

WILLOW GRACE VETERINARY HOSPITAL

JULY 2, 2026 - 100% CONSTRUCTION DOCUMENTS

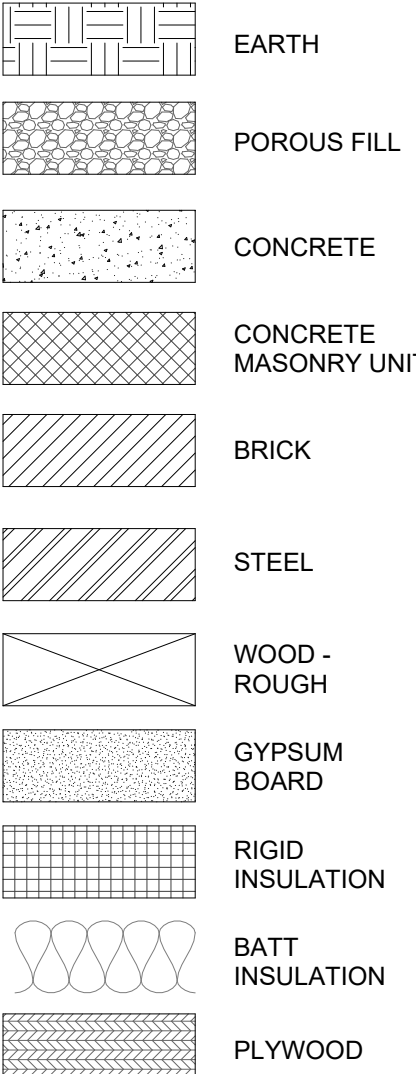
PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

ARCHITECT		GENERAL NOTES		ABBREVIATIONS	DRAWING INDEX	PROJECT DESCRIPTION
FMD ARCHITECTS 3200 WEST MARKET STREET, SUITE 205 FAIRLAWN, OHIO 44333 (P) 330-836-2343 (F) 330-836-7359 PROJECT MANAGER: CHARLEY FOX (CFOX@FMDARCHITECTS.COM) PROJECT ARCHITECT: MELANIE FRIEDMAN (MFRIEDMAN@FMDARCHITECTS.COM)				1 COMPLY WITH ALL APPLICABLE CODES, ORDINANCES, LAWS, SAFETY ORDERS, AND DIRECTIVES OF THE STATE, COUNTY AND CITY.	GENERAL TS-100 TITLE SHEET	THE PROJECT IS AN INTERIOR RENOVATION TO AN EXISTING VETERINARY CLINIC. THE SCOPE OF WORK INCLUDES, BUT NOT LIMITED TO, LIMITED DEMOLITION, NEW WALLS, NEW PLUMBING, NEW MECHANICAL, NEW ELECTRICAL, AND NEW CASEWORK AND EQUIPMENT.
OWNER DR. S STACEY: 10 ARTISAN DR. SMYRNA, DE 19977		2 EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, FEES, CERTIFICATES OF INSPECTION AND APPROVAL, ETC, UNLESS OTHERWISE NOTED.		2 THE SUBMISSION OF A BID BY CONTRACTOR SHALL INDICATE HE HAS BECOME FAMILIAR WITH ALL THE CONSTRUCTION DOCUMENTS, AND UNDERSTANDS THE LABOR AND MATERIALS REQUIRED TO COMPLETE THE PROJECT.	CODE DATA CD-100 CODE DATA CD-500 TYPICAL ACCESSIBILITY DETAILS	
PROJECT TEAM MEP ENGINEER: WRIGHT ENGINEERING 190 N UNION ST SUITE 303 AKRON, OH 44304 (P)330-606-2957		3 PRIOR TO CONSTRUCTION EACH CONTRACTOR SHALL VISIT THE SITE, AND VERIFY ALL DIMENSIONS AND CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.		3 IN THE CASE OF DISCREPANCIES OR INCONSISTENCIES APPEARING IN THE CONSTRUCTION DOCUMENTS, OR FIELD CONDITIONS, THE ARCHITECT SHALL BE NOTIFIED. IN NO CASE SHALL WORK PROCEED IN UNCERTAINTY OR WITH INSUFFICIENT DATA. BID PLANS TO THE MOST RESTRICTIVE WAY.	DEMOLITION AD-100 DEMOLITION PLAN AD-600 DEMOLITION REFLECTIVE CEILING PLAN	
DRAWING LEGEND		4 ALL WORK, FIXTURES AND THE STRUCTURE SHALL BE PROTECTED IN ALL RESPECTS FROM WEATHER, CONSTRUCTION HAZARDS, FIRE, UNNECESSARY INTRUSIONS, DUST, DIRT OR DEBRIS.		4 EACH CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN, FOR THE DURATION OF CONSTRUCTION, ALL REQUIRED SCAFFOLDS, TARPULINS, WARNING SIGNS, FENCES, AND OTHER TEMPORARY CONSTRUCTION ITEMS FOR THE PROPER AND SAFE COMPLETION OF THEIR WORK AND FOR COMPLIANCE WITH ALL APPLICABLE REGULATIONS, INCLUDING OSHA.	ARCHITECTURE A-100 FLOOR PLAN A-101 FLOOR PLAN DIMENSION PLAN A-200 EXTERIOR ELEVATIONS A-300 BUILDING SECTIONS A-500 MISC. DETAILS A-600 REFLECTED CEILING PLANS A-700 INTERIOR ELEVATIONS A-710 INTERIOR RESTROOM ELEVATIONS A-800 DOOR & WINDOW SCHEDULE A-810 DOOR & WINDOW DETAILS	
LOCATION MAP		5 ALL MATERIALS, FABRICATION, AND/OR INSTALLATION SHALL COMPLY WITH ALL TECHNICAL AND INDUSTRY STANDARDS AND SPECIFICATIONS FOR EACH DIVISION OF WORK.		5 ALL WORK SHALL BE CHECKED AND ACCEPTED BY THE ARCHITECT AND OWNER BEFORE CONSIDERED COMPLETE.	FINISH F-100 FINISH PLAN & SCHEDULE F-300 CASEWORK SECTIONS AND MISCELLANEOUS DETAILS	
MATERIALS 		SYMBOLS ROOM NAME ROOM NUMBER DOOR NUMBER WINDOW TYPE WALL TYPE INTERIOR ELEVATION NUMBER SHEET NUMBER SECTION NUMBER SHEET NUMBER DETAIL NUMBER SHEET NUMBER EXTERIOR ELEVATION NUMBER SHEET NUMBER FINISH TYPE FINISH DESIGNATION CODED NOTE ALTERNATE		6 AN APPROVED SET OF PLANS FROM THE BUILDING DEPARTMENT SHALL BE KEPT AT THE SITE AND SHALL BE AVAILABLE FOR REFERENCE BY THE BUILDING OFFICIAL AT ALL TIMES DURING WORKING HOURS WHILE SUCH WORK IS IN PROGRESS PER THE CURRENT APPLICABLE CODE.	EQUIPMENT EQ-100 EQUIPMENT FLOOR PLAN & SCHEDULE	TITLE SHEET
		7 THE CONTRACTOR SHALL SCHEDULE ALL REQUIRED INSPECTIONS AND THE BUILDING DEPARTMENT SHALL PERFORM INSPECTIONS BEFORE ANY WORK IS COVERED UP BY OTHER CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO ALL REINFORCING, FRAMING, PLUMBING, MECHANICAL AND ELECTRICAL WORK PER THE CURRENT APPLICABLE CODE.		7 ALL SHOP DRAWINGS, INCLUDING SUBMITTALS FROM SUB-CONTRACTORS, SHALL BE REVIEWED BY GENERAL CONTRACTOR PRIOR TO FORWARDING TO ARCHITECT.	PLUMBING P-001 PLUMBING GENERAL INFORMATION P-002 PLUMBING SPECIFICATIONS PD-100 FIRST FLOOR PLUMBING DEMOLITION PLAN P-101 FIRST FLOOR SANITARY AND VENT PLAN P-102 FIRST FLOOR DOMESTIC WATER PLAN P-201 SANITARY ISOMETRIC P-301 PLUMBING SCHEDULES AND DETAILS	
		8 CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SHOP DRAWINGS ARE COMPLETED BASED ON MOST RECENT CONSTRUCTION DRAWINGS/BULLETIN(S) AND NOT SOLELY RELY UPON ORIGINAL BID SET.		8 CHANGES BY THE CONTRACTOR TO THE DESIGN INTENT SHALL BE HIGHLIGHTED TO THE ARCHITECT IN SHOP DRAWINGS. ACCEPTANCE OF NON-CONFORMING SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WHAT IS IN THE CONTRACT DOCUMENTS.	MECHANICAL M-001 MECHANICAL GENERAL INFORMATION MD-100 FIRST FLOOR MECHANICAL DEMOLITION PLAN M-100 FIRST FLOOR MECHANICAL ZONING M-101 FIRST FLOOR MECHANICAL PLAN M-102 ROOF MECHANICAL PLAN M-201 MECHANICAL DETAILS AND SCHEDULES M-202 MECHANICAL DETAILS AND SCHEDULES	
		9 ALL COLOR SELECTIONS SHALL BE APPROVED BY OWNER/ARCHITECT. CONTRACTOR SHALL LEAVE COLOR SELECTIONS OPEN IN SHOP DRAWINGS, HIGHLIGHT WHERE SELECTIONS NEED TO BE MADE, AND PROVIDE FULL RANGE OF SAMPLES BY LEVEL OF FINISH NOTED IN FINISH SCHEDULE.		9 DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.	ELECTRICAL E-001 ELECTRICAL GENERAL INFORMATION E-002 ELECTRICAL SPECIFICATIONS E-003 ELECTRICAL SPECIFICATIONS ED-100 FIRST FLOOR ELECTRICAL DEMOLITION PLAN E-100 ELECTRICAL SITE PLAN E-101 FIRST FLOOR LIGHTING PLAN E-102 FIRST FLOOR POWER PLAN E-200 PANELBOARD AND SCHEDULES AND DISTRIBUTION DIAGRAM E-201 PANELBOARD AND SCHEDULES AND DISTRIBUTION DIAGRAM	
		10 IF ANY QUESTIONS OCCUR DURING THE BID PROCESS THE CONTRACTOR IS RESPONSIBLE TO SUBMIT AN (RFI) REQUEST FOR INFORMATION TO THE ARCHITECT FOR CLARIFICATION AND INTENT.		10 EACH CONTRACTOR TO FULLY REVIEW ALL SHEETS IN THE CONSTRUCTION DOCUMENTS FOR OWN SCOPE OF WORK AND COORDINATE SEQUENCE OF WORK BETWEEN TRADES.		

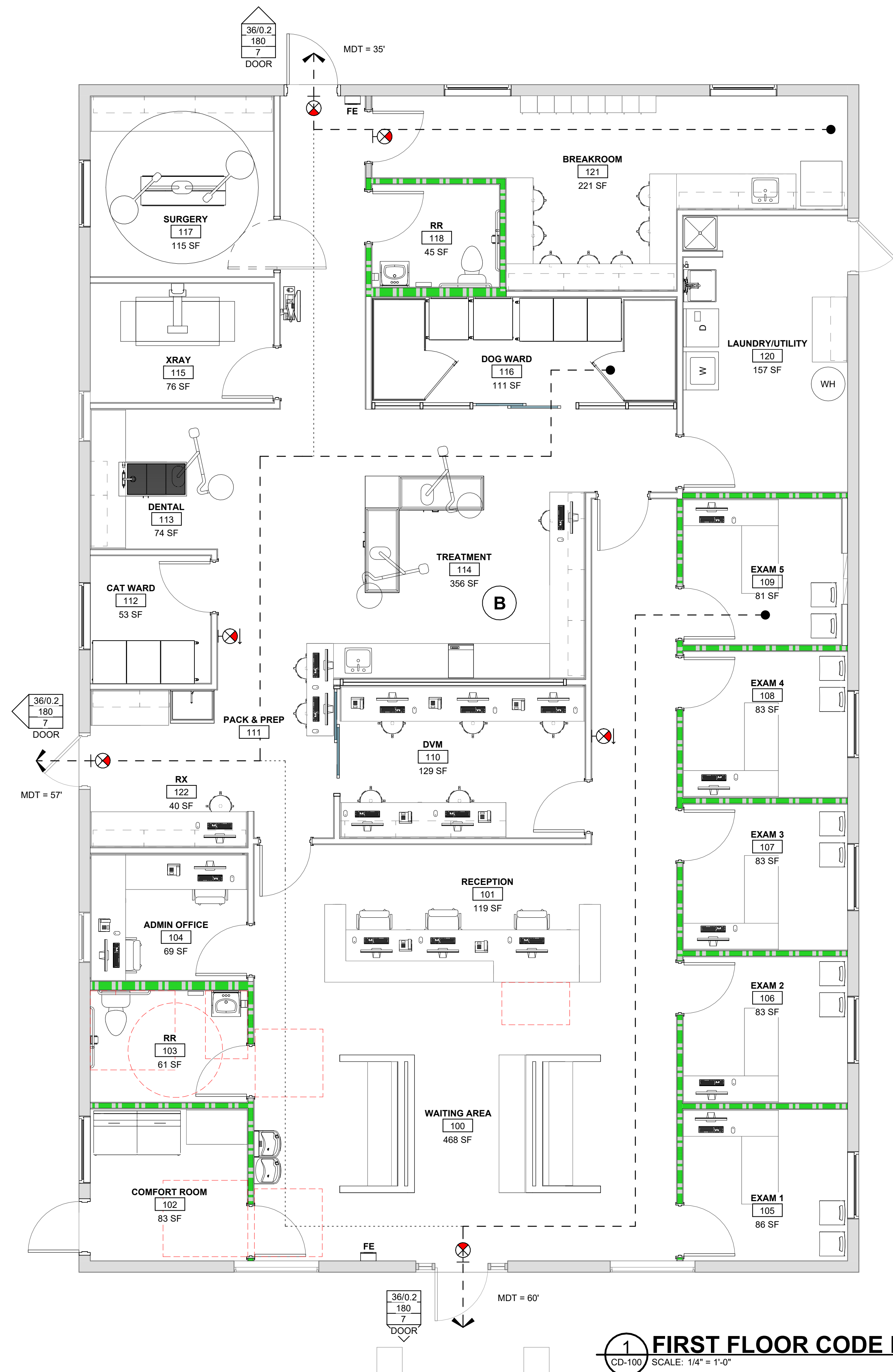
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

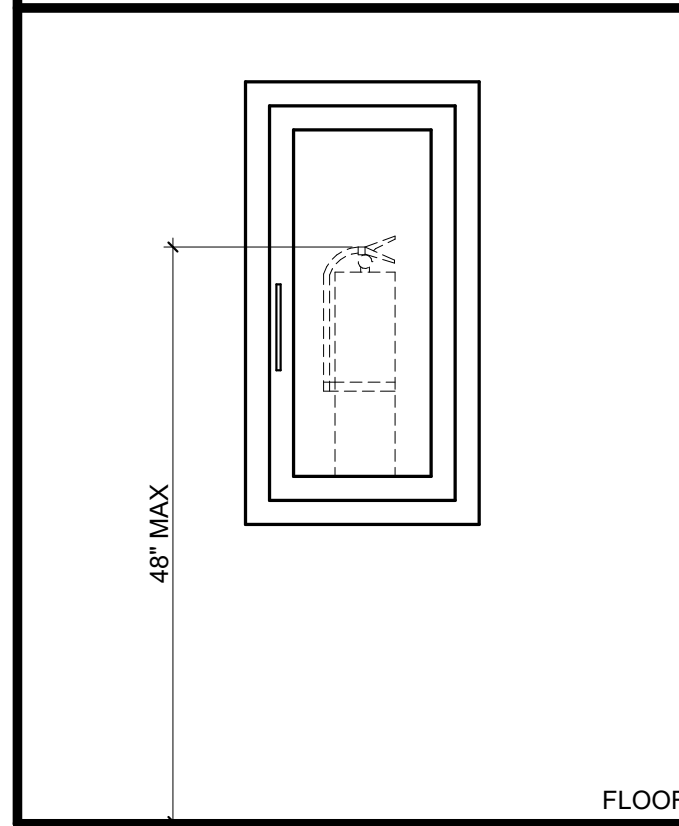
07/02/26 | 100% CDs

TS-100

7/17/2026 5:03:23 PM



FIRE EXT. CABINET



LEGEND

-
- B** OCCUPANCY TYPE
- #** OCCUPANT LOAD
- EGRESS WIDTH (INCHES)
- EGRESS WIDTH FACTOR (N/IN)
- EXIT CAPACITY (# OF PEOPLE)
- OCCUPANTS USING EXIT
- TYPE OF EGRESS COMPONENT
- MDT = MAXIMUM DISTANCE OF TRAVEL
- PRIMARY EGRESS PATH
- MOST REMOTE POINT
- OTHER EXIT ACCESS
- 1 HOUR RATED WALL
- 2 HOUR RATED WALL
- ADA TURNING CLEARANCE
- FE-1 FIRE EXTINGUISHER - TYPE 1
10LB ABC TYPE
SEMI-RECESSED CABINET
- FE-1A FIRE EXTINGUISHER - TYPE 1
10LB ABC TYPE
MOUNTED ON A HOOK AT 42" A.F.F.

SQUARE FOOTAGE

- **FIRST FLOOR** **3,220 GSF**

CODE DATA

BUILDING CODE		
2021 INTERNATIONAL PLUMBING CODE (IPC)		
2018 INTERNATIONAL MECHANICAL CODE (IMC)		
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)		
2015 INTERNATIONAL EXISTING BUILDING CODE (IEBC)		
2018 INTERNATIONAL BUILDING CODE (IBC)		
2018 INTERNATIONAL FUEL GAS CODE (IFGC)		
2012 INTERNATIONAL PROPERTY MAINTENANCE CODE (IPMC)		
2024 NFPA 101 LIFE SAFETY CODE		
CHAPTER 3 – USE AND OCCUPANCY CLASSIFICATION		
USER GROUPS:		
• B - BUSINESS		
<u>TABLE 307.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A PHYSICAL HAZARD.</u>		
• OXIDIZING GAS - MAXIMUM ALLOWABLE STORES- LESS THAN 1,500 CUBIC FEET.		
CHAPTER 5 – GENERAL BUILDING HEIGHTS AND AREAS		
CONSTRUCTION TYPE – TYPE VB		
<u>TABLE 504.3 & 505.4 & 506.2 ALLOWABLE BUILDING AREA, HEIGHT & STORIES ABOVE GRADE PLANE</u>		
	<u>ALLOWED</u>	<u>PROVIDED</u>
	40'-0"	0'-0"
	1 STORY	1 STORY
	9,000 SF	3221 SF
CHAPTER 6 – TYPES OF CONSTRUCTION		
TYPE VB CONSTRUCTION		
<u>TABLE 601 FIRE-RESISTANT RATING REQUIREMENTS FOR BUILDING ELEMENTS</u>		
• STRUCTURAL FRAME		0 HR
• BEARING WALLS	EXTERIOR	0 HR
	INTERIOR	0 HR
• NONBEARING WALLS		0 HR
• FLOOR CONSTRUCTION		0 HR
• ROOF CONSTRUCTION		0 HR
CHAPTER 8 - INTERIOR FINISHES		
<u>TABLE 803.13 - INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY</u>		
• EXIT ENCLOSURES AND EXIT PASSAGEWAYS - CLASS A		
• CORRIDORS - CLASS B		
• ROOMS AND ENCLOSED SPACES - CLASS C		
CHAPTER 9 – FIRE PROTECTION SYSTEM		
SECTION 903 - AUTOMATIC SPRINKLER SYSTEMS		
• AUTOMATIC SPRINKLER SYSTEM SHALL NOT BE INSTALLED		
SECTION 906 - PORTABLE FIRE EXTINGUISHERS		
	LIGHT HAZARD	
• MINIMUM RATED SINGLE EXTINGUISHER:		RATED 2-A
• MAXIMUM FLOOR AREA PER EXTINGUISHER:		11,250 SF
• MAXIMUM DISTANCE OF TRAVEL TO EXTINGUISHER:		75'-0"
• PORTABLE FIRE EXTINGUISHERS (IF E.) SHALL BE INSTALLED PER INTERNATIONAL FIRE CODE AND MEET WITH LOCAL FIRE INSPECTOR(S) FOR FINAL LOCATIONS.		
SECTION 907 - FIRE ALARM AND DETECTION SYSTEMS		
• AUTOMATIC FIRE ALARM IS NOT REQUIRED AND WILL NOT BE PROVIDED.		
CHAPTER 10 – MEANS OF EGRESS		
1003.2 CEILING HEIGHT:		
• MIN ALLOWABLE CEILING HEIGHT IS 7'-6"		
<u>TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCE PER OCCUPANT</u>		
FUNCTION - LOAD FACTOR	SQUARE FOOT	OCC.
BUSINESS - 150 GROSS	3068	21
1005.1 MIN EGRESS WIDTH		
• W/O SPRINKLER SYSTEM		
• STAIRWAY = 0.3		
OTHER EGRESS COMPONENT = 0.2		
1006.1 MIN EGRESS WIDTH		
• W/O SPRINKLER SYSTEM		
1006.3.2 MIN NUMBER OF EXITS OR ACCESS TO EXITS PER STORY		
OCCUPANT NUMBER:	# EXITS/STORY	#EXITS PROVIDED
1-500	2	3
1007.1.1 TWO EXITS OR EXIT ACCESS DOORWAYS		
THEY SHALL BE PLACED AT DISTANCE APART EQUAL TO NOT LESS THAN 1/2 OF THE LENGTH OF THE OVERALL DIAGONAL DIMENSION OF THE BUILDING.		
<u>TABLE 1017.2 EXIT TRAVEL DISTANCE (UNSPRINKLED)</u>		
• A = 200'		
• B = 20'		
TABLE 1020.1 CORRIDOR FIRE-RESISTANCE RATING		
• CORRIDORS IN A AND B OCCUPANCY TYPES SERVING GREATER THAN 30 OCCUPANTS MUST BE RATED 1 HR. 1 HR PROVIDED		

PLUMBING

IBC 2021 - TABLE 2902.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES			
FIXTURE	REQUIREMENT	REQUIRED	PROVIDED
WATER CLOSETS	1:25 FOR THE FIRST 50, 1:50 FOR AFTER 50 OCC.	1	2
LAVATORIES	1:40 FOR THE FIRST 80, 1:80 FOR AFTER 80 OCC.	1	2
DRINKING FOUNTAINS	1:100	1	1
OTHER	1 SERVICE SINK	1	1

A. BUSINESS CLASSIFICATION IS USED TO DETERMINE FIXTURE REQUIREMENTS

ENERGY CODE

TABLE C402.2 OPAQUE THERMAL ENVELOPE REQUIREMENTS			
CLIMATE ZONE 5			
	TYPE	R VALUE REQUIRED	R VALUE PROVIDED
ROOF	INSULATION ENTIRELY ABOVE DECK	R-25ci	EXISTING
	METAL BUILDINGS	R-19 + R-11 LS	EXISTING
	ATTIC AND OTHER	R-38	EXISTING
WALLS, ABOVE GRADE	MASS	R-13.3ci	EXISTING
	METAL BUILDING	R-13 + R-13ci	N/A
	METAL FRAMED	R-13 + R-7.5ci	N/A
	WOOD FRAMED AND OTHER	R-13 + R-3.8ci or R-20	EXISTING
WALLS, BELOW GRADE	BELOW-GRADE WALL	R-7.5ci	EXISTING
FLOORS	MASS	R-10ci	EXISTING
	JOIST/FRAMING	R-30	EXISTING
SLAB-ON-GRADE	UNHEATED SLABS	R-10 ^A	EXISTING
	HEATED SLABS	R-15 ^B	EXISTING
OPAQUE DOORS	SWINGING	U-0.37	EXISTING
	ROLL-UP OR SLIDING	U-0.75	EXISTING

NOTE A: INSULATION REQUIRED FOR 24" BELOW
NOTE B: INSULATION REQUIRED FOR 36" BELOW

PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2024



ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St. Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

SMYRNA, DE 19977
CONSTRUCTION DOCS

CODE DATA

NOTE: CODE DATA DRAWINGS
(CD-100) MUST BE
PRINTED IN COLOR

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

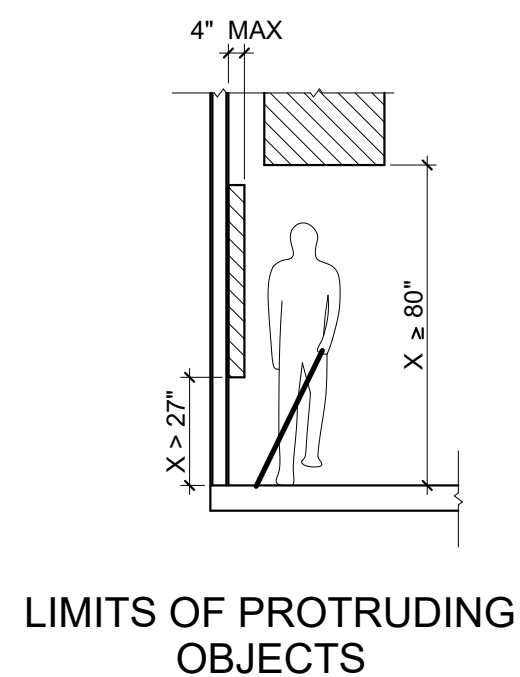
[illegible]

CD-100

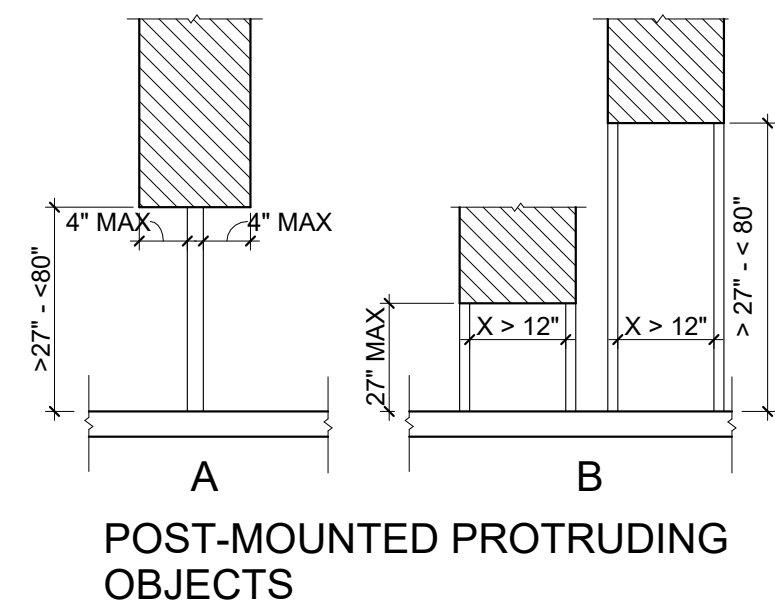
7/1/2026 11:48:47 AM

3 TYPICAL ACCESSIBLE DETAILS

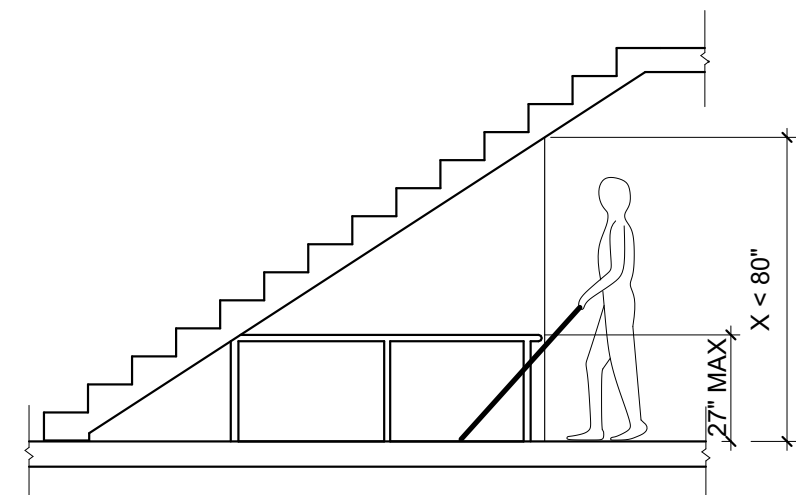
CD-500 SCALE: 1/4" = 1'-0"



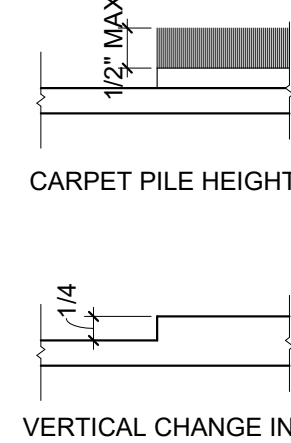
LIMITS OF PROTRUDING OBJECTS



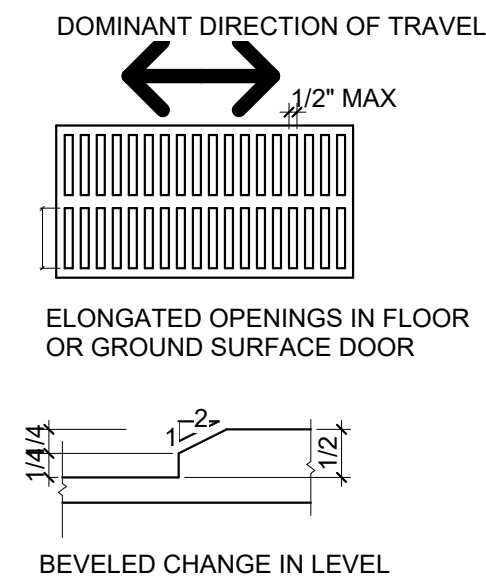
POST-MOUNTED PROTRUDING OBJECTS



VERTICAL CLEARANCE



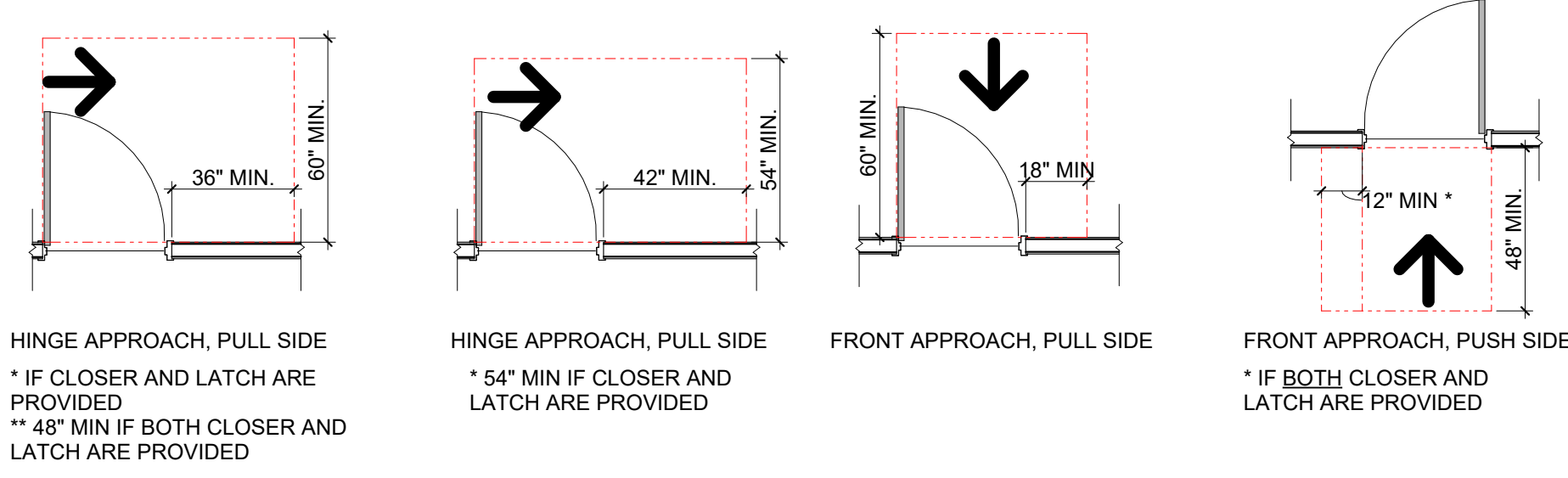
CHANGES IN FLOOR LEVEL



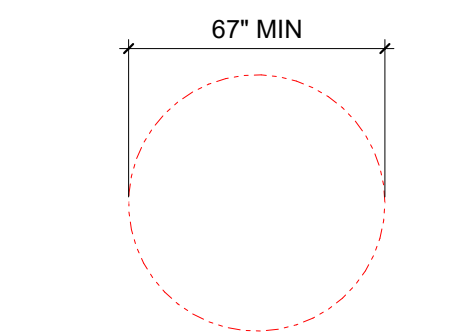
BEVELED CHANGE IN LEVEL

1 TYPICAL DOOR CLEARANCES

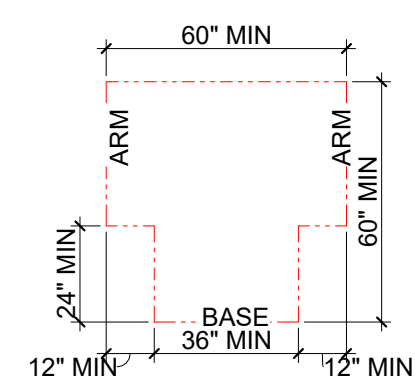
CD-500 SCALE: 1/4" = 1'-0"



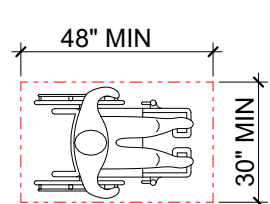
MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS



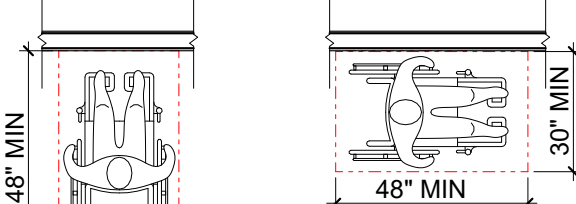
TURNING DIAMETER



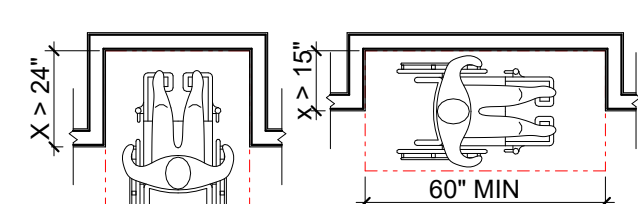
T-SHAPED TURNING SPACE



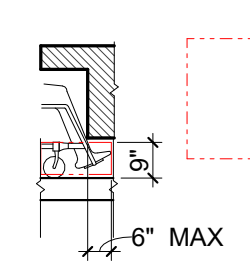
CLEAR FLOOR SPACE



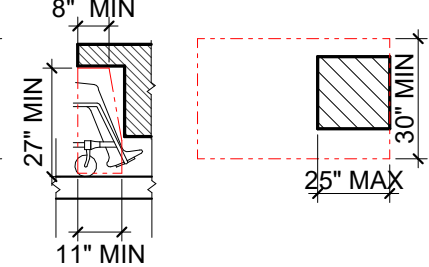
POSITION OF CLEAR FLOOR SPACE



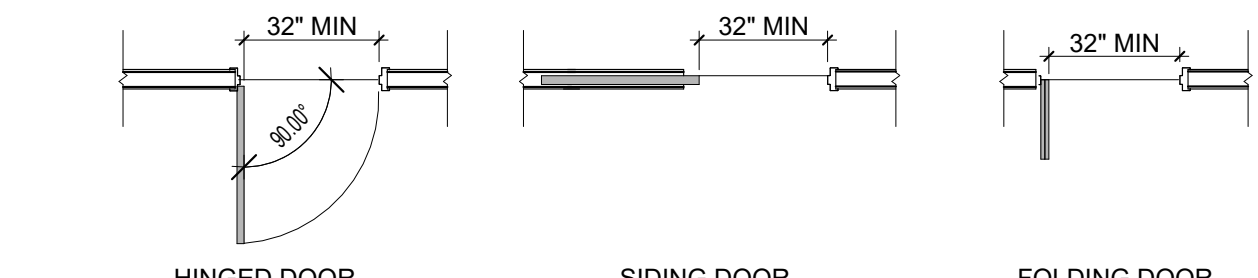
MANEUVERING CLEARANCE IN ALCOVE



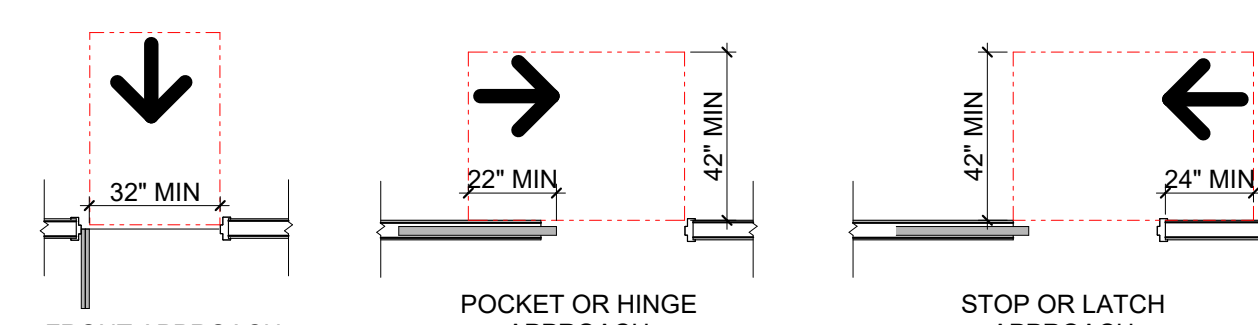
TOE CLEARANCE



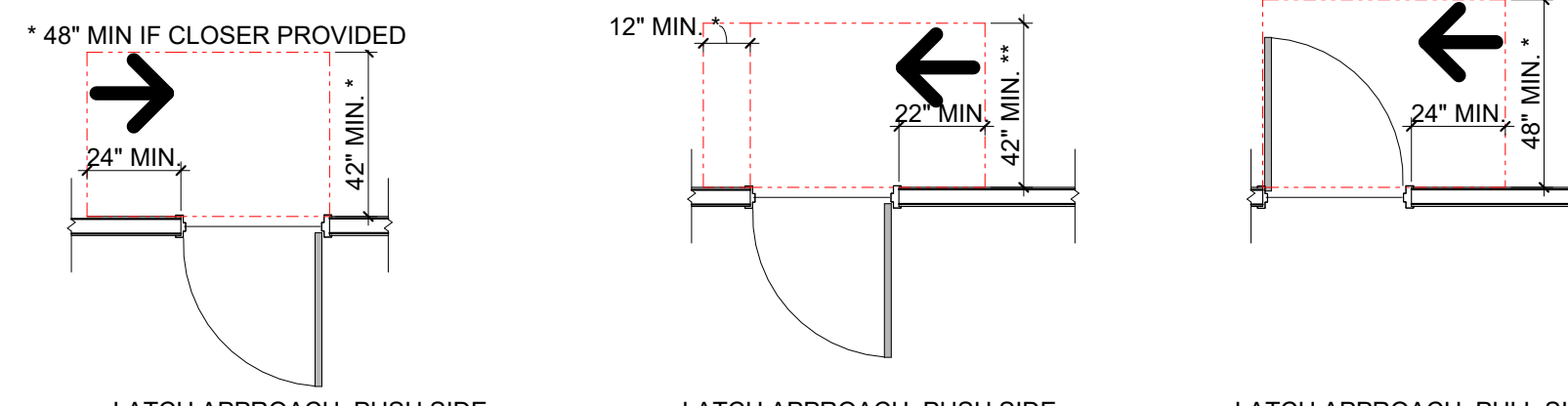
KNEE CLEARANCE



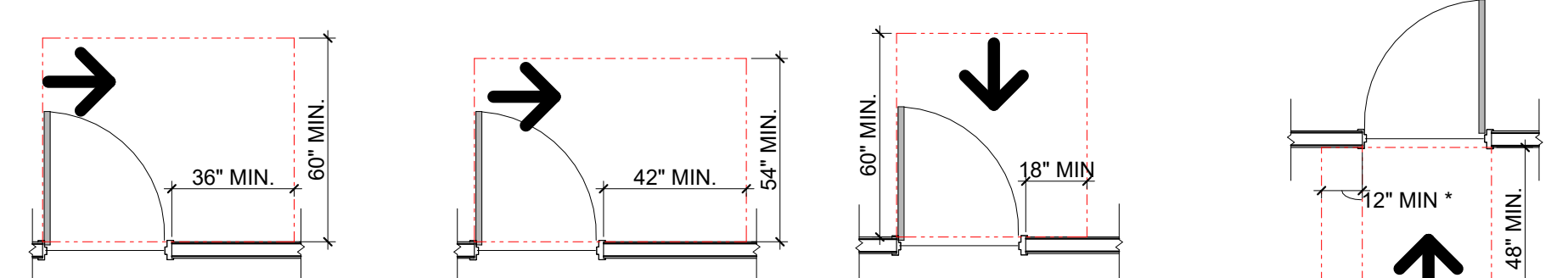
CLEAR WIDTH OF DOORWAYS



MANEUVERING CLEARANCE AT SLIDING AND FOLDING DOORS



LATCH APPROACH, PUSH SIDE



HINGE APPROACH, PULL SIDE

CD-500

TYPICAL ACCESSIBILITY DETAILS

WILLOW GRACE VETERINARY HOSPITAL

CONSTRUCTION DOCS

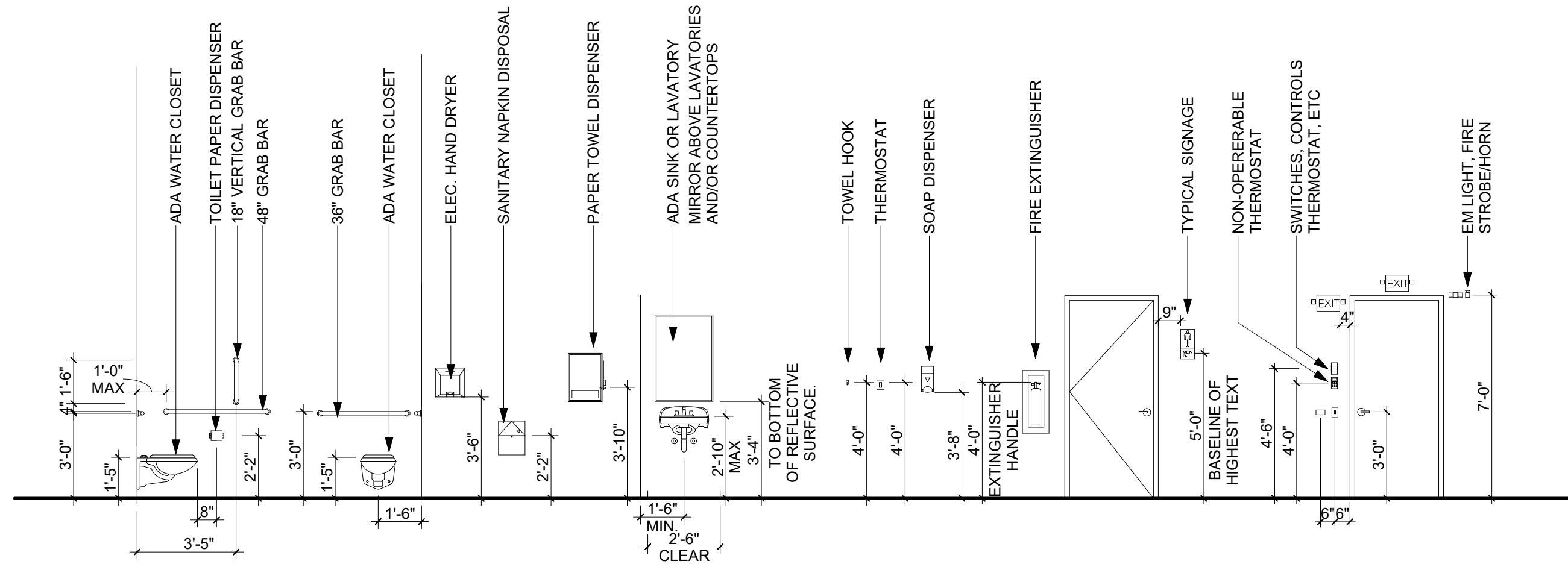
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

FMD | ARCHITECTS
ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

PRELIMINARY
NOT FOR CONSTRUCTION
MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

2 TYPICAL FIXTURE MOUNTING HEIGHTS & DETAILS

CD-500 SCALE: 1/4" = 1'-0"



GENERAL NOTES

- A VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE ARCHITECT IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
- B ALL EXISTING ITEMS TO REMAIN SHALL BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION.
- C REMOVE EXISTING CONSTRUCTION AS NOTED AND WHERE SHOWN DASHED. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION REQUIRED FOR THE INSTALLATION OF NEW WORK, AND PROTECTION OF ITEMS TO REMAIN.
- D PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DEMOLITION WORK. PATCH WITH MATCHING MATERIALS AND CONSTRUCTION UNLESS NOTED OTHERWISE.
- E REFER TO MECHANICAL/ELECTRICAL PLANS AND SPECIFICATIONS FOR REMOVAL/RELOCATION/ROUTING OF EXISTING UTILITIES. COORDINATE WITH NEW WORK.
- F VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED BEFORE STARTING SELECTIVE DEMOLITION OPERATIONS.

CODED NOTES

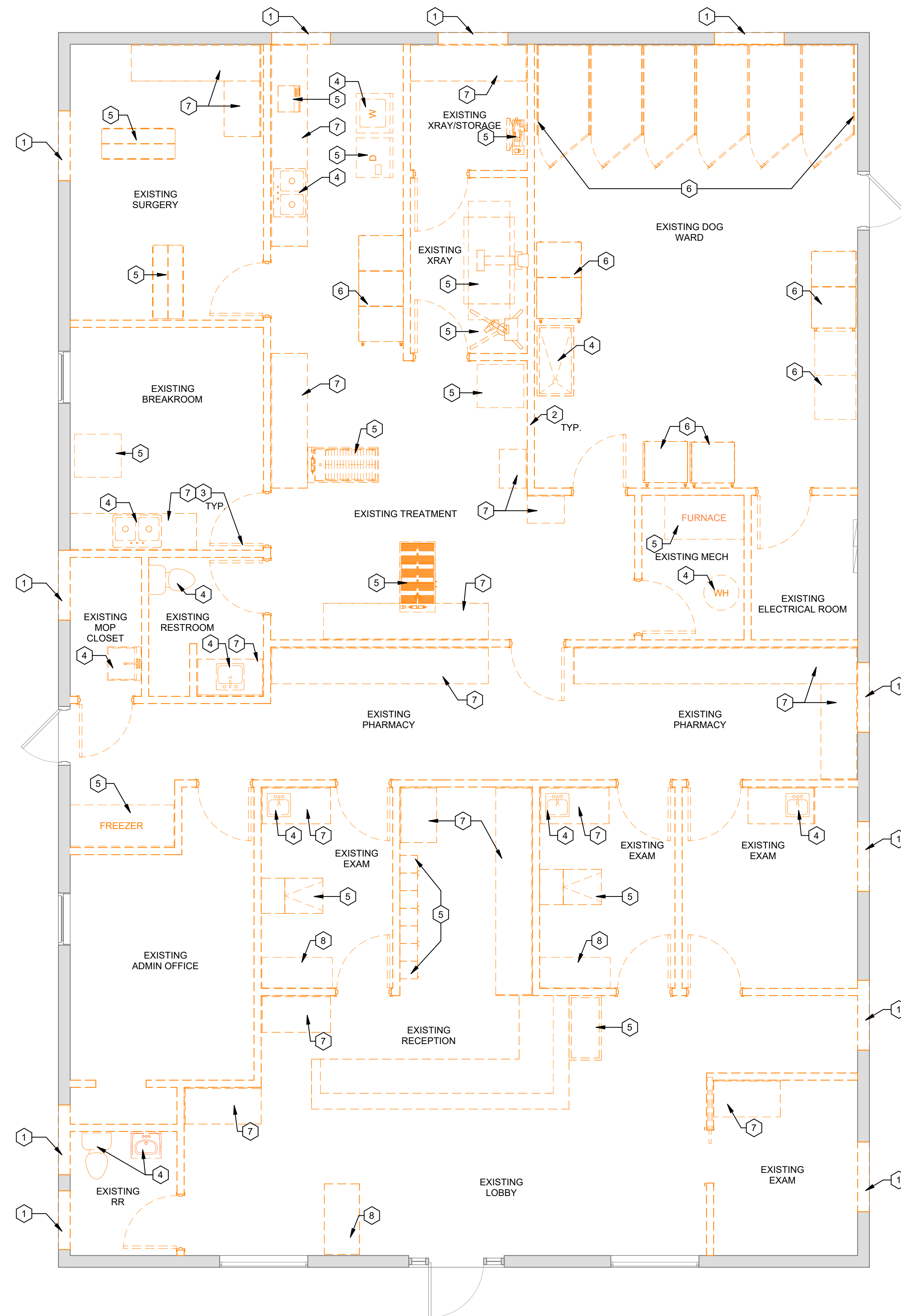
- 1 DEMO PORTION OF WALL FOR NEW OPENING.
- 2 DEMO EXISTING WALL, FILL, PATCH AND PREP FLOOR AS
REQUIRED TO ACCEPT NEW FLOOR FINISH.
- 3 REMOVE EXISTING DOOR(S), FRAME, AND ASSOCIATED
HARDWARE
- 4 DEMO EXISTING PLUMBING FIXTURE(S) AND ASSOCIATED
PLUMBING. CAP EXISTING PLUMBING THAT WILL NOT BE
REUSED IN THE NEW CONSTRUCTION.
- 5 REMOVE EXISTING EQUIPMENT. COORDINATE WITH
OWNER ON REUSE OR DISPOSAL.
- 6 REMOVE EXISTING CAGE BANK. COORDINATE WITH
OWNER ON REUSE OR DISPOSAL.
- 7 REMOVE EXISTING CASEWORK. PREP FLOOR AS
REQUIRED TO RECEIVE NEW FLOORING.
- 8 REMOVE EXISTING FURNITURE. PREP FLOOR AS
REQUIRED TO RECEIVE NEW FLOORING.

SQUARE FOOTAGE

- **FIRST FLOOR** **3,220 GSF**

DEMO LEGEND

 EXISTING WALL
 DEMOLISHED WALL
 DOOR TO BE DEMOLISHED



1 DEMO FLOOR PLAN
AD-100 SCALE: 1/4" = 1'-0"

- A VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BRING ANY DISCREPANCIES FROM THE DRAWINGS AND NOTES TO THE ARCHITECT IMMEDIATELY. MINOR CHANGES IN THE SCOPE OF THE DEMOLITION WORK SHALL NOT JUSTIFY AN ADDITIONAL COST.
- B ALL EXISTING ITEMS TO REMAIN SHALL BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION.
- C REMOVE EXISTING CONSTRUCTION AS NOTED AND WHERE SHOWN DASHED. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION REQUIRED FOR THE INSTALLATION OF NEW WORK, AND PROTECTION OF ITEMS TO REMAIN.
- D PATCH OPENINGS IN WALLS, CEILINGS AND FLOORS RESULTING FROM DEMOLITION WORK. PATCH WITH MATCHING MATERIALS AND CONSTRUCTION UNLESS NOTED OTHERWISE.
- E REFER TO MECHANICAL/ELECTRICAL PLANS AND SPECIFICATIONS FOR REMOVAL, RELOCATION/ROUTING OF EXISTING UTILITIES. COORDINATE WITH NEW WORK.
- F VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED BEFORE STARTING SELECTIVE DEMOLITION OPERATIONS.

	EXISTING WALL/ BULKHEAD TO BE REMOVED
	EXISTING WALL/ BULKHEAD TO REMAIN
	EXISTING ACT CEILING TO REMAIN
	EXISTING ACT CEILING TO BE REMOVED
	EXISTING GYPSUM CEILING TO REMAIN
	EXISTING GYPSUM CEILING TO BE REMOVED
	EXISTING LIGHT FIXTURES TO REMAIN
	EXISTING LIGHT FIXTURES TO BE REMOVED
	EXISTING CONCRETE CEILING TO REMAIN



© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

7/1/2026 11:48:50 AM



1 FIRST FLOOR PLAN
A-100 SCALE: 1/4" = 1'-0"

GENERAL NOTES

- A REFER TO A-800 FOR DOOR SCHEDULE
- B ROUGH OPENING SIZES SHOWN ARE APPROXIMATE. COORDINATE ALL ROUGH OPENING DIMENSIONS WITH ACTUAL WINDOW, DOOR, AND LOUVER MANUFACTURERS.
- C FROST SLAB TO BE INSTALLED AT ALL OUTSWINGING EXTERIOR DOORS. COORDINATE WITH STRUCTURAL DRAWINGS FOR DETAILS.
- D REFER TO STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ADDITIONAL WORK AND COORDINATE BETWEEN TRADES.
- E DIMENSIONS ARE TO FACE OF STUD/BLOCK AT NEW WALLS U.N.O. DIMENSIONS ARE TO FINISH FACE OF EXISTING WALLS. U.N.O.
- F IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT FINISH FACE OF GYPSUM BOARD ALIGNS REGARDLESS OF DISSIMILAR MATERIALS BEHIND GYPSUM BOARD.
- G PROVIDE SEALANT AT ALL DISSIMILAR MATERIALS
- H COORDINATE AND SLOPE SLAB AND FLOOR FINISH TO FLOOR DRAINS

CODED NOTES

- 1 ELECTRICAL PANELS. SEE ELECTRICAL DRAWINGS FOR
- 2 PROVIDE GYP. BD. W/ 1/16" LEAD LINING ON X-RAY SIDE OF WALL
- 3 NEW LOCKERS. REFER TO EQUIPMENT SCHEDULE.
- 4 NEW DRINKING FOUNTAIN
- 5 NEW OR RELOCATED CAGES/CRATES, BY OWNER
- 6 CHEST FREEZER, REFER TO EQUIPMENT SCHEDULE
- 7 NEW CONCRETE SLAB. REFER TO
- 7 NEW FENCING TO BE INSTALLED. COORDINATE FINAL

LEGEND

(SEE TITLE SHEET FOR COMPLETE LEGEND)

- SOUND WALL; SEE WALL SECTIONS FOR DETAILS
- SOUND WALL; SEE WALL SECTIONS FOR DETAILS
- CODED NOTE
- WALL TYPE
- WINDOW TYPE
- INTERIOR ELEVATION TAG

PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

FMD | ARCHITECTS
ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St. Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

**WILLOW GRACE VETERINARY
HOSPITAL**

10 ARTISAN DR.
SWYRNA, DE 19977

CONSTRUCTION DOCS

FLOOR PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26 | 100% CDs

A-100

5/8" GYP. BD.
BOTH SIDES

3 5/8" 20 GA METAL
STUDS @ 16" O.C.

SOUND
ATTENUATION BATT
INSULATION MAY
OCCUR, REFER TO
FLOOR PLAN FOR
REQUIREMENTS

5/8" GYP. BD.
BOTH SIDES

6" 20 GA METAL
STUDS @ 16" O.C.

SOUND
ATTENUATION BATT
INSULATION MAY
OCCUR, REFER TO
FLOOR PLAN FOR
REQUIREMENTS

WALL TYPE S6

METAL FURRING PARTITIONS

A-101 SCALE: 1" = 1'-0"



- A. PROVIDE MOISTURE RESISTANT GYP. BOARD AT ALL WET AREAS INCLUDING RESTROOMS, WASH DOWN AREAS, KITCHENS/KITCHENETTES. AND WHERE SINKS OR OTHER PLUMBING EQUIPMENT IS LOCATED.
- B. GYP. BOARD MAY TERMINATE 6" MINIMUM ABOVE FINISHED CEILINGS UNLESS NOTED OTHERWISE
- C. THICKNESS OF ALL WALL TYPES ARE NOMINAL BASED. ACTUAL THICKNESS MAY VARY BASED ON FINAL MATERIAL SELECTIONS.
- D. TYPE "X" GYP BOARD IS SPECIFIED THROUGHOUT UNLESS NOTED OTHERWISE.
- E. PROVIDE TILE BACKER BOARD AT ALL TILE LOCATIONS ON WALLS
- F. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL WALL REQUIREMENTS, INCLUDING LOCATIONS OF BEARING WALLS, SHEAR WALLS, BRACING, BLOCKING, AND ATTACHMENT DETAILS. CONTRACTOR RESPONSIBLE TO COORDINATE BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS. IF A DISCREPANCY EXISTS BETWEEN DRAWINGS, PLEASE CONTACT ARCHITECT FOR DIRECTION PRIOR TO PROCEEDING WITH THE WORK.
- G. ALL WALLS TO BE S4-D.O.U.N.O.

The diagram illustrates a cross-section of a wall partition assembly. It shows a central core material, likely gypsum, with acoustic batt insulation on either side. The assembly is held together by wall type modifiers and fire rating components. Labels with leader lines point to the following parts:

- NOMINAL WALL THICKNESS**: Points to the overall width of the partition.
- CORE MATERIAL**: Points to the central gypsum core.
- WALL TYPE MODIFIERS**: Points to the vertical studs or battens that support the partition.
- FIRE RATING**: Points to the acoustic batt insulation.
- CORE MATERIAL**: Points to the central gypsum core.
- WALL TYPE MODIFIERS**: Points to the vertical studs or battens.
- HEIGHT**: Points to the vertical dimension of the partition.
- D - FULL HEIGHT TO DECK**: Points to the top edge of the partition.
- C - 6" ABOVE CEILING**: Points to the top edge of the partition.
- P - PARTIAL HT. (4'-0" U.N.O.)**: Points to the bottom edge of the partition.
- A - ACOUSTICAL BATT**: Points to the acoustic insulation on the left side.
- L - LEAD LINED (3/32" TYP. U.N.O.)**: Points to the lead lining on the left side.
- G - FURRING WITH GYPSUM**: Points to the furring on the left side.
- FIRE RATING**: Points to the acoustic batt insulation on the right side.
- D - NO RATING (TYP. U.N.O.)**: Points to the top edge of the partition.
- 1 - ONE HOUR RATING**: Points to the top edge of the partition.
- 2 - TWO HOUR RATING**: Points to the top edge of the partition.
- NOTE: 6'-0" BATT INSULATION TO EXTEND 4'-0" EACH SIDE OF PARTITION WITH ACOUSTICAL BATT**: Points to the acoustic batt insulation on the left side.



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

**WILLOW GRACE VETERINARY
HOSPITAL**

10 ARTISAN DR.
SMYRNA, DE 19777

CONSTRUCTION DOCS

**FLOOR PLAN
DIMENSION PLAN**

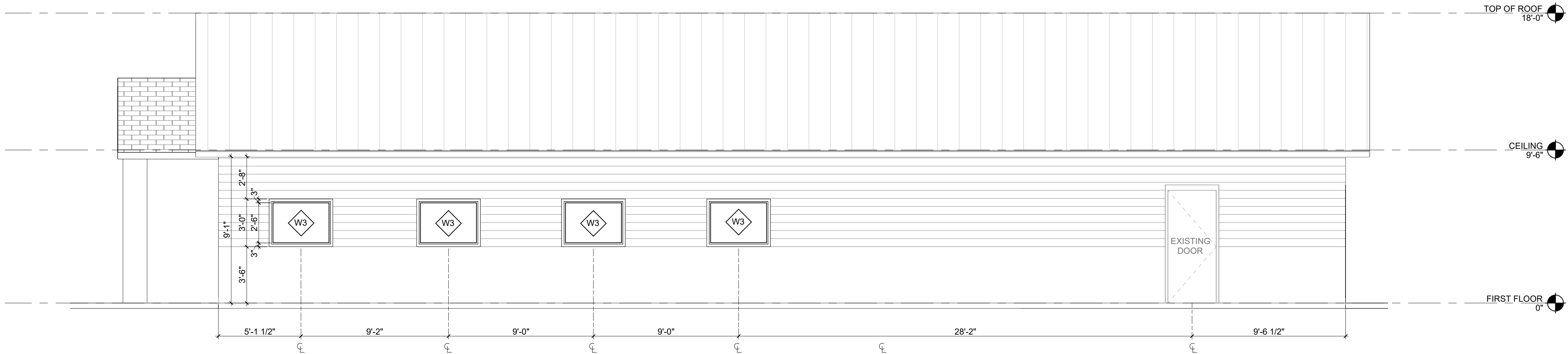
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

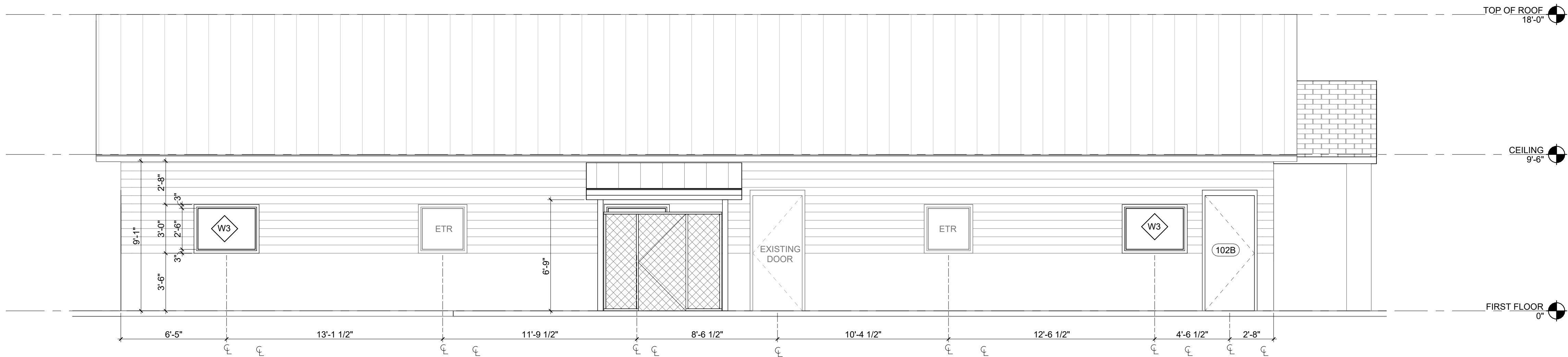
[illegible]

A-101

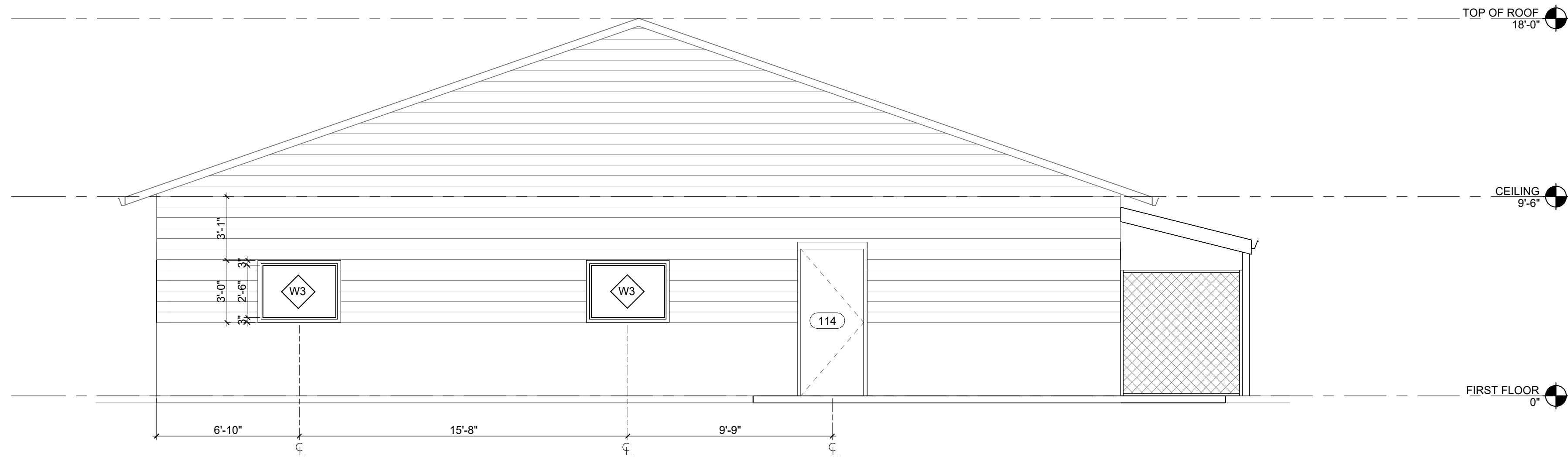
7/1/2026 11:48:51 AM



3 SOUTH ELEVATION
A-200 SCALE: 1/4" = 1'-0"



2 NORTH ELEVATION
A-200 SCALE: 1/4" = 1'-0"



1 WEST ELEVATION
A-200 SCALE: 1/4" = 1'-0"

GENERAL NOTES

- A ALL GUTTERS AND DOWNSPOUTS TO BE ALUMINUM. GUTTER SIZING TO BE 4"x8" K-STYLE. DOWNSPOUT SIZING TO BE 3"x4" RECTANGULAR.
- B COORDINATE DOWNSPOUT LOCATIONS WITH ELEVATION.
- C SLOPE ALL GUTTERS 1/16" PER FOOT.

CODED NOTES

- 1 TEMPLATE NOTE A-200 CODED NOTE. USED (0-FMD) 0.06 CODED NOTES FOR REF.
- 1 TEMPLATE NOTE A-200 CODED NOTE. USED (0-FMD) 0.06 CODED NOTES FOR REF.

MATERIAL LEGEND

- EXISTING VINYL SIDING
- EXISTING STONE
- EXISTING ASPHALT SHINGLE ROOF
- EXISTING METAL SEAM ROOF

PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

**WILLOW GRACE VETERINARY
HOSPITAL**

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

EXTERIOR ELEVATIONS

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26	100% CDs	1

A-200

GENERAL NOTES

- A ALL GUTTERS AND DOWNSPOUTS TO BE ALUMINUM. GUTTER SIZING TO BE 4"x8" K-STYLE. DOWNSPOUT SIZING TO BE 3"x4" RECTANGULAR.
- B COORDINATE DOWNSPOUT LOCATIONS WITH ELEVATION.
- C SLOPE ALL GUTTERS 1/16" PER FOOT.

CODED NOTES

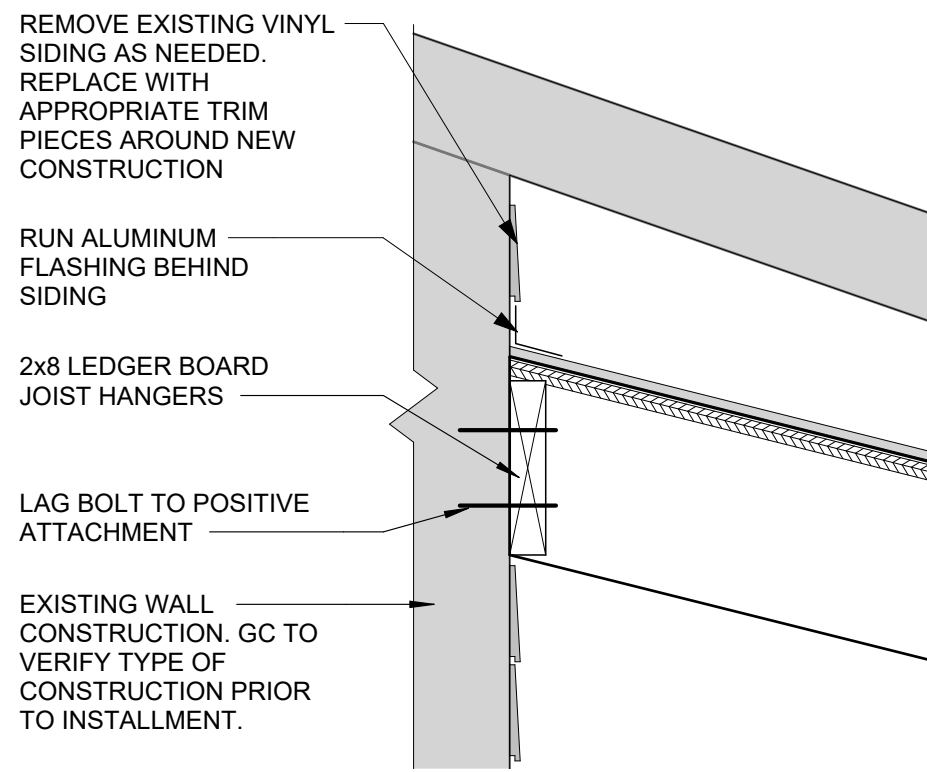
- 1 CHEST FREEZER. REFER TO EQUIPMENT SCHEDULE.
- 2 NEW FENCING. COORDINATE WITH OWNER.

PRELIMINARY
NOT FOR CONSTRUCTION

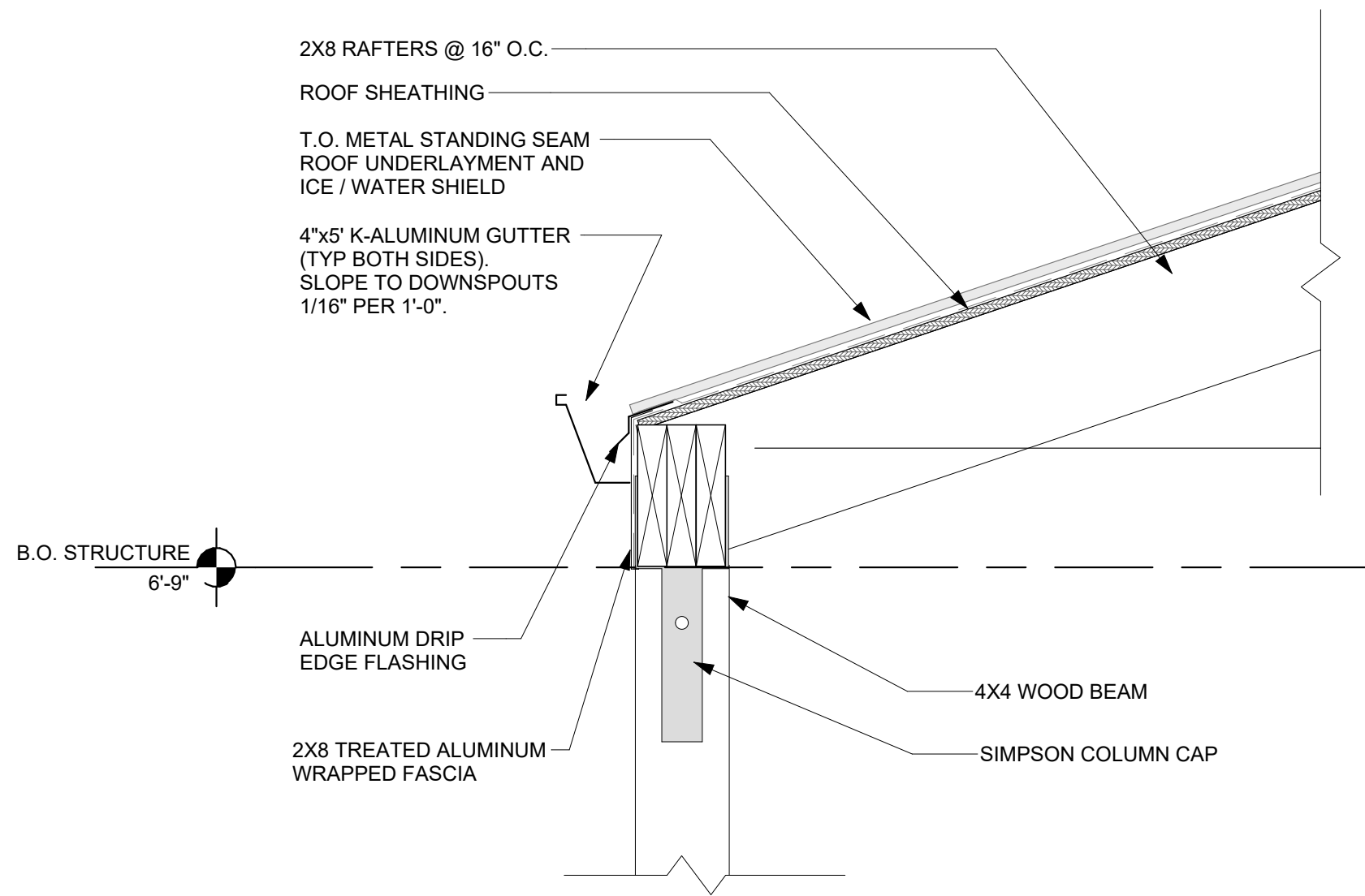
MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026



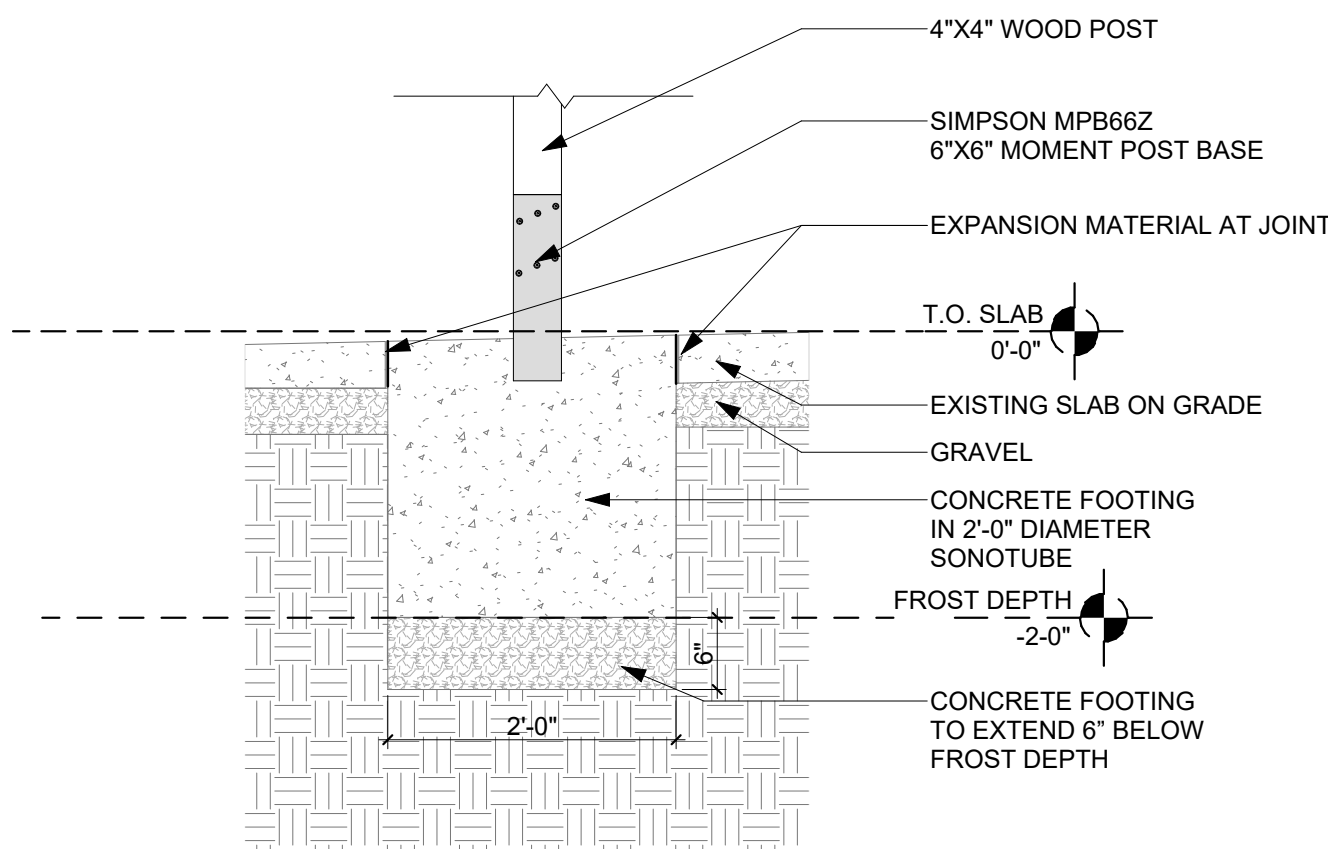
ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343



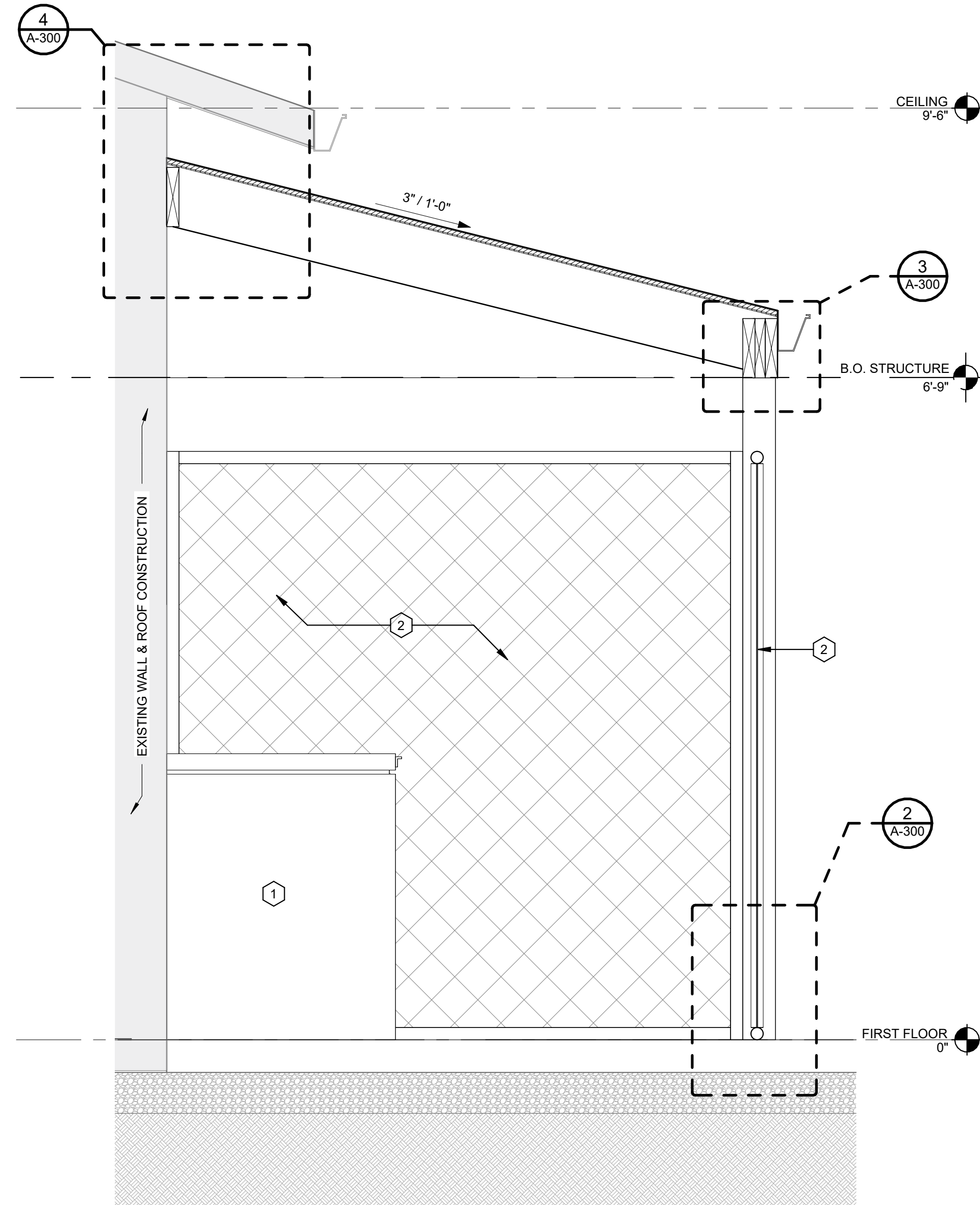
4 EXISTING WALL CONNECTION
A-300 SCALE: 1 1/2" = 1'-0"



3 EAVE DETAIL
A-300 SCALE: 1 1/2" = 1'-0"



2 COLUMN TO BASE
A-300 SCALE: 3/4" = 1'-0"



1 CHEST FREEZER ENCLOSURE
A-300 SCALE: 1" = 1'-0"

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

BUILDING SECTIONS

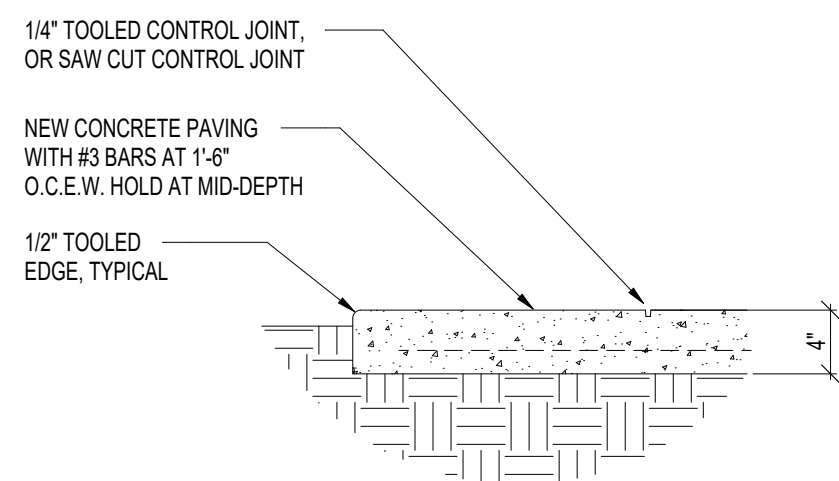
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

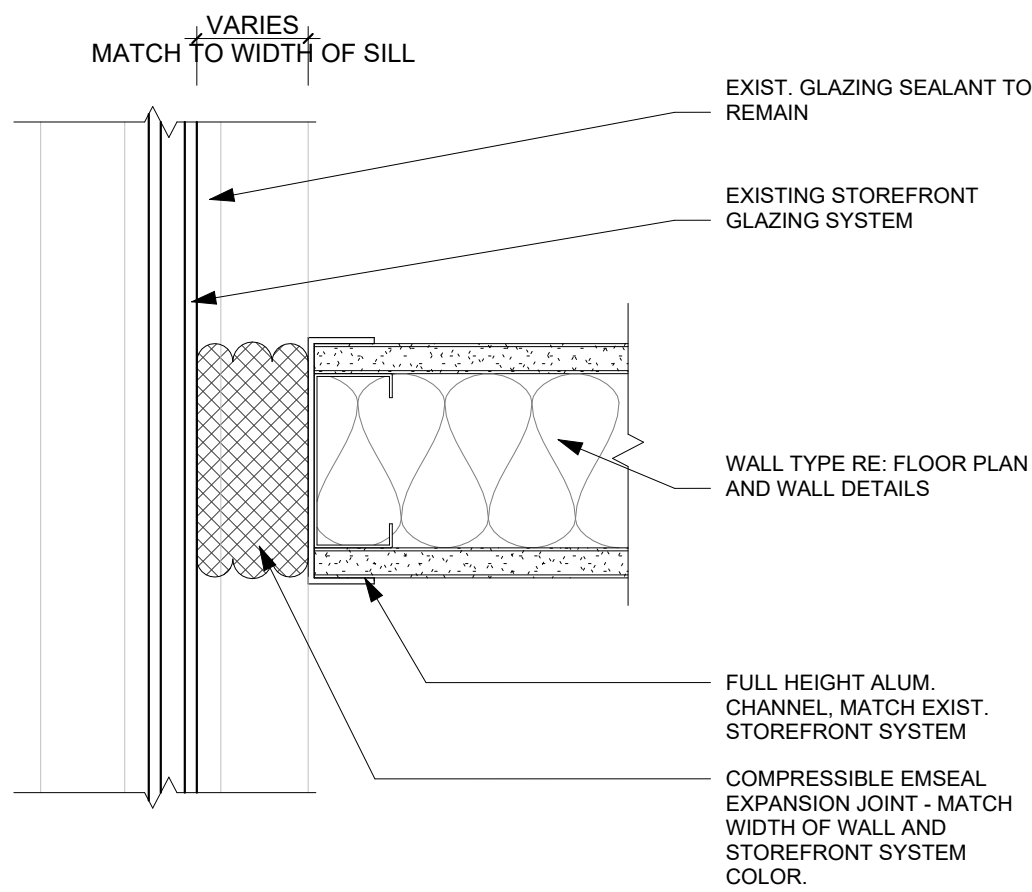
07/02/26 100% CDs

A-300

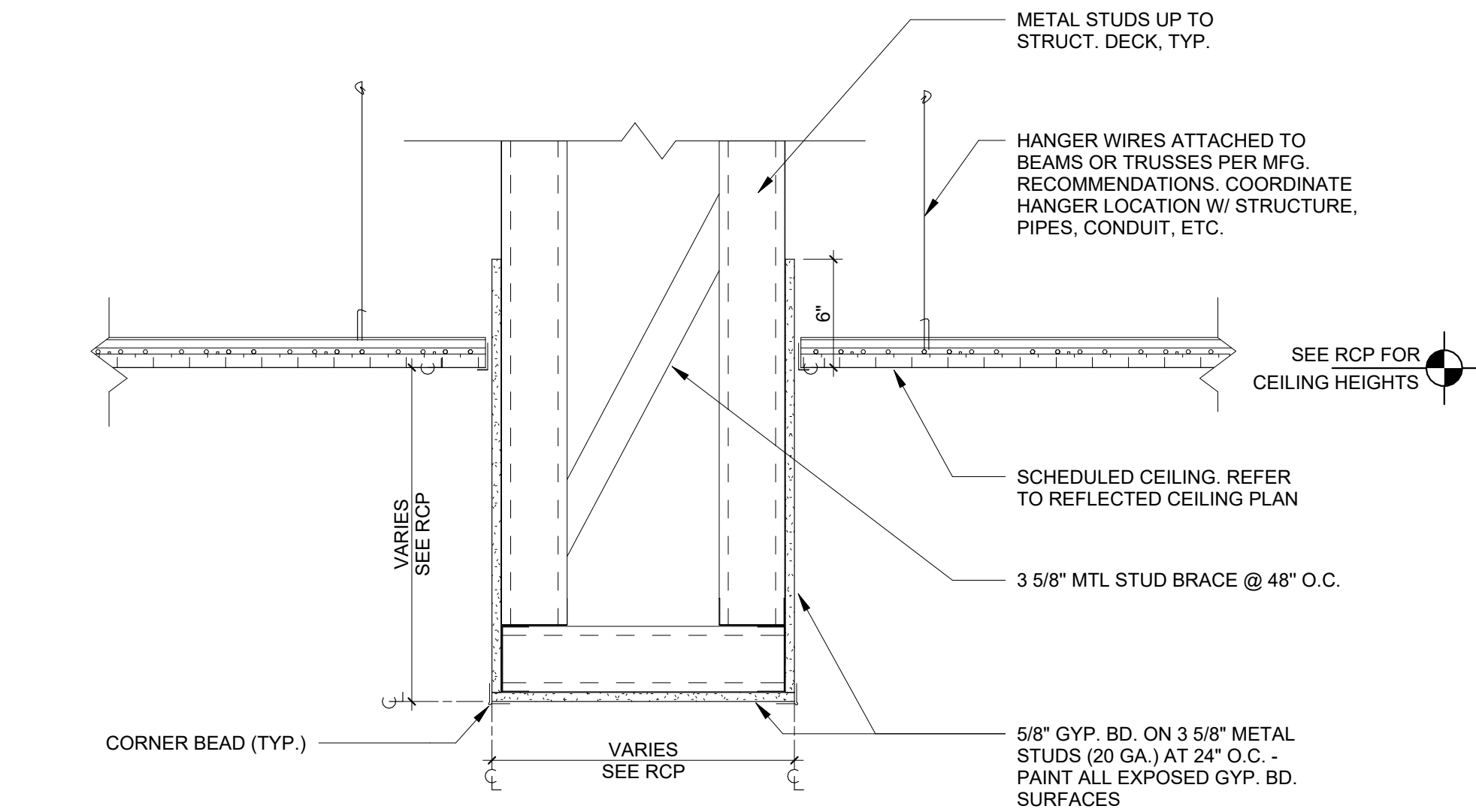
7/1/2026 11:48:52 AM



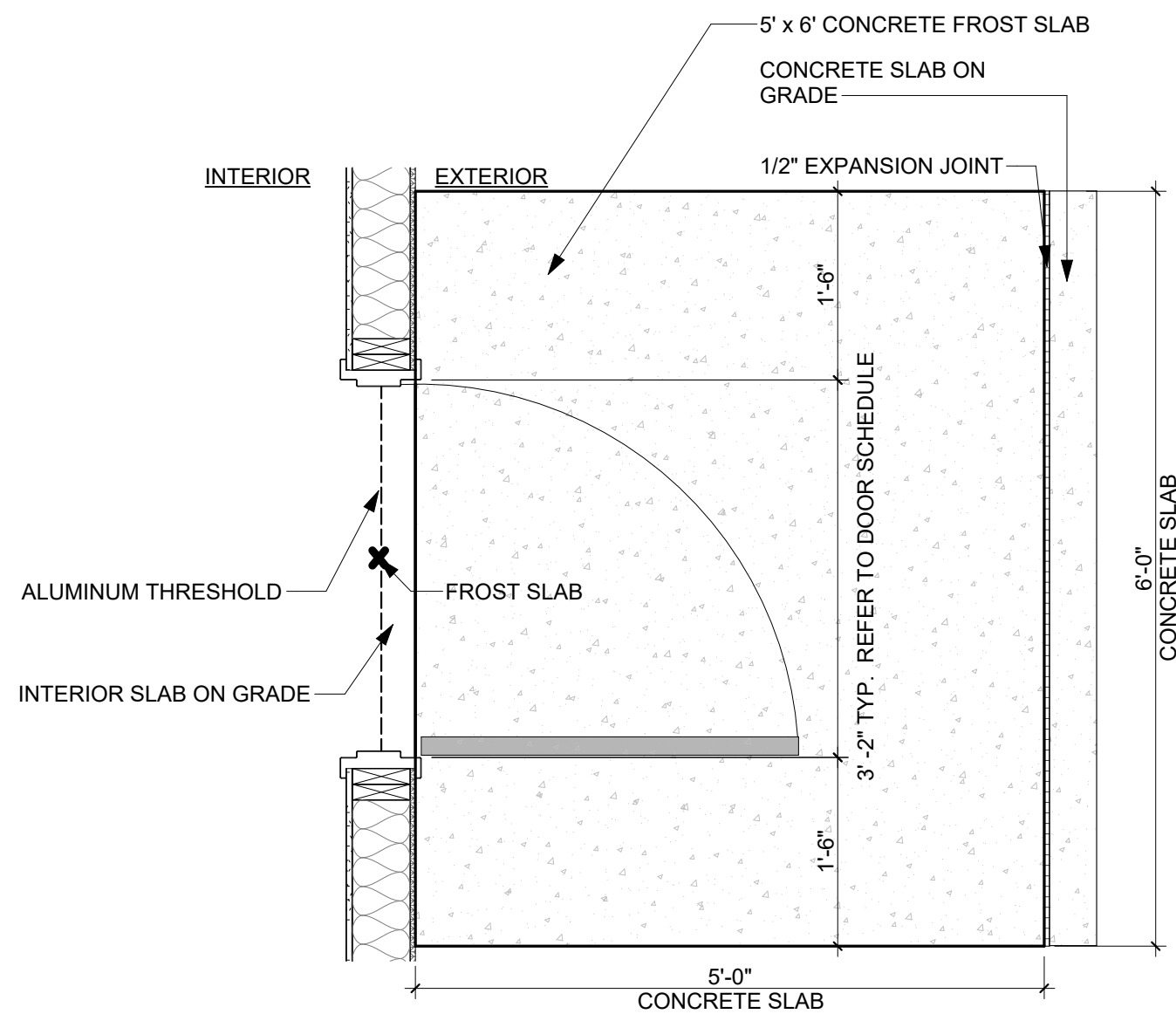
3 TYPICAL CONCRETE WALK DETAIL
A-500 SCALE: 1" = 1'-0"



2 WINDOW AT STOREFRONT GLAZING
A-500 SCALE: 3" = 1'-0"



1 CEILING DETAIL - GYP. BD. SOFFIT
A-500 SCALE: 1 1/2" = 1'-0"



4 TYPICAL FROST SLAB DETAIL
A-500 SCALE: 3/4" = 1'-0"

MISC. DETAILS

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

A-500

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19777

CONSTRUCTION DOCS

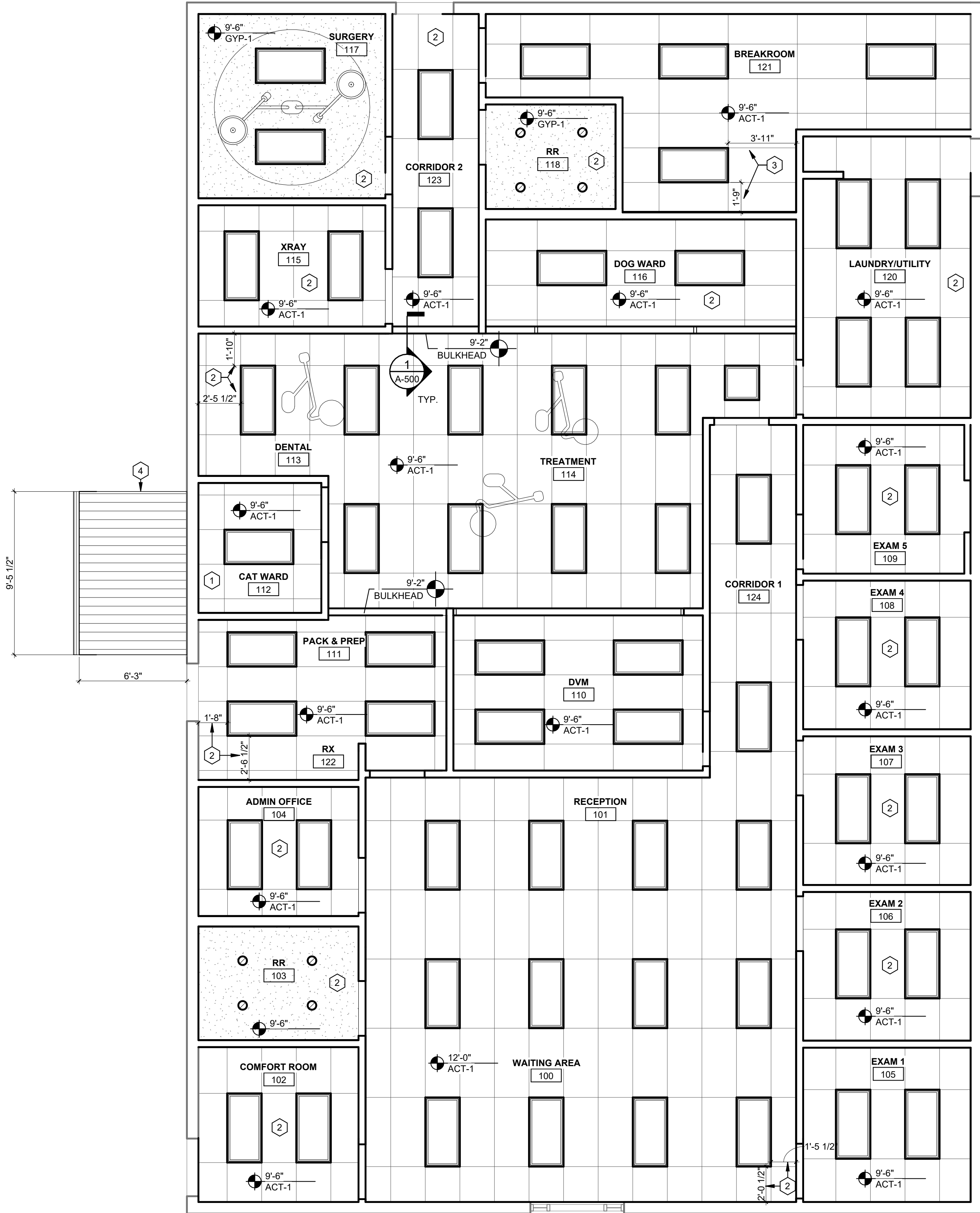
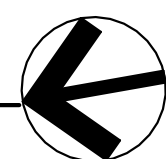


ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St. Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

PRELIMINARY
NOT FOR CONSTRUCTION
MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

7/1/2026 11:48:53 AM

1 FIRST FLOOR REFLECTED CEILING PLAN
A-600 SCALE: 1/4" = 1'-0"



GENERAL NOTES

- A ALL FIXTURES SHOWN ARE FOR QUANTITY AND LOCATION ONLY. REFER TO ENGINEERING DRAWINGS FOR TECHNICAL INFORMATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS PROMPTLY.
- B REFLECTED CEILING PLAN IS TO IDENTIFY CEILING TYPES, DESIGN, AND LIGHTING LAYOUT ONLY. THE CONTRACTOR SHALL COMPARE THE REFLECTED CEILING PLAN WITH THE ELECTRICAL AND MECHANICAL DRAWINGS FOR DETAILED INFORMATION ON LIGHT FIXTURES, DIFFUSERS, RETURNS, CEILING MOUNTED DEVICES, ETC. IF DISCREPANCY EXISTS VERIFY WITH ARCHITECT.
- C ALL CEILING DIMENSIONS ARE FROM FINISH FACE OF WALL U.N.O.
- D ANY CEILING FIXTURES (SPEAKERS, SPRINKLERS, ALARMS, DOWNLIGHTS, ETC.) SHALL BE CENTERED IN CEILING TILES. UNLESS NOTED OTHERWISE. SIMILAR FEATURES SHALL ALIGN. SUBMIT DRAWINGS INDICATING LOCATIONS PRIOR TO INSTALLATION.
- E ALL GYPSUM BOARD CEILINGS SHALL BE PAINTED (CP-1) U.N.O.
- F CENTER ALL CEILING GRID AND TILE SYSTEMS IN ROOM U.N.O.
- G ALL RECESSED FIXTURES MAY VARY SLIGHTLY IF FALLING DIRECTLY UNDER BOTTOM CHORD OF TRUSS.
- H CONTRACTOR TO PROVIDE A LAYER OF OSB AND APPROPRIATE BRACING WITHIN GYPSUM BOARD SOFFITS ABOVE ALL TREATMENT TABLES, SURGICAL ROOMS, ISOLATION ROOMS & WHERE SURGICAL LIGHTS ARE LOCATED - REFER TO DETAILS.
- I ALL CEILING MOUNTED ACCESS DOORS (PANELS) TO BE FLUSH WITH EXPOSED FLANGES. FACTORY PRIMED 0.064 INCH STEEL SHEET FOR DOOR AND FRAME WITH CONCEALED HINGE AND SCREWDRIVER OPERATED CAM-LATCH. APPROVED MANUFACTURERS: ACUDOR, KARP, OR EQUAL. SIZE: 24 INCH x 24 INCH U.N.O.

CODED NOTES

- 1 PROVIDE CEILING HOL DOWN CLIPS ON CEILING TILES IN THIS ROOM
- 2 CENTER GRIDS AND FIXTURE IN ROOM AS SHOWN
- 3 START CEILING GRID AS NOTED HERE
- 4 NEW FREEZER ENCLOSURE ROOF COVERING

LEGEND

- WALL MOUNTED LIGHTED EXIT SIGN, ON BATTERY BACKUP
- CEILING MOUNTED LIGHTED EXIT SIGN, ON BATTERY BACKUP
- 24X48 LAY-IN LIGHT FIXTURE (SHADED = EMERGENCY) - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
- 24X24 LAY-IN LIGHT FIXTURE (SHADED = EMERGENCY) - REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
- RECESSED CAN LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
- SUSPENDED LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
- SUPPLY AIR DIFFUSER
- RETURN AIR GRILLE
- ATTIC ACCESS PANEL. REFER TO DETAIL FOR ADDITIONAL INFORMATION
- BULKHEAD. REFER TO PLAN FOR REFLECTED CEILING PLAN FOR ELEVATION
- GYPSUM BOARD ACCESS PANEL. REFER TO DETAIL FOR ADDITIONAL INFORMATION

CEILING FINISH LEGEND

- ACT-1
SIZE: 24" X 48" X 5/8"
COLOR: WHITE
STYLE: SQUARE
BASIS OF DESIGN: ARMSTRONG ULTIMA
- ACT-2
SIZE: 24" X 48" X 5/8"
COLOR: WHITE
STYLE: SQUARE
BASIS OF DESIGN: ARMSTRONG CLEAN ROOM FL
- GYP-1
5/8" GYPSUM BOARD CEILING
PROVIDE MAXIMUM DEFLECTION: L/360
BASIS OF DESIGN: USG DRYWALL

PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026



ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWYRNA, DE 19977

CONSTRUCTION DOCS

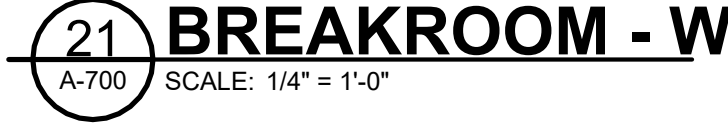
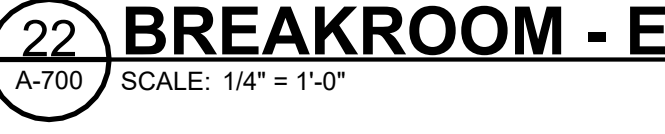
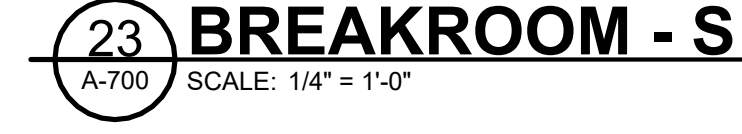
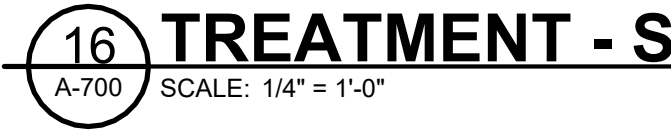
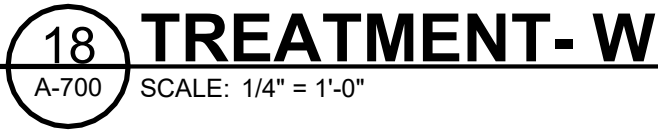
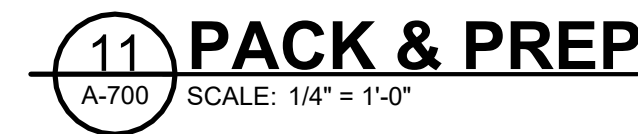
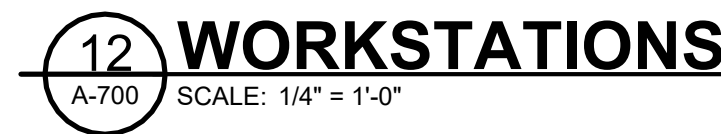
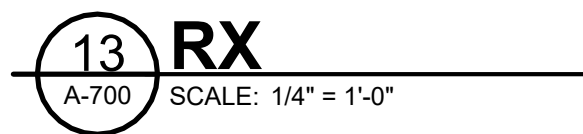
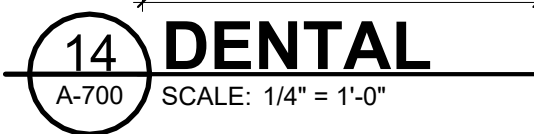
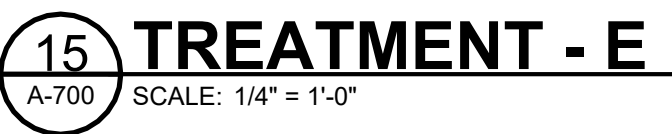
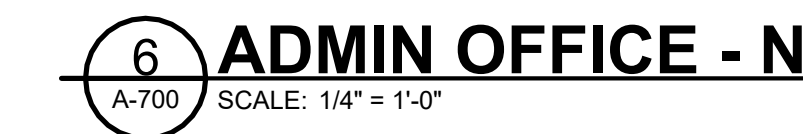
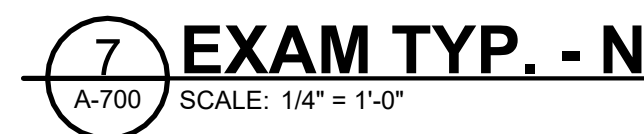
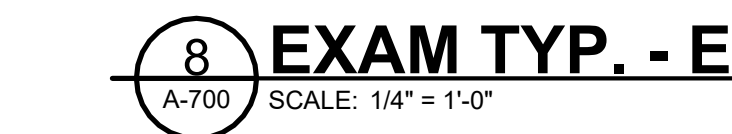
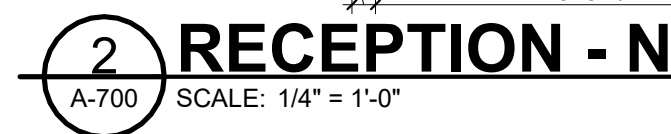
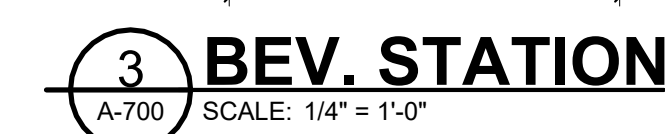
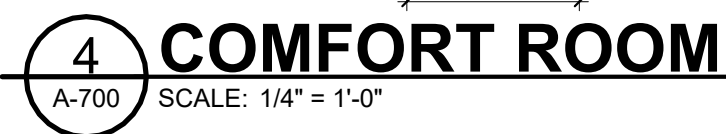
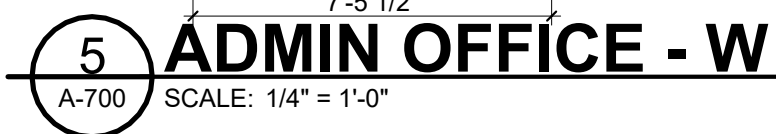
REFLECTED CEILING
PLANS

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26 | 100% CDs

A-600



A	PROVIDE GROMMET HOLES AS REQUIRED BY OWNER FOR EQUIPMENT. GENERAL CONTRACTOR TO VERIFY IN FIELD EXACT LOCATION WITH OWNER BEFORE CUTTING GROMMET HOLES.
B	ALL COUNTERTOPS TO BE PROVIDED BY G.C. U.N.O.
C	REFER TO FINISH SCHEDULE FOR ALL FINISH INFORMATION.
D	PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING WITHIN GYPSUM BOARD PARTITIONS FOR WALL MOUNTED AND RECESSED ACCESSORIES, FIXTURES AND EQUIPMENT
E	ALL DIMS PROVIDED ARE FROM FINISHED FACE OF WALL U.N.O.
F	ALL CASEWORK TO HAVE WHITE MELAMINE INTERIORS U.N.O.
G	ALL NEW CASEWORK TO BE PLASTIC LAMINATE WITH HARDWOOD BACKING U.N.O. ALL PRODUCTS TO BE CONSTRUCTED WITH AWI STANDARDS OF CONSTRUCTION.
H	ALL CASEWORK DOORS AND DRAWERS WITH LOCKS TO BE KEYS ALIKE PER ROOM AND GRAND MASTER KEY TO OWNER
I	PROVIDE ALL NECESSARY COUNTER SUPPORTS TYPICAL AT ALL COUNTERTOPS EVEN IF NOT SHOWN IN ELEVATION. SPACING @ 36" MAX. PROVIDE CLEATS AT ALL COUNTERTOPS NOT SUPPORTED BY CABINetry - PAINT TO MATCH ADJACENT WALL. BRACKETS TO BE COORD. W/ OWNER EQUIPMENT, EMPLOYEE PLACEMENT, AND POWER/ DATA. COORDINATE LAMINATE COLOR SELECTION WITH ARCHITECT/OWNER. SUPPORT BRACKETS TO BE PROPERLY IDENTIFIED AND DIMENSIONED IN PROVIDED SHOP DRAWINGS.
J	PROVIDE 3 MM PVC EDGE BAND ON ALL DOORS & DRAWERS TO MATCH MATERIAL.
K	AT ALL EXTERIOR WINDOWS, CONTRACTOR IS TO PROVIDE A PLASTIC LAMINATE WINDOW SILL.
L	ALL OUTSIDE COUNTERTOP CORNERS TO HAVE 2" RADIUS.
M	ALL UPPER CABINETS TO BE 14" DEEP U.N.O.
N	REFERENCE EQUIPMENT PLAN AND SCHEDULE FOR SPECIALITY EQUIPMENT AND APPLIANCES.
O	ALL PLUMBING UNDERNEATH ADA LAVS SHALL RECIEVE PIPE PROTECTION.
P	ALL CASEWORK TO HAVE 1" MINIMUM FILLER PANEL BETWEEN CASEWORK AND WALL.
Q	WRAP PIPES PER ADA REQUIREMENTS.
R	ALL COUNTER DEPTHS TO BE 2'-1" U.N.O.

- 1 EXAM TABLE
- 2 WET TABLE
- 3 HEAVY DUTY METAL SUPPORT BRACKET, MAX 48"
SPACING, SEE GENERAL NOTE K ABOVE.
- 4 SCRUB SINK
- 5 WATER HEATER
- 6 REFRIGERATOR
- 7 PLASTIC LAMINATE END PANEL &/OR BACK PANEL TO
MATCH ADJACENT CASEWORK
- 8 GC TO INSTALL PRIVACY FILL ON SLIDING DOOR BELOW
COUNTER HEIGHT

Diagram illustrating the components of a door tag:

- 101**: DOOR NUMBER
- W**: WINDOW TYPE
- WALL FINISH TAG**: WALL FINISH TAG
- FINISH TYPE**: FINISH TYPE
- FINISH DESIGNATION**: FINISH DESIGNATION
- FINISH ACCENT TAG**: FINISH ACCENT TAG

INTERIOR ELEVATIONS

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

CONSTRUCTION DOCS

JOB NUMBER: 26-1482

07/02/26	100% CDs
----------	----------

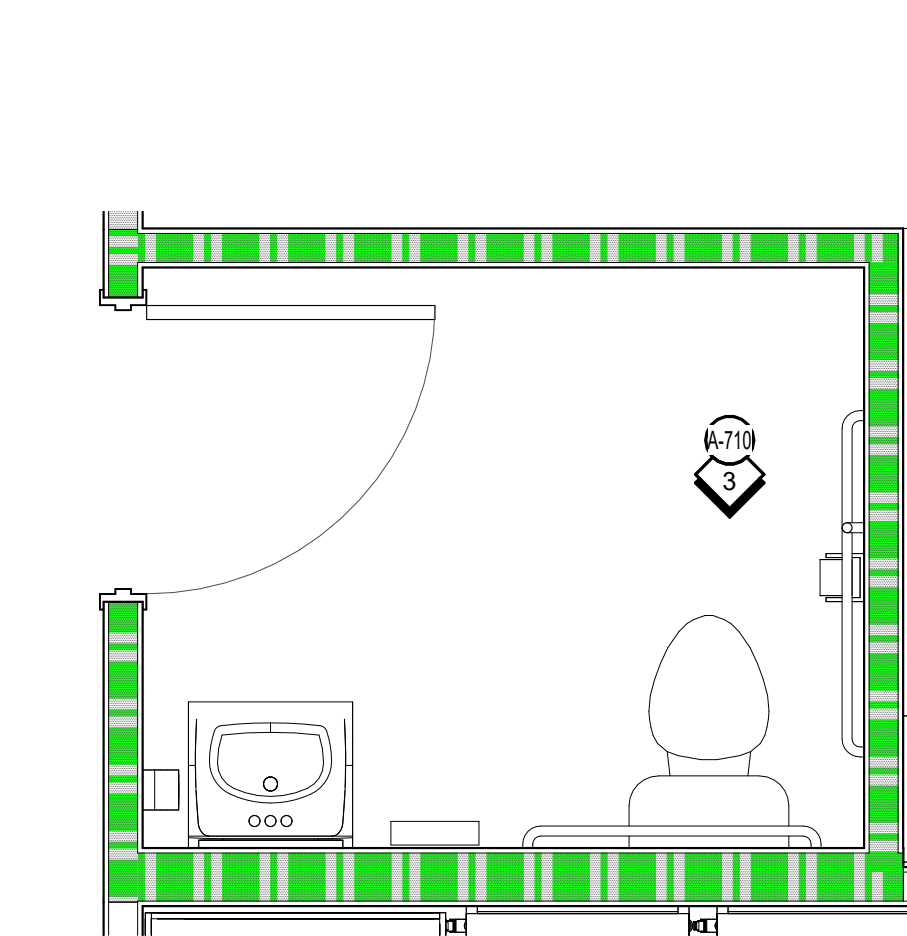
A-700

GENERIC NOTES

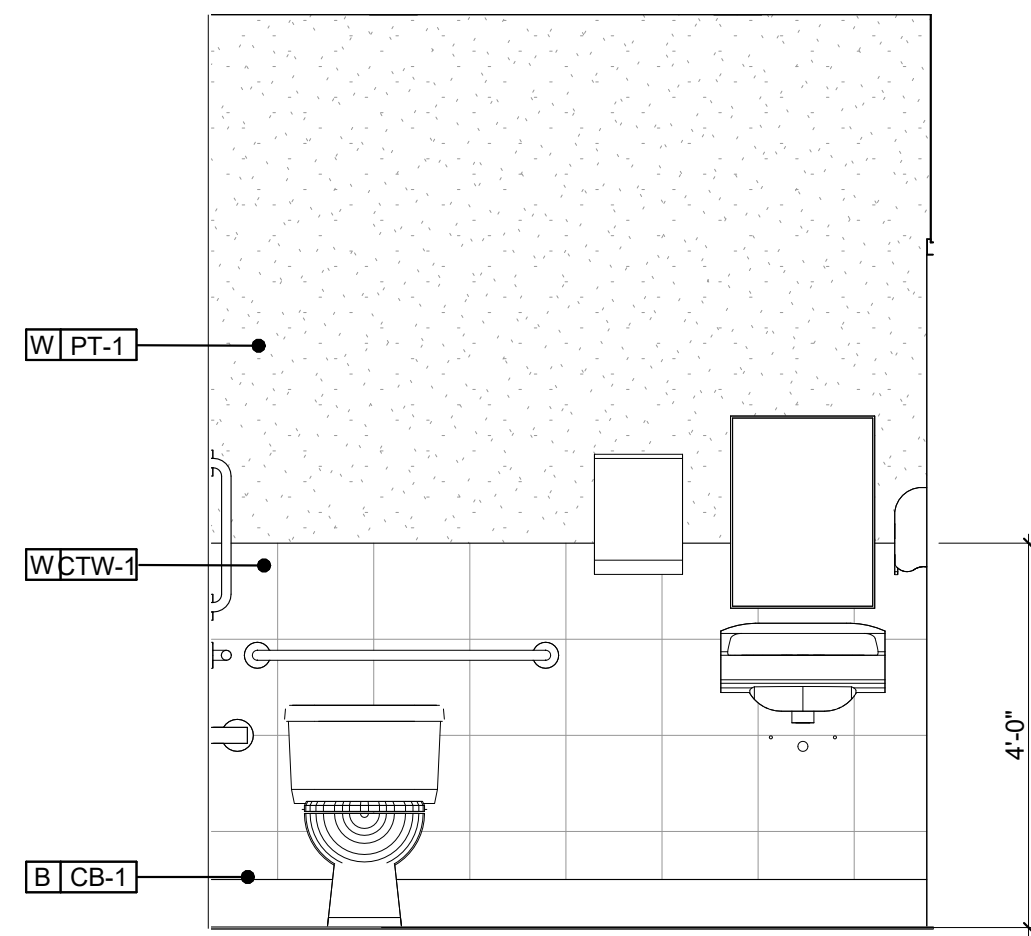
- | | |
|---|--|
| A | PROVIDE GROMMET HOLES AS REQUIRED BY OWNER FOR EQUIPMENT. GENERAL CONTRACTOR TO VERIFY IN FIELD EXACT LOCATION WITH OWNER BEFORE CUTTING GROMMET HOLES. |
| B | ALL COUNTERTOPS TO BE PROVIDED BY G.C. U.N.O. |
| C | REFER TO FINISH SCHEDULE FOR ALL FINISH INFORMATION. |
| D | PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING WITHIN GYPSUM BOARD PARTITIONS FOR WALL MOUNTED AND RECESSED ACCESSORIES, FIXTURES AND EQUIPMENT. |
| E | ALL DIMS PROVIDED ARE FROM FINISHED FACE OF WALL U.N.O. |
| F | CASEWORK TO HAVE WHITE MELAMINE INTERIORS U.N.O. |
| G | ALL NEW CASEWORK TO BE PLASTIC LAMINATE WITH HARDWOOD BACKING U.N.O. ALL PRODUCTS TO BE CONSTRUCTED WITH AWI STANDARDS OF CONSTRUCTION. |
| H | CASEWORK DOORS AND DRAWERS WITH LOCKS TO BE KEYS ALIKE PER ROOM AND GRAND MASTER KEY TO OWNER |
| I | PROVIDE ALL NECESSARY COUNTER SUPPORTS TYPICAL AT ALL COUNTERTOPS EVEN IF NOT SHOWN IN ELEVATION, SPACING @ 36" MAX. PROVIDE CLEATS AT ALL COUNTERTOPS NOT SUPPORTED BY CABINetry - PAINT TO MATCH ADJACENT WALL. BRACKETS TO BE COORD. W/ OWNER EQUIPMENT, EMPLOYEE PLACEMENT, AND POWER/ DATA. COORDINATE LAMINATE COLOR SELECTION WITH ARCHITECT/OWNER. SUPPORT BRACKETS TO BE PROPERLY IDENTIFIED AND DIMENSIONED IN PROVIDED SHOP DRAWINGS. |
| J | PROVIDE 3 MM PVC EDGE BAND ON ALL DOORS & DRAWERS TO MATCH MATERIAL. |
| K | AT ALL EXTERIOR WINDOWS, CONTRACTOR IS TO PROVIDE A PLASTIC LAMINATE WINDOW SILL. |
| L | ALL OUTSIDE COUNTERTOP CORNERS TO HAVE 2" RADIUS. |
| M | ALL UPPER CABINETS TO BE 14" DEEP U.N.O. |
| N | REFERENCE EQUIPMENT PLAN AND SCHEDULE FOR SPECIALITY EQUIPMENT AND APPLIANCES. |
| O | ALL PLUMBING UNDERNEATH ADA LAVS SHALL RECIEVE PIPE PROTECTION. |
| P | ALL CASEWORK TO HAVE 1" MINIMUM FILLER PANEL BETWEEN CASEWORK AND WALL. |
| Q | WRAP PIPES PER ADA REQUIREMENTS. |
| R | ALL COUNTER DEPTHS TO BE 2'-1" U.N.O. |

CODED NOTES

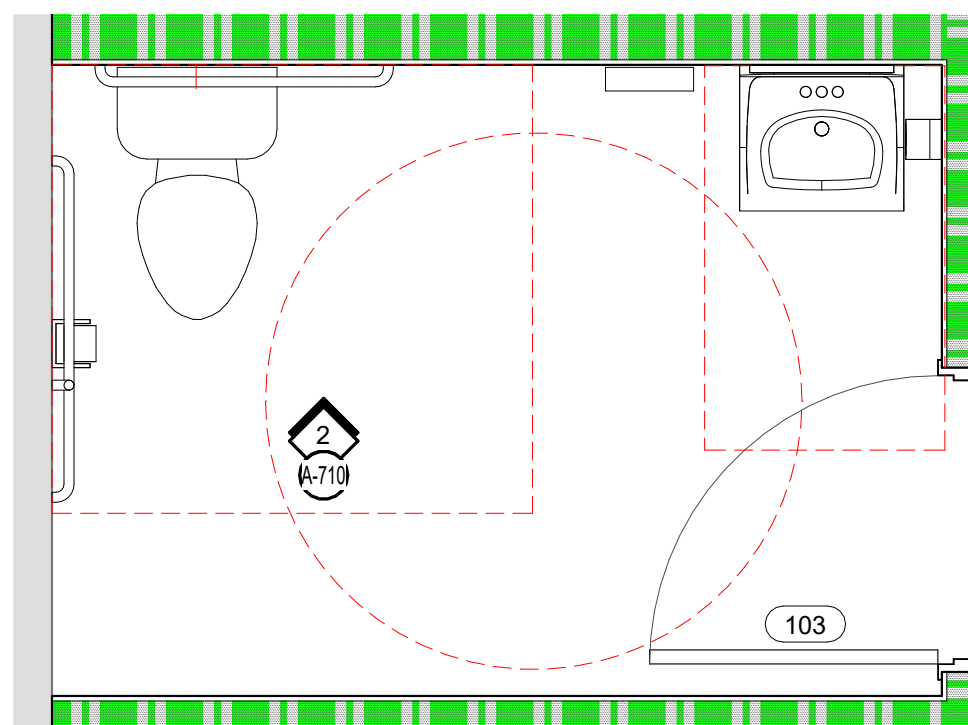
- | | |
|---|-----------------------------|
|  | DOOR TAG, SEE SHEET A/800 |
|  | WINDOW TAG, SEE SHEET A/800 |
|  | BASE MATERIAL TAG |
|  | WALL MATERIAL TAG |
|  | CASEWORK MATERIAL TAG |
|  | CODED NOTE |



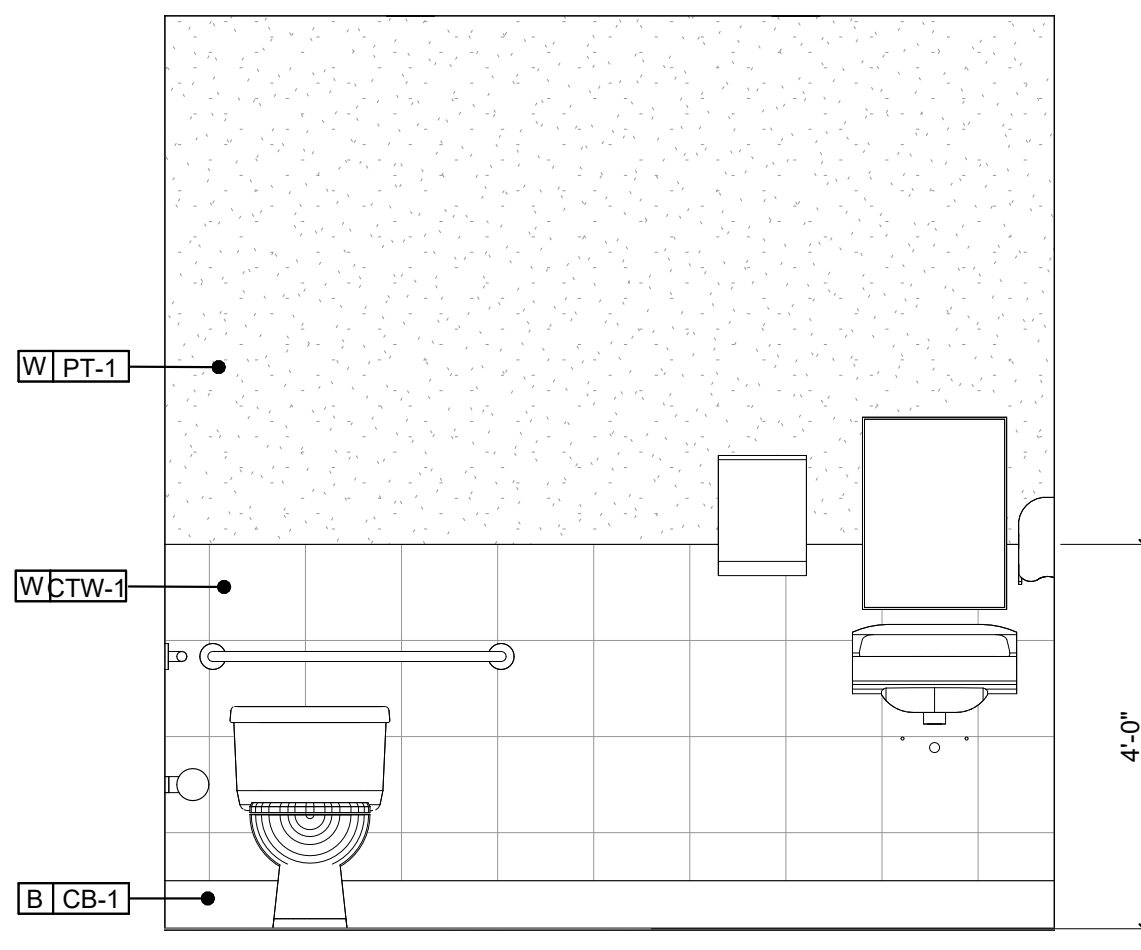
4 RR-118 ENLARGED PLAN
A-710 SCALE: 1/2" = 1'-0"



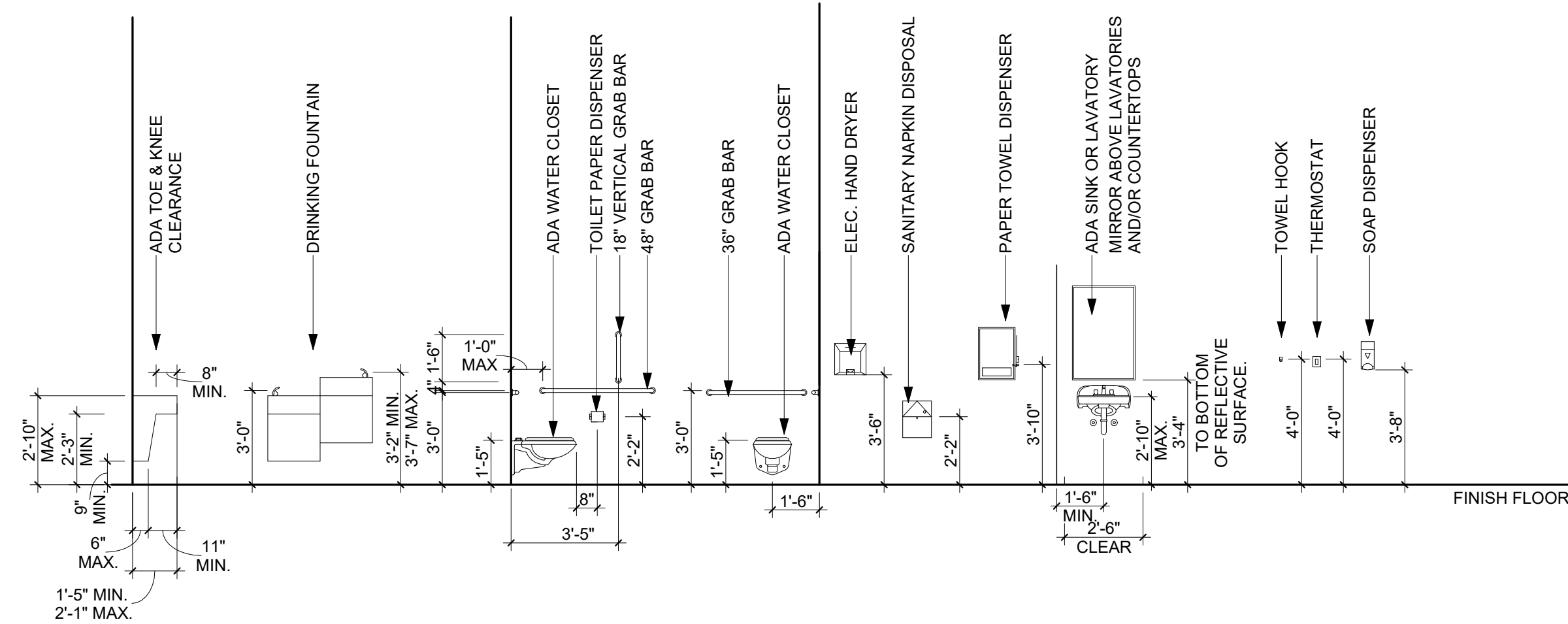
3 RR 118
A-710 SCALE: 1/2" = 1'-0"



5 RR-103 ENLARGED PLAN
A-710 SCALE: 1/2" = 1'-0"



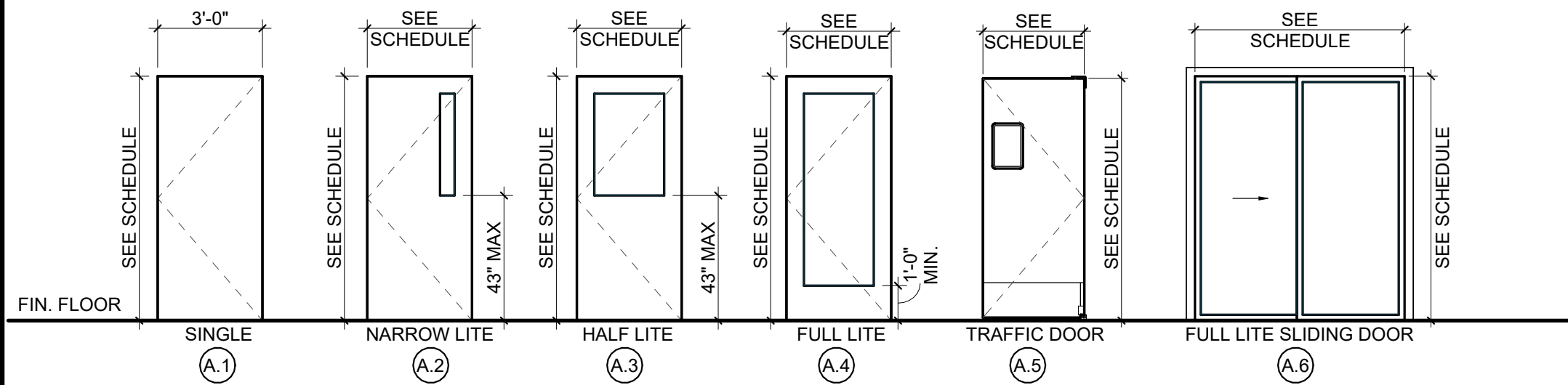
2 RR 103
A-710 SCALE: 1/2" = 1'-0"



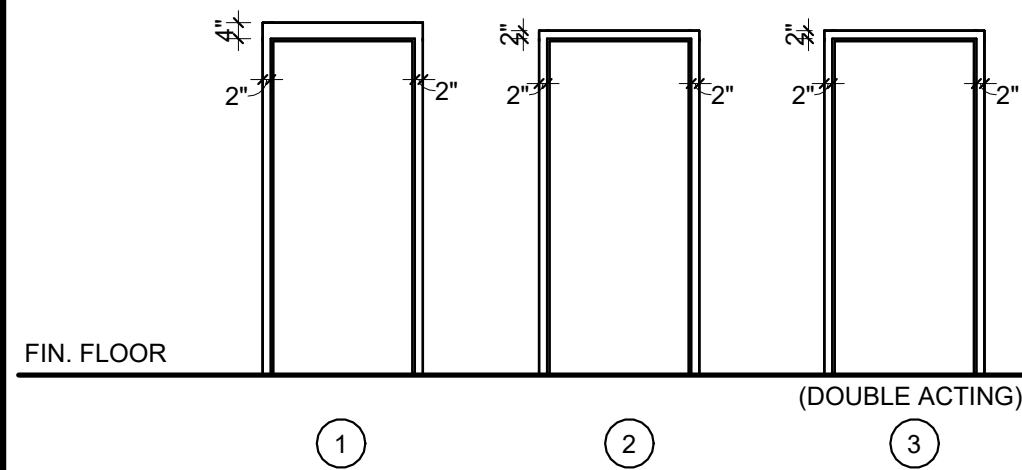
1 TYPICAL FIXTURE MOUNTING HEIGHTS

DOOR TYPES

LITE DIMS/LOCATION VARY BASED ON SCHEDULED DOOR HEIGHT AND WIDTH.
REFER TO DOOR MANUFACTURERS SPECIFICATIONS FOR DETAILS



DOOR FRAME TYPES

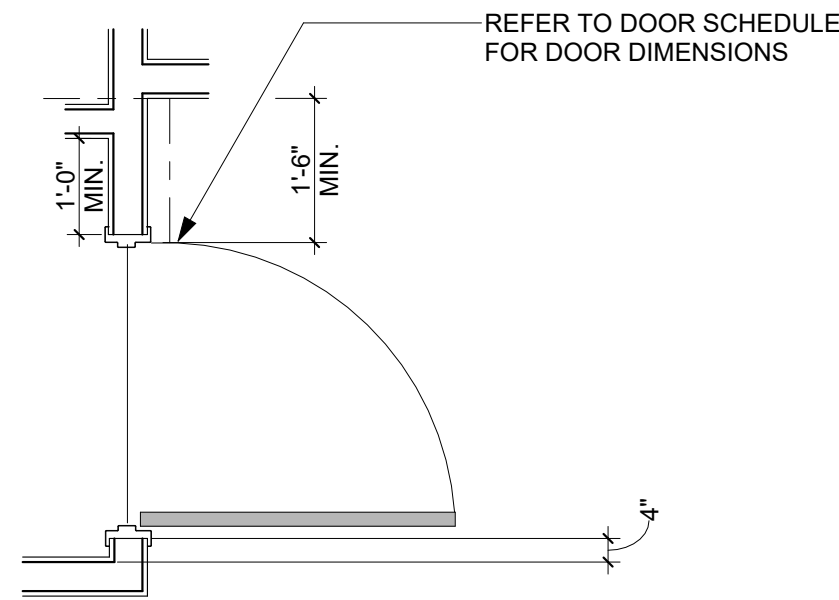


DOOR NOTES

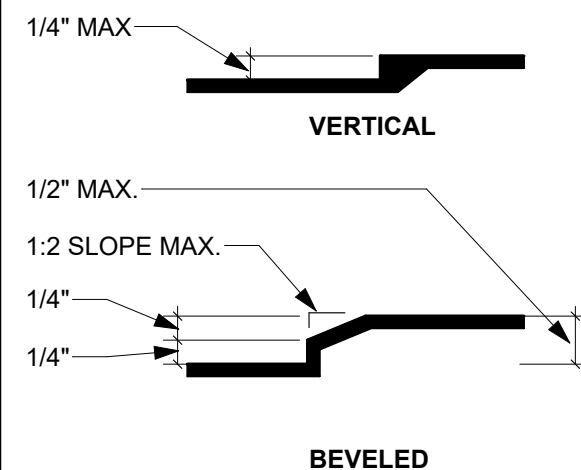
1. PROVIDE TRANSITION STRIP AT ANY/ ALL DISSIMILAR MATERIALS
2. INSULATE ALL EXTERIOR DOOR FRAMES. REFER TO PLANS FOR LOCATIONS
3. ALL EXTERIOR DOORS TO RECEIVE FULL WEATHER-STRIP PACKAGE AT HEAD AND JAMBS. PROVIDE DOOR SWEEP AT SILL & DRIP EDGE. PROVIDED BY DOOR MANUFACTURER.
4. ALL HOLLOW METAL DOOR FRAMES SHALL BE EQUIPPED WITH RUBBER DOOR SILENCERS. (3) PER DOOR.
5. PROVIDE BITUMINOUS BARRIER AT ALL DOOR HEADS WHERE DISSIMILAR METALS MEET.
6. PROVIDE SEALANT AROUND THE ENTIRE PERIMETER OF FRAME ON BOTH SIDES AT DISSIMILAR MATERIALS.
7. CONTRACTOR TO PROVIDE SOLID BLOCKING BEHIND ALL WALL STOPS.
8. COORDINATE ALL DOOR HARDWARE BETWEEN DOOR MANUFACTURER AND DOOR HARDWARE INSTALLER.
9. DOOR INSTALLER TO ADJUST ALL NEW DOORS PER ADA REQUIREMENTS.
10. ALL EGRESS DOORS SHALL BE SPECIALLY OPENABLE FROM EGRESS SIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT.
11. ALL THRESHOLDS TO MEET ADAAG REQUIREMENTS.
12. ALL SOLID CORE WOOD DOOR FINISHES TO BE SELECTED BY OWNER/ARCHITECT BEFORE PRODUCTION OF DOORS. PHYSICAL SAMPLES TO BE PROVIDED TO ARCHITECT & OWNER FOR REVIEW AND SELECTION. FOUR (4) SIDES OF DOOR TO BE STAINED AND FINISHED. ALL SOLID CORE WOOD DOORS TO BE PRE-STAINED & PRE-FINISHED. (TYP.). FINISH T.B.D.
13. ALL HOLLOW METAL FRAMES TO BE PAINTED.
14. ALL EXTERIOR DOORS WITH GLAZING TO HAVE DOUBLE PANE LOW-E GLAZING
15. ALL GLAZING IN DOORS TO BE TEMPERED SAFETY GLAZING.
16. PROVIDE 'RAM JAMB' DOOR JAMB PROTECTION DURING CONSTRUCTION.

TYP. DOOR DETAILS

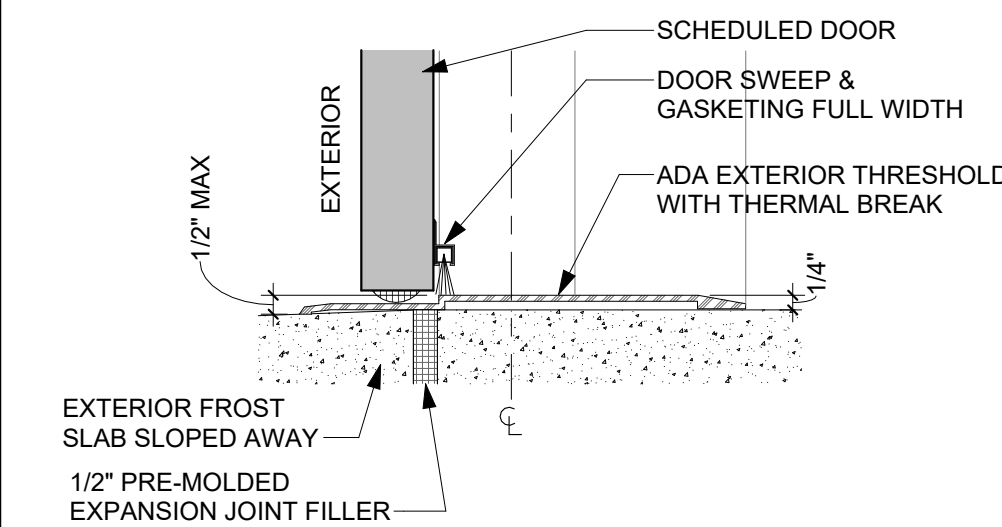
UNLESS NOTED OTHERWISE ON THE FLOORPLAN, DOORS ARE TO BE LOCATED AS INDICATED IN THIS TYPICAL DETAIL. SHOULD DISCREPANCIES ARISE IN THE FIELD, GC TO COORDINATE WITH OWNER VIA RFI FOR DIRECTION.



TYP. DOOR PLACEMENT



ADA THRESHOLD



EXTERIOR THRESHOLD

DOOR SCHEDULE

FF/PF - PREFINISHED
HM - HOLLOW METAL

ST - DOOR STAIN
PT - PAINTED

ALUM - ALUMINUM
FGL - FIBERGLASS

SCWD - SOLID CORE WOOD
ANOD - ANODIZED

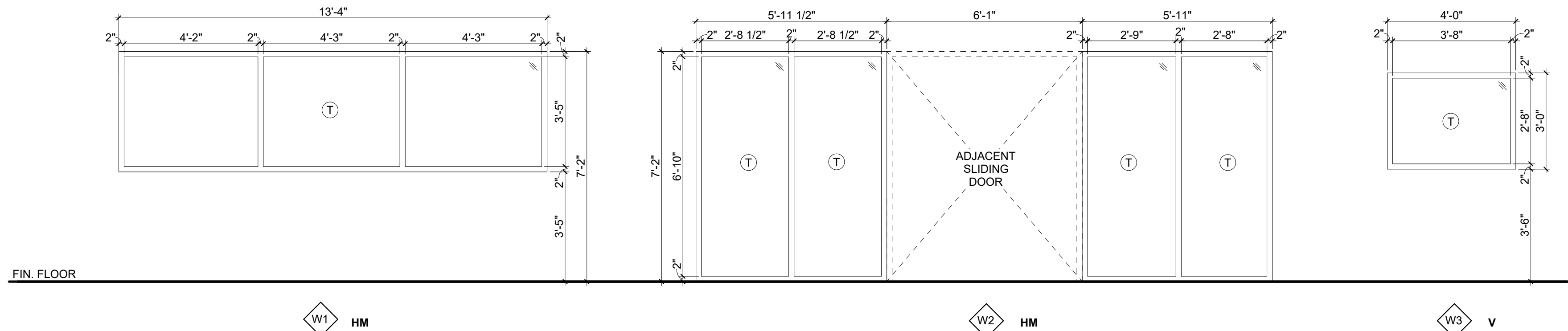
WD - WOOD

"●" = REQUIRED
 "-" = NOT APPLICABLE

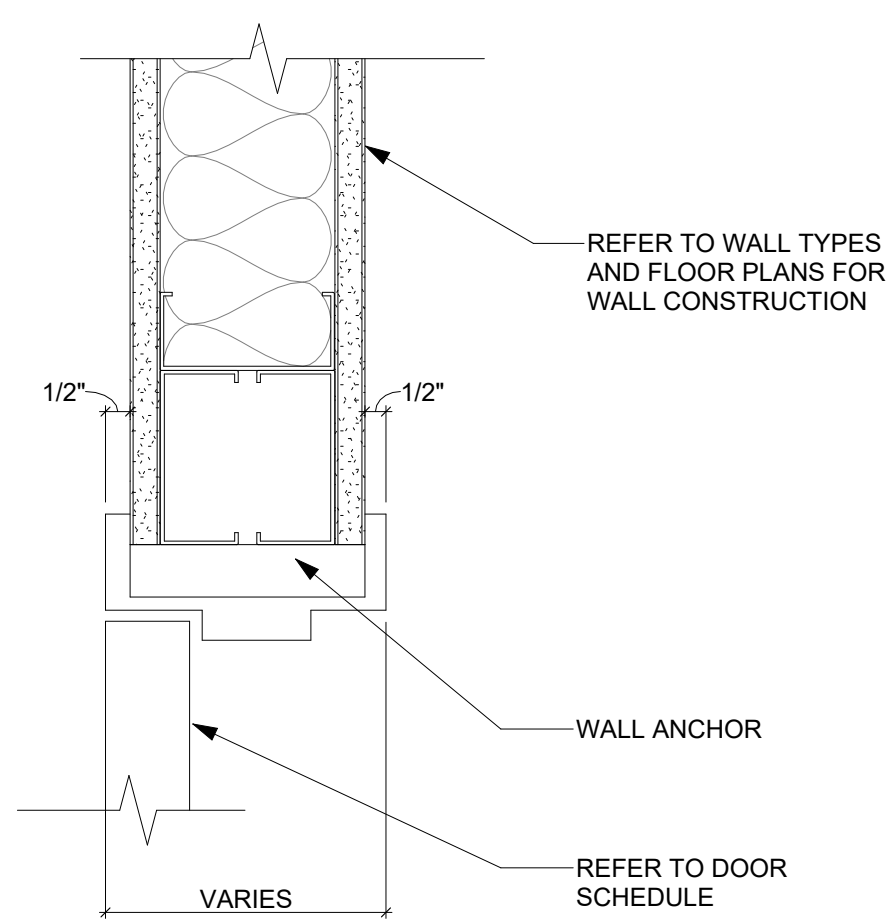
[illegible]

WINDOW SCHEDULE

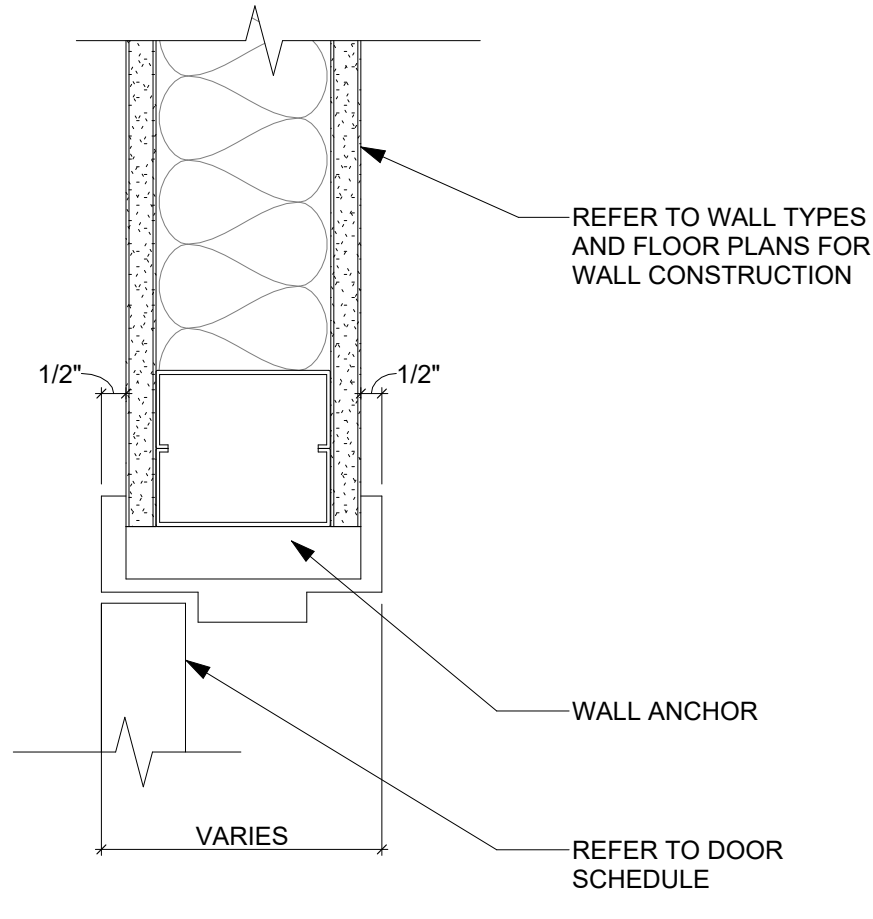
Ⓣ TEMPERED GLASS HM - HOLLOW METAL V- VINYL



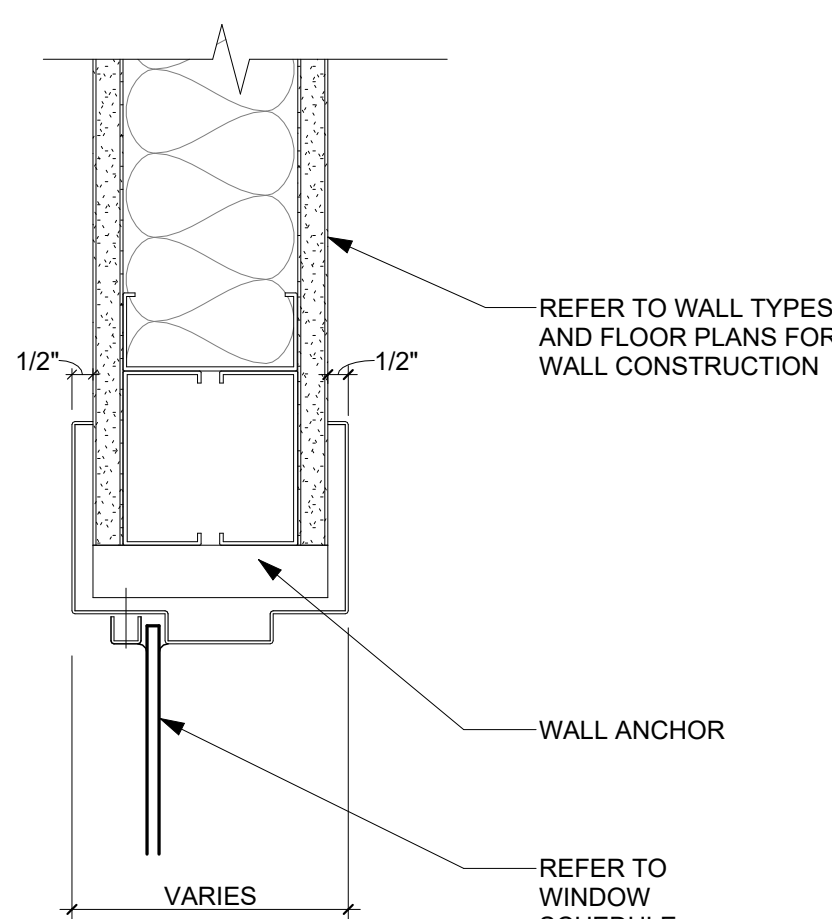
7/1/2026 11:48:56 AM



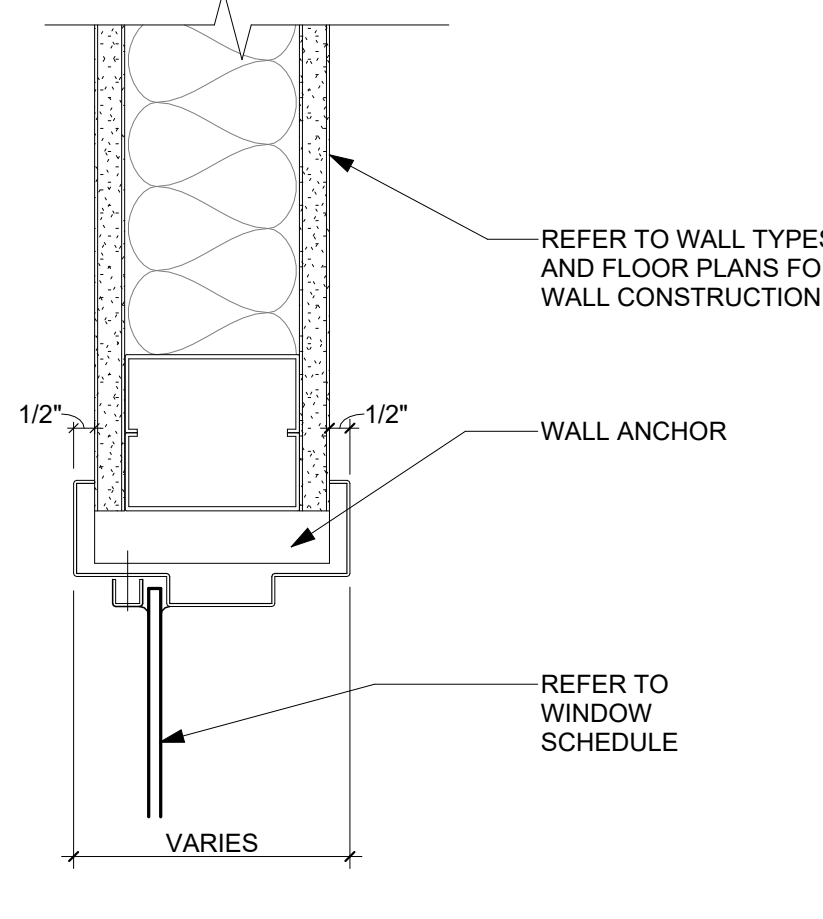
5 INT. STUD HM DOOR HEAD
A-810 SCALE: 3" = 1'-0"



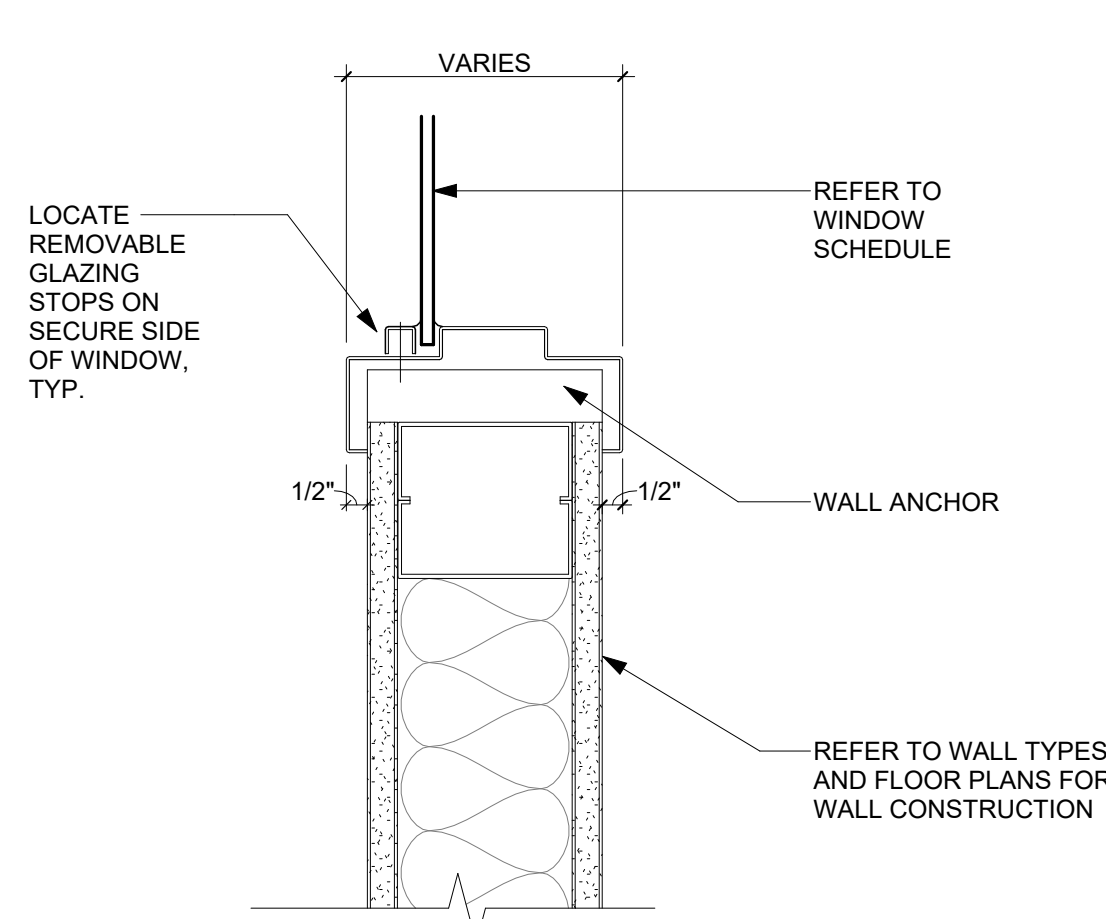
4 INT. STUD HM DOOR JAMB
A-810 SCALE: 3" = 1'-0"



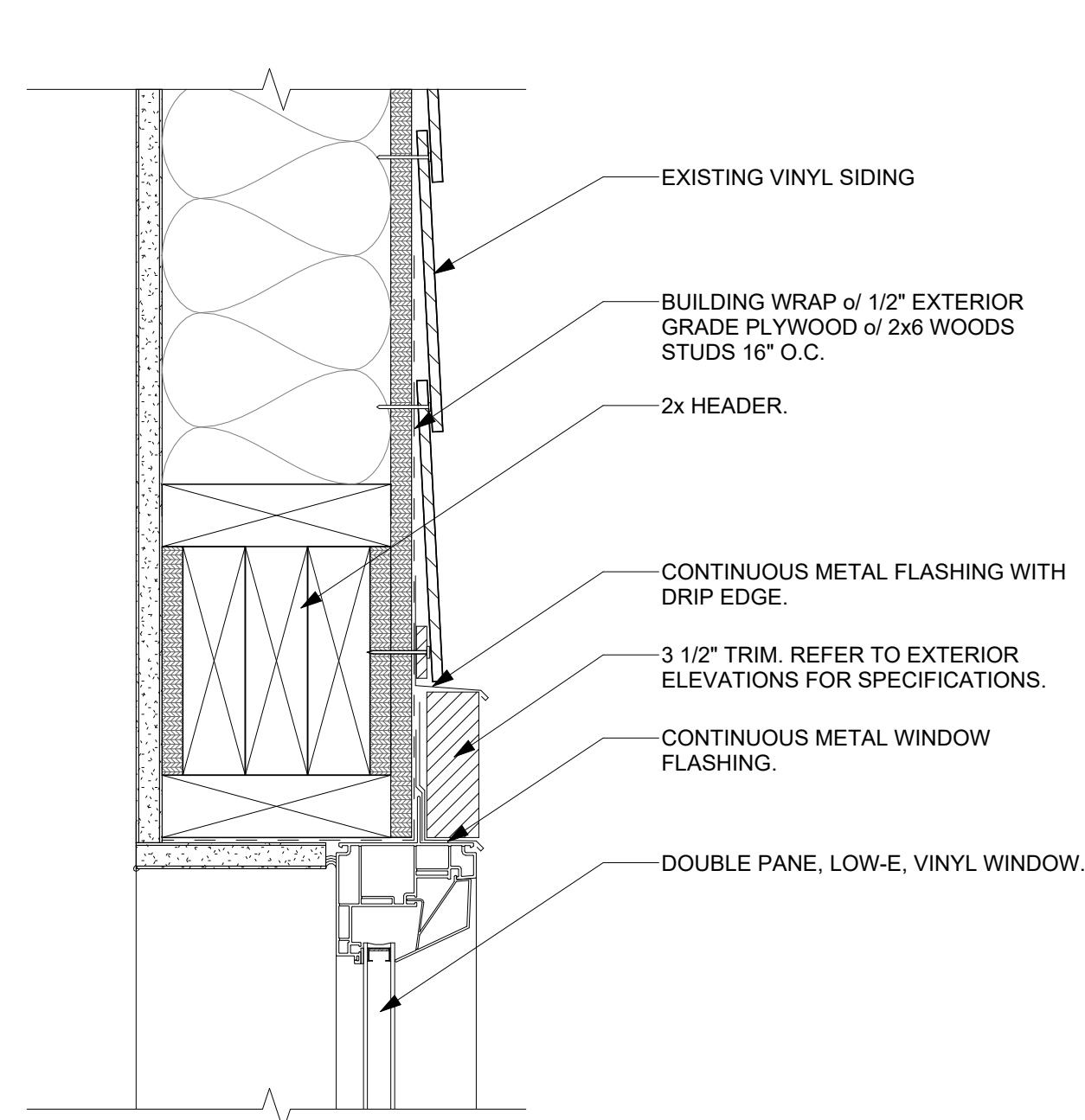
3 INT. STUD HM WINDOW HEAD
A-810 SCALE: 3" = 1'-0"



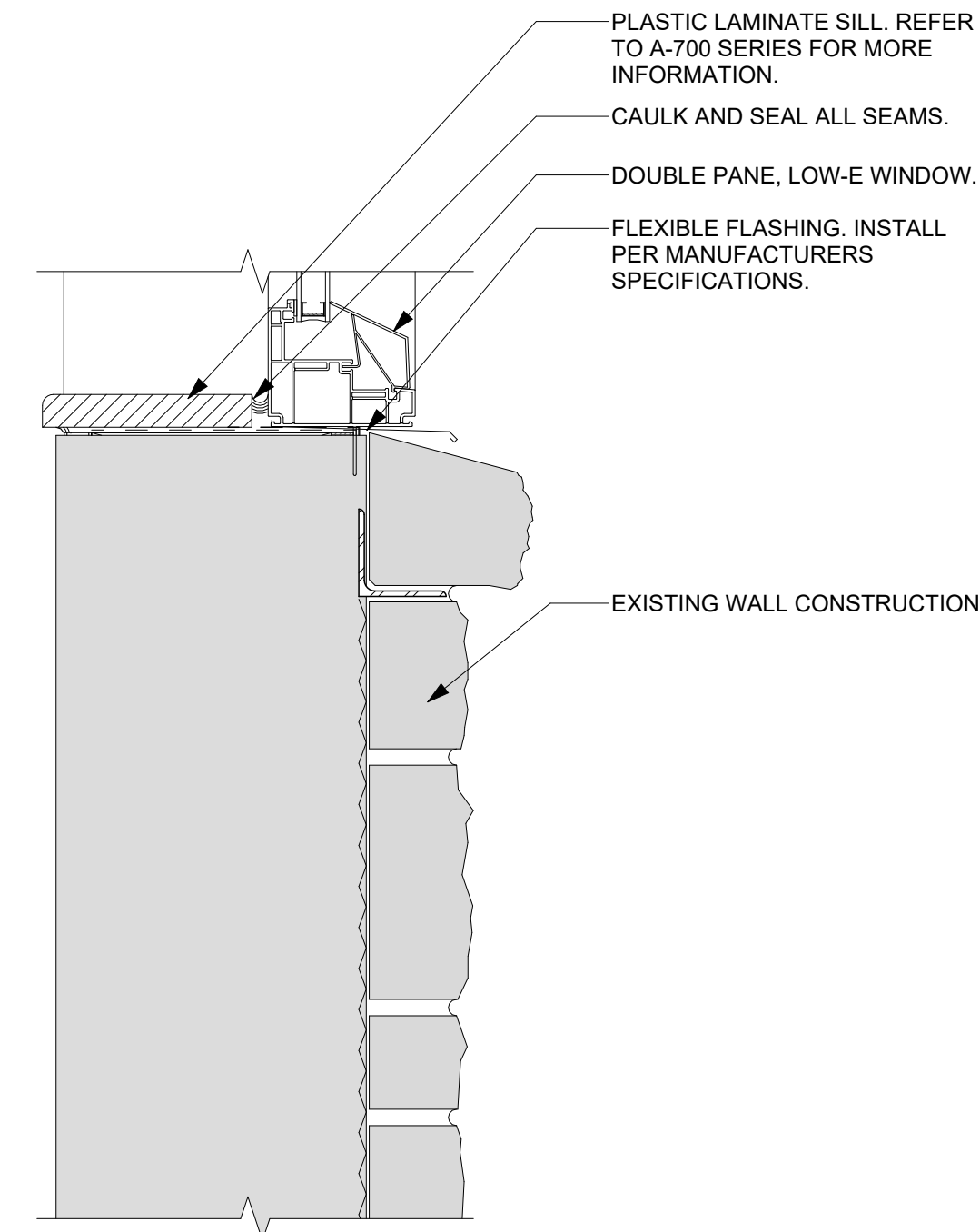
2 INT. STUD HM WINDOW JAMB
A-810 SCALE: 3" = 1'-0"



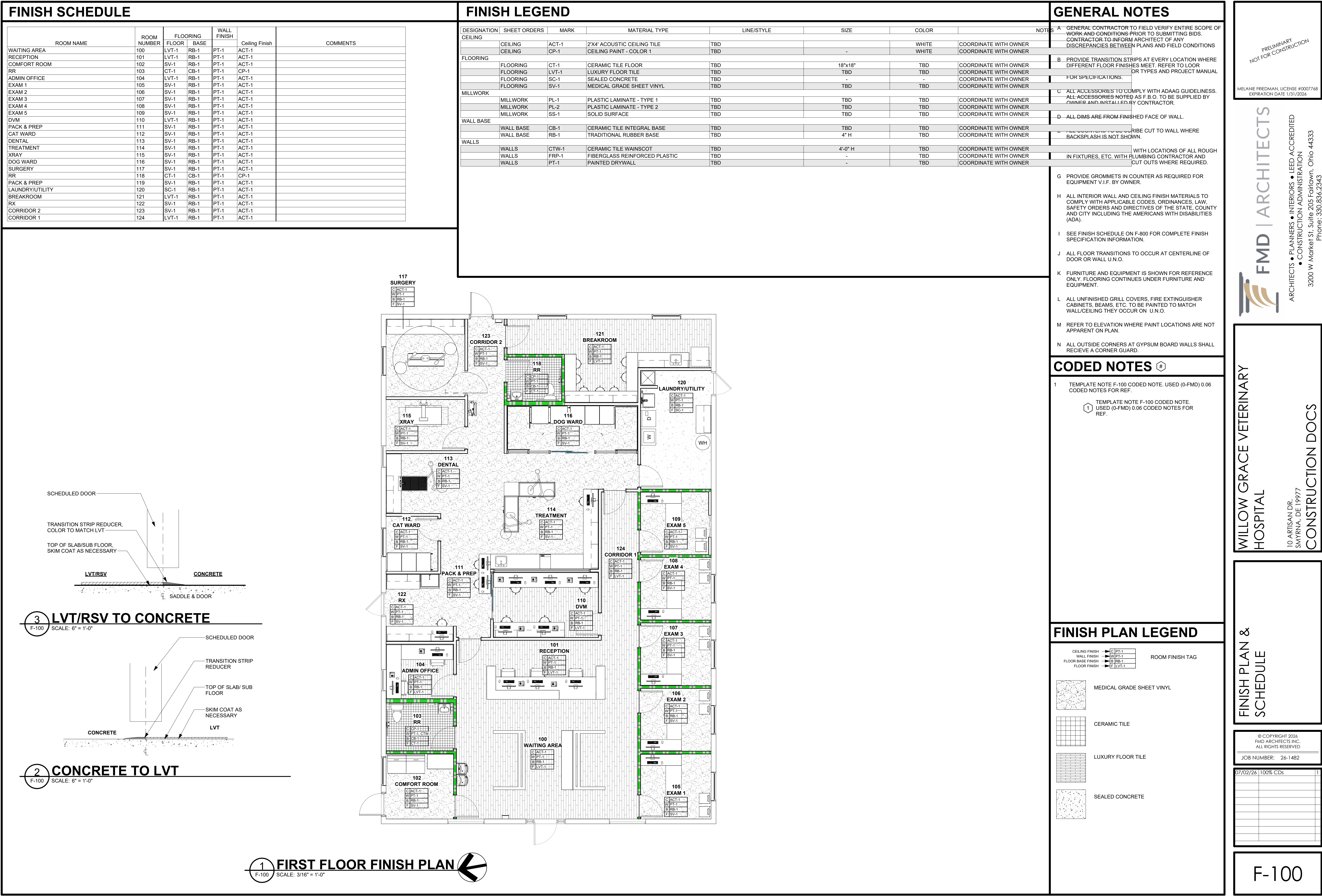
1 INT. STUD HM WINDOW SILL
A-810 SCALE: 3" = 1'-0"



7 EXISTING SIDING @ WINDOW HEAD
A-810 SCALE: 3" = 1'-0"

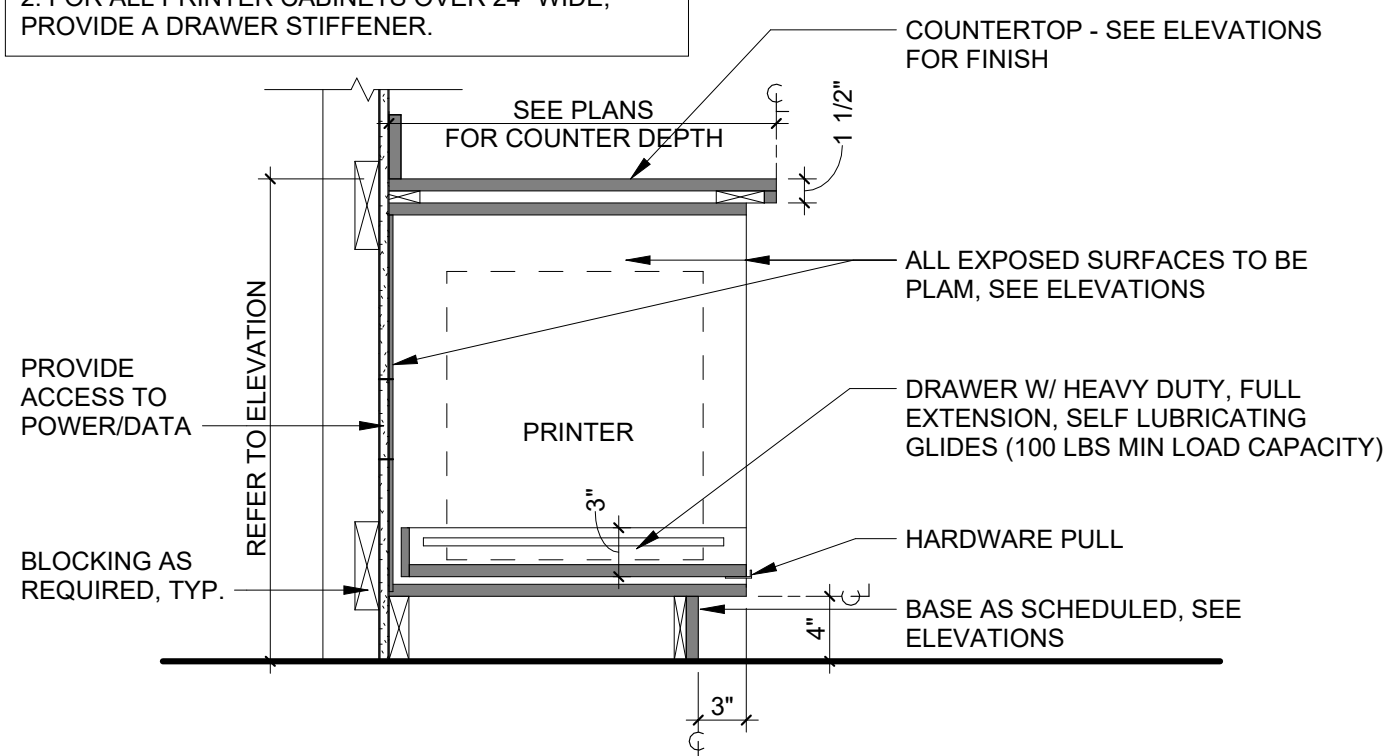


6 EXISTING STONE @ WINDOW SILL
A-810 SCALE: 3" = 1'-0"

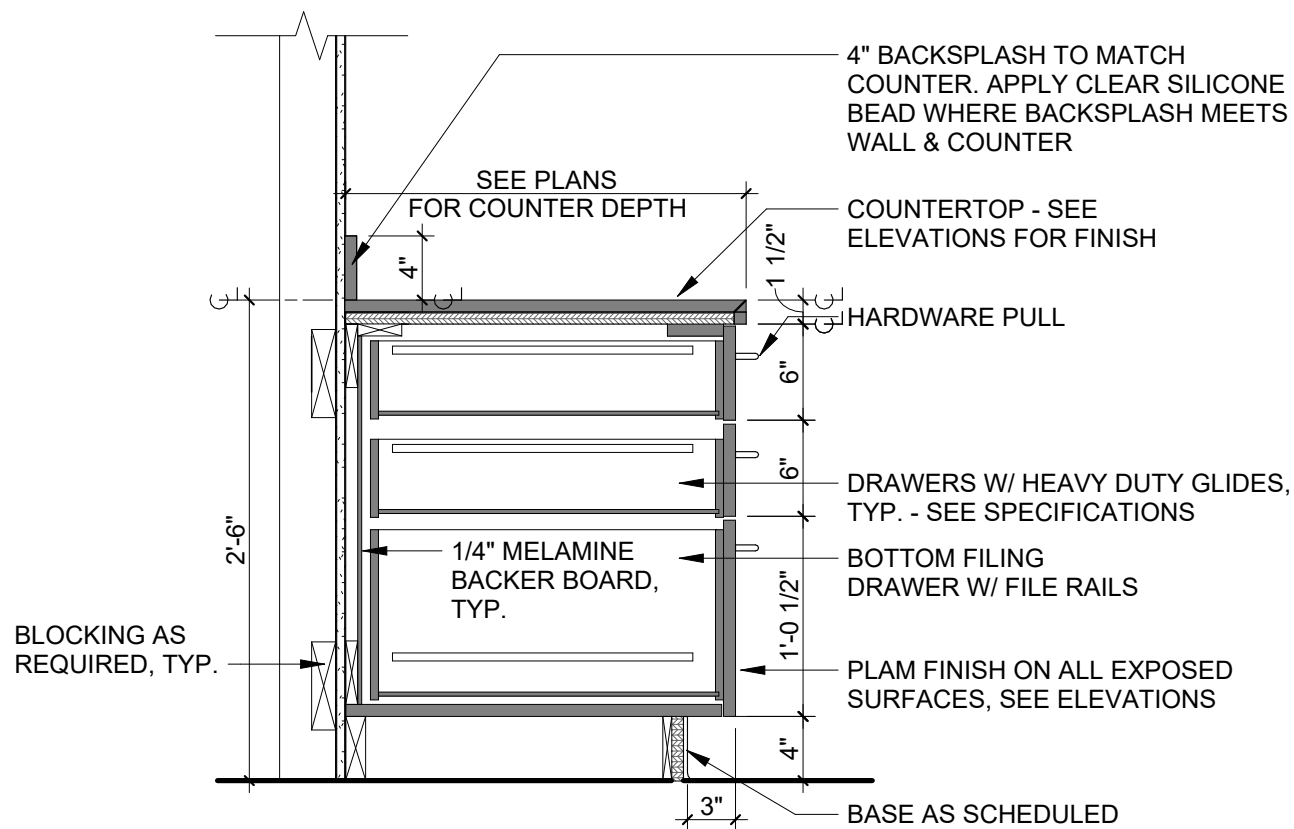


7/1/2026 11:48:57 AM

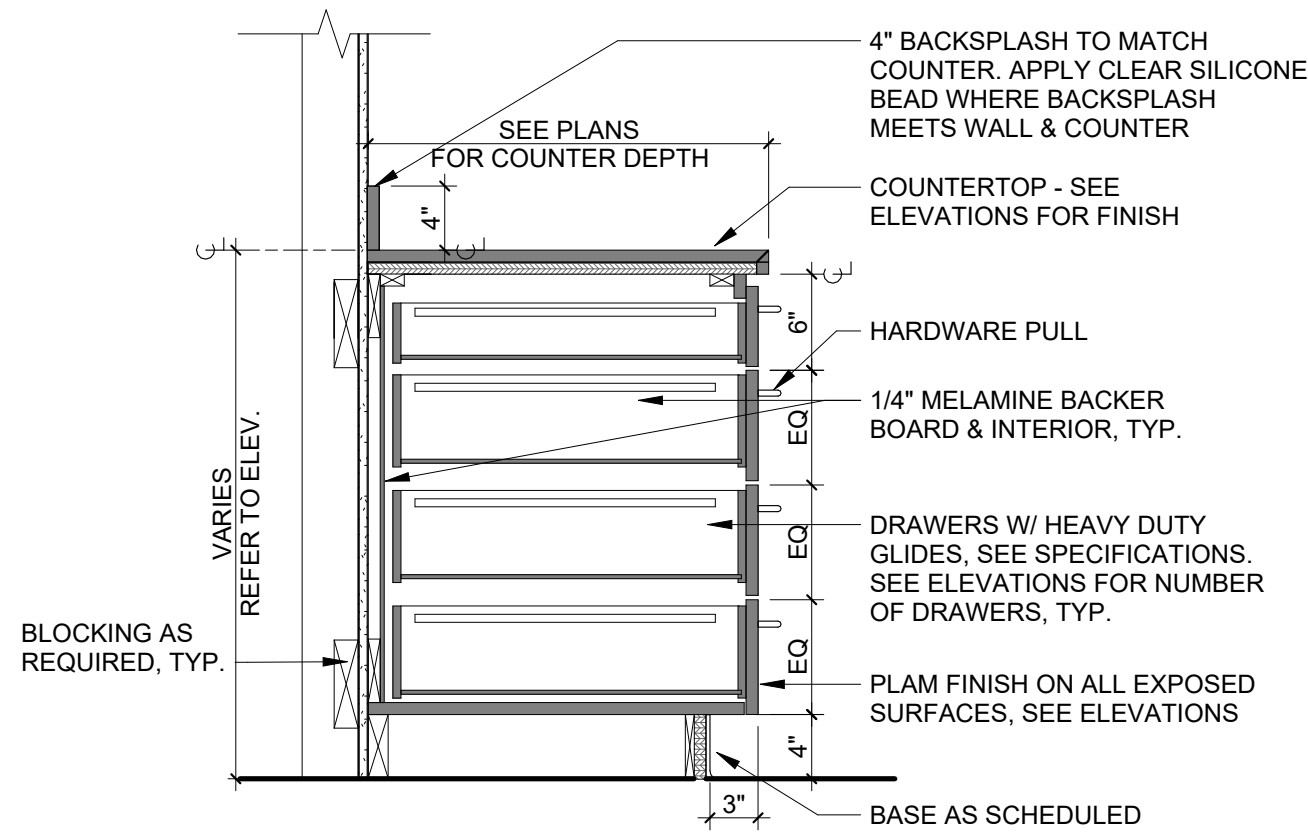
NOTES:
1. VERIFY ALL DIMENSIONS WITH PRINTER MANUFACTURER.
2. FOR ALL PRINTER CABINETS OVER 24" WIDE, PROVIDE A DRAWER STIFFENER.



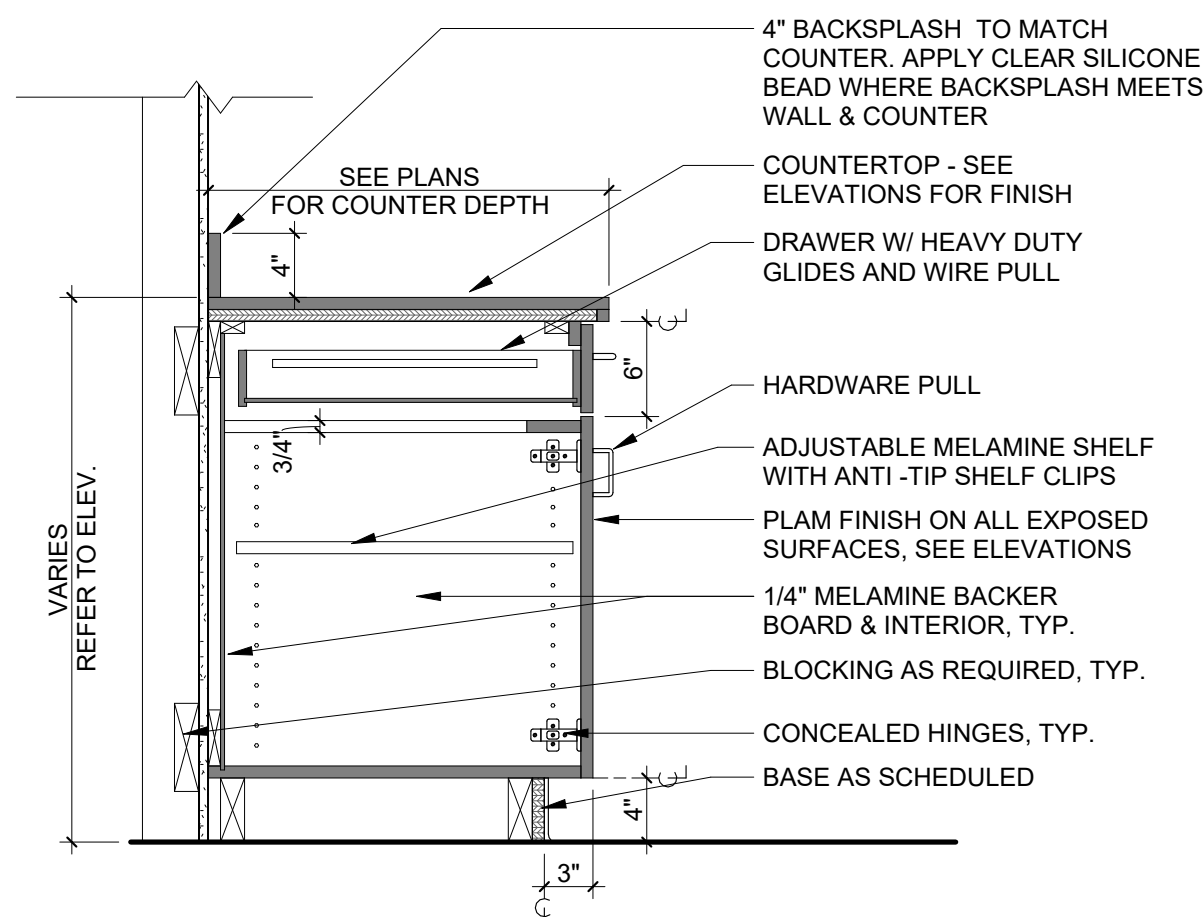
8 BASE PRINTER CABINET
F-300 SCALE: 1" = 1'-0"



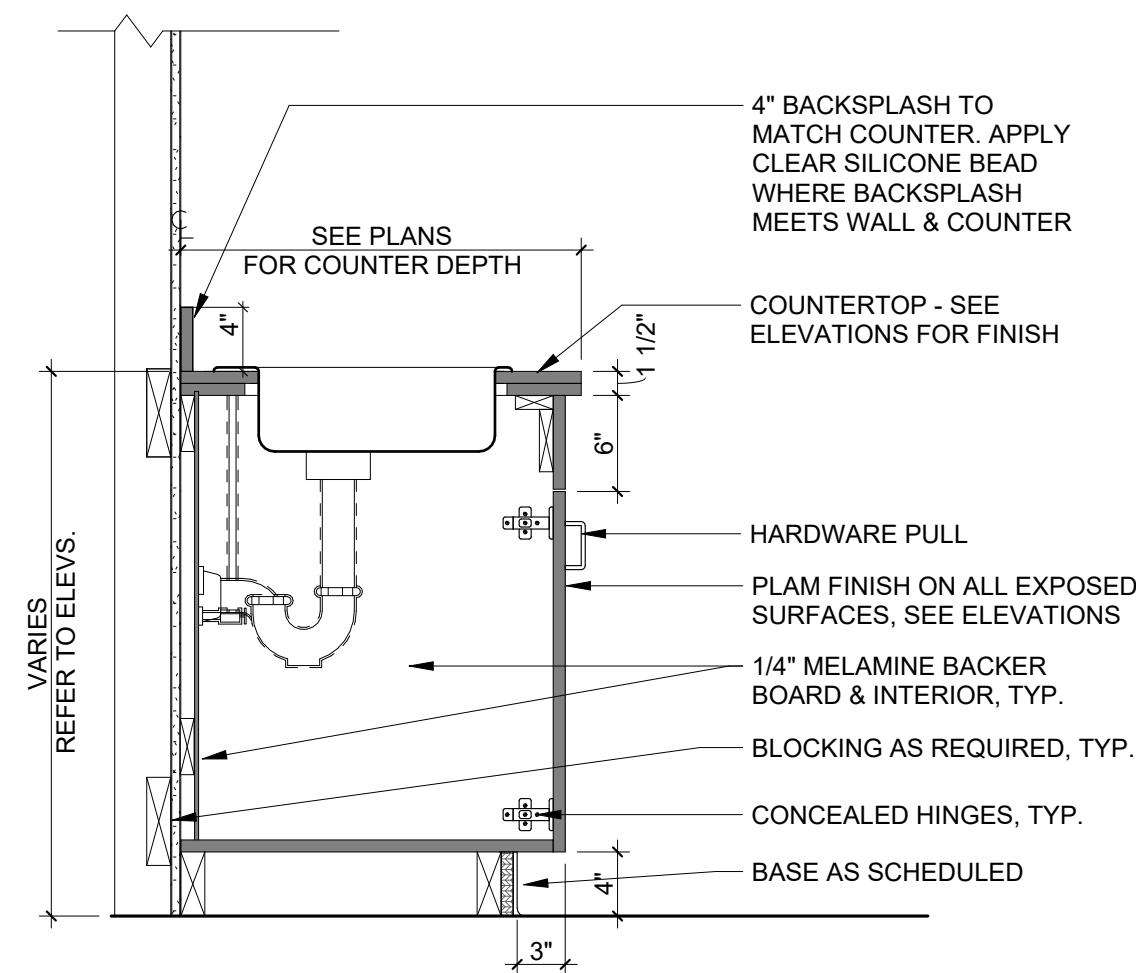
4 BASE CABINET W/ FILE DRAWER
F-300 SCALE: 1" = 1'-0"



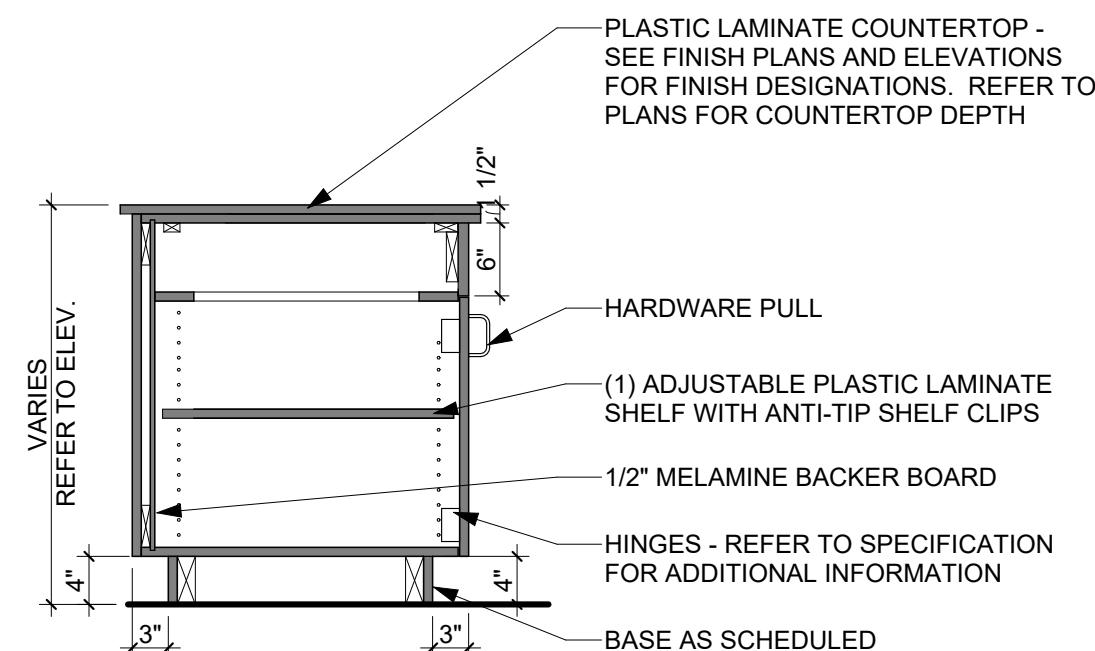
7 BASE CABINET W/ DRAWERS
F-300 SCALE: 1" = 1'-0"



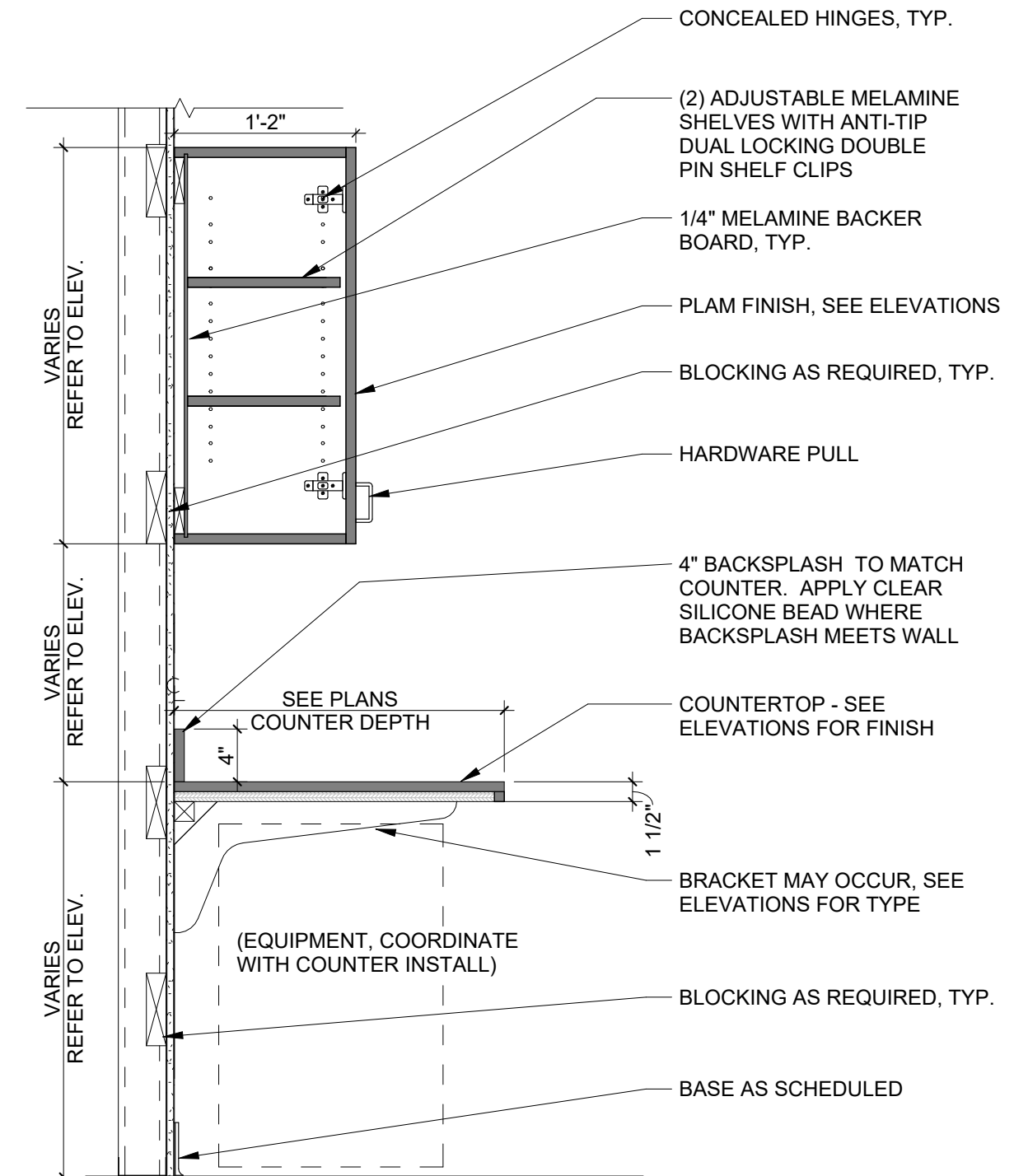
3 BASE CABINET W/ DOORS
F-300 SCALE: 1" = 1'-0"



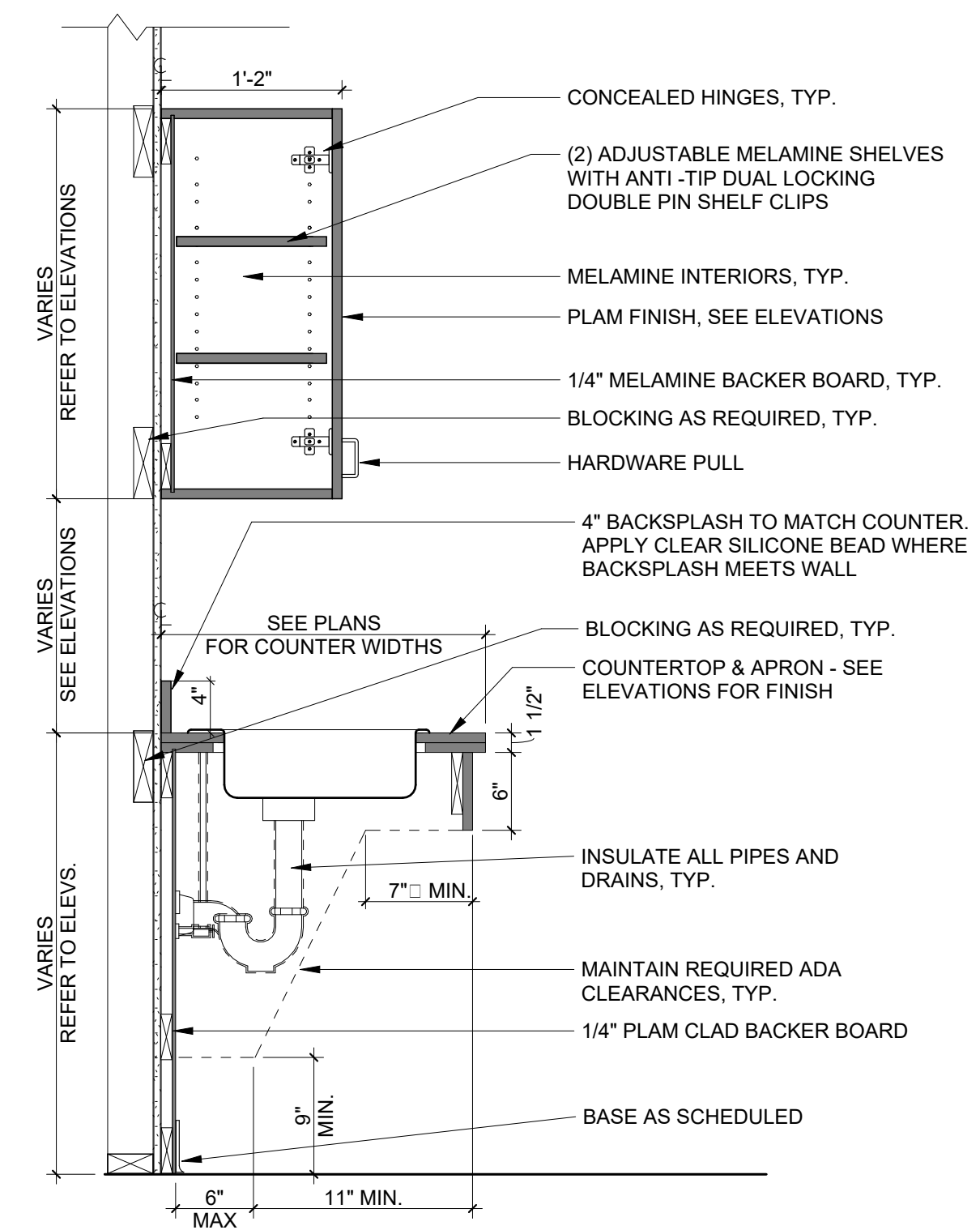
6 BASE SINK CABINET
F-300 SCALE: 1" = 1'-0"



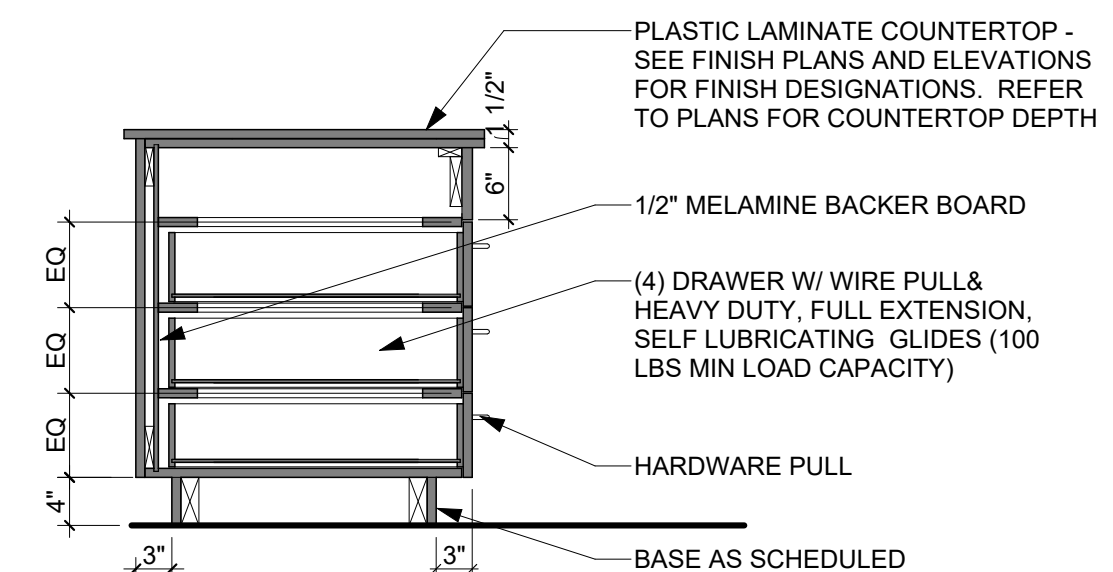
2 EXAM TABLE- W/ DOORS
F-300 SCALE: 3/4" = 1'-0"



9 COUNTER W/ UPPER CABINETS
F-300 SCALE: 1" = 1'-0"



5 ADA SINK APRON
F-300 SCALE: 1" = 1'-0"



1 EXAM TABLE- W/ 3 DRAWERS
F-300 SCALE: 3/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2026

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333

Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

CASEWORK SECTIONS
AND MISCELLANEOUS
DETAILS

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

F-300



LEGEND

- EQUIPMENT TAG**
- 00-000
- ← EQUIPMENT NUMBER
- ← EQUIPMENT CATEGORY

MELANIE FRIEDMAN, LICENSE #0007768
EXPIRATION DATE 1/31/2024

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St., Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

10 ARTISAN DR.
SMYRNA DE 19977

© COPYRIGHT 2026
FMD ARCHITECTS INC
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26 100% CD:

EQ-100

SANITARY SEWER MINIMUM PIPE SLOPES	
PIPE SIZE	SLOPE (PER FOOT)
2-1/2" OR LESS	1/4" (2%)
3" TO 6"	1/8" (1%)

PIPE FITTING LEGEND	
SYMBOL	DESCRIPTION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	CAP
	90° PIPE RISE OR DROP
	90° PIPE CONNECTION OUT OF BOTTOM
	90° PIPE CONNECTION OUT OF TOP
	90° PIPE CONNECTION OUT OF SIDE
	45° PIPE CONNECTION OUT OF SIDE
	PIPING RISER DOWN
	PIPING RISER UP

PLUMBING INSULATION SCHEDULE				
NOTE: 1. FIBERGLASS INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.23 BTU"IN/(HR * FT*2 *F) AT 75F MEAN TEMP. 2. ELASTOMERIC INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.28 BTU"IN/(HR * FT*2 *F) AT 70F MEAN TEMP. 3. IN AREAS OF THE BUILDING THAT UTILIZE A RETURN AIR PLENUM. ALL MATERIALS SHALL HAVE A MAXIMUM 25 FLAME SPREAD AND 50 SMOKE-DEVELOPED INDEX AS TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. WIRING SHALL BE PLENUM RATED PER NFPA 70. PVC PIPING NOT ALLOWED IN RETURN AIR CEILING PLENUMS.				
SYSTEM	SIZES	TYPE	THICKNESS	JACKET
DOMESTIC COLD WATER ABOVE GROUND	ALL SIZES	FIBERGLASS	1"	VAPOR RETARDANT ASJ
DOMESTIC HOT AND RECIRC WATER ABOVE GROUND	1.25" AND LESS	FIBERGLASS	1"	ASJ
DOMESTIC HOT AND RECIRC WATER ABOVE GROUND	1.5" AND LARGER	FIBERGLASS	1-1/2"	ASJ
FLOOR DRAIN BODIES WITH A/C CONDENSATE	ALL SIZES	ELASTOMERIC	1/2"	NONE
TRAP PRIMER	ALL SIZES	ELASTOMERIC	1/2"	NONE
WATER COOLER TRAPS AND A/C DRAIN PIPING	ALL SIZES	ELASTOMERIC	1/2"	NONE

PLUMBING PIPING SYSTEM SCHEDULE				
NOTE: 1. WHERE MULTIPLE MATERIALS ARE INDICATED, SELECTION IS INSTALLER'S CHOICE. 2. ALL OUTDOOR NATURAL GAS PIPING SHALL BE PRIMED AND PAINTED WITH TWO COATS MINIMUM OF WEATHERPROOF EPOXY PAINT; COLOR SHALL BE SELECTED BY ARCHITECT OR OWNER. 3. IN AREAS OF THE BUILDING THAT UTILIZE A RETURN AIR PLENUM. ALL MATERIALS SHALL HAVE A MAXIMUM 25 FLAME SPREAD AND 50 SMOKE-DEVELOPED INDEX AS TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. WIRING SHALL BE PLENUM RATED PER NFPA 70. PVC PIPING NOT ALLOWED IN RETURN AIR CEILING PLENUMS. 4. ALL PEX TUBING SHALL BE FURNISHED BY UPONOR OR APPROVED EQUAL. CONTRACTOR SHALL INSTALL IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.				
SYSTEM	SIZES	PIPE MATERIAL	FITTING MATERIAL	JOINT TYPE
DOMESTIC WATER ABOVE GROUND	4" AND SMALLER	TYPE L HARD COPPER	WROUGHT COPPER	SOLDERED
DOMESTIC WATER ABOVE GROUND	4" AND SMALLER	TYPE L HARD COPPER	ASME B16.51 COPPER AND COPPER ALLOY PRESS-CONNECT	ASTM B88: PROPPRESS
NATURAL GAS ABOVE GROUND	2" AND SMALLER	SCH 40 BLACK STEEL	MALLEABLE IRON	THREADED
NATURAL GAS ABOVE GROUND	2.5" AND LARGER	SCH 40 BLACK STEEL	FACTORY FORMED	WELDED
NATURAL GAS BELOW GROUND	4" AND SMALLER	PLASTIC, FLEXIBLE AS REQUIRED BY UTILITY	NONE	FUSION WELDED
OXYGEN	ALL SIZES	TYPE L HARD COPPER (ASTM B-819)	ASME B16.22 WROUGHT COPPER	AWS A5.8M/A5.8 SILVER BRAZE
VACUUM	ALL SIZES	ASTM D2665 SCH 40 PVC	FACTORY FORMED PVC	PVC: SOLVENT WELDED WITH ASTM D2235 CEMENT
STORM, SANITARY DRAIN, WASTE & VENT ABOVE AND BELOW GROUND	ALL SIZES	ASTM D2665 SCH 40 PVC	FACTORY FORMED PVC	PVC: SOLVENT WELDED WITH ASTM D2235 CEMENT
TRAP PRIMER	ALL SIZES	SOFT COPPER	WROUGHT COPPER	SOLDERED
TRAP PRIMER	ALL SIZES	PEX TUBING	BRASS	CLAMP, CRIMP OR PUSH

PLUMBING FIRESTOP SCHEDULE		
NOTE: 1. FIRESTOP ASSEMBLY TYPE (REQUIRED FIRESTOPPING MATERIALS) SHALL BE DETERMINED BY THE WALL OR FLOOR/CEILING ASSEMBLY AND PENETRATION TYPE AND SHALL BE UL LISTED AND TESTED IN ACCORDANCE WITH ASTM E814. FIRE RATING OF THE ASSEMBLY SHALL BE EQUIVALENT TO THE WALL OR FLOOR/CEILING ASSEMBLY RATING. 2. ACCEPTABLE FIRE BARRIER PRODUCTS: HILTI "FS-ONE", NELSON "FLAMESEAL" OR APPROVED EQUAL AS MANUFACTURED BY 3M. 3. IF REQUESTED, THE CONTRACTOR SHALL SHOW PROOF OF COMPLIANCE BY PROVIDING THE APPROPRIATE UL FIRESTOPPING SYSTEM NUMBER TO THE INSPECTION AUTHORITY HAVING JURISDICTION OR THE ARCHITECT/ENGINEER.		
PENETRATION	RATING	U.L. SYSTEM
INSULATED METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL5029 OR APPROVED EQUAL
METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL1054 OR APPROVED EQUAL
METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ1291 OR APPROVED EQUAL
PLASTIC PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL2078 OR APPROVED EQUAL
PLASTIC PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ2271 OR APPROVED EQUAL

PIPING SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	MANUAL BALANCING VALVE
	BALL VALVE
	CHECK VALVE
	GATE VALVE
	BUTTERFLY VALVE
	GAS VALVE
	STRAINER WITH FULL SIZE VALVED BLOWDOWN WITH PLUGGED VALVE
	TIE-IN POINT
	PETEE'S PLUG
	TEMPERATURE WELL
	PRESSURE GAUGE
	THERMOMETER
	MANUAL AIR VALVE
	GATE VALVE WITH TAMPER SWITCH
	FLOW SWITCH
	REDUCED PRESSURE BACKFLOW PREVENTER
	PIPE GUIDE
	PIPE ANCHOR
	CLEANOUT
	CLEANOUT (AT BASE OF RISER)
	CLEANOUT (FLUSH WITH FLOOR)
	EXPANSION JOINT
	MANUAL DRAIN VALVE WITH HOSE CONNECTION
	DOUBLE CHECK BACKFLOW PREVENTER
	EMERGENCY (OVERFLOW) ROOF DRAIN
	HOSE BIBB
	MIXING VALVE
	ROOF DRAIN
	SANITARY FLOOR DRAIN
	TRAP PRIMER VALVE
	WATER HAMMER ARRESTOR
	WATER METER
	NITROGEN CEILING OUTLET
	OXYGEN CEILING OUTLET
	SCAVENGER CEILING OUTLET
	VACUUM CEILING OUTLET
	WASTE ANESTHESIA GAS DISPOSAL
	VACUUM WALL OUTLET
	OXYGEN WALL OUTLET
	OXYGEN CONSOLE OUTLET
	OXYGEN CAGE OUTLET

PLUMBING ABBREVIATIONS LEGEND	
ABBREVIATION	DESCRIPTION
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
CO	CLEANOUT
DCW	DOMESTIC COLD WATER
DHW	DOMESTIC HOT WATER
DHWR	RECIRC HOT WATER
DN	DOWN
EC	ELECTRICAL CONTRACTOR
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FLA	FULL LOAD AMPS
GAL	GALLON
GC	GENERAL CONTRACTOR
GPF	GALLONS PER FLUSH
GPH	GALLON PER HOUR
GPM	GALLON PER MINUTE
KW	KILOWATT
L	LAVATORY
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MFR	MANUFACTURER
MIN	MINIMUM
O	OXYGEN
PC	PLUMBING CONTRACTOR
PH	PHASE
PVC	POLYVINYL CHLORIDE
S	SINK
SAN	SANITARY ABOVE FLOOR
SANB	SANITARY BELOW FLOOR
SS	STAINLESS STEEL
TYP	TYPICAL
V	VENT
V	VOLT
VTR	VENT THROUGH ROOF
WC	WATER CLOSET

PLUMBING DRAWING LIST	
SHEET NUMBER	SHEET NAME
P-001	PLUMBING GENERAL INFORMATION
P-002	PLUMBING SPECIFICATIONS
PD-100	FIRST FLOOR PLUMBING DEMOLITION PLAN
P-101	FIRST FLOOR SANITARY AND VENT PLAN
P-102	FIRST FLOOR DOMESTIC WATER PLAN
P-201	SANITARY ISOMETRIC
P-301	PLUMBING SCHEDULES AND DETAILS

- GENERAL DRAWING NOTES:**
- MATERIALS ILLUSTRATED WITH LIGHT LINES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
 - EXISTING CONDITIONS SHOWN ARE BASED ON REVIEW OF REFERENCE DRAWINGS AND GENERAL FIELD REVIEW. NOTIFY ENGINEER IF FIELD CONDITIONS DIFFER FROM WHAT IS SHOWN. CONTRACTOR IS RESPONSIBLE FOR FIELD MEASURING AND COORDINATING DIMENSIONS FOR TIE-IN AND INSTALLATION OF ALL NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER MATERIALS PRIOR TO FABRICATION.
 - MATERIALS ILLUSTRATED WITH DARK DASHED LINES SHALL BE REMOVED. THE OWNER SHALL HAVE THE RIGHT TO RETAIN ANY MATERIALS ILLUSTRATED TO BE REMOVED. IF REQUESTED BY THE OWNER, THE CONTRACTOR SHALL REMOVE MATERIALS AND RELOCATE THEM TO THE OWNER'S SPECIFIED LOCATION OF STORAGE. ALL MATERIALS NOTED TO BE RELOCATED SHALL BE TEMPORARILY STORED AND PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR UNLESS NOTED OTHERWISE. REMOVE ALL MATERIALS ASSOCIATED WITH EQUIPMENT AND DUCTWORK, INCLUDING PIPING, HANGERS, SUPPORTS, POWER, CONTROLS, INSULATION, ETC.
 - MATERIALS ILLUSTRATED WITH DARK LINES ARE NEW.
 - DO NOT INSTALL ANY MATERIALS IN A LOCATION THAT HINDERS MAINTENANCE ACCESS TO ANY MATERIAL THAT REQUIRES SERVICE OR MAINTENANCE.
 - THIS CONTRACTOR SHALL REMOVE AND RE-INSTALL EXISTING CEILING SYSTEMS WHERE NECESSARY TO ACCOMMODATE ABOVE CEILING WORK. PRIOR TO REMOVAL OF CEILINGS, CONTRACTOR SHALL PHOTOGRAPH CONDITION OF EXISTING CEILINGS AND SUBMIT PHOTO DOCUMENTATION TO OWNER AND ENGINEER. CEILING REMOVAL AND REINSTALLATION WORK SHALL BE CAREFULLY PERFORMED WITH CLEAN GLOVES TO MAINTAIN CEILING APPEARANCE. CONTRACTOR SHALL REPLACE ALL DAMAGED AND/OR DIRTY CEILING TILES TO MATCH EXISTING.
 - PATCH AND PAINT WALLS, CEILINGS AND FLOORS TO MATCH EXISTING AS REQUIRED TO ACCOMMODATE WORK.
 - AREAS OF THIS BUILDING UTILIZE A RETURN AIR PLENUM. ALL MATERIALS SHALL HAVE A MAXIMUM 25 FLAME SPREAD AND 50 SMOKE-DEVELOPED INDEX AS TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. WIRING SHALL BE PLENUM RATED PER NFPA 70.
 - SHUT-OFF VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. COORDINATE THE LOCATION OF ACCESS DOORS IN CEILINGS OR WALLS WITH THE GENERAL CONTRACTOR IF A VALVE IS REQUIRED TO BE LOCATED ABOVE AN INACCESSIBLE CEILING OR IN A WALL OR CHASE.
 - PROVIDE ESCUTCHEONS FOR ALL PIPING PENETRATIONS OF CEILINGS AND WALLS IN OCCUPIED AREAS.
 - FIRESTOP ALL PENETRATIONS OF RATED CEILINGS WITH APPROPRIATE FIRESTOPPING MATERIAL. REQUIRED MATERIAL ARE INDICATION IN THE SPECIFICATIONS.
 - PIPING RUNOUTS TO OXYGEN AND VACUUM OUTLETS SHALL BE 1/2" FOR OXYGEN AND 3/4" VACUUM PIPE LINES UNLESS NOTED OTHERWISE.
 - UNLESS DETAILED OTHERWISE, SYSTEMS SHALL BE ORGANIZED SUCH THAT DUCTWORK MAINS ARE THE HIGHEST LEVEL AND ARE TIGHT TO BUILDING STRUCTURE. HVAC PIPING AND PLUMBING PIPING SHALL BE ROUTED BELOW THE DUCTWORK MAINS, AND FIRE PROTECTION PIPING SHALL BE BELOW ALL.
 - UNLESS NOTED OTHERWISE, ALL NEW PLUMBING UTILITIES TO EXTEND TO 5'-0" BEYOND BUILDING FOR CONTINUATION BY CIVIL TRADES. PC TO MAKE FINAL CONNECTION TO SITE UTILITIES.

PRELIMINARY
NOT FOR CONSTRUCTION
07/12/26



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

PLUMBING GENERAL
INFORMATION

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

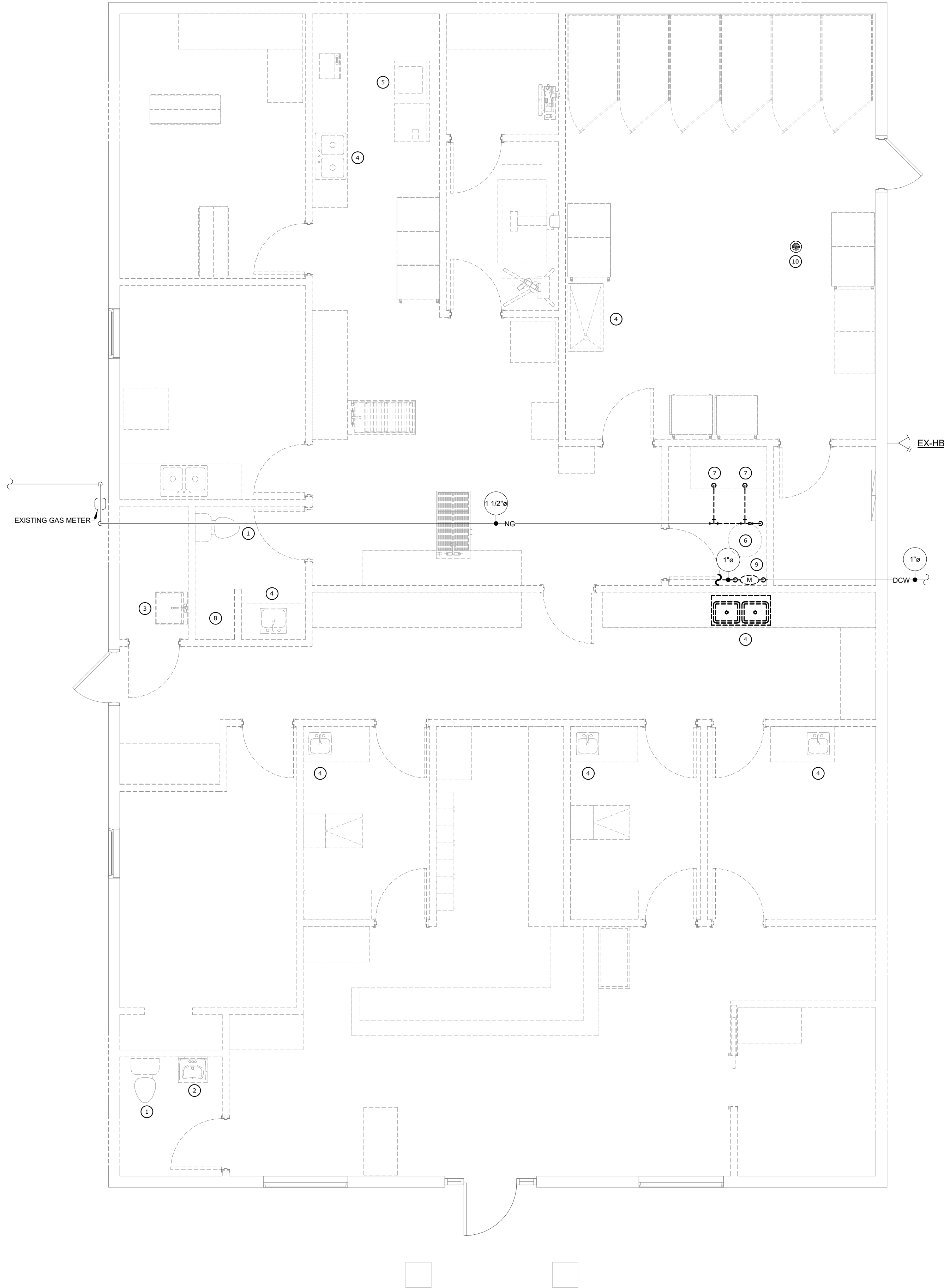
JOB NUMBER: 26-1482

07/02/26	CONSTRUCTION

P-001

7/12/2026 9:21:06 AM

1 FIRST FLOOR PLUMBING DEMOLITION PLAN
PD-100 1/4" = 1'-0"



PLUMBING DEMOLITION KEYNOTES

- 1 REMOVE EXISTING TOILET, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 2 REMOVE EXISTING LAVATORY, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 3 REMOVE EXISTING MOP BASIN, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 4 REMOVE EXISTING SINK, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 5 REMOVE EXISTING WASHER CONNECTION BOX, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 6 REMOVE EXISTING WATER HEATER, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 7 DISCONNECT GAS FROM EXISTING MECHANICAL UNITS BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 8 REMOVE EXISTING SHOWER, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.
- 9 DISCONNECT EXISTING DOMESTIC WATER METER, APPURTENANCES, AND ASSOCIATED PIPING ABOVE FLOOR COMPLETE. REMOVE EXISTING 1\"/>
- 10 REMOVE EXISTING FLOOR DRAIN, APPURTENANCES, AND ASSOCIATED PIPING BACK TO THE MAIN TO WHICH IT CONNECTS AND CAP.

PRELIMINARY
NOT FOR CONSTRUCTION
07/12/26

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWIRNA, DE 19977

CONSTRUCTION DOCS

FIRST FLOOR PLUMBING
DEMOLITION PLAN

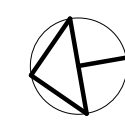
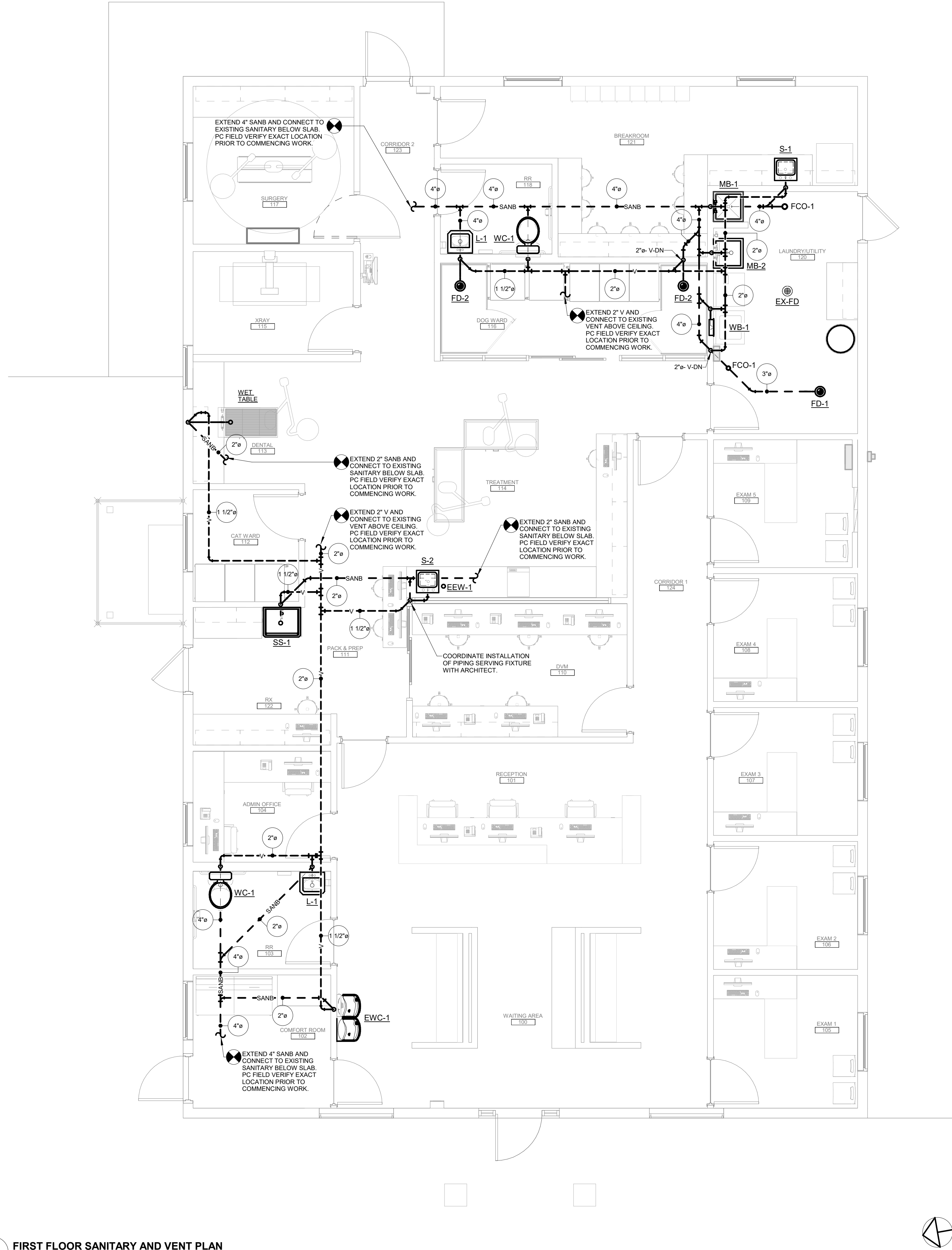
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/12/26 CONSTRUCTION

PD-100

7/12/2026 9:21:10 AM



PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

FIRST FLOOR SANITARY
AND VENT PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26	CONSTRUCTION

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



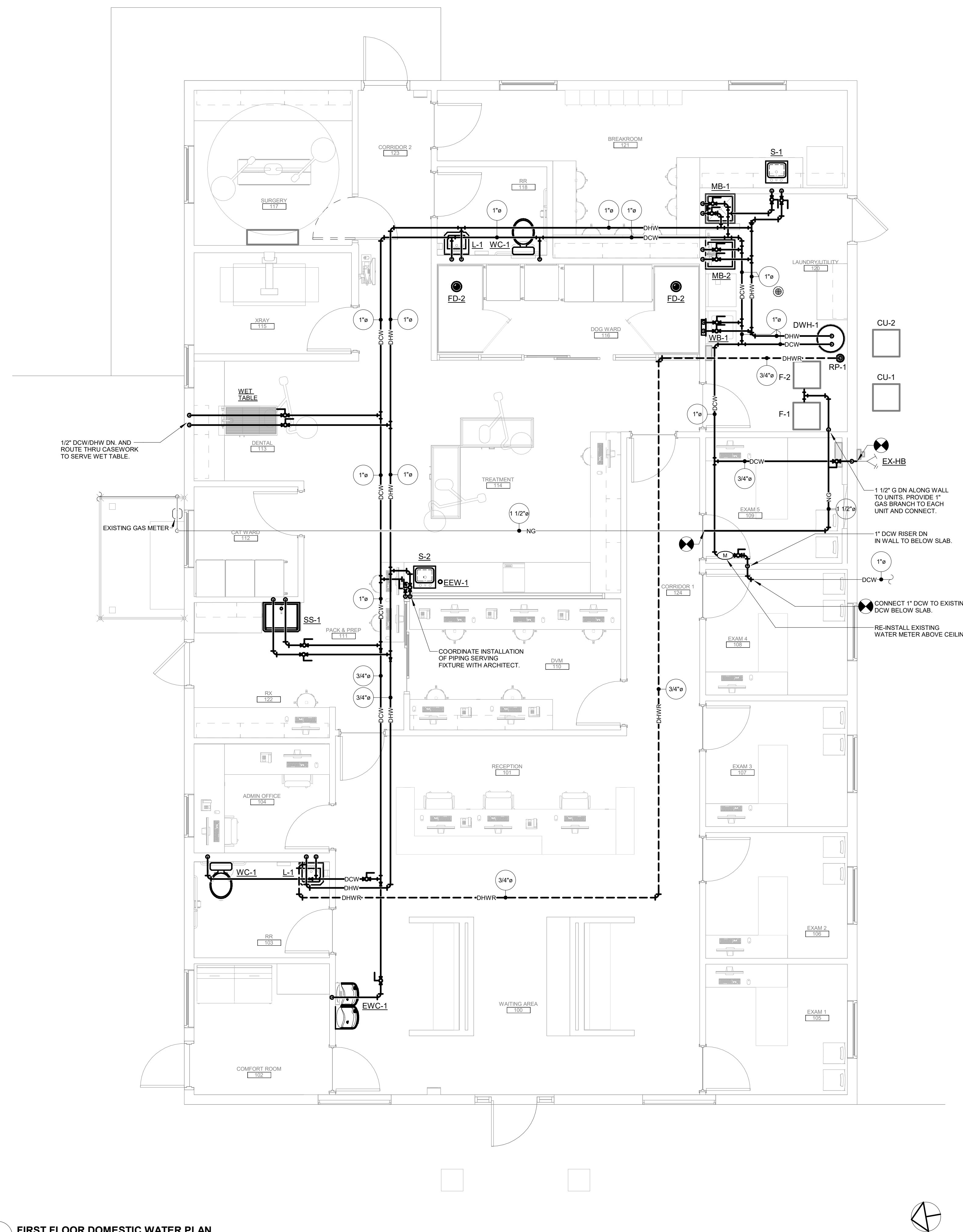
WILLOW GRACE VETERINARY
HOSPITAL

SMYRNA, DE 19977
CONSTRUCTION DOCS

FIRST FLOOR DOMESTIC WATER PLAN

JOB NUMBER: 26-1482

P-102



1 FIRST FLOOR DOMESTIC WATER PLAN
P-102 **1/4" = 1'-0"**

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

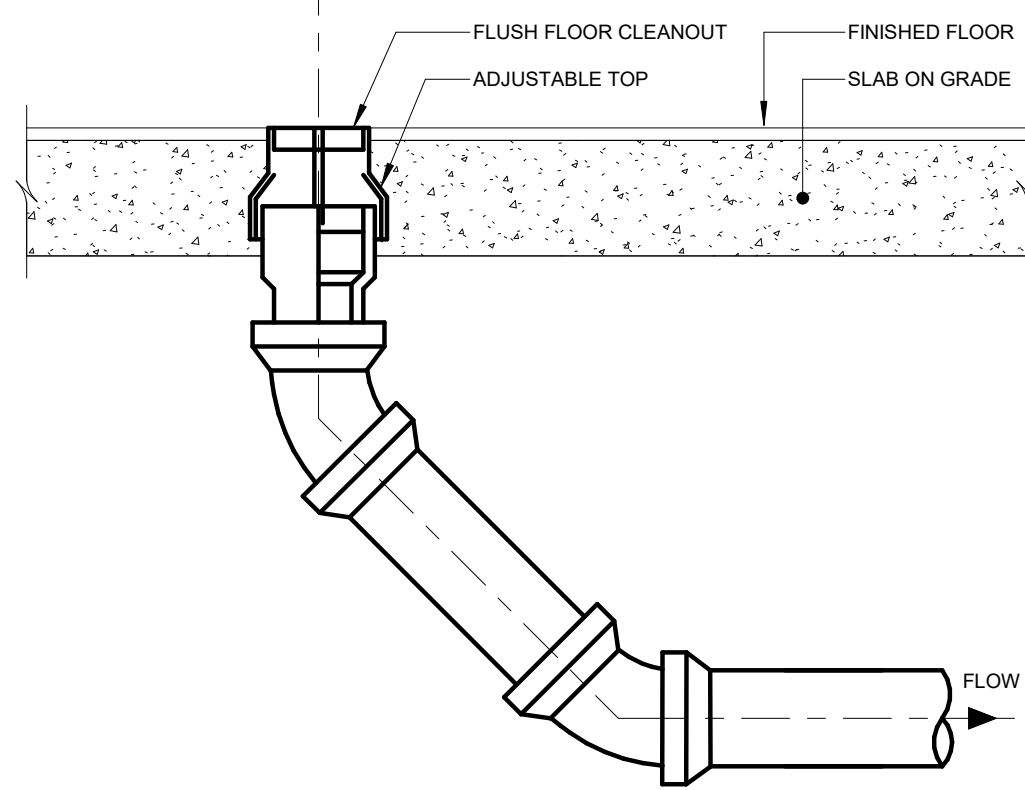
SANITARY ISOMETRIC

07/02/26 | CONSTRUCTION

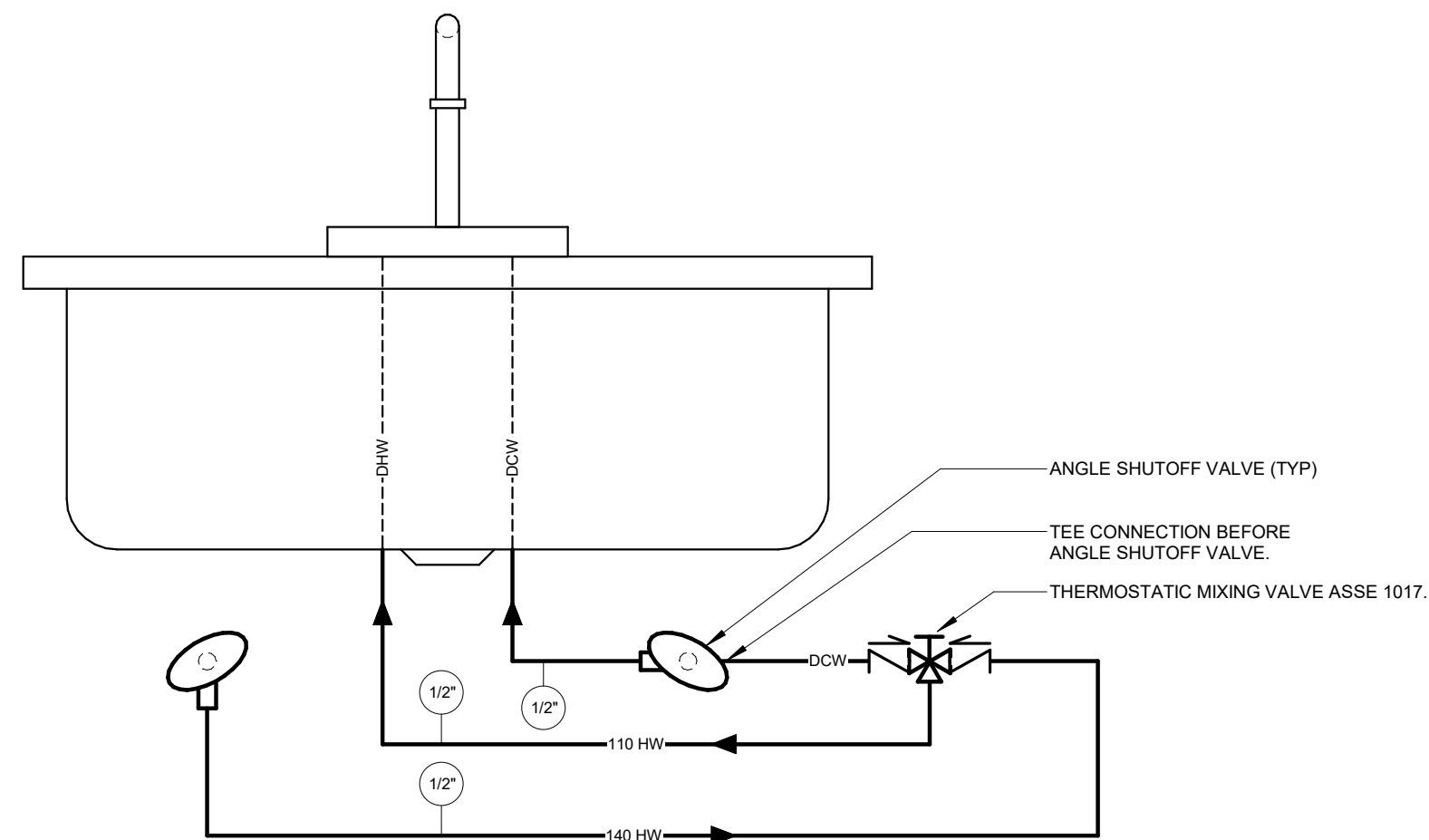
P-201

1 **SANITARY ISOMETRIC**
P-201

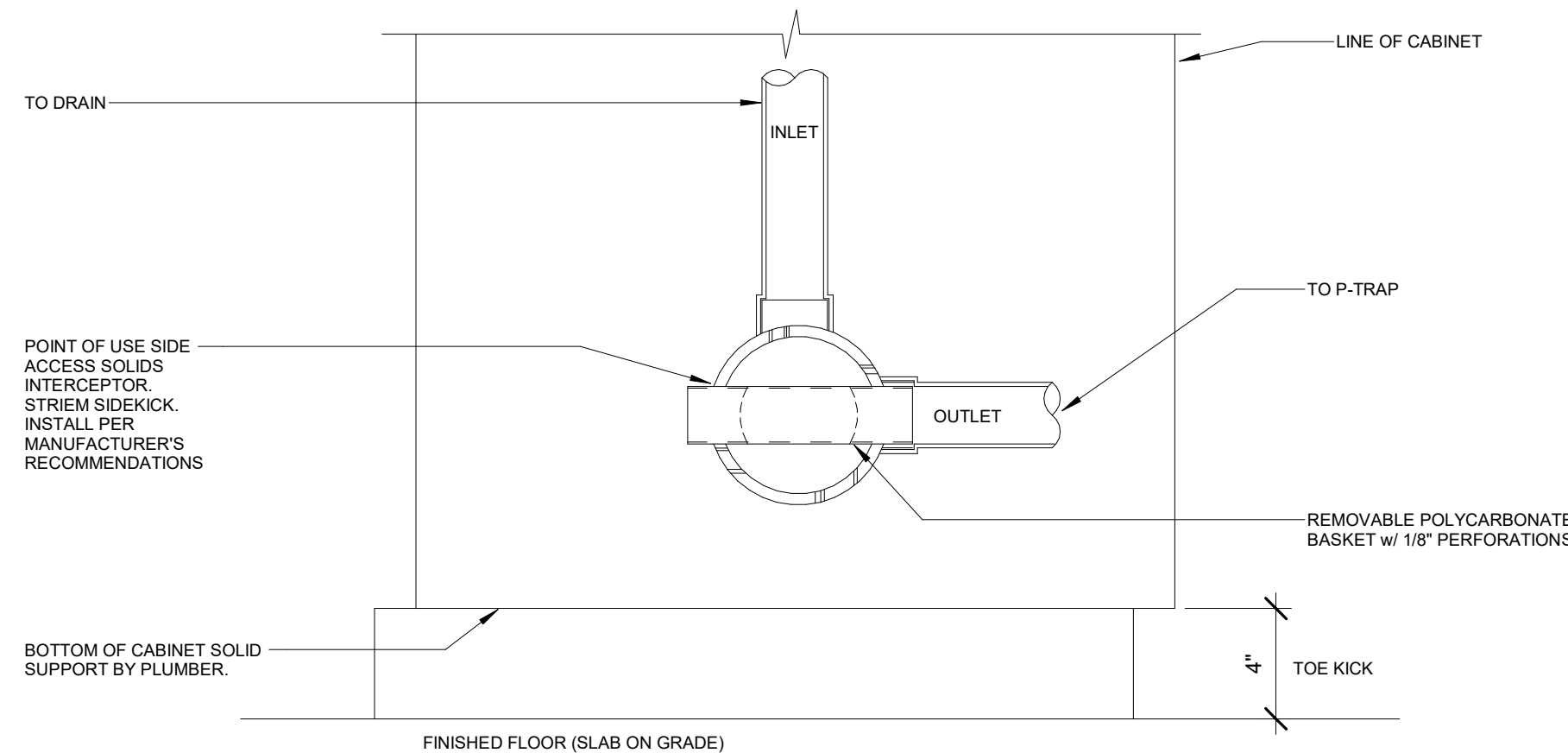
MISCELLANEOUS PLUMBING SCHEDULE				
MARK	MANUFACTURER	MODEL	CONNECTION SIZE	REMARKS
FCO-1	JAY R. SMITH	4031	MATCH PIPE SIZE	FLUSH WITH FLOOR CLEANOUT



1 INTERIOR FLOOR CLEANOUT DETAIL
NTS

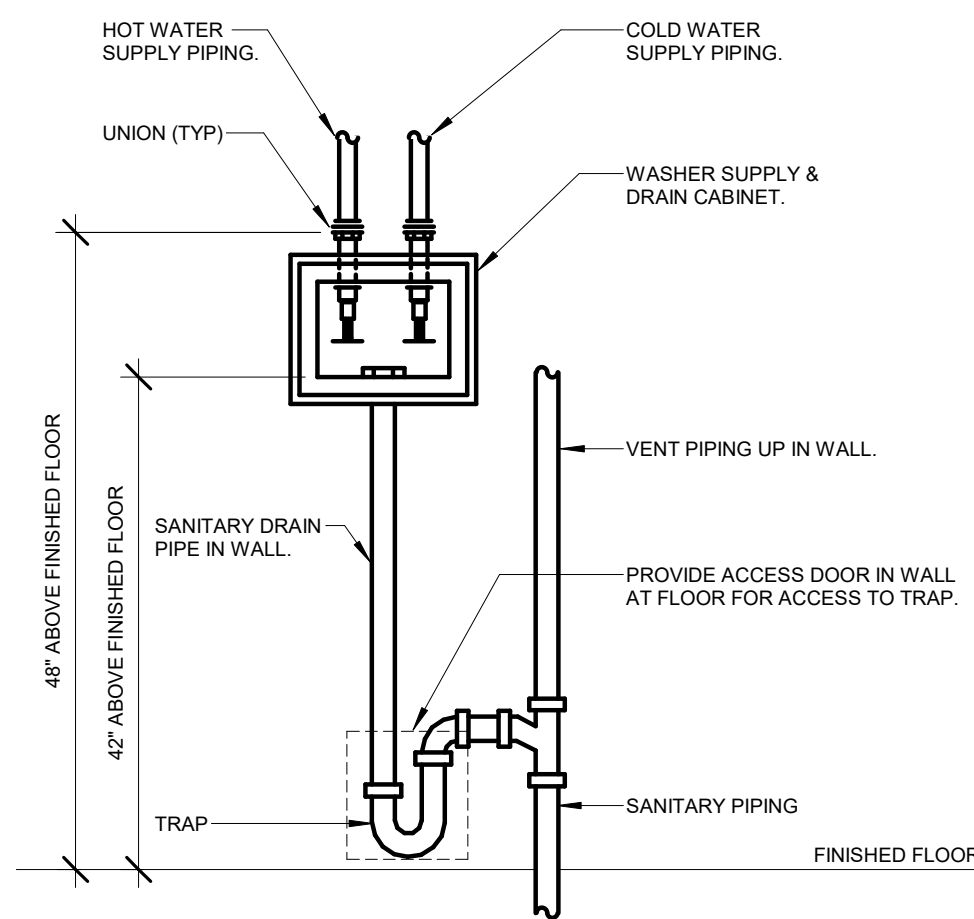


2 LAVATORY PIPING DETAIL
NTS



4 TYPICAL HAIR TRAP IN CABINET DETAIL (WET TABLE)
NTS

WALL BOX SCHEDULE						
REMARKS:						
1. CONTRACTOR SHALL COORDINATE MODEL NUMBER WITH PIPE MATERIAL.						
MARK	MANUFACTURER	MODEL	SERVICE	CONNECTIONS	REMARKS	
WB-1	IPS CORPORATION (GUY GRAY)	W470	CLOTHES WASHER	DHW 1/2" DCW 1/2" SAN 2"	1	



3 CLOTHES WASHER SUPPLY/DRAIN CABINET DETAIL
NTS

FLOOR MOUNTED FLUSH TANK WATER CLOSET SCHEDULE									
REMARKS:									
1. COORDINATE FLUSH VALVE HANDING WITH OWNER.									
MARK	FIXTURE	SEAT	CONNECTIONS	ADA COMPLIANT	REMARKS				
WC-1	AMERICAN STANDARD	CADET 2467.016	AMERICAN STANDARD	5901.1	DCW 1/2" SAN 4" VENT 2"	YES	1		

WALL MOUNTED LAVATORY SCHEDULE											
REMARKS:											
1. PROVIDE ADA COMPLIANT MCQUIRE PRO-WRAP DHW AND DCW SUPPLIES AND TRAP. 2. PROVIDE THERMOSTATIC MIXING VALVE: ASSE 1017 LEONARD VALVE 170-LF OR APPROVED EQUAL. 3. FURNISH WITH PLUG-IN POWER ADAPTER. 4. FURNISH WITH 0062.00 ACRYLIC SHROUD.											
MARK	FIXTURE	FAUCET	CONNECTIONS	REMARKS							
L-1	AMERICAN STANDARD	355.012	AMERICAN STANDARD	7385.02	HANDLES SINGLE LEVER	OUTLET LAMINAR 0.5GPM	DHW 1/2" DCW 1/2"	110°F DHW -	SAN 1-1/2" VENT 1-1/2"	1, 2	

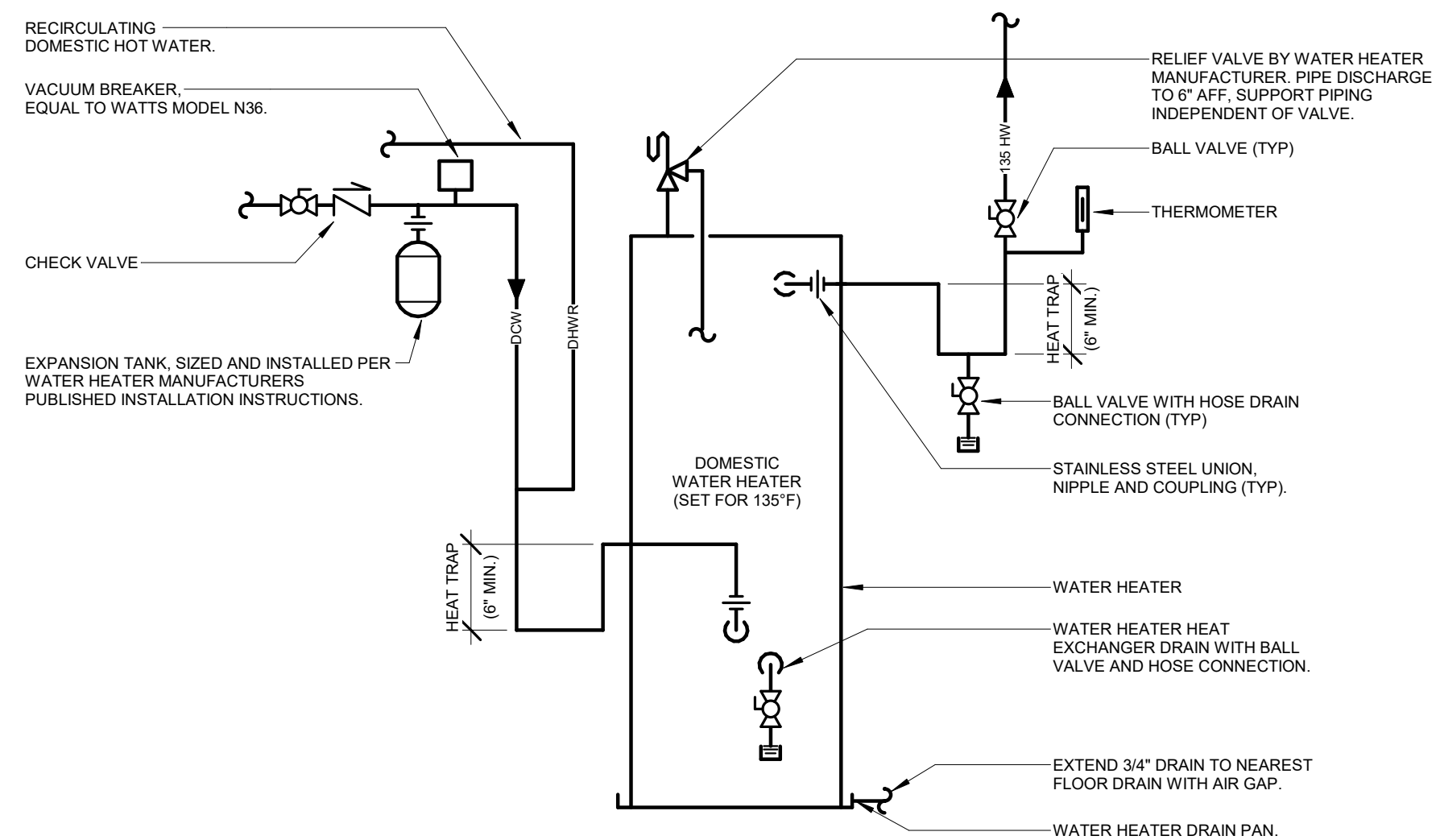
STAINLESS STEEL SINK SCHEDULE													
REMARKS:													
1. SCRUB SINK KIT: FURNISHED WITH SINK, SPOUT, AND FOOT CONTROL. 2. WATTS, ES-LF7C DUAL CHECK VALVES ON SUPPLIES.													
MARK	TYPE	MANUFACTURER	MODEL	STRAINER	MANUFACTURER	MODEL	HANDLES	OUTLET	DHW	DCW	CONNECTIONS	VENT	REMARKS
S-1	SINGLE BOWL DROP-IN	ELKAY	LRAD 191865	LK35	ELKAY	LK6000	SINGLE LEVER	LAMINAR 1.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"	2
S-2	SINGLE BOWL DROP-IN	ELKAY	LRAD191865	LK35	CHICAGO FAUCETS	895-317ABCP	4" WRISTBLADE	LAMINAR 1.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"	2
SS-1	SCRUB SINK	ELKAY	EWS3120FC		ELKAY	SPOUT: LK395A	FOOT CONTROL: LK398C	LAMINAR 1.5 GPM	1/2"	1/2"	1-1/2"	1-1/2"	1

ELECTRIC WATER COOLER WITH BOTTLE FILLER SCHEDULE												
REMARKS:												
1.												
MARK	MANUFACTURER	MODEL	PERFORMANCE	CONNECTIONS	ELECTRICAL	REMARKS						
EW-1	ELKAY	EZSTLG8WSSK	CAPACITY 8 GPH EWT 80 LWT 50 DESIGN AMBIENT 90	DCW 1/2" SAN 1-1/2" VENT 1-1/2"	VOLTS/PHASE 115/1 FLA 6	POWER SUPPLY PLUG-IN CORD	1					

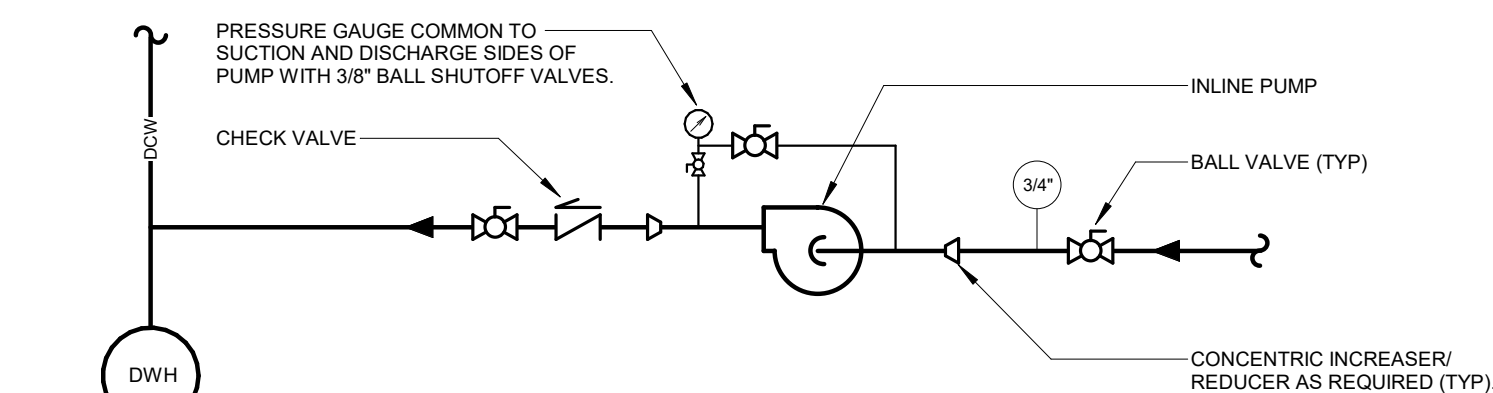
FLOOR DRAIN SCHEDULE							
REMARKS:							
1. FURNISH WITH BARRIER TYPE TRAP SEAL DEVICE, EQUAL TO ZURN 1072.							
MARK	MANUFACTURER	MODEL	STRAINER SIZE	CONNECTION SIZE	DCW	REMARKS	
FD-1	ZURN	415B-Y	6"	3"	-	1	
FD-2	JAY R. SMITH	2110	8"	4"	-	1	

MOP BASIN SCHEDULE										
REMARKS:										
1. FURNISH WITH HOSE HOLDER 65.700, MOP HANGER 65.600, AND WALL GUARDS.										
MARK	TYPE	MANUFACTURER	MODEL	MANUFACTURER	MODEL	HANDLES	OUTLET	CONNECTIONS	REMARKS	
MB-1	FIBERGLASS	MUSTEE	63M 24"X24"X10"	CHICAGO	897-CCP	2-3/8" LEVER	3/4" HOSE THREAD	DHW 1/2" DCW 1/2" SAN 3" VENT 1-1/2"	1	
MB-2	MOLDED STONE	MUSTEE	14CP	CHICAGO	891	2-3/8" LEVER	3/4" HOSE THREAD	1/2" 1/2" 1-1/2"	1	

WATER HEATER - ELECTRIC (TANK) SCHEDULE												
REMARKS:												
1. FURNISH WITH RELIEF VALVE. 2. FURNISH WITH INSULATION BLANKET.												
MARK	MFR	MODEL	TYPE	FUEL TYPE	INPUT CAPACITY (KW)	STORAGE CAPACITY (GAL)	WATER MAX GPH (@90 RISE)	EWT (°F)	LWT (°F)	ELECTRICAL VOLTS/PH	DISCONNECT BY	REMARKS
DWH-1	A.O. SMITH	DEN-66	TANK	ELECTRIC	9.0	66	40.0	40	135	208/1	EC	1, 2



6 DOMESTIC WATER HEATER - PIPING DETAIL (TANK TYPE ELECTRIC)
NTS



5 RECIRCULATOR PUMP PIPING DIAGRAM
NTS

RECIRCULATOR PUMP SCHEDULE											
REMARKS:											
1. PUMP IS TO BE CONTINUOUS RUN. 2. STAINLESS STEEL MATERIAL.											
MARK	MANUFACTURER	MODEL	TYPE	CONNECTION (INCH)	FLOW (GPM)	HEAD PRESSURE (FT)	HP	RPM	ELECTRICAL VOLTS/PH	POWER DISCONNECT BY	REMARKS
RP-1	TACO	009-SF5	CARTRIDGE	3/4"	4.0	11	1/8	3250	120/1	EC	1, 2

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26

FMD | ARCHITECTS
ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL
10 ARTISAN DR.
SMYRNA, DE 19777
CONSTRUCTION DOCS

PLUMBING SCHEDULES
AND DETAILS

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

07/02/26 CONSTRUCTION

P-301

CONTROL SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	WIRE TO SF, RF, AND/OR EF SHUTDOWN CONTACTS
	MOTOR STARTER WITH S/S CONTACTS
	VARIABLE FREQUENCY DRIVE
	DUCT MOUNTED SMOKE DETECTOR
	HUMIDIFIER
	AIRFLOW MEASURING STATION
	SINGLE POINT TEMPERATURE SENSOR (DUCT MOUNTED)
	MOTORIZED DAMPER
	MOTORIZED DAMPER WITH END SWITCH
	HUMIDITY SENSOR (DUCT MOUNTED)
	HUMIDITY SENSOR (WALL MOUNTED)
	CARBON DIOXIDE SENSOR (DUCT MOUNTED)
	CARBON DIOXIDE SENSOR (WALL MOUNTED)
	120V THERMOSTAT (WALL MOUNTED)
	ADJUSTABLE DDC THERMOSTAT (WALL MOUNTED)
	TEMP SENSOR (READ ONLY, WALL MOUNTED)
	DUAL CONTACT OCCUPANCY SENSOR.
	DIFFERENTIAL PRESSURE TRANSMITTER
	STATIC PRESSURE LOW-LIMIT SWITCH
	STATIC PRESSURE HIGH-LIMIT SWITCH
	CURRENT SENSING RELAY
	STATIC PRESSURE TRANSMITTER
	DUCT AVERAGING TEMPERATURE SENSOR
	LOW-LIMIT TEMPERATURE SWITCH
	OVERFLOW SENSOR
	LIGHT SENSOR
	THREE-WAY TCV
	TWO-WAY TCV
	SPACE ION SENSOR
	NEEDLE POINT BI-POLAR IONIZER
	DUCT ION SENSOR
	BIPOLAR IONIZER
	ANALOG INPUT TO BAS
	ANALOG OUTPUT TO BAS
	DIGITAL INPUT TO BAS
	DIGITAL OUTPUT TO BAS
	INTEGRATION TO BAS

VIEW SYMBOL LEGEND	
	SECTION CUT
	ENLARGED PLAN
	DETAIL CALLOUT

PIPE FITTING LEGEND	
SYMBOL	DESCRIPTION
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	CAP
	90° PIPE RISE OR DROP
	90° PIPE CONNECTION OUT OF BOTTOM
	90° PIPE CONNECTION OUT OF TOP
	90° PIPE CONNECTION OUT OF SIDE SANITARY STANDARD
	45° PIPE CONNECTION OUT OF SIDE
	PIPING RISER DOWN
	PIPING RISER UP

DUCTWORK ACCESSORIES LEGEND	
SYMBOL	DESCRIPTION
	4-WAY DIFFUSER (*MARK**CFM) XX-XXX
	3-WAY DIFFUSER (*MARK**CFM) XX-XXX
	2-WAY DIFFUSER (*MARK**CFM) XX-XXX
	RETURN / EXHAUST GRILLE - CEILING MOUNTED (*MARK**CFM) XX-XXX
	SUPPLY DIFFUSER - SIDEWALL MOUNTED (*MARK**CFM) XX-XXX
	TIE-IN POINT
	FIRE DAMPER
	DUCT DETECTOR
	MANUAL BALANCE DAMPER

DUCTWORK FITTING LEGEND	
SYMBOL	DESCRIPTION
	45° ENTRY BOOT TAKE-OFF (RECTANGULAR TO RECTANGULAR)
	90° ENTRY BOOT TAKE-OFF (CONICAL/BELLMOUTH FITTING)
	CONVERGING/DIVERGING TRANSITION
	DUCT CAP
	DUCT RISE (IN THE DIRECTION OF AIRFLOW)
	DUCT DROP (IN THE DIRECTION OF AIRFLOW)
	MITERED DUCT ELBOW WITH TURNING VANES
	RETURN, EXHAUST OR RELIEF AIR DUCT DOWN
	RETURN, EXHAUST OR RELIEF AIR DUCT UP
	SUPPLY OR OUTSIDE AIR DUCT DOWN
	SUPPLY OR OUTSIDE AIR DUCT UP
	SQUARE TO ROUND TRANSITION
	DOUBLE WALL DUCT
	INTERNALLY LINED DUCTWORK

HVAC PIPING SYSTEM SCHEDULE				
NOTE: 1. WHERE MULTIPLE MATERIALS ARE INDICATED, SELECTION IS INSTALLER'S CHOICE.				
SYSTEM	SIZES	PIPE MATERIAL	FITTING MATERIAL	JOINT TYPE
A/C CONDENSATE DRAIN	ALL SIZES	TYPE L HARD COPPER OR PVC (NOT IN PLENUMS)	WROUGHT COPPER OR PVC	SOLDERED OR SOLVENT WELD
REFRIGERANT	ALL SIZES	ASTM B280 COPPER TUBE, H58 HARD DRAWN OR O60 SOFT ANNEALED	WROUGHT COPPER	AWS A5.8M / A5.8 SILVER BRAZE

DUCT INSULATION SCHEDULE				
NOTE: 1. FIBERGLASS INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.23 BTU"IN/(HR * FT*2 *F) AT 75F MEAN TEMP. 2. CLOSED CELL POLYMERIC INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.28 BTU"IN/(HR * FT*2 *F) AT 70F MEAN TEMP.				
SYSTEM	LOCATION	TYPE	THICKNESS	JACKET
OUTSIDE AIR AND COMBUSTION AIR	CONCEALED	FIBERGLASS DUCT WRAP	2"	GLASS CLOTH JACKET
OUTSIDE AIR AND COMBUSTION AIR	EXPOSED	FIBERGLASS DUCT BOARD	2"	GLASS CLOTH JACKET
RETURN AIR BOOTS	ALL	CLOSED CELL ELASTOMERIC DUCT LINER	1"	N/A
RETURN AIR DUCT	SEE PLANS	CLOSED CELL ELASTOMERIC DUCT LINER	1"	N/A
SUPPLY, MIXED AND RELIEF AIR	CONCEALED IN AIR-CONDITIONED SPACE	FIBERGLASS DUCT WRAP	2"	FOIL FACED VAPOR SEAL
SUPPLY, MIXED AND RELIEF AIR	EXPOSED IN AIR-CONDITIONED SPACE	FIBERGLASS DUCT BOARD	2"	GLASS CLOTH JACKET

HVAC PIPING INSULATION SCHEDULE					
NOTE: 1. FIBERGLASS INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.23 BTU"IN/(HR * FT*2 *F) AT 75F MEAN TEMP. 2. ELASTOMERIC INSULATION THICKNESSES ARE BASED ON A CONDUCTIVITY OF 0.28 BTU"IN/(HR * FT*2 *F) AT 70F MEAN TEMP.					
SYSTEM	SIZES	TYPE	THICKNESS	JACKET	OUTDOOR INSTALLATION
A/C CONDENSATE PIPING	ALL SIZES	FIBERGLASS	1"	VAPOR RETARDANT JACKET	N/A
REFRIGERANT PIPING - SUCTION, LIQUID AND HOT GAS	1" AND LARGER	ELASTOMERIC	1"	NONE	PVC JACKET
REFRIGERANT PIPING - SUCTION, LIQUID AND HOT GAS	LESS THAN 1"	ELASTOMERIC	1/2"	NONE	PVC JACKET

MECHANICAL FIRESTOP SCHEDULE		
NOTE: 1. FIRESTOP ASSEMBLY TYPE (REQUIRED FIRESTOPPING MATERIALS) SHALL BE DETERMINED BY THE WALL OR FLOOR/CEILING ASSEMBLY AND PENETRATION TYPE AND SHALL BE UL LISTED AND TESTED IN ACCORDANCE WITH ASTM E814. FIRE RATING OF THE ASSEMBLY SHALL BE EQUIVALENT TO THE WALL OR FLOOR/CEILING ASSEMBLY RATING. 2. ACCEPTABLE FIRE BARRIER PRODUCTS: HILTI "FS-ONE", NELSON "FLAMESEAL" OR APPORVED EQUAL AS MANUFACTURED BY 3M. 3. IF REQUESTED, THE CONTRACTOR SHALL SHOW PROOF OF COMPLIANCE BY PROVIDING THE APPROPRIATE UL FIRESTOPPING SYSTEM NUMBER TO THE INSPECTION AUTHORITY HAVING JURISDICTION OR THE ARCHITECT/ENGINEER.		
PENETRATION	RATING	U.L. SYSTEM
INSULATED METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL5029 OR APPROVED EQUAL
INSULATED METAL PIPE THROUGH MASONRY	4 HOUR	HILTI UL #WJ5028 OR APPROVED EQUAL
INSULATED METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ5091 OR APPROVED EQUAL
METAL DUCT WITHOUT FIRE DAMPER THROUGH MASONRY/CONCRETE	1 OR 2 HOUR	HILTI UL #WLJ7021 OR #WLJ7022 OR APPROVED EQUAL
METAL DUCT WITHOUT FIRE DAMPER THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL7040 OR #WL7042 OR APPROVED EQUAL
METAL DUCT WITHOUT FIRE DAMPER THROUGH MASONRY/CONCRETE	3 HOUR	HILTI UL #CAJ7046 OR APPROVED EQUAL
METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL1054 OR APPROVED EQUAL

MECHANICAL ABBREVIATIONS LEGEND	
ABBREVIATION	DESCRIPTION

MECHANICAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
M-001	MECHANICAL GENERAL INFORMATION
MD-100	FIRST FLOOR MECHANICAL DEMOLITION PLAN
M-100	FIRST FLOOR MECHANICAL ZONING PLAN
M-101	FIRST FLOOR MECHANICAL PLAN
M-102	ROOF MECHANICAL PLAN
M-201	MECHANICAL DETAILS AND SCHEDULES
M-202	MECHANICAL DETAILS AND SCHEDULES

- GENERAL DRAWING NOTES:**
- MATERIALS ILLUSTRATED WITH LIGHT LINES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
 - EXISTING CONDITIONS SHOWN ARE BASED ON REVIEW OF REFERENCE DRAWINGS AND GENERAL FIELD REVIEW. NOTIFY ENGINEER IF FIELD CONDITIONS DIFFER FROM WHAT IS SHOWN. CONTRACTOR IS RESPONSIBLE FOR FIELD MEASURING AND COORDINATING DIMENSIONS FOR TIE-IN AND INSTALLATION OF ALL NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER MATERIALS PRIOR TO FABRICATION.
 - MATERIALS ILLUSTRATED WITH DARK DASHED LINES SHALL BE REMOVED. THE OWNER SHALL HAVE THE RIGHT TO RETAIN ANY MATERIALS ILLUSTRATED TO BE REMOVED. IF REQUESTED BY THE OWNER, THE CONTRACTOR SHALL REMOVE MATERIALS AND RELOCATE THEM TO THE OWNER'S SPECIFIED LOCATION OF STORAGE. ALL MATERIALS NOTED TO BE RELOCATED SHALL BE TEMPORARILY STORED AND PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR UNLESS NOTED OTHERWISE. REMOVE ALL MATERIALS ASSOCIATED WITH EQUIPMENT AND DUCTWORK, INCLUDING PIPING, HANGERS, SUPPORTS, POWER, CONTROLS, INSULATION, ETC.
 - MATERIALS ILLUSTRATED WITH DARK LINES ARE NEW.
 - DO NOT INSTALL ANY MATERIALS IN A LOCATION THAT HINDERS MAINTENANCE ACCESS TO ANY MATERIAL THAT REQUIRES SERVICE OR MAINTENANCE.
 - THIS CONTRACTOR SHALL REMOVE AND RE-INSTALL EXISTING CEILING SYSTEMS WHERE NECESSARY TO ACCOMMODATE ABOVE CEILING WORK. PRIOR TO REMOVAL OF CEILINGS, CONTRACTOR SHALL PHOTOGRAPH CONDITION OF EXISTING CEILINGS AND SUBMIT PHOTO DOCUMENTATION TO OWNER AND ENGINEER. CEILING REMOVAL AND REINSTALLATION WORK SHALL BE CAREFULLY PERFORMED WITH CLEAN GLOVES TO MAINTAIN CEILING APPEARANCE. CONTRACTOR SHALL REPLACE ALL DAMAGED AND/OR DIRTY CEILING TILES TO MATCH EXISTING.
 - PATCH AND PAINT WALLS, CEILINGS AND FLOORS TO MATCH EXISTING AS REQUIRED TO ACCOMMODATE WORK.
 - DUCT RUNOUT SIZES TO TERMINAL EQUIPMENT (VAV BOXES, DIFFUSERS, GRILLES, ETC.) SHALL MATCH THE EQUIPMENT CONNECTION SIZE UNLESS NOTED OTHERWISE.
 - PIPING RUNOUTS TO TERMINAL EQUIPMENT (RE-HEAT COILS, FINNED TUBE RADIATION, UNIT HEATERS, CABINET UNIT HEATERS, ETC.) SHALL BE ¾" UNLESS NOTED OTHERWISE.
 - AREAS OF THIS BUILDING UTILIZE A RETURN AIR PLENUM. ALL MATERIALS SHALL HAVE A MAXIMUM 25 FLAME SPREAD AND 50 SMOKE-DEVELOPED INDEX AS TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723. WIRING SHALL BE PLENUM RATED PER NFPA 70.
 - DUCT SIZES NOTED REPRESENT THE ACTUAL SHEET METAL SIZE. WHERE INTERIOR DUCT LINING IS USED, DUCT SIZES HAVE ALREADY ACCOUNTED FOR THE LINING.
 - FIRESTOP ALL PENETRATIONS OF RATED CEILINGS WITH APPROPRIATE FIRESTOPPING MATERIAL. REQUIRED MATERIALS ARE INDICATED IN THE SPECIFICATIONS.
 - UNLESS DETAILED OTHERWISE, SYSTEMS SHALL BE ORGANIZED SUCH THAT DUCTWORK MAINS ARE THE HIGHEST LEVEL AND ARE TIGHT TO BUILDING STRUCTURE. HVAC PIPING AND PLUMBING PIPING SHALL BE ROUTED BELOW THE DUCTWORK MAINS, AND FIRE PROTECTION PIPING SHALL BE BELOW ALL.

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED

• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333

Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWIRINA, DE 19977

CONSTRUCTION DOCS

MECHANICAL
GENERAL
INFORMATION

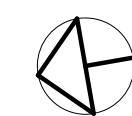
© COPYRIGHT 2026 FMD ARCHITECTS INC. ALL RIGHTS RESERVED	
JOB NUMBER: 26-1482	
07/02/26	CONSTRUCTION

M-001

7/2/2026 9:21:16 AM

DEMOLISH ALL EXISTING HVAC EQUIPMENT,
DUCTWORK, PIPING, AND CONTROLS. TURNOVER
ALL DEMOLISHED EQUIPMENT TO OWNER FOR
FIRST RIGHT OF REFUSAL.

1 FIRST FLOOR MECHANICAL DEMOLITION PLAN
MD-100 1/4" = 1'-0"



PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St., Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

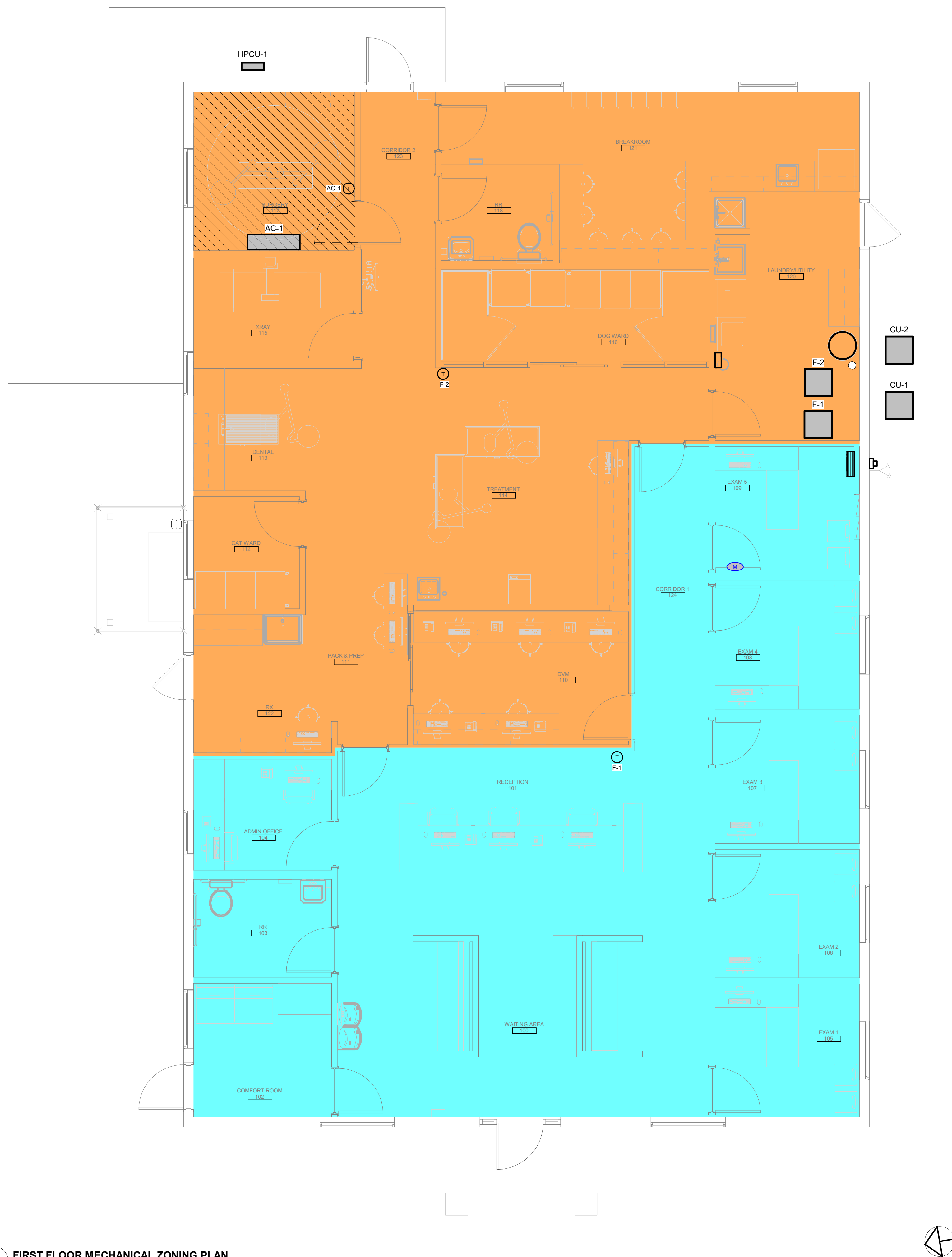
FIRST FLOOR
MECHANICAL
DEMOLITION PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

[illegible]

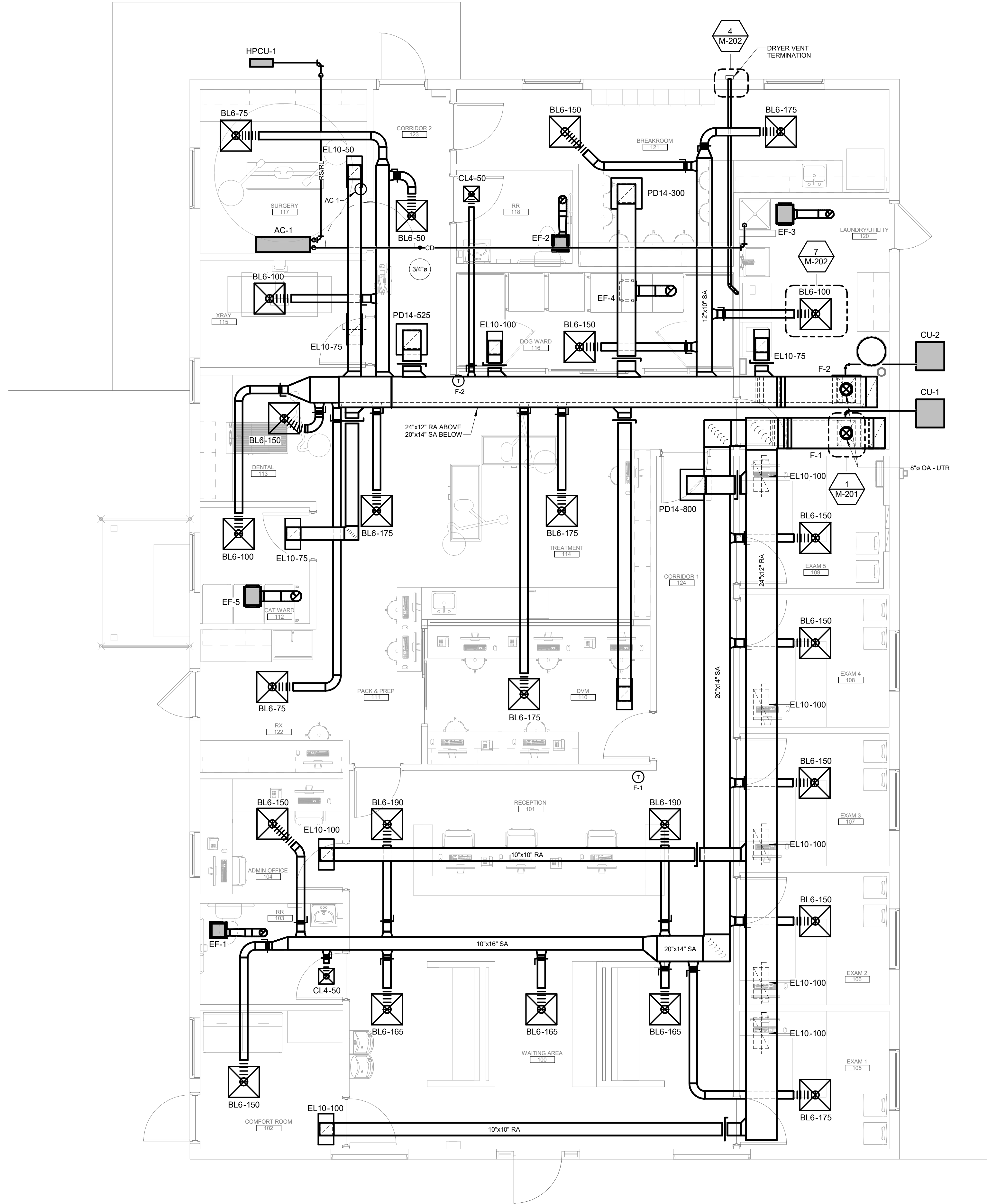
MD-100



1 FIRST FLOOR MECHANICAL ZONING PLAN
M-100 1/4" = 1'-0"

7/12/2026 9:21:22 AM

1 FIRST FLOOR MECHANICAL PLAN
M-101 1/4" = 1'-0"



PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWYTRNA, DE 19977

CONSTRUCTION DOCS

FIRST FLOOR
MECHANICAL PLAN

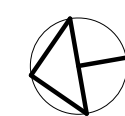
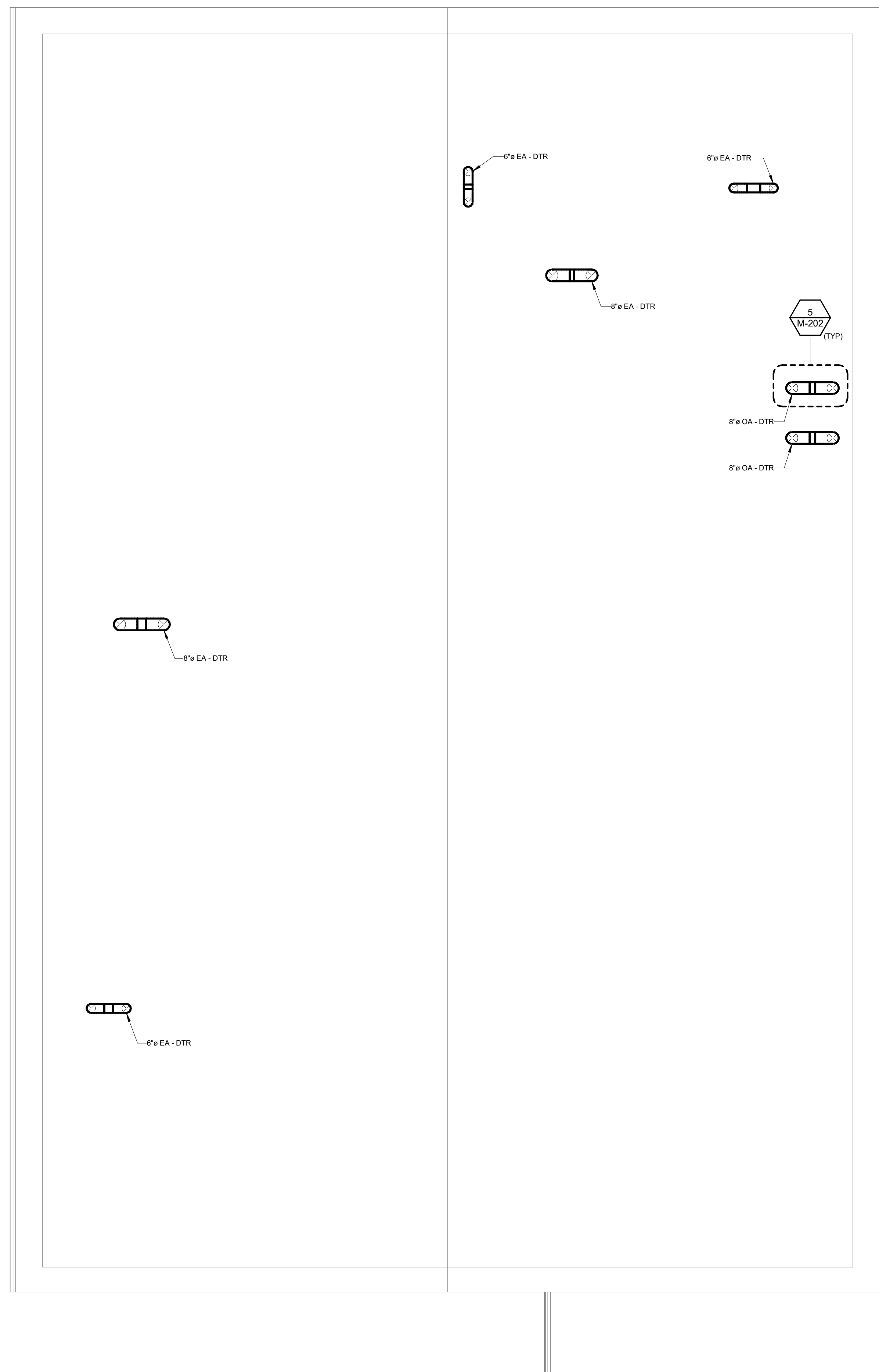
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26	CONSTRUCTION

M-101

7/2/2026 9:21:22 AM



1 ROOF MECHANICAL PLAN
M-102 1/4" = 1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

SMYRNA, DE 1997
CONSTRUCTION DOCS

ROOF MECHANICAL PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26 | CONSTRUCTION

M-102

FURNACE AIR HANDLER SCHEDULE

- | MARK | MANUFACTURER | MODEL | MIN OA | SUPPLY FAN | | COOLING COILS - DX | | | | GAS HEAT | | | | | | ELECTRICAL | | | | ASSOCIATED CONDENSING UNIT | REMARKS | |
|------|--------------|--------------|--------|------------|-----|--------------------|---------------|---------------|-----------|--------------------------|----------|-----------|------------|-----|-----|------------|----------|------|------|----------------------------|---------|---------------------|
| | | | | CFM | ESP | EDB / EWB (F) | MAX VEL (FPM) | LDB / LWB (F) | TOTAL MBH | TYPE (HEATING/FAN) | FUEL | INPUT MBH | OUTPUT MBH | EAT | LAT | FILTER | VOLTS/PH | MCA | MOCP | | | DISCONNECT BY |
| F-1 | DAIKIN | DR96TC100SCN | 250 | 2,000 | 0.7 | 78/64 | 550 | 55/54 | 48 | TWO-STAGE/VARIABLE SPEED | NAT. GAS | 100 | 95 | 55 | 99 | DISPOSABLE | 115/1 | 13.9 | 20 | EC | CU-1 | 1, 2, 3, 4, 5, 6, 7 |
| F-2 | DAIKIN | DR96TC100SCN | 275 | 1,950 | 0.7 | 78/64 | 550 | 55/54 | 48 | TWO-STAGE/VARIABLE SPEED | NAT. GAS | 100 | 95 | 55 | 100 | DISPOSABLE | 115/1 | 13.9 | 20 | EC | CU-2 | 1, 2, 3, 4, 5, 6, 7 |

CONDENSING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	COOLING MBH	AMBIENT TEMP (°F)		REFRIGERANT TYPE	CONTROL	SEER	ELECTRICAL				WEIGHT (LBS)	ASSOCIATED INDOOR UNIT	REMARKS
				DESIGN	LOW				VOLTS/PH	MCA	MOCAP	DISCONNECT BY			
CU-1	DAIKIN	DC9VSA	48	95	30	R32	VARIABLE SPEED	19.2	208/1	37.5	40	EC	174	F-1	1, 2
CU-2	DAIKIN	DC9VSA	48	95	30	R32	VARIABLE SPEED	19.2	208/1	37.5	40	EC	174	F-2	1, 2

DUCTLESS HEAT PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	COOLING MBH	HEATING MBH	REFRIGERANT TYPE	ELECTRICAL				ASSOCIATED CONDENSING UNIT	REMARKS
							VOLTS/PHASE	MCA	MOCp	DISCONNECT BY		
AC-1	DAIKIN	FTXV09AVJU9	WALL MOUNTED	9	10.9	R32	208-230/1	POWERED BY CU	POWERED BY CU	EC	HPCU-1	1, 2, 3, 4, 5

HEAT PUMP CONDENSING UNIT SCHEDULE									
------------------------------------	--	--	--	--	--	--	--	--	--

MARK	MANUFACTURER	MODEL	TYPE	COOLING MBH	HEATING MBH	OPERATIONAL OUTDOOR TEMP RANGE		REFRIGERANT	CONTROL	SEER	ELECTRICAL			ASSOCIATED INDOOR UNIT	REMARKS	
						MAX (CLG)	MIN (HTG)				VOLTS/PHASE	MCA	MOPC			DISCONNECT BY
HPCU-1	DAIKIN	RXT09AVJU9	HEAT PUMP	9	10.9	115	-13	R-32	14-100% CAPACITY MODULATION	21	208-230/1	11.6	15	EC	AC-1	1



PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION

3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19977

CONSTRUCTION DOCS

MECHANICAL DETAILS AND SCHEDULES

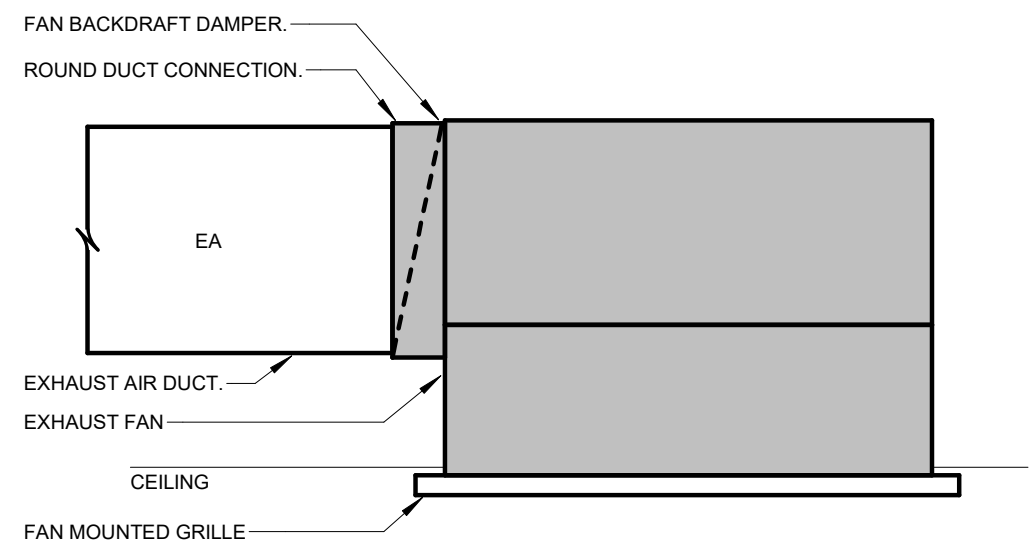
© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

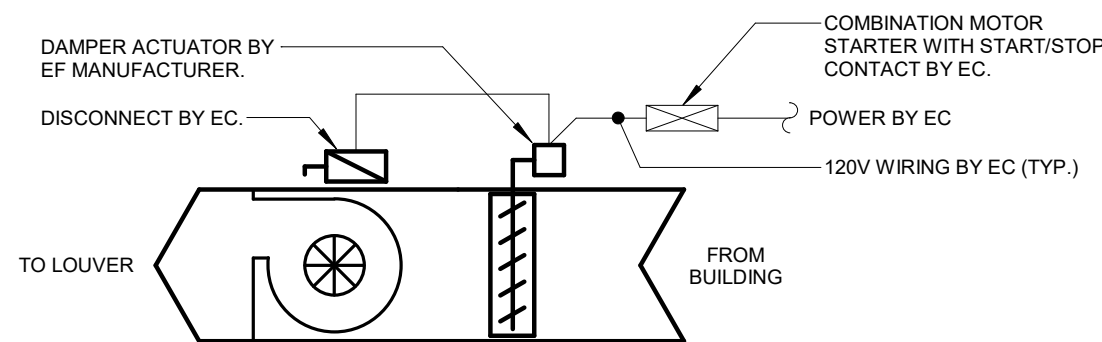
07/02/26 | CONSTRUCTION

M-201

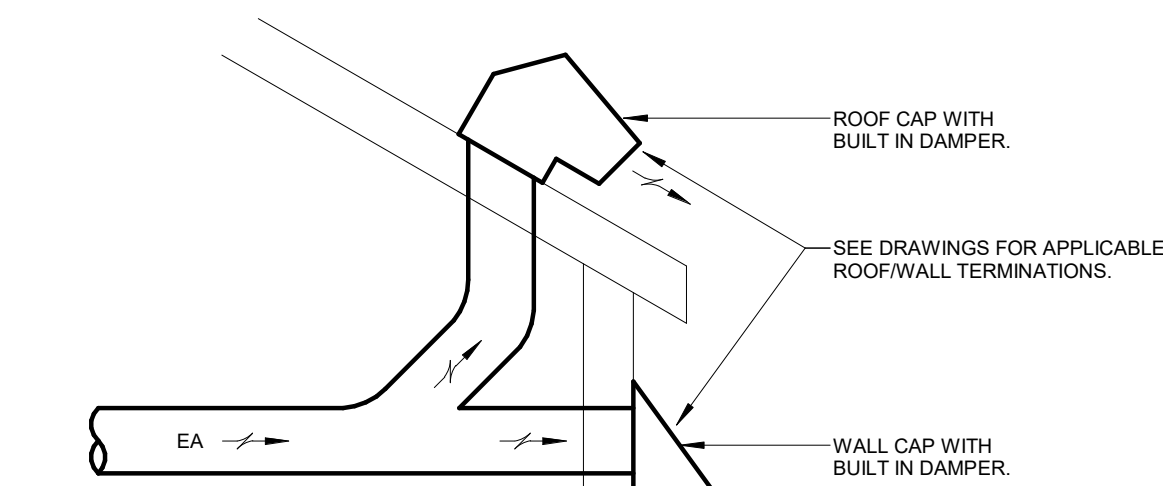
GRILLE AND DIFFUSER SCHEDULE										
REMARKS: 1. FINISH SHALL BE WHITE, UNLESS NOTED OTHERWISE. 2. FURNISH ALL DIFFUSERS WITH FACTORY INSULATED R-6 FOIL-BACKED INSULATION.										
MARK	MANUFACTURER	MODEL	SERVICE	MOUNTING	INLET SIZE	OVERALL SIZE	MAX AIRFLOW (CFM)	THROW PATTERN	MAX NC	REMARKS
BL6	PRICE	SPD	SUPPLY	LAY-IN	6" DIA	24"x24"	215	4-WAY	25	1, 2
CL4	PRICE	SPD	SUPPLY	LAY-IN	4" DIA	12"x12"	105	4-WAY	25	1, 2
EL10	PRICE	PDDR	RETURN / EXHAUST	LAY-IN	10" DIA	24"x12"	245	N/A	25	1
PD14	PRICE	PDDR	RETURN / EXHAUST	LAY-IN	14" DIA	24"x24"	1035	N/A	25	1



1
M-202/ NTS
CEILING EXHAUST FAN WITH INTEGRAL GRILLE

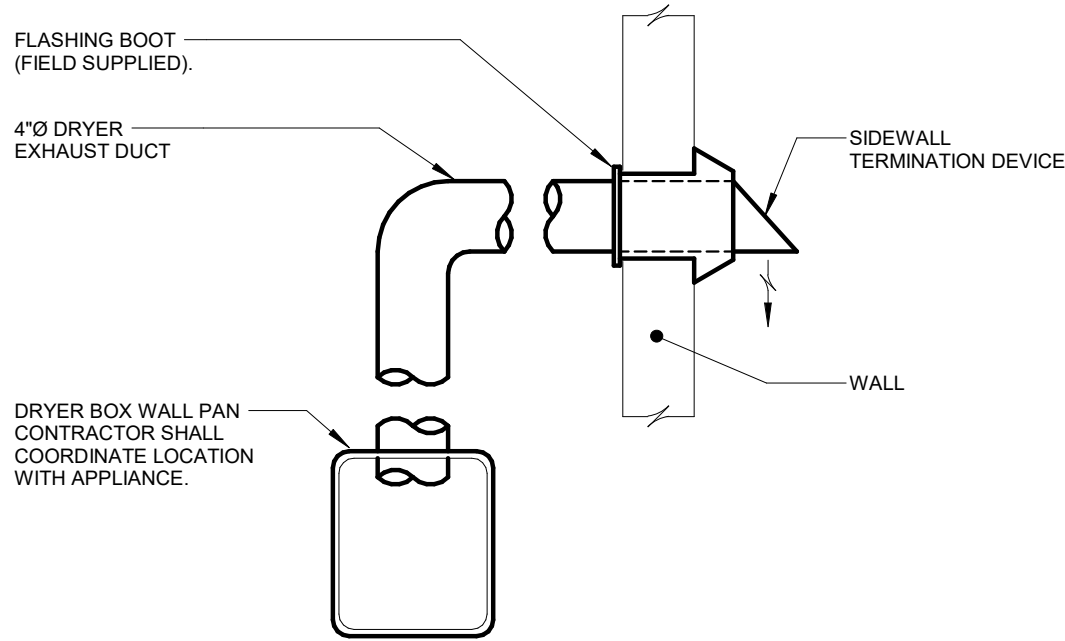


2
M-202/ NTS
EXHAUST FAN CONTROL DIAGRAM

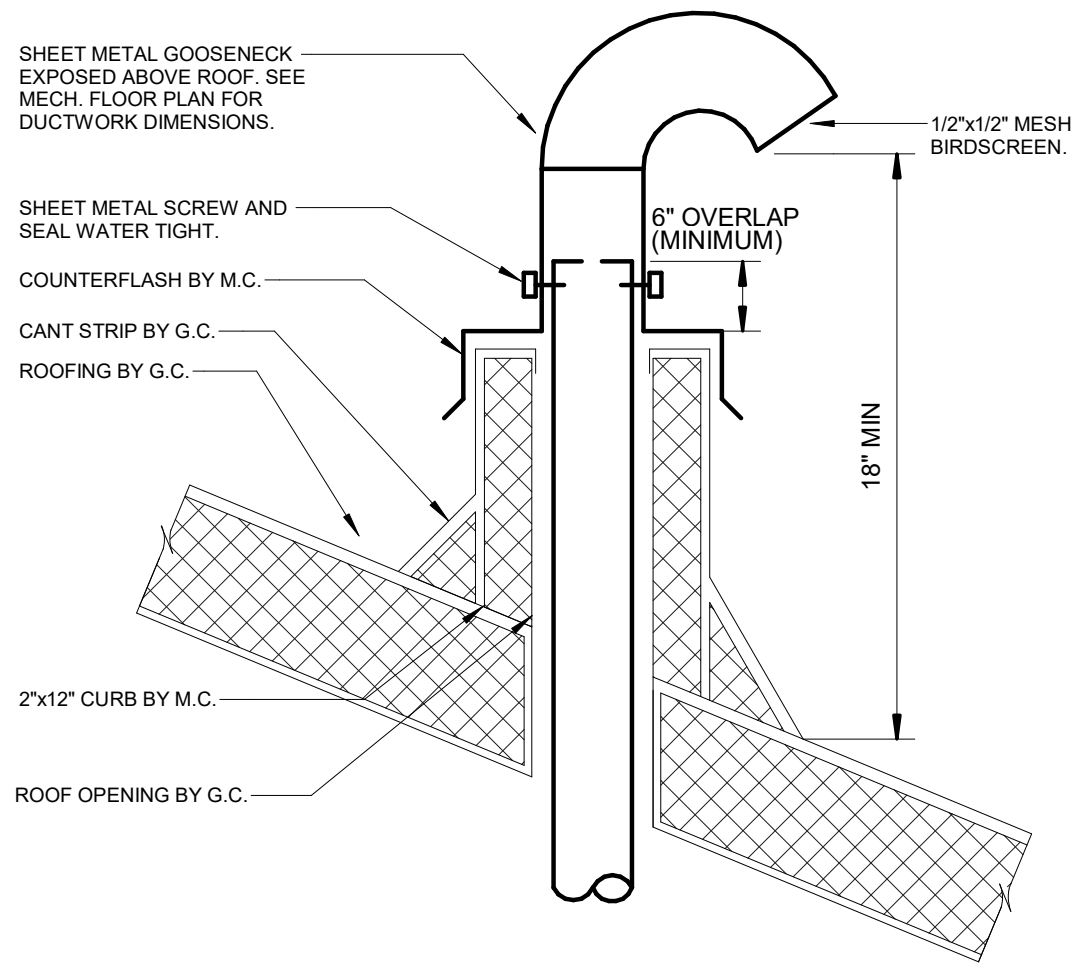


3
M-202/ NTS
EXHAUST VENT CAP DETAIL

- NOTE:**
- WHERE THE EXHAUST DUCT EQUIVALENT LENGTH EXCEEDS 35 FEET, THE EQUIVALENT LENGTH OF THE EXHAUST DUCT SHALL BE IDENTIFIED ON A PERMANENT LABEL OR TAG (BY HVAC CONTRACTOR). THE LABEL OR TAG SHALL BE LOCATED WITHIN 6 FEET OF THE EXHAUST DUCT CONNECTION.
 - COORDINATE EXTERIOR WALL PENETRATION, PATCHING, AND SEALING WITH LANDLORD.

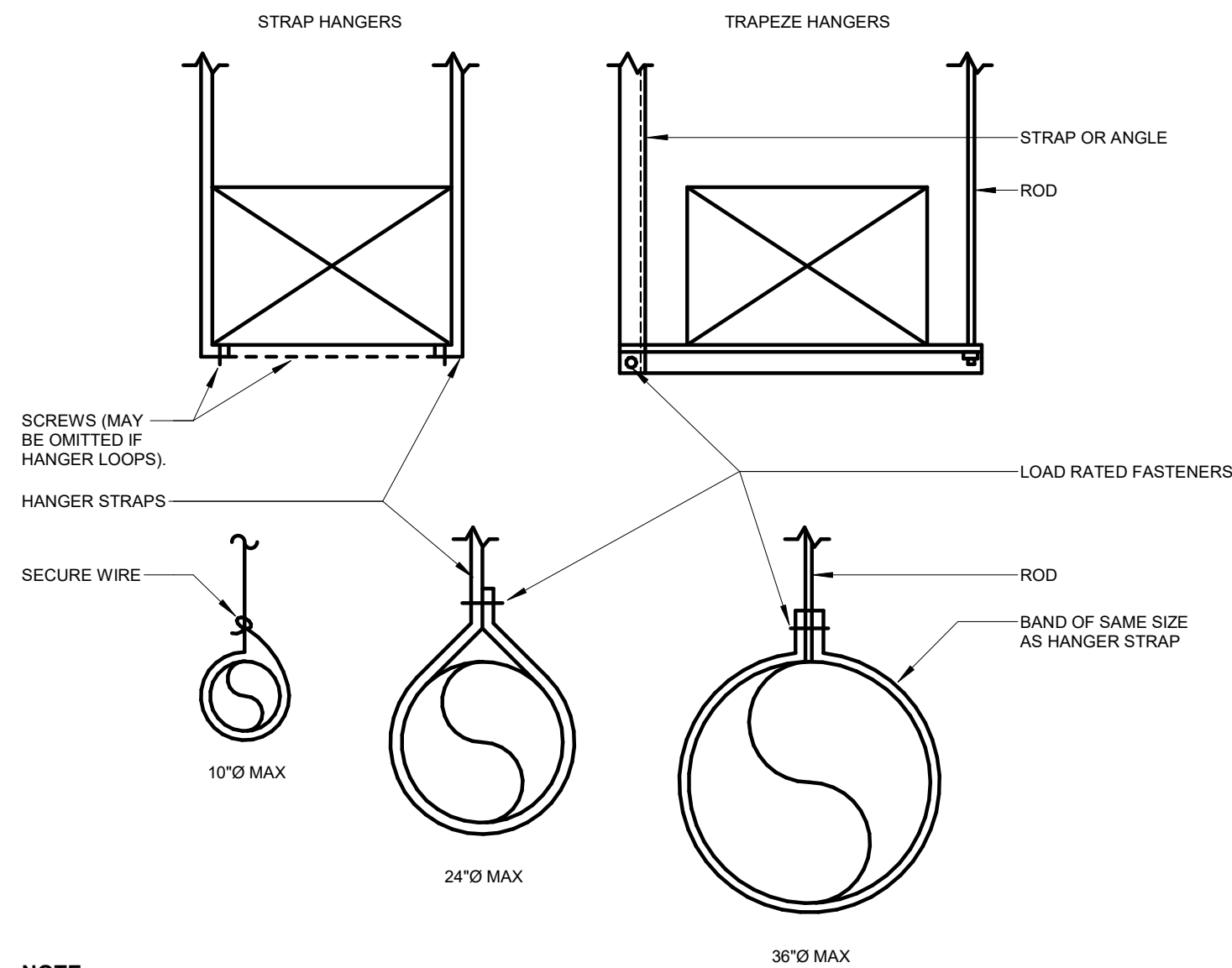


4
M-202/ NTS
DRYER EXHAUST DUCT BOX AND WALL TERMINATION DETAIL



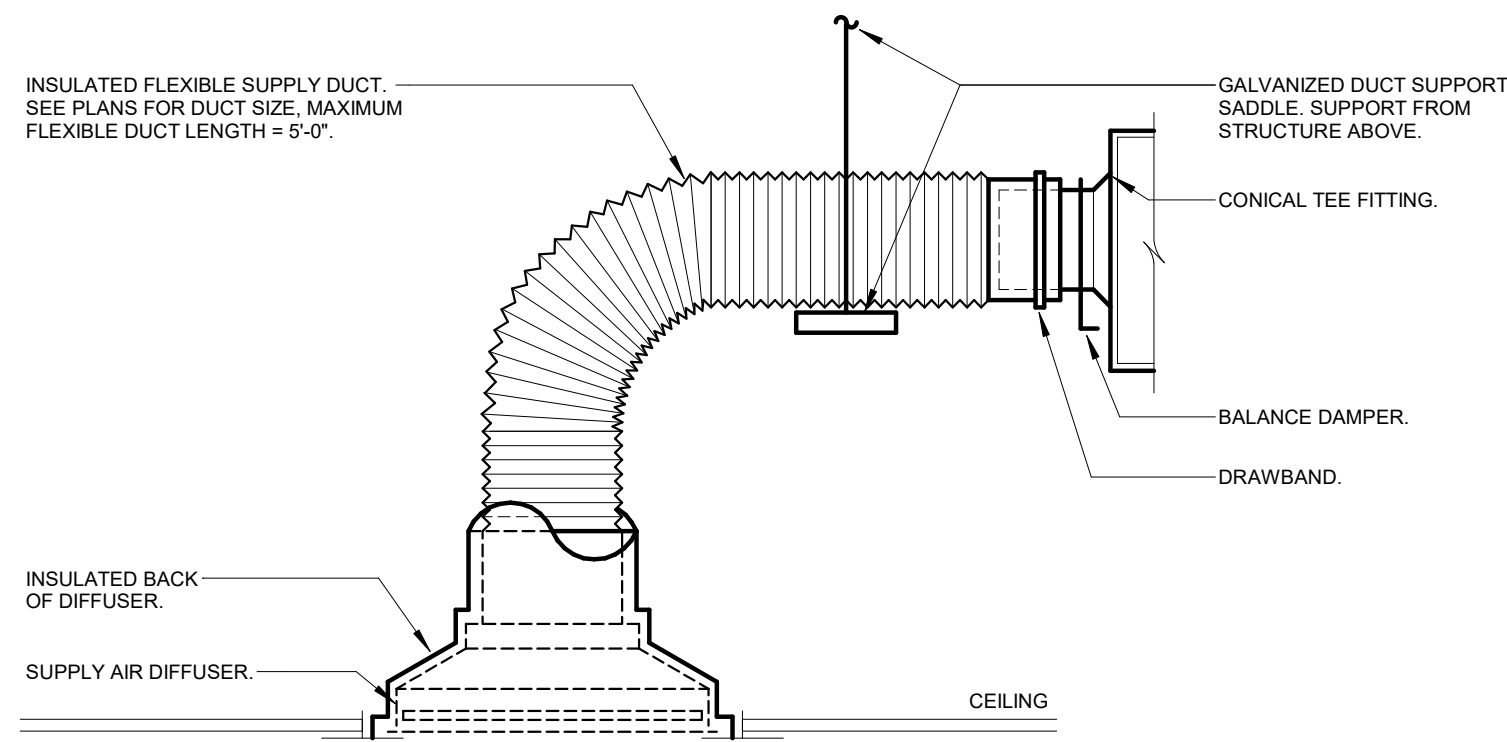
5
M-202/ NTS
GOOSENECK DUCT DETAIL SLOPED ROOF

EXHAUST FAN SCHEDULE																
REMARKS: 1. FURNISH WITH BACKDRAFT DAMPER. 2. INTERLOCK OPERATION WITH ROOM LIGHT SWITCH. 3. FANS SHALL OPERATE CONTINUOUSLY. 4. ALL OUTDOOR EXHAUST FANS SHALL BE FURNISHED WITH A BIRD SCREEN. IF EXHAUST FAN IS DUCTED TO OUTDOORS, CONTRACTOR SHALL PROVIDE ALUMINUM BIRD SCREEN IN THE FIELD FOR UNIT DISCHARGE.																
MARK	MANUFACTURER	MODEL	TYPE	SERVICE	AIRFLOW (CFM)	ESP (IN W.C.)	FAN RPM	DRIVE TYPE	MAX SONES	VOLTS/PH	BHP	ELECTRICAL	MOCP	DISCONNECT BY	STARTER BY	REMARKS
EF-1	GREENHECK	SP-LP0511	CEILING MT	RESTROOM	75	0.5	773	DIRECT	2.6	115/1	16 W	-	-	PLUG	N/A	1, 2, 4
EF-2	GREENHECK	SP-LP0511	CEILING MT	RESTROOM	75	0.5	773	DIRECT	2.6	115/1	16 W	-	-	PLUG	N/A	1, 2, 4
EF-3	GREENHECK	SP-A390	CEILING MT	LAUNDRY/UTILITY	175	0.5	1060	DIRECT	2.8	115/1	63 W	-	-	MFR	EC	1, 3, 4
EF-4	GREENHECK	SP-LP0810W	CEILING MT	DOG WARD	100	0.5	894	DIRECT	2.8	115/2	4 W	-	-	PLUG	N/A	1, 3, 4
EF-5	GREENHECK	SP-LP0810W	CEILING MT	CAT WARD	75	0.5	894	DIRECT	2.8	115/2	4 W	-	-	PLUG	N/A	1, 3, 4

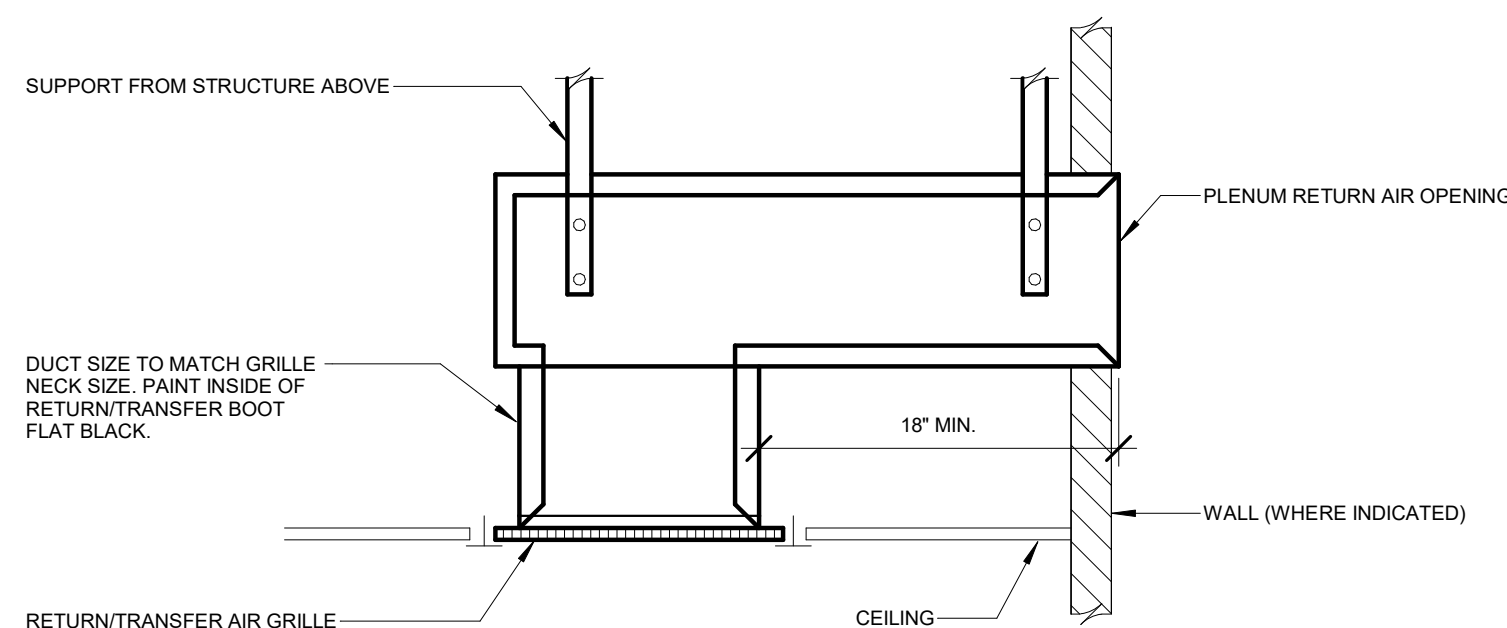


- NOTE:**
- PROVIDE ALL HANGERS AND SUPPORTS SIZED AND SPACED IN ACCORDANCE WITH THE REQUIREMENTS INDICATED IN THE LATEST EDITION OF SMACNA "HVAC DUCT CONSTRUCTION STANDARDS".

6
M-202/ NTS
DUCT HANGER DETAIL



7
M-202/ NTS
TYPICAL DUCT/DIFFUSER CONNECTION DETAIL



8
M-202/ NTS
RETURN AIR TRANSFER BOOT

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26

FMD | ARCHITECTS
ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL
10 ARTISAN DR.
SWIRTA, DE 19977
CONSTRUCTION DOCS

MECHANICAL DETAILS
AND SCHEDULES

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

07/02/26	CONSTRUCTION

M-202

LIGHTING FIXTURE SCHEDULE											
MARK	VOLTAGE	WATTAGE	LUMENS	COLOR TEMP	MOUNTING	DIMMING	FINISH	DIMENSION (W X L X H)	DESCRIPTION	MANUFACTURER	
C	120/277V	41.4	4556	4000K	LAY-IN	0-10V	WHITE	48" X 24" X 2"	RECESSED LED FLAT PANEL LIGHT FIXTURE WITH ALUMINUM FRAME, AND FRAME FOR MOUNTING IN LAY-IN TEE BAR CEILING.	METALUX #24FP SERIES COLUMBIA #CBT SERIES LITHONIA #CPX SERIES CURRENT #LBP SERIES	
D	120/277V	13	1000	4000K	DRYWALL	0-10V	WHITE	4" X 6"	RECESSED LED DOWNLIGHT WITH HAZE, SEMI-SPECULAR SELF-FLANGED REFLECTOR, MEDIUM BEAM, AND FRAME FOR MOUNTING IN DRYWALL CEILING.	PORTFOLIO #LD4B SERIES PRESCOLITE #LBRP SERIES LITHONIA #LDN4 SERIES HE WILLIAMS #4DR SERIES	
EM	120/277V	1.5	--	--	WALL MOUNT AT 8'-0"	--	WHITE	9" X 2-5/8" X 5"	TWIN HEAD EMERGENCY EGRESS LIGHT UNIT WITH THERMOPLASTIC HOUSING, SEALED NICKEL CADMIUM BATTERY, AUTOMATIC CHARGER, AUTOMATIC TRANSFER CIRCUITRY, SELF-DIAGNOSTICS, AND (2) .78W LED HEADS, CONNECT TO UNSWITCHED LIGHTING CIRCUIT.	SURE-LITES #APEL SERIES LITHONIA #ELM2L SERIES COMPASS #CJ2 SERIES EMERGLITE #EL-ZLED SERIES	
R	120/277V	41.4	4556	4000K	LAY-IN	0-10V	WHITE	48" X 24" X 2"	RECESSED LED FLAT PANEL LIGHT FIXTURE WITH ALUMINUM FRAME, AND FRAME FOR MOUNTING IN LAY-IN TEE BAR CEILING.	METALUX #24FP SERIES COLUMBIA #CBT SERIES LITHONIA #CPX SERIES CURRENT #LBP SERIES	
X1	120/277V	1	--	--	CEILING/ABOVE DOOR	--	WHITE	13" X 3" X 7-1/2"	LED EXIT SIGN WITH THERMOPLASTIC HOUSING AND CANOPY, RED LETTERS, NICKEL CADMIUM BATTERY WITH SELF-DIAGNOSTICS AND CHARGING CIRCUITRY. ARROWS SHALL BE AS INDICATED ON THE DRAWINGS.	SURE-LITES #LPX-7SD SERIES COMPASS #CE SERIES LITHONIA #LOM-ELN-SD SERIES EMERGLITE #ELXN SERIES	
NOTES: 1. WHETHER INDICATED IN CATALOG NUMBER OR NOT, CONTRACTOR TO PROVIDE ALL NECESSARY ACCESSORIES AND MOUNTING HARDWARE REQUIRED FOR A COMPLETE INSTALLATION. 2. COORDINATE COLOR SELECTION OF FIXTURES WITH ARCHITECT PRIOR TO PURCHASE. 3. LED'S SHALL MEET THE FOLLOWING MINIMUM SPECS IN ADDITION TO REQUIREMENTS SHOWN ELSEWHERE: A. 50,000 HOUR RATED, MIN CRI = 80 FOR INTERIOR LIGHTING B. LAMP CCT SHALL CONFORM TO ANSI C78.377A COLOR BINNING AND UTILIZE 4 STEP MACADAM ELLIPSE ALGORITHM BINNING PROCESS. 4. LED DRIVERS SHALL MEET THE FOLLOWING MINIMUM SPECS IN ADDITION TO THE REQUIREMENTS SHOWN ELSEWHERE: A. THD LESS THAN 10% POWER FACTOR GREATER THAN 90%											

SYMBOLS SCHEDULE:

- 

RECESSED LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

RECESSED DOWNLIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

SURFACE/PENDANT MOUNTED LINEAR LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

SURFACE/PENDANT MOUNTED LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

WALL MOUNTED LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

EMERGENCY EGRESS LIGHT FIXTURE. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

CEILING MOUNTED EXIT SIGN. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

WALL MOUNTED EXIT SIGN. REFER TO FIXTURE SCHEDULE FOR DESCRIPTION.
- 

20 AMP SINGLE POLE SWITCH AND COVERPLATE (HUBBELL #HBL1221). MOUNT FLUSH IN WALL AT 48" AFF. FINISH AS DIRECTED BY THE ARCHITECT. CONNECT ON LOAD SIDE OF OCCUPANCY SENSORS WHERE APPLICABLE. PROVIDE SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVER TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

LOW VOLTAGE CEILING MOUNTED DUAL TECHNOLOGY (PIR/ULTRASONIC) OCCUPANCY SENSOR WITH EXTENDED RANGE (2000 SQ-FT), 360 DEGREE SENSOR, LOW VOLTAGE AUXILIARY CONTACT FOR BAS INTEGRATION, NETWORKING PORT, AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. FURNISH WITH NETWORKING CABLE FOR COMPLETE STANDALONE ROOM CONTROL NETWORK. MOUNT OVER FLUSH OCTAGONAL OUTLET BOX IN CEILING. ADJUST TIME DELAY TO 30 MINUTES AND SET SENSOR TO MANUAL-ON MODE (VACANCY SENSING). NLIGHT #NCM-PDT-10 SERIES.
- 

LINE VOLTAGE, 1-BUTTON ON/OFF DUAL TECHNOLOGY (PIR/ULTRASONIC) OCCUPANCY SENSOR SWITCH WITH ENGRAVED BUTTONS INDICATING FUNCTION AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT FLUSH IN WALL AT 48" AFF. PROVIDE SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVER TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER. SENSOR SWITCH #WSX-PDT SERIES.
- 

LINE VOLTAGE, 2-BUTTON, 2-RELAY ON/OFF DUAL TECHNOLOGY (PIR/ULTRASONIC) OCCUPANCY SENSOR SWITCH WITH ENGRAVED BUTTONS INDICATING FUNCTION AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT FLUSH IN WALL AT 48" AFF. PROVIDE SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVER TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER. WATTSTOPPER #DSW-302 SERIES.
- 

WALL MOUNTED LINE VOLTAGE, DUAL TECHNOLOGY (PIR/ULTRASONIC) OCCUPANCY SENSOR 0-10V DIMMER SWITCH WITH ENGRAVED BUTTONS INDICATING FUNCTION AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT FLUSH IN WALL AT 48" AFF. PROVIDE SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVER TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER. SENSOR SWITCH #WSX-PDT-D SERIES.
- 

16 AMP POWER/RELAY PACK WITH 0-10V DIMMING CAPABILITIES. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT TO JUNCTION BOX ABOVE ACCESSIBLE CEILING. INSTALL SELF-LAMINATED LABEL (WHITE WITH BLACK LETTERS) IDENTIFYING BRANCH PANEL AND CIRCUIT NUMBER. FURNISH WITH NETWORKING CABLE FOR COMPLETE STANDALONE ROOM CONTROL NETWORK. NLIGHT #NPP16-D SERIES.
- 

16 AMP POWER/RELAY PACK. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT TO JUNCTION BOX ABOVE ACCESSIBLE CEILING. INSTALL SELF-LAMINATED LABEL (WHITE WITH BLACK LETTERS) IDENTIFYING BRANCH PANEL AND CIRCUIT NUMBER. FURNISH WITH NETWORKING CABLE FOR COMPLETE STANDALONE ROOM CONTROL NETWORK. NLIGHT #NPP16 SERIES.
- 

LOW VOLTAGE, SINGLE-CHANNEL, 4-BUTTON ON/OFF AND RAISE/LOWER DIMMING WALL STATION WITH ENGRAVED BUTTONS INDICATING FUNCTION AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT FLUSH IN WALL AT 48" AFF. STUB A 1" C FROM BOX TO CEILING PLENUM FOR CABLE INSTALLATION. FURNISH WITH NETWORKING CABLE FOR COMPLETE STANDALONE ROOM CONTROL NETWORK. NLIGHT #NPDM-DX SERIES.
- 

LOW-VOLTAGE SINGLE CHANNEL, 2-BUTTON ON/OFF WALL STATION, AND FINISH AS DIRECTED BY THE ARCHITECT. SUBSCRIPT IDENTIFIES CONTROL ZONE WHERE APPLICABLE. MOUNT TO JUNCTION BOX ABOVE ACCESSIBLE CEILING. INSTALL SELF-LAMINATED LABEL (WHITE WITH BLACK LETTERS) IDENTIFYING BRANCH PANEL AND CIRCUIT NUMBER. FURNISH WITH NETWORKING CABLE FOR COMPLETE STANDALONE ROOM CONTROL NETWORK. NLIGHT #NPDM SERIES.
- 

20A TIMER SWITCH WITH ADJUSTABLE 5 MIN - 24 HOUR TIMER WITH 2 MIN FLICKER WARNING AND COVERPLATE (EATON #TSW-MV) MOUNT FLUSH ON WALL AT 48" AFF. PROVIDE SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVER TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

MANUAL MOTOR STARTER SWITCH WITH ON/OFF DISCONNECT SWITCH, HAND-OFF-AUTO MODE, AUTO RUN INPUT AND ELECTRONIC OVERLOADS. FRANKLIN CONTROLS #BAS-1P. SURFACE MOUNT ON WALL AT APPROXIMATELY 48" AFF, OR ADJACENT TO EQUIPMENT BEING SERVED, UNLESS NOTED OTHERWISE ON PLANS. INSTALL LAMINATED LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY LOAD, BRANCH PANEL AND CIRCUIT NUMBER.

- 

20 AMP, 120V, SPECIFICATION GRADE SNAP CONNECT DUPLEX GROUNDING RECEPTACLE WITH #12 AWG STRANDED PLUGTAIL CONNECTOR AND COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT FLUSH IN WALL AT 18" AFF TO BOTTOM, UNLESS NOTED OTHERWISE. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

TWO 20 AMP, 120V, SPECIFICATION GRADE SNAP CONNECT DUPLEX GROUNDING RECEPTACLES MOUNTED IN A 2-GANG BOX WITH #12 AWG STRANDED PLUGTAIL CONNECTOR AND COMMON COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT FLUSH IN WALL AT 18" AFF TO BOTTOM, UNLESS NOTED OTHERWISE. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120V, SPECIFICATION GRADE SNAP CONNECT DUPLEX GROUNDING RECEPTACLE WITH #12 AWG STRANDED PLUGTAIL CONNECTOR AND COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT ABOVE WORK COUNTER AT HEIGHT AS DIRECTED BY THE ARCHITECT. MOUNT AT APPROXIMATELY 48" AFF WHERE NO COUNTER IS INSTALLED. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

TWO 20 AMP, 120V, SPECIFICATION GRADE SNAP CONNECT DUPLEX GROUNDING RECEPTACLES MOUNTED IN A 2-GANG BOX WITH #12 AWG STRANDED PLUGTAIL CONNECTOR AND COMMON COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT HORIZONTALLY ABOVE WORK COUNTER AT HEIGHT AS DIRECTED BY THE ARCHITECT. MOUNT AT APPROXIMATELY 48" AFF WHERE NO COUNTER IS INSTALLED. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120V, DUPLEX RECEPTACLE WITH INTEGRAL GFCI. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT FLUSH IN WALL AT 18" AFF TO BOTTOM, UNLESS NOTED OTHERWISE. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

TWO 20 AMP, 120V, DUPLEX RECEPTACLE WITH INTEGRAL GFCI MOUNTED IN A 2-GANG BOX WITH A COMMON COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT FLUSH IN WALL AT 18" AFF TO BOTTOM, UNLESS NOTED OTHERWISE. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120V, DUPLEX RECEPTACLE WITH INTEGRAL GFCI. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT ABOVE COUNTER, OR AT 48" AFF WHERE NO COUNTER IS INSTALLED. EXACT HEIGHT SHALL BE AS DIRECTED BY THE ARCHITECT. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

TWO 20 AMP, 120V, DUPLEX RECEPTACLES WITH INTEGRAL GFCI MOUNTED IN A 2-GANG BOX WITH A COMMON COVERPLATE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT HORIZONTALLY ABOVE COUNTER. EXACT HEIGHT SHALL BE AS DIRECTED BY THE ARCHITECT, OR AT 48" AFF WHERE NO COUNTER IS INSTALLED. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120V, DUPLEX WEATHER RESISTANT GROUNDING RECEPTACLE WITH INTEGRAL GFCI. MOUNT ON EXTERIOR WALL AT 24" ABOVE FINISHED GRADE WITH CLEAR WEATHERPROOF "WET WHILE IN USE" COVER. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

SPECIAL RECEPTACLE. MOUNT FLUSH IN WALL AT 24" AFF. COORDINATE EXACT NEMA CONFIGURATION WITH OWNER/EQUIPMENT SUPPLIER. CONFIRM EXACT REQUIRED NEMA CONFIGURATION WITH EQUIPMENT PRIOR TO THE PURCHASE OF ANY EQUIPMENT. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120V, SPECIFICATION GRADE TAMPER RESISTANT RECEPTACLE. FINISH AS DIRECTED BY THE ARCHITECT. MOUNT FLUSH IN WALL AT 18" AFF TO BOTTOM, UNLESS NOTED OTHERWISE. INSTALL LAMINATED LABELS (CLEAR W/BLACK LETTERS) ON COVERPLATE AND INSIDE OUTLET BOX TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.
- 

11-7/8" X 14-1/2" X 3-7/16" FOUR COMPARTMENT FULLY ADJUSTABLE CAST IRON FLOOR BOX FOR USE ON GRADE WITH (2) DUPLEX RECEPTACLE BRACKETS (#CHLT-D), (2) BLANK BRACKETS (#CHLT-B) AS REQUIRED TO COVER ANY BLANK BRACKET SPACES. PROVIDE (2) 20 AMP DUPLEX RECEPTACLES AND BRUSHED ALUMINUM COVER WITH CARPET FLANGE AND CUT OUT FOR TILE/CARPET INSERT. WIREMOLD #RFB4-CLN4/FPTCAL SERIES. INSTALL FLUSH IN CONCRETE FLOOR SLAB. WIRE TO BRANCH CIRCUIT INDICATED. PROVIDE LAMINATING LABEL (CLEAR W/BLACK LETTERS) TO IDENTIFY PANEL AND CIRCUIT NUMBER.
- 

20 AMP, 120 VOLT SPRING RETRACTING CORD REEL WITH WHITE STEEL HOUSING, 25 FEET OF 3/4" #12 AWG TYPE SJEOOW CORD, DUPLEX OUTLET BOX, 20 AMP RECEPTACLE, ADJUSTABLE CORD STOP, AND CORD & PLUG TO SUPPLY POWER TO UNIT (HUBBELL #ACA12325-DR20W CORD REEL). INSTALL REEL BELOW CEILING AND SUPPORT TO STRUCTURAL CEILING ABOVE. INSTALL RECESSED 120V, 20A DUPLEX RECEPTACLE ADJACENT TO REEL FOR POWER FEED. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) ON COVERPLATE TO IDENTIFY BRANCH PANEL AND CIRCUIT NUMBER.

- 

VOICE/DATA OUTLET PROVISION CONSISTING OF A FLUSH TWO GANG DEEP BOX WITH SINGLE GANG PLASTER RING AT 18" AFF, UNLESS NOTED OTHERWISE. STUB A 1" CONDUIT (WITH INSULATED BUSHING ON EACH END) FROM BOX TO ACCESSIBLE CEILING PLENUM FOR CABLE INSTALLATION.
- 

VOICE/DATA OUTLET PROVISION CONSISTING OF A FLUSH TWO GANG DEEP BOX WITH SINGLE GANG PLASTER RING AT 48" AFF, UNLESS NOTED OTHERWISE. STUB A 1" CONDUIT (WITH INSULATED BUSHING ON EACH END) FROM BOX TO ACCESSIBLE CEILING PLENUM FOR CABLE INSTALLATION.
- 

FIRE ALARM SYSTEM CEILING MOUNTED SMOKE DETECTOR. REFER TO SPECIFICATIONS FOR DESCRIPTION. MOUNT TIGHT TO UNDERSIDE OF FINISHED CEILING OVER RECESSED 4" OCTAGONAL BOX. PROVIDE SELF-LAMINATING LABEL TO IDENTIFY DEVICE ADDRESS. PROVIDE CABLEING AS REQUIRED BY THE MANUFACTURER.
- 

FIRE ALARM SYSTEM MANUAL PULL-STATION DEVICE. REFER TO SPECIFICATIONS FOR DESCRIPTION. WALL MOUNT OVER RECESSED 4" TWO GANG 1-1/2" DEEP BOX WITH SINGLE GANG PLASTER RING AT 48" AFF. PROVIDE SELF-LAMINATING LABEL TO IDENTIFY DEVICE ADDRESS. PROVIDE CABLEING AS REQUIRED BY THE MANUFACTURER.
- 

FIRE ALARM SYSTEM AUDIO/VISUAL NOTIFICATION DEVICE. REFER TO SPECIFICATIONS FOR DESCRIPTION. WALL MOUNT OVER RECESSED 4" X 1-1/2" DEEP TWO-GANG BOX WITH SINGLE GANG PLASTER RING AT 80" AFF TO BOTTOM. PROVIDE CABLEING AS REQUIRED BY THE MANUFACTURER.
- 

FIRE ALARM SYSTEM VISUAL ONLY NOTIFICATION DEVICE. REFER TO SPECIFICATIONS FOR DESCRIPTION. WALL MOUNT OVER RECESSED 4" X 1-1/2" DEEP TWO-GANG BOX WITH SINGLE GANG PLASTER RING AT 80" AFF TO BOTTOM. PROVIDE CABLEING AS REQUIRED BY THE MANUFACTURER.
- 

TERMINAL CONNECTION ON EQUIPMENT FURNISHED AND SET BY OTHERS. LINE CONNECTIONS BY THE ELECTRICAL CONTRACTOR.
- 

MOTOR FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. WIRED BY THE ELECTRICAL CONTRACTOR.
- 

HEAVY DUTY NON-FUSED DISCONNECT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. NEMA TYPE 1 INDOORS, NEMA TYPE 3R OUTDOORS AND IN WET LOCATIONS. AMPERAGE AND NUMBER OF POLES OTHERWISE. INSTALL SELF-LAMINATING LABEL (CLEAR W/BLACK LETTERS) TO MATCH UPSTREAM OVERCURRENT PROTECTION. ALL SWITCHES TO CONTAIN GROUND LUG. FURNISH AND INSTALL ENGRAVED NAMEPLATE ON FRONT TRIM TO IDENTIFY LOAD SERVED.
- 

HEAVY DUTY FUSED DISCONNECT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. NEMA TYPE 1 INDOORS, NEMA TYPE 3R OUTDOORS AND IN WET LOCATIONS. AMPERAGE AND NUMBER OF POLES INDICATED ON THE DRAWINGS. ALL SWITCHES TO CONTAIN GROUND LUG. FURNISH AND INSTALL ENGRAVED NAMEPLATE ON FRONT TRIM TO IDENTIFY LOAD SERVED.
- 

SURFACE MOUNTED WIREMOLD FOR INSTALLATION ALONG COUNTER AREAS. LENGTH TO BE COORDINATED WITH COUNTER AS SHOWN ON DRAWINGS. LEGRAND 3300 SERIES OR APPROVED EQUAL. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECTURAL SECTIONS PRIOR TO ROUGH-IN.
- 

JUNCTION BOX WITH BLANK SCREW COVER CONCEALED ABOVE ACCESSIBLE CEILING. SIZE AS REQUIRED BY THE NEC. LABEL COVER WITH PANEL/BRANCH CIRCUIT NUMBER.
- 

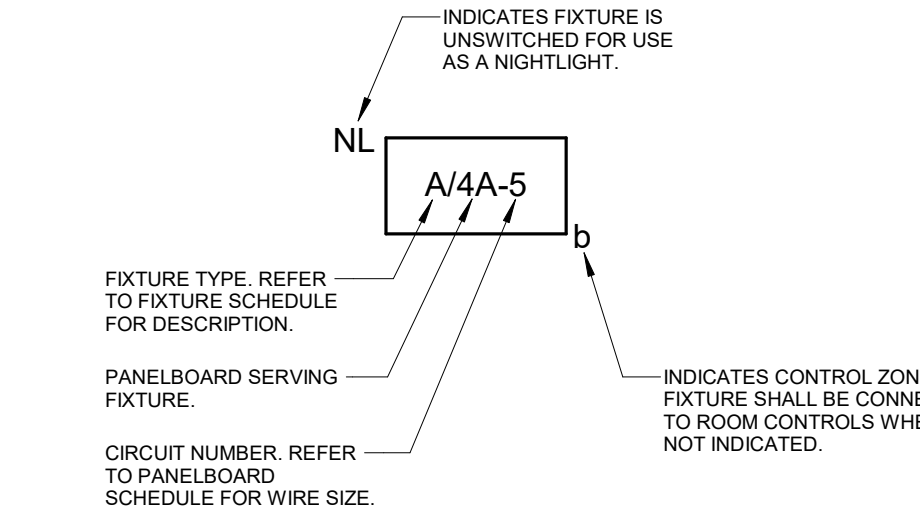
JUNCTION BOX WITH BLANK SCREW COVER USED IN CONJUNCTION WITH SURFACE WIRING. SIZE AS REQUIRED BY THE NEC. LABEL COVER WITH PANEL/BRANCH CIRCUIT NUMBER.
- 

208/120V, 3Ø, 4W PANELBOARD. REFER TO PANELBOARD SCHEDULES AND SPECIFICATIONS FOR DESCRIPTION.

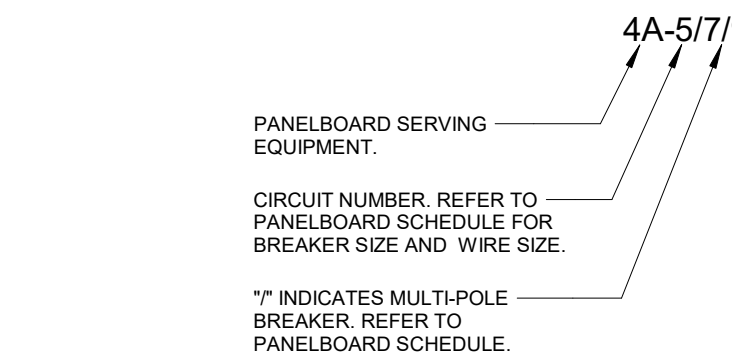
ELECTRICAL DRAWING LIST	
SHEET NUMBER	SHEET NAME
E-001	ELECTRICAL GENERAL INFORMATION
E-002	ELECTRICAL SPECIFICATIONS
E-003	ELECTRICAL SPECIFICATIONS
ED-100	FIRST FLOOR ELECTRICAL DEMOLITION PLAN
E-100	ELECTRICAL SITE PLAN
E-101	FIRST FLOOR LIGHTING PLAN
E-102	FIRST FLOOR POWER PLAN
E-200	PANELBOARD SCHEDULES AND DISTRIBUTION DIAGRAM
E-201	ELECTRICAL DETAILS

GENERAL DRAWING NOTES:

- MATERIALS ILLUSTRATED WITH LIGHT LINES ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- EXISTING CONDITIONS SHOWN ARE BASED ON REVIEW OF REFERENCE DRAWINGS AND GENERAL FIELD REVIEW. NOTIFY ENGINEER IF FIELD CONDITIONS DIFFER FROM WHAT IS SHOWN.
- MATERIALS ILLUSTRATED WITH DARK DASHED LINES SHALL BE REMOVED. THE OWNER SHALL HAVE THE RIGHT TO RETAIN ANY MATERIALS ILLUSTRATED TO BE REMOVED. IF REQUESTED BY THE OWNER, THE CONTRACTOR SHALL REMOVE MATERIALS AND RELOCATE THEM TO THE OWNER'S SPECIFIED LOCATION OF STORAGE. ALL MATERIALS NOTED TO BE RELOCATED SHALL BE TEMPORARILY STORED AND PROTECTED DURING CONSTRUCTION BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- MATERIALS ILLUSTRATED WITH DARK LINES ARE NEW.
- THE ELECTRICAL INSTALLATION MUST MEET OR EXCEED THE MINIMUM REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE AND ANY APPLICABLE STATE OR LOCAL CODES.
- PATCH AND PAINT WALLS, CEILINGS, AND FLOORS TO MATCH EXISTING AS REQUIRED TO ACCOMMODATE WORK.
- ALL WORK IN AREAS OUTSIDE OF DESIGNATED CONSTRUCTION AREAS SHALL BE SCHEDULED IN ADVANCE WITH THE OWNER. THE WORK SHALL BE PERFORMED AT TIMES AND DAYS AS DICTATED BY THE OWNER.
- ALL CONDUITS SHALL BE CONCEALED, EXCEPT IN ELECTRICAL OR MECHANICAL ROOMS.
- PROVIDE 24" MINIMUM HORIZONTAL SEPARATION BETWEEN OUTLET BOXES INSTALLED ON OPPOSITE SIDES OF A COMMON WALL SO TO MAINTAIN ACOUSTICAL INTEGRITY OF WALL AND FIRE RATING.
- PROVIDE UL LISTED FIRE RATED SEALS FOR ALL RACEWAY PENETRATIONS THRU FIRE RATED WALLS, SLABS, AND CEILINGS IN ACCORDANCE WITH NEC 300.21.
- ALL SINGLE POLE BRANCH CIRCUITS SHALL HAVE DEDICATED NEUTRALS.
- MC TYPE CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING CONCEALED ABOVE CEILINGS AND IN STUD WALLS, AND FINAL CONNECTIONS TO RECESSED LIGHT FIXTURES. ALL BRANCH CIRCUIT HOMERUNS SHALL BE INSTALLED IN CONDUIT (MC CABLEING SHALL NOT ENTER INTO PANELBOARDS). ALL BRANCH CIRCUIT WIRING INSTALLED EXPOSED IN UNFINISHED SPACES SHALL BE IN CONDUIT.



1 LIGHT FIXTURE DESIGNATION DETAIL
E-001 NTS



1.1	GENERAL REQUIREMENTS	1.2	SELECTIVE DEMOLITION FOR ELECTRICAL	F.	"F" RATING - 3 HOURS	I.	LED LUMINAIRES:
A.	RELATED DOCUMENTS	A.	PREPARATION	1.	METAL PIPE THROUGH MASONRY/CONCRETE FLOOR OR WALL - HILTI #C-AJ-1155, #C-AJ-1226	1.	COMPONENTS: UL 8750 RECOGNIZED OR LISTED AS APPLICABLE.
1.	DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND GENERAL DIVISION SPECIFICATION SECTIONS, APPLY TO THIS SECTION.	1.	DISCONNECT ELECTRICAL SYSTEMS IN WALLS, FLOORS, AND CEILINGS TO BE REMOVED.	2.	METAL PIPE THROUGH POURED CONCRETE FLOOR SLABS - HILTI #F-A-1017	2.	TESTED IN ACCORDANCE WITH IES LM-79 AND IES LM-80.
B.	SCOPE	2.	COORDINATE UTILITY SERVICE OUTAGES WITH UTILITY COMPANY.	3.	PLASTIC PIPE THROUGH MASONRY/CONCRETE FLOOR OR WALL - HILTI #C-AJ-2109	3.	LED ESTIMATED USEFUL LIFE: MINIMUM OF 50,000 HOURS AT 70 PERCENT LUMEN MAINTENANCE, CALCULATED BASED ON IES LM-80 TEST DATA.
1.	THE WORK SHALL INCLUDE THE FURNISHING OF SYSTEMS, EQUIPMENT, AND MATERIALS SPECIFIED IN THIS DIVISION AND AS CALLED FOR ON THE DRAWINGS, TO INCLUDE: SUPERVISION, OPERATIONS, METHODS, AND LABOR FOR THE FABRICATION, INSTALLATION, START-UP, AND TESTS FOR THE COMPLETE ELECTRICAL INSTALLATION.	3.	PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN EXISTING SYSTEMS IN SERVICE DURING CONSTRUCTION. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.	4.	CABLE THROUGH MASONRY/CONCRETE FLOOR OR WALLS - HILTI #C-AJ-3095	J.	EMERGENCY LIGHTING UNITS
2.	DRAWINGS FOR THE WORK ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF THE WORK AND TO INDICATE THE TYPE, ARRANGEMENT AND LOCATION OF THE WORK. BECAUSE OF THE SCALE OF THE DRAWINGS, CERTAIN BASIC ITEMS SUCH AS CONDUIT FITTINGS, ACCESS PANELS, SLEEVES, PULL AND JUNCTION BOXES MAY NOT BE SHOWN, WHERE SUCH ITEMS ARE REQUIRED BY CODE OR BY OTHER SECTIONS, OR WHERE THEY ARE REQUIRED FOR PROPER INSTALLATION OF THE WORK, SUCH ITEMS SHALL BE INCLUDED.	B.	DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK	5.	CABLE THROUGH POURED CONCRETE FLOOR SLABS - HILTI #F-A-3007	1.	DESCRIPTION: EMERGENCY LIGHTING UNITS COMPLYING WITH NFPA 101 AND ALL APPLICABLE STATE AND LOCAL CODES, AND LISTED AND LABELED AS COMPLYING WITH UL 924.
3.	EQUIPMENT SPECIFICATION MAY NOT DEAL INDIVIDUALLY WITH MINUTE ITEMS SUCH AS COMPONENTS, PARTS, CONTROLS AND DEVICES WHICH MAY BE REQUIRED TO PRODUCE THE EQUIPMENT PERFORMANCE SPECIFIED OR AS REQUIRED TO MEET THE EQUIPMENT WARRANTIES, WHERE SUCH ITEMS ARE REQUIRED, THEY SHALL BE PROVIDED BY THE SUPPLIER OF THE EQUIPMENT, WHETHER OR NOT SPECIFICALLY CALLED FOR.	1.	REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	6.	CABLE TRAY THROUGH MASONRY/CONCRETE FLOOR OR WALL - HILTI #C-AJ-4035	2.	OPERATION: UPON INTERRUPTION OF NORMAL POWER SOURCE OR BROWNOUT CONDITION EXCEEDING 20 PERCENT VOLTAGE DROP FROM NOMINAL, SOLID-STATE CONTROL AUTOMATICALLY SWITCHES CONNECTED LAMPS TO INTEGRAL BATTERY POWER FOR MINIMUM 90 MINUTES OF RATED EMERGENCY ILLUMINATION, AND AUTOMATICALLY RECHARGES BATTERY UPON RESTORATION OF NORMAL POWER SOURCE.
C.	ELECTRICAL REFERENCE SYMBOLS	2.	REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY.	7.	MULTIPLE CABLE TRAYS THROUGH MASONRY/CONCRETE FLOOR OR WALL - HILTI #C-AJ-4017	3.	SIZE BATTERY TO SUPPLY ALL CONNECTED LAMPS, INCLUDING EMERGENCY REMOTE HEADS WHERE INDICATED.
1.	SYMBOLS USED ON THE FLOOR PLANS ARE DEFINED IN THE ELECTRICAL SYMBOLS SCHEDULE ON THE DRAWINGS. NOT NECESSARILY WILL ALL SYMBOLS SCHEDULED BE REQUIRED FOR THE PROJECT.	3.	REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. CUT BACK WALLS AND FLOORS, AND PATCH SURFACES.	1.7	OUTLET BOXES	4.	DIAGNOSTICS: PROVIDE POWER STATUS INDICATOR LIGHT AND ACCESSIBLE INTEGRAL TEST SWITCH TO MANUALLY ACTIVATE EMERGENCY OPERATION
D.	PERMITS, INSPECTIONS, AND CODES	4.	DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS THAT ARE NOT REMOVED.	A.	CONCEALED OUTLET BOXES FOR LIGHTING FIXTURES IN SUSPENDED CEILING AREAS SHALL BE 4" OCTAGON BY 1-1/2" DEEP. WHERE NUMBER OF WIRES REQUIRES A LARGER BOX, USE 4-1/16" OR 4" SQUARE BY 2-1/8" DEEP. BOXES SHALL BE PROVIDED WITH ROUND OPENING PLASTER COVERS TO FINISH FLUSH WITH CEILING. PROVIDE 3/8" FIXTURE STUDS.	5.	PROVIDE LOW-VOLTAGE DISCONNECT TO PREVENT BATTERY DAMAGE FROM DEEP DISCHARGE.
1.	THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE PROSECUTION OF THE ELECTRICAL WORK. ALL PERMITS AND CERTIFICATES OF INSPECTION AND APPROVAL SIGNED BY THE CONTROLLING BUILDING DEPARTMENT SHALL BECOME THE PROPERTY OF THE OWNER.	5.	DISCONNECT AND REMOVE ABANDONED PANELBOARDS AND DISTRIBUTION EQUIPMENT.	C.	OUTLET BOXES FOR WIRING DEVICES SHALL BE 4" SQUARE BY 1-1/2" DEEP. WHERE NUMBER OF WIRES REQUIRES A LARGER BOX, USE 4" SQUARE BY 2-1/8" DEEP. PROVIDE ONE OR TWO GANG ADAPTERS AS REQUIRED, TO FINISH FLUSH WITH WALL. WHERE THREE OR MORE DEVICES ARE SET AT ONE POINT, USE GANG TYPE BOXES.	6.	SELF-DIAGNOSTICS: PROVIDE UNITS THAT SELF-MONITOR FUNCTIONALITY AND AUTOMATICALLY PERFORM TESTING REQUIRED BY NFPA 101 WHERE INDICATED; PROVIDE INDICATOR LIGHT(S) TO REPORT TEST AND DIAGNOSTIC STATUS.
2.	ALL WIRING SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE, APPLICABLE STATE AND CITY REGULATIONS, AND OSHA IN CASES OF CONFLICT BETWEEN CODE AND SPECIFICATIONS, THE MORE RESTRICTIVE REQUIREMENTS SHALL GOVERN.	6.	DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, SLENS, HANGERS, AND OTHER ACCESSORIES.	D.	JUNCTION BOXES SHALL BE BONDED TO THE EQUIPMENT GROUND CONDUCTORS CONTAINED WITHIN, WHENEVER SAID CONDUCTORS ARE "SPliced" OR "TERMINATED" WITHIN THE BOX, IN FULL COMPLIANCE WITH NEC ARTICLE 250.146.	K.	EXIT SIGNS
3.	ALL WIRING SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	7.	REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK.	E.	ALL BOXES SHALL BE RIGIDLY SUPPORTED FROM THE BUILDING STRUCTURE INDEPENDENT OF THE CONDUIT SYSTEM.	1.	DESCRIPTION: EXIT SIGNS COMPLYING WITH NFPA 101 AND APPLICABLE STATE AND LOCAL CODES, AND LISTED AND LABELED AS COMPLYING WITH UL 924.
E.	VISIT TO THE SITE	8.	REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK.	F.	ELECTRICAL CONTRACTOR SHALL PROVIDE PRE-PAINTED RED, SPRAY PAINTED RED, OR RED COLORED STICK-ON LABELS FOR ALL FIRE ALARM SYSTEM JUNCTION BOXES AND COVERS.	2.	NUMBER OF FACES: SINGLE, OR DOUBLE-FACE AS INDICATED OR AS REQUIRED FOR INSTALLED LOCATION.
1.	THE ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO VISIT THE SITE OF THE WORK AND FAMILIARIZE HIMSELF WITH ALL SUCH CONDITIONS AFFECTING THE WORK. THE SUBMISSION OF HIS BID PROPRIETARY SHALL PRESUPPOSE HIS KNOWLEDGE OF ALL SUCH CONDITIONS.	9.	MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS THAT REMAIN ACTIVE. MODIFY INSTALLATION OR PROVIDE ACCESS PANEL AS APPROPRIATE.	1.8	WIRING DEVICES AND COVERS	3.	DIRECTIONAL ARROWS: AS INDICATED OR AS REQUIRED FOR INSTALLED LOCATION.
F.	WORKMANSHIP	1.3	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES	A.	STANDARD GFCI RECEPTACLES: CONVENIENCE RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R; SINGLE OR DUPLEX AS INDICATED ON THE DRAWINGS.	L.	BALLASTS/DRIVERS - GENERAL REQUIREMENTS
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	A.	CONDUCTOR AND CABLE GENERAL REQUIREMENTS	1.	HUBBELL #HBL5362 SERIES.	1.	PROVIDE BALLASTS CONTAINING NO POLYCHLORINATED BIPHENYLS (PCBS).
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	B.	MINIMUM CONDUCTOR SIZE	2.	LEVITON #5362 SERIES.	2.	MINIMUM EFFICIENCY/EFFICACY: PROVIDE BALLASTS COMPLYING WITH ALL CURRENT APPLICABLE FEDERAL AND STATE BALLAST EFFICIENCY/EFFICACY STANDARDS.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	1.	BRANCH CIRCUITS - 12 AWG	3.	PASS & SEYMOUR #PSS326A SERIES.	M.	DIMMABLE LED DRIVERS:
F.	WORKMANSHIP	a.	20 A, 120 V CIRCUITS LONGER THAN 75 FEET (23 M): 10 AWG, FOR VOLTAGE DROP	1.	DEVICES SHALL HAVE ONE-PIECE BRASS MOUNTING STRAP.	1.	DIMMING RANGE: CONTINUOUS DIMMING FROM 100 PERCENT TO FIVE PERCENT RELATIVE LIGHT OUTPUT UNLESS DIMMING CAPABLE TO LOW LEVEL IS INDICATED; PROVIDE DIMMING CONTROLS TO BE INSTALLED.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	b.	20 A, 120 V CIRCUITS LONGER THAN 150 FEET (46 M): 8 AWG, FOR VOLTAGE DROP	2.	COVERPLATES FOR FLUSH MOUNTED AND PLATE MOUNTED DEVICES IN WIREMOLD BOXES SHALL BE 0.04" THICK BRUSHED FINISH, STAINLESS STEEL, WHERE TWO OR MORE DEVICES ARE SET AT ONE POINT, THEY SHALL BE COVERED WITH A COMMON PLATE.	2.	CONTROL COMPATIBILITY: FULLY COMPATIBLE WITH THE DIMMING CONTROLS TO BE INSTALLED.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	c.	CONTROL CIRCUITS: 14 AWG	3.	COVERPLATES FOR DEVICES SHALL BE SMOOTH NYLON NON-BREAKABLE TYPE. WHERE TWO OR MORE DEVICES ARE SET AT ONE POINT, THEY SHALL BE COVERED WITH A COMMON PLATE.	N.	INSTALLATION
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	d.	CONDUCTOR COLOR CODING	D.	WHERE DECORATIVE OR FINISH MOUNTED AND PLATE MOUNTED DEVICES ARE LOCATED ADJACENT TO STANDARD TOGGLE SWITCHES THEY SHALL BE INSTALLED IN SEPARATE BOXES.	1.	INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
F.	WORKMANSHIP	e.	COLOR CODING METHOD: INTEGRALLY COLORED INSULATION	E.	COVERPLATES FOR SURFACE MOUNTED DEVICES IN CAST FS BOXES SHALL BE HEAVY-GAUGE GALVANIZED STAMPED SHEET STEEL, CROUSE HUNDS TYPE "DS" OR APPLETON TYPE "FSK".	2.	PROVIDE REQUIRED SUPPORT AND ATTACHMENT IN ACCORDANCE WITH SECTION 260520.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	f.	20BY120 V, 3 PHASE, 4 WIRE SYSTEM: PHASE A - BLACK, PHASE B - RED, PHASE C - BLUE, NEUTRAL/GROUND - WHITE	1.9	RECEPTACLES	3.	INSTALL LUMINAIRES PLUMB AND SQUARE AND ALIGNED WITH BUILDING LINES AND WITH ADJACENT LUMINAIRES
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	1.	INSULATION: COPPER BUILDING WIRE: TYPE THHN/THWN OR THHN/THWN-2, EXCEPT AS INDICATED BELOW.	A.	STANDARD GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R; SINGLE OR DUPLEX AS INDICATED ON THE DRAWINGS.	4.	SUSPENDED CEILING MOUNTED LUMINAIRES:
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	2.	INSTALLATION	1.	HUBBELL #HBL5362TR SERIES.	a.	DO NOT USE CEILING TILES TO BEAR WEIGHT OF LUMINAIRES.
F.	WORKMANSHIP	a.	WHEN CIRCUIT DESTINATION IS INDICATED WITHOUT SPECIFIC ROUTING, DETERMINE EXACT ROUTING REQUIRED.	2.	LEVITON #5362TR SERIES.	b.	DO NOT USE CEILING SUPPORT SYSTEM TO BEAR WEIGHT OF LUMINAIRES UNLESS CEILING SUPPORT SYSTEM IS CERTIFIED AS SUITABLE TO DO SO.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	b.	ARRANGE CIRCUITING TO MINIMIZE SPLICES.	3.	PASS & SEYMOUR #PSS326A SERIES.	c.	SECURE LAY-IN LUMINAIRES TO CEILING SUPPORT CHANNELS USING LISTED SAFETY CLIPS AT FOUR CORNERS.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	c.	CIRCUITING ADJUSTMENTS: UNLESS OTHERWISE INDICATED, WHEN BRANCH CIRCUITS ARE INDICATED AS SEPARATE, COMBINING THEM TOGETHER IN A SINGLE RACEWAY IS NOT PERMITTED.	4.	WEATHER RESISTANT CONVENIENCE RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R; LISTED AND LABELED AS WEATHER RESISTANT TYPE, SINGLE OR DUPLEX AS INDICATED ON THE DRAWINGS.	d.	SEE APPROPRIATE DIVISION 9 SECTION WHERE SUSPENDED GRID CEILING IS SPECIFIED FOR ADDITIONAL REQUIREMENTS.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	d.	PROVIDE NO MORE THAN EIGHT CURRENT-CARRYING CONDUCTORS IN A SINGLE RACEWAY. DEDICATED NEUTRAL CONDUCTORS ARE CONSIDERED CURRENT-CARRYING CONDUCTORS.	1.	HUBBELL #HBL5362WR SERIES.	e.	RECESSED LUMINAIRES:
F.	WORKMANSHIP	e.	INCREASE SIZE OF CONDUCTORS AS REQUIRED TO ACCOUT FOR AMPACITY DERATING.	2.	LEVITON #5362WR SERIES.	a.	INSTALL TRIMS TIGHT TO MOUNTING SURFACE WITH NO VISIBLE LIGHT LEAKAGE.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	f.	COMMON NEUTRALS: UNLESS OTHERWISE INDICATED, SHARING OF NEUTRAL/GROUNDED CONDUCTORS IN THE SAME RACEWAY IS NOT PERMITTED. PROVIDE DEDICATED NEUTRAL/GROUNDED CONDUCTOR FOR EACH INDIVIDUAL BRANCH CIRCUIT.	3.	PASS & SEYMOUR #PSS326A SERIES.	b.	NON-IC RATED LUMINAIRES: MAINTAIN REQUIRED SEPARATION FROM INSULATION AND COMBUSTIBLE MATERIALS ACCORDING TO LISTING.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	1.4	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	4.	WEATHER RESISTANT CONVENIENCE RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R; LISTED AND LABELED AS TAMPER RESISTANT TYPE, SINGLE OR DUPLEX AS INDICATED ON THE DRAWINGS.	3.	SUSPENDED LUMINAIRES:
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	A.	GROUNDING AND BONDING REQUIREMENTS	1.	HUBBELL #HBL5362TR SERIES.	7.	UNLESS OTHERWISE INDICATED, SPECIFIED MOUNTING HEIGHTS ARE TO BOTTOM OF LUMINAIRE.
F.	WORKMANSHIP	1.	UNLESS SPECIFICALLY INDICATED TO BE EXCLUDED, PROVIDE ALL REQUIRED COMPONENTS, CONDUCTORS, CONNECTORS, CONDUIT, BOXES, FITTINGS, SUPPORTS, ACCESSORIES, ETC. AS NECESSARY FOR A COMPLETE GROUNDING AND BONDING SYSTEM.	2.	LEVITON #5362TR SERIES.	8.	INSTALL USING THE SUSPENSION METHOD INDICATED, WITH SUPPORT LENGTHS AND ACCESSORIES AS REQUIRED FOR SPECIFIED MOUNTING HEIGHTS.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	2.	WHERE CONDUCTOR SIZE IS NOT INDICATED, SIZE TO COMPLY WITH NFPA 70 BUT NOT LESS THAN APPLICABLE MINIMUM SIZE REQUIREMENTS SPECIFIED.	3.	PASS & SEYMOUR #PSS326A SERIES.	9.	INSTALL ACCESSORIES FURNISHED WITH EACH LUMINAIRE.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	3.	BONDING AND EQUIPMENT GROUNDING	4.	WEATHER RESISTANT CONVENIENCE RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R; LISTED AND LABELED AS TAMPER RESISTANT TYPE, SINGLE OR DUPLEX AS INDICATED ON THE DRAWINGS.	10.	BOND PRODUCTS AND METAL ACCESSORIES TO BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	a.	PROVIDE BONDING FOR EQUIPMENT GROUNDINGS CONDUCTORS, EQUIPMENT GROUND BUSES, METALLIC EQUIPMENT ENCLOSURES, METALLIC RACEWAYS AND BOXES, DEVICE GROUNDING TERMINALS, AND OTHER NORMALLY NON-CURRENT-CARRYING CONDUCTIVE MATERIALS ENCLOSING ELECTRICAL CONDUCTORS/EQUIPMENT OR LIKELY TO BECOME ENERGIZED AS INDICATED AND IN ACCORDANCE WITH NFPA 70.	1.	HUBBELL #GFR120 SERIES.	11.	EMERGENCY LIGHTING UNITS:
F.	WORKMANSHIP	b.	PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR IN EACH FEEDER AND BRANCH CIRCUIT RACEWAY. DO NOT USE RACEWAYS AS SOLE EQUIPMENT GROUNDING CONDUCTOR.	2.	LEVITON #7899 SERIES.	1.	UNLESS OTHERWISE INDICATED, CONNECT UNIT TO UNSWITCHED POWER FROM SAME CIRCUIT FEEDING NORMAL LIGHTING IN SAME ROOM OR AREA, BYPASS LOCAL SWITCHES, CONTACTORS, OR OTHER LIGHTING CONTROLS.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	c.	WHERE CIRCUIT CONDUCTOR SIZES ARE INCREASED FOR VOLTAGE DROP, INCREASE SIZE OF EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NFPA 70.	3.	PASS & SEYMOUR #PSS326A SERIES.	2.	UNLESS OTHERWISE INDICATED, CONNECT UNIT TO UNSWITCHED POWER FROM SAME CIRCUIT FEEDING NORMAL LIGHTING IN SAME ROOM OR AREA, BYPASS LOCAL SWITCHES, CONTACTORS, OR OTHER LIGHTING CONTROLS.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	d.	TERMINATE BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTORS ON SOLIDLY BONDED EQUIPMENT GROUND BUS ONLY. DO NOT TERMINATE ON NEUTRAL (GROUNDED) OR ISOLATED/INSULATED GROUND BUS.	4.	WEATHER RESISTANT GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, DUPLEX, 20A, 125V, NEMA 5-20R, RECTANGULAR DECORATOR STYLE, LISTED AND LABELED AS WEATHER RESISTANT TYPE COMPLYING WITH UL 488 SUPPLEMENT SE SUITABLE FOR INSTALLATION IN DAMP OR WET LOCATIONS.	3.	EXIT SIGNS:
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	e.	PROVIDE BONDING JUMPER ACROSS EXPANSION OR EXPANSION/DEFLECTION FITTINGS PROVIDED TO ACCOMMODATE CONDUIT MOVEMENT.	1.	HUBBELL #GFR120 SERIES.	1.	AIM AND POSITION ADJUSTABLE LUMINAIRES TO ACHIEVE DESIRED ILLUMINATION AS INDICATED OR AS DIRECTED BY ENGINEER. SECURE LOCKING FITTINGS IN PLACE.
F.	WORKMANSHIP	B.	INSTALLATION	2.	LEVITON #7899WR SERIES.	2.	AIM AND POSITION ADJUSTABLE EMERGENCY LIGHTING UNIT LAMPS TO ACHIEVE OPTIMUM ILLUMINATION OF EGRESS PATH AS REQUIRED BY ENGINEER OR AUTHORITY HAVING JURISDICTION.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	1.	MAKE GROUNDING AND BONDING CONNECTIONS USING SPECIFIED CONNECTORS.	3.	PASS & SEYMOUR #PSS326A SERIES.	3.	EXIT SIGNS WITH FIELD-SELECTABLE DIRECTIONAL ARROWS: SET AS INDICATED OR AS REQUIRED TO PROPERLY DESIGNATE EGRESS PATH AS DIRECTED BY ENGINEER OR AUTHORITY HAVING JURISDICTION.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	a.	REMOVE APPROPRIATE AMOUNT OF CONDUCTOR INSULATION FOR MAKING CONNECTIONS WITHOUT CUTTING, NICKING OR DAMAGING CONDUCTORS. DO NOT REMOVE CONDUCTOR STRANDS TO FACILITATE INSERTION INTO CONNECTOR.	4.	WEATHER RESISTANT GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, DUPLEX, 20A, 125V, NEMA 5-20R, RECTANGULAR DECORATOR STYLE, LISTED AND LABELED AS WEATHER RESISTANT TYPE COMPLYING WITH UL 488 SUPPLEMENT SE SUITABLE FOR INSTALLATION IN DAMP OR WET LOCATIONS.	P.	CLEANING
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	b.	REMOVE NONCONDUCTIVE PAINT, ENAMEL, OR SIMILAR COATING AT THREADS, CONTACT POINTS, AND CONTACT SURFACES.	1.	HUBBELL #GFR120 SERIES.	1.	CLEAN SURFACES ACCORDING TO NECA 500 (COMMERCIAL LIGHTING) AND MANUFACTURER'S INSTRUCTIONS TO REMOVE DIRT, FINISHES, PAINT, OR OTHER FOREIGN MATERIAL AND RESTORE FINISHES TO MATCH ORIGINAL FACTORY FINISH.
F.	WORKMANSHIP	1.5	RACEWAYS	2.	LEVITON #7899 SERIES.	1.1	PROTECT INSTALLED LUMINAIRES FROM SUBSEQUENT CONSTRUCTION OPERATIONS.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	1.	FURNISH AND INSTALL CONDUIT, SUPPORTS, BOXES, WIRE, AND NECESSARY FITTINGS AND ACCESSORIES AS REQUIRED TO MAKE A COMPLETE INSTALLATION OF THE WIRING SYSTEM INDICATED ON THE DRAWINGS.	3.	PASS & SEYMOUR #PSS326A SERIES.	A.	SUBMITTALS
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	B.	WHERE CONDUITS ARE ROUTED THROUGH AREAS OF DIFFERING TEMPERATURES OR AIR PRESSURES (AIR HANDLERS, EXTERIOR WALLS, ETC.), THE PENETRATION AROUND THE CONDUIT SHALL BE ADEQUATELY SEALED. THE INTERIOR OF THESE CONDUITS SHALL BE SEALED AT THE FIRST BOX OR FITTING ADJACENT TO THE PENETRATION TO PREVENT AIR MIGRATION BETWEEN THE SPACES.	4.	WEATHER RESISTANT GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, DUPLEX, 20A, 125V, NEMA 5-20R, RECTANGULAR DECORATOR STYLE, LISTED AND LABELED AS WEATHER RESISTANT TYPE COMPLYING WITH UL 488 SUPPLEMENT SE SUITABLE FOR INSTALLATION IN DAMP OR WET LOCATIONS.	1.	PRODUCT DATA: INCLUDE RATINGS, CONFIGURATIONS, STANDARD WIRING DIAGRAMS, DIMENSIONS, COLORS, SERVICE CONDITION REQUIREMENTS, AND INSTALLED FEATURES.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	1.	WHERE CONDUITS ARE ROUTED THROUGH AREAS OF DIFFERING TEMPERATURES OR AIR PRESSURES (AIR HANDLERS, EXTERIOR WALLS, ETC.), THE PENETRATION AROUND THE CONDUIT SHALL BE ADEQUATELY SEALED. THE INTERIOR OF THESE CONDUITS SHALL BE SEALED AT THE FIRST BOX OR FITTING ADJACENT TO THE PENETRATION TO PREVENT AIR MIGRATION BETWEEN THE SPACES.	1.	HUBBELL #GFR120 SERIES.	B.	SHOP DRAWINGS:
F.	WORKMANSHIP	2.	CONDUITS INSTALLED ON EXTERIORS OF BUILDINGS OR OTHER STRUCTURES SHALL BE ARRANGED TO DRAIN (NOT TRAP WATER), AND SHALL BE RAIN-TIGHT IN WET LOCATIONS.	2.	LEVITON #7899WR SERIES.	1.	OCCUPANCY SENSORS: PROVIDE LIGHTING PLAN INDICATING LOCATION, MODEL NUMBER, AND ORIENTATION OF EACH OCCUPANCY SENSOR AND ASSOCIATED SYSTEM COMPONENT.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	3.	CONDUITS INSTALLED BELOW GRADE SHALL BE PVC-40 WITH PVC-80 STUB-UPS. REFER TO EXCAVATION, TRENCHING AND BACKFILL SECTION FOR ADDITIONAL INFORMATION.	3.	PASS & SEYMOUR #PSS326A SERIES.	2.	DAYLIGHTING CONTROLS: PROVIDE LIGHTING PLAN INDICATING LOCATION, MODEL NUMBER, AND ORIENTATION OF EACH PHOTO SENSOR AND ASSOCIATED SYSTEM COMPONENT.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	4.	CONDUITS SHALL BE OF THE SIZE INDICATED OR REQUIRED BY THE NATIONAL ELECTRIC CODE FOR THE NUMBER AND SIZE CONDUCTORS INVOLVED. JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH AND PULLED UP TIGHT. CONDUITS SHALL NOT BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.	4.	WEATHER RESISTANT GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, DUPLEX, 20A, 125V, NEMA 5-20R, RECTANGULAR DECORATOR STYLE, LISTED AND LABELED AS WEATHER RESISTANT TYPE COMPLYING WITH UL 488 SUPPLEMENT SE SUITABLE FOR INSTALLATION IN DAMP OR WET LOCATIONS.	C.	LIGHTING CONTROL DEVICES - GENERAL REQUIREMENTS
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	5.	EMT CONDUIT FITTINGS SHALL BE SET SCREW TYPE GALVANIZED STEEL, CONCRETE TIGHT. DIE CAST TYPE INDENTOR FITTINGS ARE NOT ACCEPTABLE.	1.	HUBBELL #GFR120 SERIES.	1.	UNLESS SPECIFICALLY INDICATED TO BE EXCLUDED, PROVIDE ALL REQUIRED CONDUIT, WIRING, CONNECTORS, HARDWARE, COMPONENTS, ACCESSORIES, ETC. AS REQUIRED FOR A COMPLETE OPERATING SYSTEM.
F.	WORKMANSHIP	C.	RACEWAYS IN GENERAL SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS, IN WALLS, IN ACCESSIBLE FLOOR PLenums, AND EXPOSED ELSEWHERE AS SHOWN ON PLANS.	2.	LEVITON #7899WR SERIES.	E.	OCCUPANCY SENSORS: WALL STATIONS, CONTACTORS, RELAYS, AND TIME SWITCHES SHALL BE AS DESCRIBED ON THE DRAWINGS.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	1.	PVC CONDUIT AND LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT SHALL NOT BE USED IN ENVIRONMENTAL AIR PLenums.	3.	PASS & SEYMOUR #PSS326A SERIES.	F.	THE BASIS OF DESIGN IS ACUTY: THE EC SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COMPONENTS AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM INSTALLATION FROM AN ALTERNATE MANUFACTURER.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	2.	CONDUITS INSTALLED ON EXTERIORS OF BUILDINGS OR OTHER STRUCTURES SHALL BE ARRANGED TO DRAIN (NOT TRAP WATER), AND SHALL BE RAIN-TIGHT IN WET LOCATIONS.	4.	WEATHER RESISTANT GFCI RECEPTACLES: EXTRA HEAVY DUTY, INDUSTRIAL SPECIFICATION GRADE, DUPLEX, 20A, 125V, NEMA 5-20R, RECTANGULAR DECORATOR STYLE, LISTED AND LABELED AS WEATHER RESISTANT TYPE COMPLYING WITH UL 488 SUPPLEMENT SE SUITABLE FOR INSTALLATION IN DAMP OR WET LOCATIONS.	G.	SINGLE WALL SWITCH WITH INTEGRAL DUAL TECHNOLOGY SENSOR (PIR AND ULTRASONIC) SHALL BE UNIVERSAL LINE VOLTAGE TYPE WITH ADAPTIVE LEARNING TECHNOLOGY AND 180 DEGREE COVERAGE.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	3.	CONDUITS INSTALLED BELOW GRADE SHALL BE PVC-40 WITH PVC-80 STUB-UPS. REFER TO EXCAVATION, TRENCHING AND BACKFILL SECTION FOR ADDITIONAL INFORMATION.	1.	HUBBELL #HMTS1 SERIES.	1.	HUBBELL #HMTS1 SERIES.
F.	WORKMANSHIP	4.	CONDUITS SHALL BE OF THE SIZE INDICATED OR REQUIRED BY THE NATIONAL ELECTRIC CODE FOR THE NUMBER AND SIZE CONDUCTORS INVOLVED. JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH AND PULLED UP TIGHT. CONDUITS SHALL NOT BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.	2.	LEVITON #HMTS1 SERIES.	2.	LEVITON #OSSMT-DM SERIES.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	5.	EMT CONDUIT FITTINGS SHALL BE SET SCREW TYPE GALVANIZED STEEL, CONCRETE TIGHT. DIE CAST TYPE INDENTOR FITTINGS ARE NOT ACCEPTABLE.	3.	PHILIPS #HRS220 SERIES.	3.	PHILIPS #HRS220 SERIES.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	C.	RACEWAYS IN GENERAL SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS, IN WALLS, IN ACCESSIBLE FLOOR PLenums, AND EXPOSED ELSEWHERE AS SHOWN ON PLANS.	4.	SENSOR SWITCH #WSX-POT SERIES.	4.	SENSOR SWITCH #WSX-POT SERIES.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	1.	PVC CONDUIT AND LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT SHALL NOT BE USED IN ENVIRONMENTAL AIR PLenums.	1.	HUBBELL #HMTS1 SERIES.	5.	WATTS TOPPER #DW-100 SERIES.
F.	WORKMANSHIP	2.	CONDUITS INSTALLED ON EXTERIORS OF BUILDINGS OR OTHER STRUCTURES SHALL BE ARRANGED TO DRAIN (NOT TRAP WATER), AND SHALL BE RAIN-TIGHT IN WET LOCATIONS.	2.	LEVITON #HMTS1 SERIES.	I.	SINGLE WALL SWITCH WITH INTEGRAL DUAL TECHNOLOGY SENSOR (PIR AND ULTRASONIC) WITH 0-10V DIMMING CAPABILITIES SHALL BE UNIVERSAL LINE VOLTAGE TYPE WITH ADAPTIVE LEARNING TECHNOLOGY AND 180 DEGREE COVERAGE.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	3.	CONDUITS INSTALLED BELOW GRADE SHALL BE PVC-40 WITH PVC-80 STUB-UPS. REFER TO EXCAVATION, TRENCHING AND BACKFILL SECTION FOR ADDITIONAL INFORMATION.	3.	PHILIPS #HRS220 SERIES.	1.	ACUTY NIGHT #NCOM-PDT-10 SERIES.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	4.	CONDUITS SHALL BE OF THE SIZE INDICATED OR REQUIRED BY THE NATIONAL ELECTRIC CODE FOR THE NUMBER AND SIZE CONDUCTORS INVOLVED. JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH AND PULLED UP TIGHT. CONDUITS SHALL NOT BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.	4.	SENSOR SWITCH #WSX-POT SERIES.	2.	HUBBELL #NXOS-OM-DT-1-R SERIES.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	5.	EMT CONDUIT FITTINGS SHALL BE SET SCREW TYPE GALVANIZED STEEL, CONCRETE TIGHT. DIE CAST TYPE INDENTOR FITTINGS ARE NOT ACCEPTABLE.	1.	HUBBELL #HMTS1 SERIES.	3.	WATTS TOPPER #LM5W-101 SERIES.
F.	WORKMANSHIP	C.	RACEWAYS IN GENERAL SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS, IN WALLS, IN ACCESSIBLE FLOOR PLenums, AND EXPOSED ELSEWHERE AS SHOWN ON PLANS.	2.	LEVITON #HMTS1 SERIES.	4.	LEVITON #DRKDN-C4 SERIES.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	1.	PVC CONDUIT AND LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT SHALL NOT BE USED IN ENVIRONMENTAL AIR PLenums.	3.	PHILIPS #HRS220 SERIES.	J.	WALL MOUNTED TWO ZONE LOW VOLTAGE 4-BUTTON (ON/OFF CONTROLS) WITH LOW VOLTAGE NETWORKING CAPABILITIES.
2.	KEEP FULLY INFORMED AS TO PROGRESS OF WORK, SO THAT WORK OF THIS DIVISION MAY BE BUILT INTO PLACE IN SUFFICIENT TIME TO INSURE AGAINST DELAY TO OTHER TRADES, AND TO PREVENT MISALIGNMENTS OR DAMAGE TO ELECTRICAL WORK.	2.	CONDUITS INSTALLED ON EXTERIORS OF BUILDINGS OR OTHER STRUCTURES SHALL BE ARRANGED TO DRAIN (NOT TRAP WATER), AND SHALL BE RAIN-TIGHT IN WET LOCATIONS.	4.	SENSOR SWITCH #WSX-POT SERIES.	1.	ACUTY NIGHT #NCOM-PDT-10 SERIES.
3.	ALL WORK SHALL BE COMPLETED IN A NEAT AND WORKMANLIKE MANNER AS DESCRIBED AND ILLUSTRATED IN THE MOST CURRENT EDITION OF THE ANSI STANDARDS PUBLICATION "NECA STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING"	3.	CONDUITS INSTALLED BELOW GRADE SHALL BE PVC-40 WITH PVC-80 STUB-UPS. REFER TO EXCAVATION, TRENCHING AND BACKFILL SECTION FOR ADDITIONAL INFORMATION.	1.	HUBBELL #HMTS1 SERIES.	2.	HUBBELL #NXOS-OM-DT-1-R SERIES.
F.	WORKMANSHIP	4.	CONDUITS SHALL BE OF THE SIZE INDICATED OR REQUIRED BY THE NATIONAL ELECTRIC CODE FOR THE NUMBER AND SIZE CONDUCTORS INVOLVED. JOINTS SHALL BE CUT SQUARE, REAMED SMOOTH AND PULLED UP TIGHT. CONDUITS SHALL NOT BE SMALLER THAN 3/4" UNLESS NOTED OTHERWISE.	2.	LEVITON #HMTS1 SERIES.	3.	WATTS TOPPER #LM5W-101 SERIES.
1.	EMPLOY ONLY EXPERIENCED CRAFTSMEN UNDER DIRECT SUPERVISION OF A FULL TIME COMPETENT FOREMAN.	5.	EMT CONDUIT FITTINGS SHALL BE SET SCREW TYPE GALVANIZED STEEL, CONCRETE TIGHT. DIE CAST TYPE INDENTOR FITTINGS ARE NOT ACCEPTABLE.				

- DIMMING RELAY POWER PACK WITH 16A RELAY, 120/277V UNIVERSAL INPUT, 0-10V DIMMING, AND LOW VOLTAGE NETWORKING CAPABILITIES.

 1. ACUTY NIGHT #NPP10-B SERIES.
 2. HUBBELL #NRC-1RD-UNV SERIES.
 3. WATTS TOPPER #MRC-211 SERIES.
 4. LEVITON #DRC7 SERIES.

P. INSTALLATION

 1. COORDINATE LOCATIONS OF OUTLET BOXES AS REQUIRED FOR INSTALLATION OF LIGHTING CONTROL DEVICES PROVIDED UNDER THIS SECTION.
 2. MOUNTING HEIGHTS: UNLESS OTHERWISE INDICATED, AS FOLLOWS
 - a. WALL SWITCH OCCUPANCY SENSORS: 48 INCHES (1.2 M) ABOVE FINISHED FLOOR.
 - b. IN-WALL TIME SWITCHES: 48 INCHES (1.2 M) ABOVE FINISHED FLOOR.
 - c. IN-WALL INTERVAL TIMERS: 48 INCHES (1.2 M) ABOVE FINISHED FLOOR.
 3. ORIENT OUTLET BOXES FOR VERTICAL INSTALLATION OF LIGHTING CONTROL DEVICES UNLESS OTHERWISE INDICATED.
 4. LOCATE WALL SWITCH OCCUPANCY SENSORS ON STRIKE SIDE OF DOOR WITH EDGE OF WALL PLATE 3 INCHES (80 MM) FROM EDGE OF DOOR FRAME. WHERE LOCATIONS ARE INDICATED OTHERWISE, NOTIFY ENGINEER TO OBTAIN DIRECTION PRIOR TO PROCEEDING WITH WORK.
 5. WHERE REQUIRED AND NOT FURNISHED WITH LIGHTING CONTROL DEVICE, PROVIDE WALL PLATE.
 6. WHERE APPLICABLE, INSTALL LIGHTING CONTROL DEVICES AND ASSOCIATED WALL PLATES TO FIT COMPLETELY FLUSH TO MOUNTING SURFACE WITH NO GAPS AND ROUGH OPENING COMPLETELY COVERED WITHOUT STRAIN ON WALL PLATE. REPAIR OR RENEWAL IMPROPERLY INSTALLED OUTLET BOXES OR IMPROPERLY SIZED ROUGH OPENINGS. DO NOT USE OVERSIZED WALL PLATES IN LIEU OF MEETING THIS REQUIREMENT.

Q. OCCUPANCY SENSOR LOCATIONS:

 1. LOCATION ADJUSTMENT: WITHIN THE DESIGN INTENT, REASONABLY MINOR ADJUSTMENTS TO LOCATIONS MAY BE MADE IN ORDER TO OPTIMIZE COVERAGE AND AVOID CONFLICTS OR PROBLEMS AFFECTING COVERAGE.

R. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROGRAMMING THE SYSTEM AND DEVICE SETTINGS FOR PROPER SYSTEM OPERATIONS.

S. ALL PROGRAMMING REQUIRED FOR PROPER SYSTEM OPERATION AND AS REQUIRED BY THE ARCHITECT, ENGINEER, AND OWNER SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

T. TWO HOUR (MIN) TUTORIAL OF THE SYSTEM OPERATION AND PROGRAMMING SHALL BE PROVIDED BY THE MANUFACTURER FOR THE MAINTENANCE STAFF.

1.4 LOW VOLTAGE AND COMMUNICATIONS REWAY PROVISIONS

 - A. FURNISH AND INSTALL A SYSTEM OF RACEWAYS AND OUTLETS FOR THE INSTALLATION OF VOICEDATA CABLING AND SIMILAR LOW VOLTAGE SYSTEMS.
 - B. CONDUITS SHALL BE SIZED AS SHOWN ON THE DRAWINGS AND SHALL CONFORM TO "RACEWAYS" SPECIFICATION.
 - C. OUTLETS SHALL BE AS DESCRIBED IN THE SYMBOL SCHEDULE ON THE DRAWINGS.
 - D. RACEWAYS SHALL UTILIZE LONG SWEEP 90° BENDS AT ALL LOCATIONS WHERE ELBOWS ARE REQUIRED (2 FOOT MINIMUM RADIUS ON ALL BENDS).
 - E. RACEWAYS SHALL BE TERMINATED WITH INSULATING BUSHINGS. ALL RACEWAYS LEFT WITHOUT CABLING SHALL CONTAIN NYLON PULL WIRE.
 - F. WIRING SHALL BE INSTALLED BY OTHERS.

1.5 FIRE ALARM SYSTEM

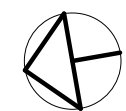
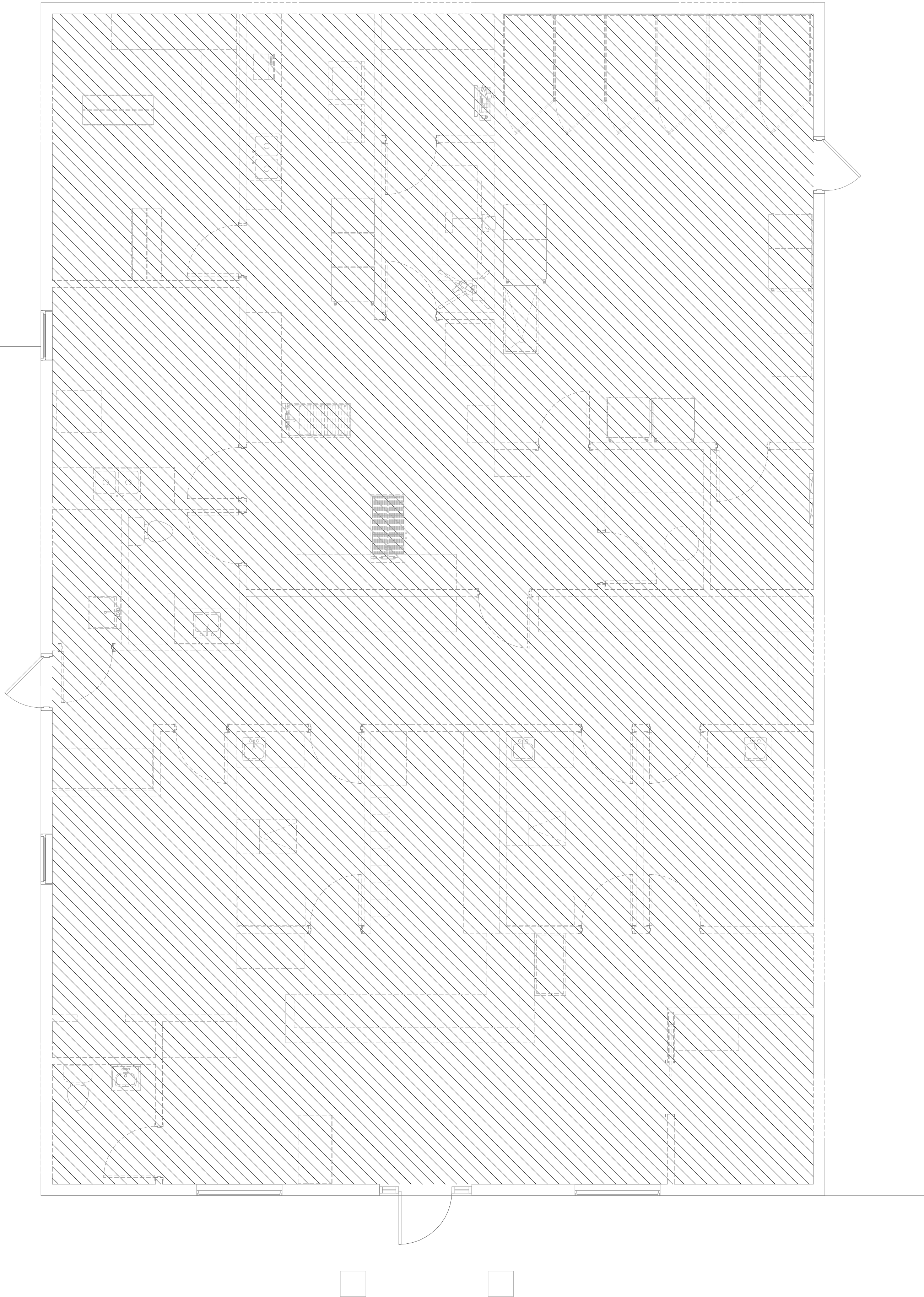
 - A. THE ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL, AND PLACE IN OPERATING CONDITION COMPONENTS NECESSARY TO EXISTING ELECTRICAL OPERATED, SUPERVISED, AUTOMATED FIRE DETECTION ALARM SYSTEM AS DESCRIBED IN THESE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS. EQUIPMENT PROVIDED UNDER THIS SPECIFICATION SHALL INCLUDE ALL DEVICES REQUIRED TO PROVIDE A COMPLETELY OPERABLE SYSTEM.
 - B. THE SYSTEM FURNISHED UNDER THIS SPECIFICATION SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF THE FOLLOWING STANDARDS AND CODES:
 1. NFPA 70, NATIONAL ELECTRICAL CODE.
 2. NFPA 72, NATIONAL FIRE ALARM CODE.
 3. STATE CODES.
 4. LOCAL CODES.
 5. SYSTEM SHALL BE UL LISTED.
 - C. THE EQUIPMENT SHALL BE VERIFIED TO BE COMPATIBLE WITH EXISTING NOVAF FIRE ALARM SYSTEM.
 - D. THE EQUIPMENT MANUFACTURER SHALL HAVE A LOCAL BRANCH OFFICE STAFFED WITH TRAINED, FULL-TIME EMPLOYEES WHO ARE CAPABLE OF PERFORMING TESTING, INSPECTION, REPAIR, AND MAINTENANCE SERVICE FOR THE FIRE DETECTION SYSTEM.
 - E. ALL COMPONENTS, PARTS AND ASSEMBLIES SUPPLIED BY THE MANUFACTURER SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL, WORKMANSHIP, AND A PERIOD OF 12 MONTHS. WARRANTY SERVICE SHALL BE PROVIDED BY A TRAINED SPECIALIST OF THE EQUIPMENT MANUFACTURER. THE SPECIALIST SHALL BE BASED IN A FULLY STAFFED BRANCH OFFICE LOCATED WITHIN A REASONABLE DISTANCE FROM THE JOB SITE.
 - F. PRIOR TO INSTALLATION OF ANY EQUIPMENT OR RACEWAYS, SUBMIT SHOP DRAWINGS FOR APPROVAL. DRAWINGS SHALL INCLUDE:
 1. EQUIPMENT BROCHURE WITH SPECIFICATION SHEETS INCLUDING CUSTOM LABELING DESIGNATION.
 2. DEVICE WIRING DIAGRAMS WITH REQUIRED COLOR CODING NOTED.
 3. FLOOR PLANS WITH WIRING, DEVICE ADDRESSES AND SYMBOL SCHEDULE.
 4. RISER DIAGRAMS WITH WIRE FILL NOTED.
 5. BATTERY CALCULATIONS (PER NFPA 72) AND A LISTING OF SPARE CAPACITY ON EACH POWER SUPPLY IN THE SYSTEM UNDER NORMAL CONDITIONS.
 6. COMPLETE DESCRIPTION OF SYSTEM OPERATION.
 7. LISTING OF ALL MATERIALS FURNISHED WITH THE SYSTEM.
 8. FIRE ALARM EQUIPMENT SUPPLIER SHALL SUBMIT APPROVED SHOP DRAWINGS TO BUILDING DEPARTMENT FOR PLAN REVIEW AND PERMITTING.
 - G. PROVIDE ON-SITE TRAINING FOR MINIMUM OF FOUR (4) PERSONS ON SYSTEM OPERATION AND SYSTEM RESET. THIS TRAINING SHALL INCLUDE AN INITIAL FOUR (4) HOURS DEDICATED INSTRUCTOR TIME.
 1. EQUIPMENT SUPPLIER SHALL BE RESPONSIBLE FOR THE INITIAL PROGRAMMING REQUIRED TO MAKE THE SYSTEM PERFORM AS OUTLINED UNDER SYSTEM OPERATION OF THIS SPECIFICATION.
 2. CUSTOM LABEL MESSAGES FOR THE INDIVIDUAL ZONES SHALL BE DEFINED BY THE OWNER AND SHALL BE PROGRAMMED BY THE SUPPLIER. THE OWNER RESERVES THE RIGHT TO REQUEST MINOR CHANGES IN THE OPERATION WITHOUT ADDITIONAL EXPENSE.
 3. COMPLETE DOCUMENTATION OF THE SYSTEM PROGRAMMING SHALL BE FURNISHED TO THE OWNER PRIOR TO FINAL ACCEPTANCE.
 - H. SYSTEM OPERATION
 1. UPON ACTUATION OF ANY ALARM INITIATION DEVICE (MANUAL STATION, CEILING OR DUCT SMOKE DETECTOR, WATERFLOW SWITCH, OR FIRE SUPPRESSION PANEL), THE FOLLOWING DESCRIBED EVENTS SHALL OCCUR:
 - a. DISPLAY THE ALARM CONDITION AND SOUND THE AUDIBLE TONE AT THE CONTROL PANEL.
 - b. DISPLAY THE ALARM CONDITION AND SOUND THE AUDIBLE TONE AT ALL ANNUNCIATORS.
 - c. ALERT THE OWNER SELECTED CENTRAL STATION OR LOCAL FIRE DEPARTMENT SERVICE UTILIZING HARDWARE IN THE CONTROL PANEL.
 - d. AUDIOVISUAL DEVICES SHALL ACTIVATE SOUND AND SYNCHRONIZED FLASH OF STROBES. SOUND MAY BE SILENCED WHILE THE VISUAL INDICATOR SHALL REMAIN FLASHING UNTIL THE SYSTEM IS RESET.
 - e. THE FIRE HANDLING UNIT SHALL BE SHUT DOWN (DUCT DETECTOR ALARM ONLY).
 2. UPON ACTIVATION OF THE ELEVATOR EQUIPMENT ROOM SMOKE DETECTOR, ELEVATOR LOBBY SMOKE DETECTOR, OR ELEVATOR SHAFT SMOKE DETECTOR, THE FIRE ALARM SYSTEM SHALL SEND THE ASSOCIATED ELEVATOR TO THE MAIN EGRESS LEVEL. IN THE EVENT THAT THE ELEVATOR LOBBY SMOKE DETECTOR ON THE MAIN EGRESS LEVEL IS ACTIVATED, THE ELEVATOR SHALL BE SENT TO AN ALTERNATE FLOOR AS DESIGNATED BY THE OWNER.
 3. UPON ACTIVATION OF THE ELEVATOR EQUIPMENT ROOM HEAT DETECTORS THE ELEVATOR SHUNT TRIP MECHANISM SHALL BE ACTIVATED AND SHUNT TRIP THE ELEVATOR EQUIPMENT.
 4. UPON ACTUATION OF VALVE SUPERVISORY SWITCH THE FOLLOWING DESCRIBED EVENTS SHALL OCCUR:
 - a. ILLUMINATE THE APPROPRIATE ZONE LED TO INDICATE THE TROUBLE CONDITION ON THE CPU.
 - b. THE CPU SHALL SOUND AND DISPLAY THE TROUBLE CONDITION.
 - c. THE AUDIO DEVICES SHALL BE SILENCED BY THE ALARM SILENCE SWITCH. THE VISUAL DEVICE SHALL CONTINUE TO STROBE UNTIL THE SYSTEM IS RESET.
 5. THE FIRE ALARM SYSTEM SHALL ALLOW FOR LOADING AND EDITING SPECIAL INSTRUCTIONS AND OPERATING SEQUENCES AS REQUIRED. THE SYSTEM SHALL BE CAPABLE OF ON-SITE TROUBLE SHOOTING TO ADAPTATE SYSTEMS EXPANSION AND FACILITATE CHANGES IN OPERATION. ALL SOFTWARE OPERATIONS SHALL BE STORED IN A NON-VOLATILE PROGRAMMABLE MEMORY WITHIN THE FIRE ALARM CONTROL PANEL. LOSS OF PRIMARY AND SECONDARY POWER SHALL NOT ERASE THE INSTRUCTIONS STORED IN MEMORY. FULL FLEXIBILITY FOR SELECTIVE INPUT CONTROL FUNCTIONS BASED ON ADDRESS, ORIGIN, NOTING, TIMING AND SPECIAL CODED OPERATIONS SHALL ALSO BE INCORPORATED IN THE RESIDENT SOFTWARE PROGRAMMING OF THE SYSTEM.
 6. THE SYSTEM SHALL HAVE THE CAPABILITY OF RECALLING ALARMS AND TROUBLE CONDITIONS IN CHRONOLOGICAL ORDER FOR THE PURPOSE OF RECREATING AN EVENT HISTORY.
 7. WHEN THE SYSTEM IS OPERATING ON BATTERY POWER, A TROUBLE CONDITION SHALL BE GENERATED AFTER POWER OUTAGE EXCEEDS 15 SECONDS. WHEN AC POWER IS RESTORED, THE SYSTEM SHALL REVERT TO THE 120 VAC, 60 HZ SUPPLY WITHOUT ANY MANUAL RESTART PROCEDURES.
 8. THE SYSTEM SHALL DETECT FAULTS IN THE WIRING AND POWER LOSS. UPON DETECTION OF THESE CONDITIONS, A LOCAL ALARM AND INDICATION LIGHT SHALL OPERATE AT THE FIRE ALARM PANEL AND ALSO AT THE REMOTE ANNUNCIATOR.
 9. THE SYSTEM SHALL CONTAIN INDEPENDENTLY SUPERVISED INITIATION CIRCUITS AND INDIVIDUALLY ADDRESSABLE DEVICES. THE ALARM ACTIVATION OF ANY INITIATING CIRCUIT SHALL NOT PREVENT THE SUBSEQUENT ALARM OPERATION OF ANY OTHER INITIATION CIRCUIT.
 10. AUXILIARY MANUAL CONTROLS SHALL BE SUPERVISED SO THAT AN "OFF NORMAL" POSITION OF ANY SWITCH SHALL CAUSE A SYSTEM TROUBLE.
 11. EACH INDEPENDENTLY SUPERVISED CIRCUIT SHALL INCLUDE A DISCRETE LCO READOUT TO INDICATE DISARRANGEMENT CONDITION PER CIRCUIT.
 12. THE SYSTEM BATTERIES SHALL BE SUPERVISED SO THAT A LOW BATTERY CONDITION OR DISCONNECTION OF THE BATTERY SHALL BE AUDIBLY AND VISUALLY INDICATED AT THE CONTROL PANEL AND THE REMOTE ANNUNCIATOR.
 13. ALL SYSTEM CONTROL AND MONITOR MODULES SHALL BE ELECTRICALLY SUPERVISED FOR MODULE PLACEMENT. SHOULD A MODULE BECOME DISCONNECTED THE SYSTEM TROUBLE INDICATOR SHALL ILLUMINATE AND THE AUDIBLE TROUBLE SIGNAL MUST SOUND.
 14. THE SYSTEM SHALL HAVE PROVISIONS FOR DISABLING AND ENABLING ALL CIRCUITS INDIVIDUALLY FOR MAINTENANCE OR TESTING PURPOSES.
 - I. SYSTEM RESET
 1. THE "SYSTEM RESET" BUTTON SHALL BE USED TO RETURN THE SYSTEM TO ITS NORMAL STATE AFTER AN ALARM CONDITION HAS BEEN REMOVED. PRINTED MESSAGES SHALL PROVIDE OPERATOR ASSURANCE OF THE SEQUENTIAL STEPS (I.E. "IN PROGRESS", "RESET COMPLETED", AND "SYSTEM NORMAL") AS THEY OCCUR, SHOULD ALL ALARM CONDITIONS BE CLEARED.
 2. SHOULD AN ALARM CONDITION CONTINUE TO EXIST, THE SYSTEM WILL REMAIN IN AN ABNORMAL STATE. SYSTEM CONTINUOUSLY RECHECKS THE PANEL PRIORITY ALARM LED SHALL REMAIN ON. THESE POINTS WILL NOT REQUIRE ACKNOWLEDGMENT IF THEY WERE PREVIOUSLY ACKNOWLEDGED.

J. FIRE ALARM CONTROL PANEL

 1. THE DETECTION CONTROL PANEL SHALL BE UL LISTED FM APPROVED AND INSTALLED IN ACCORDANCE WITH THE LIMITS AND GUIDELINES DEPICTED IN THE MANUFACTURER'S INSTALLATION AND OPERATION MANUAL.
 2. THE CONTROL PANEL SHALL BE ADDRESSABLE TYPE, WITH LCD DISPLAY, CAPABLE OF COMMUNICATION WITH UP TO 198 ADDRESSABLE FIELD DEVICES VIA A TWISTED PAIR OF WIRES, EXPANDABLE TO 32 MONITOR ZONES, 6 SIGNAL ZONE AND 10 CONTROL POINTS, OPERATE ON A PRIMARY INPUT ELECTRICAL POWER OF 120 VOLTS AC, 60 HZ, AND PROVIDE 24 VOLTS DC FULV WERE RECTIFIED OUTPUT TO POWER DETECTORS AND ALARMS. AN ALARM LIGHT AND TROUBLE LIGHT SHALL PROVIDED FOR EACH ZONE AND ZONE FAILURE INDICATOR. A SIMPLEX #4100ES (3-BAY ENCLOSURE), NOTIFIER #N74-5F560 (D SERIES ENCLOSURE), EDWARDS #K050, SIEMENS #JES030 (3-BAY ENCLOSURE).
 3. PANEL SHALL CONTAIN FOUR INDEPENDENTLY SUPERVISED AND INDEPENDENTLY FUSED 24 VDC INDICATING CIRCUITS FOR ADDITIONAL DEVICES. EACH INDEPENDENTLY SUPERVISED CIRCUIT SHALL INCLUDE A DISCRETE AMBER "TROUBLE" LED TO INDICATE DISARRANGEMENT CONDITIONS PER CIRCUIT. PROVIDE ADDITIONAL CARDS/HARDWARE TO THE BASE PANEL AS REQUIRED TO MEET THIS SIGNAL CIRCUIT REQUIREMENT. THE PANEL SHALL INCLUDE SUPPORT FOR SYNCHRONIZED VISUAL DEVICE OPERATION.
 4. THE CONTROL PANEL SHALL RECEIVE 120 VAC POWER VIA A DEDICATED CIRCUIT BREAKER AS NOTED ON THE PLANS. THE INCOMING POWER TO THE SYSTEM SHALL BE SUPERVISED SO THAT ANY POWER FAILURE SHALL BE AUDIBLY AND VISUALLY INDICATED AT THE CONTROL PANEL. A "POWER ON" LED SHALL BE DISPLAYED CONTINUOUSLY WHILE AC POWER IS PRESENT.
 5. THE CONTROL PANEL SHALL BE PROVIDED WITH SUFFICIENT BATTERY CAPACITY TO OPERATE THE ENTIRE SYSTEM UPON LOSS OF NORMAL SUPPLY POWER FOR A PERIOD OF TWENTY-FOUR (24) HOURS WITH FIVE (5) MINUTES OF ALARM INDICATION AT THE END OF THIS PERIOD. THE SYSTEM SHALL AUTOMATICALLY TRANSFER TO THE STANDBY BATTERIES UPON POWER FAILURE. ALL BATTERY CHARGING AND RECHARGING OPERATIONS SHALL BE AUTOMATIC. BATTERIES, ONCE DISCHARGED, SHALL RECHARGE AT A RATE TO PROVIDE A MINIMUM OF 70% CAPACITY IN 12 HOURS.
 6. THE CONTROL PANEL IS TO HAVE A DEDICATED SYSTEM TROUBLE LED AND A DEDICATED TROUBLE ACKNOWLEDGE SWITCH.
 7. PANEL SHALL CONTAIN AN AUTO DIALER FOR CENTRAL STATION THE OR FOR ALERTING THE LOCAL FIRE DEPARTMENT OF A TROUBLE OR ALARM CONDITION.

K. ADDITIONAL SIGNAL POWER SUPPLY

7/12/2026 9:21:24 AM



ELECTRICAL DEMOLITION NOTES:

- UNLESS OTHERWISE NOTED, THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL EXISTING LIGHTING FIXTURES, WIRING DEVICES, EQUIPMENT WIRING, SYSTEM WIRING, CABLES, JACK, ETC. IN HATCHED AREAS.
 - CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE HIMSELF WITH THE EXTENT OF THE ELECTRICAL DEMOLITION WORK INVOLVED, PRIOR TO SUBMITTING HIS BID.
 - REFER TO DISTRIBUTION DIAGRAMS FOR DELINEATION OF DEMOLITION WORK ASSOCIATED WITH THE EXISTING POWER DISTRIBUTION SYSTEM.
- DEMOLITION OF ELECTRICAL SYSTEMS SHALL BE LIMITED AS NOTED IN UNSHADED AREAS.
- ALL REMOVED MATERIALS SHALL BE OFFERED TO THE OWNER FOR SALVAGE.
 - ALL MATERIAL NOT SELECTED BY THE OWNER SHALL BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND SHALL PROMPTLY BE REMOVED FROM THE JOB SITE AND SAFELY DISPOSED OF PER SPECIFICATIONS.
- ALL EXISTING WIRELESS ACCESS POINTS SHALL BE REMOVED, SAFEGUARDED AND TURNED OVER TO THE OWNER'S IT DEPARTMENT.
- ALL ADDRESSABLE FIRE ALARM DEVICES THAT ARE TO BE REMOVED SHALL BE REMOVED FROM THE FIRE ALARM PROGRAMMING AT THE TIME OF REMOVAL TO AVOID NUISANCE ALARMS.
- ALL SECURITY AND CARD ACCESS EQUIPMENT SHALL REMAIN AND BE MAINTAINED ALONG WITH ASSOCIATED CABLING. ANY COSTS ASSOCIATED WITH ACCIDENTAL REMOVAL OF EQUIPMENT OR CABLING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

PRELIMINARY
NOT FOR CONSTRUCTION
07/12/26



FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWIRNA, DE 19977

CONSTRUCTION DOCS

FIRST FLOOR
ELECTRICAL
DEMOLITION PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

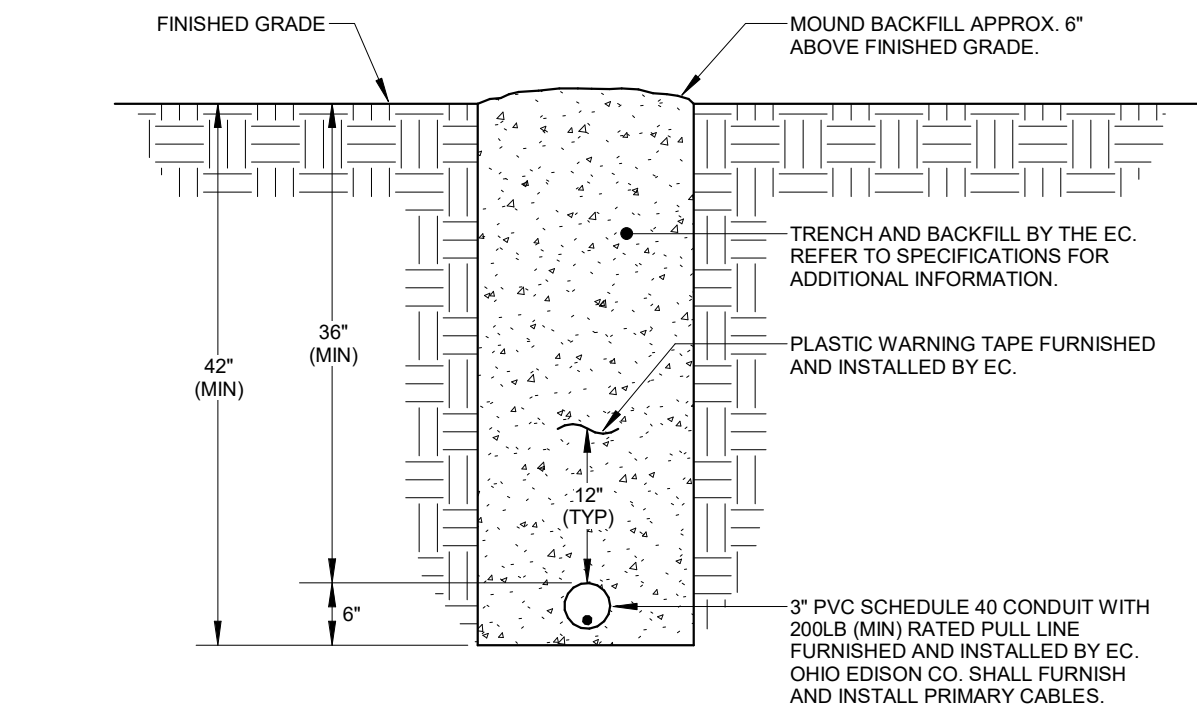
07/12/26	CONSTRUCTION

ED-100

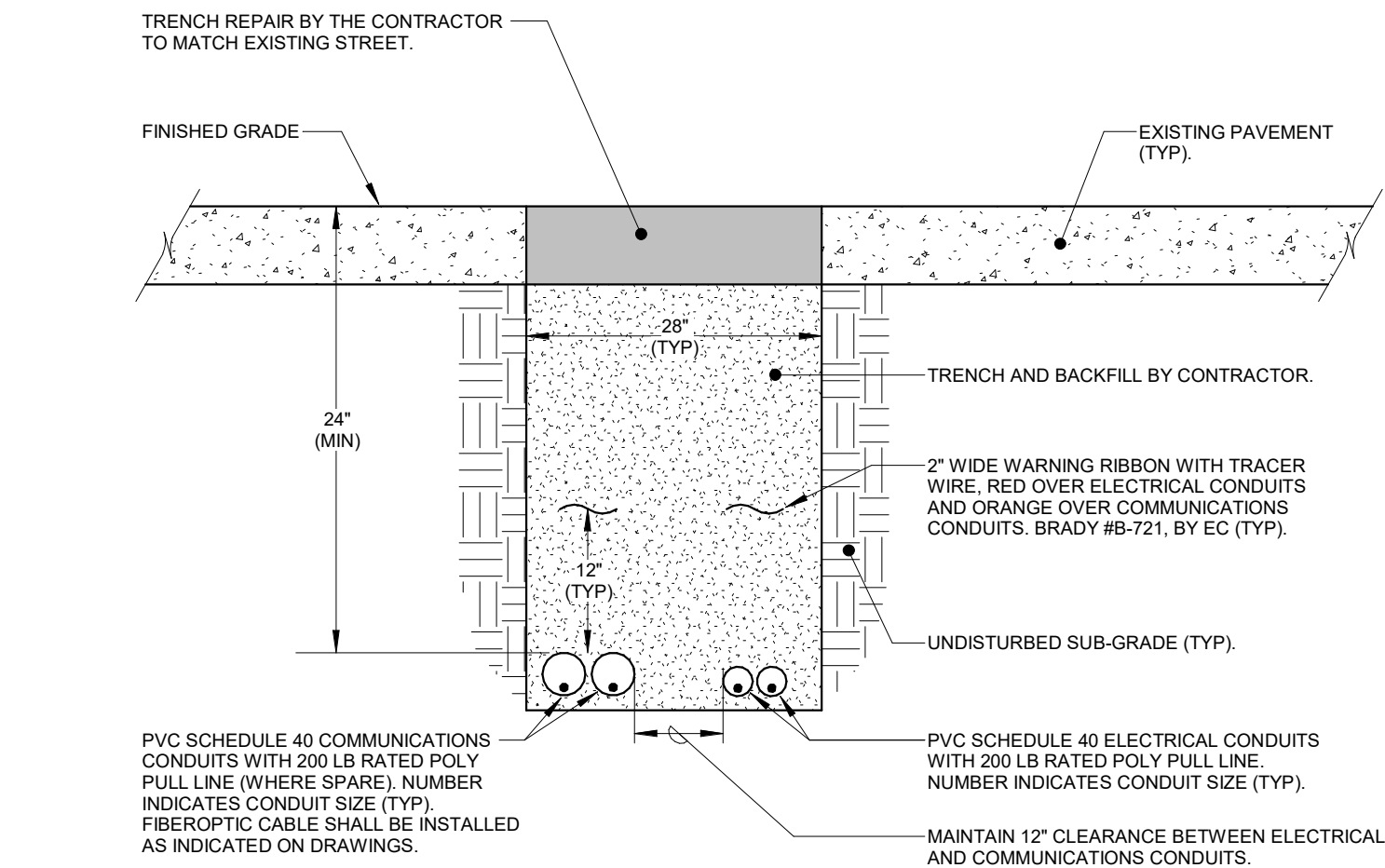
7/12/2026 9:21:25 AM



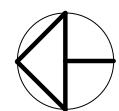
- SITE PLAN NOTES:**
1. EXISTING EXTERIOR BUILDING LIGHTING TO REMAIN. EXTEND EXISTING CIRCUIT TO NEW PANEL INDICATED AS NEEDED.
 2. EXISTING PARKING LOT LIGHTING TO REMAIN. EXTEND EXISTING CIRCUIT TO NEW PANEL INDICATED AS NEEDED.
 3. ALL EXTERIOR LIGHTING TO BE CONTROLLED VIA PROGRAMMABLE LIGHTING CONTROL PANEL. PROVIDED BY ELECTRICAL CONTRACTOR.
 4. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL UTILITY WORK WITH THE LOCAL UTILITY COMPANY AND THE GENERAL CONTRACTOR FOR TRANSFORMER LOCATION AND SERVICE ROUTE TO BUILDING.



2 PRIMARY SERVICE TRENCH DETAIL
E-100 NTS



3 CONDUIT TRENCH DETAIL - PAVEMENT
E-100 NTS



PRELIMINARY
NOT FOR CONSTRUCTION
07/12/26

FMD | ARCHITECTS

ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SWIRTA, DE 19977

CONSTRUCTION DOCS

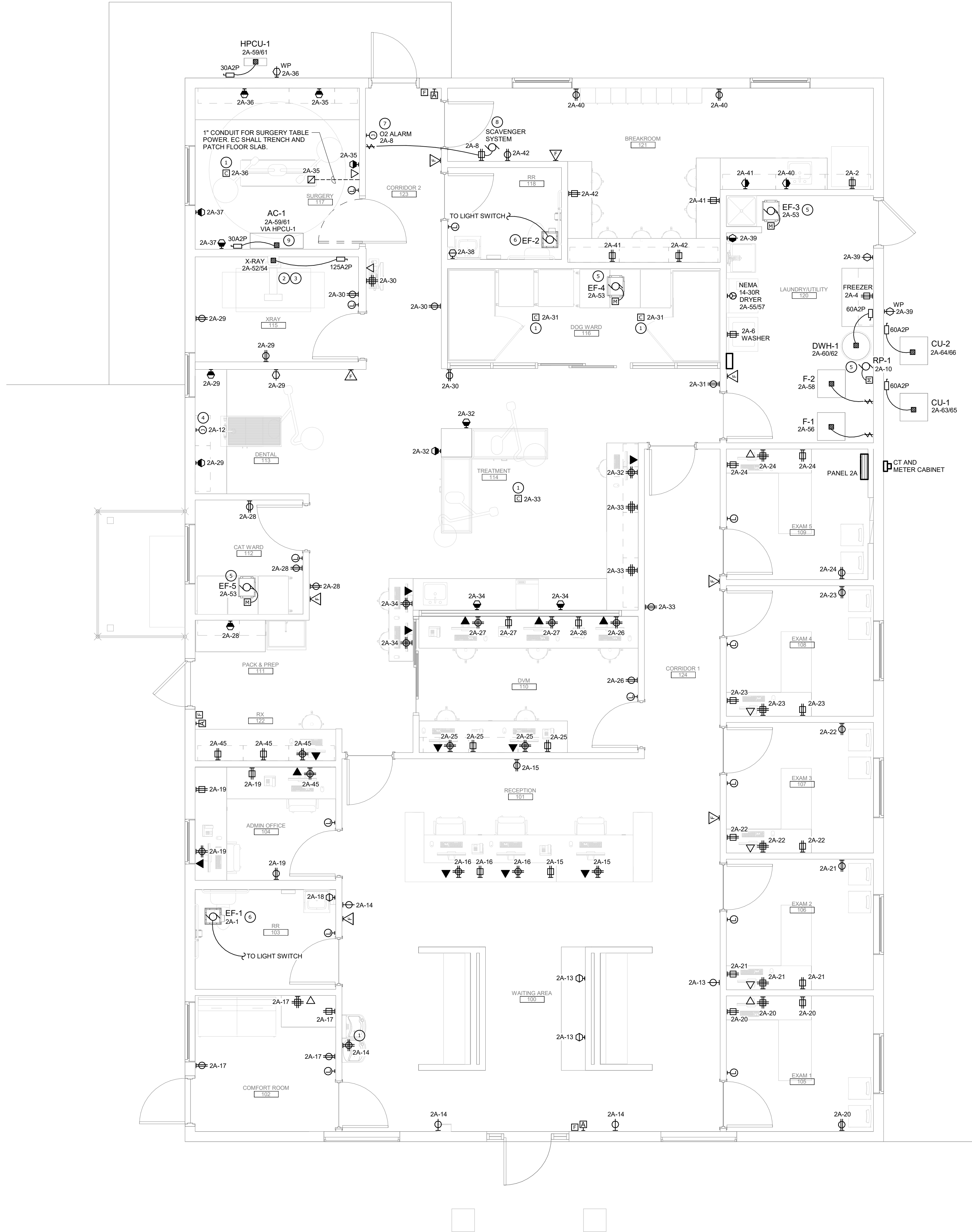
ELECTRICAL SITE PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED

JOB NUMBER: 26-1482

07/02/26 CONSTRUCTION

7/12/2026 9:21:29 AM



- KEYED NOTES:**
- ① DRINKING FOUNTAIN - COORDINATE INSTALLATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR.
 - ② X-RAY - CONCEAL WIRING IN THIS LOCATION. SURFACE RACEWAY IN NOT ACCEPTABLE.
 - ③ X-RAY - SUPPLIER TO PROVIDE BUCK BOOST TRANSFORMER FOR X-RAY EQUIPMENT AS NEEDED. INSTALLED BY ELECTRICAL CONTRACTOR.
 - ④ DENTAL X-RAY UNIT - VERIFY REQUIREMENTS AND ELEVATION BEFORE INSTALLATION.
 - ⑤ EXHAUST FAN / MOTOR - INDICATED FOR CONTINUOUS OPERATION DURING BUSINESS HOURS. CONTROL TO BE BAS-1P MANUAL STARTER MOTOR.
 - ⑥ EXHAUST FAN - TO BE WIRED/CONTROLLED THRU 2-RELAY LIGHTING CONTROL DEVICE. REFER TO LIGHTING PLAN FOR LIGHTING CONTROL DEVICE LOCATION. EXHAUST FAN SHALL BE CONTROLLED INDEPENDENTLY FROM RESTROOM LIGHTS.
 - ⑦ OXYGEN ALARM - COORDINATE EXACT HEIGHT AND LOCATION WITH MEDICAL GAS CONTRACTOR. PLUMBING CONTRACTOR TO BE RESPONSIBLE FOR LOW VOLTAGE WIRING. SEE PLUMBING DETAILS FOR MORE INFORMATION.
 - ⑧ SCAVENGER SYSTEM - SCAVENGER TO BE POWERED AND CONTROLLED THROUGH A SWITCHED RECEPTACLE. ELECTRICAL CONTRACTOR TO COORDINATE EXACT HEIGHT AND LOCATION OF EQUIPMENT AND RECEPTACLE WITH MECHANICAL CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO INSTALLATION.
 - ⑨ INDOOR UNIT TO BE POWERED FROM ASSOCIATED OUTDOOR UNIT.

PRELIMINARY
NOT FOR CONSTRUCTION
07/02/26



ARCHITECTS • PLANNERS • INTERIORS • LEED ACCREDITED
• CONSTRUCTION ADMINISTRATION
3200 W Market St, Suite 205 Fairlawn, Ohio 44333
Phone: 330.836.2343

WILLOW GRACE VETERINARY
HOSPITAL

10 ARTISAN DR.
SMYRNA, DE 19777
CONSTRUCTION DOCS

FIRST FLOOR POWER
PLAN

© COPYRIGHT 2026
FMD ARCHITECTS INC.
ALL RIGHTS RESERVED
JOB NUMBER: 26-1482

07/02/26 CONSTRUCTION

2A

SERVICE ENTRANCE RATED: NO						BUS RATING: 400 A				MAINS TYPE: MAIN LUGS ONLY			
						VOLTAGE: 208Y/120V, 3Ø, 4W				MAINS RATING: 400 A			
						GFP: NO				FEED: BOTTOM			
						SCOR Rating: 22,000 A				MOUNTING: SURFACE			
						NEMA ENCLOSURE: 1				EXISTING? NO			
CCT	LOAD TYPE	BREAKER	LOAD (VA)	WIRE SIZE	DESCRIPTION	PHASE	CCT	LOAD TYPE	BREAKER	LOAD (VA)	WIRE SIZE	DESCRIPTION	
1	L	20/1	1,068	2#12, #12G	LIGHTING ROOMS 100-107	A	2	E	20/1 - GFCI	1,000	2#12, #12G	BREAKROOM 121 REF	
3	L	20/1	816	2#12, #12G	LIGHTING ROOMS 108, 109, 115-118, 120, 121	B	4	E	20/1 - GFCI	1,000	2#12, #12G	LAUNDRY 120 FREEZER	
5	L	20/1	878	2#12, #12G	LIGHTING ROOMS 110-114, 123	C	6	E	20/1 - GFCI	1,200	2#12, #12G	LAUNDRY 120 WASHING MACHINE	
7	L	20/1	720	2#12, #12G	LIGHTING DENTAL 113 / SURGERY 117 BOOM	A	8	E	20/1	500	2#12, #12G	SCAVENGER SYSTEM / O2 ALARM	
9	L	20/1	720	2#12, #12G	LIGHTING TREATMENT 114 BOOM	B	10	E	20/1	150	2#12, #12G	RECIRCULATION PUMP RP-1	
11	L	20/1	500	EXISTING	LIGHTING EXISTING EXTERIOR BUILDING (VIA LCP)	C	12	E	20/1	500	2#12, #12G	DENTAL X-RAY	
13	R	20/1	540	2#12, #12G	RECEPTACLES WAITING AREA 100	A	14	E	20/1	900	2#12, #12G	WATERCOOLER	
15	R	20/1	720	2#12, #12G	RECEPTACLES RECEPTION 101	B	16	R	20/1	900	2#12, #12G	RECEPTACLES RECEPTION 101	
17	R	20/1	900	2#12, #12G	RECEPTACLES COMFORT 102	C	18	R	20/1 - GFCI	180	2#12, #12G	RECEPTACLES RESTROOM 103	
19	R	20/1	1,080	2#12, #12G	RECEPTACLES ADMIN OFFICE 104	A	20	R	20/1	1,080	2#12, #12G	RECEPTACLES EXAM 1 105	
21	R	20/1	900	2#12, #12G	RECEPTACLES EXAM 2 106	B	22	R	20/1	900	2#12, #12G	RECEPTACLES EXAM 3 107	
23	R	20/1	900	2#12, #12G	RECEPTACLES EXAM 4 108	C	24	R	20/1	900	2#12, #12G	RECEPTACLES EXAM 5 109	
25	R	20/1	1,080	2#12, #12G	RECEPTACLES DVM 110	A	26	R	20/1	720	2#12, #12G	RECEPTACLES DVM 110	
27	R	20/1	900	2#12, #12G	RECEPTACLES DVM 110	B	28	R	20/1	720	2#12, #12G	RECEPTACLES PACK & PREP 111 / CAT WARD 112	
29	R	20/1	900	2#12, #12G	RECEPTACLES DENTAL 113 / X-RAY 115	C	30	R	20/1	900	2#12, #12G	RECEPTACLES X-RAY 115	
31	R	20/1	540	2#12, #12G	RECEPTACLES DOG WARD 116	A	32	R	20/1	720	2#12, #12G	RECEPTACLES TREATMENT 114	
33	R	20/1	900	2#12, #12G	RECEPTACLES TREATMENT 114	B	34	R	20/1	1,080	2#12, #12G	RECEPTACLES TREATMENT 114	
35	R	20/1	900	2#12, #12G	RECEPTACLES SURGERY 117	C	36	R	20/1	900	2#12, #12G	RECEPTACLES SURGERY 117	
37	R	20/1	720	2#12, #12G	RECEPTACLES SURGERY 117	A	38	R	20/1 - GFCI	180	2#12, #12G	RECEPTACLES RESTROOM 118	
39	R	20/1 - GFCI	540	2#12, #12G	RECEPTACLES LAUNDRY / UTILITY 120	B	40	R	20/1 - GFCI	540	2#12, #12G	RECEPTACLES BREAKROOM 121	
41	R	20/1 - GFCI	540	2#12, #12G	RECEPTACLES BREAKROOM 121	C	42	R	20/1 - GFCI	540	2#12, #12G	RECEPTACLES BREAKROOM 121	
43	L	20/1	376	EXISTING	LIGHTING EXISTING PARKING LOT LIGHTING (VIA LCP)	A	44	L	20/1	500	EXISTING	LIGHTING MONUMENT SIGN (VIA LCP)	
45	R	20/1	1,080	2#12, #12G	RECEPTACLES PACK / PREP 111	B	46	20/1				SPARE	
47	20/1				SPARE	C	48	20/1				SPARE	
49	20/1				SPARE	A	50	20/1				SPARE	
51	20/1				SPARE	B	52	E	125	7,500	2#1, #6G	X-RAY MACHINE	
53	M	15/1	96	2#12, #12G	EXHAUST FANS EF-3 / EF-4 / EF-5	C	54	E	/2	7,500			
55	E	30 - GFCI	2,400			A	56	M	20/1	1,668	2#12, #12G	FURNACE F-1	
57	E	/2	2,400			B	58	M	20/1	1,668	2#12, #12G	FURNACE F-2	
59	M	15	1,206			C	60	E	60	4,472			
61	M	/2	1,206	3#12, #12G	HEAT PUMP CONDENSING UNIT HPCU-1 / DUCTLESS HEAT PUMP AC-1	A	62	E	/2	4,472		DOMESTIC WATER HEATER DWH-1	
63	M	40	3,900			B	64	M	40	3,900			
65	M	/2	3,900		CONDENSING UNIT CU-1	C	66	M	/2	3,900		CONDENSING UNIT CU-2	

DEMAND LOAD BY TYPE:				TOTAL:	
RECEPTACLE (R) : 10KVA@	100%			16,700	VA
REMAINER@	50%				
MOTOR (M) :			21,444	VA	
LARGEST MOTOR (LM) :	125%		0	VA	
LIGHTING (L) :	125%		6,973	VA	
EQUIPMENT (E) :	100%		33,994	VA	
KITCHEN EQUIPMENT (KE) :	100%		0	VA	
CONTINUOUS (C) :	125%		0	VA	
DWELLING UNIT (DU) : 220.82(B)	0		0	VA	
DWELLING UNITS :		0		UNITS	
DISTRIBUTION (DS) : 100%	AS STATED				

CONNECTED LOAD (VA):

PHASE A: 21,470

PHASE B: 31,234

PHASE C: 31,712

TOTAL: 84,416

DEMAND LOAD:

TOTAL (VA): 79,111

TOTAL (A): 720

NOTES:

-ALL CONDUIT RUNS SHALL HAVE A DEDICATED GROUND SIZED IN ACCORDANCE WITH NEC TABLE 250-122

-ALL SINGLE POLE CIRCUITS SHALL HAVE A DEDICATED FULL SIZE NEUTRAL ROUTED WITH THE PHASE CONDUCTOR

-CONDUITS SHALL BE SIZED PER THE NEC FILL LIMITS.

-CIRCUITS MAY BE ROUTED IN COMMON CONDUITS AS APPROPRIATE.

-WHERE WIRE SIZES ARE NOTED, INDICATES WIRING INSTALLED UNDER THIS PROJECT.

"-GFCI" INDICATES 5mA GFCI CIRCUIT BREAKER (PERSONNEL PROTECTION).

"-GFP" INDICATES 30mA GFCI CIRCUIT BREAKER (EQUIPMENT PROTECTION).

"-AFCI" INDICATES ARC FAULT CIRCUIT INTERRUPTER PROTECTION

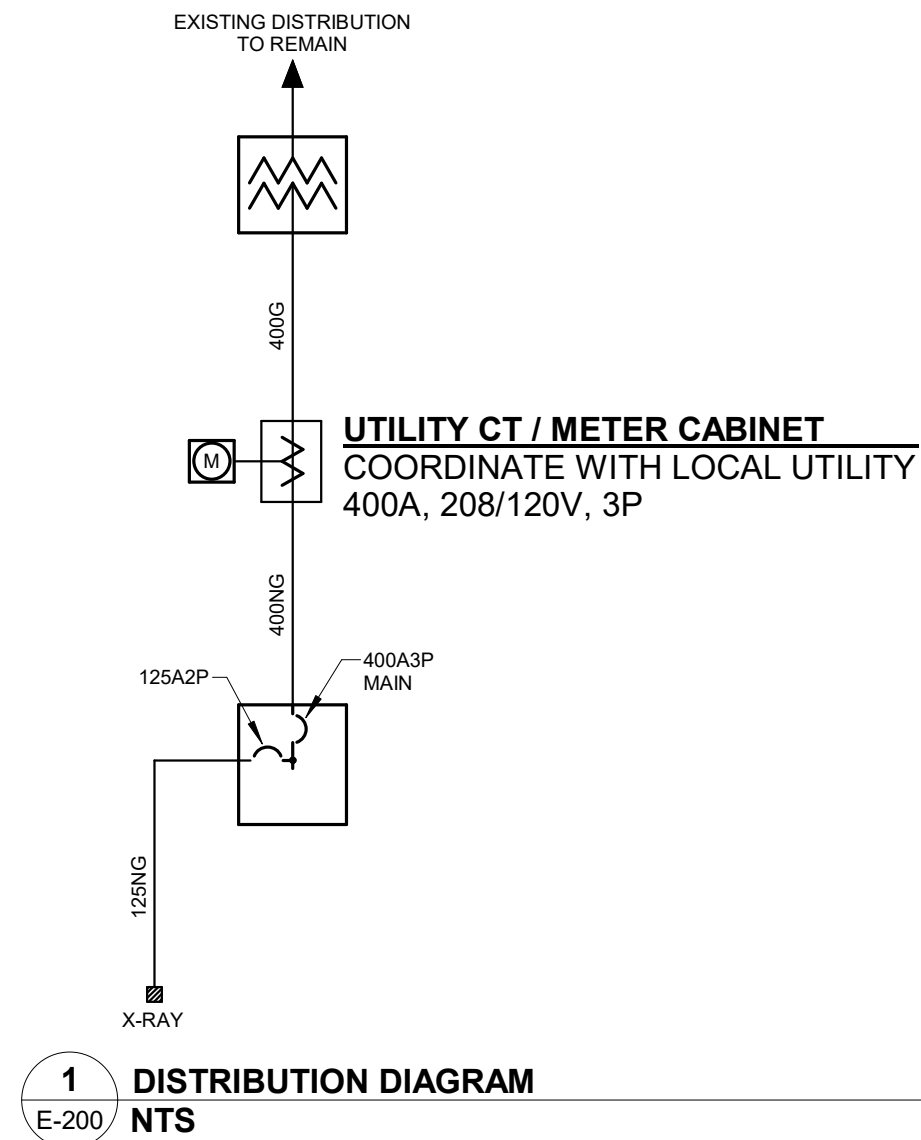
"-GFAF" INDICATES COMBINED ARC FAULT CIRCUIT INTERRUPTER AND GFCI PROTECTION

PROVIDE EQUIPMENT RELATED TO THIS SCHEDULE.

MECHANICAL EQUIPMENT SCHEDULE (FURNISHED AND SET BY MECHANICAL TRADES, WIRED BY ELECTRICAL TRADES)						
MARK	DESCRIPTION	VOLTAGE	PHASE	LOAD (A)	MOCP	REMARKS
RP-1	RECIRCULATION PUMP	120	1	1	20/1	
DWH-1	DOMESTIC WATER HEATER	208	1	43	60/2	
SC-1	SCAVENGER SYSTEM	120	1	2	20/1	
EF-1	EXHAUST FAN	120	1	16W		SWITCHED RECEPTACLE WITH PILOT LIGHT PLUG IN
EF-2	EXHAUST FAN	120	1	16W		PLUG IN
EF-3	EXHAUST FAN	120	1	63W		DISCONNECT BY MFR
EF-4	EXHAUST FAN	120	1	4W		PLUG IN
EF-5	EXHAUST FAN	120	1	4W		PLUG IN
HCPU-1	HEAT PUMP CONDENSING UNIT	208	1	11.6	15/2	
AC-1	DUCTLESS HEAT PUMP	208	1	NA	15/2	INDOOR UNIT TO BE POWERED FROM HCPU-1
CU-1	CONDENSING UNIT	208	1	37.5	40/2	
CU-2	CONDENSING UNIT	208	1	37.5	40/2	
F-1	FURNACE	120	1	13.9	20/1	
F-2	FURNACE	120	1	13.9	20/1	

DISTRIBUTION DIAGRAM NOTES:

1. ALL FEEDERS AND EQUIPMENT SHOWN DASHED SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE.
2. ALL EQUIPMENT SHOWN TO BE EXISTING FEEDERS WITH DESIGNATION "E" ARE EXISTING TO REMAIN AND BE MAINTAINED UNLESS NOTED OTHERWISE.
3. REFER TO SPECIFICATIONS FOR EQUIPMENT DESCRIPTIONS.
4. ALL EQUIPMENT AND FEEDERS SHOWN ON THE DISTRIBUTION DIAGRAMS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE.
5. THE ELECTRICAL CONTRACTOR SHALL UPDATE EXISTING PANELBOARD DIRECTORIES AFFECTED UNDER THIS PROJECT.
6. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A SELF LAMINATED LABEL INDICATING AVAILABLE FAULT CURRENT PER NEC 110.24 ON ELECTRICAL SERVICES ESTABLISHED UNDER THE PROJECT AS NECESSARY.





CONTRACTOR NOTES:

ALL X-RAY DISCONNECT WIRING SHALL BE COPPER, 208V, SINGLE-PHASE, 125A SERVICE RATED PROVIDED BY THE CONTRACTOR. X-RAY UNIT BASIS OF DESIGN IS SUMMIT INDUSTRIES INC. "INNOVET SELECT" MODEL PROVIDED BY THE CLIENT.