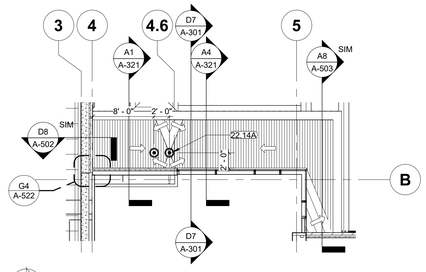
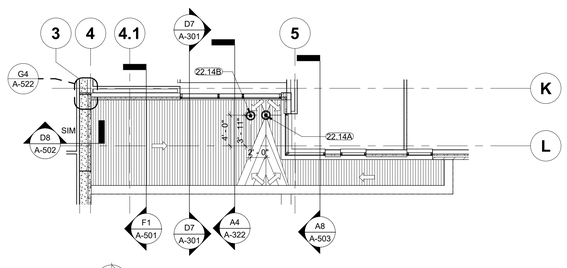
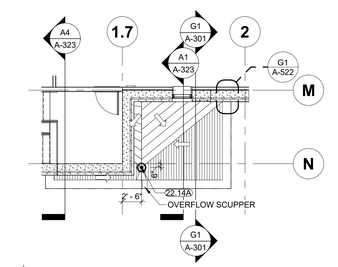


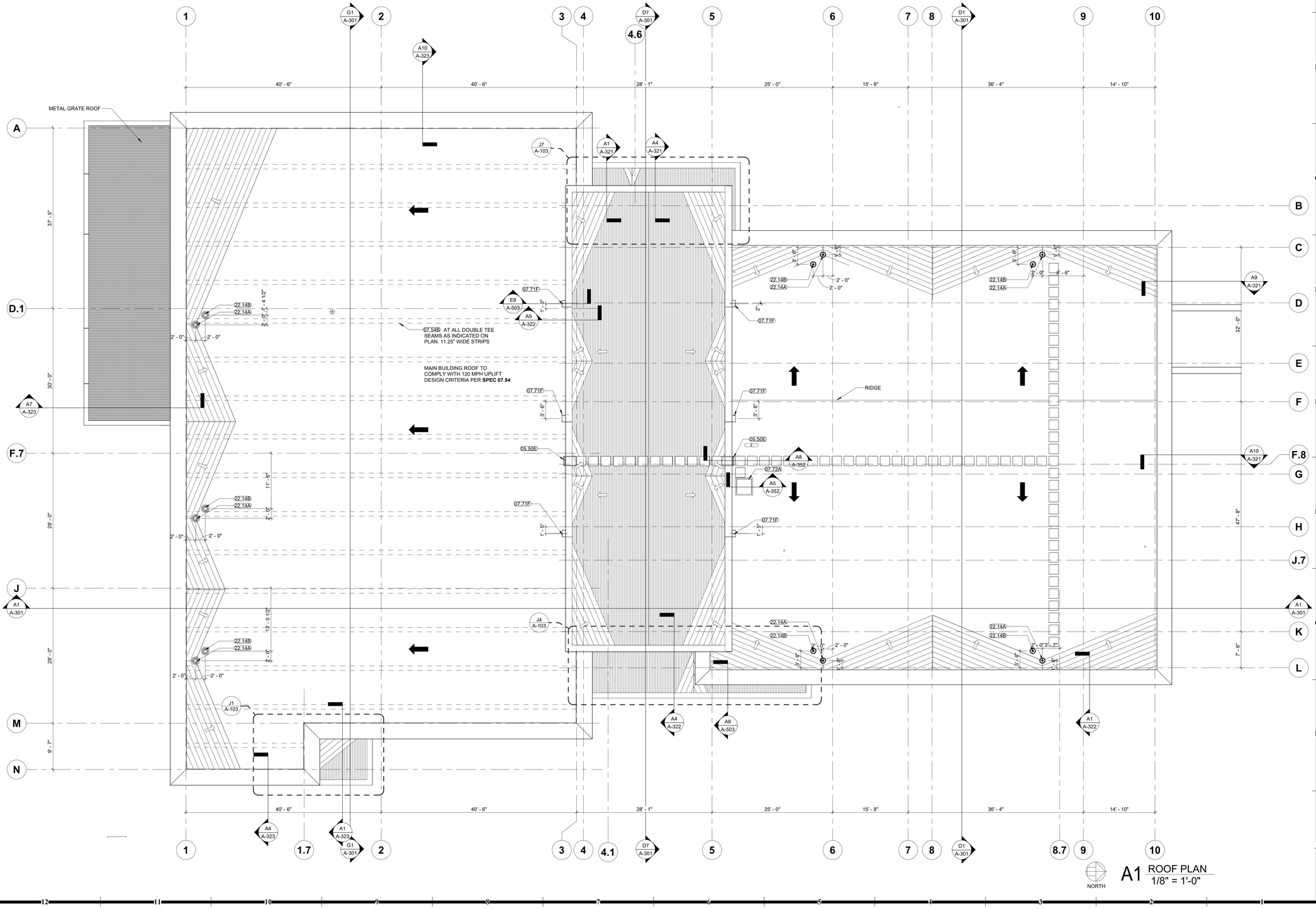
NORTH J7 ROOF PLAN - PUBLIC ENTRY CANOPY
1/8" = 1'-0"



NORTH J4 ROOF PLAN - STAFF ENTRY CANOPY
1/8" = 1'-0"



NORTH J1 ROOF PLAN - DISPATCH CANOPY
1/8" = 1'-0"



NORTH A1 ROOF PLAN
1/8" = 1'-0"

GENERAL NOTES - ROOF PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE ROOF PLAN ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
3. PROVIDE 1/2" / FT. TAPERED INSULATION AT ALL ROOF CURBS AND AT EQUIPMENT WHICH EXCEEDS 18 INCHES IN WIDTH.

ROOF PLAN LEGEND

- SLOPED STRUCTURE
- TAPERED INSULATION 1/4" PER FOOT
- TAPERED INSULATION 1/2" PER FOOT
- METAL GRATE ROOF
- ROOF WALKING PAD
- PRE-MANUFACTURED METAL BUILDING ROOF

MATERIAL KEYNOTES

05.50E	METAL LADDERS
07.54B	VAPOR BARRIER MEMBRANE
07.71F	PREFINISHED METAL SCUPPER BOX
07.72A	ROOF HATCH 36" X 36"
22.14A	ROOF DRAIN
22.14B	OVERFLOW ROOF DRAIN

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

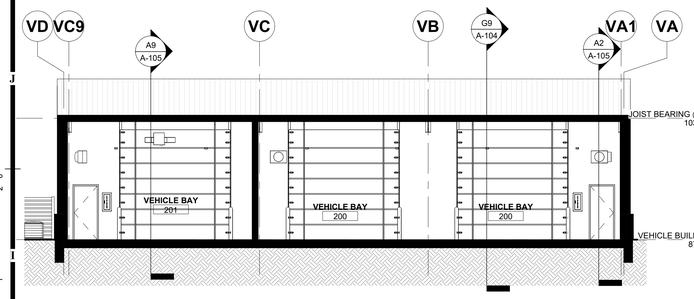
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

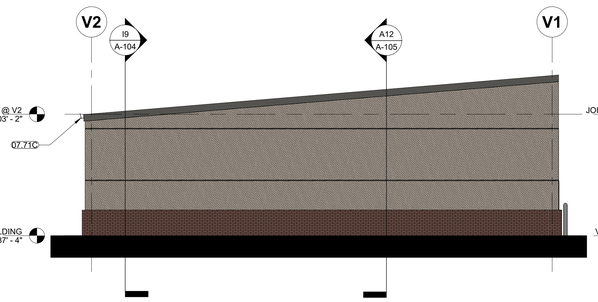
A-103

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

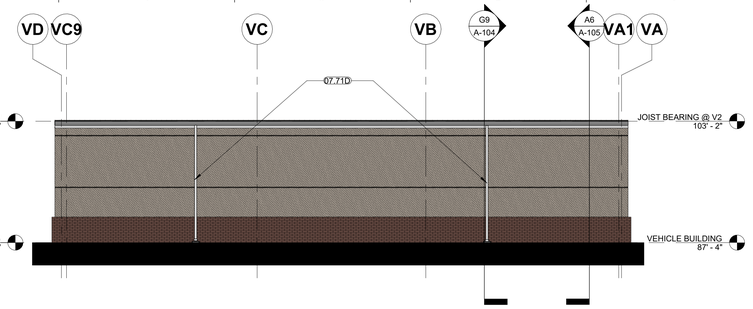
ROOF PLAN



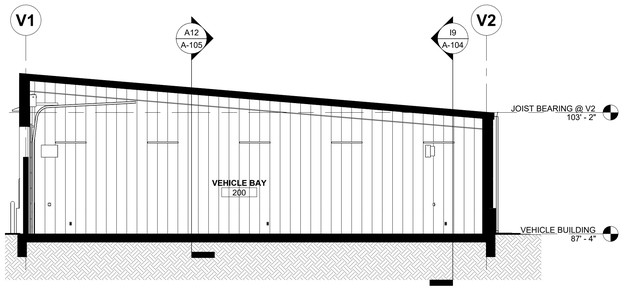
I9 VEHICLE BUILDING LONGITUDINAL SECTION
1/8" = 1'-0"



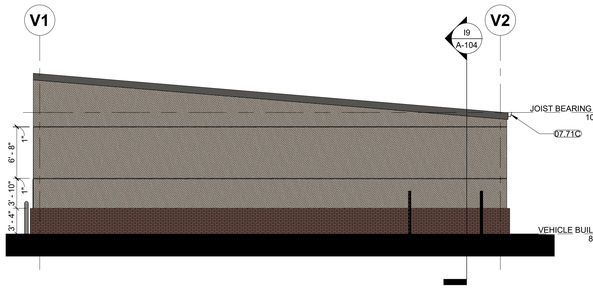
I6 WEST ELEVATION - VEHICLE
1/8" = 1'-0"



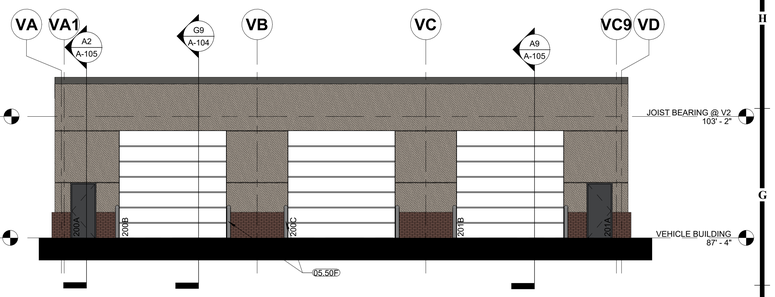
I1 NORTH ELEVATION - VEHICLE
1/8" = 1'-0"



G9 VEHICLE BUILDING TRANSVERSE SECTION
1/8" = 1'-0"

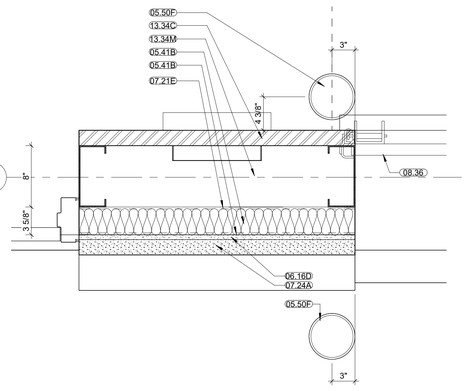


G6 EAST ELEVATION - VEHICLE
1/8" = 1'-0"

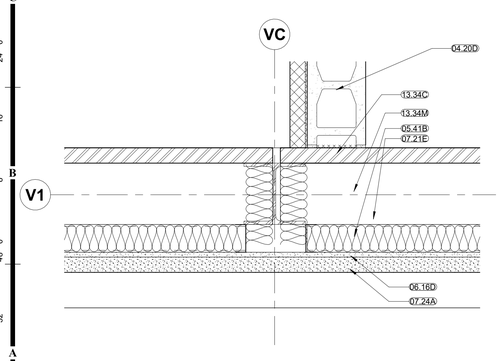


G1 SOUTH ELEVATION - VEHICLE
1/8" = 1'-0"

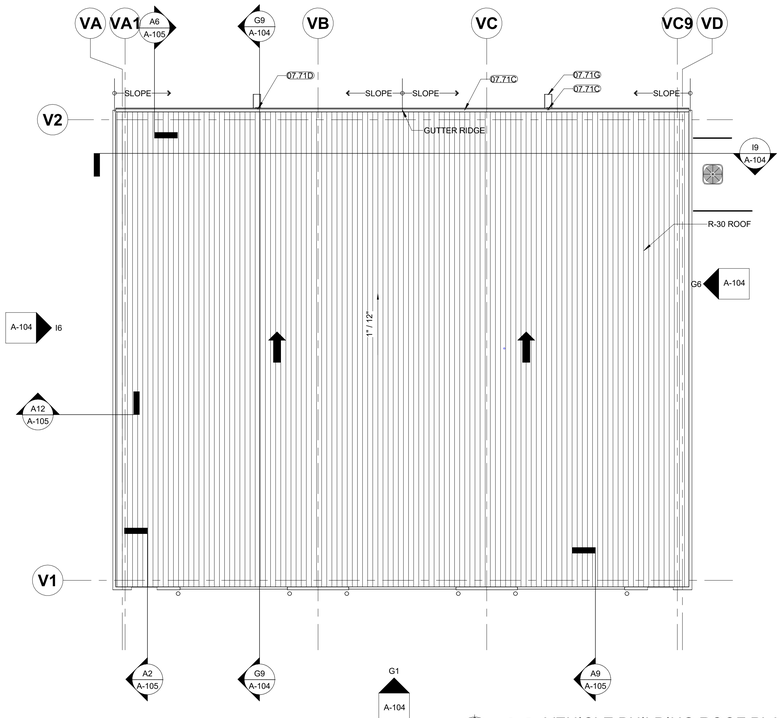
VEHICLE BAY DOOR SCHEDULE												
DOOR #	ROOM: NAME	WIDTH	HEIGHT	DOOR MATERIAL	DOOR TYPE	FRAME MATERIAL	FRAME TYPE	FIRE RATING	AAOS Project HW Set	HEAD	JAMB	REMARKS
200A	VEHICLE BAY	3' - 0"	7' - 0"	ST	F	HM	F1		8.2 ALT 2	xx / A-522	A6 / A-522	
200B	VEHICLE BAY	14' - 0"	14' - 0"	ST	CD2	ST	CD1		1.0	D9/A1.16	G1/A1.16	
200C	VEHICLE BAY	14' - 0"	14' - 0"	ST	CD2	ST	CD1		1.0	D9/A1.16	G1/A1.16	
201A	VEHICLE BAY	3' - 0"	7' - 0"	ST	F	HM	F1		8.2 ALT 2	xx / A-522	A6 / A-522	
201B	VEHICLE BAY	14' - 0"	14' - 0"	ST	CD2	ST	CD1		1.0	D9/A1.16	G1/A1.16	



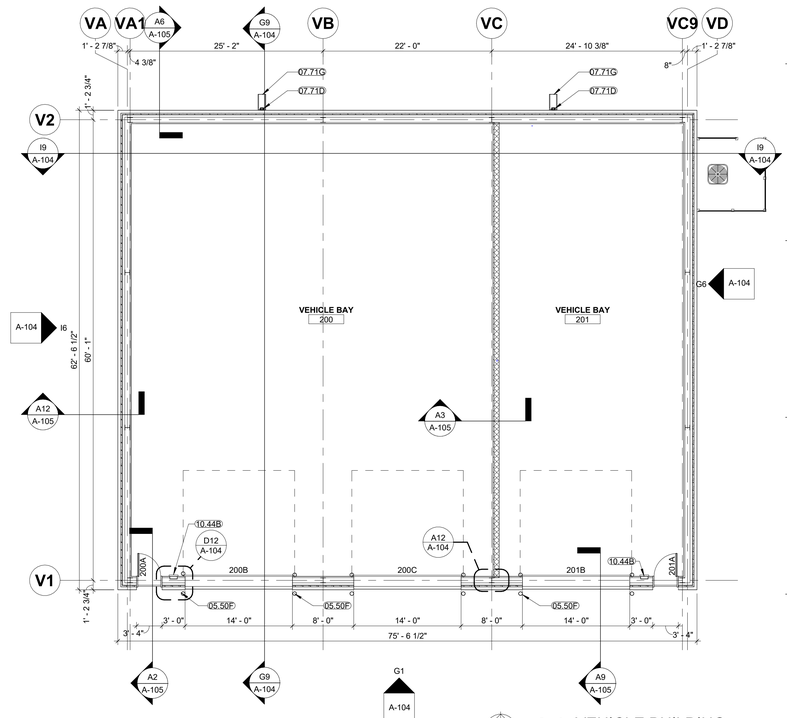
D12 O.H. DOOR JAMB
1 1/2" = 1'-0"



A12 WALL CORNER DETAIL @ BEAM
1 1/2" = 1'-0"



A6 VEHICLE BUILDING ROOF PLAN
1/8" = 1'-0"
NORTH



A1 VEHICLE BUILDING
1/8" = 1'-0"
NORTH

GENERAL NOTES - FLOOR PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL STUD CONSTRUCTION DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE.
5. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS.
6. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO OUTSIDE FACE OF DOOR FRAME - HINGE SIDE, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
7. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
8. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
9. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
10. ALL EXPOSED STEEL INCLUDING COLUMNS TO BE PAINTED WP4

GENERAL NOTES - ROOF PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE
2. DIMENSIONS SHOWN ON THE ROOF PLAN ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
3. PROVIDE 1/2" / FT. TAPERED INSULATION AT ALL ROOF CURBS AND AT EQUIPMENT WHICH EXCEEDS 18 INCHES IN WIDTH.

ROOF PLAN LEGEND

- SLOPED STRUCTURE
- TAPERED INSULATION 1/4" PER FOOT
- TAPERED INSULATION 1/2" PER FOOT
- METAL GRATE ROOF
- ROOF WALKING PAD
- PRE-MANUFACTURED METAL BUILDING ROOF

MATERIAL KEYNOTES

04.20D	CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.50F	METAL BOLLARDS - CONCRETE-FILLED WITH DOME TOP
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.21E	3-1/2-INCH THERMAL BATT INSULATION
07.24A	WATER DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM.(EIFS)
07.71C	PREFINISHED METAL GUTTER
07.71D	PREFINISHED METAL DOWNSPOUT
07.71G	SPLASH PAN
08.36	SECTIONAL DOOR
10.44B	SEMI-RECESSED FIRE EXTINGUISHER CABINET
13.34C	METAL BUILDING SYSTEMS - WALL PANEL
13.34M	METAL BUILDING SYSTEMS - METAL GIRT

EXTERIOR ELEVATION MATERIALS

- BRICK - RUNNING BOND - EDICOTT- COLOR MEDIUM IRONSPOT 46 VELOUR
- EIFS - SANDPEBBLE FINISH COLOR SW7532 URBAN PUTTY

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

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LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

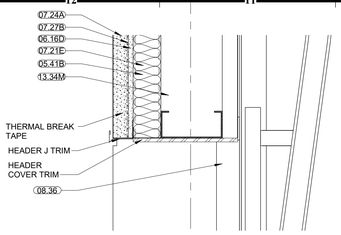
STATE OF MISSOURI
CHRISTOPHER KRUMREI
BINDER
A-2016011211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

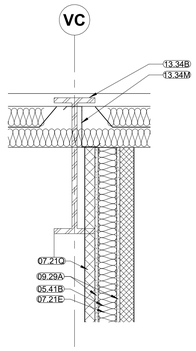
A-104

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

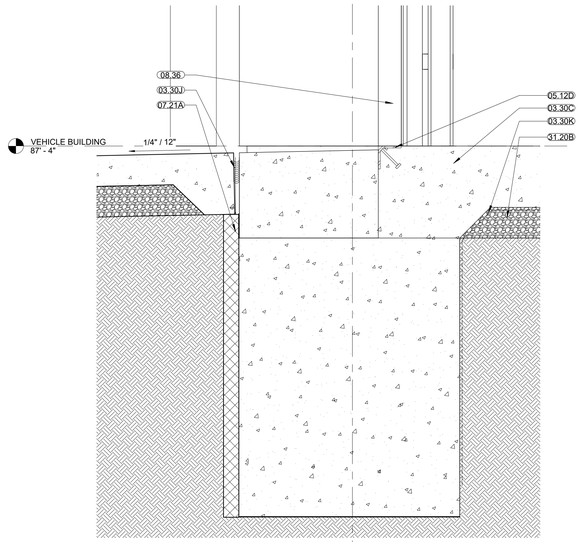
ALTERNATE #2 - VEHICLE BUILDING



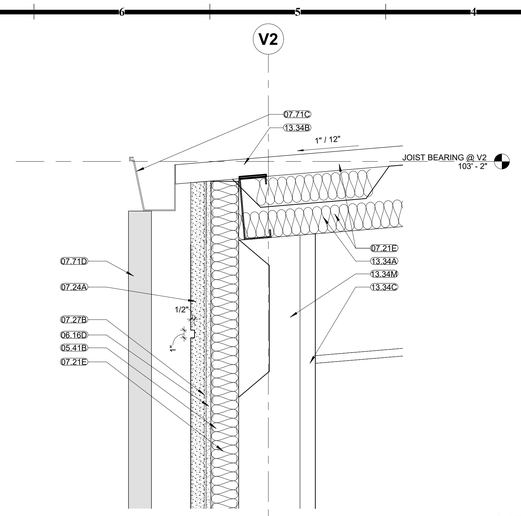
J11 O.H. DOOR HEAD
1 1/2" = 1'-0"



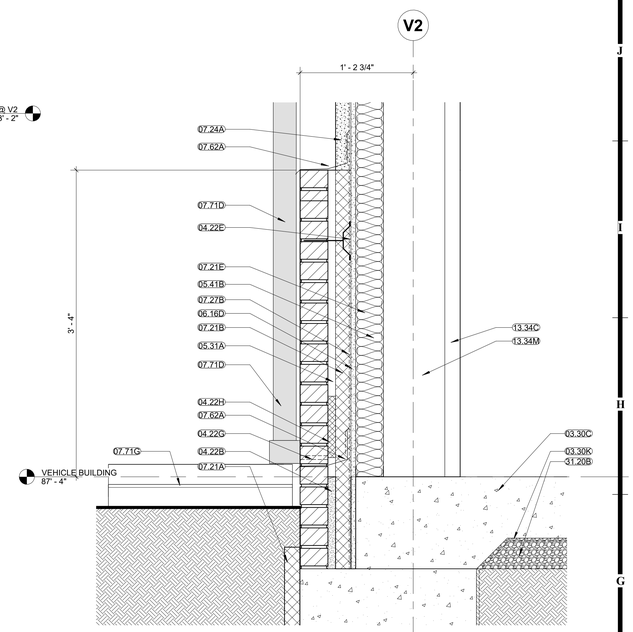
G11 CMU PARTITION @ BEAM
1" = 1'-0"



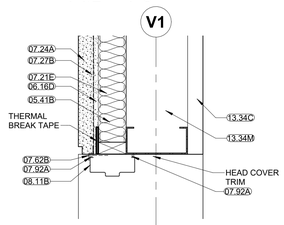
J7 O.H. DOOR SILL
1 1/2" = 1'-0"



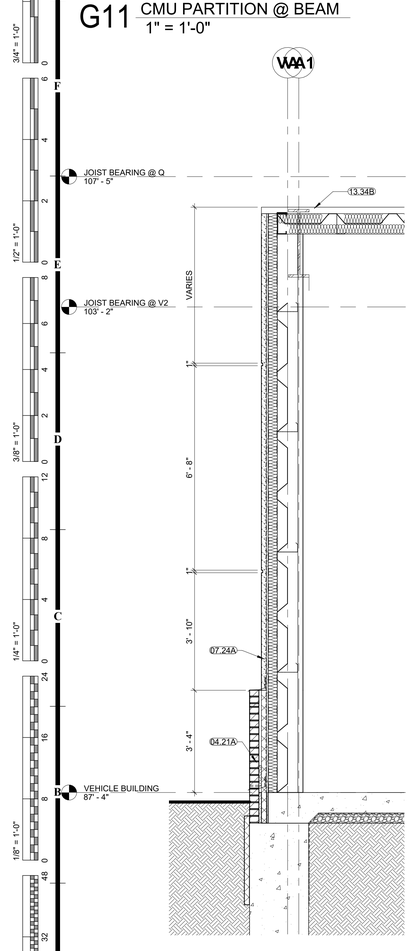
J5 ROO DETAIL @ GUTTER
1 1/2" = 1'-0"



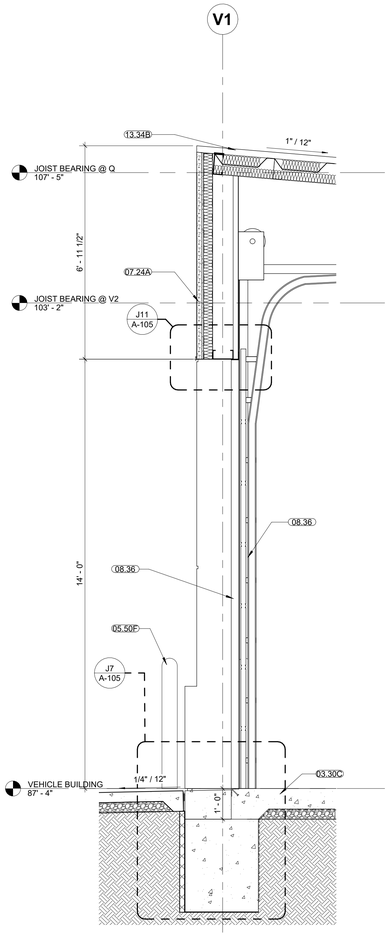
J2 LEDGE DETAIL
1 1/2" = 1'-0"



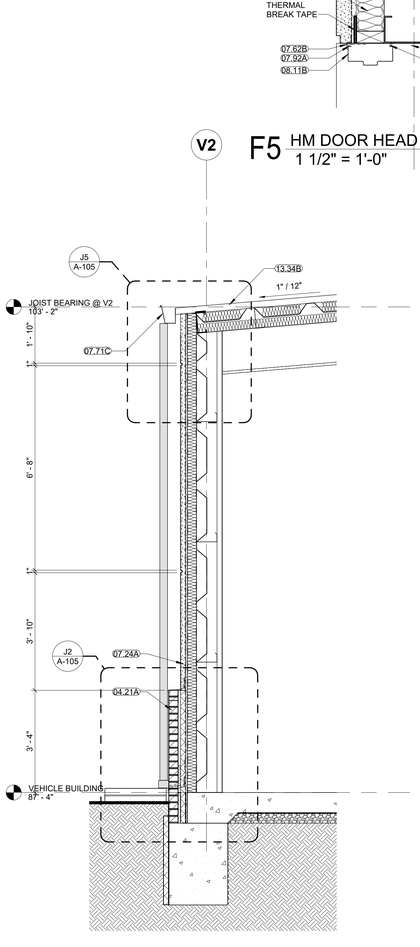
F5 HM DOOR HEAD @ MTL BUILDING
1 1/2" = 1'-0"



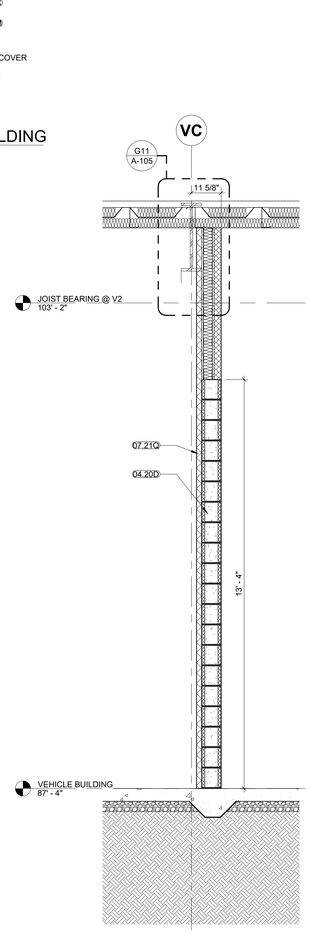
A12 VEHICLE BLDG END WALL
1/2" = 1'-0"



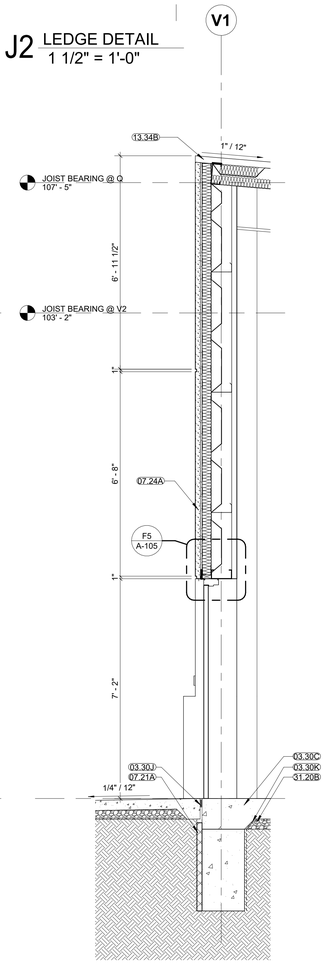
A9 VEHICLE BLDG @ SECTION DOOR
1/2" = 1'-0"



A6 VEHICLE BLDG @ LOW EAVE
1/2" = 1'-0"



A3 VEHICLE BLDG @ CMU PARTION
1/2" = 1'-0"



A2 VEHICLE BLDG SECTION @ DOOR
1/2" = 1'-0"

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT.)
03.30K	UNDER-SLAB VAPOR RETARDER
04.20D	CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH
04.21A	FACE BRICK
04.22B	GROUT SOLID - MASONRY CELLS
04.22E	TIES AND ANCHORS
04.22G	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12D	STEEL ANGLE
05.31A	STEEL ROOF DECK
05.41B	EXTERIOR NON-LOAD-BEARING MTL C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.50F	METAL BOLLARDS - CONCRETE-FILLED WITH DOME TOP
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21E	3-1/2-INCH THERMAL BATT INSULATION
07.21Q	2" SEMI RIGID INSULATION, PIN MOUNTED TO WALL
07.24A	WATER DRAINAGE EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SILL FLASHING
07.71C	PREFINISHED METAL GUTTER
07.71D	PREFINISHED METAL DOWNSPOUT
07.71G	SPLASH PAN
07.92A	JOINT SEALANT
08.11B	HOLLOW METAL FRAME
08.36	SECTIONAL DOOR
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
13.34A	METAL BUILDING SYSTEMS - STRUCTURAL FRAMING
13.34B	METAL BUILDING SYSTEMS - ROOF PANELS
13.34C	METAL BUILDING SYSTEMS - WALL PANEL
13.34M	METAL BUILDING SYSTEMS - METAL GIRT
31.20B	GRANULAR FILL

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PACKAGE 2: CONSTRUCTION SET

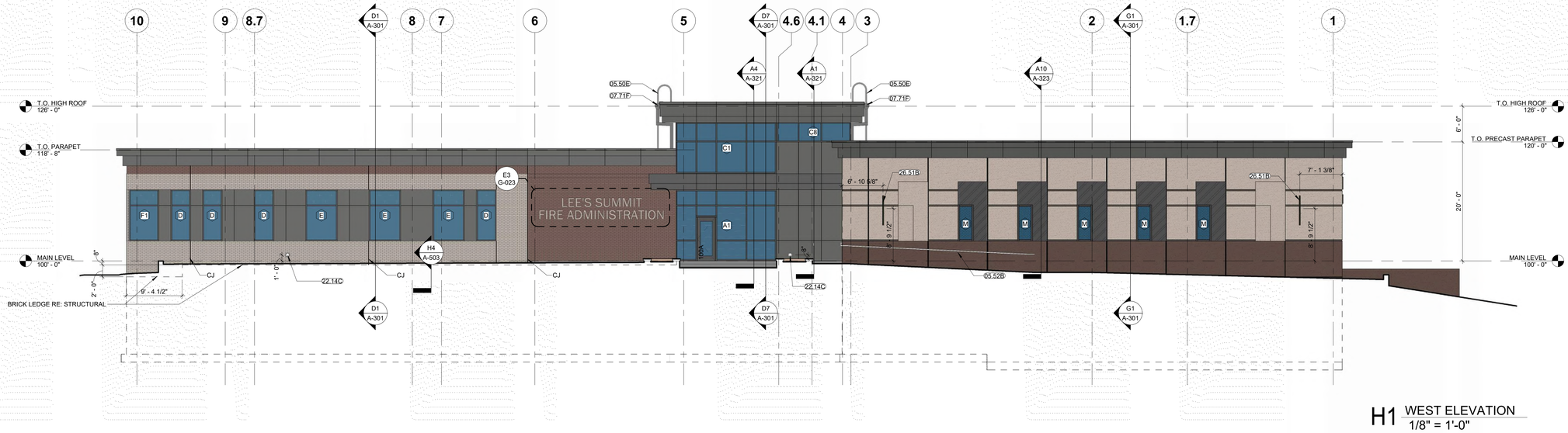
REVISION DATES:

PROFESSIONAL SEAL

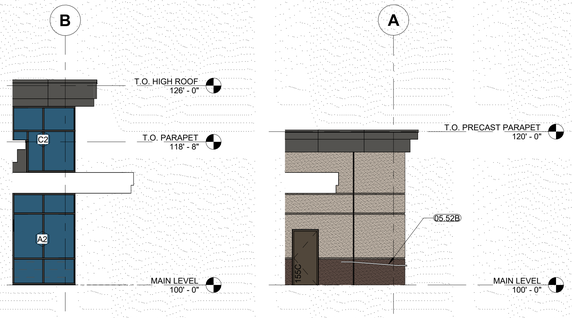
A-105

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ALTERNATE #2 - VEHICLE BUILDING

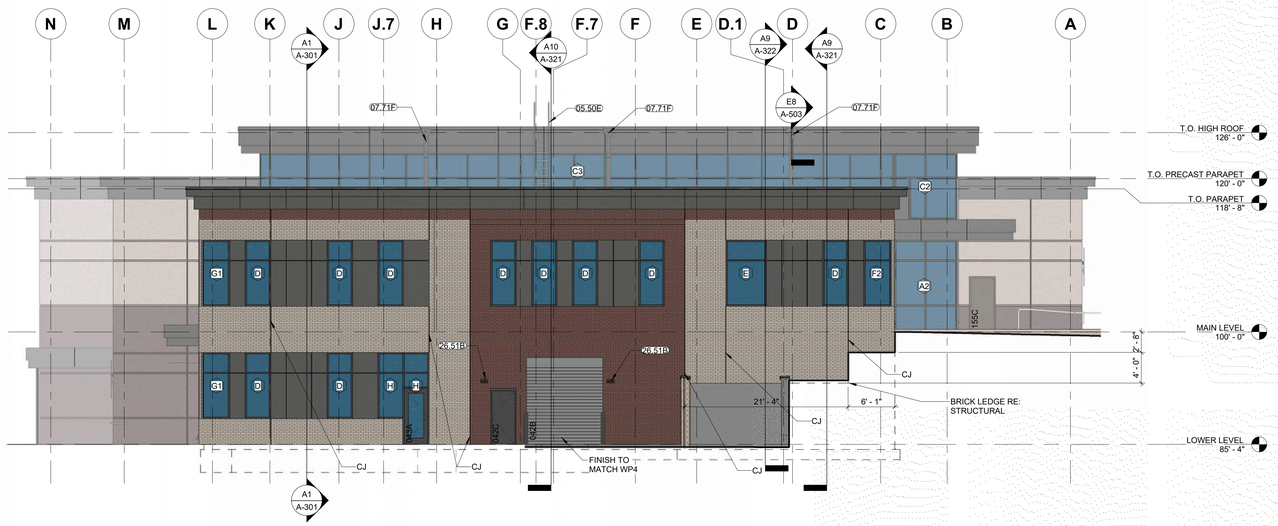


H1 WEST ELEVATION
1/8" = 1'-0"

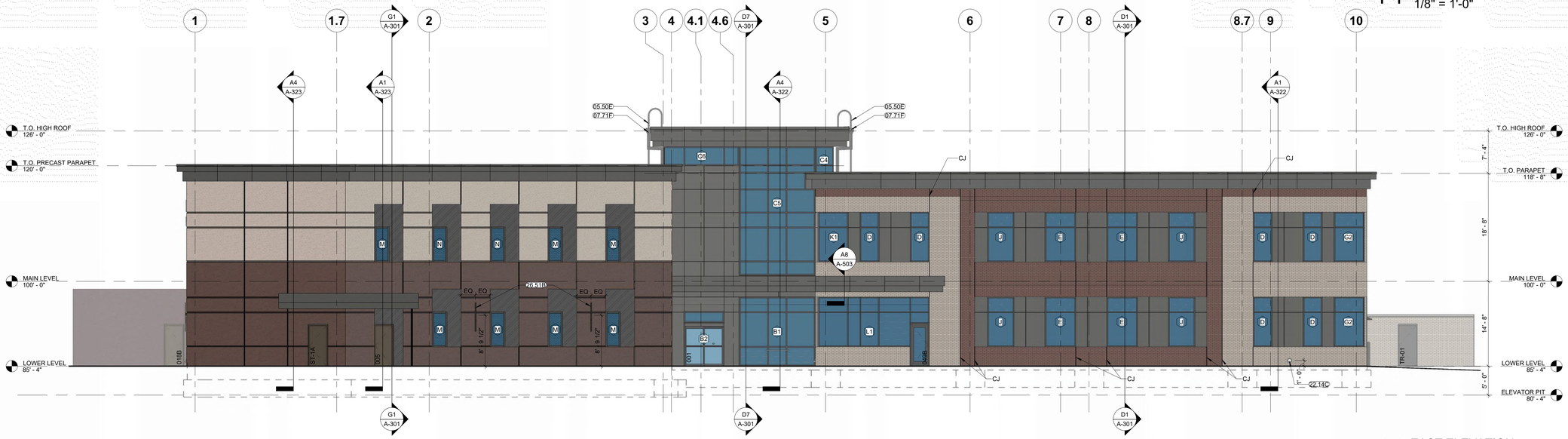


F12 NORTH EAST CORNER A
1/8" = 1'-0"

F10 NORTH EAST CORNER B
1/8" = 1'-0"



F1 NORTH ELEVATION
1/8" = 1'-0"



A1 EAST ELEVATION
1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
4. ALL EXPOSED STEEL INCLUDING COLUMNS AND LINTELS TO BE PAINTED WP4
5. ALL SEALANT JOINTS TO MATCH ADJACENT FINISH, TYP.
6. ALL EXTERIOR DOORS TO BE PAINTED WP4.
7. METAL COPINGS TO MATCH METAL PANEL.

MATERIAL KEYNOTES

05.50E	METAL LADDERS
05.52B	STAINLESS STEEL PIPE/ TUBE RAILING
07.71F	PREFINISHED METAL SCUPPER BOX
22.14C	LAMBS TONGUE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL

EXTERIOR ELEVATION MATERIALS

- BRICK - RUNNING BOND - ENDICOTT- COLOR MEDIUM IRONSPOT 46 VELOUR
- BRICK - RUNNING BOND - INTERSTATE BRICK - COLOR ASH
- PRECAST PANEL, COLOR TAN, ACID ETCH FINISH (USE WHITE PORTALND CEMENT)
- PRECAST PANEL, COLOR MEDIUM BROWN, HEAVY RETARDANT FINISH
- PRECAST PANEL WITH COLOR TREATMENT, LIGHT SANDBLAST FINISH, COLOR NWW004 CHARCOAL
- IGU - BOD: VIRACON VRE26-38.
- COMPOSITE METAL PANEL, COLOR SUNSHINE GRAY
- MODULAR BLOCK RETAINING WALL

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

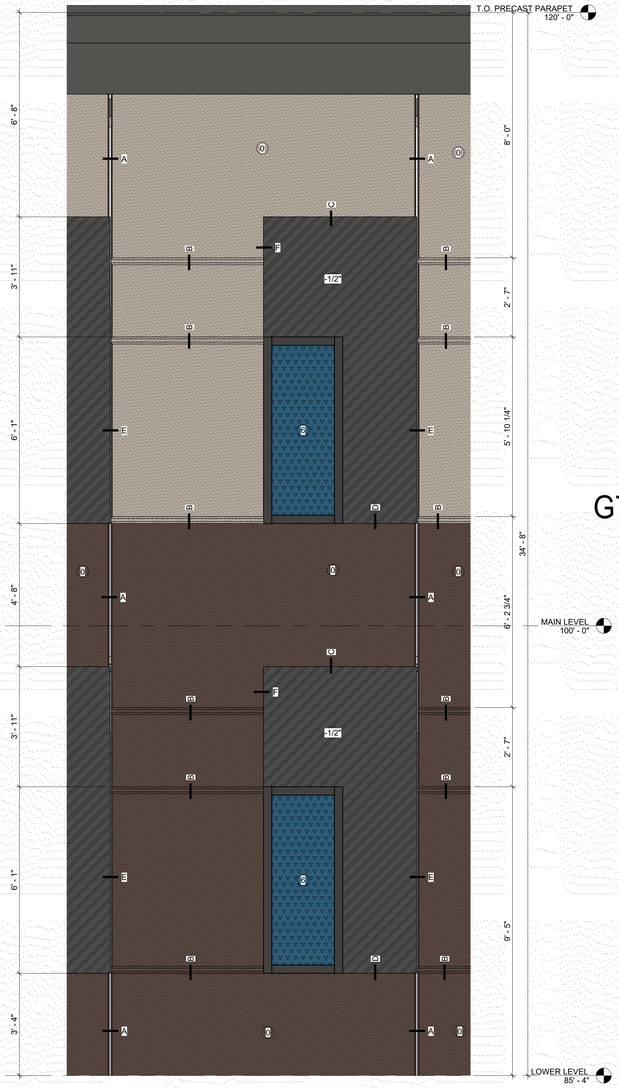
STATE OF MISSOURI
CHRISTOPHER KRUMREI
A-2016011211
ARCHITECT
10/11/2024

PROFESSIONAL SEAL

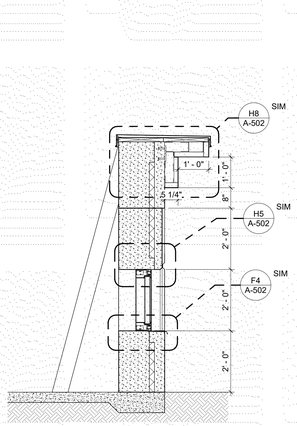
A-201

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

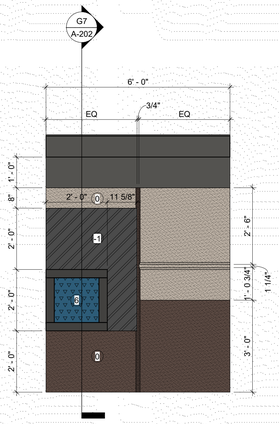
EXTERIOR ELEVATIONS



G7 MOCKUP PRECAST WALL SECTION
1/2" = 1'-0"



G5 MOCKUP WALL PRECAST
1/2" = 1'-0"



G4 MOCKUP BRICK WALL SECTION
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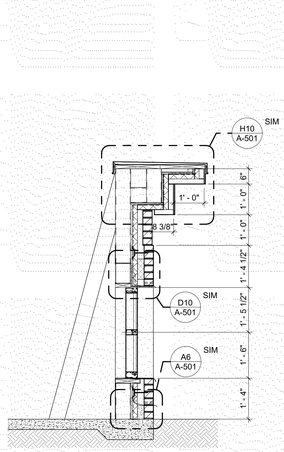
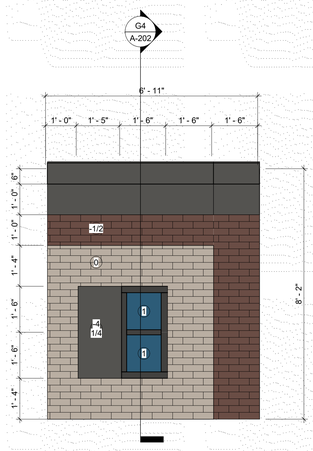
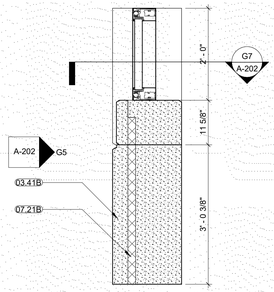
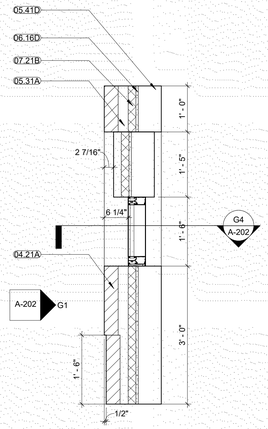


G1 MOCKUP WALL BRICK
1/2" = 1'-0"

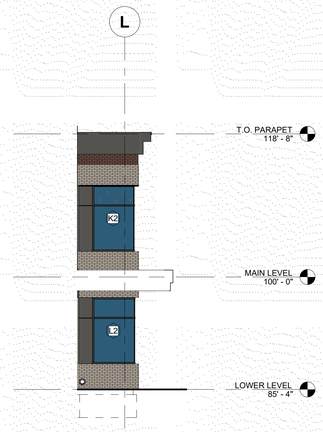




D6 MOCKUP PRECAST WALL PLAN
3/4" = 1'-0"

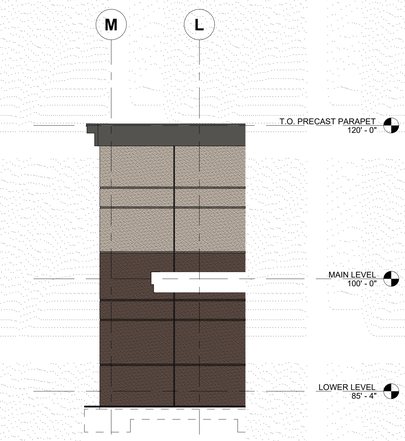


D4 MOCKUP BRICK WALL PLAN
3/4" = 1'-0"

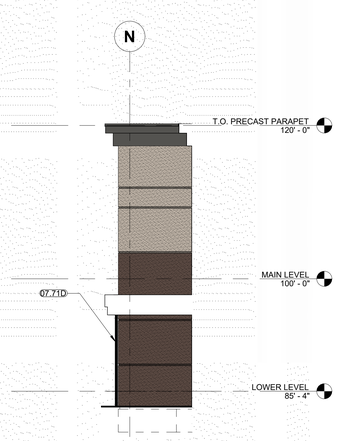


D1 SOUTH CORNER ELEVATION
1/8" = 1'-0"

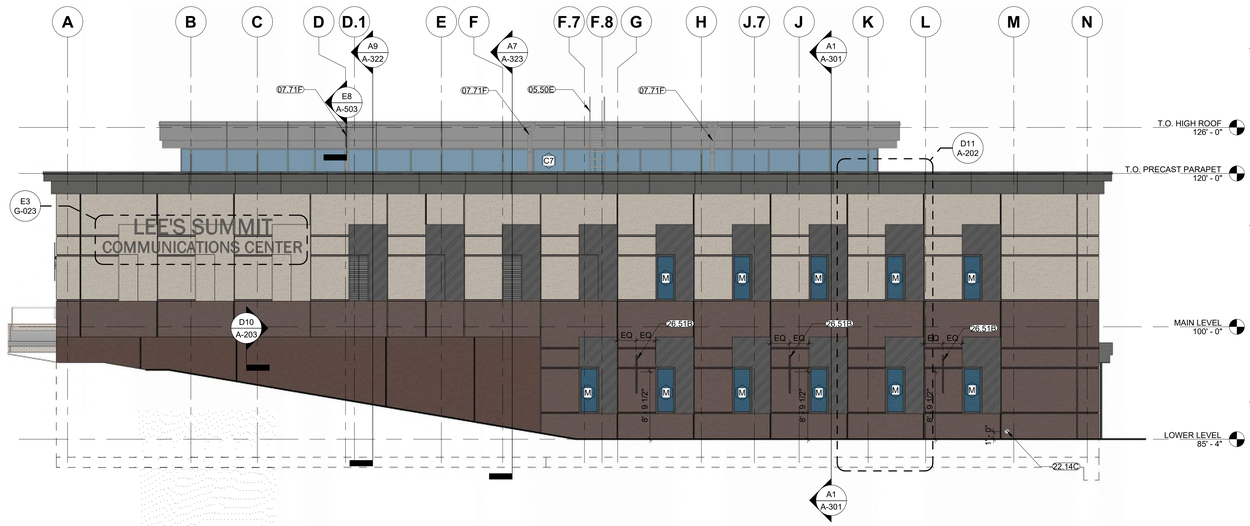
D11 ENLARGED ELEVATION PRECAST
1/2" = 1'-0"



A11 NORTH CORNER ELEVATION
1/8" = 1'-0"



A9 NORTH STAIR WALL ELEVATION
1/8" = 1'-0"



A1 SOUTH ELEVATION
1/8" = 1'-0"

GENERAL NOTES - EXTERIOR ELEVATIONS:

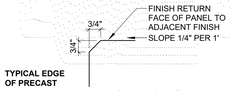
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL EXTERIOR WINDOW TYPES AND GLASS TYPES.
4. ALL EXPOSED STEEL INCLUDING COLUMNS AND LINTELS TO BE PAINTED WP4
5. ALL SEALANT JOINTS TO MATCH ADJACENT FINISH, TYP.
6. ALL EXTERIOR DOORS TO BE PAINTED WP4.
7. METAL COPINGS TO MATCH METAL PANEL.

GENERAL NOTES - ENLARGED ELEVATIONS:

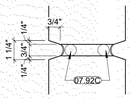
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. BRICK PLANE CHANGES REFER TO (+0) = ***1'-7"*** FROM COLUMN CENTERLINE (TYP.), UNLESS NOTED OTHERWISE.

MATERIAL KEYNOTES

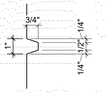
03.41B	PRECAST CONCRETE WALL
04.21A	FACE BRICK
05.31A	STEEL ROOF DECK
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
05.50E	METAL LADDERS
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.71D	PREFINISHED METAL DOWNSPOUT
07.71F	PREFINISHED METAL SCUPPER BOX
07.92C	BACKER ROD AND SEALANT
22.14C	LAMBS TONGUE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL



TYPICAL EDGE OF PRECAST

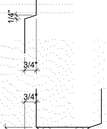


TYPE A - TYPICAL PRECAST JOINT

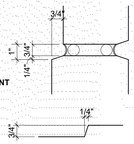


TYPE B - TYPICAL PRECAST REVEAL

TYPE C TYPICAL INSET PANEL



TYPE D TYPICAL INSET PANEL



TYPE E TYPICAL PRECAST JOINT @ INSET PANEL

TYPE F TYPICAL WINDOW EDGE

GENERAL NOTES
1. SEE SECTION/PLAN DETAILS FOR DIMENSIONS OF ALL OTHER REVEALS/MATERIAL TRANSITIONS

EXTERIOR ELEVATION MATERIALS

- **BRICK - RUNNING BOND - ENDICOTT- COLOR MEDIUM IRONSPOT 46 VELOUR**
- **BRICK - RUNNING BOND - INTERSTATE BRICK - COLOR ASH**
- **PRECAST PANEL, COLOR TAN, ACID ETCH FINISH (USE WHITE PORTALND CEMENT)**
- **PRECAST PANEL, COLOR MEDIUM BROWN, HEAVY RETARDANT FINISH**
- **PRECAST PANEL WITH COLOR TREATMENT, LIGHT SANDBLAST FINISH, COLOR NWW004 CHARCOAL**
- **IGU - BOD: VIRACON VRE26-38.**
- **COMPOSITE METAL PANEL, COLOR SUNSHINE GRAY**
- **MODULAR BLOCK RETAINING WALL**

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

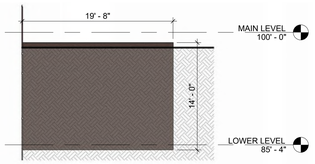
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016013211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

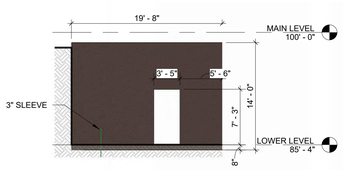
A-202

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

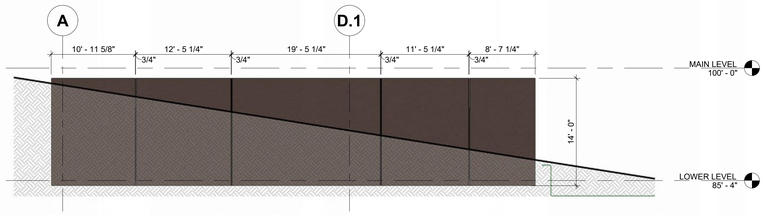
EXTERIOR ELEVATIONS



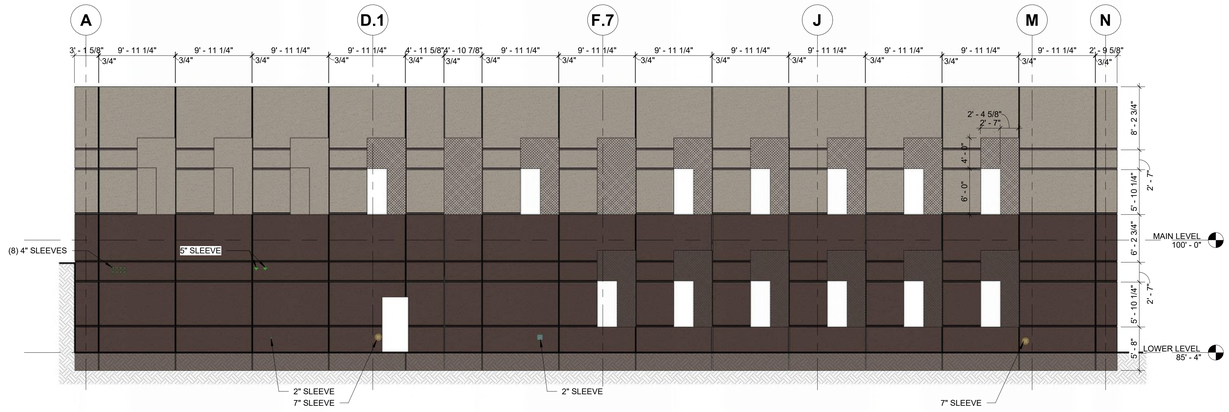
J11 GENERATOR WEST
1/8" = 1'-0"



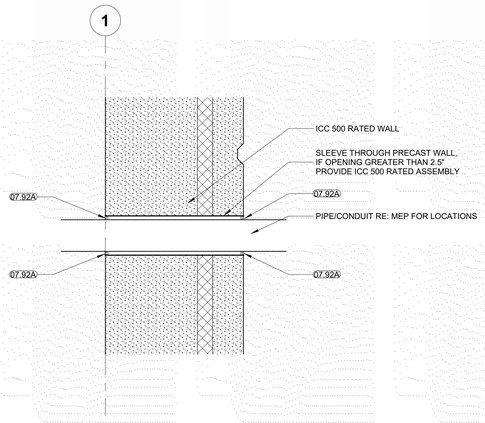
J9 GENERATOR EAST
1/8" = 1'-0"



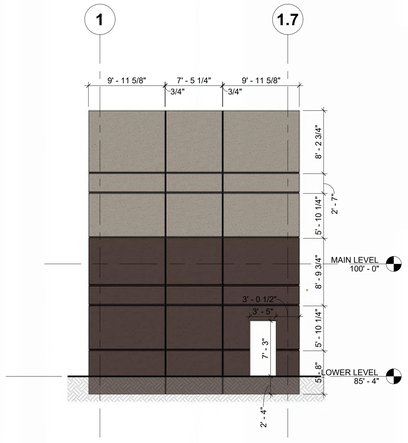
G9 GENERATOR SOUTH
1/8" = 1'-0"



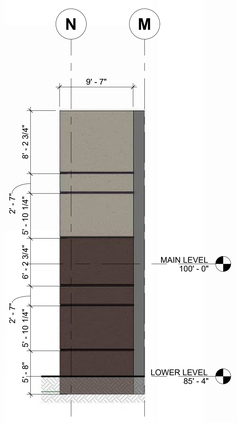
G1 PRECAST - SOUTH
1/8" = 1'-0"



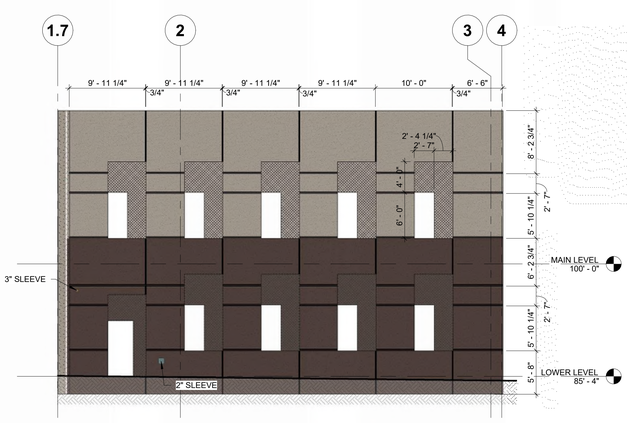
D10 TYP. PRECAST PENETRATION DETAIL
1 1/2" = 1'-0"



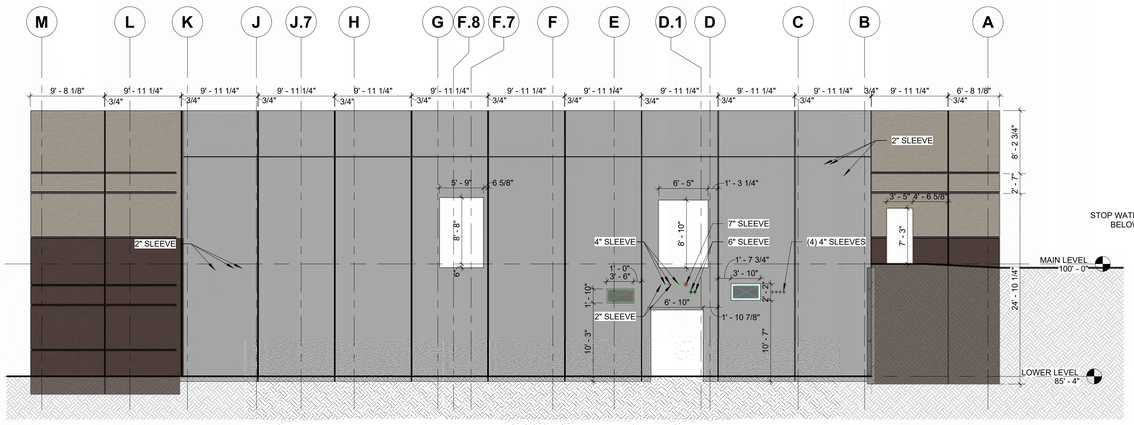
D6 PRECAST - EAST STAIR
1/8" = 1'-0"



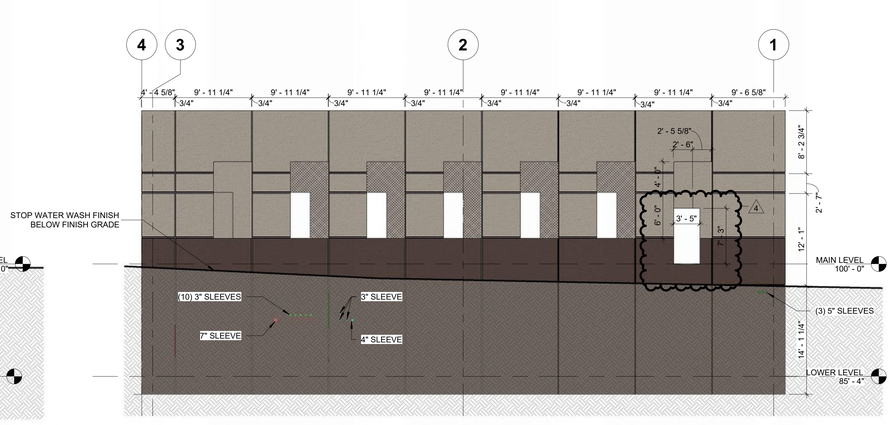
D4 PRECAST - NORTH STAIR
1/8" = 1'-0"



D1 PRECAST - EAST
1/8" = 1'-0"



A6 PRECAST - NORTH
1/8" = 1'-0"



A1 PRECAST-WEST
1/8" = 1'-0"

EXTERIOR ELEVATION MATERIALS

- PRECAST PANEL, COLOR TAN, ACID ETCH FINISH (USE WHITE PORTLAND CEMENT)
- PRECAST PANEL, COLOR TAN, SANDBLAST FINISH
- PRECAST PANEL, COLOR MEDIUM BROWN, SANDBLAST FINISH
- PRECAST PANEL, COLOR MEDIUM BROWN, WATER WASH FINISH
- PRECAST PANEL, COLOR MEDIUM BROWN, (BELOW GRADE)
- PRECAST PANEL - GRAY PORTLAND

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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

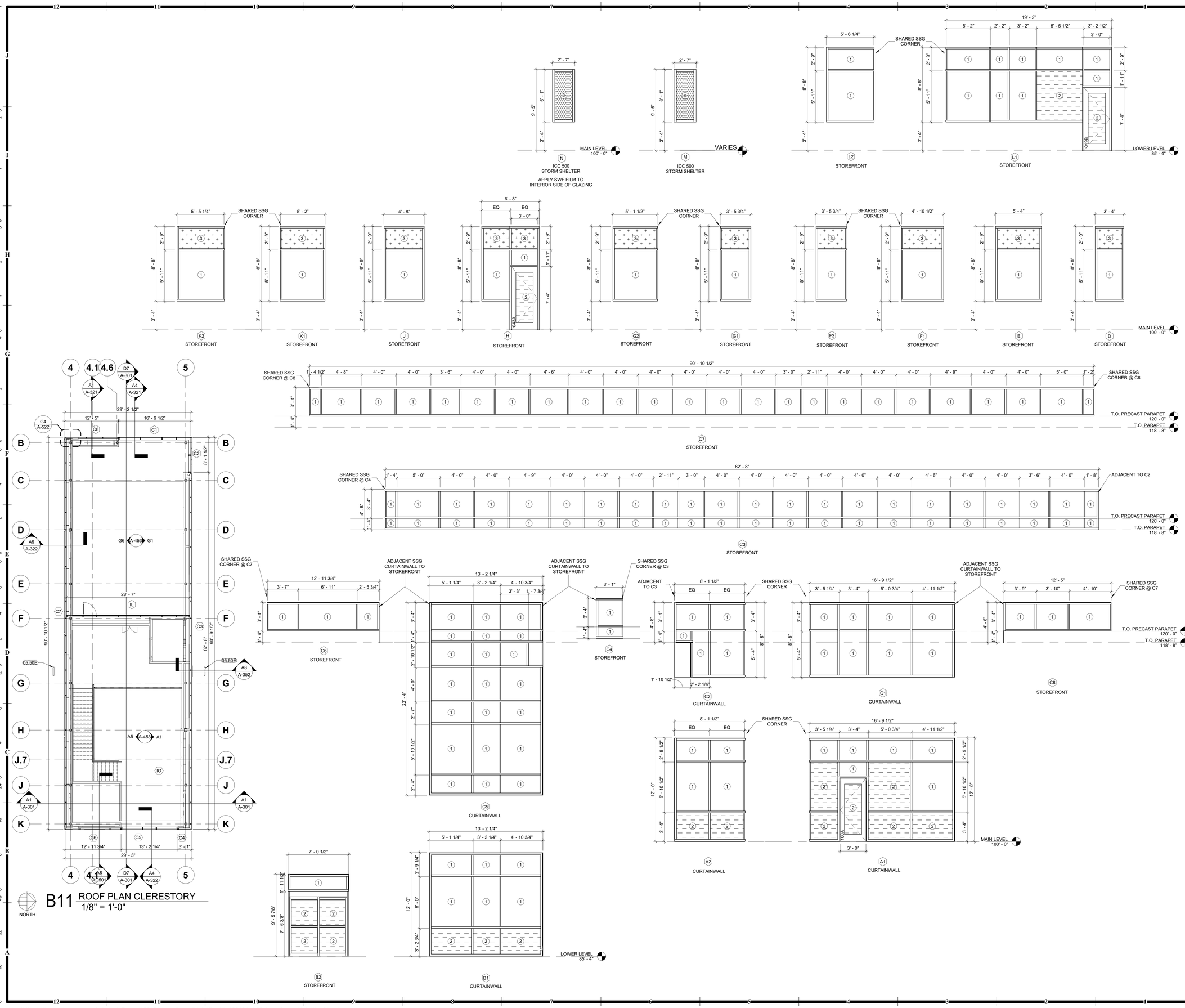
4	ADDENDUM 4	11/26/2024

PROFESSIONAL SEAL

A-203

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

PRECAST ELEVATIONS



B11 ROOF PLAN CLERESTORY
1/8" = 1'-0"

GENERAL NOTES - WINDOW TYPES/ GLASS TYPES:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ALL WINDOW TYPES ARE ALUMINUM STOREFRONT, UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO ROUGH OPENING AND TO TOP OR BOTTOM OF MULLION, UNLESS NOTED OR SHOWN OTHERWISE.
4. ALL OPENINGS ARE TO BE FIELD VERIFIED, AND NOTED AS SUCH ON SHOP DRAWINGS, PRIOR TO ARCHITECT'S REVIEW.
5. GLASS DOORS, ADJACENT PANELS AND ALL GLAZED OPENINGS WITHIN 1'-6" OF THE FLOOR, AND WITHIN A 24-INCH ARC OF EITHER VERTICAL EDGE OF A DOOR, ETC., SHALL BE SAFETY GLAZING AS APPROVED FOR IMPACT BY APPLICABLE BUILDING CODES, AND SHALL BE LABELED AS SUCH.

GLASS TYPE LEGEND	
DESIGNATION NUMBER	DESCRIPTION
1	VIRACON VRE 26-38 -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2 -1/2" AIR SPACE -1/4" CLEAR HEAT-STRENGTHENED
2	VIRACON VRE 26-38 TEMPERED -1/4" SOLARBLUE TEMPERED VRE 26-38 #2 -1/2" AIR SPACE -1/4" CLEAR TEMPERED
3	VIRACON VRE 26-38 -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2 -1/2" AIR SPACE -1/4" SPANDREL V908
4	-1/2" CLEAR GLASS
5	-1/2" CLEAR GLASS TEMPERED
6	2" TOR-GARD 30 IG GLAZING -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2
7	-1/2" CLEAR GLASS TEMPERED -FROSTED CLEAR FILM SWF
8	BULLET RESISTANT -1 1/4" UL 752 LEVEL 3

MATERIAL KEYNOTES	
05.50E	METAL LADDERS

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PACKAGE 2: CONSTRUCTION SET

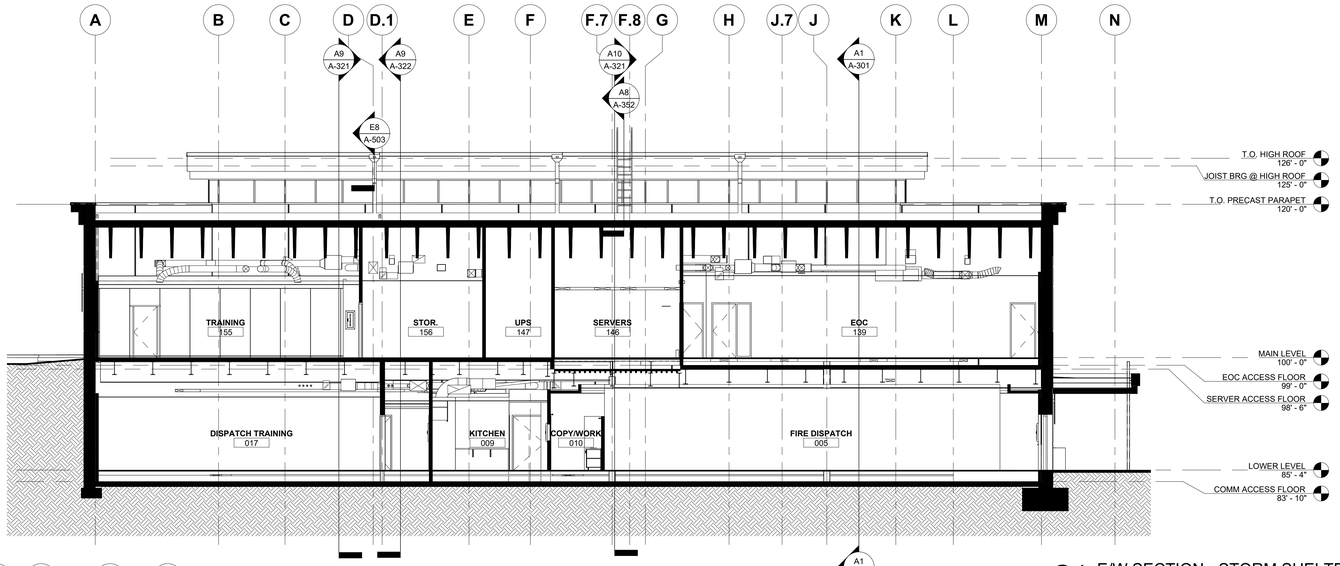
REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
A-2016011211
ARCHITECT
PROFESSIONAL SEAL

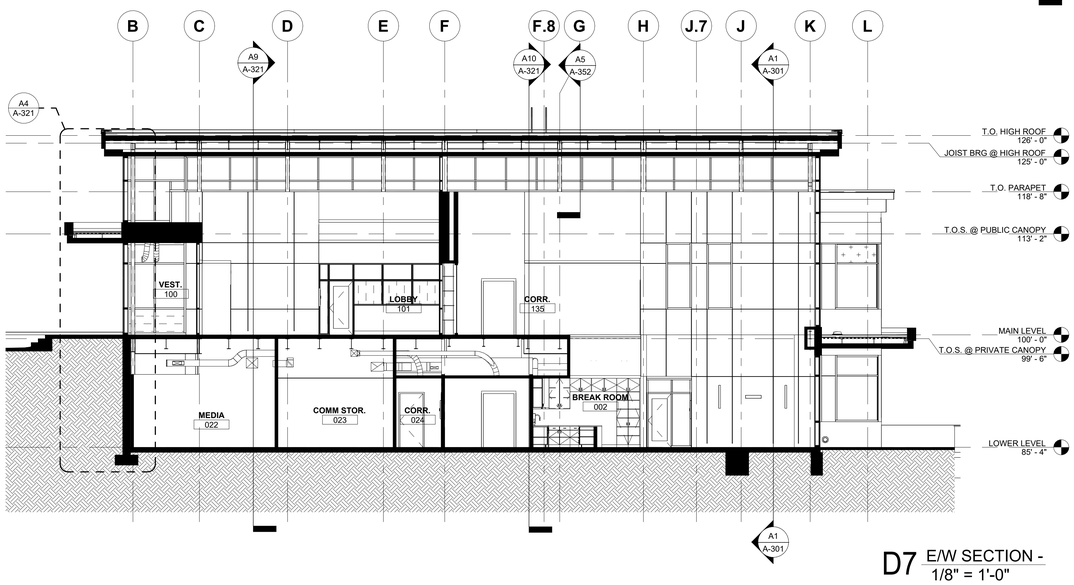
A-251

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

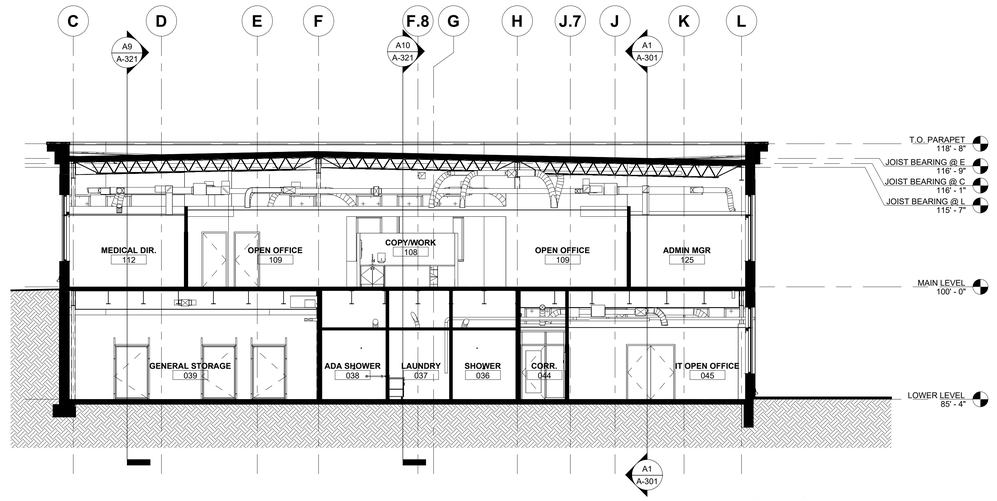
EXTERIOR WINDOW TYPES



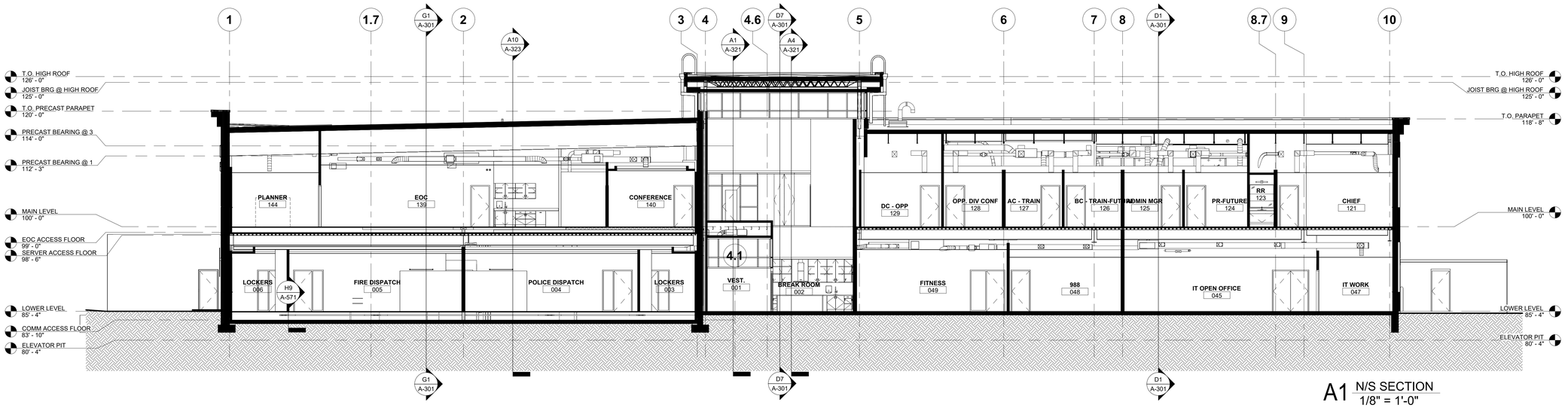
G1 E/W SECTION - STORM SHELTER
1/8" = 1'-0"



D7 E/W SECTION -
1/8" = 1'-0"



D1 E/W SECTION - FIRE ADMIN
1/8" = 1'-0"



A1 N/S SECTION
1/8" = 1'-0"

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

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LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

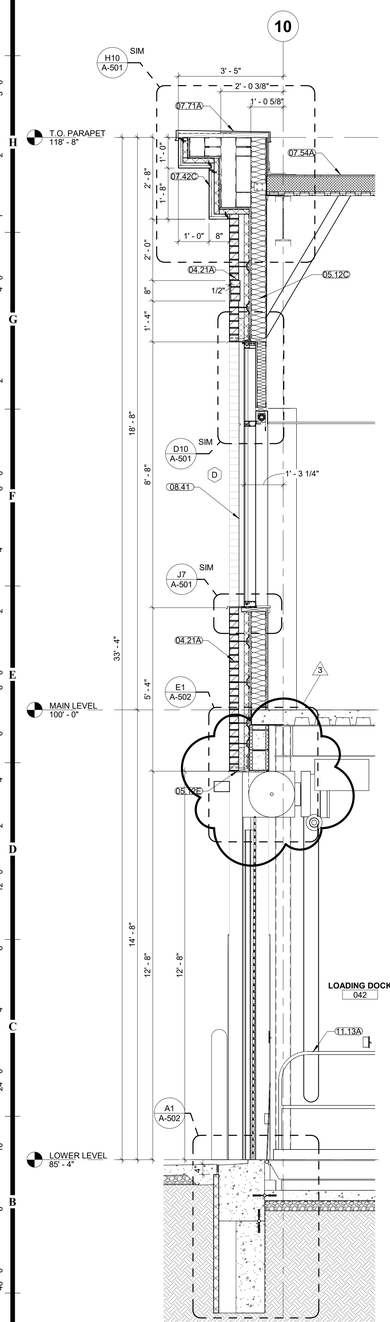
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
11/1/24

PROFESSIONAL SEAL

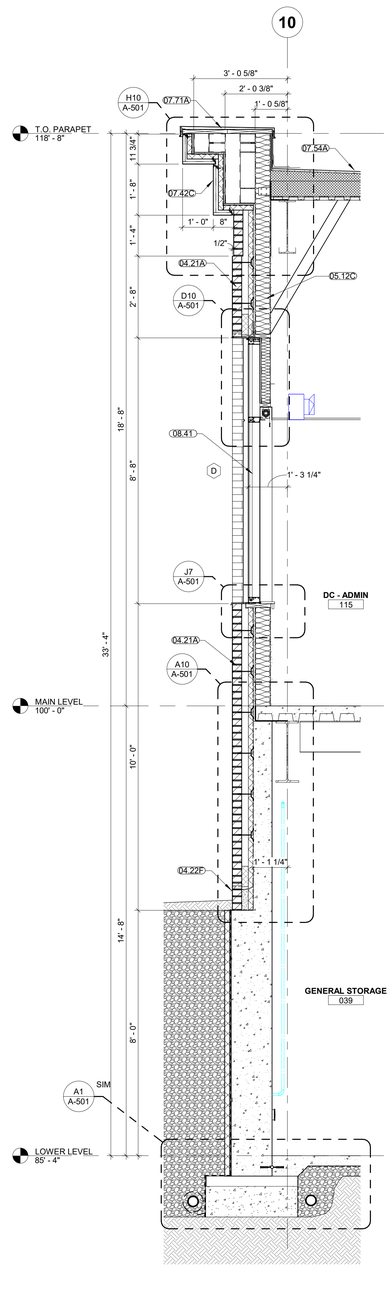
A-301

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

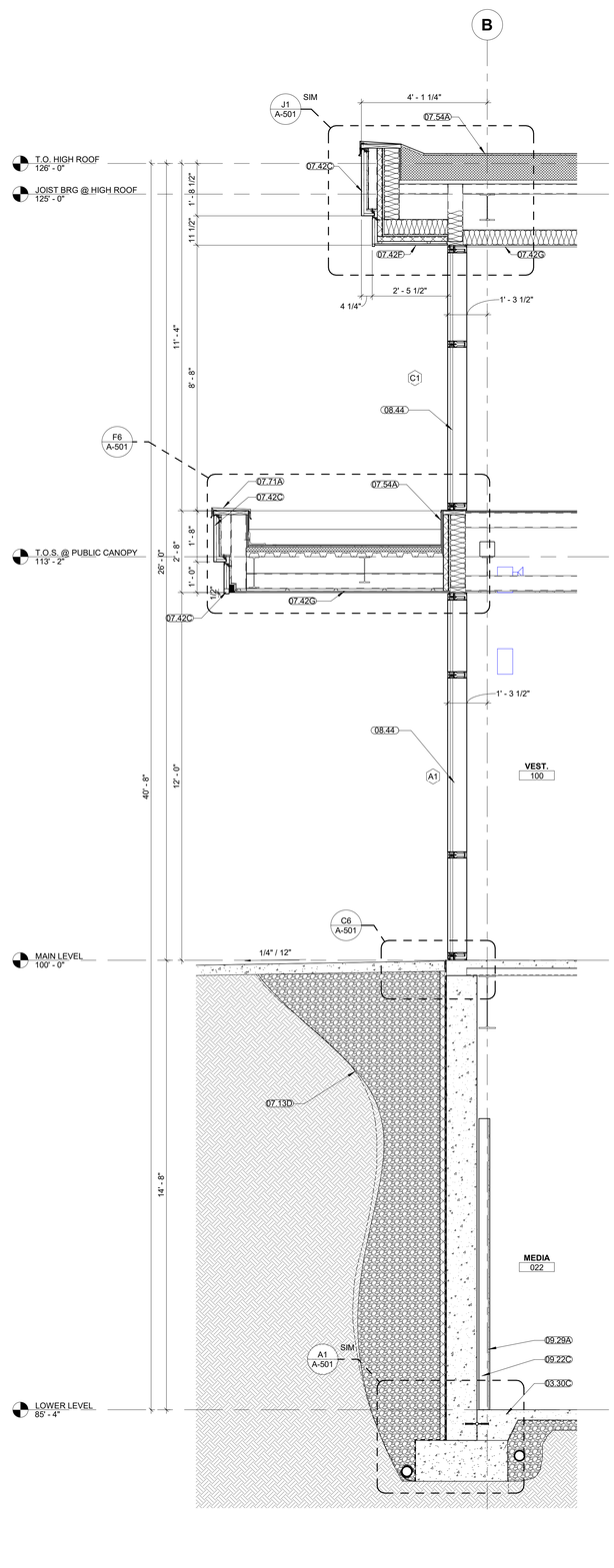
BUILDING SECTIONS



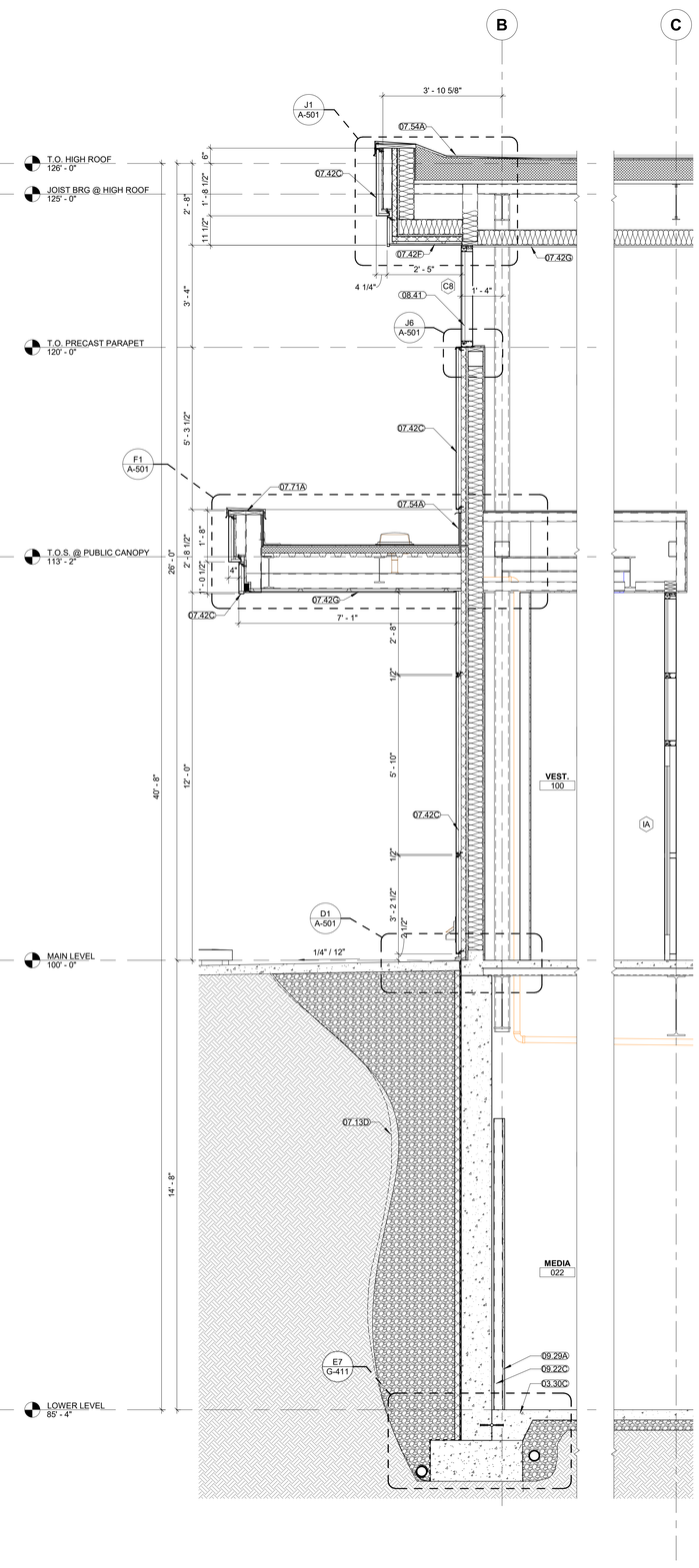
A10 FIRE ADMINISTRATION @ LOADING DOCK
1/2" = 1'-0"



A9 FIRE ADMINISTRATION @ FOUNDATION
1/2" = 1'-0"



A4 LOBBY @ CURTAIN WALL
1/2" = 1'-0"



A1 LOBBY @ METAL PANEL
1/2" = 1'-0"

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL; FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
04.21A	FACE BRICK
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
05.12C	STEEL CHANNEL
05.12E	STEEL PLATE
07.13D	FILTER FABRIC
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42F	METAL WOOD LOOK SOFFIT PANELS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
11.13A	LOADING DOCK LIFT

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM 3	11/18/2024

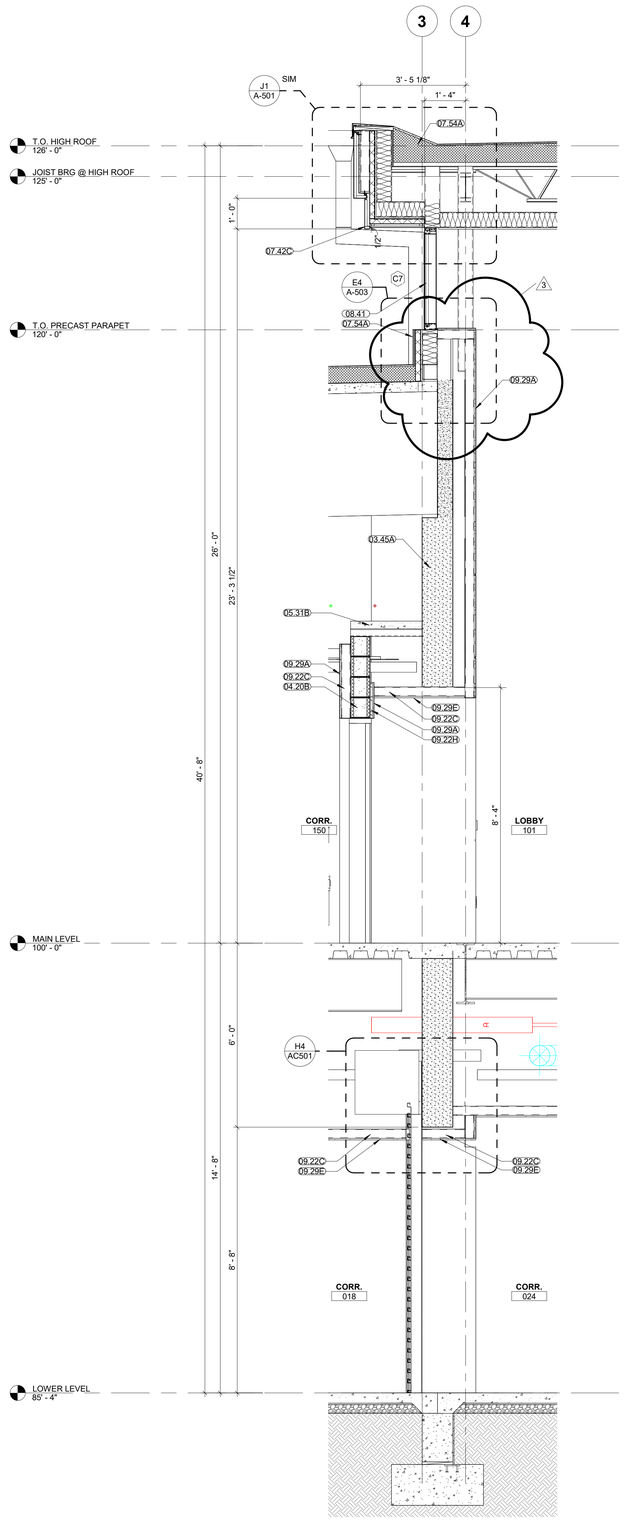
STATE OF MISSOURI
CHRISTOPHER KRAMREI
NUMBER A-2016012121
11/19/24
ARCHITECT

PROFESSIONAL SEAL

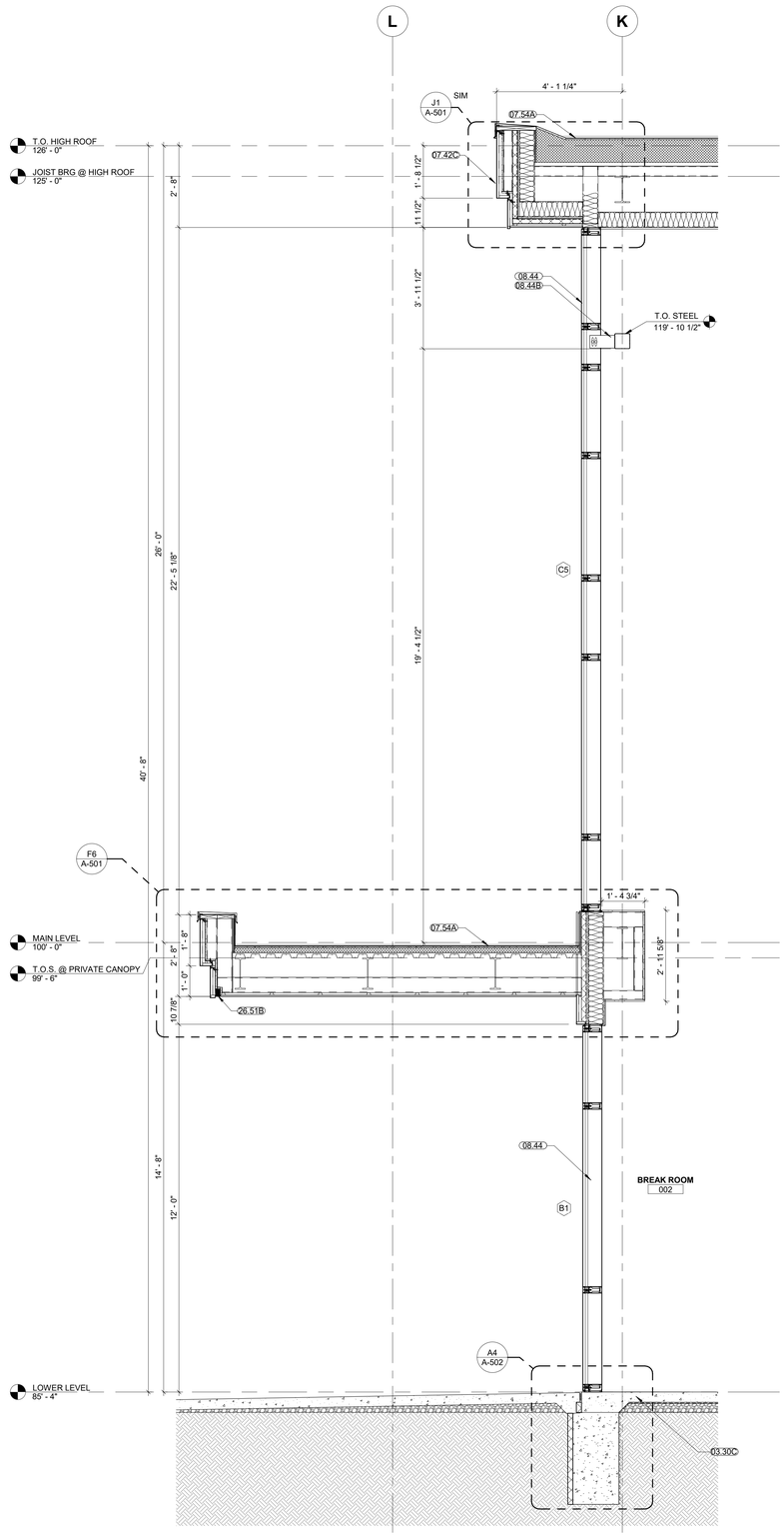
A-321

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

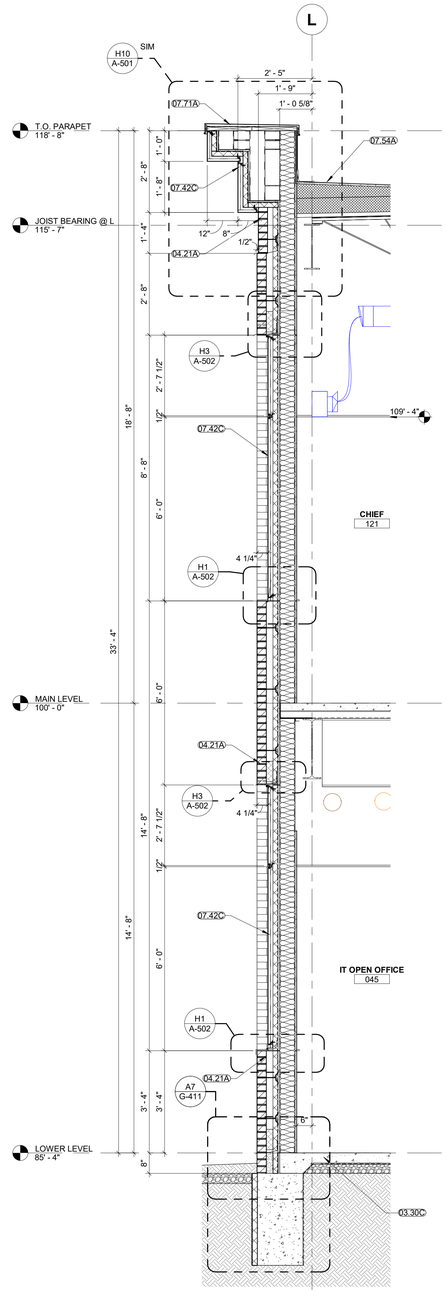
WALL SECTIONS



A9 INTERIOR PRECAST
1/2" = 1'-0"



A4 STAFF ENTRY @ CURTAIN WALL
1/2" = 1'-0"



A1 FIRE ADMINISTRATION SECTION
1/2" = 1'-0"

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.20B	CONCRETE MASONRY UNIT (CMU) - 3 5/8 INCH
04.21A	FACE BRICK
05.31B	COMPOSITE FLOOR DECK
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
08.44B	CURTAIN WALL SLIP CONNECTION
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.29E	INTERIOR 5/8-INCH GYP. BD., EXTENDS TO UNDERSIDE OF ROOF OR FLOOR ASSEMBLY, REF: WALL SCHEDULE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL

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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM 3	11/18/2024

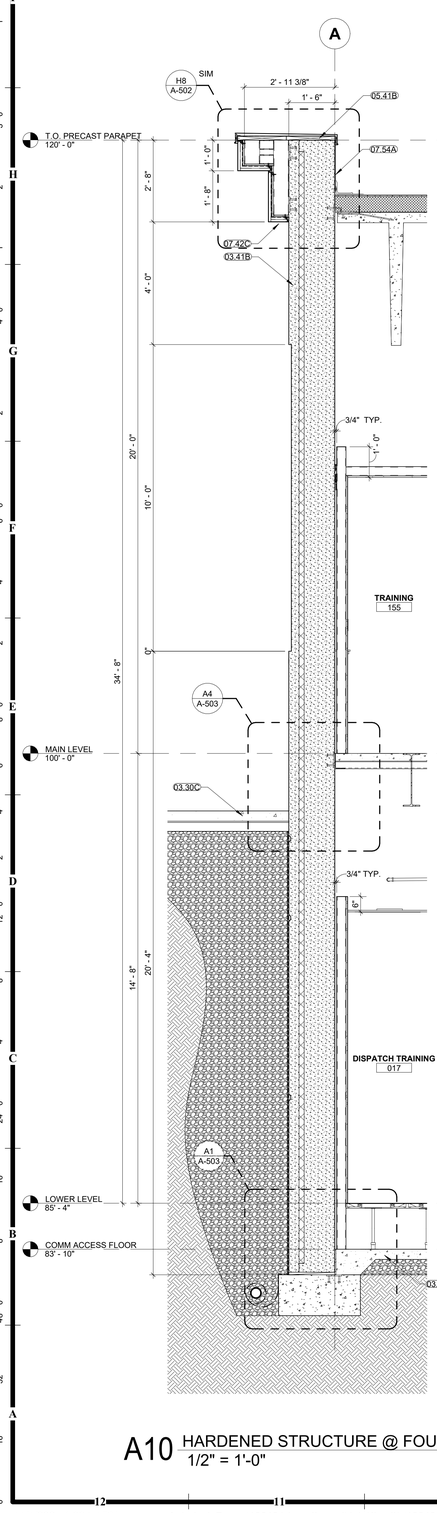
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

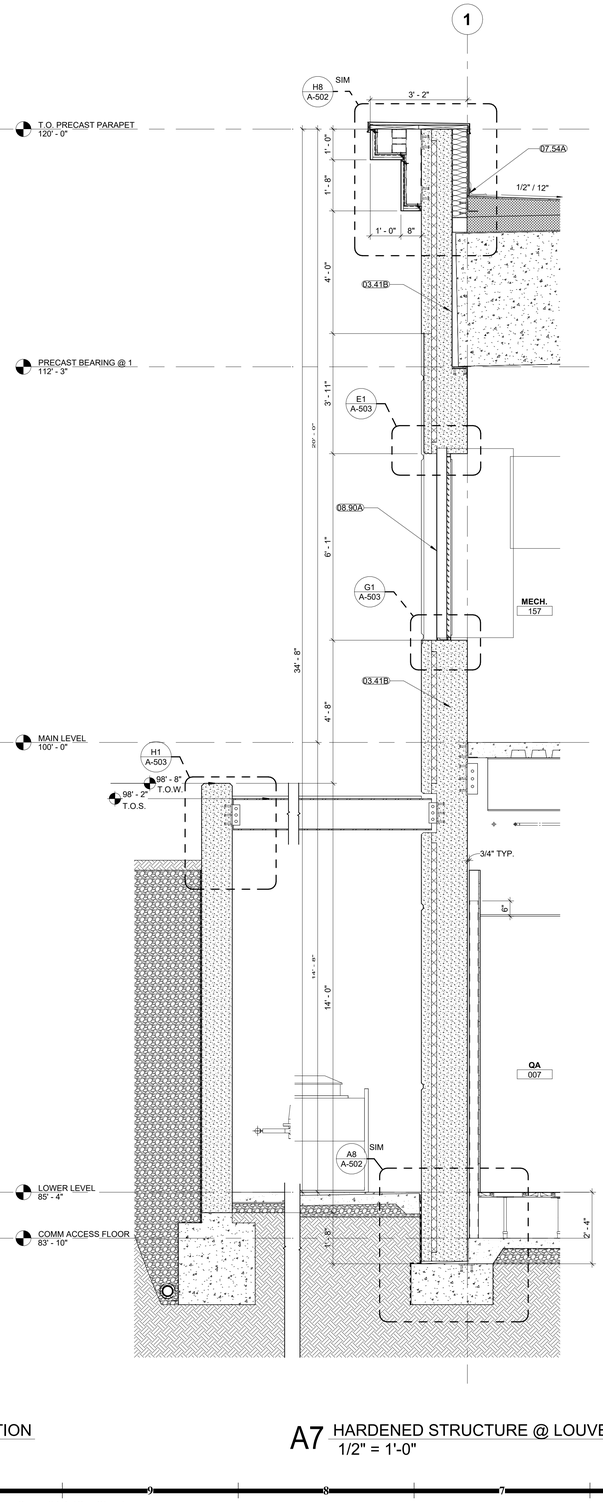
PROFESSIONAL SEAL

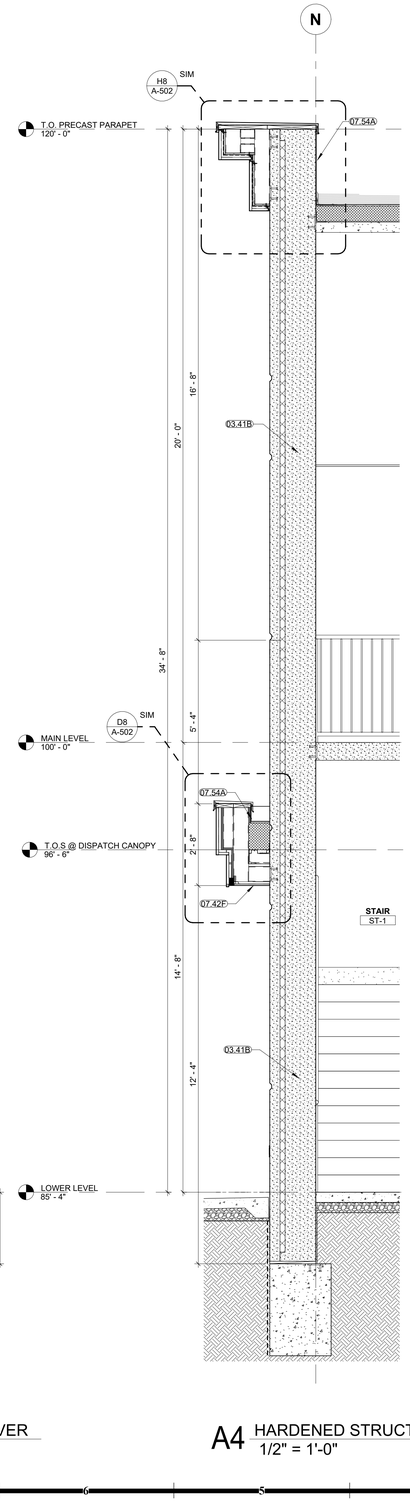
A-322

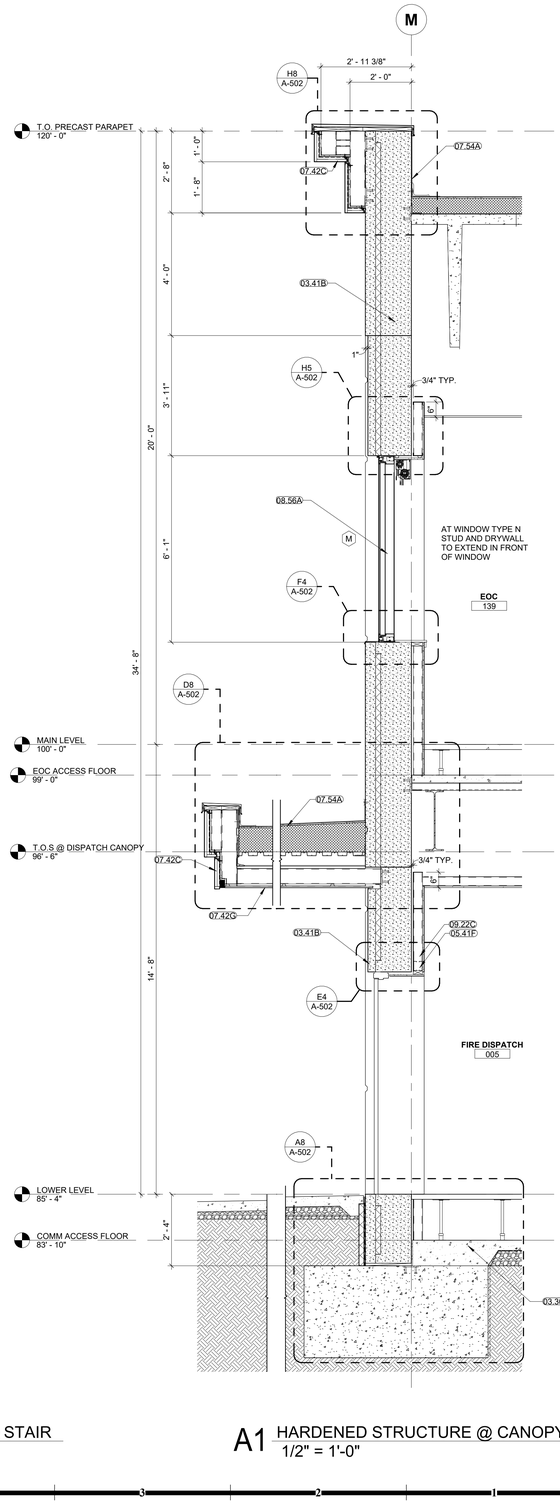
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

WALL SECTIONS









A10 HARDENED STRUCTURE @ FOUNDATION
1/2" = 1'-0"

A7 HARDENED STRUCTURE @ LOUVER
1/2" = 1'-0"

A4 HARDENED STRUCTURE @ STAIR
1/2" = 1'-0"

A1 HARDENED STRUCTURE @ CANOPY
1/2" = 1'-0"

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.41B	PRECAST CONCRETE WALL
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41F	EXTERIOR NON-LOAD-BEARING MTL. BOX BEAM HEADER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42F	METAL WOOD LOOK SOFFIT PANELS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
08.56A	WIND AND IMPACT SECURITY WINDOWS
08.90A	ALUMINUM LOUVER
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.

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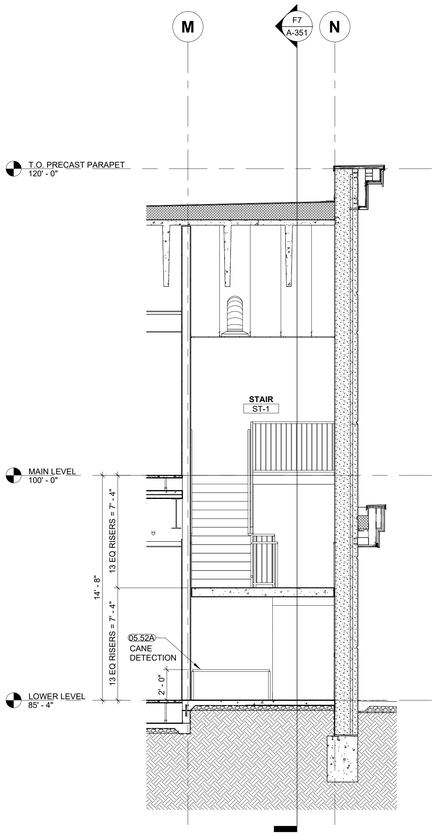
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

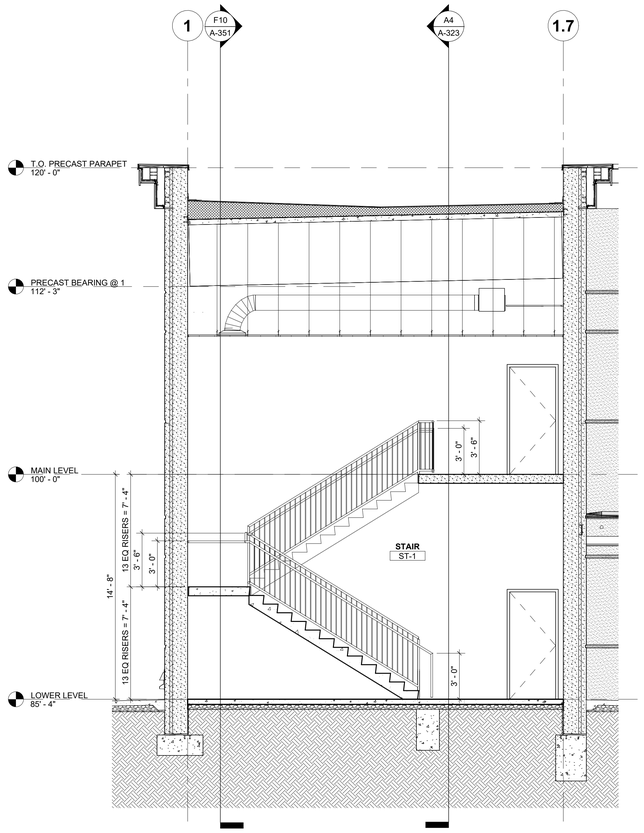
A-323

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

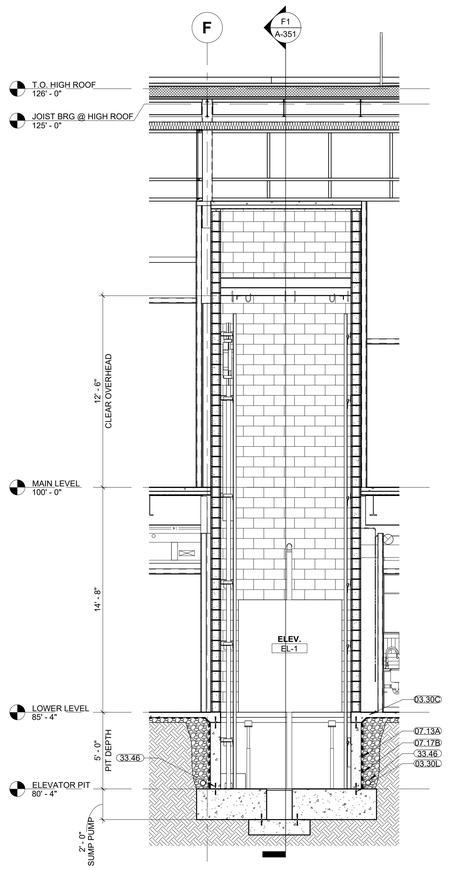
WALL SECTIONS



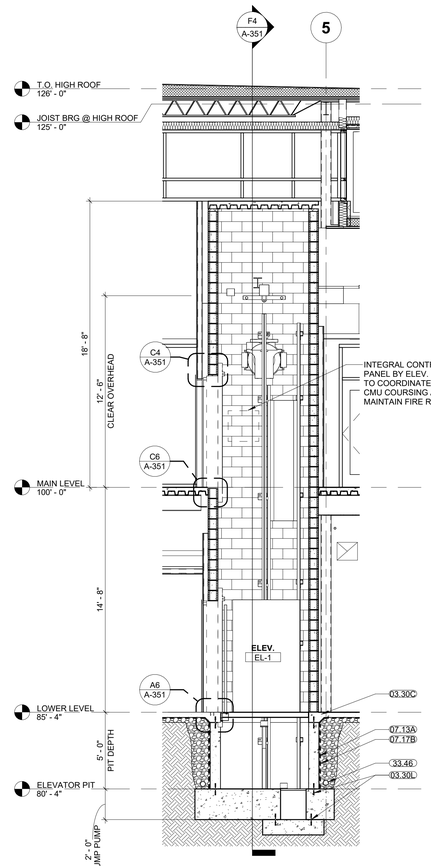
F10 STAIR ST-1 SECTION B
1/4" = 1'-0"



F7 STAIR ST-1 SECTION A
1/4" = 1'-0"



F4 EL-1 SECTION B
1/4" = 1'-0"



F1 EL-1 SECTION A
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLANS:

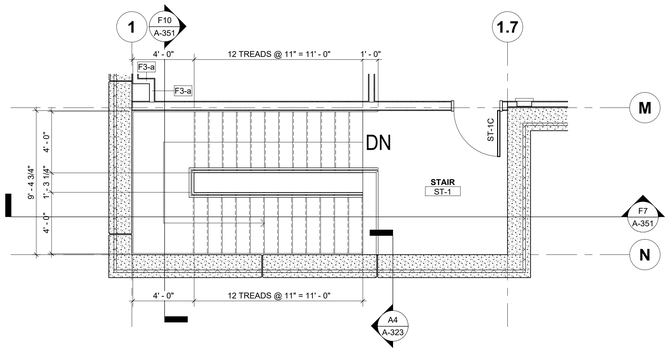
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL STUD CONSTRUCTION DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE.
5. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS.
6. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO OUTSIDE FACE OF DOOR FRAME - HINGE SIDE, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
7. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
8. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
9. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
10. ALL EXPOSED STEEL INCLUDING COLUMNS TO BE PAINTED WP4

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

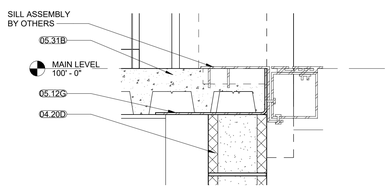
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

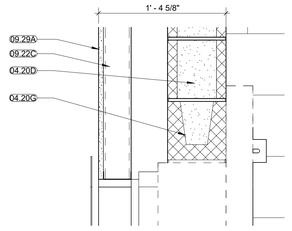
03.30C	CONCRETE SLAB-ON-GRADE
03.30K	UNDER-SLAB VAPOR RETARDER
03.30L	PVC WATER STOP
04.20D	CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH
04.20G	CONCRETE MASONRY UNIT (CMU) BOND BEAM GROUTED FULL
05.12G	STEEL BENT PLATE
05.31B	COMPOSITE FLOOR DECK
05.50E	METAL LADDERS
05.52A	STEEL PIPE/ TUBE RAILING
07.13A	SELF-ADHEARING SHEET WATERPROOFING MEMBRANE
07.17B	COMPOSITE HDPE/ BENTONITE-POLYMER WATERPROOFING MEMBRANE
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
14.24C	ELEVATOR SILL
31.20B	GRANULAR FILL
33.46	FOUNDATION DRAINAGE



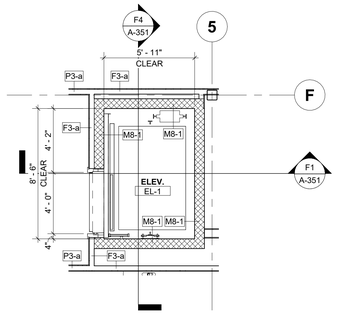
C8 MAIN LEVEL ST-1
1/4" = 1'-0"



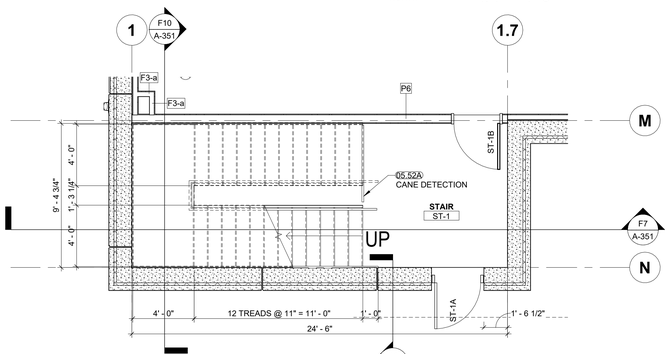
C6 ELEVATOR THRESHOLD AT CMU
1 1/2" = 1'-0"



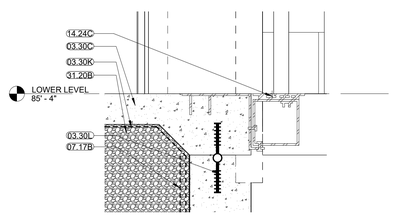
C4 ELEVATOR HEAD DETAIL @ CMU
1 1/2" = 1'-0"



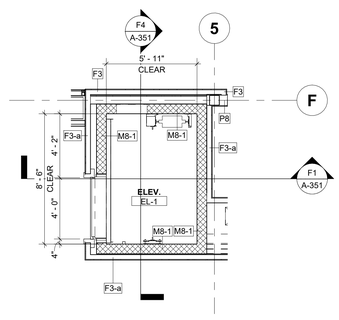
C1 LOWER LEVEL EL-1
1/4" = 1'-0"



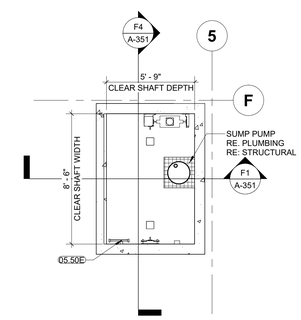
A8 LOWER LEVEL ST-1
1/4" = 1'-0"



A6 ELEVATOR THRESHOLD AT CONCRETE
1 1/2" = 1'-0"



A4 MAIN LEVEL EL-1
1/4" = 1'-0"



A1 PIT LEVEL EL-1
1/4" = 1'-0"

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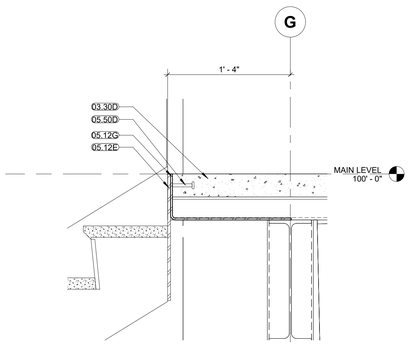
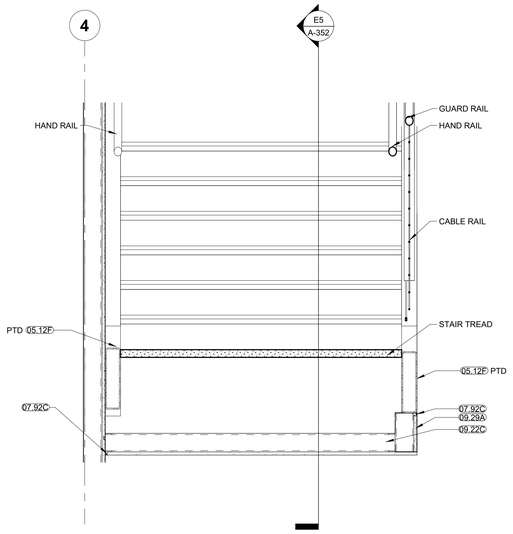
HOEFER WELKER #: 138191

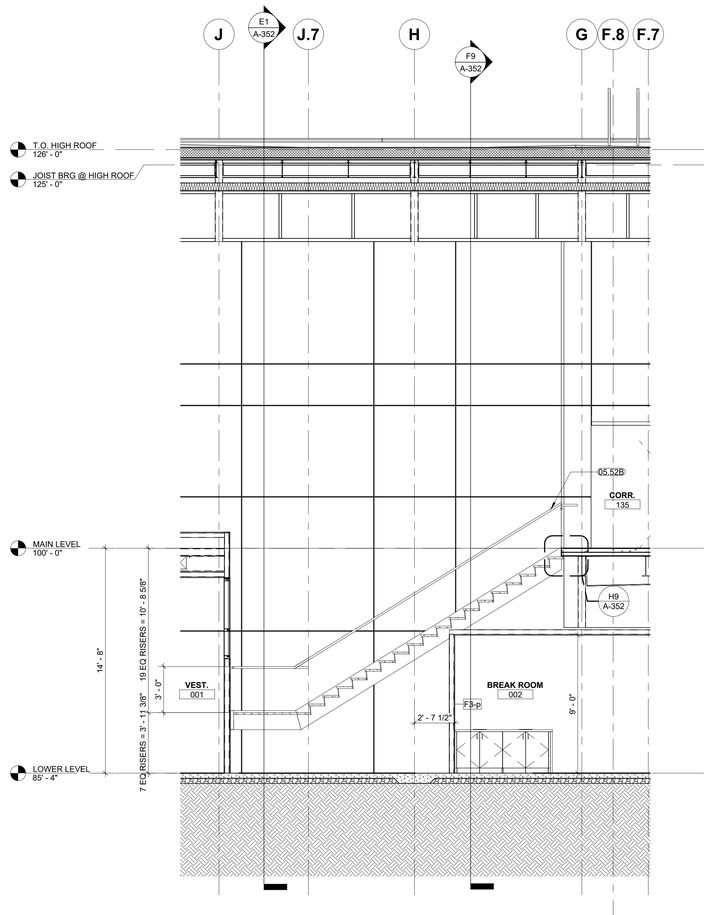
VERTICAL CIRCULATION PLANS AND SECTIONS



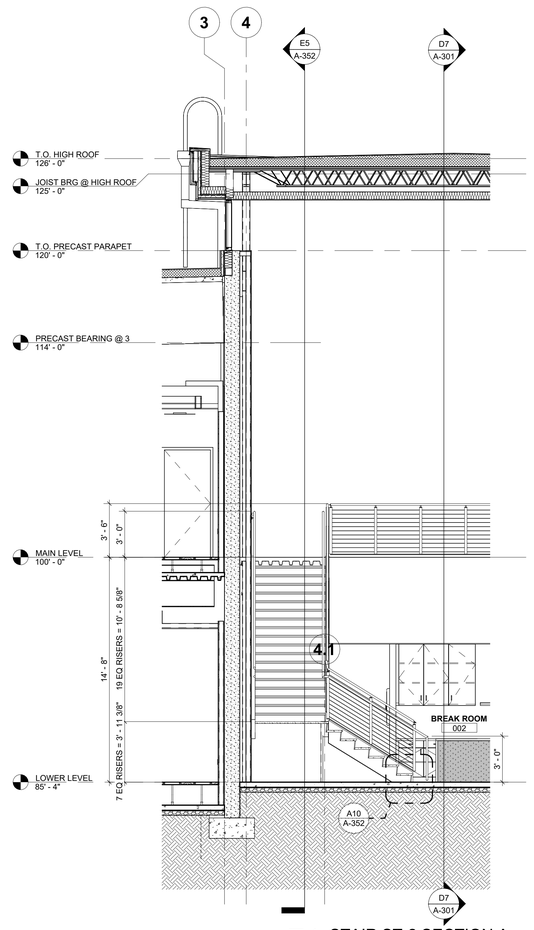
H9 METAL PAN STAIR @ DECK
1 1/2" = 1'-0"



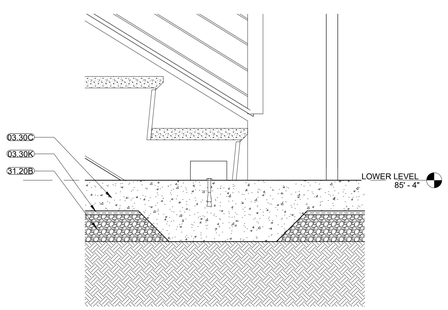
F9 GYP CEILING @ METAL PAN STAIR
1" = 1'-0"



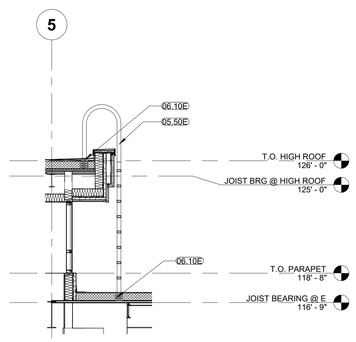
E5 STAIR ST-2 SECTION B
1/4" = 1'-0"



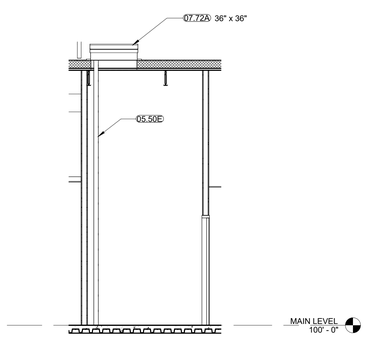
E1 STAIR ST-2 SECTION A
1/4" = 1'-0"



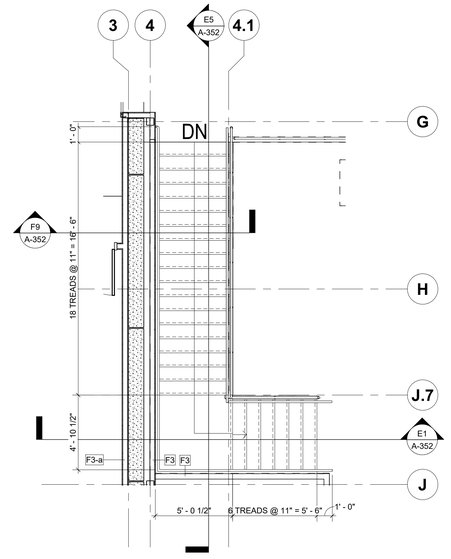
A10 METAL PAN STAIR BASE @ SLAB
1 1/2" = 1'-0"



A8 HIGH ROOF ACCESS LADDER
1/4" = 1'-0"



A5 ROOF ACCESS HATCH
1/4" = 1'-0"



NORTH

A1 MAIN LEVEL ST-2
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL STUD CONSTRUCTION DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE.
5. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS.
6. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO OUTSIDE FACE OF DOOR FRAME - HINGE SIDE, ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL, OR OTHER PROTRUDING OBJECTS.
7. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
8. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
9. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
10. ALL EXPOSED STEEL INCLUDING COLUMNS TO BE PAINTED WP4

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.30D	CONCRETE FLOOR
03.30K	UNDER-SLAB VAPOR RETARDER
05.12E	STEEL PLATE
05.12F	STEEL TUBE
05.12G	STEEL BENT PLATE
05.50D	STEEL EMBED ANGLE/ PLATE
05.50E	METAL LADDERS
05.52B	STAINLESS STEEL PIPE/ TUBE RAILING
06.10E	WOOD BLOCKING, AS REQUIRED
07.72A	ROOF HATCH 36" X 36"
07.92C	BACKER ROD AND SEALANT
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
31.20B	GRANULAR FILL

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

PROFESSIONAL SEAL

A-352

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

VERTICAL CIRCULATION PLANS AND SECTIONS

TOILET ACCESSORY SCHEDULE					
TYPE MARK	MANUFACTURER	DESCRIPTION	MODEL	FINISH	COMMENTS
1	BOBRICK	MIRROR WITH STAINLESS STEEL CHANNEL FRAME	B-165 1836	SATIN STAINLESS STEEL	3,5
2	BOBRICK	SURFACE MOUNTED PAPER TOWEL DISPENSER	B-9262	SATIN STAINLESS STEEL	3
3	BOBRICK	SEMI-RECESSED CONVERTIBLE AUTOMATIC TOWEL DISPENSER AND WASTE RECEPTACLE	B-3974	SATIN STAINLESS STEEL	2
4	BOBRICK	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	B-254	SATIN STAINLESS STEEL	3
5	BOBRICK	SURFACE MOUNTED TOILET TISSUE DISPENSER WITH UTILITY SHELF	B-2840	SATIN STAINLESS STEEL	3
6	BOBRICK	36" GRAB BAR	B-6806X36	SATIN STAINLESS STEEL	3
7	BOBRICK	42" GRAB BAR	B-6806X42	SATIN STAINLESS STEEL	3
8	BOBRICK	18" GRAB BAR	B-6806x18	SATIN STAINLESS STEEL	3
9	BOBRICK	60" GRAB BAR	B-6806X60	SATIN STAINLESS STEEL	3
10	BOBRICK	24" GRAB BAR	B-6806x24	SATIN STAINLESS STEEL	3
11	BOBRICK	12" GRAB BAR	B-6806x12	SATIN STAINLESS STEEL	3
12	BOBRICK	DOUBLE ROBE HOOK	B-6727	SATIN STAINLESS STEEL	3, 6
13	GRAB BAR SPECIALTIES	FOLDING SHOWER SEAT	62-TK26	TEAKWOOD	3
14	BOBRICK	BOBRICK B-6107 SHOWER CURTAIN ROD, SHOWER CURTAIN, & HOOKS	B-6107	STAINLESS STEEL	3

COMMENTS:
1. RECESSED
2. SEMI-RECESSED
3. SURFACE MOUNTED
4. MOUNT TOP OF UNIT AT 48" A.F.F.
5. CENTER ON SINK
6. INSTALL CENTERED ON INSIDE OF DOOR @ 4'-6" A.F.F.
7. TOILET PAPER DISPENSER SHALL BE 7" MIN. TO 9" MAX. IN. FROM EDGE OF W.C.

GENERAL NOTES:
A. REFER TO G-021 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS.
B. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
C. REFER TO ELEVATIONS AND GUIDESHEETS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON THE PLANS.
D. G.C. TO COORDINATE DIRECTLY W/ OWNER TO DETERMINE IF ANY ITEMS WILL BE OWNER PROVIDED, CONTRACTOR INSTALLED; VERIFY ALL ITEMS W/ OWNER PRIOR TO PURCHASING.
E. ALL TOILET ACCESSORIES LOCATIONS BASED ON PLAN LAYOUT.

GENERAL NOTES - FLOOR PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL STUD CONSTRUCTION DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE.
5. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS.
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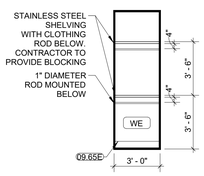
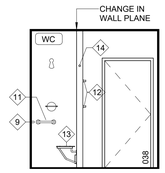
8. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
9. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
10. ALL EXPOSED STEEL INCLUDING COLUMNS TO BE PAINTED WP4

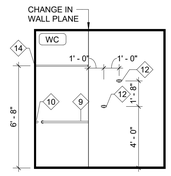
MATERIAL KEYNOTES	
06.40K	PLASTIC LAMINATE FILLER PANEL
09.30G	PORCELAIN TILE BASE
09.65E	BASE RE: FINISH SCHEDULE
10.21A	TOILET PARTITION
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL



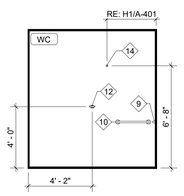
H9 LOCKER ROOM ALCOVE
1/4" = 1'-0"



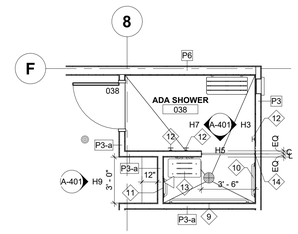
H7 038 SHOWER - S
1/4" = 1'-0"



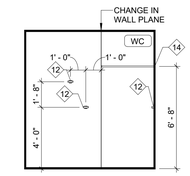
H5 038 SHOWER - E
1/4" = 1'-0"



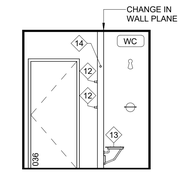
H3 038 SHOWER - N
1/4" = 1'-0"



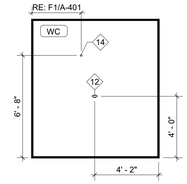
NORTH H1 038 SHOWER ROOM
1/4" = 1'-0"



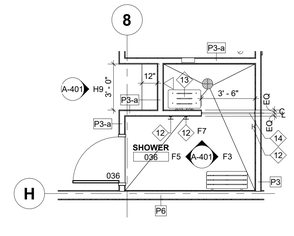
F7 036 SHOWER - W
1/4" = 1'-0"



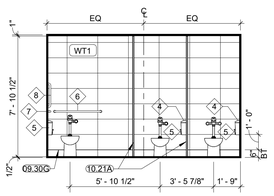
F5 036 SHOWER - S
1/4" = 1'-0"



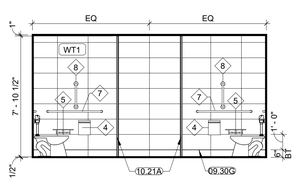
F3 036 SHOWER - N
1/4" = 1'-0"



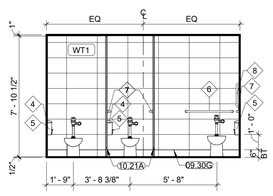
NORTH F1 036 SHOWER ROOM
1/4" = 1'-0"



C11 031 RESTROOM TLTS - W
1/4" = 1'-0"



C9 031 RESTROOM TLTS - S
1/4" = 1'-0"



C7 031 RESTROOM TLTS - E
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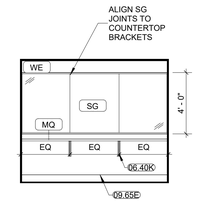

C6 031 RESTROOM - S
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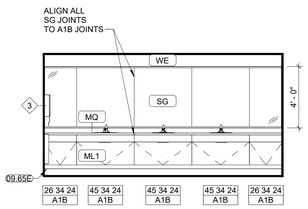

C4 031 RESTROOM - N
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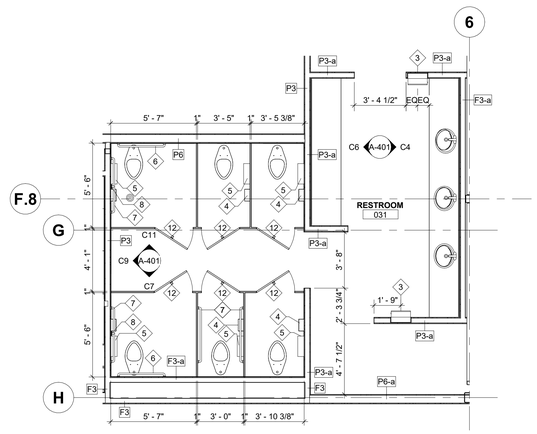
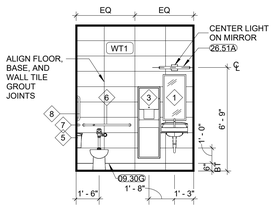
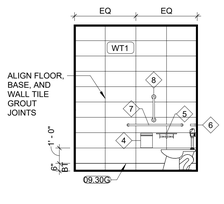


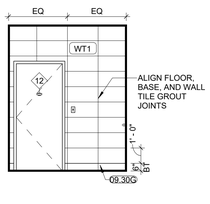
NORTH C1 031 RESTROOM
1/4" = 1'-0"



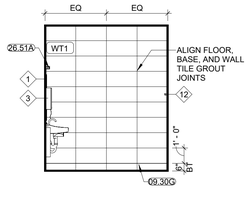
A9 012 W. RR - W
1/4" = 1'-0"



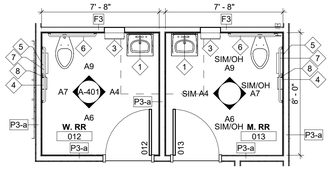
A7 012 W. RR - S
1/4" = 1'-0"



A6 012 W. RR - E
1/4" = 1'-0"



A4 012 W. RR - N
1/4" = 1'-0"



NORTH A1 012-013 RESTROOMS
1/4" = 1'-0"

WALL FINISH LEGEND
- WT1
- WT2
- WT3
- WT4

RE: FINISH SCHEDULE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

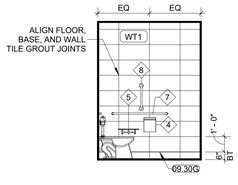
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
ARCHITECT
11/1/24

PROFESSIONAL SEAL

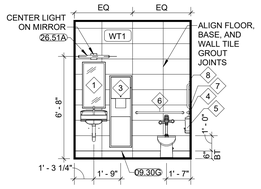
A-401

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

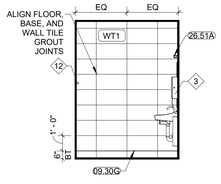
ENLARGED PLANS



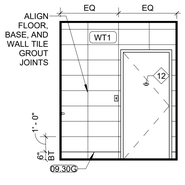
J11 137 RR - W
1/4" = 1'-0"



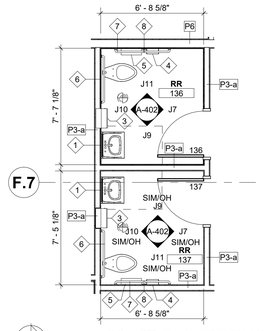
J10 137 RR - S
1/4" = 1'-0"



J9 137 RR - E
1/4" = 1'-0"



J7 137 RR - N
1/4" = 1'-0"

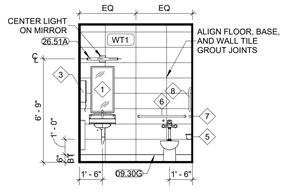


NORTH J5 136-137 RESTROOMS
1/4" = 1'-0"

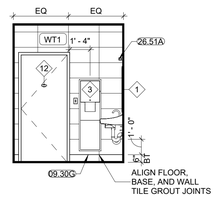
TOILET ACCESSORY SCHEDULE					
TYPE MARK	MANUFACTURER	DESCRIPTION	MODEL	FINISH	COMMENTS
1	BOBRICK	MIRROR WITH STAINLESS STEEL CHANNEL FRAME	B-165 1836	SATIN STAINLESS STEEL	3,5
2	BOBRICK	SURFACE MOUNTED PAPER TOWEL DISPENSER	B-262	SATIN STAINLESS STEEL	3
3	BOBRICK	SEMI-RECESSED CONVERTIBLE AUTOMATIC TOWEL DISPENSER AND WASTE RECEPTACLE	B-3974	SATIN STAINLESS STEEL	2
4	BOBRICK	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL	B-254	SATIN STAINLESS STEEL	3
5	BOBRICK	SURFACE MOUNTED TOILET TISSUE DISPENSER WITH UTILITY SHELF	B-2840	SATIN STAINLESS STEEL	3
6	BOBRICK	36" GRAB BAR	B-6806X36	SATIN STAINLESS STEEL	3
7	BOBRICK	42" GRAB BAR	B-6806X42	SATIN STAINLESS STEEL	3
8	BOBRICK	18" GRAB BAR	B-6806x18	SATIN STAINLESS STEEL	3
9	BOBRICK	60" GRAB BAR	B-6806X60	SATIN STAINLESS STEEL	3
10	BOBRICK	24" GRAB BAR	B-6806x24	SATIN STAINLESS STEEL	3
11	BOBRICK	12" GRAB BAR	B-6806x12	SATIN STAINLESS STEEL	3
12	BOBRICK	DOUBLE ROBE HOOK	B-6727	SATIN STAINLESS STEEL	3, 6
13	GRAB BAR SPECIALTIES	FOLDING SHOWER SEAT	62-TK26	TEAKWOOD	3
14	BOBRICK	BOBRICK B-6107 SHOWER CURTAIN ROD, SHOWER CURTAIN, & HOOKS	B-6107	STAINLESS STEEL	3

COMMENTS:
1. RECESSED
2. SEMI-RECESSED
3. SURFACE MOUNTED
4. MOUNT TOP OF UNIT AT 48" A.F.F.
5. CENTER ON SINK
6. INSTALL CENTERED ON INSIDE OF DOOR @ 4'-6" A.F.F.
7. TOILET PAPER DISPENSER SHALL BE 7" MIN. TO 9" MAX. IN. FROM EDGE OF W.C.

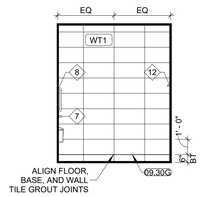
GENERAL NOTES:
A. REFER TO G-021 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS.
B. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
C. REFER TO ELEVATIONS AND GUIDESHEETS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON THE PLANS.
D. G.C. TO COORDINATE DIRECTLY W/ OWNER TO DETERMINE IF ANY ITEMS WILL BE OWNER PROVIDED, CONTRACTOR INSTALLED; VERIFY ALL ITEMS W/ OWNER PRIOR TO PURCHASING.
E. ALL TOILET ACCESSORIES LOCATIONS BASED ON PLAN LAYOUT.



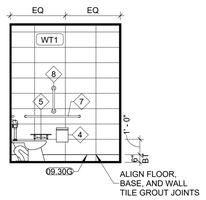
F8 130 RR - W
1/4" = 1'-0"



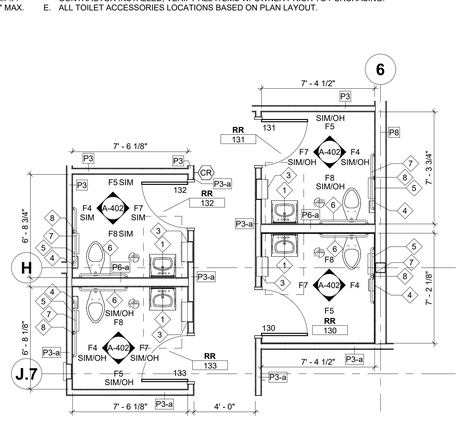
F7 130 RR - S
1/4" = 1'-0"



F5 130 RR - E
1/4" = 1'-0"



F4 130 RR - N
1/4" = 1'-0"



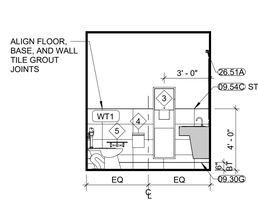
NORTH F1 FIRE ADMIN. RESTROOMS
1/4" = 1'-0"

GENERAL NOTES - FLOOR PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL STUD CONSTRUCTION DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF GYP. BOARD/ WALL (FOG), UNLESS NOTED OR SHOWN OTHERWISE.
5. NOTE: WALL THICKNESSES ARE ACTUAL DIMENSIONS.
6. DOOR OPENINGS NOT LOCATED BY DIMENSION SHALL BE CENTERED IN WALL SHOWN OR LOCATED 4 INCHES FROM FINISH WALL TO OUTSIDE FACE OF DOOR FRAME - HINGE SIDE. ALWAYS ALLOWING A MINIMUM OF 18" FROM THE PULL SIDE (STRIKE SIDE) OF THE DOOR TO THE INTERSECTING WALL OR OTHER PROTRUDING OBJECTS.
7. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FINISHES AS THE ADJOINING SPACES.
8. ALL PUBLIC SPACES: THE WALLS WILL BE FINISHED WITH 5/8" GYP. BD. TO A LEVEL 4 FINISH AND PAINTED, UNLESS NOTED OR SPECIFIED OTHERWISE.
9. RE: FINISH LEGEND, AND SPECIFICATIONS FOR DOOR AND DOOR FRAME FINISHES.
10. ALL EXPOSED STEEL INCLUDING COLUMNS TO BE PAINTED WP4

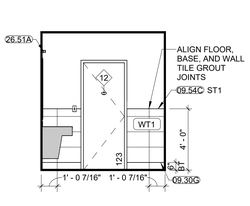
MATERIAL KEYNOTES	
09.30G	PORCELAIN TILE BASE
09.54C	METAL EDGE TRIM
09.65E	BASE RE: FINISH SCHEDULE
10.21A	TOILET PARTITION
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL

D8 123 RESTROOM - W
1/4" = 1'-0"

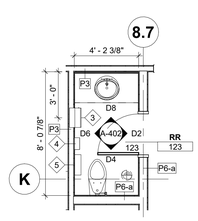


D6 123 RESTROOM - S
1/4" = 1'-0"

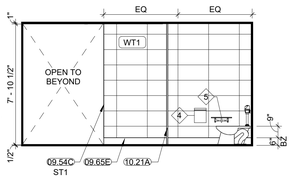
D4 123 RESTROOM - E
1/4" = 1'-0"



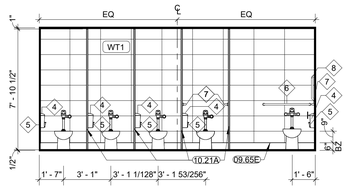
D2 123 RESTROOM - N
1/4" = 1'-0"



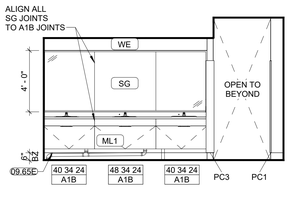
NORTH D1 123 RESTROOM
1/4" = 1'-0"



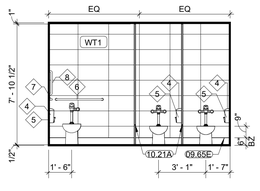
A11 103 PUBLIC RR - S
1/4" = 1'-0"



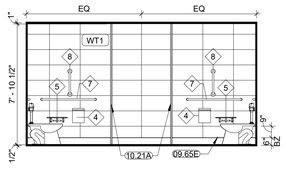
A9 103 PUBLIC RR - W
1/4" = 1'-0"



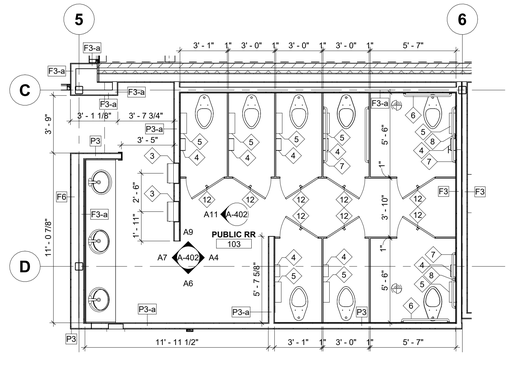
A7 103 PUBLIC RR SINK - S
1/4" = 1'-0"



A6 103 PUBLIC RR - E
1/4" = 1'-0"



A4 103 PUBLIC RR - N
1/4" = 1'-0"



NORTH A1 103 PUBLIC RESTROOMS
1/4" = 1'-0"

WALL FINISH LEGEND

	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

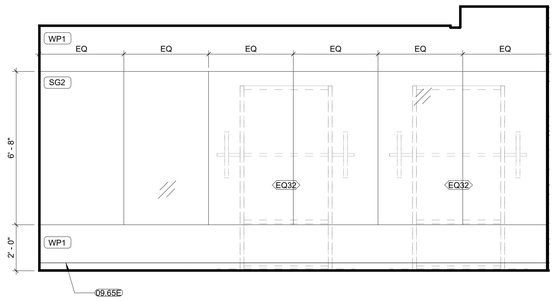
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
11/1/24
ARCHITECT

PROFESSIONAL SEAL

A-402

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ENLARGED PLANS



H10 049 FITNESS - N
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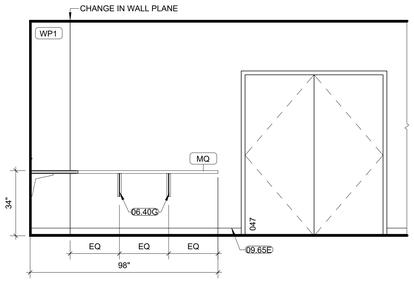

H8 047 IT WORK/STORAGE - S
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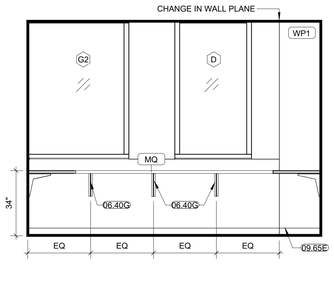

H6 047 IT WORK/STORAGE - E
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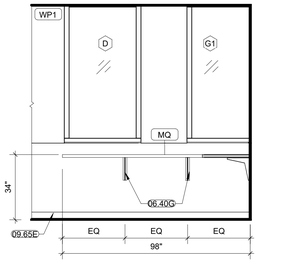

H3 047 IT WORK/STORAGE - N
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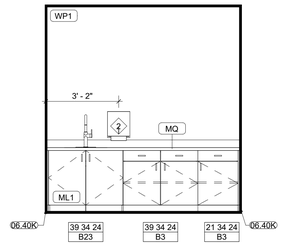
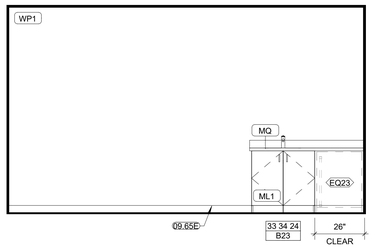


H1 035 LAUNDRY - W
3/8" = 1'-0"



F7 027 QUIET ROOM - TYP
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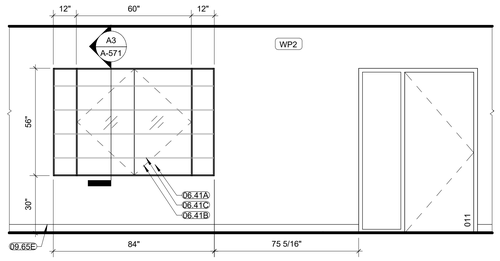
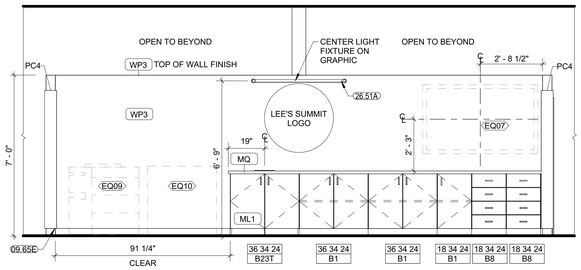


F4 018 CORRIDOR - E
3/8" = 1'-0"



F1 010 COPY/WORK - E
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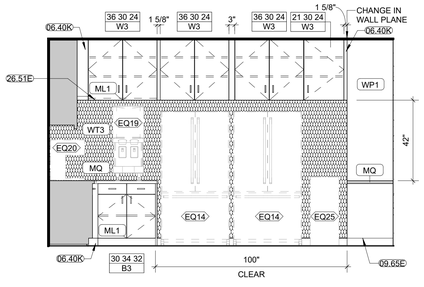
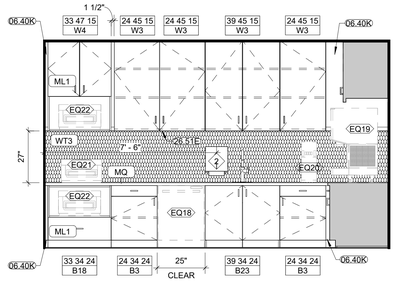
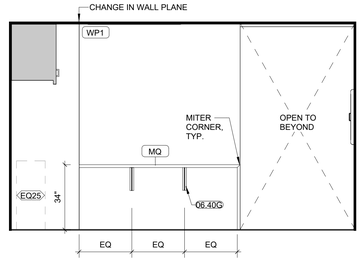


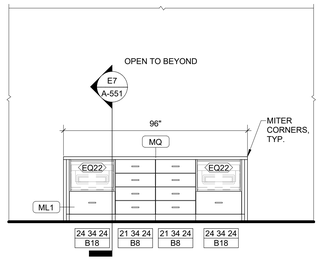
D9 009 KITCHEN - W
3/8" = 1'-0"



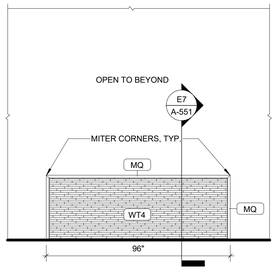
D6 009 KITCHEN - S
3/8" = 1'-0"



D4 009 KITCHEN - N
3/8" = 1'-0"



D1 002 BREAK ROOM ISLAND - E
3/8" = 1'-0"



A10 002 BREAK ROOM ISLAND - W
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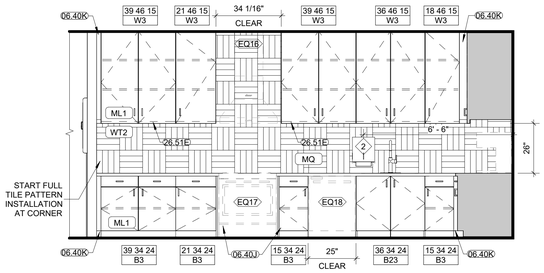
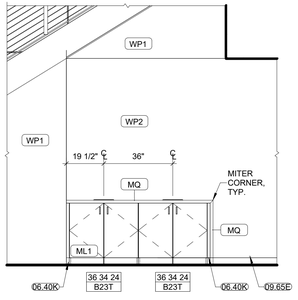
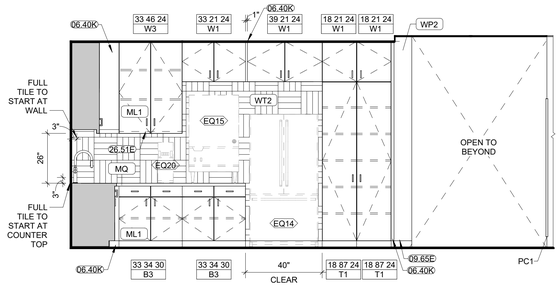


A7 002 BREAK ROOM - W
3/8" = 1'-0"



A4 002 BREAK ROOM - S
3/8" = 1'-0"



A1 002 BREAK ROOM - N
3/8" = 1'-0"

GENERAL NOTES - INTERIOR ELEVATIONS & MILLWORK/ CASEWORK ELEVATIONS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G-021 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: FINISH LEGEND AND FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. WALL FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH PLAN ROOM TAG & ELEVATIONS FOR ADDITIONAL ROOM FINISHES.
5. PROVIDE GYPSUM BOARD CONTROL JOINTS AT DOOR HEADERS WHERE GYPSUM BOARD EXCEEDS 30 FEET (TYP.), UNLESS SHOWN OTHERWISE. JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0".
6. ALIGN BASE TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
7. TRANSITION ALL WALL AND BASE FINISHES, AND/ OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
8. CONTINUE WALL FINISH BEHIND ALL FURNITURE AND EQUIPMENT, INCLUDING UNDER OPEN COUNTERS.
9. CONTINUE WALL BASE AT ALL WALLS, FURRED OUT COLUMNS, COLUMN COVERS, AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER OPEN COUNTERS, UNLESS NOTED OTHERWISE.
10. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK/ CASEWORK FABRICATION & INSTALLATION.
11. ALL MILLWORK/CASEWORK CONSTRUCTION SHALL MEET AWI PREMIUM STANDARDS, UNLESS NOTED OR SPECIFIED OTHERWISE.
12. CONTRACTOR SHALL PROVIDE & INSTALL GROMMETS AT 48" O.C. MAX. AT ALL WORK STATIONS WITH OPEN KNEE SPACE. COORDINATE LOCATIONS DIRECTLY WITH OWNER. COLOR TO BE SELECTED BY ARCHITECT.
13. CONTRACTOR SHALL PROVIDE COUNTERTOP BRACKETS AT OPEN KNEE SPACES WIDER THAN 42" (TYP.), CENTER IN OPEN AREA, UNLESS NOTED OR SHOWN OTHERWISE. ARCHITECT TO SELECT COLOR.
14. ALL EXPOSED CASEWORK/ MILLWORK SURFACES SHALL BE FINISHED TO MATCH ADJACENT CASEWORK/ MILLWORK FINISH, UNLESS NOTED OTHERWISE.
15. ALL FILLER PANELS SHALL BE FINISHES TO MATCH ADJACENT SURFACES AND SCRIBED TO FIT ADJACENT WALL, UNLESS NOTED OTHERWISE. FILLER PANELS TO BE 1 1/2" MIN. OR 3" MAX. UNLESS NOTED OTHERWISE.
16. RE: ENLARGED FLOOR PLAN SHEETS FOR TOILET ACCESSORY SCHEDULE. FINISHED END PANEL SURFACES SHALL BE FINISHED TO MATCH ADJACENT CASEWORK/MILLWORK FINISH. PANELS TO BE 1 1/2" WIDE, UNLESS NOTED OTHERWISE.
17. RE: EQUIPMENT DRAWINGS & SPECS. FOR EQUIPMENT ITEMS SHOWN DASHED, PROVIDED BY EQUIP. CONSULTANT AND/ OR SUPPLIED BY OWNER. COORDINATE WITH OTHER TRADES AS NECESSARY.
18. MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE LOCATIONS WITH MEP DRAWINGS. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
19. RE: SHEET A/501 FOR FINISH DETAILS.
20. RE: FINISH LEGEND & DOOR SCHEDULE FOR INTERIOR DOOR AND DOOR FRAME COLORS.
21. TYPICAL MILLWORK FINISHES TO BE ML1 FOR CABINETS, MQ FOR COUNTERTOPS UNLESS NOTED OTHERWISE.
22. RE: TO A-551 FOR CASEWORK SECTION DETAILS.
23. RE: TO A-551 FOR COUNTERTOP SECTIONS BY FINISH MATERIAL.
    A. TYPE C3: MQ
    B. TYPE C4: MST

MATERIAL KEYNOTES

06.40G	COUNTER BRACKET
06.40J	PLASTIC LAMINATE FINISHED END PANEL
06.40K	PLASTIC LAMINATE FILLER PANEL
06.41A	GLASS DISPAY CASE
06.41B	GLASS DISPAY CASE DOOR
06.41C	GLASS DISPAY CASE SHELF
09.65E	BASE RE: FINISH SCHEDULE
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL
26.51E	UNDERCABINET LIGHTING RE: ELECTRICAL

WALL FINISH LEGEND

	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

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KANSAS CITY, MO 64112
P: 913.307.3700
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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

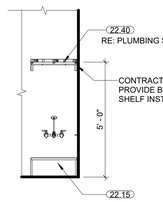
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

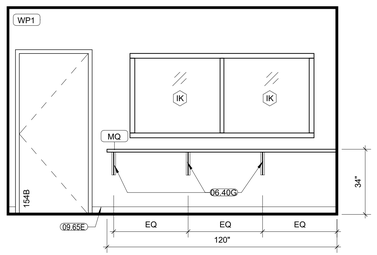
A-451

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

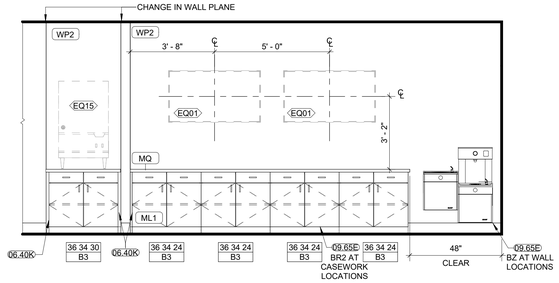
INTERIOR AND CASEWORK ELEVATIONS



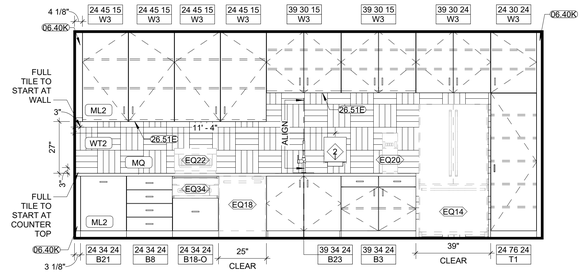
F11 JAN. MOP SINK, TYP.
3/8" = 1'-0"



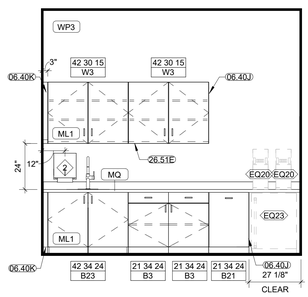
F8 154 VIEWING - N
3/8" = 1'-0"



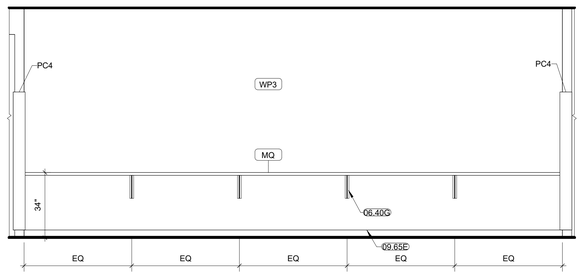
F5 150 CORRIDOR - W
3/8" = 1'-0"



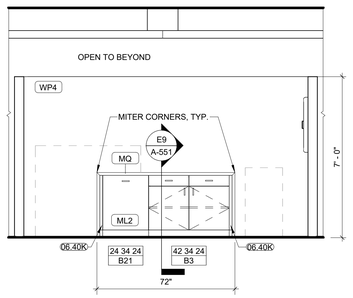
F1 148 KITCHEN - N
3/8" = 1'-0"



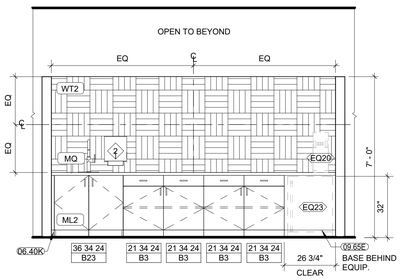
D9 139 EOC - W
3/8" = 1'-0"



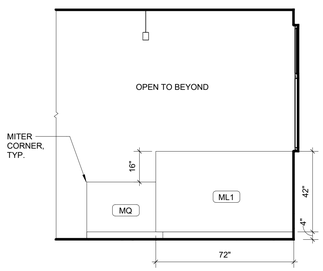
D6 109 OPEN OFFICE - W
3/8" = 1'-0"



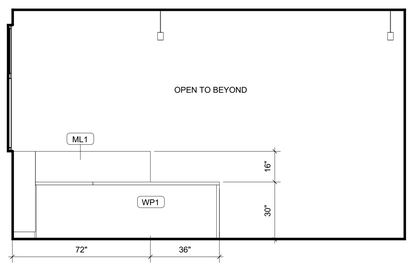
D4 108 COFFEE/COPY/WORK - S
3/8" = 1'-0"



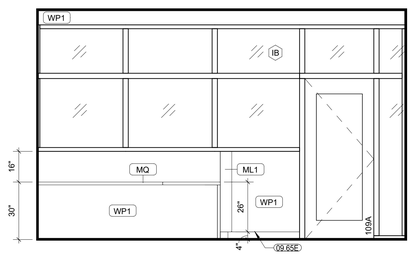
D1 108 COFFEE/COPY/WORK - N
3/8" = 1'-0"



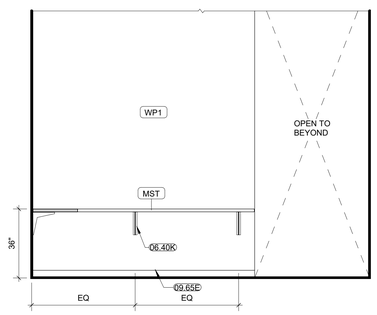
A11 158 RECPT DESK - E
3/8" = 1'-0"



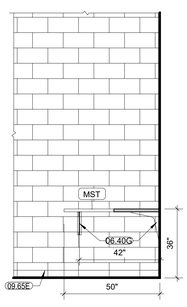
A8 158 RECPT DESK - W
3/8" = 1'-0"



A5 158 RECPT DESK - S
3/8" = 1'-0"



A3 039 GENERAL STORAGE - E
3/8" = 1'-0"



A1 039 GENERAL STORAGE - N
3/8" = 1'-0"

GENERAL NOTES - INTERIOR ELEVATIONS & MILLWORK/ CASEWORK ELEVATIONS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G-021 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: FINISH LEGEND AND FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. WALL FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH PLAN ROOM TAG & ELEVATIONS FOR ADDITIONAL ROOM FINISHES.
5. PROVIDE GYPSUM BOARD CONTROL JOINTS AT DOOR HEADERS WHERE GYPSUM BOARD EXCEEDS 30 FEET (TYP.), UNLESS SHOWN OTHERWISE. JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0".
6. ALIGN BASE TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
7. TRANSITION ALL WALL AND BASE FINISHES, AND/ OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
8. CONTINUE WALL FINISH BEHIND ALL FURNITURE AND EQUIPMENT, INCLUDING UNDER OPEN COUNTERS.
9. CONTINUE WALL BASE AT ALL WALLS, FURRED OUT COLUMNS, COLUMN COVERS, AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER OPEN COUNTERS, UNLESS NOTED OTHERWISE.
10. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK/ CASEWORK FABRICATION & INSTALLATION.
11. ALL MILLWORK/CASEWORK CONSTRUCTION SHALL MEET AWI PREMIUM STANDARDS, UNLESS NOTED OR SPECIFIED OTHERWISE.
12. CONTRACTOR SHALL PROVIDE & INSTALL GROMMETS AT 48" O.C. MAX. AT ALL WORK STATIONS WITH OPEN KNEE SPACE. COORDINATE LOCATIONS DIRECTLY WITH OWNER. COLOR TO BE SELECTED BY ARCHITECT.
13. CONTRACTOR SHALL PROVIDE COUNTERTOP BRACKETS AT OPEN KNEE SPACES WIDER THAN 42" (TYP.). CENTER IN OPEN AREA, UNLESS NOTED OR SHOWN OTHERWISE. ARCHITECT TO SELECT COLOR.
14. ALL EXPOSED CASEWORK/ MILLWORK SURFACES SHALL BE FINISHED TO MATCH ADJACENT CASEWORK/ MILLWORK FINISH, UNLESS NOTED OTHERWISE.
15. ALL FILLER PANELS SHALL BE FINISHES TO MATCH ADJACENT SURFACES AND SCRIBED TO FIT ADJACENT WALL, UNLESS NOTED OTHERWISE. FILLER PANELS TO BE 1 1/2" MIN. OR 3" MAX. UNLESS NOTED OTHERWISE.
16. RE: ENLARGED FLOOR PLAN SHEETS FOR TOILET ACCESSORY SCHEDULE. FINISHED END PANEL SURFACES SHALL BE FINISHED TO MATCH ADJACENT CASEWORK/MILLWORK FINISH. PANELS TO BE 1 1/2" WIDE, UNLESS NOTED OTHERWISE.
17. RE: EQUIPMENT DRAWINGS & SPECS. FOR EQUIPMENT ITEMS SHOWN DASHED, PROVIDED BY EQUIP. CONSULTANT AND/ OR SUPPLIED BY OWNER. COORDINATE WITH OTHER TRADES AS NECESSARY.
18. MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE LOCATIONS WITH MEP DRAWINGS. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
19. RE: SHEET AI501 FOR FINISH DETAILS.
20. RE: FINISH LEGEND & DOOR SCHEDULE FOR INTERIOR DOOR AND DOOR FRAME COLORS.
21. TYPICAL MILLWORK FINISHES TO BE ML1 FOR CABINETS, MQ FOR COUNTERTOPS UNLESS NOTED OTHERWISE.
22. RE: TO A-551 FOR CASEWORK SECTION DETAILS.
23. RE: TO A-551 FOR COUNTERTOP SECTIONS BY FINISH MATERIAL.
    A. TYPE C3: MQ
    B. TYPE C4: MST

MATERIAL KEYNOTES	
06.40G	COUNTER BRACKET
06.40J	PLASTIC LAMINATE FINISHED END PANEL
06.40K	PLASTIC LAMINATE FILLER PANEL
09.65E	BASE RE: FINISH SCHEDULE
22.15	MOP SINK
22.40	PLUMBING FIXTURE
26.51E	UNDERCABINET LIGHTING RE: ELECTRICAL

WALL FINISH LEGEND	
	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

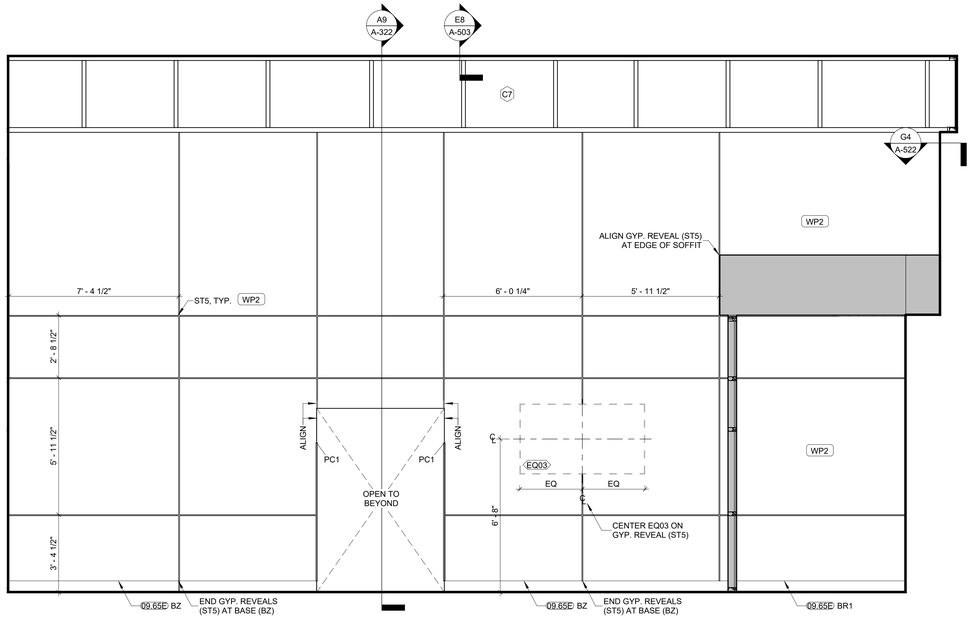
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

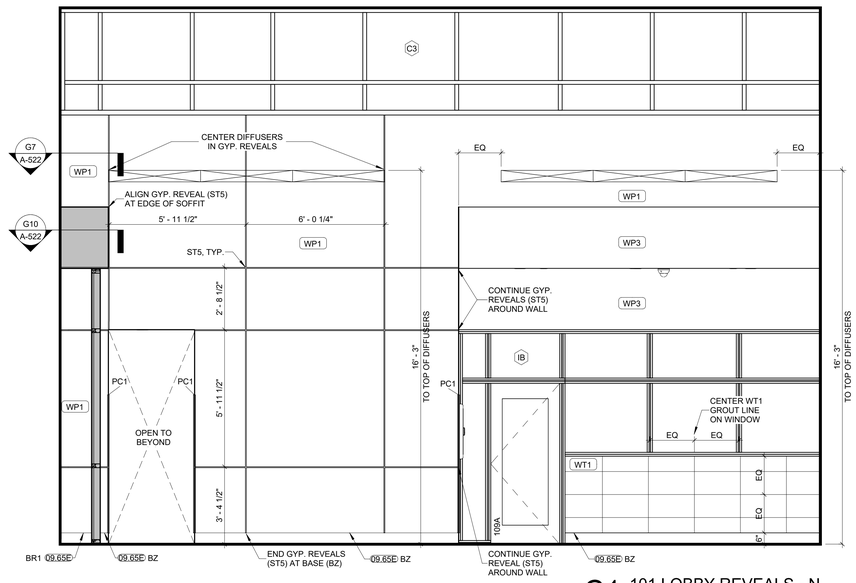
A-452

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

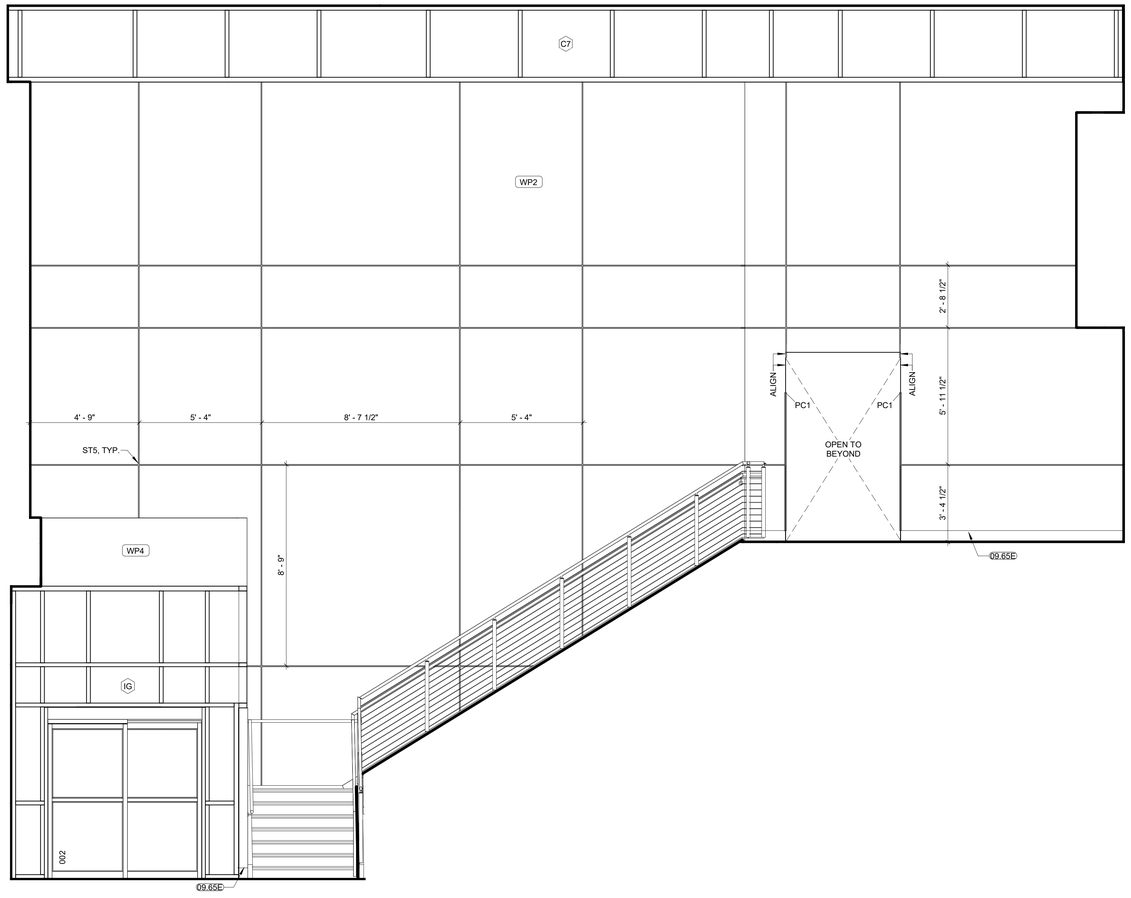
INTERIOR AND CASEWORK ELEVATIONS



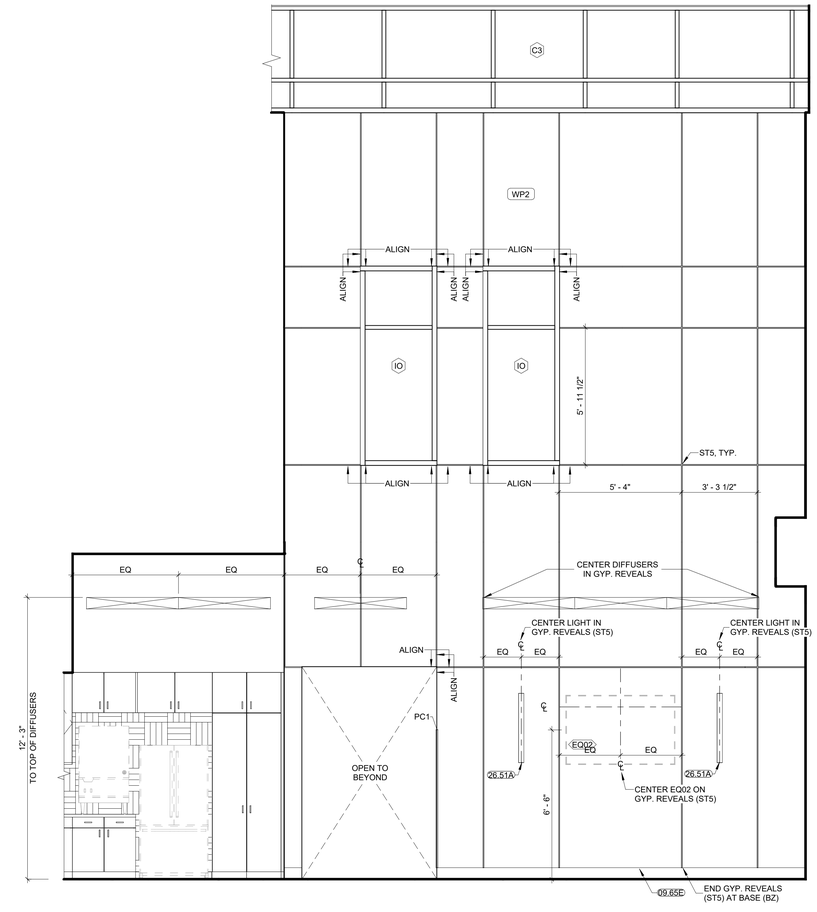
G6 101 LOBBY REVEALS - S
3/8" = 1'-0"



G1 101 LOBBY REVEALS - N
3/8" = 1'-0"



A5 002 BREAK ROOM REVEALS - S
3/8" = 1'-0"



A1 002 BREAK ROOM REVEALS - N
3/8" = 1'-0"

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2. RE: SHEET G-021 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
3. RE: FINISH LEGEND AND FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
4. WALL FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH PLAN ROOM TAG & ELEVATIONS FOR ADDITIONAL ROOM FINISHES.
5. PROVIDE GYPSUM BOARD CONTROL JOINTS AT DOOR HEADERS WHERE GYPSUM BOARD EXCEEDS 30 FEET (TYP.), UNLESS SHOWN OTHERWISE. JOINTS TO BE LINED UP WITH BOTH SIDES OF DOOR FRAMES FOR DOORS 4'-0".
6. ALIGN BASE TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
7. TRANSITION ALL WALL AND BASE FINISHES, AND/ OR COLOR CHANGES AT INSIDE CORNERS, UNLESS NOTED OTHERWISE. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
8. CONTINUE WALL FINISH BEHIND ALL FURNITURE AND EQUIPMENT, INCLUDING UNDER OPEN COUNTERS.
9. CONTINUE WALL BASE AT ALL WALLS, FURRED OUT COLUMNS, COLUMN COVERS, AT ALL CASEWORK TOE KICKS, SIDE PANELS, AND UNDER OPEN COUNTERS, UNLESS NOTED OTHERWISE.
10. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK/ CASEWORK FABRICATION & INSTALLATION.
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15. ALL FILLER PANELS SHALL BE FINISHES TO MATCH ADJACENT SURFACES AND SCRIBED TO FIT ADJACENT WALL UNLESS NOTED OTHERWISE. FILLER PANELS TO BE 1 1/2" MIN. OR 3" MAX, UNLESS NOTED OTHERWISE.
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19. RE: SHEET AI501 FOR FINISH DETAILS.
20. RE: FINISH LEGEND & DOOR SCHEDULE FOR INTERIOR DOOR AND DOOR FRAME COLORS.
21. TYPICAL MILLWORK FINISHES TO BE ML1 FOR CABINETS, MQ FOR COUNTERTOPS UNLESS NOTED OTHERWISE.
22. RE: TO A-551 FOR CASEWORK SECTION DETAILS.
23. RE: TO A-551 FOR CASEWORK SECTIONS BY FINISH MATERIAL.
    A. TYPE C3: MQ
    B. TYPE C4: MST

MATERIAL KEYNOTES

09.65E	BASE RE: FINISH SCHEDULE
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL

WALL FINISH LEGEND

	WT1
	WT2
	WT3
	WT4

RE: FINISH SCHEDULE

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
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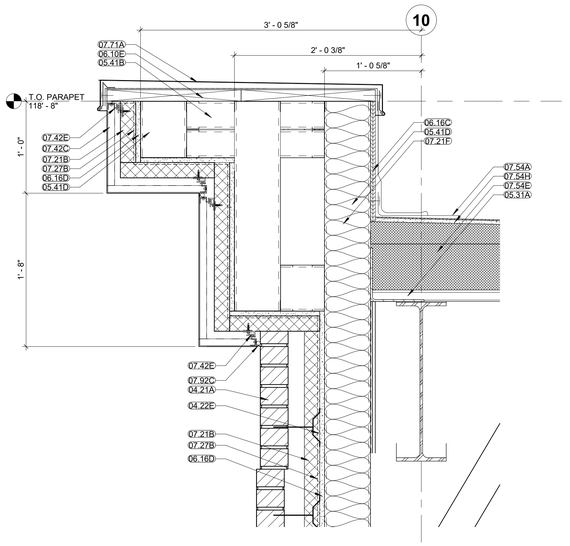
ARCHITECT

PROFESSIONAL SEAL

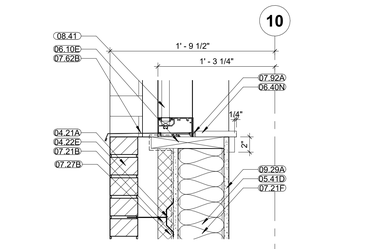
A-453

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

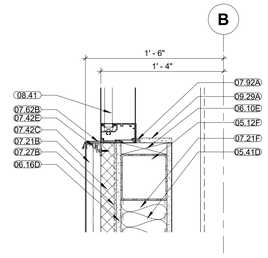
INTERIOR AND CASEWORK ELEVATIONS



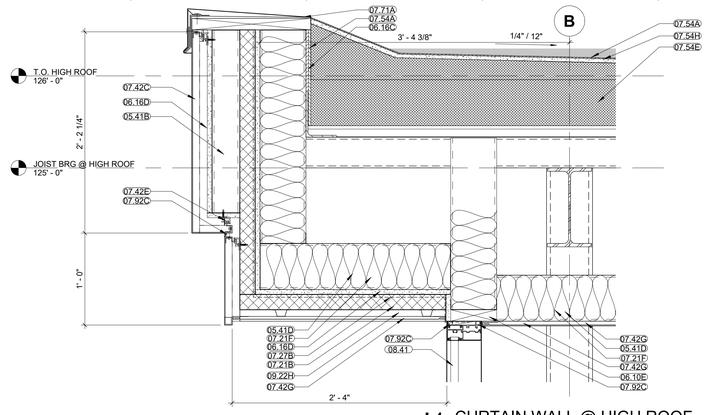
H10 FASCIA @ FIRE ADMINISTRATION
1 1/2" = 1'-0" G4 / A-202



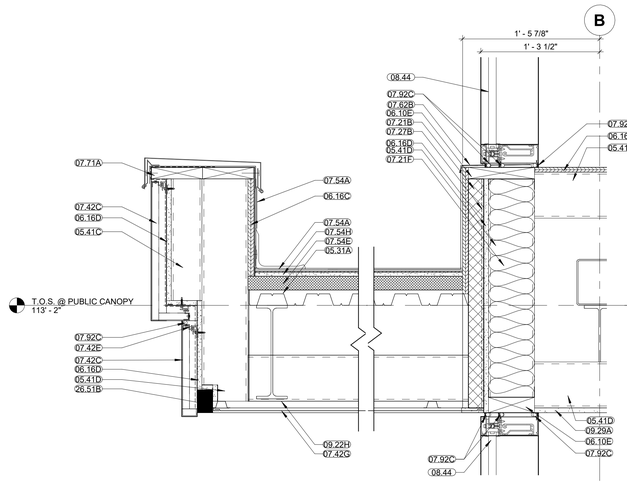
J7 FIRE ADMINISTRATION @ WINDOW SILL
1 1/2" = 1'-0" A9 / A-321



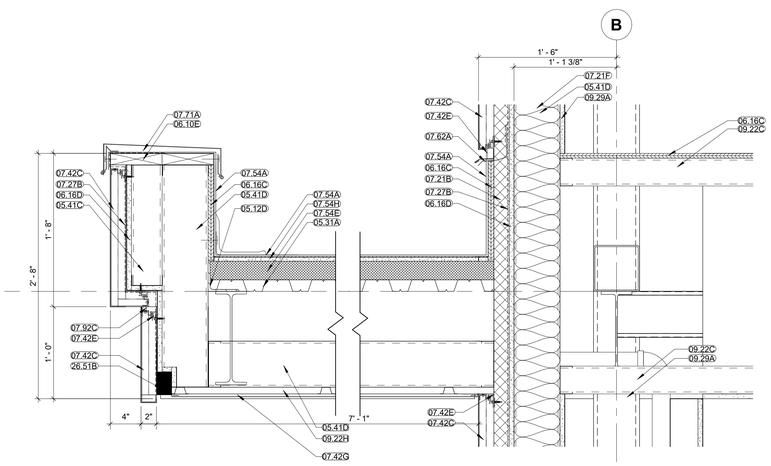
J6 SF SILL @ METAL PANEL
1 1/2" = 1'-0" A1 / A-321



J1 CURTAIN WALL @ HIGH ROOF
1 1/2" = 1'-0" A1 / A-321

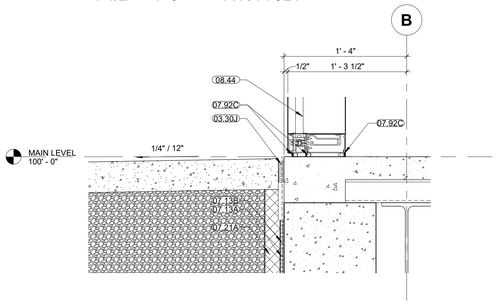


F6 PUBLIC ENTRY CANOPY @ CURTAINWALL
1 1/2" = 1'-0" A4 / A-321

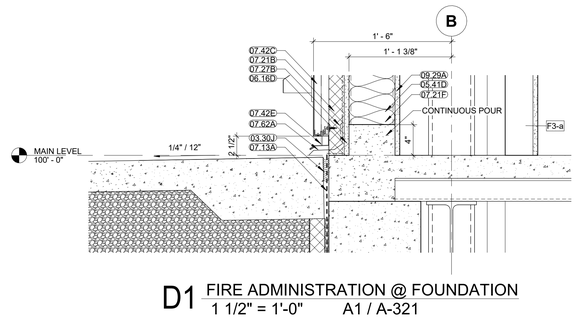


F1 PUBLIC ENTRY CANOPY @ METAL PANEL
1 1/2" = 1'-0" J4 / A-103

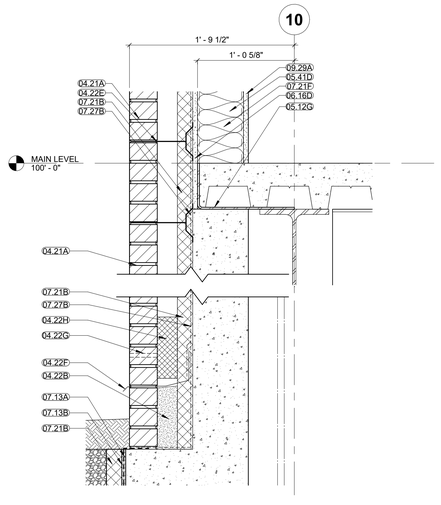
D10 FIRE ADMINISTRATION @ WINDOW HEAD
1 1/2" = 1'-0" G4 / A-202



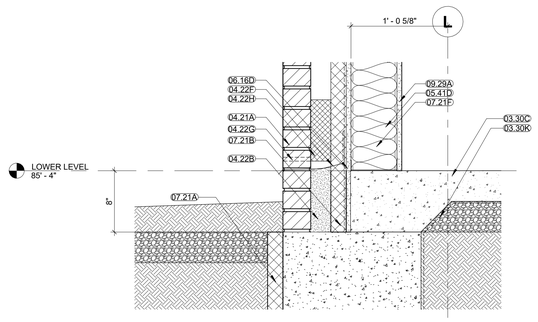
C6 LOBBY @ CURTAIN WALL
1 1/2" = 1'-0" A4 / A-321



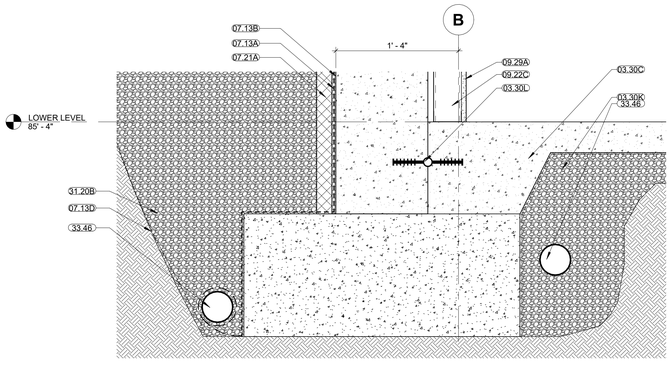
D1 FIRE ADMINISTRATION @ FOUNDATION
1 1/2" = 1'-0" A1 / A-321



A10 FIRE ADMINISTRATION @ FOUNDATION
1 1/2" = 1'-0" A9 / A-321



A6 FIRE ADMINISTRATION SECTION
1 1/2" = 1'-0" G4 / A-202



A1 LOBBY @ METAL PANEL
1 1/2" = 1'-0" A1 / A-321

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT.)
03.30K	UNDER-SLAB VAPOR RETARDER
03.30L	PVC WATER STOP
04.21A	FACE BRICK
04.22B	GROUT SOLID - MASONRY CELLS
04.22E	TIES AND ANCHORS
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
04.22G	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12D	STEEL ANGLE
05.12E	STEEL PLATE
05.12F	STEEL TUBE
05.12G	STEEL BENT PLATE
05.31A	STEEL ROOF DECK
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
06.10E	WOOD BLOCKING, AS REQUIRED
06.16A	1/2-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
06.40N	SOLID-SURFACING-MATERIAL COUNTERTOP
07.13A	SELF-ADHEARING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIX DRAINAGE SYSTEM
07.13D	FILTER FABRIC
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21E	3-1/2-INCH THERMAL BATT INSULATION
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.54E	RIGID ROOF INSULATION
07.54H	ROOFING COVER BOARD
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SILL FLASHING
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.51A	ACOUSTICAL PANEL CEILING W/ EXPOSED GRID
12.24A	ROLLER WINDOW SHADE - SINGLE SHADE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL
31.20B	GRANULAR FILL
33.46	FOUNDATION DRAINAGE

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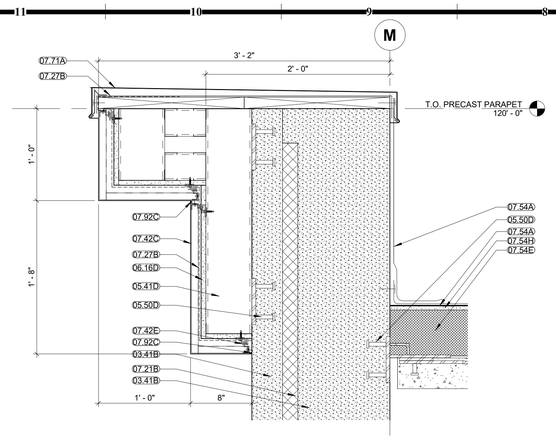
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
11/1/24

PROFESSIONAL SEAL

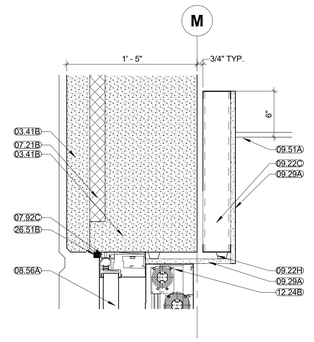
A-501

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

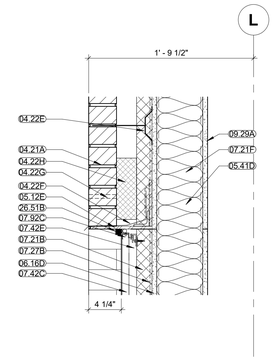
EXTERIOR SECTION DETAILS



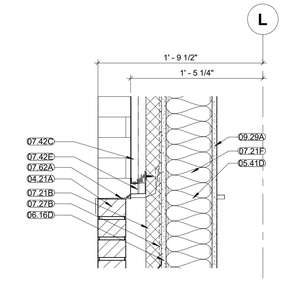
H8 HARDENED STRUCTURE @ COPING
1 1/2" = 1'-0" G7 / A-202



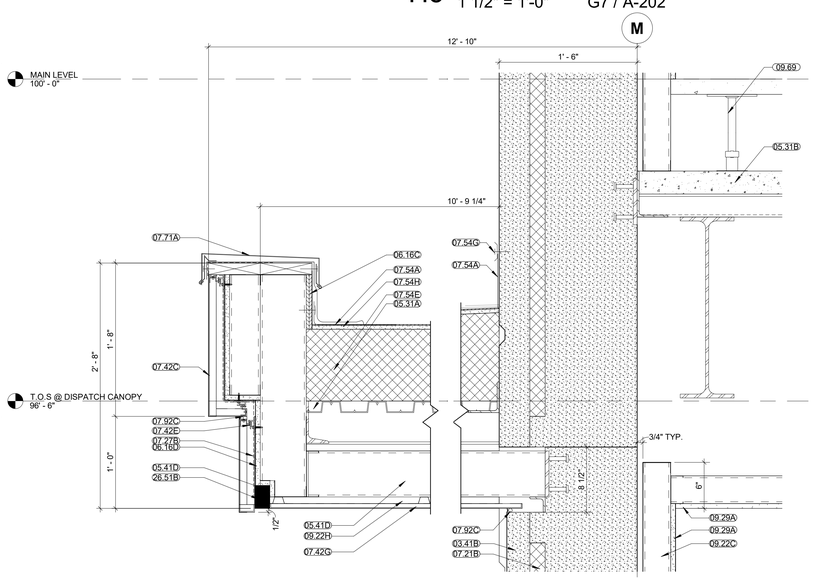
H5 HARDENED STRUCTURE @ WINDOW HEAD
1 1/2" = 1'-0" G7 / A-202



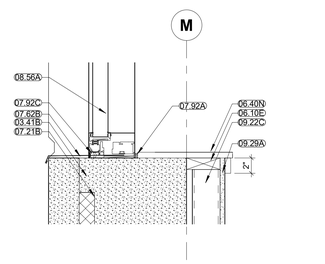
H3 MASONRY LINTEL @ METAL PANEL
1 1/2" = 1'-0" A1 / A-322



H1 METAL PANEL SILL @ MASONRY
1 1/2" = 1'-0" A1 / A-322



D8 HARDENED STRUCTURE @ CANOPY
1 1/2" = 1'-0" J4 / A-103



F4 HARDENED STRUCTURE @ WINDOW SILL
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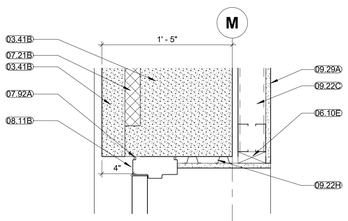
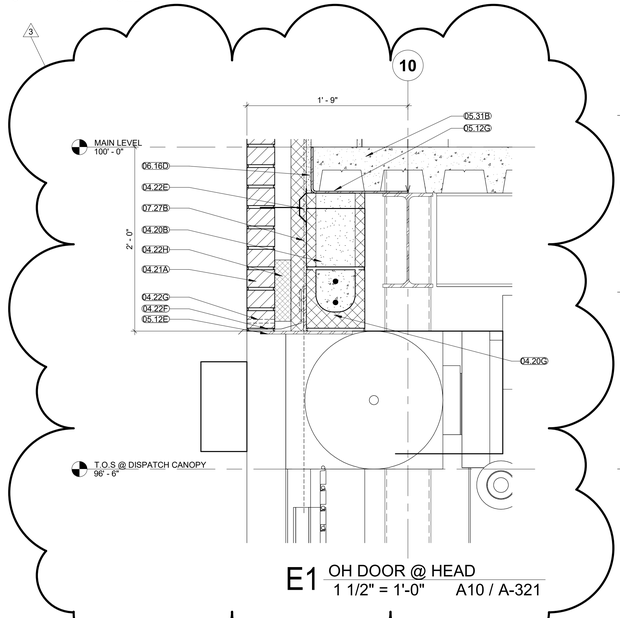
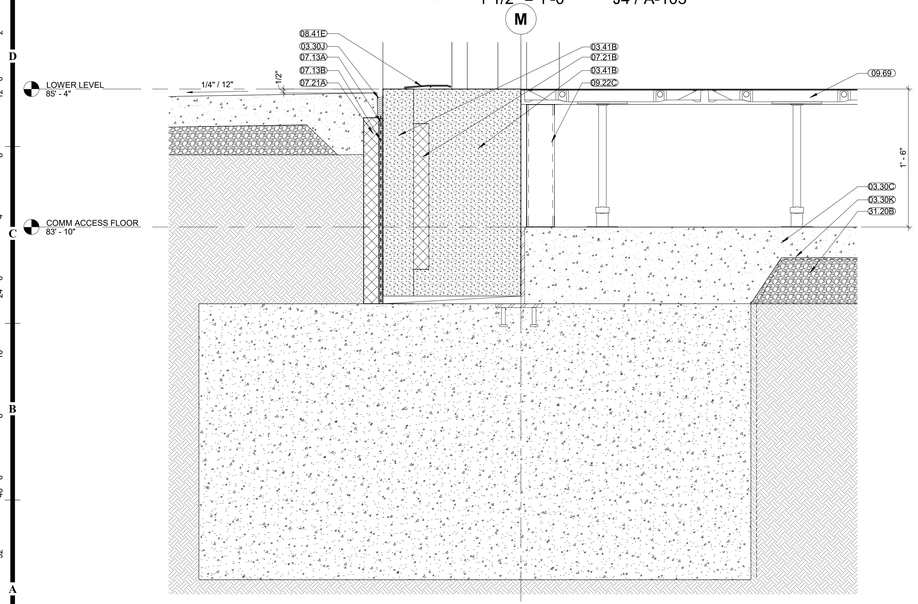


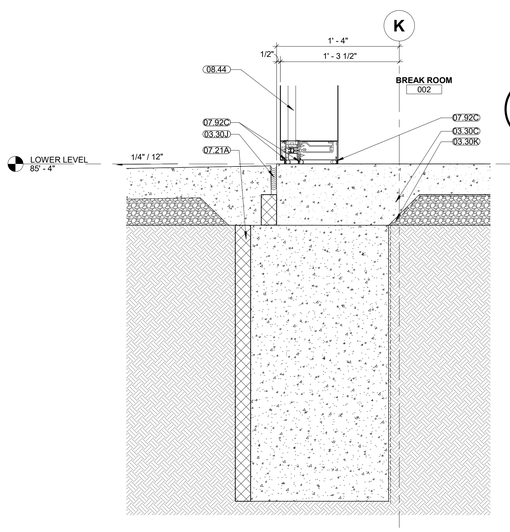
E4 HM HEAD AT HARDENED STRUCTURE
1 1/2" = 1'-0" A1 / A-323



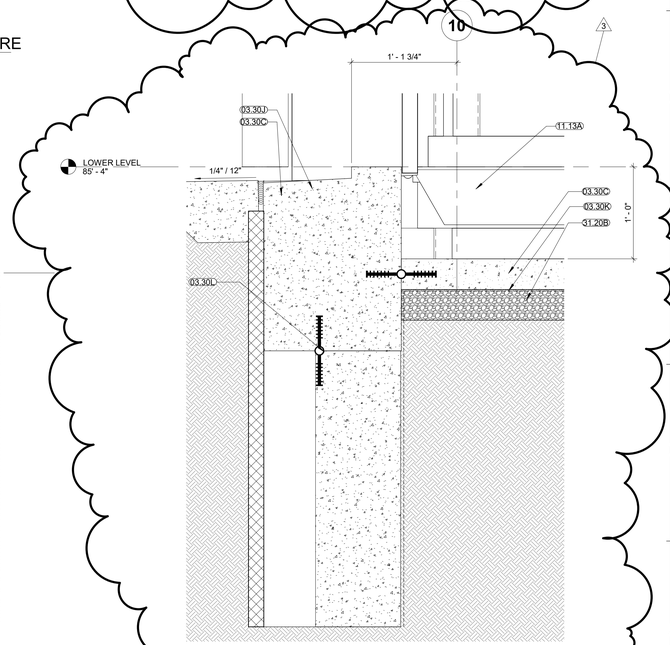
E1 OH DOOR @ HEAD
1 1/2" = 1'-0" A10 / A-321



A8 HARDENED STRUCTURE @ FOUNDATION
1 1/2" = 1'-0" A1 / A-323



A4 STAFF ENTRY @ CURTAIN WALL
1 1/2" = 1'-0" A4 / A-322



A1 OH DOOR @ BASE
1 1/2" = 1'-0" A10 / A-321

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT)
03.30K	UNDER-SLAB VAPOR RETARDER
03.30L	PVC WATER STOP
03.41B	PRECAST CONCRETE WALL
04.20B	CONCRETE MASONRY UNIT (CMU) - 3 5/8 INCH
04.20G	CONCRETE MASONRY UNIT (CMU) BOND BEAM GROUTED FULL
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
04.22G	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12E	STEEL PLATE
05.12G	STEEL BENT PLATE
05.31A	STEEL ROOF DECK
05.31B	COMPOSITE FLOOR DECK
05.41D	EXTERIOR NON-LOAD-BEARING MTL C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE/ PLATE
06.10E	WOOD BLOCKING, AS REQUIRED
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
06.40N	SOLID-SURFACING-MATERIAL COUNTERTOP
07.13A	SELF-ADHEARING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIX DRAINAGE SYSTEM
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.54E	RIGID ROOF INSULATION
07.54G	CONT. METAL TERMINATION BAR
07.54H	ROOFING COVER BOARD
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SILL FLASHING
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.11B	HOLLOW METAL FRAME
08.41E	ALUMINUM THRESHOLD
08.44	GLAZED ALUMINUM CURTAIN WALL
08.56A	WIND AND IMPACT SECURITY WINDOWS
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.51A	ACOUSTICAL PANEL CEILING W/ EXPOSED GRID
09.69	ACCESS FLOORING
11.13A	LOADING DOCK LIFT
12.24B	ROLLER WINDOW SHADE - DOUBLE SHADE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL
31.20B	GRANULAR FILL

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM 3	11/18/2024

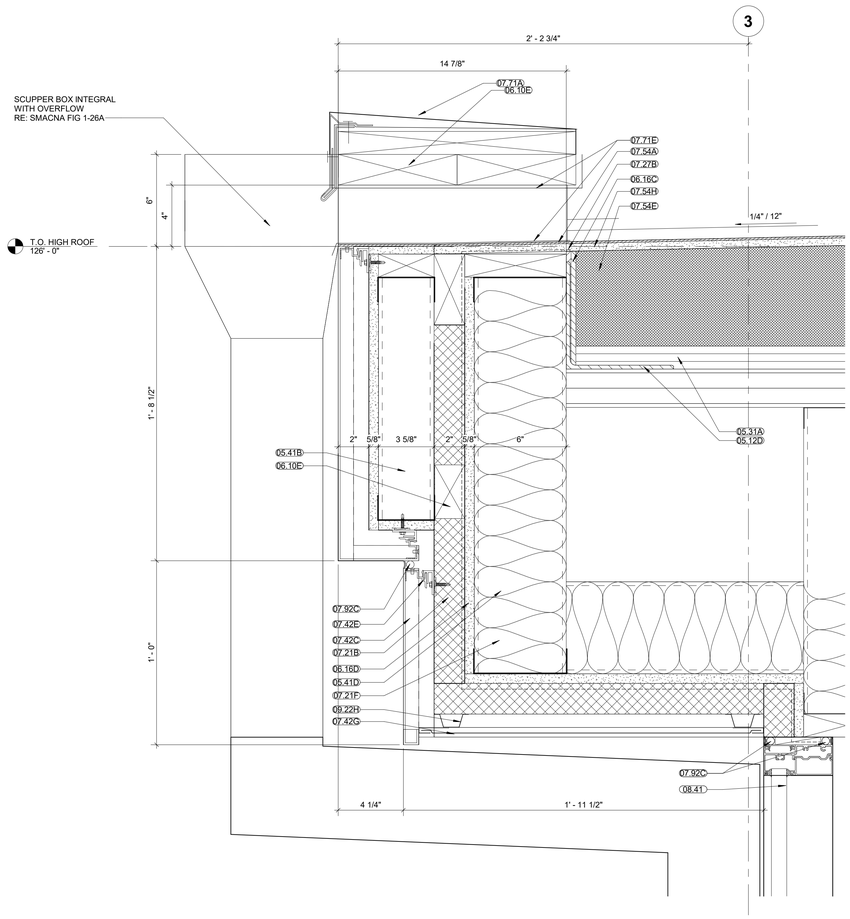
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

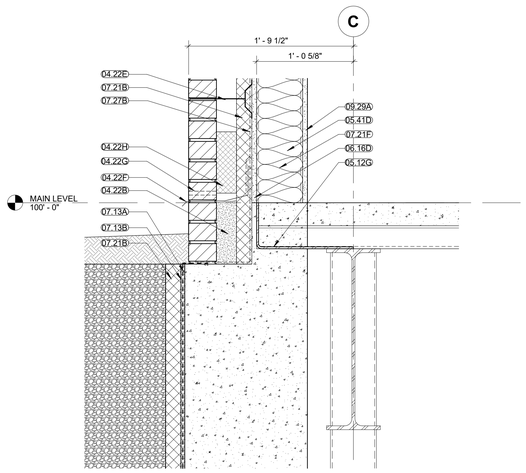
A-502

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

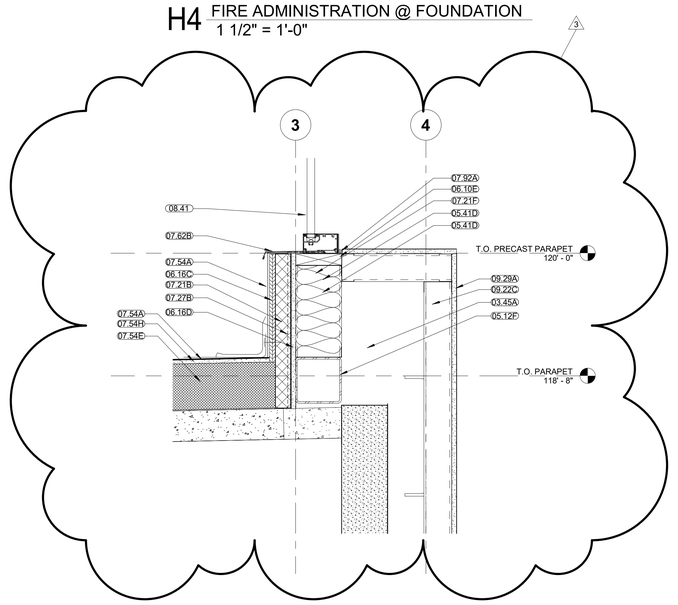
EXTERIOR SECTION DETAILS



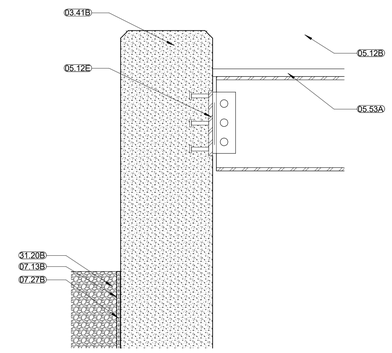
E8 ROOF FASCIA SCUPPER DETAIL ENLARGE
3" = 1'-0" A1 / A-103



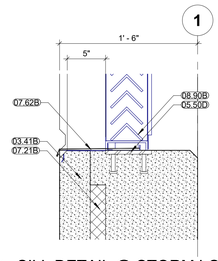
H4 FIRE ADMINISTRATION @ FOUNDATION
1 1/2" = 1'-0"



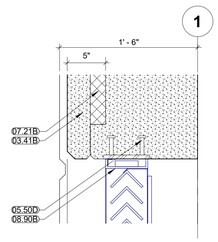
E4 PARAPET @ PRECAST
1 1/2" = 1'-0" A9 / A-322



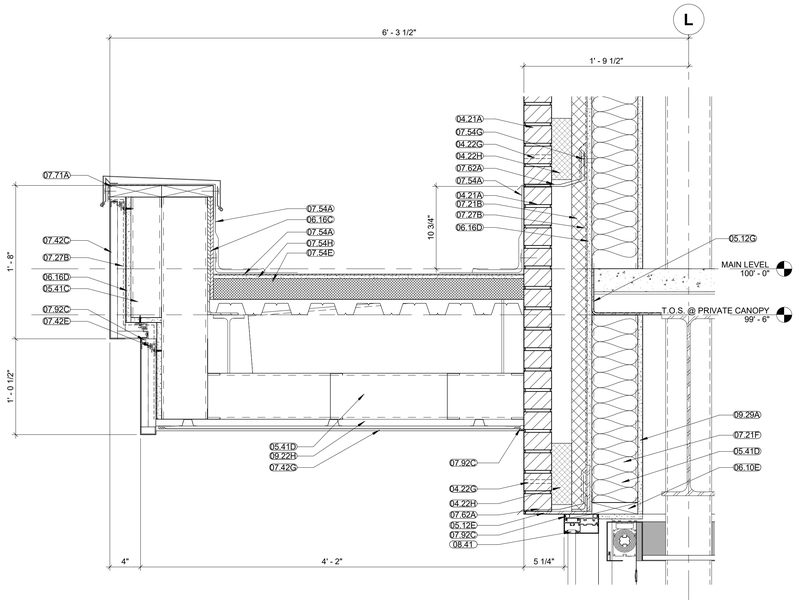
H1 METAL GRATE DETAIL
1 1/2" = 1'-0"



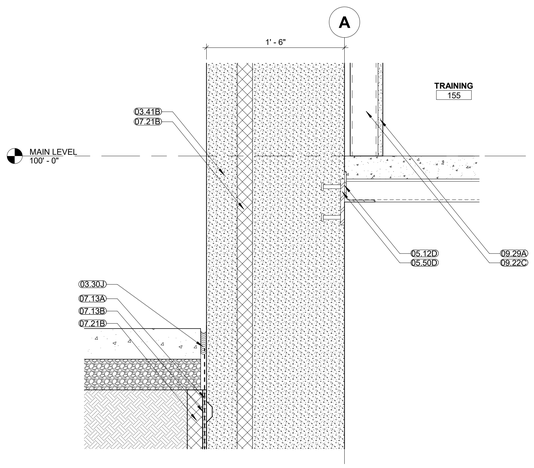
G1 SILL DETAIL @ STORM LOUVER
1 1/2" = 1'-0" A7 / A-323



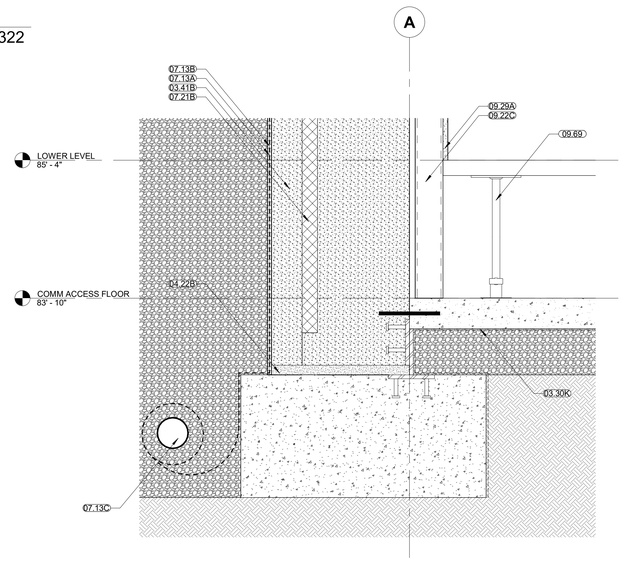
E1 HEAD DETAIL @ STORM LOUVER
1 1/2" = 1'-0" A7 / A-323



A8 ENTRY CANOPY @ MASONRY
1 1/2" = 1'-0"



A4 HARDENED STRUCTURE @ FLOOR LINE
1 1/2" = 1'-0" A10 / A-323



A1 HARDENED STRUCTURE BASEMENT FOUNDATION
1 1/2" = 1'-0" A10 / A-323

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5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30J	1/2-INCH COMPRESSIBLE JOINT FILLER (HOLD DOWN TOP 1/2-INCH - FILL W/ SEALANT.)
03.30K	UNDER-SLAB VAPOR RETARDER
03.41B	PRECAST CONCRETE WALL
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.21A	FACE BRICK
04.22B	GROUT SOLID - MASONRY CELLS
04.22E	TIES AND ANCHORS
04.22F	THROUGH-WALL MEMBRANE FLASHING WITH METAL DRIP EDGE
04.22G	WEEP VENTS @ 24-INCH O.C.
04.22H	CAVITY DRAINAGE MATERIAL (MORTAR NET)
05.12B	STEEL BEAM
05.12D	STEEL ANGLE
05.12E	STEEL PLATE
05.12F	STEEL TUBE
05.12G	STEEL BENT PLATE
05.31A	STEEL ROOF DECK
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE/ PLATE
05.53A	METAL GRATING
06.10E	WOOD BLOCKING, AS REQUIRED
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.13A	SELF-ADHEARING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIX DRAINAGE SYSTEM
07.13C	FOUNDATION DRAIN SYSTEM
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.42G	METAL WOOD LOOK SOFFIT PANEL - VENTED
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.54E	RIGID ROOF INSULATION
07.54G	CONT. METAL TERMINATION BAR
07.54H	ROOFING COVER BOARD
07.62A	PREFINISHED SHEET METAL FLASHING
07.62B	PREFINISHED METAL SILL FLASHING
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
07.71E	PREFINISHED METAL SCUPPER
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.90B	METAL LOUVER
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.69	ACCESS FLOORING
31.20B	GRANULAR FILL

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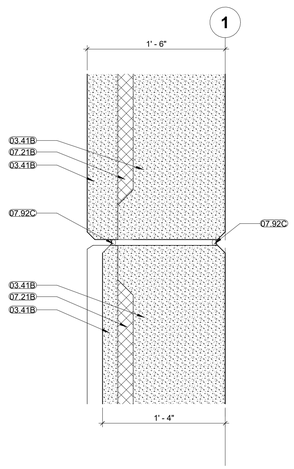
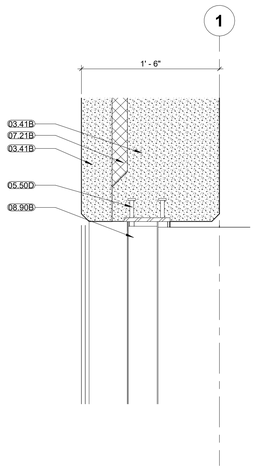
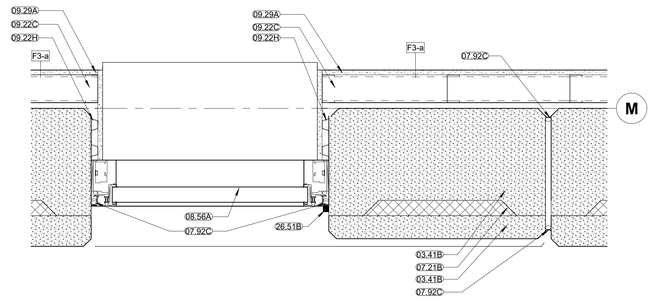
EXTERIOR SECTION DETAILS



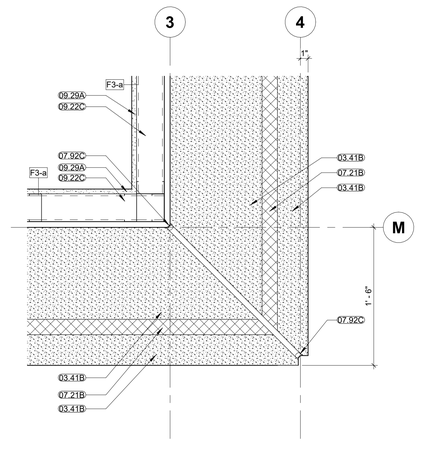
G10 JOINT @ INSET PRECAST PANEL
1 1/2" = 1'-0" A1 / A-102



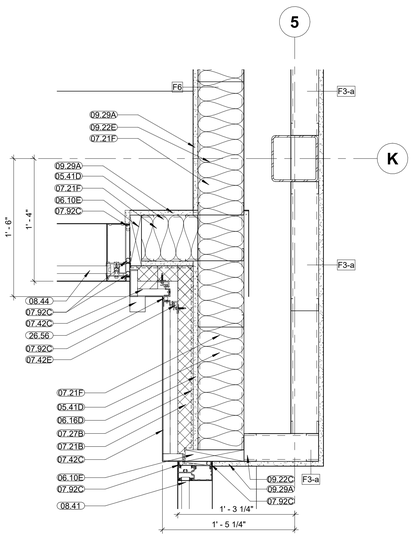
G8 LOUVER @ PRECAST
1 1/2" = 1'-0" A1 / A-102



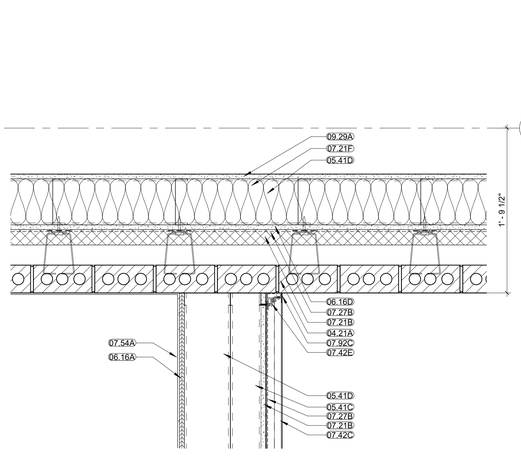
G4 WINDOW @ PRECAST
1 1/2" = 1'-0" A1 / A-102



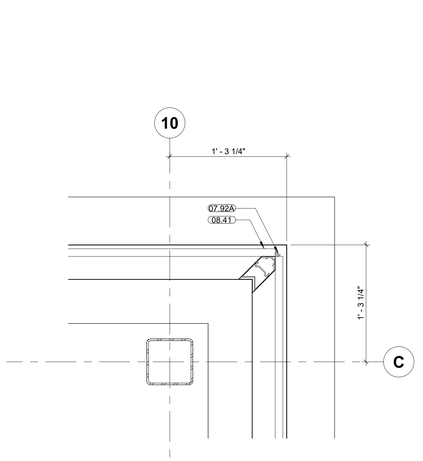
G1 TYP PRECAST CORNER
1 1/2" = 1'-0" A1 / A-101



D10 CURTAIN WALL @ INSET METAL PANEL
1 1/2" = 1'-0" A1 / A-102



D7 STAFF CANOPY @ BRICK
1 1/2" = 1'-0" A1 / A-102



D4 TYP STOREFRONT CORNER
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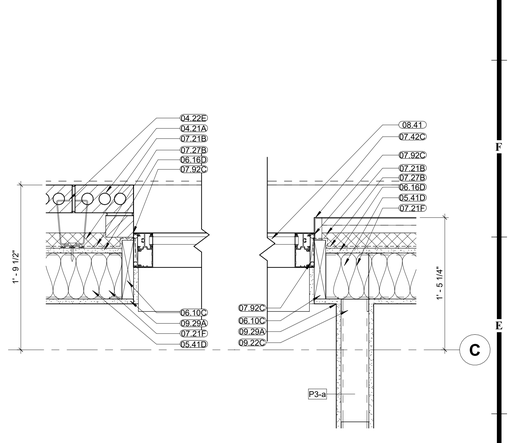

D1 TYP STOREFRONT
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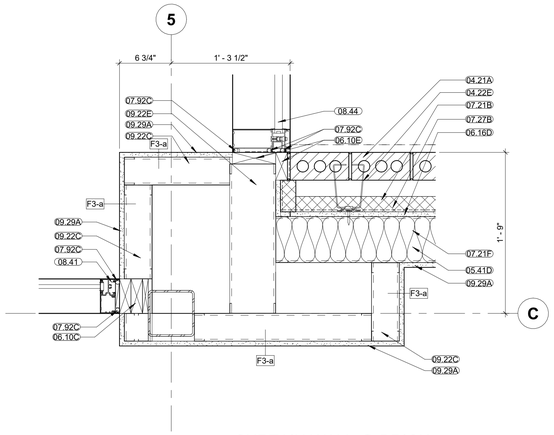
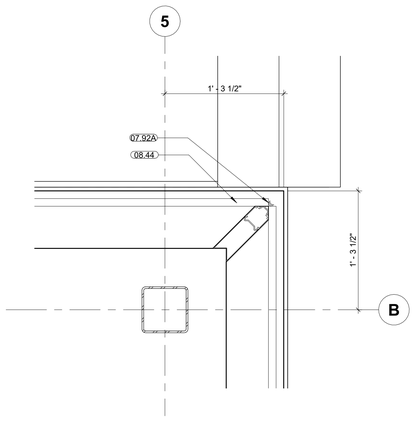
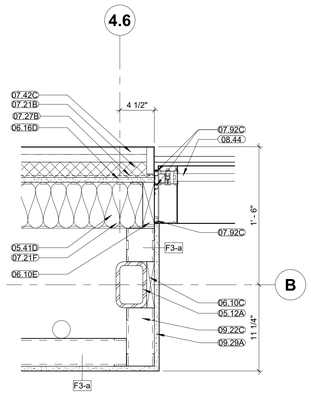


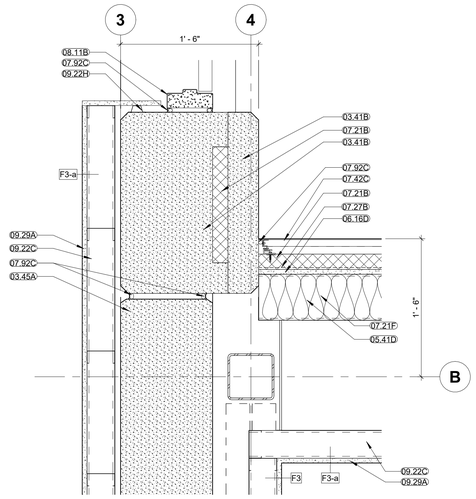
A10 CURTAIN WALL @ BRICK
1 1/2" = 1'-0" A1 / A-102



A7 CURTAIN WALL EXTERIOR CORNER
1 1/2" = 1'-0" A1 / A-102



A4 CURTAIN WALL @ METAL PANEL
1 1/2" = 1'-0" A1 / A-102



A1 STORM SHELTER @ METAL PANEL
1 1/2" = 1'-0" A1 / A-102

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.41B	PRECAST CONCRETE WALL
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
05.12A	STEEL COLUMN
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE/ PLATE
06.10C	FIRE-RETARDENT-TREATED WOOD BLOCKING, CONTINUOUS
06.10E	WOOD BLOCKING, AS REQUIRED
06.16A	1/2-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.42E	CONCEALED WALL PANEL FASTENERS
07.54A	THERMOPLASTIC POLYOLEFIN (TPO) ROOFING SYSTEM
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.11B	HOLLOW METAL FRAME
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
08.56A	WIND AND IMPACT SECURITY WINDOWS
08.90B	METAL LOUVER
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22E	6-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL
26.56	EXTERIOR LIGHT FIXTURE

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LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

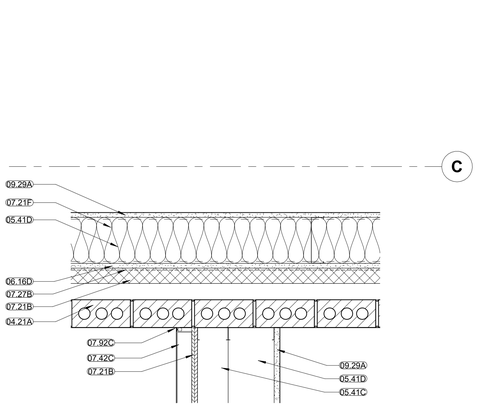
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

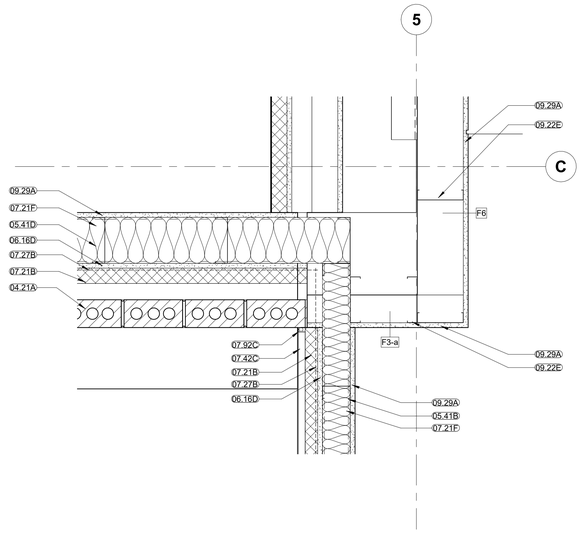
A-521

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

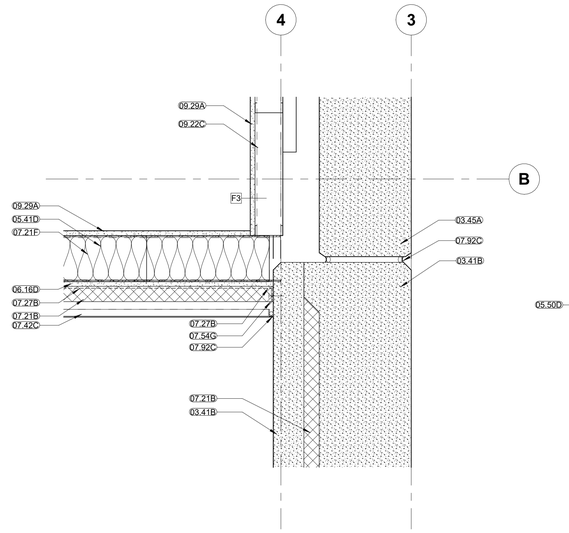
EXTERIOR PLAN DETAILS



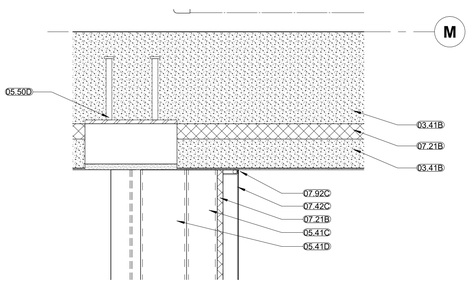
G10 CANOPY @ BRICK
1 1/2" = 1'-0" G1 / A-453



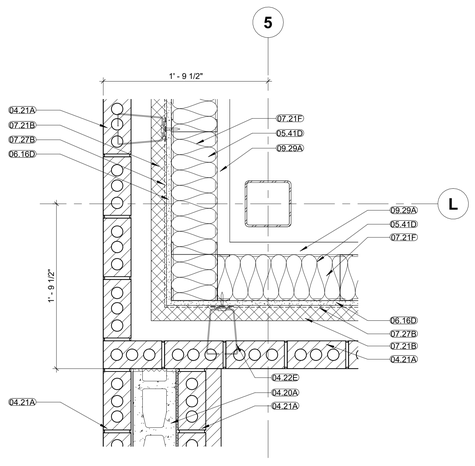
G7 METAL PANEL/BRICK CORNER HIGH
1 1/2" = 1'-0" G1 / A-453



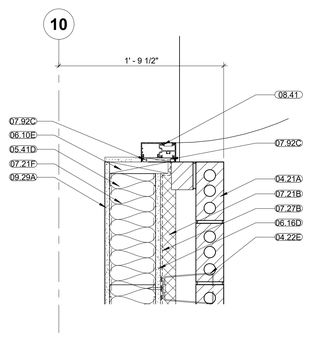
G4 COPING @ METAL PANEL
1 1/2" = 1'-0" J4 / A-103



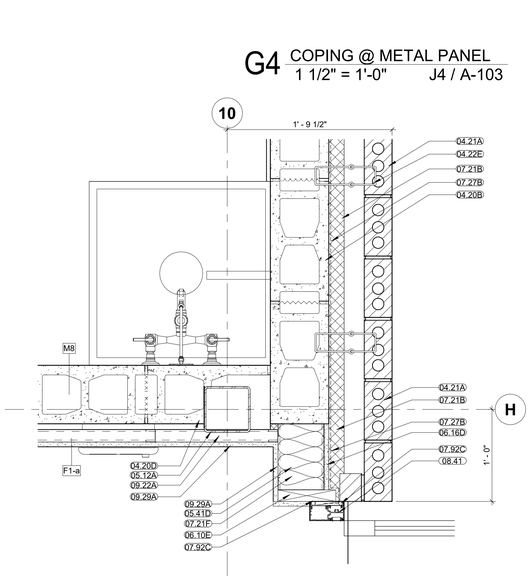
G1 CANOPY @ PRECAST
1 1/2" = 1'-0" A1 / A-102



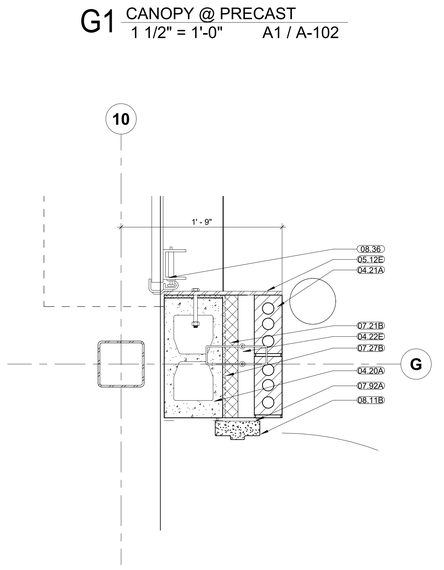
D10 BRICK CORNER @ STAFFF PATIO
1 1/2" = 1'-0" A1 / A-101



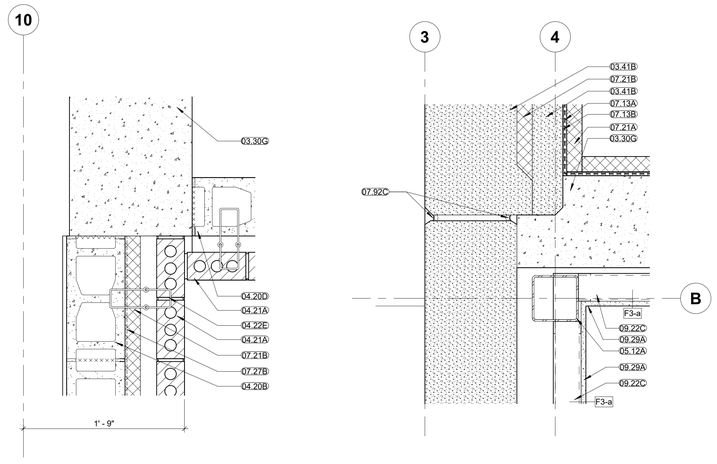
D7 STOREFRONT DOOR JAMB
1 1/2" = 1'-0" A1 / A-101



D4 CMU/METAL STUD
1 1/2" = 1'-0" A1 / A-101

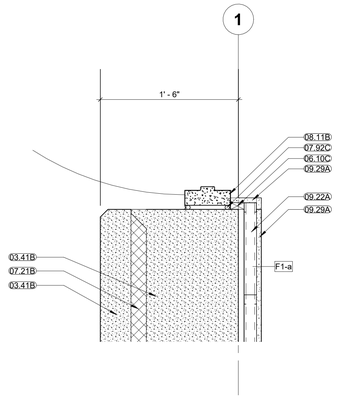


D1 OH DOOR JAMB @ CMU/BRICK
1 1/2" = 1'-0" A1 / A-101

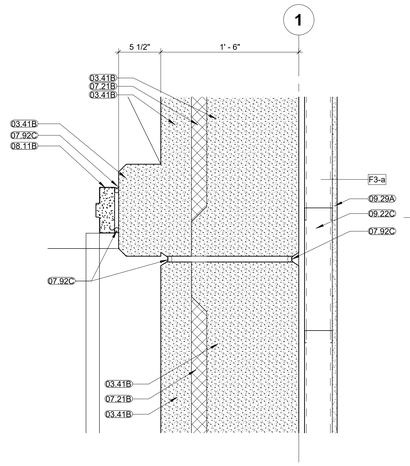


A11 CMU/CONCRETE FOUNTATION WALL
1 1/2" = 1'-0" A1 / A-101

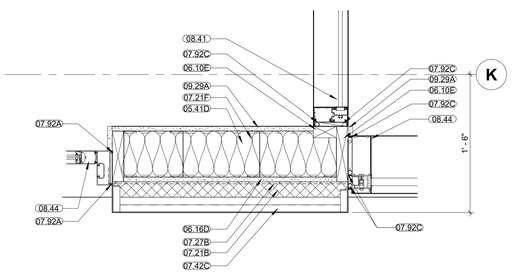
A8 FOUNDATION WALL @ PRECAST
1 1/2" = 1'-0" A1 / A-101



A6 HM DOOR @ PRECAST
1 1/2" = 1'-0" A1 / A-101



A4 HM DOOR @ PRECAST ENCLOSURE
1 1/2" = 1'-0" A1 / A-101



A1 CURTAIN WALL @ STAFF ENTRY
1 1/2" = 1'-0" A1 / A-101

GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
5. PAINT ALL EXPOSED STEEL, INCLUDING STEEL LINTELS, ETC. (TYP.)

MATERIAL KEYNOTES

03.30G	CONCRETE WALL
03.41B	PRECAST CONCRETE WALL
03.45A	PRECAST ARCHITECTURAL CONCRETE
04.20A	CONCRETE MASONRY UNIT (CMU)
04.20B	CONCRETE MASONRY UNIT (CMU) - 3 5/8 INCH
04.20D	CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH
04.21A	FACE BRICK
04.22E	TIES AND ANCHORS
05.12A	STEEL COLUMN
05.12E	STEEL PLATE
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41C	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 4-INCH - RE: STRUCT. FOR SPACING
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
05.50D	STEEL EMBED ANGLE/ PLATE
06.10C	FIRE-RETARDENT-TREATED WOOD BLOCKING, CONTINUOUS
06.10E	WOOD BLOCKING, AS REQUIRED
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.13A	SELF-ADHEARING SHEET WATERPROOFING MEMBRANE
07.13B	MATRIX DRAINAGE SYSTEM
07.21A	2-INCH RIGID PERIMETER SLAB-ON-GRADE INSULATION
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.42C	METAL-FACED COMPOSITE WALL PANELS
07.54G	CONT. METAL TERMINATION BAR
07.92A	JOINT SEALANT
07.92C	BACKER ROD AND SEALANT
08.11B	HOLLOW METAL FRAME
08.36	SECTIONAL DOOR
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
08.44	GLAZED ALUMINUM CURTAIN WALL
09.22A	1 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22E	6-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

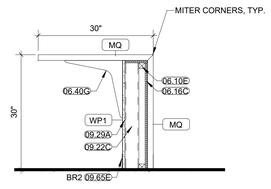
REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
PROFESSIONAL SEAL

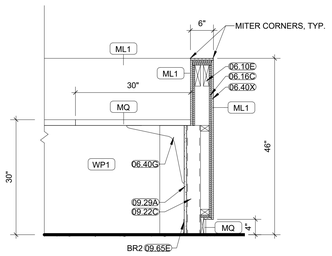
A-522

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

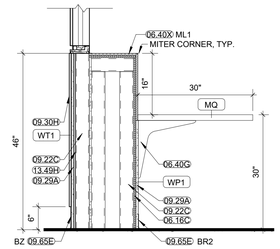
EXTERIOR PLAN DETAILS



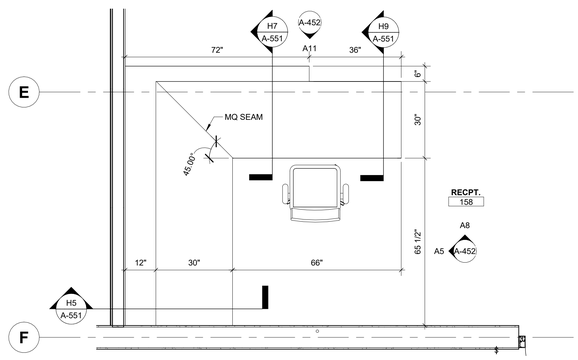
H9 RECEPTION DESK, LOW
3/4" = 1'-0"



H7 RECEPTION DESK SECTION, HIGH
3/4" = 1'-0"



H5 RECEPTION DESK SECTION
3/4" = 1'-0"



NORTH

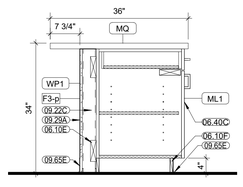
H1 158 RECPT - DESK
1/2" = 1'-0"

GENERAL NOTES - CASEWORK

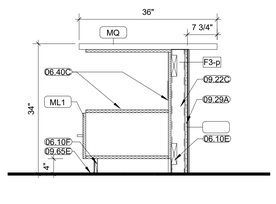
1. RE: FINISH LEGEND AND FINISH SCHEDULE FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
2. ALL MILLWORK/ CASEWORK CONSTRUCTION SHALL MEET AWI PREMIUM STANDARDS, UNLESS NOTED OR SPECIFIED OTHERWISE.
3. ALL EXPOSED MILLWORK/ CASEWORK SURFACES SHALL BE FINISHED W/ PLASTIC LAMINATE TO MATCH ADJACENT PLASTIC LAMINATE SURFACES, UNLESS NOTED OTHERWISE.
4. ALL CASEWORK INTERIORS SHALL BE WHITE MELAMINE, UNLESS NOTED OTHERWISE.
5. ALL FILLER PANELS SHALL BE 1-1/2 INCH WIDE MINIMUM, FINISHED TO MATCH ADJACENT FINISH SURFACES, AND SCRIBED TO FIT ADJACENT WALL, UNLESS NOTED OTHERWISE.
6. ALL BACKSPLASH FINISHES SHALL MATCH COUNTERTOP MATERIAL AND FINISH, UNLESS NOTED OTHERWISE. PLASTIC LAMINATE SIDE/BACKSPLASHES TO HAVE SELF EDGE LAMINATE, UNLESS NOTED OTHERWISE.
7. CONTRACTOR SHALL APPLY CLEAR MILDEW RESISTANT SILICONE SEALANT WHERE BACKSPLASH MEETS WALL AND COUNTERTOP.
8. THE UNDERSIDE OF COUNTERTOPS WITH KNEE OPENINGS, MUST HAVE A WHITE MELAMINE FINISH, UNLESS NOTED OTHERWISE.
9. WATER AND SUPPLY DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OF ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.
10. SOLID SURFACE COUNTERTOPS TO HAVE EASED EDGES, TYPICAL.
11. CONTRACTOR SHALL PROVIDE LOCKS AT ALL CABINET DOORS AND DRAWERS AS INDICATED.
12. RE: SHEET A-451 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
13. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO MILLWORK / CASEWORK FABRICATION & INSTALLATION.
14. COUNTERTOP BRACKETS TO BE PAINTED TO MATCH ADJACENT SURFACE, TYPICAL. AT ALL LOCATIONS WHERE OCCURS.
15. MECH. & ELEC. SYMBOLS AND OUTLETS ARE SHOWN FOR REFERENCE ONLY. COORDINATE LOCATIONS WITH MEP DRAWINGS. CONSULT ARCHITECT FOR CLARIFICATION, IF NECESSARY.
16. RE: SHEET A\501 FOR WALL BASE DETAILS.

MATERIAL KEYNOTES

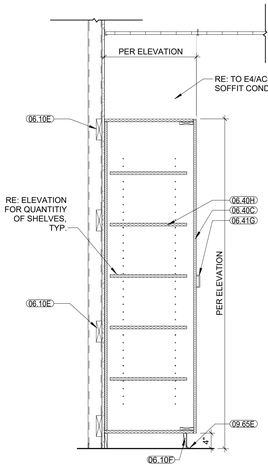
05.12F	STEEL TUBE
06.10E	WOOD BLOCKING, AS REQUIRED
06.10F	WOOD SHIMS, AS REQUIRED
06.16C	3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING
06.40C	PLASTIC LAMINATE CASEWORK
06.40G	COUNTER BRACKET
06.40H	SHELF
06.40L	LOCKABLE DRAWER AND/ OR DOOR, AS INDICATED
06.40N	SOLID-SURFACING-MATERIAL COUNTERTOP
06.40V	SOLID SURFACE BACKSPLASH
06.40X	PLASTIC LAMINATE OVER PARTICLE BOARD
06.41G	DOOR AND DRAWER PULL RE: FINISH SCHEDULE
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22T	METAL STRAPING 18 GAUGE
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.30H	PORCELAIN TILE
09.65E	BASE RE: FINISH SCHEDULE
13.49H	UL STANDARD 752, LEVEL III BULLET RESISTANT ARMOR PANEL



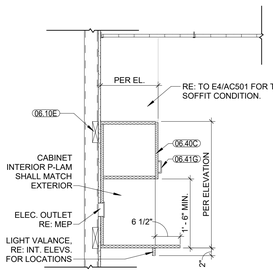
E9 108 COPY/WORK ISLAND SECTION
3/4" = 1'-0"



E7 002 BREAK ROOM ISLAND SECTION
3/4" = 1'-0"



TYPE T1 - CASEWORK SECTION
3/4" = 1'-0"



TYPE W4 - CASEWORK SECTION
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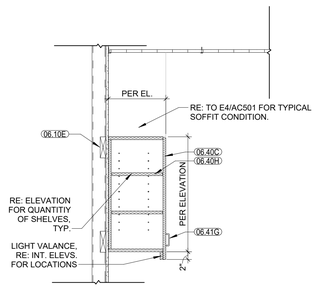
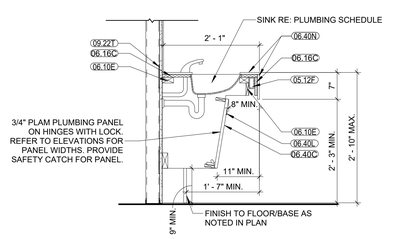
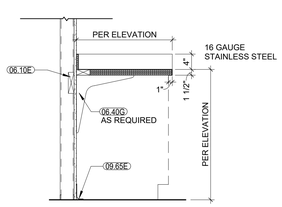


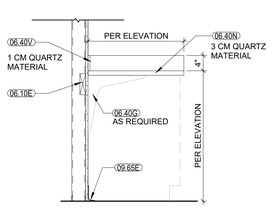
TYPE W1,W2,W3 - CASEWORK SECTION
3/4" = 1'-0"



TYPE A1B - HINGED - CASEWORK SECTION
3/4" = 1'-0"



TYPE C4 - CASEWORK SECTION
3/4" = 1'-0"



TYPE C3 - CASEWORK SECTION
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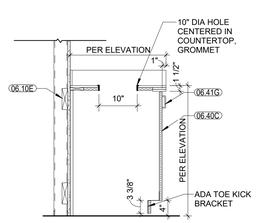

TYPE B23T - CASEWORK SECTION
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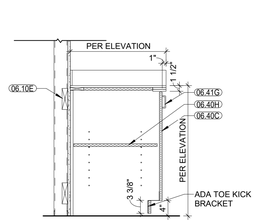
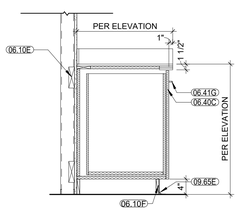
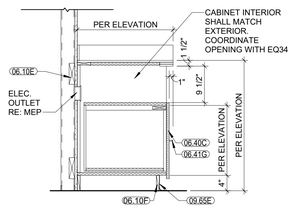


TYPE B23 - CASEWORK SECTION
3/4" = 1'-0"



TYPE B21 - CASEWORK SECTION
3/4" = 1'-0"



TYPE B18-O - CASEWORK SECTION
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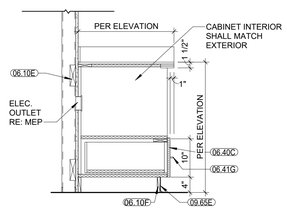

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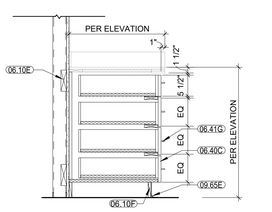

TYPE B8 - CASEWORK SECTION
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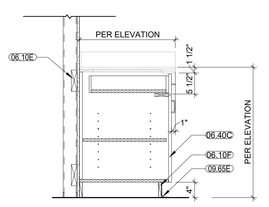

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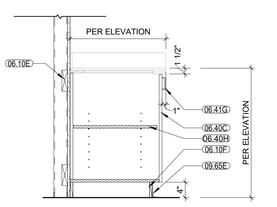

TYPE B1 - CASEWORK SECTION
3/4" = 1'-0"

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

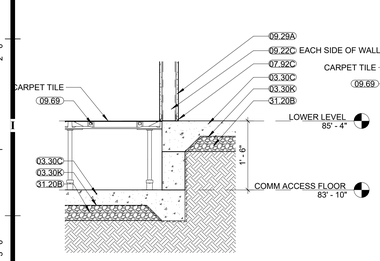
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

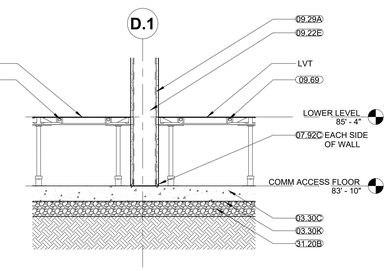
A-551

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

CASEWORK DETAILS



H11 TYP. RAISED ACCESS FLOOR
3/4" = 1'-0"



H9 TYP. RAISED ACCESS FLOOR
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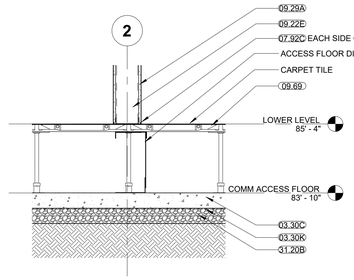
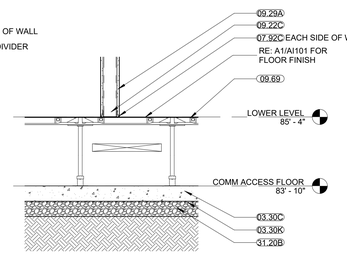
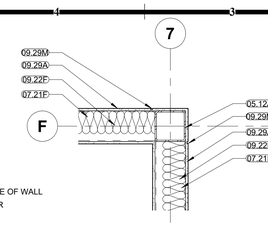


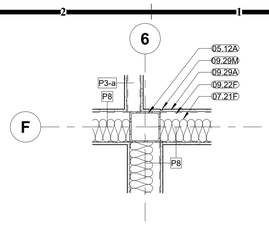
H7 TYP. RAISED ACCESS FLOOR DIVIDER
3/4" = 1'-0"



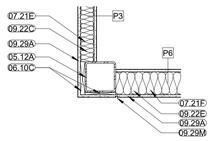
H5 TYP. RAISED ACCESS FLOOR
3/4" = 1'-0"



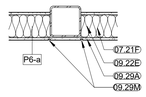
J3 TYP. COLUMN IN WALL
3/4" = 1'-0"



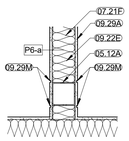
J1 TYP. COLUMN IN WALL
3/4" = 1'-0"



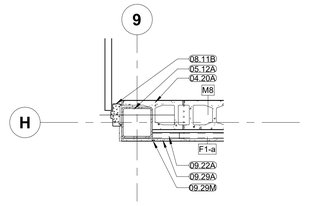
H3 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-101



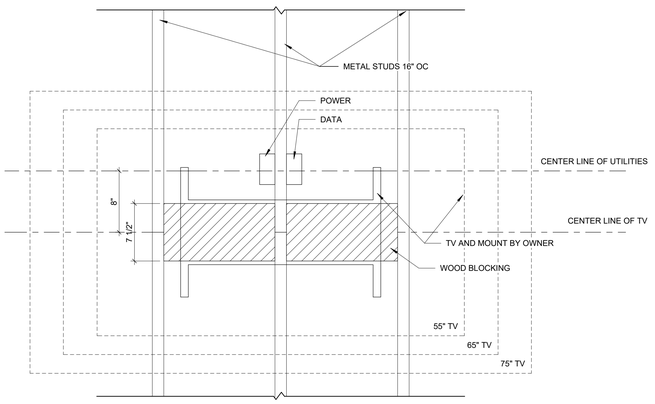
H1 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-101



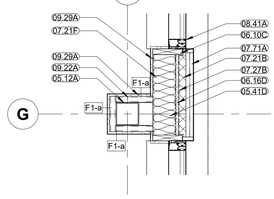
G3 TYP. IN WALL COLUMN
3/4" = 1'-0" A1 / A-102



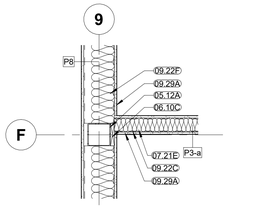
G1 COLUMN @ CMU WALL
3/4" = 1'-0" A1 / A-101



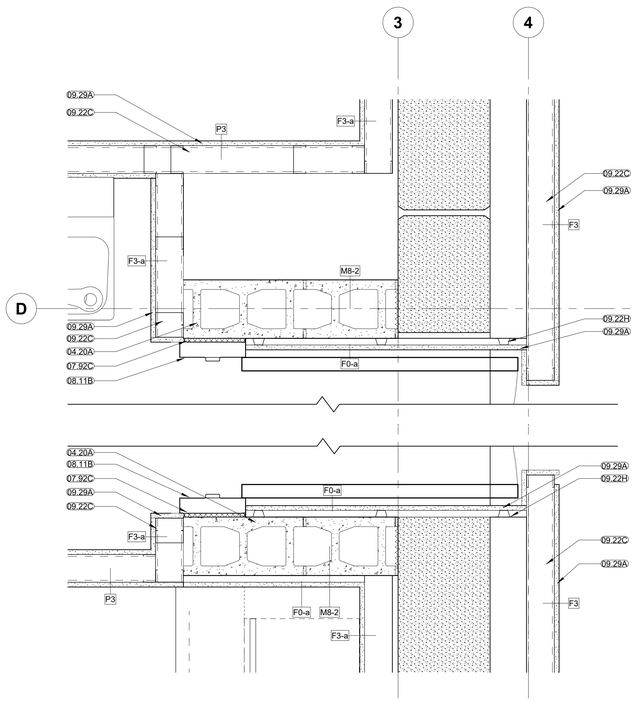
E5 TYPICAL TV BLOCKING
1 1/2" = 1'-0"



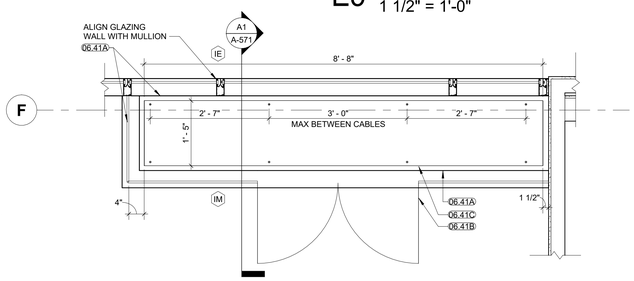
E3 COLUMN @ EXTERIOR WALL
3/4" = 1'-0" A1 / A-102



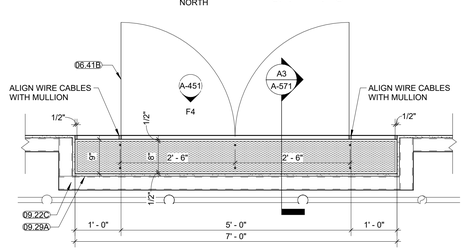
E1 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-102



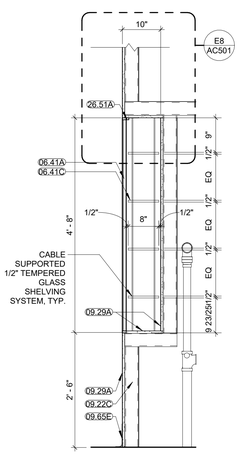
A9 STORM SHELTER DOOR
1 1/2" = 1'-0"



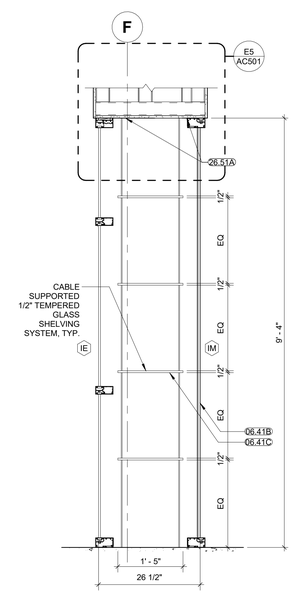
C5 LOBBY DISPLAY CASE
3/4" = 1'-0"



A5 018 CORR - DISPLAY CASE
3/4" = 1'-0"



A3 018 CORRIDOR - DISPLAY CASE SECTION
3/4" = 1'-0"



A1 LOBBY DISPLAY CASE
3/4" = 1'-0"

GENERAL NOTES - FLOOR FINISH PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FINISH LEGEND, FINISH SCHEDULE, AND FLOOR FINISH PLANS FOR SPECIFIC FLOOR FINISH INFORMATION AND LOCATIONS.
3. RE: FINISH DETAILS SHEET FOR ADDITIONAL FINISH & FLOOR TRANSITION CONDITIONS.
4. FLOOR FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
5. FLOOR FINISH PATTERN SHALL BE CENTERED IN ROOM, UNLESS NOTED OTHERWISE.
6. ALIGN ALL WALL TILE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
7. ALL CLOSETS & ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FLOOR FINISHES AS ADJOINING SPACES.
8. FLOOR FINISH MATERIAL AND/OR PATTERN SHALL BE INSTALLED UNDER TOE KICKS OF CASEWORK/ MILLWORK, UNDER OPEN COUNTERTOPS, & UNDER EQUIPMENT.
9. FLOOR MATERIAL/ COLOR TRANSITIONS TO ALIGN WITH ROOM SIDE OF DOOR STOP, UNLESS NOTED OR SHOWN OTHERWISE.
10. INSTALL TRANSITION STRIPS AT ALL FLOOR FINISH MATERIAL CHANGES, UNLESS NOTED OTHERWISE.

GENERAL NOTES - WALL FINISH / WALL PROTECTION PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FINISH LEGEND & FINISH SCHEDULE FOR SPECIFIC FINISH INFORMATION & LOCATIONS.
3. RE: SHEET AI501 FOR ADDITIONAL WALL FINISH / WALL PROTECTION DETAILS.
4. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING FOR WALL PROTECTION ATTACHMENT. THIS INCLUDES, BUT IS NOT LIMITED TO: CRASH RAILS, HANDRAILS & BUMPER RAILS. RE: ROUGH CARPENTRY SPECIFICATION SECTION FOR CLARIFICATION.
5. CONTRACTOR SHALL PROVIDE MANUFACTURER'S STANDARD ACCESSORY MOLDING OR TRIM FOR WALL PROTECTION ITEMS, UNLESS NOTED OTHERWISE.
6. IF WALL IS LESS THAN 18" WIDE DO NOT PROVIDE HANDRAIL. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM THE OPEN SWING OF A DOOR. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM A CORNER GUARD. RE: SHEET AI501

GENERAL NOTES - INTERIOR FINISHES:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: AC SERIES SHEETS FOR ADDITIONAL CEILING FINISH INFORMATION.
3. RE: A-451 SERIES SHEETS FOR ADDITIONAL WALL FINISH INFORMATION.
4. RE: AI SERIES SHEETS FOR ADDITIONAL FLOOR FINISH & WALL PROTECTION INFORMATION.
5. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ROOM ON THE FINISH SCHEDULE, REFER TO THE A-451 AND AI SERIES SHEETS FOR FINISH CLARIFICATION.
6. ALL INTERIOR GYP. BD. SURFACES SHALL RECEIVE EGGSHELL/ SATIN FINISH LATEX PAINT, UNLESS NOTED OR SPECIFIED OTHERWISE.
7. INTERIOR GYP. BD. SURFACES TO RECEIVE EPOXY PAINT SHALL HAVE A SATIN FINISH, UNLESS NOTED OR SPECIFIED OTHERWISE.
8. INSTALL METAL TRANSITION STRIP WHERE WALL TILE MEETS PAINTED GYP. BD. WALL IN ALL VERTICAL AND/ OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE.
9. HOLLOW METAL FRAMES SHALL RECEIVE SEMI-GLOSS FINISH.
10. WHERE PORCELAIN OR GLASS WALL TILES OF DIFFERENT THICKNESSES MEET, ENSURE THAT THE FACES OF THE DIFFERENT TILES ARE FLUSH.

MATERIAL KEYNOTES

03.30C	CONCRETE SLAB-ON-GRADE
03.30K	UNDER-SLAB VAPOR RETARDER
04.20A	CONCRETE MASONRY UNIT (CMU)
05.12A	STEEL COLUMN
05.41D	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING
06.10C	FIRE-RETARDENT-TREATED WOOD BLOCKING, CONTINUOUS
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
06.41A	GLASS DISPAY CASE
06.41B	GLASS DISPAY CASE DOOR
06.41C	GLASS DISPAY CASE SHELF
07.21B	EXTRUDED-POLYSTYRENE BOARD INSULATION WITH TAPED AND SEALED SEAMS
07.21E	3-1/2-INCH THERMAL BATT INSULATION
07.21F	6-INCH THERMAL BATT INSULATION
07.27B	FLUID-APPLIED MEMBRANE AIR BARRIER
07.71A	PREFINISHED METAL COPING & CONT. CLEAT
07.92C	BACKER ROD AND SEALANT
08.11B	HOLLOW METAL FRAME
08.41A	ALUMINUM-FRAMED STOREFRONT SYSTEM - ENTRANCE DOORS
09.22A	1 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.22E	6-INCH METAL STUDS @ 16-INCHES O.C.
09.22F	8-INCH METAL STUDS @ 16-INCHES O.C.
09.22H	7/8-INCH HAT RIGID CHANNEL
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.29M	DRYWALL REVEAL. RE: TO FINISH LEGEND
09.65E	BASE RE: FINISH SCHEDULE
09.69	ACCESS FLOORING
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL
31.20B	GRANULAR FILL

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

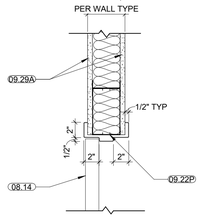
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

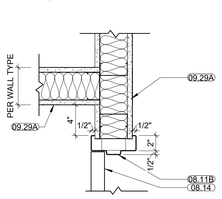
A-571

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

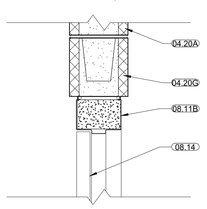
INTERIOR DETAILS



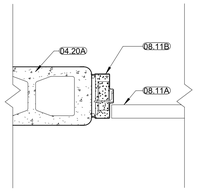
J12 HM DOOR HEAD - TYP.
1 1/2" = 1'-0"



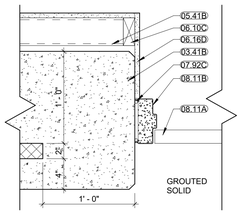
J10 HM DOOR JAMB - TYP.
1 1/2" = 1'-0"



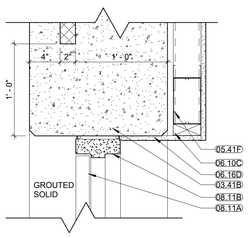
J9 HM DOOR HEAD - MASONRY
1 1/2" = 1'-0"



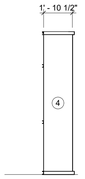
J7 HM DOOR JAMB - MASONRY
1 1/2" = 1'-0"



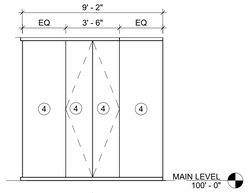
H12 HM JAMB AT PRECAST
1 1/2" = 1'-0"



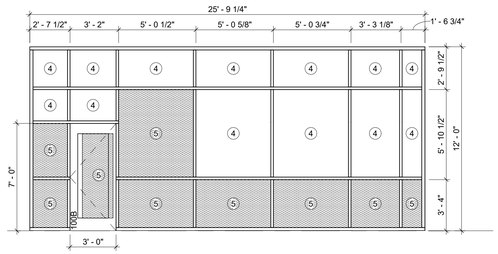
H10 HM HEAD IN PRECAST
1 1/2" = 1'-0"



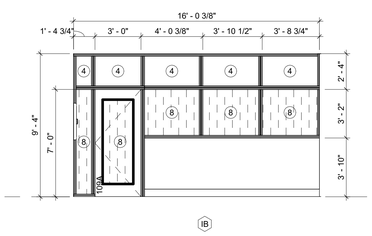
IN
STOREFRONT



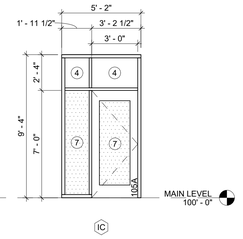
IM
STOREFRONT



IA
STOREFRONT



IB
NATURAL VOICE TRANSMISSION LEVEL III
BULLET RESISTANT FRAME



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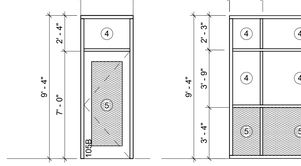

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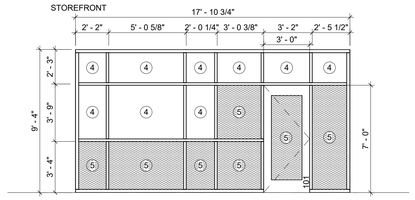

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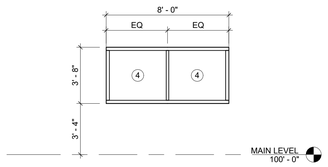
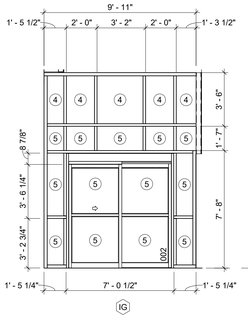
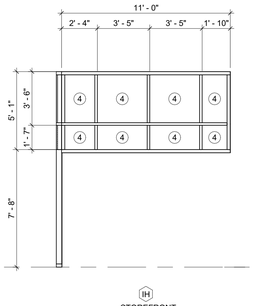


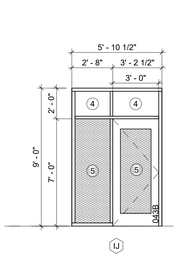
IK
STOREFRONT



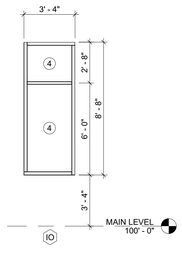
IG
CURTAINWALL



IH
STOREFRONT



IJ
STOREFRONT



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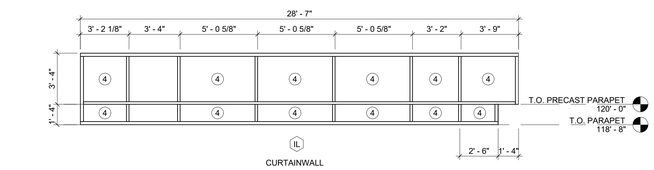
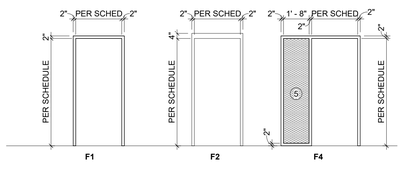
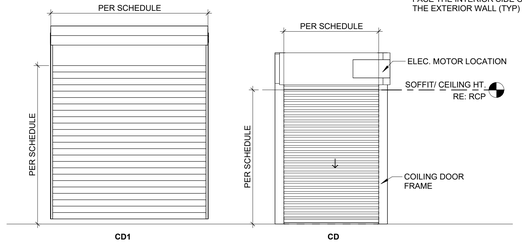


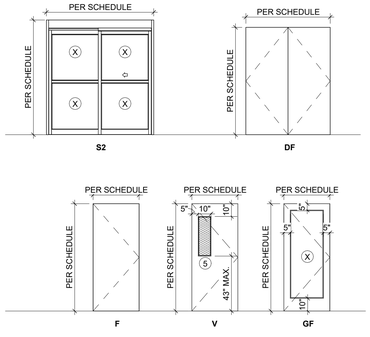
IL
CURTAINWALL



HM FRAME TYPES
1/4" = 1'-0"



PLEASE NOTE: AT ALL EXTERIOR DOORS, INSTALL DOOR TRACKS SO THEY FACE THE INTERIOR SIDE OF THE EXTERIOR WALL (TYP)



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

DOOR SCHEDULE

DOOR #	ROOM: NAME	WIDTH	HEIGHT	DOOR MATERIAL	DOOR TYPE	FRAME MATERIAL	FRAME TYPE	FIRE RATING	AAOS Project HW Set	HEAD	JAMB	REMARKS
001	VEST.	7' - 0"	7' - 5 3/4"	ALUM	S2	ALUM	B2		2.0		A1/A-522	1
002	VEST.	7' - 0"	7' - 5 3/4"	ALUM	S2	ALUM	IG		2.0			1
005	FIRE DISPATCH	3' - 0"	7' - 0"	--	F	--	F1		4.0	A4 / A-503	A6 / A-522	2
007A	QA	3' - 0"	7' - 0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
007B	QA	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
008A	FIRE SUPV	3' - 0"	7' - 0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
008B	FIRE SUPV	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
011	CORR.	3' - 0"	7' - 0"	WD	F	HM	F4		10.0	J12 / A-601	J10 / A-601	
012	W. RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
013	M. RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
014	MECH	4' - 0"	7' - 0"	WD	F	HM	F1		21.0	J12 / A-601	J10 / A-601	
015A	POLICE SUPV	3' - 0"	7' - 0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
015B	POLICE SUPV	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
016A	POLICE CAPT	3' - 0"	7' - 0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
016B	POLICE CAPT	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
017A	DISPATCH TRAINING	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
017B	DISPATCH TRAINING	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
018A	CORR.	3' - 0"	7' - 0"	--	F	--	F1		3.0	A4 / A-503	A6 / A-522	2
018B	UTILITY YARD	3' - 0"	7' - 0"	HM	F	HM	F1		5.0		A4 / A-522	2
019	CONF.	3' - 0"	7' - 0"	WD	F	HM	F4		17.0	J12 / A-601	J10 / A-601	
020	WATER	3' - 0"	7' - 0"	HM	F	HM	F1		20.0	J12 / A-601	J10 / A-601	
021	ELEC.	3' - 0"	7' - 0"	HM	F	HM	F1		24.0	J12 / A-601	J10 / A-601	
022	MEDIA	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
023	COMM STOR.	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
024	CORR.	6' - 0"	11' - 2"	ST	CD	ST	CD	90 MIN	1.0			2
025	QUIET	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
027	QUIET	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
028	QUIET	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
029	QUIET	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
030	JANITOR	3' - 0"	7' - 0"	HM	F	HM	F1		35.0	J12 / A-601	J10 / A-601	
032	CHANGING	3' - 0"	7' - 0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
033	CHANGING	3' - 0"	7' - 0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
034	CHANGING	3' - 0"	7' - 0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
036	SHOWER	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
038	ADA SHOWER	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
039A	GENERAL STORAGE	6' - 0"	8' - 0"	ST	CD1	ST			1.0			4
039B	GENERAL STORAGE	3' - 0"	7' - 0"	HM	F	HM	F1		18.0	J12 / A-601	J10 / A-601	
039C	GENERAL STORAGE	3' - 0"	7' - 0"	HM	F	HM	F1		18.0	J12 / A-601	J10 / A-601	
040	ELEC.	3' - 0"	7' - 0"	HM	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
041	IT	3' - 0"	7' - 0"	HM	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
042A	LOADING DOCK	3' - 0"	8' - 0"	HM	DF	HM	F2		25.0	J9 / A-601	J7 / A-601	
042B	LOADING DOCK			ST	CD1	ST	CD1		1.0	H1 / A-502	D1 / A-522	
042C	LOADING DOCK	3' - 0"	7' - 0"	HM	F	HM	F2		8.0			
043A	VEST.	3' - 0"	7' - 4"	ALUM	GF	ALUM	H		6.0			
043B	VEST.	3' - 0"	7' - 0"	ALUM	GF	ALUM	IJ		38.0			
045	IT OPEN OFFICE	3' - 0"	7' - 0"	WD	DF	HM	F1		15.0	J12 / A-601	J10 / A-601	
047	IT WORK	3' - 0"	7' - 0"	WD	DF	HM	F1		28.0	J12 / A-601	J10 / A-601	
048	988	3' - 0"	7' - 0"	WD	F	HM	F1		27.0	J12 / A-601	J10 / A-601	
049A	FITNESS	3' - 0"	7' - 0"	WD	F	HM	F4		36.0	J12 / A-601	J10 / A-601	
049B	FITNESS	3' - 0"	7' - 4"	ALUM	GF	ALUM	L1		6.0			
100A	VEST.	3' - 0"	7' - 4"	ALUM	GF	ALUM	A1		7.0	F6 / A-501		
100B	VEST.	3' - 0"	7' - 0"	ALUM	GF	ALUM	IA		39.0			
101	LOBBY	3' - 0"	7' - 0"	ALUM	GF	ALUM	IE		11.0			
105A	CONFERENCE	3' - 0"	7' - 0"	ALUM	GF	ALUM	IC		17.1			
105B	RECPT.	3' - 0"	7' - 0"	ALUM	GF	ALUM	ID		13.0			
106	STORAGE	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
107	FIRE OPS CTR	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
109A	RECPT.	3' - 0"	7' - 0"	ALUM	GF	ALUM	IB		12.0			3
109B	CORR.	3' - 0"	7' - 0"	WD	F	HM	F1		9.0	J12 / A-601	J10 / A-601	
110	BC - PREV	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
111	AC - PREV	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
112	MEDICAL DIR.	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
113	AC - EMS	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
114	ADMIN DIV. CONF.	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
115	DC - ADMIN	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
116	OPEN OFFICE	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
116B	AC-SS	3' - 0"	7' - 0"	WD	F	HM	F1		23.0	J12 / A-601	J10 / A-601	
121	CHIEF	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
122	STOR.	2' - 8"	7' - 0"	WD	F	HM	F1		23.0	J12 / A-601	J10 / A-601	
123	CHIEF	2' - 8"	7' - 0"	WD	F	HM	F1		31.0	J12 / A-601	J10 / A-601	
124	PR-FUTURE	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
125	ADMIN MGR	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
126	BC - TRAIN-FUTURE	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
127	AC - TRAIN	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
128	OPP. DIV CONF	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
129	DC - OPP	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
130	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
131	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
132	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
133	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
134	ROOF	3' - 0"	7' - 0"	WD	F	HM	F1		19.0	J12 / A-601	J10 / A-601	
135		5' - 0"	11' - 2"	ST	CD	ST	CD	90 MIN	1.0			2
136	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
137	RR	3' - 0"	7' - 0"	WD	F	HM	F1		30.0	J12 / A-601	J10 / A-601	
138A / 3	BREAK	3' - 0"	7' - 0"	WD	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
138B	EOC	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
139	EOC	3' - 0"	7' - 0"	WD	F	HM	F1		33.0	J12 / A-601	J10 / A-601	
140A	CONFERENCE	3' - 0"	7' - 0"	WD	F	HM	F4		10.0	J12 / A-601	J10 / A-601	
140B / 3	CHECK IN	3' - 0"	7' - 0"	WD	V	HM	F1		27.0	J12 / A-601	J10 / A-601	
141	STORAGE	3' - 0"	7' - 0"	WD	F	HM	F1		17.0	J12 / A-601	J10 / A-601	
142	CONFERENCE	3' - 0"	7' - 0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
143	CONFERENCE	3' - 0"	7' - 0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
144	PLANNER	3' - 0"	7' - 0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
145	AC - EMERG MGMT	3' - 0"	7' - 0"	WD	V	HM	F1		17.0	J12 / A-601	J10 / A-601	
146	SERVERS	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
147	UPS	3' - 0"	7' - 0"	WD	F	HM	F1		32.0	J12 / A-601	J10 / A-601	
148	BREAK	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
149	JAN	3' - 0"	7' - 0"	WD	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
150	CORR.	3' - 0"	7' - 2"	HM / 3	F	HM	F2	90 MIN	41.0			2
151	DRIVING SIM	3' - 0"	7' - 0"	WD	F	HM	F1		10.0	J12 / A-601	J10 / A-601	
152A	EMS SIM	3' - 0"	7' - 0"	WD	F	HM	F1		14.0	J12 / A-601	J10 / A-601	
153	STORAGE	3' - 0"	7' - 0"	WD	F	HM	F1		26.0 / 3	J12 / A-601	J10 / A-601	
154B	VIEW.	3' - 0"	7' - 0"	WD	V	HM	F1		34.0	J12 / A-601	J10 / A-601	
155A	TRAINING	3' - 0"	7' - 0"	WD	V	HM	F1		29.0	J12 / A-601	J10 / A-601	
155B	TRAINING	3' - 0"	7' - 0"	WD	V	HM	F1		29.0	J12 / A-601	J10 / A-601	
156A	TRAINING	3' - 0"	7' - 0"	HM	F	HM	F1		3.0	E4 / A-502	A1/A-521	2
156B	TRAINING	3' - 0"	7' - 0"	HM	F	HM	F1		3.0	E4 / A-502	A1/A-521	2
158	STOR.	3' - 0"	7' - 0"	WD	DF	HM	F1		26.0	J12 / A-601	J10 / A-601	
157	MECH.	3' - 0"	7' - 0"	HM	F	HM	F1		22.0	J12 / A-601	J10 / A-601	
ST-1A	STAIR	3' - 0"	7' - 0"	HM	F	HM	F1		3.0	H10 / A-601	A6 / A-522	2
ST-1B	STAIR	3' - 0"	7' - 0"	HM	F	HM	F1		37.0	J12 / A-601	J10 / A-601	
ST-1C	STAIR	3' - 0"	7' - 0"	WD	F	HM	F1		16.0	J12 / A-601	J10 / A-601	
TR-01		3' - 0"	7' - 0"	HM	F	HM	F2		8.1			

DOOR SCHEDULE REMARKS:
1. REFERENCE EXTERIOR WINDOW AND DOOR TYPES ON SHEET A-251.
2. ICC 500 COMPLIANT DOOR
3. LEVEL III BULLET RESISTANT
4. MANUAL COILING DOOR

GENERAL NOTES:

1. HM REFERS TO HOLLOW METAL
2. AL REFERS TO ALUMINUM
3. WD REFERS TO WOOD
4. ST REFERS TO STEEL
5. GL REFERS TO GLASS
6. OHCD REFERS TO OVERHEAD COILING DOOR
7. ALL EXTERIOR ALUMINUM DOORS & FRAMES ARE TO BE FINISHED TO MATCH ADJACENT ALUMINUM WINDOW FRAME, UNO
8. REFER TO FINISH SCHEDULE FOR FINISH OF INTERIOR DOORS AND FRAMES.

GLASS TYPE LEGEND

DESIGNATION NUMBER	DESCRIPTION
1	VIRACON VRE 26-38 -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2 -1/2" AIR SPACE -1/4" CLEAR HEAT-STRENGTHENED
2	VIRACON VRE 26-38 TEMPERED -1/4" SOLARBLUE TEMPERED VRE 26-38 #2 -1/2" AIR SPACE -1/4" CLEAR TEMPERED
3	VIRACON VRE 26-38 -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2 -1/2" AIR SPACE -1/4" SPANDREL V908
4	-1/2" CLEAR GLASS
5	-1/2" CLEAR GLASS TEMPERED
6	2" TOR-GARD 30 IG GLAZING -1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2
7	-1/2" CLEAR GLASS TEMPERED -FROSTED CLEAR FILM SWF
8	BULLET RESISTANT -1 1/4" UL 752 LEVEL 3

MATERIAL KEYNOTES

03.41B	PRECAST CONCRETE WALL
04.20A	CONCRETE MASONRY UNIT (CMU)
04.20G	CONCRETE MASONRY UNIT (CMU) BOND BEAM GROUTED FULL
05.41B	EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 3 5/8-INCH - RE: STRUCT. FOR SPACING
05.41F	EXTERIOR NON-LOAD-BEARING MTL. BOX BEAM HEADER
06.10C	FIRE-RETARDENT-TREATED WOOD BLOCKING, CONTINUOUS
06.16D	EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS
07.92C	BACKER ROD AND SEALANT
08.11A	HOLLOW METAL DOOR
08.11B	HOLLOW METAL FRAME
08.14	WOOD DOOR
09.22P	3 5/8-INCH BOX BEAM HEADER
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES

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KANSAS CITY, MO 64112
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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

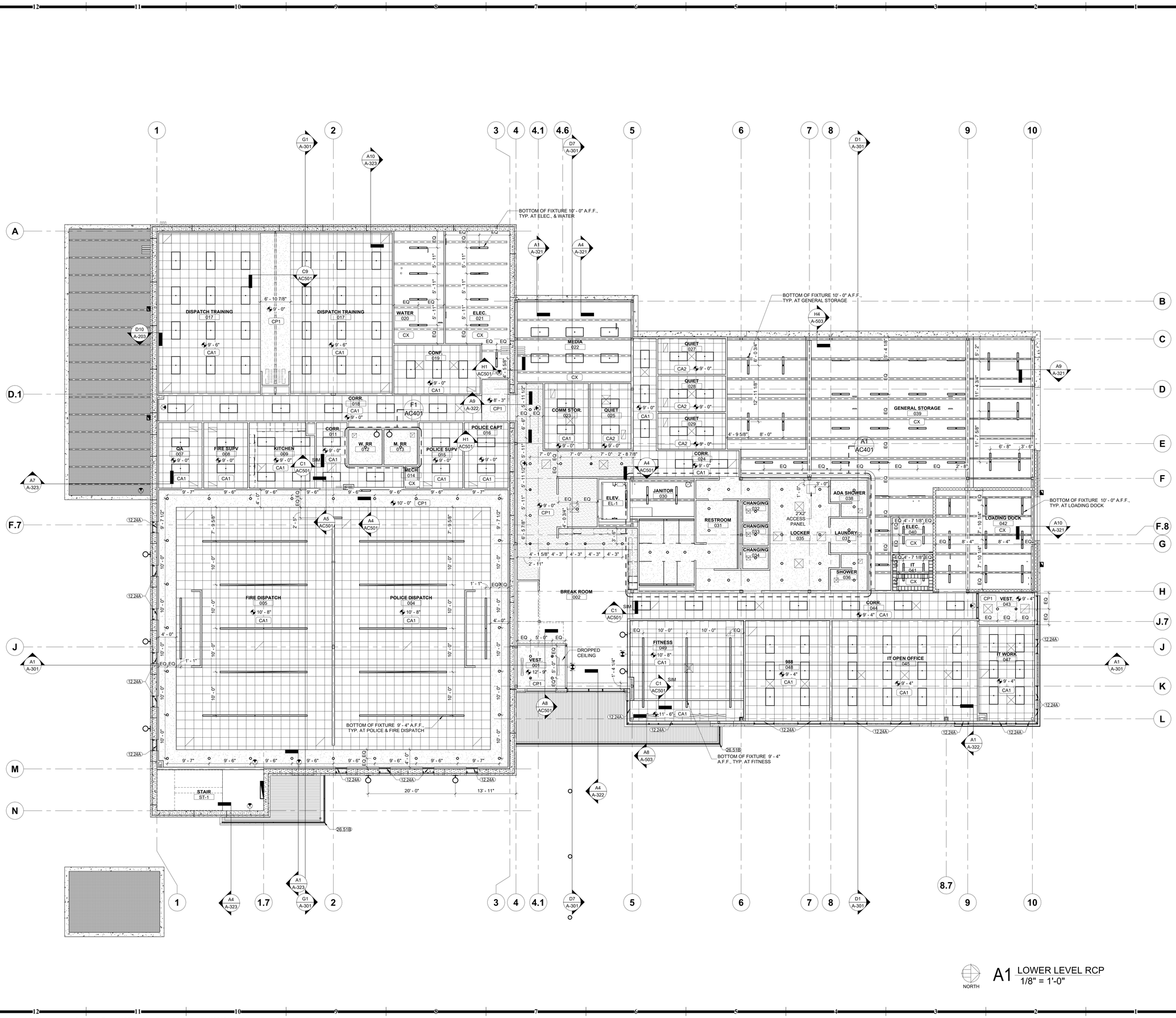
3	ADDENDUM 3	11/18/2024
4	ADDENDUM 4	11/26/2024

PROFESSIONAL SEAL

A-601

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

DOOR SCHEDULE, DETAILS, AND INT. WIN. TYPES


BOTTOM OF FIXTURE 10' - 0" A.F.F., TYP. AT ELEC., & WATER
BOTTOM OF FIXTURE 10' - 0" A.F.F., TYP. AT GENERAL STORAGE
BOTTOM OF FIXTURE 10' - 0" A.F.F., TYP. AT LOADING DOCK
BOTTOM OF FIXTURE 9' - 4" A.F.F., TYP. AT POLICE & FIRE DISPATCH
BOTTOM OF FIXTURE 9' - 4" A.F.F., TYP. AT FITNESS
DISPATCH TRAINING 017
WATER 020
ELEC. 021
CONF. 019
MEDIA 022
QUIET 027
QUIET 028
QUIET 029
CORR. 018
COMM STOR. 023
QUIET 025
GENERAL STORAGE 039
CORR. 011
W. RR 012
M. RR 013
POLICE CAPT 016
QA 007
FIRE SUPV 006
KITCHEN 009
SIM
BRK
DECK 014
POLICE SUPV 015
CORR. 024
JANITOR 030
ELEV. EL-1
CHANGING 032
CHANGING 033
CHANGING 034
RESTROOM 031
LOCKER 035
LAUNDRY 037
ADA SHOWER 038
SHOWER 036
2'X2' ACCESS PANEL
ELEC. 040
IT 041
LOADING DOCK 042
CORR. 044
VEST. 043
FIRE DISPATCH 005
POLICE DISPATCH 004
BREAK ROOM 002
VEST. 001
DROPPED CEILING
FITNESS 049
988 048
IT OPEN OFFICE 045
IT WORK 047
STAIR ST-1
AC401
AC501
AC502
AC503
AC504
AC505
AC506
AC507
AC508
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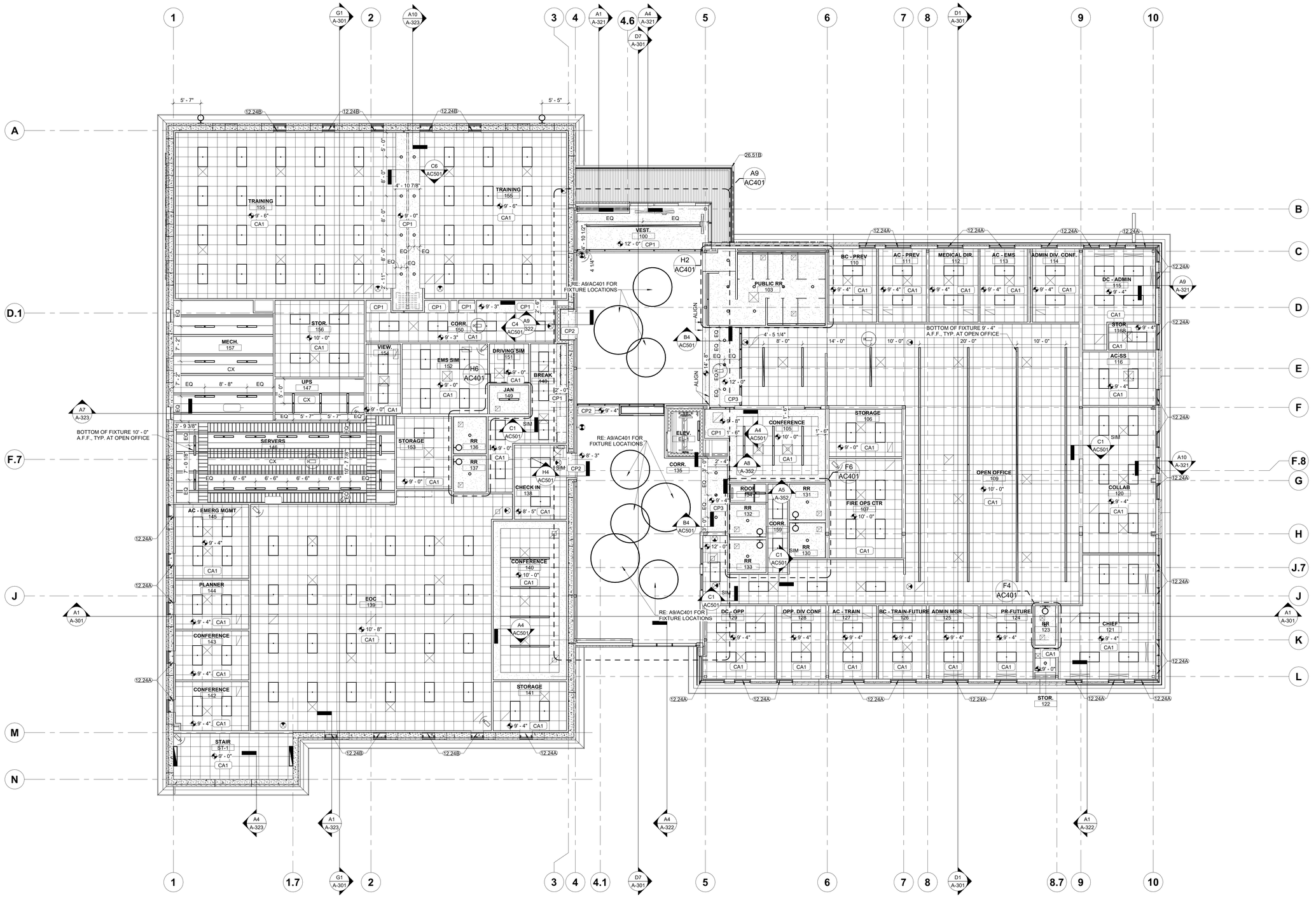

GENERAL NOTES- REFLECTED CEILING PLANS:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE REFLECTED CEILING PLANS ARE TO THE FACE OF GYP. BOARD (FOG), AND COLUMN GRID LINES. UNLESS NOTED OR SHOWN OTHERWISE.
3. ALL CEILINGS TO BE **9'-0"** AFF, UNLESS NOTED OTHERWISE.
4. ALL CEILING HEIGHTS AS SHOWN ON PLANS AND DETAILS ARE FROM SLAB OR TILE FLOOR (FINISHED FLOOR) TO FINISH CEILING.
5. AT ALL GYP. BD. SOFFITS: EXTEND GYP. BD. UP 6 INCHES ABOVE ADJACENT CEILING UNLESS NOTED OTHERWISE.
6. RE: DETAILS FOR ADDITIONAL CONDITIONS AND CEILING HEIGHT INFORMATION.
7. RE: FINISH LEGEND AND FINISH PLANS FOR ROOM CEILING FINISHES.
8. CEILING TILES/GRID TO BE CENTERED IN THE ROOM, UNLESS NOTED OTHERWISE.
9. RECESSED LIGHTING, SPEAKERS, SMOKE DETECTORS, ETC. AND PENDANT LIGHT FIXTURES - SHALL BE CENTERED IN CEILING TILE OR GYP. BD. CEILING, UNLESS NOTED OTHERWISE.
10. RE: INTERIOR ELEVATIONS FOR LOCATION OF WALL MOUNTED LIGHT FIXTURES.
11. RE: ELECTRICAL SHEETS AND SPECIFICATIONS FOR DETAILED INFORMATION ON LIGHT FIXTURE SCHEDULE.
12. RE: MECHANICAL SHEETS AND SPECIFICATIONS FOR DETAILED INFORMATION ON DIFFUSERS.
13. COORDINATE ALL PENDANT MOUNTED LIGHT FIXTURES IN MECHANICAL AND ELECTRICAL ROOMS WITH EXPOSED STRUCTURE.
14. COORDINATE ALL CEILING MOUNTED EQUIPMENT WITH FURNITURE AND CASEWORK BELOW.
15. IF THERE IS A CONFLICT BETWEEN ANY ABOVE-CEILING MECHANICAL / ELECTRICAL / PLUMBING WORK & THE SCHEDULED OR SHOWN CEILING HEIGHT, CONTACT THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
16. RE: INTERIOR ELEVATIONS FOR PENDANT LIGHT FIXTURE HEIGHTS. IF HEIGHT IS NOT SHOWN, COORDINATE WITH ARCHITECT.
17. COORDINATE DIFFUSER/ LIGHT FIXTURE COLORS WITH ARCHITECT.
18. CONTRACTOR TO PROVIDE BLOCKING/ SUPPORT FOR ANY CEILING MOUNTED EQUIPMENT, HEAVY LIGHT FIXTURES/ CEILING FANS/ TOILET PARTITIONS, ETC.

REFLECTED CEILING PLAN SYMBOLS:

- 9'-0" — CEILING HEIGHT
- GYP. BD.
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- SUPPLY AIR
- RETURN/EXHAUST AIR
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- SUSPENDED LIGHT FIXTURE
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- WALL MOUNTED LIGHT FIXTURE
- FIRE EXIT SIGN
- CONTROL JOINT IN GYP BD CEILING
- 2'X2' LAY-IN CEILING
- 1 HOUR RATED LID UL 415
- OPEN TO STRUCTURE
- EXTERIOR WOOD LOOKING METAL PANEL SOFFIT

MATERIAL KEYNOTES

12.24A	ROLLER WINDOW SHADE - SINGLE SHADE
12.24B	ROLLER WINDOW SHADE - DOUBLE SHADE
26.51B	EXTERIOR LIGHT FIXTURE RE: ELECTRICAL

NORTH

A1 MAIN LEVEL RCP
1/8" = 1'-0"

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

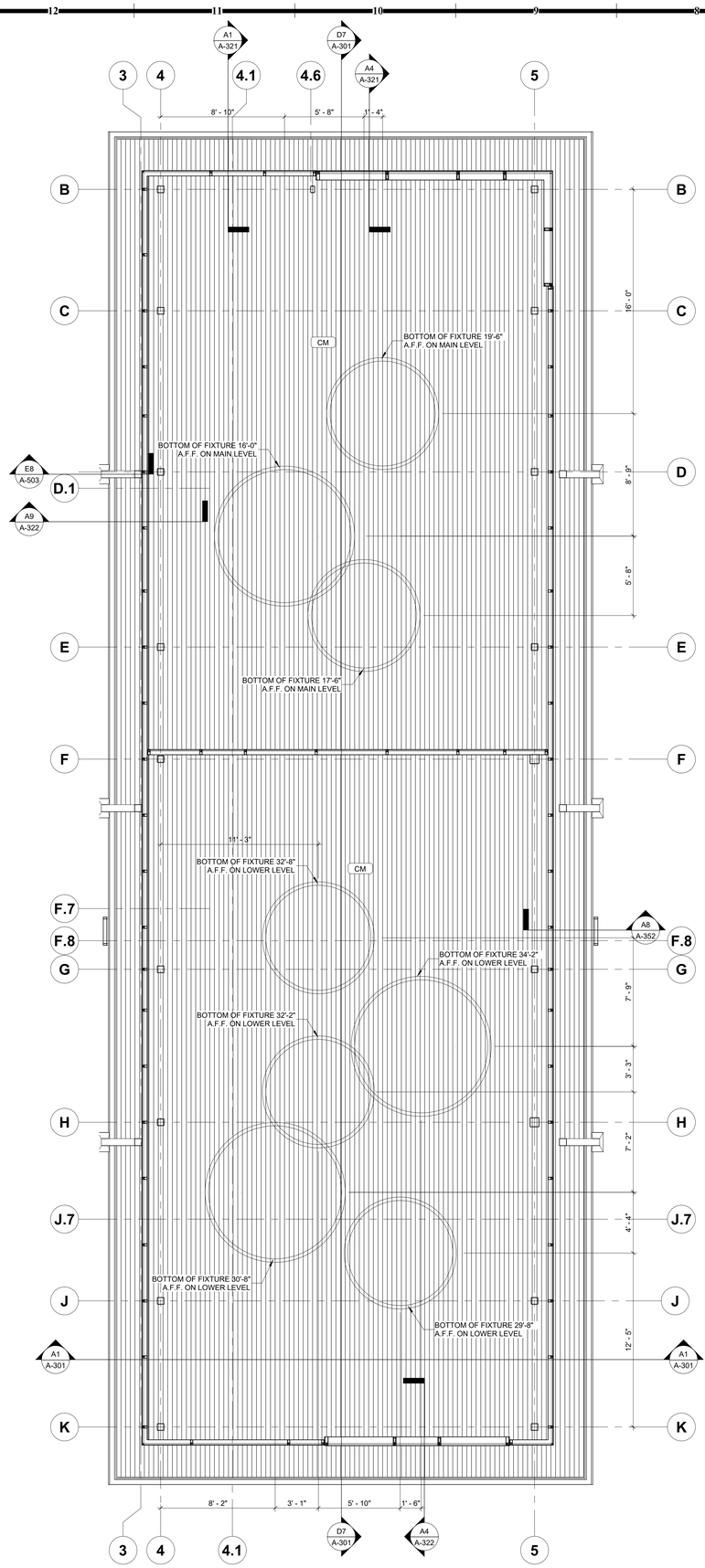
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
11/1/24
ARCHITECT

PROFESSIONAL SEAL

AC102

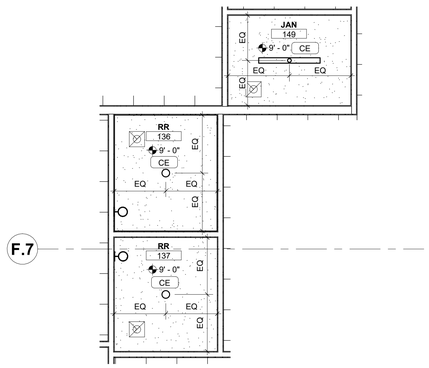
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - RCP



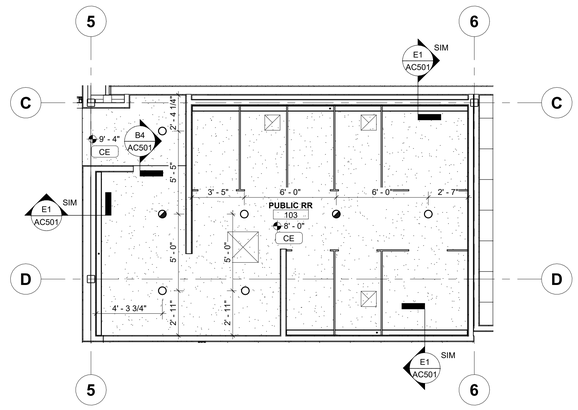
NORTH

A9 MAIN LEVEL RCP - CLERESTORY
1/4" = 1'-0"



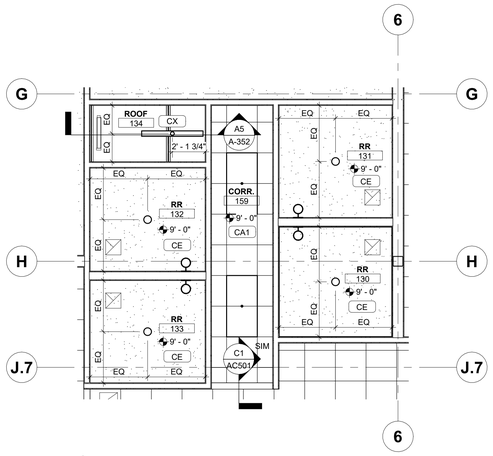
NORTH

H6 MAIN LEVEL RCP - EOC RR & JAN
1/4" = 1'-0"



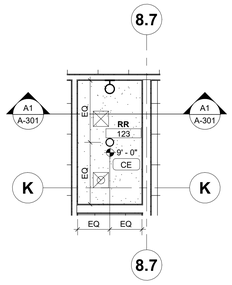
NORTH

H2 MAIN LEVEL RCP - PUBLIC RR
1/4" = 1'-0"



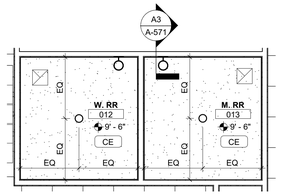
NORTH

F6 MAIN LEVEL RCP - FIRE ADMIN RR
1/4" = 1'-0"



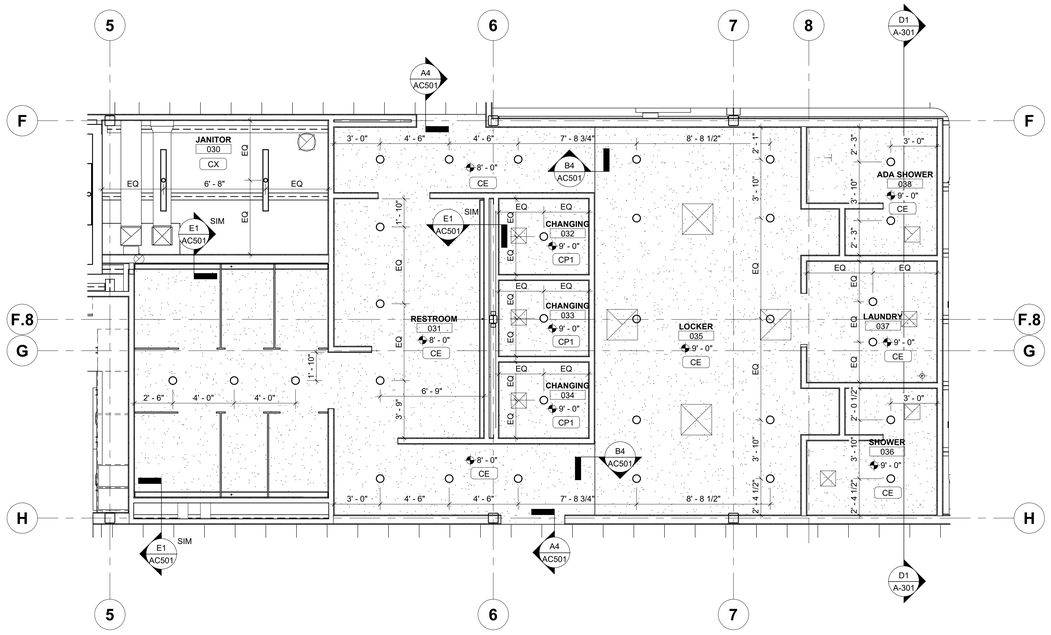
NORTH

F4 MAIN LEVEL RCP - CHIEF RR
1/4" = 1'-0"



NORTH

F1 LOWER LEVEL RCP - DISPATCH RR
1/4" = 1'-0"



NORTH

A1 LOWER LEVEL RCP - STAFF SUPPORT RR & LOCKER
1/4" = 1'-0"

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- SUSPENDED LIGHT FIXTURE
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MATERIAL KEYNOTES

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

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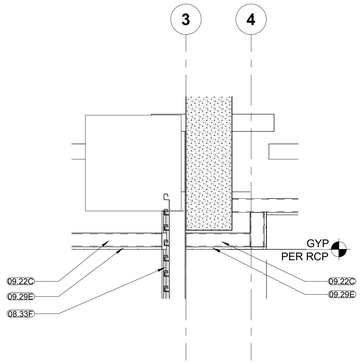
PROFESSIONAL SEAL

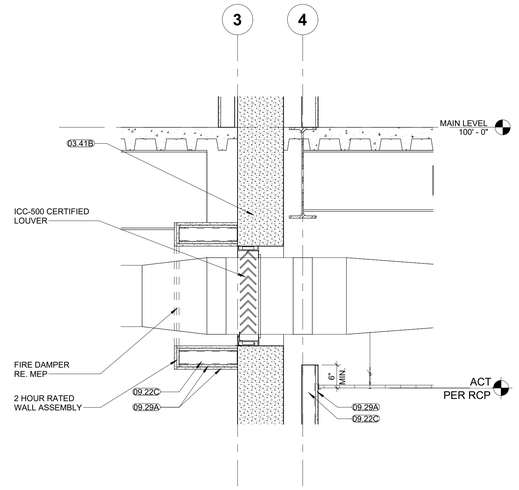
AC401

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

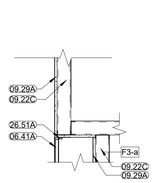
ENLARGED RCP



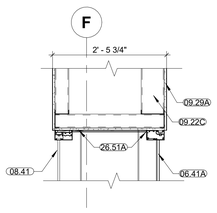
H4 DETAIL @ STORM SHUTTER
3/4" = 1'-0"



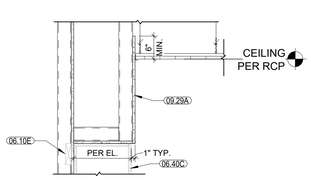
H1 STORM SHELTER LOUVER
3/4" = 1'-0"



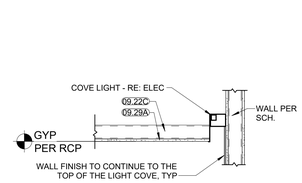
E8 DETAIL AT 018 CORR DISPLAY CASE
3/4" = 1'-0"



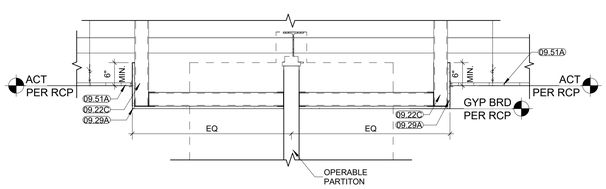
E5 DETAIL AT LOBBY DISPLAY CASE
3/4" = 1'-0"



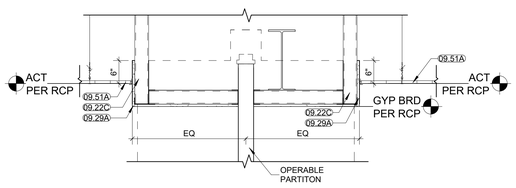
E4 GYP SOFFIT - CASEWORK SECTION
3/4" = 1'-0"



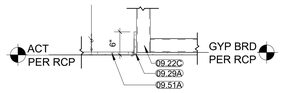
E1 TOILET COVE LIGHT DETAIL - TYP
3/4" = 1'-0"



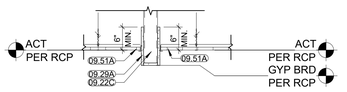
C9 LOWER LEVEL OPERABLE PARTITION SOFFIT DTL
3/4" = 1'-0"



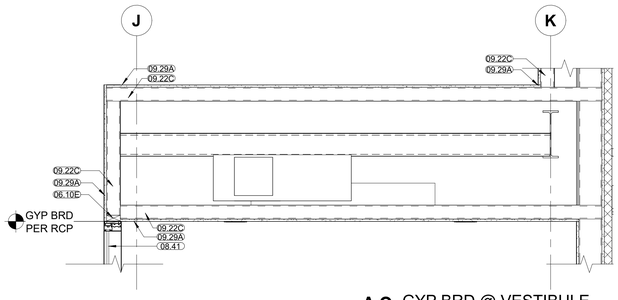
C6 MAIN LEVEL OPERABLE PARTITION SOFFIT DTL
3/4" = 1'-0"



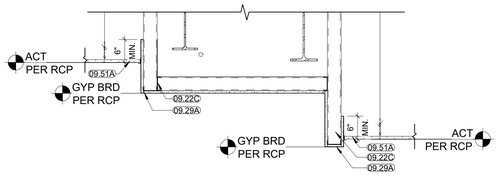
C4 ACT TO GYP. BRD., FLUSH
3/4" = 1'-0"



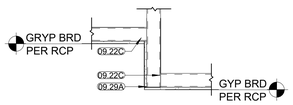
C1 GYP BRD BULKHEAD DETAIL - TYP.
3/4" = 1'-0"



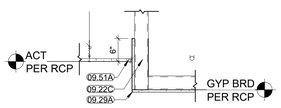
A8 GYP BRD @ VESTIBULE
3/4" = 1'-0"



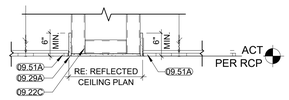
A5 DISPATCH SOFFIT DETAIL
3/4" = 1'-0"



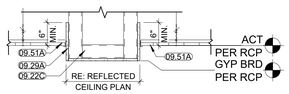
B4 GYP. BRD. SOFFIT DTL
3/4" = 1'-0"



A4 GYP TO ACT DETAIL
3/4" = 1'-0"



B1 GYP BRD FLUSH SOFFIT DETAIL - TYP
3/4" = 1'-0"



A1 GYP BRD SOFFIT DETAIL - TYP
3/4" = 1'-0"

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1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE REFLECTED CEILING PLANS ARE TO THE FACE OF GYP. BOARD (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
3. ALL CEILINGS TO BE **9'-0"** AFF, UNLESS NOTED OTHERWISE.
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5. AT ALL GYP. BD. SOFFITS: EXTEND GYP. BD. UP 6 INCHES ABOVE ADJACENT CEILING UNLESS NOTED OTHERWISE.
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MATERIAL KEYNOTES

03.41B	PRECAST CONCRETE WALL
06.10E	WOOD BLOCKING, AS REQUIRED
06.40C	PLASTIC LAMINATE CASEWORK
06.41A	GLASS DISPAY CASE
08.33F	ICC 500 RATED ROLLING SHUTTER
08.41	ALUMINUM-FRAMED STOREFRONT SYSTEM
09.22C	3 5/8-INCH METAL STUDS @ 16-INCHES O.C.
09.29A	INTERIOR 5/8-INCH GYP. BD. REF: WALL TYPES
09.29E	INTERIOR 5/8-INCH GYP. BD., EXTENDS TO UNDERSIDE OF ROOF OR FLOOR ASSEMBLY, REF: WALL SCHEDULE
09.51A	ACOUSTICAL PANEL CEILING W/ EXPOSED GRID
26.51A	INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

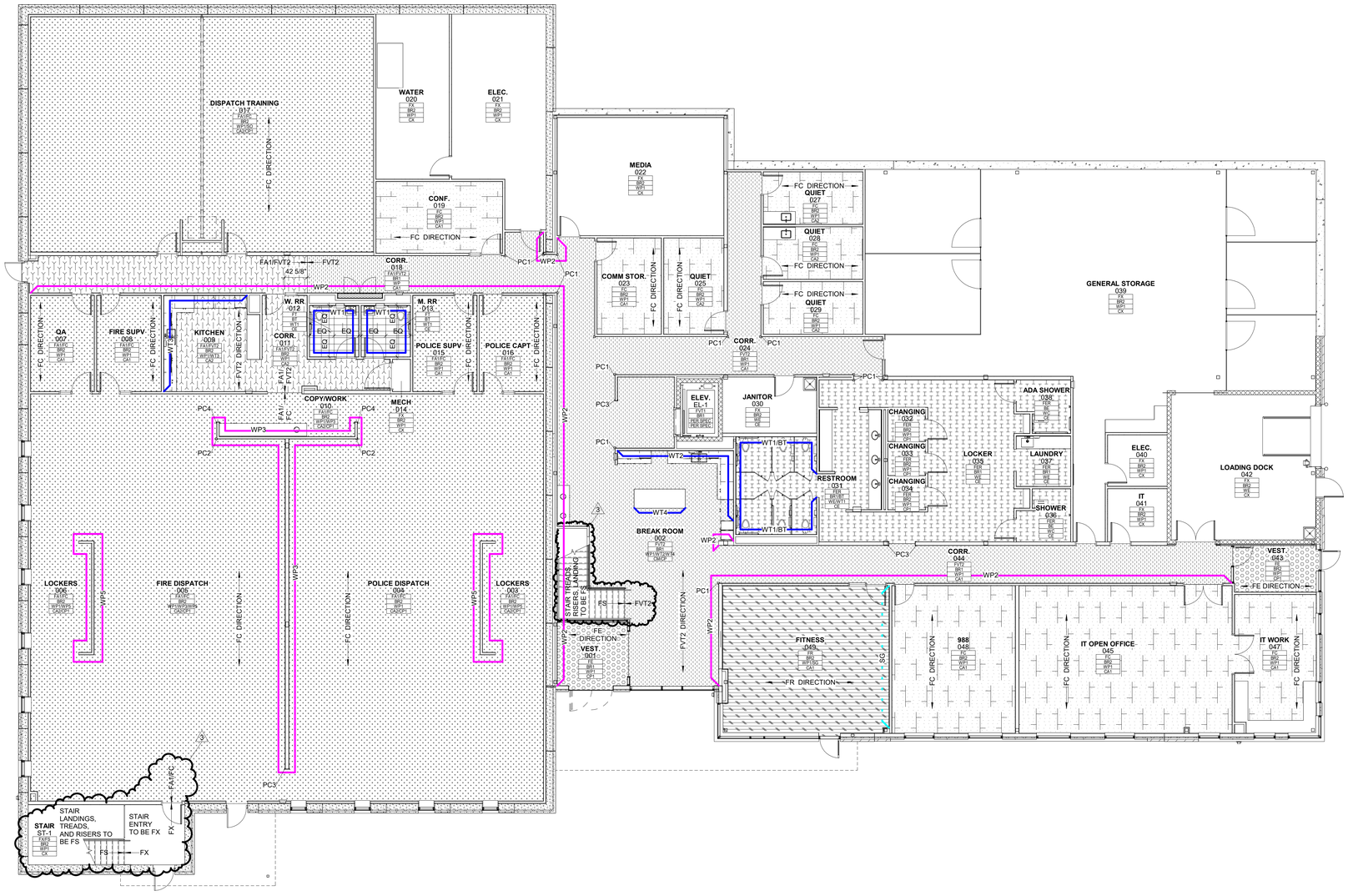
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016013211
11/1/2024
ARCHITECT

PROFESSIONAL SEAL

AC501

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

CEILING DETAILS



NORTH

A1 LOWER LEVEL FINISH PLAN
1/8" = 1'-0"

GENERAL NOTES - FINISH PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FINISH LEGEND, AND FLOOR FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
3. RE: FINISH DETAILS SHEET AI501 FOR ADDITIONAL FINISH AND FLOOR TRANSITION CONDITIONS.
4. RE: FINISH DETAILS SHEET AI501 FOR ADDITIONAL WALL FINISH / WALL PROTECTION DETAILS.
5. FLOOR FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH TAGS FOR ADDITIONAL INFORMATION.
6. FLOOR FINISH PATTERN SHALL BE CENTERED IN ROOM, UNLESS NOTED OTHERWISE.
7. ALIGN ALL WALL BASE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
8. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FLOOR FINISHES AS ADJOINING SPACES.
9. FLOOR FINISH MATERIAL AND/ OR PATTERN SHALL BE INSTALLED UNDER TOE KICKS OF CASEWORK/MILLWORK, UNDER OPEN COUNTERTOPS, AND UNDER EQUIPMENT.
10. FLOOR MATERIAL/ COLOR TRANSITIONS TO BE CENTERED UNDER DOOR, UNLESS NOTED OR SHOWN OTHERWISE.
11. RE: AI501 FOR ALL FLOORING TRANSITION DETAILS & FINISH WALL PROTECTION DETAILS.
12. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING FOR WALL PROTECTION ATTACHMENT. THIS INCLUDES, BUT IS NOT LIMITED TO: HANDRAILS. RE: MANUFACTURE'S GUIDELINES FOR CLARIFICATIONS.
13. CONTRACTOR SHALL PROVIDE MANUFACTURER'S STANDARD ACCESSORY MOLDING OR TRIM FOR WALL PROTECTION ITEMS, UNLESS NOTED OTHERWISE.
14. IF WALL IS LESS THAN 18" WIDE DO NOT PROVIDE HANDRAIL. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM THE OPEN SWING OF A DOOR. HANDRAILS SHOULD STOP APPROXIMATELY 3" FROM A CORNER GUARD. RE: SHEET AI501
15. CONTRACTOR SHALL PROVIDE BLOCKING FOR ALL WALL MOUNTED EQUIPMENT. RE G-021 FOR CLARIFICATION.
16. CONTRACTOR SHALL PROVIDE BLOCKING FOR SIGNS AS CALLED OUT ON ELEVATIONS.

ROOM FINISH TAG KEY LEGEND

ROOM
000
FLOOR FINISH
WALL BASE
WALL FINISH
CEILING FINISH

WALL FINISH LEGEND

PC	CORNER GUARD (PC)
	ACCENT PAINT (WP)
	WALL TILE (WT)
	FABRIC WRAPPED PANELS (SF)
	SPECIALTY WALLS (S-)

NOT ALL WALL FINISHES ARE SHOWN GRAPHICALLY. REFER TO SHEETS A-601, A-602, A-603 AND SERIES A-45100 FOR SPECIFIC LOCATIONS AND MATERIALS

FLOOR FINISH LEGEND

	FA1/FC
	FA1/FVT2
	FC
	FA2
	FE
	FER
	FR
	FT
	FVT1
	FVT2
	FZ

RE: FINISH SCHEDULE

HOEFER WELKER
4622 PENNSYLVANIA AVENUE
SUITE 1400
KANSAS CITY, MO 64112
P: 913.307.3700
www.hoeferwelker.com

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM 3	11/18/2024

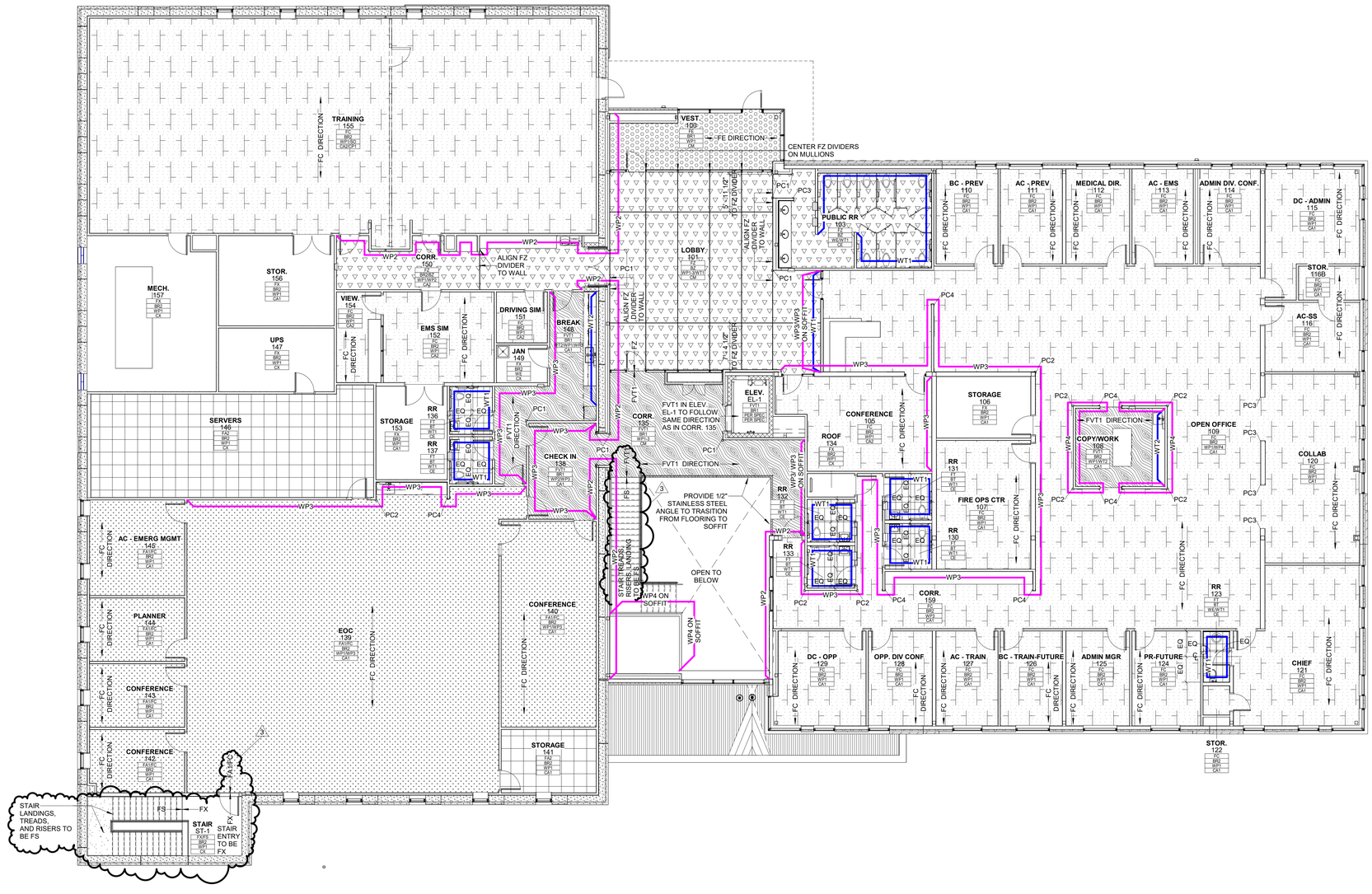
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016013211
11/18/24
ARCHITECT

PROFESSIONAL SEAL

AI101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - FINISH PLAN



NORTH

A1 MAIN LEVEL FINISH PLAN
1/8" = 1'-0"

GENERAL NOTES - FINISH PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FINISH LEGEND, AND FLOOR FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
3. RE: FINISH DETAILS SHEET A1501 FOR ADDITIONAL FINISH AND FLOOR TRANSITION CONDITIONS.
4. RE: FINISH DETAILS SHEET A1501 FOR ADDITIONAL WALL FINISH / WALL PROTECTION DETAILS.
5. FLOOR FINISHES SHOWN ARE FOR ACCENT CLARIFICATION ONLY. RE: FINISH TAGS FOR ADDITIONAL INFORMATION.
6. FLOOR FINISH PATTERN SHALL BE CENTERED IN ROOM, UNLESS NOTED OTHERWISE.
7. ALIGN ALL WALL BASE JOINTS WITH FLOOR TILE JOINTS, UNLESS NOTED OR SHOWN OTHERWISE.
8. ALL CLOSETS AND ALCOVES WITHOUT A SPACE IDENTIFICATION NUMBER SHALL HAVE THE SAME FLOOR FINISHES AS ADJOINING SPACES.
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ROOM FINISH TAG KEY LEGEND

ROOM
000
FLOOR FINISH
WALL BASE
WALL FINISH
CEILING FINISH

WALL FINISH LEGEND

PC	CORNER GUARD (PC)
	ACCENT PAINT (WP)
	WALL TILE (WT)
	FABRIC WRAPPED PANELS (SF)
	SPECIALTY WALLS (S-)

NOT ALL WALL FINISHES ARE SHOWN GRAPHICALLY. REFER TO SHEETS A-601, A-602, A-603 AND SERIES A-45100 FOR SPECIFIC LOCATIONS AND MATERIALS

FLOOR FINISH LEGEND

	FA1/FC
	FA1/FVT2
	FC
	FA2
	FE
	FER
	FR
	FT
	FVT1
	FVT2
	FZ

RE: FINISH SCHEDULE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM 3	11/18/2024

PROFESSIONAL SEAL

A1102

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - FINISH PLAN

GENERAL NOTES - FINISH PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FINISH LEGEND, AND FLOOR FINISH PLANS FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
3. RE: FINISH DETAILS SHEET AI501 FOR ADDITIONAL FINISH AND FLOOR TRANSITION CONDITIONS.
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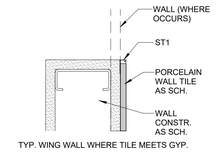
16. CONTRACTOR SHALL PROVIDE BLOCKING FOR SIGNS AS CALLED OUT ON ELEVATIONS.

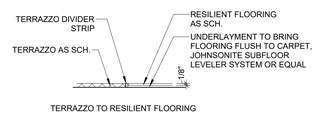
GENERAL NOTES - INTERIOR FINISHES:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: AC SERIES SHEETS FOR ADDITIONAL CEILING FINISH INFORMATION.
3. RE: A-451 SERIES SHEETS FOR ADDITIONAL WALL FINISH INFORMATION.
4. RE: AI SERIES SHEETS FOR ADDITIONAL FLOOR FINISH & WALL PROTECTION INFORMATION.
5. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ROOM ON THE FINISH SCHEDULE, REFER TO THE A-451 AND AI SERIES SHEETS FOR FINISH CLARIFICATION.
6. ALL INTERIOR GYP. BD. SURFACES SHALL RECEIVE EGGSHELL/ SATIN FINISH LATEX PAINT, UNLESS NOTED OR SPECIFIED OTHERWISE.
7. INTERIOR GYP. BD. SURFACES TO RECEIVE EPOXY PAINT SHALL HAVE A SATIN FINISH, UNLESS NOTED OR SPECIFIED OTHERWISE.
8. INSTALL METAL TRANSITION STRIP WHERE WALL TILE MEETS PAINTED GYP. BD. WALL IN ALL VERTICAL AND/ OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE.
9. HOLLOW METAL FRAMES SHALL RECEIVE SEMI-GLOSS FINISH.
10. WHERE PORCELAIN OR GLASS WALL TILES OF DIFFERENT THICKNESSES MEET, ENSURE THAT THE FACES OF THE DIFFERENT TILES ARE FLUSH.



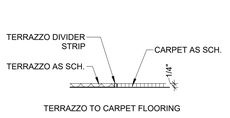
TYP. WING WALL WHERE TILE MEETS GYP.

E5 WING WALL TILE DETAIL
3" = 1'-0"



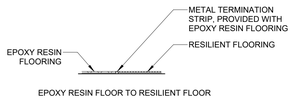
TERRAZZO TO RESILIENT FLOORING

E3 TRANSITION DETAIL
3" = 1'-0"



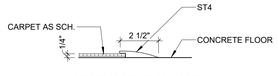
TERRAZZO TO CARPET FLOORING

E1 TRANSITION DETAIL
3" = 1'-0"



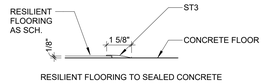
EPOXY RESIN FLOOR TO RESILIENT FLOOR

C10 TRANSITION DETAIL
3" = 1'-0"



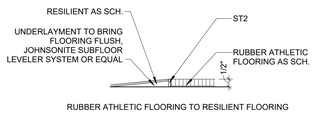
CARPET TO SEALED CONCRETE

C8 TRANSITION DETAIL
3" = 1'-0"



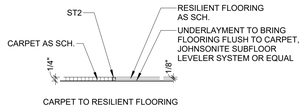
RESILIENT FLOORING TO SEALED CONCRETE

C6 TRANSITION DETAIL
3" = 1'-0"



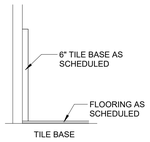
RUBBER ATHLETIC FLOORING TO RESILIENT FLOORING

C5 TRANSITION DETAIL
3" = 1'-0"



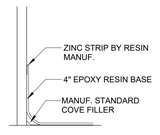
CARPET TO RESILIENT FLOORING

C3 TRANSITION DETAIL
3" = 1'-0"



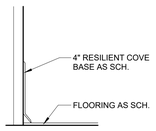
TILE BASE

C2 BASE DETAIL
3" = 1'-0"



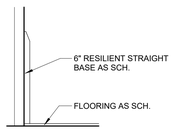
EPOXY RESIN FLASH COVE BASE

C1 BASE DETAIL
3" = 1'-0"



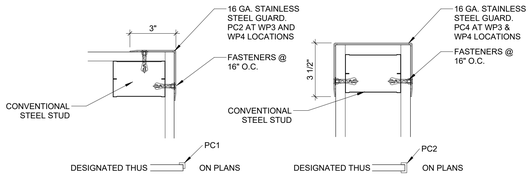
RESILIENT COVE BASE

A11 BASE DETAIL
3" = 1'-0"



RESILIENT STRAIGHT BASE

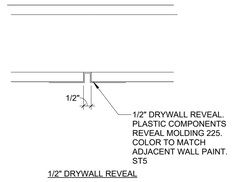
A10 BASE DETAIL
3" = 1'-0"



STAINLESS STEEL 90 DEG - PC1 & PC2

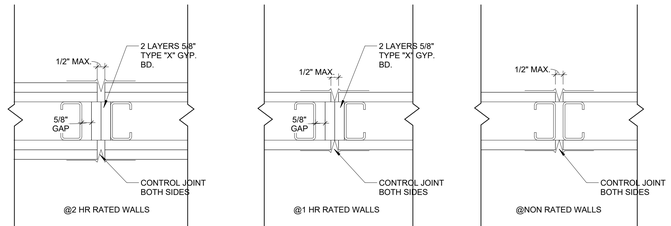
STAINLESS STEEL END WALL - PC3 & PC4

A6 CORNER GUARD DETAIL
3" = 1'-0"



1/2" DRYWALL REVEAL

A5 REVEAL DETAIL
3" = 1'-0"



A1 CONTROL JOINT DETAILS
3" = 1'-0"

HOEFER WELKER
4622 PENNSYLVANIA AVENUE
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KANSAS CITY, MO 64112
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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016013211
11/1/24
ARCHITECT

PROFESSIONAL SEAL

AI501

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

FINISH DETAILS

FINISH LEGEND

SYMBOL	MATERIAL	FINISH SPEC	TYP. AREA / REMARKS	CONTACT
FLOOR FINISH				
FA1	ACCESS FLOORING	MANF: TATE STYLE: CONCORE 1000 FINISH: PER FINISH PLAN COLOR: STANDARD UNFINISHED INSTALLATION: PER MANUFACTURER	DISPATCH/EOC	NAME: DOUG EVAK PHONE: 331.300.5465 EMAIL: DEVAK@TATEINC.COM
FA2	ACCESS FLOORING	MANF: TATE STYLE: CONCORE 2500/3000 FINISH: ESD STATIC DISSAPATIVE VINYL - FORBO COLOREX SD COLOR: SD 150240 ETNA INSTALLATION: PER MANUFACTURER	SERVER/STORAGE	NAME: DOUG EVAK PHONE: 331.300.5465 EMAIL: DEVAK@TATEINC.COM
FC	MODULAR CARPET TILE	MANF: MILLIKEN STYLE: HEAVY META - FOUNDRY COLOR: TUNGSTEN FDR174-133 SIZE: 25CM X 1M INSTALLATION: VERTICAL ASHLAR	FIELD	NAME: JENNY WOLFF PHONE: 816.814.5890 EMAIL: JENNIFER.WOLFF@MILIKEN.COM
FE	ENTRANCE FLOORING	MANF: INTERFACE STYLE: STEP REPEAT SR899 COLOR: 104941 ONYX SIZE: 50CM X 50CM INSTALLATION: MONOLITHIC	VESTIBULES	NAME: KATIE ALLEN PHONE: 816.673.5771 EMAIL: KATIE.ALLEN@INTERFACE.COM
FER	EPOXY RESIN FLOORING	MANF: DESCO STYLE: QUARTZ CERMONA SERIES COLOR: CUSTOM COLOR, S#0820-728TG FINISH: ORANGE PEEL SHEEN: SATIN	LOWER LEVEL LOCKER ROOM	NAME: BLAKE WOOD PHONE: 913.782.3330 EMAIL: BLAKE@DESCOCOATINGS.COM
FR	RUBBER ATHLETIC FLOOR - ROLLED GOODS	MANF: ECORE STYLE: PERFORMANCE RALLY COLOR: ES15A STEEL APPEAL 2 ROLL WIDTH: 48" WIDE SHEETS	FITNESS	NAME: RYAN CLAVENNA PHONE: 815.341.2555 EMAIL: RLCLAVENNA@ECOREINTL.COM
FS	RUBBER STAIR TREADS W/ INTEGRAL RISER	MANF: NORA BY INTERFACE STYLE: NORAMENT STAIRTREADS COLOR: STONE GREY TEXTURE: HAMMERED 0749		NAME: KATIE ALLEN PHONE: 816.673.5771 EMAIL: KATIE.ALLEN@INTERFACE.COM
FT	PORCELAIN TILE	MANF: CROSSVILLE STYLE: MOONSTRUCK COLOR: GEMINI SIZE: 12X24 INSTALLATION: PER FINISH FLOOR PLAN GROUT: MAPEI KERAPOXY - 5009 GRAY		NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
FVT1	LUXURY VINYL FLOORING	MANF: INTERFACE STYLE: LEVEL SET - TEXTURED WOODGRAINS COLOR: A00422 RUSTIC HICKORY SIZE: 25CM X 1M INSTALLATION: ASHLAR	MAIN LEVEL/ELEVATOR	NAME: KATIE ALLEN PHONE: 816.673.5771 EMAIL: KATIE.ALLEN@INTERFACE.COM
FVT2	LUXURY VINYL FLOORING	MANF: PATCRAFT STYLE: ENERGIZE 1602V COLOR: INTENTION-V1 00700 SIZE: 9IN X 36IN INSTALLATION: STAGGER	LOWER LEVEL	NAME: SARAH JENKINS PHONE: 913.237.7586 EMAIL: SARAH.JENKINS@PATCRAFT.COM
FX	SEALED CONCRETE	MANF: TBD STYLE: TBD COLOR: CLEAR		
FZ	POURED EPOXY TERRAZZO	MANF: TERRAZZO & MARBLE SUPPLY COMPANY STYLE: TERRAZZO FLOORING COLOR: CUSTOM COLOR TM# 23-2490 2A INTALLATION: TROWELED	LOBBY/WAITING	NAME: MIKE BRAWLEY PHONE: 847.777.6754 EMAIL: MBRAWLEY@TMSUPPLY.COM
WALL BASE				
BE	EPOXY RESIN FLASH COVE W/ METAL TERMINATION STRIP	MANF: DESCO STYLE: QUARTZ CERMONA SERIES COLOR: CUSTOM COLOR, S#0820-728TG FINISH: ORANGE PEEL SHEEN: SATIN HEIGHT: 4"	AT FER LOCATIONS UNLESS NOTED OTHERWISE	NAME: BLAKE WOOD PHONE: 913.782.3330 EMAIL: BLAKE@DESCOCOATINGS.COM
BR1	PROFILED RESILIENT BASE	MANF: ROPPE STYLE: CONTOURS PROFILED BASE - VERTICAL PV6065 COLOR: 193 BLACK BROWN HEIGHT: 6"		NAME: WENDY BREMER PHONE: 630.277.1414 EMAIL: WABREMER@ROPPE.COM
BR2	RESILIENT COVE BASE	MANF: ROPPE STYLE: 700 SERIES PROFILE: TOE BASE COLOR: 193 BLACK BROWN HEIGHT: 4"		NAME: WENDY BREMER PHONE: 630.277.1414 EMAIL: WABREMER@ROPPE.COM
BT	TILE BASE	MANF: CROSSVILLE STYLE: MOONSTRUCK COLOR: GEMINI HEIGHT: 12" X 24" TILE CUT TO 6" HIGH WITH MANUFACTURER'S EDGE FACING UP GROUT: MAPEI KERAPOXY - 5009 GRAY	AT FT LOCATIONS UNLESS NOTED OTHERWISE	NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
BZ	TERRAZZO WALL BASE	MANF: TERRAZZO & MARBLE SUPPLY COMPANY STYLE: TERRAZZO FLOORING COLOR: CUSTOM COLOR TM# 23-2490 2A INTALLATION: TROWELED HEIGHT: 6"	AT FZ LOCATIONS UNLESS NOTED OTHERWISE	NAME: MIKE BRAWLEY PHONE: 847.777.6754 EMAIL: MBRAWLEY@TMSUPPLY.COM
WALL FINISH				
WC	EPOXY RESIN WALL FINISH	MANF: DESCO STYLE: QUARTZ CERMONA SERIES COLOR: CUSTOM COLOR, S#0820-728TG FINISH: ORANGE PEEL SHEEN: SATIN	SHOWERS	NAME: BLAKE WOOD PHONE: 913.782.3330 EMAIL: BLAKE@DESCOCOATINGS.COM
WE	PAINT - EPOXY	MANF: SHERWIN WILLIAMS STYLE: EPOXY, SATIN FINISH COLOR: FIRST STAR SW7646		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WP1	PAINT - LATEX	MANF: SHERWIN WILLIAMS STYLE: LATEX, EG-SHEL FINISH COLOR: FIRST STAR SW7646	FIELD	NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WP2	PAINT - LATEX	MANF: SHERWIN WILLIAMS STYLE: LATEX, EG-SHEL FINISH COLOR: SILVERPLATE SW7649		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WP3	PAINT - LATEX	MANF: SHERWIN WILLIAMS STYLE: LATEX, EG-SHEL FINISH COLOR: CITYSCAPE SW7067		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WP4	PAINT - LATEX	MANF: SHERWIN WILLIAMS STYLE: LATEX, EG-SHEL FINISH COLOR: IRON ORE SW7069	ACCENT PAINT AS NOTED IN DRAWINGS & PAINT USED FOR EXPOSED INTERIOR METAL COLUMNS	NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WP5	PAINT - LATEX	MANF: SHERWIN WILLIAMS STYLE: LATEX, EG-SHEL FINISH COLOR: SEA SERPANT SW7615		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
WT1	PORCELAIN WALL TILE	MANF: CROSSVILLE STYLE: MOONSTRUCK COLOR: JUNO SIZE: 12X24 GROUT: MAPEI KERAPOXY - 5093 WARM GRAY		NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
WT2	CERAMIC WALL TILE	MANF: ANATOLIA STYLE: TERAMODA COLOR: STONE, GLOSSY FINISH SIZE: 3X12 GROUT: MAPEI KERAPOXY - 5077 FROST INSTALLATION: BASKETWEAVE		NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
WT3	CERAMIC WALL TILE	MANF: ANN SACKS STYLE: SAVOY HIVE COLOR: LANTERN SIZE: 13X11 MOSAIC GROUT: MAPEI KERAPOXY - 5077 FROST		NAME: SONYA CAZENAVE PHONE: 303.282.9300 EMAIL: SONYA.CASENAVE@ANNSACKS.COM
WT4	GLASS MOSAIC WALL TILE	MANF: TILEBAR STYLE: MATCHSTIX COLOR: RAINSTORM SIZE: 10.75X10.5 MOSAIC GROUT: MAPEI KERAPOXY - 5227 CASTLE WALL		NAME: LIZ LESTER PHONE: EMAIL: LLESTER@TILEBAR.COM

FINISH LEGEND

SYMBOL	MATERIAL	FINISH SPEC	TYP. AREA / REMARKS	CONTACT
WALL PROTECTION				
PC1	STAINLESS STEEL CORNER GUARD - 90 DEGREE, 6' - 0" H	MANF: CONSTRUCTION SPECIALTIES STYLE: CO-8 COLOR: STAINLESS STEEL, SATIN FINISH SIZE: 3" WING INSTALLATION: INSTALL AT TOP OF WALL BASE		NAME: RICK STINGLEY PHONE: 816.536.0229 EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM
PC2	STAINLESS STEEL CORNER GUARD - 90 DEGREE, 6' - 0" H	MANF: CONSTRUCTION SPECIALTIES STYLE: CO-8 COLOR: METAL POWDER COAT - GRAY HAMMERTONE #004 SIZE: 3" WING INSTALLATION: INSTALL AT TOP OF WALL BASE	AT WP3 & WP4 LOCATIONS	NAME: RICK STINGLEY PHONE: 816.536.0229 EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM
PC3	STAINLESS STEEL CORNER GUARD - END WALL, 6' - 0" H	MANF: CONSTRUCTION SPECIALTIES STYLE: SCO-8 COLOR: STAINLESS STEEL, SATIN FINISH SIZE: 3 1/2" END WALL INSTALLATION: INSTALL AT TOP OF WALL BASE		NAME: RICK STINGLEY PHONE: 816.536.0229 EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM
PC4	STAINLESS STEEL CORNER GUARD - END WALL, 6' - 0" H	MANF: CONSTRUCTION SPECIALTIES STYLE: SCO-8 COLOR: METAL POWDER COAT - GRAY HAMMERTONE #004 SIZE: 3 1/2" END WALL INSTALLATION: INSTALL AT TOP OF WALL BASE	AT WP3 & WP4 LOCATIONS	NAME: RICK STINGLEY PHONE: 816.536.0229 EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM
MILLWORK / CASEWORK				
ML1	PLASTIC LAMINATE	MANF: WILSONART STYLE: PREMIUM LAMINATE COLOR: MANGALORE MANGO 7984-38 EDGEBAND: .018" PVC TO MATCH		NAME: MANDY BRIDGES PHONE: 913.484.2691 EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM
ML2	PLASTIC LAMINATE	MANF: WILSONART STYLE: PREMIUM LAMINATE COLOR: SLATE GREY D91-60 EDGEBAND: .018" PVC TO MATCH		NAME: MANDY BRIDGES PHONE: 913.484.2691 EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM
MQ	QUARTZ SURFACE	MANF: WILSONART STYLE: QUARTZ COLOR: HAIDA Q4008 THICKNESS: 3CM COUNTERTOPS, 2CM BACKSPLASHES		NAME: MANDY BRIDGES PHONE: 913.484.2691 EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM
MS	GRANITE SURFACE	MANF: STONE SOURCE STYLE: GRANITE COLOR: SILVER GREY THICKNESS: 3CM COUNTERTOP	EXTERIOR COUNTERTOP	NAME: MITCH KALMAR PHONE: 314.282.4658 EMAIL: MKALMAR@STONESOURCE.COM
MST	STAINLESS STEEL	MANF: - STYLE: SATIN		
CEILING FINISH				
CA1	ACOUSTICAL CEILING TILE W/ TEGULAR EDGE	MANF: ARMSTRONG CEILINGS STYLE: ULTIMA BEVELED TEGULAR 1952 COLOR: WHITE SIZE: 24" X 24" X 3/4" GRID: 9/16" SUPRAFINE		NAME: ELIZABETH MOON PHONE: 816.216.2890 EMAIL: EMOON@ARMSTRONGCEILINGS.COM
CA2	ACOUSTICAL CEILING TILE W/ TEGULAR EDGE	MANF: ARMSTRONG CEILINGS STYLE: ULTIMA HIGH NRC BEVELED TEGULAR 1942 COLOR: WHITE SIZE: 24" X 24" X 7/8" GRID: 9/16" SUPRAFINE		NAME: ELIZABETH MOON PHONE: 816.216.2890 EMAIL: EMOON@ARMSTRONGCEILINGS.COM
CE	GYPSUM BOARD CEILING - EPOXY	MANF: SHERWIN WILLIAMS STYLE: EPOXY, FLAT FINISH COLOR: HIGH REFLECTIVE WHITE SW7757		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
CM	METAL CEILING PANEL	MANF: BERRIDGE STYLE: VEE-PANEL COLOR: WALNUT	LOBBY/CANOPY PANELS TO BE PERFERATED AT INTERIOR APPLICATIONS WITH 6" ACOUSTICAL INSULATION ABOVE	NAME: BRENT EAGLE PHONE:913.227.0855 EMAIL: BEAGLE@BERRIDGE.COM
CP1	GYPSUM BOARD CEILING	MANF: SHERWIN WILLIAMS STYLE: LATEX, FLAT FINISH COLOR: HIGH REFLECTIVE WHITE SW7757		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
CP2	GYPSUM BOARD CEILING	MANF: SHERWIN WILLIAMS STYLE: LATEX, FLAT FINISH COLOR: SILVERPLATE SW7649		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
CP3	GYPSUM BOARD CEILING	MANF: SHERWIN WILLIAMS STYLE: LATEX, FLAT FINISH COLOR: CITYSCAPE SW7067		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
CX	EXPOSED TO STRUCTURE	-		
SPECIALTY				
ELEVATOR FINISHES	COORDINATE W/ SPECS &/OR DRAWINGS	MANF: KONE WALLS: MANUFACTURER'S SPECIFIC BRUSHED STAINLESS STEEL FLOOR: TO MATCH FVT1		NAME: JONNY RICHARDSON PHONE: 816.337.2854 EMAIL: JONNY.RICHARDSON@KONE.COM
SD1	INTERIOR DOORS - WOOD	MANF: TBD STYLE: CHERRY VENEER, PLAIN SLICED/BOOK MATCHED COLOR: STAINED TO MATCH ML1 (WILSONART MANGALORE MANGO 7984)		
SD2	INTERIOR DOORS - METAL	MANF: SHERWIN WILLIAMS STYLE: ALKYD COLOR: SILVERPLATE SW7649	INTERIOR METAL DOORS AND INTERIOR FACE OF EXTERIOR DOORS	NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
SD3	EXTERIOR DOORS - METAL	MANF: SHERWIN WILLIAMS STYLE: ALKYD COLOR: IRON ORE SW7069	EXTERIOR FACE OF EXTERIOR METAL DOORS	NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
SD FRAME	INTERIOR HOLLOW METAL DOOR FRAMES	MANF: SHERWIN WILLIAMS STYLE: ALKYD COLOR: SILVERPLATE SW7649		NAME: PETER KREMM PHONE: 303.902.7239 EMAIL: PETER.KREMM@SHERWIN.COM
SG	MIRROR	MANF: - STYLE: MIRRORED GLASS THICKNESS: 1/4" SIZE: PER ELEVATIONS		
SL	METAL LOCKERS	MANF: TIFFIN METAL PRODUCTS STYLE: TBD COLOR: GRAY SMOKE		
SO	OPERABLE PARTITION	MANF: KWIK-WALL - 3000 SERIES STYLE: 3050 COLOR: LINO, DRAPERIE, KCS-30		NAME: KAYLEIGH ICENOGLE PHONE: - EMAIL: ICENOGLEK@KWIK-WALL.COM
SP	TOILET PARTITIONS	MANF: BRADLEY STYLE: EURO STYLE PARTITIONS, HIGHRISE SERIES COLOR: PHENOLIC LT, COLOR SLATE GREY		NAME: SARAH HACKETT PHONE: 816.221.3322 EMAIL: SARAH.HACKETT@PATTERSONSALES.BIZ
SS	INTERIOR WINDOW SILLS - SOLID SURFACE	MANF: CORIAN THICKNESS: 1/2" COLOR: GLACIER ICE NOTE: EASED EDGES AT ALL WINDOW SILLS		NAME: KRISTY RINNE PHONE: 314.254.6634 EMAIL: KRINNE@HLLMARK.COM
ST1	METAL EDGE TRIM	MANF: SCHLUTER STYLE: JOLLY COLOR: SATIN ANODIZED ALUMINUM (AE)		NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
ST2	METAL EDGE TRIM	MANF: SCHLUTER STYLE: SCHIENE COLOR: SATIN ANODIZED ALUMINUM (AE)		NAME: NIKKI VAN DYNE PHONE: 913.620.6098 EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM
ST3	RUBBER TRANSITION STRIP	MANF: ROPPE STYLE: #22 REDUCER STRIP 1/8" COLOR: 193 BLACK BROWN		NAME: WENDY BREMER PHONE: 630.277.1414 EMAIL: WABREMER@ROPPE.COM
ST4	RUBBER TRANSITION STRIP	MANF: ROPPE STYLE: #38 GLUE-DOWN CARPET EDGE 1/4" COLOR: 193 BLACK BROWN		NAME: WENDY BREMER PHONE: 630.277.1414 EMAIL: WABREMER@ROPPE.COM
ST5	GYPSUM REVEAL INSERT/PLASTIC TRIM	MANF: PLASTIC COMPONENTS STYLE: DRYWALL REVEAL 225 SIZE: 1/2" COLOR: PAINTED TO MATCH ADJACENT WALL		
SW1	WINDOW TREATMENT - ROLLER SHADES	MANF: MECHOSHADE TYPE: MECHO/S OPENNESS: 3% STYLE: THERMOVEIL - 1500 SERIES COLOR: GREY 1513	KEYNOTED IN RCP AS 12.24A	NAME: RYAN HELLING PHONE: 816.471.2559 EMAIL: RYAN@HARTKS.COM
SW2	WINDOW TREATMENT - ROLLER SHADES DOUBLE POCKET	MANF: MECHOSHADE TYPE: MECHO/S DOUBLESHADE #15 TOP SHADE: CHELSEA BLACKOUT - 0250 SERIES, GRAPHITE 0253 BOTTOM SHADE: THERMOVEIL - 1500 SERIES, GREY 1513	KEYNOTED IN RCP AS 12.24B	NAME: RYAN HELLING PHONE: 816.471.2559 EMAIL: RYAN@HARTKS.COM
SWF	DECORATIVE WINDOW FILM	MANF: SOLYX STYLE: GLASS WINDOW FILM COLOR: TBD	AT GLASS TYPE 7 LOCATIONS AND INTERIOR SIDE OF EXTERIOR WINDOW TYPE N	NAME: AARON LOTINSKY PHONE: 301.810.5903 EMAIL: CUSTOM@DECORATIVEFILM.COM

GENERAL NOTES - INTERIOR FINISHES:

1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: AC SERIES SHEETS FOR ADDITIONAL CEILING FINISH INFORMATION.
3. RE: A-451 SERIES SHEETS FOR ADDITIONAL WALL FINISH INFORMATION.
4. RE: AI SERIES SHEETS FOR ADDITIONAL FLOOR FINISH & WALL PROTECTION INFORMATION.
5. WHERE MULTIPLE FINISHES ARE LISTED IN ONE AREA OR ROOM ON THE FINISH SCHEDULE, REFER TO THE A-451 AND AI SERIES SHEETS FOR FINISH CLARIFICATION.
6. ALL INTERIOR GYP. BD. SURFACES SHALL RECEIVE EGGSHELL/ SATIN FINISH LATEX PAINT, UNLESS NOTED OR SPECIFIED OTHERWISE.
7. INTERIOR GYP. BD. SURFACES TO RECEIVE EPOXY PAINT SHALL HAVE A SATIN FINISH, UNLESS NOTED OR SPECIFIED OTHERWISE.
8. INSTALL METAL TRANSITION STRIP WHERE WALL TILE MEETS PAINTED GYP. BD. WALL IN ALL VERTICAL AND/ OR HORIZONTAL CONDITIONS, UNLESS NOTED OTHERWISE.
9. HOLLOW METAL FRAMES SHALL RECEIVE SEMI-GLOSS FINISH.
10. WHERE PORCELAIN OR GLASS WALL TILES OF DIFFERENT THICKNESSES MEET, ENSURE THAT THE FACES OF THE DIFFERENT TILES ARE FLUSH.

REMARKS:

1. REFER TO TOILET ELEVATIONS ON SHEET A-401 & A-402 FOR TYPICAL WALL TILE INSTALLATION PATTERNS.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

AI601

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

FINISH LEGEND

EQUIPMENT SCHEDULE		
TYPE MARK	DESCRIPTION	SUPPLIED/ INSTALLED BY
EQ01	WALL MOUNT LED TELEVISION, 55"	OF/CI
EQ02	WALL MOUNT LED TELEVISION, 65"	OF/CI
EQ03	WALL MOUNT LED TELEVISION, 75"	OF/CI
EQ03B	CEILING HUNG LED TELEVISION, 75", TELEVISION MOUNT: CHIEF MANF. CMS0406, CMA345, LCM1U	OF/CI
EQ04	WALL MOUNT LED TELEVISION, 85"-100"	OF/CI
EQ05	VIDEO WALL	OF/OI
EQ06	WHITE BOARD	OF/OI
EQ07	BULLETIN BOARD	OF/OI
EQ08	PLOTTER	OF/OI
EQ09	PRINTER COPIER FAX, FLOOR MODEL	OF/OI
EQ10	SHREDDER	OF/OI
EQ11	SHREDDER	OF/OI
EQ12	AV CREDENZA	OF/OI
EQ13	CONTAINER SHELVING	OF/OI
EQ14	REFRIGERATOR, DOMESTIC, FRENCH DOOR STYLE, 26 CU. FT.	OF/OI
EQ15	CUBELET ICE MACHINE/WATER DISPENSER	OF/CI
EQ16	RANGE HOOD	OF/CI
EQ17	OVEN/STOVE COMBO	OF/CI
EQ18	ADA-COMPLIANT DISHWASHER	OF/CI
EQ19	CUBLET ICE MACHINE/WATER DISPENSER	OF/CI
EQ20	COFFEE MAKER	OF/CI
EQ21	AIR FRYER	OF/OI
EQ22	MICROWAVE	OF/OI
EQ23	UNDER COUNTER REFRIGERATOR	OF/OI
EQ24	VENDING MECHINE	OF/OI
EQ25	TRASH	OF/OI
EQ26	LOCKER	OF/CI
EQ27	WASHING MACHINE	OF/CI
EQ28	DRYER	OF/CI
EQ29	DUMB BELL RACK	OF/OI
EQ30	BENCH PRESS	OF/OI
EQ31	LAT PULLDOWN/ROW	OF/OI
EQ32	SMITH MACHINE	OF/OI
EQ33	TREADMILL	OF/OI
EQ34	SLOW COOKING WARMING DRAWER	OF/OI

GENERAL NOTES – FURNITURE & EQUIPMENT PLANS:

1. RE: SHEET G-011 - FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: SHEET G-021 - FOR TYPICAL MOUNTING HEIGHTS.
3. RE: SHEET A-401's - FOR ENLARGED TOILET ROOM PLANS.
4. RE: INTERIOR/ CASEWORK ELEVATIONS ON SHEETS A-451 FOR EQUIPMENT LOCATIONS.
5. ELECTRICAL DATA SHOWN FOR INFORMATION ONLY, RE: MEP SHEETS.

FFE LEGEND	
	FURNITURE
	EQUIPMENT
01	TOILET ACCESSORIES TAG
EQ01	SPECIALTY EQUIPMENT TAG

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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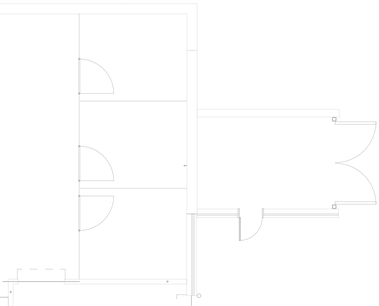

PROFESSIONAL SEAL

AF101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - FFE PLAN

A1 LOWER LEVEL FFE PLAN
1/8" = 1'-0"

NORTH

11/1/2024 1:47:56 PM Autodesk Docs://138191-LeesSummitJointOpsCtr/138191_A23_LeesSummitJointOpsCtr.rvt

EQUIPMENT SCHEDULE		
TYPE MARK	DESCRIPTION	SUPPLIED/ INSTALLED BY
EQ01	WALL MOUNT LED TELEVISION, 55"	OF/CI
EQ02	WALL MOUNT LED TELEVISION, 65"	OF/CI
EQ03	WALL MOUNT LED TELEVISION, 75"	OF/CI
EQ03B	CEILING HUNG LED TELEVISION, 75", TELEVISION MOUNT: CHIEF MANF. CMS0406, CMA345, LCM1U	OF/CI
EQ04	WALL MOUNT LED TELEVISION, 85"-100"	OF/CI
EQ05	VIDEO WALL	OF/OI
EQ06	WHITE BOARD	OF/OI
EQ07	BULLETIN BOARD	OF/OI
EQ08	PLOTTER	OF/OI
EQ09	PRINTER COPIER FAX, FLOOR MODEL	OF/OI
EQ10	SHREDDER	OF/OI
EQ11	SHREDDER	OF/OI
EQ12	AV CREDENZA	OF/OI
EQ13	CONTAINER SHELVING	OF/OI
EQ14	REFRIGERATOR, DOMESTIC, FRENCH DOOR STYLE, 26 CU. FT.	OF/OI
EQ15	CUBELET ICE MACHINE/WATER DISPENSER	OF/CI
EQ16	RANGE HOOD	OF/CI
EQ17	OVEN/STOVE COMBO	OF/CI
EQ18	ADA-COMPLIANT DISHWASHER	OF/CI
EQ19	CUBLET ICE MACHINE/WATER DISPENSER	OF/CI
EQ20	COFFEE MAKER	OF/CI
EQ21	AIR FRYER	OF/OI
EQ22	MICROWAVE	OF/OI
EQ23	UNDER COUNTER REFRIGERATOR	OF/OI
EQ24	VENDING MECHINE	OF/OI
EQ25	TRASH	OF/OI
EQ26	LOCKER	CF/CI
EQ27	WASHING MACHINE	OF/CI
EQ28	DRYER	OF/CI
EQ29	DUMB BELL RACK	OF/OI
EQ30	BENCH PRESS	OF/OI
EQ31	LAT PULLDOWN/ROW	OF/OI
EQ32	SMITH MACHINE	OF/OI
EQ33	TREADMILL	OF/OI
EQ34	SLOW COOKING WARMING DRAWER	OF/OI

GENERAL NOTES – FURNITURE & EQUIPMENT PLANS:

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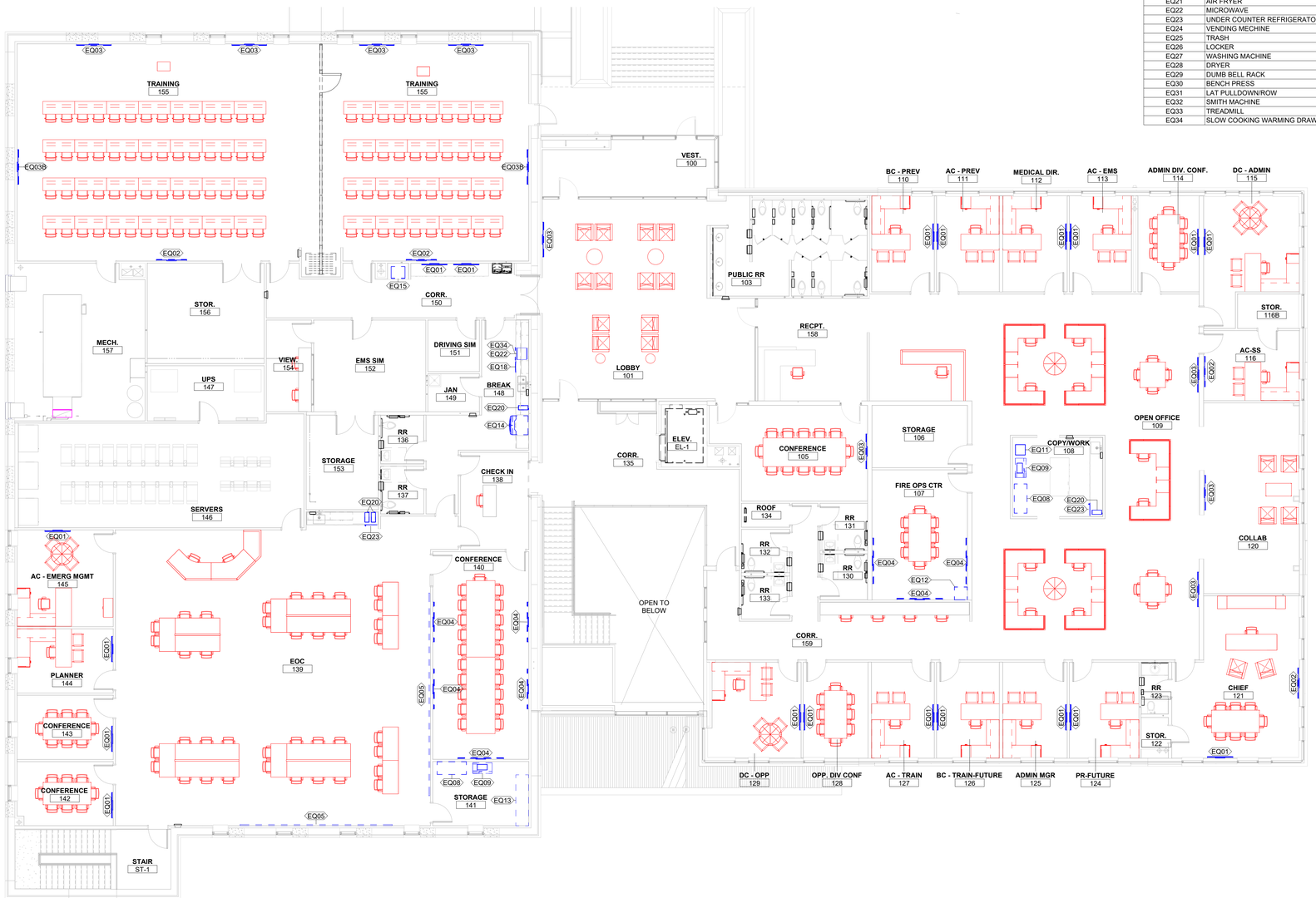
2. RE: SHEET G-021 - FOR TYPICAL MOUNTING HEIGHTS.
3. RE: SHEET A-401's - FOR ENLARGED TOILET ROOM PLANS.
4. RE: INTERIOR/ CASEWORK ELEVATIONS ON SHEETS A-451 FOR EQUIPMENT LOCATIONS.
5. ELECTRICAL DATA SHOWN FOR INFORMATION ONLY, RE: MEP SHEETS.

FFE LEGEND	
	FURNITURE
	EQUIPMENT
01	TOILET ACCESSORIES TAG
EQ01	SPECIALTY EQUIPMENT TAG



NORTH

A1 MAIN LEVEL FFE PLAN
1/8" = 1'-0"

MAIN LEVEL - FFE PLAN

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

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STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

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AF102

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GENERAL SYMBOLS

"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

- 1 — MECHANICAL NOTE REFERENCE
- 2 — ELECTRICAL NOTE REFERENCE
- 3 — DEMOLITION NOTE REFERENCE
- A — REVISION NOTE REFERENCE
- CONNECT TO EXISTING WORK
- M1 — DETAIL REFERENCE - NO./SHEET NO.
- A / M1 — SECTION CUT - SECTION/SHEET NO.
- BRACKET DENOTES A WALL MOUNTED DEVICE, TYP

FIRE ALARM SYMBOLS

"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

FAAP	FIRE ALARM ANNUNCIATION PANEL	C	CHIME
FACP	FIRE ALARM CONTROL PANEL	B	BELL
F	MANUAL PULL STATION	F	FIRE ALARM HORN
S	SMOKE DETECTOR	S	FIRE ALARM SPEAKER
SD	SMOKE DETECTOR - DUCT MOUNTED		FIRE ALARM STROBE
SB	SMOKE DETECTOR - WITH SOUNDER BASE		COMBINATION FIRE ALARM HORN AND STROBE
SO	COMBINATION SMOKE/CARBON MONOXIDE DETECTOR		COMBINATION FIRE ALARM SPEAKER AND STROBE
CO	CARBON MONOXIDE DETECTOR	RL	REMOTE ALARM LAMP
SBO	COMBO SMOKE/CARBON MONOXIDE/SOUNDER BASE	PI	POST INDICATOR SWITCH
H	THERMODETECTOR(HEAT) DETECTOR	FS	FLOW SWITCH
HD	THERMODETECTOR(HEAT) DETECTOR - DUCT MOUNTED	TS	TAMPER SWITCH
DH	DOOR HOLDER	AI	ADDRESSABLE INTERFACE

GENERAL NOTES:

1. FIRE ALARM SHALL MEET THE APPLICABLE REQUIREMENTS OF NFPA 72, NFPA 101, NFPA 90A, NFPA 99 AND ASME 17.3 OR 17.3 IN ADDITION TO THE LOCALLY ADOPTED CODES.
2. SET CANDELA SETTINGS ON ALL STROBES PER THE REQUIREMENTS OF NFPA 72.
3. CONDUITS, BOXES AND SLEEVES SHALL BE INSTALLED BY DIVISION 26 CONTRACTOR.
4. SEAL ALL PENETRATIONS MADE FOR FIRE ALARM CABLING AND INFRASTRUCTURE USING APPROPRIATE METHOD AND MATERIAL TO MAINTAIN FIRE RATING OF ALL FIRE RESISTANCE - RATED CONSTRUCTIONS. REFER TO FIRESTOP DETAILS ON THE LOW VOLTAGE DETAIL SHEETS FOR ADDITIONAL INFORMATION, AND ARCHITECTURAL CODE SHEETS FOR RATED WALL AND FLOOR LOCATIONS.
5. SPECIAL MOUNTING HEIGHTS NOTED ON PLANS ARE MEASURED TO THE CENTER OF THE JUNCTION BOX. REFER TO TYPICAL MOUNTING HEIGHT DETAIL FOR TYPICAL MOUNTING HEIGHTS.
6. FIRE ALARM DEVICES TO BE WHITE.

PLAN NOTES:

1. FIRE ALARM CONTROL PANEL.
2. WEATHERPROOF HORN STROBE ABOVE FIRE PROTECTION SERVICE ENTRANCE LOCATION.
3. FIRE ALARM CONNECTION TO FIRE SHUTTER DOOR. COORDINATE WITH DOOR INSTALLER.

NORTH

A1 LOWER LEVEL - FIRE ALARM PLAN
1/8" = 1'-0"

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

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2 NE TUDOR RD
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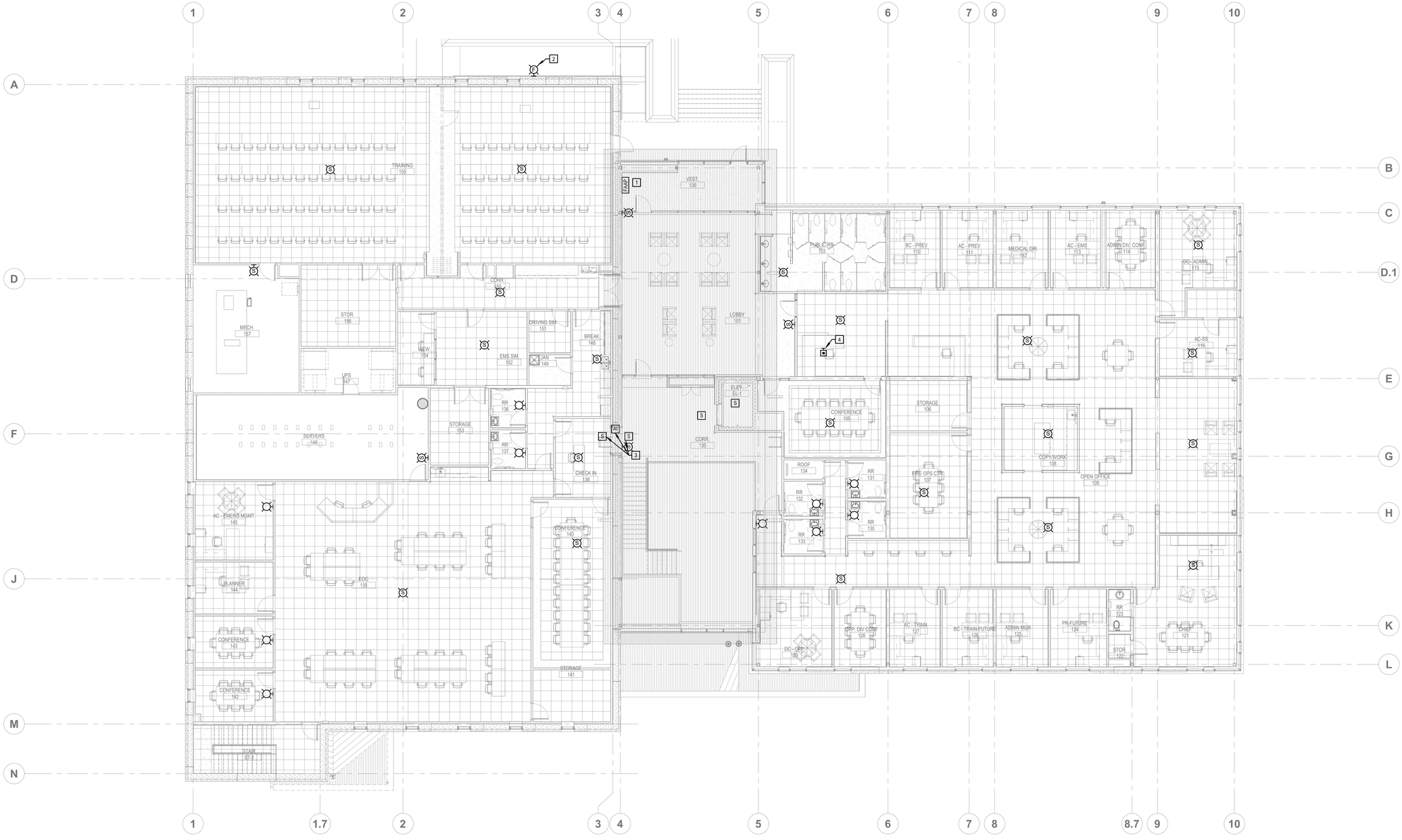
HOEFER WELKER #: 138191

LOWER LEVEL - FIRE ALARM PLAN



GENERAL NOTES:

1. REFER TO FA101 FOR GENERAL NOTES AND SYMBOLS.

PLAN NOTES:

1. FIRE ALARM REMOTE ANNUNCIATOR PANEL.
2. WEATHERPROOF HORN STROBE ABOVE FIRE PROTECTION SERVICE ENTRANCE LOCATION.
3. FIRE ALARM CONNECTION TO FIRE SHUTTER DOOR. COORDINATE WITH DOOR INSTALLER.
4. DURESS PUSH BUTTON WITH AUX CONTACTS AND CONNECTION TO FIRE ALARM SYSTEM. PUSHING BUTTON SHALL INITIATE A PRERECORDED MESSAGE COORDINATE MESSAGE CONTENT AND PROGRAMMING WITH OWNER. COORDINATE BUTTON LOCATION WITH OWNER PRIOR TO ISNTALLATON.

A1 MAIN LEVEL - FIRE ALARM PLAN
1/8" = 1'-0"

NORTH

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project number 2421800

LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER EDWARD ALBRIGHT
NUMBER 2009033954
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

FA102

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - FIRE ALARM PLAN

GENERAL SYMBOLS

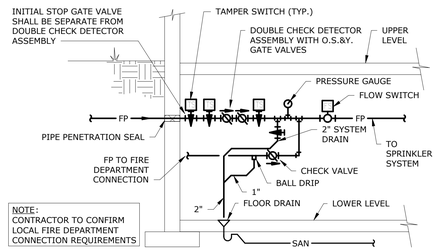
"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

- 1 — MECHANICAL NOTE REFERENCE
- 2 — ELECTRICAL NOTE REFERENCE
- 3 — DEMOLITION NOTE REFERENCE
- 4 — REVISION NOTE REFERENCE
- CONNECT TO EXISTING WORK
- 1 / M1 — DETAIL REFERENCE - NO./SHEET NO.
- A / M1 — SECTION CUT - SECTION/SHEET NO.
- BRACKET DENOTES A WALL MOUNTED DEVICE, TYP

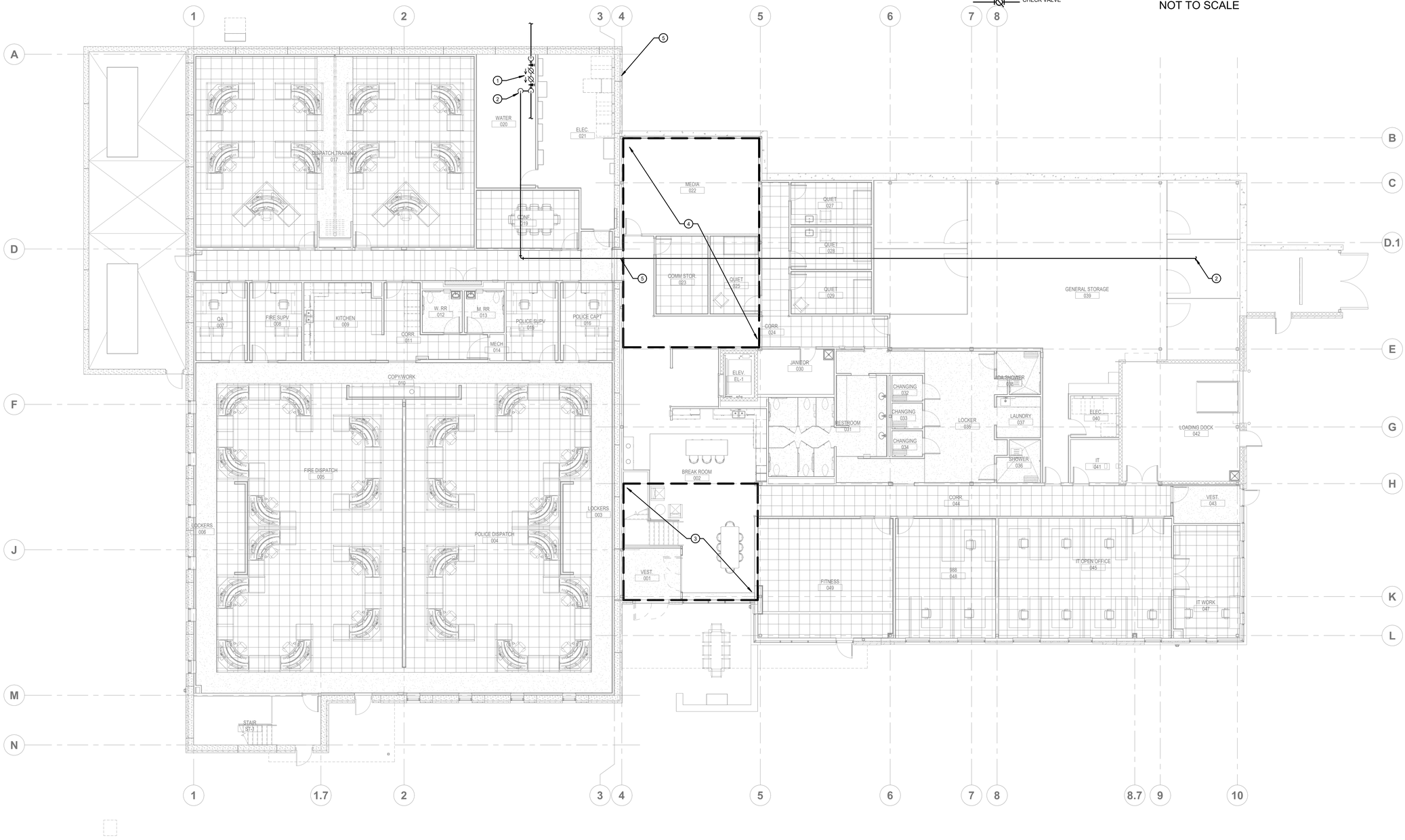
FIRE PROTECTION SYMBOLS

"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

- FP — FIRE PROTECTION PIPING
- FHC — FIRE HOSE CABINET
- FDV — FIRE DEPARTMENT VALVE
- UPRIGHT SPRINKLER HEAD
- PENDENT SPRINKLER
- RECESSED SPRINKLER
- CONCEALED SPRINKLER
- SIDEWALL SPRINKLER.
- DOUBLE CHECK DETECTOR BACKFLOW PREVENTER
- FIRE DEPARTMENT CONNECTION
- POST INDICATOR VALVE
- ELBOW DOWN
- ELBOW UP
- TEE UP
- TEE DOWN
- CAP
- UNION
- PIPE FLEX
- STRAINER
- PRESSURE GAUGE WITH GAUGE COCK
- SHUTOFF VALVE
- SHUTOFF VALVE IN RISER
- CHECK VALVE



FIRE PROTECTION ENTRANCE DETAIL
NOT TO SCALE



NORTH

A1 LOWER LEVEL - FIRE PROTECTION PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. PROVIDE NFPA 13 COMPLIANT SPRINKLER SYSTEM FOR THE BUILDING.
2. CAREFULLY COORDINATE PIPE ROUTING WITH STRUCTURE AS WELL AS ALL OTHER TRADES TO MAINTAIN EQUIPMENT CLEARANCES AND DESIRED CEILING HEIGHTS.
3. ALL PIPING TO BE INSTALLED CONCEALED FROM VIEW UNLESS NOTED.
4. PROVIDE PROTECTIVE CAGE OVER SPRINKLER HEADS LOCATED WITHIN 84" AFF & ALL CUSTODIAL, MECHANICAL, AND STORAGE ROOMS.
5. SPRINKLER HEAD LOCATIONS SHALL BE COORDINATED WITH LIGHTS, DIFFUSERS, SOUND SYSTEM COMPONENTS AND OTHER ITEMS INSTALLED IN CEILING. LOCATION OF THESE DEVICES TAKES PRIORITY OVER SPRINKLER HEAD LOCATIONS. SHOW CLEARLY, THE RELATIONSHIP OF ALL CEILING MOUNTED DEVICES WITH THE SPRINKLER HEAD LOCATIONS WHEN SPRINKLER SHOP DRAWINGS ARE SUBMITTED FOR APPROVAL.
6. SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF LAY-IN CEILING GRIDS, ASSUMING 2x2 GRID FORMAT. SPRINKLER HEADS IN EXPOSED OR HARD CEILINGS SHALL BE LAID OUT IN A UNIFORM AND SYMMETRICAL PATTERN ACCEPTABLE WITH ARCHITECT AND/OR ENGINEER. SEE ARCHITECTURAL PLANS FOR TYPE OF CEILING INSTALLED.
7. SPRINKLER DRAIN PIPING SHALL BE ROUTED IN CONCEALED SPACES TO OUTSIDE OR TO MOP SINKS ONLY. 2" TEST LINES MUST BE PIPED TO OUTSIDE. EXTERIOR DRAIN OUTLETS SHALL BE CHROME WITH MATCHING ESCUTCHEON AND THREADED HOSE FITTING, AND SHALL DISCHARGE ON SPLASH BLOCK AT 45-DEGREE ANGLE.
8. WHERE AN EXISTING SURFACE MUST BE CUT, OR EXISTING UTILITIES INTERFERE, SUCH OBSTRUCTION SHALL BE BYPASSED, REMOVED, REPLACED OR RELOCATED, PATCHED, OR REPAIRED. WORK DISTURBED OR DAMAGED SHALL BE REPLACED OR REPAIRED TO ITS PRIOR CONDITION.
9. PIPING SHALL BE SUITABLE FOR INSTALLATION IN A RETURN AIR PLENUM. COORDINATE WITH HVAC PLANS.
10. COORDINATE ALL PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO CORE DRILLING.
11. PROVIDE FIRESTOPPING AT PENETRATIONS OF ALL RATED WALLS. REFER TO CODE PLANS FOR LOCATIONS OF RATED WALLS.
12. PROVIDE ICC 500 RATED PIPING SHROUD FOR ALL PENETRATIONS THROUGH THE ICC 500 STRUCTURE FOR ALL PIPE PENETRATIONS OVER 2" IN DIAMETER.
13. FIRE PROTECTION PLANS, SPRINKLER DRAWINGS, AND SPRINKLER CALCULATIONS MUST BE SIGNED BY A LICENSED REGISTERED FIRE PROTECTION CONTRACTOR ALLOWED TO WORK IN AREA OF JURISDICTION AND FOLLOW ALL LOCAL AND STATE CODES.
14. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

PLAN NOTES:

1. 6" FIRE PROTECTION SERVICE ENTRANCE AND BACKFLOW ASSEMBLY. REFER TO DETAIL. COORDINATE WITH THE DOMESTIC WATER SERVICE ENTRY, HYDRONIC PIPING, AND ALL EQUIPMENT. COORDINATE WITH CIVIL.
2. FIRE PROTECTION PIPING TO REMOTE FIRE DEPARTMENT CONNECTION LOCATED OUTSIDE OF THE BUILDING. COORDINATE FIRE DEPARTMENT CONNECTION LOCATION AND PIPE ROUTING WITH CIVIL.
3. COORDINATE PIPE ROUTING AT TWO-STORY BREAK ROOM.
4. ROUTE PIPING BETWEEN SIDES WITHIN THIS PLENUM.
5. COORDINATE ALL PENETRATIONS IN THE STORM SHELTER PRECAST PRIOR TO CONSTRUCTION. PRECAST PENETRATIONS CANNOT BE FIELD CUT.

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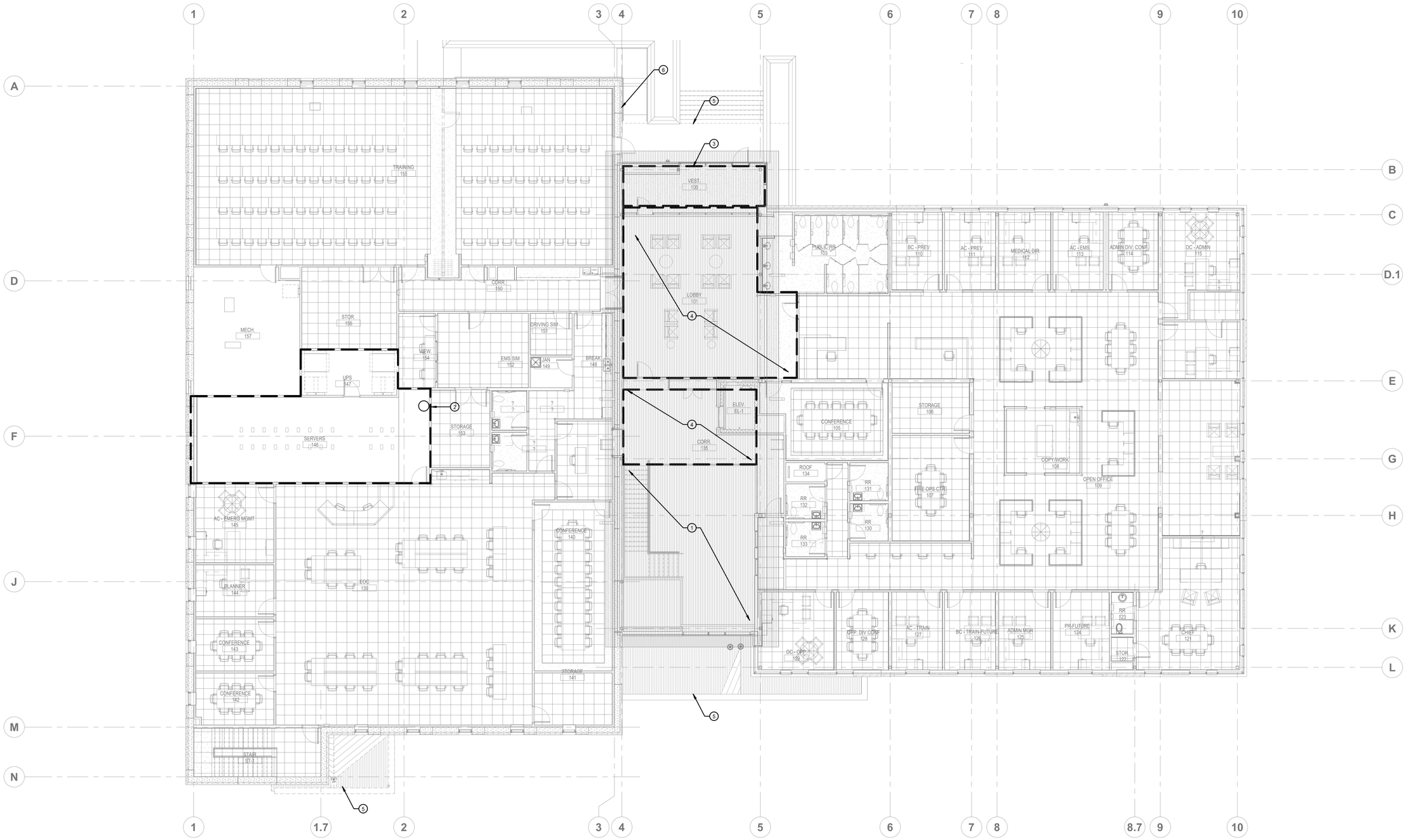
PROFESSIONAL SEAL

FX101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - FIRE PROTECTION PLAN



NORTH

A1 MAIN LEVEL - FIRE PROTECTION PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET FX101 FOR GENERAL NOTES AND SYMBOLS.

PLAN NOTES:

1. COORDINATE PIPE ROUTING AT TWO-STORY BREAK ROOM.
2. PROVIDE COMPLETE CLEAN AGENT FIRE SUPPRESSION SYSTEM AND ALL REQUIRED ALARMS, ACCESSORIES, AND PIPING FOR SERVER ROOM AND UPS ROOM. SYSTEM TO BE DELEGATED DESIGN.
3. THERE IS A LID ON THE VESTIBULE AND THE SPACE ABOVE THE VESTIBULE IS OPEN TO THE LOBBY, SO COORDINATE THE SPRINKLER SYSTEM ACCORDINGLY.
4. AVOID ROUTING SPRINKLER MAINS THROUGH THIS SPACE, COORDINATE ROUTING THE SPRINKLER MAINS THROUGH THE LOWER LEVEL.
5. EXTERIOR CANOPIES CONSIST OF ONLY NON COMBUSTIBLE MATERIALS, NO SPRINKLER REQUIRED.
6. COORDINATE ALL PENETRATIONS IN THE STORM SHELTER PRECAST PRIOR TO CONSTRUCTION. PRECAST PENETRATIONS CANNOT BE FIELD CUT.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - FIRE PROTECTION PLAN

PLUMBING SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

STANDARD MOUNTING HEIGHTS

REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.

LAVATORY OR SINK	
STANDARD HEIGHT	31" FLOOR TO RIM
ADA ACCESSIBLE	34" FLOOR TO RIM
CHILD HEIGHT	24" FLOOR TO RIM
URINAL	
STANDARD HEIGHT	24" FLOOR TO RIM
ADA ACCESSIBLE	17" FLOOR TO RIM
CHILD HEIGHT	14" FLOOR TO RIM
WATER CLOSET	
STANDARD HEIGHT	15" FLOOR TO RIM
ADA ACCESSIBLE	17" TO 19" FLOOR TO TOP OF SEAT
CHILD HEIGHT	10" FLOOR TO RIM
WATER COOLER OR DRINKING FOUNTAIN	
STANDARD HEIGHT	41" FLOOR TO SPOUT
ADA ACCESSIBLE	36" FLOOR TO SPOUT
CHILD HEIGHT	30" FLOOR TO SPOUT
SHOWER VALVES	
STANDARD HEIGHT - MEN	48" FLOOR TO CENTERLINE
STANDARD HEIGHT - WOMEN	42" FLOOR TO CENTERLINE
ADA ACCESSIBLE	38" MIN TO 48" MAX FLOOR TO CENTERLINE
SHOWER HEADS	
MEN	6'-6" FLOOR TO CENTERLINE
WOMEN	6'-0" FLOOR TO CENTERLINE
TUB VALVES	
STANDARD HEIGHT	32" FLOOR TO CENTERLINE
ADA ACCESSIBLE	CENTER BETWEEN GRAB BAR AND TUB RIM
CLINIC SERVICE SINKS	30" FLOOR TO RIM
SURGEON'S SCRUB-UP SINKS	35" FLOOR TO FRONT RIM
ICE MAKER OUTLET BOXES	24" FLOOR TO CENTER OF BOX
WASHING MACHINE OUTLET BOXES	42" FLOOR TO RIM
JANITOR'S SINK FAUCET FITTING	42" FLOOR TO CENTERLINE
HOSE BIBBS	36" AFF TO CENTERLINE
NON-FREEZE WALL HYDRANTS	18" AFG TO CENTERLINE

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ANNOTATION

- (1) PLUMBING PLAN NOTE CALLOUT
- (1) PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
- 1 EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CU 1 MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 / P1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / P1 SECTION CUT DESIGNATION

ABBREVIATIONS

ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AP	ACCESS PANEL
BAS	BUILDING AUTOMATION SYSTEM
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTU	BRITISH THERMAL UNIT
CP	CONDENSATE PUMP
CPVC	CHLORINATED POLYVINYL CHLORIDE
CU	COPPER
D	DEMOLISH
DI	DUCTILE IRON
DN	DOWN
DFU	DRAINAGE FIXTURE UNIT
DS	DOWNSPOUT
EMS	ENERGY MANAGEMENT SYSTEM
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FFA	FROM FLOOR ABOVE
FFA	FROM FLOOR BELOW
FF	FINISHED FLOOR
FL	FLOW LINE
FLA	FULL LOAD AMPS
FLR	FLOOR
GPM	GALLONS PER MINUTE
HD	HEAD, HUB DRAIN
HZ	HERTZ
IE	INVERT ELEVATION
IN WC	INCHES OF WATER COLUMN
JB	JUNCTION BOX
J-BOX	JUNCTION BOX
KW	KILOWATT
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MH	MANHOLE
MIN	MINIMUM
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NIC	NOT IN CONTRACT
ORD	OVERFLOW ROOF DRAIN
PDI	PLUMBING DRAINAGE INSTITUTE
PH/Ø	PHASE
PRV	PRESSURE REDUCING VALVE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SF	SQUARE FEET
SP	SUMP
SS	STAINLESS STEEL SANITARY SEWER, SOIL STACK
TDH	TOTAL DYNAMIC HEAD
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
VCP	VITRIFIED CLAY PIPE
VFD	VARIABLE FREQUENCY DRIVE
VS	VENT STACK
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WC	WATER COLUMN
WS	WASTE STACK
WSFU	WATER SUPPLY FIXTURE UNIT
WVS	WASTE VENT STACK

PIPING SYMBOLS

- FLOOR SINK (FS), SIZE & TYPE
- FLOOR DRAIN (FD), SIZE & TYPE
- ROOF DRAIN (RD), SIZE & TYPE
- BALL VALVE
- CONTROL VALVE
- SHUTOFF VALVE
- CHECK VALVE
- BUTTERFLY VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- WATER METER
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- GAS PRESSURE REGULATOR
- THERMOSTATIC MIXING VALVE
- PA PIPE ANCHOR
- EJ EXPANSION JOINT
- BACKFLOW PREVENTER
- PRESSURE GAUGE
- THERMOMETER
- UNION
- FLANGE CONNECTION
- HOSE BIBB (HB)
- NON-FREEZING WALL HYDRANT (NW)
- MANUAL / AUTOMATIC AIR VENT OR VACUUM RELIEF VALVE
- PRESSURE / VACUUM SWITCH
- CLEANOUT
- CAP
- WALL CLEANOUT (WCO)
- FLOOR CLEANOUT (FCO)
- EXTERIOR CLEANOUT (ECO)
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- ELBOW UP WITH SHUT-OFF VALVE (SOV)
- ELBOW DOWN WITH SHUT-OFF VALVE (SOV)
- TEE UP WITH SHUT-OFF VALVE (SOV)
- TEE DOWN WITH SHUT OFF VALVE (SOV)
- "A" WATER HAMMER ARRESTER (WHA) WITH PDI SIZES, (A, B, C, D, & E)
- RECIRCULATION PUMP
- P-TRAP
- GAS COCK
- TRAP PRIMER
- TRAP PRIMER WITH DISTRIBUTION UNIT

PIPING LINETYPES

- CW DOMESTIC COLD WATER (CW)
- SCW SOFTENED COLD WATER (SCW)
- HW DOMESTIC HOT WATER (HW)
- HWR DOMESTIC HOT WATER RECIRC. (HWR)
- 140° DOMESTIC HOT WATER (140°)
- T TRAP PRIMER LINE (T)
- S SOIL PIPING - ABOVE FLOOR (S)
- S SOIL PIPING - BELOW FLOOR (S)
- W WASTE PIPING - ABOVE FLOOR (W)
- W WASTE PIPING - BELOW FLOOR (W)
- GW GREASE WASTE - ABOVE FLOOR (GW)
- GW GREASE WASTE - BELOW FLOOR (GW)
- CGWV COMBINATION GREASE WASTE AND VENT (CGWV)
- CWV COMBINATION WASTE AND VENT (CWV)
- V VENT PIPING (V)
- AW ACID WASTE - ABOVE FLOOR (AW)
- AW ACID WASTE - BELOW FLOOR (AW)
- AV ACID VENT (AV)
- ST STORM DRAIN - ABOVE FLOOR (ST)
- ST STORM DRAIN - BELOW FLOOR (ST)
- OST OVERFLOW STORM DRAIN - ABOVE FLOOR (OST)
- VBG VENT BELOW GRADE (VBG)
- VBF VENT BELOW FLOOR (VBF)
- ID INDIRECT DRAIN (ID)
- CDH CONDENSATE DRAIN - HIGH EFFICIENCY RTU (CDH)
- CD CONDENSATE DRAIN (CD)
- ACD AUXILIARY CONDENSATE DRAIN (ACD)
- SPD SUMP OR SEWAGE PUMP DISCHARGE (SPD)
- G NATURAL GAS (G)
- MPG MEDIUM PRESSURE NATURAL GAS (MPG)
- MPG MEDIUM PRESSURE NATURAL GAS ON ROOF (MPG)
- NPW NON-POTABLE WATER (NPW)
- LPG LIQUEFIED PETROLEUM GAS (LPG)
- WS WATER SERVICE (WS)
- FP FIRE PROTECTION (FP)
- PD CONDENSATE PUMP DISCHARGE (PD)
- CA COMPRESSED AIR (CA)

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	NEW
DEMOLISH	FUTURE

GENERAL PLUMBING NOTES

1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
3. PROVIDE TO THE ARCHITECT A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS, REFER TO SPECIFICATIONS.
4. INSTALLATION SHALL COMPLY WITH LEGALLY CONSTITUTED CODES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND ALSO MEET ALL REQUIREMENTS OF THE LANDLORD. OBTAIN A COPY OF THE LANDLORD'S REQUIREMENTS AND REVIEW PRIOR TO SUBMITTING BID.
5. PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
6. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
7. DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.
8. INSTALL CONCEALED PIPING TIGHT TO THE STRUCTURE AND AS HIGH AS POSSIBLE. INSTALL EXPOSED PIPING TIGHT TO THE STRUCTURE, WALL OR CEILING AND AS HIGH AS POSSIBLE. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS.
9. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
10. PIPING IN FINISHED AREAS SHALL BE ROUTED CONCEALED; EXPOSED PIPING, WHERE NECESSARY, SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO WALLS.
11. INSTALL NO PLASTIC PIPE IN THE CEILING RETURN AIR PLENUM.
12. COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
13. COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
14. CLEAN PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
15. PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL AUTHORITIES.
16. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
17. WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE. PROVIDE WATER HAMMER ARRESTORS WHERE QUICK CLOSING VALVES ARE UTILIZED.

PLUMBING SHEET INDEX

SHEET NUMBER	SHEET NAME
PG001	PLUMBING LEGEND AND GENERAL NOTES
PS101	PLUMBING SITE PLAN
P-101	UNDERGROUND PLUMBING PLAN
P-111	LOWER LEVEL - WASTE AND VENT PLAN
P-112	MAIN LEVEL - WASTE AND VENT PLAN
P-113	ROOF PLUMBING PLAN
P-114	VEHICLE BAY PLUMBING PLAN
P-121	LOWER LEVEL - WATER AND GAS PLAN
P-122	MAIN LEVEL - WATER AND GAS PLAN
P-401	ENLARGED LOWER LEVEL WASTE AND VENT PLANS
P-402	ENLARGED MAIN LEVEL WASTE AND VENT PLANS
P-403	ENLARGED LOWER LEVEL WATER PLANS
P-404	ENLARGED MAIN LEVEL WATER PLANS
P-501	PLUMBING DETAILS
P-601	PLUMBING SCHEDULES
P-621	PLUMBING WASTE AND VENT RISER
P-622	PLUMBING WASTE AND VENT RISER

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

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REVISION DATES:

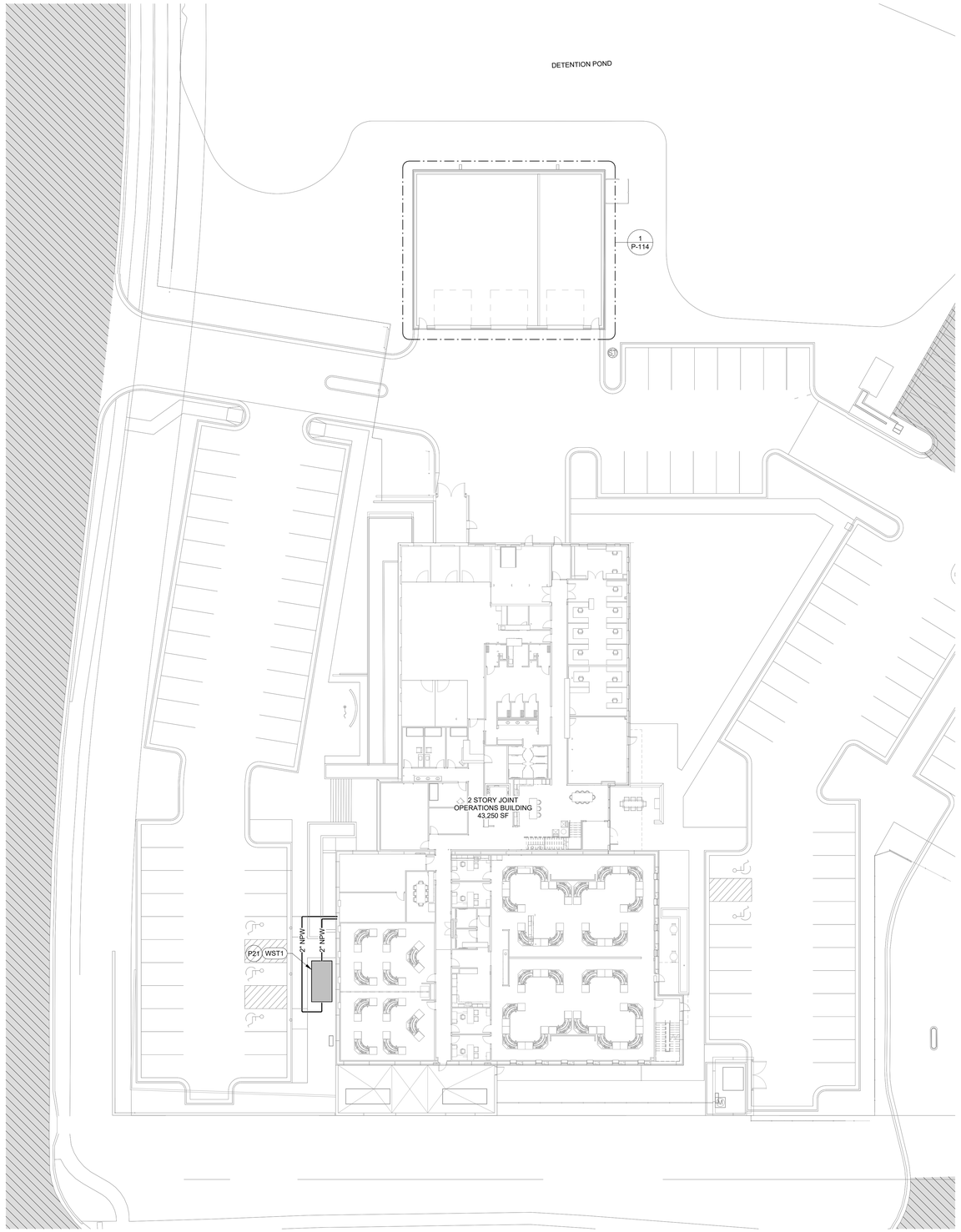
STATE OF MISSOURI — CLINT STUCKEMPER — NUMBER E-24340 — 10/31/24 — REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

PG001

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

PLUMBING LEGEND AND GENERAL NOTES



1 PLUMBING SITE PLAN
1" = 20'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P21 PROVIDE HOSE HOOKUP AT GRADE LEVEL FOR PUMPER TRUCK CONNECTION TO STORAGE TANK.

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PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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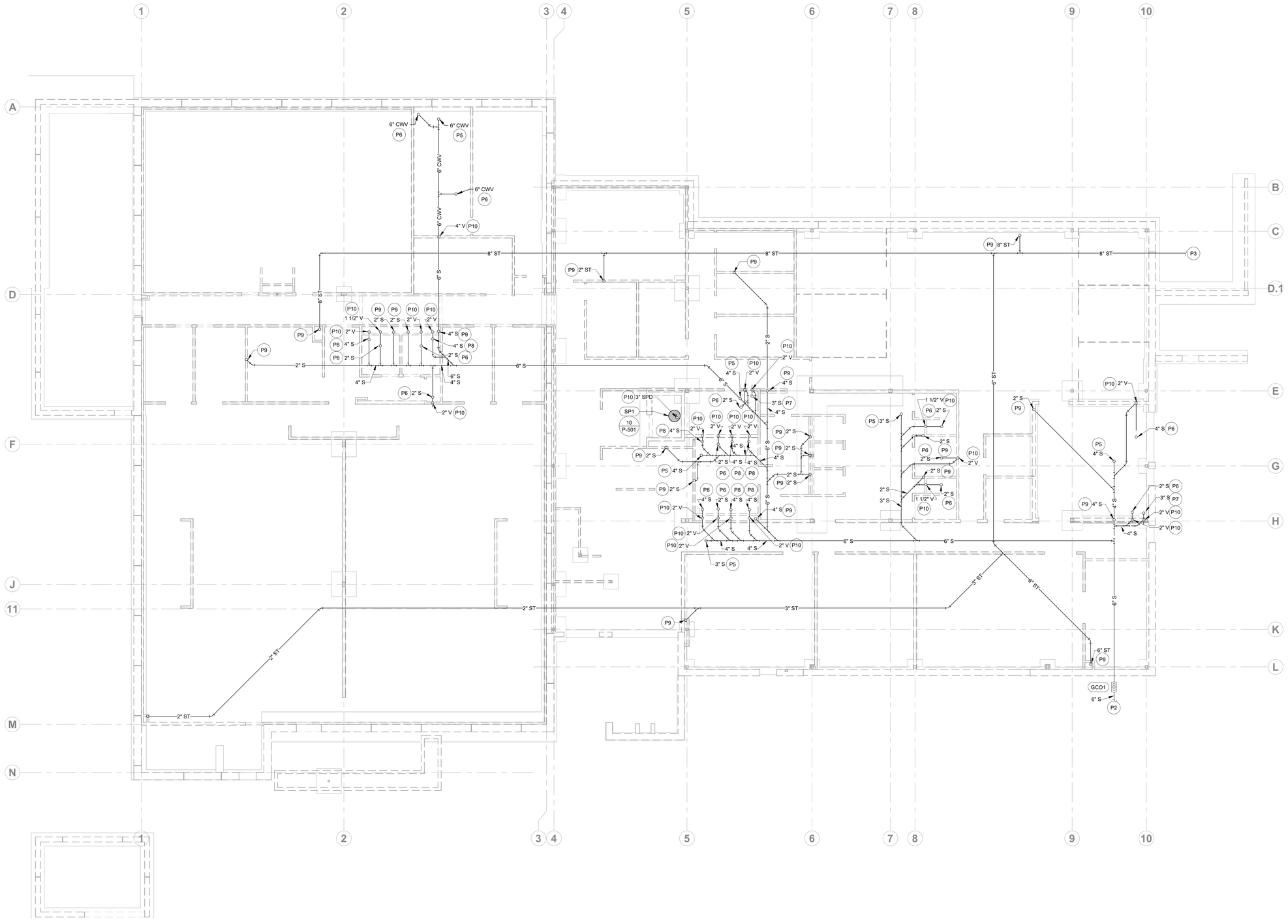
REVISION DATES:

PROFESSIONAL SEAL

PS101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

PLUMBING SITE PLAN



1 UNDERGROUND PLUMBING PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P2 EXTEND SANITARY SEWER 5'-0" OUTSIDE BUILDING AND CONNECT TO CIVIL AT 1003.2. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
P3 EXTEND STORM SEWER 5'-0" OUTSIDE BUILDING AND CONNECT TO CIVIL AT 1003.75. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
P5 FROM FLOOR CLEANOUT ABOVE.
P6 FROM FLOOR DRAIN ABOVE.
P7 FROM MOP SINK ABOVE.
P8 FROM WATER CLOSET ABOVE.
P9 FFA
P10 TFA

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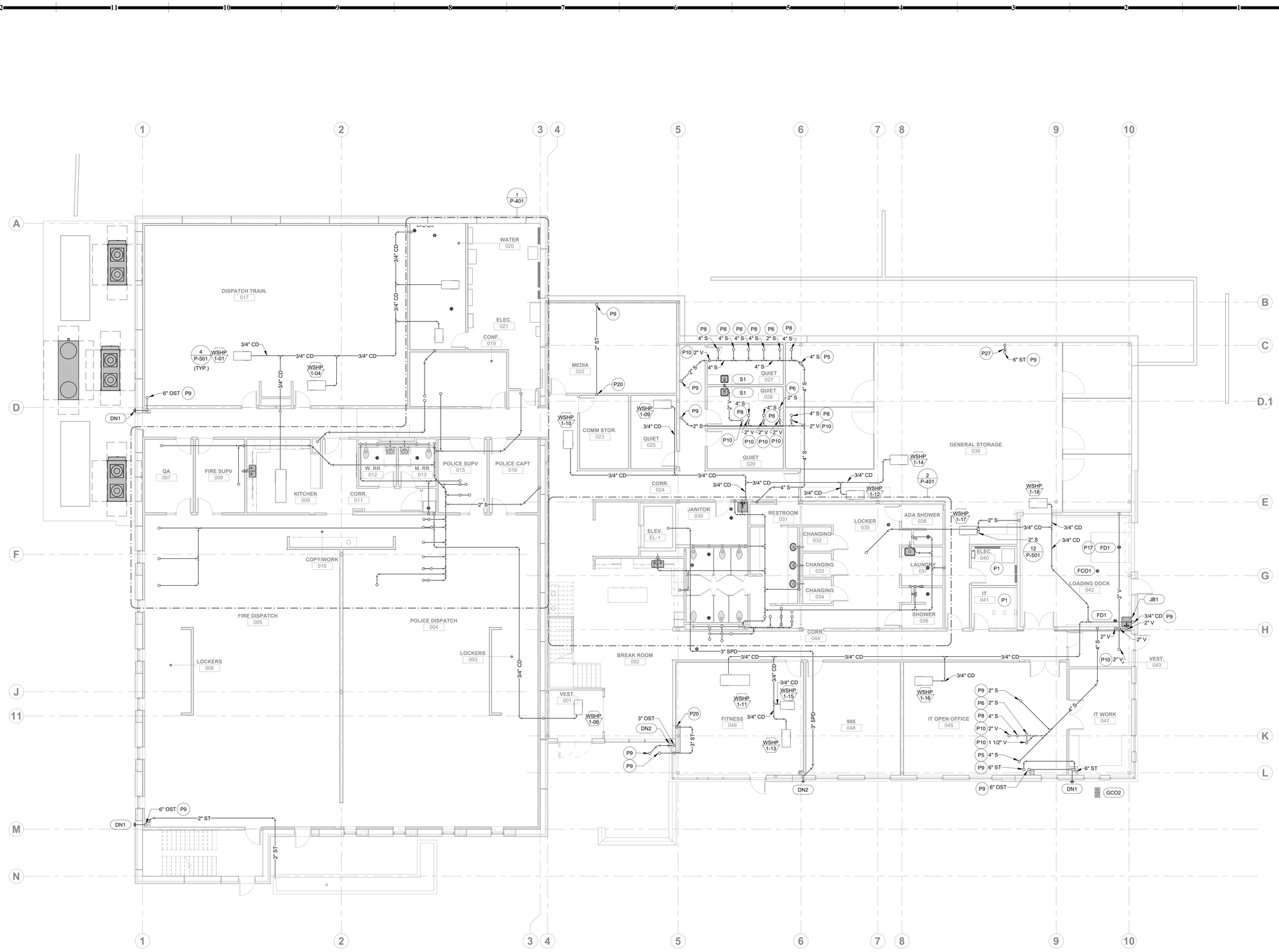
UNDERGROUND PLUMBING PLAN



1 LOWER LEVEL WASTE & VENT PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1	DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P5	FROM FLOOR CLEANOUT ABOVE.
P6	FROM FLOOR DRAIN ABOVE.
P8	FROM WATER CLOSET ABOVE.
P9	FFA
P10	TFA
P17	EXTEND NON POTABLE WATER TO WATER STORAGE TANK INLET. COORDINATE WITH PRECAST STORM WALL SHOP DRAWINGS FOR FINAL PENETRATION LOCATION.
P20	TFB
P27	STEP OUT STORM LINE AT FLOOR PENETRATION TO AVOID FOUNDATION.

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LOWER LEVEL - WASTE AND VENT PLAN

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P9 FFA
P19 FFB
P20 TFB

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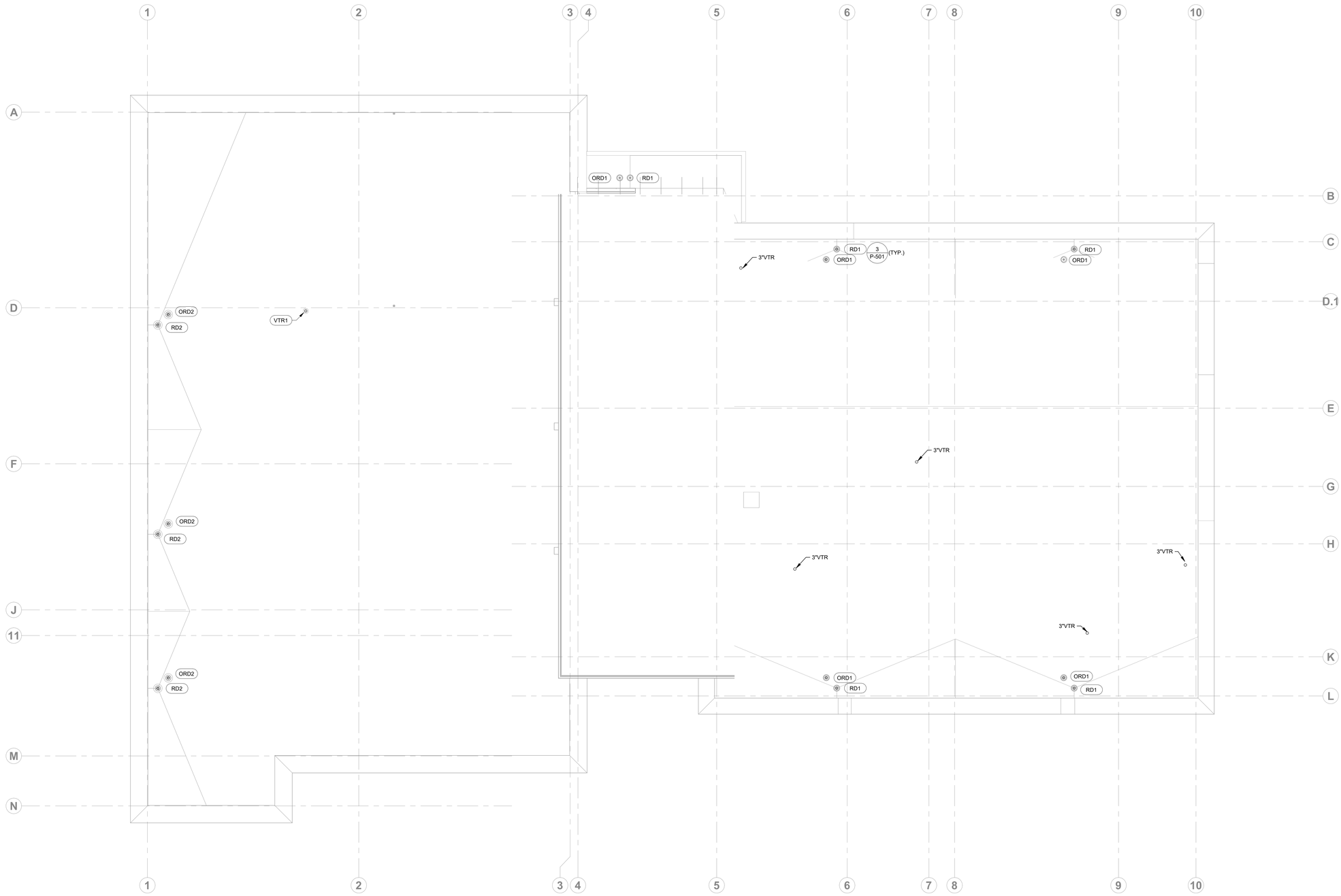
MAIN LEVEL - WASTE AND VENT PLAN

1 MAIN LEVEL WASTE & VENT PLAN
1/8" = 1'-0"

NORTH



1 ROOF PLUMBING PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

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REVISION DATES:

ELSIE STOCKTON KOCHENOUR
NUMBER PE-2010019916
10/31/24
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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ROOF PLUMBING PLAN

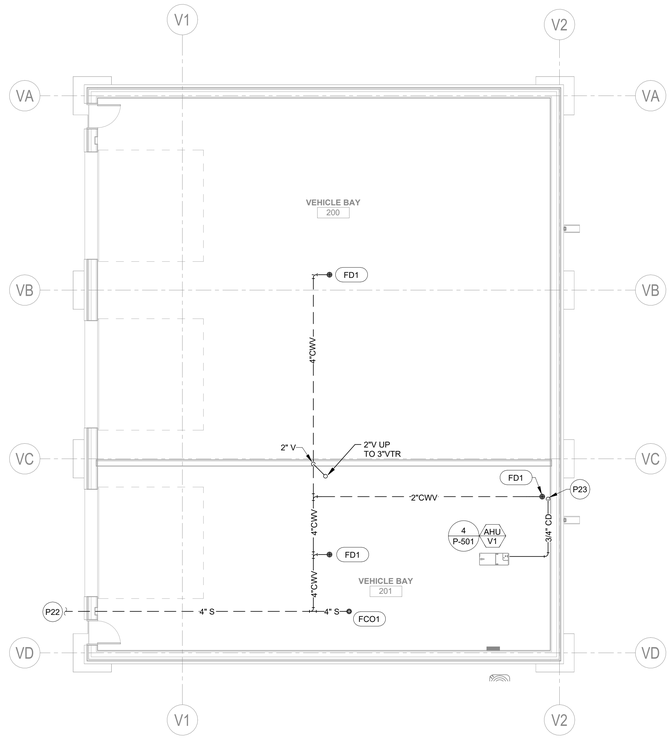
GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P22 EXTEND SANITARY SEWER 5'-0" OUTSIDE BUILDING AND CONNECT TO CIVIL AT 1007.67. REFER TO CIVIL DRAWINGS FOR CONTINUATION.

P23 ROUTE CONDENSATE WALL DOWN IN WALL AND TERMINATE AT FLOOR DRAIN WITH AIR GAP.



NORTH

1 VEHICLE BUILDING - PLUMBING PLAN
1/8" = 1'-0"

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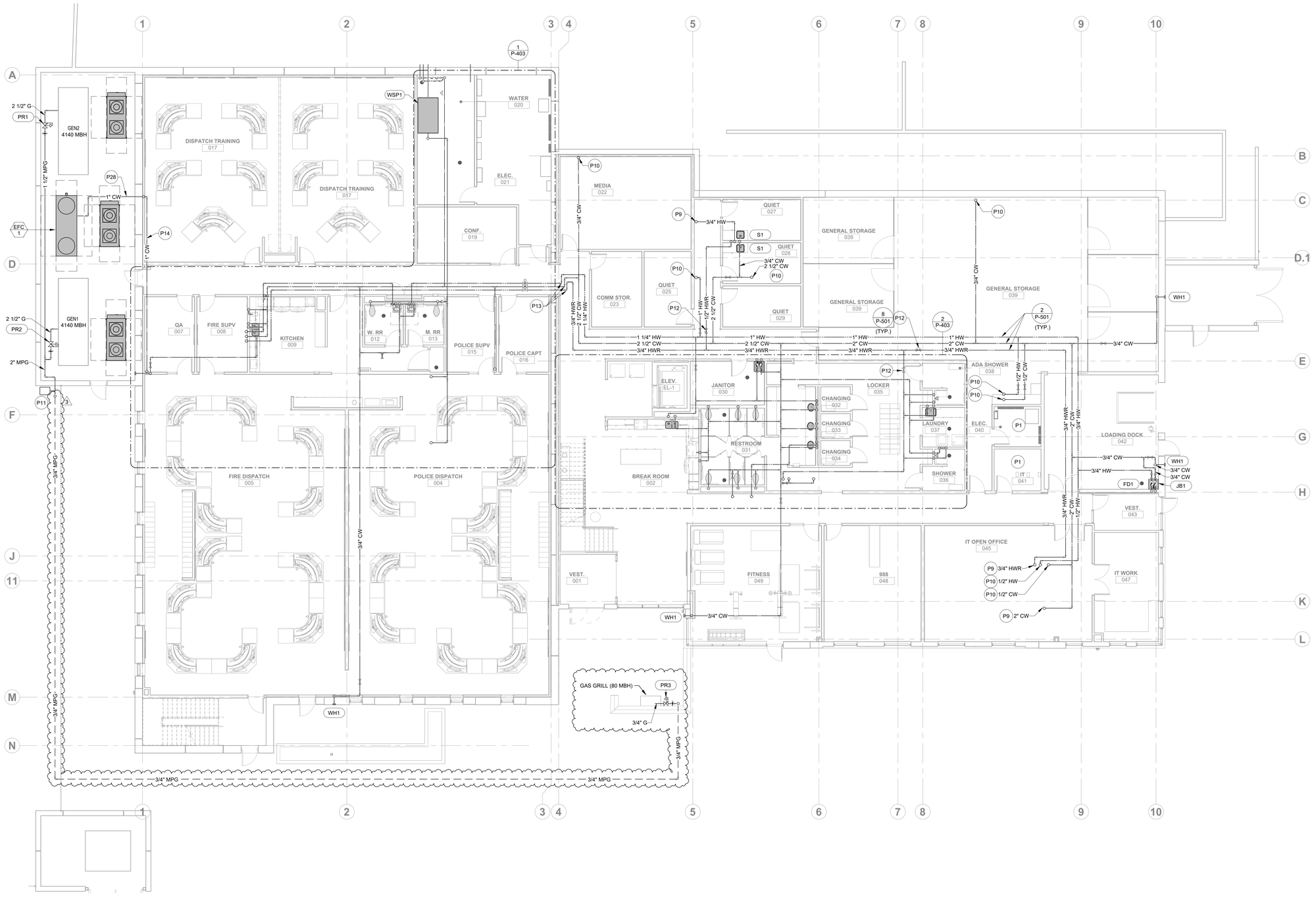
VEHICLE BAY PLUMBING PLAN

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1 DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P9 FFA
P10 TFA
P11 NEW GAS METER INSTALLED BY GAS UTILITY. DESIGN BASED ON A DELIVERY PRESSURE OF 2 PSI, A TOTAL CONNECTED LOAD OF 8,360 MBH, AND TOTAL DEVELOPED LENGTH OF 80 FEET FOR THE GENERATORS AND 250 FEET FOR THE OUTDOOR GRILL.
P12 THERMOSTATIC BALANCING VALVE SET TO 125F. BOD. JOMAR TB-120MFG.
P13 PROVIDE PIPED LOOP WITH ELBOW AS CLOSE TO WALL AS POSSIBLE TO PROVIDE A BREAKAWAY POINT DURING A CATASTROPHIC STORM EVENT.
P14 SLOPE WATER PIPE TOWARDS FLUID COOLER CONNECTION FOR DRAIN DOWN DURING WINTER MONTHS.
P28 ROUTE COLD WATER LINE ALONG FLOOR AND CONNECT TO FLUID COOLER. SUPPORT PER SPECIFICATION 220529.



1 LOWER LEVEL WATER & GAS PLAN
1/8" = 1'-0"

NORTH

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3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
KLINE STOCKTON KIRCHHOFER
NUMBER PE-2002021161
11.18.24
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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LOWER LEVEL - WATER AND GAS PLAN

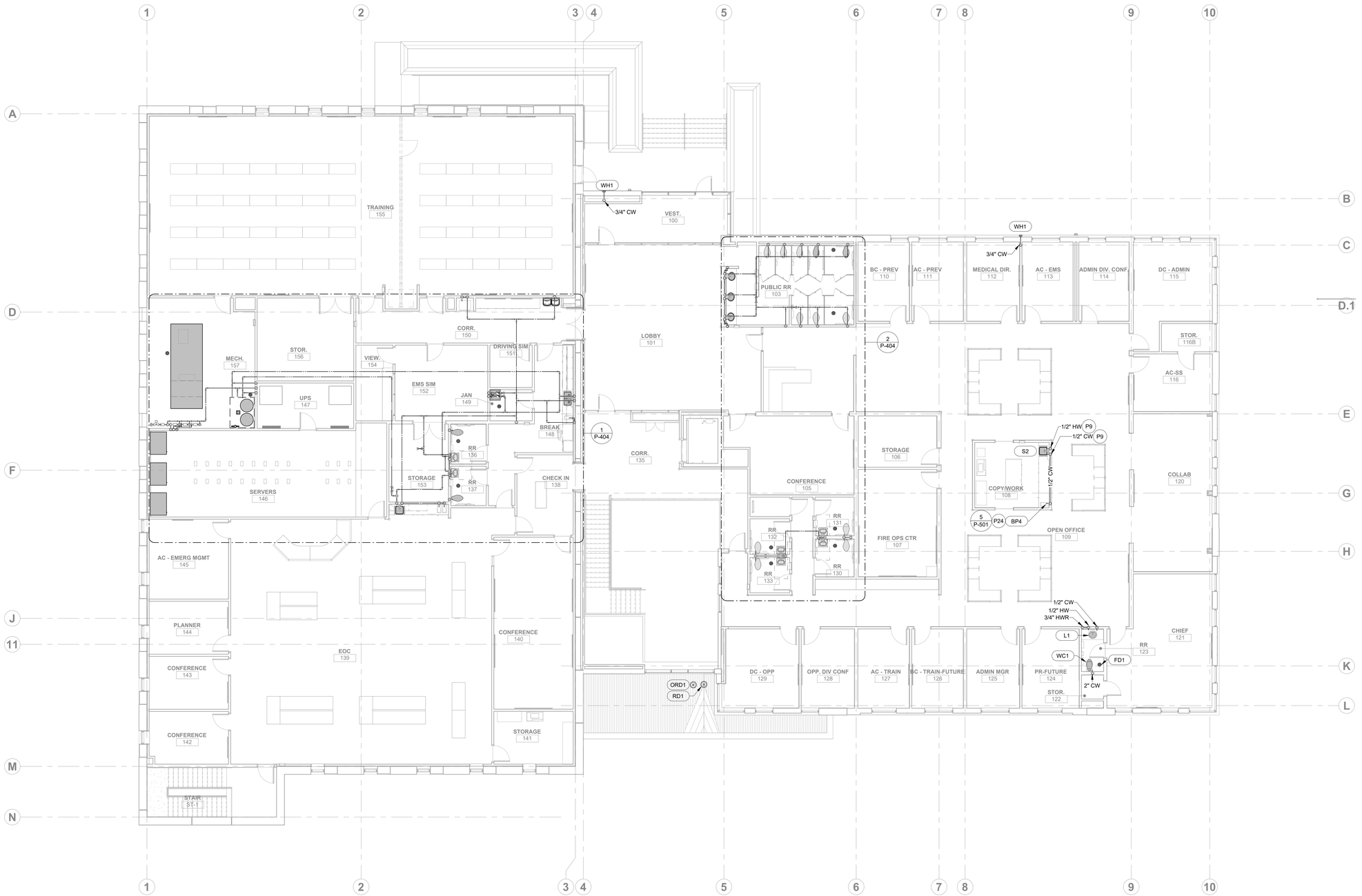
GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P9 FFA

P24 STUB OUT 1/2" CW BELOW COUNTERTOP FOR COFFEE MAKER. INSTALL SHUT-OFF VALVE AND DUAL CHECK BACKFLOW PREVENTER IN ACCESSIBLE LOCATION WITHIN CABINETRY AND EXTEND FLEXIBLE COPPER TUBE OR BRAIDED STAINLESS STEEL HOSE TO COFFEE MAKER THROUGH HOLE DRILLED IN COUNTERTOP AND CONNECT PER MANUFACTURERS RECOMMENDATIONS.



1 MAIN LEVEL WATER & GAS PLAN
1/8" = 1'-0"

NORTH

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ELLIOT PROCTOR CHRISTOPHER NUMBER PE-2010021316 10/31/24 PROFESSIONAL ENGINEER

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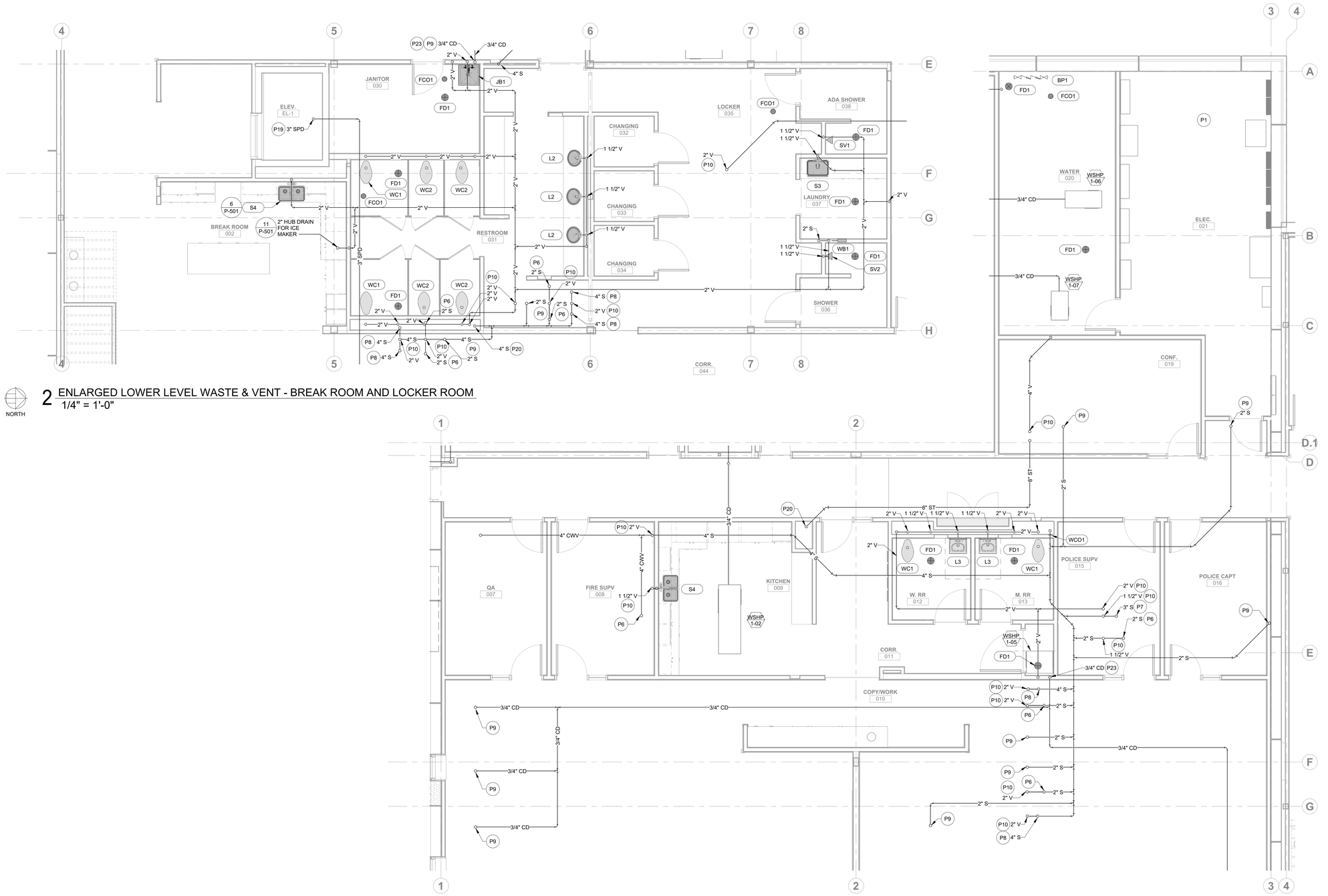
MAIN LEVEL - WATER AND GAS PLAN



NORTH

2 ENLARGED LOWER LEVEL WASTE & VENT - BREAK ROOM AND LOCKER ROOM
1/4" = 1'-0"

NORTH

1 ENLARGED LOWER LEVEL WASTE & VENT PLAN - WATER ROOM AND DISPATCH
1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1	DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P6	FROM FLOOR DRAIN ABOVE.
P7	FROM MOP SINK ABOVE.
P8	FROM WATER CLOSET ABOVE.
P9	FFA
P10	TFA
P19	FFB
P20	TFB
P23	ROUTE CONDENSATE WALL DOWN IN WALL AND TERMINATE AT FLOOR DRAIN WITH AIR GAP.

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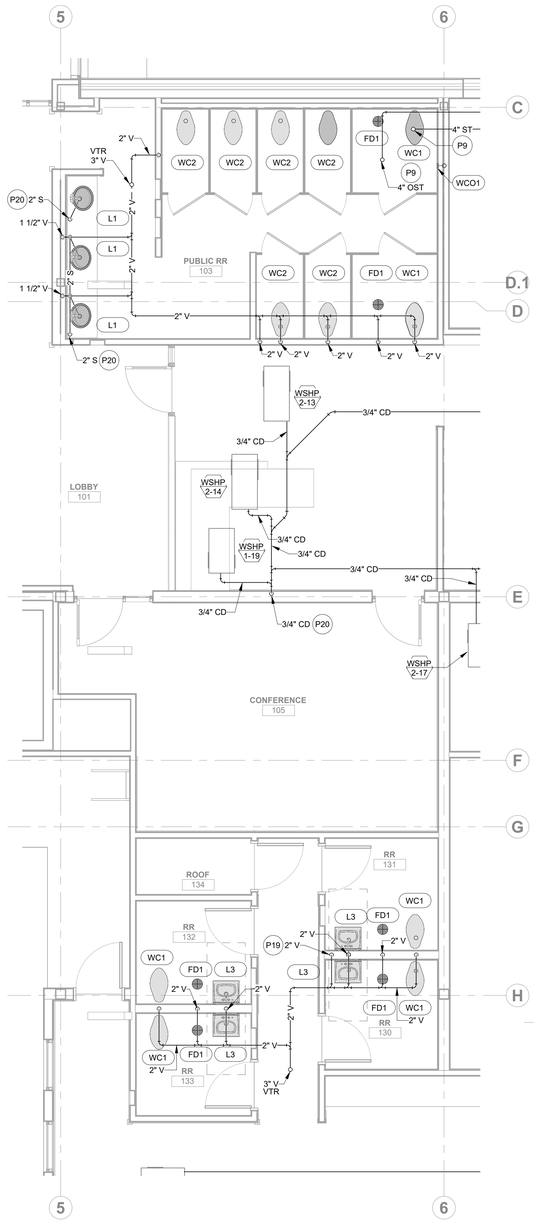
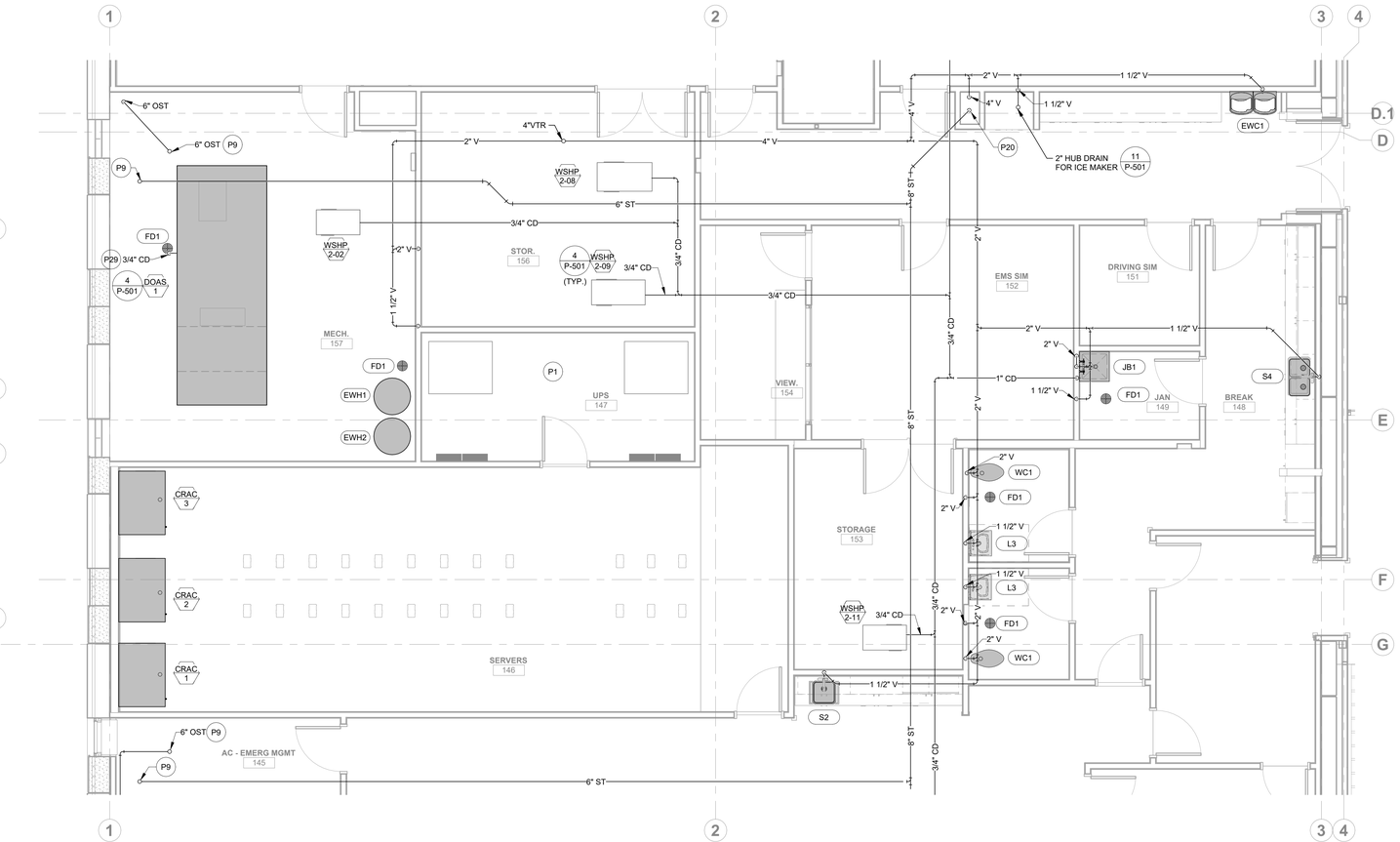
ENLARGED LOWER LEVEL WASTE AND VENT PLANS





2 ENLARGED MAIN LEVEL WASTE & VENT PLAN - OFFICE AND PUBLIC RESTROOMS
1/4" = 1'-0"

1 ENLARGED MAIN LEVEL WASTE & VENT PLAN - MECHANICAL ROOM AND EOC RESTROOMS
1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1 DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P9 FFA
P19 FFB
P20 TFB
P29 DISCHARGE CONDENSATE AT FLOOR DRAIN WITH AIR GAP.

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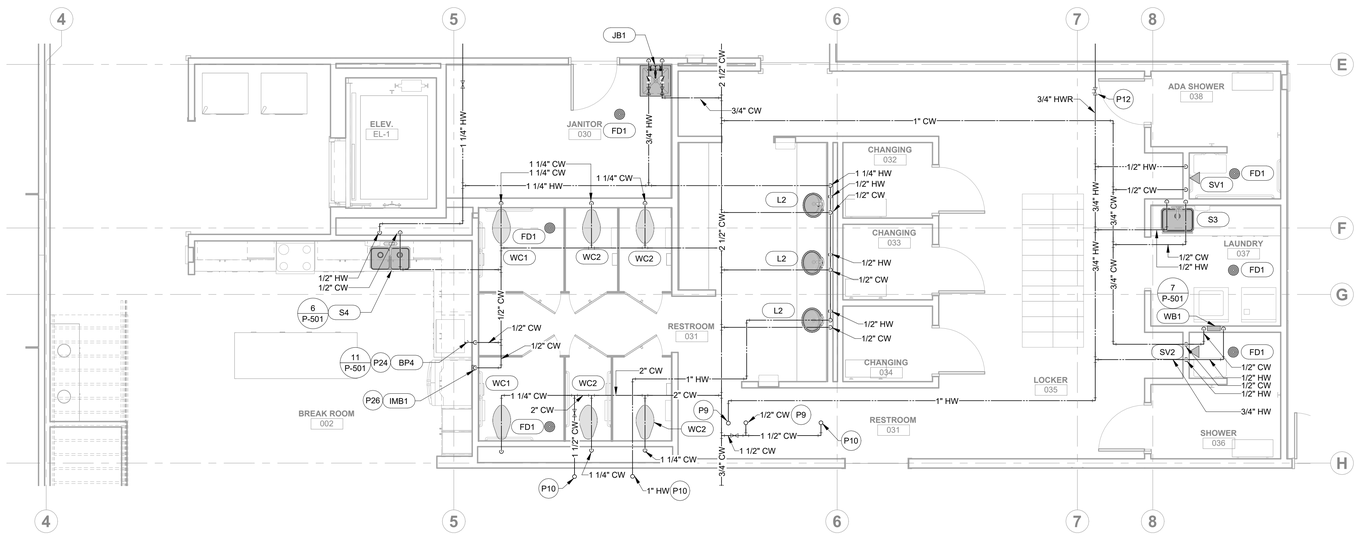
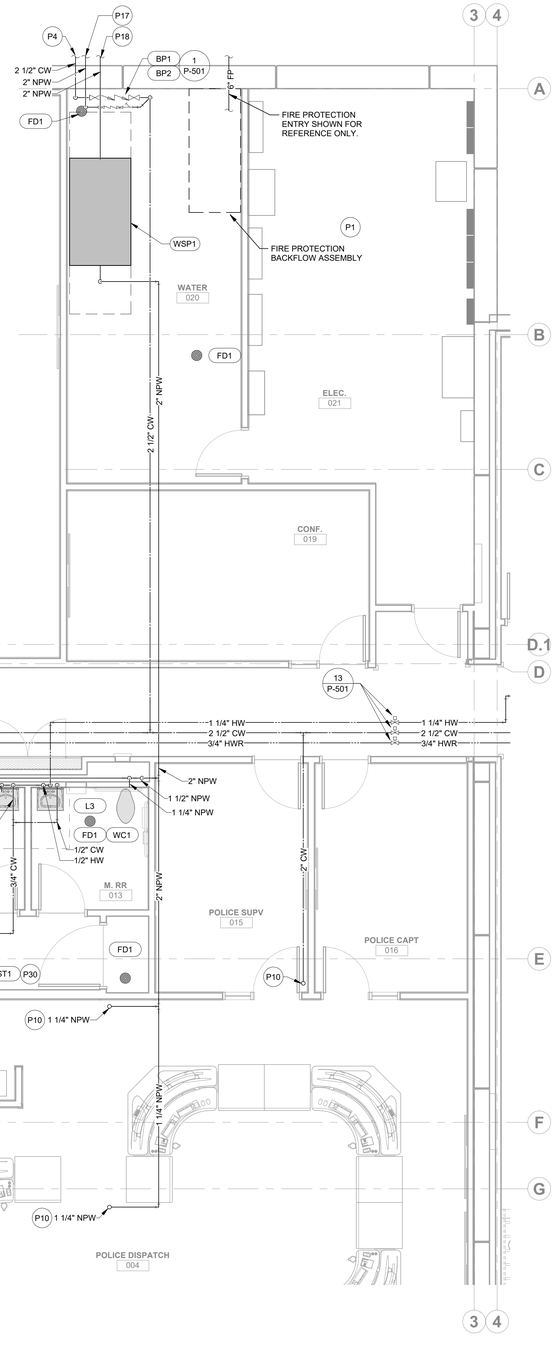
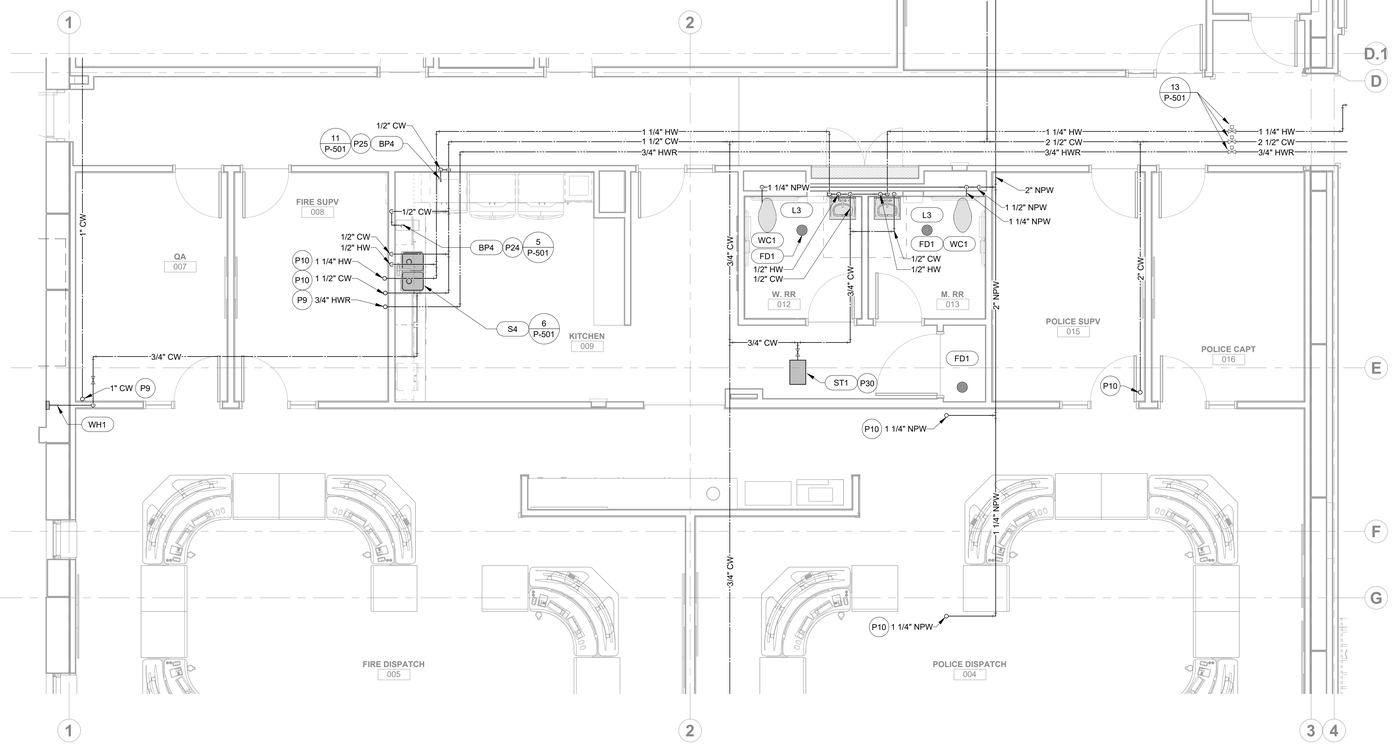
ENLARGED MAIN LEVEL WASTE AND VENT PLANS



2 ENLARGED LOWER LEVEL WATER PLAN - BREAK ROOM AND LOCKER ROOM
1/4" = 1'-0"

NORTH





1 ENLARGED LOWER LEVEL WATER PLAN - WATER ROOM AND DISPATCH
1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1 DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P4 EXTEND DOMESTIC COLD WATER SERVICE TO CIVIL AND CONNECT AT IE=1017.5.
P9 FFA
P10 TFA
P12 THERMOSTATIC BALANCING VALVE SET TO 125F. BOD: JOMAR TB-120MFG.
P17 EXTEND NON POTABLE WATER TO WATER STORAGE TANK INLET. COORDINATE WITH PRECAST STORM WALL SHOP DRAWINGS FOR FINAL PENETRATION LOCATION.
P18 EXTEND NON POTABLE WATER TO WATER STORAGE TANK OUTLET. COORDINATE WITH PRECAST STORM WALL SHOP DRAWINGS FOR FINAL PENETRATION LOCATION.
P24 STUB OUT 1/2" CW BELOW COUNTERTOP FOR COFFEE MAKER. INSTALL SHUT-OFF VALVE AND DUAL CHECK BACKFLOW PREVENTER IN ACCESSIBLE LOCATION WITHIN CABINETRY AND EXTEND FLEXIBLE COPPER TUBE OR BRAIDED STAINLESS STEEL HOSE TO COFFEE MAKER THROUGH HOLE DRILLED IN COUNTERTOP AND CONNECT PER MANUFACTURERS RECOMMENDATIONS.
P25 STUB OUT 1/2" CW BELOW COUNTERTOP FOR COUNTERTOP ICE MAKER. INSTALL SHUT-OFF VALVE, STRAINER, AND DUAL CHECK BACKFLOW PREVENTER IN ACCESSIBLE LOCATION WITHIN CABINETRY AND EXTEND FLEXIBLE COPPER TUBE OR BRAIDED STAINLESS STEEL HOSE TO ICE MAKER THROUGH HOLE DRILLED IN COUNTERTOP AND CONNECT PER MANUFACTURERS RECOMMENDATIONS.
P26 1/2" CW TO ICE MAKER BOX FOR CONNECTION TO REFRIGERATOR.
P30 MOUNT TANK SIDEWAYS ABOVE CEILING ON UNISTRUT ATTACHED TO STRUCTURE.

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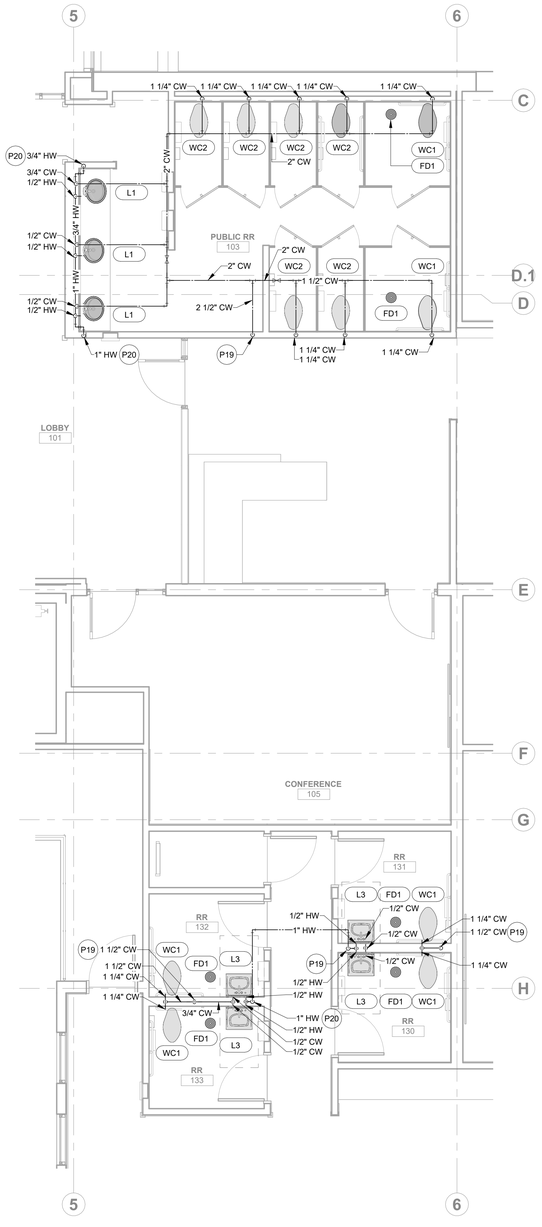
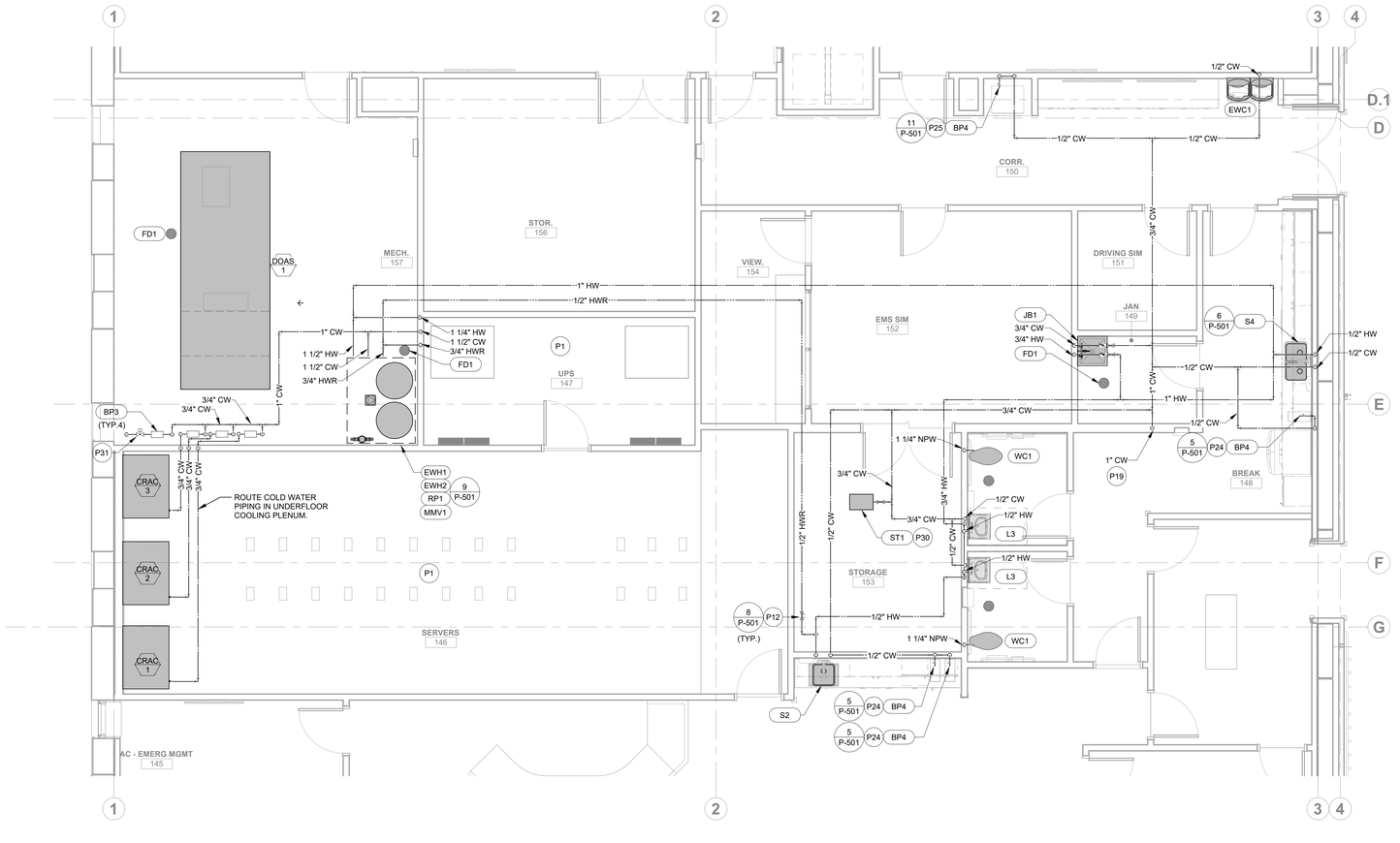
ENLARGED LOWER LEVEL WATER PLANS



2 ENLARGED MAIN LEVEL WATER PLAN - OFFICE AND PUBLIC RESTROOMS
1/4" = 1'-0"

NORTH



1 ENLARGED MAIN LEVEL WATER PLAN - MECHANICAL ROOM AND EOC RESTROOMS
1/4" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET PG001 FOR GENERAL PLUMBING NOTES.

PLUMBING PLAN NOTES:

P1	DO NOT ROUTE PIPING OVER ELECTRICAL ROOM OR EQUIPMENT.
P12	THERMOSTATIC BALANCING VALVE SET TO 125F. BOD: JOMAR TB-120MFG.
P19	FFB
P20	TFB
P24	STUB OUT 1/2" CW BELOW COUNTERTOP FOR COFFEE MAKER. INSTALL SHUT-OFF VALVE AND DUAL CHECK BACKFLOW PREVENTER IN ACCESSIBLE LOCATION WITHIN CABINETRY AND EXTEND FLEXIBLE COPPER TUBE OR BRAIDED STAINLESS STEEL HOSE TO COFFEE MAKER THROUGH HOLE DRILLED IN COUNTERTOP AND CONNECT PER MANUFACTURERS RECOMMENDATIONS.
P25	STUB OUT 1/2" CW BELOW COUNTERTOP FOR COUNTERTOP ICE MAKER. INSTALL SHUT-OFF VALVE, STRAINER, AND DUAL CHECK BACKFLOW PREVENTER IN ACCESSIBLE LOCATION WITHIN CABINETRY AND EXTEND FLEXIBLE COPPER TUBE OR BRAIDED STAINLESS STEEL HOSE TO ICE MAKER THROUGH HOLE DRILLED IN COUNTERTOP AND CONNECT PER MANUFACTURERS RECOMMENDATIONS.
P30	MOUNT TANK SIDEWAYS ABOVE CEILING ON UNISTRUT ATTACHED TO STRUCTURE.
P31	NORMALLY OPEN SOLENOID VALVE FOR FLUID COOLER SHALL BE INTERLOCKED WITH BAS TO SHUT OFF DURING WINTERIZATION PROCEDURES. PROVIDE VALVE TAG ACCORDING TO SPECIFICATIONS IDENTIFYING VALVE AS "SV1." COORDINATE WITH DIVISION 23.

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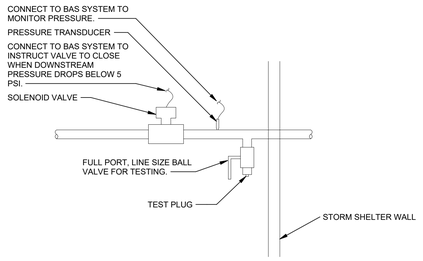
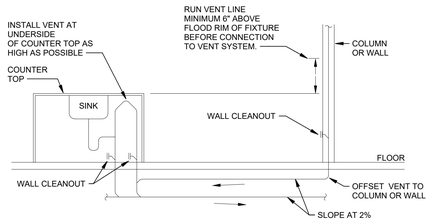
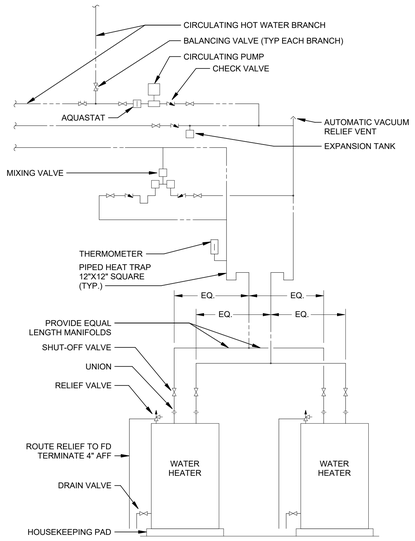
ENLARGED MAIN LEVEL WATER PLANS



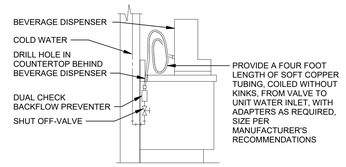
13 AUTOMATIC SHUT-OFF VALVE
NOT TO SCALE



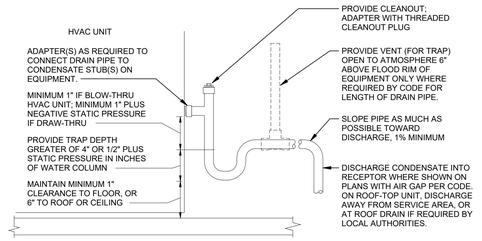
12 ISLAND VENT PIPING
NOT TO SCALE



9 ELECTRIC WATER HEATER PIPING
NOT TO SCALE



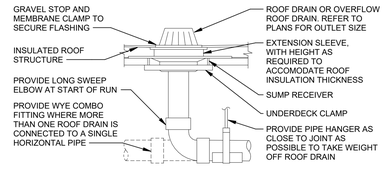
5 BEVERAGE DISPENSER CONNECTIONS
NOT TO SCALE



NOTES:

1. INSULATE PIPE ONLY WHERE REQUIRED TO PREVENT DAMAGE FROM CONDENSATION DRIP. REFER TO SPECIFICATIONS.

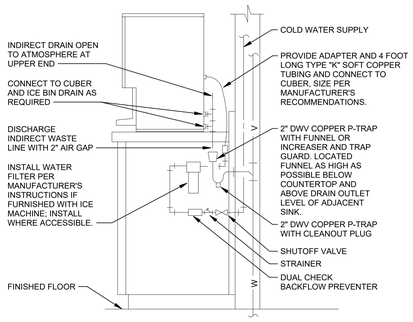
4 CONDENSATE DRAIN INSTALLATION
NOT TO SCALE



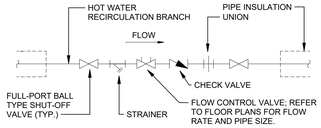
NOTES:

1. UNDERDECK CLAMP AND SUMP RECEIVER ARE NOT REQUIRED WHEN ROOF DRAIN BODY IS CAST INTO CONCRETE ROOF. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. INSULATE ROOF DRAIN SUMP AND PIPE PER SPECIFICATIONS. LOCATE DRAINS WHERE SHOWN ON ARCHITECTURAL PLANS. VERIFY WITH STRUCTURAL PLANS FOR ROOF LOW POINTS. COORDINATE WITH STRUCTURAL DRAWINGS REGARDING PROVISION FOR SUPPLEMENTARY STEEL FRAMING AROUND ROOF OPENING. COORDINATE ROOF DRAIN INSTALLATION WITH ARCHITECTURAL DETAILS AND ROOFING INSTALLATION. SET OVERFLOW DRAIN WEIR ELEVATION 2" ABOVE PRIMARY ROOF DRAIN WEIR ELEVATION.

3 ROOF DRAIN INSTALLATION
NOT TO SCALE



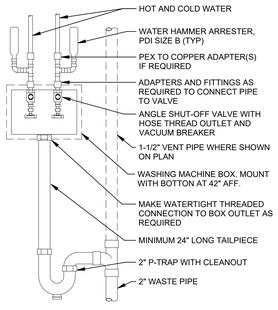
11 COUNTERTOP ICE MAKER CONNECTIONS
NOT TO SCALE



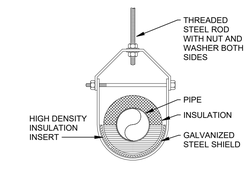
NOTES:

1. FULL FLOW CONTROL VALVE TRAIN SHALL BE ACCESSIBLE FOR SERVICE. COORDINATE WITH ARCHITECT FOR ACCESS.

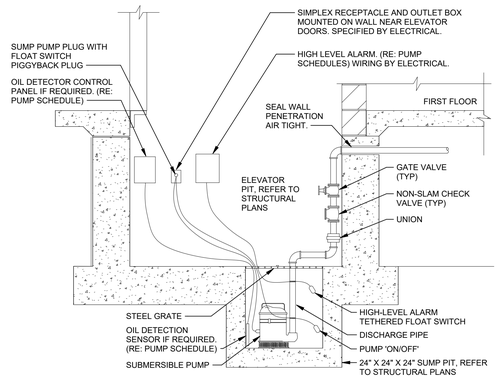
8 TYPICAL HOT WATER FLOW CONTROL VALVE TRAIN
NOT TO SCALE



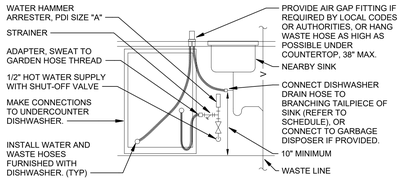
7 WASHING MACHINE BOX
NOT TO SCALE



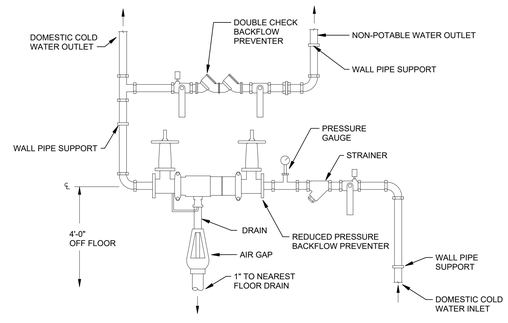
2 INSULATED PIPE AT HANGER
NOT TO SCALE



10 ELEVATOR SUMP PUMP PIPING BELOW FLOOR
NOT TO SCALE



6 RESIDENTIAL DISHWASHER CONNECTION
NOT TO SCALE



1 DOMESTIC WATER ENTRY
NOT TO SCALE

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PROFESSIONAL SEAL

P-501

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

PLUMBING DETAILS

PLUMBING FIXTURE SCHEDULE

PLAN MARK	UNIT TYPE	MANUFACTURER	MODEL	FLUSH VALVE/FAUCET	PLUMBING CONNECTIONS (IN)				OPTIONS	NOTES
					CW	HW	WASTE	VENT		
BP1	REDUCED PRESSURE BACKFLOW PREVENTER	WATTS	LF909	N/A	2.5	0	0	0		
BP2	DOUBLE CHECK BACKFLOW PREVENTER	WATTS	007-M1-QT-S	N/A	2	0	0	0		
BP3	DOUBLE CHECK BACKFLOW PREVENTER	WATTS	LF007	N/A	0.75	0	0	0		
BP4	DUAL CHECK BACKFLOW PREVENTER	WATTS	SD-3	N/A	0.5	0	0	0		
EWC1	HI-LO WATER COOLER WITH BOTTLE FILLER	ELKAY	EZSTL8WSLK	N/A	0.5	0	2	1.5	BF,SB	1
IMB1	ICE MAKER BOX	GUY GRAY	BIM875	N/A	0.5	0	0	0		
JB1	JANITOR'S BASIN	ZURN	Z1996-24-HH-MH-WG	ZURN MODEL Z1996-SF	0.75	0.75	3	1.5		
L1	UNDERCOUNTER MOUNT, BATTERY-POWERED AUTOMATIC FAUCET LAVATORY	ZURN	Z5220	ZURN MODEL Z6915-XL, 0.5 GPM	0.5	0.5	2	1.5	AE5,GD,SV,T	
L2	UNDERCOUNTER MOUNT, MANUAL FAUCET LAVATORY	ZURN	Z5220	ZURN MODEL Z7440-XL, 0.5 GPM	0.5	0.5	2	1.5	AE5,GD,SV,T	
L3	WALL MOUNTED, BATTERY-POWERED AUTOMATIC FAUCET LAVATORY	ZURN	Z5360	ZURN MODEL Z6915-XL, 0.5 GPM	0.5	0.5	2	1.5	AE5,GD,SV,T	1
MMV1	DIGITAL MASTER MIXING VALVE	LEONARD	PNV-125	N/A	1	1	0	0	MSP	
S1	15X15 SINGLE COMPARTMENT, UNDERMOUNT BLACK QUARTZ SINK	ELKAY	ELG1616	KOHLER MODEL K-7505, 1.5 GPM, SWIVEL FLAT GOOSENECK FAUCET, VIBRANT STAINLESS FINISH	0.5	0.5	2	1.5	BS,SV,T	
S2	15X15 SINGLE COMPARTMENT, UNDERMOUNT BLACK QUARTZ SINK WITH GARBAGE DISPOSAL	ELKAY	ELG1616	KOHLER MODEL K-7505, 1.5 GPM, SWIVEL FLAT GOOSENECK FAUCET	0.5	0.5	2	1.5	BS,SV,T,BGD	
S3	24X17 SINGLE COMPARTMENT, UNDERMOUNT BLACK QUARTZ SINK	ELKAY	ELGU251912PD	KOHLER MODEL K-7505, 1.5 GPM, SWIVEL FLAT GOOSENECK FAUCET	0.5	0.5	2	1.5	BS,SV,T	
S4	33X19 DOUBLE COMPARTMENT, UNDERMOUNT BLACK QUARTZ SINK WITH GARBAGE DISPOSAL	ELKAY	ELGDULB3322	KOHLER MODEL K-596-CP, 1.5 GPM, SWIVEL GOOSENECK PULL DOWN FAUCET	0.5	0.5	2	1.5	BS,SV,T,BGD	
SV1	ADA SHOWER VALVE	DELTA	T17TH325	N/A	0.5	0.5	0	0		1
SV2	SHOWER VALVE	DELTA	T13H122	N/A	0.5	0.5	0	0		1
VTR1	ICC 500 COMPLIANT VENT-THRU-ROOF	ROOF PENETRATION HOUSING	CVTR							
WB1	WASHER BOX	GUY GRAY	B200	N/A	0.5	0.5	2	1.5		
WC1	ADA FLOOR MOUNT, BACK OUTLET, BATTERY POWERED AUTOMATIC 1.28 GPF FLUSH VALVE WATER CLOSET	ZURN	Z5645-BWL	SLOAN ECOS 8111-1.28	1.25	0	4	2	ESLC,SV	2
WC2	FLOOR MOUNT, BACK OUTLET, BATTERY POWERED AUTOMATIC 1.28 GPF FLUSH VALVE WATER CLOSET	ZURN	Z5635-BWL	SLOAN ECOS 8111-1.28	1.25	0	4	2	ESLC,SV	2
WH1	FREEZE PROOF WALL HYDRANT	ZURN	Z1321-C	N/A	0.75	0	0	0		

NOTES:
1. REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHTS.
2. REFER TO ARCHITECTURAL PLANS FOR ADA REQUIRED GRAB BARS.

DRAINAGE FIXTURE SCHEDULE

PLAN MARK	TYPE	MANUFACTURER	MODEL	OPTIONS	NOTES
DN1	DOWNSPOUT NOZZLE	ZURN	Z199		
DN2	DOWNSPOUT NOZZLE	ZURN	Z199		
FCO1	FLOOR CLEANOUT	JAY R SMITH	4031L		
FD1	FLOOR DRAIN - ROUND	JAY R SMITH	2005A	CC,NBS,TG	
GCO2	TWO-WAY FINISHED GRADE CLEANOUT	JAY R SMITH	4261L		
ORD1	OVERFLOW ROOF DRAIN	ZURN	Z100-89		
ORD2	ICC 500 COMPLIANT OVERFLOW ROOF DRAIN	ROOF PENETRATION HOUSINGS	COFRD		
RD1	ROOF DRAIN	ZURN	Z100		
RD2	ICC 500 COMPLIANT ROOF DRAIN	ROOF PENETRATION HOUSINGS	CRD		
WCO1	WALL CLEANOUT	JAY R SMITH	4530S		

SUMP PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	PUMP				BASIN		ELECTRICAL					OPTIONS	NOTES
				MIN FLOW RATE (GPM)	HEAD (FT)	MAX HP	RPM	DIAMETER (IN)	HEIGHT (IN)	VOLTAGE	PHASE	FLA	MCA	MOCP		
SP1	WEIL	1411-538	ELEVATOR	50	20	0.5	1750	24"	36"	120	1	3.1	3.1	15		

RECIRCULATION PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SIZE	MOUNTING	FLOW RATE (GPM)	HEAD (FT)	ELECTRICAL					OPTIONS	NOTES
							VOLTAGE	PHASE	FLA	MCA	MOCP		
RP1	GRUNDFOS	ALPHA 15-58 F	3/4"	INLINE	2.0	15	120	1	0.3	0.8	15	AS	

WATER HEATER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	TYPE	TANK VOLUME (GAL)	GPH @ 100 DEG.F TEMP RISE	ELECTRICAL						OPTIONS	NOTES
						VOLTAGE	PHASE	NOMINAL (W)	FLA	MCA	MOCP		
EWH1	LOCHINVAR	CHPA120PD	AIR-SOURCE HEAT PUMP WATER HEATER	120	50	208	1	12000	21.6	21.6	30	HSP,ET	
EWH2	LOCHINVAR	CHPA120PD	AIR-SOURCE HEAT PUMP WATER HEATER	120	50	208	1	12000	21.6	21.6	30	HSP	

PRESSURE REGULATOR SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SYSTEM	MAX CAPACITY (MBH)	INLET PRESSURE (PSIG)	OUTLET PRESSURE (IN. W.C.)	VALVE SIZE (IN)	OPTIONS	NOTES
PR1	PIETRO FIORENTINI	31156/F	NATURAL GAS	4140	2	7	2.5		
PR2	PIETRO FIORENTINI	31156/E	NATURAL GAS	4140	2	7	2.5		
PR3	PIETRO FIORENTINI	31052	NATURAL GAS	80	2	7	0.75		

WATER STORAGE PUMP/FILTRATION SCHEDULE

PLAN MARK	SERVICE	UNIT TYPE	MANUFACTURER	MODEL	PUMP			BLADDER TANK VOLUME (GAL)	PROCESSING				ELECTRICAL			LENGTH	WIDTH	OPTIONS	NOTES
					NUMBER OF PUMPS	FLOW RATE (GPM)	OUTLET PRESSURE (PSI)		FILTER TYPE	FILTRATION LEVEL	SANITATION TYPE	SANITATION LEVEL	VOLTAGE	PHASE	MOCP				
WSP1	EMERGENCY WATER STORAGE	PUMP/FILTRATION SKID	WAHASO	CUSTOM	2	50	60	26	BAG FILTER	5 MICRON	ULTRAVIOLET	40 mJ/cm2	480	3	30	84	48		1,2,3,4

NOTES:
1. MANUFACTURER TO MOUNT BOOSTER PUMP, FILTRATION, AND CONTROLS ON SINGLE SKID. SKID TO BE PRE-PIPED AND WIRED AT THE FACTORY.
2. CONTROLS TO MONITOR AND REPORT TANK LEVEL TO CONTROL PANEL AND BAS, OPERATE PUMPS AND VFDs, MONITOR DIFFERENTIAL PRESSURE ACROSS FILTERS, TRACK HOURS OF USAGE AND REMAINING LIFE OF UV BULBS, AND TRACK TOTAL GALLONS OF WATER USED.
3. SYSTEM TO PREVENT STAGNATION WITH RECIRCULATION OF WATER. RECIRC WATER TO BE TREATED BY FILTRATION AND SANITATION.
4. PLC-BASED CONTROLS WITH BACNET INTEGRATION.

PLUMBING STORAGE TANK SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	VOLUME (GAL)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	OPTIONS	NOTES
WST1	EMERGENCY WATER STORAGE	WAHASO	CUSTOM	3000	192	96	62		

PLUMBING PRESSURIZED STORAGE TANK SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	MOUNTING	VOLUME (GAL)	DRAWDOWN (GAL)	OPERATING PRESSURE (PSI)	DIAMETER (IN)	HEIGHT(IN)	WEIGHT (LB)
ST1	FLEXCON	FT 35(S)	SIDEWAYS, ABOVE CEILING	9	2.16	60	12.5	19	90
ST2	FLEXCON	FT 35(S)	SIDEWAYS, ABOVE CEILING	9	2.16	60	12.5	19	90

PLUMBING ABBREVIATION LIST

GENERAL NOTES	
1	THE MANUFACTURER LISTED SHALL BE CONSIDERED THE BASIS OF DESIGN. EQUIPMENT AND ACCESSORIES SHALL BE SUPPLIED IN ACCORDANCE WITH THE SCHEDULED VALUES, NOTES, DETAILS, AND SPECIFICATIONS. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST AND COORDINATION WHEN NON BASIS OF DESIGN EQUIPMENT IS PROVIDED.
OPTIONS	
AE5	0.5 GPM AERATOR
AS	PROVIDE ADJUSTABLE, SURFACE MOUNTED AQUASTAT - HONEYWELL L6006C. SET AQUASTAT TO SHUT OFF RECIRCULATION PUMP AT 130F AND ON AT 125F.
BF	BOTTLE FILLER
BGD	INSINKERATOR BADGER 5XP, 3/4 HP GARBAGE DISPOSAL AND 73274K CHROME FINISH SINK TOP SWITCH BUTTON OPERATOR.
BS	BASKET STRAINER
CC	CAST IRON BODY AND CLAMPING COLLAR
DSB	DRAIN SEDIMENT BUCKET
ESLC	WHITE ELONGATED OPEN FRONT SEAT LESS COVER
ET	PROVIDE AMTROL ST-30VC-DD EXPANSION TANK. PRE-CHARGE EXPANSION TANK TO EQUAL THE COLD WATER STATIC PRESSURE AT WATER HEATER.
FG	FULL GRATE
GD	GRID DRAIN
HG	HALF GRATE
HSP	OPERATING TEMPERATURE SHALL BE SET TO 140F
MSP	MIXING TEMPERATURE SHALL BE SET TO 130F
NBR	NICKEL BRONZE RIM
NBS	6" NICKEL BRONZE STRAINER
PS	PIPE SHROUD
SB	SAFETY BUBBLER
SV	QUARTER TURN STOP VALVES
T	TRAP
TG	PROVENT TRAP GUARD.
TMV	PROVIDE WITH POWERS LFE480-00 THERMOSTATIC MIXING VALVE SET TO 105F FOR LAVATORIES AND 115F FOR SINKS

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3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
CLISE STOCKTON KIRCHHOFER
NUMBER PE-2003021814
11/18/24
PROFESSIONAL ENGINEER

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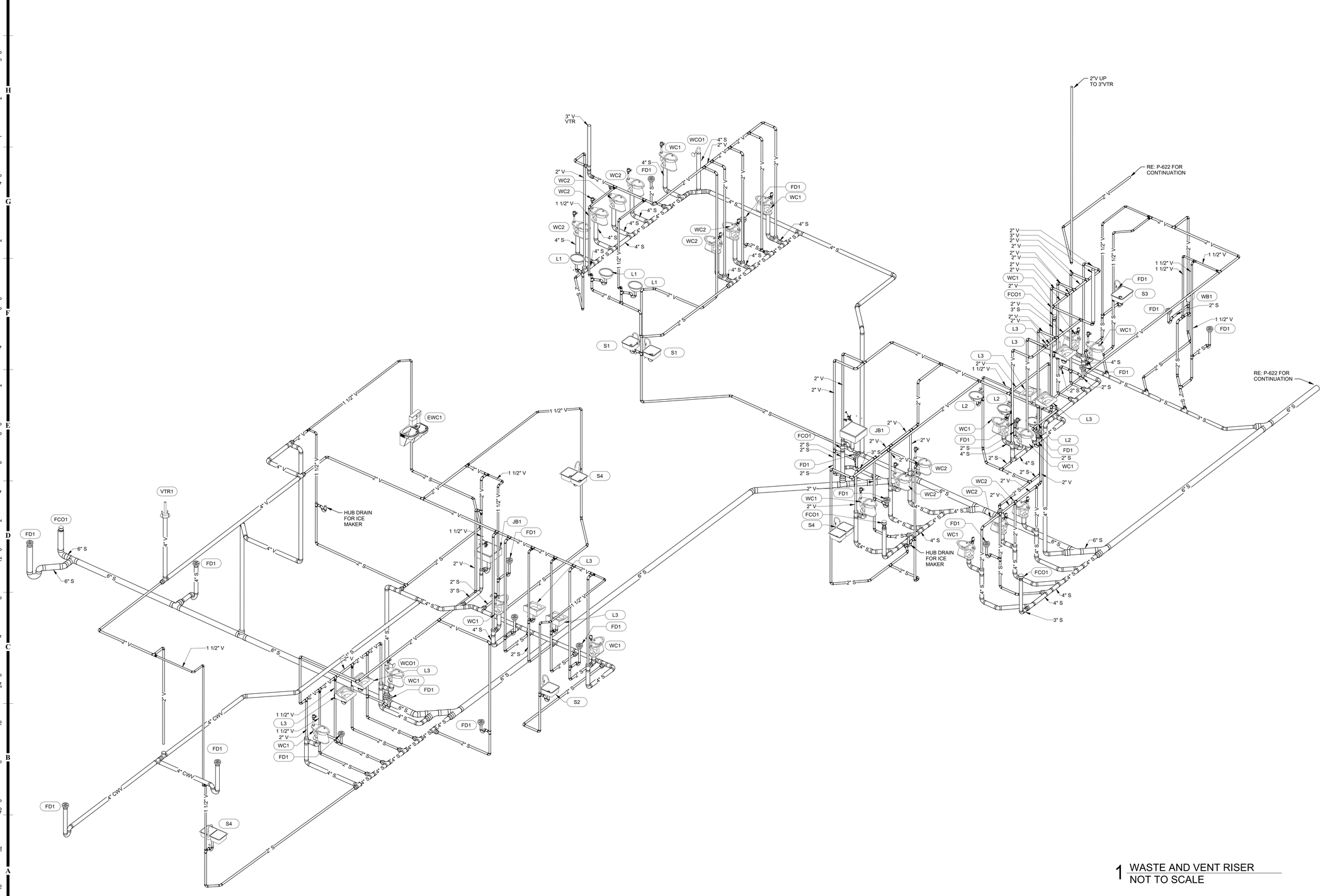
PLUMBING SCHEDULES



1 WASTE AND VENT RISER
NOT TO SCALE

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ISSUE DATE: NOVEMBER 1, 2024
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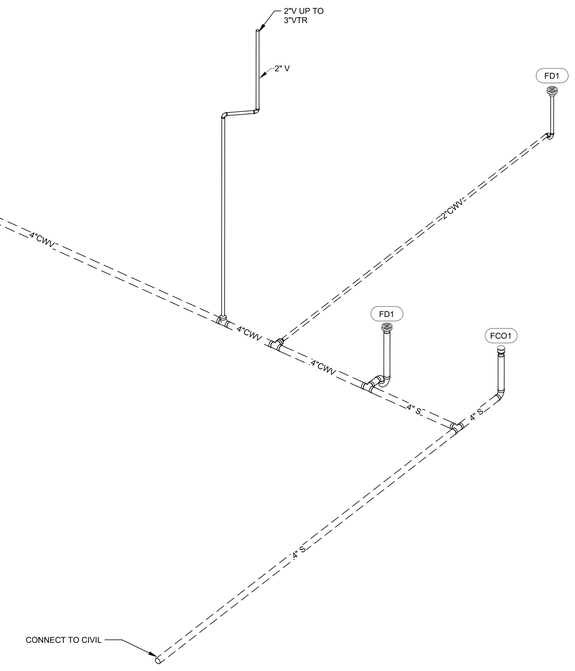
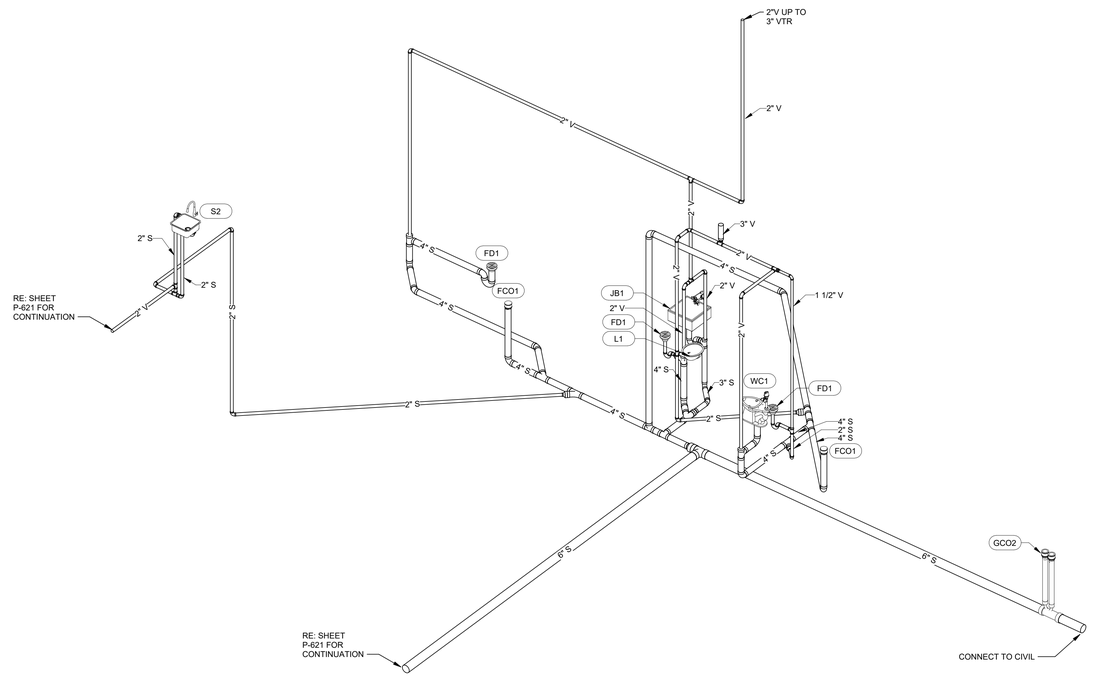
PLUMBING WASTE AND VENT RISER



2 WASTE AND VENT RISER - VEHICLE BAY
NOT TO SCALE



1 WASTE AND VENT RISER EAST
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ISSUE DATE: NOVEMBER 1, 2024
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PLUMBING WASTE AND VENT RISER

MECHANICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

STANDARD MOUNTING HEIGHT

CONTROL DEVICES- THERMOSTATS, SENSORS, ETC. (TOP OF DEVICE) 48"

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG) TO TOP OF DEVICE. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ANNOTATION

- 1 — MECHANICAL PLAN NOTE CALLOUT
- CU 1 — MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- CONNECTION POINT OF NEW WORK TO EXISTING
- 1 / M1 — DETAIL REFERENCE. UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / M1 — SECTION CUT DESIGNATION
- DIFFUSER DESIGNATION:
  S1(E) 1. PLAN MARK (EXISTING)
  8" 2. NECK SIZE
  200 3. AIRFLOW

ABBREVIATIONS

A/C	AIR CONDITIONING
ACC	AIR COOLED CHILLER
ACCU	AIR COOLED CONDENSING UNIT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
AWG	AMERICAN WIRE GAUGE
B	BOILER
BAS	BUILDING AUTOMATION SYSTEM
BB	BACKBONE
BD	BACKDRAFT DAMPER
BD	BLOWDOWN
BFC	BELOW FINISHED CEILING
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BFP	BOILER FEED PUMP
BHP	BRAKE HORSEPOWER
BI	BINARY INPUT
BO	BINARY OUTPUT
BOD	BOTTOM OF DUCT
BOS	BOTTOM OF STRUCTURE
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CLG	COOLING
CP	CONDENSATE PUMP
CPT	CONTROL POWER TRANSFORMER
CRAC	COMPUTER ROOM AIR CONDITIONING UNIT
CRU	COMPUTER ROOM UNIT
CT	COOLING TOWER
CV	CONTROL VALVE
CWP	CONDENSER WATER PUMP
CU	CONDENSING UNIT
CHWP	CHILLED WATER PUMP
DB	DECIBELS
DBA	DECIBEL AVERAGE
DDC	DIRECT DIGITAL CONTROL
DI	DIGITAL INPUT
DISC	DISCONNECT
DN	DOWN
DS	DUCT SILENCER
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ED	EXHAUST DUCT
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EFF	EFFICIENCY
EMS	ENERGY MANAGEMENT SYSTEM
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
FCU	FAN COIL UNIT
FFA	FROM FLOOR ABOVE
FFB	FROM FLOOR BELOW
FF	FINISHED FLOOR
FPI	FINS PER INCH
FPM	FEET PER MINUTE
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HTG	HEATING
HWP	HEATING WATER PUMP
IN WC	INCHES OF WATER COLUMN
L	LOUVER
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LP	LOW PRESSURE
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MD	MOTORIZED DAMPER
MFR	MANUFACTURER
MIN	MINIMUM
N/A	NOT APPLICABLE
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NOM	NOMINAL
NC	NOISE CRITERIA
NF	NON-FUSED
NIC	NOT IN CONTRACT
OA	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
PICV	PRESSURE INDEP. CONTROL VALVE
PROVIDE	FURNISH AND INSTALL
QTY	QUANTITY
RA	RETURN AIR
RC	ROOM CRITERIA
RD	RETURN DUCT
REA	RELIEF AIR
RF	RETURN FAN
RFR	REFRIGERANT
RH	RELATIVE HUMIDITY
RH	ROOF HOOD
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
SCP	STEAM CONDENSATE PUMP
SD	SMOKE DUCT DETECTOR
SD	SUPPLY DUCT
SF	SUPPLY FAN
SH	SENSIBLE HEAT CAPACITY
SOW	SCOPE OF WORK
SP	STATIC PRESSURE
ST	STEAM TRAP
STM	STEAM
TBD	TO BE DETERMINED
TC/C	TEMPERATURE CONTROLS CONTRACTOR
TCP	TEMPERATURE CONTROL PANEL
TF	TRANSFER FAN
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TH	TOTAL HEAT CAPACITY
TSP	TOTAL STATIC PRESSURE
TT	TEMPERATURE TRANSMITTAL
TYP	TYPICAL
U/F	UNDERFLOOR
U/G	UNDERGROUND
U/S	UNDERSLAB
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VRF	VARIABLE REFRIGERANT FLOW
VRV	VARIABLE REFRIGERANT VOLUME
W/	WITH
W/O	WITHOUT
WB	WET BULB
WC	WATER COLUMN
WPD	WATER PRESSURE DROP
XP	EXPLOSION PROOF

HVAC DUCTWORK AND ACCESSORIES

ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS. REFER TO DUCTWORK SPECIFICATIONS FOR DUCTWORK INSULATION AND LINER INFORMATION.

- LINEAR SLOT DIFFUSER
- INSULATED FLEXIBLE DUCT (MAX. 5'-0" LONG)
- BRANCH DUCT WITH 45° RECTANGLE-ROUND BRANCH FITTING AND MANUAL VOLUME DAMPER
- ELBOW WITH TURNING VANES
- BRANCH DUCT WITH BELL-MOUTH FITTING & MANUAL VOLUME CONTROL DAMPER
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT UP
- RETURN, EXHAUST, OR OUTSIDE AIR DUCT DOWN
- SUPPLY AIR DUCT UP
- SUPPLY AIR DUCT DOWN
- EQUIPMENT WITH FLEXIBLE DUCT CONNECTION
- S1 (PLAN MARK) 10" (NECK SIZE) 300 CFM (CFM OF SUPPLY DIFFUSER OR REGISTER)
- E1 (PLAN MARK) 24x24 (NECK SIZE) 800 CFM (CFM OF EXHAUST GRILLE)
- MANUAL VOLUME DAMPER
- SQUARE TO ROUND TRANSITION
- SD/RD — DUCT MOUNTED SMOKE DETECTOR (SD=SUPPLY/RD=RETURN)
- # — RISER DESIGNATION
- FD — FIRE DAMPER
- FSD — FIRE SMOKE DAMPER
- SD — SMOKE DAMPER
- VD — VOLUME DAMPER
- MD — MOTORIZED DAMPER
- BD — BACKDRAFT DAMPER
- BLANKED OFF DIFFUSER (SHADED SECTION IS BLANKED OFF)

HVAC CONTROL DEVICES

- H — HUMIDISTAT
- T — THERMOSTAT
- SP — STATIC PRESSURE SENSOR
- TS — TEMPERATURE SENSOR
- CO — CARBON MONOXIDE SENSOR
- CO2 — CARBON DIOXIDE SENSOR
- DP — DIFFERENTIAL PRESSURE SENSOR
- FS — FLOW SWITCH
- HS — HUMIDITY SENSOR
- PS — PULL STATION

PIPING SYMBOLS

- DIRECTION OF FLOW
- CONTROL VALVE
- THREE-WAY CONTROL VALVE
- SHUTOFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- TRIPLE DUTY VALVE WITH PRESSURE PORTS
- STRAINER
- STRAINER WITH BLOWDOWN VALVE
- RELIEF / SAFETY VALVE
- SOLENOID VALVE
- PRESSURE REDUCING VALVE
- GAS PRESSURE REGULATOR
- THERMOSTATIC MIXING VALVE
- PA — PIPE ANCHOR
- EJ — EXPANSION JOINT
- FLEXIBLE CONNECTION
- PIPE GUIDE
- PIPING SUPPORT
- F & T TRAP
- BUCKET TRAP
- THERMOSTATIC TRAP
- BACKFLOW PREVENTER
- PRESSURE GAUGE
- THERMOMETER
- PRESSURE AND TEMPERATURE TEST PLUG
- UNION
- FLANGE CONNECTION
- VACUUM RELIEF VALVE
- AV — AUTOMATIC AIR VENT
- MV — MANUAL AIR VENT
- PRESSURE / VACUUM SWITCH
- CLEANOUT
- CAP
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- ELBOW UP WITH SHUT-OFF VALVE (SOV)
- ELBOW DOWN WITH SHUT-OFF VALVE (SOV)
- TEE UP WITH SHUT-OFF VALVE (SOV)
- TEE DOWN WITH SHUT-OFF VALVE (SOV)
- REDUCER
- RECIRCULATION PUMP
- P-TRAP
- GAS COCK
- TOP BEAM CLAMP
- TRAPEZE HANGER
- FM — FLOW METER

PIPING LINETYPES

- CD — CONDENSATE DRAIN (CD)
- ACD — AUXILIARY CONDENSATE DRAIN (ACD)
- NPW — NON-POTABLE WATER (NPW)
- G — NATURAL GAS (G)
- G — NATURAL GAS ON ROOF (G)
- MPG — MEDIUM PRESSURE NATURAL GAS (MPG)
- MPG — MEDIUM PRESSURE NATURAL GAS ON ROOF (MGP)
- FOS — FUEL OIL SUPPLY (FOS)
- FOR — FUEL OIL RETURN (FOR)
- FOV — FUEL OIL VENT (FOV)
- LPG — LIQUEFIED PETROLEUM GAS (LPG)
- BFW — BOILER FEED WATER (BFW)
- HPS — HIGH PRESSURE STEAM SUPPLY (HPS)
- HPC — HIGH PRESSURE STEAM CONDENSATE (HPC)
- MPS — MEDIUM PRESSURE STEAM SUPPLY (MPS)
- MPC — MEDIUM PRESSURE STEAM CONDENSATE (MPC)
- LPS — LOW PRESSURE STEAM SUPPLY (LPS)
- LPC — LOW PRESSURE STEAM CONDENSATE (LPC)
- PD — CONDENSATE PUMP DISCHARGE (PD)
- HWS — HEATING HOT WATER SUPPLY (HWS)
- HWR — HEATING HOT WATER RETURN (HWR)
- CHWS — CHILLED WATER SUPPLY (CHWS)
- CHWR — CHILLED WATER RETURN (CHR)
- HCS — HOT / CHILLED WATER SUPPLY (HCS)
- HCR — HOT / CHILLED WATER SUPPLY (HCR)
- CWS — CONDENSER WATER SUPPLY (CWS)
- CWR — CONDENSER WATER RETURN (CWR)
- HPWS — HEAT PUMP WATER SUPPLY (HPWS)
- HPWR — HEAT PUMP WATER RETURN (HPWR)
- RL — REFRIGERANT LIQUID (RL)
- RD — REFRIGERANT DISCHARGE (HOT GAS) (RD)
- RS — REFRIGERANT SUCTION (RS)
- RDB — REFRIGERANT DISCHARGE BYPASS (RDB)
- RV — REFRIGERANT VENT (RV)

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	NEW
DEMOLISH	FUTURE

GENERAL MECHANICAL NOTES:

1. PRIOR TO SUBMITTING BID, VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY ARCHITECT, ENGINEER AND/OR OWNER OF CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
2. COORDINATE THE INSTALLATION OF THE MECHANICAL SYSTEMS WITH OTHER TRADES TO ENSURE A NEAT AND ORDERLY INSTALLATION. INSTALL DUCTWORK AND PIPING AS TIGHT TO STRUCTURE AS POSSIBLE. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS. COORDINATE INSTALLATION OF DUCTWORK AND PIPING TO AVOID CONFLICTS WITH ELECTRICAL PANELS, LIGHTING FIXTURES, ETC. ANY MODIFICATIONS REQUIRED DUE TO LACK OF COORDINATION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.
3. ALL MECHANICAL EQUIPMENT SHOWN ON THE MECHANICAL PLANS SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
4. NEW MECHANICAL EQUIPMENT, DUCTWORK AND PIPING ARE SHOWN AT APPROXIMATE LOCATIONS. FIELD MEASURE FINAL DUCTWORK AND PIPING LOCATIONS PRIOR TO FABRICATION AND MAKE ADJUSTMENTS AS REQUIRED TO FIT THE DUCTWORK AND PIPING WITHIN THE AVAILABLE SPACE. VERIFY THAT FINAL EQUIPMENT LOCATIONS MEET MANUFACTURER'S RECOMMENDATIONS REGARDING SERVICE CLEARANCE AND PROPER AIRFLOW CLEARANCE AROUND EQUIPMENT.
5. REFER TO ARCHITECTURAL DRAWINGS FOR RELATED CONSTRUCTION DETAILS AS APPLICABLE TO THE HVAC SYSTEM. VERIFY CHASES AND PENETRATIONS SHOWN ON ARCHITECTURAL DRAWINGS THAT ARE INTENDED FOR DUCTWORK AND PIPING MEET REQUIREMENTS.
6. COORDINATE LOCATION OF ROOF MOUNTED HVAC EQUIPMENT AND ROOF PENETRATIONS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
7. INDOOR AIR QUALITY MEASURES: PROTECT INSIDE OF (INSTALLED AND DELIVERED) DUCTWORK AND HVAC UNITS FROM EXPOSURE TO DUST, DIRT, PAINT AND MOISTURE. REPLACE INSULATION THAT HAS GOTTEN WET AT ANY TIME DURING CONSTRUCTION, DRYING THE INSULATION IS NOT ACCEPTABLE. SEAL ANY TEARS OR JOINTS OF INTERNAL FIBERGLASS INSULATION. REMOVE DEBRIS FROM CEILING/RETURN AIR PLENUM INCLUDING DUST. PROVIDE FILTERS OVER ANY RETURN OR TRANSFER OPENINGS DURING CONSTRUCTION.
8. WHERE HVAC SYSTEMS ARE REQUIRED TO STAY OPERATIONAL TO SERVE OTHER AREAS OF THE BUILDING, PLACE FILTER MEDIA OVER ALL SUPPLY AND RETURN AIR OPENINGS, TRANSFER DUCTS AND FIRE/SMOKE DAMPERS.
9. INSTALL DUCTWORK AND PIPING PARALLEL TO BUILDING COLUMN LINES UNLESS OTHERWISE SHOWN OR NOTED.
10. OVERHEAD HANGERS AND SUPPORTS FOR EQUIPMENT, DUCTWORK AND PIPING SHALL BE FASTENED TO BUILDING JOISTS OR BEAMS. DO NOT ATTACH HANGERS AND SUPPORTS TO THE ABOVE FLOOR SLAB OR ROOF EXCEPT WHERE CONCRETE INSERTS IN CONCRETE SLABS ARE ALLOWED BY THE SPECIFICATIONS.
11. COORDINATE LOCATION OF EQUIPMENT SUPPORTS WITH LOCATION OF EQUIPMENT ACCESS PANELS/DOORS TO ENABLE SERVICE OF EQUIPMENT AND/OR FILTER REPLACEMENT.
12. SEAL PENETRATIONS THROUGH THE BUILDING COMPONENTS IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS. FIREPROOF PENETRATIONS THROUGH FIRE RATED COMPONENTS IN ACCORDANCE WITH U.L. REQUIREMENTS.
13. FOR HYDRONIC, PIPING TO EQUIPMENT, MINIMUM ACCEPTABLE SIZE FOR STEEL AND COPPER PIPE IS 3/4 INCH. USE THIS CRITERIA WHERE PIPE SIZES ARE NOT SHOWN ON PLAN.
14. CONTRACTOR SHALL DRAIN, FLUSH, AND REFILL ALL PIPING SYSTEMS NECESSARY TO PERFORM THE WORK. REFERENCE SPECIFICATIONS FOR FLUSHING PERFORMANCE REQUIREMENTS AND SUBMIT FLUSHING PLAN TO ENGINEER FOR REVIEW. PROVIDE CHEMICAL TREATMENT FOR ALL PIPING SYSTEMS AFTER FLUSHING AND REFILLING THE SYSTEM.
15. COORDINATE THE EXACT MOUNTING SIZE AND FRAME TYPE OF DIFFUSERS, REGISTERS AND GRILLES WITH THE SUPPLIER TO MEET THE CEILING, WALL AND DUCT INSTALLATION REQUIREMENTS.
16. ADJUST LOCATION OF CEILING DIFFUSERS, REGISTERS AND GRILLES AS REQUIRED TO ACCOMMODATE FINAL CEILING GRID AND LIGHTING LOCATIONS.
17. DUCTWORK CROSSING FIRE RATED WALLS OR OTHER FIRE RATED ASSEMBLIES SHALL BE MINIMUM 26 GAUGE SHEET METAL.
18. PROVIDE FIRE OR FIRE/SMOKE DAMPERS, AS APPLICABLE, IN DUCTWORK AT CEILINGS AND WALLS AT LOCATIONS SHOWN ON THE PLANS. FIRE AND FIRE/SMOKE DAMPERS SHALL CONFORM TO NFPA AS APPLICABLE. COORDINATE SLEEVE LENGTH WITH REQUIREMENTS OF INSTALLED LOCATION.
19. PROVIDE WALL OR DUCT ACCESS PANELS OR DOORS FOR ACCESS TO FIRE AND FIRE/SMOKE DAMPERS. ACCESS PANEL OR DOOR SHALL BE MINIMUM SIZE OF 10" BY 10" AND SHALL BE INSTALLED WITHIN 12" OF DAMPER. PROVIDE A REMOVABLE DUCT SECTION WHERE DUCT SIZE IS TOO SMALL FOR A 10" BY 10" ACCESS DOOR.
20. LOCATE AND SET THERMOSTATS AND HUMIDISTATS AT LOCATIONS SHOWN ON PLANS. VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION. INSTALL DEVICES WITH TOP OF DEVICE AT MAXIMUM 48" AFF TO MEET ADA REQUIREMENTS UNLESS NOTED OTHERWISE ON PLANS. PROVIDE INSULATED BACKING FOR THERMOSTATS MOUNTED ON EXTERIOR BUILDING WALLS. INSTALL WIRING IN CONDUIT PROVIDED BY DIVISION 26. AT A MINIMUM, PROVIDE CONDUIT IN THE WALL FROM THE JUNCTION BOX TO 6" ABOVE THE CEILING.
21. COORDINATE THE LOCATION AND ELEVATION OF WALL-MOUNTED DEVICES WITH PRESENTATION BOARDS, DISPLAY CABINETS, SHELVES OR OTHER COMPONENTS SHOWN ON THE ARCHITECTURAL DRAWINGS THAT ARE TO BE INSTALLED UNDER OTHER DIVISIONS. CONTRACTOR WILL NOT BE REIMBURSED FOR RELOCATION OF WALL-MOUNTED DEVICES CAUSED BY A LACK OF COORDINATION.
22. PROVIDE A MANUAL BALANCING DAMPER IN EACH BRANCH DUCT TAKEOFF FROM MAIN SUPPLY, RETURN, OUTDOOR AND EXHAUST AIR DUCTS.
23. PROVIDE A PREFABRICATED 45 DEGREE, HIGH EFFICIENCY, RECTANGULAR/ROUND BRANCH DUCT TAKEOFF FITTING WITH MANUAL BALANCING DAMPER AND LOCKING QUADRANT FOR BRANCH DUCT CONNECTIONS AND TAKE-OFFS TO INDIVIDUAL DIFFUSERS, REGISTERS AND GRILLES.
24. BRANCH DUCTWORK TO AIR OUTLETS SHALL BE SAME SIZE AS OUTLET NECK SIZE UNLESS OTHERWISE NOTED.
25. REFER TO SPECIFICATIONS FOR DUCTWORK AND PIPING INSULATION REQUIREMENTS. DUCT SIZES ON MECHANICAL PLANS INDICATE CLEAR INSIDE AIRFLOW DIMENSIONS, INCREASE SHEET METAL SIZES ACCORDINGLY TO ACCOUNT FOR THICKNESS OF DUCT LINER.
26. FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH AND SHALL BE INSTALLED AND SUPPORTED TO AVOID SHARP BENDS AND SAGGING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
27. PROVIDE EQUIPMENT VENTS AND FLUES PER EQUIPMENT MANUFACTURERS RECOMMENDATIONS AND EQUIPMENT SPECIFICATIONS. KEEP PENETRATIONS THROUGH ROOF A MINIMUM OF 25'-0" FROM HVAC EQUIPMENT FRESH AIR INLETS AND 3'-0" FROM ROOF PARAPETS.
28. PROVIDE WALL MOUNTED LOUVERS AND DAMPERS WITH SUITABLE MOUNTING FRAME TO MATCH WALL CONSTRUCTION. COORDINATE WITH ARCHITECTURAL DRAWINGS.
29. PROVIDE A NEW SET OF AIR FILTERS IN UNITS PRIOR TO TESTING, ADJUSTING AND BALANCING AND BEFORE TURNING SYSTEM(S) OVER TO OWNER.

MECHANICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
MG001	MECHANICAL LEGEND AND GENERAL NOTES
MS101	MECHANICAL SITE PLAN
M-101	LOWER LEVEL - HVAC PLAN
M-102	MAIN LEVEL - HVAC PLAN
M-103	VEHICLE BUILDING - HVAC PLAN
M-111	LOWER LEVEL - PIPING PLAN
M-112	MAIN LEVEL - PIPING PLAN
M-501	MECHANICAL DETAILS
M-502	MECHANICAL DETAILS
M-503	MECHANICAL DETAILS
M-601	MECHANICAL SCHEDULES
M-602	MECHANICAL SCHEDULES
M-621	MECHANICAL CONTROLS
M-622	MECHANICAL CONTROLS
M-623	MECHANICAL CONTROLS
M-624	ONE LINE DIAGRAM

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

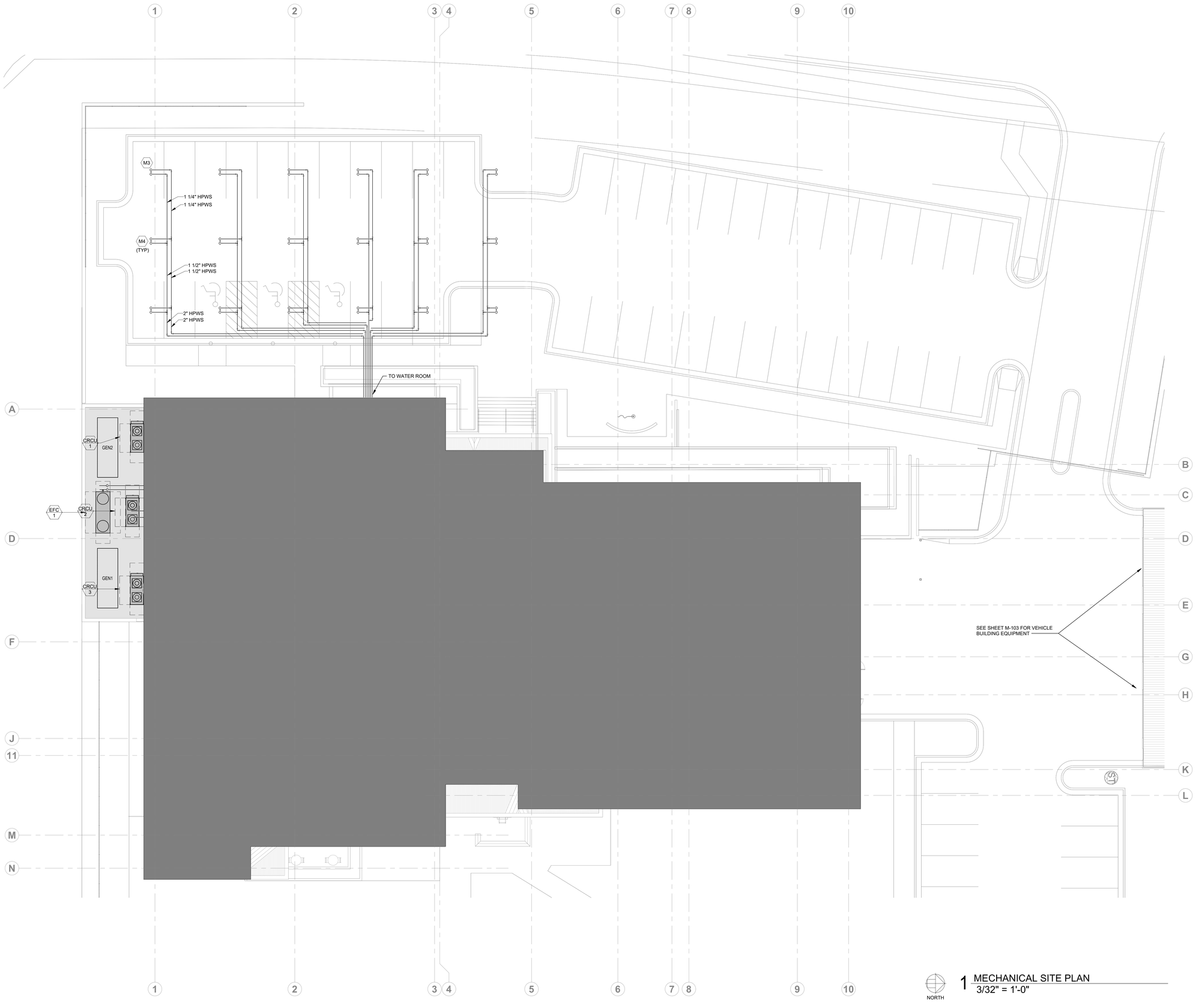
REVISION DATES:

PROFESSIONAL SEAL

MG001

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL LEGEND AND GENERAL NOTES



NORTH

1 MECHANICAL SITE PLAN
3/32" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET MG001 FOR GENERAL MECHANICAL NOTES.

MECHANICAL PLAN NOTES:

M3 GEOTHERMAL TEST WELL, 400FT DEEP. INTEGRATE EXISTING PIPING INTO WELL FIELD.

M4 GEOTHERMAL WELL, 400FT DEEP, 5.5" DIAMETER. TYPICAL 17 WELLS. 1.25" HDPE PIPE. PROVIDE HIGH CONDUCTIVITY THERMAL BENTONITE GROUT FILL. WELLS SHALL BE SEPARATED BY 20 FT.

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PACKAGE 2: CONSTRUCTION SET

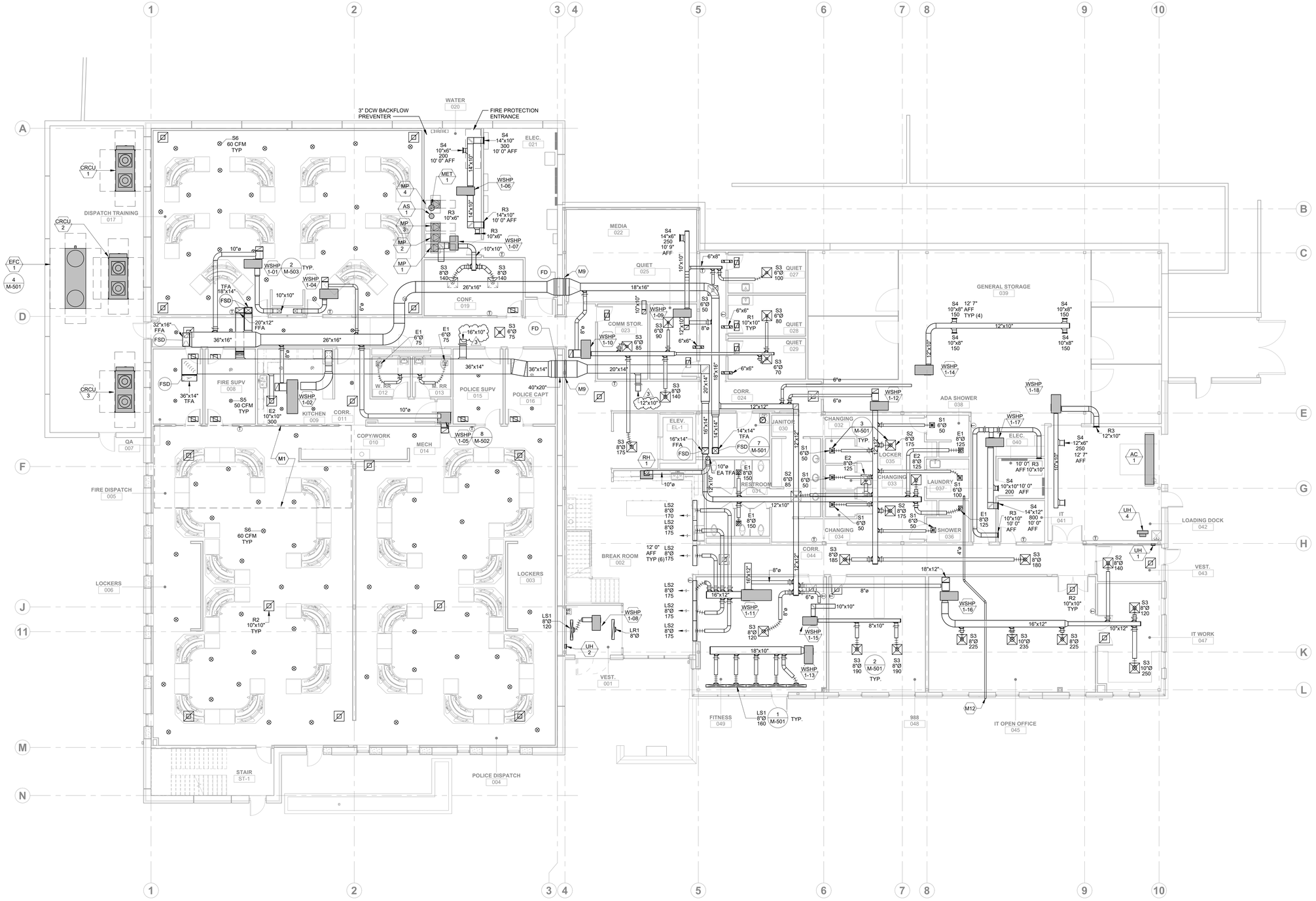
REVISION DATES:

PROFESSIONAL SEAL

MS101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL SITE PLAN



1 LOWER LEVEL HVAC PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET MG001 FOR GENERAL MECHANICAL NOTES.
2. ALL 12X24 RETURN GRILLES ARE TYPE R1 WITH 10X10 NECK UNLESS INDICATED OTHERWISE ON PLANS.
3. ALL 24X24 RETURN GRILLES ARE TYPE R2 WITH 10X10 NECK UNLESS INDICATED OTHERWISE.

MECHANICAL PLAN NOTES:

M1 LOWER STRUCTURE IN THIS AREA FOR SERVER ROOM UNDER FLOOR AIR DISTRIBUTION SYSTEM ABOVE.

M9 PROVIDE FIRE DAMPER, ICC 500 RATED STORM LOUVER, AND FLEXIBLE CONNECTION FOR DUCT PENETRATION THROUGH ICC 500 RATED STORM SHELTER WALL.

M12 PROVIDE BLACK WALL CAP WITH BACK DRAFT DAMPER.

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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024

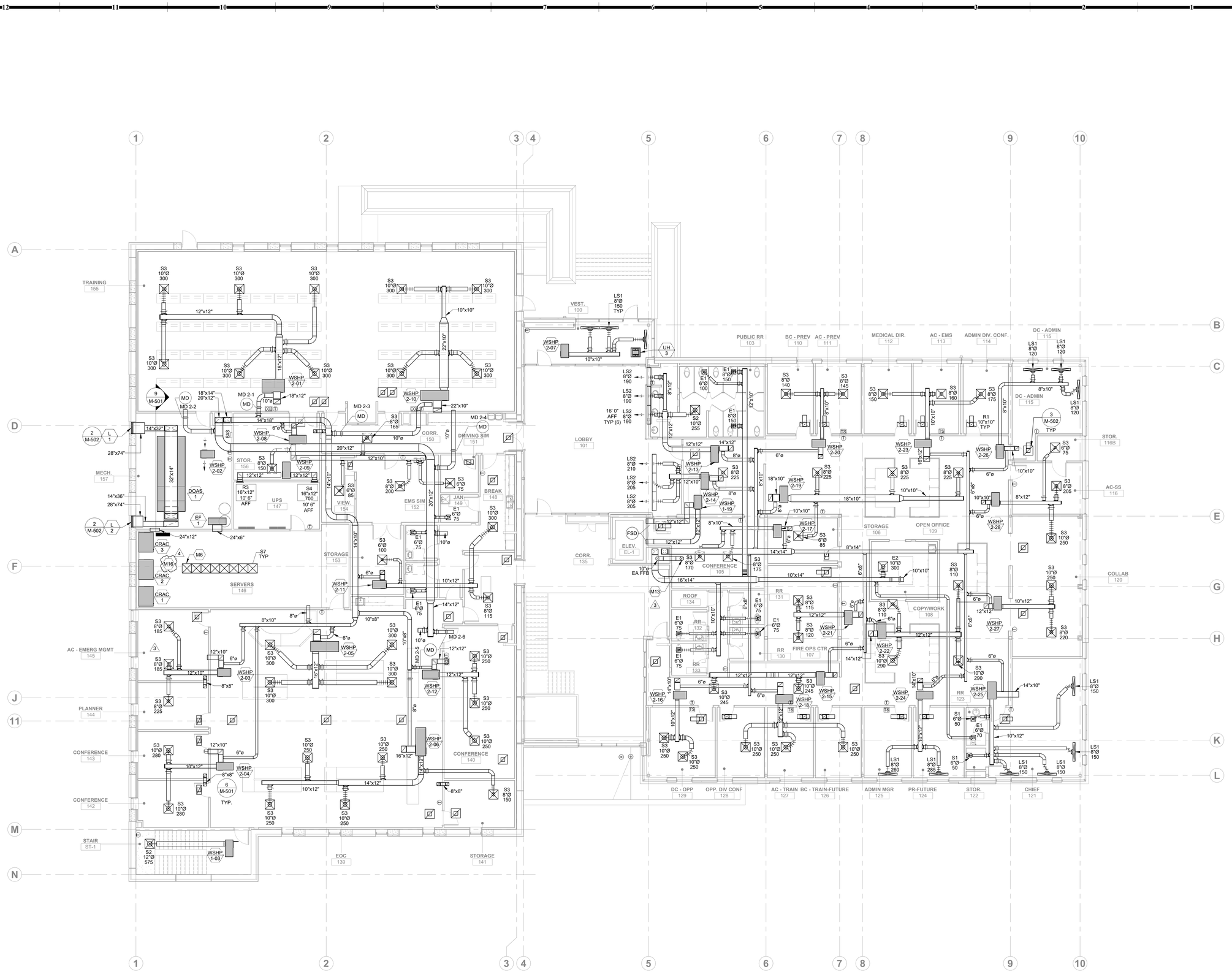
STATE OF MISSOURI
CLINT STOCKTON
NUMBER PE-2013023814
11.12.24
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

M-101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - HVAC PLAN



1 MAIN LEVEL HVAC PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET MG001 FOR GENERAL MECHANICAL NOTES.
2. ALL 12X24 RETURN AIR REGISTERS ARE TYPE R1 WITH 10X10 NECKS UNLESS NOTED OTHERWISE. ACOUSTICAL BOOTS SHOWN WHERE REQUIRED.
3. ALL 24X24 RETURN AIR REGISTERS ARE TYPE R2 WITH 10X10 NECKS UNLESS NOTED OTHERWISE. ACOUSTICAL BOOTS SHOWN WHERE REQUIRED.

MECHANICAL PLAN NOTES:

M6 FLOOR MOUNTED DIFFUSER BETWEEN SERVER RACKS.

3 M13 10" EXHAUST DUCT UP TO ROOF. TERMINATE WITH GOOSE NECK DOWN, MINIMUM 30" ABOVE ROOF.

4 M16 PROVIDE SMOKE DETECTOR ABOVE CRAC UNITS. CONNECT TO FIRE ALARM SYSTEM AND CRAC UNITS. IF SMOKE IS DETECTED, AN ALARM SHALL BE SENT TO THE BAS AND ALL CRAC UNITS SHALL SHUT OFF.

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM #3	11/18/2024
4	ADDENDUM #4	11/26/2024

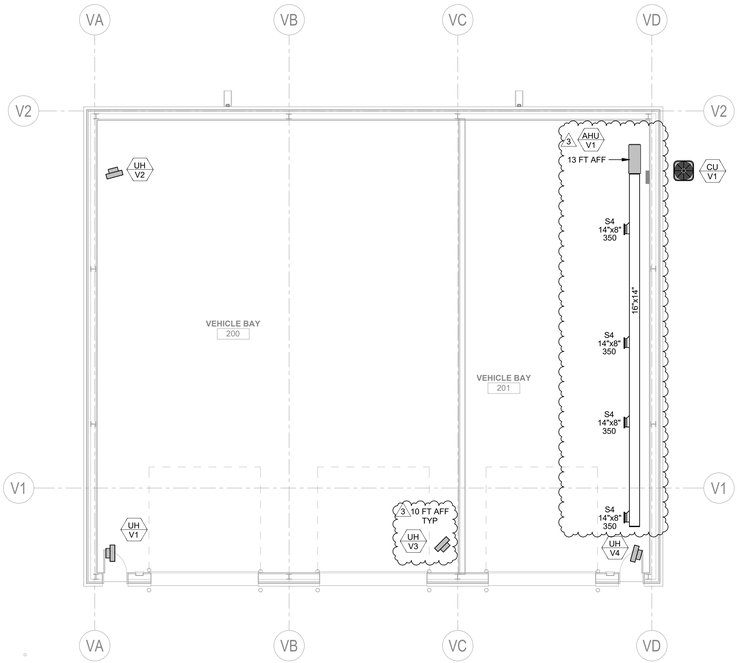
STATE OF MISSOURI
BLAKE ANTHONY KIRCHHOFER
NUMBER PE-2013031916
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

M-102

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - HVAC PLAN



NORTH

1 VEHICLE BUILDING - MECHANICAL PLAN
1/8" = 1'-0"

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PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
BLAKE STOCKTON HITCHCOCK
NUMBER PE-2010021144
11.18.2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

M-103

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

VEHICLE BUILDING - HVAC PLAN

GENERAL NOTES:

1. REFER TO SHEET MG001 FOR GENERAL MECHANICAL NOTES.

MECHANICAL PLAN NOTES:

M7 DO NOT ROUTE HYDRONIC PIPING THROUGH IT SERVER ROOM.

M8 DO NOT ROUTE HYDRONIC PIPING THROUGH ELECTRICAL ROOM.

M14 PROVIDE ICC 500 RATED WALL SHROUD FOR LARGE PIPES EXITING STORM SHELTER.

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PACKAGE 2: CONSTRUCTION SET

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REVISION DATES:

3	ADDENDUM #3	11/18/2024

PROFESSIONAL SEAL

M-111

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - PIPING PLAN

1 LOWER LEVEL HVAC PIPING PLAN
1/8" = 1'-0"

NORTH

11/17/2024 11:07:13 PM Autodesk Docs://138191-LeesSummitJointOpsCtr/138191_MEP23_LeesSummitJointOpsCtr.rvt

GENERAL NOTES:

1. REFER TO SHEET MG001 FOR GENERAL MECHANICAL NOTES.

MECHANICAL PLAN NOTES:

M7 DO NOT ROUTE HYDRONIC PIPING THROUGH IT SERVER ROOM.

3 M15 THERMOSTAT SHALL READ TEMPERATURE FROM ASSOCIATED TEMPERATURE SENSOR IN OFFICE.

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LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
ECIRS STOCKTON
REGISTERED
NUMBER PE-2013023214
PROFESSIONAL ENGINEER
11.14.24

PROFESSIONAL SEAL

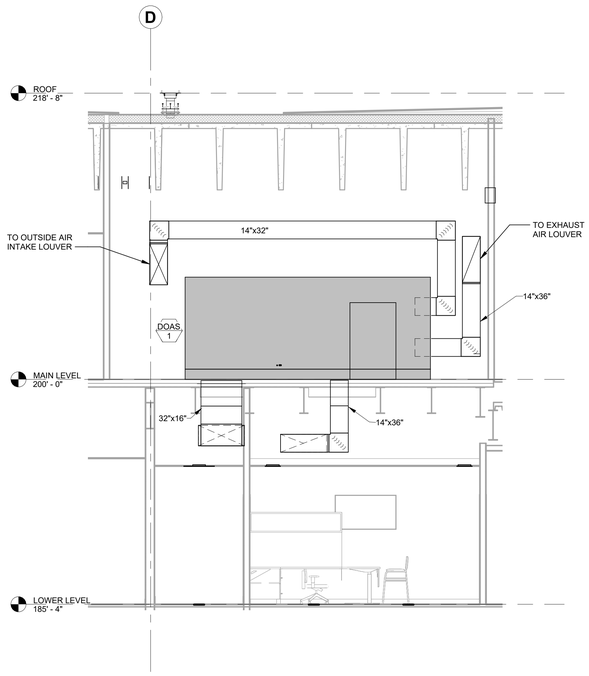
M-112

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

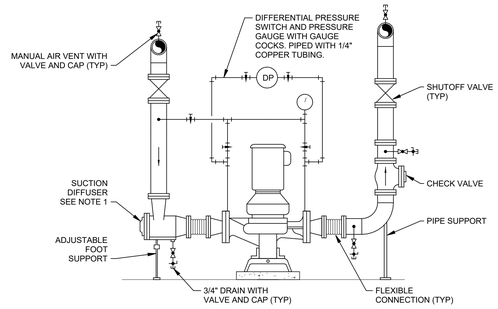
1 MAIN LEVEL HVAC PIPING PLAN
1/8" = 1'-0"

NORTH

MAIN LEVEL - PIPING PLAN

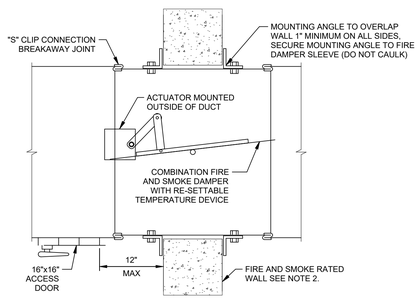


9 DOAS 1
1/4" = 1'-0"



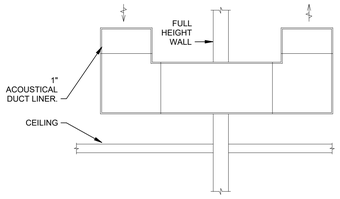
NOTES:
1. INCLUDE INTEGRAL STRAINER, MAINTAIN REQUIRED SERVICE CLEARANCE FOR STRAINER REMOVAL.

8 FLOOR MOUNTED IN-LINE PUMP
NOT TO SCALE

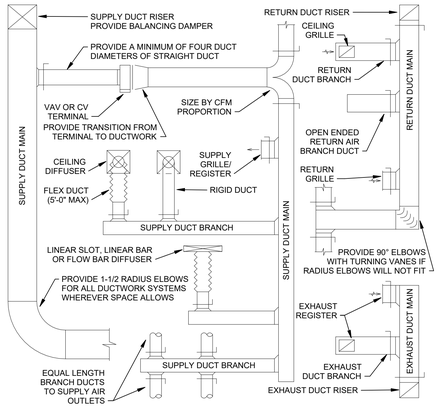


NOTES:
1. INSTALL FIRE/SMOKE DAMPER PER MANUFACTURERS RECOMMENDATION AND NFPA STANDARDS
2. MAKE WALL OPENING 1/8" PER FOOT LARGER THAN DAMPER DIMENSIONS WITH 1/4" MINIMUM REQUIRED, MAXIMUM 1".
3. DIVISION 15 CONTRACTOR SHALL PROVIDE CONTROL AIR CONNECTION TO ALL SMOKE DAMPERS. DIVISION 16 CONTRACTOR SHALL PROVIDE POWER CONNECTION TO ALL DAMPERS.

7 FIRE/SMOKE DAMPER DETAIL
NOT TO SCALE

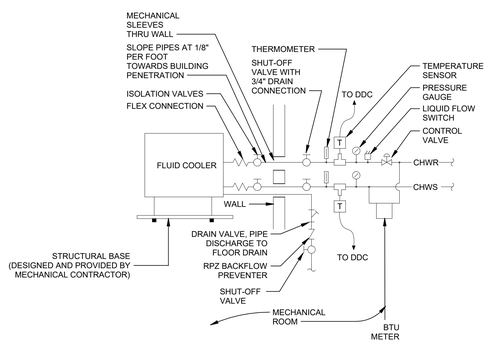


6 TRANSFER DUCT DETAIL
NOT TO SCALE

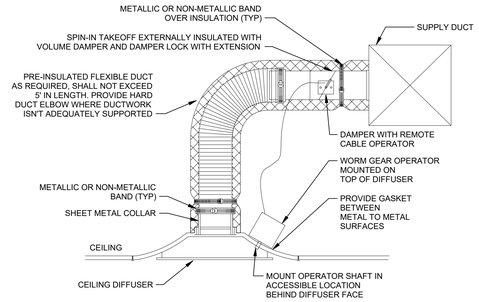


NOTES:
1. REFER TO HVAC FLOOR PLANS FOR DUCT SIZES.
2. REFER TO SCHEDULES FOR GRILLES, REGISTERS, DIFFUSERS AND TERMINAL SIZES AND TYPES.
3. PROVIDE A MANUAL TYPE BALANCING DAMPER FOR EACH SUPPLY OUTLET AND RETURN INLET.
4. ALL DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED.
5. FLEX DUCT WILL NOT BE ALLOWED ON RETURN OR EXHAUST DUCTWORK SYSTEMS.
6. PROVIDE 12" AIR CUSHION AT THE END OF EACH SUPPLY MAIN AND BRANCH DUCT.
7. INDIVIDUAL BRANCH BALANCING DAMPERS NOT REQUIRED FOR SUPPLY OR EXHAUST REGISTERS.

5 DUCTWORK INSTALLATION DIAGRAM
NOT TO SCALE

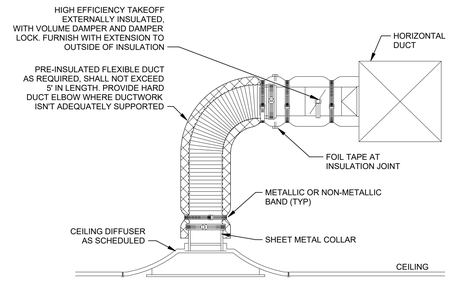


4 FLUID COOLER DETAIL
NOT TO SCALE

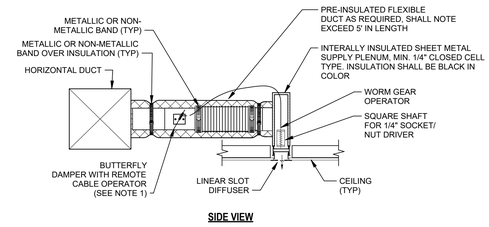


NOTES:
1. FURNISH REMOTE CABLE OPERATORS WHERE BALANCING DAMPERS ARE LOCATED IN-ACCESSIBLE LOCATIONS SUCH AS ABOVE HARD CEILINGS.

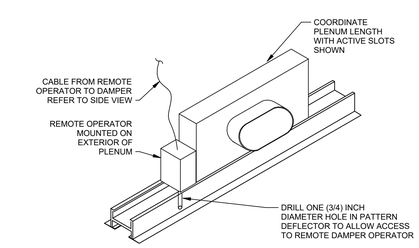
3 HARD CEILING DIFFUSER DETAIL
NOT TO SCALE



2 LAY-IN CEILING DIFFUSER DETAIL
NOT TO SCALE



SIDE VIEW



ISOMETRIC VIEW

NOTES:
1. FURNISH REMOTE CABLE OPERATORS WHERE BALANCING DAMPERS ARE LOCATED IN-ACCESSIBLE LOCATIONS SUCH AS ABOVE HARD CEILINGS.
2. COORDINATE EXACT LENGTH AND LOCATION OF SLOT DIFFUSER WITH ARCHITECT'S REFLECTED CEILING PLAN.

1 LINEAR SLOT DIFFUSER DETAIL
NOT TO SCALE

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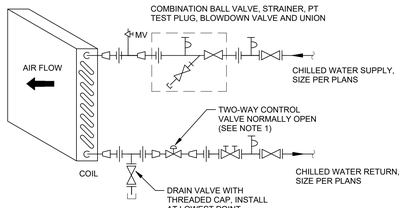
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL DETAILS



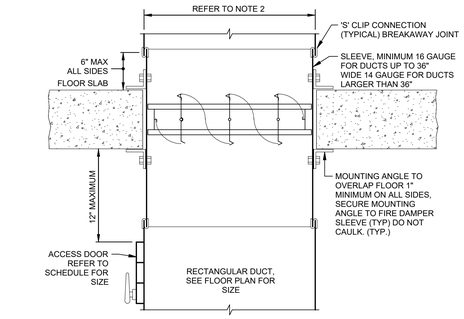
NOTES:
1. CONTRACTOR SHALL COORDINATE CONTROL VALVE FURNISHING AND SIZES WITH TERMINAL UNIT MANUFACTURER. PROVIDE CONCENTRIC REDUCERS ON BOTH SIDES OF CONTROL VALVE AS REQUIRED.
2. PREMANUFACTURED HOSE KIT ASSEMBLIES ARE ACCEPTABLE.

10 WSHP PIPING DETAIL
NOT TO SCALE

NOTES:
1. SEE SPECIFICATION FOR HANGER TYPE AND SIZES.

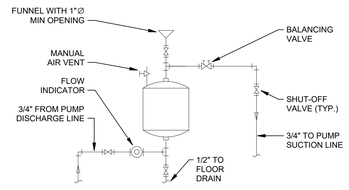
9 PIPE SUPPORT DETAIL
NOT TO SCALE

8 FLOOR MOUNTED WHSP DETAIL
NOT TO SCALE

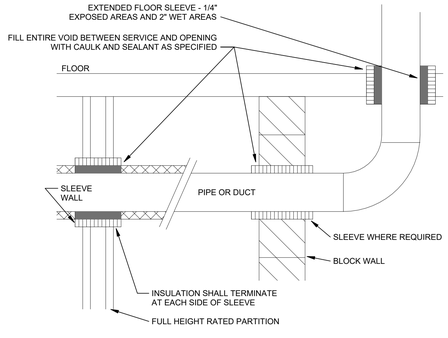


NOTES:
1. INSTALL FIRE DAMPER PER MANUFACTURERS RECOMMENDATION AND NFPA STANDARDS.
2. DIVISION 23 CONTRACTOR TO COORDINATE FLOOR OPENING WITH DIVISION 01 CONTRACTOR TO ALLOW DAMPER CURTAIN TO BE INSTALLED OUTSIDE AIRSTREAM.

7 FLOOR FIRE DAMPER DETAIL
NOT TO SCALE

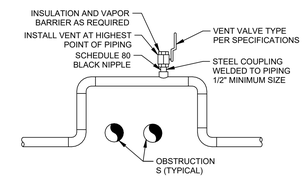


6 CHEMICAL SHOT FEEDER DETAIL
NOT TO SCALE

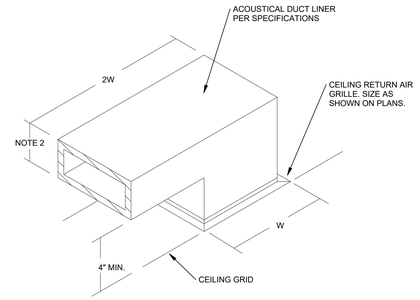


NOTES:
1. VAPOR BARRIER (WHERE REQUIRED) AND INSULATION TO BE FITTED TIGHT TO SLEEVE. SEAL WITH CONTINUOUS BEAD OF NON-HARDENING CAULKING.

5 DUCT/PIPE WALL/FLOOR PENETRATION DETAIL
NOT TO SCALE

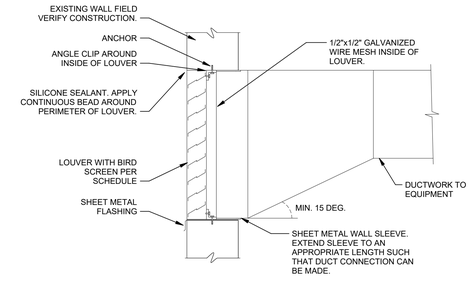


4 HIGH POINT MANUAL AIR VENT - STEEL PIPE
NOT TO SCALE

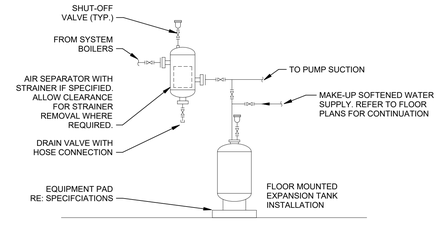


NOTES:
1. ALL INTERIOR SURFACES OF DUCT BOOTS INCLUDING FASTENERS SHALL BE BLACK IN COLOR.
2. REFER TO FLOOR PLAN FOR NECK SIZE.

3 RETURN AIR BOOT DETAIL
NOT TO SCALE



2 LOUVER ASSEMBLY DETAIL
NOT TO SCALE



NOTES:
1. REFER TO SCHEDULE FOR EXPANSION TANK TYPE AND MOUNTING
2. INSULATE COMPONENTS PER SPECIFICATIONS. PROVIDE REMOVABLE ACCESS TO STRAINERS, VALVES AND VENTS

1 EXPANSION TANK WITH AIR SEPARATOR DETAIL
NOT TO SCALE

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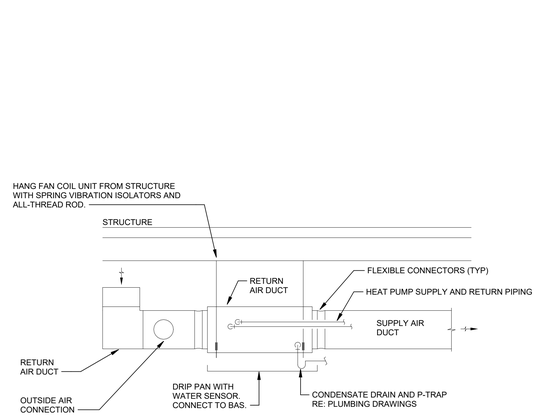
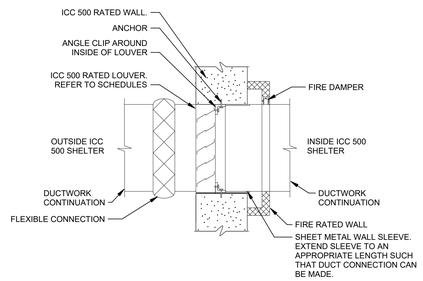
MECHANICAL DETAILS



NOTES:
1. ARRANGEMENT SHOWN IS SCHEMATIC, ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS.
2. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR MAXIMUM CONDENSATE DRAIN LIFT LENGHTS.

2 WATER SOURCE HEAT PUMP UNIT - CEILING CONCEALED
NOT TO SCALE



1 DUCT PENETRATION THROUGH ICC 500 WALL
NOT TO SCALE

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MECHANICAL DETAILS

DEDICATED OUTDOOR AIR SUPPLY UNIT SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN TYPE	SUPPLY FAN QUANTITY	SUPPLY FAN AIRFLOW (CFM)	SUPPLY FAN ESP (IN)	SUPPLY FAN TSP (IN)	SUPPLY FAN MAX HP	SUPPLY FAN BRAKE HP	SUPPLY FAN STARTER TYPE	EXHAUST FAN TYPE	EXHAUST FAN QUANTITY	EXHAUST FAN AIRFLOW (CFM)	EXHAUST FAN ESP (IN)	EXHAUST FAN TSP (ESP)	EXHAUST FAN MAX HP	EXHAUST FAN BRAKE HP	EXHAUST FAN STARTER TYPE	COOLING COIL TOTAL (MBH)	COOLING COIL SENSIBLE (MBH)	COOLING COIL EAT DB (DEG.F)	COOLING COIL EAT WB (DEG.F)	COOLING COIL LAT DB (DEG.F)	COOLING COIL LAT WB (DEG.F)	COOLING COIL FLOW RATE (GPM)	COOLING COIL EWT (DEG. F)	COOLING COIL LWT (DEG.F)	COOLING COIL MAX WPD (FT)	COOLING COIL MAX VELOCITY (FPM)	HEATING COIL AIRFLOW (CFM)	HEATING COIL MIN. OUTPUT (BTUH)	HEATING COIL EAT (DEG.F)	HEATING COIL LAT (DEG.F)	HEATING COIL FLOW RATE (GPM)	HEATING COIL EWT (DEG.F)	HEATING COIL LWT (DEG.F)	HEATING COIL CONTROL (STAGED/MOD)	FILTERS PREFILTER MERV	FILTERS PREFILTER DIRTY SP LOSS (IN)	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MOCP	PHYSICAL PROPERTIES LENGTH (FT)	PHYSICAL PROPERTIES WIDTH (FT)	PHYSICAL PROPERTIES HEIGHT (FT)	PHYSICAL PROPERTIES WEIGHT (LBS)	OPTIONS	NOTES
DOAS 1	YORK	JRMW180	WSHP	DIRECT	1	4900	1.0	3.2	5.00	3.71	VFD	DIRECT	0	3900	1.0	2.1	3	2.37	VFD	214	139	84.6	69.7	56.0	55.0	72.0	80.0	90.0	11	450	3900	141	37.5	64.0	72.0	50.0	40.0		13	0.8	460	3	102.0	112.0	125	16"	6"	6"	3400	CAB,DSE,SSDP	1-12

NOTES:
1. UNIT HANDING AND DUCT CONNECTION ORIENTATION SHALL BE BASED ON STANDING INSIDE THE UNIT FACING FORWARD WITH AIRFLOW HITTING YOU IN THE BACK OF THE HEAD.
2. MOUNT DOAS ON CONCRETE PAD. SUPPLY AND RETURN CONNECTIONS SHALL EXIT THE UNIT VERTICALLY DOWN THROUGH CONCRETE PAD. CONTRACTOR TO VERIFY SIZE AND LOCATION OF OPENINGS BEFORE POURING SLAB.
3. UNIT SHALL BE DRAW THRU CONFIGURATION.
4. CONTROLS SHALL BE FACTORY INSTALLED. REFER TO CONTROLS DRAWINGS.
5. FURNISH FACTORY MOUNTED VARIABLE FREQUENCY DRIVE PER FAN. VARIABLE FREQUENCY DRIVE TO BE FURNISHED BY DIVISION 23 CONTRACTOR.
6. EFFICIENCIES: EER = 21.8, COP 3.8.
7. PROVIDE WITH MODULATING HOT GAS REHEAT FOR DEHUMIDIFICATION CONTROL.
8. PROVIDE SMOKE DETECTOR IN SUPPLY AIR AND RETURN AIR DUCT. SEE CONTROLS SHEETS FOR SEQUENCE OF OPERATION. 4
9. COMPRESSORS AND FANS SHALL HAVE VIBRATION ISOLATION FOR NOISE CONTROL.
10. PROVIDE WITH ENERGY RECOVERY WHEEL. SEE ENERGY RECOVERY WHEEL SCHEDULE BELOW.
11. PROVIDE INTERAL ELECTRIC RESISTANCE HEATER FOR BACK UP HEAT WHEN ERW IS IN FROST CONTROL. SIZE 45 KW.
12. REFRIGERANT - R454B.

ENERGY RECOVERY WHEEL SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SUPPLY AIRFLOW (CFM)	EXHAUST AIRFLOW (CFM)	FILTERS OA FILTER MERV	FILTERS OA FILTER DIRTY SP LOSS (IN)	FILTERS RA FILTER MERV	FILTERS RA FILTER DIRTY SP LOSS (IN)	SUMMER EXHAUST DB (DEG.F)	SUMMER EXHAUST WB (DEG.F)	SUMMER O/A DB (DEG.F)	SUMMER O/A WB (DEG.F)	SUMMER SUPPLY DB (DEG.F)	SUMMER SUPPLY WB (DEG.F)	SUMMER SUPPLY TH (BTUH)	WINTER EXHAUST DB (DEG.F)	WINTER EXHAUST O/A DB (DEG.F)	WINTER SUPPLY DB (DEG.F)	WINTER SUPPLY TH (BTUH)	OPTIONS	NOTES
DOAS1	YORK	ECW 484	4900	3900	8	0.4	8	0.4	75.0	64.0	96.0	75.3	84.6	69.7	140	70.0	0.0	37.5	276		1-4

NOTES:
1. TOTAL ENERGY RECOVERY WHEEL SHALL BE INTEGRATED INTO DOAS 1 SHOWN ABOVE.
2. PROVIDE VFD DEFROST CONTROL AND BYPASS DAMPERS.
3. COOLING EFFECTIVENESS: TOTAL=72%, SENSIBLE=74%.
4. HEATING EFFECTIVENESS: TOTAL=77%, SENSIBLE=80%.

WATER SOURCE HEAT PUMP SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	SUPPLY FAN AIRFLOW (CFM)	SUPPLY FAN ESP (IN)	SUPPLY FAN STARTER TYPE	COOLING COIL TOTAL (MBH)	COOLING COIL SENSIBLE (MBH)	COOLING COIL EAT DB (DEG.F)	COOLING COIL EAT WB (DEG.F)	COOLING COIL LAT DB (DEG.F)	COOLING COIL LAT WB (DEG.F)	COOLING COIL FLOW RATE (GPM)	COOLING COIL EWT (DEG. F)	COOLING COIL LWT (DEG.F)	HEATING COIL MIN. OUTPUT (BTUH)	HEATING COIL EAT (DEG.F)	HEATING COIL LAT (DEG.F)	HEATING COIL EWT (DEG.F)	HEATING COIL LWT (DEG.F)	HEATING COIL MAX WPD (FT)	HEATING COIL CONTROL (STAGED/MOD)	MIN O/A AIRFLOW (CFM)	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MOCP	PHYSICAL PROPERTIES LENGTH (IN)	PHYSICAL PROPERTIES WIDTH (IN)	PHYSICAL PROPERTIES HEIGHT (IN)	PHYSICAL PROPERTIES WEIGHT (LBS)	OPTIONS 3	NOTES
WSHP 1-01	CLIMATE MASTER	SC-024	900	0.5	ECM	20.3	18.0	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.4	68.0	90.0	50.0	40.0	11.0	2	110	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-02	CLIMATE MASTER	SE-060	1800	0.5	ECM	45.5	38.8	75.0	63.0	55.0	53.0	12.5	80.0	90.0	5.3	68.0	90.0	50.0	40.0	11.0	2	345	460	3	12.5	14.1	15	81"	26"	22"	475	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-03	CLIMATE MASTER	SC-015	700	0.5	ECM	12.1	7.7	75.0	63.0	55.0	53.0	3.1	80.0	90.0	11.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-04	CLIMATE MASTER	SC-018	750	0.5	ECM	16.1	14.3	75.0	63.0	55.0	53.0	3.8	80.0	90.0	4.8	68.0	90.0	50.0	40.0	11.0	1	110	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-05	CLIMATE MASTER	SE-048	1200	0.5	ECM	31.8	28.0	75.0	63.0	55.0	53.0	10.0	80.0	90.0	3.6	68.0	90.0	50.0	40.0	11.0	2	310	460	3	11.6	13.3	15	55"	31"	26"	450	DP,DSN,ESM,HK,PFB,RDS	1,3-8
WSHP 1-06	CLIMATE MASTER	SC-015	700	0.5	ECM	10.4	10.1	75.0	63.0	55.0	53.0	3.1	80.0	90.0	3.3	68.0	90.0	50.0	40.0	11.0	1	55	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-07	CLIMATE MASTER	SC-009	300	0.5	ECM	7.0	5.0	75.0	63.0	55.0	53.0	1.9	80.0	90.0	1.6	68.0	90.0	50.0	40.0	11.0	1	90	277	1	5.9	6.8	15	34"	20"	12"	110	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-08	CLIMATE MASTER	SC-006	200	0.5	ECM	3.7	2.0	75.0	63.0	55.0	53.0	1.3	80.0	90.0	1.4	68.0	90.0	50.0	40.0	11.0	1	0	277	1	4.9	5.6	15	36"	20"	12"	110	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-09	CLIMATE MASTER	SC-015	700	0.5	ECM	11.0	9.5	75.0	63.0	55.0	53.0	3.1	80.0	90.0	7.3	68.0	90.0	50.0	40.0	11.0	1	135	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-10	CLIMATE MASTER	SC-018	750	0.5	ECM	16.3	13.3	75.0	63.0	55.0	53.0	3.8	80.0	90.0	5.4	68.0	90.0	50.0	40.0	11.0	1	150	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-11	CLIMATE MASTER	SC-036	1350	0.5	ECM	21.7	20.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	13.9	68.0	90.0	50.0	40.0	11.0	2	100	460	3	9.3	10.4	15	72"	26"	22"	360	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-12	CLIMATE MASTER	SC-024	900	0.5	ECM	19.8	18.7	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.5	68.0	90.0	50.0	40.0	11.0	2	100	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-13	CLIMATE MASTER	SC-024	900	0.5	ECM	23.8	14.4	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	2	180	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-14	CLIMATE MASTER	SC-018	750	0.5	ECM	13.8	13.4	75.0	63.0	55.0	53.0	3.8	80.0	90.0	8.1	68.0	90.0	50.0	40.0	11.0	1	195	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-15	CLIMATE MASTER	SC-012	400	0.5	ECM	7.9	6.8	75.0	63.0	55.0	53.0	2.5	80.0	90.0	2.7	68.0	90.0	50.0	40.0	11.0	1	60	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-16	CLIMATE MASTER	SC-024	900	0.5	ECM	19.4	16.7	75.0	63.0	55.0	53.0	5.0	80.0	90.0	10.2	68.0	90.0	50.0	40.0	11.0	2	150	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-17	CLIMATE MASTER	SC-024	900	0.5	ECM	16.7	16.1	75.0	63.0	55.0	53.0	5.0	80.0	90.0	1.0	68.0	90.0	50.0	40.0	11.0	2	0	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-18	CLIMATE MASTER	SC-018	750	0.5	ECM	17.9	8.9	75.0	63.0	55.0	53.0	3.8	80.0	90.0	10.7	68.0	90.0	50.0	40.0	11.0	1	0	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 1-19	CLIMATE MASTER	SC-012	400	0.3	ECM	10.7	10.6	75.0	63.0	55.0	53.0	2.5	80.0	90.0	0.5	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	1,3-8
WSHP 2-01	CLIMATE MASTER	SE-048	1600	0.5	ECM	49.0	36.4	0.0	63.0	55.0	53.0	10.0	80.0	90.0	20.0	68.0	90.0	50.0	40.0	11.0	2	490	460	3	11.6	13.3	15	58"	33"	21"	450	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-02	CLIMATE MASTER	SC-012	400	0.5	ECM	6.4	6.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.2	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-03	CLIMATE MASTER	SC-012	400	0.5	ECM	10.4	9.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	6.3	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-04	CLIMATE MASTER	SC-015	700	0.5	ECM	13.4	9.8	75.0	63.0	55.0	53.0	3.1	80.0	90.0	5.2	68.0	90.0	50.0	40.0	11.0	1	125	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-05	CLIMATE MASTER	SC-036	1350	0.5	ECM	27.1	21.6	75.0	63.0	55.0	53.0	7.5	80.0	90.0	8.0	68.0	90.0	50.0	40.0	11.0	2	160	460	3	9.3	10.4	15	72"	26"	22"	360	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-06	CLIMATE MASTER	SC-036	1350	0.5	ECM	27.9	23.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	14.5	68.0	90.0	50.0	40.0	11.0	2	170	460	3	9.3	10.4	15	72"	26"	22"	360	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-07	CLIMATE MASTER	SC-012	400	0.5	ECM	8.4	8.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.6	68.0	90.0	50.0	40.0	11.0	1	0	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-08	CLIMATE MASTER	SC-018	750	0.5	ECM	15.6	13.7	75.0	63.0	55.0	53.0	3.8	80.0	90.0	7.5	68.0	90.0	50.0	40.0	11.0	1	125	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-09	CLIMATE MASTER	SC-015	700	0.5	ECM	12.9	12.5	75.0	63.0	55.0	53.0	3.1	80.0	90.0	9.0	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-10	CLIMATE MASTER	SC-036	1350	0.5	ECM	36.5	27.0	75.0	63.0	55.0	53.0	7.5	80.0	90.0	12.9	68.0	90.0	50.0	40.0	11.0	2	360	460	3	9.3	10.4	15	72"	26"	22"	360	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-11	CLIMATE MASTER	SC-012	400	0.5	ECM	9.5	7.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.7	68.0	90.0	50.0	40.0	11.0	1	60	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-12	CLIMATE MASTER	SC-018	750	0.5	ECM	7.4	7.1	75.0	63.0	55.0	53.0	3.8	80.0	90.0	2.3	68.0	90.0	50.0	40.0	11.0	1	165	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-13	CLIMATE MASTER	SC-015	700	0.5	ECM	14.4	13.3	75.0	63.0	55.0	53.0	3.1	80.0	90.0	5.6	68.0	90.0	50.0	40.0	11.0	1	60	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-14	CLIMATE MASTER	SC-015	700	0.5	ECM	12.0	10.8	75.0	63.0	55.0	53.0	3.1	80.0	90.0	2.8	68.0	90.0	50.0	40.0	11.0	1	95	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-15	CLIMATE MASTER	SC-012	400	0.5	ECM	8.9	8.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	7.0	68.0	90.0	50.0	40.0	11.0	1	55	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-16	CLIMATE MASTER	SC-009	300	0.5	ECM	8.2	7.5	75.0	63.0	55.0	53.0	1.9	80.0	90.0	5.3	68.0	90.0	50.0	40.0	11.0	1	50	277	1	5.9	6.8	15	34"	20"	12"	110	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-17	CLIMATE MASTER	SC-009	300	0.5	ECM	8.8	6.1	75.0	63.0	55.0	53.0	1.9	80.0	90.0	1.8	68.0	90.0	50.0	40.0	11.0	1	90	277	1	5.9	6.8	15	34"	20"	12"	110	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-18	CLIMATE MASTER	SC-018	750	0.5	ECM	14.8	13.1	75.0	63.0	55.0	53.0	3.8	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	1	60	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-19	CLIMATE MASTER	SC-024	900	0.5	ECM	20.9	17.3	75.0	63.0	55.0	53.0	5.0	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	2	150	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-20	CLIMATE MASTER	SC-012	400	0.5	ECM	9.2	8.0	75.0	63.0	55.0	53.0	2.5	80.0	90.0	5.1	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-21	CLIMATE MASTER	SC-006	200	0.5	ECM	5.8	4.5	75.0	63.0	55.0	53.0	1.3	80.0	90.0	1.6	68.0	90.0	50.0	40.0	11.0	1	60	277	1	4.9	5.6	15	36"	20"	12"	110	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-22	CLIMATE MASTER	SC-024	900	0.5	ECM	21.2	16.7	75.0	63.0	55.0	53.0	5.0	80.0	90.0	7.1	68.0	90.0	50.0	40.0	11.0	2	140	460	3	5.0	6.0	15	43"	21"	18"	175	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-23	CLIMATE MASTER	SC-015	700	0.5	ECM	14.3	12.6	75.0	63.0	55.0	53.0	3.1	80.0	90.0	8.2	68.0	90.0	50.0	40.0	11.0	1	55	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-24	CLIMATE MASTER	SC-015	700	0.5	ECM	10.9	9.6	75.0	63.0	55.0	53.0	3.1	80.0	90.0	6.0	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.9	8.2	15	43"	20"	18"	155	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-25	CLIMATE MASTER	SC-018	750	0.5	ECM	9.7	9.0	75.0	63.0	55.0	53.0	3.8	80.0	90.0	8.8	68.0	90.0	50.0	40.0	11.0	1	50	277	1	8.4	10.0	15	44"	23"	18"	160	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-26	CLIMATE MASTER	SC-012	400	0.5	ECM	8.0	7.3	75.0	63.0	55.0	53.0	2.5	80.0	90.0	6.4	68.0	90.0	50.0	40.0	11.0	1	50	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-27	CLIMATE MASTER	SC-012	400	0.5	ECM	10.5	8.3	75.0	63.0	55.0	53.0	2.5	80.0	90.0	5.4	68.0	90.0	50.0	40.0	11.0	1	80	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8
WSHP 2-28	CLIMATE MASTER	SC-012	400	0.5	ECM	9.3	4.1	75.0	63.0	55.0	53.0	2.5	80.0	90.0	4.8	68.0	90.0	50.0	40.0	11.0	1	75	277	1	6.5	7.6	15	35"	20"	12"	120	DP,DSN,ESM,HK,PFB,RDS	2-8

NOTES:
1. UNIT SHALL BE FLOOR MOUNTED WITH DOWN FLOW DISCHARGE INTO UNDER FLOOR AIR PLENUM. REFER TO DETAIL XXX.
2. UNIT SHALL BE HUNG FROM STRUCTURE WITH HORIZONTAL DISCHARGE. REFER TO DETAIL XXX.
3. FURNISH WITH 1" FILTER RACK. PROVIDE MERV 11 FILTER. CONTRACTOR TO CONFIRM IF RACK OR FRAME FILTERS ARE NECESSARY FOR EACH UNIT.
4. FURNISH WITH TERMINAL STRIP FOR BACNET CONNECTION TO BAS. BAS SHALL MONITOR UNIT POINTS. REFER TO CONTROLS SHEETS.
5. UNIT EFFICIENCIES: EER = 15, COP = 4.9
6. UNITS ARE SIZED FOR 100% WATER, NO GLYCOL.
7. CONTRACTOR TO VERIFY AIRFLOW DIRECTIONS AND CONTROLS LOCATIONS WITH FLOOR PLANS.
8. HOSE KIT TO INCLUDE: STAINLESS STEEL BRAIDED FLEXIBLE HOSE, 2 SHUT OFF VALVES, MOTORIZED BALANCING VALVE, AND Y STRAINER.

RANGE HOOD SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	AIRFLOW (CFM)	ESP (IN)	UNIT WIDTH (IN)	OUTLET DIAMETER (IN)	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MOCP	PHYSICAL PROPERTIES LENGTH (IN)	PHYSICAL PROPERTIES WIDTH (IN)	PHYSICAL PROPERTIES HEIGHT (IN)	OPTIONS	NOTES
RH 1	GREENHECK	GRRS	WALL MOUNTED	250	0.3	30"	8"	120	1	1.6	1.6	15	20"	30"	28"	DSN,EEF,SFS,SS,UIT	1-4

NOTES:
1. HOOD SHALL BE WALL MOUNTED 30" FROM TOP OF COOKTOP.
2. HOOD SHALL BE CONTROLLED BY INTEGRAL SWITCH.
3. RANGE HOOD INTERNAL FIRE SUPPRESSION SYSTEM SHALL SHUT OFF ELECTRIC RANGE ON ACTIVATION.
4. PROVIDE EXTERNAL, INLINE FAN FOR TOP DISCHARGE.

FAN SCHEDULE

PLAN MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING	AIRFLOW (CFM)	ESP (IN)	DRIVE	BRAKE HP	MIN HP	FAN RPM	STARTER TYPE	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MOCP	OPTIONS	NOTES
EF 1	MECH RM	GREENHECK	CSP-A3300-VG	SUSPEND	2000	0.5	DD	0.39	0.39	1080	ECM	277	1	8.0	15	DSN	1,2

NOTES:
1. FURNISH NECESSARY MOUNTING BRACKET AND ACCESSORIES FOR SUSPENSION FROM STRUCTURE. 3
2. FAN CONTROLLED BY THERMOSTAT. SET INTERNAL FAN WILL ACTIVATE WHEN THEMOSTAT READS 70 DEGREES OR LOWER.

AIR CURTAIN SCHEDULE

PLAN MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING LOCATION	OVERALL LENGTH (IN)	MAX AIRFLOW (CFM)	NOMINAL (KW)	FAN QUANTITY	MOTOR HP	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MOCP	OPTIONS	NOTES
AC 1	LOADING DOCK	POWERED AIRE	MP-2-120	SUSPEND	120"	3218	0.0	2	0.20	120	1	8.8	15	DSN,MDC,STC	1-2

NOTES:
1. SUSPEND AIR CURTAIN AT SAME HEIGHT AS ROLL UP DOOR.
2. FANS SHALL ACTIVATE WHEN ROLLING DOOR OPENS VIA MAGNETIC DOOR SWITCH. FANS SHALL BE OVERRIDDEN BY OCCUPANTS AT SMART TOUCH CONTOLLER.

LOUVER SCHEDULE

PLAN MARK	AREA SERVED	SERVICE	MANUFACTURER	MODEL	WIDTH (IN)	HEIGHT (IN)	AIRFLOW (CFM)	MIN FREE AREA (SF)	MAX VELOCITY (FPM)	MAX APD (IN WC)	OPTIONS	NOTES
L 1	DOAS	INTAKE	RUSKIN	AFL 501	30"	76"	4500	7.41	800	0.10	AC,BS	1-3
L 2	DOAS	RELIEF	RUSKIN	AFL 501	30"	76"	4500	7.41	800	0.10	AC,BS	1-3

NOTES:
1. COORDINATE LOUVER SIZE AND JAMB WITH ARCHITECT. CONTRACTOR TO VERIFY SIZE OF OPENINGS.
2. COLOR=STATUARY BRONZE. CONFIRM COLOR SELECTION WITH ARCHITECTS.
3. LOUVER SHALL BE ICC 500 RATED.

UNIT HEATER - ELECTRIC SCHEDULE

PLAN MARK	AREA SERVED	MANUFACTURER	MODEL	MOUNTING TYPE	AIRFLOW (CFM)	NOMINAL (KW)	ELECTRICAL VOLTAGE	ELECTRICAL PHASE	ELECTRICAL FLA	ELECTRICAL MOCP	OPTIONS	NOTES

EVAPORATIVE FLUID COOLER SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	OUTDOOR FAN					PUMPS			COOLNG COIL				WATER REQUIREMENTS				ELECTRICAL					PHYSICAL PROPERTIES				OPTIONS	NOTES
				FAN TYPE	FAN QUANTITY	AIRFLOW (CFM)	MAX HP	BRAKE HP	RPM	PUMP QUANTITY	FLOW RATE (GPM)	MAX HP	TH (MBH)	LOW AMB TEMP (DEG. F)	HIGH AMB DB (DEG. F)	HIGH AMB WB (DEG. F)	EWT	LWT	WPD (FT)	DOMESTIC WATER CONNECTION SIZE (IN)	VOLTAGE	PHASE	FLA	MCA	MOCP	MAX LENGTH (FT)	MAX WIDTH (FT)	MAX HEIGHT (FT)	WEIGHT (LBS)		
EFC 1	GSHP	MARLEY	LWA048ME1	DIRECT	3	26500	22.5	22.5	1200	1	150	1.5	600	50	95	76	90	80	9.3	0"	480	3	17	22	25	12' - 0"	4' - 2"	10' - 4"	7500	DSE	1-3

NOTES:
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. MOUNT ON CONCRETE PAD AND PER MANUFACTUER RECOMMENDATIONS.
3. UNIT SIZED FOR PURE WATER, 0% GLYCOL. UNIT WILL NOT OPERATE FOR 6 MONTHS OF THE YEAR. SEE CONTROLS DRAWINGS FOR WINTERIZATION DRAINDOWN SEQUENCE.
4. SET AUTOMATIC CONTROL VAVLE MINIMUM POSITION TO CALCULATED BLOWDOWN AS REQUIRED BY MANUFACTURER.

SPLIT SYSTEM AIR HANDLER SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN						COOLING COIL				HEATING COIL					MIN O/A AIRFLOW (CFM)	FILTER		ELECTRICAL					DUCT CONNECTIONS		PHYSICAL PROPERTIES				OPTIONS	NOTES
					TYPE	AIRFLOW (CFM)	ESP (IN)	TSP (IN)	MAX HP	BRAKE HP	STARTER TYPE	TH (BTUH)	SH (BTUH)	EAT DB (DEG.F)	EAT WB (DEG.F)	LAT DB (DEG.F)	LAT WB (DEG.F)	AIRFLOW (CFM)	TH (BTUH)	NOMINAL (KW)	EAT (DEG.F)	LAT (DEG.F)	CONTROL (STAGED/ MOD)		MERV	DIRTY SP LOSS (IN)	VOLTAGE	PHASE	FLA	MCA	MOCP	SUPPLY	RETURN	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT (LBS)		
AHU V1	VEHICLE BAY	TRANE	TEM4A0C048	SINGLE	DD	1600	0.5	0.0	0.75		INTEGRAL	48800	34500	80.0	67.0	55.0	53.0	1600	36800	10.8	60.0	81.0	1 STAGE	0	8	0.4	208	1	68.0	91.0	100	FRONT	REAR	21"	23"	51"	300	DSE,IC	1-5

NOTES:
1. SUSPEND UNIT FROM STRUCTURE.
2. SIZE EVAPORATOR COIL BASED ON ASSOCIATED CONDENSING UNIT.
3. UNIT SHALL BE BLOW THRU CONFIGURATION.
4. FURNISH 1" FILTER RACK.
5. FURNISH UNIT WITH TERMINAL STRIP AND 7-DAY PROGRAMMABLE THERMOSTAT. SET UNIT TO MAINTAIN TEMPERATURE BETWEEN 60 AND 78 DEGREES. 3

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	REFRIGERANT	TH (BTUH)	SH (BTUH)	AMB TEMP (DEG.F)	ELECTRICAL					MIN SEER	OPTIONS	NOTES
								VOLTAGE	PHASE	FLA	MCA	MOCP			
CU V1	VEHICLE BAY	TRANE	4TTA3048	R454B	48800	34500	105	208	3	18.0	18.0	30	14	DSE,HG	1,2

NOTES:
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. MOUNT ON CONCRETE PAD.

COMPUTER ROOM CONDENSING UNIT SCHEDULE

PLAN MARK	AREA SERVED	MANUFACTURER	MODEL	REFRIGERANT	OUTDOOR FAN				COOLING COIL		CONNECTION SIZES		ELECTRICAL			PHYSICAL PROPERTIES				OPTIONS	NOTES
					FAN QUANTITY	AIRFLOW (CFM)	MAX HP	RPM	TH (MBH)	LOW AMB TEMP (DEG. F)	HIGH AMB TEMP (DEG. F)	LIQUID LINE (IN)	HOT GAS LINE (IN)	VOLTAGE	PHASE	MCA	MOCP	MAX LENGTH (IN)	MAX WIDTH (IN)	MAX HEIGHT (IN)	MAX WEIGHT (LBS)		
CRCU 1	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9' - 1"	4' - 0"	3' - 5"	500	DSN	1-3
CRCU 2	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9' - 1"	4' - 0"	3' - 5"	500	DSN	1-3
CRCU 3	SERVER 146	STULZ	SCS-252-SEC	407C	2	18400	7.7	1500	204	-15	105	1 1/8"	1 3/8"	460	3	9.3	15	9' - 1"	4' - 0"	3' - 5"	500	DSN	1-3

NOTES:
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. COOLING COILS BASED ON NET CAPACITIES.
3. MOUNT ON CONCRETE PAD WITH NEOPRENE VIBRATION ISOLATION PAD AND PER MANUFACTUER IOM INSTRUCTIONS.

COMPUTER ROOM AIR CONDITIONING SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	UNIT TYPE	SUPPLY FAN		COOLING		HUMIDIFCATION CAPACITY (LBS/HR)	FILTER MERV	ELECTRICAL				OPTIONS	NOTES
				AIRFLOW (CFM)	ESP (IN)	TOTAL (MBH)	SENSIBLE (MBH)			VOLTAGE	PHASE	MCA	MOCP		
CRAC 1	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2
CRAC 2	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2
CRAC 3	STULZ	COS-120-AR-D-EC	DOWNFLOW	4800	0.5	111	92	15	11	480	3	33.7	50	DSN	1-2

NOTES:
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. PROVIDE FLOOR MOUNTED WATER SENSOR IN UNDER FLOOR AIR PLENUM. CONNECT TO BAS.
3. PROVIDE MANUFACTURER'S STANDARD FLOOR STAND FOR DOWNFLOW CONFIRGURATION.

MECHANICAL PUMP SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	MOUNTING	FLOW RATE (GPM)	HEAD (FT)	NPSH (FT)	MAX HP	RPM	ELECTRICAL					OPTIONS	NOTES
										VOLTAGE	PHASE	FLA	MCA	MOCP		
MP 1	GSHP	GRUNDFOS	DELTA HCU 3CREH32-1	FLOOR	125.0	63	0	5	3600	480	3	19.6	24.7	30	DSN	1-7
MP 2	GSHP	GRUNDFOS	DELTA HCU 3CREH32-1	FLOOR	125.0	63	0	5	3600	480	3	19.6	24.7	30	DSN	1-7
MP 3	GSHP	GRUNDFOS	DELTA HCU 3CREH32-1	FLOOR	125.0	63	0	5	3600	480	3	19.6	24.7	30	DSN	1-7
MP 4	GSHP	GRUNDFOS	TPE3 D 80-120	FLOOR	150.0	21	9	1.5	2650	480	3	2.1	0.0	15	DSN	1-4,8

NOTES:
1. MAX OPERATING PRESSURE SHALL BE 125 PSI. MAX OPERATING TEMPERATURE SHALL BE 120 DEG.F.
2. PROVIDE PACKAGED SYSTEM WITH PUMPS, BASE, VALVES, GAUGES, PRESSURE TRANSDUCERS, SUCTION & DISCHARGE HEADERS, CONTROLS AND DRIVES.
3. PUMPS TO BE PROVIDED WITH PERMANENT MAGNET, TEFC MOTORS WITH INTEGRAL VFD. MOTOR AND VFD ASSEMBLY TO MEET IE5 EFFICIENCY LEVELS.
4. PROVIDE UNIT MOUNTED INLET AND OUTLET PRESSURE SENSOR WITH DRY RUN PROTECTION AND OVER PRESSURIZATION FEATURES.
5. PROVIDE SINGLE POINT POWER WITH FACTORY-WIRED AND TESTED PUMP CONTROLLER UTILIZING OPTIMAL POWER PUMP SEQUENCING.
6. PUMPS SHALL HAVE CARTRIDGE TYPE SEALS, AND SHALL NOT REQUIRE ALIGNMENT
7. PUMPS ARE DESIGNED FOR N+1 ARRANGEMENT.
8. PUMPS CONTAINS TWO, REDUNDANT 1.5 HP MOTORS. MOTORS HAVE SEPARATE VFDS AND ELECTRICAL CONNECTIONS.

MECHANICAL EXPANSION TANK SCHEDULE

PLAN MARK	SERVICE	MANUFACTURER	MODEL	LOCATION	MOUNTING	VOLUME (GAL)	ACCEPTANCE (GAL)	MIN TEMP (DEG.F)	MAX TEMP (DEG.F)	MIN PRESSURE (PSIG)	WEIGHT (LBS)	OPTIONS	NOTES
MET 1	GSHP	AMTROL	AX-40V-DD	MECH RM	FLOOR	23	11	40	100	18	200		1-3

NOTES:
1. EXPANSION TANK SHALL BE SUSPENDED FROM STRUCTURE ABOVE PER DETAIL.
2. HYDRONIC SYSTEM IS 100% WATER.
3. UNIT SHALL BE ASME RATED, 125 PSIG.

AIR SEPARATOR SCHEDULE

PLAN MARK	SYSTEM	MANUFACTURER	MODEL	FLOW RATE (GPM)	PRESSURE DROP (FT)	SIZE (IN)	OPTIONS	NOTES
AS 1	WSHP	AMTROL	4-ADS	250.0	1.0	4"		1,2

NOTES:
1. AIR SEPARATOR SHALL BE SUSPENDED FROM STRUCTURE ABOVE PER DETAIL.
2. FURNISH WITH INTEGRAL STAINLESS STEEL STRAINER.

GRILLE, REGISTER AND DIFFUSER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL	FACE TYPE	MOUNTING LOCATION	COLOR	OBD	FACE SIZE (IN)	MAX PRESS DROP (IN WC)	MAX NC	OPTIONS	NOTES
E1	PRICE	80	EGG CRATE	GYP CEILING	WHITE	YES	12"x12"	0.1	30		1,5
E2	PRICE	80	EGG CRATE	GYP CEILING	WHITE	MVOLT	24"x24"	0.1	30		1
LR1	PRICE	SDR	LINEAR	CEILING	WHITE	NO	48"x6"	0.1	30		7
LS1	PRICE	SDS	LINEAR	CEILING	WHITE	NO	48"x6"	0.1	30	FFI	1,6
LS2	PRICE	SDS	LINEAR	CEILING	WHITE	NO	48"x6"	0.1	30	FFI	1,8
R1	PRICE	80	EGG CRATE	LAY-IN	WHITE	NO	24"x12"	0.1	30		9
R2	PRICE	80	EGG CRATE	LAY-IN	WHITE	NO	24"x24"	0.1	30		9
R3	PRICE	530	DOUBLE DEFLECTION	WALL	WHITE	NO	SEE DWG	0.1	30		1,4
S1	PRICE	SPD	PLAQUE	GYP CEILING	WHITE	YES	12"x12"	0.1	30		1,2,5
S2	PRICE	SPD	PLAQUE	GYP CEILING	WHITE	YES	24"x24"	0.1	30		1,2
S3	PRICE	SPD	PLAQUE	LAY-IN	WHITE	NO	12"x12"	0.1	30		1,2
S4	PRICE	520	DOUBLE DEFLECTION	WALL	WHITE	YES	SEE DWG	0.1	30		1,3,4
S5	PRICE	MFD	DISPLACEMENT	FLOOR	BLACK	YES	8 INCHES	0.1	30		10
S6	PRICE	MFD	DISPLACEMENT	FLOOR	BLACK	YES	10 INCHES	0.1	30		10
S7	PRICE	PDDR	PERFORATED	FLOOR	WHITE	NO	24"x24"	0.1	30		11

NOTES:
1. NECK SIZE SHOWN ON DRAWINGS - BRANCH DUCT SIZE SHALL BE SAME AS NECK SIZE UNLESS OTHERWISE NOTED.
2. 4-WAY THROW PATTERN UNLESS OTHERWISE SHOWN ON DRAWINGS AND LEGEND.
3. DOUBLE DEFLECTION BARS SHALL BE ADJUSTABLE. ADJUST TO DEFLECT AIR DOWN AND EVENLY TO THE SIDE.
4. FRONT BLADES PARALLEL TO LONG DIMENSION.
5. ALUMINUM CONSTRUCTION.
6. SINGLE SLOT DIFFUSER, 1.5" WIDE. PROVIDE SDB PLENUM.
7. SINGLE SLOT DIFFUSER, 1.5" WIDE. PROVIDE LIGHT SHIELD.
8. TWO SLOT DIFFUSER, 1.5" WIDE. PROVIDE SDB PLENUM.
9. PROVIDE ACOUSTICAL BOOTS FOR ALL RETURN REGISTERS WHERE SHOWN ON DRAWINGS. PROVIDE LIGHT SHIELDS FOR ALL REGISTER NOT UTILIZING ACOUSTICAL BOOTS.
10. PROVIDE BASKET AND FACE OPERATED DAMPER.
11. PERFORATED FLOOR TILE SHALL INTEGRATE INTO MANFUACTURE'S FLOOR PLENUM SYSTEM. TILE SHALL BE CAPABLE OF WALKING ON.

MECHANICAL ABBREVIATION LIST

GENERAL NOTES

1	THE MANUFACTURER LISTED SHALL BE CONSIDERED THE BASIS OF DESIGN EQUIPMENT AND ACCESSORIES SHALL BE SUPPLIED IN ACCORDANCE WITH THE SCHEDULED VALUES, NOTES, DETAILS, AND SPECIFICATIONS. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST AND COORDINATION WHEN NON BASIS OF DESIGN EQUIPMENT IS PROVIDED.
2	ALL PERFORMANCE SHALL BE BASED ON EQUIPMENT OPERATING AT AN ELEVATION OF 1,086 FEET ABOVE SEA LEVEL
3	SPECIFIED FAN ESP INCLUDES DUCT AND EQUIPMENT LOSSES EXTERNAL TO UNIT. SCHEDULED FAN TSP INCLUDES EXTERNAL LOSSES PLUS INTERNAL UNIT LOSSES DUE TO COILS, FILTERS AT DIRTY CONDITIONS, ETC.

OPTIONS

AC	ALUMINUM CONSTRUCTION
AS	AIRFLOW SWITCH
ASD	AIR SCOOP DEVICE
BS	BIRDSCREEN
BSK	BREAKER SEAL KIT
CAB	COMPRESSOR ACCOUSTICAL BLANKET
CL	COLOR BY ARCHITECT
CPE	CONDENSATE PUMP - EXTERNAL EQUAL TO ??
CPI	CONDENSATE PUMP - INTEGRAL
DMK	DOWNFLOW MOUNTING KIT AND CONDENSATE MANAGEMENT KIT
DP	DRAIN PAN
DSE	DISCONNECT BY E/C
DSF	FUSED DISCONNECT - FACTORY MOUNTED
DSN	NON-FUSED DISCONNECT - FACTORY MOUNTED
DSR	DUPLEX SERVICE RECEPTACLE - FACTORY MOUNTED AND POWERED
DSRE	DUPLEX SERVICE RECEPTACLE BY E/C
EEF	EXTERNAL EXHAUST FAN
GBD	GRAVITY BACKDRAFT DAMPER
HG	HAIL GUARD
HK	HOSE KIT
IC	INSULATED CABINET
MDC	MAGNETIC DOOR CONTROLLER
OAH	OUTDOOR AIR HOOD
PC	PLUG CONNECTIONS FOR ELECTRIC HEATER
RD	RADIATION DAMPER
RDS	REFRIGERANT DETECTION SYSTEM
RMB	2" RECESSED MOUNTING BOX
SC	SPEED CONTROLLER
SFS	SELF CONTAINED FIRE SUPPRESION
SG	STANDARD GRILLE
SMB	SURFACE MOUNTING BOX
SPP	SINGLE POINT POWER ENTRY KIT
SS	STAINLESS STEEL
SSDP	STAINLESS STEEL DRAIN PAN
STC	SMART TOUCH CONTROLLER
TEV	THERMAL EXPANSION VALVE
UIT	USER INTERFACE TOUCHPAD
WS	WALL SLEEVE
WSH	WEATHERSHIED HOOD

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LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
SCOTT
STOCKTON
JEFFREY
NUMBER PE-2010023744
11-14-24
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

M-602

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL SCHEDULES

SEQUENCE OF OPERATION

BUILDING AUTOMATION SYSTEM INTERFACE:
1. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER HEAT/COOL MODES. THE BAS SHALL ALSO SEND THE DISCHARGE AIR TEMPERATURE SETPOINT AND THE DUCT STATIC PRESSURE SETPOINT. IF A BAS IS NOT PRESENT, OR COMMUNICATION IS LOST WITH THE BAS THE CONTROLLER SHALL OPERATE USING DEFAULT MODES AND SETPOINTS.

BASIC OPERATION:
1. THE SUPPLY FAN AND EXHAUST FAN SHALL RUN CONTINUOUSLY.
2. THE ENERGY RECOVERY WHEEL, HEAT PUMP , AND THE ELECTRIC HEAT SHALL CONTROL TO MAINTAIN THE ACTIVE DISCHARGE AIR TEMPERATURE AND HUMIDITY SETPOINT. IF THE DISCHARGE AIR TEMPERATURE SENSOR FAILS, THE DOAS SHALL CONTINUE TO OPERATE IN THE CURRET STATE, AND AN ALARM SHALL ANNUNCIATE AT THE BAS.

HEAT/COOL MODE:
1. WHEN THE DISCHARGE AIR TEMPERATURE RISES ABOVE THE COOLING SETPOINT THE MODE SHALL TRANSITION TO COOLING. WHEN THE DISCHARGE AIR TEMPERATURE FALLS BELOW THE HEATING SETPOINT THE MODE SHALL TRANSITION TO HEATING. WHEN THE DISCHARGE AIR TEMPERATURE IS ABOVE THE COOLING SETPOINT OR BELOW THE HEATING SETPOINT THE MODE SHALL REMAIN IN ITS LAST STATE. IF THE DISCHARGE AIR TEMPERATURE SENSOR FAILS THE MODE SHALL REMAIN IN ITS LAST STATE AND AN ALARM SHALL ANNUNCIATE AT THE BAS. IF THE LOCAL AND COMMUNICATED SETPOINTS FAIL THE CONTROLLER SHALL DISABLE THE SUPPLY FAN AND AN ALARM SHALL ANNUNCIATE AT THE BAS.

DISCHARGE AIR TEMPERATURE RESET CONTROL:
1. THE DISCHARGE AIR TEMPERATURE SHALL BE CONTROLLED TO A FIXED SETPOINT. THE DISCHARGE AIR TEMPERATURE SHALL NOT BE RESET BASED UPON SPACE CONDITIONS OR OUTDOOR AIR CONDITIONS.

SUPPLY FAN:
1. THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY AND ITS SPEED SHALL BE MODULATED TO MAINTAIN THE DUCT STATIC PRESSURE SETPOINT. THE DUCT STATIC PRESSURE SETPOINT SHALL BE SENT BY THE BAS
2. IF THE SUPPLY FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, ALL HEATING AND COOLING SHALL BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN. A HARDWIRED, HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE ELECTRICALLY INTERLOCKED WITH THE VARIABLE SPEED DRIVE. IF THE HIGH STATIC PRESSURE CUT-OFF SWITCH IS TRIPPED THE FAN SHALL BE COMMANDED OFF, HEATING AND COOLING SHALL BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE REQUIRED TO RESTART THE FAN.

EXHAUST FAN:
1. THE EXHAUST FAN SHALL RUN CONTINUOUSLY, AND THE FAN SPEED SHALL BE CONTROLLED BASED OFF OF THE SUPPLY FAN SPEED.
2. IF THE EXHAUST FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN SHALL BE COMMANDED OFF, ALL HEATING AND COOLING SHALL BE DISABLED, AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH SHALL BE REQUIRED TO RESTART THE FAN. SUPPLY AND EXHAUST FANS ARE INTERLOCKED VIA SOFTWARE, A FAILURE OF EITHER SHALL DISABLE BOTH.

SEQUENCE OF OPERATION - CONT.

FREEZE PROTECTION:
1. A HARDWIRED, LOW LIMIT TEMPERATURE SWITCH SHALL BE ELECTRICALLY INTERLOCKED WITH THE VARIABLE SPEED DRIVE. IF THE LOW LIMIT TEMPERATURE SWITCH IS TRIPPED 38.0 DEG. F (ADJ.), THE FAN SHALL BE COMMANDED OFF AND THE OUTSIDE AIR DAMPER SHALL CLOSE. ALL VALVES SHALL BE COMMANDED OPEN TO 100% (ADJUST PER CLIMATE). THE ELECTRIC HEATING SHALL BE DISABLED. AN ALARM SHALL ANNUNCIATE AT THE BAS AND MANUAL RESET OF THE LOW LIMIT TEMPERATURE SWITCH SHALL BE REQUIRED TO RESTART THE FAN.

FILTER STATUS:
1. DIFFERENTIAL PRESSURE SWITCHES SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER(S) WHEN THE FAN IS RUNNING. IF ANY SWITCH CLOSES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL ANNUNCIATE AT THE BAS.

PREHEAT CONTROL:
1. WHEN THE FAN IS OFF, IF THE OUTDOOR AIR TEMPERATURE IS BELOW 40.0 DEG. F (ADJ.) OR THE OUTSIDE AIR TEMPERATURE SENSOR IS FAILED, THE PREHEAT VALVE SHALL FULLY OPEN AND MODULATE THE FACE AND BYPASS DAMPERS TO MAINTAIN A MIXED AIR TEMPERATURE OF 45.0 DEG. F (ADJ.). IF THE OUTDOOR AIR TEMPERATURE IS ABOVE 40.0 DEG. F (ADJ.) AND THE OUTDOOR AIR TEMPERATURE SENSOR IS NOT FAILED THE PREHEAT VALVE SHALL BE CLOSED AND THE BYPASS DAMPER(S) OPEN TO THE FACE OF THE COIL. IF THE MIXED AIR TEMPERATURE SENSOR FAILS THE PREHEAT VALVE SHALL BE FULLY OPEN AND THE FACE AND BYPASS DAMPER(S) SHALL MODULATE TO 50% OPEN (ADJ.).
2. WHEN THE FAN IS ON, THE PREHEAT VALVE SHALL FULLY OPEN AND THE FACE AND BYPASS DAMPER(S) SHALL MODULATE TO MAINTAIN A LEAVING PREHEAT TEMPERATURE OF 45.0 DEG. F (ADJ.). IF THE PREHEAT TEMPERATURE SENSOR FAILS AND THE MIXED AIR TEMPERATURE IS BELOW 45.0 DEG. F (ADJ.) THE PREHEAT VALVE SHALL BE FULLY OPEN AND THE BYPASS DAMPER(S) SHALL OPEN TO 50% (ADJ.) TO THE FACE OF THE COIL. IF THE PREHEAT TEMPERATURE SENSOR FAILS AND THE MIXED AIR TEMPERATURE IS ABOVE 50.0 DEG. F (ADJ.) THE PREHEAT VALVE SHALL BE COMMANDED OPEN AND THE BYPASS DAMPER(S) SHALL CLOSE TO 0% (ADJ.) TO THE FACE OF THE COIL. AN ALARM SHALL ANNUNCIATE AT THE BAS IF THE LEAVING PREHEAT TEMPERATURE SENSOR, THE MIXED AIR TEMPERATURE SENSOR OR THE OUTSIDE AIR TEMPERATURE SENSOR ARE FAILED.

HUMIDITY CONTROL:
1. IF THE EXHAUST AIR RELATIVE HUMIDITY IS GREATER THAN 55% (ADJ.), THE DX COOLING SHALL CONTROL TO MAINTAIN RELATIVE HUMIDITY SETPOINT OF 50% (ADJ.) AND THE HOT GAS REHEAT SHALL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. MODE SHALL TERMINATE WHEN THE EXHAUST AIR RELATIVE HUMIDITY FALLS BELOW THE RELATIVE HUMIDITY SETPOINT OF 50% (ADJ.). IF THE EXHAUST AIR RELATIVE HUMIDITY SENSOR FAILS THE DEHUMIDIFICATION SEQUENCE SHALL BE TERMINATED AND AN ALARM SHALL ANNUNCIATE AT THE BAS.

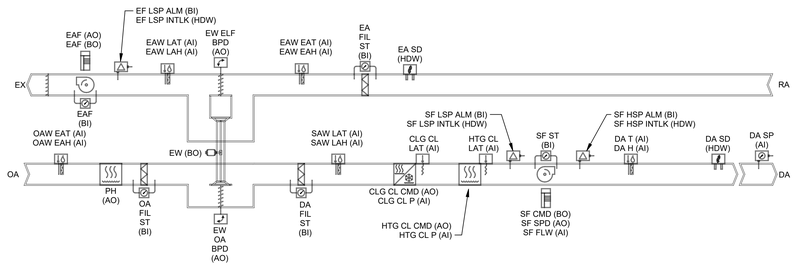
ENERGY RECOVERY OPERATION:
1. WHEN THE OUTSIDE AIR DRY-BULB TEMPERATURE IS HIGHER THAN THE RELIEF AIR DRY-BULB TEMPERATURE, THE FIXED-PLATE HX FACE-AND-BYPASS DAMPERS SHALL BE POSITIONED FOR 0% BYPASS. WHEN THE OUTSIDE AIR DRY-BULB TEMPERATURE IS LESS THAN THE RELIEF AIR DRY-BULB TEMPERATURE AND THE AHU IS COOLING (OR AIRSIDE ECONOMIZING), THE FACE-AND-BYPASS DAMPERS SHALL BE POSITIONED FOR 100% BYPASS.
2. WHEN THE AHU IS HEATING, THE FIXED-PLATE HX FACE-AND-BYPASS DAMPERS SHALL MODULATE (AS NECESSARY) TO MAINTAIN DISCHARGE AIR TEMPERATURE AT SETPOINT (ADJ.). IF THE TEMPERATURE LEAVING THE RELIEF SIDE OF THE FIXED-PLATE HX DROPS BELOW THE FROST THRESHOLD SETPOINT (ADJ.), THE FROST PREVENTION DAMPER SHALL CLOSE.

CONDENSATE OVERFLOW MONITORING:
1. IF THE CONDENSATE LEVEL REACHES THE TRIP POINT, A CONDENSATE OVERFLOW DIAGNOSTIC SHALL ANNUNCIATE AT THE BAS. TO PREVENT THE CONDENSATE DRAIN PAN FROM OVERFLOWING AND CAUSING WATER DAMAGE TO THE BUILDING THE FAN SHALL BE DISABLED AND THE HEAT PUMP COOLING SHALL BE DISABLED.

SMOKE DETECTOR SHUTDOWN:
1. THE UNIT SHALL SHUT DOWN IN RESPONSE TO A SIGNAL FROM THE SMOKE DETECTORS INDICATING THE PRESENCE OF SMOKE. THE SMOKE DETECTORS SHALL BE INTERLOCKED TO THE UNIT THROUGH THE DRY CONTACTS OF THE SMOKE DETECTOR. A MANUAL RESET OF THE SMOKE DETECTORS SHALL BE REQUIRED TO RESTART THE UNIT.

POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS TYPE	POINTS DISPLAY GRAPHIC	POINTS SOFTWARE POINT	POINTS HARDWIRE INTERLOCK	ALARMS HIGH ANALOG LIMIT	ALARMS LOW ANALOG LIMIT	ALARMS BINARY	ALARMS LATCH DIAGNOSTIC	ALARMS SENSOR FAIL	ALARMS COMM. FAIL	NOTES
DA CLG SP	DISCHARGE AIR COOLING SETPOINT			X								75 F
DA HTG SP	DISCHARGE AIR HEATING SETPOINT			X								70 F
DA H SP	DISCHARGE AIR HUMIDITY SETPOINT			X								50 % RH
MA LLT SP	MIXED AIR TEMPERATURE LOW LIMIT SETPOINT			X								
DA SP SP	DISCHARGE AIR STATIC PRESSURE SETPOINT			X								FIELD VERIFY
DA HSP SP	DISCHARGE AIR HIGH STATIC ALARM SETPOINT			X								FIELD VERIFY
DA LSP SP	DISCHARGE AIR LOW STATIC ALARM SETPOINT			X								FIELD VERIFY
EA LSP SP	EXHAUST AIR LOW STATIC ALARM SETPOINT			X								FIELD VERIFY
DA T	DISCHARGE AIR TEMPERATURE	AI	X			X	X			X		
OW EAT	OUTDOOR WHEEL ENTERING AIR TEMPERATURE	AI	X									
OW LAT	OUTDOOR WHEEL LEAVING AIR TEMPERATURE	AI	X									
EW EAT	EXHAUST WHEEL ENTERING AIR TEMPERATURE	AI	X									
EW LAT	EXHAUST WHEEL LEAVING AIR TEMPERATURE	AI	X									
DA H	DISCHARGE AIR HUMIDITY	AI	X			X	X			X		
OW EAH	OUTDOOR WHEEL ENTERING AIR RELATIVE HUMIDITY	AI	X									
OW LAH	OUTDOOR LEAVING AIR RELATIVE HUMIDITY	AI	X									
EW EAH	EXHAUST WHEEL ENTERING AIR RELATIVE HUMIDITY	AI	X									
EW LAH	EXHAUST WHEEL LEAVING AIR RELATIVE HUMIDITY	AI	X									
DA SP	DISCHARGE AIR STATIC PRESSURE	AI	X			X			X	X		
RA SP	RETURN DUCT STATIC PRESSURE	AI	X							X		
CMP CMD	COMPRESSOR 1 COMMAND (?-STAGE)	BO	X									
CLG CL LAT	COOLING COIL LEAVING TEMPERATURE	AI	X			X	X			X		
CLG CL CMD	COOLING COIL VALVE COMMAND (MOD)	AO	X									
CLG CL P	COOLING COIL VALVE POSITION	AI	X									
HTG CL LAT	HEATING COIL LEAVING AIR TEMPERATURE	AI	X			X	X			X		
HTG CL CMD	HEATING COIL COMMAND (MOD)	AO	X									
HTG CL P	HEATING COIL POSITION	AI	X									
SF FLW	SUPPLY FAN AIR FLOW	AI	X									
SF SPD	SUPPLY FAN SPEED (VAR)	AO	X									
SF CMD	SUPPLY FAN COMMAND (START/STOP)	BO	X									
SF ST	SUPPLY FAN STATUS	BI	X									
EF FLW	EXHAUST FAN AIR FLOW	AI	X									
EF SPD	EXHAUST FAN SPEED (VAR)	AO	X									
EF CMD	EXHAUST FAN COMMAND (START/STOP)	BO	X									
EF ST	EXHAUST FAN STATUS	BI	X									
EPH LAT	ELECTRIC PREHEAT LEAVING COIL TEMPERATURE	AI	X							X		
EPH CMD	ELECTRIC PREHEAT OUTPUT COMMAND (MOD)	AO	X									
EW CMD	ENERGY WHEEL COMMAND	BO	X									
EW OA BPD	ENERGY WHEEL OUTDOOR AIR BYPASS DAMPER COMMAND	AO	X									
EW ELF BPD	ENERGY WHEEL EXHAUST-SIDE BYPASS DAMPER COMMAND	AO	X									
FBYP CMD	FACE AND BYPASS ACTUATOR COMMAND	AO	X									
HX FST DPR CMD	HEAT EXCHANGER ENTERING OUTDOOR AIR FROST DAMPER COMMAND	AO	X									
										X		
HX FST TMP	HEAT EXCHANGER LEAVING RETURN AIR FROST AVOIDANCE TEMPERATURE	AI	X				X					
DA FIL ST	DISCHARGE AIR FILTER STATUS	BI	X									
OA FIL ST	OUTDOOR AIR FILTER STATUS	BI	X					X				
EA FIL ST	EXHAUST AIR FILTER STATUS	BI	X					X				
EA SD	EXHAUST SMOKE DETECTOR INPUT				X							
DA SD	DISCHARGE SMOKE DETECTOR INPUT				X							
SF HSP ALM	SUPPLY FAN HIGH STATIC ALARM	BI	X					X	X			
SF LSP ALM	SUPPLY FAN LOW STATIC ALARM	BI	X					X	X			
SF HSP INTLK	HIGH STATIC ALARM INTERLOCK				X							
MA LLT ALM	MIXED AIR LOW TEMPERATURE CUTOUT ALARM	BI	X						X			
SF FAIL	SUPPLY FAN FAILURE		X	X				X				
EF FAIL	EXHAUST FAN FAILURE		X	X				X				
EF LSP ALM	EXHAUST FAN LOW STATIC ALARM	BI	X					X	X			
BAS COM	BAS COMMUNICATION STATE			X							X	



2 DOAS1 CONTROL DIAGRAM
NOT TO SCALE

POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS TYPE	POINTS DISPLAY GRAPHIC	POINTS SOFTWARE POINT	POINTS HARDWIRE INTERLOCK	ALARMS HIGH ANALOG LIMIT	ALARMS LOW ANALOG LIMIT	ALARMS BINARY	ALARMS LATCH DIAGNOSTIC	ALARMS SENSOR FAIL	ALARMS COMM. FAIL	NOTES
EWH 1 ST	HEAT PUMP WATER HEATER "EWH 1" STATUS	BI	X									
EWH 2 ST	HEAT PUMP WATER HEATER "EWH 2" STATUS	BI	X									
MMV 1 LWT	MASTER MIXING VALVE "MMV 1" LEAVING WATER TEMPERATURE	AI	X			X	X					
RP 1 CMD	HOT WATER RECIRCULATION PUMP "RP 1" COMMAND	BO	X									
RP 1 ST	HOT WATER RECIRCULATION PUMP "RP 1" STATUS	BI	X									
SP 1 HL	ELEVATOR SUMP PUMP "SP 1" HIGH LEVEL	BI	X			X						
GEN CP ST	GENERATOR MASTER CONTROL PANEL STATUS	BI	X					X				
ATS ST	AUTOMATIC TRANSFER SWITCH "ATS" STATUS	BI	X					X				
MTS ST	AUTOMATIC TRANSFER SWITCH "MTS" STATUS	BI	X					X				
GEN PL AL	GENERATOR CONTROL PANEL STATUS	BI	X					X				
UPSA ST	UNINTERUPTIBLE POWER SUPPLY "A" STATUS	BI	X					X				
UPSB ST	UNINTERUPTIBLE POWER SUPPLY "B" STATUS	BI	X					X				
WST1 TL	WATER STORAGE TANK "1" TANK LEVEL	AI	X				X			X		
WSP1 ST	WATER STORAGE PUMP STATUS	AI	X							X		
WSP1 CMD	WATER STORAGE PUMP COMMAND	BO	X									
UV ST	UV LIGHT STATUS	AI	X			X				X		
WSP1 V	WATER STORAGE PUMP TOTAL WATER VOLUME (IN GALLONS)	AI	X									

WATER HEATER

1. THE BAS SHALL MONITOR THE STATUS OF THE WATER HEATER CONTROL PANELS.

MASTER MIXING VALVE

1. THE BAS SHALL MONITOR THE STATUS OF THE MASTER MIXING VALVE CONTROL PANEL. THE BAS SHALL ANNUNCIATE AN ALARM WHEN THE LEAVING WATER TEMPERATURE IS OUTSIDE OF THE SETPOINT RANGE.

RECIRCULATION PUMP

1. THE BAS SHALL ENGAGE THE DOMESTIC HOT WATER RECIRCULATION PUMPS WHEN THE BUILDING IS IN OCCUPIED MODE. THE BAS SHALL DISABLE THE DOMESTIC HOT WATER RECIRCULATION PUMPS WHEN THE BUILDING IS IN UNOCCUPIED MODE. THE BAS SYSTEM SHALL MONITOR AND INDICATE STATUS.

STORAGE TANK, PUMP, AND FILTRATION SKID

1. THE BAS SHALL MONITOR AND REPORT TANK LEVEL TO CONTROL PANEL. OPERATE PUMPS AND VFDs, MONITOR DIFFERENTIAL PRESSURE ACROSS FILTERS, TRACK HOURS OF USAGE AND REMAINING LIFE OF UV BULBS, AND TRACK TOTAL GALLONS OF WATER USED.

ELEVATOR SUMP PUMP

1. THE BAS SHALL ANNUNCIATE AN ALARM WHEN THE HIGH LEVEL SENSOR IS REACHED.

GENERATOR MASTER CONTROL PANEL

1. THE BAS SHALL MONITOR THE GENERATOR CONTROL PANEL STATUS. THE BAS SHALL ANNUNCIATE AN ALARM FOR THE FOLLOWING:
   A. OVERCRANK
   B. LOW WATER TEMPERATURE
   C. HIGH ENGINE TEMPERATURE (PREALARM)
   D. HIGH ENGINE TEMPERATURE
   E. LOW LUBE OIL PRESSURE
   F. OVERSPEED
   G. LOW FUEL MAIN TANK
   H. LOW COOLANT LEVEL
   I. LOW CRANKING VOLTAGE
   J. FUEL TANK DERANGEMENT
   K. FUEL TANK HIGH-LEVEL SHUTDOWN OF FUEL SUPPLY
   L. LOW-CRANKING VOLTAGE

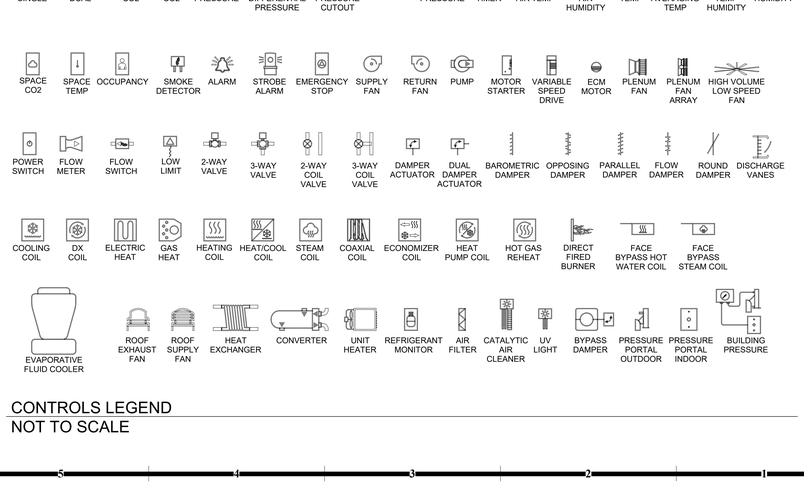
AUTOMATIC TRANSFER SWITCHES

1. THE BAS SHALL MONITOR THE FOLLOWING:
   A. SOURCES AVAILABLE
   B. SWITCH POSITION
   C. SWITCH IN TEST MODE
   D. FAILURE OF COMMUNICATION LINK

UNINTERUPTIPLE POWER SUPPLIES

1. THE BAS SHALL MONITOR THE FOLLOWING:
   A. UPS AVAILABLE
   B. UPS CHARGE
   C. UPS IN TEST MODE
   D. FAILUE OF COMMUNICATION LINK

3 MISC. EQUIPMENT CONTROL DIAGRAM
NOT TO SCALE



1 CONTROLS LEGEND
NOT TO SCALE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

PROFESSIONAL SEAL

M-621

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL CONTROLS

SEQUENCE OF OPERATION:

BUILDING AUTOMATION SYSTEM INTERFACE:
1. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL MONITOR THE POINTS SHOWN IN THE POINTS LIST AND SEND THE CRAC UNITS ENABLE AND DISABLE COMMANDS.

OPERATION:
1. THE SUPPLY FAN SHALL RUN CONTINUOUSLY. THE DX COOLING SHALL CONTROL TO MAINTAIN THE ACTIVE SPACE TEMPERATURE SETPOINT.

SUPPLY FAN OPERATION:
1. IF THE SUPPLY FAN FAILS THE FAN SHALL BE COMMANDED OFF AND AN ALARM SHALL ANNUNCIATE AT THE BAS. A MANUAL RESET SHALL BE REQUIRED TO RESTART THE FAN.

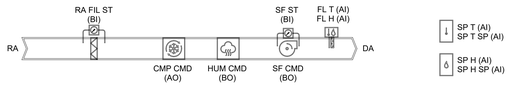
FILTER STATUS
1. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER WHEN THE FAN IS RUNNING. IF THE SWITCH CLOSES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL ANNUNCIATE AT THE BAS.

HUMIDIFICATION:
1. HUMIDIFICATION SHALL BE ENABLED START UP DELAY HAS TERMINATED AND HUMIDITY IS BELOW SETPOINT. THE STEAM HUMIDIFIER SHALL CONTROL TO THE HUMIDIFIER OUTPUT COMMAND TO MAINTAIN SETPOINT. HUMIDIFICATION SHALL BE DISABLED WHEN THE HUMIDITY RISES ABOVE THE SETPOINT PLUS THE DEADBAND OF 5% (ADJ).

LEAD/LAG AND N+1 REDUNDANT OPERATION:
1. THE CRAC LEAD/LAG AND N+1 SEQUENCE SHALL BE BASED ON A WEEKLY SCHEDULE. FROM THE BAS, AN OPERATOR SHALL BE ABLE TO MANUALLY CHANGE THE LEAD/LAG SEQUENCE.
2. TWO CRAC UNITS SHALL BE IN OPERATION AT ANY ONE TIME. IF ONE CRAC UNIT FAILS, THAT UNIT SHALL BE COMMANDED OFF, THE THIRD CRAC UNIT SHALL BE COMMANDED ON, AND AN ALARM SHALL ANNUNCIATE AT THE BAS.
3. IF THE SPACE TEMPERATURE RISES 3 DEG (ADJ) ABOVE THE SPACE TEMPERATURE SETPOINT AND TWO CRAC UNITS ARE IN OPERATION, THE THIRD CRAC UNIT SHALL BE COMMANDED ON UNTIL THE SPACE TEMPERATURE IS 3 DEG (ADJ) BELOW THE SPACE TEMPERATURE SETPOINT.

POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS				ALARMS						NOTES
		TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	
SP T SP	SPACE TEMPERATURE SETPOINT			X								78 F
SP H SP	SPACE HUMIDITY SETPOINT SETPOINT			X								40 %
SP T	SPACE TEMPERATURE	AI	X			X	X			X		
SP H	SPACE HUMIDITY	AI	X			X				X		
DA T	DISCHARGE TEMPERATURE	AI	X			X	X			X		
DA H	DISCHARGE HUMIDITY	AI	X			X				X		
CMP CMD	COMPRESSOR COMMAND (1-STAGE)	BO	X									
HUM CMD	HUMIDITY COMMAND	BO	X									
SF CMD	SUPPLY FAN COMMAND (START/STOP)	BO	X									
SF ST	SUPPLY FAN STATUS	BI	X									
RA FIL ST	RETURN AIR FILTER STATUS	BI	X									
SF FAIL	SUPPLY FAN FAILURE		X	X				X				
BAS COM	BAS COMMUNICATION STATE			X							X	



2 CRAC CONTROL DIAGRAM
NOT TO SCALE

SEQUENCE OF OPERATION

BUILDING AUTOMATION SYSTEM INTERFACE:
1. THE BUILDING AUTOMATION SYSTEM (BAS) SHALL SEND THE CONTROLLER OCCUPIED, AND UNOCCUPIED COMMANDS. THE BAS MAY ALSO SEND A HEAT/COOL MODE, PRIORITY SHUTDOWN COMMANDS, SPACE TEMPERATURE AND/OR SPACE TEMPERATURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE CONTROLLER SHALL OPERATE USING ITS LOCAL SETPOINTS.

OCCUPIED:
1. NORMAL OPERATING MODE FOR OCCUPIED SPACES OR DAYTIME OPERATION. WHEN THE UNIT IS IN THE OCCUPIED MODE THE VAV SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE OCCUPIED HEATING OR COOLING SETPOINT. APPLICABLE VENTILATION AND AIRFLOW SETPOINTS SHALL BE ENFORCED. THE OCCUPIED MODE SHALL BE THE DEFAULT MODE OF THE VAV.

OCCUPIED STANDBY (SEE NOTES):
1. THE OCCUPANCY SENSOR SHALL BE USED TO INDICATE THAT THE SPACE IS UNOCCUPIED, EVEN THOUGH THE BAS HAS SCHEDULED THE SPACE AS OCCUPIED. IN THE OCCUPIED STANDBY MODE, THE ACTIVE COOLING AND HEATING SETPOINTS SHALL BE RELAXED (SEE COOLING AND HEATING MODE) AND BOTH THE VENTILATION AIRFLOW AND MINIMUM AIRFLOW SETPOINTS SHALL BE LOWERED (SEE VAV SCHEDULE).

UNOCCUPIED:
1. NORMAL OPERATING MODE FOR UNOCCUPIED SPACES OR NIGHTTIME OPERATION. WHEN THE UNIT IS IN UNOCCUPIED MODE THE WSHP CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE STORED UNOCCUPIED HEATING OR COOLING SETPOINT REGARDLESS OF THE PRESENCE OF A HARDWIRED OR COMMUNICATED SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS THE ACTIVE UNOCCUPIED SETPOINT THE WSHP FAN HEATING AND COOLING SHALL BE DISABLED.

OCCUPIED BYPASS:
1. MODE USED TO TEMPORARILY PLACE THE UNIT INTO THE OCCUPIED OPERATION. TENANTS SHALL BE ABLE TO OVERRIDE THE UNOCCUPIED MODE FROM THE SPACE SENSOR. THE OVERRIDE SHALL LAST FOR A MAXIMUM OF 4 HOURS (ADJ.). THE TENANTS SHALL BE ABLE TO CANCEL THE OVERRIDE FROM THE SPACE SENSOR AT ANY TIME. DURING THE OVERRIDE THE UNIT SHALL OPERATE IN OCCUPIED MODE.

HEAT/COOL MODE:
1. THE HEAT/COOL MODE SHALL BE SET BY A COMMUNICATED VALUE OR AUTOMATICALLY BY THE VAV. IN STANDALONE OR AUTO MODE THE VAV SHALL COMPARE THE PRIMARY AIR TEMPERATURE WITH THE CONFIGURED AUTO CHANGEOVER SETPOINT TO DETERMINE IF THE AIR IS "HOT"" OR ""COLD"". HEATING MODE IMPLIES THE PRIMARY AIR TEMPERATURE IS HOT. COOLING MODE IMPLIES THE PRIMARY AIR TEMPERATURE IS COLD."

HEAT/COOL SETPOINT:
1. THE SPACE TEMPERATURE SETPOINT SHALL BE DETERMINED EITHER BY A LOCAL (E.G., THUMBWHEEL) SETPOINT, THE WSHP DEFAULT SETPOINT OR A COMMUNICATED VALUE. THE VAV SHALL USE THE LOCALLY STORED DEFAULT SETPOINTS WHEN NEITHER A LOCAL SETPOINT NOR COMMUNICATED SETPOINT IS PRESENT. IF BOTH A LOCAL SETPOINT AND COMMUNICATED SETPOINT EXIST, THE VAV SHALL USE THE COMMUNICATED VALUE.

COOLING MODE:
1. WHEN THE UNIT IS IN COOLING MODE, THE WSHP CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE COOLING SETPOINT BY FIRST ACTIVATING THE FAN, AND THEN ACTIVATING THE COOLING. THE WSHP SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE COOLING SETPOINT TO DETERMINE THE REQUESTED COOLING CAPACITY OF THE UNIT IF THE UNIT HAS MULTIPLE STAGES. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED COOLING CAPACITY.

SEQUENCE OF OPERATION - CONT.

HEATING MODE:
1. WHEN THE UNIT IS IN HEATING MODE, THE WSHP CONTROLLER SHALL MAINTAIN THE SPACE TEMPERATURE AT THE ACTIVE HEATING SETPOINT BY FIRST ACTIVATING THE FAN AIRFLOW AND THEN ACTIVATING THE HEATING. THE VAV CONTROLLER SHALL USE THE MEASURED SPACE TEMPERATURE AND THE ACTIVE HEATING SETPOINT TO DETERMINE THE REQUESTED HEATING CAPACITY OF THE UNIT IF THE UNIT HAS MULTIPLE STAGES. THE OUTPUTS WILL BE CONTROLLED BASED ON THE UNIT CONFIGURATION AND THE REQUESTED HEATING CAPACITY.

INTERMITTENT FAN CONTROL:
1. FANS SHALL RUN AT A MINIMUM 10 MIN PER HOUR.

DEMAND CONTROL VENTILATION (WHERE REQUIRED):
1. WHEN THE OCCUPANCY SENSOR DETECT OCCUPANCY OR THE CO2 SENSOR INDICATES A CO2 LEVEL ABOVE 800 PPM, THE DEMAND CONTROL VENTILATION SEQUENCE SHALL ACTIVATE. THE WSHP SHALL ENTER THE OCCUPIED MODE AND THE MOTORIZED CONTROL VALVES ON THE OUTSIDE AIR AND EXHAUST AIR DUCTS SHALL OPEN.
2. WHEN THE OCCUPANCY SENSOR HAS NOT DETECTED OCCUPANCY FOR 30 MIN (ADJ), OR THE CO2 LEVEL FALLS BELOW 800 PPM (ADJ), THE WSHP SHALL DISABLE DEMAND CONTROL VENTILATION MODE AND RESUME NORMAL OPERATION.
3. EACH WSHP WITH DCV CONTROLS SHALL ENTER THE OCCUPIED MODE EVERYDAY AT 8AM (ADJ) FOR A PERIOD OF 1 HR (ADJ).

SPACE SENSOR FAILURE:
1. IF THERE IS A FAULT WITH THE OPERATION OF THE ZONE SENSOR AN ALARM SHALL BE ANNUNCIATED AT THE BAS. SPACE SENSOR FAILURE SHALL CAUSE THE WSHP TO RUN THE FAN CONTINUOUSLY IF THE WSHP IS IN THE OCCUPIED MODE, OR DISABLE THE FAN IF THE WSHP IS IN THE UNOCCUPIED MODE. THE WSHP HEATING AND COOLING SHALL BE DISABLED ON SPACE SENSOR FAILURE.

SPACE TEMPERATURE ALARM:
1. IF THE UNIT IS IN THE OCCUPIED MODE AND THE SPACE TEMPERATURE IS OUTSIDE THE HIGH OR LOW LIMIT ALARM SETPOINTS, THE BAS SHALL VISUALLY INDICATE THAT THE WSHP IS NOT MAINTAINING TEMPERATURE. IF THIS IS ACCOMPLISHED VIA NOTIFICATION TO THE OPERATOR, THE ALARM SHALL ONLY BE SENT AFTER THE SPACE HAS BEEN OUTSIDE TEH HIGH OR LOW LIMITS FOR A CONTINUOUS 30 MIN (ADJ).

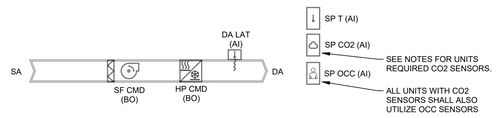
NOTES:

ROOMS WITH DCV CONTROLS, CO2 SENSORS, AND OCCUPANCY SENSORS:
1. TRAINING 155 SOUTH
   A. WSHP 2-01
   B. MD 2-1
   C. MD 2-2
2. TRAINING 155 NORTH
   A. WSHP 2-10
   B. MD 2-3
   C. MD 2-4
3. CONFERENCE 140
   A. WSHP 2-12
   B. MD 2-5
   C. MD 2-6

ROOMS WITH SPECIAL TEMPERATURE SETPOINTS:
1. WSHP 1-02, 1-05, 2-13, AND 2-14 SHALL ALWAYS BE IN THE OCCUPIED MODE, AND SHALL ALWAYS MAINTAIN 70-75 DEGREES (ADJ). THE FANS FOR THESE WSHPS SHALL RUN CONTINOUSLY.
2. WSHP 1-14 AND 18 SHALL ALWAYS OPERATE IN THE UNOCCUPIED MODE.

POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS				ALARMS						NOTES
		TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	
SP T SP	SPACE TEMPERATURE SETPOINT	AI	X	X								70-75 F
OCC BYP TMR	OCCUPIED BYPASS TIMER		X	X								4 HR
OCC CLG SP	OCCUPIED COOLING SETPOINT		X	X								75 F
OCC HTG SP	OCCUPIED HEATING SETPOINT		X	X								70 F
UNOCC CLG SP	UNOCCUPIED COOLING SETPOINT		X	X								78 F
UNOCC HTG SP	UNOCCUPIED HEATING SETPOINT		X	X								65 F
SP CO2 SP	SPACE CO2 SETPOINT		X	X								1000 PPM
SP T	SPACE TEMPERATURE	AI	X			X	X					68-77 F
SP CO2	SPACE CO2 CONCENTRATION	AI	X			X						
SP OCC	SPACE OCCUPANCY	AI	X									
DA T	DISCHARGE AIR TEMPERATURE	AI	X									
HP ST	HEAT PUMP STATUS	AI	X									
SF CMD	SUPPLY FAN COMMAND (START/STOP)	BO	X									
HP CMD	HEAT PUMP COMMAND (STAGED)	BO	X									
OAD CMD	OUTSIDE AIR DAMPER COMMAND (2 POSITION)	BO	X									
EAD CMD	EXHAUST AIR DAMPER COMMAND (2 POSITION)	BO	X									
BAS COM	BAS COMMUNICATION STATE			X							X	



1 WSHP CONTROL DIAGRAM
NOT TO SCALE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

PROFESSIONAL SEAL

M-622

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MECHANICAL CONTROLS

SEQUENCE OF OPERATION

SYSTEM GENERAL OPERATION::
1. THE GROUND SOURCE HEAT PUMP SYSTEM IS CONTROLLED AND MONITORED BY THE BAS.
2. THE GROUND SOURCE HEAT PUMP SYSTEMS CONSIST OF 3 SUPPLY PUMPS, AN EVAPORATIVE FLUID COOLER, A FLUID COOLER PUMP, MULTIPLE WATER SOURCE HEAT PUMPS, AND THE WELL FEILD.
3. THE HEAT PUMP SYSTEM INCLUDES FLOWMETERING CAPABILITIES WITH MINIMUM FLOW BYPASS CONTROL.
4. THE SUPPLY PUMPS ARE CONFIGURED AS A PACKAGED SKID WITH THEIR OWN CONTROLS FOR OPTIMUM EFFICIENCY. THE BAS SHALL MONITOR THE PUMP STATUS AND COMMUNICATE WITH THE PUMP CONTROLS.

SUPPLY PUMP CONTROLS:
1. THE SUPPLY PUMPS SHALL RUN CONTINUOUSLY AT THE MINIMUM FLOW SETPOINT.
2. THE SUPPLY PUMPS SHALL INCREASE IN SPEED LINEARLY TO THE MAX FLOW SETPOINT AS THE HEAT PUMP RETURN TEMPERATURE INCREASES OR DECREASES AS FOLLOWS:
   A. BETWEEN 55-70 DEGREES (ADJ) THE PUMPS SHALL BE AT MINIMUM SPEED.
   B. AT 45 DEGREES (ADJ) AND LOWER THE PUMPS SHALL BE AT THE MAXIMUM FLOW SETPOINT.
   C. AT 85 DEGREES (ADJ) AND HIGHER, THE PUMPS SHALL BE AT THE MAXIMUM FLOW SETPOINT.

EVAPORATIVE FLUID COOLER CONTROLS:
1. FLUID COOLER ISOLATION VALVE:
   A. THE FLUID COOLER ISOLATION VALVE SHALL FULLY OPEN AND THE FLUID COOLER BASIN ISOLATION VALVE SHALL FULLY CLOSE ON MAY 1ST (ADJ) OR ON COMMAND FROM THE BAS OPERATOR.
   B. THE FUILD COOLER ISLOATION VALVE SHALL FULLY CLOSE AND THE FLUID COOLER BASIN ISOLATION VALVE SHALL FULLY OPEN ON NOVEMBER 1ST (ADJ), ON COMMAND FROM THE BAS OPERATOR, OR IF THE OUTSIDE AIR TEMPERATURE DROPS BELOW 35 DEGREES (ADJ).
   C. AN ALERT SHALL BE SENT TO THE BUILDING OPERATOR 7 DAYS BEFORE THE ISOLATION VALVE IS PROGRAMMED TO OPEN OR CLOSE INFORMING THE OPERATOR OF THE UPCOMING ACTION, AND NOTIFYING THAT ADDITIONAL WINTERIZATION MAINTENANCE MAY BE REQUIRED.
2. THE EVAPORATIVE FLUID COOLER SHALL ENABLE WHEN THE FLUID COOLER ISOLATION VALVE IS CONFIRMED CLOSED AND THE GEOTHERMAL SUPPLY TEMPERATURE IS GREATER THAN 85 DEGREES.
   A. BETWEEN THE HOURS OF MIDNIGHT AND 6AM (ADJ), THE FLUID COOLER SHALL ENABLE WHEN THE FLUID COOLER VALVE IS CONFIRMED CLOSED AND THE GEOTHERMAL SUPPLY TEMPERATURE IS GREATER THAN 80 DEGREES.
   B. WHEN THE FLUID COOLER IS ENABLED, FOLLOWING ACTIONS WILL TAKE PLACE:
      a. FLUID COOLER PUMP 4 WILL ENABLE.
      b. ALL FLUID COOLER FANS WILL ENABLE.
      c. THE FLUID COOLER INTERNAL PUMP SHALL ENABLE FOR EVAPORATIVE COOLING.
   C. THE FLUID COOLER WILL DISABLE WHEN THE GEOTHERMAL SUPPLY TEMPERATURE IS BELOW 80 DEG (ADJ) FOR 1 HOUR (ADJ).

FLOW METER:
1. THE FLOW METER SHALL MONITOR THE GEOTHERMAL WATER SUPPLY AND RETURN FLOW. THE FLOW MEASURED SHALL BE USED TO ADJUST THE POSITION OF THE GEOTHERMAL BYPASS CONTROL VALVE. THE GEOTHERMAL BYPASS CONTROL VALVE SHALL MODULATE OPEN WHEN THE GEOTHERMAL WATER SUPPLY IS GREATER THAN 150 GPM (ADJ). THE GEOTHERMAL BYPASS CONTROL VALVE SHALL MODULATE CLOSED WHEN THE GEOTHERMAL SUPPLY FLOW IS LESS THAN 150 GPM.

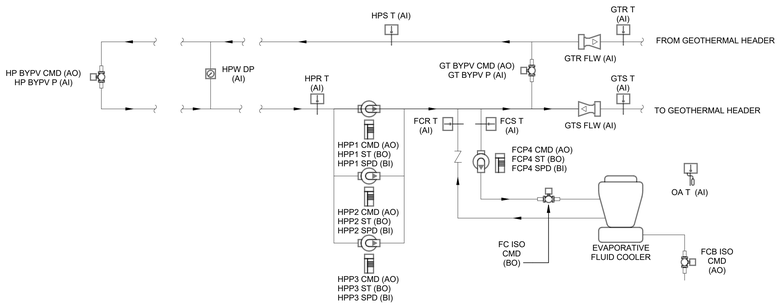
SEQUENCE OF OPERATION - CONT.

HEAT PUMP FLOW BYPASS VALVE:
1. WHEN THE LEAD BUILDING PUMP REACHES MINIMUM SPEED, THE PUMP SKID FLOW METER SHALL MEASURE THE SYSTEM GPM. THE MINIMUM FLOW BYPASS VALVE SHALL BE MODULATED TO MAINTAIN THE MINIMUM NEEDED FLOW THROUGH THE PUMPS AS MEASURED BY THE PUMP SKID FLOW METERS.

HEAT PUMP WATER DISTRIBUTION PUMP START/STOP:
1. THE SYSTEM SHALL START A HEAT PUMP WATER PUMP THROUGH A CONTACT CLOSURE OF THE PUMP 'S VARIABLE FREQUENCY DRIVE (VARIABLE SPEED DRIVE) RUN-ENABLE CONTACTS.

HEAT PUMP WATER DISTRIBUTION PUMP LEAD/LAG:
1. THE HEAT PUMP WATER PUMP LEAD/LAG SEQUENCE SHALL BE BASED ON A WEEKLY SCHEDULE. FROM THE BAS, AN OPERATOR SHALL BE ABLE TO MANUALLY CHANGE THE LEAD/LAG SEQUENCE.
2. IF THE LEAD PUMP SPEED FALLS BELOW 65% (ADJ.) FOR MORE THAN 5 MINUTES (ADJ.) THE LAST OPERATING PUMP IN THE SEQUENCE SHALL BE DISABLED.

HEAT PUMP WATER DISTRIBUTION PUMP FAILURE:
1. IF THE LEAD START/STOP RELAY IS ENABLED AND THE CURRENT SWITCH STATUS IS OFF FOR MORE THAN 30 SECONDS (ADJ.), THE SYSTEM SHALL ANNUNCIATE A HEAT PUMP WATER PUMP FAILURE ALARM TO THE BAS AND START THE LAG PUMP. WHEN A PUMP FAILURE EXISTS, LEAD/LAG AUTOMATION SHALL BE DISABLED AND THE CURRENTLY RUNNING PUMP BECOMES THE LEAD PUMP. ONCE THE PROBLEM HAS BEEN CORRECTED, THE OPERATOR SHALL BE ABLE TO CLEAR THE ALARM FAILURE FROM THE BAS. THIS ACTION SHALL RE-ENABLE THE LEAD/LAG SEQUENCE.



1 GROUND SOURCE HEAT PUMP CONTROL DIAGRAM
NOT TO SCALE

BAS POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS: TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	ALARMS: HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	NOTES
OA T	OUTSIDE AIR TEMPERATURE		X		X							
FC CP	FLUID COOLER CONTROL PANEL		X		X							1
HPP CP	HEAT PUMP PUMP CONTROL PANEL		X		X							2
HPS T	HEAT PUMP SUPPLY TEMPERATURE	AI	X			X	X					
HPR T	HEAT PUMP RETURN TEMPERATURE	AI	X			X	X					
GTS FLW	GEOTHERMAL SUPPLY FLOW METER	AI	X							X		
GTR FLW	GEOTHERMAL RETURN FLOW METER	AI	X							X		
GTS T	GEOTHERMAL SUPPLY TEMPERATURE	AI	X			X	X			X		
GTR T	GEOTHERMAL RETURN TEMPERATURE	AI	X			X	X			X		
GT BYPV CMD	GEOTHERMAL BYPASS VALVE COMMAND	AO	X									
GT BYPV P	GEOTHERMAL BYPASS VALVE POSITION	AI	X									
HP BYPV CMD	HEAT PUMP BYPASS VALVE COMMAND	AO	X									
HP BYPV P	HEAT PUMP BYPASS VALVE POSITION	AI	X									
FC1 ISO CMD	FLUID COOLER 1 ISOLATION VALVE COMMAND	BO	X									
FCB ISO CMD	FLUID COOLER BASIN ISOLATION VALVE COMMAND	AO	X									
FC1 FLW	FLUID COOLER 1 FLOW SWITCH	BI	X							X		
FCS T	FLUID COOLER SUPPLY TEMPERATURE	AI	X			X	X			X		
FCR T	FLUID COOLER RETURN TEMPERATURE	AI	X			X	X			X		

EVAPORATIVE FLUID COOLER POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS: TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	ALARMS: HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	NOTES
EFC1 F1 CMD	FLUID COOLER 1 FAN 1 ENABLE COMMAND	AO	X									
EFC1 F2 CMD	FLUID COOLER 1 FAN 2 ENABLE COMMAND	AO	X									
EFC1 F3 CMD	FLUID COOLER 1 FAN 3 ENABLE COMMAND	AO	X									
EFC1 IP CMD	FLUID COOLER 1 INTERNAL PUMP ENABLE COMMAND	AO	X									
EFC1 STS	FLUID COOLER 1 STATUS	BI	X									
EFC1 ALM	FLUID COOLER 1 ALARM	BI	X					X				
EFC1 FLW	FLUID COOLER 1 FLOW SWITCH	BI	X									
EFC1 SW T	FLUID COOLER 1 SUPPLY WATER TEMPERATURE	AI	X			X	X					
EFC1 RW T	FLUID COOLER 1 RETURN WATER TEMPERATURE	AI	X			X	X					

PUMP POINTS LIST

POINT ID	POINT DESCRIPTION	POINTS: TYPE	DISPLAY GRAPHIC	SOFTWARE POINT	HARDWIRE INTERLOCK	ALARMS: HIGH ANALOG LIMIT	LOW ANALOG LIMIT	BINARY	LATCH DIAGNOSTIC	SENSOR FAIL	COMM. FAIL	NOTES
HPP1 CMD	HEAT PUMP PUMP 1 ENABLE COMMAND	AO	X									
HPP1 ST	HEAT PUMP PUMP 1 STATUS	BI	X									
HPP1 SPD	HEAT PUMP PUMP 1 SPEED OUTPUT	BO	X									
HPP2 CMD	HEAT PUMP PUMP 2 ENABLE COMMAND	AO	X									
HPP2 ST	HEAT PUMP PUMP 2 STATUS	BI	X									
HPP2 SPD	HEAT PUMP PUMP 2 SPEED OUTPUT	BO	X									
HPP3 CMD	HEAT PUMP PUMP 3 ENABLE COMMAND	AO	X									
HPP3 ST	HEAT PUMP PUMP 3 STATUS	BI	X									
HPP3 SPD	HEAT PUMP PUMP 3 SPEED OUTPUT	BO	X									
FCP4 CMD	FLUID COOLER PUMP 4 ENABLE COMMAND	AO	X									
FCP4 ST	FLUID COOLER PUMP 4 STATUS	BI	X									
FCP4 SPD	FLUID COOLER PUMP 4 SPEED OUTPUT	BO	X									
HPP LEAD	HPP LEAD		X	X								
HPP1 FAIL	HEAT PUMP PUMP 1 FAILURE		X	X				X				
HPP2 FAIL	HEAT PUMP PUMP 2 FAILURE		X	X				X				
HPP3 FAIL	HEAT PUMP PUMP 3 FAILURE		X	X				X				
FCP4 FAIL	FLUID COOLER PUMP 4 FAILURE		X	X				X				

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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REVISION DATES:

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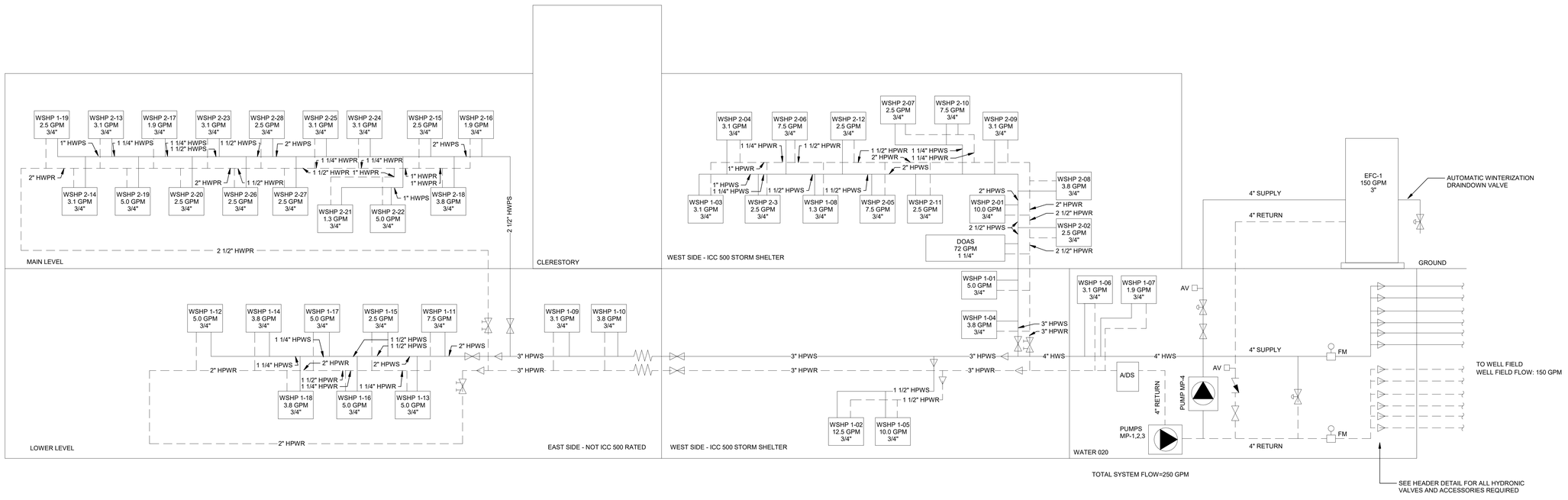
MECHANICAL CONTROLS



GENERAL NOTES:
1. SEE DETAILS SHEETS FOR ALL HYDRONIC VALVES AND ACCESSORIES REQUIRED ON GEOTHERMAL HEADERS, PUMPS, AIR/DIRT SEPERATOR, EXPANSION TANK, WATER SOURCE HEAT PUMPS, AND EVAPORATIVE FLUID COOLER.

1 HOT WATER RISER DIAGRAM
NOT TO SCALE

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ONE LINE DIAGRAM

ELECTRICAL SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS MAY BE USED.

STANDARD MOUNTING HEIGHTS

CONTROLS	48"
EXIT SIGNS (WALL MOUNTED)	80"
RECEPTACLES	18"
RECEPTACLES (EXTERIOR)	24"
RECEPTACLES (ABOVE COUNTER)	+6" ABOVE BACKSPLASH/COUNTER, 48" MAX
SAFETY SWITCHES	48"
STARTERS	48"
SWITCHES	48"
TELEPHONE, DATA OUTLETS	SAME AS ADJACENT DEVICE, UNO

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR OR ABOVE FINISHED GRADE TO TOP OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS

AF	AMPERE FUSE SIZE
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
APR	APPROXIMATED
AS	AMPERE SWITCH
AT	AMPERE TRIP SETTING
ATS	AUTOMATIC TRANSFER SWITCH
C	CONDUIT
CKT	CIRCUIT
CODE	APPLICABLE CODE ADOPTED BY JURISDICTION
CT	CURRENT TRANSFORMER
CVD	CUMULATIVE VOLTAGE DROP
DEMO	DEMOLISH
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
EM	EMERGENCY
ETR	EXISTING TO REMAIN
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FCA	FAULT CURRENT AMPS AVAILABLE
FF	FINISHED FLOOR
FLA	FULL LOAD AMPS
FLR	FLOOR
GEC	GROUNDING ELECTRICAL CONDUCTOR
GES	GROUNDING ELECTRODE SYSTEM
GFR	GROUND FAULT RELAY
G	GROUND
IG	ISOLATED GROUND
ISC	SHORT CIRCUIT CURRENT
ISO	ISOLATION
LRA	LOCKED ROTOR AMPS
LRP	LIGHTING RELAY PANEL
LTG	LIGHTING/LIGHTS
MAX	MAXIMUM
MBJ	MAIN BONDING JUMPER
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NF	NON-FUSED
NO	NORMALLY OPEN
NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY (CSA, ETL, NSF, UL)
OS	OCCUPANCY SENSOR
P	POLE
PHØ	PHASE
PNL	PANEL / PANELBOARD
PROVIDE	FURNISH AND INSTALL
PT	POTENTIAL TRANSFORMER
RCPT	RECEPTACLE
REF	REFRIGERATOR
RELO	RELOCATED
RLA	RUNNING LOAD AMPS
RLY	RELAY
SCCR	SHORT-CIRCUIT CURRENT RATING
SE	SERVICE ENTRANCE
SPDT	SINGLE-POLE, DOUBLE-THROW
SPST	SINGLE-POLE, SINGLE-THROW
SSBJ	SUPPLY SIDE BONDING JUMPER
ST	SHUNT TRIP
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BUS BAR
TYP	TYPICAL
UC	UNDERCABINET
UNO	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
W/	WITH
WP	WEATHER PROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINETYPES ARE USED TO INDICATE THE STATUS OF ITEMS AS EXISTING, DEMOLISHED, OR NEW. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR.

PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT.

EXISTING TO REMAIN ——— | DEMOLISH — — — | NEW ———

ANNOTATION

- 1 — ELECTRICAL PLAN NOTE CALLOUT
- 1 — PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
- 1 — EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
- CU 1 — MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
- 1 / E1 — DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
- 1 / E1 — SECTION CUT DESIGNATION

CIRCUITING AND WIRING

- PNL-CKT(S) — HOMERUN TO PANELBOARD. CONNECT TO PANELBOARD AND CIRCUIT NUMBER(S) SHOWN.
- PNL-CKT LRP-RLY,a — HOMERUN TO LIGHTING RELAY PANEL. CONNECT TO PANELBOARD AND CIRCUIT NUMBER SHOWN. RUNNING THROUGH RELAY PANEL AND RELAY NUMBER (SUMMARIZED BY SWITCH ID "a") SHOWN.
- PNL-CKT — BOXED PANELBOARD AND CIRCUIT NUMBER(S) INDICATE TO CONNECT WIRING DEVICES (ON POWER SHEETS) OR LIGHT FIXTURES AND DEVICES (ON LIGHTING SHEETS) IN THE SPACE TO PANELBOARD AND CIRCUIT NUMBER(S) SHOWN.
- CONCEALED CONDUIT
- UNDER FLOOR/IN GROUND CONDUIT
- EXPOSED CONDUIT
- FLEXIBLE CONDUIT
- LOW VOLTAGE CABLE
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP

BRANCH CIRCUIT CONDUCTOR TABLE

PROVIDE AT A MINIMUM THE FOLLOWING CONDUCTORS FOR ALL BRANCH CIRCUITS:

# OF POLES	HOT (PHASE)*	NEUTRAL (GROUNDED)**	GROUND (GROUNDING)
1P	(1)	(1) UNO	(1)
2P	(2)	(1) UNO	(1)
3P	(3)	(1) UNO	(1)

* PROVIDE ADDITIONAL CONDUCTORS (SWITCHED, UNSWITCHED, EMERGENCY, ETC.) AS INDICATED THROUGHOUT CONSTRUCTION DOCUMENTS AND AS REQUIRED FOR A COMPLETE AND WORKING SYSTEM.

** REFER TO SPECIFICATIONS FOR LIMITATIONS ON SHARING NEUTRAL (GROUNDED) CONDUCTORS. DO NOT CIRCUIT AS A MULTI-WIRE BRANCH CIRCUIT, UNO.

REFER TO SPECIFICATIONS, PLANS, NOTES, WIRING, AND CONTROL DIAGRAMS FOR ADDITIONAL CIRCUITING REQUIREMENTS.

INTERIOR LIGHTING

- A,a — LIGHT FIXTURE. A = LIGHT FIXTURE TYPE "A". a = SWITCHED BY SWITCH ID "a". ⊥ = WALL MOUNT. 〉 = ARROW INDICATES AIMING DIRECTION
- CRITICAL LIGHT FIXTURE CONNECTED TO CRITICAL SOURCE*
- LIFE SAFETY LIGHT FIXTURE WITH EMERGENCY BATTERY PACK OR CONNECTED TO LIFE SAFETY SOURCE*
- LIGHTING TRACK WITH LIGHT FIXTURE TYPES AS INDICATED
- EXIT SIGN - CEILING / WALL MOUNTED. ARROWS AS INDICATED, FACE HATCHED
- EMERGENCY LIGHTING UNIT EQUIPMENT WITH BATTERY PACK - CEILING/WALL MOUNTED

* SYMBOL DEMONSTRATED WITH TROFFER LIGHT FIXTURE. THE MEANING IS SIMILAR WHEN USED IN COMBINATION WITH OTHER FIXTURE TYPES.

LIGHTING CONTROL DEVICES

- D,a / -OR- / ^{a} — SWITCH. D = SWITCH DESIGNATION*: - NONE = SINGLE POLE SWITCH - 2 = TWO POLE - 3 = THREE-WAY - 4 = FOUR-WAY - D = DIMMER - F = FAN SPEED CONTROL - K = KEYED / TAMPER RESISTANT - WP = WEATHER PROOF. a = SWITCH ID "a". - NO SWITCH ID INDICATES THE SWITCH CONTROLS ALL LIGHT FIXTURES WITHIN THE SPACE
- RA a — RELAY/ROOM CONTROLLER. RA = RELAY/ROOM CONTROLLER TYPE "A" *. a = SWITCH ID "a"
- OA a — OCCUPANCY SENSOR - CEILING MOUNTED. COVERAGE PATTERN INDICATED BY WAVES. OA = OCCUPANCY SENSOR TYPE "A" *. a = SWITCH ID "a"
- A a — OCCUPANCY SENSOR - CORNER/WALL MOUNTED. A = OCCUPANCY SENSOR TYPE "A" *. a = SWITCH ID "a"
- DA a — DAYLIGHT SENSOR - CEILING MOUNTED. AIMING DIRECTION INDICATED BY WAVES. DA = DAYLIGHT SENSOR TYPE "A" *. a = SWITCH ID "a"
- ALCR / BTS — AUTOMATIC LOAD CONTROL RELAY/BRANCH CIRCUIT TRANSFER SWITCH

* REFER TO LIGHTING CONTROL DEVICE SCHEDULE FOR ADDITIONAL INFORMATION, INCLUDING DEVICE AND TYPE SPECIFICATIONS.

POWER EQUIPMENT, WIRING DEVICES, AND BOXES

- ELECTRICAL PANELBOARD (SURFACE OR FLUSH MOUNT)
- ELECTRICAL EQUIPMENT. REFER TO PLANS, SCHEDULES, AND ONE-LINE DIAGRAM FOR EQUIPMENT TYPE (SWITCHBOARD, DISTRIBUTION PANELBOARD, TRANSFORMER, ETC.). REFER TO PLANS AND SPECIFICATIONS FOR HOUSEPAD REQUIREMENTS.
- 200/3/150/3R — DISCONNECT SWITCH. 200/3/150/3R = AMPERES/POLE/FUSE/NEMA RATING - NF = NON-FUSED - CB = CIRCUIT BREAKER (200/3/CB) - NO VALUE (200/3/150) FOR NEMA RATING MEANS STANDARD NEMA 1 RATING
- 30/3/15/1/3R — COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER. 30/3/15/1/3R = AMPERES/POLE/FUSE/NEMA STARTER SIZE/NEMA RATING - NF = NON-FUSED - CB = CIRCUIT BREAKER (30/3/CB/1) - NO VALUE (200/3/150/1) FOR NEMA RATING MEANS STANDARD NEMA 1 RATING
- 2 — MAGNETIC MOTOR STARTER, NEMA SIZE AS NOTED. 3-POLE, UNO
- SINGLE POLE TOGGLE DISCONNECT SWITCH
- ^{M} — MANUAL MOTOR STARTER DISCONNECT
- ^{FH} — FRACTIONAL HORSEPOWER MANUAL CONTROLLER
- ^{IH} — INTEGRAL HORSEPOWER MANUAL CONTROLLER
- VFD — VARIABLE FREQUENCY DRIVE
- C — CONTACTOR
- TS — TIME SWITCH
- PC — PHOTOCELL
- SIMPLEX RECEPTACLE - NEMA 5-20R, UNO
- DUPLEX RECEPTACLE - NEMA 5-20R, UNO
- DOUBLE DUPLEX RECEPTACLE - NEMA 5-20R, UNO
- SPECIAL RECEPTACLE - NEMA TYPE AS NOTED
- TWIST-LOCK TYPE RECEPTACLE
- GFCI TYPE RECEPTACLE
- ISOLATED GROUND TYPE RECEPTACLE*
- EMERGENCY RECEPTACLE*
- RECEPTACLE - ABOVE COUNTER*
- RECEPTACLE - CEILING MOUNTED*
- RECEPTACLE - FLOOR MOUNTED*
- WIRING DEVICE TAGGING AND INFORMATION*: D = RECEPTACLE DESIGNATION(S) - NONE = STANDARD RECEPTACLE - C = AUTOMATICALLY CONTROLLED - CH = CLOCK HANGER TYPE - DEMO = DEMOLISH - ETR = EXISTING TO REMAIN - H = HORIZONTALLY MOUNTED - RELO = RELOCATE / RELOCATED - S = MANUALLY CONTROLLED - TR = TAMPER RESISTANT - USB = USB / DUPLEX - WP = WEATHER PROOF COVER - WR = WEATHER RESISTANT - TV = TELEVISION. REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT. - EWC = ELECTRICAL WATER COOLER
- PNL-CKT(S) / -OR- / D,PNL-CKT(S) — PNL-CKT(S) = CONNECT RECEPTACLE TO PANELBOARD AND CIRCUIT(S) INDICATED
- MULTI-OUTLET ASSEMBLY
- TELEPHONE / DATA OUTLET ROUGH IN/EXISTING
- TELEPHONE / DATA - ABOVE COUNTER
- TELEPHONE / DATA - CEILING MOUNTED
- TELEPHONE / DATA - FLOOR MOUNTED
- ^{A} — POWER POLE WITH TELEPHONE, DATA, AND POWER OUTLETS/FURNITURE FEED, A = TYPE "A"
- ^{A} — FLOOR BOX WITH DATA / TELEPHONE (ROUGH-IN) AND POWER OUTLETS, A = TYPE "A"
- ^{A} — POKE THROUGH WITH DATA/TELEPHONE (ROUGH-IN) AND POWER OUTLETS / FURNITURE FEED, A = TYPE "A"
- WALL MOUNTED JUNCTION BOX / OUTLET BOX
- JUNCTION BOX/OUTLET BOX INSTALLED IN CEILING
- BLANK FACE GFCI FEED THROUGH DEVICE
- FURNITURE POWER FEED
- FURNITURE DATA FEED
- EMERGENCY POWER OFF BUTTON

* SYMBOL DEMONSTRATED WITH DUPLEX RECEPTACLE. THE MEANING IS SIMILAR WHEN USED IN COMBINATION WITH OTHER DEVICE TYPES.

ELECTRICAL ONE-LINE DIAGRAM

- CIRCUIT BREAKER
- DRAWOUT CIRCUIT BREAKER
- COMBINATION CIRCUIT BREAKER/STARTER
- SWITCH
- FUSED SWITCH
- COMBINATION FUSED SWITCH/STARTER
- PANELBOARD (ONE OR MULTIPLE SECTIONS)
- ISOLATED POWER PANELBOARD W/ INTEGRAL TRANSFORMER
- TRANSFORMER
- SHIELDED TRANSFORMER
- AUTOMATIC TRANSFER SWITCH
- AUTOMATIC TRANSFER SWITCH WITH BYPASS
- G / M/G — GENERATOR. NON-SEPARATELY DERIVED SOURCE -OR- SEPARATELY DERIVED SOURCE
- SWITCHGEAR, SWITCHBOARD AND/OR DISTRIBUTION PANELBOARD
- DIGITAL VM/AM — COMBINATION DIGITAL VOLT METER/AMMETER
- GFR — GROUND FAULT RELAY
- PFR — PHASE FAILURE RELAY
- KK — KIRK-KEY INTERLOCK
- M — MECHANICAL INTERLOCK
- ST — SHUNT TRIP
- PT — POWER TRIP
- AT — AMMETER TRIP
- GW — GATEWAY
- AM — AMMETER
- VM — VOLTMETER
- UTILITY METER / M — UTILITY METER
- CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER
- SPD — SURGE-PROTECTION DEVICE
- GROUND CONNECTION
- GROUND CONNECTION WITH TEST WELL
- GROUND ROD
- LA — LIGHTNING ARRESTER
- HEATER
- HP — MOTOR

GENERAL ELECTRICAL NOTES:

1. FEDERAL, STATE, LOCAL, MUNICIPAL AND UTILITY COMPANY CODES, RULES AND REGULATIONS APPLY UNLESS EXCEEDED BY THIS DESIGN.
2. NO WORK SHALL BE PERFORMED PRIOR TO REVIEW AND APPROVAL OF ALL REQUIRED SHOP DRAWINGS, PRODUCT MATERIAL AND EQUIPMENT SUBMITTALS. ANY WORK INSTALLED PRIOR TO MEETING THESE REQUIREMENTS SHALL BE REMOVED BY CONTRACTOR WHERE DIRECTED BY CONTRACT ADMINISTRATOR.
3. PRIOR TO SUBMITTING BID, THE CONTRACTOR AND SUB-CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR REVIEW OF THE GENERAL NOTES, SPECIFICATIONS AND ALL OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY CONTRACT ADMINISTRATOR OF ANY DISCREPANCIES PRIOR TO SUBMISSION OF BID.
4. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK.
5. THE DRAWINGS REPRESENT THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ALL DIMENSIONS AND SIZES SHALL BE FIELD VERIFIED. SMALL DEVIATIONS BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS ENCOUNTERED SHALL BE RECONCILED DURING THE PERFORMANCE OF THE WORK AND SHALL NOT CONSTITUTE REASON FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR. NOTIFY THE CONTRACT ADMINISTRATOR IF ACTUAL CONDITIONS DEVIATE SUBSTANTIALLY FROM THOSE INDICATED ON THE DRAWINGS.
6. ALL FEES AND OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.
7. COORDINATE WITH ALL OTHER TRADES, MAKE ADJUSTMENTS AND OFFSETS WHERE NEEDED FOR CLEARANCE REQUIREMENTS. REFER TO ALL OTHER DISCIPLINE DRAWINGS FOR COORDINATION.
8. COORDINATE ALL OPENINGS IN WALLS, FLOORS, ROOFS AND FOUNDATIONS WITH OTHER CONTRACTORS. PROVIDE UL RATED FIRE STOPPING ASSEMBLIES AT ALL PENETRATIONS OF FIRE RATED CONSTRUCTION. SEAL ALL PENETRATIONS OF SMOKE WALLS SMOKE TIGHT.
9. CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE BUILDING, FIXTURES AND FINISHES CAUSED BY CONTRACTOR DURING THE PERFORMANCE OF THE WORK. REPAIRS SHALL BE PERFORMED BY QUALIFIED TRADESMEN AND SHALL BE COMPLETED IN A MANNER ACCEPTABLE TO THE CONTRACT ADMINISTRATOR.
10. REFER TO ARCHITECTURAL PLANS ELEVATIONS AND DETAILS FOR EXACT MOUNTING REQUIREMENTS OF ELECTRICAL DEVICES PRIOR TO ROUGH-IN.
11. PROVIDE A SEPARATE CODE SIZED GREEN EQUIPMENT GROUND CONDUCTOR IN ALL CONDUITS AND RACEWAYS CONTAINING LINE VOLTAGE CIRCUITS.
12. NEUTRALS SHALL NOT BE SHARED FOR ANY WIRING UNLESS FOR SYSTEMS FURNITURE REQUIRING A SHARED NEUTRAL. PROVIDE HANDLE TIE BREAKERS FOR THESE INSTANCES.
13. SPECIAL ATTENTION SHALL BE GIVEN TO ALL RACEWAYS WITHIN FINISHED AREAS WITHOUT CEILING AND EXPOSED TO STRUCTURE. IN GENERAL, ALL RACEWAYS SHALL BE CONCEALED WITHIN WALLS, BELOW FLOOR SLABS. WHERE EXPOSED CONDITIONS ARE NECESSARY OR UNAVOIDABLE DUE TO OTHER CONDITIONS, THE BID SHALL INCLUDE ANY REASONABLE MEANS TO MINIMIZE THE AMOUNT OF SURFACE MOUNTED EQUIPMENT. PRIOR TO ROUGH-IN, COORDINATE ALL EXPOSED RACEWAY AND BOX CONDITIONS WITH ARCHITECT PRIOR TO CONSTRUCTION OF WALLS, FLOOR SLABS, OR ROOF DECK.
14. NON-COMPLIANT INSTALLATIONS OF RACEWAY AND CABLE WILL NOT BE ACCEPTED AND WILL BE REQUIRED TO BE BROUGHT TO COMPLIANCE AT NO COST TO THE OWNER PRIOR TO COMPLETION OF WORK.
15. ALL EXPOSED CONDUIT AND BOXES WITHIN EXPOSED CEILING SPACES SHALL BE PAINTED TO MATCH SURROUNDING CEILING AND STRUCTURE. PROVIDE CONDUIT PARALLEL TO STRUCTURAL LINES IN A NEAT MANNER.
16. ALL CEILING MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILINGS SHALL BE CENTERED WITHIN THE ACOUSTICAL TILE.
17. REQUEST DIMENSIONED LOCATIONS OF ALL FLOOR DEVICES FROM ARCHITECT PRIOR TO ROUGH-IN.
18. ALL DEVICES SHOWN DIRECTLY ADJACENT TO EACH OTHER SHALL BE INSTALLED DIRECTLY ADJACENT TO EACH OTHER. ADJACENT DEVICES OF SIMILAR TYPE SHALL BE PROVIDED WITH SINGLE FACEPLATE WHERE FEASIBLE.
19. DEVICES SHOWN BACK-TO-BACK SHALL BE OFFSET A MINIMUM OF TWELVE (12) INCHES TO REDUCE SOUND TRANSMISSION.
20. PROVIDE ALL MISCELLANEOUS STEEL AS REQUIRED FOR THE PROPER INSTALLATION OF ELECTRICAL EQUIPMENT AND SYSTEMS.
21. PROVIDE A NEUTRAL CONDUCTOR TO ALL WALL MOUNTED LIGHT SWITCH LOCATIONS.
22. WHERE SPARE CONDUITS ARE INDICATED FOR FUTURE USE, PROVIDE PULL STRINGS IN CONDUITS AND PROTECTIVE BUSHINGS AT OPENINGS. CAP CONDUITS WHERE LOCATED BELOW GRADE OR EXPOSED TO THE ELEMENTS.

ELECTRICAL SHEET INDEX

SHEET NUMBER	SHEET NAME
EG001	ELECTRICAL LEGEND AND GENERAL NOTES
ES101	ELECTRICAL SITE PLAN
E-100	LOWER LEVEL - POWER PLAN
E-101	MAIN LEVEL - POWER PLAN
E-102	ROOF - ELECTRICAL PLAN
E-110	LOWER LEVEL - LIGHTING PLAN
E-111	MAIN LEVEL - LIGHTING PLAN
E-401	ENLARGED ELECTRICAL PLANS
E-501	ELECTRICAL DETAILS
E-502	ELECTRICAL DETAILS
E-601	PANELBOARD SCHEDULES
E-602	PANELBOARD SCHEDULES
E-621	ELECTRICAL SCHEDULES
E-641	ELECTRICAL ONE-LINE DIAGRAM

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REVISION DATES:

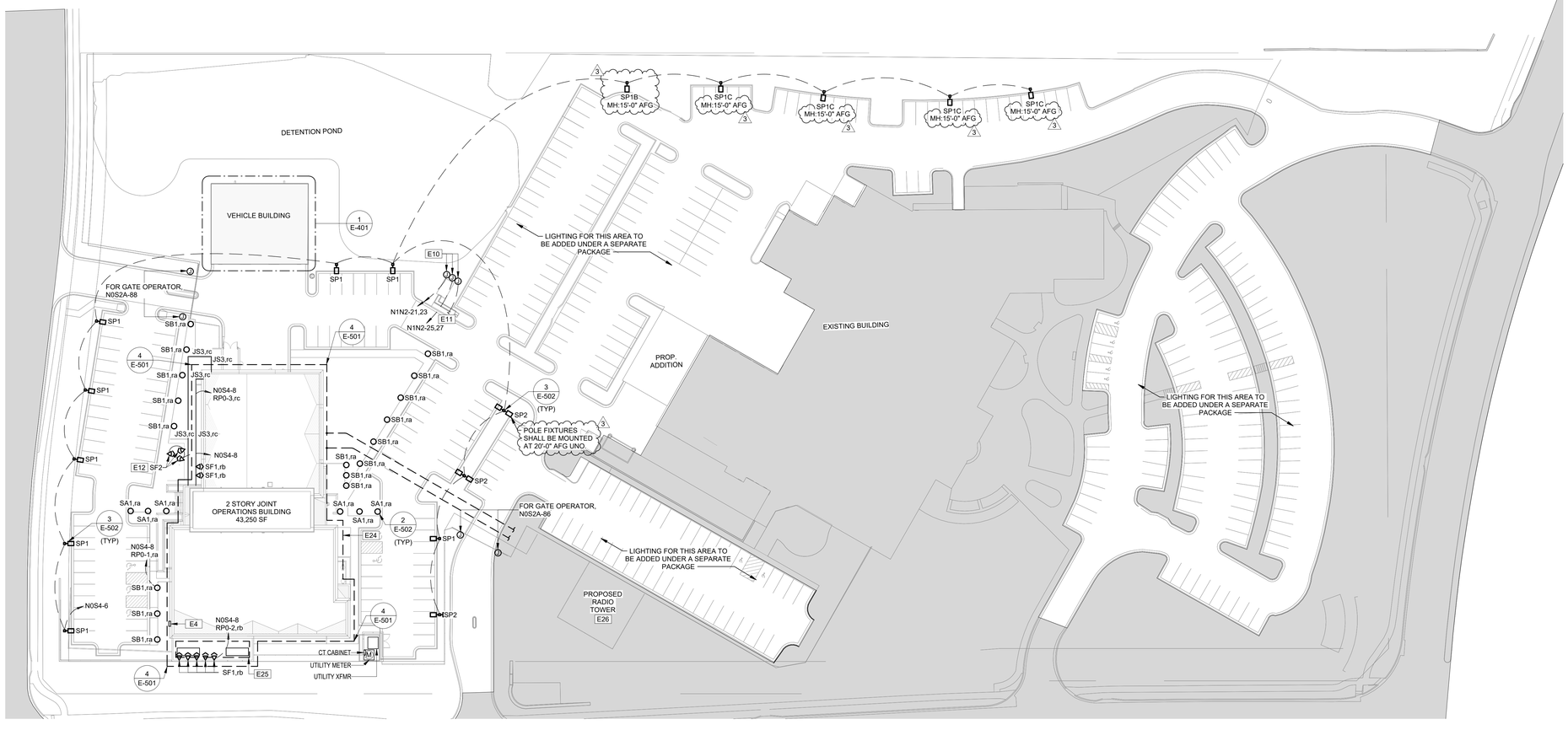
STATE OF MISSOURI — JONATHON M. LEE — NUMBER PE-2021003162 — PROFESSIONAL ENGINEER — 10/30/2024

PROFESSIONAL SEAL

EG001

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL LEGEND AND GENERAL NOTES



NORTH

1 ELECTRICAL SITE PLAN
1" = 40'-0"

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.
2. ALL EXTERIOR LIGHTING SHALL COMPLY WITH THE STANDARDS UNDER ARTICLE 8 OF THE CITY'S UNIFIED DEVELOPMENT ORDINANCE (UDO). MORE SPECIFICALLY, COMPLIANCE WITH THE LIGHTING STANDARDS OF UDO SECTIONS 8.220, 8.230, 8.250, 8.260 AND 8.270 SHALL TAKE PLACE AT THE TIME OF FINAL DEVELOPMENT PLAN.

ELECTRICAL PLAN NOTES:

E4	TEMPORARY GENERATOR QUICK CONNECT PANEL. REFER TO ONE-LINE DIAGRAM AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
E10	PROVIDE POWER AND DATA TO FUEL PUMP. CONDUIT ABOVE GRADE SHALL BE RIGID. ALL FITTINGS AND JUNCTION BOXES SHALL BE EXPLOSION PROOF AND SEALED PER CODE. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH OWNER.
E11	PROVIDE 1-1/2" C. FROM SERVER (146) TO FUEL PUMP.
E12	PROVIDE DEDICATED LINE VOLTAGE PHOTOCELL FOR FLAG LIGHTING. INSTALL PHOTOCELL IN AN INCONSPICUOUS LOCATION. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
E24	BUILDING GROUND RING. REFER TO 2/E-641 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
E25	EQUIPMENT ENCLOSURE GROUND RING. BOND ALL EQUIPMENT IN THE EQUIPMENT ENCLOSURE TO THE GROUND RING WITH #2 BONDING CONDUCTOR. REFER TO 2/E-641 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
E26	TWO (2) CONNECTIONS ARE REQUIRED TO BOND THE RADIO TOWER GROUNDING SYSTEM TO THE BUILDING GROUNDING SYSTEM. PROVIDE (2) 4" CONDUITS UNDER ROADWAY FOR GROUNDING CONDUCTORS. BONDING CONDUCTORS SHALL BE PROVIDED BY RADIO TOWER INSTALLER.

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM #3	11/18/2024

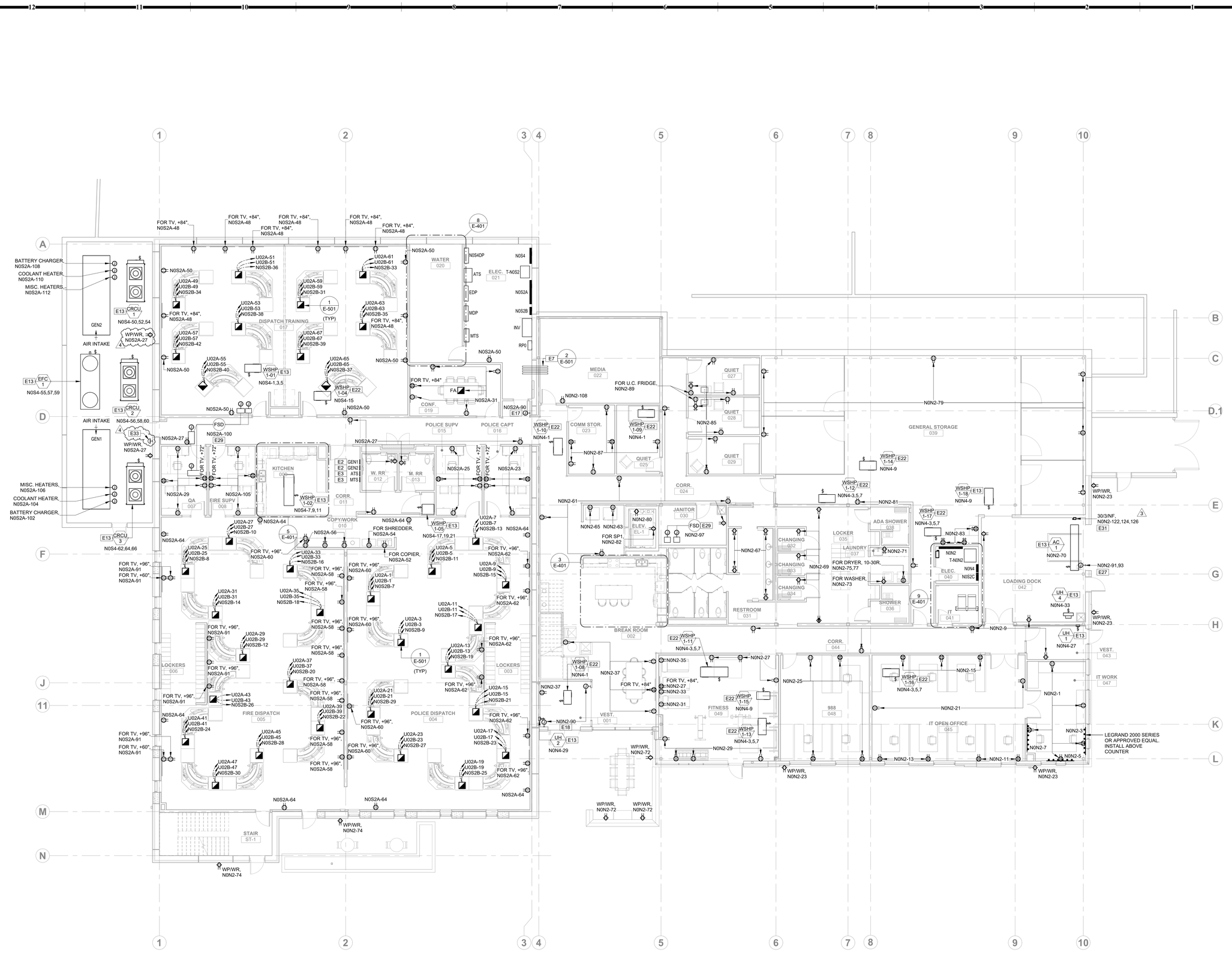
JONATHON M. LEE
STATE OF MISSOURI
NUMBER PE-2021003162
11/18/2024
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

ES101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL SITE PLAN



1 LOWER LEVEL - POWER PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

- E2 GENERATOR REMOTE ANNUNCIATOR PANEL. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- E3 AUTOMATIC TRANSFER SWITCH/MANUAL TRANSFER SWITCH REMOTE ANNUNCIATOR AND CONTROL PANEL. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- E7 WHERE CONDUITS CROSS FROM THE HARDENED PORTION OF THE BUILDING TO THE NON-HARDENED PORTION, PROVIDE ELECTRICAL BOXES (ONE FOR N0N4 FEEDER AND ONE FOR N0S2B FEEDER) ABOVE ACCESSIBLE CEILING. PROVIDE SPLICE WITHIN BOX SO IF THE NON-HARDENED PORTION IS SEPARATED, THE FEEDER WILL BREAK WITHIN THE BOX AND NOT AFFECT THE HARDENED PORTION OF THE BUILDING.
- E13 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.
- E17 PROVIDE POWER CONNECTION TO AUTOMATIC STORM DOOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- E18 PROVIDE POWER CONNECTION TO AUTOMATIC DOOR OPENER. PROVIDE ROUGH-IN FOR BUTTONS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE EXACT BUTTON LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. COORDINATE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EXACT POWER CONNECTION LOCATIONS AND REQUIREMENTS.
- E22 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND INLINE FUSE BLOCK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.
- E27 PROVIDE POWER TO COILING DOOR OPERATOR. PROVIDE ROUGH-IN FOR DOOR CONTROLS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE EXACT LOCATION OF DOOR CONTROLS WITH ARCHITECT PRIOR TO ROUGH-IN. COORDINATE EXACT POWER LOCATION AND REQUIREMENTS WITH DOOR SUBMITTALS PRIOR TO ROUGH-IN.
- E29 PROVIDE POWER TO FIRE/SMOKE DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.
- E31 PROVIDE POWER TO DOCK LEVELER. POWER SUPPLY / CONTROL PANEL. COORDINATE EXACT LOCATION OF POWER SUPPLY / CONTROL PANEL WITH ARCHITECT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 4 E33 PROVIDE GENERATOR EMERGENCY POWER OFF. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024
4	ADDENDUM #4	11/26/2024

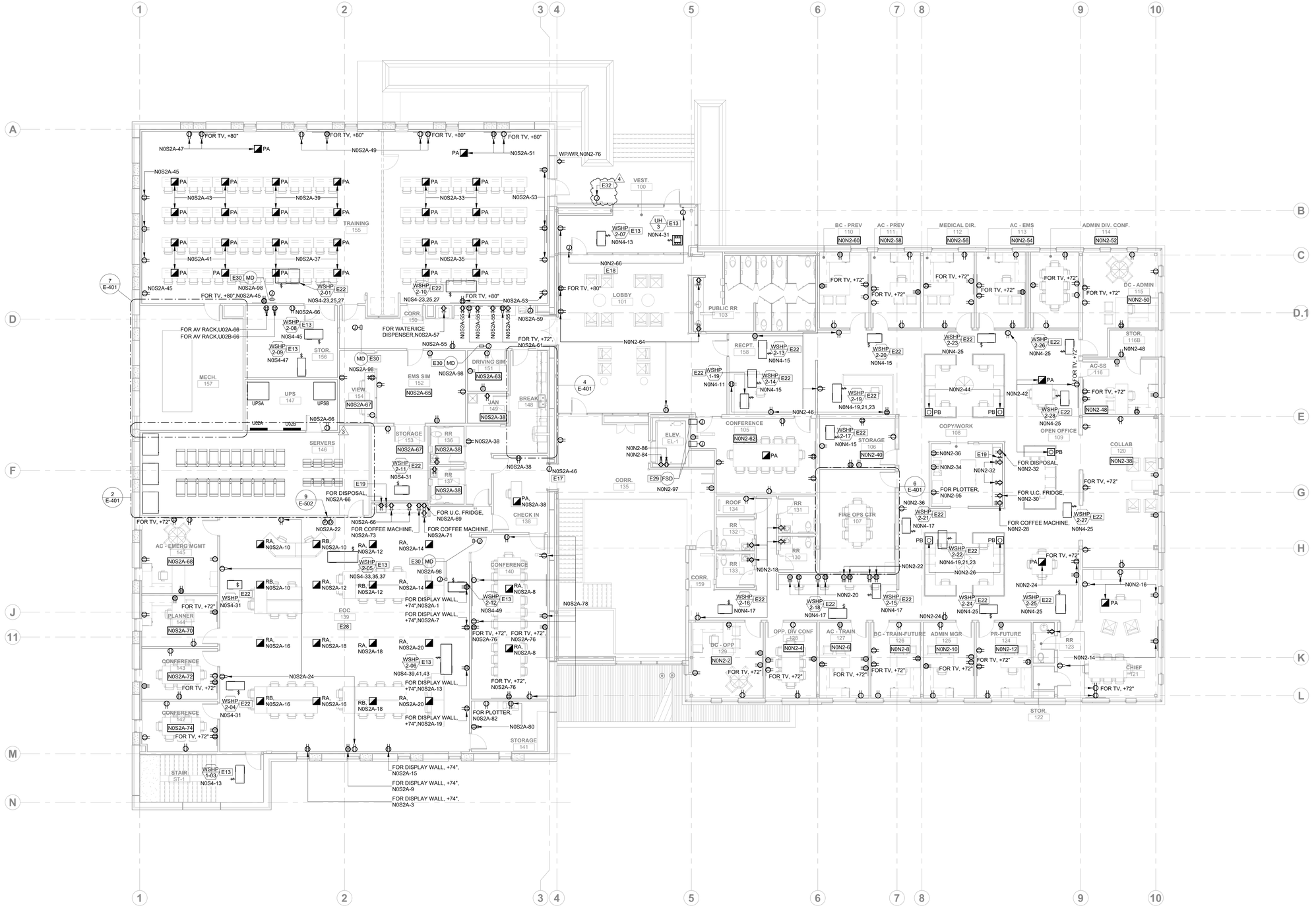
STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021033161
PROFESSIONAL ENGINEER
11/25/2024

PROFESSIONAL SEAL

E-100

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - POWER PLAN



GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

E13 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E17 PROVIDE POWER CONNECTION TO AUTOMATIC STORM DOOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

E18 PROVIDE POWER CONNECTION TO AUTOMATIC DOOR OPENER. PROVIDE ROUGH-IN FOR BUTTONS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. COORDINATE EXACT BUTTON LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN. COORDINATE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EXACT POWER CONNECTION LOCATIONS AND REQUIREMENTS.

E19 INSTALL COUNTER TOP AIR SWITCH (FURNISHED BY DIVISION 22) TO CONTROL GARBAGE DISPOSAL.

E22 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND INLINE FUSE BLOCK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E28 PROVIDE MODULAR RAISED FLOOR WIRING SYSTEM TO SERVE RAISED FLOOR FLOORBOXES WITHIN EOC. LEGRAND WALKERFLEX OR APPROVED EQUAL. PROVIDE ENOUGH LENGTH IN CABLES THAT FLOORBOXES CAN BE MOVED 72" IN ANY DIRECTION. EXACT LAYOUT / SPECIFICATION OF MODULAR RAISED FLOOR WIRING COMPONENTS SHALL BE PROVIDED TO ENGINEER BY VENDOR AS A SHOP DRAWING FOR REVIEW.

E29 PROVIDE POWER TO FIRE/SMOKE DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E30 PROVIDE POWER TO MOTORIZED DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

4 E32 PROVIDE RECESSED KNOX REMOTE POWER BOX FOR WHOLE BUILDING SHUTDOWN. CONNECT TO SHUNT TRIP BREAKERS IN NOS4DP AND NON4. PROVIDE WITH TAMPER SWITCH CONNECTED TO BUILDING AUTOMATION SYSTEM. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23 AND ARCHITECT.

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM #3	11/18/2024
4	ADDENDUM #4	11/26/2024

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021033162
PROFESSIONAL ENGINEER
11/25/2024

PROFESSIONAL SEAL

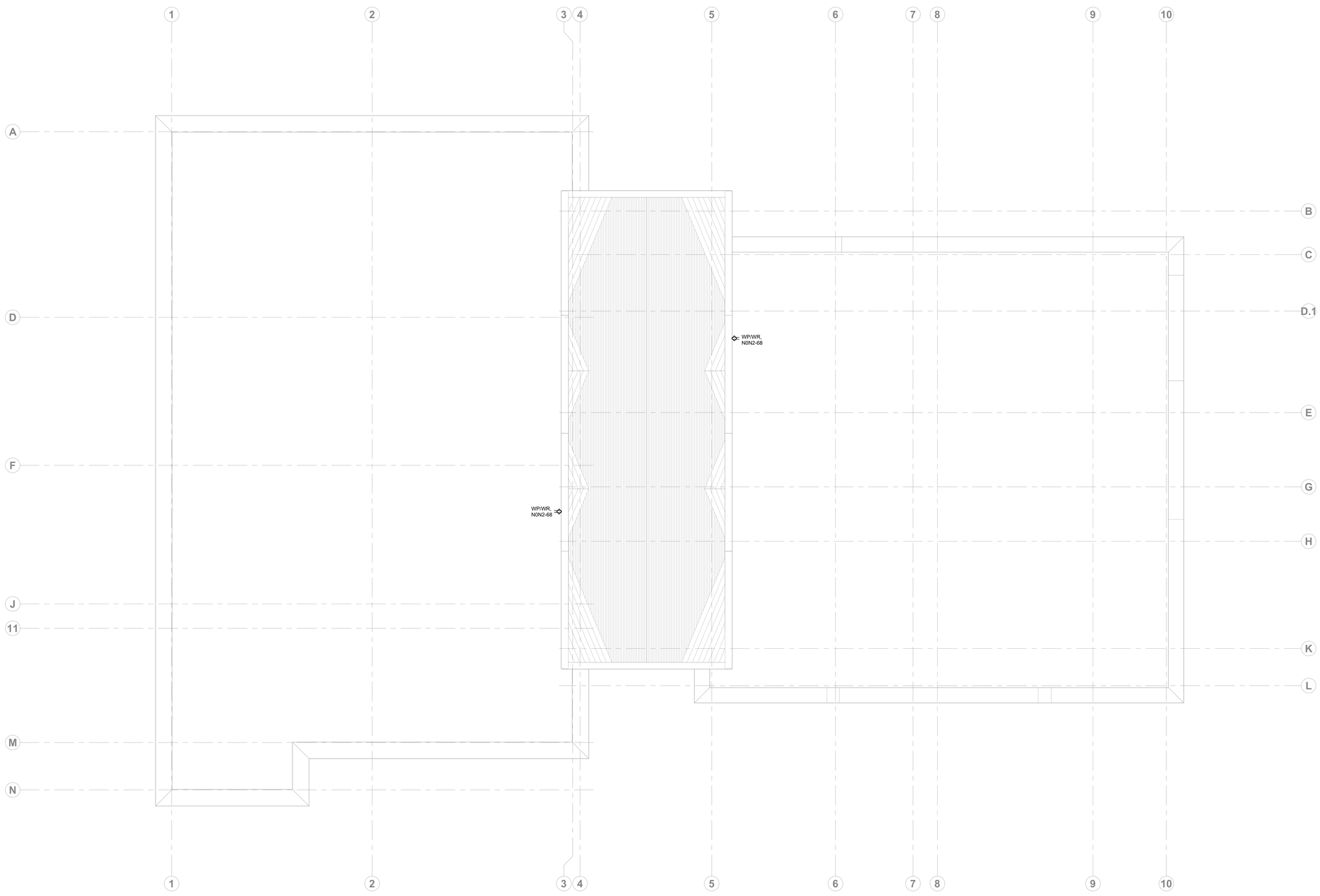
E-101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - POWER PLAN

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.



1 ROOF - ELECTRICAL PLAN
1/8" = 1'-0"

NORTH

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

E-102

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ROOF - ELECTRICAL PLAN

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR LIGHT FIXTURE MOUNTING HEIGHTS.

ELECTRICAL PLAN NOTES:

E1 INSTALL VERTICALLY IN WINDOW WELL. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.

E7 WHERE CONDUITS CROSS FROM THE HARDENED PORTION OF THE BUILDING TO THE NON-HARDENED PORTION, PROVIDE ELECTRICAL BOXES (ONE FOR N0N4 FEEDER AND ONE FOR N0S2B FEEDER) ABOVE ACCESSIBLE CEILING. PROVIDE SPLICE WITHIN BOX SO IF THE NON-HARDENED PORTION IS SEPARATED, THE FEEDER WILL BREAK WITHIN THE BOX AND NOT AFFECT THE HARDENED PORTION OF THE BUILDING.

E14 THE TOP DIMMING SWITCH SHALL CONTROL THE FIXTURE UPLIGHT, AND THE BOTTOM DIMMING SWITCH SHALL CONTROL THE FIXTURE DOWNLIGHT.

E15 RELAY LOCATIONS SHOWN ARE DIAGRAMMATIC. LOCATE RELAY IN A CONCEALED, ACCESSIBLE LOCATION.

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PACKAGE 2: CONSTRUCTION SET

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REVISION DATES:

4	ADDENDUM #4	11/26/2024

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
PROFESSIONAL ENGINEER
11/25/2024

PROFESSIONAL SEAL

E-110

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

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

NORTH

LOWER LEVEL - LIGHTING PLAN

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR LIGHT FIXTURE MOUNTING HEIGHTS.

ELECTRICAL PLAN NOTES:

E1 INSTALL VERTICALLY IN WINDOW WELL. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL INFORMATION.

E15 RELAY LOCATIONS SHOWN ARE DIAGRAMMATIC. LOCATE RELAY IN A CONCEALED, ACCESSIBLE LOCATION.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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REVISION DATES:

STATE OF MISSOURI
JONATHON M. [illegible]
NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

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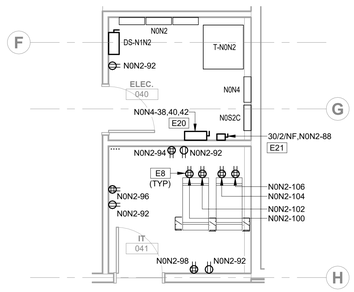
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - LIGHTING PLAN

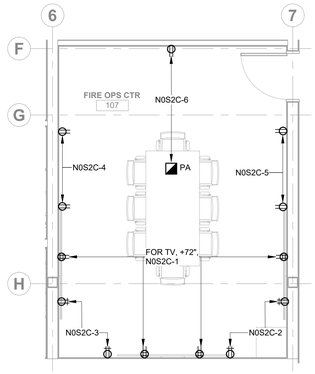
1 MAIN LEVEL - LIGHTING PLAN
1/8" = 1'-0"

NORTH



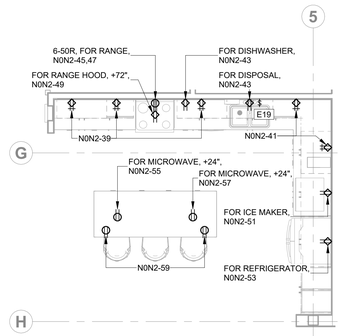
NORTH

9 ENLARGED POWER PLAN - ELEC (040) / IT (041)
1/4" = 1'-0"



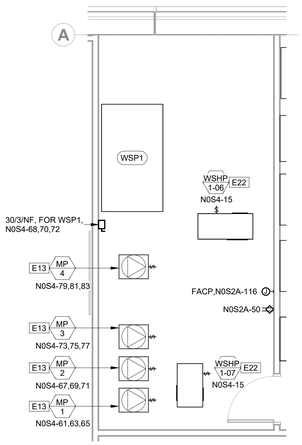
NORTH

6 ENLARGED POWER PLAN - FIRE OPS CTR
1/4" = 1'-0"



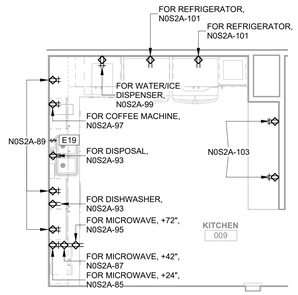
NORTH

3 ENLARGED POWER PLAN - BREAKROOM (002)
1/4" = 1'-0"



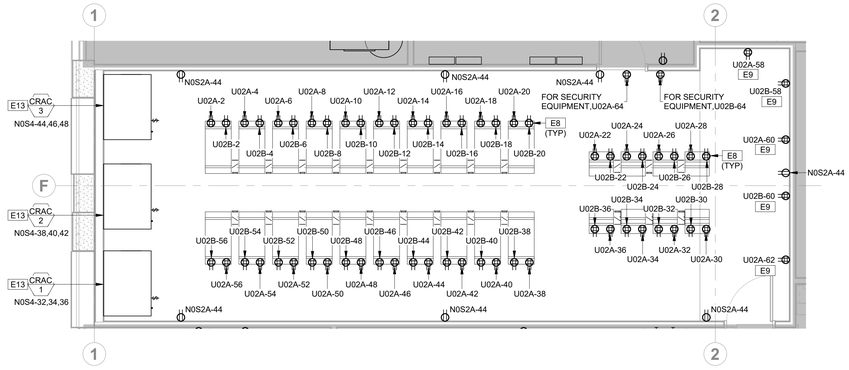
NORTH

8 ENLARGED POWER PLAN - WATER 020
1/4" = 1'-0"



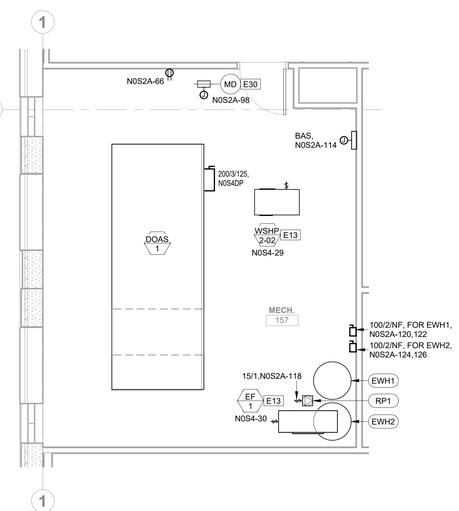
NORTH

5 ENLARGED POWER PLAN - KITCHEN (009)
1/4" = 1'-0"



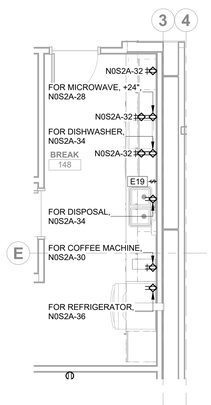
NORTH

2 ENLARGED POWER PLAN - SERVERS (146)
1/4" = 1'-0"



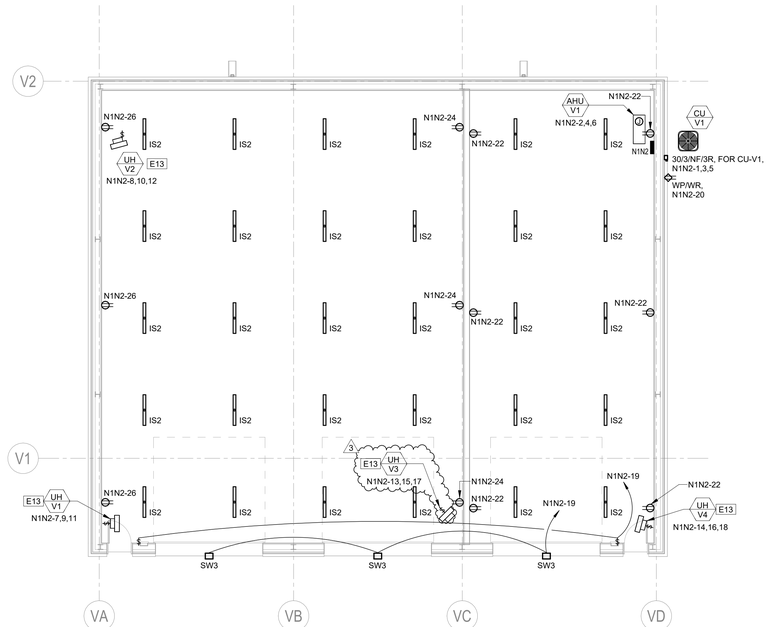
NORTH

7 ENLARGED POWER PLAN - MECH (157)
1/4" = 1'-0"



NORTH

4 ENLARGED POWER PLAN - BREAK (148)
1/4" = 1'-0"



NORTH

1 ELECTRICAL PLAN - VEHICLE BUILDING
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

E8 INSTALL RECEPTACLE ON LADDER RACK ABOVE CABINET/RACK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 27.

E9 RECEPTACLE FOR WALL MOUNTED IT EQUIPMENT. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH DIVISION 27 PRIOR TO ROUGH-IN.

E13 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E19 INSTALL COUNTER TOP AIR SWITCH (FURNISHED BY DIVISION 22) TO CONTROL GARBAGE DISPOSAL.

E20 PROVIDE SHUNT TRIP DISCONNECT AND FINAL CONNECTION FOR MAIN ELEVATOR DISCONNECT. DISCONNECT SHALL HAVE AUXILIARY CONTACT THAT IS NORMALLY CLOSED WHEN POWER IS ON AND NORMALLY OPEN WHEN POWER IS OFF. COORDINATE FIRE ALARM CONNECTION WITH FIRE ALARM CONTRACTOR. BASIS OF DESIGN IS KONE 300 SERIES. COORDINATE FINAL DISCONNECT RATING AND LOCATION WITH ELEVATOR MANUFACTURER SUBMITTALS.

E21 PROVIDE DISCONNECT AND FINAL CONNECTION FOR ELEVATOR CAB LIGHTS. BASIS OF DESIGN IS KONE 300 SERIES. COORDINATE FINAL DISCONNECT RATING AND LOCATION WITH ELEVATOR MANUFACTURER SUBMITTALS.

E22 PROVIDE POWER TO DIVISION 23 EQUIPMENT WITH FACTORY MOUNTED DISCONNECT AND INLINE FUSE BLOCK. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

E30 PROVIDE POWER TO MOTORIZED DAMPER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024

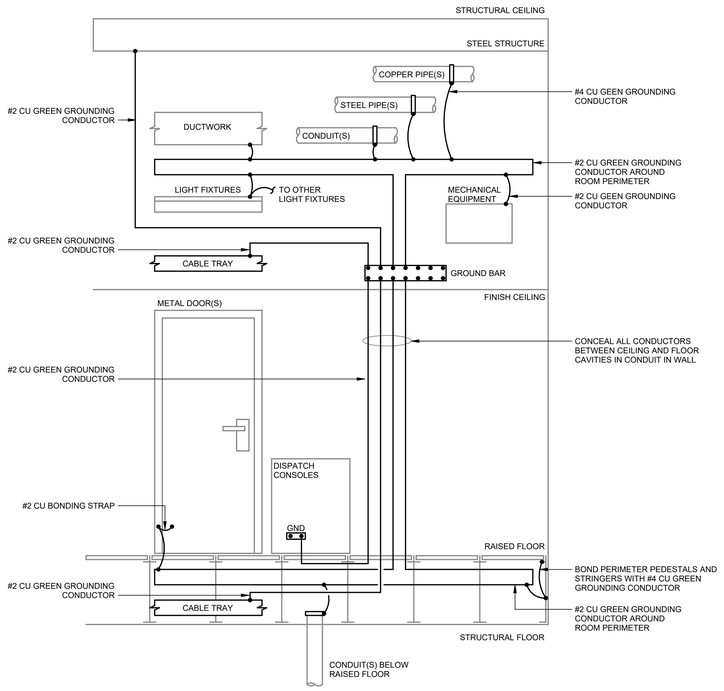
STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
11/18/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

E-401

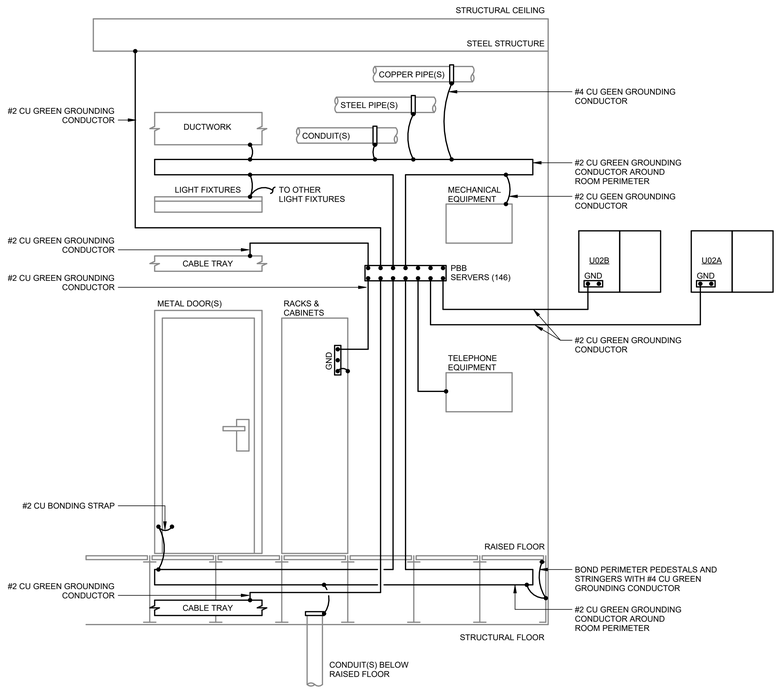
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ENLARGED ELECTRICAL PLANS



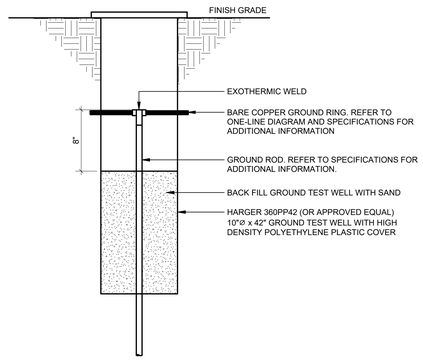
NOTES:
- MOTOROLA R56 COMPLIANCE IS A DELEGATED DESIGN. INFORMATION SHOWN IN THIS DIAGRAM IS FOR THE GROUNDING SYSTEM BACKBONE ONLY. PROVIDE ADDITIONAL CONDUCTORS, CONNECTIONS, CONDUITS, ETC. AS NECESSARY FOR A FULLY MOTOROLA R56 COMPLIANT SYSTEM TO THE SATISFACTION OF THE RADIO EQUIPMENT INSTALLER.
- PROVIDE INDIVIDUAL, DEDICATED BONDING CONDUCTORS FOR EACH PIECE OF EQUIPMENT, CONDUIT, PIPE, CABLE TRAY ASSEMBLY, ETC. UNLESS OTHERWISE NOTED.
- PROVIDE MINIMUM #6 CU GREEN GROUNDING CONDUCTOR UNLESS OTHERWISE NOTED.
- CONSOLE GROUND BARS ARE FURNISHED WITH CONSOLE.
- THIS DETAIL IS TYPICAL FOR MULTIPLE ROOMS.

6 GROUNDING DIAGRAM - DISPATCH (004 & 005), DISPATCH TRAINING (017)
NOT TO SCALE

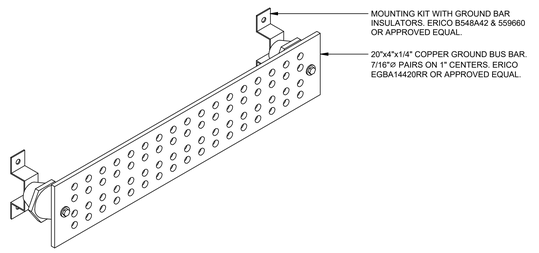


NOTES:
- MOTOROLA R56 COMPLIANCE IS A DELEGATED DESIGN. INFORMATION SHOWN IN THIS DIAGRAM IS FOR THE GROUNDING SYSTEM BACKBONE ONLY. PROVIDE ADDITIONAL CONDUCTORS, CONNECTIONS, CONDUITS, ETC. AS NECESSARY FOR A FULLY MOTOROLA R56 COMPLIANT SYSTEM TO THE SATISFACTION OF THE RADIO EQUIPMENT INSTALLER.
- PROVIDE INDIVIDUAL, DEDICATED BONDING CONDUCTORS FOR EACH PIECE OF EQUIPMENT, CONDUIT, PIPE, CABLE TRAY ASSEMBLY, ETC. UNLESS OTHERWISE NOTED.
- PROVIDE MINIMUM #6 CU GREEN GROUNDING CONDUCTOR UNLESS OTHERWISE NOTED.

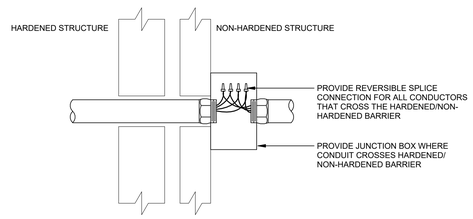
5 GROUNDING DIAGRAM - SERVERS (146)
NOT TO SCALE



4 GROUND TEST WELL DETAIL
NOT TO SCALE

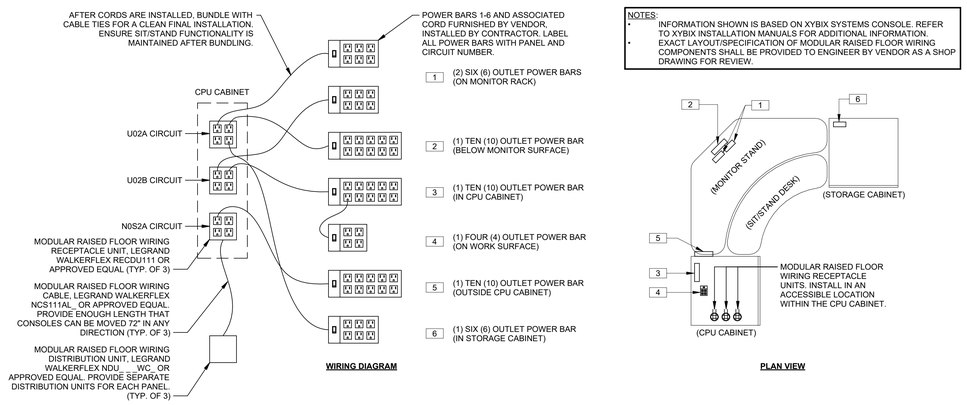


3 MAIN GROUND BUS BAR
NOT TO SCALE



NOTES:
- THIS DETAIL SHALL APPLY TO ALL CONDUITS THAT CROSS THE HARDENED/NON-HARDENED BARRIER.
- THE INTENT IS FOR CONDUCTORS TO "BREAK" AT THE HARDENED/NON-HARDENED BARRIER SHOULD THE NON-HARDENED STRUCTURE BE DESTROYED IN A NATURAL DISASTER.

2 SACRIFICIAL CONNECTION DETAIL
NOT TO SCALE



NOTES:
- INFORMATION SHOWN IS BASED ON XYBIX SYSTEMS CONSOLE. REFER TO XYBIX INSTALLATION MANUALS FOR ADDITIONAL INFORMATION.
- EXACT LAYOUT/SPECIFICATION OF MODULAR RAISED FLOOR WIRING COMPONENTS SHALL BE PROVIDED TO ENGINEER BY VENDOR AS A SHOP DRAWING FOR REVIEW.

1 DISPATCH CONSOLE WIRING DIAGRAM
NOT TO SCALE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

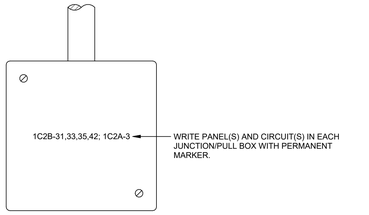
STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

E-501

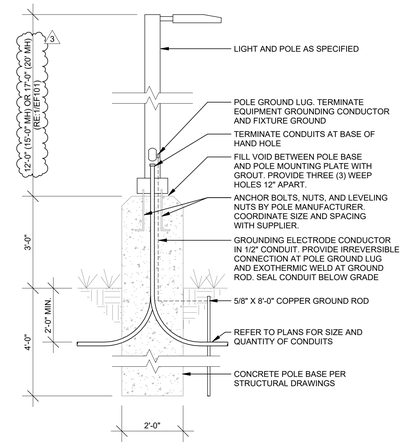
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL DETAILS



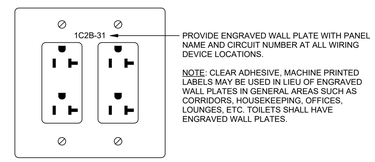
NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

6 ELECTRICAL RACEWAY IDENTIFICATION DETAIL
NOT TO SCALE



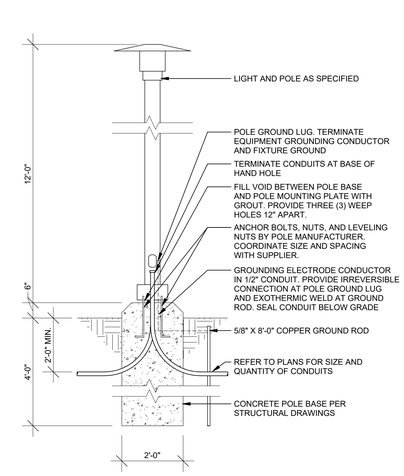
NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

3 POLE BASE DETAIL - TALL BASE
NOT TO SCALE



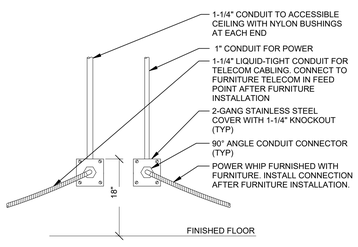
NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

5 WIRING DEVICE IDENTIFICATION DETAIL
NOT TO SCALE

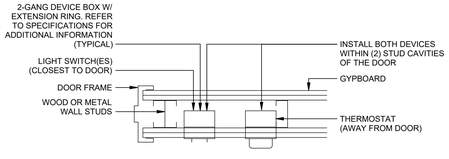


NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

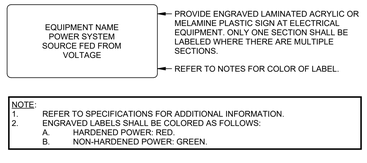
2 POLE BASE DETAIL - SHORT BASE
NOT TO SCALE



9 WALL OUTLET DETAIL FOR ELECTRIFIED PARTITION
NOT TO SCALE

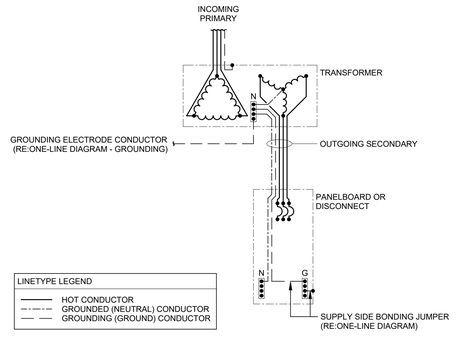


8 ROOM THERMOSTAT/LIGHT SWITCH DETAIL
NOT TO SCALE

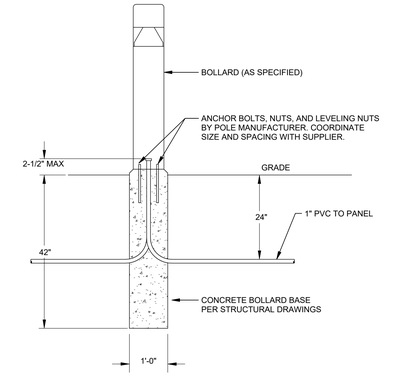


NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ENGRAVED LABELS SHALL BE COLORED AS FOLLOWS:
   A. HARDENED POWER: RED.
   B. NON-HARDENED POWER: GREEN.

7 ELECTRICAL EQUIPMENT IDENTIFICATION DETAIL
NOT TO SCALE



4 TRANSFORMER GROUNDING DETAIL
NOT TO SCALE



1 BOLLARD INSTALLATION DETAIL
NOT TO SCALE

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SUITE 1400
KANSAS CITY, MO 64112
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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

3	ADDENDUM #3	11/18/2024

PROFESSIONAL SEAL

E-502

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL DETAILS

PANELBOARD: N0S4

BUS AMPS: 600 A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 480Y/277 V, 3PH, 4W
SUPPLIED BY: N0S4DP

AIC RATING: 22,000 AIC
FAULT CURRENT: 20,071 A
CUM. VOLT. DROP: 0.94%
MOUNTING: SURFACE
LOCATION: ELEC. 021

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A		B		C		P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1							1383	4805					1	40	10	8		INV	2
3	WSHP 1-01				15	3			1383	90			1	20				LTG-STAIR (ST-1)	4
5											1383	1250	1	20				LTG-EXTERIOR PARKING	6
7							3458	1712					1	20				LTG-EXTERIOR AREA & FLAG	8
9	WSHP 1-02				15	3			3458	2053			1	20				LTG-CORRIDORS	10
11											3458	3502	1	20				LTG-LOWER LEVEL DISPATCH	12
13	WSHP 1-03				15	1	1911	1330					1	20				LTG-LOWER LEVEL TRAINING	14
15	WSHP 1-04, 06, 07		10	10	30	1			5872	1616			1	20				LTG-TRAINING	16
17											3209	2466	1	20				LTG-EOC & SUPPORT	18
19	WSHP 1-05				15	3	3209	0					1	20	--	--		SPARE	20
21									3209	0			1	20	--	--		SPARE	22
23											5782	0	1	20	--	--		SPARE	24
25	WSHP 2-01, 10		10	10	30	3	5782	0					1	20	--	--		SPARE	26
27									5782	0			1	20	--	--		SPARE	28
29	WSHP 2-02				15	1					1801	1120	1	15				EF-1	30
31	WSHP 2-03, 04, 11		10	10	30	1	5512	9											32
33									2573	9			3	50				CRAC-1	34
35	WSHP 2-05				15	3					2573	9							36
37							2573	9											38
39									2573	9			3	50				CRAC-2	40
41	WSHP 2-06				15	3					2573	9							42
43							2573	9											44
45	WSHP 2-08				15	1			2327	9			3	50				CRAC-3	46
47	WSHP 2-09				15	1					1911	9							48
49	WSHP 2-12				15	1	1801	2573											50
51	EQUIPPED SPACE		--	--	--	1			--	2573			3	15				CRCU-1	52
53	EQUIPPED SPACE		--	--	--	1					--	2573							54
55							4703	2573											56
57	EFC-1		10	10	25	3			4703	2573			3	15				CRCU-2	58
59											4703	2573							60
61							5423	2573											62
63	MP-1		10	10	30	3			5423	2573			3	15				CRCU-3	64
65											5423	2573							66
67							5423	2904											68
69	MP-2		10	10	30	3			5423	2904			3	30	10	10		WSP1	70
71											5423	2904							72
73							5423	--											74
75	MP-3		10	10	30	3			5423	--			3	--	--	--		EQUIPPED SPACE	76
77											5423	--							78
79							581	53480											80
81	MP-4				20	3			581	50240			3	250		350	OL	T-N0S2	82
83											581	55480							84
			TOTAL LOAD:				121733 VA		113379 VA		118711 VA								
			TOTAL AMPS:				442 A		409 A		432 A								
			LOAD BALANCE:				3.96%		-3.82%		1.40%								

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
COOLING	14110 VA	100.00%	14110 VA
LIGHTING	18983 VA	125.00%	23728 VA
MOTORS	60379 VA	100.00%	60379 VA
RECEPTACLES	120320 VA	54.16%	65160 VA
MISC EQUIP	140031 VA	100.00%	140031 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	353823 VA
TOTAL EST. DEMAND LOAD:	303408 VA
TOTAL CONN. CURRENT:	426 A
TOTAL EST. DEMAND CURRENT:	365 A

PANELBOARD: N0S2A

BUS AMPS: 400 A
MAIN SIZE/TYPE: 400A MCB
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: T-N0S2

AIC RATING: 10,000 AIC
FAULT CURRENT: 4,876 A
CUM. VOLT. DROP: 1.25%
MOUNTING: SURFACE
LOCATION: ELEC. 021

60A, 3P SUBFEED BREAKER

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A		B		C		P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	RCPT-139-EOC DISP. WALL N. A				20	1	460	0					1						2
3	RCPT-139-EOC DISP. WALL E. A				20	1			460	0			3	30	--	--		SPD	4
5	SPARE		--	--	20	1					0	0							6
7	RCPT-139-EOC DISP. WALL N. B				20	1	460	720					1	20				RCPT - CONFERENCE 140 FLR	8
9	RCPT-139-EOC DISP. WALL E. B				20	1			460	1080			1	20				RCPT-139-EOC FLR A	10
11	SPARE		--	--	20	1					0	1080	1	20				RCPT-139-EOC FLR B	12
13	RCPT-139-EOC DISP. WALL N. C				20	1	460	720					1	20				RCPT-139-EOC FLR C	14
15	RCPT-139-EOC DISP. WALL E. C				20	1			460	1080			1	20				RCPT-139-EOC FLR D	16
17	SPARE		--	--	20	1					0	1080	1	20				RCPT-139-EOC FLR E	18
19	RCPT-139-EOC DISP. WALL N. D				20	1	460	720					1	20				RCPT-139-EOC FLR F	20
21	SPARE		--	--	20	1			0	500			1	20				RCPT-139-EOC DESK	22
23	RCPT-016-POLICE CAPT.				20	1					1260	720	1	20				RCPT-139-EOC	24
25	RCPT-015-POLICE SUPV				20	1	1260	0					1	20	--	--		SPARE	26
27	RCPT-011-CORR./012-013 RR				20	1			1440	1200			1	20				RCPT-148-BREAK MICROWAVE	28
29	RCPT-007-QA				20	1					1260	1500	1	20				RCPT-148-BREAK COFFEE	30
31	RCPT-019-CONFERENCE				20	1	1260	540					1	20				RCPT-148-BREAK COUNTER	32
33	RCPT-155-TRAINING FLR BXS 1				20	1			1440	1380			1	20				RCPT-148-BREAK DISHWASHER	34
35	RCPT-155-TRAINING FLR BXS 2				20	1					1440	800	1	20				RCPT-148-BREAK FRIDGE	36
37	RCPT-155-TRAINING FLR BXS 3				20	1	1440	1440					1	20				RCPT-136,137,138,149	38
39	RCPT-155-TRAINING FLR BXS 4				20	1			1440	0			1	20	--	--		SPARE	40
41	RCPT-155-TRAINING FLR BXS 5				20	1					1440	0	1	20	--	--		SPARE	42
43	RCPT-155-TRAINING FLR BXS 6				20	1	1440	1260					1	20				RCPT-146-SERVER GENERAL	44
45	RCPT-155-SOUTH WALL				20	1			1080	600			1	20				PWR-135/138 STORM DOOR	46
47	RCPT-155-S.W. DISPLAY/PODIUM				20	1					900	1440	1	20				RCPT-017-TRAINING TVs	48
49	RCPT-155-WEST WALL/DISPLAY				20	1	1080	1440					1	20				RCPT-017-DISPATCH TRAINING	50
51	RCPT-155-N.W. DISPLAY/PODIUM				20	1			900	1200			1	20				RCPT-010-COPIER	52
53	RCPT-155-NORTH WALL				20	1					1080	1200	1	20				RCPT-010-SHREDDER	54
55	RCPT-150-CORR. CREDENZA				20	1	900	540					1	20				RCPT-010-COPY/WORK	56
57	RCPT-150-CORR. WATER/ICE DISP.				20	1			800	1440			1	20				RCPT-005-FIRE DISPATCH N TVs	58
59	RCPT-150-CORR. WATER/FILLER	GF			20	1					600	900	1	20				RCPT-004-POLICE DISPATCH S TVs	60
61	RCPT-150-CORR. DISPLAYS				20	1	720	1080					1	20				RCPT-004-POLICE DISPATCH N TVs	62
63	RCPT-151-DRIVING SIM				20	1			540	1440			1	20				RCPT-004,005-DISPATCH GEN	64
65	RCPT-152-EMS SIM 1				20	1					720	1080	1	20				RCPT-147 UPS/156 STOR	66
67	RCPT-154-VIEWING				20	1	900	1260					1	20				RCPT-145 AC - EMERG. MGMT	68
69	RCPT-139-EOC U.C. FRIDGE				20	1			400	1080			1	20				RCPT-144-PLANNER	70
71	RCPT-139-EOC COFFEE 1				20	1					1600	1080	1	20				RCPT-143-CONFERENCE	72
73	RCPT-139-EOC COFFEE 2		10	10	20	1	1600	1080					1	20				RCPT-142-CONFERENCE	74
75	SPARE		--	--	20	1			0	1080			1	20				RCPT-140-CONF. DISP.	76
77	SPARE		--	--	20	1					0	1080	1	20				RCPT-140-CONFERENCE	78
79	SPARE		--	--	20	1	0	360					1	20				RCPT-141-STORAGE COPIER	80
81	SPARE		--	--	20	1			0	1200			1	20				RCPT-141-PLOTTER	82
83	SPARE		--	--	20	1					0	0	1	20	--	--		SPARE	84
85	RCPT-009-MICROWAVE 3				20	1	1200	600					1	20				PWR-EAST GATE	86
87	RCPT-009-MICROWAVE 2				20	1			1200	600			1	20				PWR-WEST GATE	88
89	RCPT-009-COUNTER RCPTS				20	1					540	600	1	20				PWR - STORM DOOR	90
91	RCPT-005-FIRE DISPATCH S TVs				20	1	1260	0					1	20	--	--		SPARE	92
93	RCPT-009-DISHWASHER				20	1			1380	0			1	20	--	--		SPARE	94
95	RCPT-009-MICROWAVE 1				20	1					1200	0	1	20	--	--		SPARE	96
97	RCPT-009-COFFEE				20	1	1500	300					1	20				PWR - MOTORIZED DAMPERS	98
99	RCPT-009-WATER/ICE DISPENSER				20	1			180	200			1	20				PWR - FIRE/SMOKE DAMPERS	100
101	RCPT-009-FRIDGE 1				20	1					1600	1200	1	20				GEN 1 - BATTERY CHARGER	102
103	RCPT-009-COUNTER RCPTS 2				20	1	360	1500					1	20				GEN 1 - COOLANT HEATER	104
105	RCPT-009-FIRE SUPV				20	1			1260	500			1	20				GEN 1 - MISC HEATERS	106
107	SPARE		--	--	20	1					0	1200	1	20				GEN 2 - BATTERY CHARGER	108
109	EQUIPPED SPACE		--	--	--	1	--	1500					1	20				GEN 2 - COOLANT HEATER	110
111	EQUIPPED SPACE		--	--	--	1			--	500			1	20				GEN 2 - MISC HEATERS	112
113	EQUIPPED SPACE		--	--	--	1					--	600	1	20				PWR-157-BAS	114
115	EQUIPPED SPACE		--	--	--	1	--	500					1	20				PWR-020-FACP	116
117	EQUIPPED SPACE		--	--	--	1			--	600			1	15				RP1 & AQUASTAT	118
119	EQUIPPED SPACE		--	--	--	1					--	6000							120
121	EQUIPPED SPACE		--	--	--	1	--	6000					2	80				EWH1	122
123	EQUIPPED SPACE		--	--	--	1			--	6000									124
125	EQUIPPED SPACE		--	--	--	1					--	6000	2	80				EWH2	126
			TOTAL LOAD:				40280 VA		35840 VA		42280 VA								
			TOTAL AMPS:				341 A		299 A		358 A								
			LOAD BALANCE:				3.87%		-9.12%		8.94%								

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LIGHTING	160 VA	125.00%	200 VA
RECEPTACLES	79520 VA	56.29%	44760 VA
MISC EQUIP	38720 VA	100.00%	38720 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	118400 VA
TOTAL EST. DEMAND LOAD:	83680 VA
TOTAL CONN. CURRENT:	329 A
TOTAL EST. DEMAND CURRENT:	232 A

PANELBOARD: N0N4

BUS AMPS: 400 A
MAIN SIZE/TYPE: 400A MCB, SHUNT TRIP
VOLTS/PHASE: 480Y/277 V, 3PH, 4W
SUPPLIED BY: MTS

AIC RATING: 22,000 AIC
FAULT CURRENT: 13,616 A
CUM. VOLT. DROP: 1.47%
MOUNTING: SURFACE
LOCATION: ELEC. 040

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A		B		C		P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	WSHP 1-08, 09, 10		10	10	30	1	5595	84					1	20				LTG-ELEVATOR SHAFT	2
3									8106	1575			1	20				LTG-GENERAL STORAGE	4
5	WSHP 1-11, 12, 13, 16, 17		8	10	40	3					8106	2631	1	20				LTG-LOWER LEVEL	6
7							8106	2731					1	20				LTG-OPEN OFFICE	8
9	WSHP 1-14, 15, 18		10	10	30	1			6454	1954			1	20				LTG-PERIMETER OFFICES	10
11	WSHP 1-19				15	1					1801	0	1	20	--	--		SPARE	12
13	WSHP 2-07				15	1	1801	0					1	20	--	--		SPARE	14
15	WSHP 2-13, 14, 17, 20		8	10	40	1			7257	0			1	20	--	--		SPARE	16
17	WSHP 2-15, 16, 18, 21		8	10	40	1					7119	0	1	20	--	--		SPARE	18
19							2767	0					1	20	--	--		SPARE	20
21	WSHP 2-19, 22				15	3			2767	0			1	20	--	--		SPARE	22
23											2767	0	1	20	--	--		SPARE	24
25	WSHP 2-23, 24, 25, 26, 27, 28		6	10	50	1	11135	0					1	20	--	--		SPARE	26
27	UH-1				15	1			1500	0			1	20	--	--		SPARE	28
29	UH-2				15	1					1500	0	1	20	--	--		SPARE	30
31	UH-3				15	1	997	0					1	20	--	--		SPARE	32
33	UH-4				15	1			3300	0			1	20	--	--		SPARE	34
35	SPARE		--	--	20	1					0	0	1	20	--	--		SPARE	36
37							46491	5478											38
39	T-N0N2	OL	250		200	3			45074	5478			3	50	10	6		ELEVATOR EL-1	40
41											40488	5478							42
			TOTAL LOAD:				85185 VA		83465 VA		69890 VA								
			TOTAL AMPS:				315 A		309 A		252 A								
			LOAD BALANCE:				9.82%		7.65%		-12.06%								

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
COOLING	6480 VA	100.00%	6480 VA
HEATING	43897 VA	100.00%	43897 VA
LIGHTING	10437 VA	125.00%	13046 VA
MOTORS	7675 VA	100.00%	7675 VA
RECEPTACLES	73840 VA	56.77%	41920 VA
MISC EQUIP	96211 VA	100.00%	96211 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	238540 VA
TOTAL EST. DEMAND LOAD:	209230 VA
TOTAL CONN. CURRENT:	287 A
TOTAL EST. DEMAND CURRENT:	252 A

PANELBOARD: N0N2

BUS AMPS: 250 A
MAIN SIZE/TYPE: 250A MCB
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: T-N0N2

AIC RATING: 10,000 AIC
FAULT CURRENT: 4,520 A
CUM. VOLT. DROP: 1.79%
MOUNTING: SURFACE
LOCATION: ELEC. 040

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A		B		C		P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	RCPT - IT WORK ROOM				20	1	1440	1440					1	20				RCPT-129-DC-OPP	2
3	RCPT - IT PLUGMOLD 1				20	1			360	1080			1	20				RCPT-128-OPP. DIV CONF ROOM	4
5	RCPT - IT PLUGMOLD 2				20	1					360	1080	1	20				RCPT-127-AC - TRAIN	6
7	RCPT - IT PLUGMOLD 3				20	1	360	1080					1	20				RCPT-126-BC - TRAIN-FUT.	8
9	RCPT - CORR./VEST/ LOAD. DOCK				20	1			1080	1080			1	20				RCPT-125-ADMIN MGR	10
11	RCPT - IT/TRAFFIC WRKSTNS 1				20	1					360	1080	1	20				RCPT-124-PR - FUTURE	12
13	RCPT - IT/TRAFFIC WRKSTNS 2				20	1	360	900					1	20				RCPT-121-CHIEF	14
15	RCPT - IT/TRAFFIC WRKSTNS 3				20	1			540	900			1	20				RCPT-121-CHIEF'S DESK	16
17	SPARE		--	--	20	1					0	1080	1	20				RCPT-130-133-RR/134 ROOF	18
19	SPARE		--	--	20	1	0	1080					1	20				RCPT-159-CORR. WORKSTATIONS 1	20
21	RCPT - IT/TRAFFIC OPEN OFFICE				20	1			360	1080			1	20				RCPT-159-CORR. WORKSTATIONS 2	22
23	RCPT - N.E. EXTERIOR				20	1					720	1080	1	20				RCPT-109-OPEN OFFICE N.E CORNER	24
25	RCPT - 988				20	1	900	360					1	20				RCPT-109-OPEN OFFICE WRKSTN 2	26
27	RCPT - FITNESS 1				20	1			720	1500			1	20				RCPT-108-COFFEE	28
29	RCPT - FITNESS 2				20	1					720	400	1	20				RCPT-108-U.C. FRIDGE	30
31	RCPT - FITNESS EQUIP. 1				20	1	1200	540					1	20				RCPT-108-COUNTER	32
33	RCPT - FITNESS EQUIP. 2				20	1			1200	800			1	20				RCPT-108-COPIER	34
35	RCPT - FITNESS EQUIP. 3				20	1					1200	360	1	20				RCPT-108-COPY/WORK	36
37	RCPT - BREAKROOM				20	1	900	1440					1	20				RCPT-120-COLLAB	38
39	RCPT - BRKRM COUNTER 1				20	1			540	1260			1	20				RCPT-108-STORAGE	40
41	RCPT - BRKRM COUNTER 2				20	1					360	900	1	20				RCPT-109-OPEN OFFICE N.W CORNER	42
43	RCPT - BRKRM DISHWASHER				20	1	1380	360					1	20				RCPT-109-OPEN OFFICE WRKSTN 1	44
45	RCPT - BRKRM RANGE		6	10	50	2			90	1440			1	20				RCPT-158-RECEPTION	46
47											90	1440	1	20				RCPT-116-AC-SS	48
49	RCPT - BRKRM RANGE HOOD				20	1	180	1080					1	20				RCPT-115-DC - ADMIN	50
51	RCPT - BRKRM ICE MAKER				20	1			400	1080			1	20				RCPT-114-ADMIN DIV CONF.	52
53	RCPT - BRKRM REFRIGERATOR				20	1					800	1080	1	20				RCPT-113-AC - EMS	54
55	RCPT- BRKRM MICROWAVE 1				20	1	1200	1080					1	20				RCPT-112-MED. DIRECTOR	56
57	RCPT- BRKRM MICROWAVE 2				20	1			1200	1080			1	20				RCPT-111-AC - PREV	58
59	RCPT - BRKRM ISLAND				20	1					360	1080	1	20				RCPT-110-BC - PREV	60
61	RCPT - BRKRM/CORR. 024				20	1	1080	1620					1	20				RCPT-105-CONFERENCE	62
63	RCPT - BRKRM VENDING 1				20	1			800	1260			1	20				RCPT-101/103 - LOBBY/RR	64
65	RCPT - BRKRM VENDING 2				20	1					800	1000	1	20				PWR - W VEST. DOORS	66
67	RCPT - RESTROOM COUNTERS				20	1	720	360					1	20				RCPT - ROOF	68
69	RCPT - LOCKER/CHANGING				20	1			900	1056			1	15				AC-1	70
71	RCPT - LAUNDRY				20	1					180	540	1	20				RCPT - E. EXTERIOR PATIO	72
73	RCPT - WASHER				20	1	1000	360					1	20				RCPT - E. EXTERIOR DISPATCH	74
75	RCPT - DRYER		10	10	30	2			400	180			1	20				RCPT - W. EXTERIOR	76
77											400	360	1	20				RCPT-135-CORR	78
79	RCPT - GEN. STOR. PERIMETER				20	1	1080	180					1	20				RCPT-EL-1-ELEVATOR PIT	80
81	RCPT - GEN. STOR. HALLWAY				20	1			360	360			1	20				RCPT-EL-1-SP1	82
83	RCPT - GEN. STOR. COUNTER				20	1					1080	180	1	20				RCPT-EL-1-TOP OF SHAFT	84
85	RCPT - QUIET 027, 028, 029				20	1	1440	180					1	20				RCPT-EL-1-ELEVATOR COMM	86
87	RCPT - COMM. SOTR. / QUIET 025				20	1			1440	200			1	20				LTG-EL-1-CAB LIGHTS	88
89	RCPT - UC FRIDGES 027, 028				20	1					360	1000	1	20				PWR-001-VEST AUTO OPENERS	90
91					20	2	250	720					1	20				RCPT-040/041-ELEC. IT	92
93	PWR - LOADING DOCK DOOR								250	360			1	20				RCPT-041-IT W. WALL	94
95	RCPT - PLOTTER 108				20	1					1200	360	1	20				RCPT-041-IT S. WALL	96
97	PWR - FIRE/SMOKE DAMPERS				20	1	200	360					1	20				RCPT-041-IT E. WALL	98
99	SPARE		--	--	20	1			0	360			1	20				RCPT-041-RACK 1 A	100
101	SPARE		--	--	20	1					0	360	1	20				RCPT-041-RACK 1 B	102
103	SPARE		--	--	20	1	0	360					1	20				RCPT-041-RACK 2 A	104
105	SPARE		--	--	20	1			0	360			1	20				RCPT-041-RACK 2 B	106
107	SPARE		--	--	20	1					0	180	1	20				RCPT-022-MEDIA	108
109	SPARE		--	--	20	1	0	0					1	20	--	--		SPARE	110
111	SPARE		--	--	20	1			0	0			1	20	--	--		SPARE	112
113	SPARE		--	--	20	1					0	0	1	20	--	--		SPARE	114
115	SPARE		--	--	20	1	0	0					1	20	--	--		SPARE	116
117	SPARE		--	--	20	1			0	0			1	20	--	--		SPARE	118
119	SPARE		--	--	20	1					0	0	1	20	--	--		SPARE	120
121	SPARE		--	--	20	1	0	2018											122
123	SPARE		--	--	20	1			0	2018			3	20				PWR - DOCK LEVELER	124
125	SPARE		--	--	20	1

PANELBOARD: U02A

BUS AMPS: 400 A
MAIN SIZE/TYPE: 250A MCB
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: UPSA

AIC RATING: 10,000 AIC
FAULT CURRENT: 5,130 A
CUM. VOLT. DROP: 1.36%
MOUNTING: SURFACE
LOCATION: UPS 147

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	RCPT-004-POLICE CONSOLE 1A				20	1	500	2400		1	20				RCPT-146-CABINET 01	2
3	RCPT-004-POLICE CONSOLE 1D				20	1		500	2400	1	20				RCPT-146-CABINET 02	4
5	RCPT-004-POLICE CONSOLE 2A				20	1			500	2400	1	20				RCPT-146-CABINET 03	6
7	RCPT-004-POLICE CONSOLE 2B				20	1	500	2400			1	20				RCPT-146-CABINET 04	8
9	RCPT-004-POLICE CONSOLE 2C				20	1		500	2400		1	20				RCPT-146-CABINET 05	10
11	RCPT-004-POLICE CONSOLE 2D				20	1			500	2400	1	20				RCPT-146-CABINET 06	12
13	RCPT-004-POLICE CONSOLE 3A				20	1	500	2400			1	20				RCPT-146-CABINET 07	14
15	RCPT-004-POLICE CONSOLE 3B				20	1		500	2400		1	20				RCPT-146-CABINET 08	16
17	RCPT-004-POLICE CONSOLE 3C				20	1			500	2400	1	20				RCPT-146-CABINET 09	18
19	RCPT-004-POLICE CONSOLE 3D				20	1	500	2400			1	20				RCPT-146-CABINET 10	20
21	RCPT-004-POLICE CONSOLE 4A				20	1		500	500		1	20				RCPT-146-RACK 11	22
23	RCPT-004-POLICE CONSOLE 4D				20	1			500	500	1	20				RCPT-146-RACK 12	24
25	RCPT-005-FIRE CONSOLE 1A				20	1	500	500			1	20				RCPT-146-RACK 13	26
27	RCPT-005-FIRE CONSOLE 1B				20	1		500	500		1	20				RCPT-146-RACK 14	28
29	RCPT-005-FIRE CONSOLE 1C				20	1			500	500	1	20				RCPT-146-RACK 15	30
31	RCPT-005-FIRE CONSOLE 1D				20	1	500	500			1	20				RCPT-146-RACK 16	32
33	RCPT-005-FIRE CONSOLE 2B				20	1		500	500		1	20				RCPT-146-RACK 17	34
35	RCPT-005-FIRE CONSOLE 2C				20	1			500	500	1	20				RCPT-146-RACK 18	36
37	RCPT-005-FIRE CONSOLE 3B				20	1	500	2400			1	20				RCPT-146-CABINET 19	38
39	RCPT-005-FIRE CONSOLE 3C				20	1		500	2400		1	20				RCPT-146-CABINET 20	40
41	RCPT-005-FIRE CONSOLE 4A				20	1			500	2400	1	20				RCPT-146-CABINET 21	42
43	RCPT-005-FIRE CONSOLE 4B				20	1	500	2400			1	20				RCPT-146-CABINET 22	44
45	RCPT-005-FIRE CONSOLE 4C				20	1		500	2400		1	20				RCPT-146-CABINET 23	46
47	RCPT-005-FIRE CONSOLE 4D				20	1			500	2400	1	20				RCPT-146-CABINET 24	48
49	RCPT-017-TRAINING CONSOLE 1A				20	1	500	2400			1	20				RCPT-146-CABINET 25	50
51	RCPT-017-TRAINING CONSOLE 1B				20	1		500	2400		1	20				RCPT-146-CABINET 26	52
53	RCPT-017-TRAINING CONSOLE 1C				20	1			500	2400	1	20				RCPT-146-CABINET 27	54
55	RCPT-017-TRAINING CONSOLE 1D				20	1	500	2400			1	20				RCPT-146-CABINET 28	56
57	RCPT-017-TRAINING CONSOLE 1E				20	1		500	600		1	20				RCPT-146-WALL POWER A	58
59	RCPT-017-TRAINING CONSOLE 2A				20	1			500	700	1	20				RCPT-146-WALL POWER B	60
61	RCPT-017-TRAINING CONSOLE 2B				20	1	500	700			1	20				RCPT-146-WALL POWER C	62
63	RCPT-017-TRAINING CONSOLE 2C				20	1		500	1200		1	20				RCPT-146-SECURITY EQUIPMENT	64
65	RCPT-017-TRAINING CONSOLE 2D				20	1			500	1200	1	20				RCPT-156-AV RACK	66
67	RCPT-017-TRAINING CONSOLE 2E				20	1	500	0			1	20	--	--		SPARE	68
69	SPARE		--	--	20	1		0	0		1	20	--	--		SPARE	70
71	SPARE		--	--	20	1				0	0	1	20	--	--		SPARE	72
73	SPARE		--	--	20	1	0	0				1	20	--	--		SPARE	74
75	SPARE		--	--	20	1		0	0			1	20	--	--		SPARE	76
77	SPARE		--	--	20	1				0	0	1	20	--	--		SPARE	78
79	SPARE		--	--	20	1	0	0				1	20	--	--		SPARE	80
81	SPARE		--	--	20	1		0	0			1	20	--	--		SPARE	82
83	SPARE		--	--	20	1				0	0	1	20	--	--		SPARE	84
				TOTAL LOAD:			26900 VA		23200 VA		23300 VA							
				TOTAL AMPS:			224 A		193 A		194 A							
				LOAD BALANCE:			10.09%		-5.11%		-4.63%							

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
RECEPTACLES	73400 VA	56.81%	41700 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	73400 VA
TOTAL EST. DEMAND LOAD:	41700 VA
TOTAL CONN. CURRENT:	204 A
TOTAL EST. DEMAND CURRENT:	116 A

PANELBOARD: U02B

BUS AMPS: 400 A
MAIN SIZE/TYPE: 250A MCB
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: UPSB

AIC RATING: 10,000 AIC
FAULT CURRENT: 5,178 A
CUM. VOLT. DROP: 0.84%
MOUNTING: SURFACE
LOCATION: UPS 147

NOTE: PANELBOARDS U02A AND U02B ARE FULLY REDUNDANT. LOADS MAY BE ON U02A OR U02B BUT NOT BOTH.

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	RCPT-004-POLICE CONSOLE 1A				20	1	0	0		1	20				RCPT-146-CABINET 01	2
3	RCPT-004-POLICE CONSOLE 1D				20	1			0 0	1	20				RCPT-146-CABINET 02	4
5	RCPT-004-POLICE CONSOLE 2A				20	1			0 0	1	20				RCPT-146-CABINET 03	6
7	RCPT-004-POLICE CONSOLE 2B				20	1	0	0		1	20				RCPT-146-CABINET 04	8
9	RCPT-004-POLICE CONSOLE 2C				20	1			0 0	1	20				RCPT-146-CABINET 05	10
11	RCPT-004-POLICE CONSOLE 2D				20	1			0 0	1	20				RCPT-146-CABINET 06	12
13	RCPT-004-POLICE CONSOLE 3A				20	1	0	0		1	20				RCPT-146-CABINET 07	14
15	RCPT-004-POLICE CONSOLE 3B				20	1			0 0	1	20				RCPT-146-CABINET 08	16
17	RCPT-004-POLICE CONSOLE 3C				20	1			0 0	1	20				RCPT-146-CABINET 09	18
19	RCPT-004-POLICE CONSOLE 3D				20	1	0	0		1	20				RCPT-146-CABINET 10	20
21	RCPT-004-POLICE CONSOLE 4A				20	1			0 0	1	20				RCPT-146-RACK 11	22
23	RCPT-004-POLICE CONSOLE 4D				20	1			0 0	1	20				RCPT-146-RACK 12	24
25	RCPT-005-FIRE CONSOLE 1A				20	1	0	0		1	20				RCPT-146-RACK 13	26
27	RCPT-005-FIRE CONSOLE 1B				20	1			0 0	1	20				RCPT-146-RACK 14	28
29	RCPT-005-FIRE CONSOLE 1C				20	1			0 0	1	20				RCPT-146-RACK 15	30
31	RCPT-005-FIRE CONSOLE 1D				20	1	0	0		1	20				RCPT-146-RACK 16	32
33	RCPT-005-FIRE CONSOLE 2B				20	1			0 0	1	20				RCPT-146-RACK 17	34
35	RCPT-005-FIRE CONSOLE 2C				20	1			0 0	1	20				RCPT-146-RACK 18	36
37	RCPT-005-FIRE CONSOLE 3B				20	1	0	0		1	20				RCPT-146-CABINET 19	38
39	RCPT-005-FIRE CONSOLE 3C				20	1			0 0	1	20				RCPT-146-CABINET 20	40
41	RCPT-005-FIRE CONSOLE 4A				20	1			0 0	1	20				RCPT-146-CABINET 21	42
43	RCPT-005-FIRE CONSOLE 4B				20	1	0	0		1	20				RCPT-146-CABINET 22	44
45	RCPT-005-FIRE CONSOLE 4C				20	1			0 0	1	20				RCPT-146-CABINET 23	46
47	RCPT-005-FIRE CONSOLE 4D				20	1			0 0	1	20				RCPT-146-CABINET 24	48
49	RCPT-017-TRAINING CONSOLE 1A				20	1	0	0		1	20				RCPT-146-CABINET 25	50
51	RCPT-017-TRAINING CONSOLE 1B				20	1			0 0	1	20				RCPT-146-CABINET 26	52
53	RCPT-017-TRAINING CONSOLE 1C				20	1			0 0	1	20				RCPT-146-CABINET 27	54
55	RCPT-017-TRAINING CONSOLE 1D				20	1	0	0		1	20				RCPT-146-CABINET 28	56
57	RCPT-017-TRAINING CONSOLE 1E				20	1			0 0	1	20				RCPT-146-WALL POWER A	58
59	RCPT-017-TRAINING CONSOLE 2A				20	1			0 0	1	20				RCPT-146-WALL POWER B	60
61	RCPT-017-TRAINING CONSOLE 2B				20	1	0	0		1	20	--	--		SPARE	62
63	RCPT-017-TRAINING CONSOLE 2C				20	1			0 0	1	20				RCPT-146-SECURITY EQUIPMENT	64
65	RCPT-017-TRAINING CONSOLE 2D				20	1			0 0	1	20				RCPT-156-AV RACK	66
67	RCPT-017-TRAINING CONSOLE 2E				20	1	0	0		1	20	--	--		SPARE	68
69	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	70
71	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	72
73	SPARE		--	--	20	1	0	0		1	20	--	--		SPARE	74
75	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	76
77	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	78
79	SPARE		--	--	20	1	0	0		1	20	--	--		SPARE	80
81	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	82
83	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	84
			TOTAL LOAD:				0 VA		0 VA	0 VA						
			TOTAL AMPS:				0 A		0 A	0 A						
			LOAD BALANCE:													

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
RECEPTACLES	0 VA	0.00%	0 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	0 VA
TOTAL EST. DEMAND LOAD:	0 VA
TOTAL CONN. CURRENT:	0 A
TOTAL EST. DEMAND CURRENT:	0 A

PANELBOARD: N0S2B

BUS AMPS: 100 A
MAIN SIZE/TYPE: 100A MCB
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: T-N0S2

AIC RATING: 10,000 AIC
FAULT CURRENT: 3,995 A
CUM. VOLT. DROP: 1.48%
MOUNTING: SURFACE
LOCATION: ELEC. 021

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1							0	0		1	20	--	--		SPARE	2
3	SPD		--	--	30	3		0	0	1	20	--	--		SPARE	4
5									0 0	1	20	--	--		SPARE	6
7	RCPT-004-POLICE CONSOLE 1A				20	1	1200	1200			1	20				RCPT-005-FIRE CONSOLE 1A	8
9	RCPT-004-POLICE CONSOLE 1D				20	1		1200	1200		1	20				RCPT-005-FIRE CONSOLE 1B	10
11	RCPT-004-POLICE CONSOLE 2A				20	1			1200	1200	1	20				RCPT-005-FIRE CONSOLE 1C	12
13	RCPT-004-POLICE CONSOLE 2B				20	1	1200	1200			1	20				RCPT-005-FIRE CONSOLE 1D	14
15	RCPT-004-POLICE CONSOLE 2C				20	1		1200	1200		1	20				RCPT-005-FIRE CONSOLE 2B	16
17	RCPT-004-POLICE CONSOLE 2D				20	1			1200	1200	1	20				RCPT-005-FIRE CONSOLE 2C	18
19	RCPT-004-POLICE CONSOLE 3A				20	1	1200	1200			1	20				RCPT-005-FIRE CONSOLE 3B	20
21	RCPT-004-POLICE CONSOLE 3B				20	1		1200	1200		1	20				RCPT-005-FIRE CONSOLE 3C	22
23	RCPT-004-POLICE CONSOLE 3C				20	1			1200	1200	1	20				RCPT-005-FIRE CONSOLE 4A	24
25	RCPT-004-POLICE CONSOLE 3D				20	1	1200	1200			1	20				RCPT-005-FIRE CONSOLE 4B	26
27	RCPT-004-POLICE CONSOLE 4D				20	1		1200	1200		1	20				RCPT-005-FIRE CONSOLE 4C	28
29	RCPT-004-POLICE CONSOLE 4A				20	1			1200	1200	1	20				RCPT-005-FIRE CONSOLE 4D	30
31	RCPT-017-TRAINING CONSOLE 2A				20	1	1200	0			1	20	--	--		SPARE	32
33	RCPT-017-TRAINING CONSOLE 2B				20	1		1200	1200		1	20				RCPT-017-TRAINING CONSOLE 1A	34
35	RCPT-017-TRAINING CONSOLE 2C				20	1			1200	1200	1	20				RCPT-017-TRAINING CONSOLE 1B	36
37	RCPT-017-TRAINING CONSOLE 2D				20	1	1200	1200			1	20				RCPT-017-TRAINING CONSOLE 1C	38
39	RCPT-017-TRAINING CONSOLE 2E				20	1		1200	1200		1	20				RCPT-017-TRAINING CONSOLE 1D	40
41	SPARE		--	--	20	1			0	1200	1	20				RCPT-017-TRAINING CONSOLE 1E	42
				TOTAL LOAD:			13200 VA		14400 VA		13200 VA						
				TOTAL AMPS:			110 A		120 A		110 A						
				LOAD BALANCE:			-2.87%		5.96%		-2.87%						

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
RECEPTACLES	40800 VA	62.25%	25400 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	40800 VA
TOTAL EST. DEMAND LOAD:	25400 VA
TOTAL CONN. CURRENT:	113 A
TOTAL EST. DEMAND CURRENT:	71 A

PANELBOARD: N1N2

BUS AMPS: 225 A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: DS-N1N2

AIC RATING: 10,000 AIC
FAULT CURRENT: 2,945 A
CUM. VOLT. DROP: 3.43%
MOUNTING: SURFACE
LOCATION: VEHICLE BAY 201

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1							2160	4020								2
3	CU-V1		10	10	30	3		2160	4020	3	100	8	3		AHU-V1	4
5									2160	4020						6
7							2500	2500								8
9	UH-V1		10	10	30	3		2500	2500	3	30	10	10		UH-V2	10
11									2500	2500						12
13							2500	1100								14
15	UH-V3		10	10	30	3		2500	1100	3	15				UH-V4	16
17									2500	1100						18
19	LTG-BAYS & EXTERIOR				20	1	1263	180		1	20				RCPT-EXTERIOR	20
21	PWR-FUEL PUMP A				20	1		600	1080	1	20				RCPT-BAY A	22
23	PWR-FUEL PUMP B				20	1			600	540	1	20			RCPT-BAY B	24
25	PWR-FUEL PUMP C				20	2	520	540		1	20				RCPT-BAY C	26
27								520	0	1	20	--	--		SPARE	28
29	SPARE		--	--	20	1			0	0	1	20	--	--	SPARE	30
				TOTAL LOAD:			17283 VA		16980 VA	15920 VA						
				TOTAL AMPS:			145 A		143 A	133 A						
				LOAD BALANCE:			4.37%		2.56%	-4.76%						

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
COOLING	6480 VA	100.00%	6480 VA
HEATING	36600 VA	100.00%	36600 VA
LIGHTING	1263 VA	125.00%	1579 VA
MOTORS	1260 VA	100.00%	1260 VA
RECEPTACLES	2340 VA	100.00%	2340 VA
MISC EQUIP	2240 VA	100.00%	2240 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	50183 VA
TOTAL EST. DEMAND LOAD:	50499 VA
TOTAL CONN. CURRENT:	139 A
TOTAL EST. DEMAND CURRENT:	140 A

PANELBOARD: N0S2C

BUS AMPS: 60 A
MAIN SIZE/TYPE: MLO
VOLTS/PHASE: 208Y/120 V, 3PH, 4W
SUPPLIED BY: N0S2A

AIC RATING:
FAULT CURRENT: 1,268 A
CUM. VOLT. DROP: 1.98%
MOUNTING: SURFACE
LOCATION: ELEC. 040

CKT NO.	DESCRIPTION	NOTES	WIRE SIZE	GND SIZE	BKR AMP	P	A	B	C	P	BKR AMP	GND SIZE	WIRE SIZE	NOTES	DESCRIPTION	CKT NO.
1	RCPT-107-FIRE OPS CTR DISPLAYS				20	1	1440	360		1	20				RCPT-107-FIRE OPS 1	2
3	RCPT-107-FIRE OPS 2				20	1		360	360	1	20				RCPT-107-FIRE OPS 3	4
5	RCPT-107-FIRE OPS 4				20	1			540	540	1	20			RCPT-107-FIRE OPS 5	6
7	LTG-107-FIRE OPS CTR				20	1	160	0		1	20	--	--		SPARE	8
9	SPARE		--	--	20	1		0	0	1	20	--	--		SPARE	10
11	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	12
13	SPARE		--	--	20	1	0	0		1	20	--	--		SPARE	14
15	SPARE		--	--	20	1		0	0	1	20	--	--		SPARE	16
17	SPARE		--	--	20	1			0 0	1	20	--	--		SPARE	18
				TOTAL LOAD:			1960 VA		720 VA	1080 VA						
				TOTAL AMPS:			17 A		6 A	9 A						
				LOAD BALANCE:			60.92%		-42.51%	-9.34%						

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LIGHTING	160 VA	125.00%	200 VA
RECEPTACLES	3600 VA	100.00%	3600 VA

PANELBOARD GENERAL NOTES:
A. WIRE AND GROUND SIZE SHALL BE #12 UNLESS OTHERWISE NOTED.

PANELBOARD TOTALS	
TOTAL CONN. LOAD:	3760 VA
TOTAL EST. DEMAND LOAD:	3800 VA
TOTAL CONN. CURRENT:	10 A
TOTAL EST. DEMAND CURRENT:	11 A

PANELBOARD NOTES:
THIS IS A MASTER LIST THAT APPLIES TO ALL PANELBOARDS. NOT ALL NOTES MAY BE USED.

AF	ARC FAULT CIRCUIT INTERRUPTER (AFCI) BREAKER.
C#	ROUTE CIRCUIT THROUGH CONTACTOR #.
EM	EMERGENCY LIGHTING HANDLE ON CLAMP.
EX	EXISTING TO REMAIN.
FA	FIRE ALARM CIRCUIT. RED HANDLE, HANDLE ON CLAMP.
GF	GROUND FAULT CIRCUIT INTERRUPTER (GFCI) BREAKER.
HT#	PROVIDE HANDLE TIES TO COMPLY WITH NEC 210.4(B). # INDICATES GROUPING (I.E. GROUP 1 TOGETHER, ETC.).
LK	HANDLE PADLOCKABLE OFF DEVICE.
LO	HANDLE ON CLAMP.
NB	PROVIDE NEW BREAKER IN EXISTING PANELBOARD. AIC RATING OF NEW BREAKER SHALL MATCH THE PANELBOARD AIC RATING.
TB#	TANDEM 20A BREAKER. # INDICATES GROUPING.
OL	REFER TO ONE-LINE DIAGRAM FOR FEEDER INFORMATION.
RB	REUSE EXISTING BREAKER TO SERVE NEW LOAD.
SD	SPARE BREAKER AFTER DEMOLITION.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

JONATHON M. LEE — STATE OF MISSOURI — NUMBER PE-2021003162 — 10/30/2024 — PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

U02A	U02B
N0S2B	N1N2
NOS2C	

E-602

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

PANELBOARD SCHEDULES

LIGHTING CONTROLS SEQUENCE OF OPERATION

ROOM NAME	DESIGN ILLUMINANCE (FC)	NO AUTOMATIC CONTROL [A]	MANUAL ON/OFF CONTROL [B]	MANUAL ON/OFF/DIMMING CONTROL [C]	OCCUPANCY SENSOR, AUTO ON (100%) [D]	OCCUPANCY SENSOR, AUTO ON (50%) [E]	VACANCY SENSOR [F]	INT. DIMMING SCHEDULE CONTROLS [G]	EXT. DIMMING SCHEDULE CONTROLS [H]	EMERGENCY LIGHTING CONTROL [I]	OTHER NOTES
ALL SPACES (UNO)	30		●			●					
CONFERENCE ROOMS	50			●		●					
CORRIDORS, LOBBIES, VESTIBULES	20				●			●		●	
DISPATCH, DISPATCH TRAINING	30	●		●							
ELEC, IT, AND MECH ROOMS	30	●	●								
EOC	50			●		●			●		
EXTERIOR AREA, POLE-MOUNTED	1.5							●			1,4
EXTERIOR FACADE, SCONCES	N/A							●			2,4
EXTERIOR PLANTERS, WINDOWS	N/A							●			3,4
LOCKERS, RESTROOMS, TOILETS	10				●						
OPEN OFFICES	30		●		●						
SIMULATORS	30	●		●							

LIGHTING CONTROLS SEQUENCE OF OPERATION CONTROL NOTES :
A. **NO AUTOMATIC CONTROL**: NO AUTOMATIC CONTROL OF LIGHT FIXTURES PROVIDED DUE TO C405.2.2 EXCEPTION 1.
B. **MANUAL ON/OFF CONTROL**: MANUAL CONTROL LOCATED WITHIN THE SPACE FOR OCCUPANT ON/OFF LIGHTING CONTROL.
C. **MANUAL ON/OFF/DIMMING CONTROL**: MANUAL CONTROL LOCATED WITHIN THE SPACE FOR OCCUPANT ON, OFF, RAISE, AND LOWER LIGHTING CONTROL.
D. **OCCUPANCY SENSOR, AUTO ON (100%)**: UPON DETECTING OCCUPANCY, LIGHTS SHALL AUTOMATICALLY TURN ON AT FULL OUTPUT (ADJ), EITHER PER C405.2.1.1 EXCEPTION OR FOR OPEN OFFICES. UPON NOT DETECTING OCCUPANCY FOR 20 MINUTES, LIGHTS SHALL AUTOMATICALLY TURN OFF.
E. **OCCUPANCY SENSOR, AUTO ON (50%)**: UPON DETECTING OCCUPANCY, LIGHTS SHALL AUTOMATICALLY TURN ON AT 50% OUTPUT (ADJ, MAX 50%). UPON NOT DETECTING OCCUPANCY FOR 20 MINUTES, LIGHTS SHALL AUTOMATICALLY TURN OFF.
F. **VACANCY SENSOR**: LIGHTS SHALL NOT TURN ON AUTOMATICALLY. UPON NOT DETECTING OCCUPANCY FOR 20 MINUTES, LIGHTS SHALL AUTOMATICALLY TURN OFF.
G. **INTERIOR (INT.) DIMMING SCHEDULE CONTROLS**: LIGHT FIXTURES SHALL BE ON 24/7. DURING **DAYLIGHT HOURS**, LIGHTS SHALL BE ON AT 100% OUTPUT (ADJ). DURING **NIGHT HOURS**, LIGHTS SHALL DIM TO 75% OUTPUT (ADJ). DIMMING SHALL OCCUR OVER A 10-MINUTE (ADJ) INTERVAL.
H. **EXTERIOR (EXT.) DIMMING SCHEDULE CONTROLS**: DURING **DAYLIGHT HOURS**, LIGHTS SHALL BE OFF. DURING **EARLY NIGHT HOURS**, LIGHTS SHALL AUTOMATICALLY TURN ON TO 100% OUTPUT (ADJ). DURING **LATE NIGHT HOURS**, LIGHTS SHALL AUTOMATICALLY DIM TO LEVELS NOTED PER LEE'S SUMMIT UNIFIED DEVELOPMENT ORDINANCE 8.250(K). DIMMING SHALL OCCUR OVER A 10-MINUTE (ADJ) INTERVAL.
I. **EMERGENCY LIGHTING CONTROL**: UPON A LOSS OF NORMAL POWER (BROWNOUT OR BLACKOUT), LIGHTS DESIGNATED AS EMERGENCY SHALL TURN ON TO FULL OUTPUT UNTIL POWER IS FULLY RESTORED. UPON RESTORATION OF NORMAL POWER, NORMAL LIGHTING CONTROL SHALL RESUME. EMERGENCY POWER IS PROVIDED BY BATTERIES INTEGRAL TO LIGHT FIXTURES.

LIGHTING CONTROLS SEQUENCE OF OPERATION NOTES :
1. EXTERIOR AREA AND POLE-MOUNTED LIGHT FIXTURES SHALL DIM TO 65% OUTPUT (ADJ).
2. EXTERIOR FACADE SPOTLIGHTS AND SCONCES SHALL DIM TO 50% OUTPUT (ADJ).
3. EXTERIOR PLATER AND WINDOW WELL LIGHTS SHALL DIM TO 30% OUTPUT (ADJ).
4. TOTAL WATTAGE DIMMED VS UNDIMMED SHALL EQUAL 50% PER UDO 8.250(K).

LIGHTING CONTROLS SEQUENCE OF OPERATION SCHEDULES :
- **DAYLIGHT HOURS**: DAWN TO DUSK.
- **NIGHT HOURS**: DUSK TO DAWN.
- **EARLY NIGHT HOURS**: DUSK TO MIDNIGHT.
- **LATE NIGHT HOURS**: MIDNIGHT TO DAWN.

LIGHTING RELAY PANEL SCHEDULE

NAME: RP0
MANUFACTURER: ACUITY
MODEL: ARP INTENCO8 8FCR MVOLT 1VB HLK SM DTC
FEATURES: INTEGRAL TIME CLOCK, UL924 RATING, VOLTAGE BARRIER

RELAY No.	CKT & SWITCH ID	DESCRIPTION	DIMMING TYPE	CONTROL VOLTAGE	ON	OFF	DIM	EM	NOTES
1	N0S4-8, ra	EXTERIOR AREA LIGHTING	0-10V	277V	TC	TC	TC	NO	
2	N0S4-8, rb	EXTERIOR FACADE SPOTLIGHTS	0-10V	277V	TC	TC	N/A	NO	
3	N0S4-8, rc	EXTERIOR PLANTERS	0-10V	277V	TC	TC	TC	NO	
4	N0S4-8, rd	EXTERIOR SCONCES	0-10V	277V	TC	TC	TC	NO	
5	N0S4-8, re	EXTERIOR WINDOW WELLS	0-10V	277V	TC	TC	TC	NO	
6	N0S4-10, rf	DISPLAY CABINETS	0-10V	277V	N/A	N/A	TC	NO	
7	N0S4-10, rg	LOWER LEVEL CORRIDORS	0-10V	277V	N/A	N/A	TC	NO	
8	N0S4-10, rh	MAIN LEVEL CORRIDORS	0-10V	277V	N/A	N/A	TC	NO	
9	N0S4-10, rj	LOBBY UPLIGHT	0-10V	277V	N/A	N/A	TC	NO	
10	rk	SPARE	0-10V						
11	INV-2, rm	LOWER LEVEL EM LTG	0-10V	277V	N/A	N/A	TC	YES	
12	INV-3, rn	MAIN LEVEL EM LTG	0-10V	277V	N/A	N/A	TC	YES	
13	INV-3, ro	LOBBY UPLIGHT EM	0-10V	277V	N/A	N/A	TC	YES	
14	INV-4, rp	EXTERIOR EM	0-10V	277V	TC	TC	TC	YES	
15	rq	SPARE	0-10V					YES	
16	rs	SPARE	0-10V					YES	

GENERAL NOTES:
A. MANUFACTURER AND MODEL NUMBER LISTED ARE THE BASIS OF DESIGN. REFER TO SPECIFICATIONS FOR A LIST OF ALTERNATE MANUFACTURERS. ADDITIONAL MANUFACTURERS OF EQUAL QUALITY AND MEETING LISTED REQUIREMENTS AND SEQUENCE OF OPERATIONS MAY BE SUBMITTED FOR REVIEW. EQUIPMENT BID WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER ARE AT THE CONTRACTOR'S RISK.
B. RELAYS WITH MATCHING CONTROL ZONES SHALL BE CONTROLLED TOGETHER.
C. RELAYS WITH A CONTROL ZONE OF "N/A" SHALL BE CONTROLLED INDEPENDENTLY OF OTHER RELAYS.

DIMMING CODES:
0-10V 0-10V DIMMING
PH PHASE DIMMING
DMX DMX DIMMING CONTROL
RGB DMX DIMMING AND COLOR (RGB, RGBA, RGBW, ETC.) CONTROL

CONTROL CODES:
MC MANUAL CONTROL
OS OCCUPANCY SENSOR CONTROL
PC PHOTOCELL CONTROL
TC TIMECLOCK CONTROL
CR CIRCADIAN RHYTHM CONTROL
EM UL924 EMERGENCY LIGHTING OVERRIDE CONTROL (YES OR NO)

LIGHTING CONTROL DEVICE SCHEDULE

LABEL	MANUFACTURER	MODEL	APPROVED EQUIVALENT	DESCRIPTION	NOTES
LINE VOLTAGE DIMMERS					
D	LEVITON	DS710-10Z	ACUITY, HUBBEL, LUTRON	0-10V DIMMING SWITCH.	
LOW VOLTAGE SWITCHES					
LV	ACUITY nLIGHT	nPODMA	ETC NX CONTROLS WATTSTOPPER	LOW VOLTAGE WALL SWITCH WITH ON/OFF BUTTONS AND INDICATOR LIGHT.	1
LVD	ACUITY nLIGHT	nPODMA DX	ETC NX CONTROLS WATTSTOPPER	LOW VOLTAGE SWITCH WITH ON/OFF, RAISE, AND LOWER BUTTONS AND INDICATOR LIGHTS.	1
OCCUPANCY SENSORS					
OA	ACUITY nLIGHT	rCM PDT 10 RJB	ETC NX CONTROLS WATTSTOPPER	DUAL TECHNOLOGY, LOW VOLTAGE CEILING OCCUPANCY SENSOR.	1
RELAYS					
RA	ACUITY nLIGHT	nPP16	ETC NX CONTROLS WATTSTOPPER	ON/OFF ROOM CONTROLLER.	1
RD	ACUITY nLIGHT	nPP16 D	ETC NX CONTROLS WATTSTOPPER	0-10V DIMMING ROOM CONTROLLER.	1
RE	ACUITY nLIGHT	nPP16 D ER	ETC NX CONTROLS WATTSTOPPER	UL924 ROOM CONTROLLER WITH 0-10V DIMMING OVERRIDE.	1
WALL SWITCH OCCUPANCY SENSORS					
OS	ACUITY nLIGHT	nWSX PDT LV		DUAL TECHNOLOGYH OCCUPANCY SENSOR WITH INTEGRAL ON/OFF SWITCH.	1
OSD	ACUITY nLIGHT	nWSX PDT D	ETC NX CONTROLS WATTSTOPPER	DUAL TECHNOLIGY OCCUPANCY SENSOR WITH RAISE/LOWER BUTTONS.	1

LIGHTING CONTROL DEVICE SCHEDULE GENERAL NOTES:
A. PROVIDE CONTROL DEVICES FROM THE LIST OF MANUFACTURERS AND MODELS OR APPROVED EQUIVALENTS. ADDITIONAL CONTROLS SHALL ONLY BE ACCEPTED IF SUBMITTED WITH AN APPROVED SUBSTITUTION FORM. LIGHTING CONTROLS BID WITHOUT BEING LISTED AS AN APPROVED EQUIVALENT AND WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER ARE AT THE CONTRACTOR'S RISK.
B. ADJUST SENSOR SETTINGS AND LOCATIONS FOR PROPER LIGHTING CONTROL.
C. CEILING MOUNTED OCCUPANCY SENSORS SHALL NOT BE INSTALLED WITHIN FOUR FEET OF DIFFUSERS, CEILING MOUNTED PROJECTORS, OR OTHER CEILING-MOUNTED OBSTRUCTIONS.
D. COORDINATE ALL SETTINGS, PROGRAMMING, AND SENSOR LOCATIONS WITH OWNER PRIOR TO SUBSTANTIAL COMPLETION. CONTROLS SHALL BE TESTED AND FULLY COMMISSIONED.

LIGHTING CONTROL DEVICE SCHEDULE NOTES:
1. DEVICES SHALL BE BY A SINGLE MANUFACTURER AND COMPATIBLE AS A SYSTEM.

INVERTER: INV

MANUFACTURER: IOTA
MODEL: IISCN 8000 277IN 277OUT 90M
VOLTS/PHASE IN: 277 V
VOLTS/PHASE OUT: 277 V
WATTAGE: 8 KW

AIC RATING: 65,000 AIC
FAULT CURRENT: 0 A
SUPPLIED BY: N0S4
MOUNTING: SURFACE
LOCATION: ELEC. 021

ACCESSORIES & OPTIONS
BYPASS, BACNET

CKT	DESCRIPTION	NO. POLES	TRIP RATING	WIRE SIZE	GND SIZE	LOAD	NOTES
1	LTG-MAIN ELECTRICAL (021)	1	20 A			70	
2	LTG-LOWER LEVEL EM	1	20 A			1566	
3	LTG-MAIN LEVEL EM	1	20 A			2316	
4	LTG-EXTERIOR EM	1	20 A			703	
5	SPARE	1	20 A	--	--	0	
6	SPARE	1	20 A	--	--	0	
7	SPARE	1	20 A	--	--	0	
8	SPARE	1	20 A	--	--	0	
					TOTAL LOAD:	4655 VA	
					TOTAL AMPS:	17 A	

LOAD CLASSIFICATION	CONN. LOAD	DEMAND FACTOR	ESTIMATED DEMAND
LIGHTING	4655 VA	125.00%	5818 VA

INVERTER GENERAL NOTES:
A. WIRE & GND SIZE TO BE #12 UNLESS OTHERWISE NOTED.
B. REFER TO SPECIFICATIONS FOR ALTERNATE MANUFACTURERS.

INVERTER TOTALS	
TOTAL CONN. LOAD:	4655 VA
TOTAL EST. DEMAND:	5818 VA
TOTAL CONN. CURRENT:	17 A
TOTAL EST. DEMAND CURRENT:	21 A

FLOOR BOX / POKE-THRU SCHEDULE

TYPE	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	NUMBER OF COMPARTMENTS	NUMBER OF DUPLEX RECEPTACLES	NUMBER OF DATA KNOCKOUTS	COVER	ACCESSORIES	DESCRIPTION	NOTES
FA	LEGRAND	EFB45S-OG	4	2	2	EFB45BTC##TR	EFB8-MB	ON GRADE FLOOR BOX. SURFACE STYLE COVER WITH SOLID LID.	1,2
PA	LEGRAND	6ATCSP	2	2	2	6AT2PPCR##	EFB8-MB	FIRE RATED POKE-THRU. PRE-WIRED DUPLEX RECEPTACLE OUTLETS AND CENTER BRACKET FOR DATA.	1
PB	LEGRAND	6ATCFF	2	0	0	6CFFTCFF##	5PTHA, 12FFHA, 575CHA	FIRE RATED POKE-THRU. FURNITURE FEED COVER.	1,2
RA	LEGRAND	AF2KC2111PA	4	2	2	N/A	N/A	RAISED FLOOR BOX. FLUSH STYLE COVER WITH CARPET LID INSERT.	1,2,3
RB	LEGRAND	NCW111AL_M	0	0	0	N/A	N/A	FURNITURE POWER WHIP FROM RAISED FLOOR.	1,2,3

FLOOR BOX / POKE-THRU SCHEDULE GENERAL NOTES :
A. FLOOR BOXES / POKE-THRUs LISTED ARE THE BASIS OF DESIGN. ADDITIONAL DEVICES OF EQUAL QUALITY AND MEETING LISTED REQUIREMENTS MAY BE SUBMITTED FOR REVIEW. CONTROL DEVICES BID WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER ARE AT THE CONTRACTOR'S RISK.
B. DATA KNOCKOUTS REFERS TO THE MAXIMUM NUMBER OF DATA OUTLETS THAT MAY BE INSTALLED IN THE BRACKET. DATA OUTLETS AND CABLING PROVIDED BY OTHERS UNLESS OTHERWISE NOTED.
C. COORDINATE FINAL, DIMENSIONED, LOCATIONS OF FLOOR BOXES / POKE-THRUs WITH ARCHITECT PRIOR TO CUTTING OR CORING.

FLOOR BOX / POKE-THRU SCHEDULE NOTES :
1. VERIFY COVER FINISH WITH ARCHITECT, COORDINATE COLOR WITH FLOOR COVERINGS IN AREA WHERE BOXES ARE INSTALLED.
2. COORDINATE EXACT A/V BRACKET WITH A/V VENDOR PRIOR TO ORDERING.
3. PROVIDE WITH MODULAR RAISED FLOOR WIRING SYSTEM. REFER TO DRAWINGS FOR ADDITIONAL INFORMATION.

LIGHT FIXTURE SCHEDULE

TAG	MANUFACTURER	MODEL	APPROVED EQUIVALENT	LIGHT SOURCE	DRIVER	LUMENS	CCT	VOLTAGE	INPUT VA	DESCRIPTION	NOTES
EXTERIOR LIGHT FIXTURES											
EX4	LITHONIA	WLTC 1 R CW	EVENLITE TWLCOM, MULE CWL	LED				277 V	5 VA	EXTERIOR RATED LED EXIT SIGN WITH EXIT LIGHTS AND COLD WEATHER BATTERY. REFER TO DRAWINGS FOR NUMBER AND DIRECTION OF CHEVRONS.	
JS1	A-LIGHT	LIN 3 SP M_ LS 30 CRI U HE F B D	AXIS EX2S, BARTCO LIGHTING BSW208, LSI LAW2	LED	0-10V	400 lm	3000 K	277 V	5 VA	SURFACE MOUNTED LINEAR LED. EXTERIOR AND VERTICAL RATED. BLACK FINISH.	1,2
JS3	LUMINII	LL42WET-T-SO-30K-SL68, KXL-F CHANNEL, PS010V-96-24-LOG	DIODELED DI24VVL2, KELVIX UNI3, TIVOLI TPLFS	LED	0-10V	119 lm	3000 K	277 V	1 VA	IP68-RATED LED TAPE WITH FROSTED LENSED CHANNEL. EXTERIOR RATED. PROVIDE WITH POWER SUPPLY SIZED FOR TOTAL LENGTH.	1,2
SA1	LUMINIS	EC803-L1W30R1-R5-277V-BKT-K3-ECM 4T	ARCHITECTURAL AREA LIGHTING SLD2, HEPER TERRA, SOLERA OTAY	LED	0-10V	3700 lm	3000 K	277 V	38 VA	POST TOP LED FIXTURE WITH DECORATIVE TOP COVER. EXTERIOR RATED. PROVIDE WITH 10'-0" TALL, 4" DIAMETER ROUND POLE. BLACK FINISH.	
SB1	LUMINIS	LQ627-L1L10-R5-277V-BKT-K3	BEGA B84063, HEPER NORMA, SOLERA SSQB	LED	0-10V	1200 lm	3000 K	277 V	13 VA	SQUARE LED BOLLARD. EXTERIOR RATED. 6" SQUARE BY 42" TALL. BLACK FINISH.	
SF1	ERCO	35702.023	HEPER VEGA, LUMENPULSE LQS, TARGETTI DAM	LED	0-10V	2000 lm	3000 K	277 V	19 VA	SURFACE MOUNTED LED WALL WASH FLOOD. EXTERIOR RATED. BLACK FINISH.	
SF2	ERCO	35174.023	GRIVEN MOON, HEPER ZEROX S HYBRID, TARGETTI KPL	LED	0-10V	950 lm	3000 K	277 V	8 VA	AIMABLE LED WELL LIGHT. NARROW SPOT. EXTERIOR RATED. BLACK FINISH.	
SP1	LITHONIA	DSX1-P2-30K-T4M-MVOLT-SPA-NLTAIR 2-PIRH-DBLXD-G1	BEACON VP, COOPER GALN, LSI MRM	LED	WIRELESS	8000 lm	3000 K	277 V	70 VA	RECTANGULAR LED AREA LIGHT. EXTERIOR RATED. TYPE 4 DISTRIBUTION. BLACK FINISH. PROVIDE WITH 6" WIDE SQUARE POLE. POLE HEIGHT, INCLUDING CONCRETE BASE, SHALL NOT EXCEED 15'-0" OR 20'-0" AFG (RE:ES101). WIRELESS CONTROLS FOR AUTOMATIC DIMMING.	
SP1B	LITHONIA	DSX1-P1-30K-T4M-MVOLT-SPA-NLTAIR 2-PIR-HS-DBLXD-G1	BEACON VP, COOPER GALN, LSI MRM	LED	WIRELESS	6000 lm	3000 K	277 V	54 VA	SIMILAR TO TYPE SP1, EXCEPT LOWER LUMEN PACKAGE AND HOUSE SIDE SHIELD.	
SP1C	LITHONIA	DSX1-P1-30K-TFTM-MVOLT-SPA-NLTAIR2-PIR-HS-DBLXD-G1	BEACON VP, COOPER GALN, LSI MRM	LED	WIRELESS	6000 lm	3000 K	277 V	54 VA	SIMILAR TO TYPE SP1, EXCEPT LOWER LUMEN PACKAGE, TYPE FORWARD THROW DISTRIBUTION, AND HOUSE SIDE SHIELD.	
SP2	LITHONIA	DSX1-P2-30K-T4M-MVOLT-SPA-NLTAIR 2-PIRH-DBLXD-G1	BEACON VP, COOPER GALN, LSI MRM	LED	WIRELESS	16000 lm	3000 K	277 V	140 VA	SIMILAR TO TYPE SP1, EXCEPT WITH (2) HEADS AT 180 DEGREES ON THE SAME POLE.	
SW1	CAMMAN LIGHTING	OW610-60-30K-CLV-MV-PSB	LIGHTWAY BLCW, SOLERA SLIM	LED	0-10V	4400 lm	3000 K	277 V	50 VA	VERTICAL WALL SCONCE WITH FLAT METAL BODY. EXTERIOR RATED. BLACK FINISH.	
SW2	LITHONIA	WDGE2 LED P2 30K 90CRI VW MVOLT SRM DMG DBLXD	BEACON VPW1, LSI XWS SIL, SPITZER LIGHTING WPFP	LED	0-10V	2000 lm	3000 K	277 V	15 VA	LED EXTERIOR WALL PACK. BLACK FINISH.	
SW3	LITHONIA	WDGE2 LED P2 30K 90CRI VW MVOLT SRM PE DMG DBLXD	BEACON VPW1, LSI XWS SIL, SPITZER LIGHTING WPFP	LED	0-10V	2000 lm	3000 K	120 V	15 VA	SIMILAR TO TYPE SW2, EXCEPT WITH INTEGRAL PHOTOCELL FOR ON/OFF CONTROL.	
INTERIOR LIGHT FIXTURES											
DR1	GOTHAM	IVO4S D 15LM 35K 90CRI MD MIN1 MVOLT ZT NCH P AR LSS F	INTENSE LIGHTING LD4, PRESCOLITE LFR-4RDS, WILLIAMS 4PR	LED	0-10V	1500 lm	3500 K	277 V	16 VA	ROUND 4" LED DOWNLIGHT. CLEAR SEMI SPECULAR REFLECTOR AND TRIM.	
DR2	GOTHAM	EVO4SH 35/15 DFR SOL MVOLT EZ1 90CRI	ALPHABEIT NU4, INTENSE LIGHTING LD4, WILLIAMS 4PR	LED	0-10V	1500 lm	3500 K	277 V	14 VA	SIMILAR TO TYPE DR1, EXCEPT RATED FOR SHOWERS.	
EX1	LITHONIA	EDGR 1 R EL	DUAL-LITE LE, LSL LSX, MULE CEL	LED				277 V	5 VA	EDGE LIT LED EXIT SIGN WITH RED LETTERS ON A MIRROR PANEL. INTEGRAL BATTERY POWER.TOP MOUNTED TO CEILING ABOVE AND CENTERED ABOVE DOOR. REFER TO DRAWINGS FOR NUMBER AND DIRECTION OF CHEVRONS.	
EX2	LITHONIA	EDG 2 RMR EL	DUAL-LITE LES, LSL LSX, MULE CEL	LED				277 V	5 VA	EDGE LIT LED EXIT SIGN WITH RED LETTERS ON A MIRROR PANEL. INTEGRAL BATTERY POWER. SIDE MOUNTED TO WALL. REFER TO DRAWINGS FOR NUMBER AND DIRECTION OF CHEVRONS.	
EX3	LITHONIA	EDG 1 R EL	DUAL-LITE LES, LSL LSX, MULE CEL	LED				277 V	5 VA	EDGE LIT LED EXIT SIGN WITH RED LETTERS ON A MIRROR PANEL. INTEGRAL BATTERY POWER. BACK MOUNTED TO WALL ABOVE AND CENTERED ABOVE DOOR. REFER TO DRAWINGS FOR NUMBER AND DIRECTION OF CHEVRONS.	
GP1	ALW	MR3 D5 SS HI 90 3500K V00 LENS MIN 90 3500K V00 N SB UNV N N	BASO CIRCLE 2.5, GLIGHTING GL-2308, LUMENWERX CURV3RIP, OCL SL1	LED	0-10V	17700 lm	3500 K	277 V	183 VA	5 FOOT RADIUS, CIRCULAR DECORATIVE PENDANT. SEPARATE CONTROLS FOR DIRECT AND INDIRECT. BLACK FINISH.	
GP2	ALW	MR3 D4 SS HI 90 3500K V00 LENS MIN 90 3500K V00 N SB UNV N N	BASO CIRCLE 2.5, GLIGHTING GL-2307, LUMENWERX CURV3RIP, OCL SL1	LED	0-10V	14200 lm	3500 K	277 V	145 VA	SIMILAR TO TYPE GP1, EXCEPT 4 FOOT RADIUS.	
IS1	LITHONIA	CSS L48 4000LM MVOLT 35K 80CRI	COLUMBIA MPS, SIGNIFY SDS, WILLIAMS FS	LED	0-10V	4000 lm	3500 K	277 V	35 VA	4 FOOT SURFACE MOUNTED STRIPLIGHT WITH LENS.	
IS2	LITHONIA	CSVT L48 5000LM MVOLT 35K 80CRI	COLUMBIA LXEM, DAY-BRITE V3W, WILLIAMS 96	LED	NON-DIM	5000 lm	3500 K	MVOLT	42 VA	4 FOOT VAPORTIGHT STRIPLIGHT WITH LENS.	
JS2	LUMINII	LL42-SO-35K-SL, K45V-F CHANNEL, PS010V-96-24-LOG	DIODELED DI24VBLBSC1, KELVIX UNI3, TIVOLI TPLE	LED	0-10V	100 lm	3500 K	277 V	1 VA	TAPE LIGHT WITH 45 DEGREE FROSTED LENSED CHANNEL. PROVIDE WITH POWER SUPPLY SIZED FOR TOTAL LENGTH.	1,2
LP1	CORONET	LS1 SHARP UPDN XX 35 MED MED UNV DB W AC AVI BAT WFL NA DC SJ-WHT	AXIS TB2DILED, NULITE LP13-B, SIGNIFY TM0	LED	0-10V	1200 lm	3500 K	277 V	14 VA	SUSPENDED LINEAR LED WITH 2" APERTURE AND LOUVERS FOR CUTOFF. SEPARATE CONTROLS FOR DIRECT AND INDIRECT. WHITE FINISH.	1,2
LP2	CORONET	LS3 XX 35 HIGH UNV DB W AC FL NA NA SJ-WHT	AXIS TB3DLED, LUX ILLUMINAIRE EOS 3.0m-P-D, NULITE RP44	LED	0-10V	800 lm	3500 K	277 V	8 VA	SUSPENDED LINEAR LED WITH 3" APERTURE. WHITE FINISH.	1,2
LR1	ALW	SP4R/PR3 MUD S__ MIN 90 3500K V01 CR/ASY SW	AXIS BBPRLED, LEDALITE 3901L, LUMENWERX VIA4R	LED	0-10V	350 lm	3500 K	277 V	3 VA	RECESSED LED PERIMETER LINEAR WITH ASYMMETRIC OUTPUT. AIM ASYMMETRIC OUTPUT OUT FROM WALL.	1,2
LR2	CORONET	LS1R SHARP XX 35 MED MED UNV DB W W NT WFL NA NA NA	LEDALITE TM0, NULITE LM1-D	LED	0-10V	609 lm	3500 K	277 V	7 VA	RECESSED LINEAR LED WITH 2" APERTURE AND LOUVERS FOR CUTOFF. WHITE FINISH	1,2
LW1	LUMINII	RUNW 48" 60X2HO 35K F 6 WN	OCL DA1	LED	0-10V	400 lm	3500 K	277 V	7 VA	WALL MOUNTED AIMABLE SIGN LIGHT. BRUSHED NICKEL FINISH. 6" STAND OFFS.	1,2
TR1	LITHONIA	2ALL4 48L EZ1 LP835	COLUMBIA LCAT24-S, FINELITE HPR, PINNACLE TR24, SIGNIFY FFX	LED	0-10V	4750 lm	3500 K	MVOLT	40 VA	RECESSED LED 2x4 TROFFER WITH CENTER ACRYLIC LENS.	
U1	SSL	UNLE 2 35K WH TDE-WH UN100i	AXIS BCUC, SSL LINC, VODE LIGHTING 707-Z2	LED	0-10V	600 lm	3500 K	277 V	12 VA	LED UNDERCABINET LIGHT FIXTURE WITH INTEGRAL ON/OFF SWITCH. 24" LONG. PROVIDE ALL ACCESSORIES NECESSARY FOR A COMPLETE AND FUNCTIONAL INSTALLATION.	
WS1	LITHONIA	WL4 30L EZ1 LP835 MSD7 DIM1 EL7L	COLUMBIA MPS, SIGNIFY FLP, WILLIAMS SLF	LED	NON-DIM	3000 lm	3500 K	277 V	28 VA	SURFACE MOUNTED LED STRIP FIXTURE FOR STAIRWELL LIGHTING. INTEGRAL OCCUPANCY SENSOR. LIGHT FIXTURE SHALL DIM TO 10% WHEN NO OCCUPANCY DETECTED BUT SHALL NOT TURN OFF. INTEGRAL EMERGENCY BATTERY.	
WS2	ASL	VBOM-22-18-DV-3CCT-BRUSHED NICKEL	DALS LEDVAN003, VISUAL COMFORT & CO 700BCBAU	LED	0-10V	1400 lm	3500 K	277 V	18 VA	HORIZONTAL WALL SCONCE WITH FLAT METAL BODY. NICKEL FINISH.	
WS3	CAMMAN LIGHTING	OW610-36-35K-CLV-MV-PNL	LIGHTWAY BLCW, OCL IL1, SOLERA SLIM	LED	0-10V	2400 lm	3500 K	277 V	30 VA	VERTICAL WALL SCONCE WITH FLAT METAL BODY. NICKEL FINISH.	

LIGHT FIXTURE SCHEDULE GENERAL NOTES:
A. PROVIDE LIGHT FIXTURES FROM THE LIST OF MANUFACTURERS AND MODELS OR APPROVED EQUIVALENTS. ADDITIONAL LIGHT FIXTURES SHALL ONLY BE ACCEPTED IF SUBMITTED WITH AN APPROVED SUBSTITUTION FORM. LIGHT FIXTURES BID WITHOUT BEING LISTED AS AN APPROVED EQUIVALENT AND WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER ARE AT THE CONTRACTOR'S RISK.
B. PROVIDE ALL MOUNTING AND SUPPORT HARDWARE AS REQUIRED PER THE MANUFACTURER INSTALLATION REQUIREMENTS AND TO MEET SPECIFIED MOUNTING HEIGHTS.
C. PROVIDE UNSWITCHED HOT CONDUCTOR TO ALL LIGHT FIXTURES AND EXIT SIGNS WITH EMERGENCY BATTERY BACK-UP POWER.
D. FINAL LIGHT FIXTURE FINISHES SHALL BE CONFIRMED BY ARCHITECT PRIOR TO ORDERING.

LIGHT FIXTURE SCHEDULE NOTES:
1. LUMENS AND VA ARE PER FOOT.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LENGTH.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
11/18/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

E-621

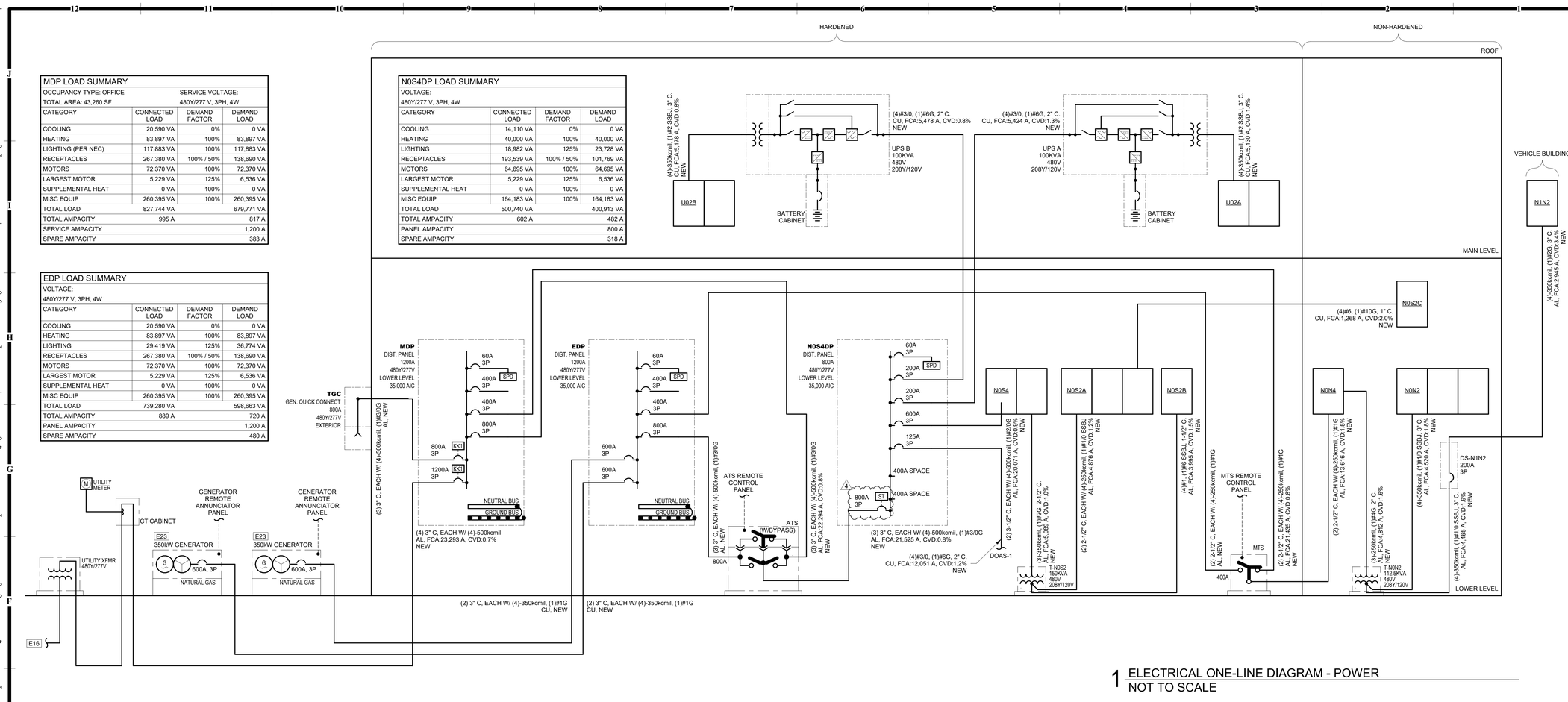
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL SCHEDULES

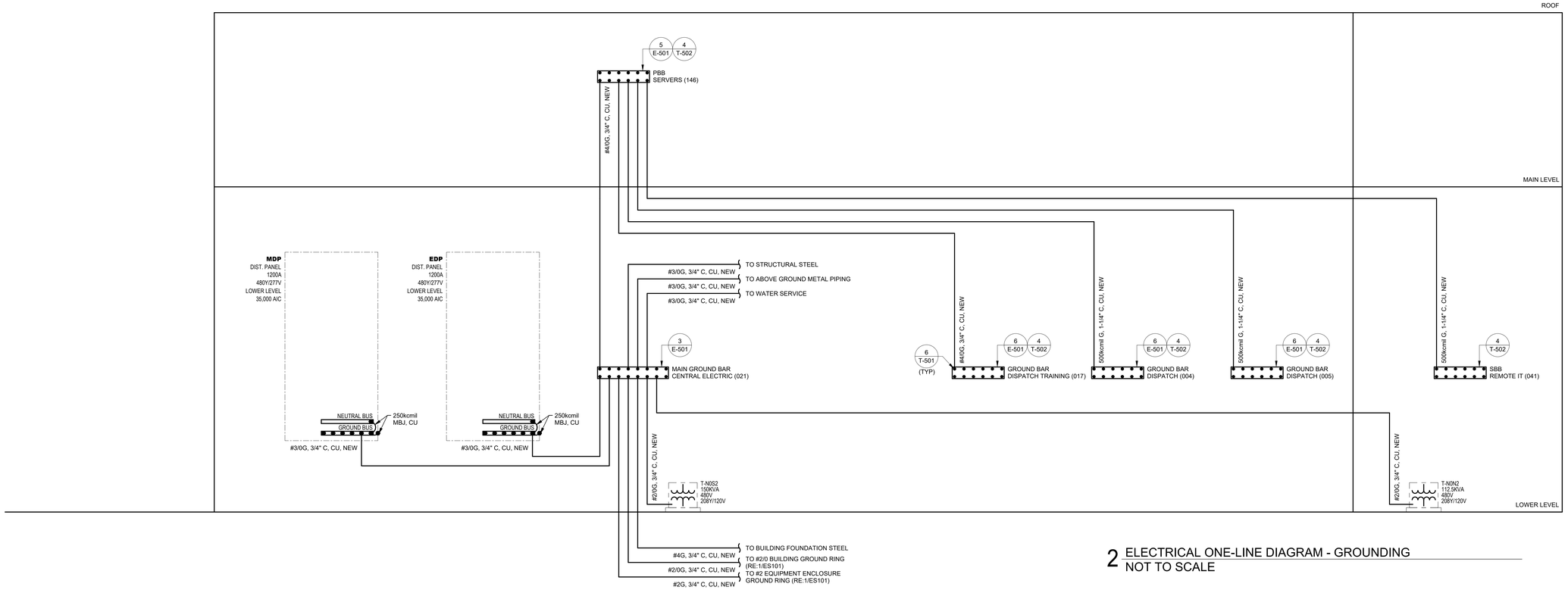
MDP LOAD SUMMARY			
OCCUPANCY TYPE: OFFICE		SERVICE VOLTAGE:	
TOTAL AREA: 43,260 SF		480Y/277 V, 3PH, 4W	
CATEGORY	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
COOLING	20,590 VA	0%	0 VA
HEATING	83,897 VA	100%	83,897 VA
LIGHTING (PER NEC)	117,883 VA	100%	117,883 VA
RECEPTACLES	287,380 VA	100% / 50%	138,690 VA
MOTORS	72,370 VA	100%	72,370 VA
LARGEST MOTOR	5,229 VA	125%	6,536 VA
SUPPLEMENTAL HEAT	0 VA	100%	0 VA
MISC EQUIP	260,395 VA	100%	260,395 VA
TOTAL LOAD	827,744 VA		679,771 VA
TOTAL AMPACITY	995 A		817 A
SERVICE AMPACITY			1,200 A
SPARE AMPACITY			383 A

EDP LOAD SUMMARY			
VOLTAGE:			
480Y/277 V, 3PH, 4W			
CATEGORY	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
COOLING	20,590 VA	0%	0 VA
HEATING	83,897 VA	100%	83,897 VA
LIGHTING	29,419 VA	125%	36,774 VA
RECEPTACLES	267,380 VA	100% / 50%	138,690 VA
MOTORS	72,370 VA	100%	72,370 VA
LARGEST MOTOR	5,229 VA	125%	6,536 VA
SUPPLEMENTAL HEAT	0 VA	100%	0 VA
MISC EQUIP	260,395 VA	100%	260,395 VA
TOTAL LOAD	739,280 VA		598,663 VA
TOTAL AMPACITY	889 A		720 A
PANEL AMPACITY			1,200 A
SPARE AMPACITY			480 A

N0S4DP LOAD SUMMARY			
VOLTAGE:			
480Y/277 V, 3PH, 4W			
CATEGORY	CONNECTED LOAD	DEMAND FACTOR	DEMAND LOAD
COOLING	14,110 VA	0%	0 VA
HEATING	40,000 VA	100%	40,000 VA
LIGHTING	18,982 VA	125%	23,728 VA
RECEPTACLES	193,539 VA	100% / 50%	101,769 VA
MOTORS	64,695 VA	100%	64,695 VA
LARGEST MOTOR	5,229 VA	125%	6,536 VA
SUPPLEMENTAL HEAT	0 VA	100%	0 VA
MISC EQUIP	164,183 VA	100%	164,183 VA
TOTAL LOAD	500,740 VA		400,913 VA
TOTAL AMPACITY	602 A		482 A
PANEL AMPACITY			800 A
SPARE AMPACITY			318 A



1 ELECTRICAL ONE-LINE DIAGRAM - POWER
NOT TO SCALE



2 ELECTRICAL ONE-LINE DIAGRAM - GROUNDING
NOT TO SCALE

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

E16 CONDUIT(S) FROM EVERGY PRIMARY. COORDINATE EXACT SIZE, NUMBER, AND ROUTE OF CONDUITS WITH EVERGY PRIOR TO INSTALLATION. CONDUIT(S) AND TRANSFORMER PAD PROVIDED BY CONTRACTOR. CONDUCTORS AND TRANSFORMER PROVIDED BY EVERGY.

E23 PROVIDE GENERATORS WITH MASTERLESS PARALLELING CONTROLS. REFER TO SPECIFICATIONS FOR GENERATOR SEQUENCE OF OPERATIONS.

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

4	ADDENDUM #4	11/26/2024

JONATHON M. LEE — STATE OF MISSOURI — NUMBER PE-2021003162 — 11/25/2024 — REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

E-641

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL ONE-LINE DIAGRAM

TECHNOLOGY SYMBOLS

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBREVIATIONS ARE USED.

STANDARD MOUNTING HEIGHTS

TELECOM BACKBOARD	100"
LADDER RACK IN TELECOM ROOMS	90"
TELEPHONE WALL OUTLET	48"
TELEPHONE, DATA OUTLET	SAME AS ADJACENT DEVICE, UNO
TELEVISION OUTLETS	REFER TO ARCH DRAWINGS
PBB/SBB	98"
WALL CLOCK	84"
INTERCOM	48"
CARD READER	48"

USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DOCUMENTS. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR OR ABOVE FINISHED GRADE TO TOP OF OUTLET BOX. ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.

ABBREVIATIONS

A	AMPERES
AC	ABOVE COUNTER
ACP	ACCESS CONTROL PANEL
ADA	AMERICANS WITH DISABILITIES ACT
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ACCESS POINT
AV	AUDIO-VIDEO
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BD	BUILDING DISTRIBUTOR
BDF	BUILDING DISTRIBUTION FRAME
BFC	BELOW FINISHED CEILING
BR	BIOMETRIC READER
C	CONDUIT
CC	CENTRAL CONTROL DOOR CONTROL SYSTEM
CAT	CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
CD	CAMPUS DISTRIBUTOR
CMP	COMMUNICATIONS PLENUM JACKET
CMR	COMMUNICATIONS RISER JACKET
DAS	DISTRIBUTED ANTENNA SYSTEM
dB	DECIBELS
DCS	DOOR CONTROL SYSTEM
DEMO	DEMOLITION
DSP	DIGITAL VIDEO RECORDER
DVR	DIGITAL VIDEO RECORDER
(E)	EXISTING
EC	ELECTRICAL CONTRACTOR
ECIA	ELECTRONIC COMPONENTS INDUSTRY ASSOCIATION
EMI	ELECTROMAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
ER	EQUIPMENT ROOM
ETR	EXISTING TO REMAIN
F	DOOR FRAME MOUNTED DEVICE
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FD	FLOOR DISTRIBUTOR
FMC	FLEXIBLE METAL CONDUIT
FOR	FIBER OPTIC RACK
FS	FIRE STOP SYSTEM
FLR	FLOOR
F/UTP	SCREEN TWISTED PAIR (SHIELDED)
GC	GENERAL CONTRACTOR
GE	GROUNDING EQUALIZER
GT	GUARD TOUR CARD READER
GYP	GYPSUM BOARD
HC	HORIZONTAL CROSS-CONNECT
HCM	HORIZONTAL CABLE MANAGER
HH	HAND HOLE
Hz	HERTZ
ICS	INTERCOM CONTROL SYSTEM
IMC	INTERMEDIATE METAL CONDUIT
IP	INTERNET PROTOCOL
ISP	INTERNET SERVICE PROVIDER
ISP	INSIDE PLANT CABLE
K	ELECTRICALLY OPERATED BY KEY
KP	KEY PAD
KVM	KEYBOARD VIDEO MOUSE SWITCH
JB	JUNCTION BOX
J-BOX	JUNCTION BOX
LAN	LOCAL AREA NETWORK
LCC	LIMITED COMBUSTIBLE CABLE
LEC	LOCAL EXCHANGE CARRIER
LED	LIGHT-EMITTING DIODE
LF	LINEAR FEET
MAN	METROPOLITAN AREA NETWORK
MATV	MASTER ANTENNA TELEVISION
MBS	MAINTENANCE BYPASS SWITCH
MC	MAIN CROSS-CONNECT
MDF	MAIN DISTRIBUTION FRAME
MFR	MANUFACTURER
MH	MAINTENANCE HOLE
MM	MULTIMODE
MPOE	MAIN POINT OF ENTRANCE
MPOP	MAIN POINT OF PRESENCE
MTD	MOUNTED
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCATION
NIC	NOT IN CONTRACT
nm	NANOMETER
NRTL	NATIONALLY RECOGNIZED TESTING LAB
NVR	NETWORK VIDEO RECORDER
OC	ON CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OSP	OUTSIDE PLANT
PBB	PRIMARY BONDING BUSBAR
PBX	PRIVATE BRANCH EXCHANGE
POE	POWER OVER ETHERNET
PON	PASSIVE OPTICAL NETWORK
POTS	PLAIN OLD TELEPHONE SERVICE
PSTN	PUBLIC SWITCHED TELEPHONE NETWORK
QTY	QUANTITY
RCDD	REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
RMC	RIGID METAL CONDUIT
RMS	REMOTE MONITORING STATION
RU	RACK UNIT
SBB	SECONDARY BONDING BUSBAR
SCS	STRUCTURED CABLING SYSTEM
SF	SQUARE FEET
SM	SINGLEMODE
SP	SCRAMBLE PAD
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TBD	TO BE DETERMINED
TIA	TELECOMMUNICATIONS INDUSTRY ASSOCIATION
TGB	TELECOMMUNICATIONS GROUND BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUND BUS BAR
TR	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UL	UNDERWRITER LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
UPSDP	UNINTERRUPTIBLE POWER SUPPLY DISRTRIBUTION PANEL
U/UTP	UNSHIELDED TWISTED PAIR
V	VOLT(S)
VCM	VERTICAL CABLE MANAGER
VCS	VIDEO CONTROL SYSTEM
VMS	VIDEO MANAGEMENT SYSTEM
W	WIRE
WAN	WIDE AREA NETWORK
WAO	WORK AREA OUTLET
WAP	WIRELESS ACCESS POINT
WP	WEATHER PROOF
WPO	WALL PHONE OUTLET
WR	WEATHER RESISTANT
WT	WATERTIGHT
XP	EXPLOSION-PROOF

ANNOTATION

- TECHNOLOGY PLAN CALLOUT
- EQUIPMENT DESIGATION
- CONNECTION POINT OF NEW WORK TO EXISTING
- DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER. LOWER NUMBER INDICATES SHEET NUMBER
- SECTION CUT DESIGNATION

LINETYPE LEGEND

THROUGHOUT THE DRAWINGS DIFFERENT LINE-TYPES ARE USED IN COMBINATION WITH THE SYMBOLS TO INDICATE THE STATUS OF ITEMS AS EXISTING, TO BE DEMOLISHED, TO BE INCLUDED AS PART OF THE NEW WORK AND/OR ITEMS WHICH ARE ANTICIPATED TO BE PROVIDED IN THE FUTURE. THE STATUS OF ITEMS USING THESE LINETYPES ARE RELATIVE TO THE VIEW IN WHICH THEY APPEAR. PHASING SHOWN IN DRAWINGS IS NOT INTENDED TO FULLY DESCRIBE ALL NECESSARY CONSTRUCTION PHASING, WHICH IS DETERMINED BY THE CONTRACTOR AS PART OF THEIR RESPONSIBILITIES. ANY SUCH PHASES DESCRIBED IN THE CONSTRUCTION DOCUMENTS ARE GENERAL AND ONLY INTENDED TO INDICATE A BROAD ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE, ETC.

EXISTING	NEW
DEMOLISH	FUTURE

PATHWAYS

- W"XH" — WIRE MESH CABLE TRAY (W="WIDTH, "H"=HEIGHT)
- (#) D" C. — UNDERGROUND CONDUIT ("#"=QUANTITY, "D"=CONDUIT DIAMETER)
- (#) D" C. — CONDUIT ("#"=QUANTITY, "D"=CONDUIT DIAMETER)
- CABLE SUPPORTS OR J-HOOKS
- (#) D" SLEEVE — CONDUIT SLEEVE ("#"=QUANTITY, "D"=CONDUIT DIAMETER) (PROVIDE 40% FILL FOR CABLING)
- (#) D" FS — UL FIRESTOP SYSTEM ASSEMBLY ("#"=QUANTITY, "D"=CONDUIT DIAMETER)
- PB — PULL BOX
- SC — SPLICE
- W"XH" — LADDER RACK (W="WIDTH, "H"=HEIGHT)

ROUGH-IN OUTLETS

- R — WALL BOX ROUGH-IN
- FLOOR BOX ROUGH-IN
- POKE THROUGH ROUGH-IN
- R — CEILING ROUGH-IN

DEVICE TAGGING AND INFORMATION:
XX = DEVICE DESIGNATION(S)
- AR = RESCUE ASSISTANCE
- AV = AUDIOVISUAL
- CAM = SECURITY CAMERA
- CR = CARD READER
- D = DATA
- F = FURNITURE FEED
- IC = VIDEO INTERCOM
- KP = KEYPAD
- MD = MOTION DETECTOR
- MP = MICROPHONE
- PB = PANIC BUTTON
- RE = REQUEST TO EXIT
- S = SPEAKER
- TV = TELEVISION

TELECOM SYMBOLS LEGEND

- XX — WALL PHONE OUTLET, "XX" INDICATES NUMBER OF PHONE PORTS.
- P/D — WALL PHONE/DATA OUTLET, "P" INDICATES NUMBER OF PHONE PORTS, "D" INDICATES NUMBER OF DATA PORTS.
- XX — WALL DATA OUTLET, "XX" INDICATES TYPE/NUMBER OF DATA PORTS.
- XX — CEILING DATA OUTLET, "XX" INDICATES TYPE/NUMBER OF DATA PORTS.
  WIRING DEVICE TAGGING AND INFORMATION:
  XX = DEVICE DESIGNATION(S)
  - -#D = DISPATCH FEED, # INDICATES NUMBER OF PORTS
  - -#F = FURNITURE FEED, # INDICATES NUMBER OF PORTS
  - -DW = DISPLAY WALL AV BACKBOX
  - -TV = 2 PORT DATA WITH 1 COAX FOR TELEVISION.
  - -WAP = 2 PORT DATA FOR WIRELESS ACCESS POINT
  - -WPO = WALL PHONE OUTLET
- # — FLOOR DATA OUTLET, "#" INDICATES NUMBER OF DATA PORTS.
- P/D — FLOOR PHONE/DATA OUTLET, "P" INDICATES NUMBER OF PHONE PORTS, "D" INDICATES NUMBER OF DATA PORTS.

EQUIPMENT SYMBOLS LEGEND

- XX — WALL PANEL, "XX" INDICATES TYPE. CHECK ABBREVIATIONS LIST FOR TYPE.
- 4-POST RACK
- 2-POST RACK

SECURITY SYMBOLS LEGEND

- CAMERA, ARC REPRESENTS VIEWING ANGLE AND DIRECTION
- CG-XX YY ZZ — XX: CAMERA NUMBER; YY: CAMERA TYPE; ZZ: CAMERA HEIGHT (IF APPLICABLE)
- XX — WALL MOUNT SYMBOL
- XX — PEDESTAL MOUNT SYMBOL
- XX — CEILING/SURFACE MOUNT SYMBOL

DEVICE TAGGING AND INFORMATION
XX = DEVICE DESIGNATION(S)
- -AR = RESCUE ASSISTANCE TWO-WAY COMMUNICATOR
- -CR = PROXIMITY CARD READER
  - # = CARD READER DESIGNATION(S)
    - 1 = MULLION MOUNT CARD READER
    - 2 = SINGLE GANG CARD READER
- -DR = DOOR RELEASE
- -DS = DOOR CONTACT/DOOR POSITION SWITCH
- -ER = EMERGENCY PHONE
- -GB = GLASS BREAK SENSOR
- -IC = VIDEO INTERCOM
  - # = VIDEO INTERCOM DESIGNATION(S)
    - 1 = VIDEO INTERCOM
    - 2 = VIDEO INTERCOM W/ CARD READER
- -IH = INTRUSION ALARM HUB
- -IK = INTRUSION ALARM KEYPAD
- -IS = INTRUSION ALARM SPEAKER
- -MD = MOTION DETECTOR
- -PB = PANIC BUTTON
- -RE = REQUEST TO EXIT
- -TP = TRAFFIC ARM PUSHBUTTON - OPEN/CLOSE
- -VD = VEHICLE DETECTOR

AUDIO VISUAL DEVICES

- XX # — WALL AUDIO VISUAL DEVICE
- XX # — CEILING/SURFACE AUDIO VISUAL DEVICE
- XX # — FLOOR AUDIO VISUAL DEVICE

DEVICE TAGGING AND INFORMATION:
XX = DEVICE DESIGNATION(S)
- AV = HDMI WALL PLATE
- C = AUDIO VISUAL CAMERA
- D1 = RECESSED DISPLAY BOX (1 DATA, 1 HDMI)
- M = MICROPHONE
- RK = AV RACK LOCATION
- S = SPEAKER
  - # = SPEAKER ZONING INFORMATION
    - Z1 = ZONE 1
    - Z2 = ZONE 2
    - Z3 = ZONE 3
    - Z4 = ZONE 4
- SM = SOUND MASKING SPEAKER
- TP = TOUCH PANEL

GENERAL LOW VOLTAGE NOTES:

1. FEDERAL, STATE, LOCAL, MUNICIPAL AND UTILITY COMPANY CODES, RULES AND REGULATIONS APPLY UNLESS EXCEEDED BY THIS DESIGN.
2. NO WORK SHALL BE PERFORMED PRIOR TO REVIEW AND APPROVAL OF ALL REQUIRED SHOP DRAWINGS, PRODUCT MATERIAL AND EQUIPMENT SUBMITTALS. ANY WORK INSTALLED PRIOR TO MEETING THESE REQUIREMENTS SHALL BE REMOVED BY CONTRACTOR WHERE DIRECTED BY CONTRACT ADMINISTRATOR.
3. PRIOR TO SUBMITTING BID, THE CONTRACTOR AND SUB-CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS OF THE PROJECT. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR REVIEW OF THE GENERAL NOTES, SPECIFICATIONS AND ALL OTHER DRAWINGS FOR ADDITIONAL REQUIREMENTS WHICH MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY CONTRACT ADMINISTRATOR OF ANY DISCREPANCIES PRIOR TO SUBMISSION OF BID.
4. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK.
5. THE DRAWINGS REPRESENT THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ALL DIMENSIONS AND SIZES SHALL BE FIELD VERIFIED. SMALL DEVIATIONS BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS ENCOUNTERED SHALL BE RECONCILED DURING THE PERFORMANCE OF THE WORK AND SHALL NOT CONSTITUTE REASON FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR. NOTIFY THE CONTRACT ADMINISTRATOR IF ACTUAL CONDITIONS DEVIATE SUBSTANTIALLY FROM THOSE INDICATED ON THE DRAWINGS.
6. ALL FEES AND OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.
7. COORDINATE WITH ALL OTHER TRADES, MAKE ADJUSTMENTS AND OFFSETS WHERE NEEDED FOR CLEARANCE REQUIREMENTS. REFER TO ALL OTHER DISCIPLINE DRAWINGS FOR COORDINATION.
8. COORDINATE ALL OPENINGS IN WALLS, FLOORS, ROOFS AND FOUNDATIONS WITH OTHER CONTRACTORS. PROVIDE UL RATED FIRE STOPPING ASSEMBLIES AT ALL PENETRATIONS OF FIRE RATED CONSTRUCTION. SEAL ALL PENETRATIONS OF SMOKE WALLS SMOKE TIGHT.
9. CONTRACTOR SHALL REPAIR ALL DAMAGE TO THE BUILDING, FIXTURES AND FINISHES CAUSED BY CONTRACTOR DURING THE PERFORMANCE OF THE WORK. REPAIRS SHALL BE PERFORMED BY QUALIFIED TRADESMEN AND SHALL BE COMPLETED IN A MANNER ACCEPTABLE TO THE CONTRACT ADMINISTRATOR.
10. REFER TO ARCHITECTURAL PLANS ELEVATIONS AND DETAILS FOR EXACT MOUNTING REQUIREMENTS OF LOW VOLTAGE DEVICES PRIOR TO ROUGH-IN.
11. SPECIAL ATTENTION SHALL BE GIVEN TO ALL RACEWAYS WITHIN FINISHED AREAS WITHOUT CEILING AND EXPOSED TO STRUCTURE. IN GENERAL, ALL RACEWAYS SHALL BE CONCEALED WITHIN WALLS, BELOW FLOOR SLABS. WHERE EXPOSED CONDITIONS ARE NECESSARY OR UNAVOIDABLE DUE TO OTHER CONDITIONS, THE BID SHALL INCLUDE ANY REASONABLE MEANS TO MINIMIZE THE AMOUNT OF SURFACE MOUNTED EQUIPMENT. PRIOR TO ROUGH-IN, COORDINATE ALL EXPOSED RACEWAY AND BOX CONDITIONS WITH ARCHITECT PRIOR TO CONSTRUCTION OF WALLS, FLOOR SLABS, OR ROOF DECK.
12. NON-COMPLIANT INSTALLATIONS OF RACEWAY AND CABLE WILL NOT BE ACCEPTED AND WILL BE REQUIRED TO BE BROUGHT TO COMPLIANCE AT NO COST TO THE OWNER PRIOR TO COMPLETION OF WORK.
13. ALL EXPOSED CONDUIT AND BOXES WITHIN EXPOSED CEILING SPACES SHALL BE PAINTED TO MATCH SURROUNDING CEILING AND STRUCTURE. PROVIDE CONDUIT PARALLEL TO STRUCTURAL LINES IN A NEAT MANNER.
14. ALL CEILING MOUNTED DEVICES INSTALLED IN ACOUSTICAL TILE CEILINGS SHALL BE CENTERED WITHIN THE ACOUSTICAL TILE.
15. REQUEST DIMENSIONED LOCATIONS OF ALL FLOOR DEVICES FROM ARCHITECT PRIOR TO ROUGH-IN.
16. ALL DEVICES SHOWN DIRECTLY ADJACENT TO EACH OTHER SHALL BE INSTALLED DIRECTLY ADJACENT TO EACH OTHER. ADJACENT DEVICES OF SIMILAR TYPE SHALL BE PROVIDED WITH SINGLE FACEPLATE WHERE FEASIBLE.
17. DEVICES SHOWN BACK-TO-BACK SHALL BE OFFSET A MINIMUM OF TWELVE (12) INCHES TO REDUCE SOUND TRANSMISSION.
18. PROVIDE PULL STRINGS IN ALL CONDUITS AND PROTECTIVE BUSHINGS AT OPENINGS. CAP CONDUITS WHERE LOCATED BELOW GRADE OR EXPOSED TO THE ELEMENTS IF RESERVED FOR FUTURE USE.
19. VERIFY EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
20. IF THE ENCLOSURE, BOXES, AND CABINETS SPECIFIED ARE NOT PROVIDED FROM THE MANUFACTURER WITH THE REQUIRED KNOCKOUTS FOR THE SPECIFIED CONDUIT, FIELD CUT ALL REQUIRED KNOCKOUTS TO TERMINATE THE QUANTITY AND SIZE OF THE SPECIFIED CONDUITS.
21. INSTALL ALL EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, SEISMIC CODES, AND INDUSTRY ACCEPTED RIGGING PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM STRUCTURE ABOVE CEILINGS. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.

INFRASTRUCTURE SCHEDULE

DEVICE TYPE	DEVICE DESCRIPTION	INFRASTRUCTURE BOX	INFRASTRUCTURE CONDUIT
2	2 PORT DATA FLOOR OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
2	2 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
4	4 PORT DATA FLOOR OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
4F	4 PORT DATA FURNITURE FEED	N/A	(1) 1" C. TO ACCESSIBLE CEILING
5	5 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
7	7 PORT DATA WALL OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
8D	8 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
8F	8 PORT DATA FURNITURE FEED	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
9D	9 PORT DATA FLOOR FEED FOR DISPATCH STATION	N/A	(1) 2" C. TO UNDERFLOOR RACEWAY
10	10 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(2) 1" C. TO ACCESSIBLE CEILING
11	11 PORT DATA WALL OUTLET	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(2) 1" C. TO ACCESSIBLE CEILING
16F	16 PORT DATA FLOOR FURNITURE FEED	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(2) 1" C. TO ACCESSIBLE CEILING
AV	AV BACKBOX (2 DATA, 1 HDMI)	4 SQUARE WITH 2 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(2) 1" C. TO ACCESSIBLE CEILING
C	AUDIO VISUAL CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
CR1	MULLION CARD READER	N/A	(1) 1" C. TO ACCESSIBLE CEILING
CR2	SINGLE GANG CARD READER	1 GANG, FLUSH MOUNTED, 2-1/8" DEEP BACK BOX	(1) 1" C. TO ACCESSIBLE CEILING
DW	2 PORT DATA WALL OUTLET FOR DISPLAY WALL	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
ED	EXTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
IC2	VIDEO INTERCOM WITH CARD READER	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
ID	INTERIOR DOME CAMERA	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
RK	AV RACK LOCATION	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(2) 1" C. TO ACCESSIBLE CEILING
S	SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
SM	SOUND MASKING SPEAKER	INSTALL AV PROVIDER'S SPEAKER BACK CAN	(1) 3/4" C. BETWEEN DEVICES AND (1) 3/4" C. HOMERUN TO ACCESSIBLE CEILING
TP	WALL MOUNT TOUCHPANEL	INSTALL AV PROVIDER'S BOX INCLUDED WITH TOUCH PANEL	(2) 1" C. TO ACCESSIBLE CEILING
TV	2 PORT DATA WALL OUTLET FOR TELEVISION	CHIEF #WMPAC526 BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
WAP	3 PORT DATA OUTLET FOR WIRELESS ACCESS POINT	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING
WPO	1 PORT DATA WALL PHONE OUTLET	4 SQUARE WITH 1 GANG MUD-RING, FLUSH MOUNTED, 2-1/8" DEEP BACKBOX	(1) 1" C. TO ACCESSIBLE CEILING

SCOPE AND RESPONSIBILITY MATRIX

CATEGORY	SYSTEM	DESCRIPTION	DESIGN	DOCUMENT	FURNISH	INSTALL	COMMENTS
SITE UTILITIES	ROUGH-IN	UNDERGROUND CONDUITS, MANHOLES	GC	HW	GC	GC	XX
	CABLING	FIBER	VENDOR	HW	VENDOR	VENDOR	VENDOR IS MARTIN UNDERGROUND
	COORDINATION	COORDINATION WITH SERVICE PROVIDER	OWNER				XX
TELECOMMUNICATIONS	ROUGH-IN	RACEWAYS, BOXES	HW	HW	GC	GC	XX
	CABLING	HORIZONTAL & VERTICAL CABLING, CABLE TERMINATIONS, FACE PLATES	HW	HW	GC	GC	XX
	RACK INFRASTRUCTURE	RACKS, CABINETS, PATCH PANELS	HW	HW	GC	GC	XX
	EQUIPMENT	SERVERS AND SWITCHES	OWNER	OWNER	OWNER	OWNER	XX
	UPS	UPS EQUIPMENT	HW/OWNER	HW	GC	GC	XX
	FIBER	ROUTE/ACCESS TO BUILDING	VENDOR	HW	VENDOR	VENDOR	HW TO DOCUMENT CONDUIT ONLY. (4)-4" CONDUIT WITH INTERDUCT
	PHONE SYSTEM	VOIP CABLING AND INFRASTRUCTURE	OWNER/HW	HW	GC	GC	XX
	WIRELESS DATA/INTERNET (WI-FI)	WIRELESS ACCESS POINTS	OWNER	HW	OWNER	OWNER	INFRASTRUCTURE AND CABLING BY GC
DAS	CELLULAR WIRELESS (DAS)	ROUGH-IN, EQUIPMENT, AND CABLING	VENDOR	HW	VENDOR	VENDOR	XX
	RADIO TOWER	TOWER, STRUCTURE, ECT.	VENDOR	VENDOR	VENDOR	VENDOR	XX
	EMERGENCY RESPONDER (DAS)	ROUGH-IN, EQUIPMENT, AND CABLING FOR POLICE, FIRE, AMBULANCE COMMUNICATIONS	VENDOR	HW	VENDOR	VENDOR	XX
SECURITY SYSTEMS	ROUGH-IN	RACEWAYS, BOXES	HW	HW	GC	GC	XX
	POWER SUPPLIES	120V/24V OR 12V	VENDOR	HW	VENDOR	VENDOR	XX
	CABLING	SECURITY CABLING	VENDOR	HW	GC	GC	XX
	EQUIPMENT	CAMERAS, CARD READERS, SENSORS, ECT.	VENDOR	HW	VENDOR	VENDOR	XX
	SOFTWARE	APPLICATIONS	OWNER				XX
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION	OWNER				XX
AUDIO/VISUAL	ROUGH-IN	RACEWAYS, BOXES	HW	HW	GC	GC	XX
	CABLING	CABLING, CABLE TERMINATIONS, FACE PLATES	HW	HW	GC	GC	XX
	RACK INFRASTRUCTURE	RACKS, CABINETS, PATCH PANELS	HW	HW	GC	GC	XX
	EQUIPMENT	SERVERS, TELEVISIONS, PAGING, ECT.	HW	HW	GC	GC	XX
	SOFTWARE	APPLICATIONS, PROGRAMMING	OWNER				XX
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION	GC/VENDOR				XX
SOUND MASKING	ROUGH-IN	RACEWAYS, BOXES	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	CABLING	CABLING, CABLE TERMINATIONS, FACE PLATES	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	RACK INFRASTRUCTURE	DSP/AMP	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	EQUIPMENT	SPEAKERS/EMITTERS	HW	HW	GC	GC	SOUND MASKING IS AN ALTERNATE
	SOFTWARE	APPLICATIONS, PROGRAMMING	OWNER				SOUND MASKING IS AN ALTERNATE
	COMMISSIONING	VERIFY OPERATION AFTER INSTALLATION	GC/VENDOR				SOUND MASKING IS AN ALTERNATE

TECHNOLOGY SHEET INDEX

SHEET NUMBER	SHEET NAME
TG001	TECHNOLOGY LEGEND AND GENERAL NOTES
TS100	TECHNOLOGY SITE PLAN
T-100	LOWER LEVEL - TECHNOLOGY PLAN
T-101	MAIN LEVEL - TECHNOLOGY PLAN
T-110	LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN
T-111	MAIN LEVEL - TECHNOLOGY CABLE TRAY PLAN
T-120	LOWER LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
T-121	MAIN LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
T-200	LOWER LEVEL - TECHNOLOGY ALTERNATE PLAN
T-201	MAIN LEVEL - TECHNOLOGY ALTERNATE PLAN
T-401	ENLARGED TECHNOLOGY PLANS
T-501	TECHNOLOGY DETAILS
T-502	TECHNOLOGY DETAILS

LEGEND

OWNER	OWNER SUPPLY CHAIN
HW	HOEFER WELKER
GC	GENERAL CONTRACTOR/SUB CONTRACTORS
LV	LOW VOLTAGE DESIGNER
VENDOR	EQUIPMENT VENDOR
(BLANK)	NOT APPLICABLE TO THIS PROJECT

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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3	ADDENDUM #3	11/18/2024

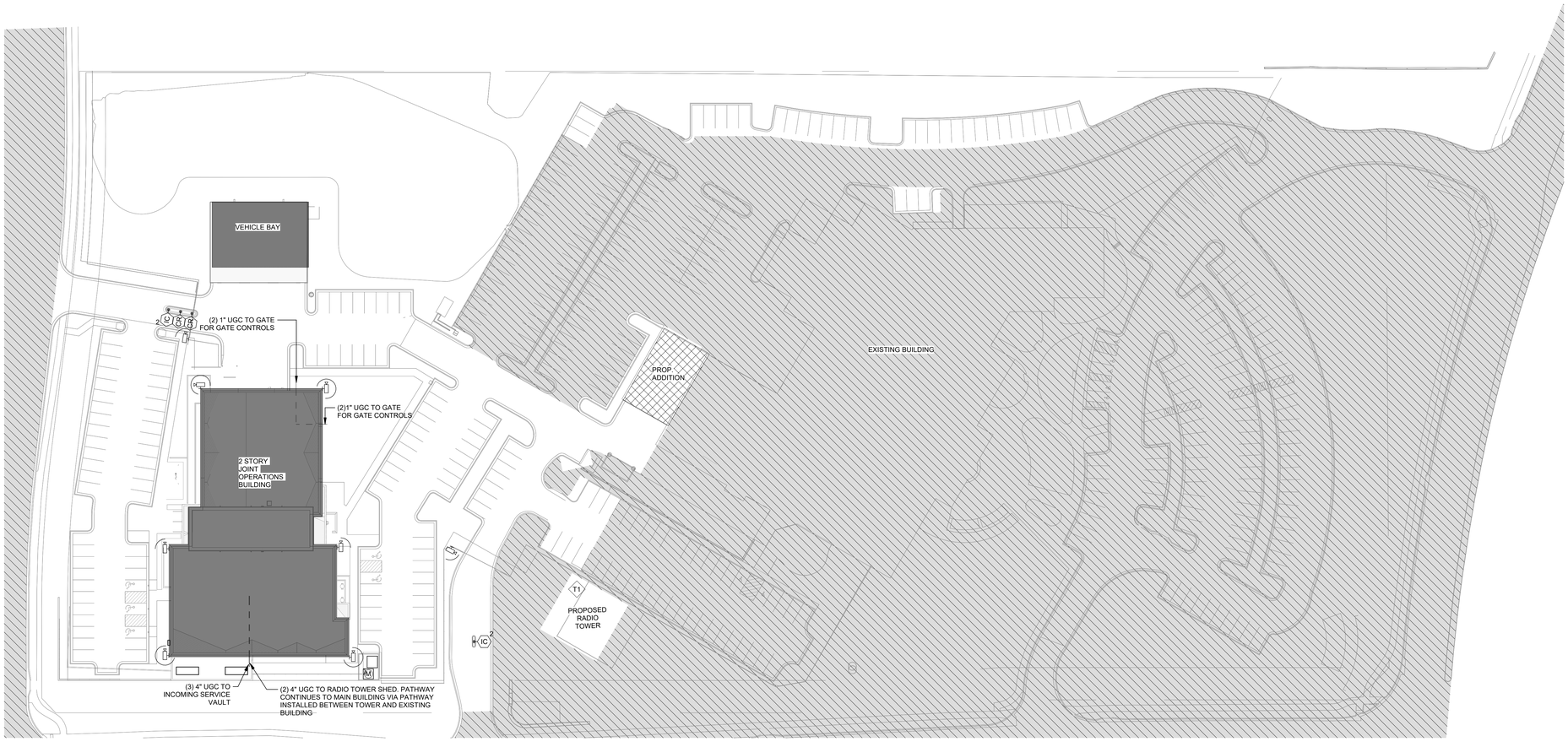
JONATHON M. LEE — STATE OF MISSOURI — NUMBER PE-2021003167 — 11/18/2024

PROFESSIONAL SEAL

TG001

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

TECHNOLOGY LEGEND AND GENERAL NOTES



1 TECHNOLOGY SITE PLAN
1" = 40'-0"

GENERAL NOTES:

1. REFER TO SHEET EG001 FOR GENERAL ELECTRICAL NOTES.

ELECTRICAL PLAN NOTES:

T1 RADIO TOWER SHED LOCATION. PROVIDE (2) 4" UGC TO EXISTING BUILDING IT. PROVIDE (2) 4" UGC TO SERVERS 146 IN JOINT OPERATIONS BUILDING.

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REVISION DATES:

STATE OF MISSOURI
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NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

TS100

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

TECHNOLOGY SITE PLAN

1 LOWER LEVEL - TECHNOLOGY PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

TECHNOLOGY PLAN NOTES:

T2 PROVIDE (9) CAT6 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) PURPLE CABLE AND TERMINATIONS FOR FIRE CAD, (1) BLUE CABLE FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, AND (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) BLACK SPARE CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

T3 PROVIDE (8) CAT6 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, AND (1) BLUE CABLE AND TERMINATION FOR PD NETWORK TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) BLACK SPARE CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

T4 PROVIDE (9) CAT6 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, AND (1) GREY CABLE AND TERMINATION FOR MOTOROLA ALARMS TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) BLACK SPARE CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

T5 POLICE SUPERVISOR TO HAVE (10) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) ORANGE CABLE AND TERMINATION FOR PD CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, (1) GREY CABLE AND TERMINATION FOR MOTOROLA ALARMS, (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (2) BLACK SPARE CABLE AND TERMINATION.

T6 FIRE SUPERVISOR TO HAVE (11) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) CABLE FOR FIRE CAD, (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) CABLE FOR PD NETWORK, (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK, (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, (1) GREY CABLE AND TERMINATIONS FOR MOTOROLA ALARMS, AND (2) SPARE BLACK CABLE AND TERMINATIONS.

T7 POLICE CAPTAIN TO HAVE (7) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) CABLE FOR 911, (1) CABLE FOR PD CAD, (1) CABLE FOR PHONE, (1) CABLE FOR PD NETWORK, (1) CABLE FOR BACKUP RADIO REMOTE, AND (2) SPARE CABLE.

T8 QA TO HAVE (6) CAT6 DATA CABLES TOTAL PROVIDED. PROVIDE (1) GREEN CABLE AND TERMINATION FOR PHONE, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK, AND (2) SPARE BLACK CABLES AND TERMINATIONS.

T9 PROVIDE (9) CAT6 DATA CABLES TOTAL TO DISPATCH LOCATION THROUGH FURNITURE FEED TO (2) PATCH PANELS INSTALLED IN THE CPU CABINET. PROVIDE (1) RED CABLE AND TERMINATION FOR 911, (1) PURPLE CABLE AND TERMINATION FOR FIRE CAD, (1) GREEN CABLE AND TERMINATION FOR PD CAD, (1) BLUE CABLE AND TERMINATION FOR PD NETWORK, AND (1) BROWN CABLE AND TERMINATION FOR FIRE NETWORK TO DATA PATCH PANEL IN CPU CABINET. PROVIDE (2) YELLOW CABLES AND TERMINATIONS FOR RADIO CONSOLE, (1) WHITE CABLE AND TERMINATION FOR BACKUP RADIO REMOTE, AND (1) SPARE BLACK CABLE AND TERMINATION TO RADIO PATCH PANEL IN CPU CABINET.

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3	ADDENDUM #3	11/18/2024

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JONATHON M. LEE
NUMBER PE-2021003162
11/18/2024

PROFESSIONAL SEAL

T-100

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

LOWER LEVEL - TECHNOLOGY PLAN

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.
2. SOUND MASKING SYSTEM IS PART OF ALTERNATE 5.

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T-101

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

1 MAIN LEVEL - TECHNOLOGY PLAN
1/8" = 1'-0"

NORTH

MAIN LEVEL - TECHNOLOGY PLAN

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

1 LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN
1/8" = 1'-0"

NORTH

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ISSUE DATE: NOVEMBER 1, 2024
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LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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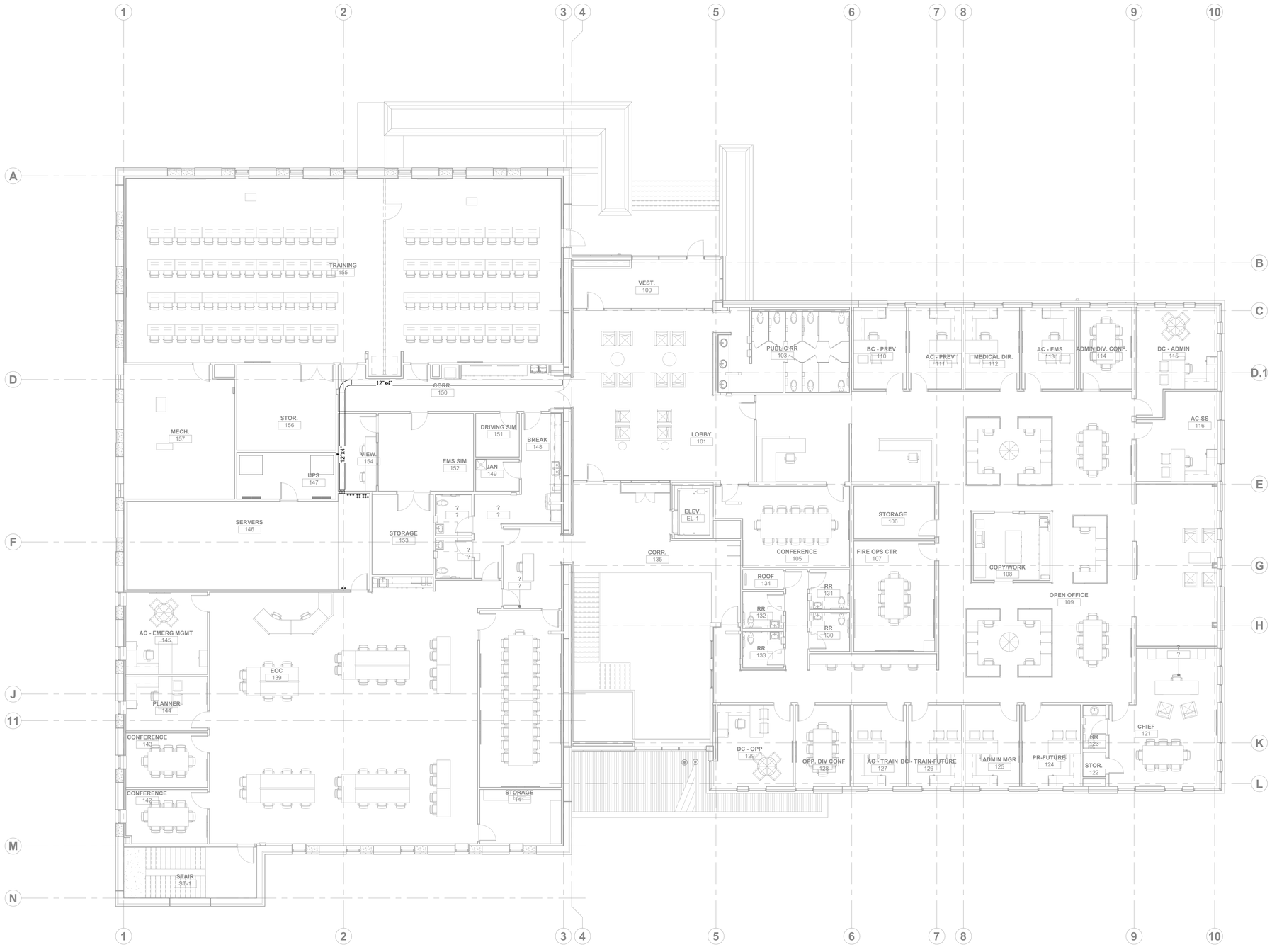

NORTH

1 MAIN LEVEL - TECHNOLOGY CABLE TRAY PLAN
1/8" = 1'-0"

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10/30/2024

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ISSUE DATE: NOVEMBER 1, 2024
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MAIN LEVEL - TECHNOLOGY CABLE TRAY PLAN

1 LOWER LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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REVISION DATES:

JONATHON M. LEE
STATE OF MISSOURI
NUMBER PE-2021003167
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

T-120

ISSUE DATE: NOVEMBER 1, 2024
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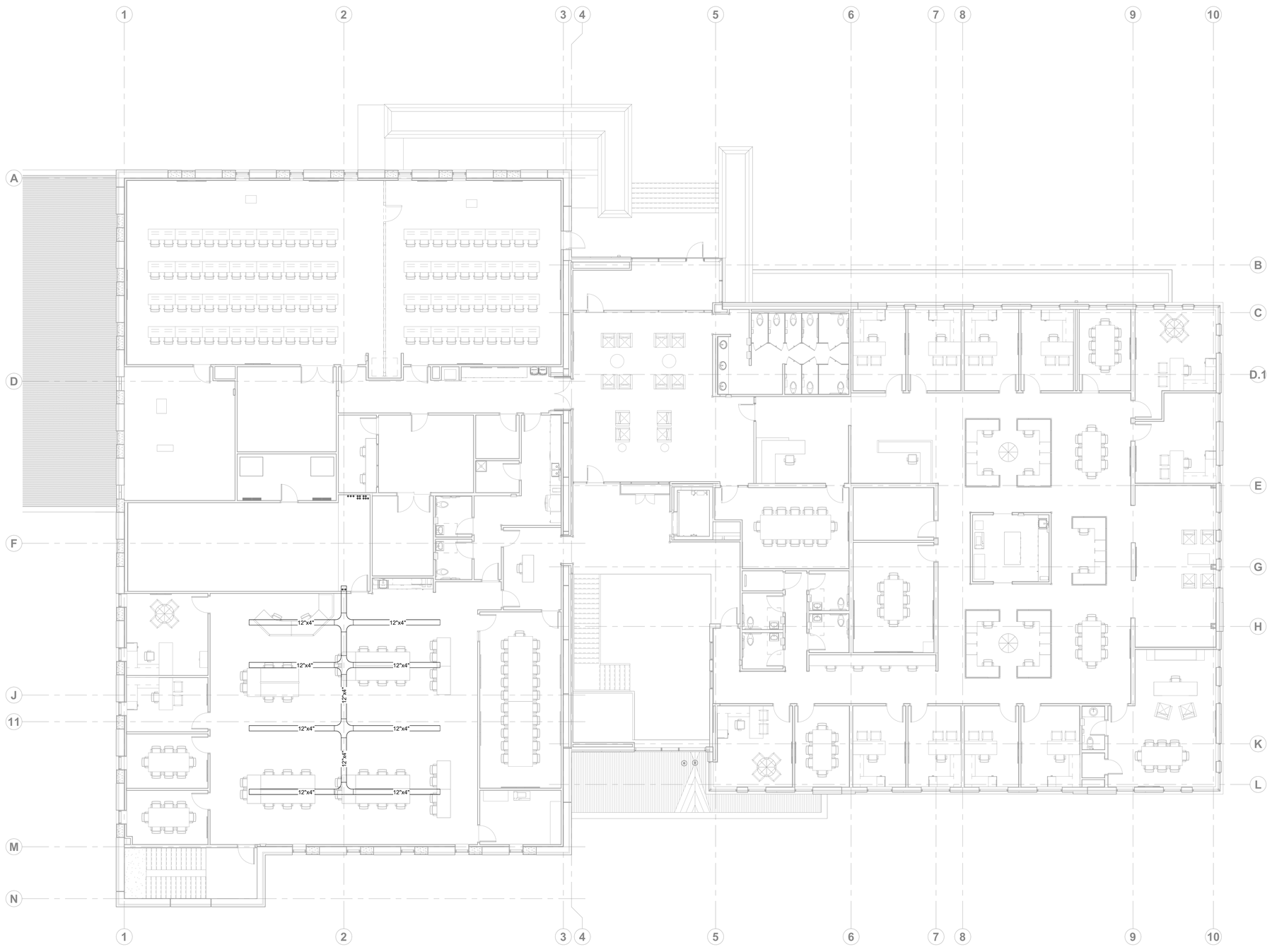
LOWER LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.



1 MAIN LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN
1/8" = 1'-0"

NORTH

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

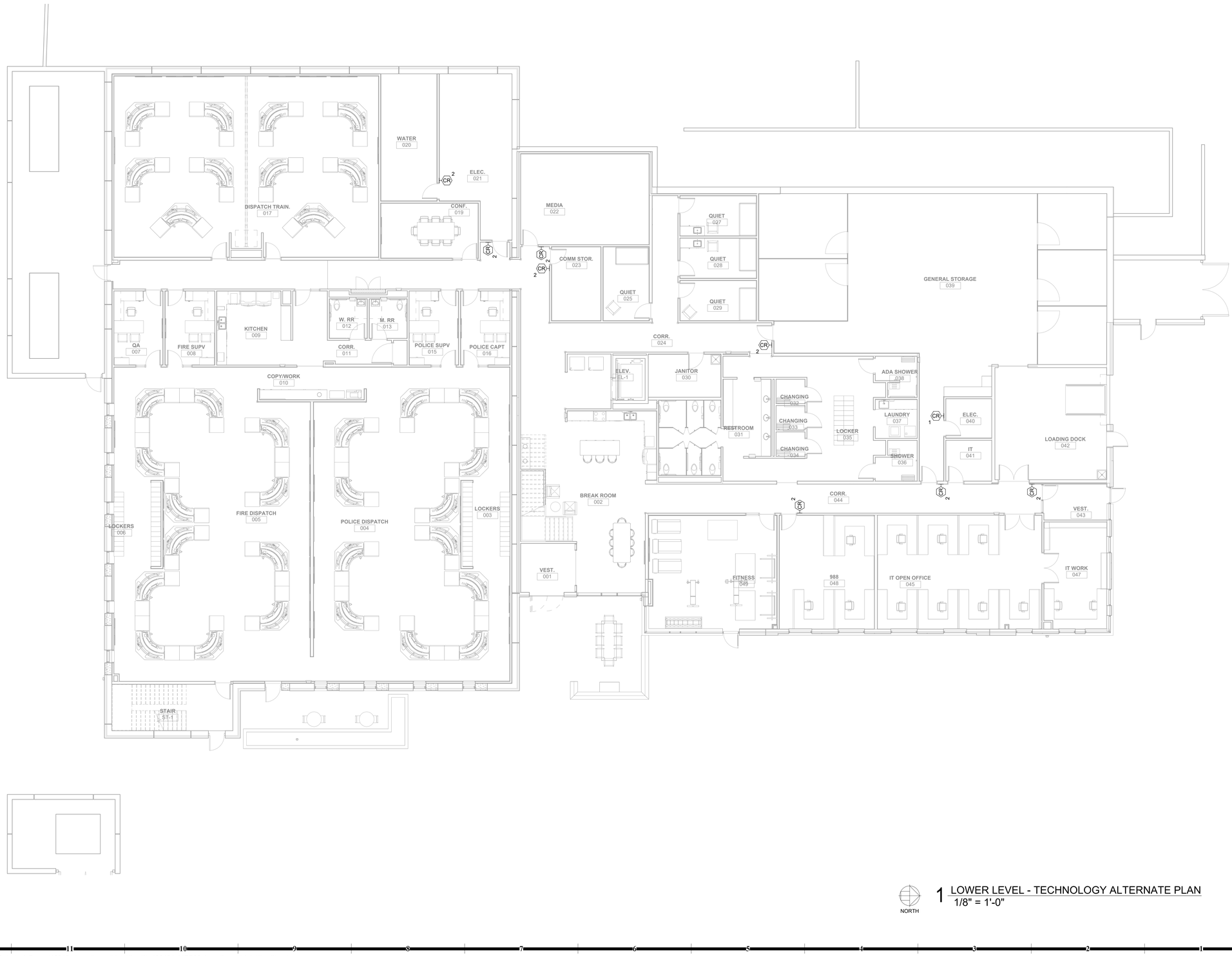
STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

T-121

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

MAIN LEVEL - TECHNOLOGY UNDERFLOOR CABLE TRAY PLAN



1 LOWER LEVEL - TECHNOLOGY ALTERNATE PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.
2. SOUND MASKING SYSTEM IS PART OF ALTERNATE 3.
3. CARD READERS SHOWN ARE PART OF ALTERNATE 2.

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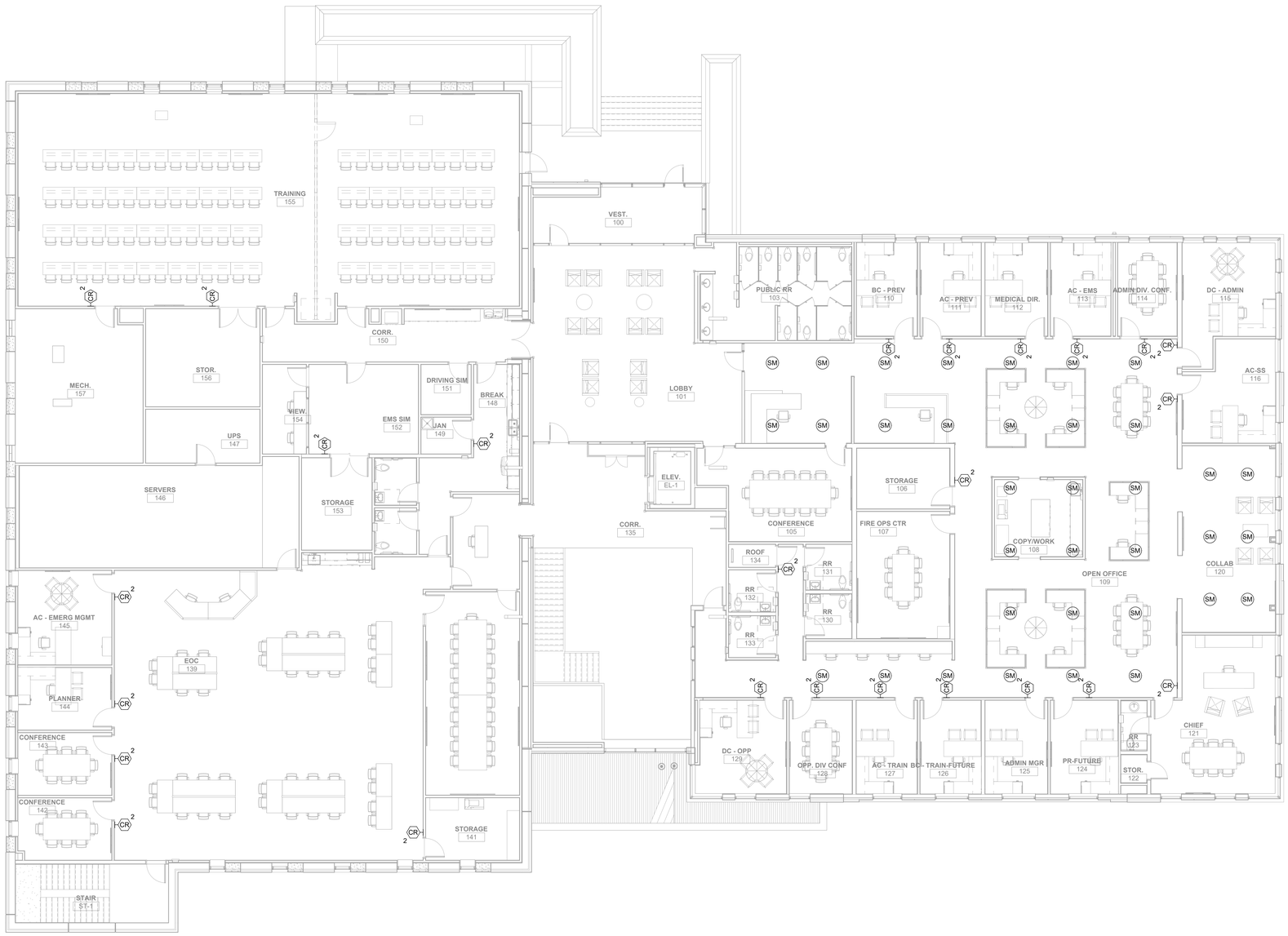
LOWER LEVEL - TECHNOLOGY ALTERNATE PLAN



NORTH

1 MAIN LEVEL - TECHNOLOGY ALTERNATE PLAN
1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.
2. SOUND MASKING SYSTEM IS PART OF ALTERNATE 3.
3. CARD READERS SHOWN ARE PART OF ALTERNATE 2.

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10/30/2024
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PROFESSIONAL SEAL

T-201

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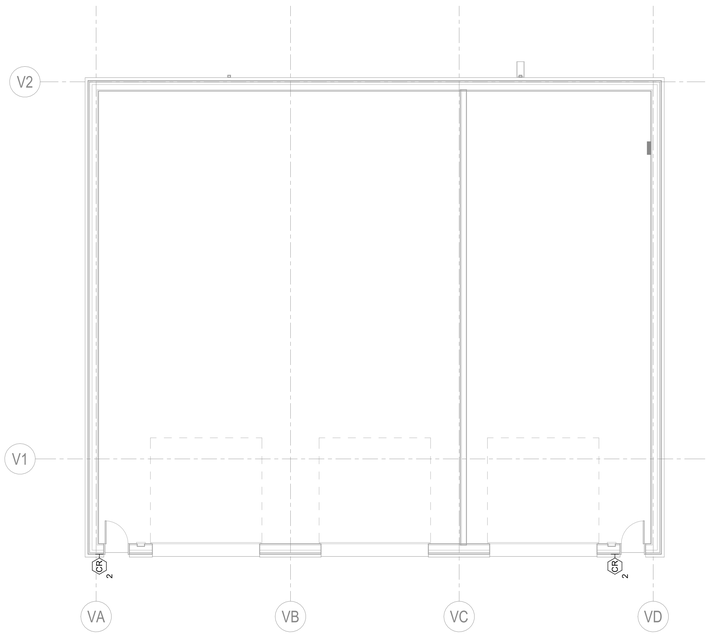
MAIN LEVEL - TECHNOLOGY ALTERNATE PLAN

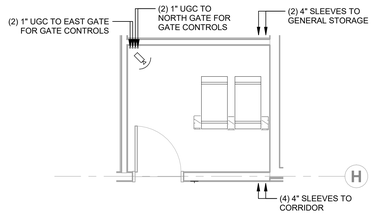
GENERAL NOTES:

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.



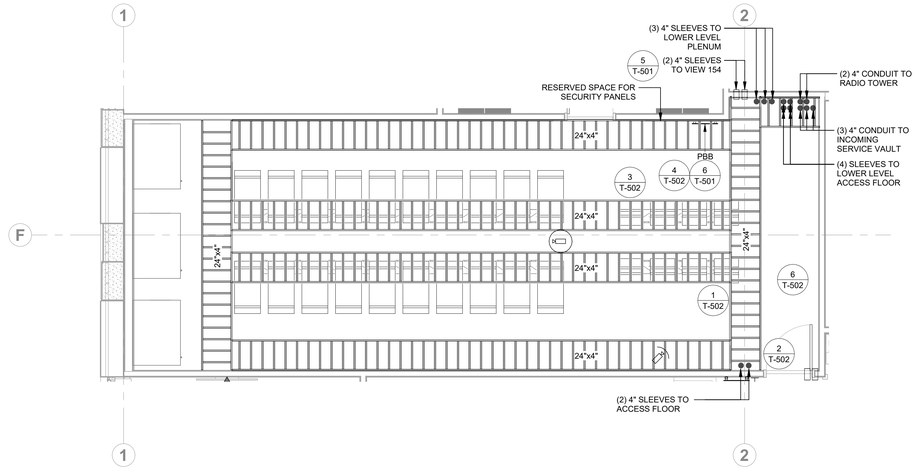
3 VEHICLE BUILDING - TECHNOLOGY PLAN
1/8" = 1'-0"

NORTH



2 REMOTE IT 041 ENLARGED PLAN
1/4" = 1'-0"

NORTH



1 EQUIPMENT/SERVERS 146 ENLARGED PLAN
1/4" = 1'-0"

NORTH

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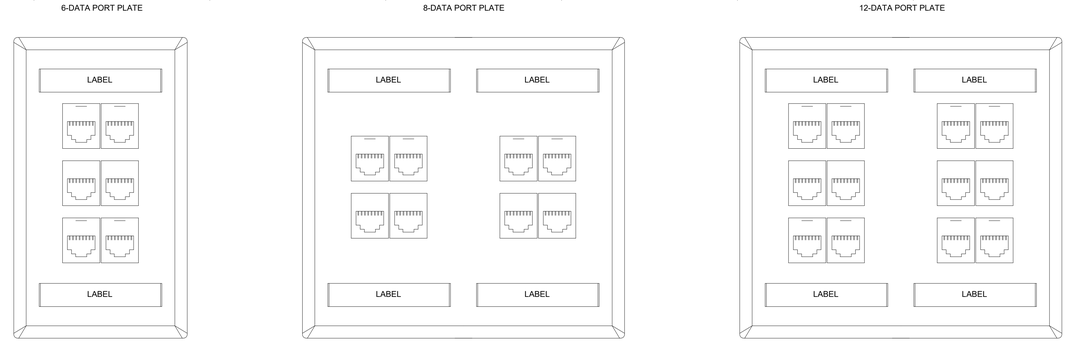
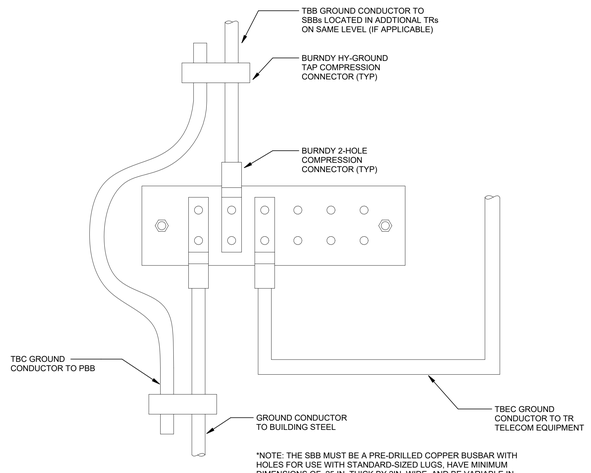
ENLARGED TECHNOLOGY PLANS



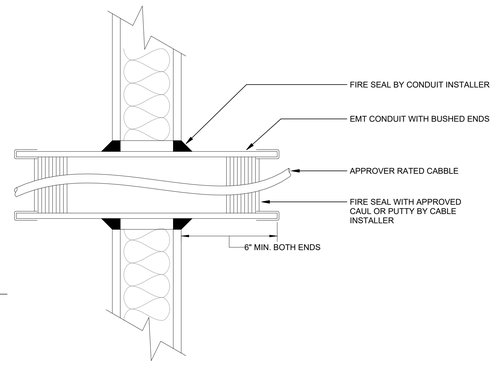
NOTES:
1. COORDINATE EXACT CONFIGURATION AND OUTLETS IN FACE PLATE WITH A/V VENDOR.
2. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL WALL ELEVATIONS.
3. PROVIDE BLANK INSERTS WHEN NECESSARY.

7 DATA FACE PLATE CONFIGURATION DETAIL
NOT TO SCALE

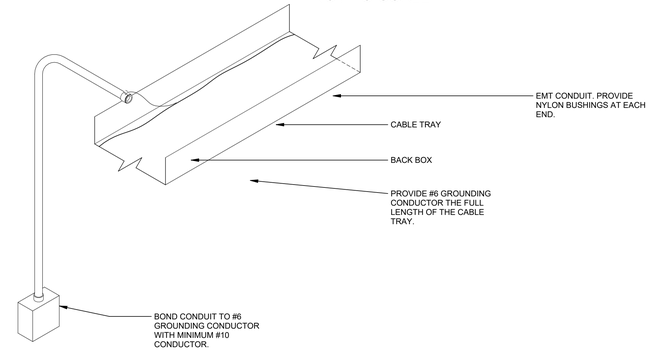


*NOTE: THE SBB MUST BE A PRE-DRILLED COPPER BUSBAR WITH HOLES FOR USE WITH STANDARD-SIZED LUGS, HAVE MINIMUM DIMENSIONS OF .25 IN. THICK BY 2IN. WIDE, AND BE VARIABLE IN LENGTH. IT MUST ALSO BE LISTED BY AN NRTL, PER TDMM CHATPER 8 (SEE FIGURE 8.5).

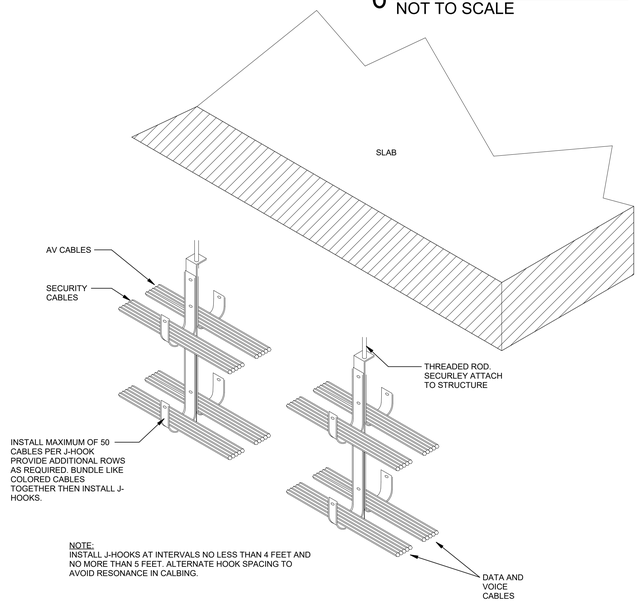
6 GROUND BAR CONNECTION
NOT TO SCALE



5 CONDUIT WITH FIRESTOP THRU WALL
NOT TO SCALE

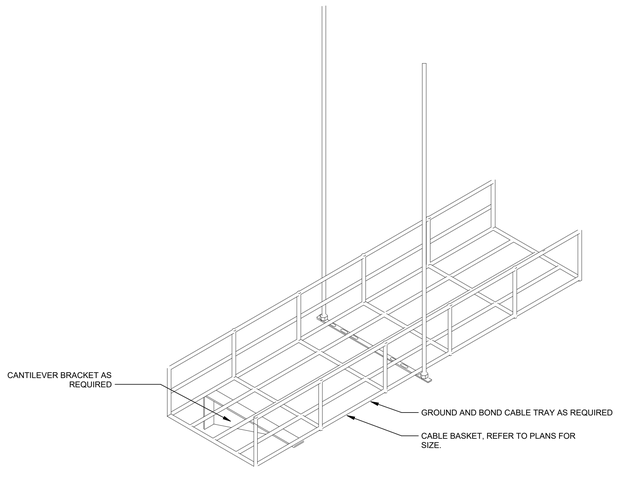


4 CABLE TRAY WITH CONDUIT DETAIL
NOT TO SCALE

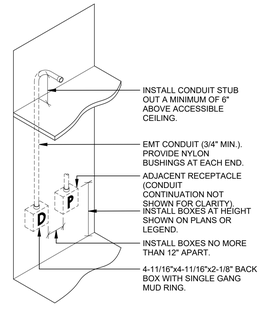


NOTE:
INSTALL J-HOOKS AT INTERVALS NO LESS THAN 4 FEET AND NO MORE THAN 5 FEET. ALTERNATE HOOK SPACING TO AVOID RESONANCE IN CALBING.

3 J-HOOK ASSEMBLY
NOT TO SCALE



2 CABLE TRAY DETAIL
NOT TO SCALE



1 DATA OUTLET ROUGH-IN DETAIL
NOT TO SCALE

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LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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REVISION DATES:

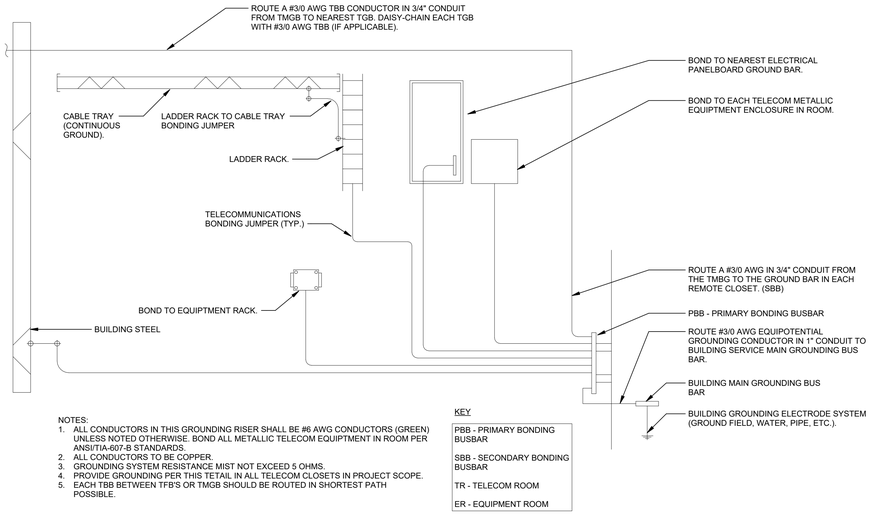
JONATHON M. LEE
STATE OF MISSOURI
NUMBER PE-2021003162
10/30/2024
REGISTERED ENGINEER

PROFESSIONAL SEAL

T-501

ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

TECHNOLOGY DETAILS



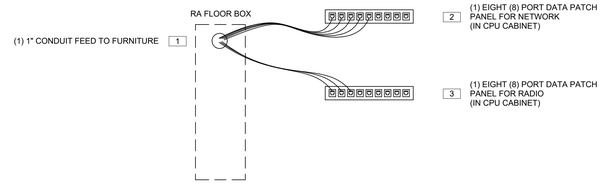
NOTES:
1. ALL CONDUCTORS IN THIS GROUNDING RISER SHALL BE #6 AWG CONDUCTORS (GREEN) UNLESS NOTED OTHERWISE. BOND ALL METALLIC TELECOM EQUIPTMENT IN ROOM PER ANSI/TIA-607-B STANDARDS.
2. ALL CONDUCTORS TO BE COPPER.
3. GROUNDING SYSTEM RESISTANCE MIST NOT EXCEED 5 OHMS.
4. PROVIDE GROUNDING PER THIS TETAIL IN ALL TELECOM CLOSETS IN PROJECT SCOPE.
5. EACH TBB BETWEEN TFB'S OR TMGB SHOULD BE ROUTED IN SHORTEST PATH POSSIBLE.

KEY

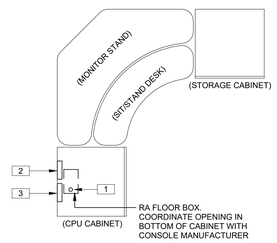
PBB - PRIMARY BONDING BUSBAR
SBB - SECONDARY BONDING BUSBAR
TR - TELECOM ROOM
ER - EQUIPMENT ROOM

6 TELECOMMUNICATIONS ROOM GROUNDING RISER DIAGRAM
NOT TO SCALE

NOTE: INFORMATION SHOWN IS BASED ON XYBIX SYSTEMS CONSOLE. REFER TO XYBIX INSTALLATION MANUALS FOR ADDITIONAL INFORMATION.



WIRING DIAGRAM

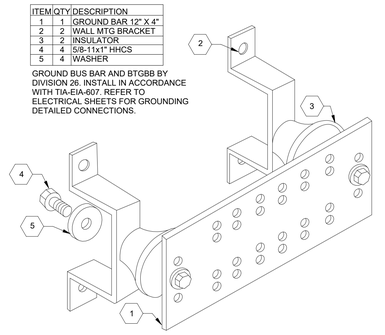


PLAN VIEW

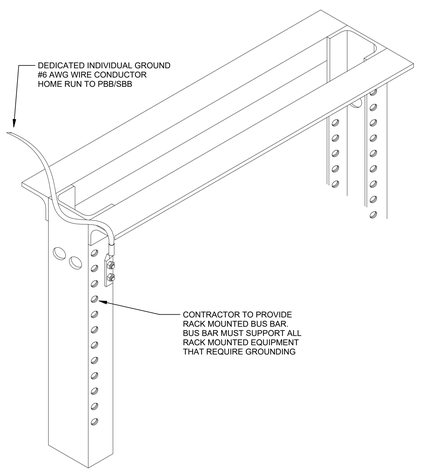
5 DISPATCH CONSOLE TELECOMMUNICATIONS WIRING DIAGRAM
NOT TO SCALE

ITEM	QTY	DESCRIPTION
1	1	GROUND BAR 12" X 4"
2	2	WALL MTG BRACKET
3	2	INSULATOR
4	4	5/8-11x1" HHCS
5	4	WASHER

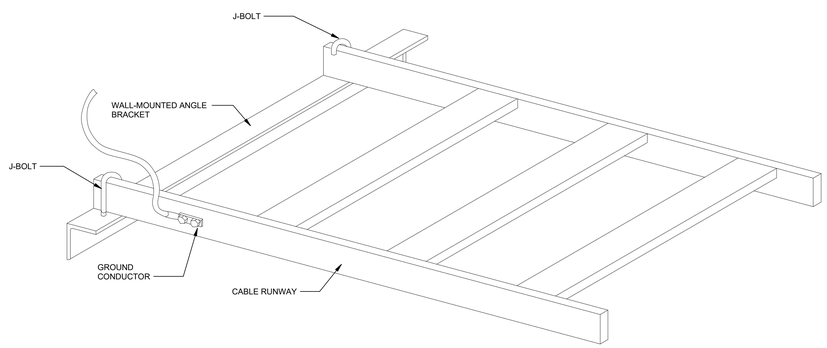
GROUND BUS BAR AND BTGBB BY DIVISION 26. INSTALL IN ACCORDANCE WITH TIA-EIA-607. REFER TO ELECTRICAL SHEETS FOR GROUNDING DETAILED CONNECTIONS.



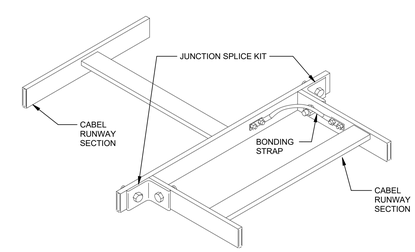
4 TELECOMMUNICATIONS GROUND BUS BAR
NOT TO SCALE



3 STANDING RACK GROUNDING ASSEMBLY
NOT TO SCALE



2 LADDER - WALL BRACKET GROUNDING
NOT TO SCALE



1 JUNCTION SPLICE GROUNDING ASSEMBLY
NOT TO SCALE

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PACKAGE 2: CONSTRUCTION SET

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REVISION DATES:

3	ADDENDUM #3	11/18/2024

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
11/18/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

T-502

ISSUE DATE: NOVEMBER 1, 2024
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TECHNOLOGY DETAILS