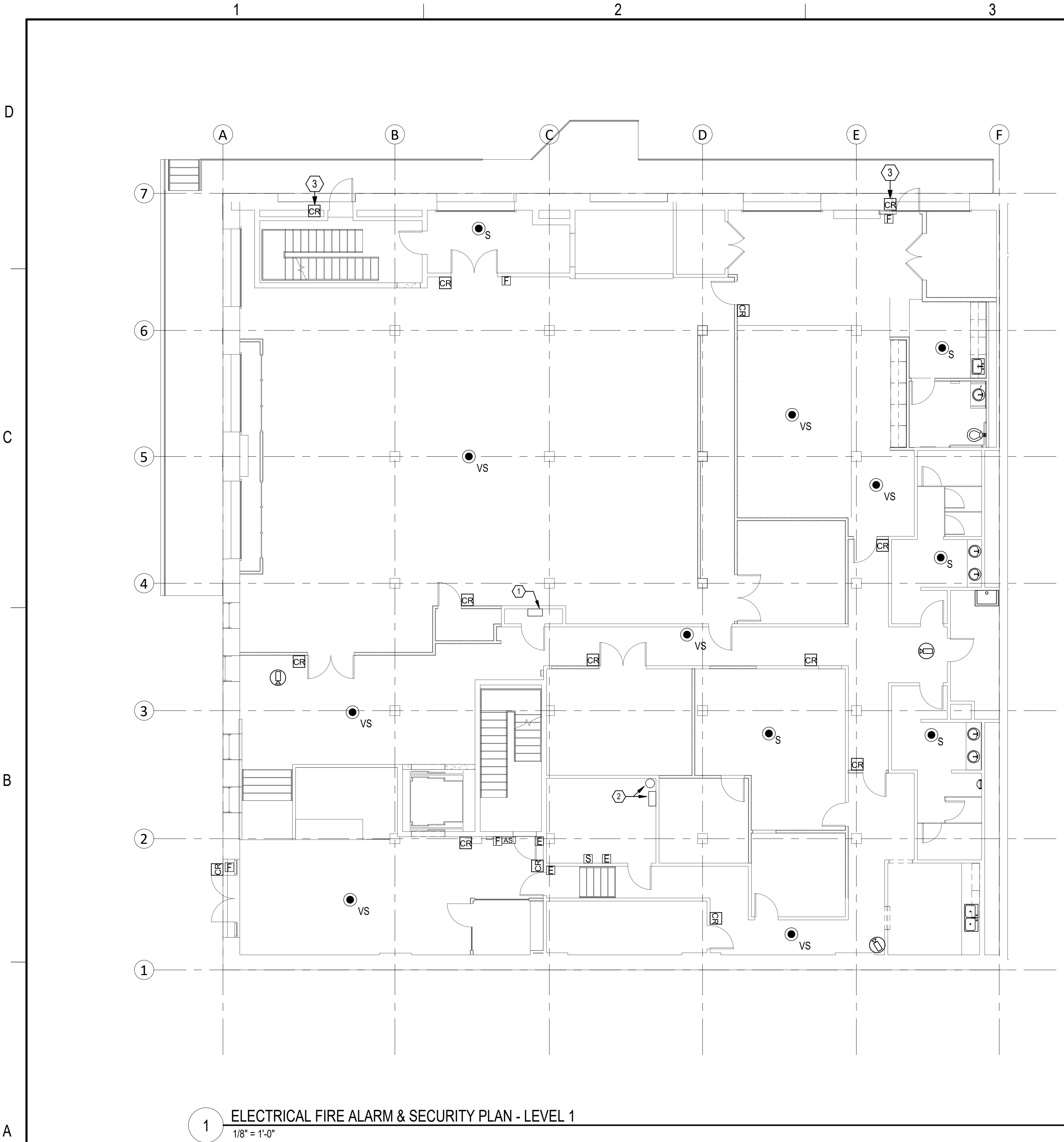


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TRINITY METRO HEADQUARTERS ELECTRICAL POWER PLAN LEVEL 5		
SHEET No.	E-205	REV 0



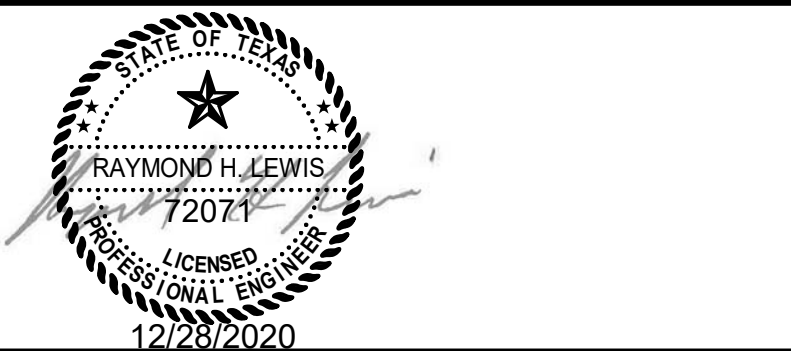
1 ELECTRICAL FIRE ALARM & SECURITY PLAN - LEVEL 1
1/8" = 1'-0"

GENERAL NOTES	
NOTE	DESCRIPTION
A.	REROUTE AND EXTEND EXISTING FIRE ALARM CIRCUITS TO RELOCATED DEVICES.
B.	EXISTING FIRE ALARM CIRCUITS TO ELEVATOR CONTROLLER AND REMOTE ANNUNCIATING PANELS TO REMAIN.
C.	CONTRACTOR TO PROVIDE DRAWINGS THAT HAVE BEEN STAMPED BY A FIRE PROTECTION ENGINEER FOR APPROVAL BY AUTHORITY HAVING JURISDICTION.
D.	THIS BUILDING HAS AN EXISTING SECURITY SYSTEM. EXISTING CONTROL PANEL AND DEVICES TO REMAIN. ADD NEW SECURITY DEVICES TO EXISTING SYSTEM AS REQUIRED.

# SHEET KEYNOTES	
NOTE	DESCRIPTION
1.	LOCATION OF EXISTING FIRE ALARM PANEL.
2.	LOCATION OF EXISTING AEGIS FIRE SUPPRESSION SYSTEM TANK & CONTROL PANEL IN MDF ROOM TO REMAIN.
3.	PROVIDE WEATHERPROOF CARD READER.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

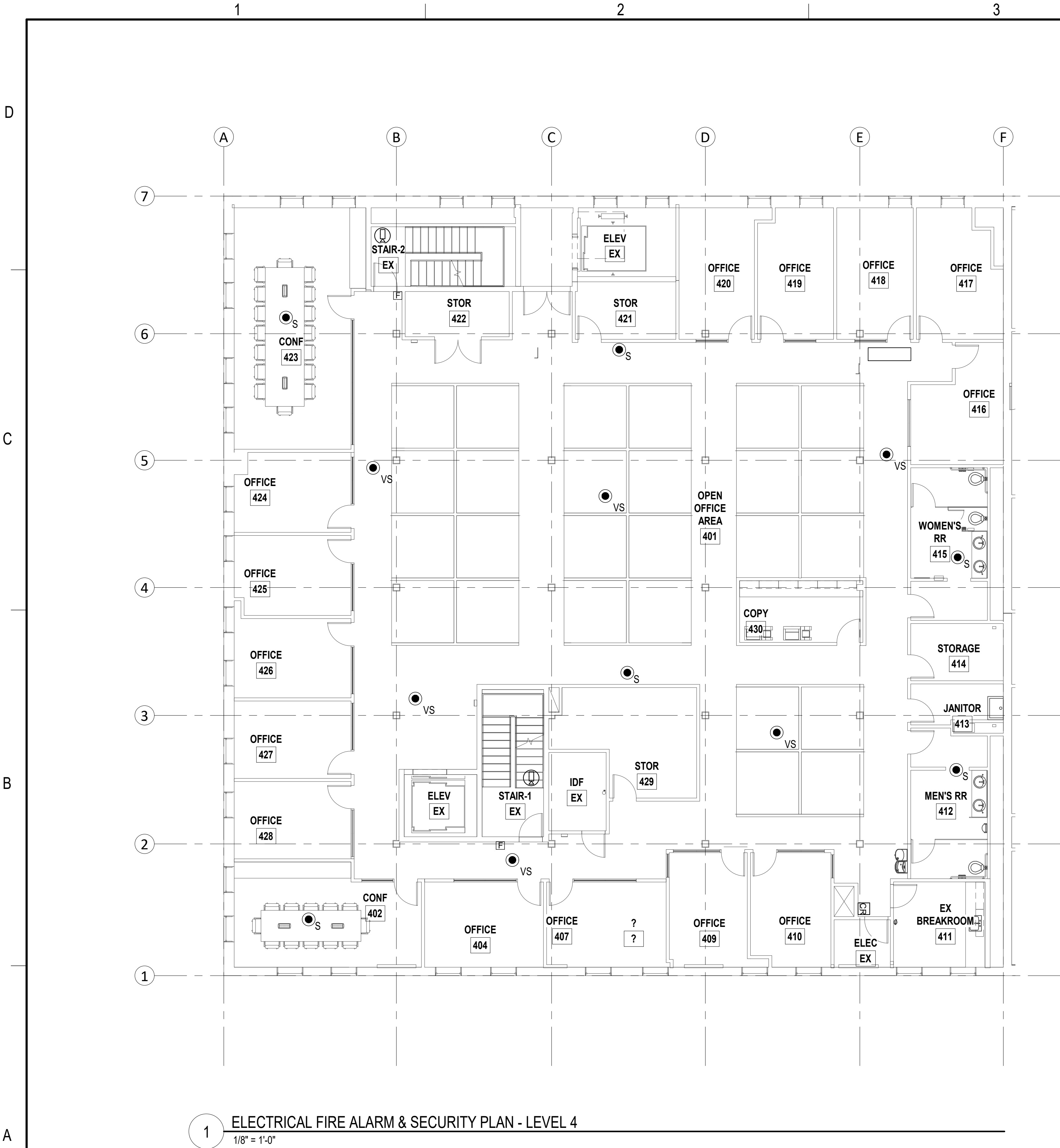


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DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS FIRE ALARM & SECURITY PLAN LEVEL 1	
SHEET No.	E-301
REV	0

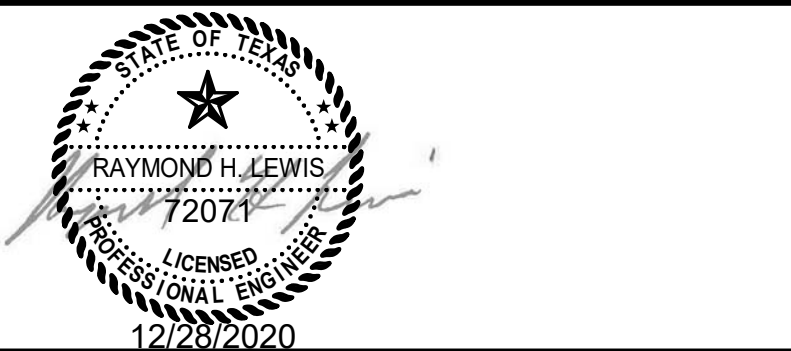


GENERAL NOTES	
NOTE	DESCRIPTION
A.	REROUTE AND EXTEND EXISTING FIRE ALARM CIRCUITS TO RELOCATED DEVICES.
B.	EXISTING FIRE ALARM CIRCUITS TO ELEVATOR CONTROLLER AND REMOTE ANNUNCIATING PANELS TO REMAIN.
C.	CONTRACTOR TO PROVIDE DRAWINGS THAT HAVE BEEN STAMPED BY A FIRE PROTECTION ENGINEER FOR APPROVAL BY AUTHORITY HAVING JURISDICTION.
D.	THIS BUILDING HAS AN EXISTING SECURITY SYSTEM. EXISTING CONTROL PANEL AND DEVICES TO REMAIN. ADD NEW SECURITY DEVICES TO EXISTING SYSTEM AS REQUIRED.

1 ELECTRICAL FIRE ALARM & SECURITY PLAN - LEVEL 4
1/8" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

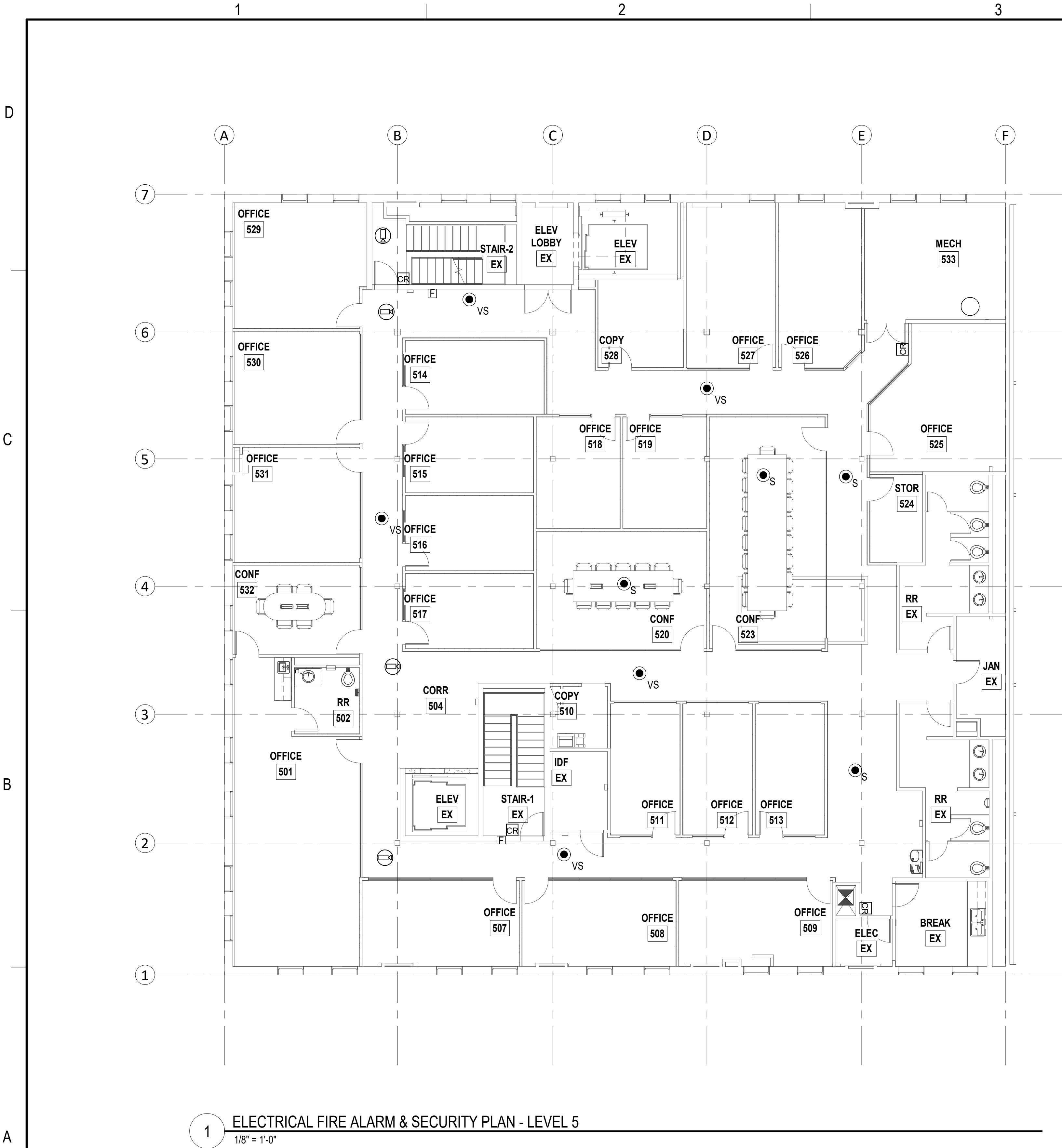


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DATE	12.28.2020

TRINITY METRO HEADQUARTERS FIRE ALARM & SECURITY PLAN LEVEL 4	
SHEET No.	E-304
REV	0

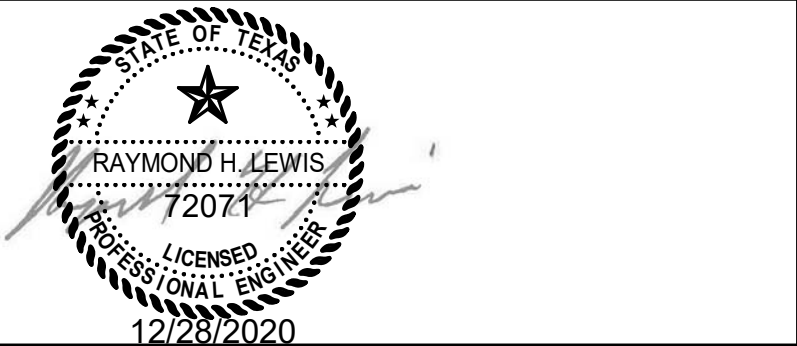


GENERAL NOTES	
NOTE	DESCRIPTION
A.	REROUTE AND EXTEND EXISTING FIRE ALARM CIRCUITS TO RELOCATED DEVICES.
B.	EXISTING FIRE ALARM CIRCUITS TO ELEVATOR CONTROLLER AND REMOTE ANNUNCIATING PANELS TO REMAIN.
C.	CONTRACTOR TO PROVIDE DRAWINGS THAT HAVE BEEN STAMPED BY A FIRE PROTECTION ENGINEER FOR APPROVAL BY AUTHORITY HAVING JURISDICTION.
D.	THIS BUILDING HAS AN EXISTING SECURITY SYSTEM. EXISTING CONTROL PANEL AND DEVICES TO REMAIN. ADD NEW SECURITY DEVICES TO EXISTING SYSTEM AS REQUIRED.

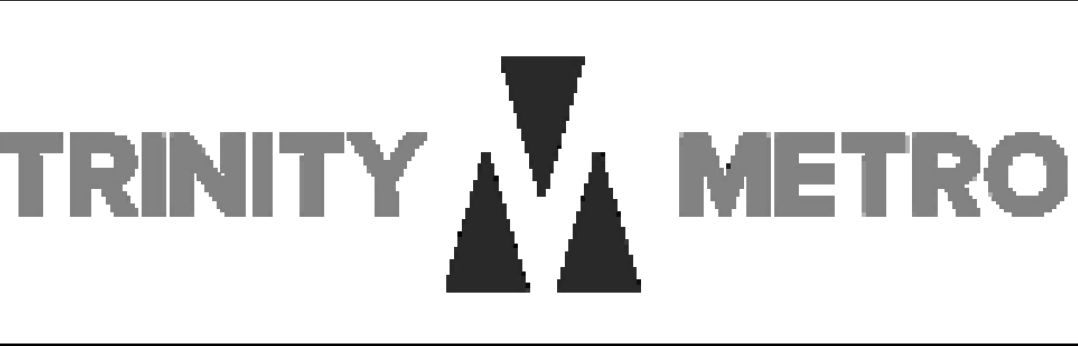
1 ELECTRICAL FIRE ALARM & SECURITY PLAN - LEVEL 5
1/8" = 1'-0"

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

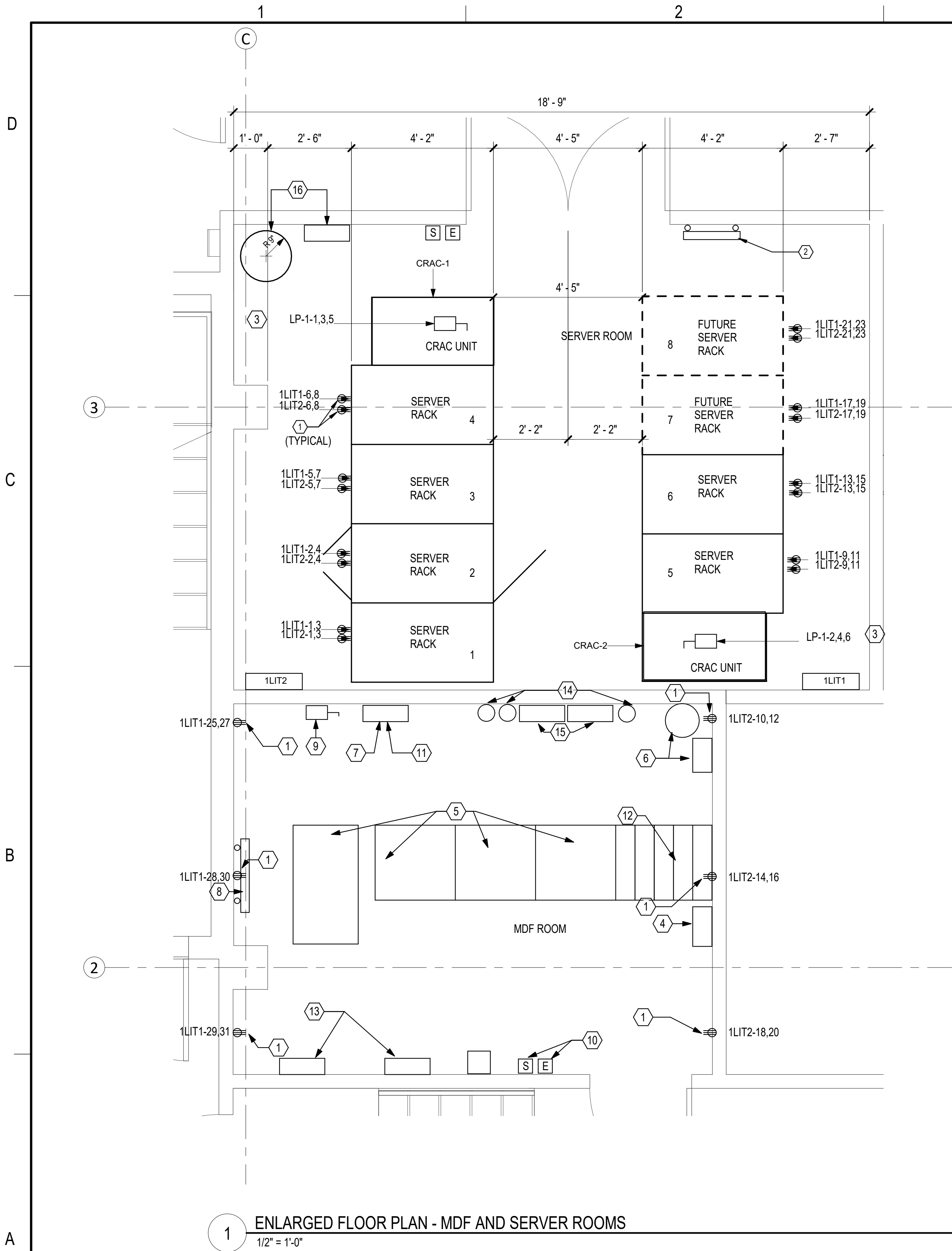


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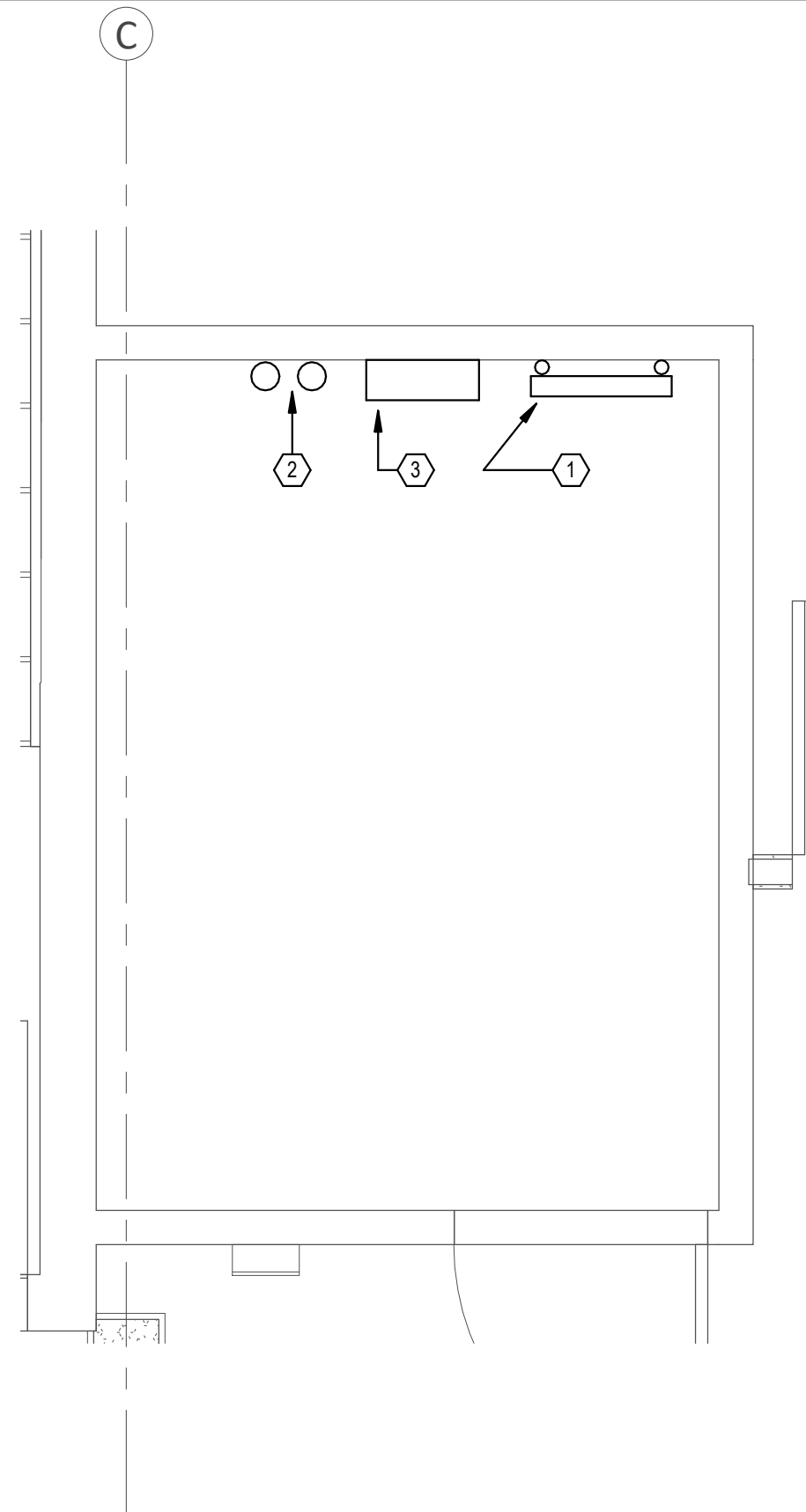
DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS FIRE ALARM & SECURITY PLAN LEVEL 5	
SHEET No.	E-305
REV	0



1 ENLARGED FLOOR PLAN - MDF AND SERVER ROOMS
1/2" = 1'-0"

2 ENLARGED FLOOR PLAN - IDF ROOM
1/2" = 1'-0"



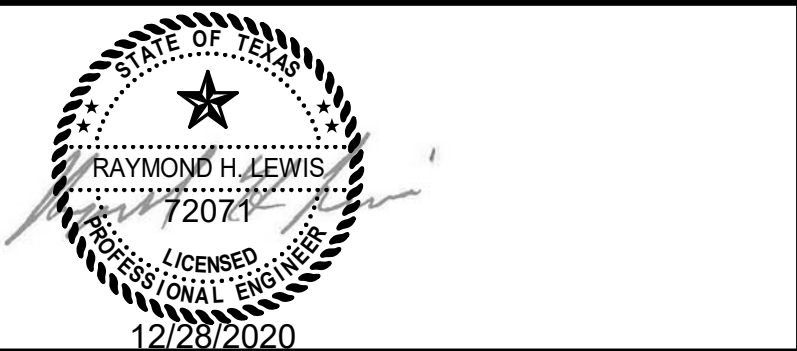
#DETAIL#2 KEYNOTES	
NOTE	DESCRIPTION
1.	EXISTING GROUND BUS TO REMAIN.
2.	EXISTING CONDUIT SLEEVES TO IDF ROOM ABOVE.
3.	PROVIDE 3 #4, 1#10G IN 1/4"C. BACK TO PANEL.

#DETAIL#1 KEYNOTES	
NOTE	DESCRIPTION
1.	MOUNT L6-30R RECEPTACLES TO WOODEN JOISTS ABOVE SERVER RACKS. HOME RUN 3 #10 IN 3/4" CONDUIT BACK TO ELECTRICAL PANEL INDICATED.
2.	NEW GROUND BUS. INSTALL AT +84" AFF.
3.	HOME-RUN 3 #3, 1 #10G IN 1 1/4" C. BACK TO PANEL.
4.	EXISTING AT&T PUNCHBLOCK TO REMAIN.
5.	EXISTING RACKS TO REMAIN.
6.	EXISTING FIRE SUPPRESSION SYSTEM TO REMAIN.
7.	EXISTING "UPS1" SERVED FROM UPS IN RACK TO REMAIN.
8.	EXISTING GROUND BUS BAR TO REMAIN.
9.	EXISTING DISCONNECT SWITCH TO REMAIN.
10.	FIRE SUPPRESSION SYSTEM ACTIVATION BUTTON AND ABORT SWITCH TO REMAIN.
11.	CIRCUITS FROM UPS-1 SERVING RECEPTACLES ON FLOORS 2,3,4, & 5 TO REMAIN.
12.	OVERHEAD CABLE TRAY TO REMAIN.
13.	EXISTING WALL MOUNTED A/C EVAPORATOR UNITS TO REMAIN.
14.	EXISTING CONDUIT SLEEVES TO REMAIN.
15.	EXISTING HONEYWELL NETAXS PANELS TO REMAIN.
16.	NEW FIRE SUPPRESSION SYSTEM CONTROL PANEL AND CHEMICAL TANK. USE SAME MANUFACTURER AS EXISTING SYSTEM IN MDF ROOM.

GENERAL NOTES	
NOTE	DESCRIPTION
A.	REFER TO "T" SERIES DRAWINGS FOR CABLE TRAY & AV SYSTEM CONDUIT DRAWINGS.

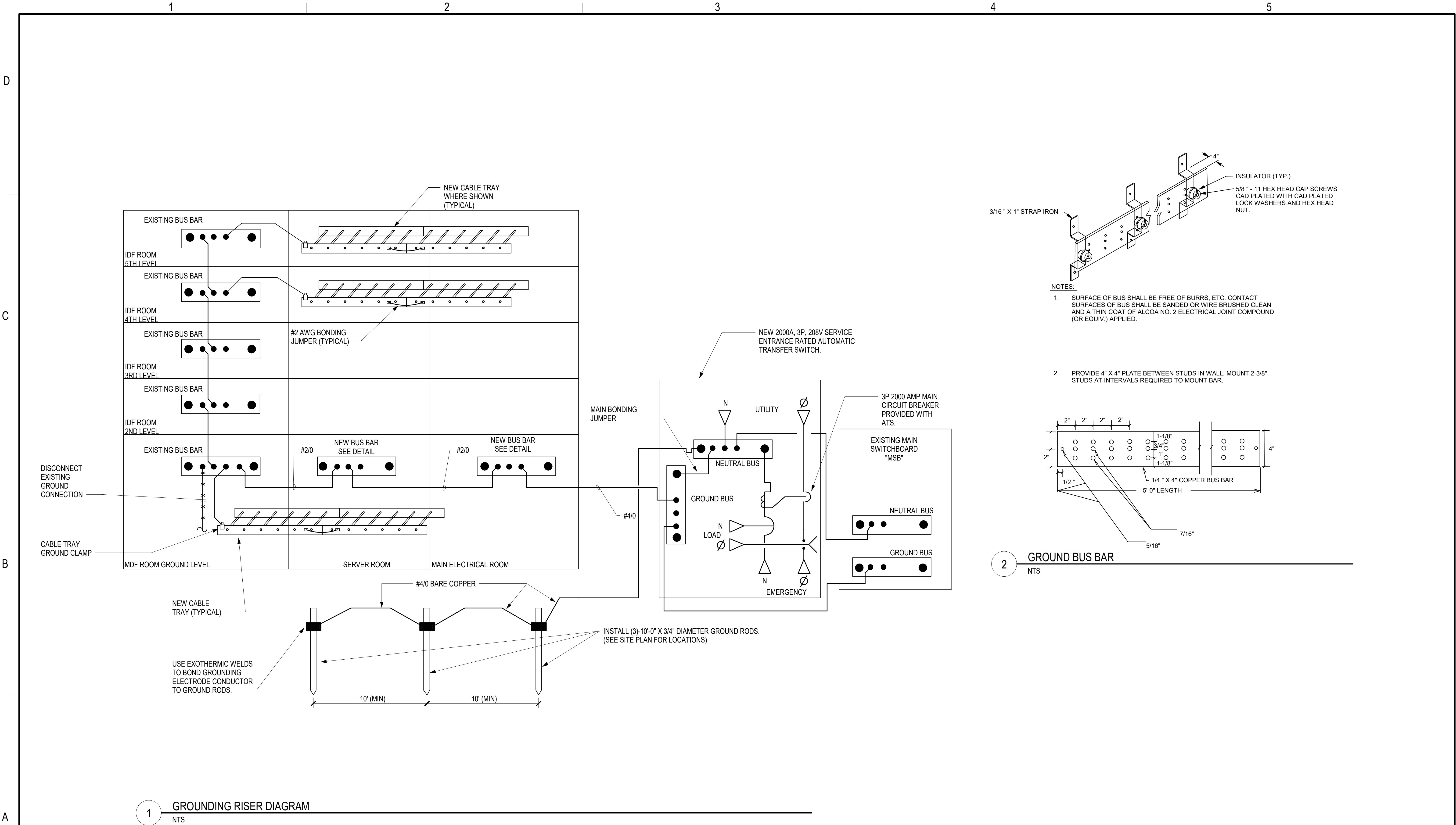
MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

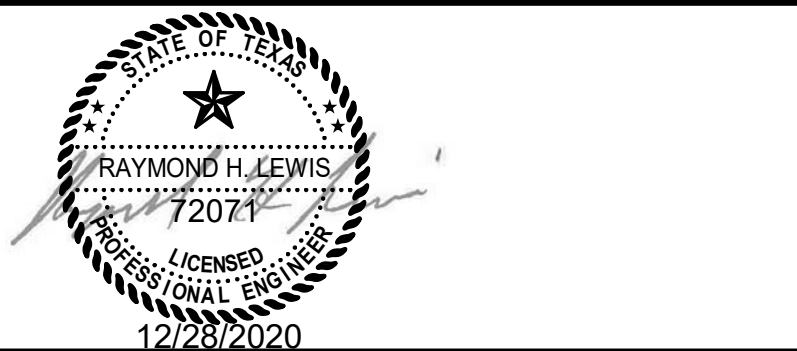


DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

TRINITY METRO HEADQUARTERS ENLARGED PLANS	
SHEET No.	E-400
REV	0



REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS DETAIL SHEET

SHEET No.	E-501	REV 0
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A

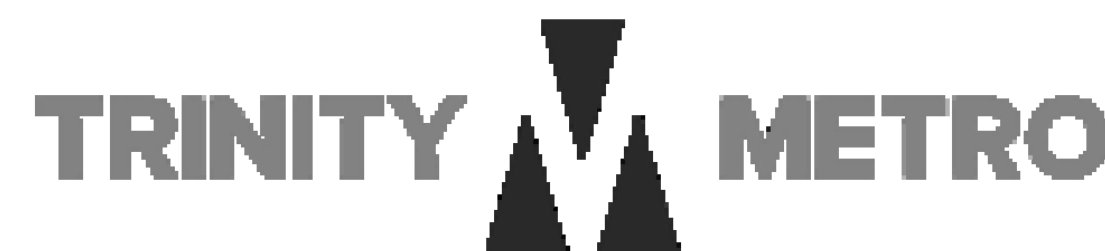


12" = 1'-0"



NTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP
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DRAWN	HZI	TRINITY METRO HEADQUARTERS DETAIL SHEET		
DESIGNED	CW			
CHECKED	RL			
APPROVED	JMF			
DATE	12.28.2020	SHEET No.	E-502	REV 0

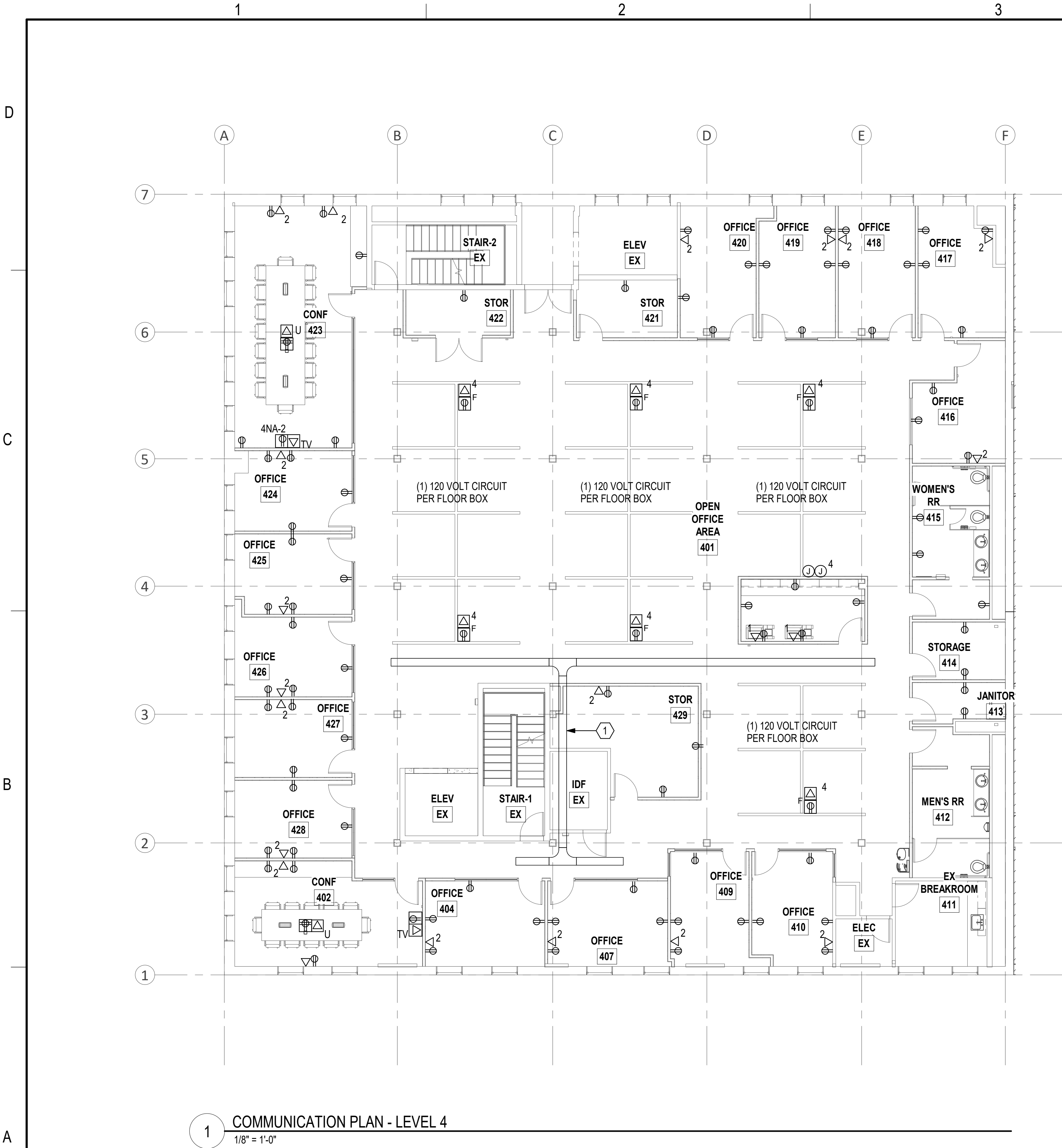


MUST MEET FTA BUY AMERICA REQUIREMENTS

STATE OF TEXAS
RAYMOND H. LEVY
72071
LICENSED
PROFESSIONAL ENGINEER
12/28/2020

TRINITY METRO

DRAWN	CW	TRINITY METRO HEADQUARTERS ELECTRICAL COMMUNICATIONS/IT PLAN - LEVEL 1	
DESIGNED			
CHECKED	RL		
APPROVED			
DATE	12.28.2020	SHEET No. T-101	REV 0



GENERAL NOTES

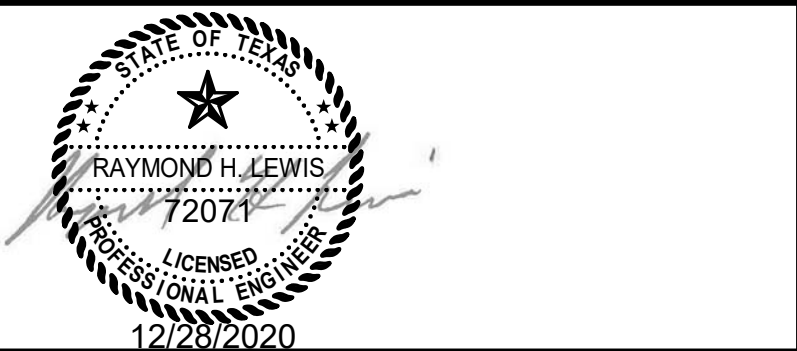
NOTE	DESCRIPTION
A.	RUN CONDUITS FROM EACH DATA OUTLET UP OVER AND TERMINATE OVER CABLE TRAY OR ABOVE ACCESSIBLE CEILING.
B.	SEE POWER DRAWINGS FOR DATA OUTLET LOCATIONS.
C.	POWER RECEPTACLES SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL POWER DRAWINGS FOR CIRCUIT ASSIGNMENTS.
D.	REFER TO DETAIL #2 ON SHEET E-502 FOR CONDUIT ROUTING FOR A/V, DATA CIRCUITS.

SHEET KEYNOTES

NOTE	DESCRIPTION
1.	PROVIDE 6" WIDE X 2" DEEP ALUMINUM CABLE TRAY EQUAL TO B-LINE RSI SERIES INSTALL AT APPROX. 8'-0" AFF. VERIFY HEIGHT TO CLEAR HVAC AND OTHER EQUIPMENT. SUPPORT FROM STRUCTURE ABOVE AT 8'-0" ON CENTER. COORDINATE LOCATION AND ELEVATION WITH MECHANICAL EQUIPMENT.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP

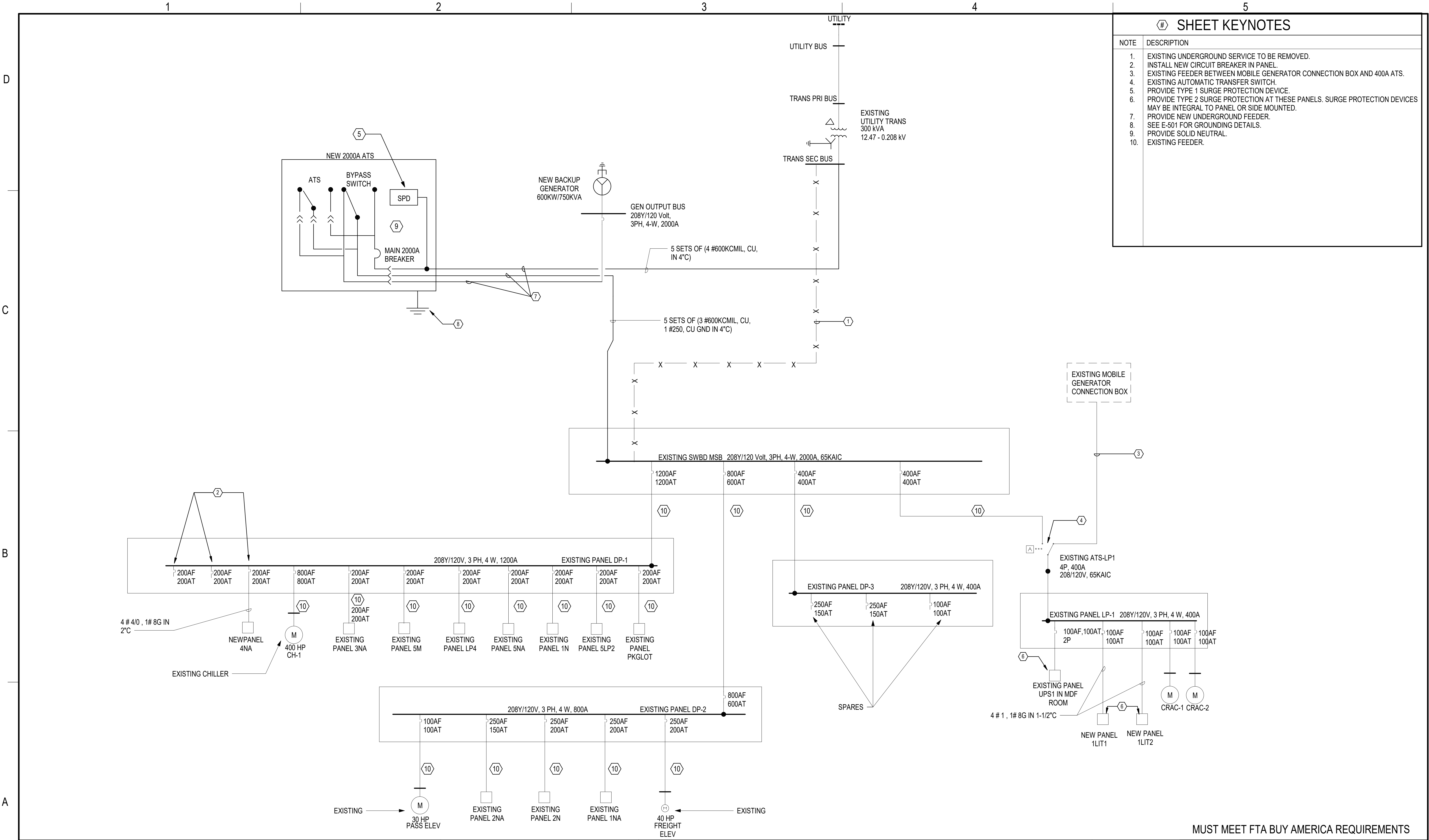


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DATE	12.28.2020

TRINITY METRO HEADQUARTERS ELECTRICAL COMMUNICATIONS/IT PLAN - LEVEL 4	
SHEET No.	T-104
REV	0

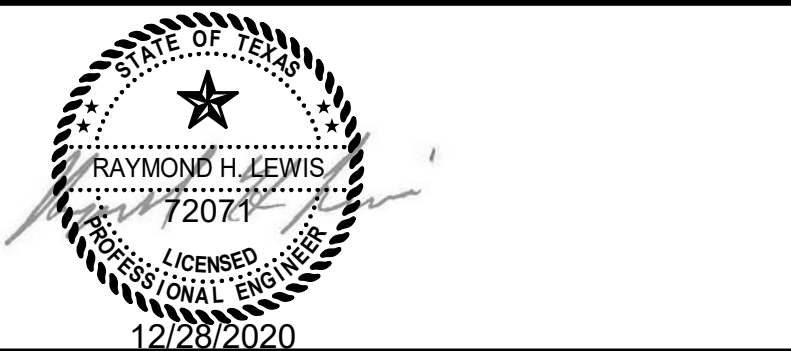


SHEET KEYNOTES

NOTE	DESCRIPTION
1.	EXISTING UNDERGROUND SERVICE TO BE REMOVED.
2.	INSTALL NEW CIRCUIT BREAKER IN PANEL.
3.	EXISTING FEEDER BETWEEN MOBILE GENERATOR CONNECTION BOX AND 400A ATS.
4.	EXISTING AUTOMATIC TRANSFER SWITCH.
5.	PROVIDE TYPE 1 SURGE PROTECTION DEVICE.
6.	PROVIDE TYPE 2 SURGE PROTECTION AT THESE PANELS. SURGE PROTECTION DEVICES MAY BE INTEGRAL TO PANEL OR SIDE MOUNTED.
7.	PROVIDE NEW UNDERGROUND FEEDER.
8.	SEE E-501 FOR GROUNDING DETAILS.
9.	PROVIDE SOLID NEUTRAL.
10.	EXISTING FEEDER.

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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP





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TRINITY METRO HEADQUARTERS
ONE-LINE DIAGRAM

SHEET No. **E-601**

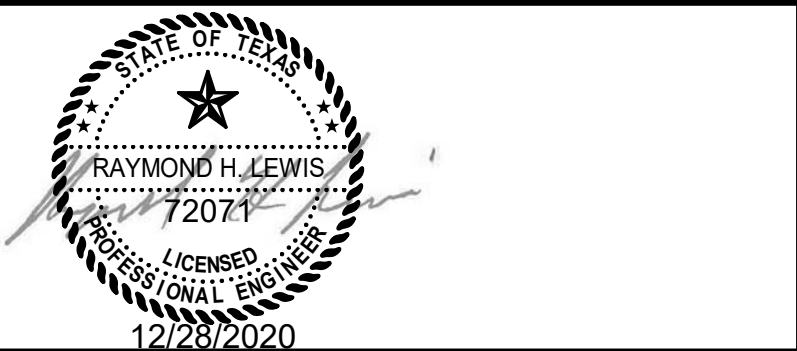
REV
0

Mechanical/HVAC Equipment Schedule				
EQUIPMENT NAME	VOLTS/PHASE	HP	FLA	MCA
AHU-1-1	208/3	10	42.18	47.49
CRAC-1	208/3	14.7	62	75.4
CRAC-2	208/3	14.7	62	75.4
CU-1	208/3	1.92	5.7	6.44
CU-2	208/3	1.92	5.7	6.44
DQAS-1-1	208/3	7.5	22.2	27.8
EP-1	208/3	1	4.6	5.175
FQIU-1-1	208/1	2.58	10.8	12.2
FQIU-1-2	208/1	62	2.6	2.93
FQIU-1-3	208/1	1.9	9	9
FQIU-4-1(EXISTING)	120/1	1	7.31	8.22
FQIU-4-2(EXISTING)	120/1	1	7.31	8.22
FQIU-4-3(EXISTING)	120/1	1	7.31	8.22
FQIU-4-4(EXISTING)	120/1	1	7.31	8.22
FQIU-4-5(EXISTING)	120/1	1	7.31	8.22
FQIU-4-6	208/1	1	9.0	9.0
FQIU-4-7	208/1	1.9	10.8	12.2
FQIU-4-8	208/1	1.9	10.8	12.2
FQIU-4-9	208/1	487	2.6	2.9
FQIU-5-1	208/1	2.58	10.8	12.2
FQIU-5-2	208/1	1/3	1.41	1.58
FQIU-5-3	208/1	1/3	1.41	1.58
FQIU-5-4	208/1	1/3	1.41	1.58
FQIU-5-5	208/1	1/3	1.41	1.58
FQIU-5-6	208/1	24	1	1.13
FQIU-5-7	208/1	76	3.2	3.6
FQIU-5-8	208/1	31	1.3	1.46
FQIU-5-9	208/1	1/3	1.4	1.58
FQIU-5-10	208/1	62	2.6	2.93
FQIU-5-11	208/1	1.9	8.0	9.0
FQIU-5-12	208/1	21	9	1.01
FQIU-5-13	208/1	1/6	7	.79
FQIU-5-14	208/1	1/6	7	.79
FQIU-5-15	208/1	1/3	1.41	1.58
FQIU-5-16	208/1	1/3	1.41	1.58
FQIU-5-17	208/1	1/3	1.41	1.58
FQIU-5-18	208/1	1/3	1.41	1.58
VAV-1-1	208/3	8.23	34.70	39.04
VAV-1-2	208/3	2.47	10.41	11.71
VAV-1-3	208/3	2.47	10.41	11.71

Lighting Fixture Style Schedule								
MARK	DESCRIPTION	MODEL	LUMENS	COLOR TEMPERATURE	VOLTAGE(V)	APPARENT LOAD (VA)	(MANUFACTURER)	NOTES
A	NEW 4' LED PENDANT.	UFIT L48 4000LM MVOLT GZ10 40K 80CRI WH	4000 LM	4000 K	120/277	31 VA	LITHONIA	A
AE	NEW 4' LED PENDANT W/ BATTERY BACK-UP	UFIT L48 4000LM MVOLT GZ10 40K 80CRI WH	4000 LM	4000 K	120/277	31 VA	LITHONIA	A
B	2'X2' LED TROFFER	2BLT2-33L-ADP-EZ1(GZ1,GZ10)-LP840	3332 LM	4000 K	120/277	24.7 VA	LITHONIA	
C	NEW 4' LED FIXTURE	BLWP4 40L ADP 120 GZ10 LP840	4000 LM	4000 K	120	35VA	LITHONIA	
CE	NEW 4' LED FIXTURE W/ BATTERY BACK-UP	BLWP4 40L ADP 120 GZ10 LP840	4000 LM	4000 K	120	35VA	LITHONIA	
D	NEW LED RECESSED DOWNLIGHT	6JBK-RD-40K-90CRI	870LM	4000K	120	10.8	LITHONIA	
X	EXIT SIGN W/ RED LETTERS AND CEILING MOUNTING	LQM-S-W-3-R-120/277-ELN-SD	NA	NA	120/277	4VA	LITHONIA	
X1	EXIT SIGN W/ RED LETTERS AND WALL MOUNTING	LQM-S-W-3-R-120/277-ELN-SD	NA	NA	120/277	4VA	LITHONIA	

GENERAL NOTES	
NOTE	DESCRIPTION
A.	PROVIDE LIGHT FIXTURE WITH DIMMING CONTROL IN AREAS WITH DIMMER SWITCHES.

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP	



**KHK Group Ltd**

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DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS SCHEDULES

SHEET No. **E-701**

REV 0

D

C

B

A

Existing Panel: 1N

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: EXISTING

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	Lighting - Dwelling Unit	20 A	1	476 VA	469 VA					1	20 A	Lighting - Dwelling Unit	2
3	Lighting - Dwelling Unit	20 A	1			476 VA	469 VA			1	20 A	Lighting - Dwelling Unit	4
5	Lighting - Dwelling Unit	20 A	1					395 VA	720 VA	1	20 A	Receptacle	6
7	Receptacle	20 A	1	1620...	540 VA					1	20 A	Receptacle	8
9	Receptacle	20 A	1			720 VA	900 VA			1	20 A	Receptacle	10
11	Receptacle	20 A	1					900 VA	49 VA	1	20 A	Lighting - Dwelling Unit	12
13	Lighting - Dwelling Unit	20 A	1	186 VA	720 VA					1	20 A	Receptacle	14
15	Lighting - Dwelling Unit	20 A	1			62 VA	720 VA			1	20 A	Receptacle	16
17	Receptacle	20 A	1					900 VA	62 VA	1	20 A	Lighting - Dwelling Unit	18
19	Lighting - Dwelling Unit	20 A	1	124 VA	240 VA					1	20 A	Lighting - Dwelling Unit	20
21	Receptacle	20 A	1			1080...	360 VA			1	20 A	Receptacle	22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
Total Load:				4327 VA		4749 VA		3005 VA					
Total Amps:				38 A		41 A		25 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	28 VA	100.00%	28 VA		
Receptacle	9180 VA	100.00%	9180 VA	Total Conn. Load:	12078 VA
Lighting - Dwelling Unit	2983 VA	100.00%	2983 VA	Total Est. Demand:	12078 VA
				Total Conn. Current:	34 A
				Total Est. Demand Current:	34 A

Notes:

GENERAL NOTES

NOTE	DESCRIPTION
A.	BRANCH CIRCUITS FOR NEW EQUIPMENT IN EXISTING PANELS MAY ALREADY BE OCCUPIED WITH AN EXISTING LOAD. IN SUCH CASES, USE THE NEXT AVAILABLE SPACE. AT THE END OF CONSTRUCTION, PROVIDE A NEW PANEL CIRCUIT INDEX CARD WITH CORRECT LOAD DESCRIPTIONS.
B.	THE EXISTING PANELBOARDS WILL HAVE SPARE BREAKERS AVAILABLE AFTER DEMOLITION. THESE SPARE BREAKERS MAY BE REUSED FOR NEW LOADS PROVIDED THEY ARE RATED FOR THE NEW LOAD. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE NEW CIRCUIT BREAKERS AS NEEDED TO ACCOMMODATE ALL EXISTING LOADS TO REMAIN AND NEW LOADS.
C.	PROVIDE 4 SPARES, 1P 20A SPARES IN EACH PANEL.

Existing Panel: 1NA

Location: ELEC EX
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: EXISTING

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	FCU-1-1	20 A	2	2246...	541 VA					2	20 A	FCU-1-2	2
3	--	--	--			2246...	541 VA			--	--	--	4
5	FCU-1-3	20 A	2					1664...	7218...	3	20 A	VAV-1-1	6
7	--	--	--	1664...	7218...					--	--	--	8
9	VAV-1-2	20 A	3			2165...	2165...			--	--	--	10
11	--	--	--					2165...	2165...	3	20 A	Power	12
13	--	--	--	2165...	2165...					--	--	--	14
15	AHU-1	20 A	3			8773...	2165...			--	--	--	16
17	--	--	--					8773...	1185...	3	30 A	CU-1	18
19	--	--	--	8773...	1185...					--	--	--	20
21	CU-2	30 A	3			1185...	1185...			--	--	--	22
23	--	--	--					1185...					24
25	--	--	--	1185...									26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
Total Load:				27142 VA		25478 VA		24355 VA					
Total Amps:				228 A		214 A		203 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Power	76975 VA	100.00%	76975 VA	
				Total Conn. Load: 76975 VA
				Total Est. Demand: 76975 VA
				Total Conn. Current: 214 A
				Total Est. Demand Current: 214 A

Notes:

MUST MEET FTA BUY AMERICA REQUIREMENTS

[illegible]

GENERAL NOTES

NOTE	DESCRIPTION
A.	BRANCH CIRCUITS FOR NEW EQUIPMENT IN EXISTING PANELS MAY ALREADY BE OCCUPIED WITH AN EXISTING LOAD. IN SUCH CASES, USE THE NEXT AVAILABLE SPACE. AT THE END OF CONSTRUCTION, PROVIDE A NEW PANEL CIRCUIT INDEX CARD WITH CORRECT LOAD DESCRIPTIONS.
B.	THE EXISTING PANELBOARDS WILL HAVE SPARE BREAKERS AVAILABLE AFTER DEMOLITION. THESE SPARE BREAKERS MAY BE REUSED FOR NEW LOADS PROVIDED THEY ARE RATED FOR THE NEW LOAD. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE NEW CIRCUIT BREAKERS AS NEEDED TO ACCOMMODATE ALL EXISTING LOADS TO REMAIN AND NEW LOADS.
C.	PROVIDE 4 SPARES, 1P 20A SPARES IN EACH PANEL.

NEW Branch Panel: 1LIT1

Location: SERVER 109
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: NEW

CKT	LOAD NAME	Trip	P...	A		B		C		P...	Trip	LOAD NAME	CKT
1	IT RACK,	30 A	2	1800 VA	1800 VA					2	30 A	IT RACK,	2
3	--	--	--	--	--	0 VA	0 VA			--	--	--	4
5	IT RACK,	30 A	2					1800 VA	1800 VA	2	30 A	IT RACK,	6
7	--	--	--	0 VA	0 VA					--	--	--	8
9	IT RACK,	30 A	2			1800 VA	0 VA			1	20 A	--	10
11	--	--	--	--	--			0 VA	0 VA	1	20 A	--	12
13	IT RACK,	30 A	2	1800 VA	0 VA					1	20 A	--	14
15	--	--	--	--	--	0 VA	0 VA			1	20 A	--	16
17	IT RACK,	30 A	2					1800 VA	0 VA	1	20 A	--	18
19	--	--	--	0 VA	0 VA					1	20 A	--	20
21	IT RACK,	30 A	2			1800 VA	0 VA			1	20 A	--	22
23	--	--	--	--	--			0 VA	0 VA	1	20 A	--	24
25	IT RACK,	30 A	2	1800 VA	0 VA					1	20 A	--	26
27	--	--	--	--	--	0 VA	1800 VA			2	30 A	IT RACK,	28
29	IT RACK,	30 A	2					1800 VA	0 VA	--	--	--	30
31	--	--	--	0 VA									32
33													34
35													36
37													38
39													40
41													42
		Total Load:		7200 VA		5400 VA		7200 VA					

Load Classification	Connected Load		Estimated Demand	Panel Totals
IT RACK	19800 VA		19800 VA	
				Total Conn. Load: 19800 VA
				Total Est. Demand: 19800 VA
				Total Conn. Current: 55 A
				Total Est. Demand Current: 55 A

Notes:

New Branch Panel: 4NA

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: EXISTING

CKT	LOAD NAME	Trip	P...	A	B	C	P...	Trip	LOAD NAME	CKT	
1	Receptacle,	20 A	1	720 VA	900 VA			1	20 A	Receptacle,	2
3	Receptacle,	20 A	1			540 VA	540 VA	1	20 A	Receptacle,	4
5	Receptacle,	20 A	1					1	20 A	Receptacle,	6
7	Receptacle,	20 A	1	540 VA	900 VA			1	20 A	Receptacle,	8
9	Receptacle,	20 A	1			720 VA	720 VA	1	20 A	Receptacle,	10
11	Receptacle,	20 A	1					1	20 A	Receptacle,	12
13	Receptacle,	20 A	1	540 VA	720 VA			1	20 A	Receptacle,	14
15	Receptacle,	20 A	1			720 VA	720 VA	1	20 A	Receptacle,	16
17	Receptacle,	20 A	1					1	20 A	Receptacle,	18
19	Lighting - Dwelling Unit,	20 A	1	646 VA	414 VA			1	20 A	Lighting - Dwelling Unit,	20
21	Lighting - Dwelling Unit,	20 A	1			371 VA	445 VA	1	20 A	Lighting - Dwelling Unit,	22
23	Receptacle,	20 A	1					1	20 A	Receptacle,	24
25	Receptacle,	20 A	1	540 VA							26
27	Receptacle,	20 A	1			180 VA	180 VA	1	20 A	Receptacle,	28
29	Receptacle,	20 A	1					1	20 A	Receptacle,	30
31	Receptacle,	20 A	1	0 VA	180 VA			1	20 A	Receptacle,	32
33	Receptacle,	20 A	1			540 VA	900 VA	1	20 A	Receptacle,	34
35	Lighting - Dwelling Unit,	20 A	1					1	20 A	Lighting - Dwelling Unit,	36
37											38
39											40
41											42
		Total Load:		6057 VA		6539 VA		5930 VA			

Load Classification	Connected Load		Estimated Demand	Panel Totals	
Lighting	24 VA		24 VA		
Power	0 VA		0 VA	Total Conn. Load:	18525 VA
Receptacle	15480 VA		12740 VA	Total Est. Demand:	15694 VA
Lighting - Dwelling Unit	3153 VA		3053 VA	Total Conn. Current:	51 A
				Total Est. Demand Current:	44 A

Notes:

New Branch Panel: 1LIT2

Location: SERVER 109
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: NEW

CKT	LOAD NAME	Trip	P...	A		B		C		P...	Trip	LOAD NAME	CKT
1	IT RACK,	30 A	2	1800 VA	1800 VA					2	30 A	IT RACK,	2
3	--	--	--	--	--	0 VA	0 VA	--	--	--	--	--	4
5	IT RACK,	30 A	2					1800 VA	1800 VA	2	30 A	IT RACK,	6
7	--	--	--	0 VA	0 VA					--	--	--	8
9	IT RACK,	30 A	2			1800 VA	1800 VA			2	30 A	IT RACK,	10
11	--	--	--	--	--			0 VA	0 VA	--	--	--	12
13	IT RACK,	30 A	2	1800 VA	1800 VA					2	30 A	IT RACK,	14
15	--	--	--	--	--	0 VA	0 VA			--	--	--	16
17	IT RACK,	30 A	2					1800 VA	1800 VA	2	30 A	IT RACK,	18
19	--	--	--	0 VA	0 VA					--	--	--	20
21	IT RACK,	30 A	2			1800 VA				--	--	--	22
23	--	--	--	--	--			0 VA					24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
Total Load:				7200 VA		5400 VA		7200 VA					

Load Classification	Connected Load		Estimated Demand	Panel Totals
IT RACK	19800 VA		19800 VA	
				Total Conn. Load: 19800 VA
				Total Est. Demand: 19800 VA
				Total Conn. Current: 55 A
				Total Est. Demand Current: 55 A

Notes:

Existing Panel LP4

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 208V 3Φ
Phases: 3
Wires: 4

A.I.C. Rating: 22K
Mains Type: MLO
Mains Rating: 200 A

Notes: EXISTING

CKT	LOAD NAME	Trip	P...	A		B		C		P...	Trip	LOAD NAME	CKT
1	FCU-4-1(E),	20 A	1	877 VA	877 VA					1	20 A	FCU-4-2(E),	2
3	FCU-4-3(E),	20 A	1			877 VA	877 VA			1	20 A	FCU-4-4(E),	4
5	FCU-4-5(E),	20 A	1					877 VA	1664 VA	2	20 A	FCU-4-6,	6
7	FCU-4-7,	20 A	2	2246 VA	1664 VA					--	--		8
9	--	--	--			2246 VA	2246 VA			2	20 A	Power,	10
11	Power,	20 A	2					541 VA	2246 VA	--	--		12
13	--	--	--	541 VA	74 VA					1	20 A	Lighting - Dwelling Unit,	14
15													16
17													18
19													20
21													22
23													24
25													26
27													28
29													30
31													32
33													34
35													36
37													38
39													40
41													42
Total Load:				6276 VA		6247 VA		5328 VA					

Load Classification	Connected Load		Estimated Demand	Panel Totals	
Power	17782 VA		17782 VA		
Lighting - Dwelling Unit	74 VA		74 VA	Total Conn. Load:	17852 VA
				Total Est. Demand:	17852 VA
				Total Conn. Current:	50 A
				Total Est. Demand Current:	50 A

Notes:

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



 **KHK Group Ltd**
HUITT-ZOLLARS
Huitt-Zollars, Inc. Engineering / Architecture
500 W. 7th St. Ste. 300 Fort Worth, Texas 76102
Phone (817)335-3000 Fax (817)335-1025

TRINITY METRO

DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12 28 2020

MUST MEET FTA BUY AMERICA REQUIREMENTS

TRINITY METRO HEADQUARTERS PANEL SCHEDULES

SHEET No.	E-802	REV 0
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NOTE	DESCRIPTION
A.	BRANCH CIRCUITS FOR NEW EQUIPMENT IN EXISTING PANELS MAY ALREADY BE OCCUPIED BY AN EXISTING LOAD. IN SUCH CASES, USE THE NEXT AVAILABLE SPACE. AT THE END OF CONSTRUCTION, PROVIDE A NEW PANEL CIRCUIT INDEX CARD WITH CORRECT LOAD DESCRIPTIONS.
B.	THE EXISTING PANELBOARDS WILL HAVE SPARE BREAKERS AVAILABLE AFTER DEMOLITION. THESE SPARE BREAKERS MAY BE REUSED FOR NEW LOADS PROVIDED THEY ARE RATED FOR THE NEW LOAD. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE NEW CIRCUIT BREAKERS AS NEEDED TO ACCOMMODATE ALL EXISTING LOADS TO REMAIN AND NEW LOADS.
C.	PROVIDE 4 SPARES, 1P 20A SPARES IN EACH PANEL.

Notes:

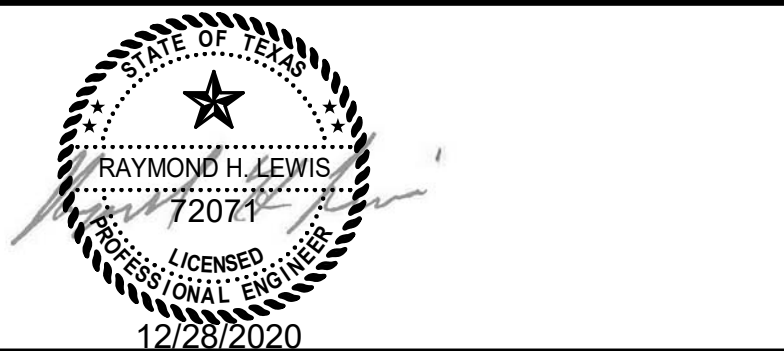
Notes:

Notes:

Notes:

SHEET No.	E-803	REV 0
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REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



DRAWN	HZI
DESIGNED	CW
CHECKED	RL
APPROVED	JMF
DATE	12.28.2020

D

C

B

A

FIRE SUPPRESSION ABBREVIATIONS

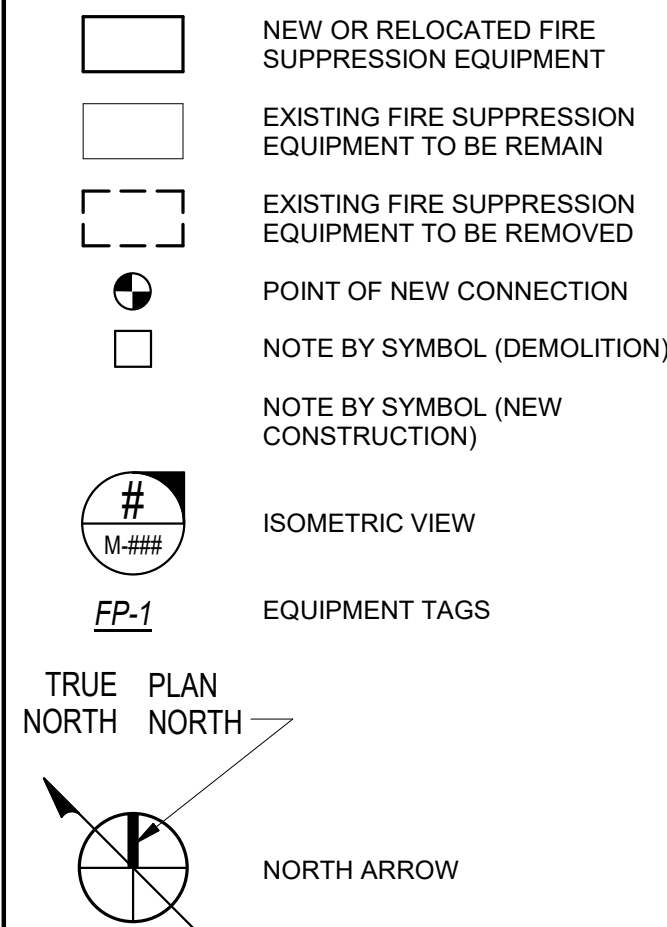
A		M	
AC	ABOVE CEILING	MCA	MINIMUM CIRCUIT AMPS
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AI	ANALOG INPUT	MOCp	MAXIMUM OVER CURRENT PROTECTION
AO	ANALOG OUTPUT		
B		N	
B	BOILER	N/A	NOT APPLICABLE
BAS	BUILDING AUTOMATION SYSTEM	NC	NORMALLY CLOSED
BLDG	BUILDING	NO	NORMALLY OPEN
		No.	NUMBER (QUANTITY)
C		NTS	NOT TO SCALE
C	COMMON		
CL	CENTER LINE	O	
CONT	CONTINUATION	OD	OUTSIDE DIAMETER
CRW	CORROSION RESISTANT WASTE	ODP	OPEN DRIP PROOF MOTOR
		OFCl	OWNER FURNISHED, CONTRACTOR INSTALLED
D		P	
DCBP	DOUBLE CHECK BACKFLOW PREVENTER	P	PRESSURE
DDC	DIRECT DIGITAL CONTROLS	PH	PHASE (ELECTRICAL)
DI	DUCTILE IRON	PSC	PERMANENT SPLIT-CAPACITOR MOTOR
DN	DOWN	PSI	POUNDS PER SQUARE INCH
DWG	DRAWING		
E		R	
(E)	EXISTING	REF	REFERENCE
ECM	ELECTRONICALLY COMMUTATED MOTOR	REV	REVISION
ET	EXPANSION TANK	RPM	REVOLUTIONS PER MINUTE
F		T	
°F	DEGREES FAHRENHEIT	TEFC	TOTALLY-ENCLOSED FAN-COOLED MOTOR
FD	FLOOR DRAIN	TYP	TYPICAL
FW	FIRE WATER	V	
FSD	FLOOR SINK DRAIN	VFD	VARIABLE FREQUENCY DRIVE
F/A	FROM ABOVE	VSD	VARIABLE SPEED DRIVE
F/B	FROM BELOW		
G			
GPM	GALLONS PER MINUTE		
H			
HP	HORSEPOWER		
HZ	HERTZ		
I			
ID	INSIDE DIAMETER		
I.E.	INVERT ELEVATION		
IN	INCHES		
K			
kW	KILOWATTS		
L			
LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN		

NOTE:

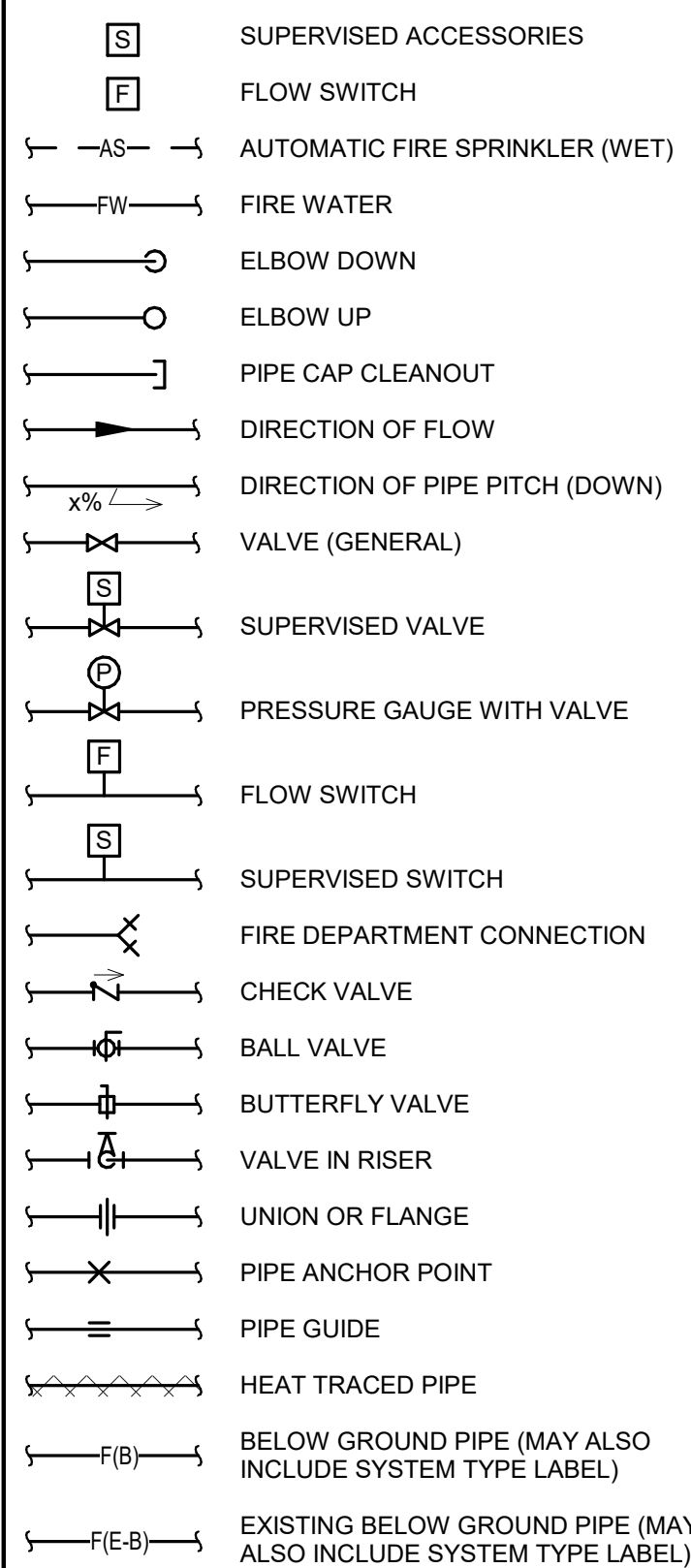
NOT ALL OF THE ABBREVIATIONS ON THIS SHEET ARE NECESSARILY USED IN THIS PROJECT.

FIRE SUPPRESSION SYMBOLS

GENERAL SYMBOLS



SYMBOLS LEGEND



NOTE:

NOT ALL OF THE SYMBOLS ON THIS SHEET ARE
NECESSARILY USED IN THIS PROJECT.

CODE CRITERIA AND DESIGN CONDITIONS

APPLICABLE CODES AND STANDARDS

APPLICABLE CODES

2015 INTERNATIONAL FIRE CODE (WITH CITY OF FORT WORTH AMENDMENTS)
2013 NFPA 13 INSTALLATION OF SPRINKLER SYSTEMS
2013 NFPA 14 INSTALLATION OF STANDPIPE AND HOSE SYSTEMS
2013 NFPA 24 PRIVATE SERVICE MAINS AND THEIR APPURTENANCES
2014 NFPA 70 NATIONAL ELECTRIC CODE
2013 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE

BUILDING INFORMATION

FIVE LEVEL BUILDING
9,400 SQUARE FOOT AREA PER FLOOR

BUILDING CONSTRUCTION TYPE: IIIB
OCCUPANCY: B
BUILDING HEIGHT: 60' (UNDERSIDE OF LEVEL 5 ROOF DECK)
FINISHED FLOOR ELEVATION = 600'

FIRE SPRINKLER SYSTEMS DESCRIPTIONS

TYPES OF SPRINKLER SYSTEMS:
OVERHEAD WETPIPE FIRE SPRINKLER SYSTEM
OFFICE AREAS
LIGHT AND ORDINARY HAZARD SPRINKLERS, $k=5.6$
QUICK RESPONSE

WATER PRESSURE INFORMATION (FOR REFERENCE ONLY)

WATER PRESSURE DATA BASED UPON CITY OF FORT WORTH WATER PRESSURE MODEL DATED
WEDNESDAY, OCTOBER 07, 2020
WATER MAIN SIZE: 8"
STATIC WATER PRESSURE = 95 PSIG (MAX.), 76 PSIG (MIN.)
RESIDUAL WATER PRESSURE = 55 PSIG
FLOW RATE = 1500 GPM

FIRE SUPPRESSION GENERAL NOTES

NOTE	DESCRIPTION
A.	THE BUILDING SHALL BE FULLY SPRINKLED. DESIGN AND PROVIDE WET AND DRY PIPE SYSTEMS IN ACCORDANCE WITH CRITERIA LISTED.
B.	PROVE AND HYDRAULICALLY CALCULATE THE AUTOMATIC SPRINKLER SYSTEM BASED ON THE RESULTS OF AN ON-SITE FLOW TEST MADE BY THE FIRE PROTECTION CONTRACTOR. EACH FLOOR LEVEL SHALL BE ZONED. BASE CALCULATIONS ON THE OCCUPANCY REQUIREMENTS OF NFPA AND THE LOCAL AUTHORITY HAVING JURISDICTION. PROVIDE AN ADDED HOSE ALLOWANCE OF 250 GPM AT THE POINT OF CONNECTION TO THE SITE WATER DISTRIBUTION MAIN. CALCULATE TO 90% OF THE FLOW TEST PRESSURE.
C.	PROVIDE DRAINS AND INSPECTOR'S TEST STATIONS TO COMPLETELY DRAIN AND TEST ALL ZONES.
D.	MAKE ALL NECESSARY OFFSETS FOR EXISTING ARCHITECTURAL, STRUCTURAL AND MECHANICAL FEATURES OF THE BUILDING WHERE NECESSARY TO ACCOMPLISH THE WORK AS INDICATED.
E.	PROVIDE ACCESS PANELS FOR VALVES AND FLOW SWITCHES LOCATED IN INACCESSIBLE CEILING OR SPACES.
F.	ALL EXTERIOR EXPOSED MATERIALS SHALL BE CHROME-PLATED.
G.	CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS IN PDF AND "REVIT OR EQUIVALENT" FILES ON DISK AT END OF INSTALLATION.
H.	ALL PIPE SIZES SHOWN ON DRAWINGS ARE MINIMUM PIPE SIZES. CONTRACTOR SHALL PROVIDE INCREASED PIPE SIZE IF REQUIRED BY HYDRAULIC CALCULATIONS AT NO ADDITIONAL COST, BUT UNDER NO CIRCUMSTANCE SHALL CONTRACTOR REDUCE PIPE SIZES.
I.	ELECTRICAL ROOMS SHALL BE PROVIDED WITH INSTITUTIONAL TYPE AUTOMATIC SPRINKLER HEADS IN ACCORDANCE WITH AUTHORITY HAVING JURISDICTION.
J.	WHEN PENETRATING FIRE-RATED ENCLOSURE, PROVIDE FIRE-RATED SEALS AROUND PENETRATIONS EQUAL TO THE FIRE RATING OF THAT ENCLOSURE. REFER ARCHITECTURAL FOR FIRE RATED ENCLOSURES. ALL FLOORS ABOVE GRADE SHALL BE FIRE-RATED.
K.	IN AREAS WITH SUSPENDED CEILINGS CONCEAL PIPING ABOVE CEILING AND PROVIDE WHITE PAINTED CONCEALED PENDANT TYPE SPRINKLER HEADS. IN AREAS WITHOUT SUSPENDED CEILINGS PROVIDE EXPOSED PIPING AND BRASS UPRIGHTS OR PENDANT TYPE SPRINKLER HEADS. EXPOSED PIPING OR SPRINKLER HEAD DEFLECTORS SHALL NOT BE MORE THAN 12" BELOW CEILING. WHITE PAINTED HORIZONTAL CONCEALED SIDEWALL SPRINKLERS ARE ACCEPTABLE. REFER SPECIFICATIONS FOR ACCEPTABLE STYLE.
L.	EXPOSED PIPING AND HANGERS SHALL BE CLEANED TO RECEIVE PAINT.
M.	SPRINKLER PIPING SHALL BE ROUTED TO AVOID INTERFERENCE WITH SANITARY WASTE AND VENT PIPING, CHILLED WATER PIPING, DUCT WORK AND DIFFUSERS, ELECTRICAL LIGHT FIXTURES AND CONDUIT AS SHOWN ON THE CONTRACTOR'S SHOP DRAWINGS.
N.	SPRINKLER HEADS 7'-0" OR LESS ABOVE FINISHED FLOOR SHALL BE PROVIDED WITH SPRINKLER HEAD GUARDS.
O.	EXPOSED PIPING SHALL BE PAINTED RED AND PROVIDED WITH PIPING LABELS.
P.	SPRINKLER HEADS SHALL NOT BE LOCATED ABOVE SHELVING. SPRINKLER HEADS SHALL BE LOCATED OUTSIDE OF THE SHELVING VERTICAL PLANE TO ALLOW STORAGE TO EXTEND ABOVE THE 18" HORIZONTAL PLANE AS DESCRIBED IN NFPA 13.
Q.	SPRINKLER HEADS SHALL BE CENTERED BOTH DIRECTIONS IN CEILING TILES.
R.	CONTRACTOR SHALL PROVIDE THE SPRINKLER HEAD LAYOUT. ADDITIONAL HEADS MAY BE REQUIRED BY THE LISTED CRITERIA.
S.	ADDITIONS TO THE LAYOUT DO NOT REQUIRE ANY PRIOR APPROVAL PROVIDED THEY DO NOT AFFECT ANY ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING OR ELECTRICAL TRADES. THE NUMBER OF SPRINKLER HEADS, THE PIPE ROUTING, AND THE LOCATION OF SPRINKLER HEADS ARE THE FIRE PROTECTION ENGINEERS RESPONSIBILITY. PROVIDE HEADS AS REQUIRED.

FIRE ALARM PERFORMANCE REQUIREMENTS

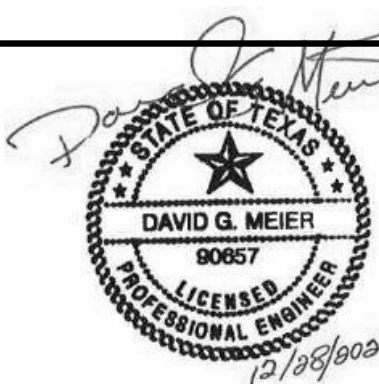
NOTE	DESCRIPTION
A.	THE CONTRACTOR SHALL EMPLOY A FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED OR LICENSED BY THE STATE FIRE MARSHAL'S OFFICE TO PROVIDE CHANGES TO THE EXISTING FIRE ALARM SYSTEM FOR A COMPLETE FIRE ALARM SYSTEM.
B.	THE FIRE ALARM PLANNING SUPERINTENDENT SHALL PREPARE PERMIT DOCUMENTS USING EXACT DEVICES TO BE PROVIDED.
C.	THE LICENSED FIRE ALARM DESIGNER SHALL ENSURE THAT THE DESIGN MEETS ALL OF THE REQUIREMENTS OF NFPA, NEC, ADA, TAS AND ALL LOCAL CODES AND AMENDMENTS, AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
D.	THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR OCCUPANCY CLASSIFICATION AND OCCUPANT LOAD FOR THE RENOVATED AREAS.
E.	PROVIDE SMOKE DUCT DETECTORS FOR EACH AIR HANDLING UNIT EXCEEDING 2,000 CFM. DETECTORS SHALL BE MONITORED BY THE EXISTING BUILDING FIRE ALARM SYSTEM.
F.	THE CONTRACTOR SHALL VERIFY CAPABILITIES OF THE EXISTING FIRE ALARM ANNUNCIATOR AND/OR VOICE EVAC PANEL. FINAL INSTALLATIONS SHALL BE COMPLIANT WITH CODE REQUIREMENTS.

FIRE SPRINKLER PERFORMANCE REQUIREMENTS

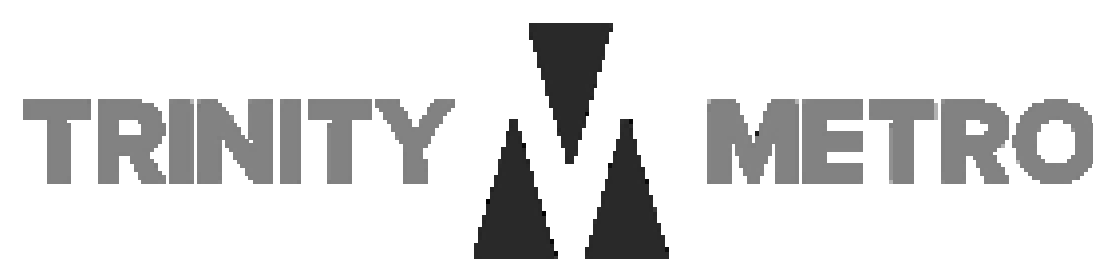
NOTE	DESCRIPTION
A.	DELEGATED DESIGN (PERFORMANCE REQUIREMENTS): PROVIDE A COMPLETE AND OPERABLE WET PIPE FIRE SUPPRESSION SYSTEM ENGINEERED AND DESIGNED CONFORMING TO NFPA 13, INSTALLATION OF SPRINKLER SYSTEMS; NFPA 14, INSTALLATION OF STANDPIPE AND HOSE SYSTEMS; ALL APPLICABLE CITY, STATE AND NATIONAL CODES AND THE CODES AND ORDINANCES OF ALL OTHER AUTHORITIES HAVING JURISDICTION. THE SYSTEM SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE CITY FIRE DEPARTMENT.
B.	THE BUILDING INCLUDES AN EXISTING MANUAL CLASS I WET STANDPIPE. BUILDING WATER PRESSURE PROVIDES ADEQUATE PRESSURE FOR SUPPLYING THE MOST HYDRAULICALLY REMOTE SPRINKLER AREA ON LEVEL 5 PROVIDING AUTOMATIC SPRINKLER PROTECTION. THE SYSTEM REQUIRES CITY FIRE DEPARTMENT EQUIPMENT CONNECTED TO THE EXISTING FDC TO PRESSURIZE THE STANDPIPE TO 100 PSIG AT THE ROOF LEVEL FOR COMPLIANCE OF A CLASS I STANDPIPE.
C.	LEVEL 1 AND LEVEL 2 OF THE GROVE BUILDING ARE SERVED BY TWO SEPARATE PRE-ACTION SPRINKLER SYSTEMS INCLUDING DELUGE VALVES AND PRE-ACTION TRIP (PRE-ACTION SYSTEM LEVEL 1; PRE-ACTION SYSTEM LEVEL 2).
D.	THE SOUTHERN MOST STAIRWELL HAS A COMBINATION STANDPIPE / OVERHEAD WET PIPE SPRINKLER SYSTEM SERVING FLOOR LEVELS 3, 4 AND 5 (FLOOR CONTROL VALVES SERVE EACH FLOOR).
E.	WORK INCLUDES THE REMOVAL OF THE TWO PRE-ACTION SYSTEM VALVING, SUPPLY PIPING AND DRAIN PIPING. PROVIDE NEW FLOOR ZONE VALVE ON EACH FLOOR LEVEL 1 AND 2 (LOCATE ABOVE CEILING IN GENERAL AREA OF EXISTING).
F.	RENOVATED SPACES ON THE FIRST FLOOR SHALL INCLUDE CONVERTING THE EXISTING OVERHEAD DRY PIPING TO A WET PIPE SYSTEM AND MODIFICATIONS TO EXISTING OVERHEAD, UP-RIGHT SPRINKLER HEADS AND REPLACE WITH ARM-OVERS OR FLEXIBLE HEADS. CONTRACTOR SHALL VERIFY THE CONDITION OF THE INTERIOR OF EXISTING OVERHEAD DRY PIPE DISTRIBUTION PIPING. REPLACE PORTION OF SYSTEM FOUND TO HAVE INTERNAL CORROSION.
G.	RENOVATIONS ON LEVEL 4 AND LEVEL 5 INCLUDES MODIFICATIONS DOWNSTREAM OF EXISTING FLOOR CONTROL VALVES TO EXISTING OVERHEAD, UP-RIGHT SPRINKLER HEADS. REPLACE UPRIGHT HEADS OR CONNECT TO EXISTING PIPING WITH ARM-OVERS OR FLEXIBLE HEADS IN LOCATION ALLOWABLE. CHANGES TO SPRINKLER MAIN OR BRANCH PIPING WILL REQUIRE HYDRAULIC CALCULATIONS.
H.	EXPPOSED NEW AND EXISTING SPRINKLER PIPE ROUTED IN FINISHED AREAS WITH EXPOSED STRUCTURE SHALL BE PAINTED AS DIRECTED BY THE ARCHITECT. PROVIDE COLOR SAMPLES SHALL FOR THE ARCHITECT TO REVIEW AND SELECT. PIPE ROUTING SHALL BE BASED UPON THE SPACE EXPOSED STRUCTURE, CENTERLINES AND AXES TO ESTABLISH A PATTERN COMPLEMENTARY TO EACH SPACE STRUCTURE.
I.	CONTRACTOR SHALL ARRANGE SPRINKLER HEADS COMPLEMENTARY TO EACH CEILING TYPE. SPRINKLER HEADS LOCATED IN LAY-IN CEILINGS SHALL BE CENTERED IN RESPECTIVE CEILING TILES (CENTERED IN THE SHORT AXES FOR 2x4 CEILING TILES).
J.	ALL SPRINKLER HEAD LOCATIONS BE COORDINATED WITH THE STRUCTURE, LIGHT FIXTURES, HVAC ELEMENTS, PLUMBING ELEMENTS, ARCHITECTURAL CEILING TREATMENTS. LAYOUT SHALL BE COORDINATED WITH AND REVIEWED BY THE ARCHITECT.
K.	THE FIRE PROTECTION AREA DESCRIPTIONS SHOWN ON THE PLAN(S) ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY WITH THE OWNER AND THE AUTHORITY HAVING JURISDICTION ALL SPACE CLASSIFICATIONS, COMMODITY TYPES AND LOCATIONS OF OBSTACLES PRIOR TO PROVIDING DESIGN CALCULATIONS OR SPRINKLER SHOP DRAWINGS.
L.	LOCATIONS OF SYSTEM TEST AND DRAIN VALVES SHALL BE COORDINATED WITH THE OWNER BY SPECIFICALLY CALLING TO THE OWNERS ATTENTION THE LOCATIONS OF THESE SUB-SYSTEMS.
M.	PROVIDE STORAGE CABINET PAINTED RED SIZED TO ACCOMMODATE SIX SPRINKLER HEADS OF EACH TYPE PROVIDED ON THE PROJECT. PROVIDE A PROPERLY SIZED WRENCH(S) TO FIT SPRINKLER HEADS (TO BE LOCATED IN THE CABINET). FASTEN CABINET TO WALL ADJACENT TO FIRE SPRINKLER VALVING AT 5'-0" AFF TO CENTERLINE OF CABINET.

MUST MEET FTA BUY AMERICA REQUIREMENTS

REV	DATE	DESCRIPTION	BY	ENG	CHK	APP



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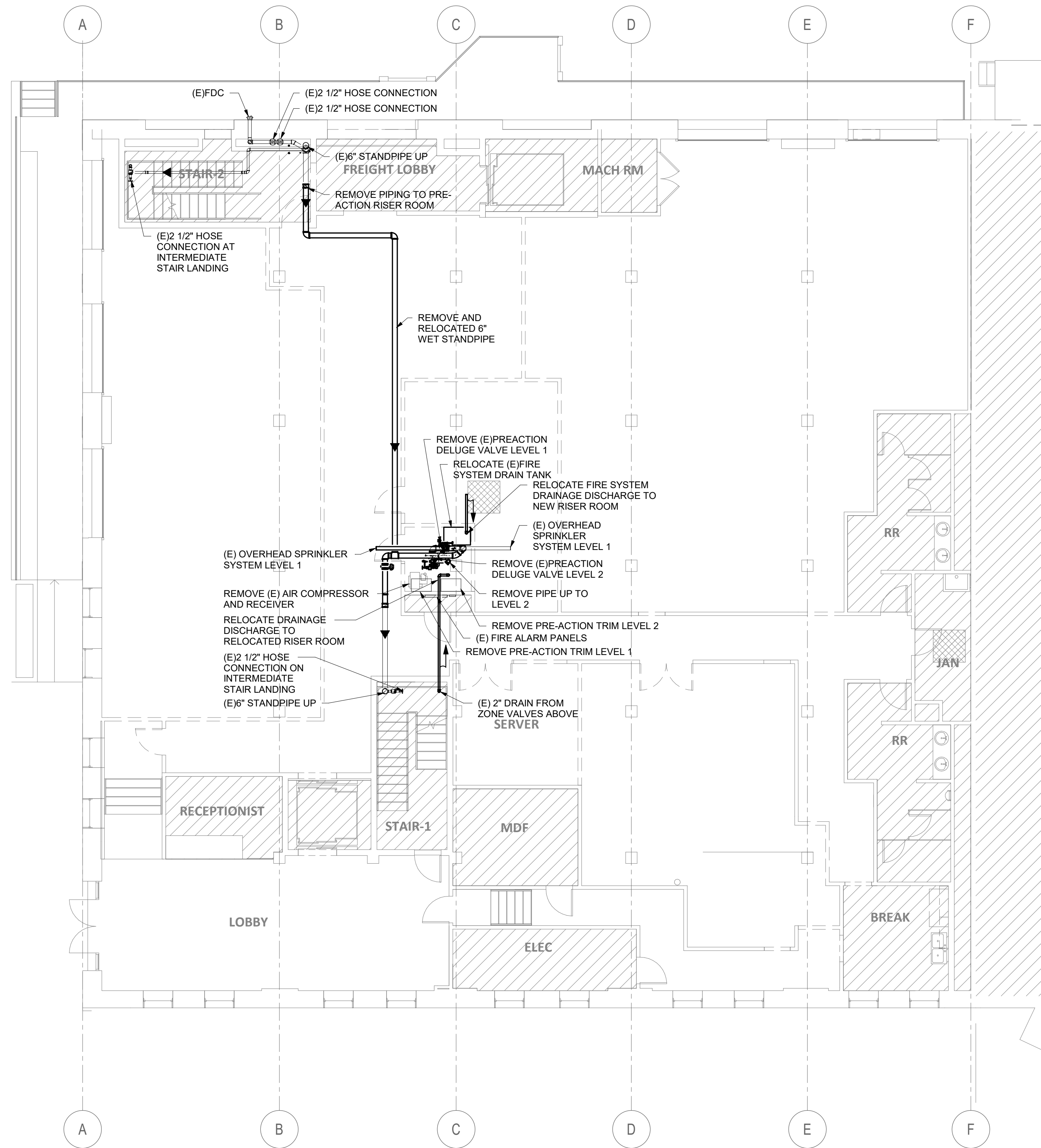


DRAWN	HZI
DESIGNED	DGM
CHECKED	KNN
APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS
FIRE SUPPRESSION NOTES, DESIGN
REQUIREMENTS

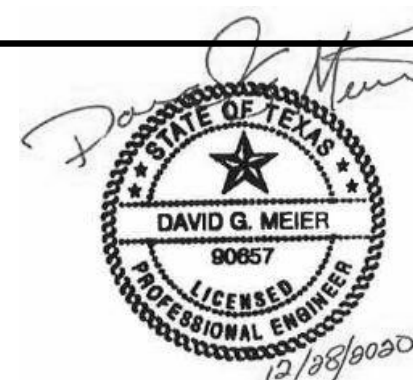
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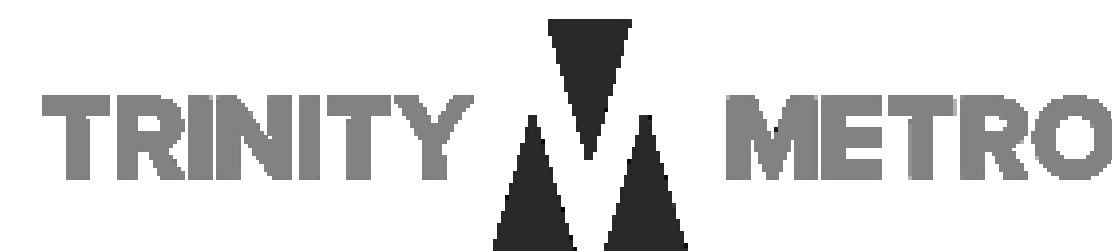


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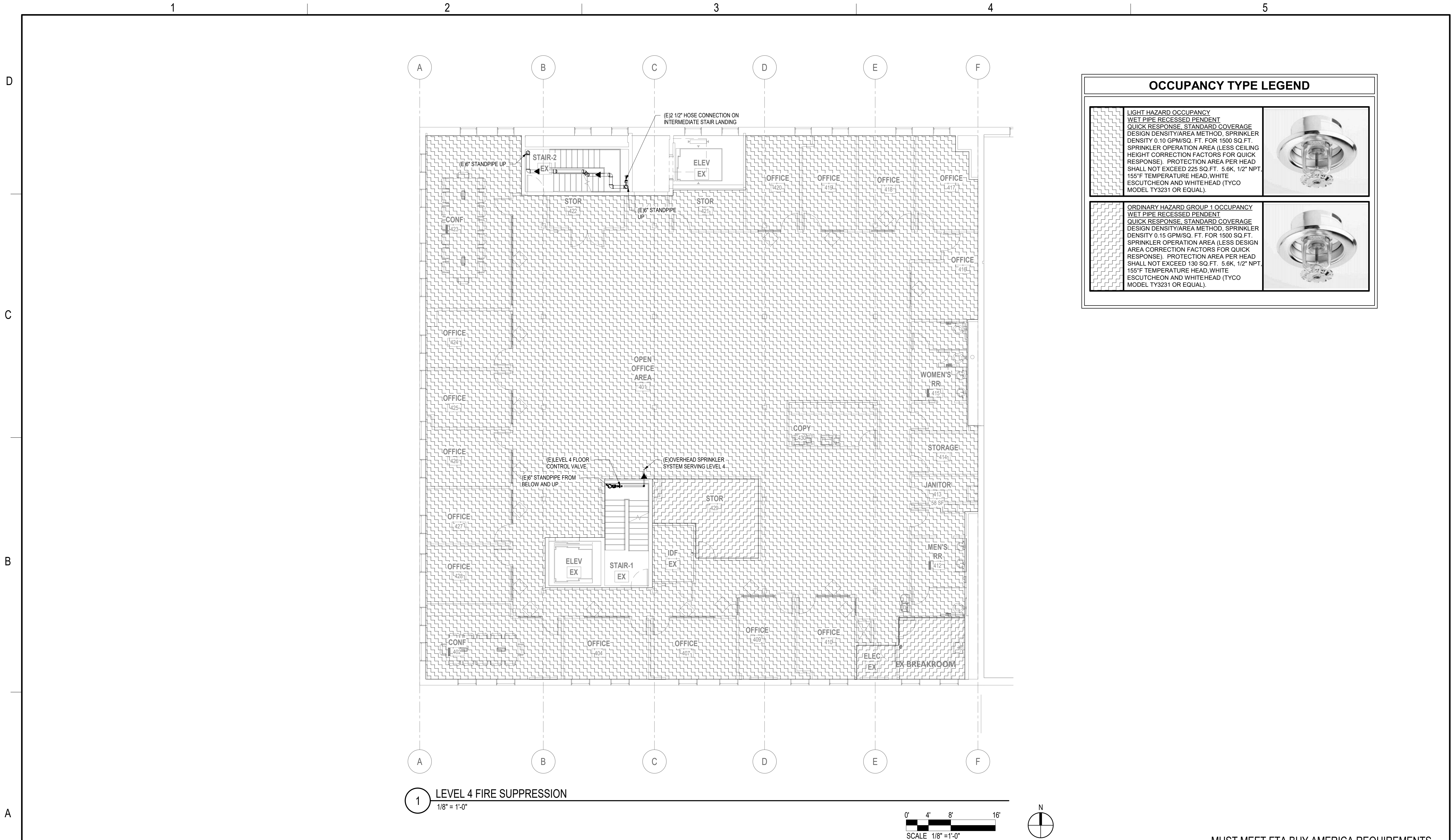
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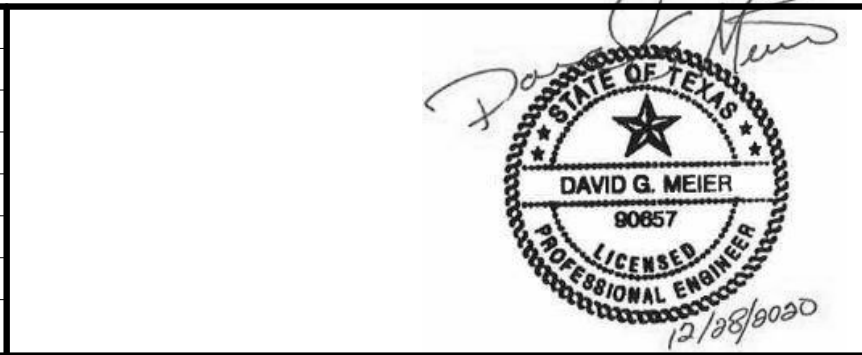
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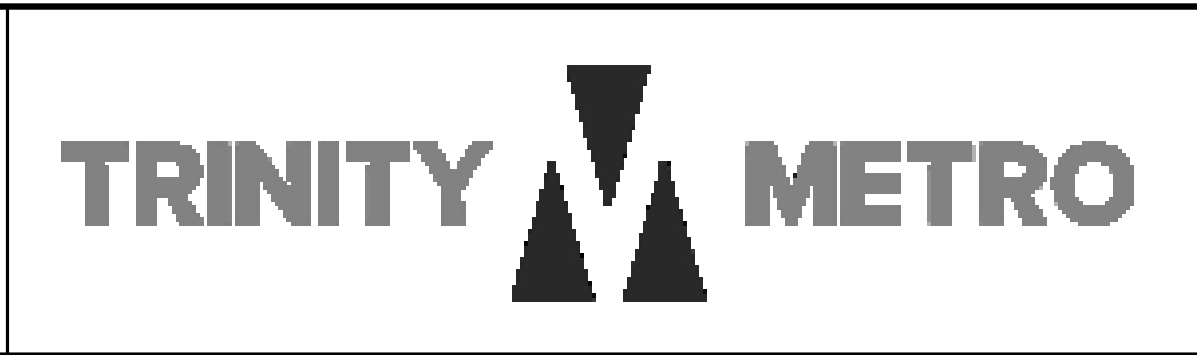
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**TRINITY METRO HEADQUARTERS
LEVEL 4 FIRE SUPPRESSION PLAN**

SHEET No. **FP-104**

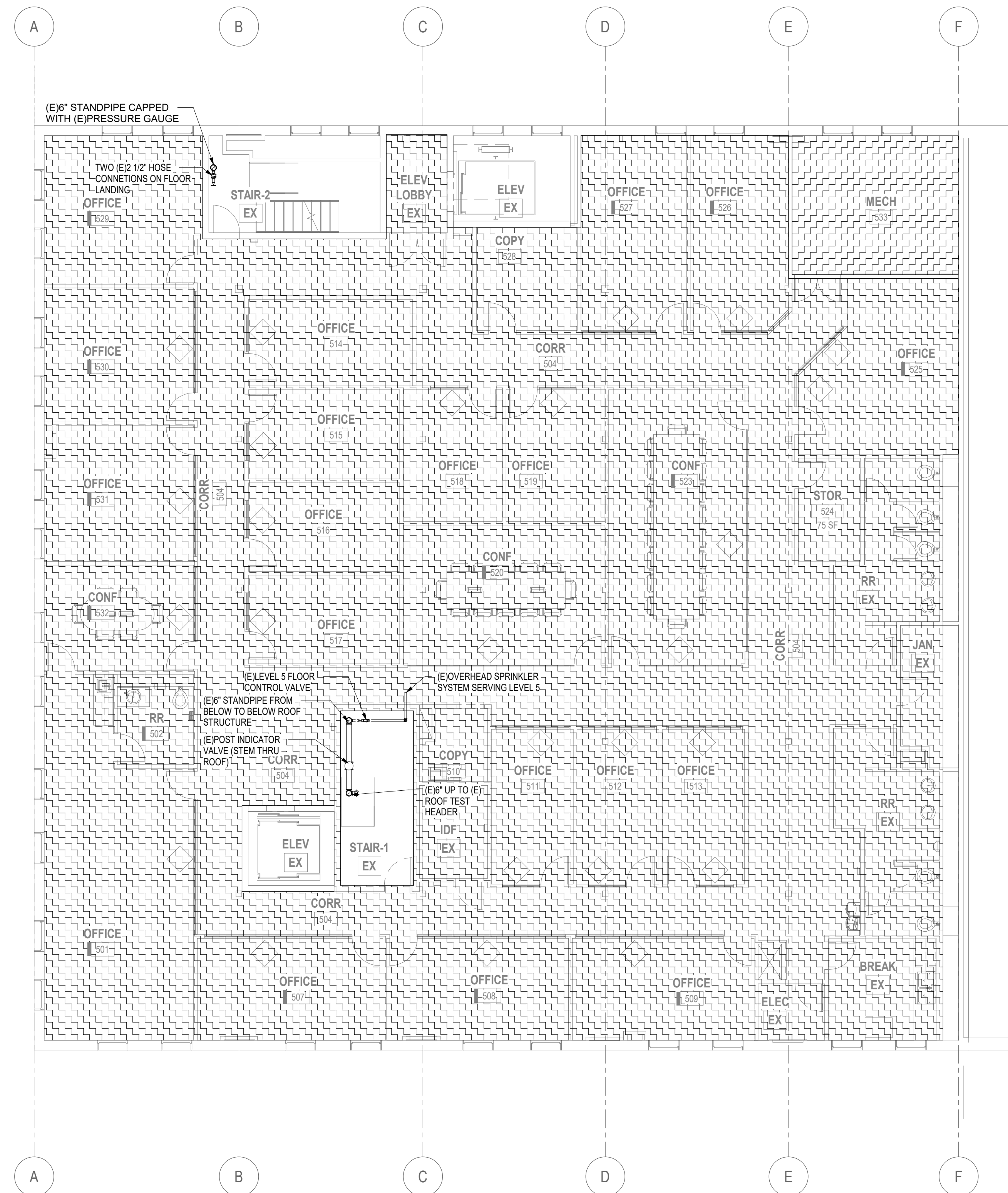
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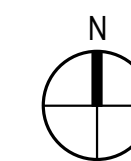
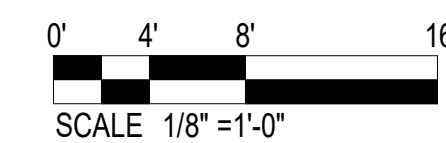
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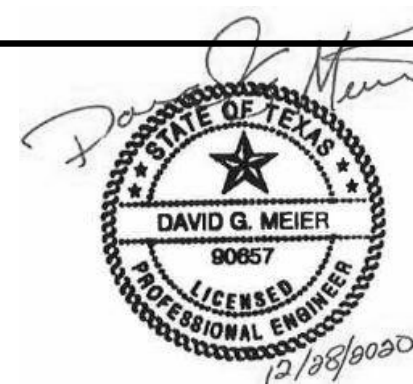


1 LEVEL 5 FIRE SUPPRESSION
1/8" = 1'-0"



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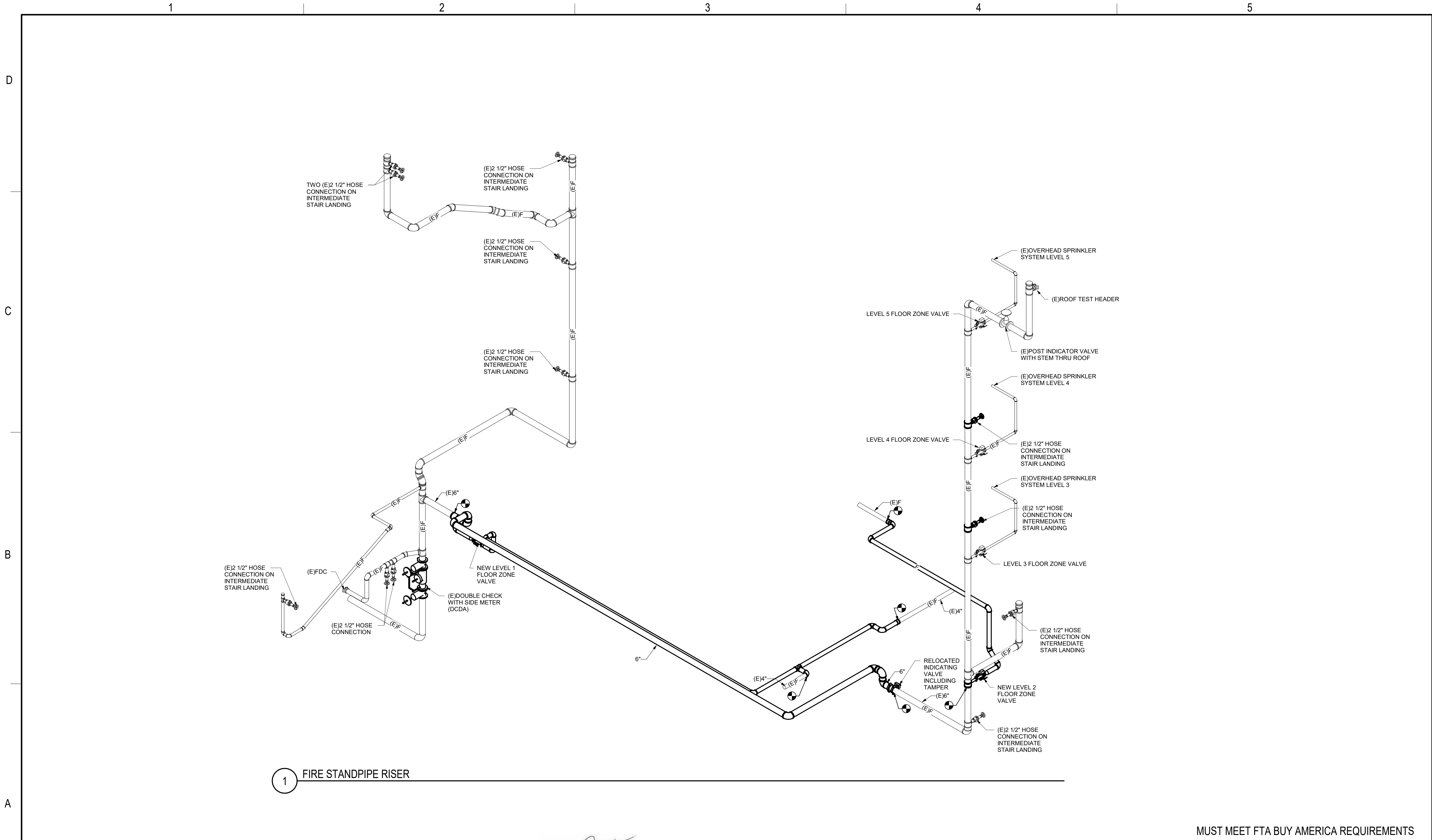
TRINITY METRO

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APPROVED	JMF
DATE	12/28/2020

TRINITY METRO HEADQUARTERS LEVEL 5 FIRE SUPPRESSION PLAN

SHEET No.	FP-105
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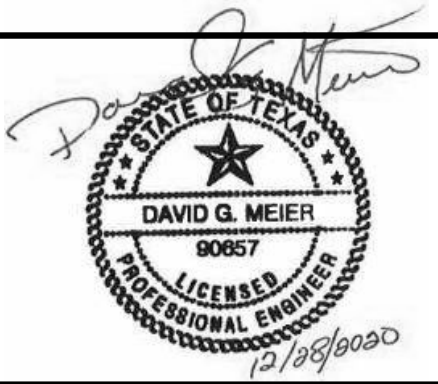
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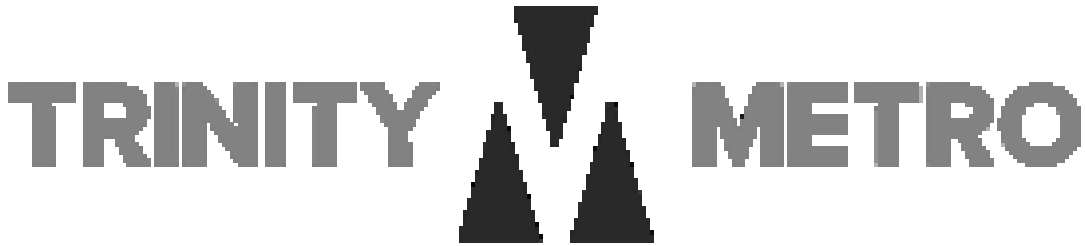
1 FIRE STANDPIPE RISER

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**TRINITY METRO HEADQUARTERS
EXISTING FIRE STANDPIPE RISER**

SHEET No.	FP-201	REV 0
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