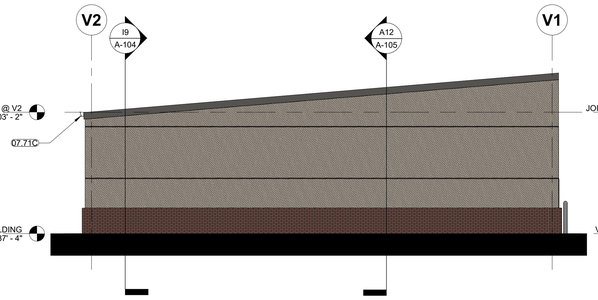
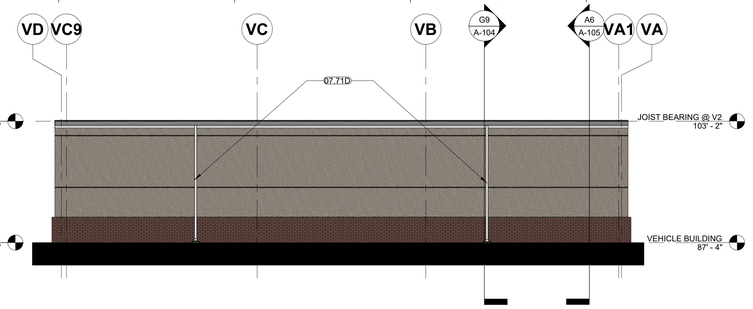


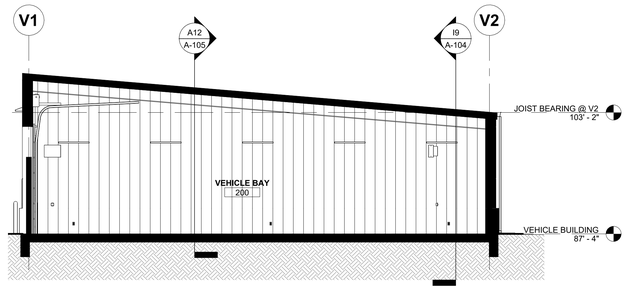

I9 VEHICLE BUILDING LONGITUDINAL SECTION
1/8" = 1'-0"



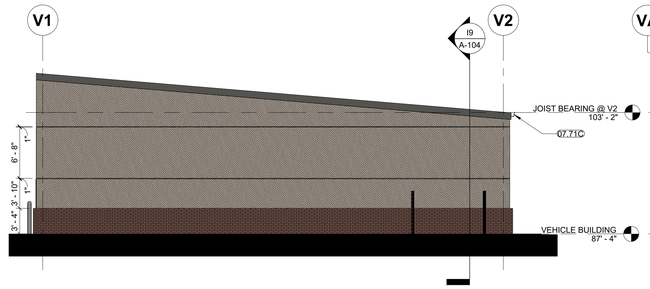

I6 WEST ELEVATION - VEHICLE
1/8" = 1'-0"



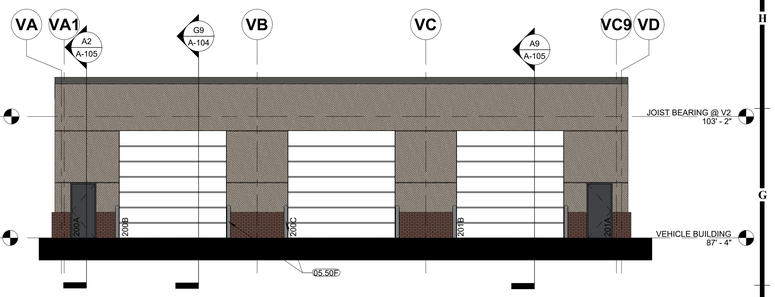

I1 NORTH ELEVATION - VEHICLE
1/8" = 1'-0"



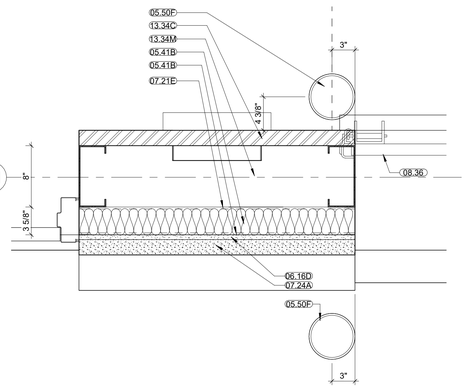

G9 VEHICLE BUILDING TRANSVERSE SECTION
1/8" = 1'-0"



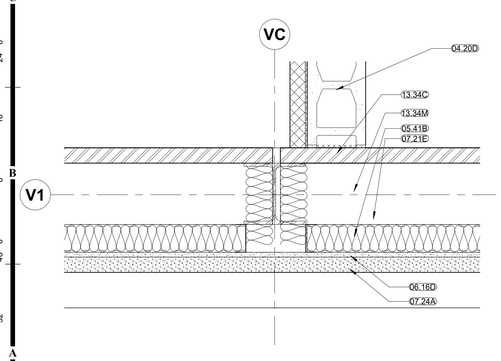

G6 EAST ELEVATION - VEHICLE
1/8" = 1'-0"



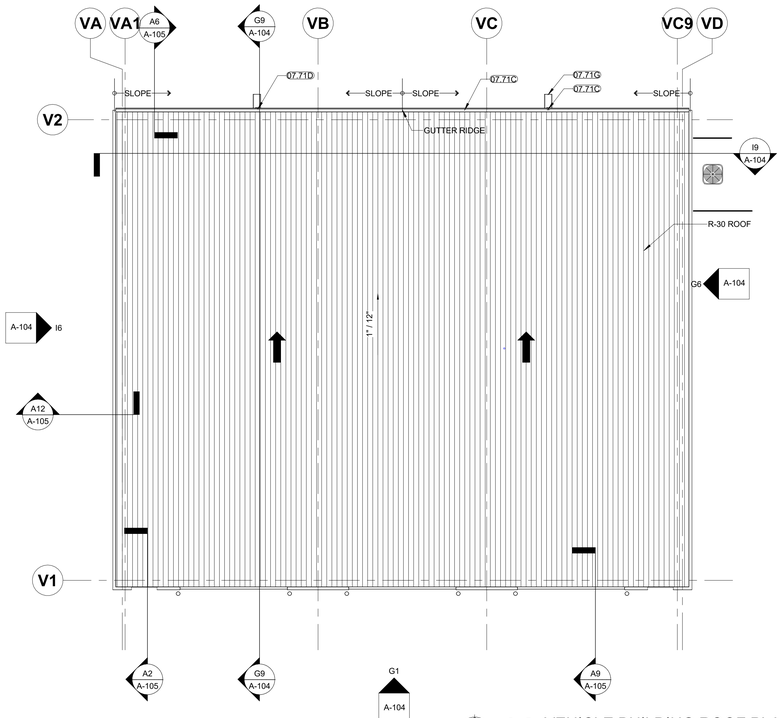

G1 SOUTH ELEVATION - VEHICLE
1/8" = 1'-0"



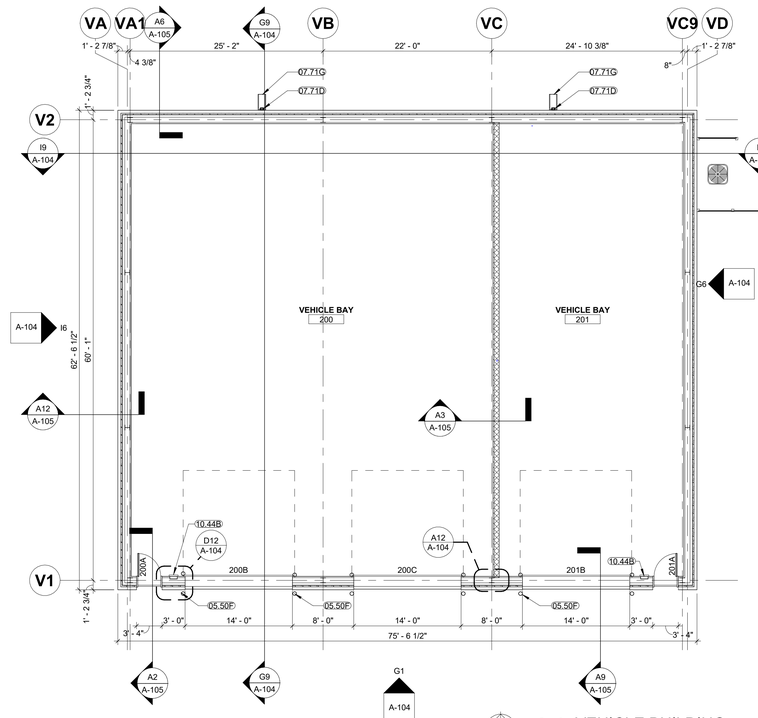

D12 O.H. DOOR JAMB
1 1/2" = 1'-0"




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

**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 | |

**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

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

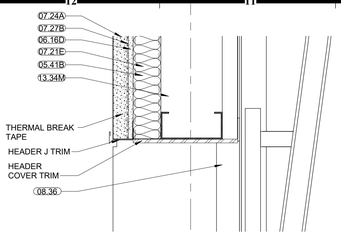
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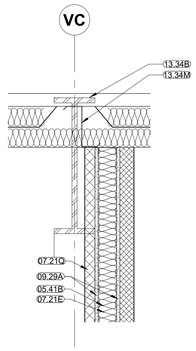
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HOEFER WELKER #: 138191

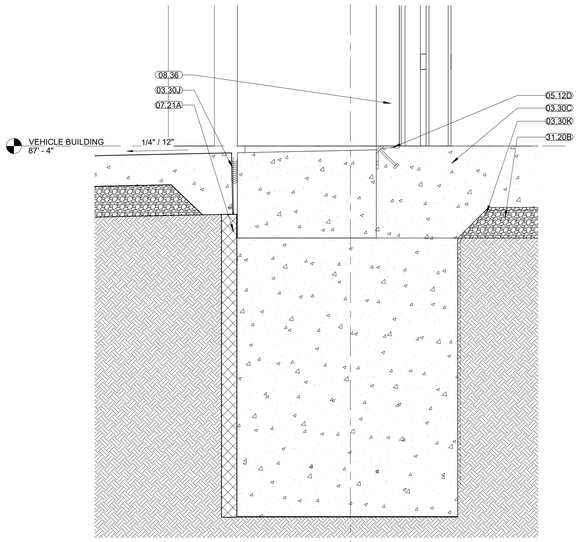
ALTERNATE #2 - VEHICLE BUILDING



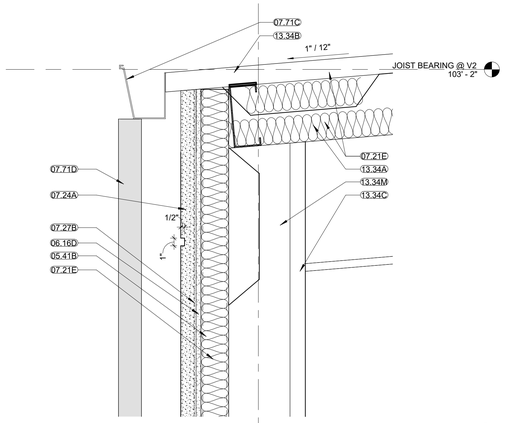

J11 O.H. DOOR HEAD
1 1/2" = 1'-0"



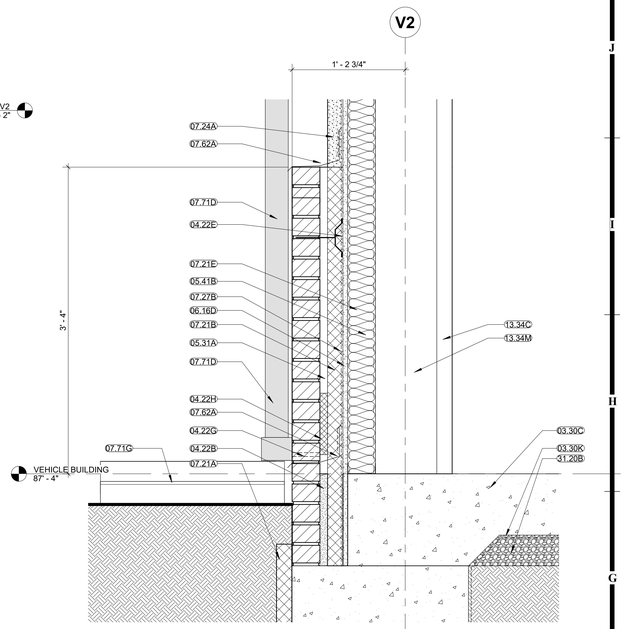

G11 CMU PARTITION @ BEAM
1" = 1'-0"



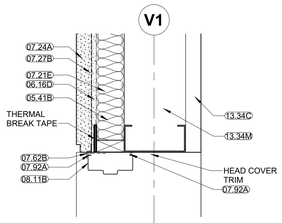

J7 O.H. DOOR SILL
1 1/2" = 1'-0"



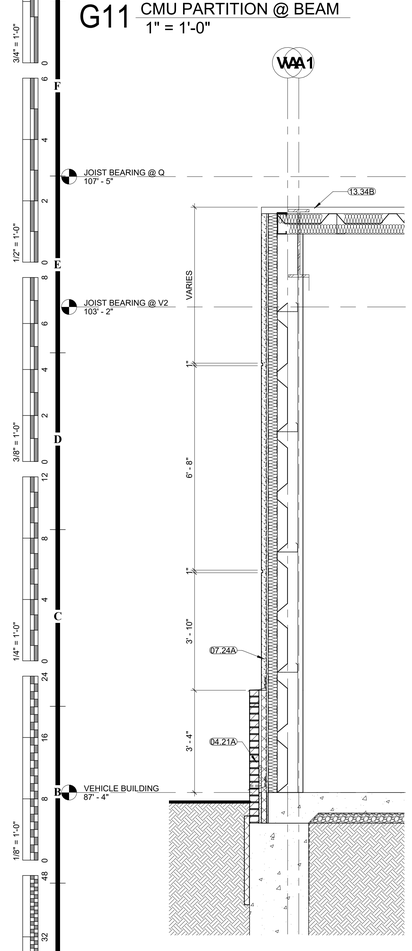

J5 ROO DETAIL @ GUTTER
1 1/2" = 1'-0"



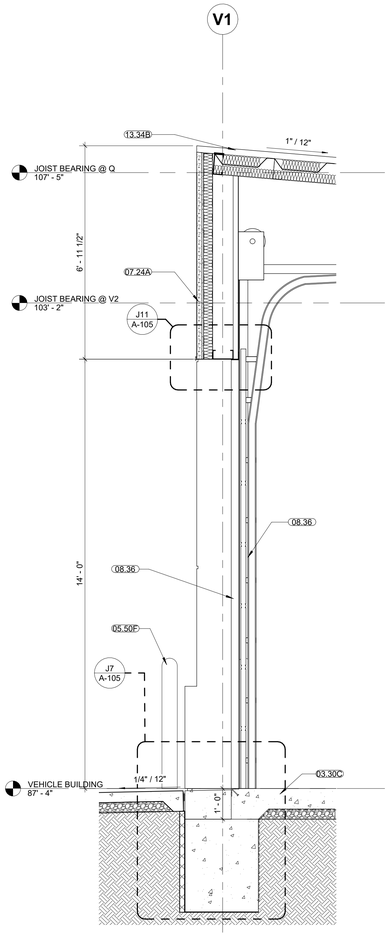

J2 LEDGE DETAIL
1 1/2" = 1'-0"



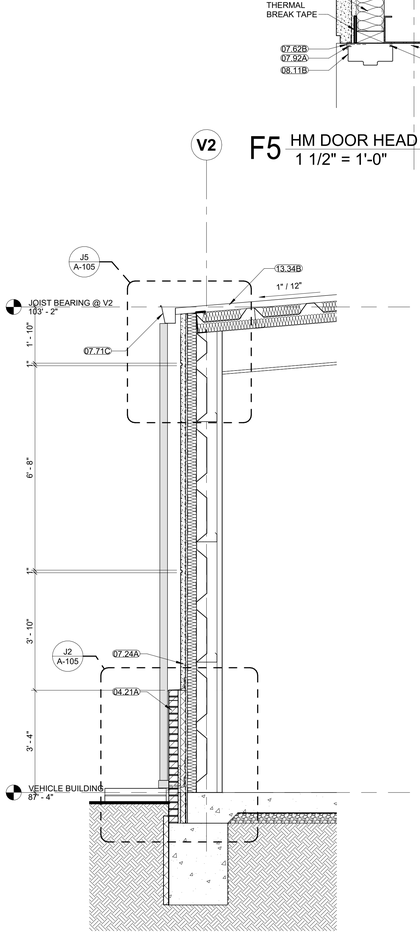

F5 HM DOOR HEAD @ MTL BUILDING
1 1/2" = 1'-0"



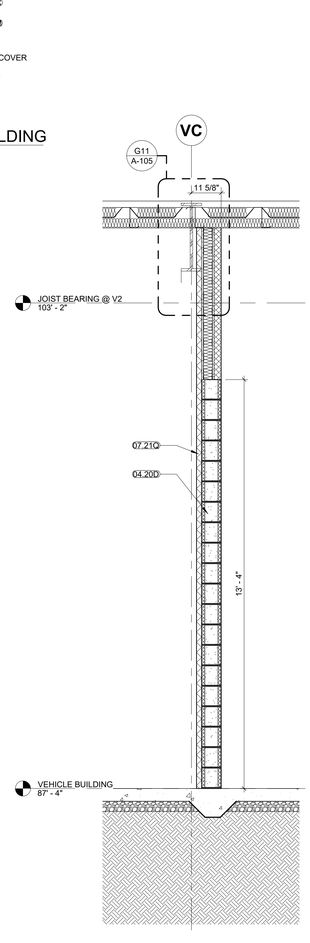

A12 VEHICLE BLDG END WALL
1/2" = 1'-0"



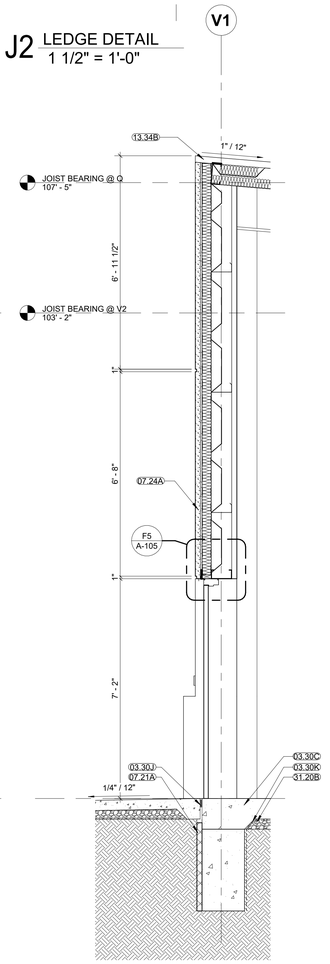

A9 VEHICLE BLDG @ SECTION DOOR
1/2" = 1'-0"




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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

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LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

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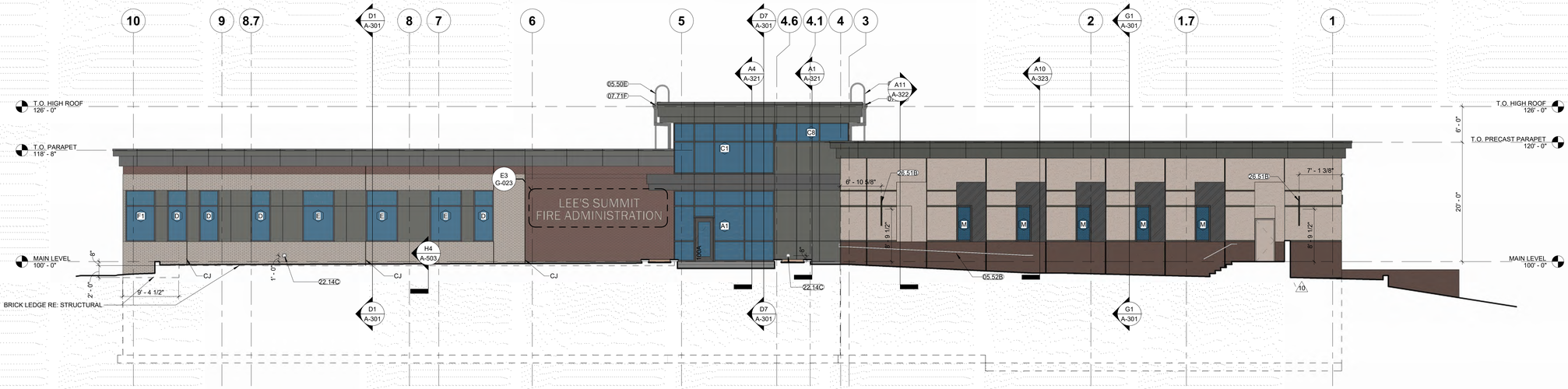
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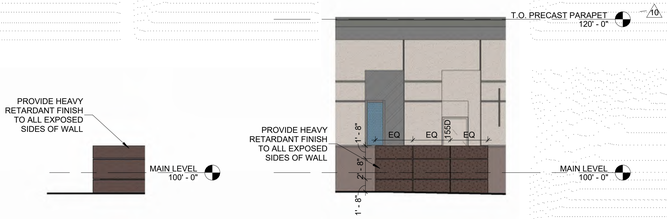
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ALTERNATE #2 - VEHICLE BUILDING



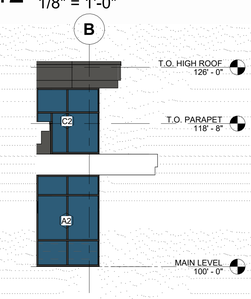

H1 WEST ELEVATION
1/8" = 1'-0"



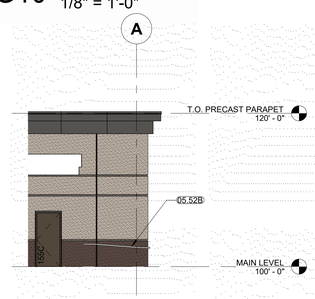

G12 SITE PRECAST WALL
1/8" = 1'-0"




G10 SITE PRECAST WALL
1/8" = 1'-0"



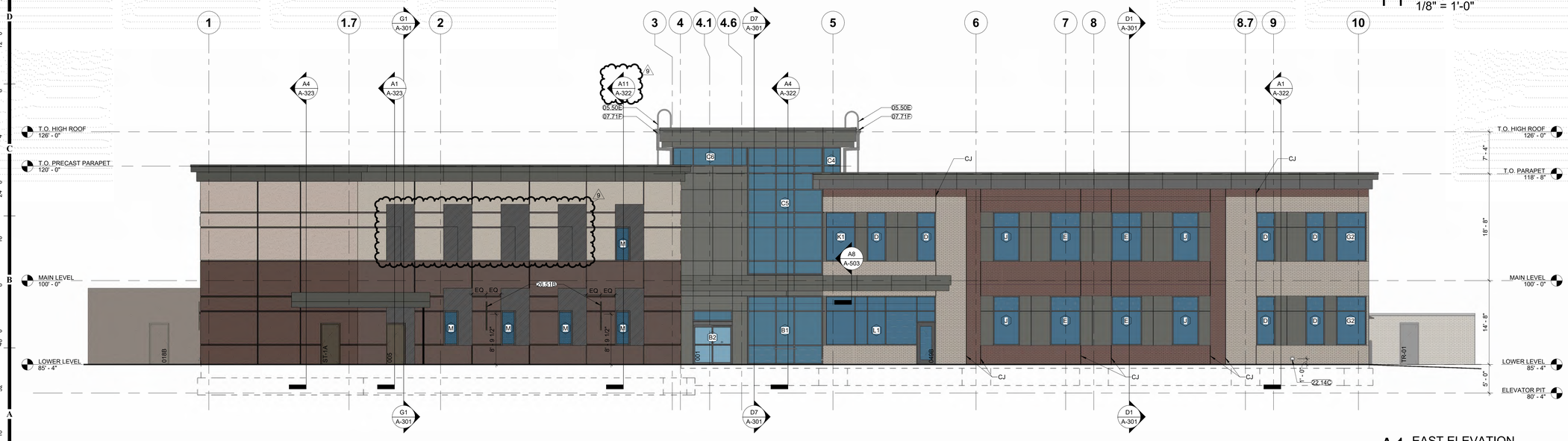

F12 NORTH EAST CORNER A
1/8" = 1'-0"




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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PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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| | | |
|---|---|---|
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| 10 | CCD 002 | 1/24/2025 |

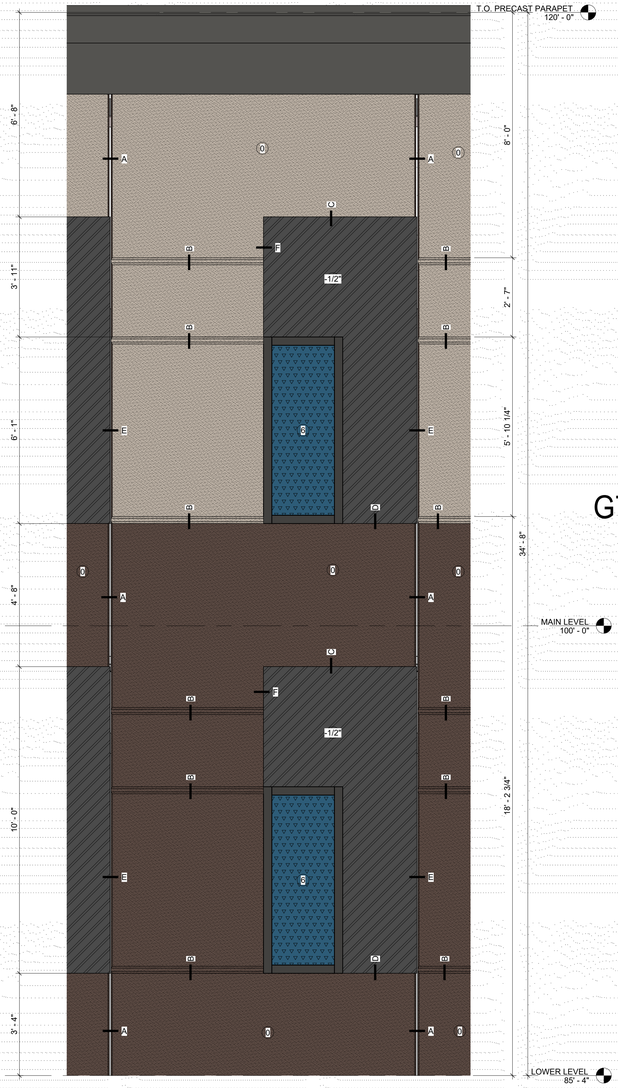
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
1/23/25
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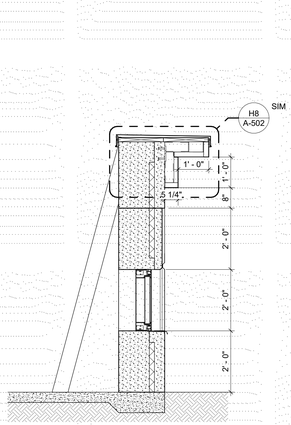
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

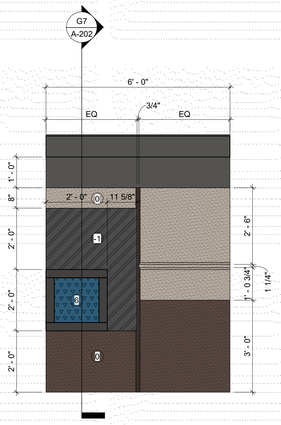
EXTERIOR ELEVATIONS



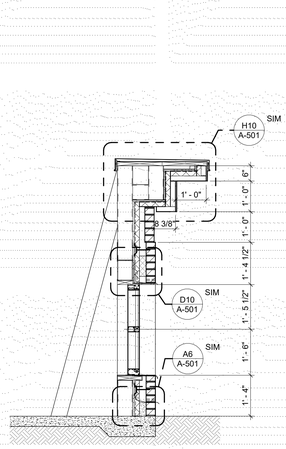

G7 MOCKUP PRECAST WALL SECTION
1/2" = 1'-0"



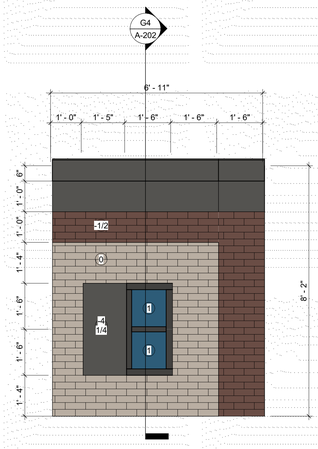

G5 MOCKUP WALL PRECAST
1/2" = 1'-0"

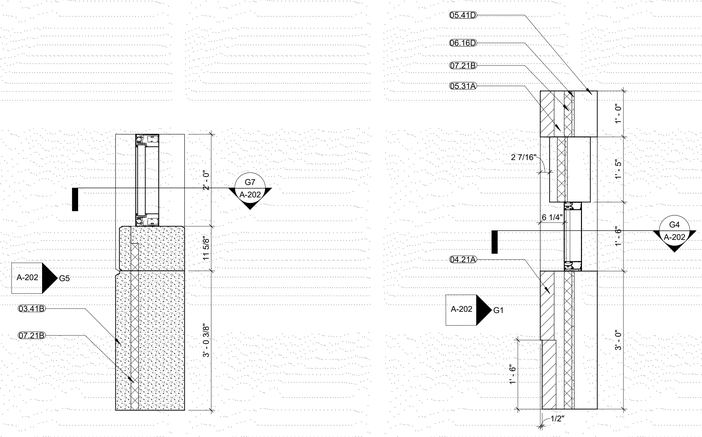



G4 MOCKUP BRICK WALL SECTION
1/2" = 1'-0"

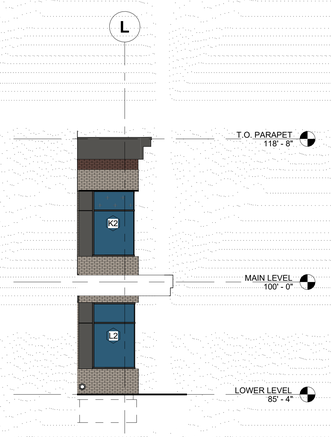



G1 MOCKUP WALL BRICK
1/2" = 1'-0"




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



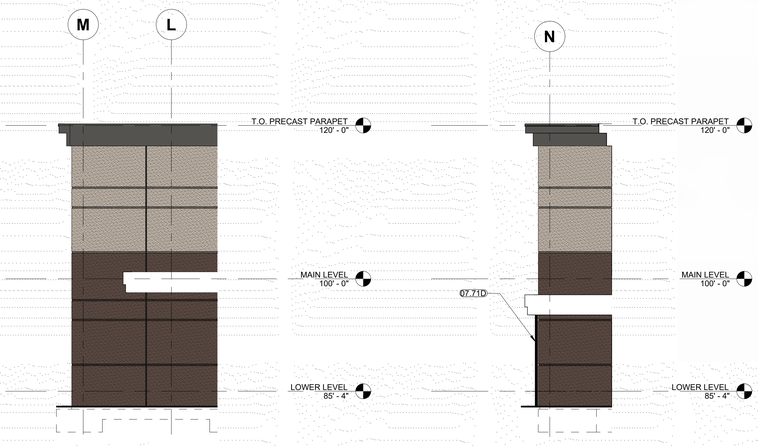

D1 SOUTH CORNER ELEVATION
1/8" = 1'-0"




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

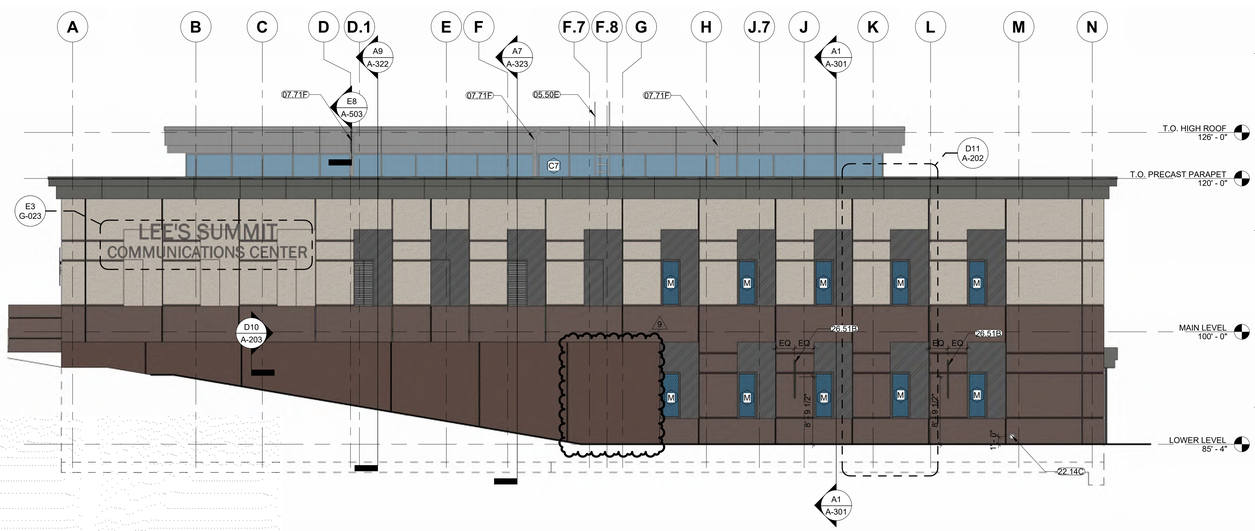



D11 ENLARGED ELEVATION PRECAST
1/2" = 1'-0"




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:**

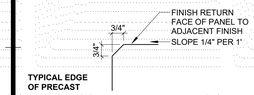
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. DIMENSIONS SHOWN ON THE EXTERIOR ELEVATIONS ARE TO THE FACE OF EXTERIOR WALL, FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS OTHERWISE NOTED OR INDICATED.
3. RE: THE WINDOW TYPES SHEET FOR ALL 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:**

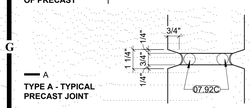
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. BRICK PLANE CHANGES REFER TO (+0) = ***1'-7"*** FROM COLUMN CENTERLINE (TYP.), UNLESS NOTED OTHERWISE.

**MATERIAL KEYNOTES**

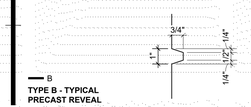
| | |
|---|---|
| 03.41B | PRECAST CONCRETE WALL |
| 04.21A | FACE BRICK |
| 05.31A | STEEL ROOF DECK |
| 05.41D | EXTERIOR NON-LOAD-BEARING MTL. C-STUDS - 6-INCH - RE: STRUCT. FOR SPACING |
| 05.50E | METAL LADDERS |
| 06.16D | EXTERIOR GLASS-MAT GYPSUM WALL SHEATHING W/ TAPED AND SEALED SEAMS |
| 07.21B | 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 |



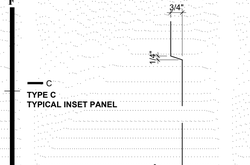

**TYPICAL EDGE OF PRECAST**



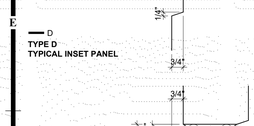

**TYPE A - TYPICAL PRECAST JOINT**



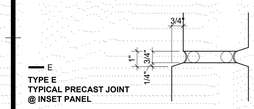

**TYPE B - TYPICAL PRECAST REVEAL**



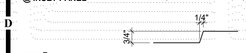

**TYPE C TYPICAL INSET PANEL**




**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

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

| | | |
|---|---|---|
| 9 | CCD 001 | 1/29/2025 |

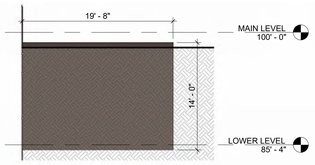
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CHRISTOPHER KRAMER
NUMBER A-2016011211
ARCHITECT
12/31/25

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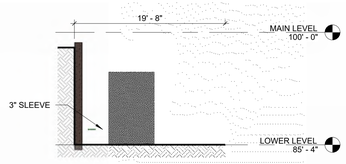
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

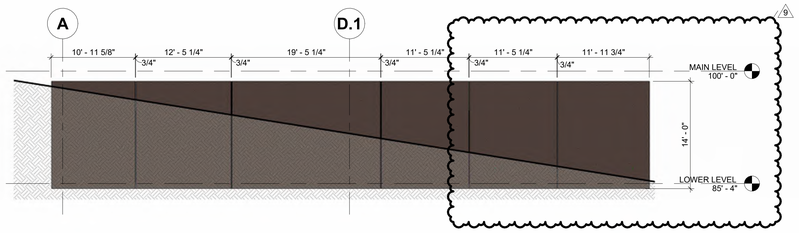
EXTERIOR ELEVATIONS



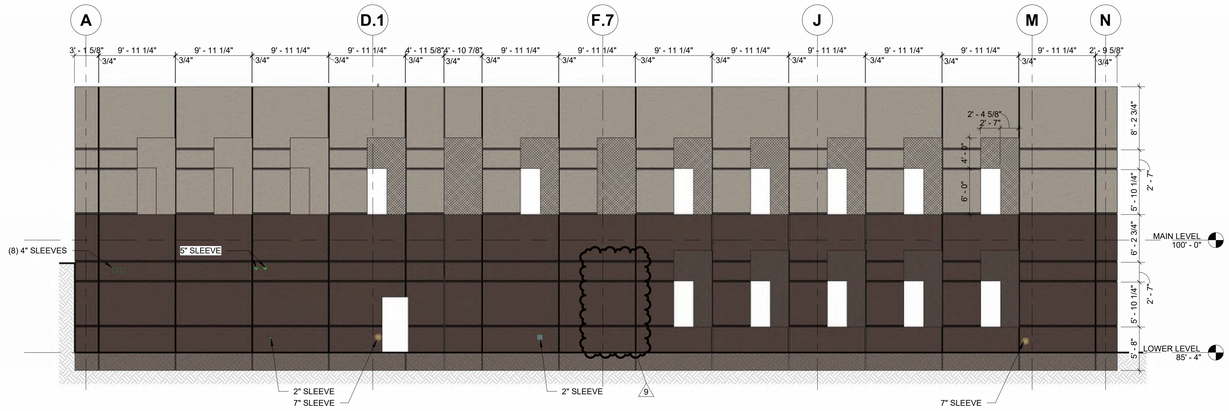

J11 GENERATOR WEST
1/8" = 1'-0"



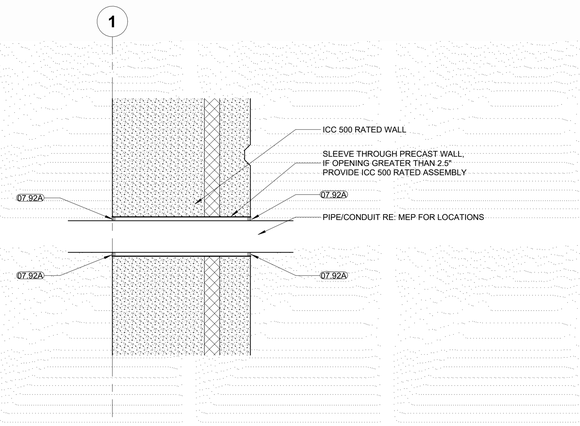

J9 GENERATOR EAST
1/8" = 1'-0"



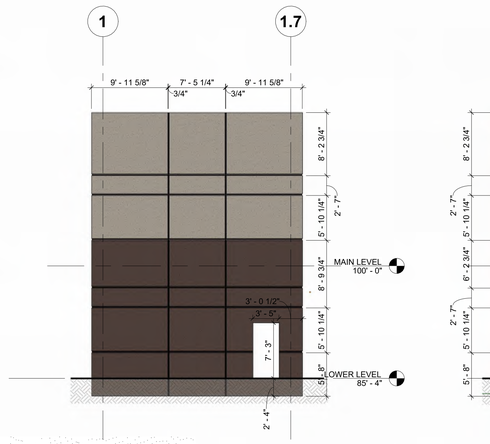

G9 GENERATOR SOUTH
1/8" = 1'-0"



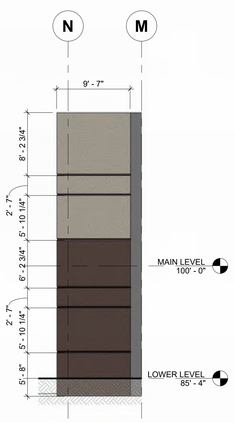

G1 PRECAST - SOUTH
1/8" = 1'-0"



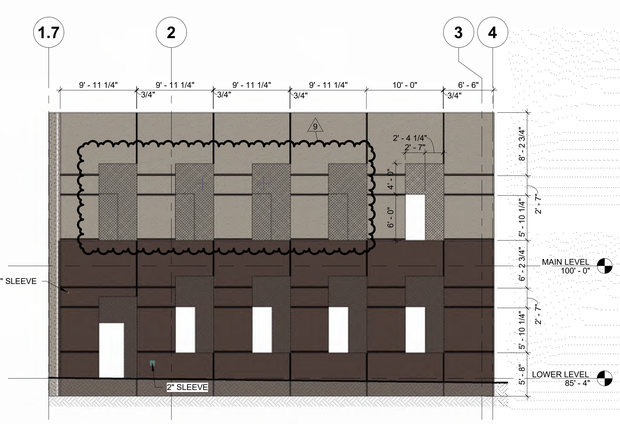

D10 TYP. PRECAST PENETRATION DETAIL
1 1/2" = 1'-0"



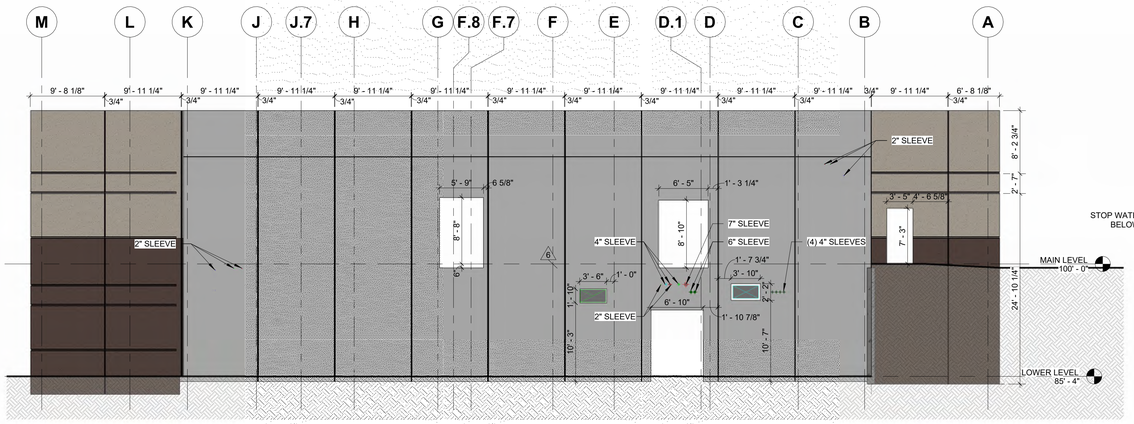

D6 PRECAST - EAST STAIR
1/8" = 1'-0"



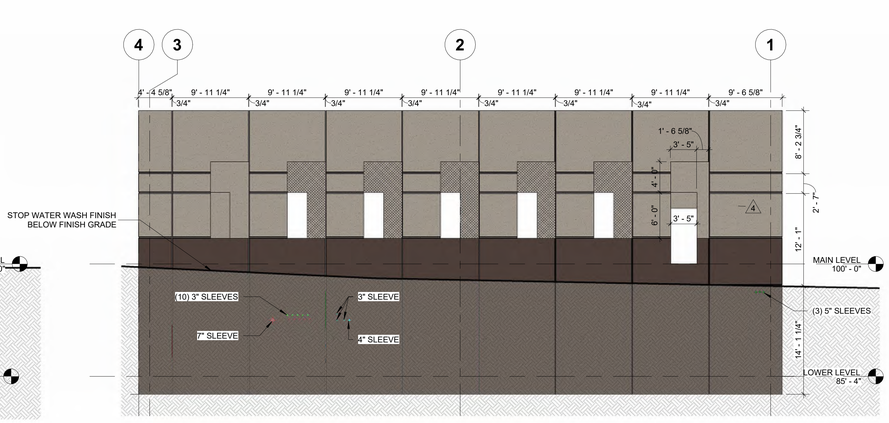

D4 PRECAST - NORTH STAIR
1/8" = 1'-0"




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




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




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

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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:

| | | |
|---|---|---|
| 4 | ADDENDUM 4 | 11/26/2024 |
| 6 | ASI 002 | 12/13/2024 |
| 9 | CCD 001 | 1/29/2025 |

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

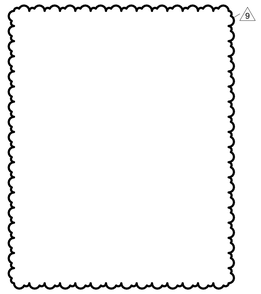
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
11/25/24
ARCHITECT

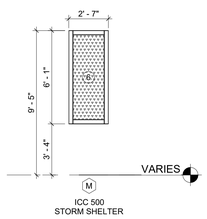
PROFESSIONAL SEAL

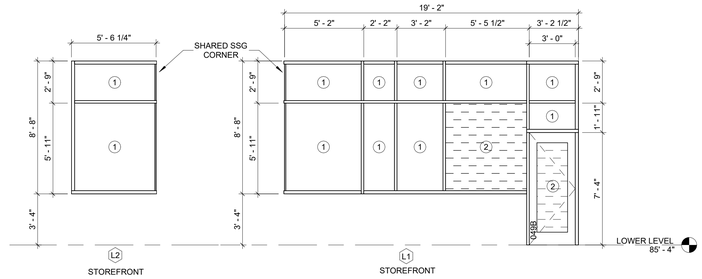
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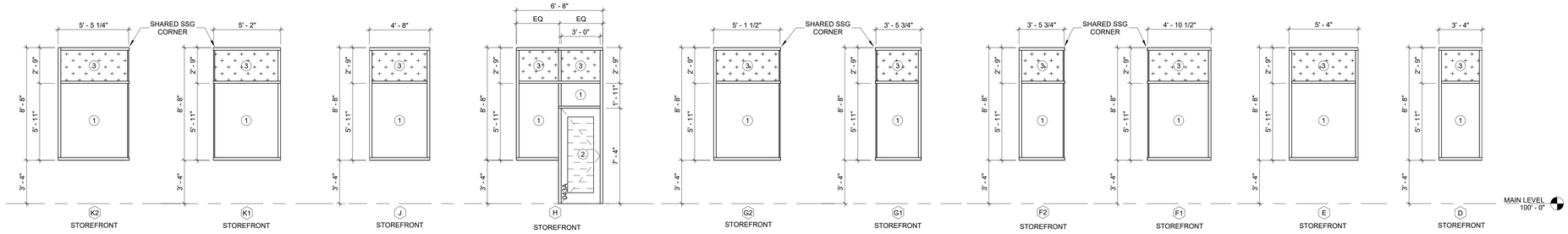
ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

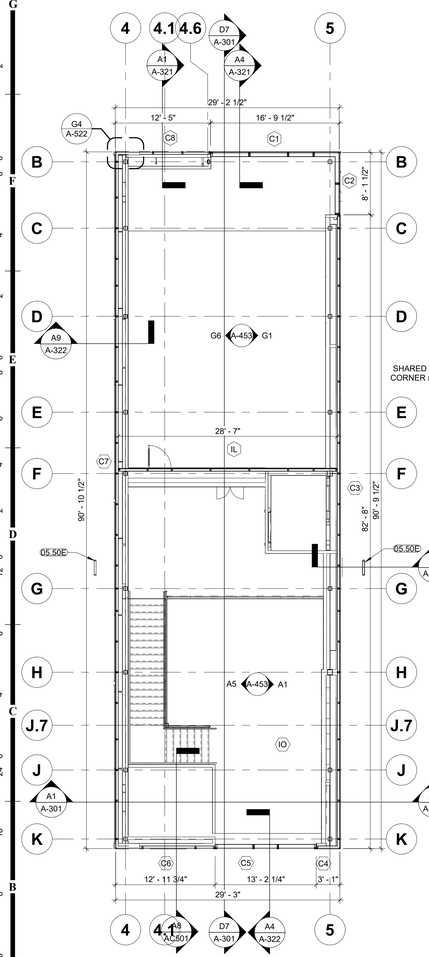
PRECAST ELEVATIONS



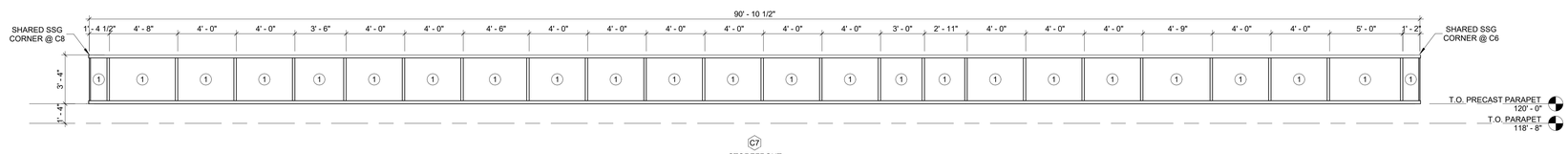



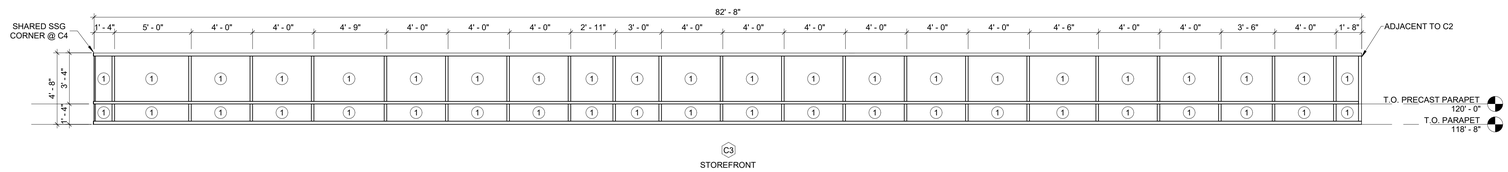



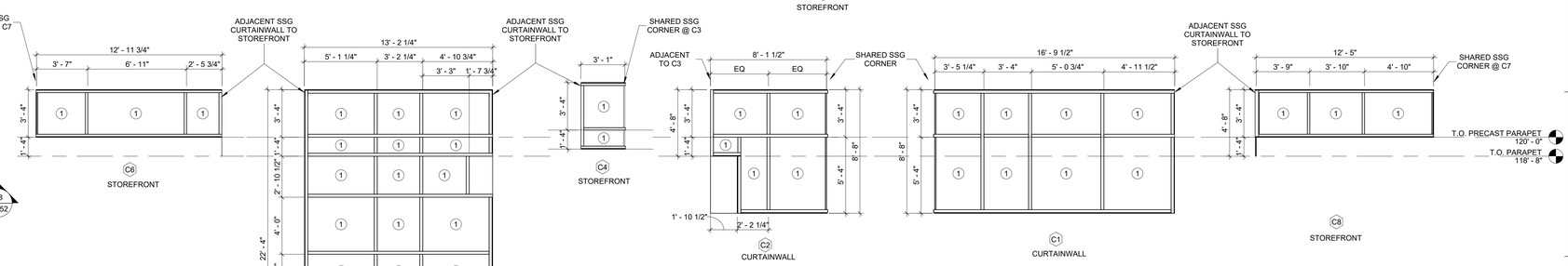



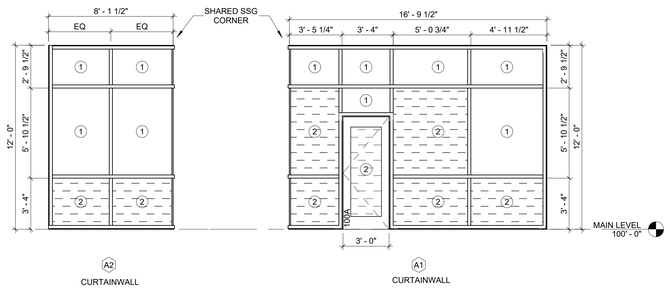



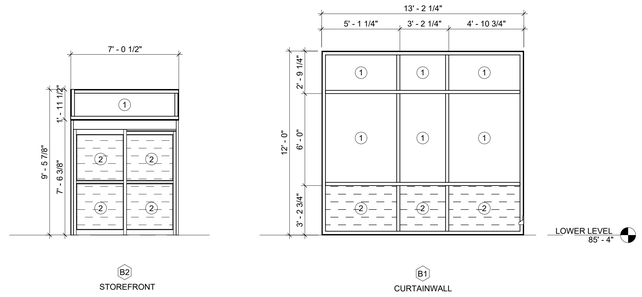

B11 ROOF PLAN CLERESTORY
1/8" = 1'-0"




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

| MATERIAL KEYNOTES | |
|---|---|
| 05.50E | METAL LADDERS |


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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:

| | | |
|---|---|---|
| 9 | CCD 001 | 1/29/2025 |

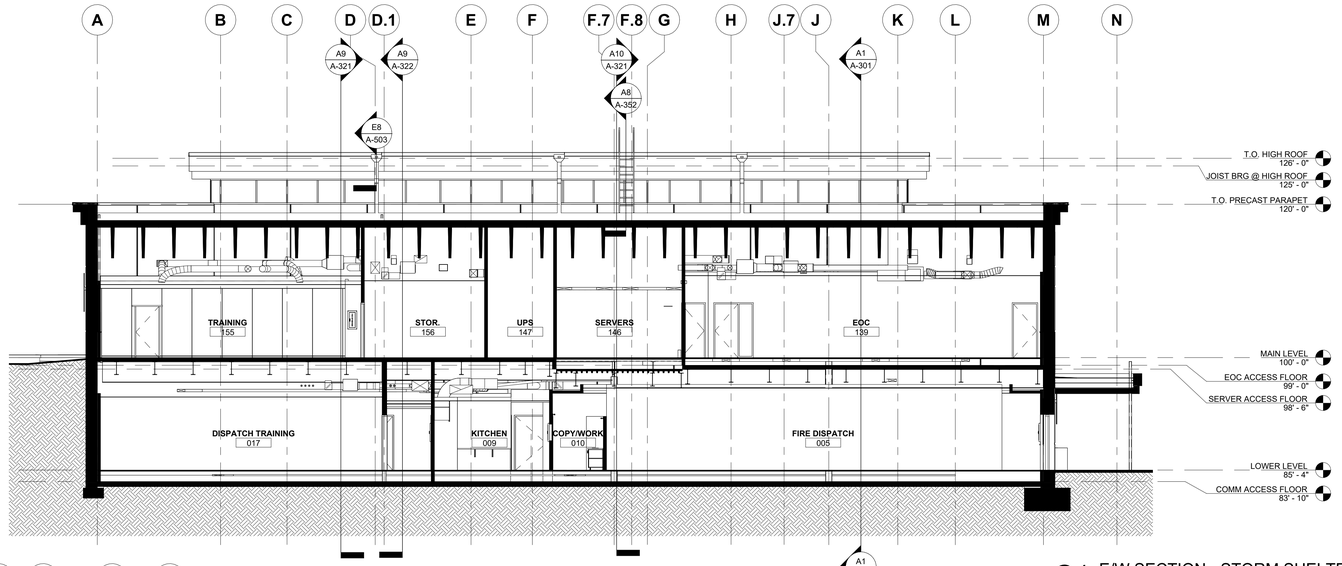
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
1/23/25
ARCHITECT

PROFESSIONAL SEAL

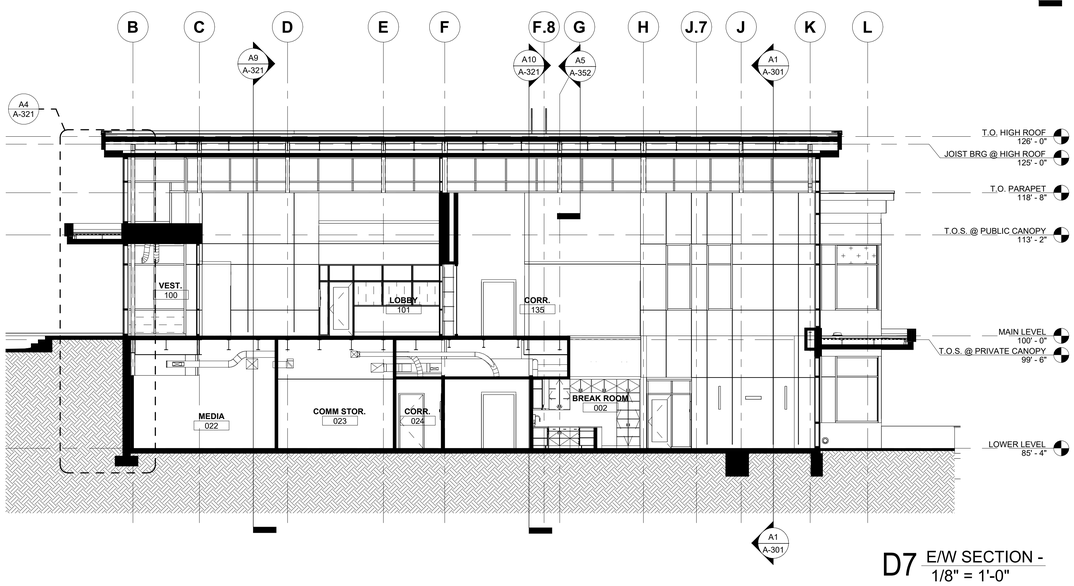
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

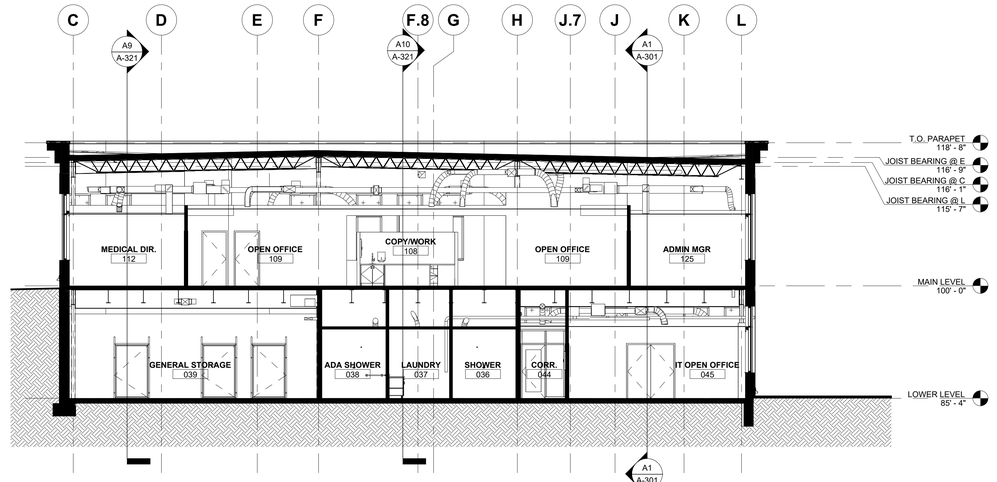
EXTERIOR WINDOW TYPES



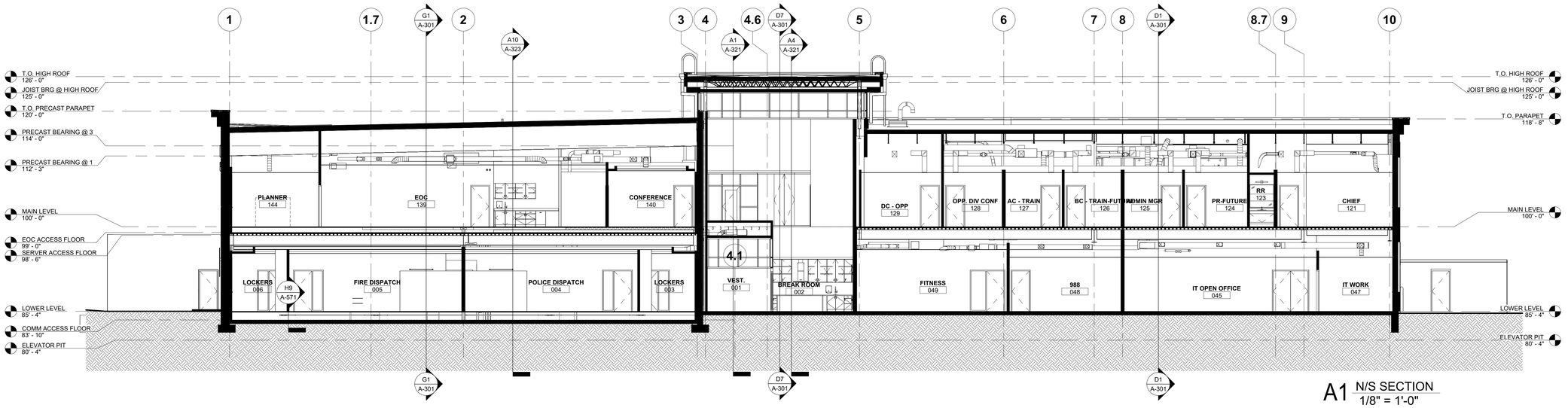

G1 E/W SECTION - STORM SHELTER
1/8" = 1'-0"




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 JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

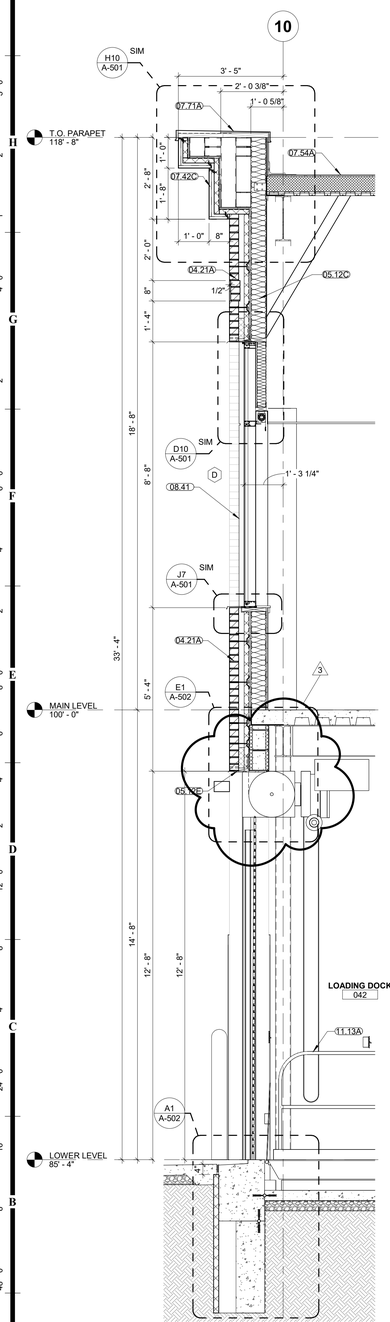
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
11/01/24

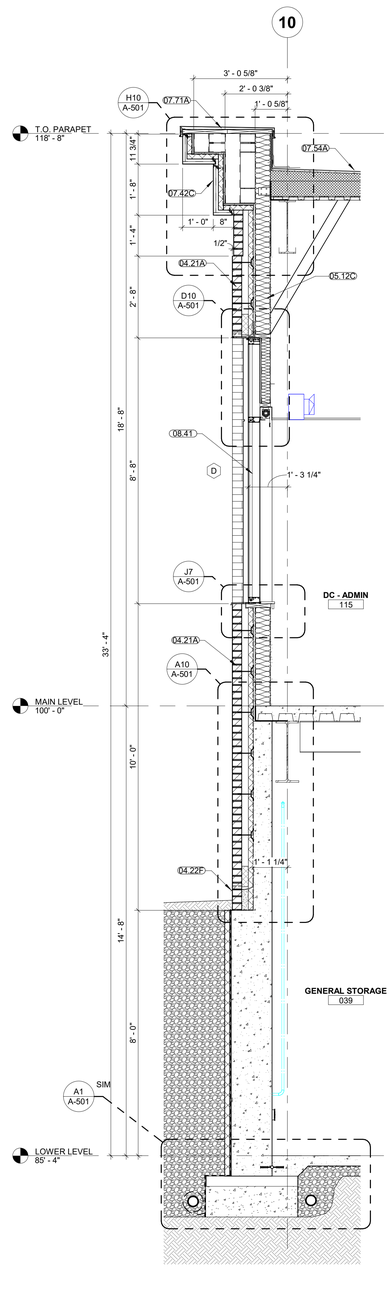
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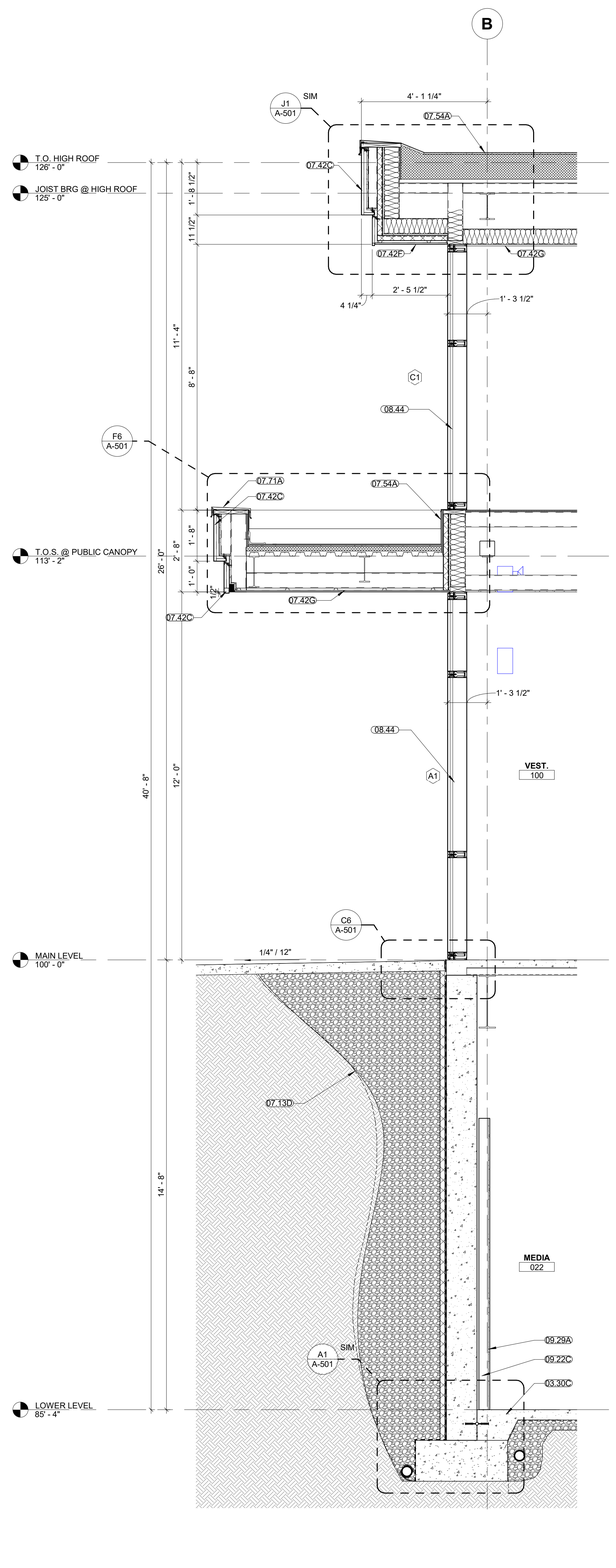
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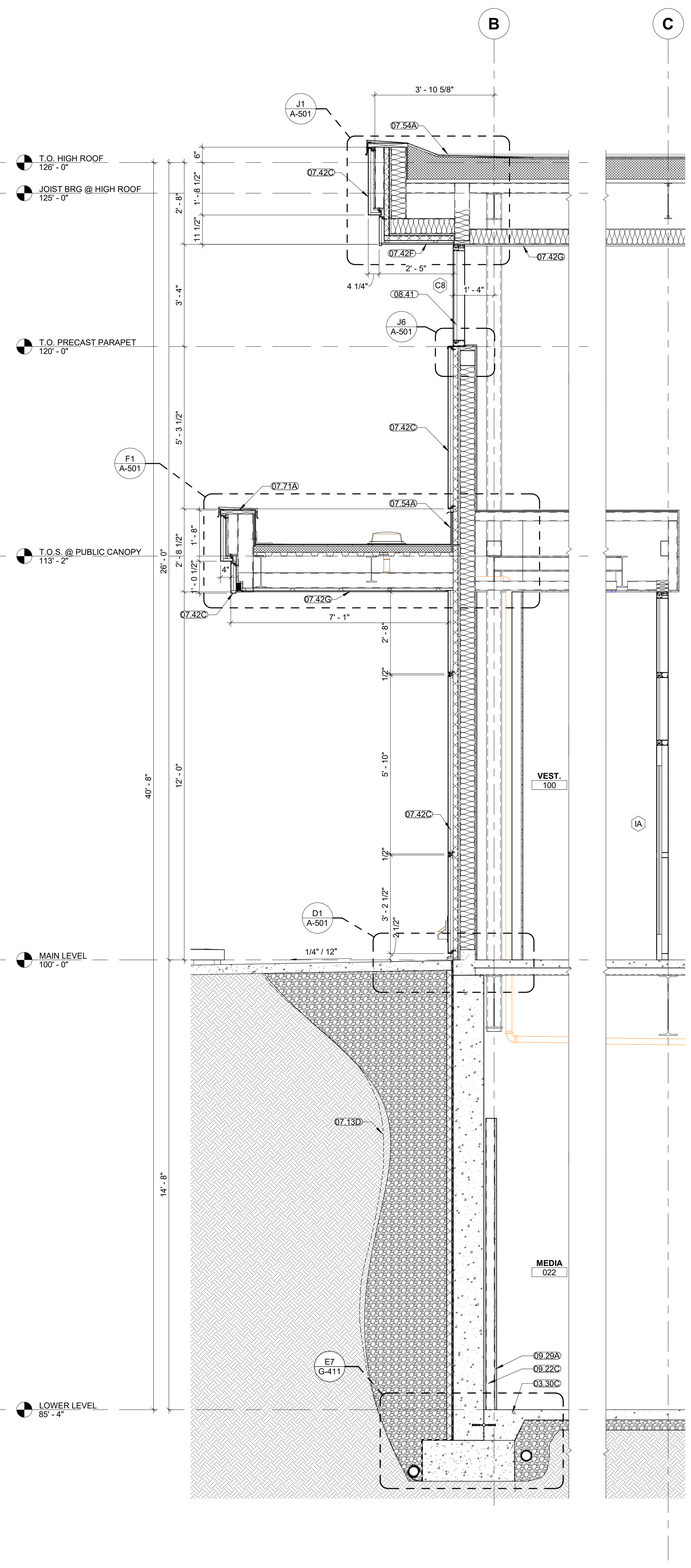
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

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

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

| | | |
|---|---|---|
| 3 | ADDENDUM 3 | 11/18/2024 |

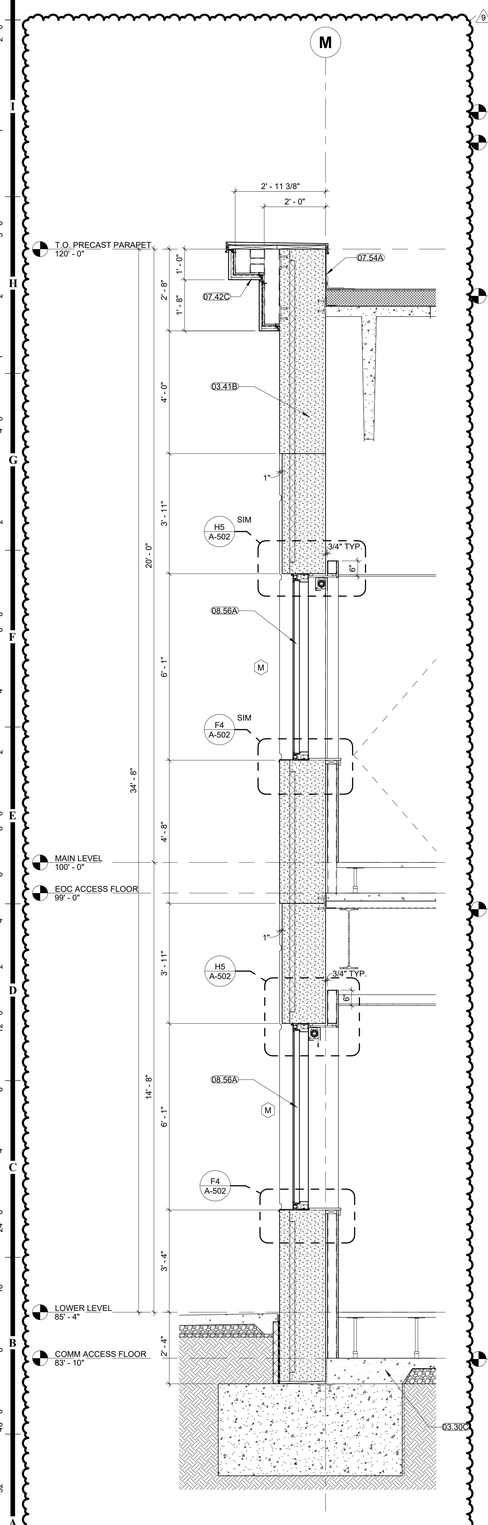
STATE OF MISSOURI
CHRISTOPHER KRAMREI
NUMBER A-2016012121
11/18/24
ARCHITECT

PROFESSIONAL SEAL

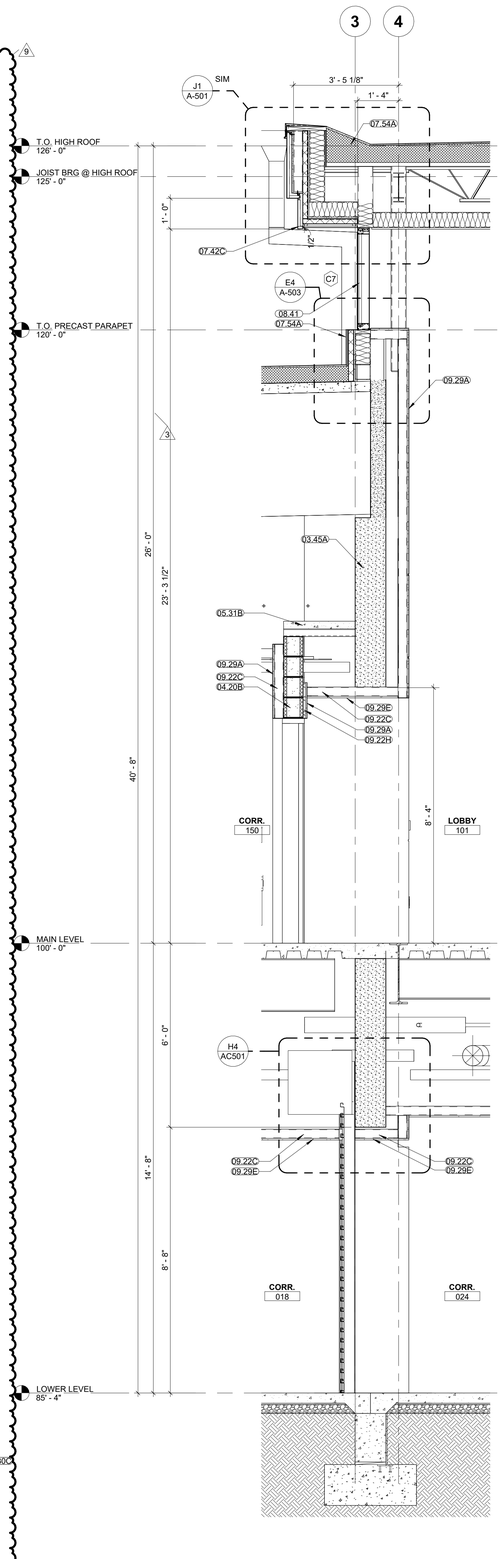
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

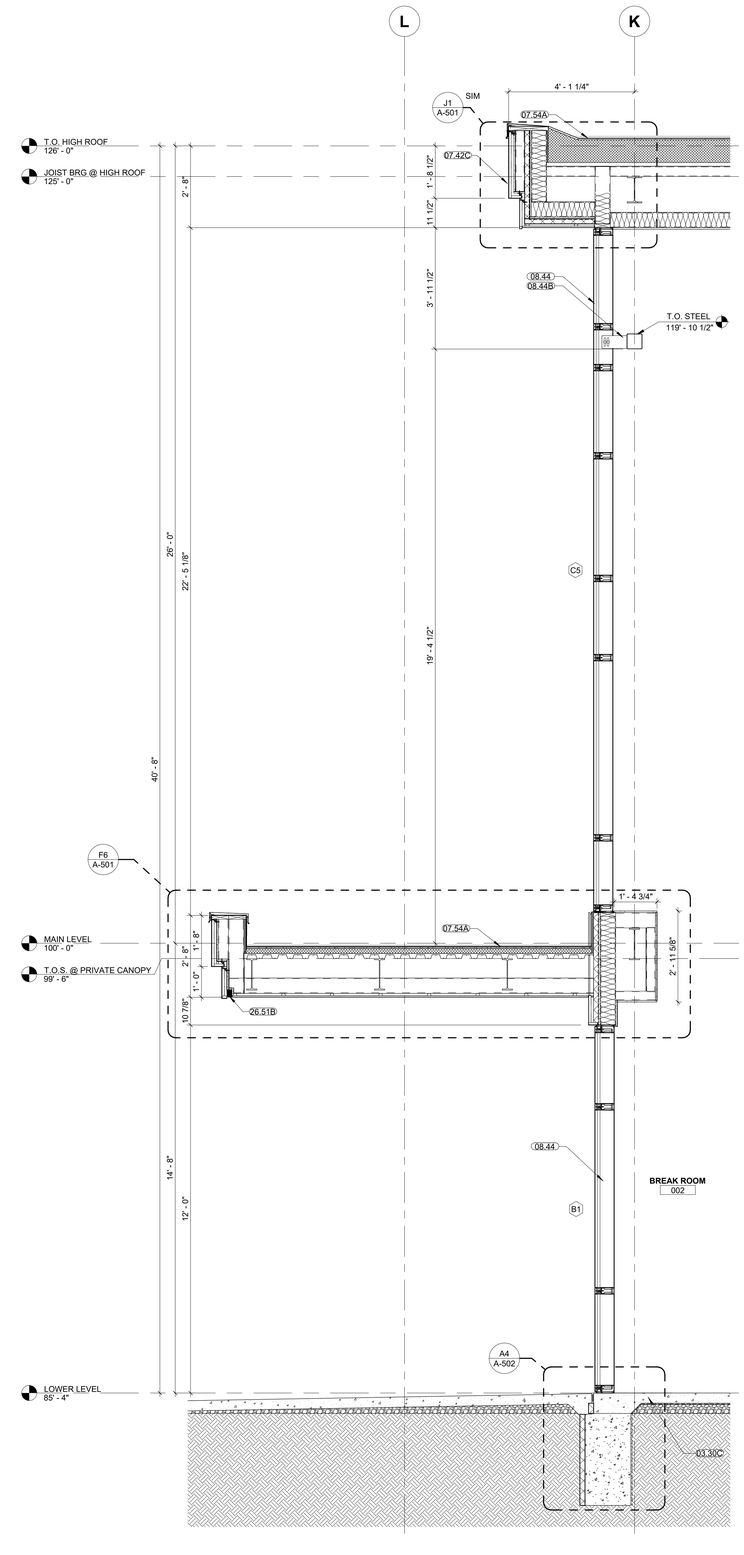
WALL SECTIONS



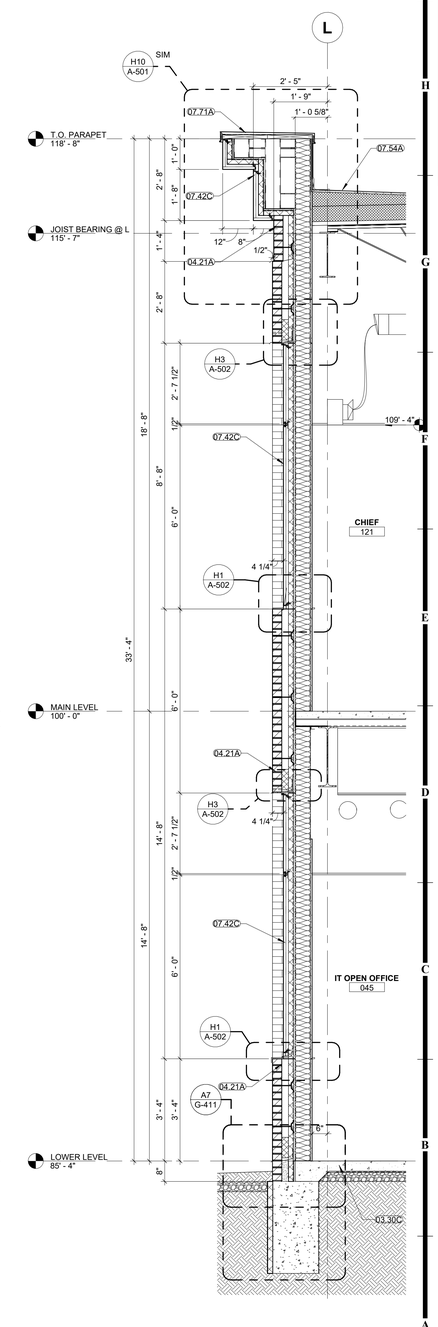

A11 HARDENED STRUCTURE @ WINDOWS
1/2" = 1'-0"




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 |
| 03.41B | PRECAST CONCRETE WALL |
| 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 |
| 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 |
| 09.29E | 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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# 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 |
| 9 | CCD 001 | 1/29/2025 |

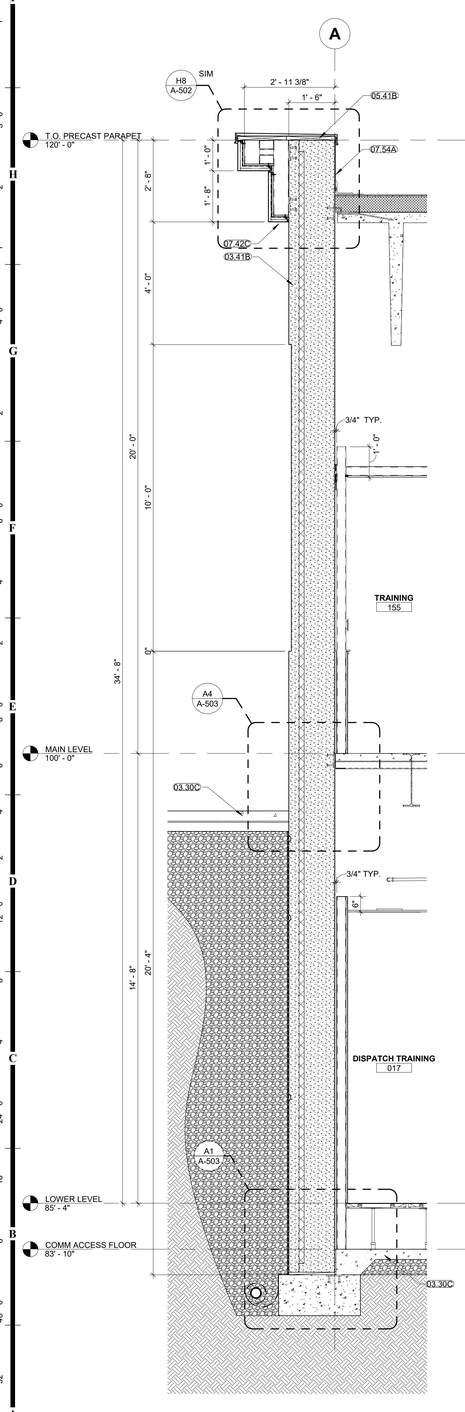
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2010011211
ARCHITECT
1/29/25

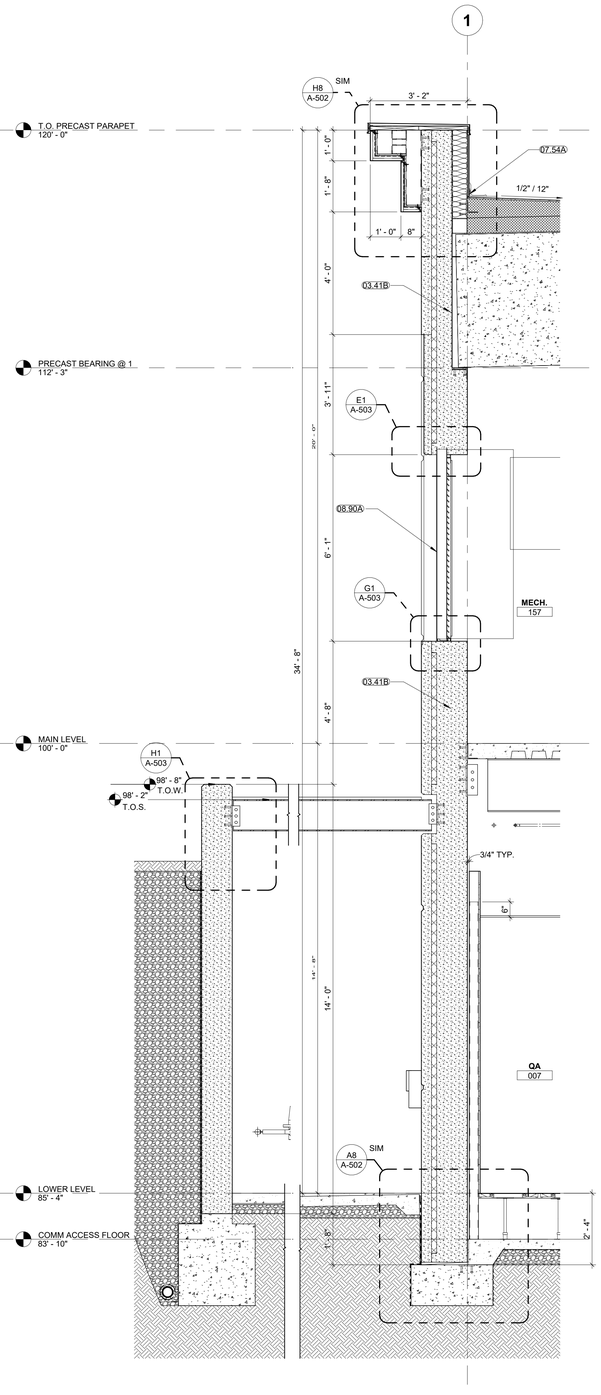
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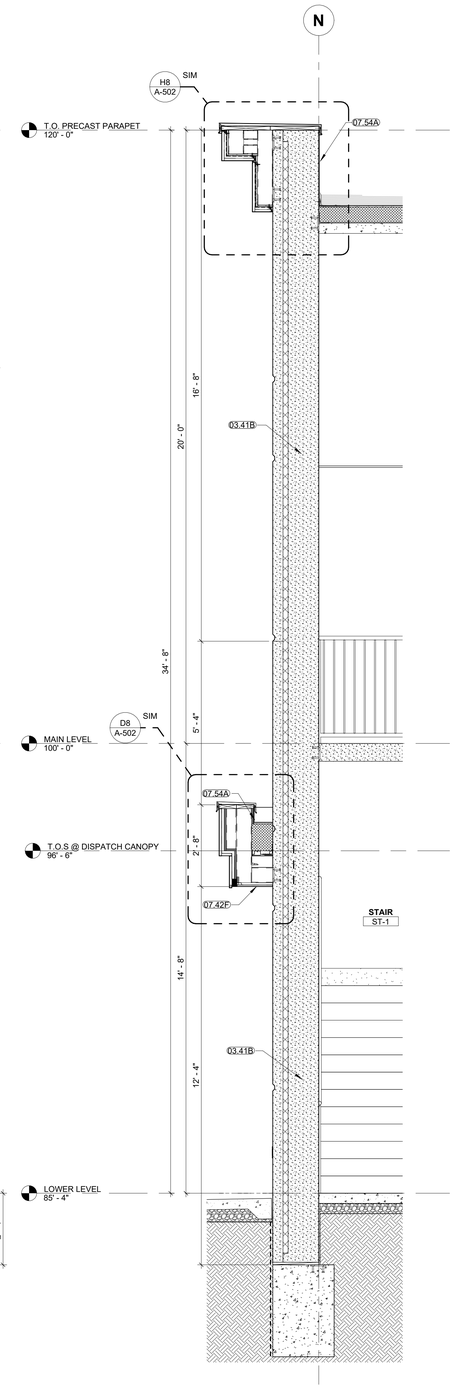
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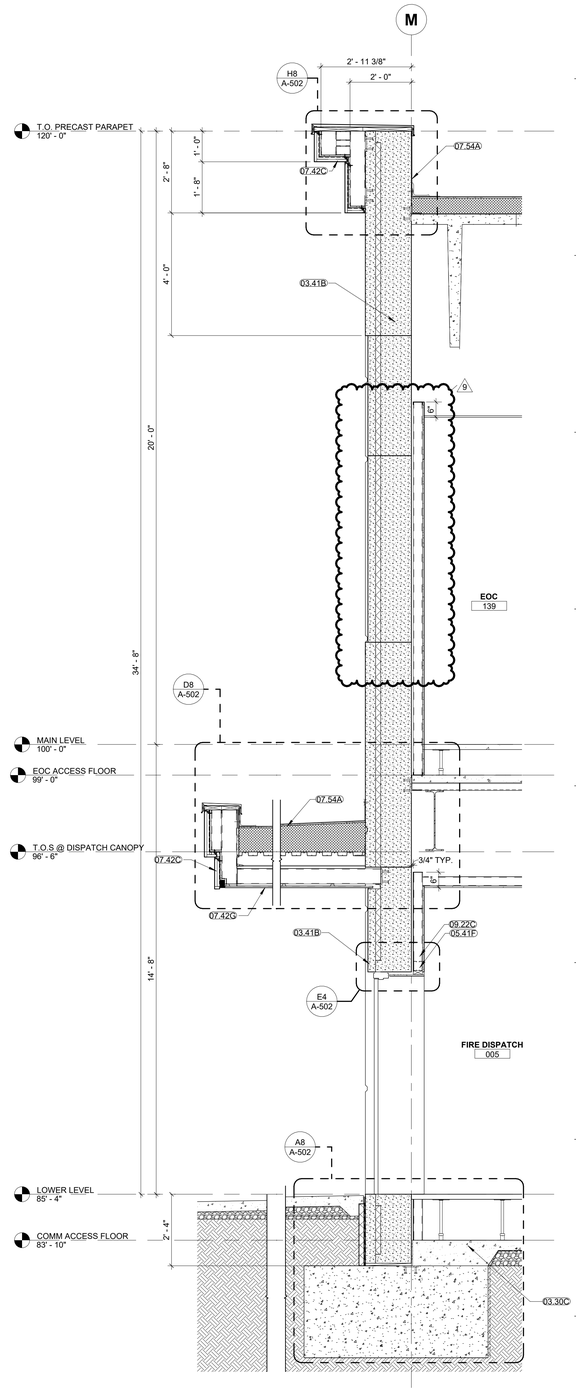
ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

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 |
| 08.90A | ALUMINUM LOUVER |
| 09.22C | 3 5/8-INCH METAL STUDS @ 16-INCHES O.C. |

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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:

| | | |
|---|---|---|
| 9 | CCD 001 | 1/29/2025 |

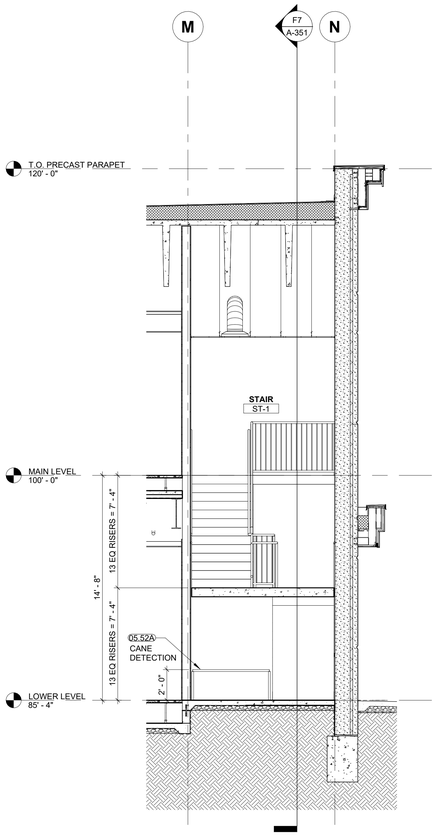
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
1/23/25

PROFESSIONAL SEAL

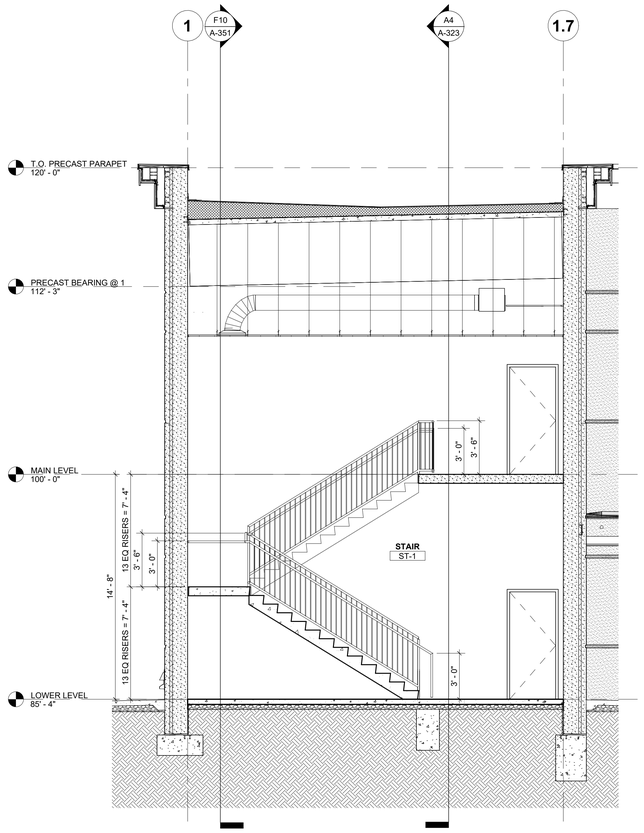
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

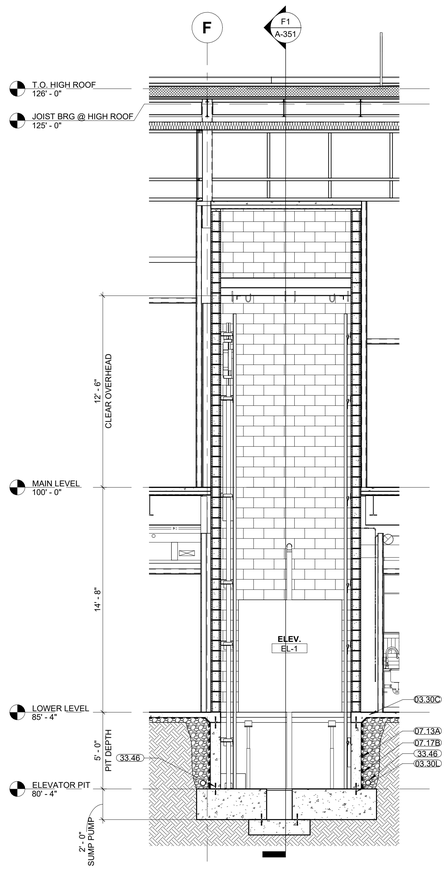
WALL SECTIONS



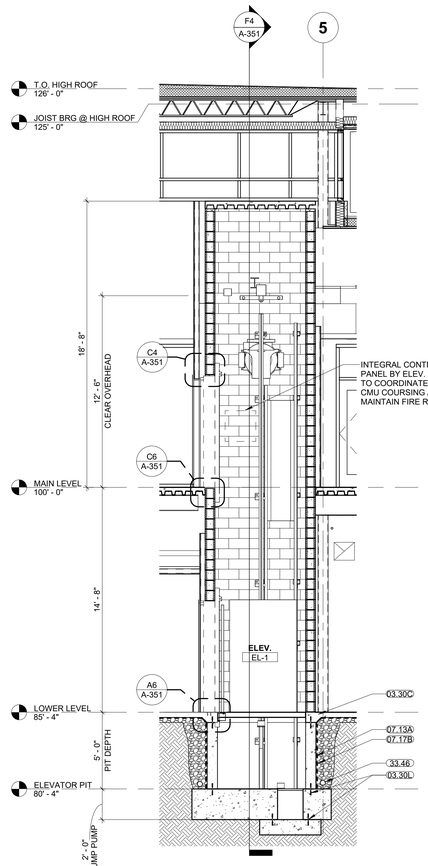

F10 STAIR ST-1 SECTION B
1/4" = 1'-0"




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:**

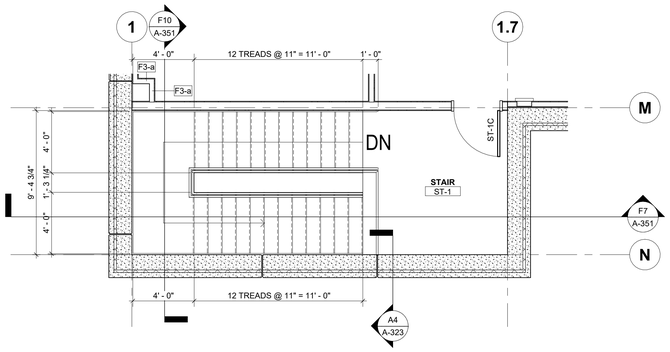
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. ARCHITECTURAL ELEVATION 100'-0" = CIVIL ELEVATION 1024.67'
3. DIMENSIONS SHOWN ON THE FLOOR PLAN ARE TO THE FACE OF MASONRY (FOM), FACE OF CONCRETE WALLS (FOC), AND COLUMN GRID LINES, UNLESS NOTED OR SHOWN OTHERWISE.
4. FOR METAL 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:**

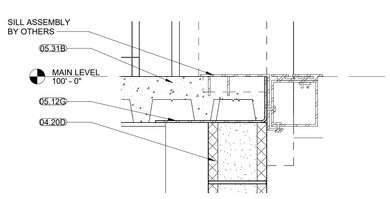
1. RE: SHEET G-011 FOR ADDITIONAL GENERAL NOTES THAT ARE APPLICABLE.
2. RE: FLOOR PLANS, ROOF PLAN AND ELEVATIONS FOR SECTION CUT LOCATIONS.
3. ALL WINDOW AND DOOR OPENING DIMENSIONS ARE ROUGH OPENING DIMENSIONS, UNLESS NOTED OTHERWISE.
4. DIMENSIONS SHOWN ON THE WALL SECTIONS ARE TO THE FACE OF EXTERIOR 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**

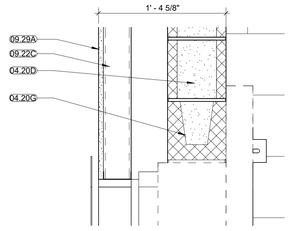
| | |
|---|---|
| 03.30C | CONCRETE SLAB-ON-GRADE |
| 03.30K | UNDER-SLAB VAPOR RETARDER |
| 03.30L | PVC WATER STOP |
| 04.20D | CONCRETE MASONRY UNIT (CMU) - 7 5/8 INCH |
| 04.20G | CONCRETE MASONRY UNIT (CMU) BOND BEAM GROUTED FULL |
| 05.12G | STEEL BENT PLATE |
| 05.31B | COMPOSITE FLOOR DECK |
| 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 |



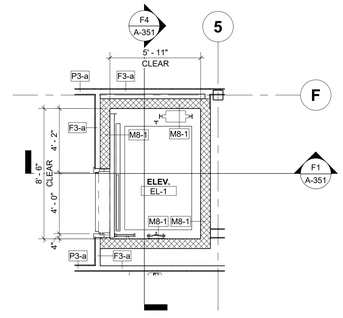

C8 MAIN LEVEL ST-1
1/4" = 1'-0"



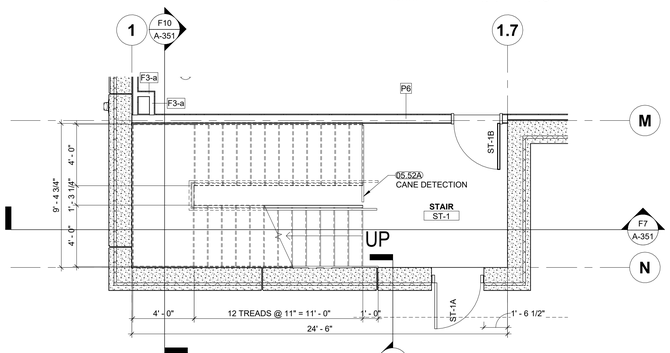

C6 ELEVATOR THRESHOLD AT CMU
1 1/2" = 1'-0"



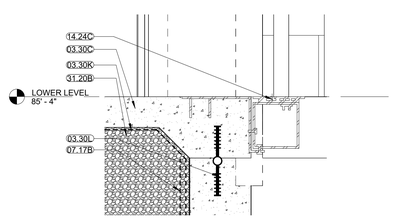

C4 ELEVATOR HEAD DETAIL @ CMU
1 1/2" = 1'-0"



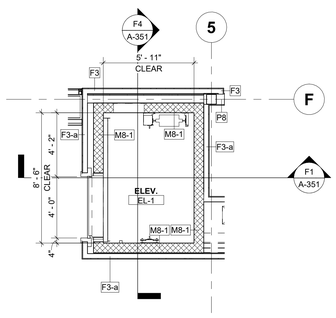

C1 LOWER LEVEL EL-1
1/4" = 1'-0"



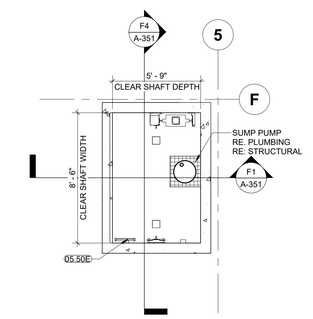

A8 LOWER LEVEL ST-1
1/4" = 1'-0"




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"

HOEFER WELKER
4622 PENNSYLVANIA AVENUE
SUITE 1400
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:

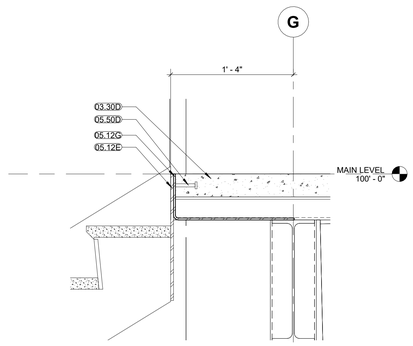
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
ARCHITECT
11/1/24

PROFESSIONAL SEAL

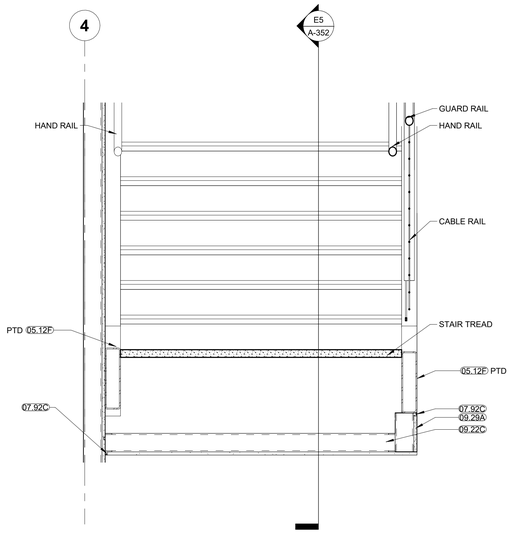
A-351

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

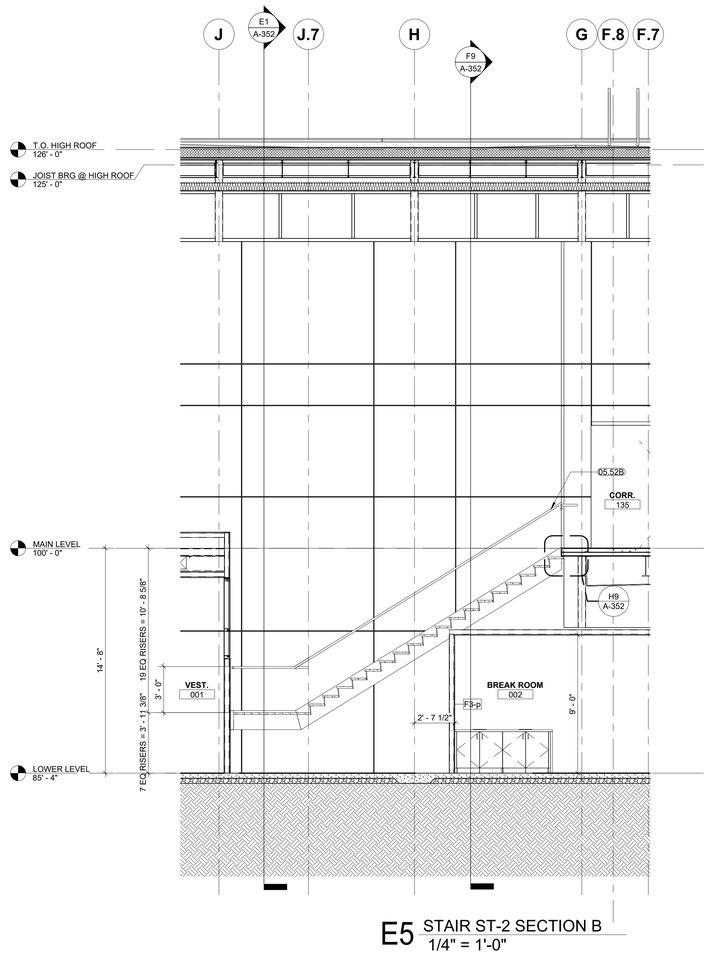
VERTICAL CIRCULATION PLANS AND SECTIONS



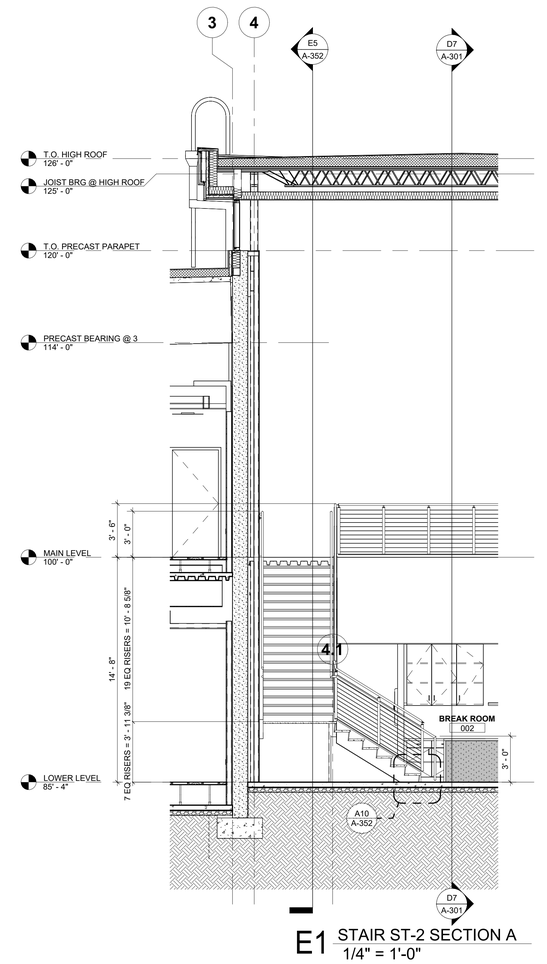

H9 METAL PAN STAIR @ DECK
1 1/2" = 1'-0"



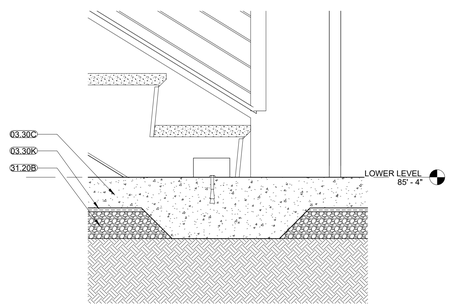

F9 GYP CEILING @ METAL PAN STAIR
1" = 1'-0"



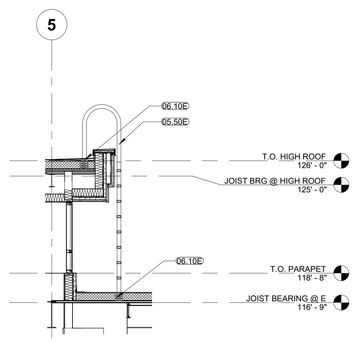

E5 STAIR ST-2 SECTION B
1/4" = 1'-0"



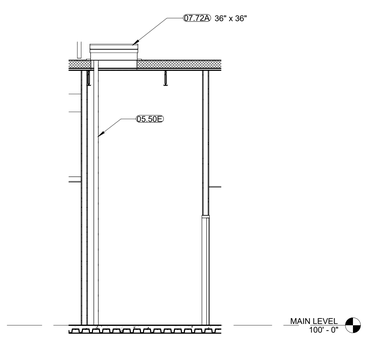

E1 STAIR ST-2 SECTION A
1/4" = 1'-0"



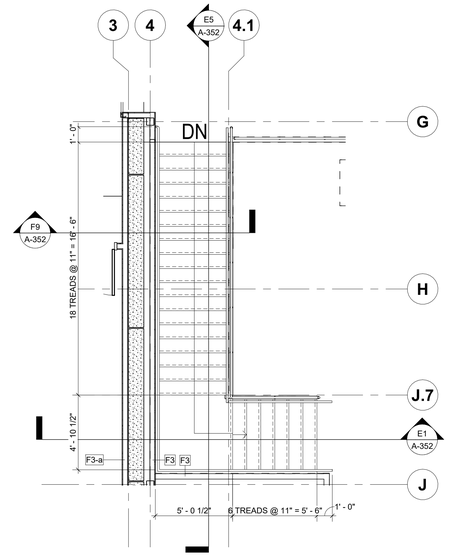

A10 METAL PAN STAIR BASE @ SLAB
1 1/2" = 1'-0"




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 |

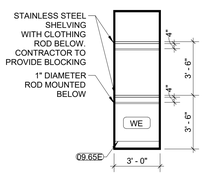
COMMENTS:
1. RECESSED
2. SEMI-RECESSED
3. SURFACE MOUNTED
4. MOUNT TOP OF UNIT AT 48" A.F.F.
5. CENTER ON SINK
6. INSTALL CENTERED ON INSIDE OF DOOR @ 4'-6" A.F.F.
7. TOILET PAPER DISPENSER SHALL BE 7" MIN. TO 9" MAX. IN. FROM EDGE OF W.C.

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.

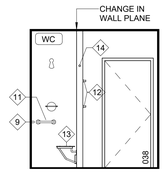
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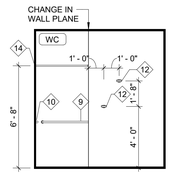
| MATERIAL KEYNOTES | |
|---|---|
| 06.40K | PLASTIC LAMINATE FILLER PANEL |
| 09.30G | PORCELAIN TILE BASE |
| 09.65E | BASE RE: FINISH SCHEDULE |
| 10.21A | TOILET PARTITION |
| 26.51A | INTERIOR LIGHT FIXTURE, TYP. RE: ELECTRICAL |



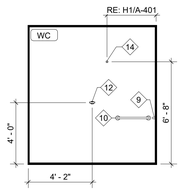

H9 LOCKER ROOM ALCOVE
1/4" = 1'-0"



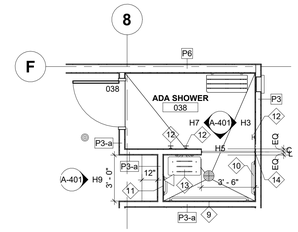

H7 038 SHOWER - S
1/4" = 1'-0"



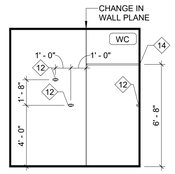

H5 038 SHOWER - E
1/4" = 1'-0"



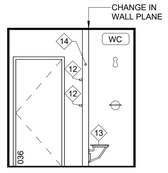

H3 038 SHOWER - N
1/4" = 1'-0"



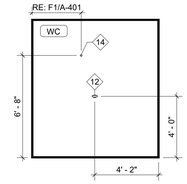

NORTH H1 038 SHOWER ROOM
1/4" = 1'-0"



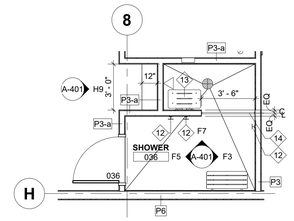

F7 036 SHOWER - W
1/4" = 1'-0"



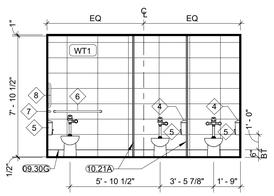

F5 036 SHOWER - S
1/4" = 1'-0"



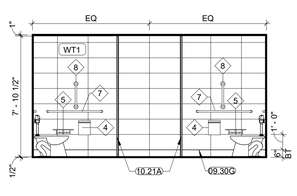

F3 036 SHOWER - N
1/4" = 1'-0"



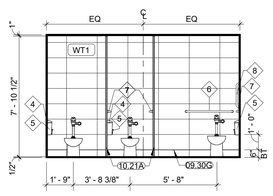

NORTH F1 036 SHOWER ROOM
1/4" = 1'-0"



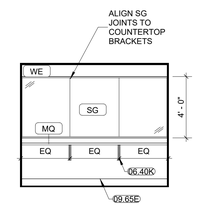

C11 031 RESTROOM TLTS - W
1/4" = 1'-0"



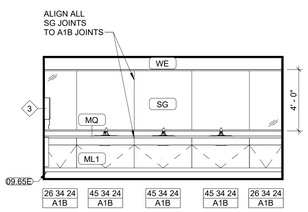

C9 031 RESTROOM TLTS - S
1/4" = 1'-0"



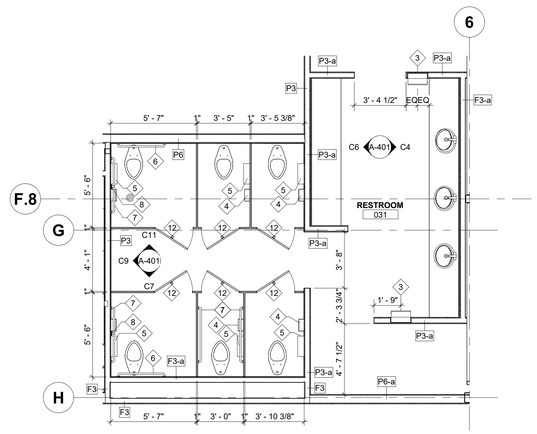

C7 031 RESTROOM TLTS - E
1/4" = 1'-0"



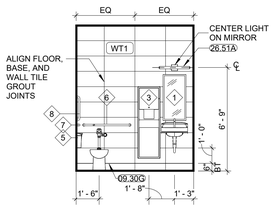

C6 031 RESTROOM - S
1/4" = 1'-0"



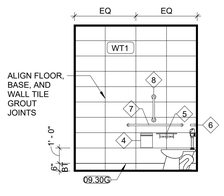

C4 031 RESTROOM - N
1/4" = 1'-0"



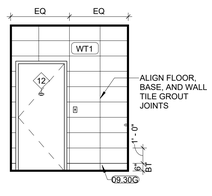

NORTH C1 031 RESTROOM
1/4" = 1'-0"



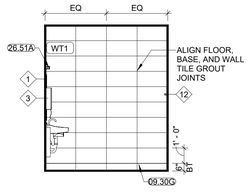

A9 012 W. RR - W
1/4" = 1'-0"



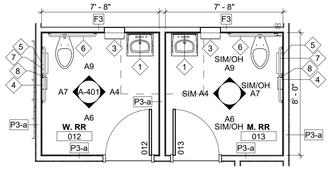

A7 012 W. RR - S
1/4" = 1'-0"




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

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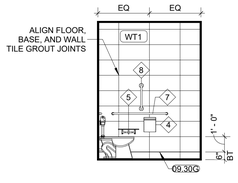
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CHRISTOPHER KRUMREI
NUMBER A-2016012111
ARCHITECT
11/1/24

PROFESSIONAL SEAL

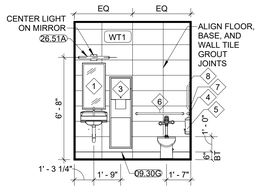
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

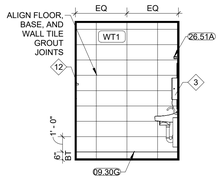
ENLARGED PLANS



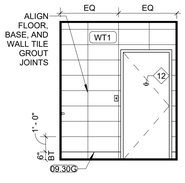

J11 137 RR - W
1/4" = 1'-0"



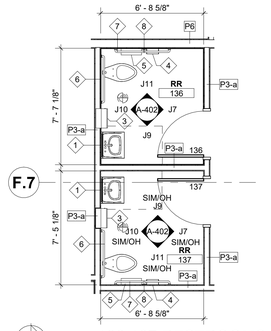

J10 137 RR - S
1/4" = 1'-0"




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




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

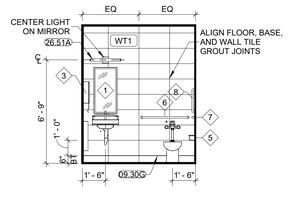



NORTH J5 136-137 RESTROOMS
1/4" = 1'-0"

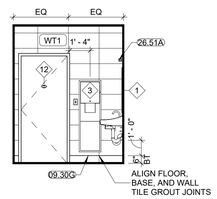
| TOILET ACCESSORY SCHEDULE | | | | | |
|---|---|---|---|---|---|
| TYPE MARK | MANUFACTURER | DESCRIPTION | MODEL | FINISH | COMMENTS |
| 1 | BOBRICK | MIRROR WITH STAINLESS STEEL CHANNEL FRAME | B-165 1836 | SATIN STAINLESS STEEL | 3,5 |
| 2 | BOBRICK | SURFACE MOUNTED PAPER TOWEL DISPENSER | B-262 | 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.

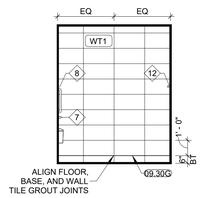
GENERAL NOTES:
A. REFER TO G-021 AND MANUFACTURERS SPECIFICATIONS FOR MOUNTING HEIGHTS.
B. COORDINATE ALL MOUNTING HEIGHTS W/ PLUMBING FIXTURES TO ALLOW PROPER OPERATION & INFORM ARCHITECT IN WRITING OF ANY CONFLICTS.
C. REFER TO ELEVATIONS AND GUIDESHEETS FOR ANY ACCESSORIES THAT MAY NOT SHOW UP ON 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.



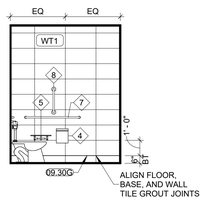

F8 130 RR - W
1/4" = 1'-0"



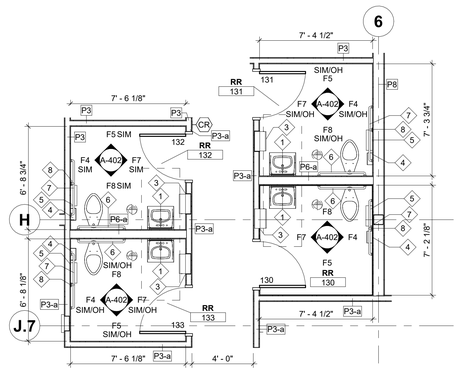

F7 130 RR - S
1/4" = 1'-0"




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




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

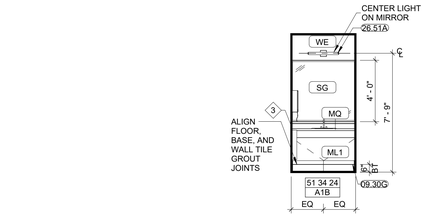



NORTH F1 FIRE ADMIN. RESTROOMS
1/4" = 1'-0"

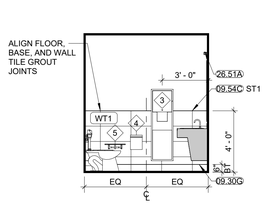
GENERAL NOTES - FLOOR PLANS:

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 |



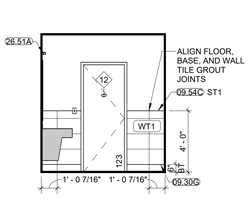

D8 123 RESTROOM - W
1/4" = 1'-0"



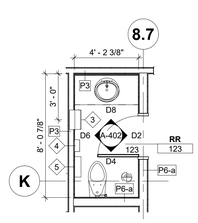

D6 123 RESTROOM - S
1/4" = 1'-0"



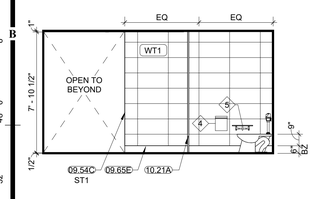

D4 123 RESTROOM - E
1/4" = 1'-0"



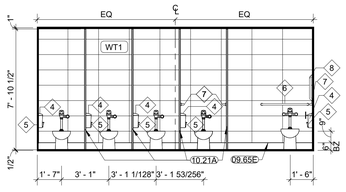

D2 123 RESTROOM - N
1/4" = 1'-0"



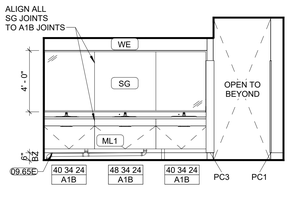

NORTH D1 123 RESTROOM
1/4" = 1'-0"



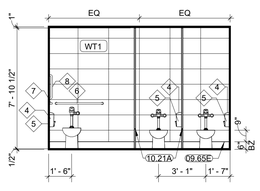

A11 103 PUBLIC RR - S
1/4" = 1'-0"



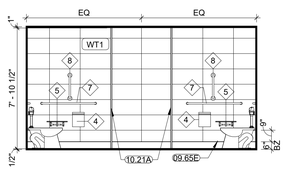

A9 103 PUBLIC RR - W
1/4" = 1'-0"



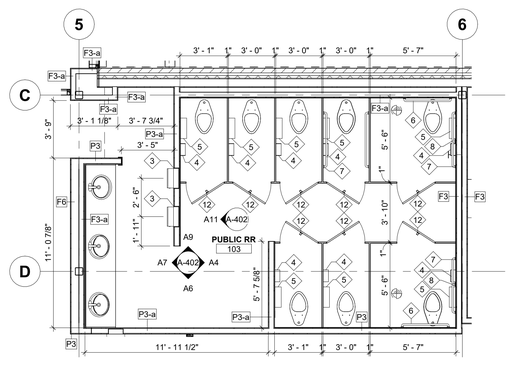

A7 103 PUBLIC RR SINK - S
1/4" = 1'-0"




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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4622 PENNSYLVANIA AVENUE
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KANSAS CITY, MO 64112
P: 913.307.3700
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# NT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

# LEE'S SUMMIT JOINT

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

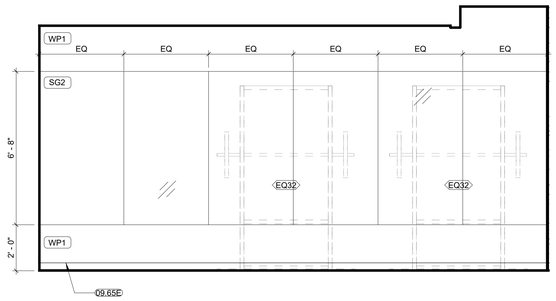
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
11/1/24
ARCHITECT

PROFESSIONAL SEAL

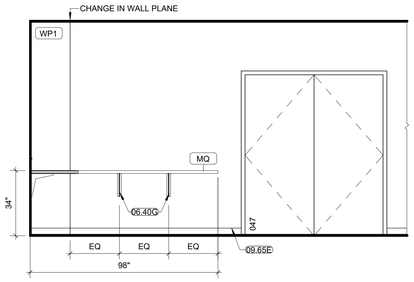
A-402

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

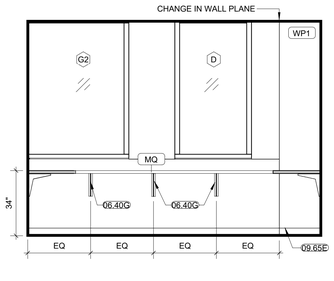
ENLARGED PLANS



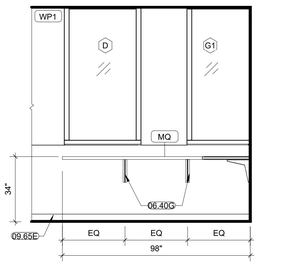

H10 049 FITNESS - N
3/8" = 1'-0"



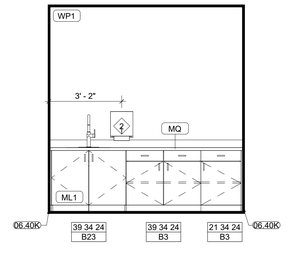

H8 047 IT WORK/STORAGE - S
3/8" = 1'-0"



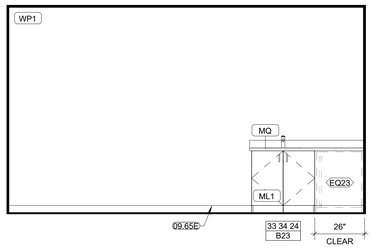

H6 047 IT WORK/STORAGE - E
3/8" = 1'-0"



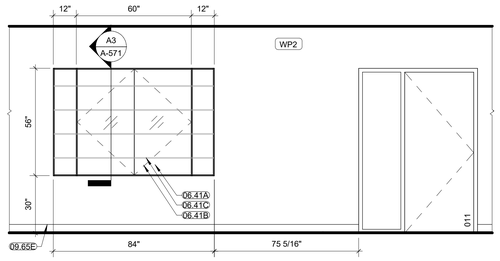

H3 047 IT WORK/STORAGE - N
3/8" = 1'-0"



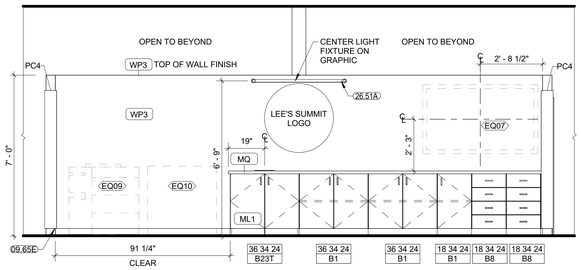

H1 035 LAUNDRY - W
3/8" = 1'-0"



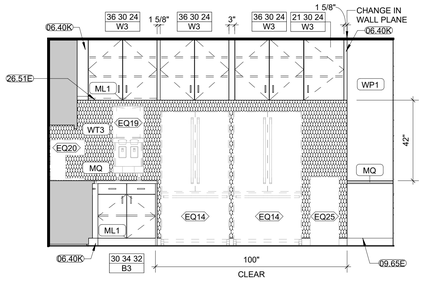

F7 027 QUIET ROOM - TYP
3/8" = 1'-0"



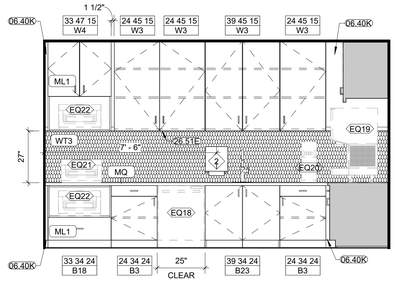

F4 018 CORRIDOR - E
3/8" = 1'-0"



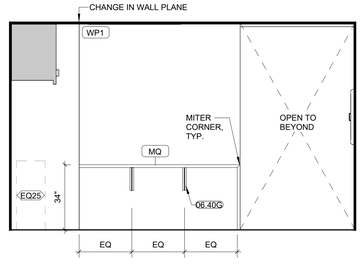

F1 010 COPY/WORK - E
3/8" = 1'-0"



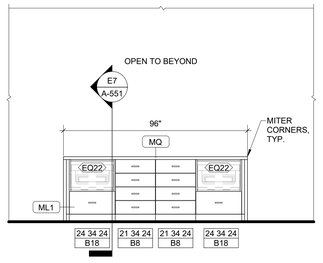

D9 009 KITCHEN - W
3/8" = 1'-0"



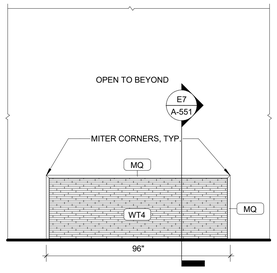

D6 009 KITCHEN - S
3/8" = 1'-0"



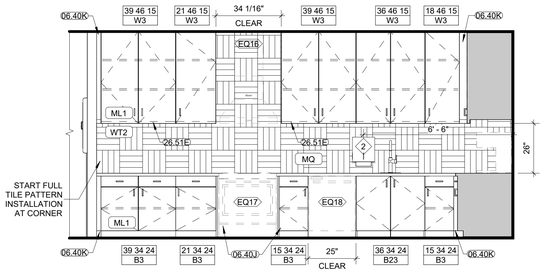

D4 009 KITCHEN - N
3/8" = 1'-0"



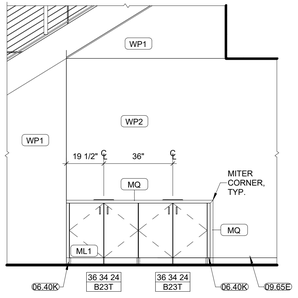

D1 002 BREAK ROOM ISLAND - E
3/8" = 1'-0"



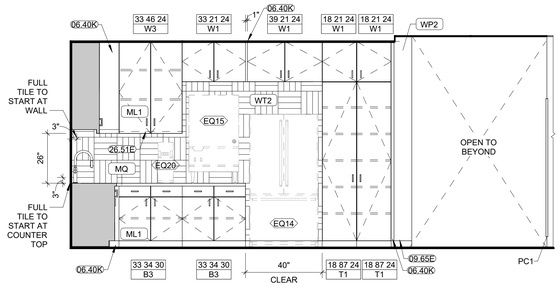

A10 002 BREAK ROOM ISLAND - W
3/8" = 1'-0"




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 A901 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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4622 PENNSYLVANIA AVENUE
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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:

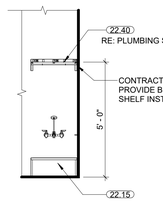
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

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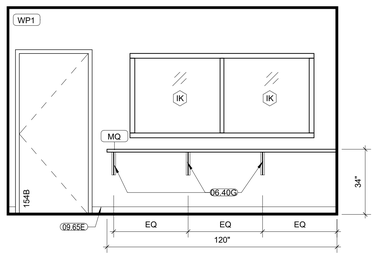
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

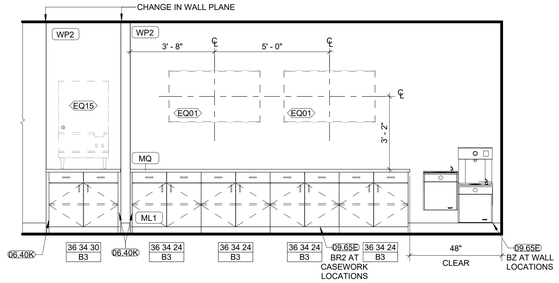
## INTERIOR AND CASEWORK ELEVATIONS



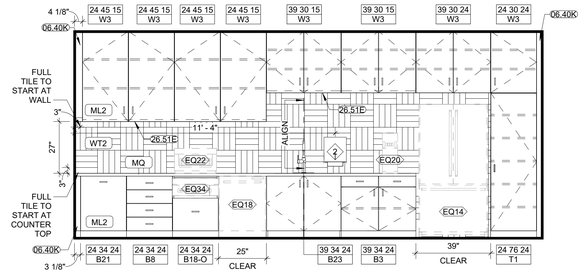

F11 JAN. MOP SINK, TYP.
3/8" = 1'-0"



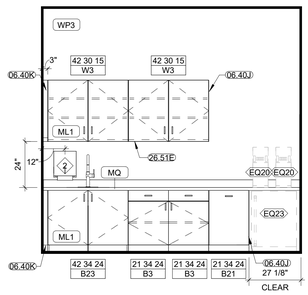

F8 154 VIEWING - N
3/8" = 1'-0"



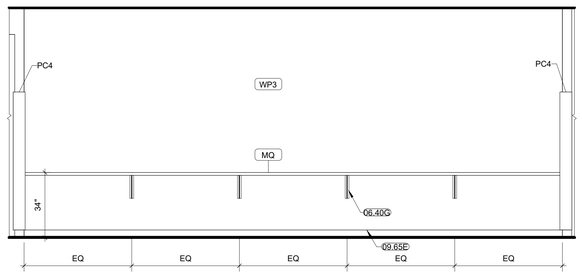

F5 150 CORRIDOR - W
3/8" = 1'-0"



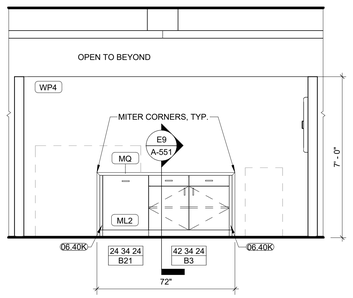

F1 148 KITCHEN - N
3/8" = 1'-0"



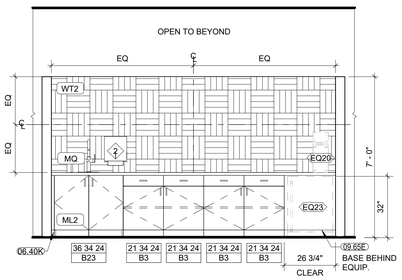

D9 139 EOC - W
3/8" = 1'-0"



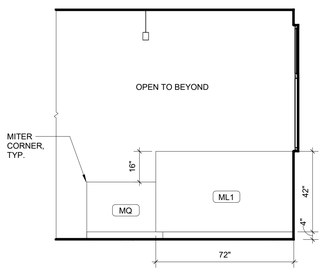

D6 109 OPEN OFFICE - W
3/8" = 1'-0"



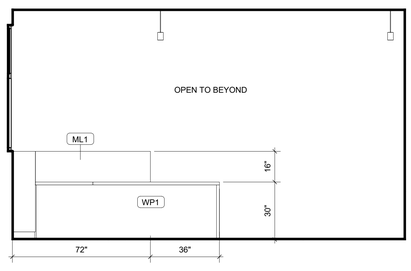

D4 108 COFFEE/COPY/WORK - S
3/8" = 1'-0"



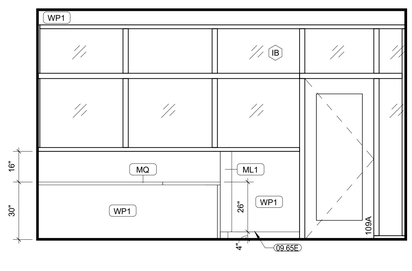

D1 108 COFFEE/COPY/WORK - N
3/8" = 1'-0"



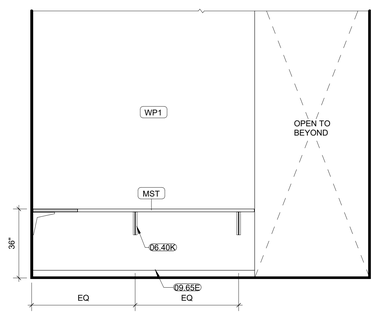

A11 158 RECPT DESK - E
3/8" = 1'-0"



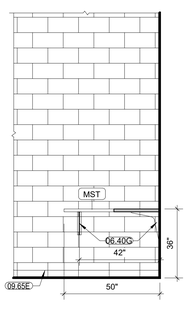

A8 158 RECPT DESK - W
3/8" = 1'-0"




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.
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19. RE: SHEET AI501 FOR FINISH DETAILS.
20. RE: FINISH LEGEND & DOOR SCHEDULE FOR INTERIOR DOOR AND DOOR FRAME COLORS.
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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:

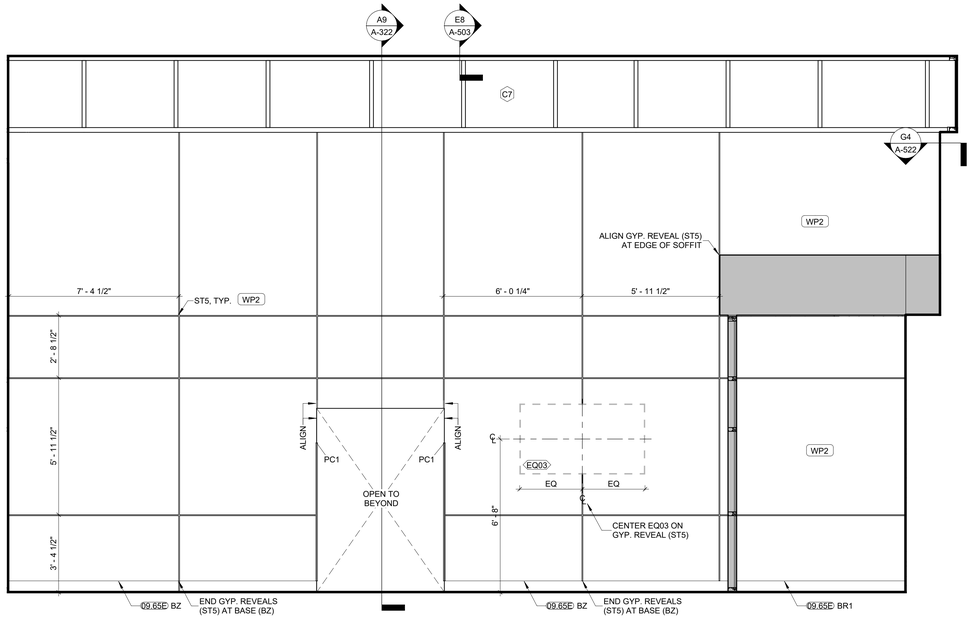
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

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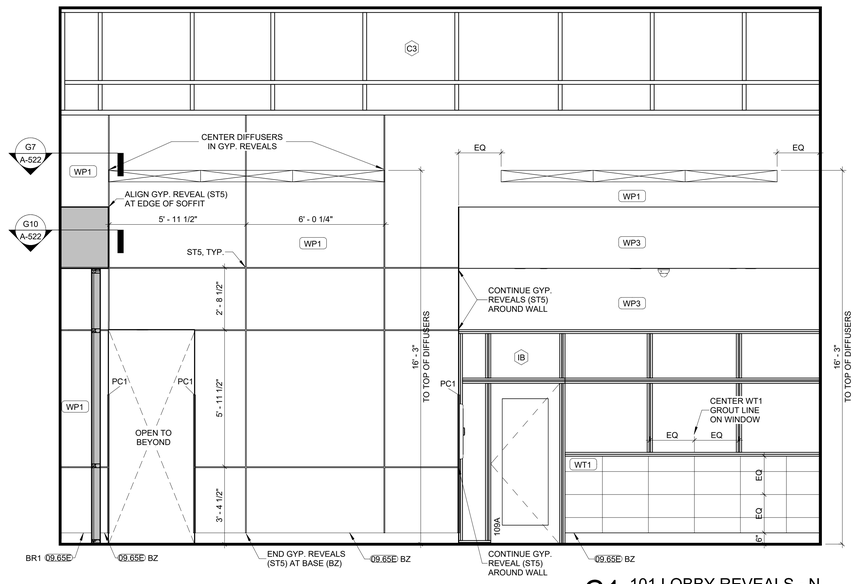
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

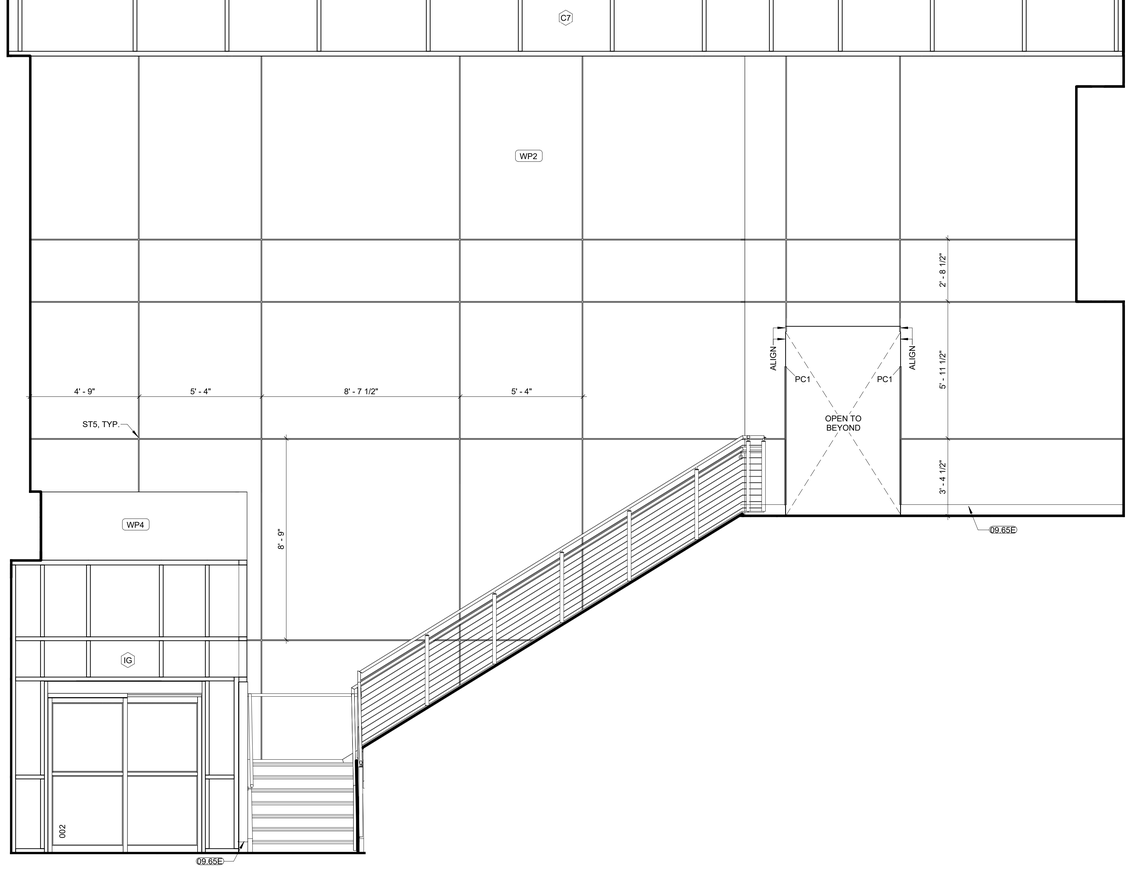
INTERIOR AND CASEWORK ELEVATIONS



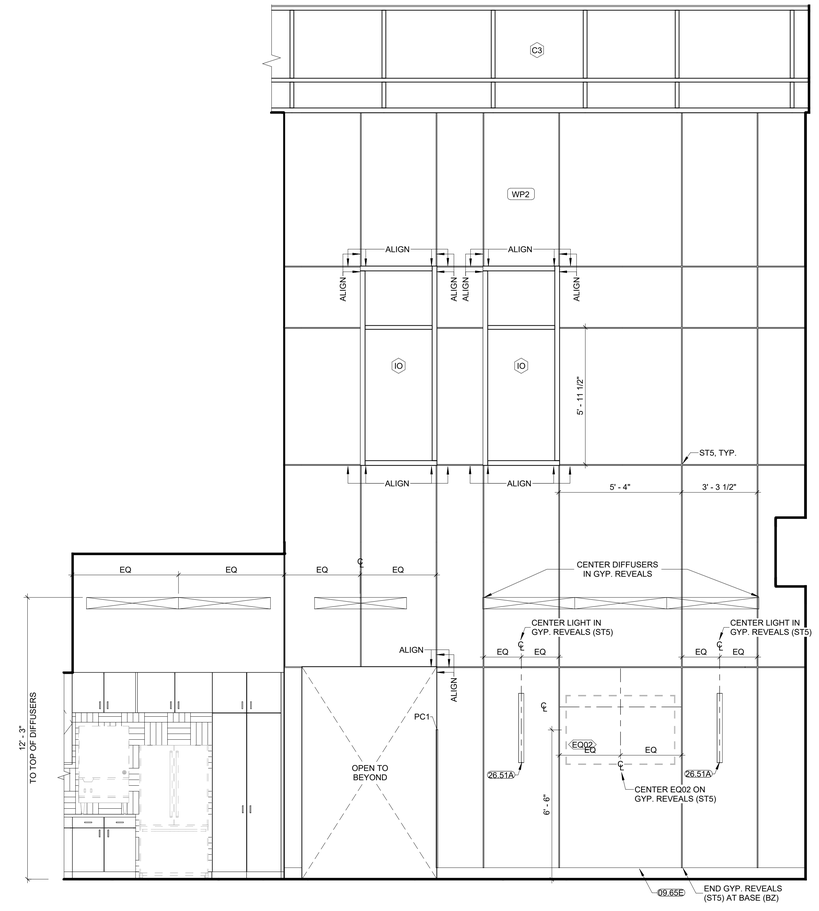

G6 101 LOBBY REVEALS - S
3/8" = 1'-0"




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"

**GENERAL NOTES - INTERIOR ELEVATIONS & MILLWORK/ CASEWORK ELEVATIONS:**

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2. RE: SHEET G-021 ACCESSIBILITY GUIDELINES FOR MOUNTING HEIGHTS OF FIXTURES AND ACCESSORIES.
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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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

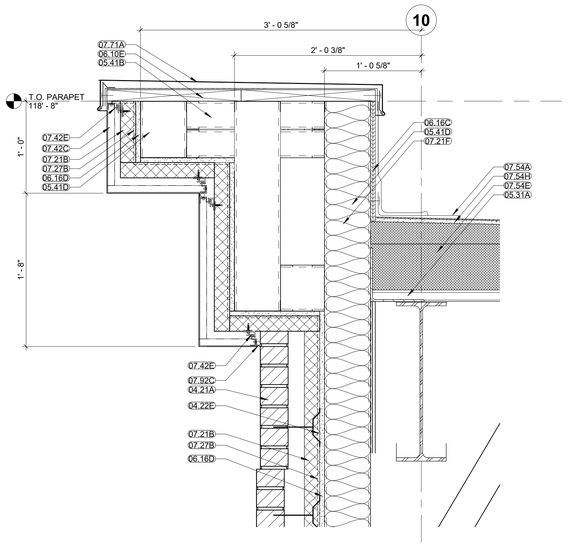
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

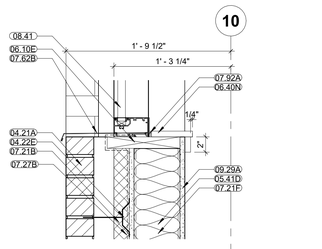
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

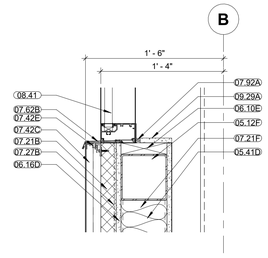
INTERIOR AND CASEWORK ELEVATIONS



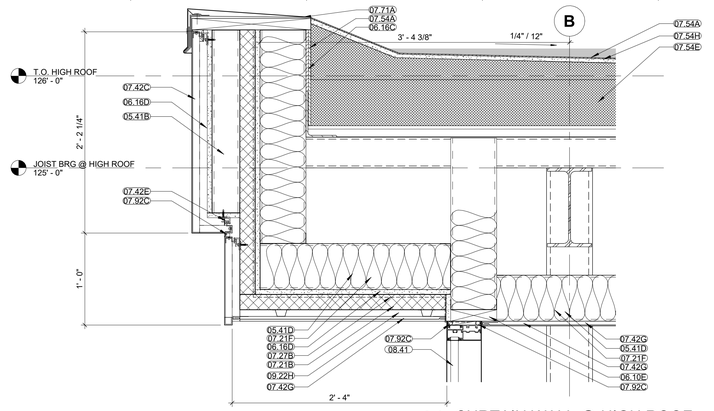

H10 FASCIA @ FIRE ADMINISTRATION
1 1/2" = 1'-0" G4 / A-202



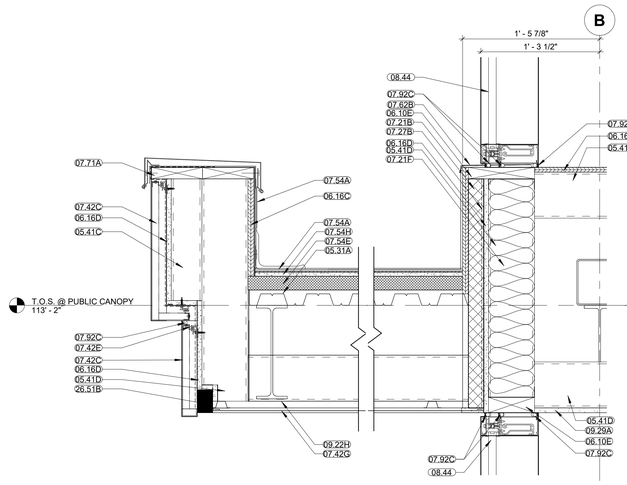

J7 FIRE ADMINISTRATION @ WINDOW SILL
1 1/2" = 1'-0" A9 / A-321



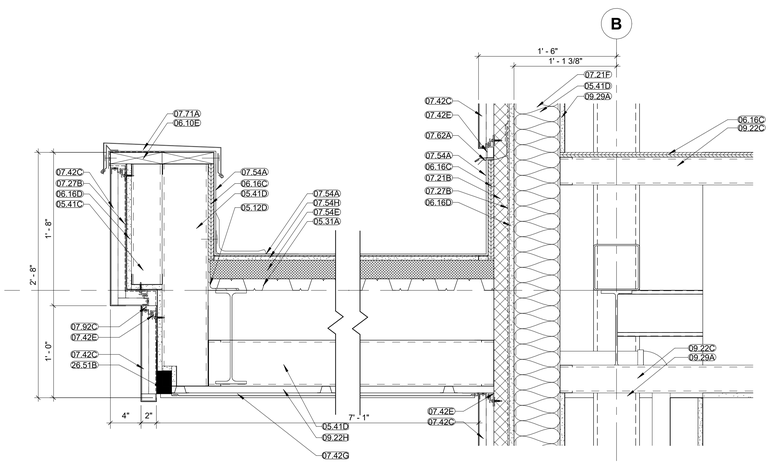

J6 SF SILL @ METAL PANEL
1 1/2" = 1'-0" A1 / A-321




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



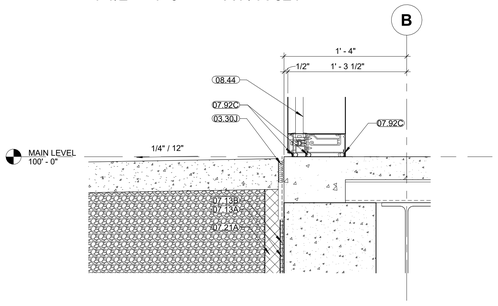

F6 PUBLIC ENTRY CANOPY @ CURTAINWALL
1 1/2" = 1'-0" A4 / A-321



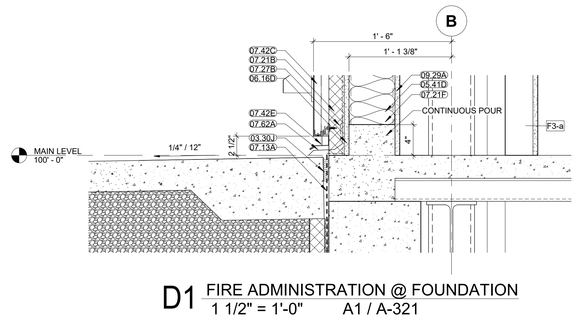

F1 PUBLIC ENTRY CANOPY @ METAL PANEL
1 1/2" = 1'-0" J4 / A-103



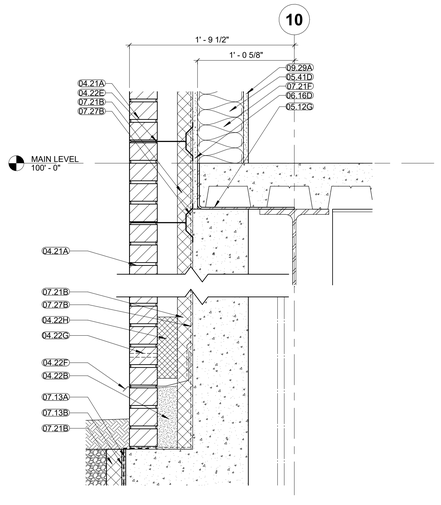

D10 FIRE ADMINISTRATION @ WINDOW HEAD
1 1/2" = 1'-0" G4 / A-202



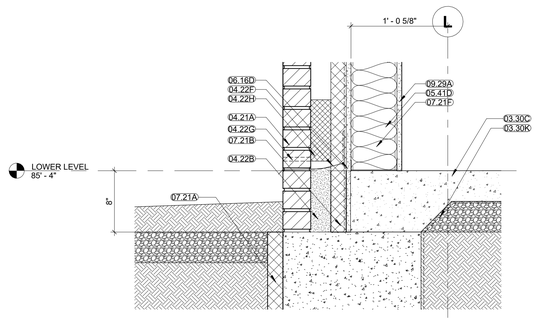

C6 LOBBY @ CURTAIN WALL
1 1/2" = 1'-0" A4 / A-321



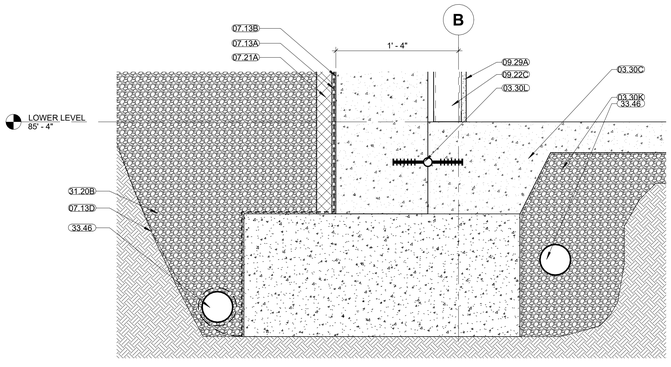

D1 FIRE ADMINISTRATION @ FOUNDATION
1 1/2" = 1'-0" A1 / A-321




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 |

HOEFER WELKER
4622 PENNSYLVANIA AVENUE
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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:

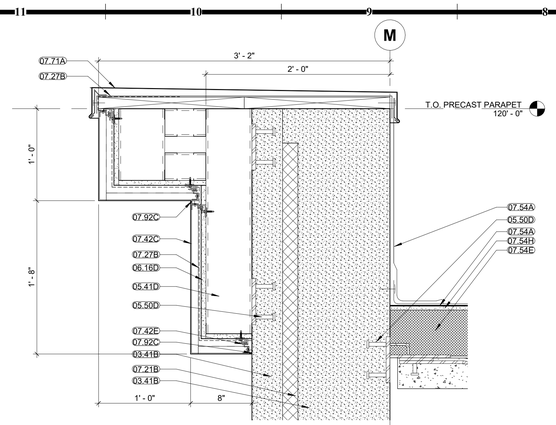
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
11/1/24

PROFESSIONAL SEAL

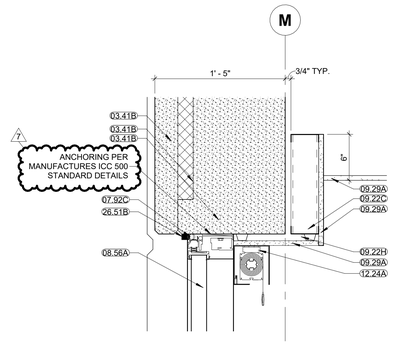
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

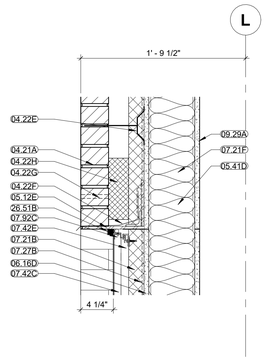
EXTERIOR SECTION DETAILS



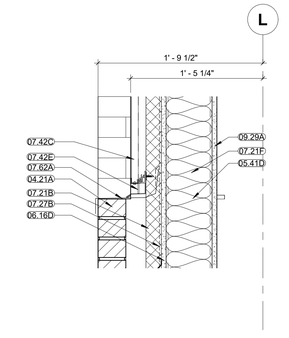

H8 HARDENED STRUCTURE @ COPING
1 1/2" = 1'-0" G7 / A-202



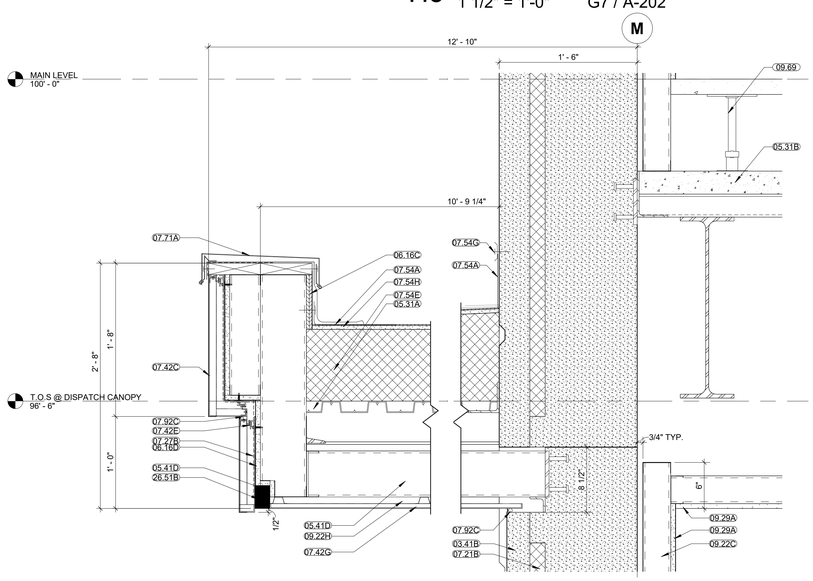

H5 HARDENED STRUCTURE @ WINDOW HEAD
1 1/2" = 1'-0"



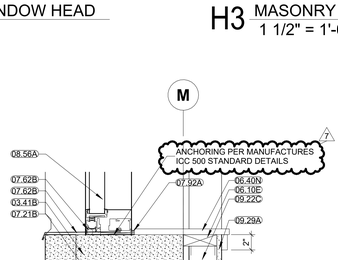

H3 MASONRY LINTEL @ METAL PANEL
1 1/2" = 1'-0" A1 / A-322



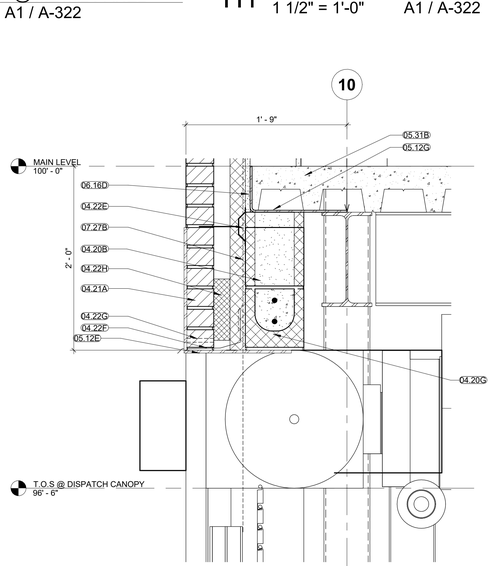

H1 METAL PANEL SILL @ MASONRY
1 1/2" = 1'-0" A1 / A-322



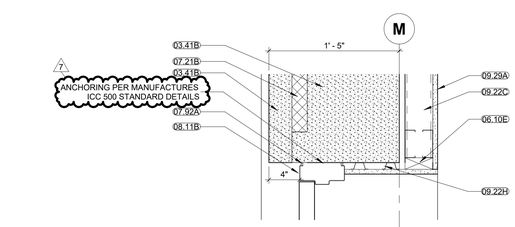

D8 HARDENED STRUCTURE @ CANOPY
1 1/2" = 1'-0" J4 / A-103



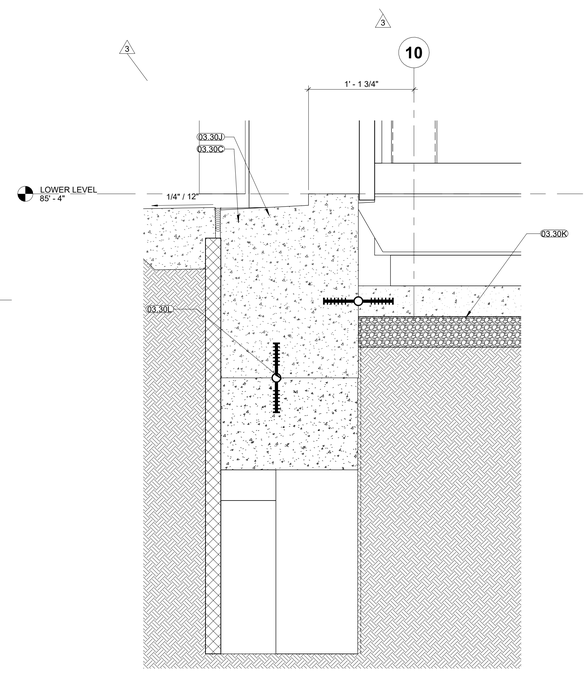

F4 HARDENED STRUCTURE @ WINDOW SILL
1 1/2" = 1'-0"

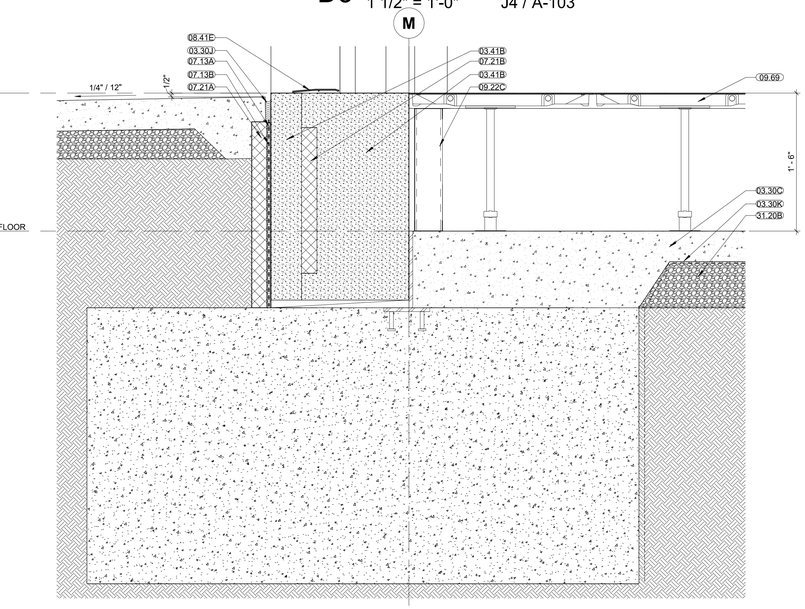



E1 OH DOOR @ HEAD
1 1/2" = 1'-0" A10 / A-321

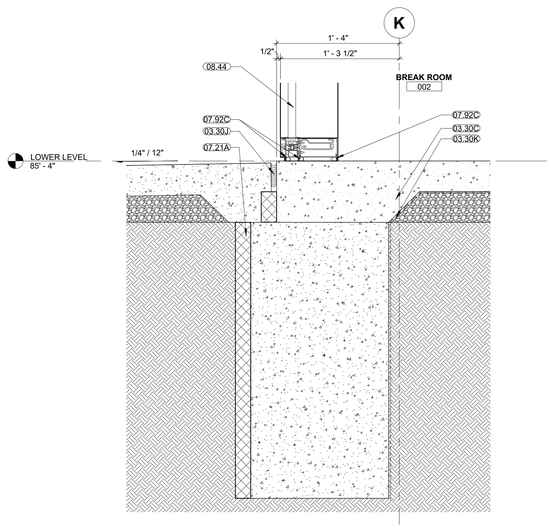



E4 HM HEAD AT HARDENED STRUCTURE
1 1/2" = 1'-0" A1 / A-323




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

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**MATERIAL KEYNOTES**

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|---|---|
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| 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 |
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| 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 |
| 09.69 | ACCESS FLOORING |
| 12.24A | ROLLER WINDOW SHADE - SINGLE SHADE |
| 26.51B | EXTERIOR LIGHT FIXTURE RE: ELECTRICAL |
| 31.20B | GRANULAR FILL |


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4622 PENNSYLVANIA AVENUE
SUITE 1400
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 |
| 7 | ASI 004 | 2/12/2025 |
| 9 | CCD 001 | 1/29/2025 |

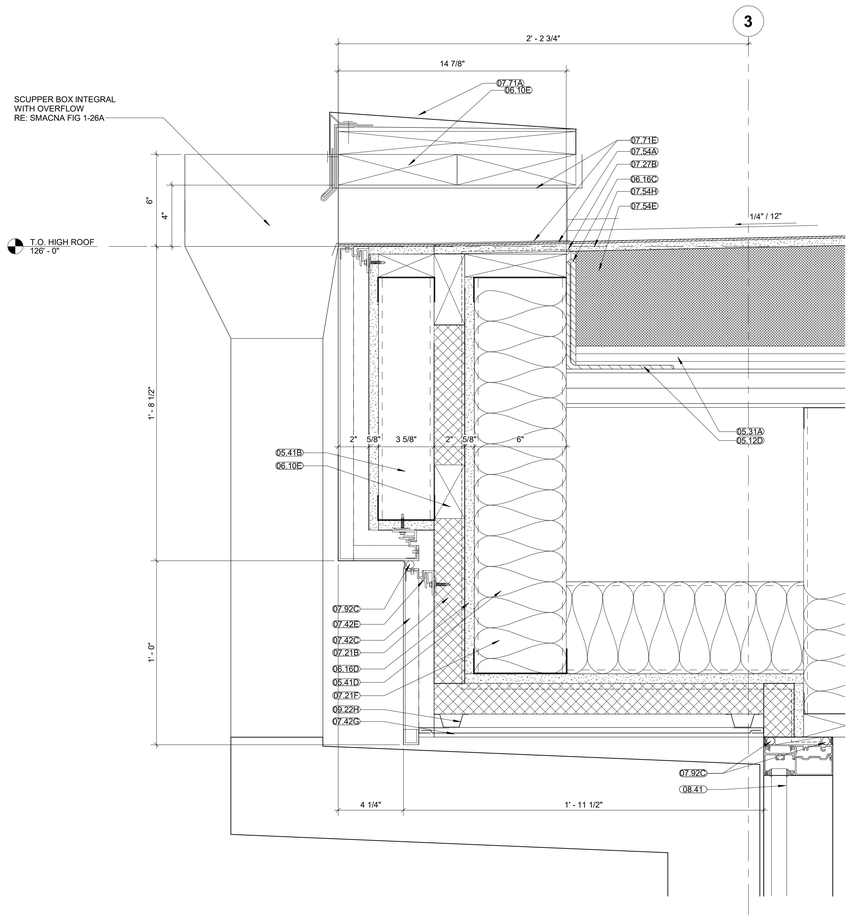
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT
11/25/24

PROFESSIONAL SEAL

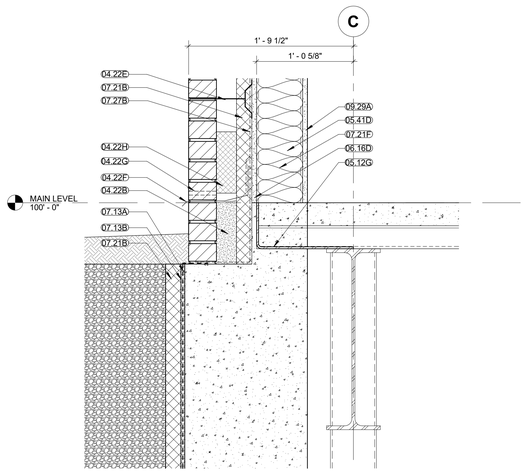
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

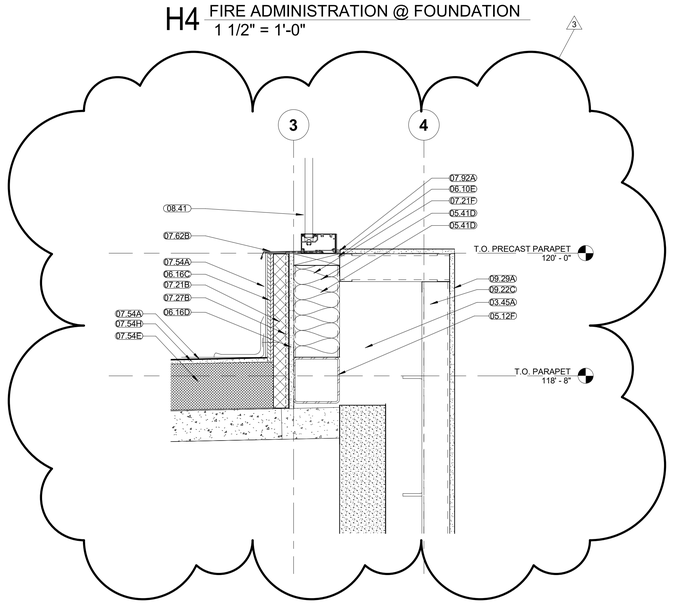
EXTERIOR SECTION DETAILS



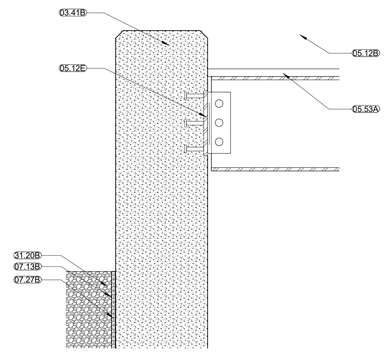

E8 ROOF FASCIA SCUPPER DETAIL ENLARGE
3" = 1'-0" A1 / A-103



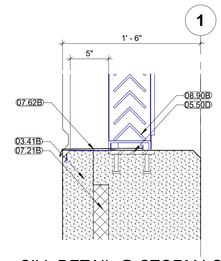

H4 FIRE ADMINISTRATION @ FOUNDATION
1 1/2" = 1'-0"



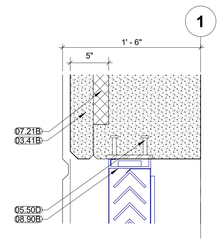

E4 PARAPET @ PRECAST
1 1/2" = 1'-0" A9 / A-322



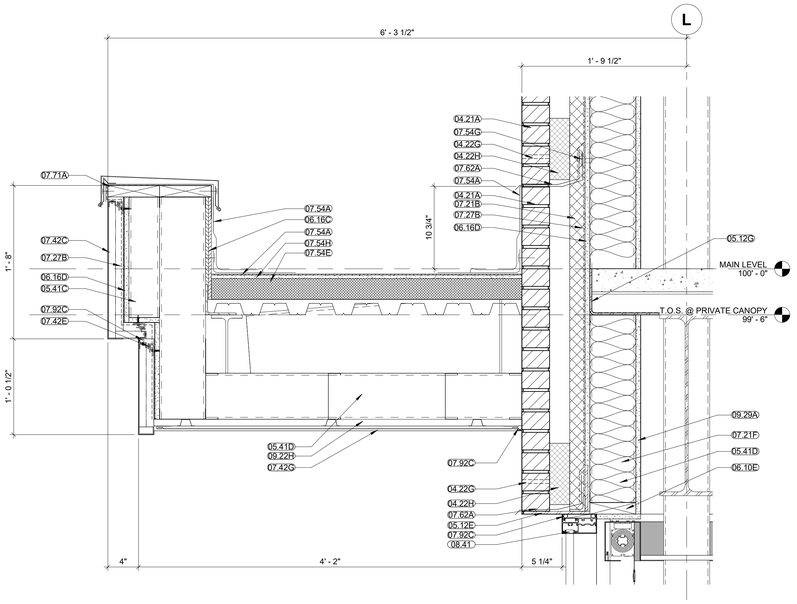

H1 METAL GRATE DETAIL
1 1/2" = 1'-0"



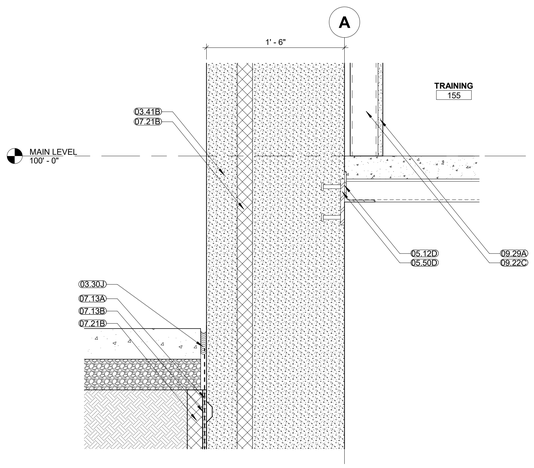

G1 SILL DETAIL @ STORM LOUVER
1 1/2" = 1'-0" A7 / A-323



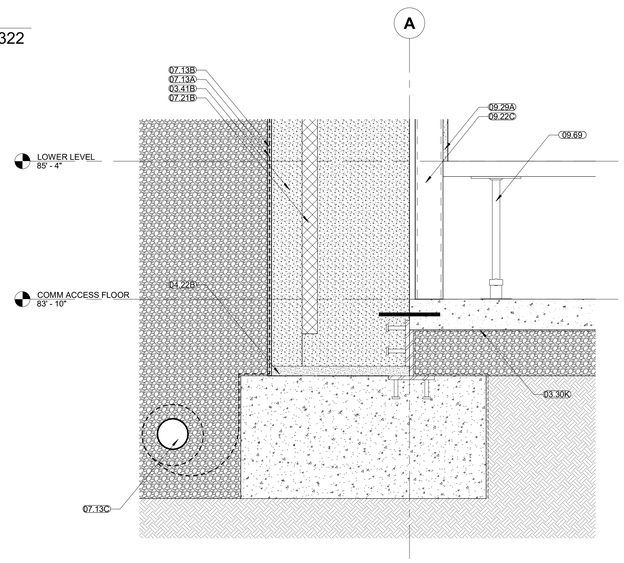

E1 HEAD DETAIL @ STORM LOUVER
1 1/2" = 1'-0" A7 / A-323




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

**GENERAL NOTES – EXTERIOR WALL SECTIONS/ DETAILS:**

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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 |
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| 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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

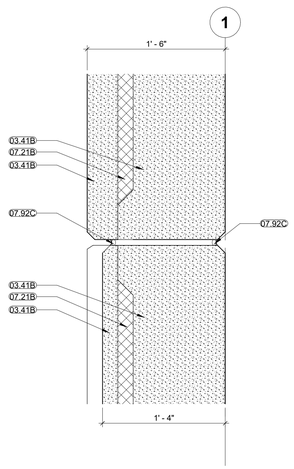
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|---|---|---|
| 3 | ADDENDUM 3 | 11/18/2024 |

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

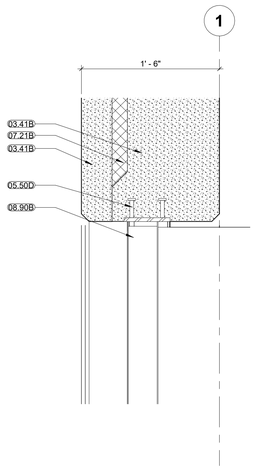
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

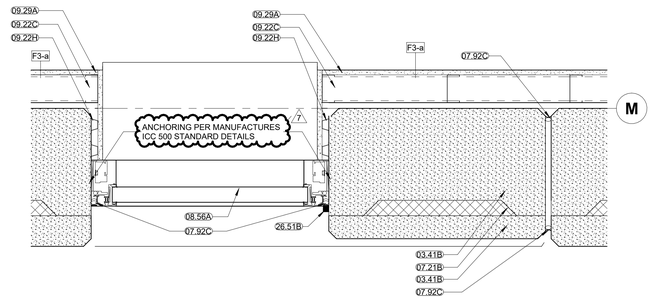
EXTERIOR SECTION DETAILS



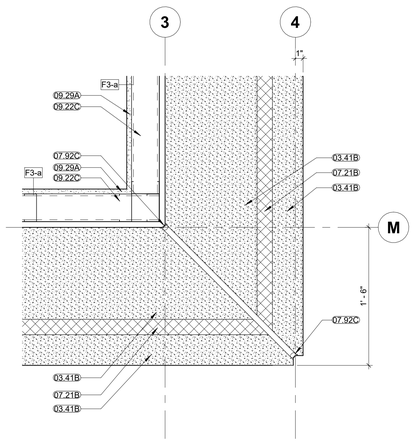

G10 JOINT @ INSET PRECAST PANEL
1 1/2" = 1'-0" A1 / A-102



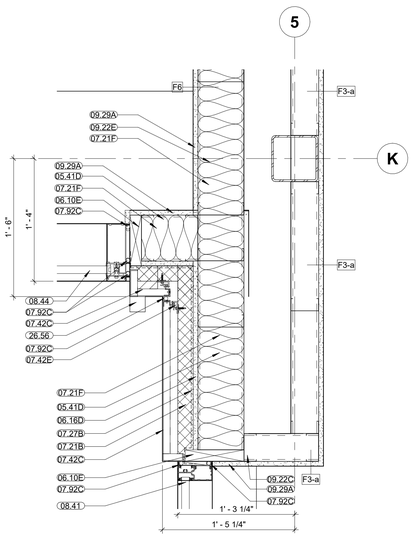

G8 LOUVER @ PRECAST
1 1/2" = 1'-0" A1 / A-102



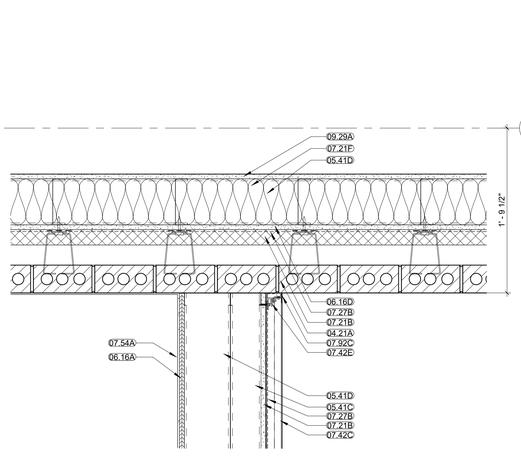

G4 WINDOW @ PRECAST
1 1/2" = 1'-0" A1 / A-102



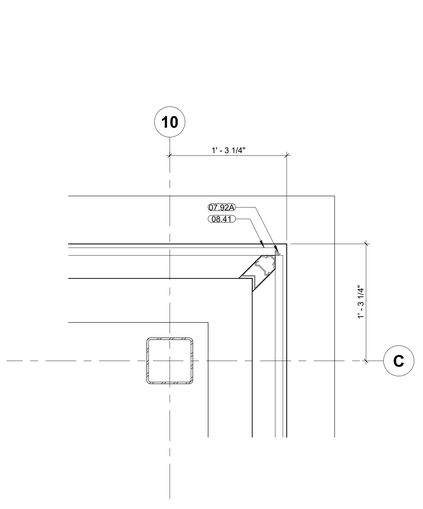

G1 TYP PRECAST CORNER
1 1/2" = 1'-0" A1 / A-101



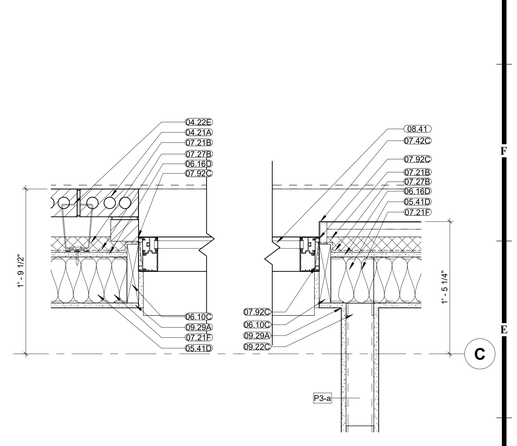

D10 CURTAIN WALL @ INSET METAL PANEL
1 1/2" = 1'-0" A1 / A-102



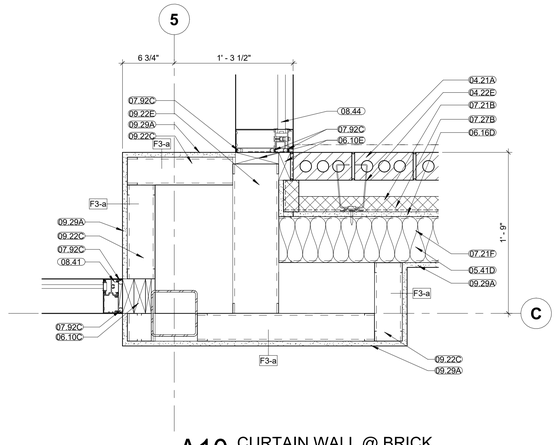

D7 STAFF CANOPY @ BRICK
1 1/2" = 1'-0" A1 / A-102



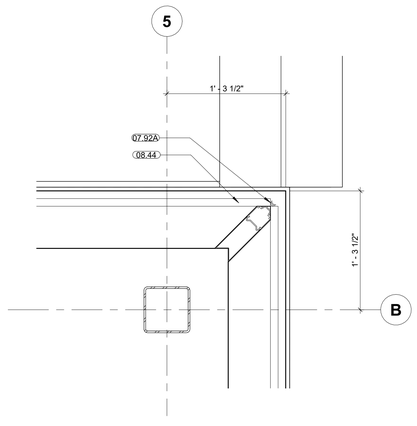

D4 TYP STOREFRONT CORNER
1 1/2" = 1'-0" A1 / A-102



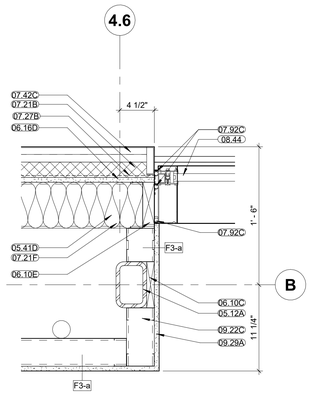

D1 TYP STOREFRONT
1 1/2" = 1'-0" A1 / A-102



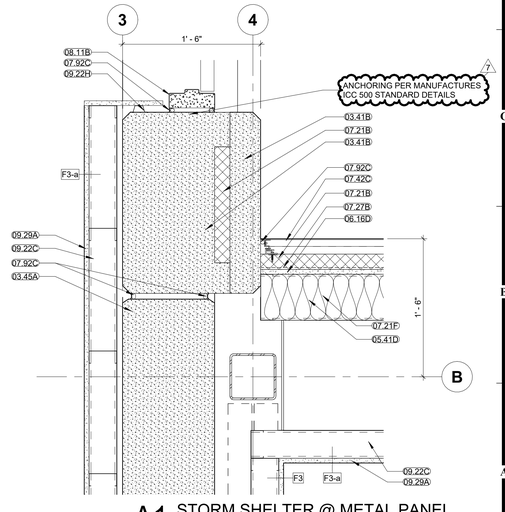

A10 CURTAIN WALL @ BRICK
1 1/2" = 1'-0" A1 / A-102




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 JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

| | | |
|---|---|---|
| 7 | ASI 004 | 2/12/2025 |

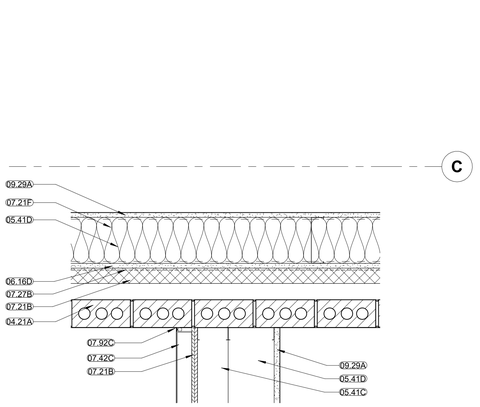
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2010012111
ARCHITECT
11/25/24

PROFESSIONAL SEAL

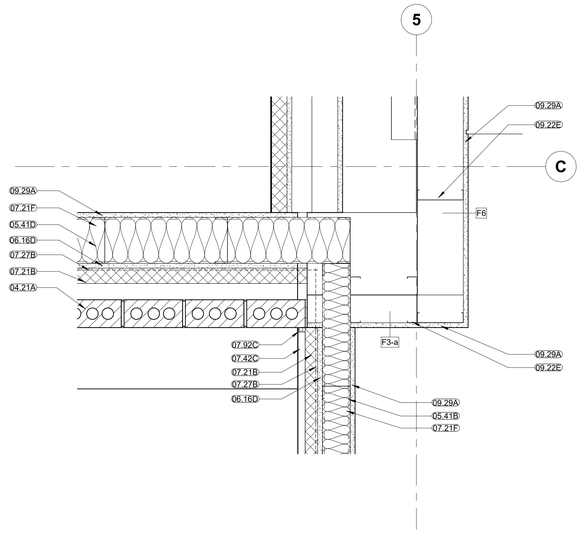
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

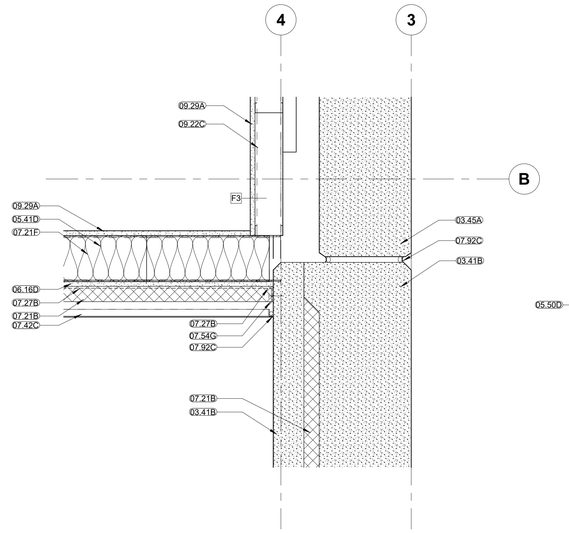
EXTERIOR PLAN DETAILS



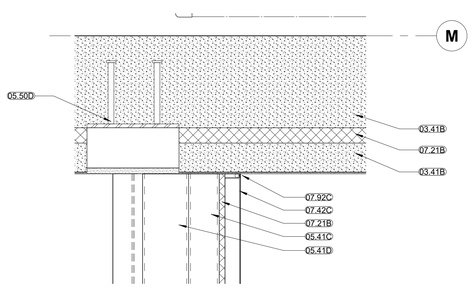

G10 CANOPY @ BRICK
1 1/2" = 1'-0" G1 / A-453



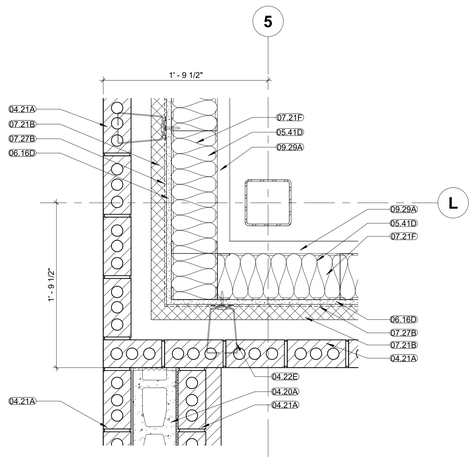

G7 METAL PANEL/BRICK CORNER HIGH
1 1/2" = 1'-0" G1 / A-453



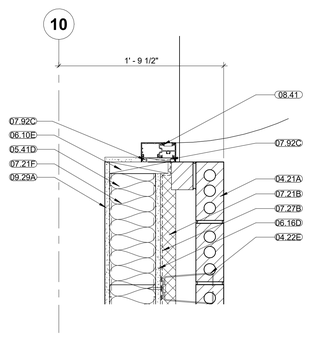

G4 COPING @ METAL PANEL
1 1/2" = 1'-0" J4 / A-103



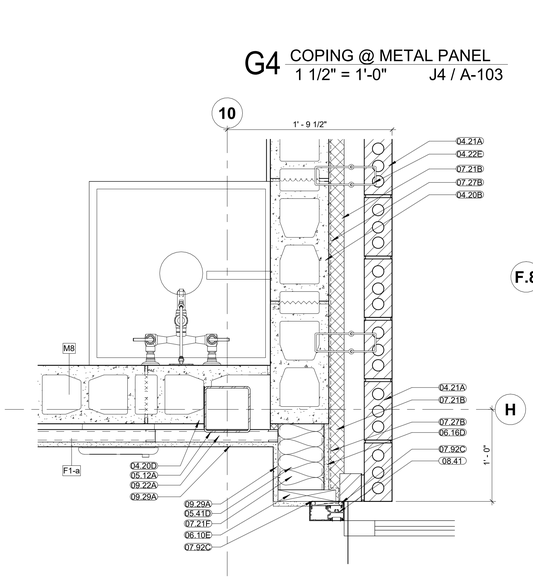

G1 CANOPY @ PRECAST
1 1/2" = 1'-0" A1 / A-102



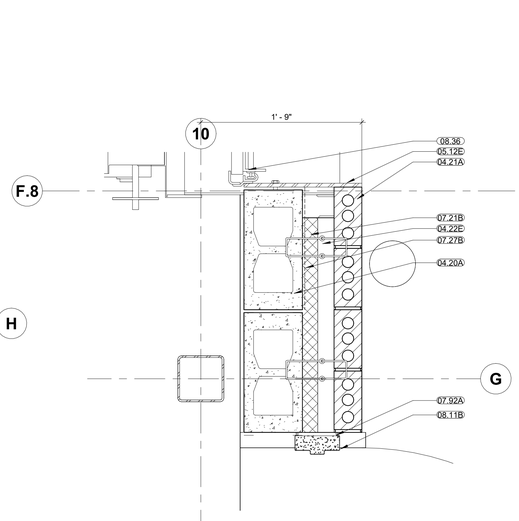

D10 BRICK CORNER @ STAFFF PATIO
1 1/2" = 1'-0" A1 / A-101



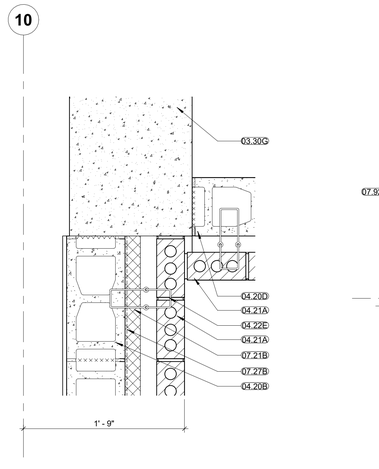

D7 STOREFRONT DOOR JAMB
1 1/2" = 1'-0" A1 / A-101



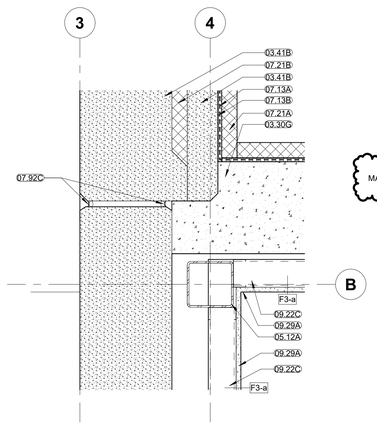

D4 CMU/METAL STUD
1 1/2" = 1'-0" A1 / A-101



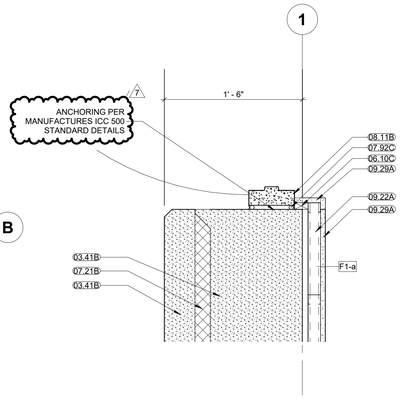

D1 OH DOOR JAMB @ CMU/BRICK
1 1/2" = 1'-0" A1 / A-101



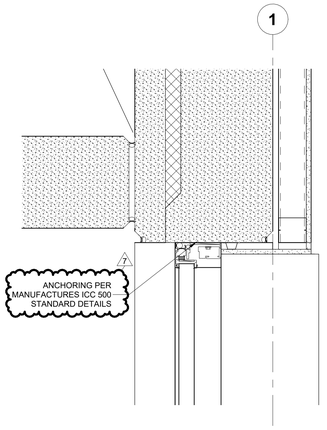

A11 CMU/CONCRETE FOUNTATION WALL
1 1/2" = 1'-0" A1 / A-101



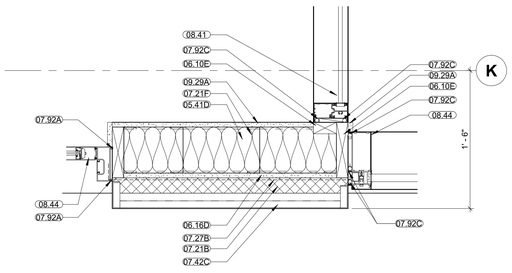

A8 FOUNDATION WALL @ PRECAST
1 1/2" = 1'-0" A1 / A-101




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




A4 UTILITY YARD
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:

| | | |
|---|---|---|
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| 9 | CCD 001 | 1/29/2025 |

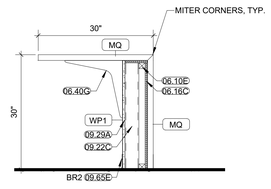
STATE OF MISSOURI
CHRISTOPHER KRYMBEL
NUMBER A-2016012111
11/25/25
ARCHITECT

PROFESSIONAL SEAL

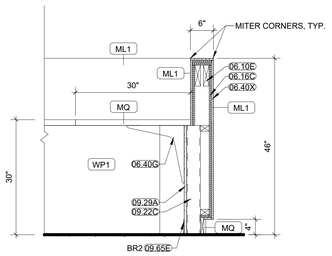
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ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

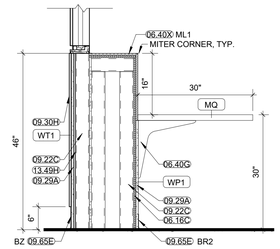
EXTERIOR PLAN DETAILS



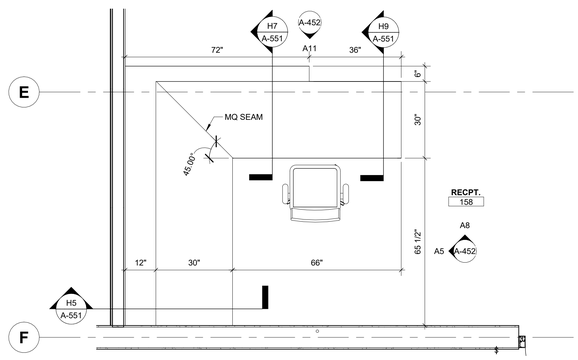

H9 RECEPTION DESK, LOW
3/4" = 1'-0"




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




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




NORTH

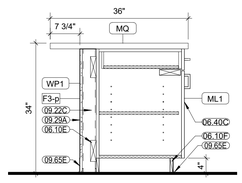
H1 158 RECPT - DESK
1/2" = 1'-0"

**GENERAL NOTES - CASEWORK**

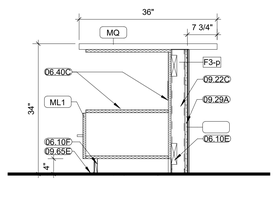
1. RE: FINISH LEGEND AND FINISH SCHEDULE FOR SPECIFIC FINISH INFORMATION AND LOCATIONS.
2. ALL MILLWORK/ CASEWORK CONSTRUCTION SHALL MEET AWI PREMIUM STANDARDS, UNLESS NOTED OR SPECIFIED OTHERWISE.
3. ALL EXPOSED MILLWORK/ CASEWORK SURFACES SHALL BE FINISHED W/ PLASTIC LAMINATE TO MATCH ADJACENT PLASTIC 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 A9O1 FOR WALL BASE DETAILS.

**MATERIAL KEYNOTES**

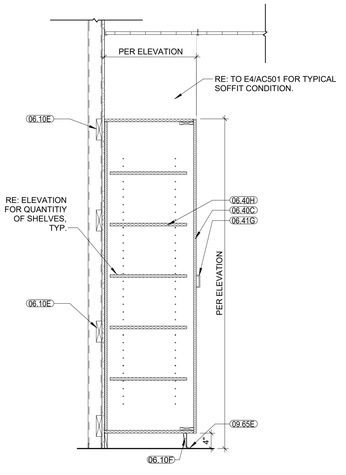
| | |
|---|---|
| 05.12F | STEEL TUBE |
| 06.10E | WOOD BLOCKING, AS REQUIRED |
| 06.10F | WOOD SHIMS, AS REQUIRED |
| 06.16C | 3/4-INCH FIRE-RETARDANT-TREATED PLYWOOD SHEATHING |
| 06.40C | PLASTIC LAMINATE CASEWORK |
| 06.40G | COUNTER BRACKET |
| 06.40H | SHELF |
| 06.40L | LOCKABLE DRAWER AND/ OR 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 |



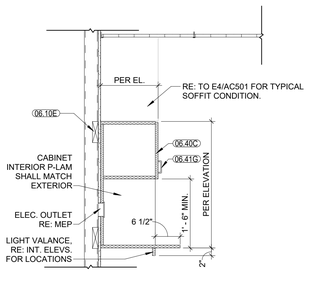

E9 108 COPY/WORK ISLAND SECTION
3/4" = 1'-0"



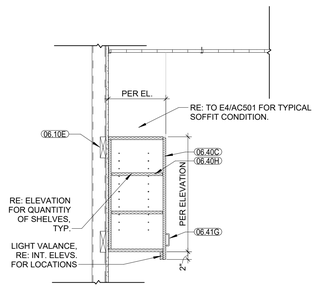

E7 002 BREAK ROOM ISLAND SECTION
3/4" = 1'-0"



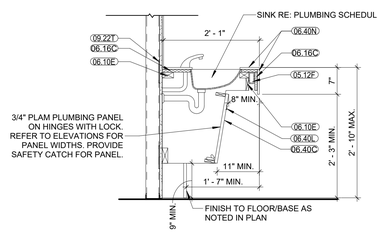

TYPE T1 - CASEWORK SECTION
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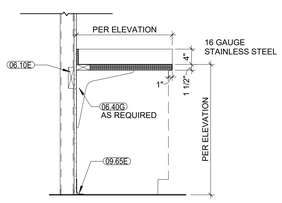

TYPE W4 - CASEWORK SECTION
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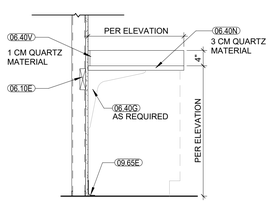

TYPE W1,W2,W3 - CASEWORK SECTION
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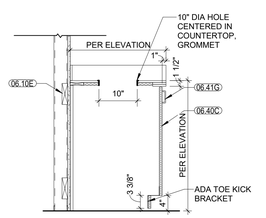

TYPE A1B - HINGED - CASEWORK SECTION
3/4" = 1'-0"



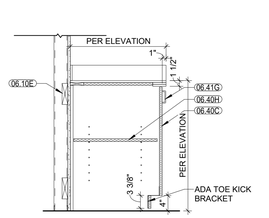

TYPE C4 - CASEWORK SECTION
3/4" = 1'-0"



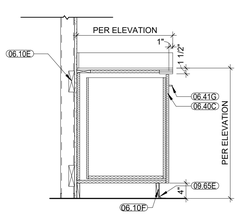

TYPE C3 - CASEWORK SECTION
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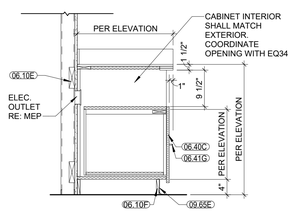

TYPE B23T - CASEWORK SECTION
3/4" = 1'-0"



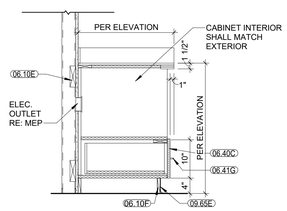

TYPE B23 - CASEWORK SECTION
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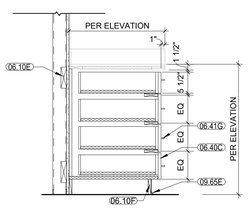

TYPE B21 - CASEWORK SECTION
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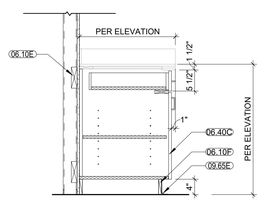

TYPE B18-O - CASEWORK SECTION
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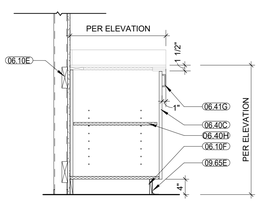

TYPE B18 - CASEWORK SECTION
3/4" = 1'-0"




TYPE B8 - CASEWORK SECTION
3/4" = 1'-0"




TYPE B3 - CASEWORK SECTION
3/4" = 1'-0"




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
ARCHITECT

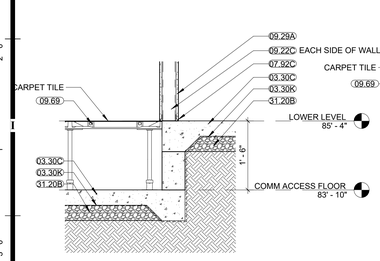
PROFESSIONAL SEAL

A-551

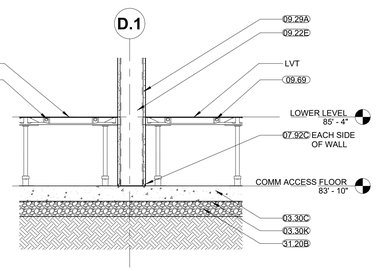
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

CASEWORK DETAILS

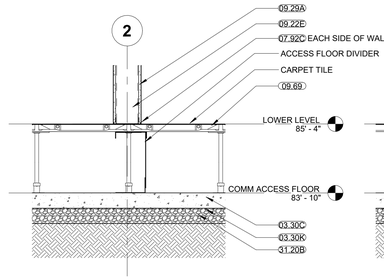
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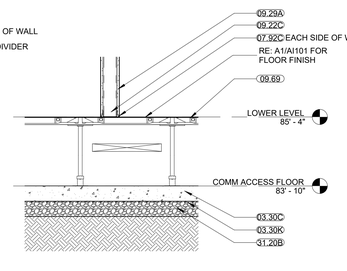

H11 TYP. RAISED ACCESS FLOOR
3/4" = 1'-0"



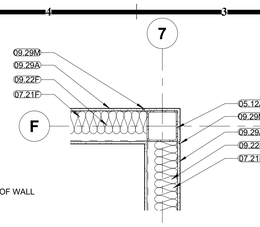

H9 TYP. RAISED ACCESS FLOOR
3/4" = 1'-0"



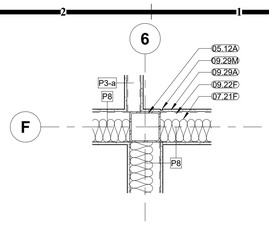

H7 TYP. RAISED ACCESS FLOOR DIVIDER
3/4" = 1'-0"



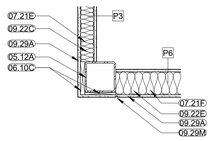

H5 TYP. RAISED ACCESS FLOOR
3/4" = 1'-0"



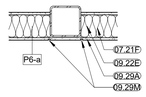

J3 TYP. COLUMN IN WALL
3/4" = 1'-0"



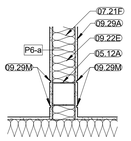

J1 TYP. COLUMN IN WALL
3/4" = 1'-0"



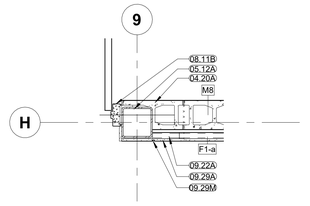

H3 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-101



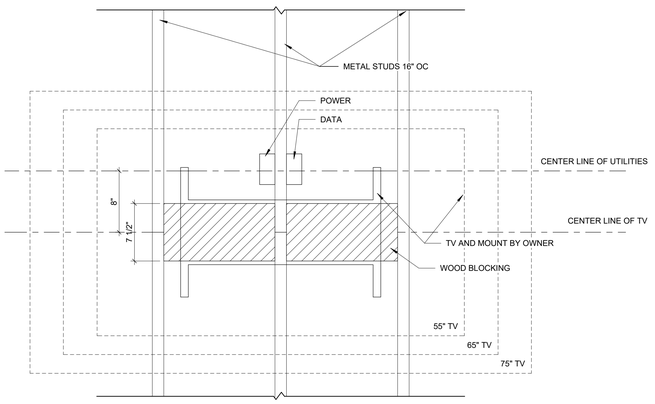

H1 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-101



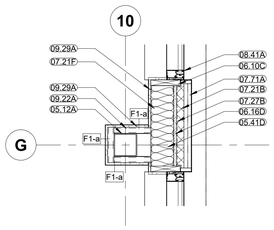

G3 TYP. IN WALL COLUMN
3/4" = 1'-0" A1 / A-102



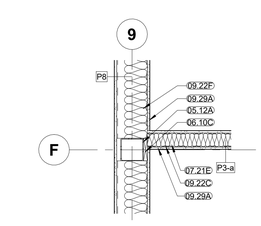

G1 COLUMN @ CMU WALL
3/4" = 1'-0" A1 / A-101



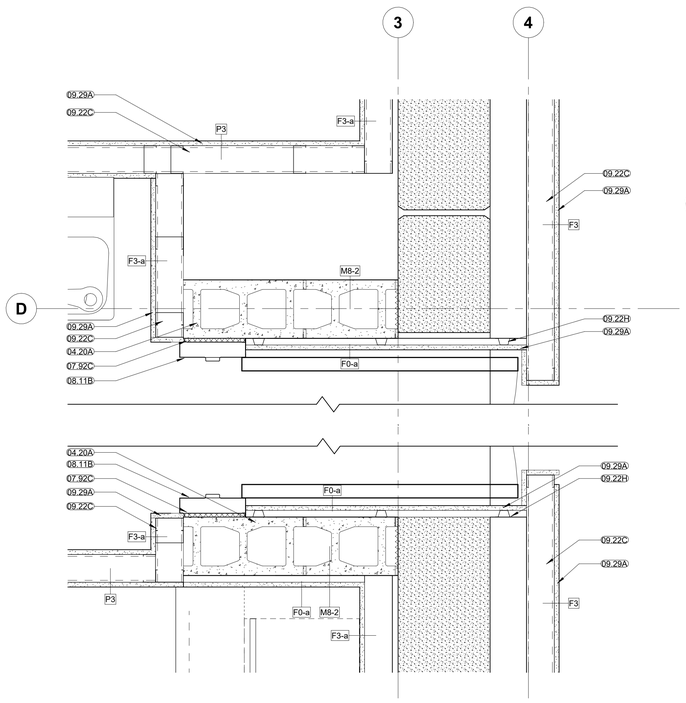

E5 TYPICAL TV BLOCKING
1 1/2" = 1'-0"



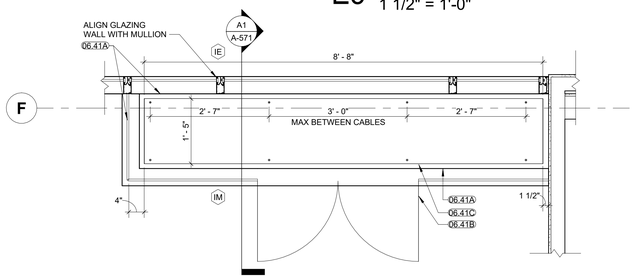

E3 COLUMN @ EXTERIOR WALL
3/4" = 1'-0" A1 / A-102



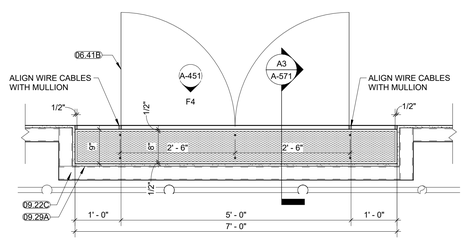

E1 TYP. COLUMN IN WALL
3/4" = 1'-0" A1 / A-102



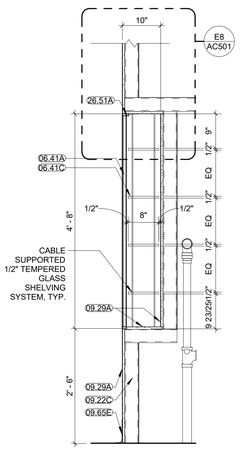

A9 STORM SHELTER DOOR
1 1/2" = 1'-0"
NORTH



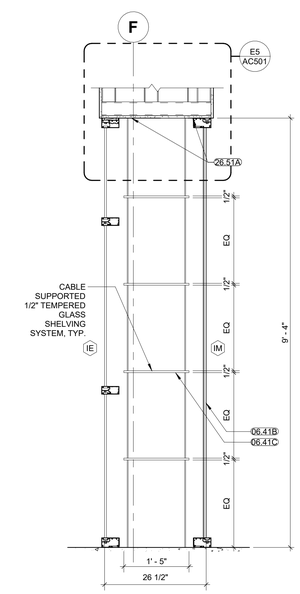

C5 LOBBY DISPLAY CASE
3/4" = 1'-0"
NORTH




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




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:

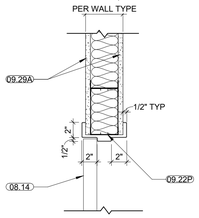
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

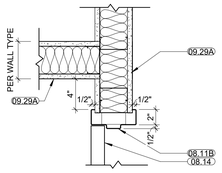
A-571

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

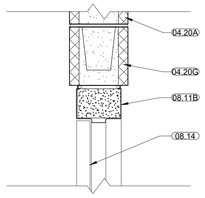
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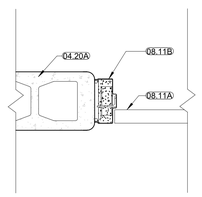

J12 HM DOOR HEAD - TYP.
1 1/2" = 1'-0"



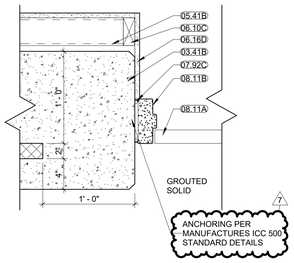

J10 HM DOOR JAMB - TYP.
1 1/2" = 1'-0"



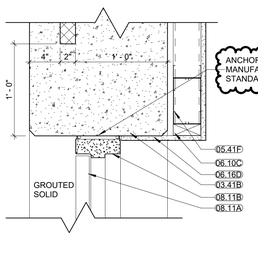

J9 HM DOOR HEAD - MASONRY
1 1/2" = 1'-0"



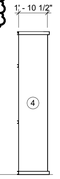

J7 HM DOOR JAMB - MASONRY
1 1/2" = 1'-0"



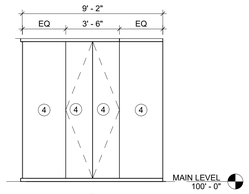

H12 HM JAMB AT PRECAST
1 1/2" = 1'-0"



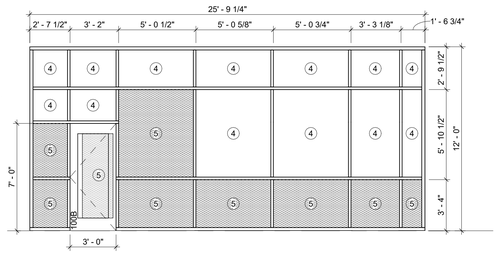

H10 HM HEAD IN PRECAST
1 1/2" = 1'-0"



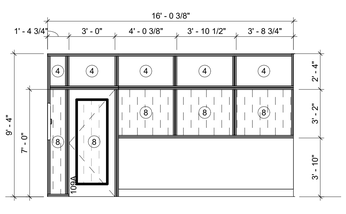

STOREFRONT



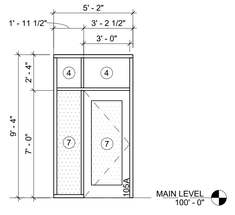

STOREFRONT



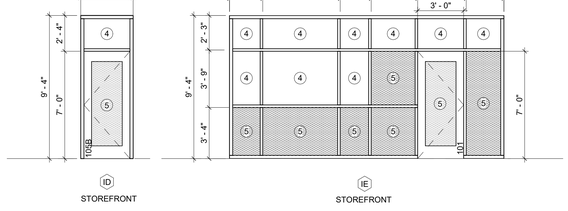

STOREFRONT




NATURAL VOICE TRANSMISSION LEVEL III
BULLET RESISTANT FRAME



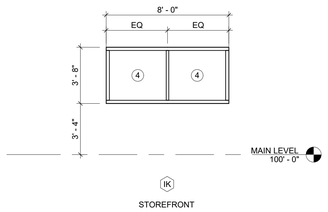

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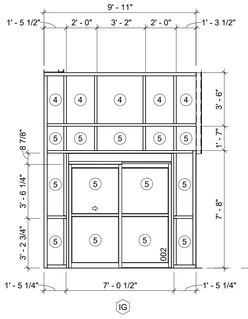

STOREFRONT



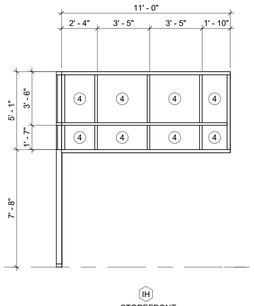

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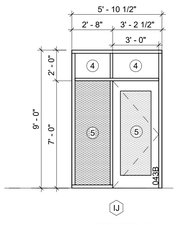

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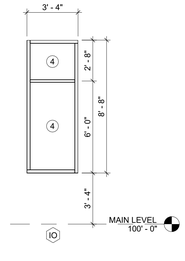

CURTAINWALL

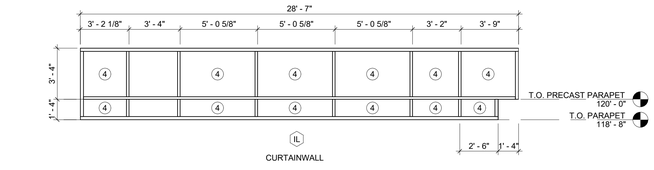



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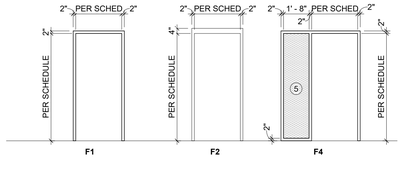



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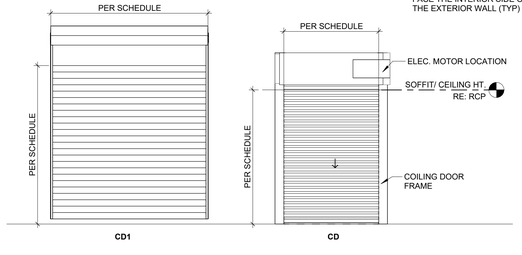


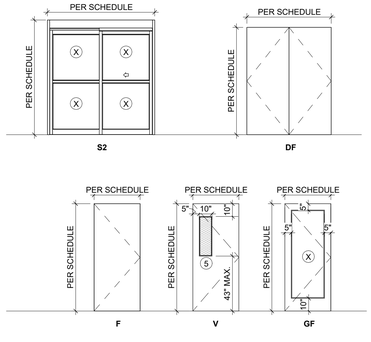

CURTAINWALL




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 | F4 | | 17.0 | 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 (3) | 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 | F | 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 | |
| 155C | TRAINING | 3' - 0" | 7' - 0" | HM | F | HM | F1 | | 3.0 | E4 / A-502 | A1/A-521 | 2 |
| 155D | TRAINING | 3' - 0" | 7' - 0" | HM | F | HM | F1 | | 3.0 | E4 / A-502 | A1/A-521 | 2 |
| 156 | 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<br>-1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2<br>-1/2" AIR SPACE<br>-1/4" CLEAR HEAT-STRENGTHENED |
| 2 | VIRACON VRE 26-38 TEMPERED<br>-1/4" SOLARBLUE TEMPERED VRE 26-38 #2<br>-1/2" AIR SPACE<br>-1/4" CLEAR TEMPERED |
| 3 | VIRACON VRE 26-38<br>-1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2<br>-1/2" AIR SPACE<br>-1/4" SPANDREL V908 |
| 4 | -1/2" CLEAR GLASS |
| 5 | -1/2" CLEAR GLASS TEMPERED |
| 6 | 2" TOR-GARD 30 IG GLAZING<br>-1/4" SOLARBLUE HEAT STRENGTHENED VRE 26-38 #2 |
| 7 | -1/2" CLEAR GLASS TEMPERED<br>-FROSTED CLEAR FILM SWF |
| 8 | BULLET RESISTANT<br>-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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# 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 |
| 4 | ADDENDUM 4 | 11/26/2024 |
| 7 | ASI 004 | 2/12/2025 |

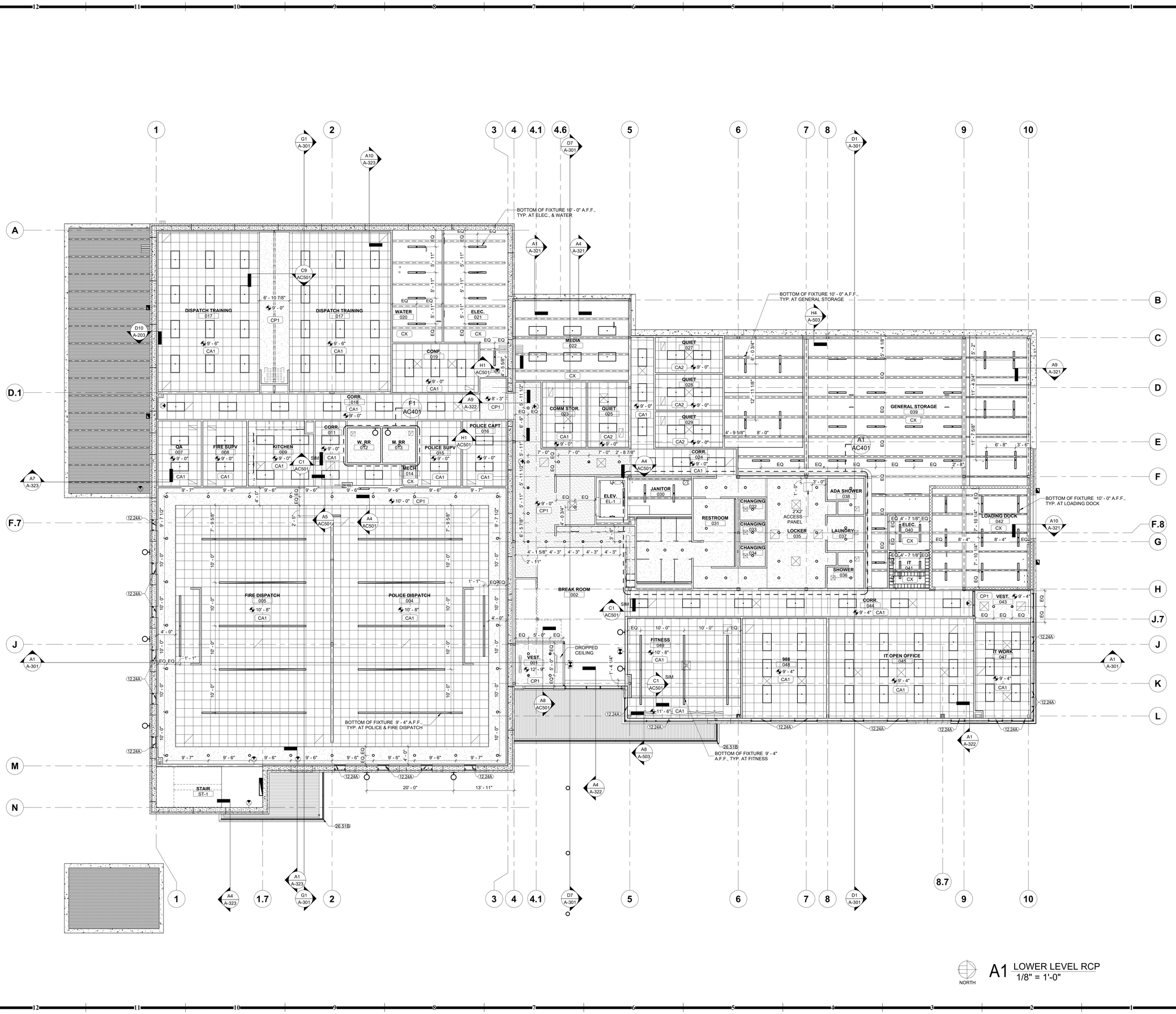
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

A-601

ISSUE DATE: DECEMBER 20, 2024
HOEFER WELKER #: 138191

DOOR SCHEDULE, DETAILS, AND INT. WIN. TYPES




**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.
- SUSP. CEILING SYSTEM
- SUPPLY AIR
- RETURN/EXHAUST AIR
- 2X4 LIGHT FIXTURE
- SUSPENDED LINEAR LIGHT FIXTURE
- SUSPENDED LIGHT FIXTURE
- CAN LIGHT
- 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 |
| 26.51B | EXTERIOR LIGHT FIXTURE RE: ELECTRICAL |


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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:

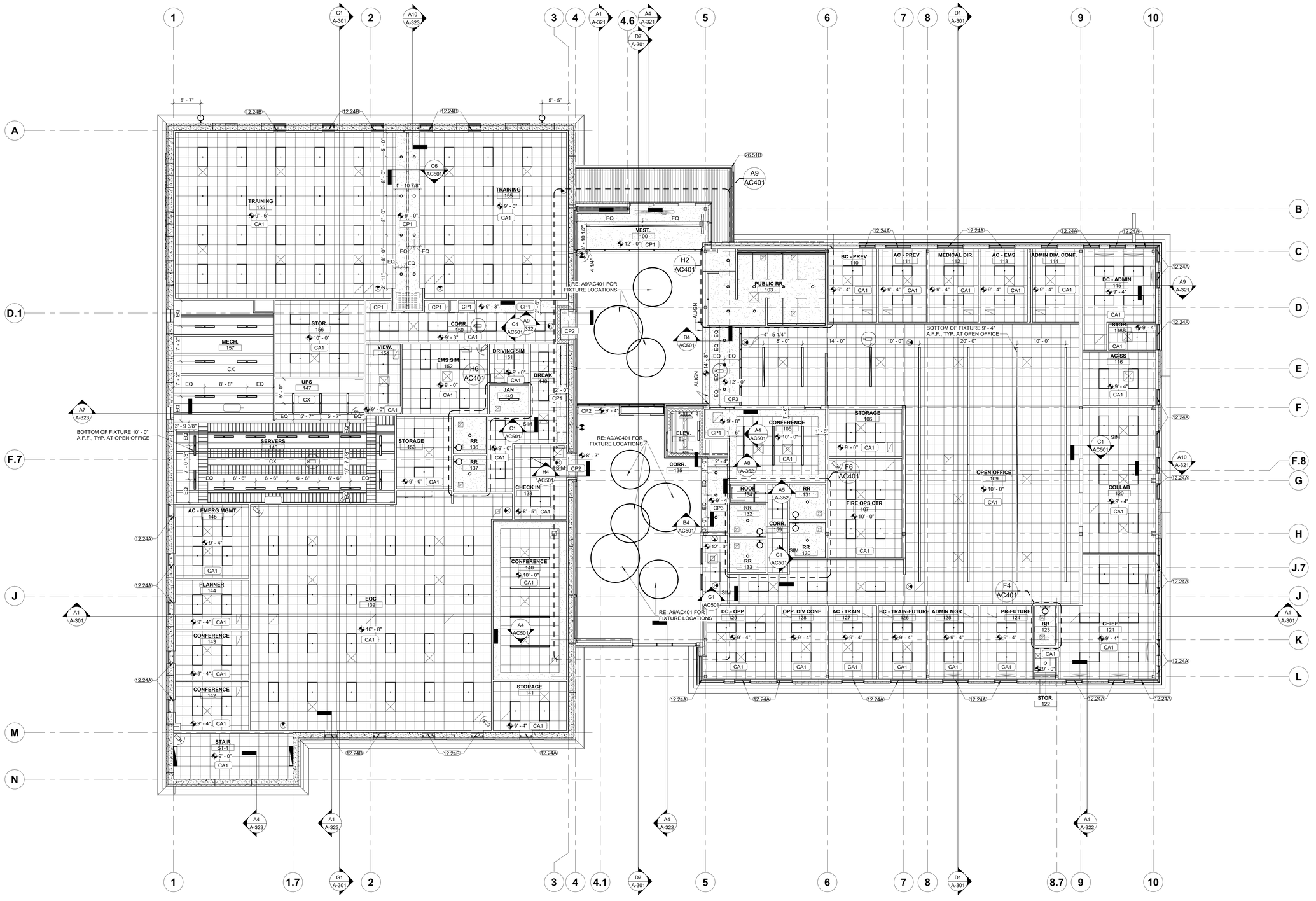
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012111
ARCHITECT

PROFESSIONAL SEAL

AC101

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

LOWER LEVEL - RCP




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

NORTH

MAIN LEVEL - RCP

**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.
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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.
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- SUSPENDED LIGHT FIXTURE
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- WALL MOUNTED LIGHT FIXTURE
- FIRE EXIT SIGN
- CONTROL JOINT IN GYP BD CEILING
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- 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 |

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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

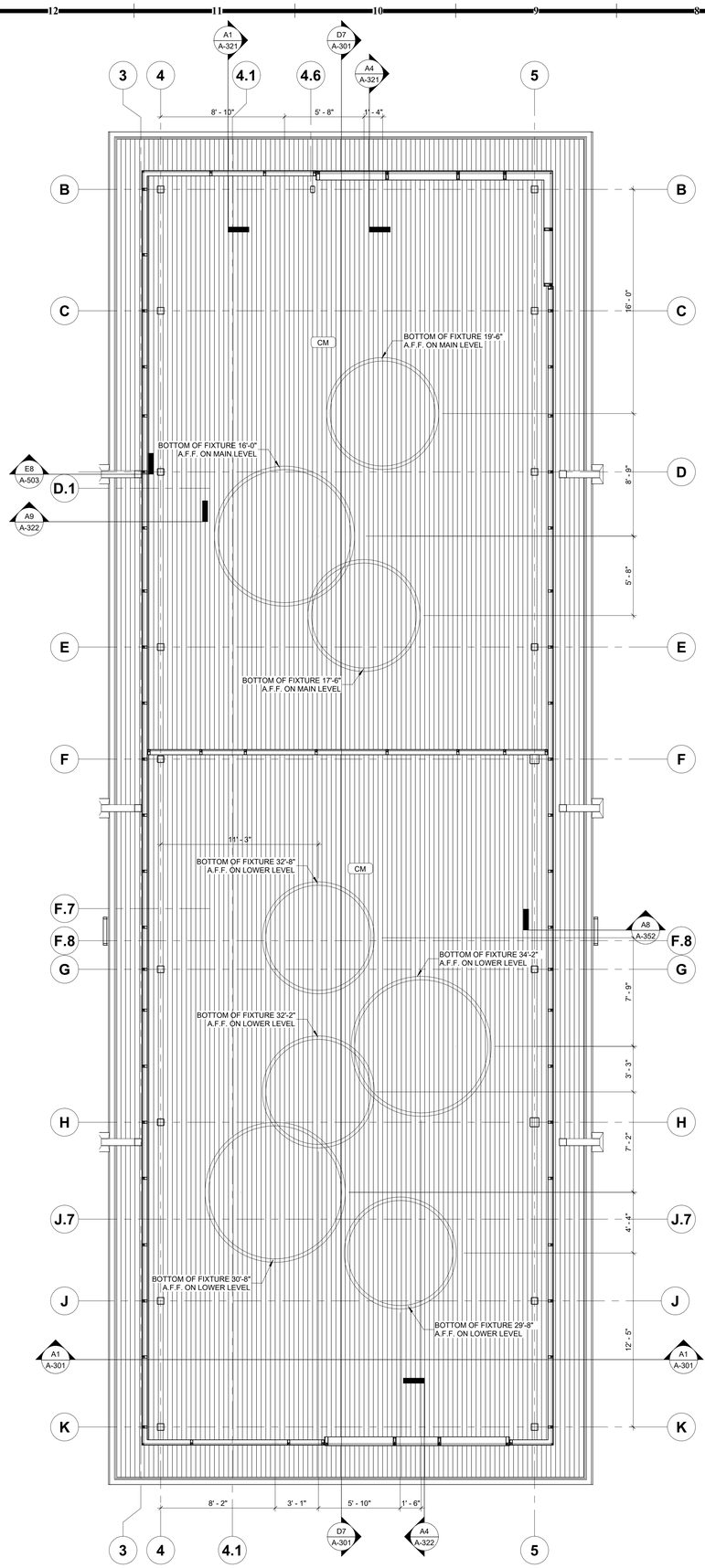
REVISION DATES:

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

PROFESSIONAL SEAL

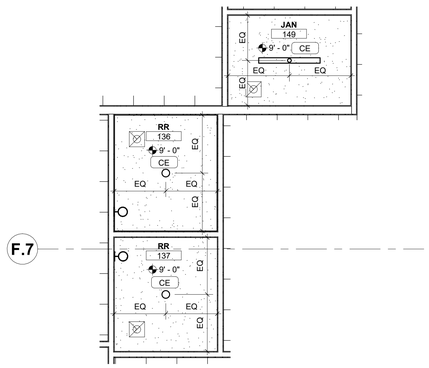
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191



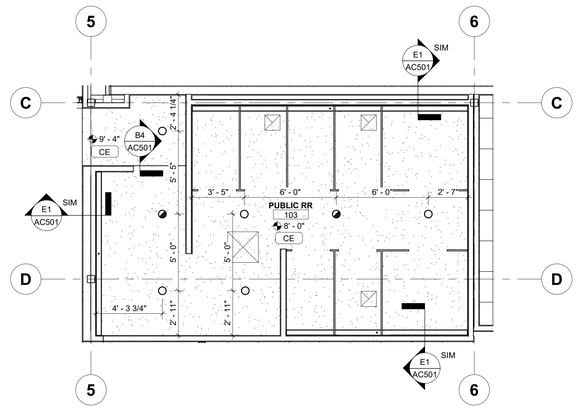

NORTH

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



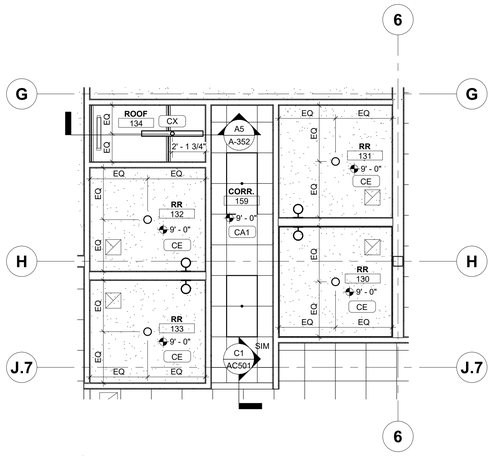

NORTH

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



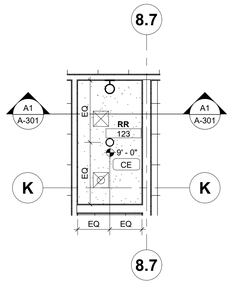

NORTH

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



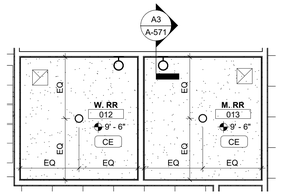

NORTH

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



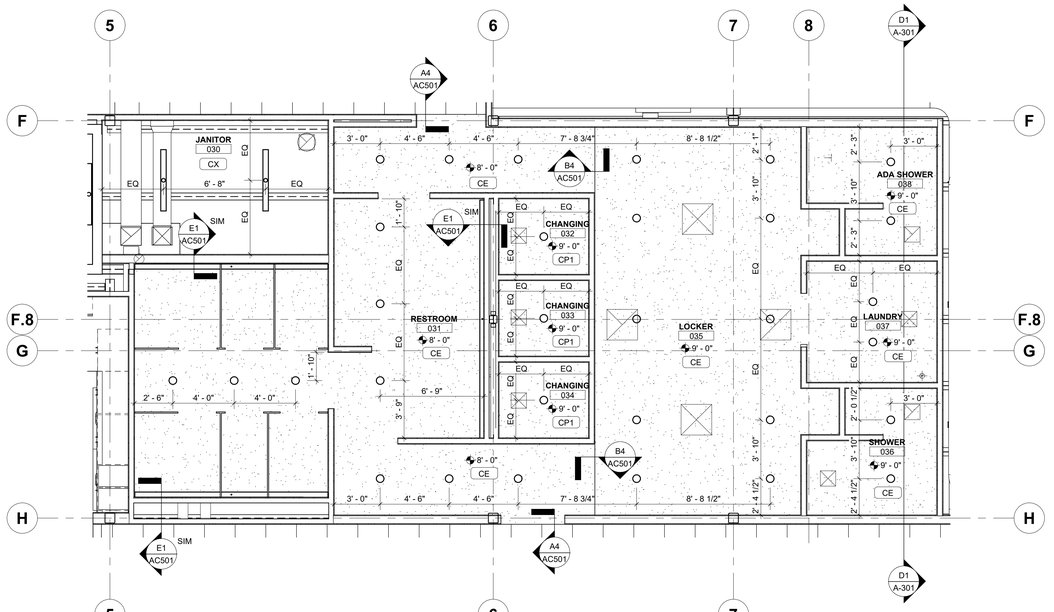

NORTH

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"

**GENERAL NOTES- REFLECTED CEILING PLANS:**

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- SUSPENDED LIGHT FIXTURE
- CAN LIGHT
- 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**


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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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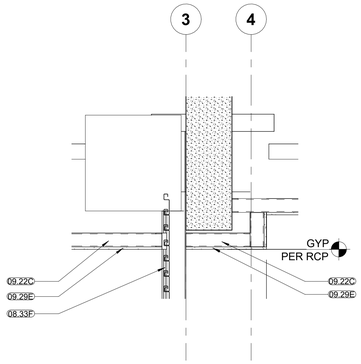
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CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

PROFESSIONAL SEAL

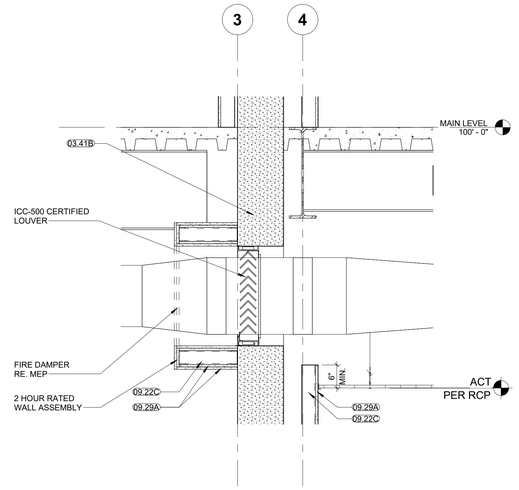
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ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

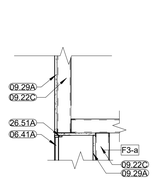
ENLARGED RCP



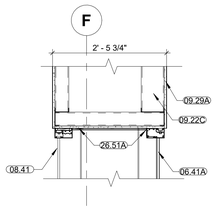

H4 DETAIL @ STORM SHUTTER
3/4" = 1'-0"



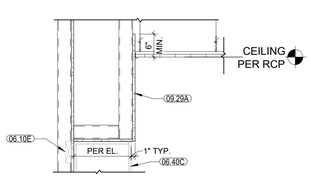

H1 STORM SHELTER LOUVER
3/4" = 1'-0"



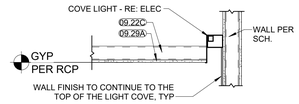

E8 DETAIL AT 018 CORR DISPLAY CASE
3/4" = 1'-0"



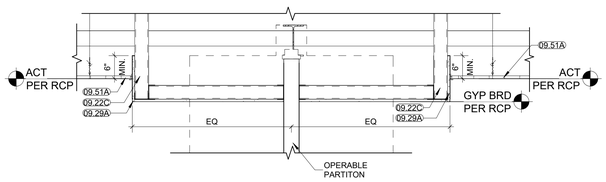

E5 DETAIL AT LOBBY DISPLAY CASE
3/4" = 1'-0"



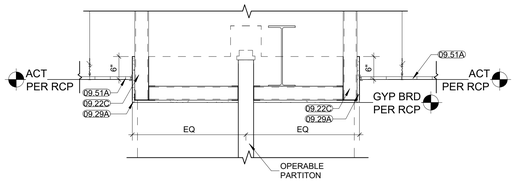

E4 GYP SOFFIT - CASEWORK SECTION
3/4" = 1'-0"



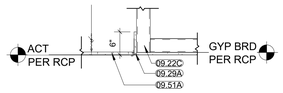

E1 TOILET COVE LIGHT DETAIL - TYP
3/4" = 1'-0"



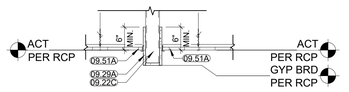

C9 LOWER LEVEL OPERABLE PARTITION SOFFIT DTL
3/4" = 1'-0"



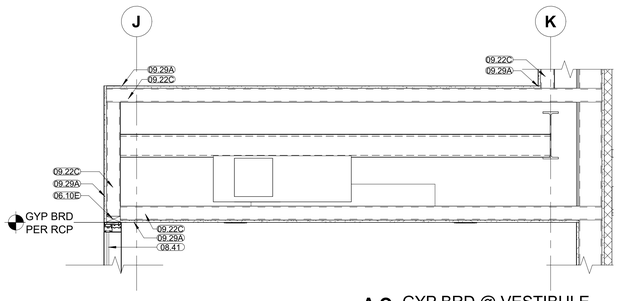

C6 MAIN LEVEL OPERABLE PARTITION SOFFIT DTL
3/4" = 1'-0"



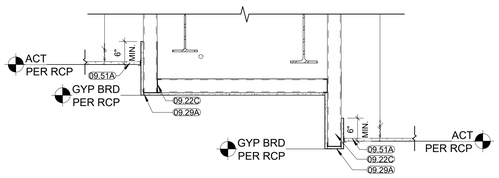

C4 ACT TO GYP. BRD., FLUSH
3/4" = 1'-0"



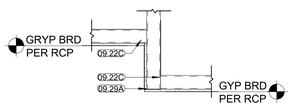

C1 GYP BRD BULKHEAD DETAIL - TYP.
3/4" = 1'-0"



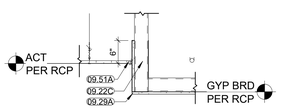

A8 GYP BRD @ VESTIBULE
3/4" = 1'-0"



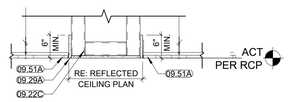

A5 DISPATCH SOFFIT DETAIL
3/4" = 1'-0"



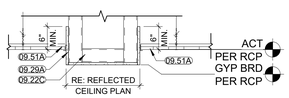

B4 GYP. BRD. SOFFIT DTL
3/4" = 1'-0"




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"

**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 (FOC), 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.

**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:

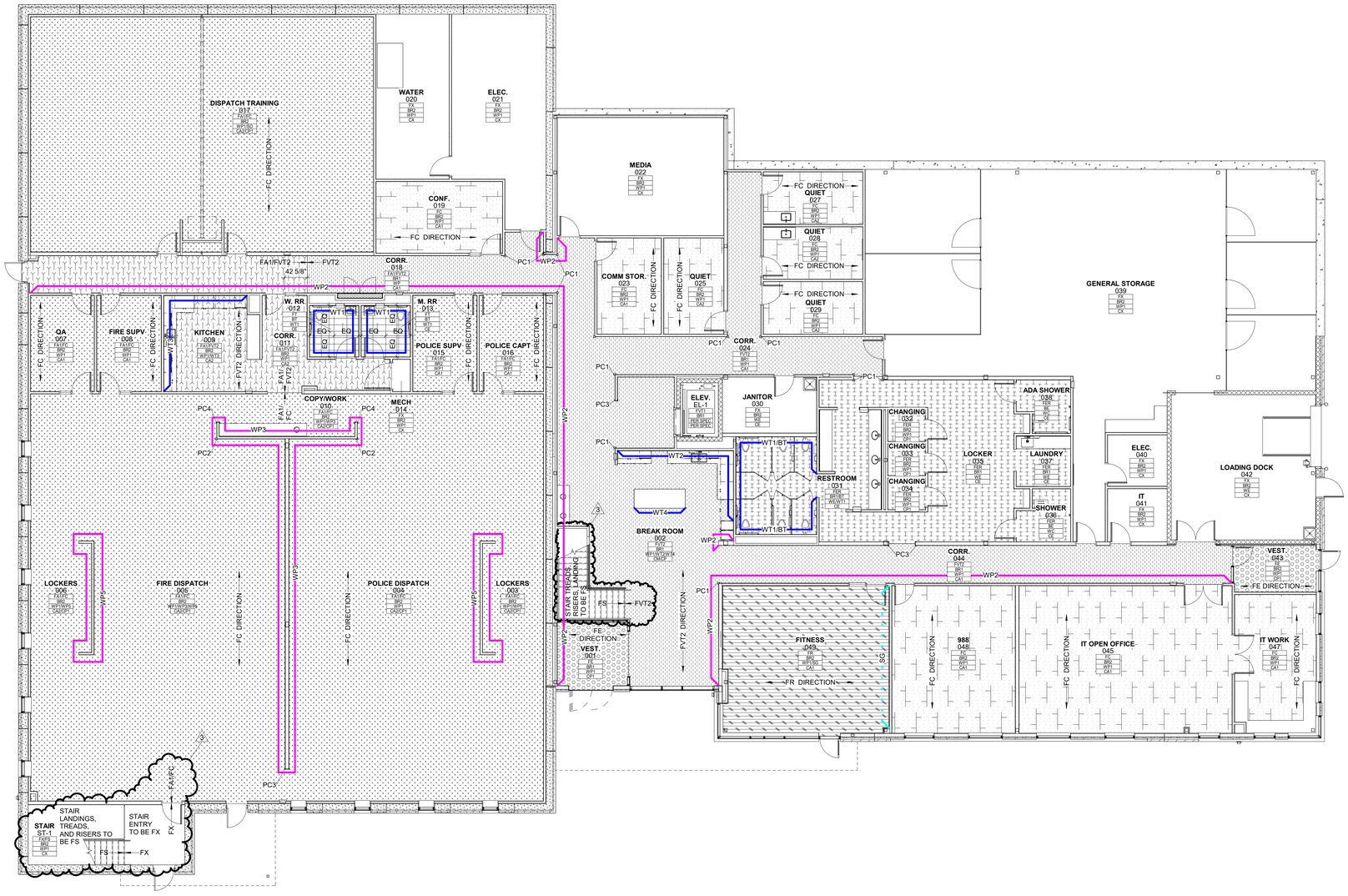
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016013211
11/1/24
ARCHITECT

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**


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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 |

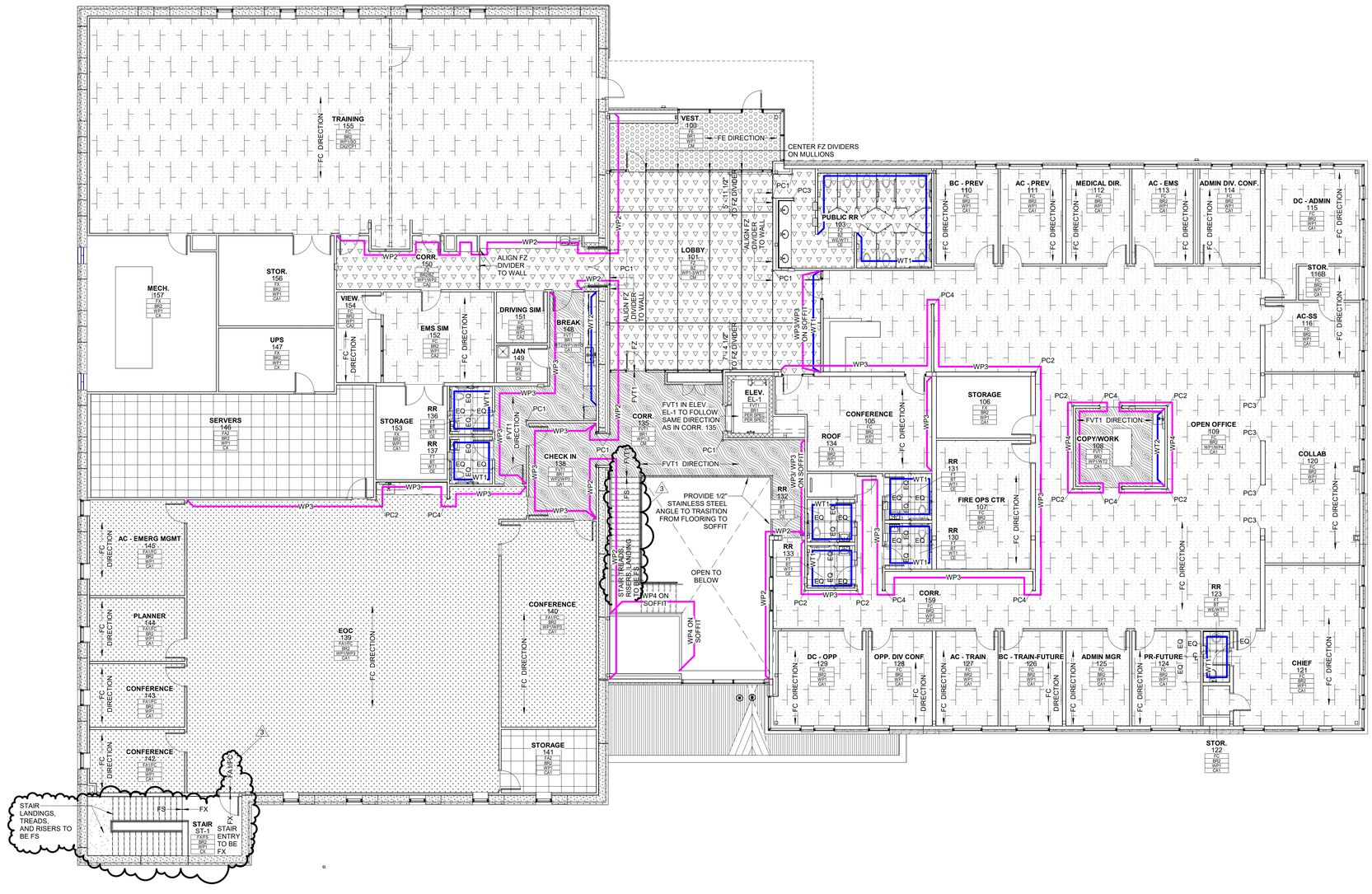
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016012131
ARCHITECT

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.
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: A501 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 A501.
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

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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

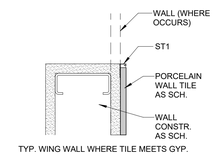
MAIN LEVEL - FINISH PLAN

**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.
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.
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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.
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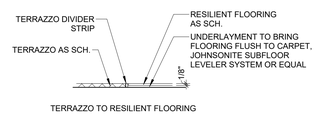
**GENERAL NOTES - INTERIOR FINISHES:**

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.



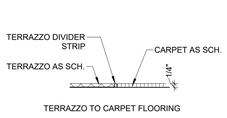
TYP. WING WALL WHERE TILE MEETS GYP.

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



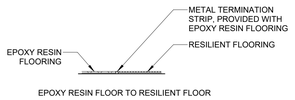
TERRAZZO TO RESILIENT FLOORING

E3 TRANSITION DETAIL
3" = 1'-0"



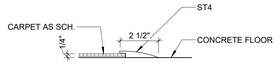
TERRAZZO TO CARPET FLOORING

E1 TRANSITION DETAIL
3" = 1'-0"



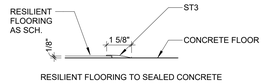
EPOXY RESIN FLOOR TO RESILIENT FLOOR

C10 TRANSITION DETAIL
3" = 1'-0"



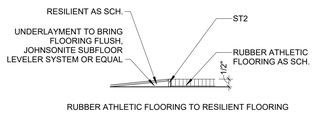
CARPET TO SEALED CONCRETE

C8 TRANSITION DETAIL
3" = 1'-0"



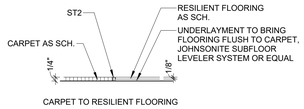
RESILIENT FLOORING TO SEALED CONCRETE

C6 TRANSITION DETAIL
3" = 1'-0"



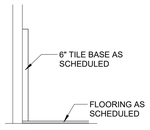
RUBBER ATHLETIC FLOORING TO RESILIENT FLOORING

C5 TRANSITION DETAIL
3" = 1'-0"



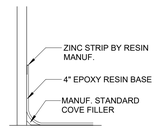
CARPET TO RESILIENT FLOORING

C3 TRANSITION DETAIL
3" = 1'-0"



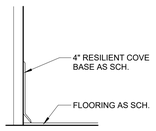
TILE BASE

C2 BASE DETAIL
3" = 1'-0"



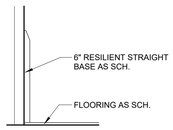
EPOXY RESIN FLASH COVE BASE

C1 BASE DETAIL
3" = 1'-0"



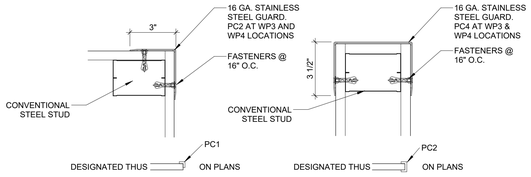
RESILIENT COVE BASE

A11 BASE DETAIL
3" = 1'-0"



RESILIENT STRAIGHT BASE

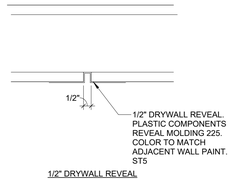
A10 BASE DETAIL
3" = 1'-0"



STAINLESS STEEL 90 DEG - PC1 & PC2

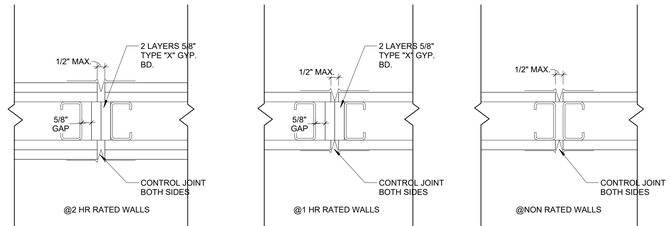
STAINLESS STEEL END WALL - PC3 & PC4

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



1/2" DRYWALL REVEAL

A5 REVEAL DETAIL
3" = 1'-0"




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

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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

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<br>STYLE: CONCORE 1000<br>FINISH: PER FINISH PLAN<br>COLOR: STANDARD UNFINISHED<br>INSTALLATION: PER MANUFACTURER | DISPATCH/EOC | NAME: DOUG EVAK<br>PHONE: 331.300.5465<br>EMAIL: DEVAK@TATEINC.COM |
| FA2 | ACCESS FLOORING | MANF: TATE<br>STYLE: CONCORE 2500/3000<br>FINISH: ESD STATIC DISSAPATIVE VINYL - FORBO COLOREX SD<br>COLOR: SD 150240 ETNA<br>INSTALLATION: PER MANUFACTURER | SERVER/STORAGE | NAME: DOUG EVAK<br>PHONE: 331.300.5465<br>EMAIL: DEVAK@TATEINC.COM |
| FC | MODULAR CARPET TILE | MANF: MILLIKEN<br>STYLE: HEAVY META - FOUNDRY<br>COLOR: TUNGSTEN FDR174-133<br>SIZE: 25CM X 1M<br>INSTALLATION: VERTICAL ASHLAR | FIELD | NAME: JENNY WOLFF<br>PHONE: 816.814.5890<br>EMAIL: JENNIFER.WOLFF@MILIKEN.COM |
| FE | ENTRANCE FLOORING | MANF: INTERFACE<br>STYLE: STEP REPEAT SR899<br>COLOR: 104941 ONYX<br>SIZE: 50CM X 50CM<br>INSTALLATION: MONOLITHIC | VESTIBULES | NAME: KATIE ALLEN<br>PHONE: 816.673.5771<br>EMAIL: KATIE.ALLEN@INTERFACE.COM |
| FER | EPOXY RESIN FLOORING | MANF: DESCO<br>STYLE: QUARTZ CERMONA SERIES<br>COLOR: CUSTOM COLOR, S#0820-728TG<br>FINISH: ORANGE PEEL<br>SHEEN: SATIN | LOWER LEVEL LOCKER ROOM | NAME: BLAKE WOOD<br>PHONE: 913.782.3330<br>EMAIL: BLAKE@DESCOCOATINGS.COM |
| FR | RUBBER ATHLETIC FLOOR - ROLLED GOODS | MANF: ECORE<br>STYLE: PERFORMANCE RALLY<br>COLOR: ES15A STEEL APPEAL 2<br>ROLL WIDTH: 48" WIDE SHEETS | FITNESS | NAME: RYAN CLAVENNA<br>PHONE: 815.341.2555<br>EMAIL: RLCLAVENNA@ECOREINTL.COM |
| FS | RUBBER STAIR TREADS W/ INTEGRAL RISER | MANF: NORA BY INTERFACE<br>STYLE: NORAMENT STAIRTREADS<br>COLOR: STONE GREY<br>TEXTURE: HAMMERED 0749 | | NAME: KATIE ALLEN<br>PHONE: 816.673.5771<br>EMAIL: KATIE.ALLEN@INTERFACE.COM |
| FT | PORCELAIN TILE | MANF: CROSSVILLE<br>STYLE: MOONSTRUCK<br>COLOR: GEMINI<br>SIZE: 12X24<br>INSTALLATION: PER FINISH FLOOR PLAN<br>GROUT: MAPEI KERAPOXY - 5009 GRAY | | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| FVT1 | LUXURY VINYL FLOORING | MANF: INTERFACE<br>STYLE: LEVEL SET - TEXTURED WOODGRAINS<br>COLOR: A00422 RUSTIC HICKORY<br>SIZE: 25CM X 1M<br>INSTALLATION: ASHLAR | MAIN LEVEL/ELEVATOR | NAME: KATIE ALLEN<br>PHONE: 816.673.5771<br>EMAIL: KATIE.ALLEN@INTERFACE.COM |
| FVT2 | LUXURY VINYL FLOORING | MANF: PATCRAFT<br>STYLE: ENERGIZE 1602V<br>COLOR: INTENTION-V1 00700<br>SIZE: 9IN X 36IN<br>INSTALLATION: STAGGER | LOWER LEVEL | NAME: SARAH JENKINS<br>PHONE: 913.237.7586<br>EMAIL: SARAH.JENKINS@PATCRAFT.COM |
| FX | SEALED CONCRETE | MANF: TBD<br>STYLE: TBD<br>COLOR: CLEAR | | |
| FZ | POURED EPOXY TERRAZZO | MANF: TERRAZZO & MARBLE SUPPLY COMPANY<br>STYLE: TERRAZZO FLOORING<br>COLOR: CUSTOM COLOR TM# 23-2490 2A<br>INTALLATION: TROWELED | LOBBY/WAITING | NAME: MIKE BRAWLEY<br>PHONE: 847.777.6754<br>EMAIL: MBRAWLEY@TMSUPPLY.COM |
| WALL BASE | | | | |
| BE | EPOXY RESIN FLASH COVE W/ METAL TERMINATION STRIP | MANF: DESCO<br>STYLE: QUARTZ CERMONA SERIES<br>COLOR: CUSTOM COLOR, S#0820-728TG<br>FINISH: ORANGE PEEL<br>SHEEN: SATIN<br>HEIGHT: 4" | AT FER LOCATIONS UNLESS NOTED OTHERWISE | NAME: BLAKE WOOD<br>PHONE: 913.782.3330<br>EMAIL: BLAKE@DESCOCOATINGS.COM |
| BR1 | PROFILED RESILIENT BASE | MANF: ROPPE<br>STYLE: CONTOURS PROFILED BASE - VERTICAL PV6065<br>COLOR: 193 BLACK BROWN<br>HEIGHT: 6" | | NAME: WENDY BREMER<br>PHONE: 630.277.1414<br>EMAIL: WABREMER@ROPPE.COM |
| BR2 | RESILIENT COVE BASE | MANF: ROPPE<br>STYLE: 700 SERIES<br>PROFILE: TOE BASE<br>COLOR: 193 BLACK BROWN<br>HEIGHT: 4" | | NAME: WENDY BREMER<br>PHONE: 630.277.1414<br>EMAIL: WABREMER@ROPPE.COM |
| BT | TILE BASE | MANF: CROSSVILLE<br>STYLE: MOONSTRUCK<br>COLOR: GEMINI<br>HEIGHT: 12" X 24" TILE CUT TO 6" HIGH WITH MANUFACTURER'S EDGE FACING UP<br>GROUT: MAPEI KERAPOXY - 5009 GRAY | AT FT LOCATIONS UNLESS NOTED OTHERWISE | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| BZ | TERRAZZO WALL BASE | MANF: TERRAZZO & MARBLE SUPPLY COMPANY<br>STYLE: TERRAZZO FLOORING<br>COLOR: CUSTOM COLOR TM# 23-2490 2A<br>INTALLATION: TROWELED<br>HEIGHT: 6" | AT FZ LOCATIONS UNLESS NOTED OTHERWISE | NAME: MIKE BRAWLEY<br>PHONE: 847.777.6754<br>EMAIL: MBRAWLEY@TMSUPPLY.COM |
| WALL FINISH | | | | |
| WC | EPOXY RESIN WALL FINISH | MANF: DESCO<br>STYLE: QUARTZ CERMONA SERIES<br>COLOR: CUSTOM COLOR, S#0820-728TG<br>FINISH: ORANGE PEEL<br>SHEEN: SATIN | SHOWERS | NAME: BLAKE WOOD<br>PHONE: 913.782.3330<br>EMAIL: BLAKE@DESCOCOATINGS.COM |
| WE | PAINT - EPOXY | MANF: SHERWIN WILLIAMS<br>STYLE: EPOXY, SATIN FINISH<br>COLOR: FIRST STAR SW7646 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WP1 | PAINT - LATEX | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, EG-SHEL FINISH<br>COLOR: FIRST STAR SW7646 | FIELD | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WP2 | PAINT - LATEX | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, EG-SHEL FINISH<br>COLOR: SILVERPLATE SW7649 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WP3 | PAINT - LATEX | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, EG-SHEL FINISH<br>COLOR: CITYSCAPE SW7067 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WP4 | PAINT - LATEX | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, EG-SHEL FINISH<br>COLOR: IRON ORE SW7069 | ACCENT PAINT AS NOTED IN DRAWINGS & PAINT USED FOR EXPOSED INTERIOR METAL COLUMNS | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WP5 | PAINT - LATEX | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, EG-SHEL FINISH<br>COLOR: SEA SERPANT SW7615 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| WT1 | PORCELAIN WALL TILE | MANF: CROSSVILLE<br>STYLE: MOONSTRUCK<br>COLOR: JUNO<br>SIZE: 12X24<br>GROUT: MAPEI KERAPOXY - 5093 WARM GRAY | | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| WT2 | CERAMIC WALL TILE | MANF: ANATOLIA<br>STYLE: TERAMODA<br>COLOR: STONE, GLOSSY FINISH<br>SIZE: 3X12<br>GROUT: MAPEI KERAPOXY - 5077 FROST<br>INSTALLATION: BASKETWEAVE | | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| WT3 | CERAMIC WALL TILE | MANF: ANN SACKS<br>STYLE: SAVOY HIVE<br>COLOR: LANTERN<br>SIZE: 13X11 MOSAIC<br>GROUT: MAPEI KERAPOXY - 5077 FROST | | NAME: SONYA CAZENAVE<br>PHONE: 303.282.9300<br>EMAIL: SONYA.CASENAVE@ANNSACKS.COM |
| WT4 | GLASS MOSAIC WALL TILE | MANF: TILEBAR<br>STYLE: MATCHSTIX<br>COLOR: RAINSTORM<br>SIZE: 10.75X10.5 MOSAIC<br>GROUT: MAPEI KERAPOXY - 5227 CASTLE WALL | | NAME: LIZ LESTER<br>PHONE:<br>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<br>STYLE: CO-8<br>COLOR: STAINLESS STEEL, SATIN FINISH<br>SIZE: 3" WING<br>INSTALLATION: INSTALL AT TOP OF WALL BASE | | NAME: RICK STINGLEY<br>PHONE: 816.536.0229<br>EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM |
| PC2 | STAINLESS STEEL CORNER GUARD - 90 DEGREE, 6' - 0" H | MANF: CONSTRUCTION SPECIALTIES<br>STYLE: CO-8<br>COLOR: METAL POWDER COAT - GRAY HAMMERTONE #004<br>SIZE: 3" WING<br>INSTALLATION: INSTALL AT TOP OF WALL BASE | AT WP3 & WP4 LOCATIONS | NAME: RICK STINGLEY<br>PHONE: 816.536.0229<br>EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM |
| PC3 | STAINLESS STEEL CORNER GUARD - END WALL, 6' - 0" H | MANF: CONSTRUCTION SPECIALTIES<br>STYLE: SCO-8<br>COLOR: STAINLESS STEEL, SATIN FINISH<br>SIZE: 3 1/2" END WALL<br>INSTALLATION: INSTALL AT TOP OF WALL BASE | | NAME: RICK STINGLEY<br>PHONE: 816.536.0229<br>EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM |
| PC4 | STAINLESS STEEL CORNER GUARD - END WALL, 6' - 0" H | MANF: CONSTRUCTION SPECIALTIES<br>STYLE: SCO-8<br>COLOR: METAL POWDER COAT - GRAY HAMMERTONE #004<br>SIZE: 3 1/2" END WALL<br>INSTALLATION: INSTALL AT TOP OF WALL BASE | AT WP3 & WP4 LOCATIONS | NAME: RICK STINGLEY<br>PHONE: 816.536.0229<br>EMAIL: RICK.S@CLOUTMANANDSTINGLEY.COM |
| MILLWORK / CASEWORK | | | | |
| ML1 | PLASTIC LAMINATE | MANF: WILSONART<br>STYLE: PREMIUM LAMINATE<br>COLOR: MANGALORE MANGO 7984-38<br>EDGEBAND: .018" PVC TO MATCH | | NAME: MANDY BRIDGES<br>PHONE: 913.484.2691<br>EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM |
| ML2 | PLASTIC LAMINATE | MANF: WILSONART<br>STYLE: PREMIUM LAMINATE<br>COLOR: SLATE GREY D91-60<br>EDGEBAND: .018" PVC TO MATCH | | NAME: MANDY BRIDGES<br>PHONE: 913.484.2691<br>EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM |
| MQ | QUARTZ SURFACE | MANF: WILSONART<br>STYLE: QUARTZ<br>COLOR: HAIDA Q4008<br>THICKNESS: 3CM COUNTERTOPS, 2CM BACKSPLASHES | | NAME: MANDY BRIDGES<br>PHONE: 913.484.2691<br>EMAIL: MANDY.BRIDGES@VIRGINIATILE.COM |
| MS | GRANITE SURFACE | MANF: STONE SOURCE<br>STYLE: GRANITE<br>COLOR: SILVER GREY<br>THICKNESS: 3CM COUNTERTOP | EXTERIOR COUNTERTOP | NAME: MITCH KALMAR<br>PHONE: 314.282.4658<br>EMAIL: MKALMAR@STONESOURCE.COM |
| MST | STAINLESS STEEL | MANF: -<br>STYLE: SATIN | | |
| CEILING FINISH | | | | |
| CA1 | ACOUSTICAL CEILING TILE W/ TEGULAR EDGE | MANF: ARMSTRONG CEILINGS<br>STYLE: ULTIMA BEVELED TEGULAR 1952<br>COLOR: WHITE<br>SIZE: 24" X 24" X 3/4"<br>GRID: 9/16" SUPRAFINE | | NAME: ELIZABETH MOON<br>PHONE: 816.216.2890<br>EMAIL: EMOON@ARMSTRONGCEILINGS.COM |
| CA2 | ACOUSTICAL CEILING TILE W/ TEGULAR EDGE | MANF: ARMSTRONG CEILINGS<br>STYLE: ULTIMA HIGH NRC BEVELED TEGULAR 1942<br>COLOR: WHITE<br>SIZE: 24" X 24" X 7/8"<br>GRID: 9/16" SUPRAFINE | | NAME: ELIZABETH MOON<br>PHONE: 816.216.2890<br>EMAIL: EMOON@ARMSTRONGCEILINGS.COM |
| CE | GYPSUM BOARD CEILING - EPOXY | MANF: SHERWIN WILLIAMS<br>STYLE: EPOXY, FLAT FINISH<br>COLOR: HIGH REFLECTIVE WHITE SW7757 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| CM | METAL CEILING PANEL | MANF: BERRIDGE<br>STYLE: VEE-PANEL<br>COLOR: WALNUT | LOBBY/CANOPY PANELS TO BE PERFERATED AT INTERIOR APPLICATIONS WITH 6" ACOUSTICAL INSULATION ABOVE | NAME: BRENT EAGLE<br>PHONE:913.227.0855<br>EMAIL: BEAGLE@BERRIDGE.COM |
| CP1 | GYPSUM BOARD CEILING | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, FLAT FINISH<br>COLOR: HIGH REFLECTIVE WHITE SW7757 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| CP2 | GYPSUM BOARD CEILING | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, FLAT FINISH<br>COLOR: SILVERPLATE SW7649 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| CP3 | GYPSUM BOARD CEILING | MANF: SHERWIN WILLIAMS<br>STYLE: LATEX, FLAT FINISH<br>COLOR: CITYSCAPE SW7067 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| CX | EXPOSED TO STRUCTURE | - | | |
| SPECIALTY | | | | |
| ELEVATOR FINISHES | COORDINATE W/ SPECS &/OR DRAWINGS | MANF: KONE<br>WALLS: MANUFACTURER'S SPECIFIC BRUSHED STAINLESS STEEL<br>FLOOR: TO MATCH FVT1 | | NAME: JONNY RICHARDSON<br>PHONE: 816.337.2854<br>EMAIL: JONNY.RICHARDSON@KONE.COM |
| SD1 | INTERIOR DOORS - WOOD | MANF: TBD<br>STYLE: CHERRY VENEER, PLAIN SLICED/BOOK MATCHED<br>COLOR: STAINED TO MATCH ML1 (WILSONART MANGALORE MANGO 7984) | | |
| SD2 | INTERIOR DOORS - METAL | MANF: SHERWIN WILLIAMS<br>STYLE: ALKYD<br>COLOR: SILVERPLATE SW7649 | INTERIOR METAL DOORS AND INTERIOR FACE OF EXTERIOR DOORS | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| SD3 | EXTERIOR DOORS - METAL | MANF: SHERWIN WILLIAMS<br>STYLE: ALKYD<br>COLOR: IRON ORE SW7069 | EXTERIOR FACE OF EXTERIOR METAL DOORS | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| SD FRAME | INTERIOR HOLLOW METAL DOOR FRAMES | MANF: SHERWIN WILLIAMS<br>STYLE: ALKYD<br>COLOR: SILVERPLATE SW7649 | | NAME: PETER KREMM<br>PHONE: 303.902.7239<br>EMAIL: PETER.KREMM@SHERWIN.COM |
| SG | MIRROR | MANF: -<br>STYLE: MIRRORED GLASS<br>THICKNESS: 1/4"<br>SIZE: PER ELEVATIONS | | |
| SL | METAL LOCKERS | MANF: TIFFIN METAL PRODUCTS<br>STYLE: TBD<br>COLOR: GRAY SMOKE | | |
| SO | OPERABLE PARTITION | MANF: KWIK-WALL - 3000 SERIES<br>STYLE: 3050<br>COLOR: LINO, DRAPERIE, KCS-30 | | NAME: KAYLEIGH ICENOGLE<br>PHONE: -<br>EMAIL: ICENOGLEK@KWIK-WALL.COM |
| SP | TOILET PARTITIONS | MANF: BRADLEY<br>STYLE: EURO STYLE PARTITIONS, HIGHRISE SERIES<br>COLOR: PHENOLIC LT, COLOR SLATE GREY | | NAME: SARAH HACKETT<br>PHONE: 816.221.3322<br>EMAIL: SARAH.HACKETT@PATTERSONSALES.BIZ |
| SS | INTERIOR WINDOW SILLS - SOLID SURFACE | MANF: CORIAN<br>THICKNESS: 1/2"<br>COLOR: GLACIER ICE<br>NOTE: EASED EDGES AT ALL WINDOW SILLS | | NAME: KRISTY RINNE<br>PHONE: 314.254.6634<br>EMAIL: KRINNE@HLLMARK.COM |
| ST1 | METAL EDGE TRIM | MANF: SCHLUTER<br>STYLE: JOLLY<br>COLOR: SATIN ANODIZED ALUMINUM (AE) | | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| ST2 | METAL EDGE TRIM | MANF: SCHLUTER<br>STYLE: SCHIENE<br>COLOR: SATIN ANODIZED ALUMINUM (AE) | | NAME: NIKKI VAN DYNE<br>PHONE: 913.620.6098<br>EMAIL: NIKKI.VANDYNE@VIRGINITALTILE.COM |
| ST3 | RUBBER TRANSITION STRIP | MANF: ROPPE<br>STYLE: #22 REDUCER STRIP 1/8"<br>COLOR: 193 BLACK BROWN | | NAME: WENDY BREMER<br>PHONE: 630.277.1414<br>EMAIL: WABREMER@ROPPE.COM |
| ST4 | RUBBER TRANSITION STRIP | MANF: ROPPE<br>STYLE: #38 GLUE-DOWN CARPET EDGE 1/4"<br>COLOR: 193 BLACK BROWN | | NAME: WENDY BREMER<br>PHONE: 630.277.1414<br>EMAIL: WABREMER@ROPPE.COM |
| ST5 | GYPSUM REVEAL INSERT/PLASTIC TRIM | MANF: PLASTIC COMPONENTS<br>STYLE: DRYWALL REVEAL 225<br>SIZE: 1/2"<br>COLOR: PAINTED TO MATCH ADJACENT WALL | | |
| SW1 | WINDOW TREATMENT - ROLLER SHADES | MANF: MECHOSHADE<br>TYPE: MECHO/S<br>OPENNESS: 3%<br>STYLE: THERMOVEIL - 1500 SERIES<br>COLOR: GREY 1513 | KEYNOTED IN RCP AS 12.24A | NAME: RYAN HELLING<br>PHONE: 816.471.2559<br>EMAIL: RYAN@HARTKS.COM |
| SW2 | WINDOW TREATMENT - ROLLER SHADES DOUBLE POCKET | MANF: MECHOSHADE<br>TYPE: MECHO/S DOUBLESHADE #15<br>TOP SHADE: CHELSEA BLACKOUT - 0250 SERIES, GRAPHITE 0253<br>BOTTOM SHADE: THERMOVEIL - 1500 SERIES, GREY 1513 | KEYNOTED IN RCP AS 12.24B | NAME: RYAN HELLING<br>PHONE: 816.471.2559<br>EMAIL: RYAN@HARTKS.COM |
| SWF | DECORATIVE WINDOW FILM | MANF: SOLYX<br>STYLE: GLASS WINDOW FILM<br>COLOR: TBD | AT GLASS TYPE 7 LOCATIONS AND INTERIOR SIDE OF EXTERIOR WINDOW TYPE N | NAME: AARON LOTINSKY<br>PHONE: 301.810.5903<br>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:

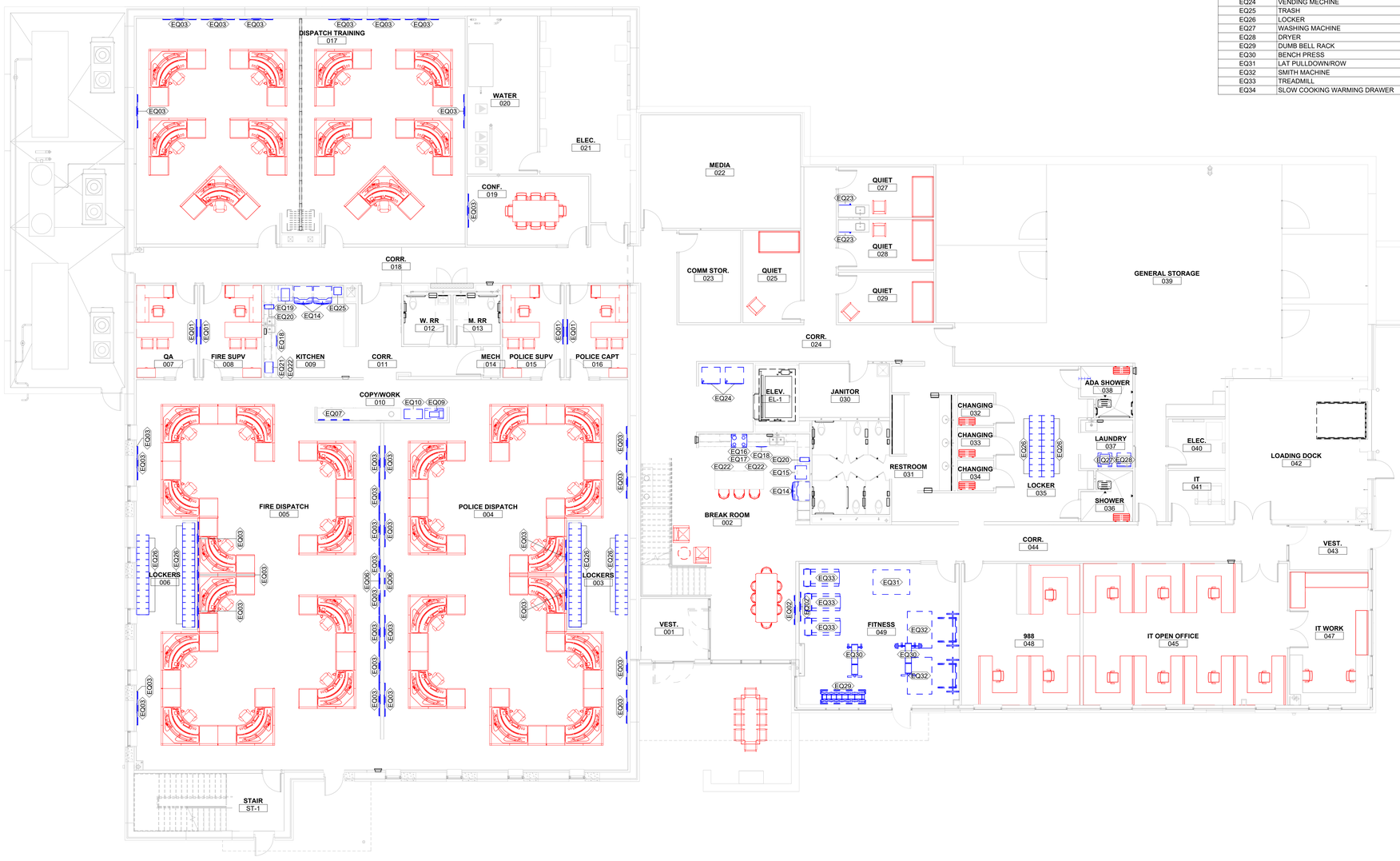
STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-2016011211
ARCHITECT

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 | 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:**

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

REVISION DATES:

STATE OF MISSOURI
CHRISTOPHER KRUMREI
NUMBER A-201601211
ARCHITECT

PROFESSIONAL SEAL

AF101

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

NORTH

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

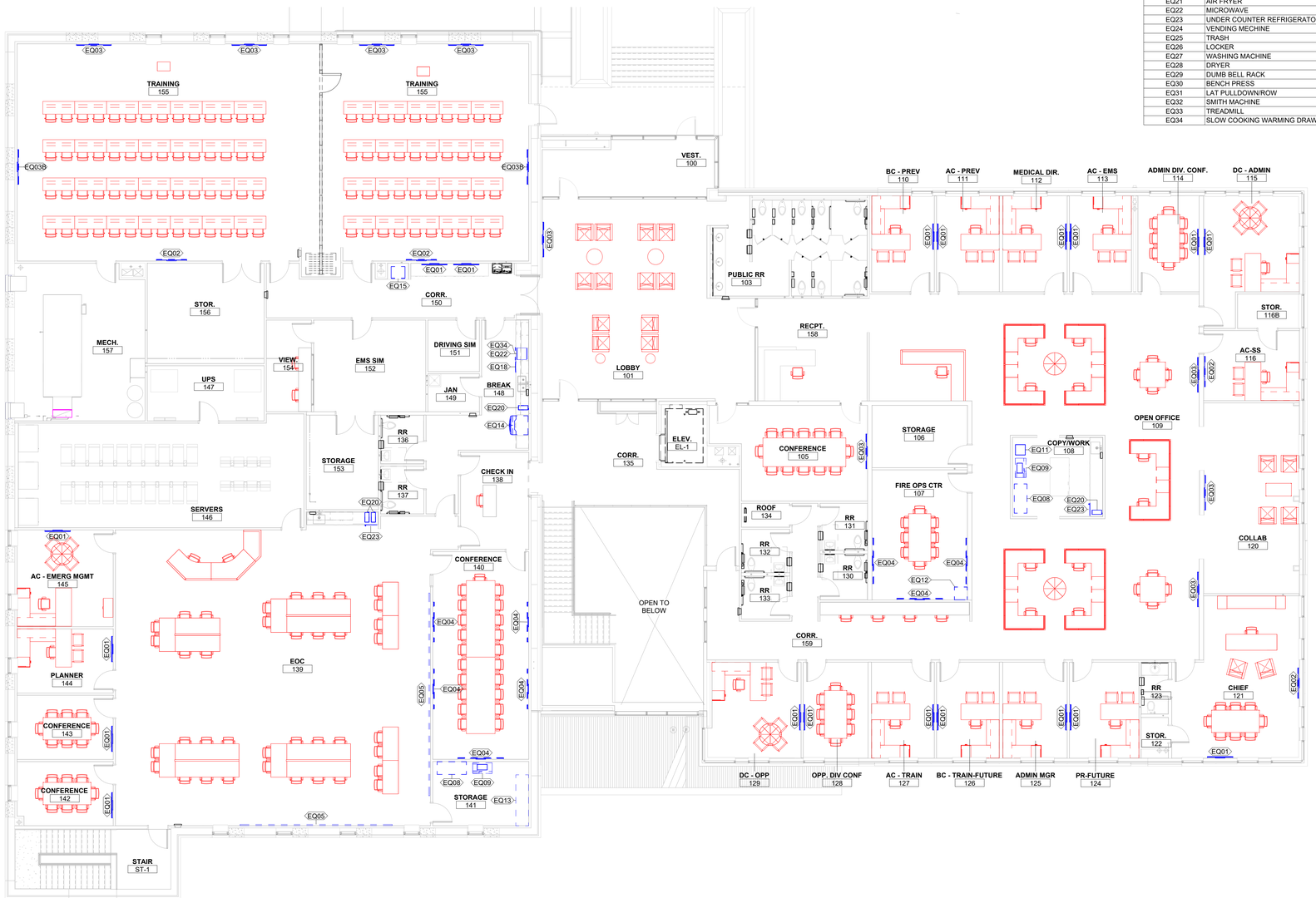
LOWER LEVEL - FFE PLAN

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| TYPE MARK | DESCRIPTION | SUPPLIED/ INSTALLED BY |
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| EQ08 | PLOTTER | OF/OI |
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| EQ24 | VENDING MECHINE | OF/OI |
| EQ25 | TRASH | OF/OI |
| EQ26 | LOCKER | CF/CI |
| EQ27 | WASHING MACHINE | OF/CI |
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| EQ30 | BENCH PRESS | OF/OI |
| EQ31 | LAT PULLDOWN/ROW | OF/OI |
| EQ32 | SMITH MACHINE | OF/OI |
| EQ33 | TREADMILL | OF/OI |
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**GENERAL NOTES – FURNITURE & EQUIPMENT PLANS:**

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| 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

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

AF102

ISSUE DATE: NOVEMBER 1, 2024
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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.
- 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
- FACP — FIRE ALARM CONTROL PANEL
- F — MANUAL PULL STATION
- S — SMOKE DETECTOR
- SD — SMOKE DETECTOR - DUCT MOUNTED
- SB — SMOKE DETECTOR - WITH SOUNDER BASE
- SO — COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- CO — CARBON MONOXIDE DETECTOR
- SBO — COMBO SMOKE/CARBON MONOXIDE/SOUNDER BASE
- H — THERMODETECTOR(HEAT) DETECTOR
- HD — THERMODETECTOR(HEAT) DETECTOR - DUCT MOUNTED
- DH — DOOR HOLDER
- C — CHIME
- B — BELL
- F — FIRE ALARM HORN
- S — FIRE ALARM SPEAKER
- FIRE ALARM STROBE
- COMBINATION FIRE ALARM HORN AND STROBE
- COMBINATION FIRE ALARM SPEAKER AND STROBE
- RL — REMOTE ALARM LAMP
- PI — POST INDICATOR SWITCH
- FS — FLOW SWITCH
- TS — TAMPER SWITCH
- 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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project number 2421800

# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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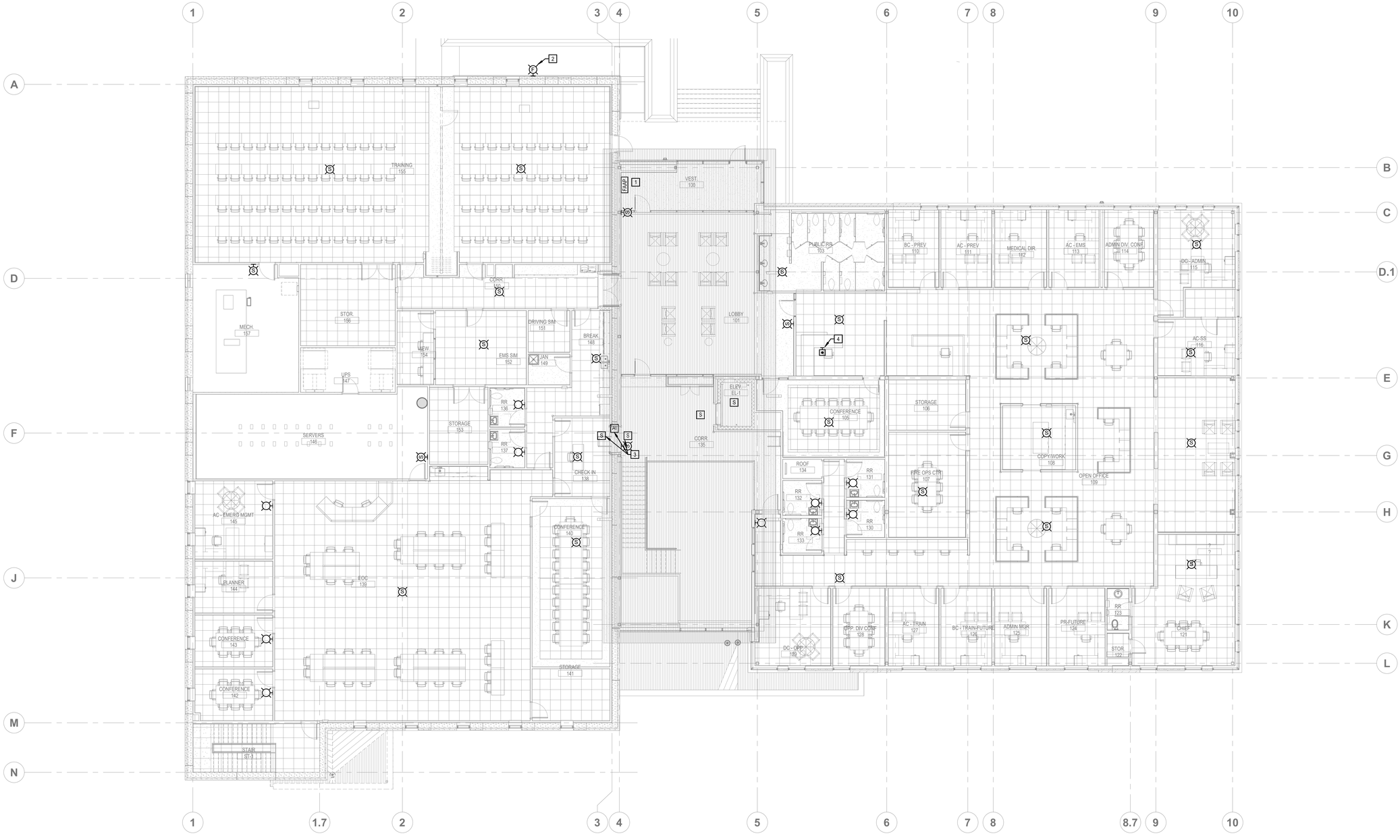
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PROFESSIONAL SEAL

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LOWER LEVEL - FIRE ALARM PLAN




NORTH

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

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.

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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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CHRISTOPHER EDWARD ALBRIGHT
NUMBER 2009033960
REGISTERED ARCHITECT

PROFESSIONAL SEAL

FA102

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

MAIN LEVEL - FIRE ALARM PLAN

## GENERAL SYMBOLS

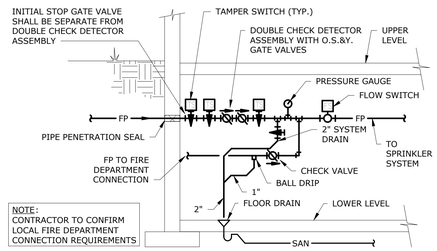
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- 1 / M1 — DETAIL REFERENCE - NO./SHEET NO.
- A / M1 — SECTION CUT - SECTION/SHEET NO.
- BRACKET DENOTES A WALL MOUNTED DEVICE, TYP

## FIRE PROTECTION SYMBOLS

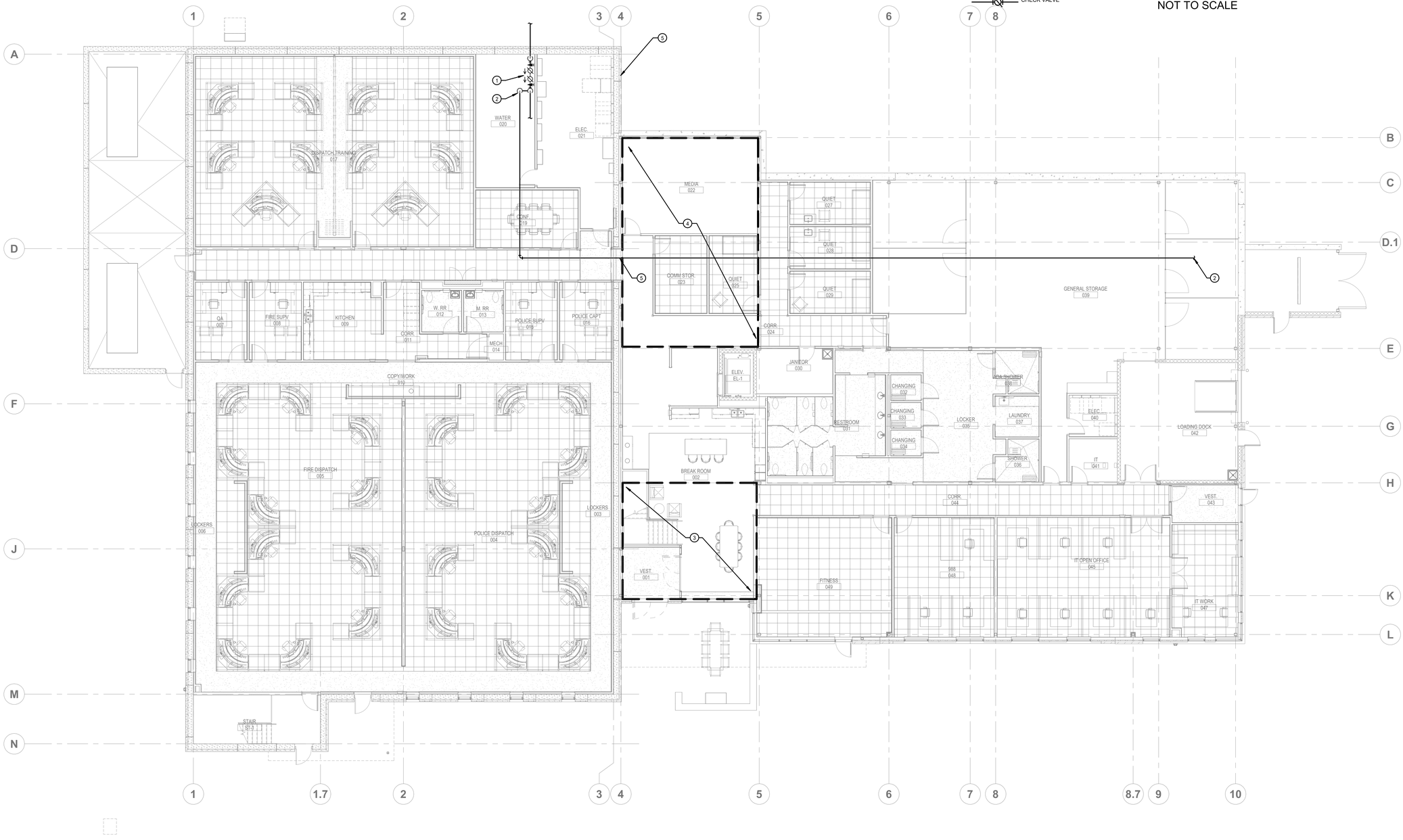
"SOME SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."

- 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




NOTE:
CONTRACTOR TO CONFIRM LOCAL FIRE DEPARTMENT CONNECTION REQUIREMENTS

## FIRE PROTECTION ENTRANCE DETAIL
NOT TO SCALE




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

NORTH

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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2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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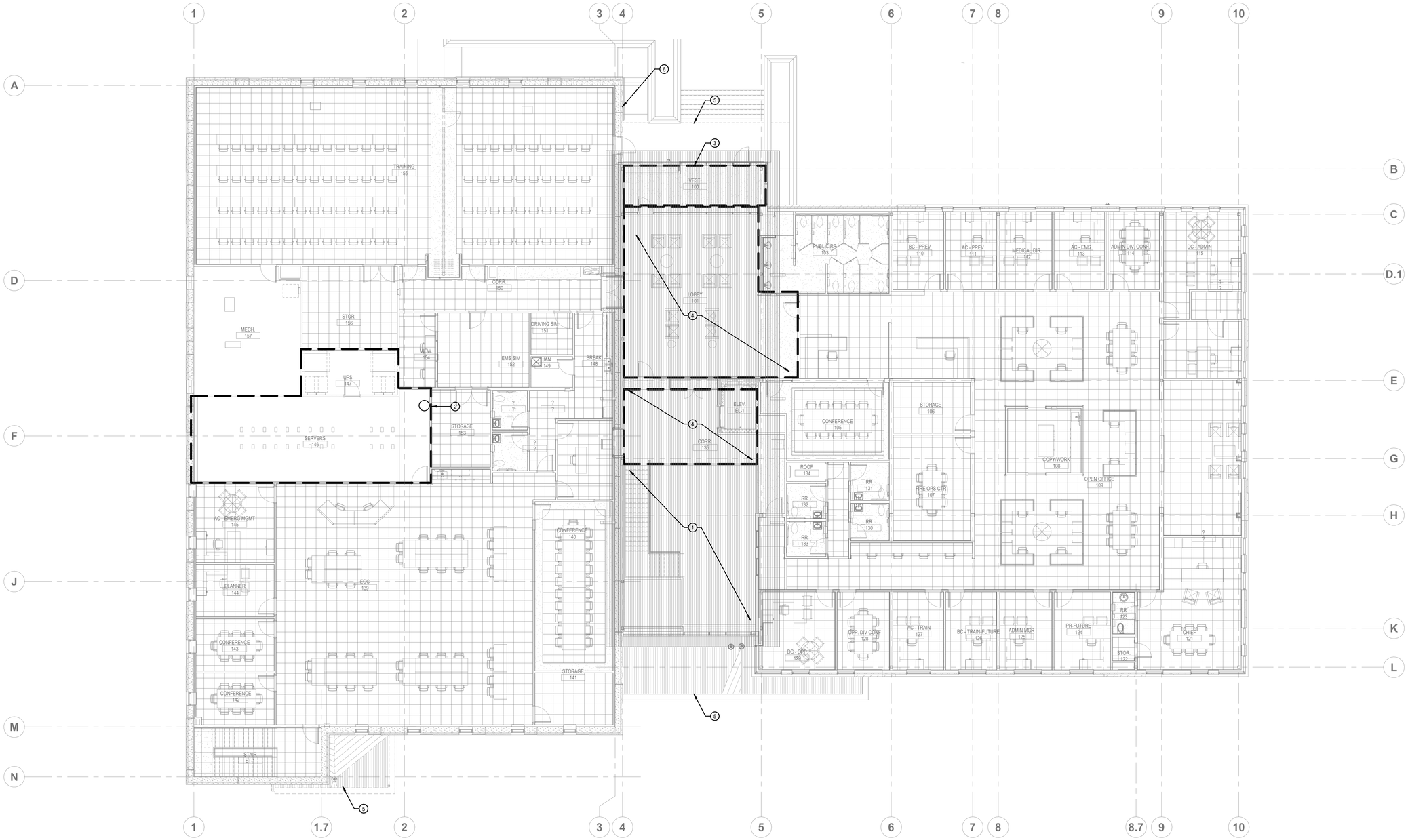
STATE OF MISSOURI
CHRISTOPHER EDWARD ALBRIGHT
NUMBER 2009033966
REGISTERED PROFESSIONAL ENGINEER

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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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 2009034961
REGISTERED ARCHITECT
PROFESSIONAL SEAL

FX102

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

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

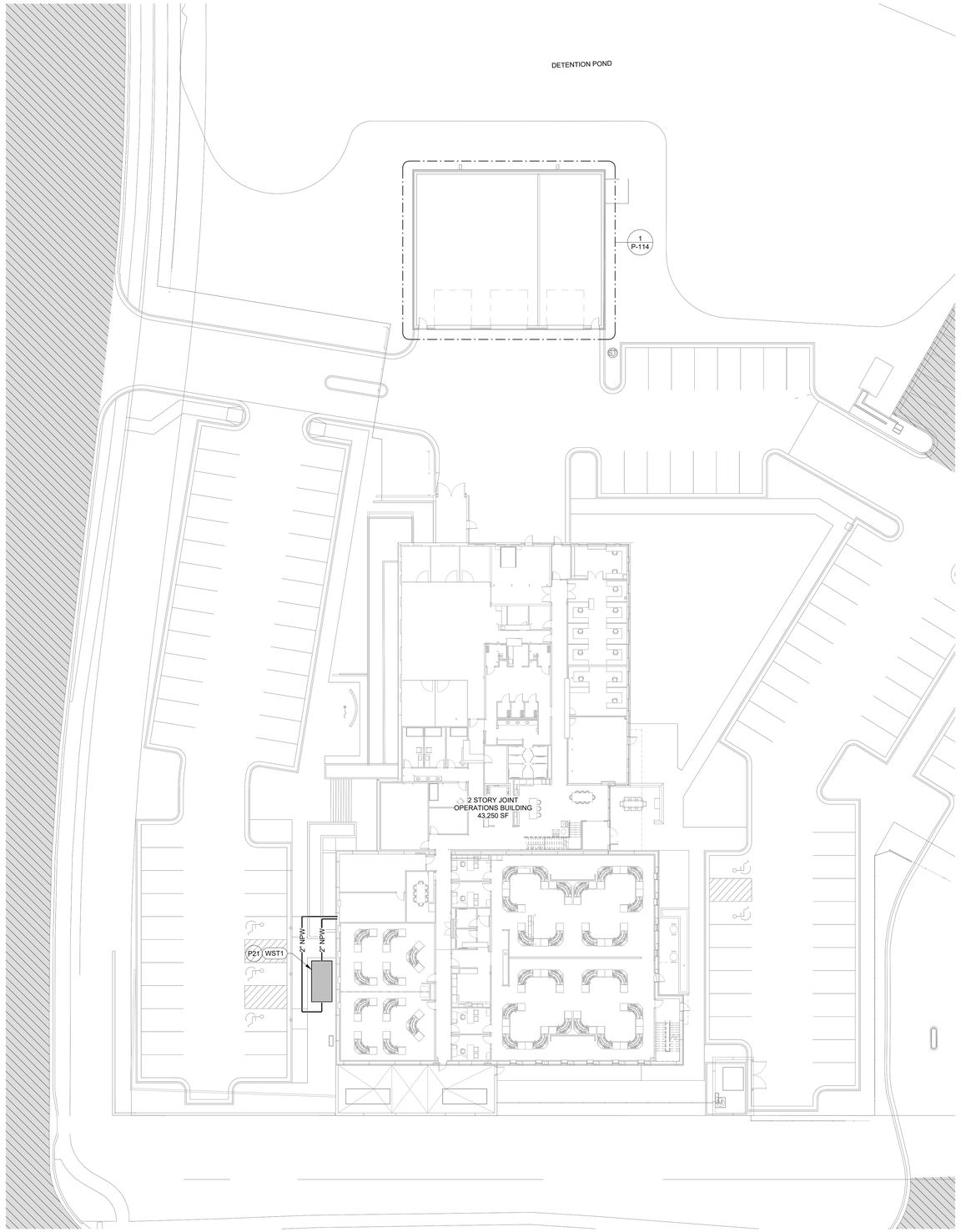
STATE OF MISSOURI — ELIAS ERICSON HOEFER — NUMBER E-2012004116 — 10/31/24 — PROFESSIONAL ENGINEER

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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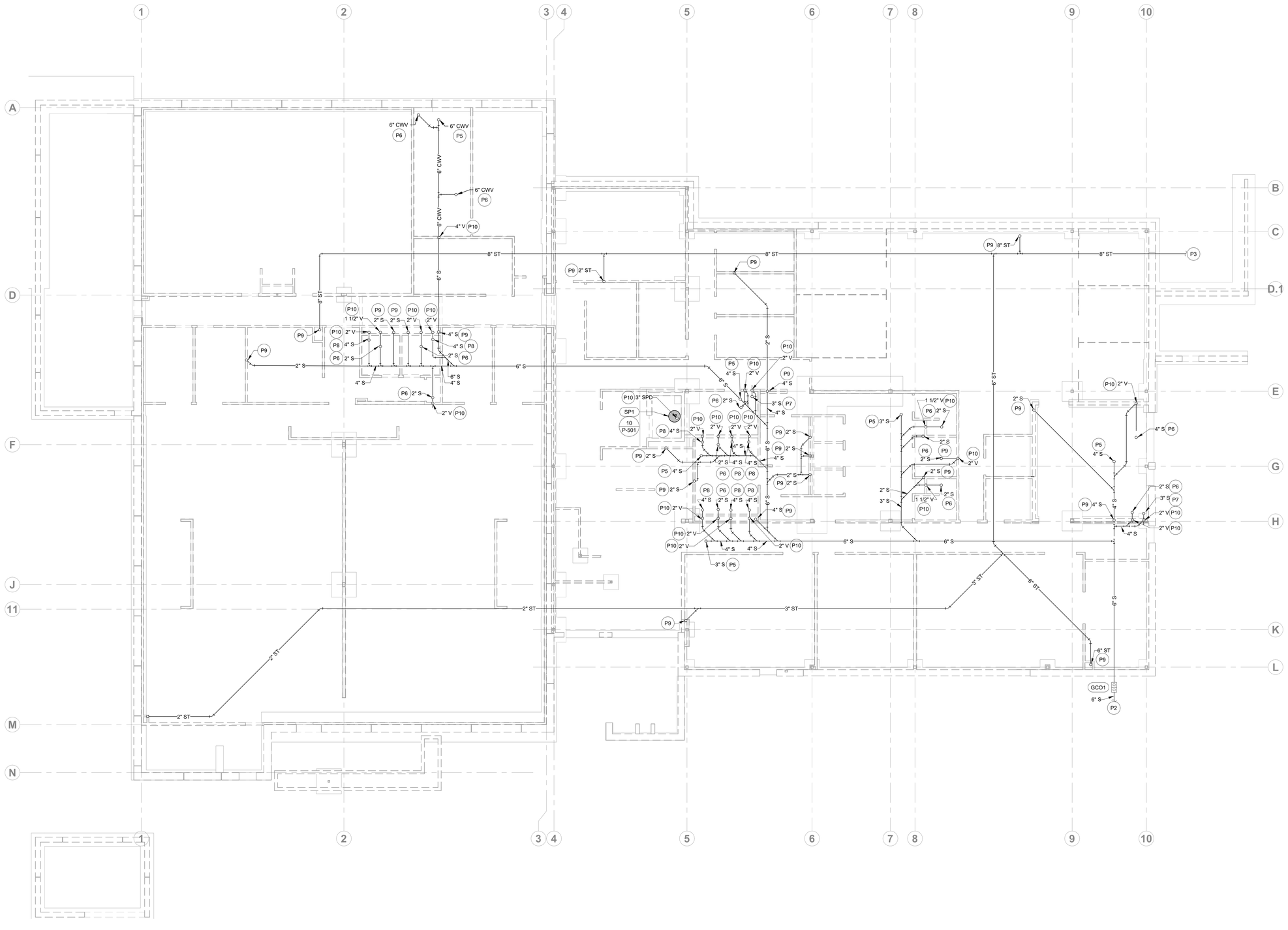
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ELIAS STOCKTON SCHNEIDER
NUMBER PE-2012019916
10/31/24
PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

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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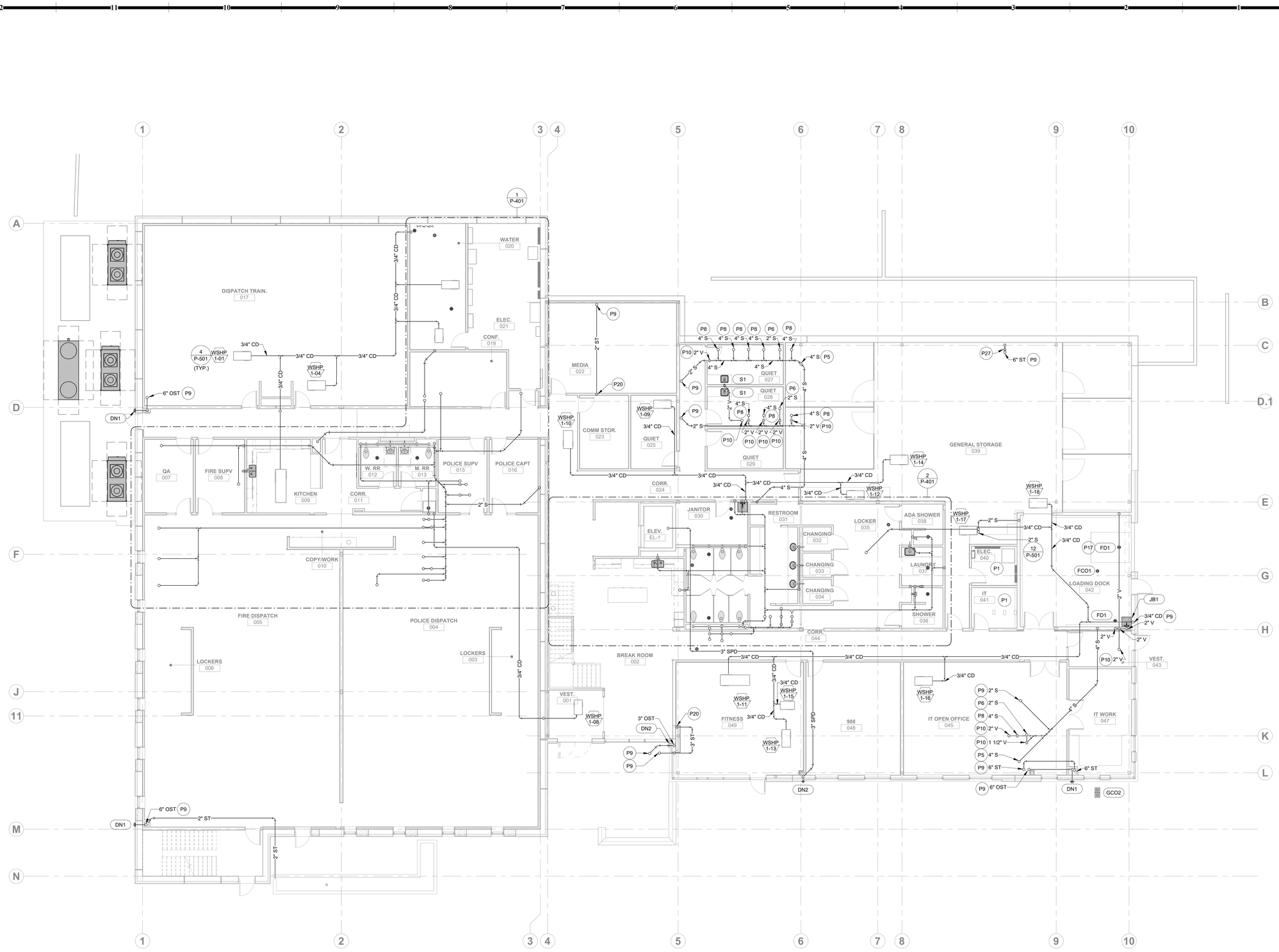
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P-101

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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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LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

ELIZABETH STOCKTON CHRISTIFER
NUMBER PE-2012020516
10/31/24
PROFESSIONAL ENGINEER
PROFESSIONAL SEAL

P-111

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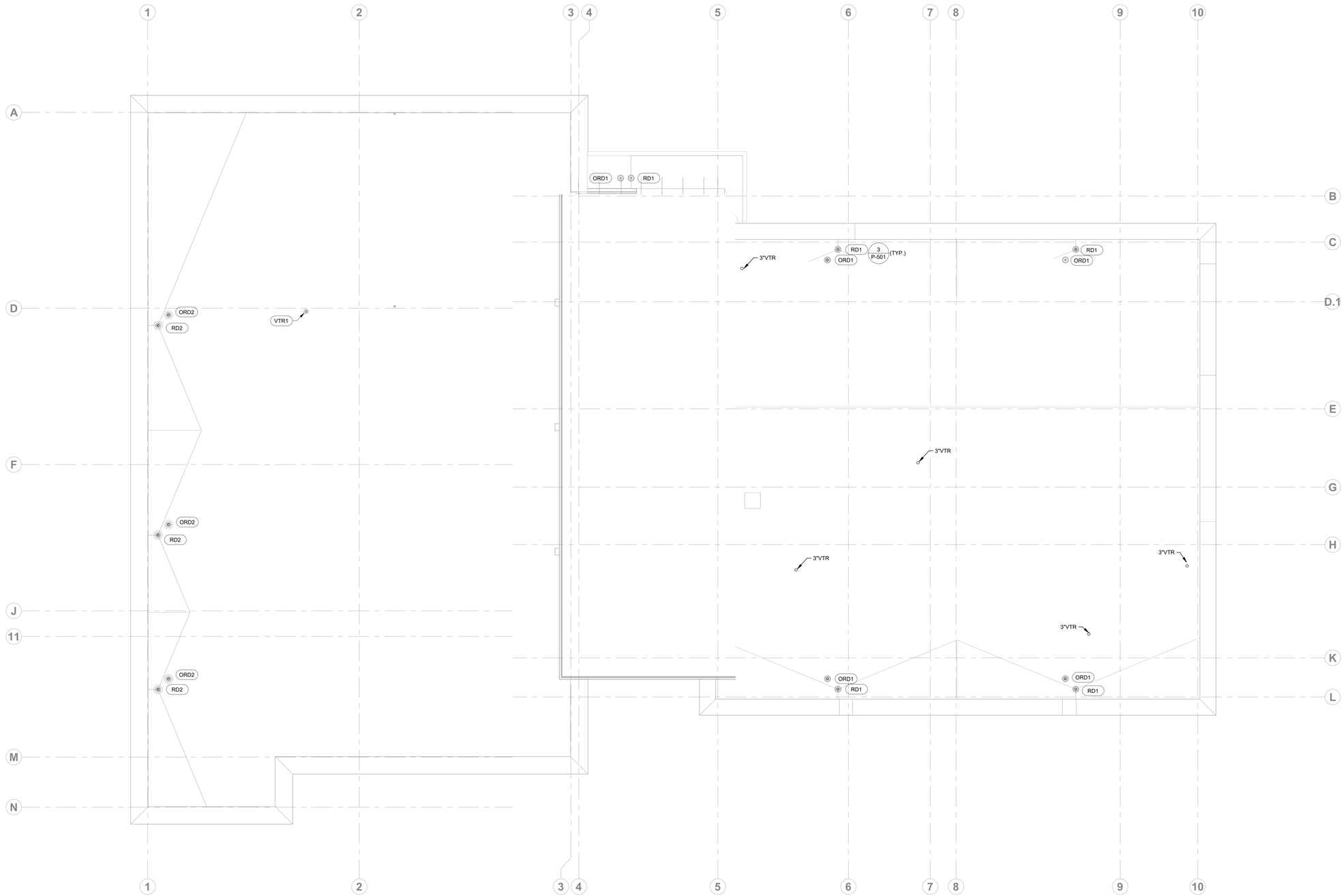
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1 MAIN LEVEL WASTE & VENT PLAN
1/8" = 1'-0"

NORTH

MAIN LEVEL - WASTE AND VENT PLAN




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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10/31/24
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

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ROOF PLUMBING PLAN

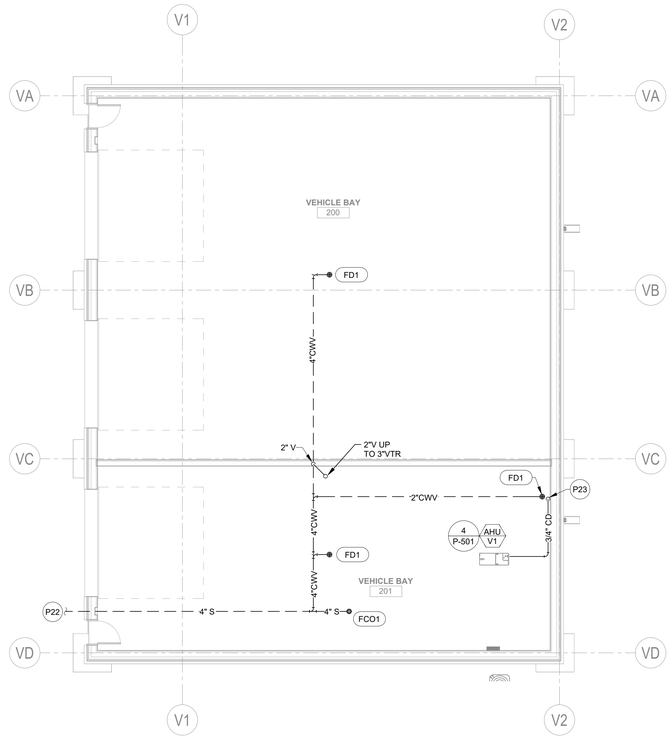
**GENERAL NOTES:**

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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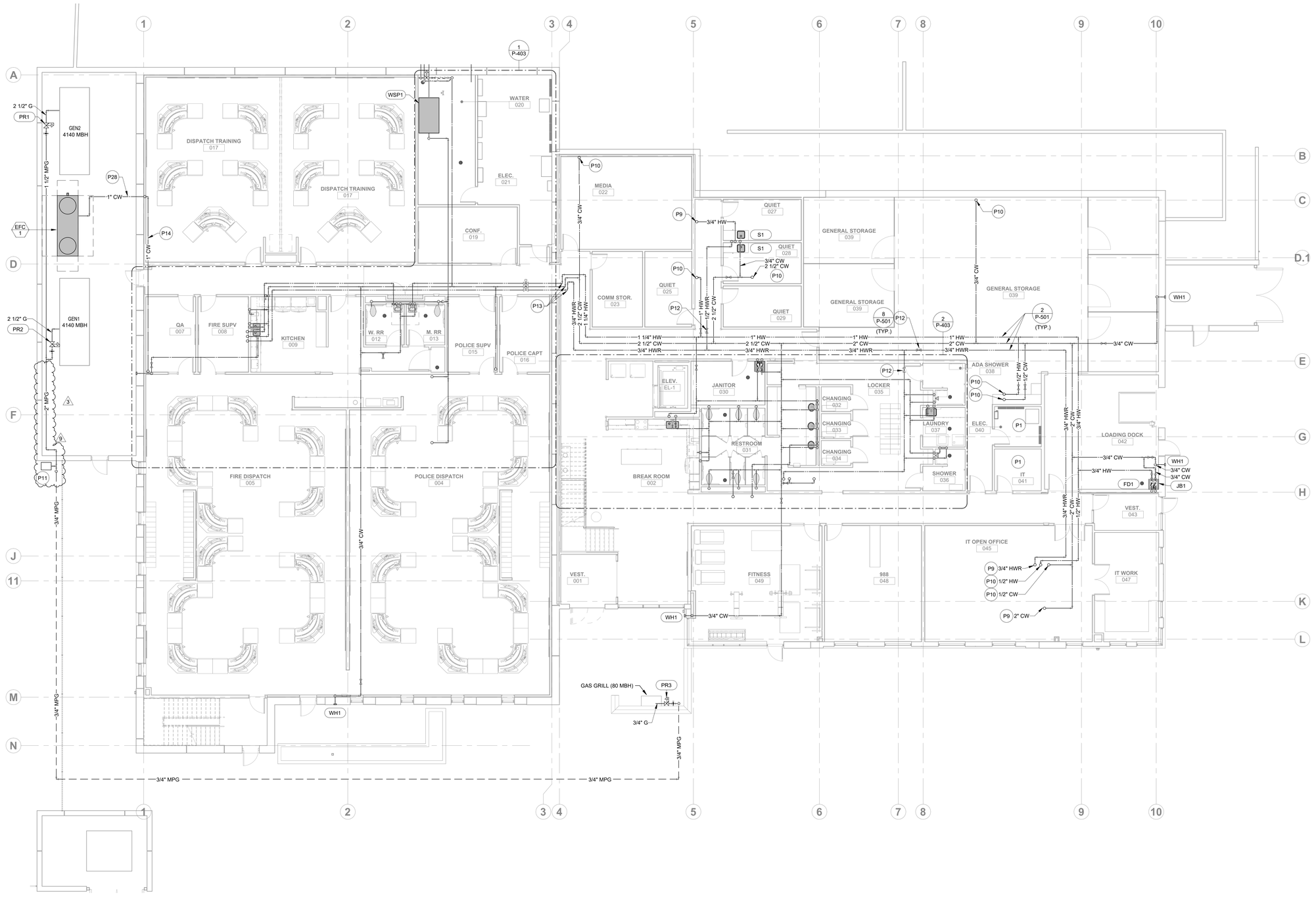
VEHICLE BAY PLUMBING PLAN

## 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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# 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 |
| 9 | CCD #001 | 1/29/2025 |




PROFESSIONAL SEAL

P-121

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

LOWER LEVEL - WATER AND GAS PLAN

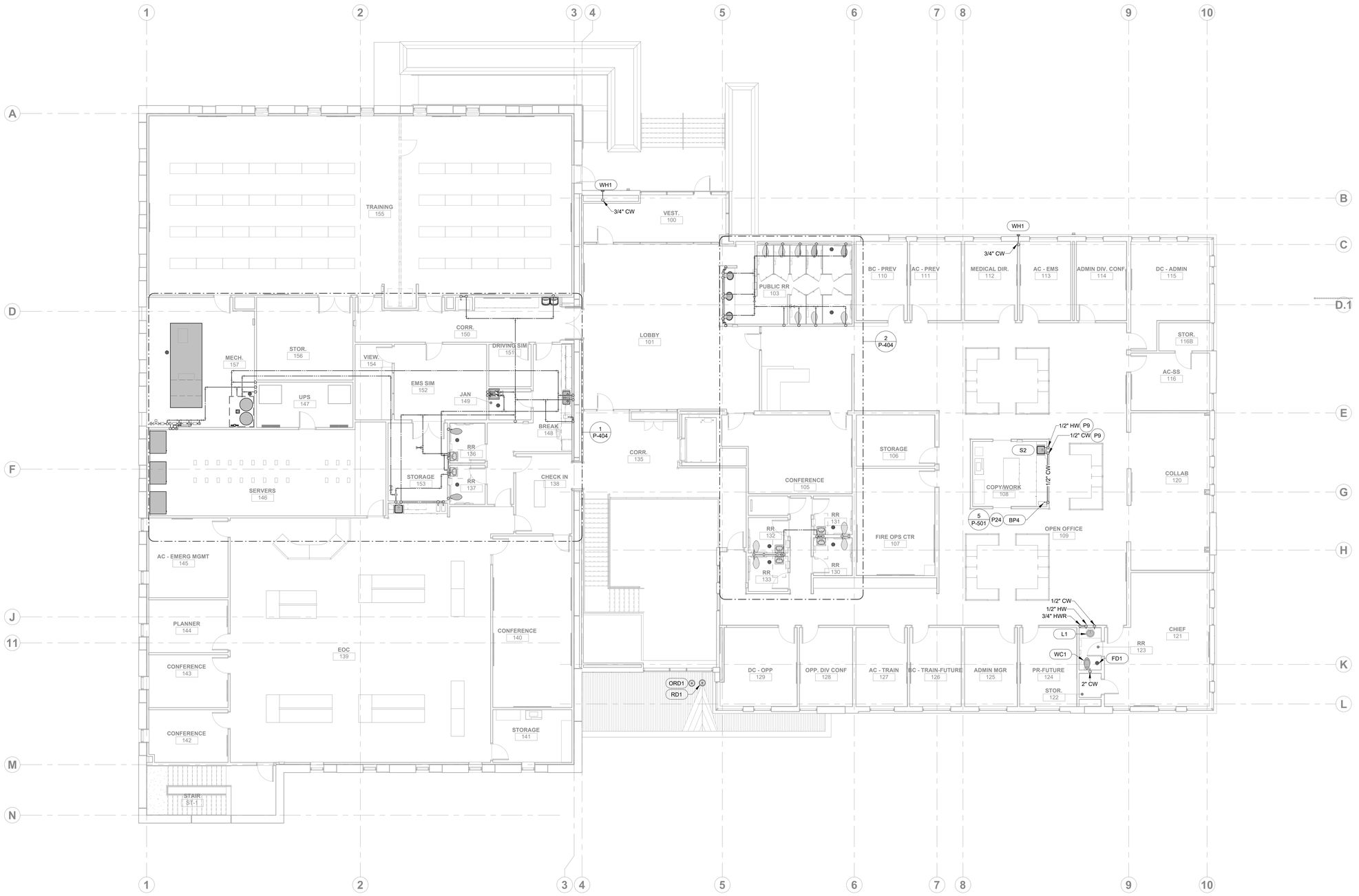
**GENERAL NOTES:**

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

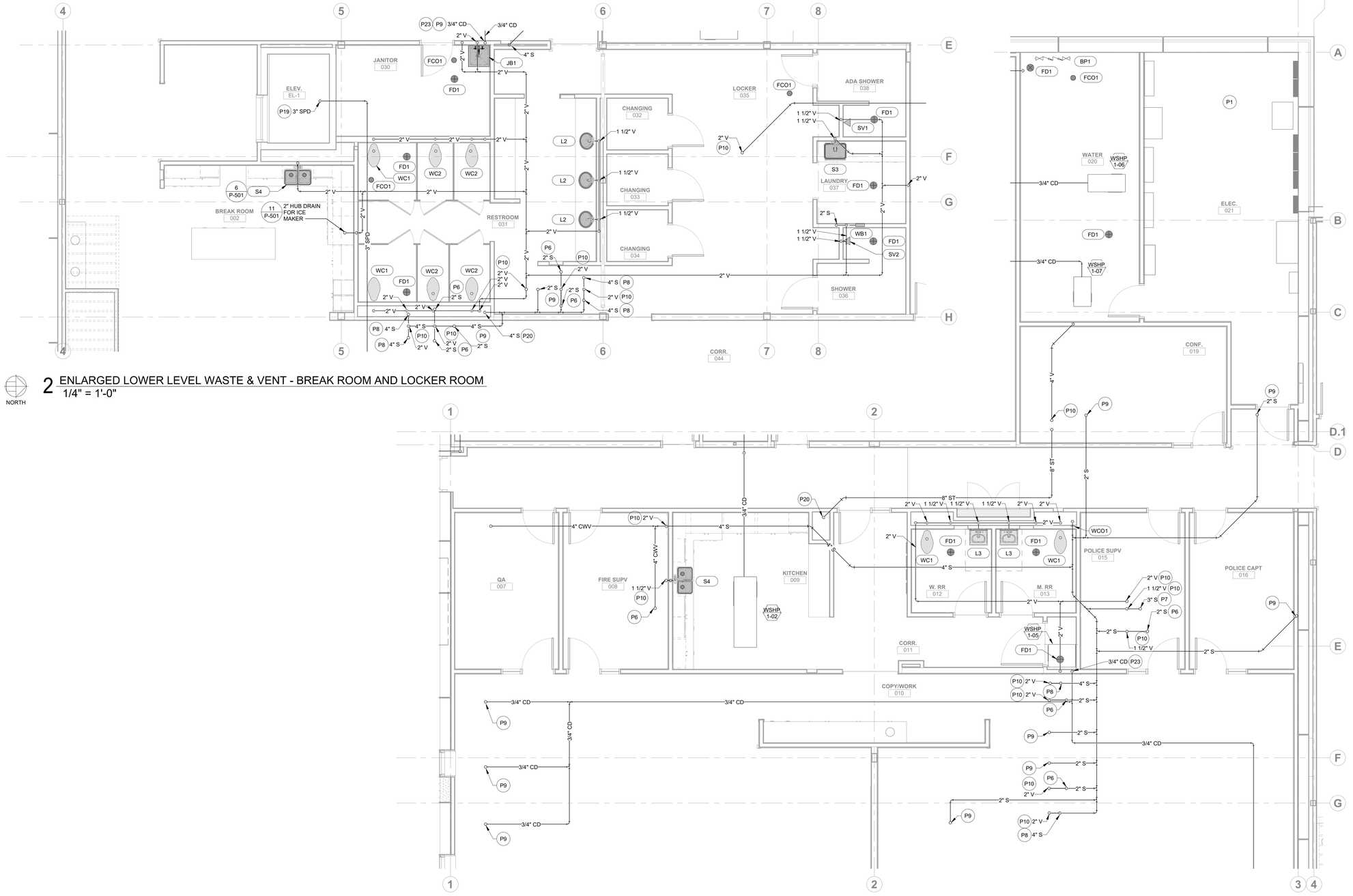
REVISION DATES:

PROFESSIONAL SEAL

P-122

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

MAIN LEVEL - WATER AND GAS PLAN




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"

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. |
| 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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

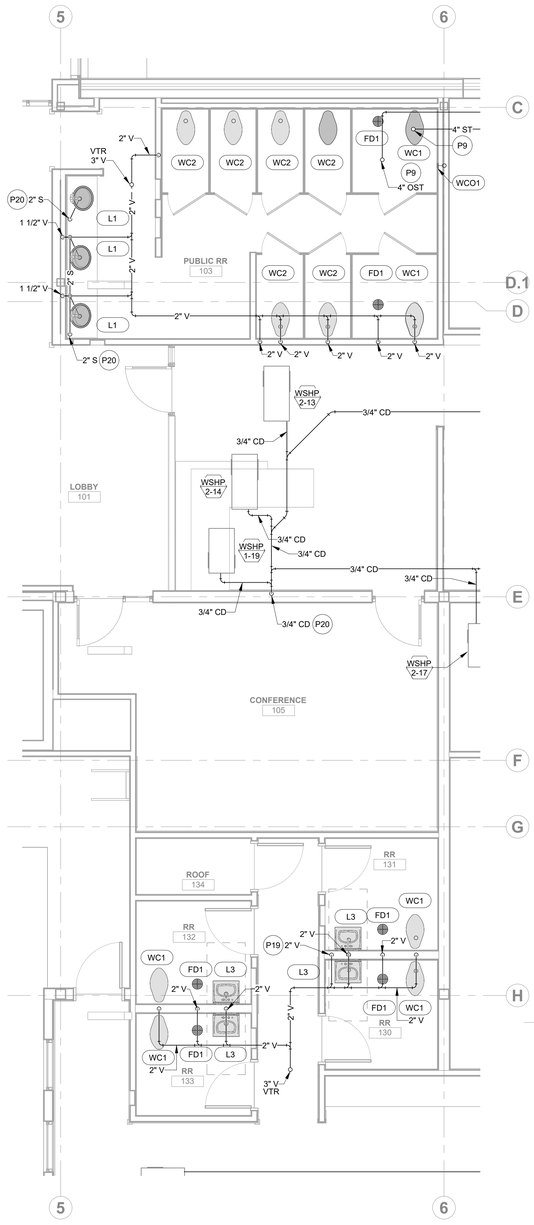
REVISION DATES:

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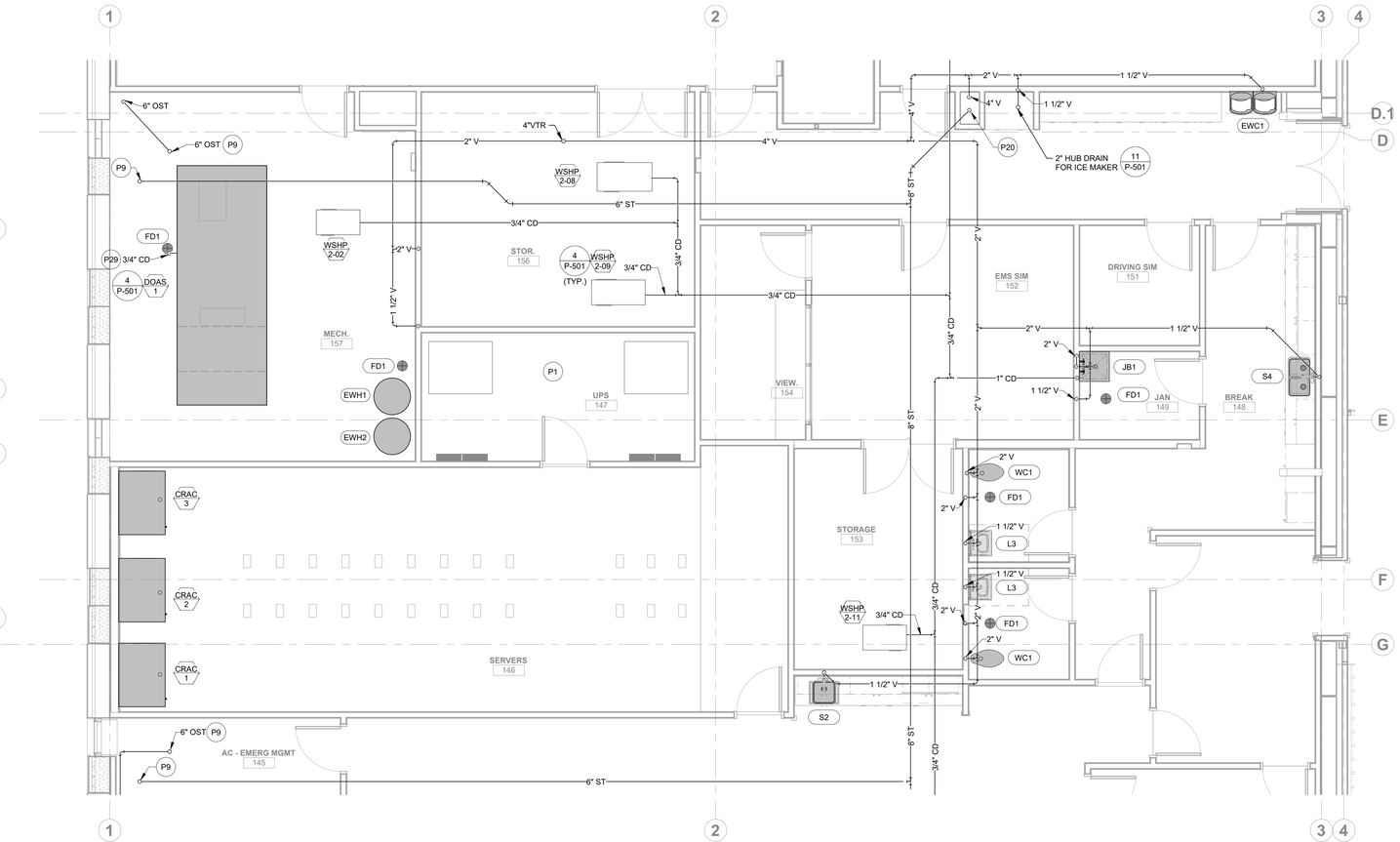
P-401

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

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
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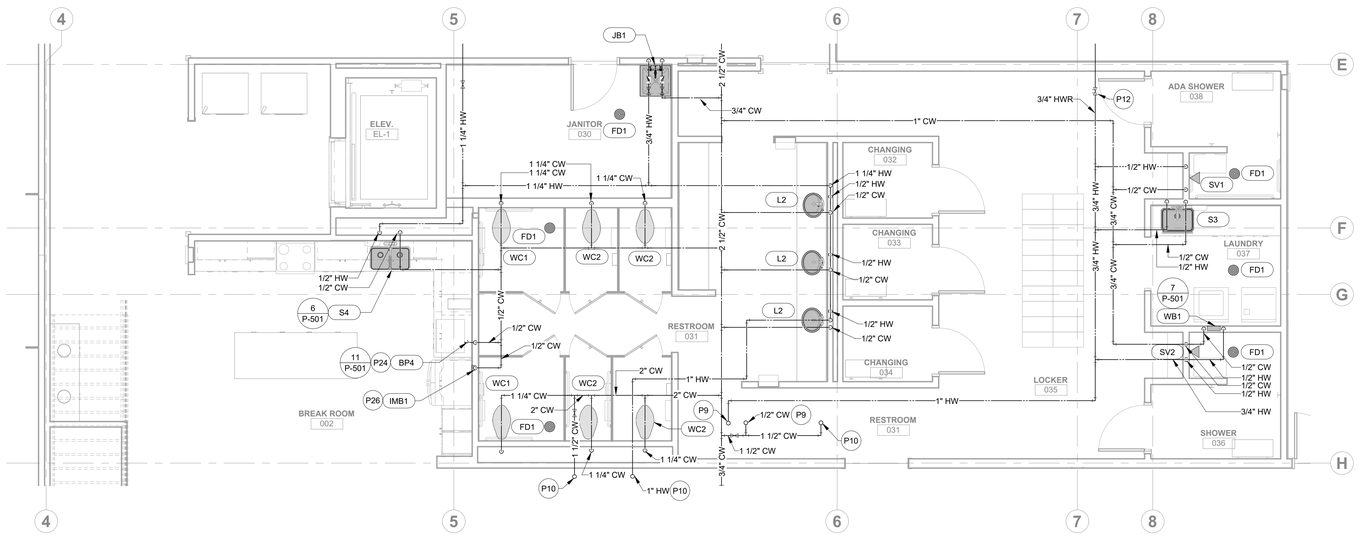
REVISION DATES:

PROFESSIONAL SEAL

P-402

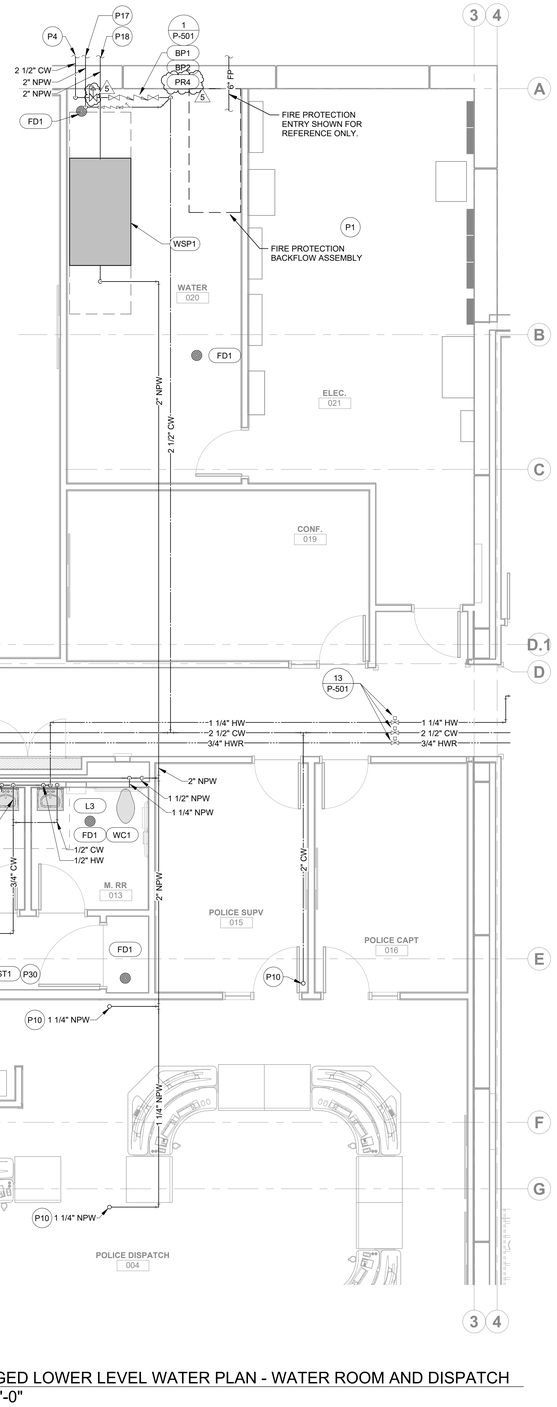
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

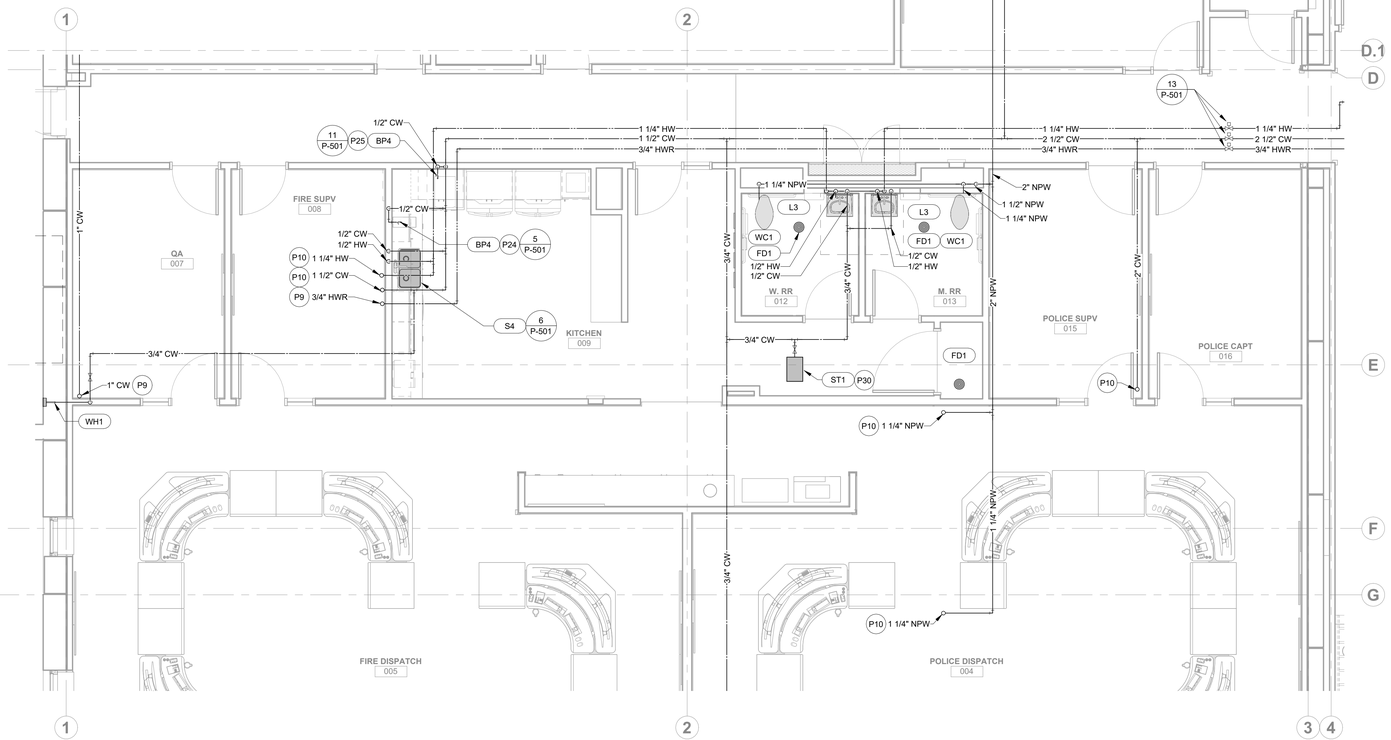
ENLARGED MAIN LEVEL WASTE AND VENT PLANS




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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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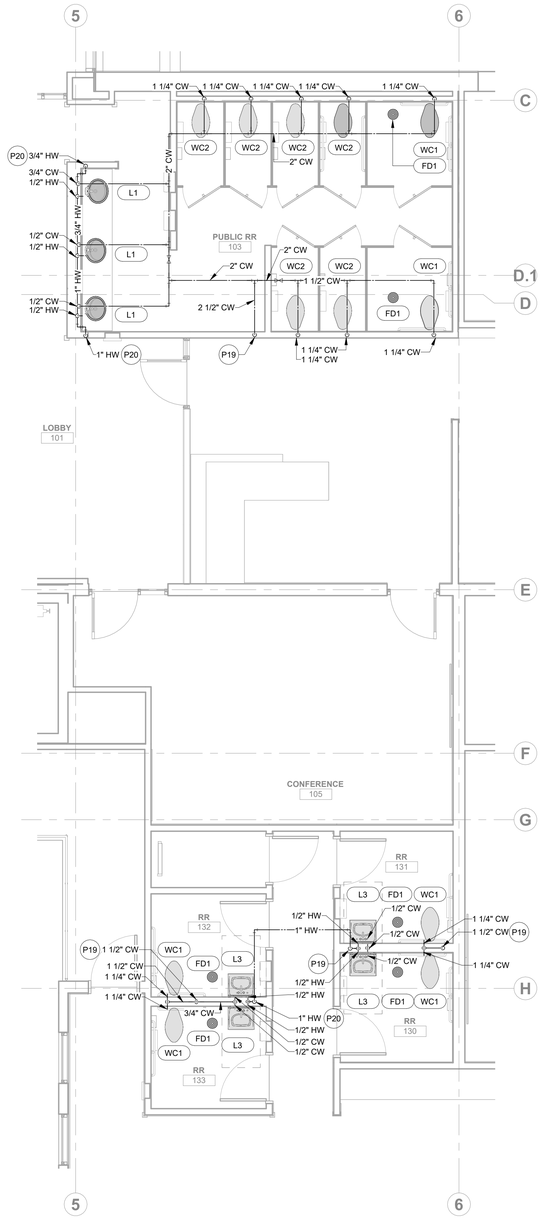
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|---|---|---|
| 5 | ASI 002 | 12/13/2024 |

PROFESSIONAL SEAL

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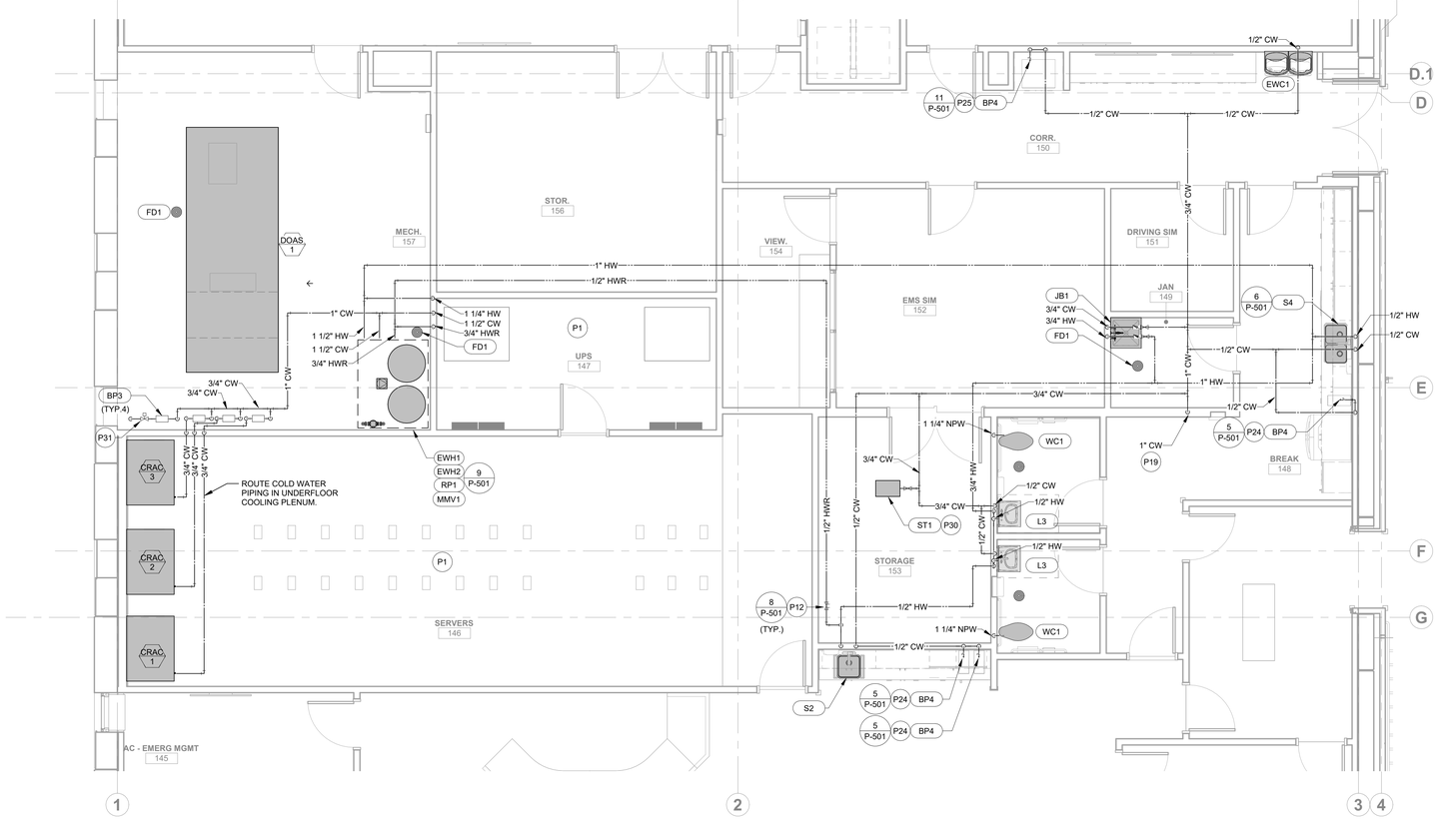
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

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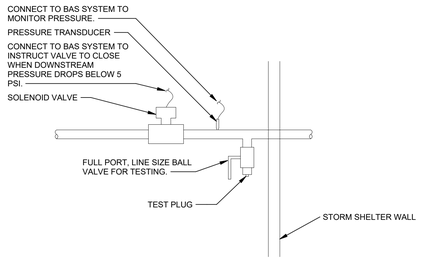



PROFESSIONAL SEAL

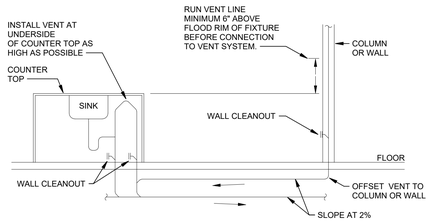
P-404

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

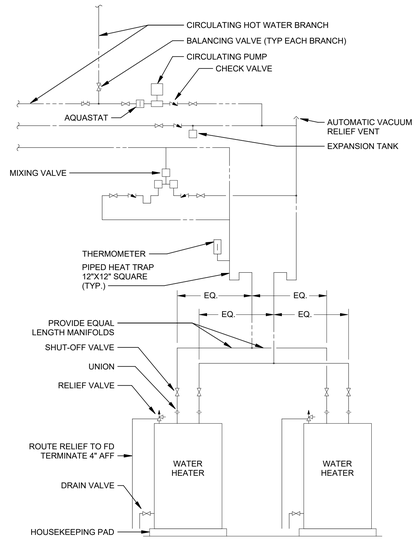
ENLARGED MAIN LEVEL WATER PLANS



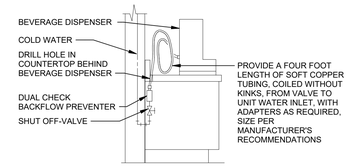

13 AUTOMATIC SHUT-OFF VALVE
NOT TO SCALE



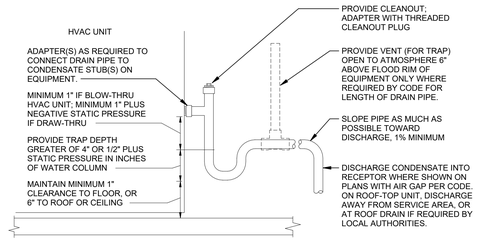

12 ISLAND VENT PIPING
NOT TO SCALE




9 ELECTRIC WATER HEATER PIPING
NOT TO SCALE



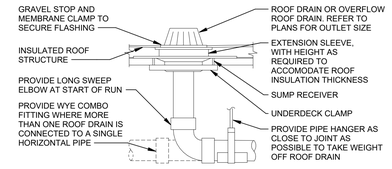

5 BEVERAGE DISPENSER CONNECTIONS
NOT TO SCALE




NOTES:

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

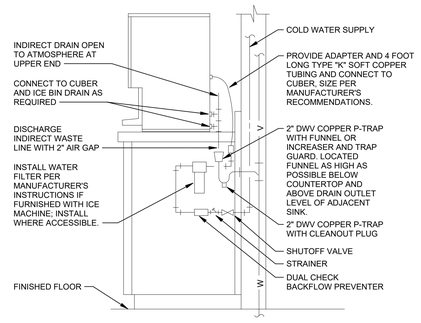
4 CONDENSATE DRAIN INSTALLATION
NOT TO SCALE



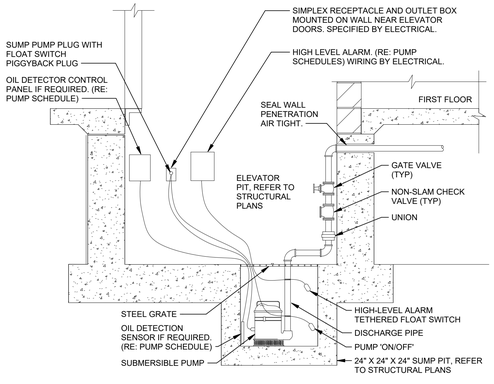

NOTES:

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.

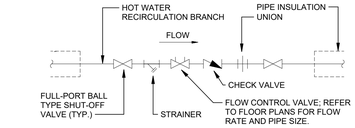
3 ROOF DRAIN INSTALLATION
NOT TO SCALE




11 COUNTERTOP ICE MAKER CONNECTIONS
NOT TO SCALE



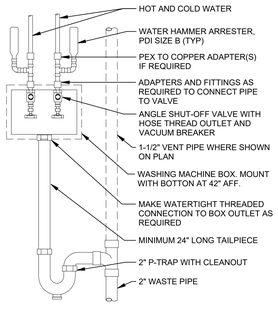

10 ELEVATOR SUMP PUMP PIPING BELOW FLOOR
NOT TO SCALE



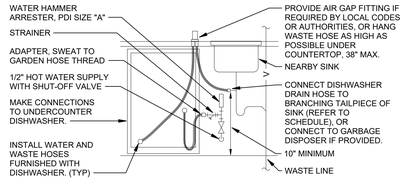

NOTES:

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

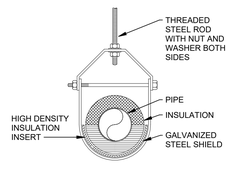
8 TYPICAL HOT WATER FLOW CONTROL VALVE TRAIN
NOT TO SCALE



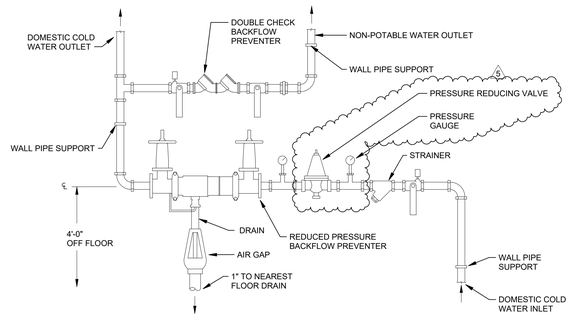

7 WASHING MACHINE BOX
NOT TO SCALE




6 RESIDENTIAL DISHWASHER CONNECTION
NOT TO SCALE




2 INSULATED PIPE AT HANGER
NOT TO SCALE




1 DOMESTIC WATER ENTRY
NOT TO SCALE

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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:

| | | |
|---|---|---|
| 5 | ASI 002 | 12/13/2024 |

STATE OF MISSOURI
KJ.SU
STOCKTON
KJ.SU.STOCKTON@HOEFERWELKER.COM
NUMBER
PE-2013033714
12-13-24
PROFESSIONAL ENGINEER

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 | |

## GAS PRESSURE REGULATOR SCHEDULE

| PLAN MARK | MANUFACTURER | MODEL | SYSTEM | MIN CAPACITY (MBH) | MAX CAPACITY (MBH) | INLET PRESSURE (PSIG) | OUTLET PRESSURE (IN. W.C.) | VALVE SIZE (IN) | OPTIONS | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|
| PR1 | PIETRO FIORENTINI | 31156/F | NATURAL GAS | 0 | 4140 | 2 | 7 | 2.5 | | |
| PR2 | PIETRO FIORENTINI | 31156/F | NATURAL GAS | 0 | 4140 | 2 | 7 | 2.5 | | |
| PR3 | PIETRO FIORENTINI | 31052 | NATURAL GAS | 0 | 80 | 2 | 7 | 0.75 | | |

## WATER PRESSURE REGULATOR SCHEDULE

| PLAN MARK | MANUFACTURER | MODEL | SYSTEM | INLET PRESSURE (PSIG) | OUTLET PRESSURE (PSIG) | VALVE SIZE (IN) | OPTIONS | NOTES |
|---|---|---|---|---|---|---|---|---|
| PR4 | WATTS | LFF115 | DOMESTIC WATER SERVICE | 62 | 60 | 2 | | |

## 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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# 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 |
| 5 | ASI 002 | 12/13/2024 |

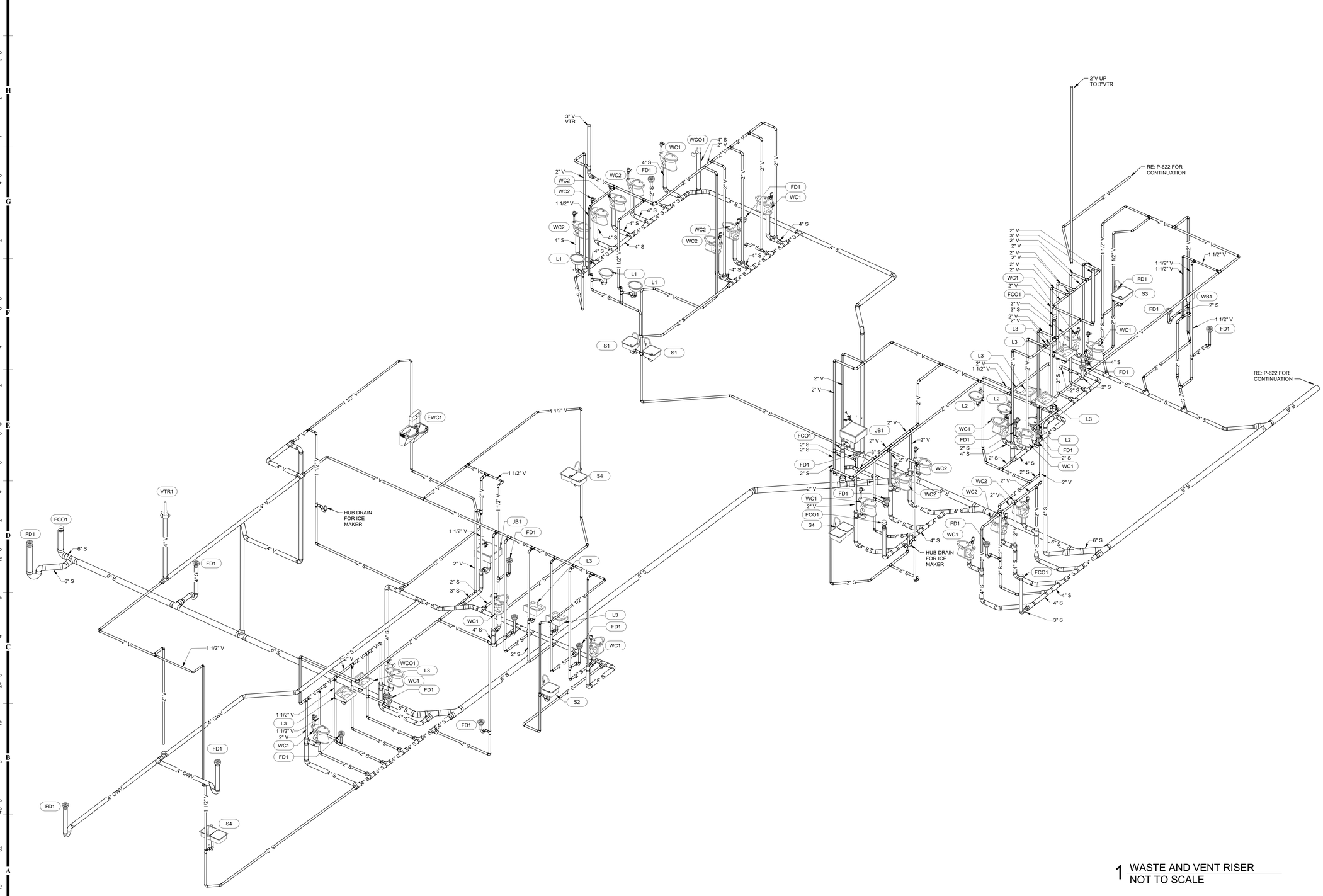
STATE OF MISSOURI
42,330
STOCKTON
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ENGINEER
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P-601

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

PLUMBING SCHEDULES




1 WASTE AND VENT RISER
NOT TO SCALE

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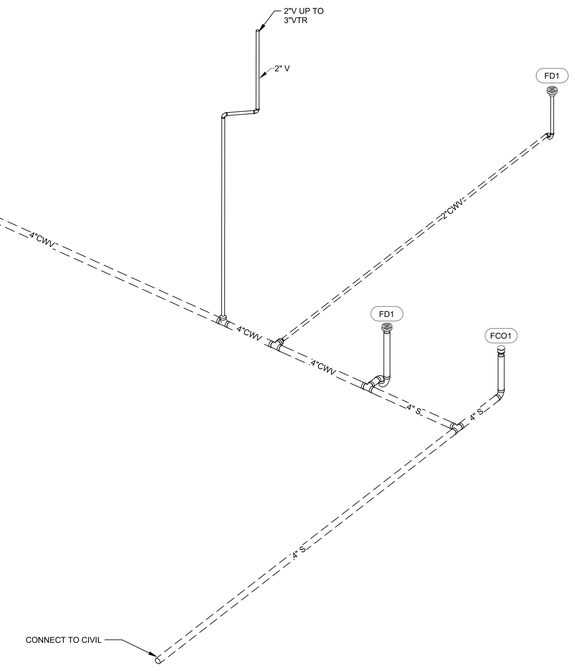
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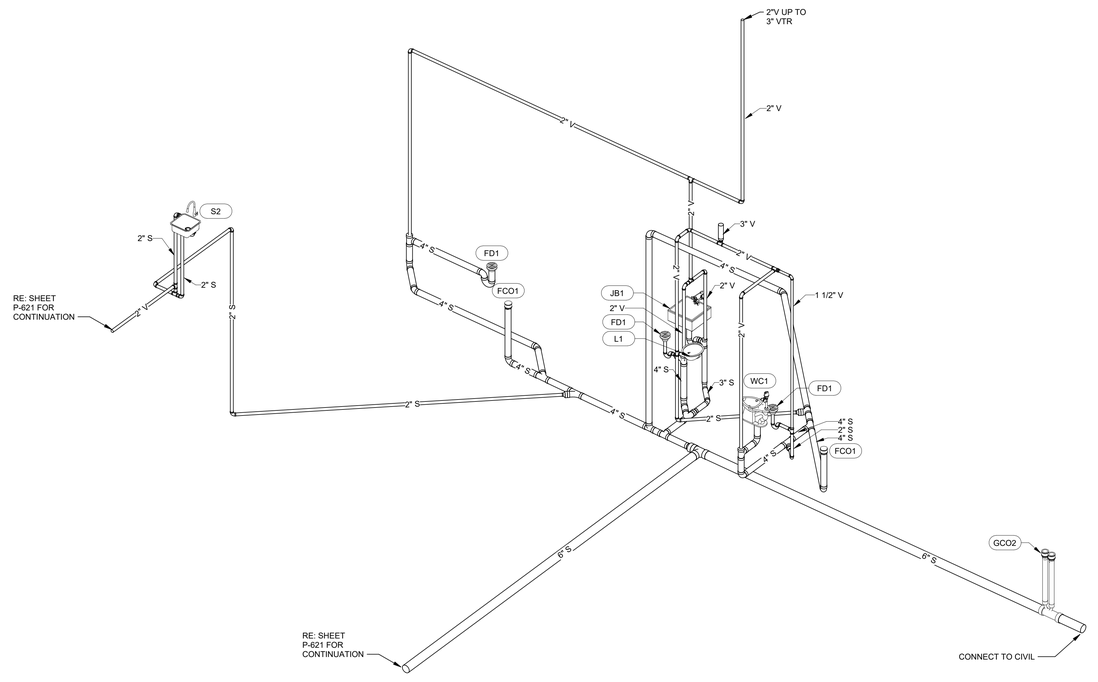
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PLUMBING WASTE AND VENT RISER




2 WASTE AND VENT RISER - VEHICLE BAY
NOT TO SCALE




1 WASTE AND VENT RISER EAST
NOT TO SCALE

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P-622

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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

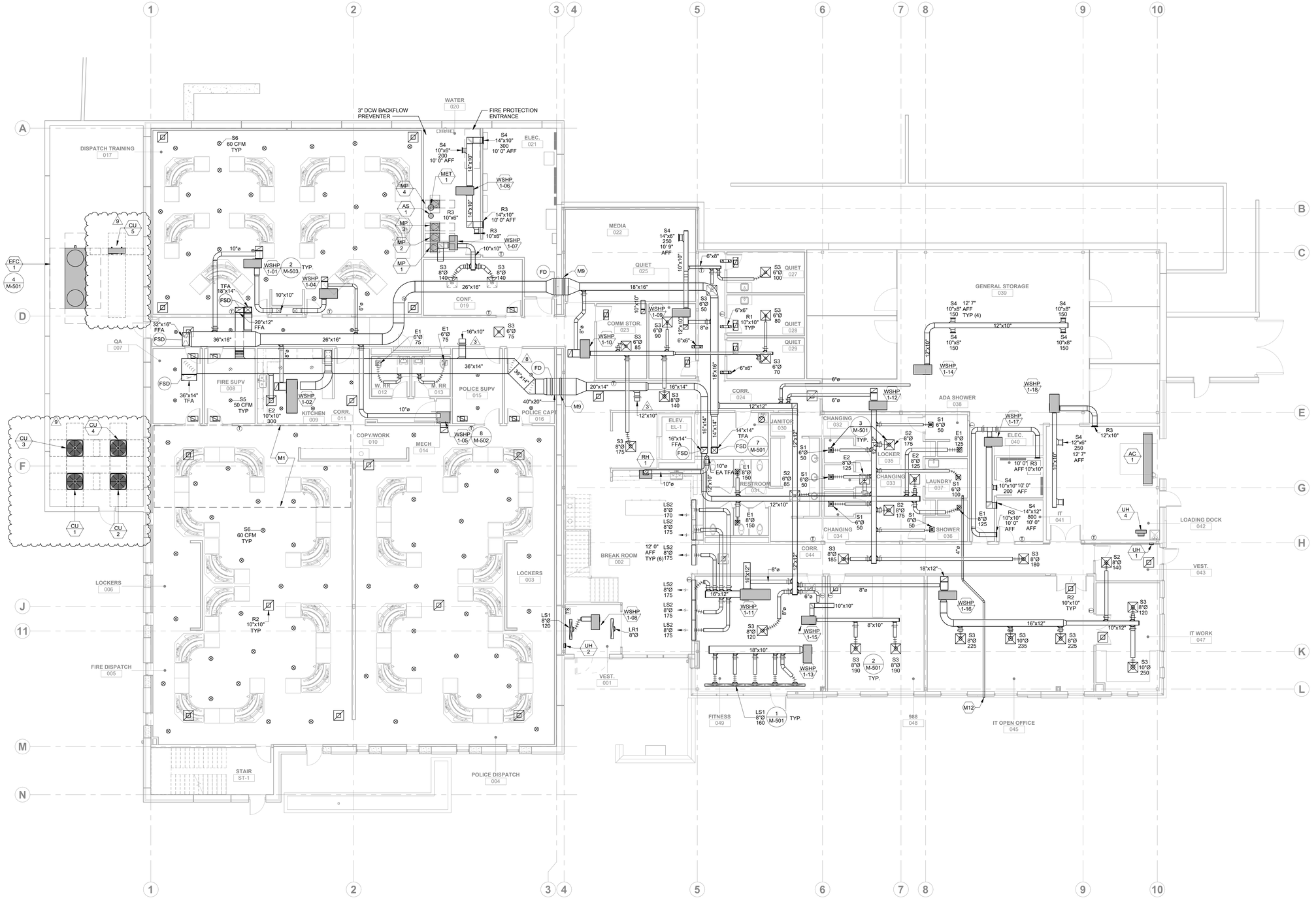
REVISION DATES:

PROFESSIONAL SEAL

MS101

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

MECHANICAL SITE PLAN




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

**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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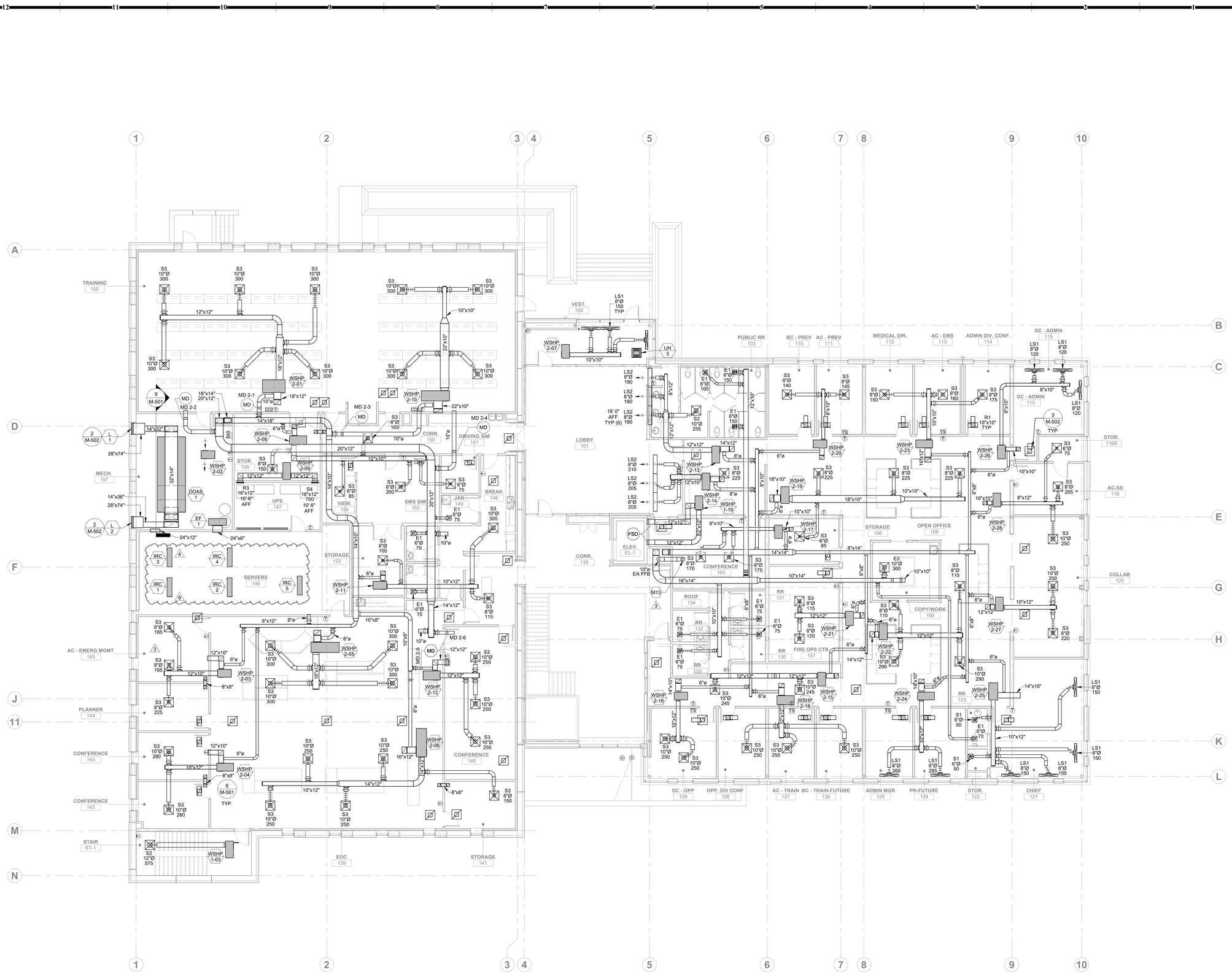
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|---|---|---|
| 3 | ADDENDUM #3 | 11/18/2024 |
| 8 | ASI 003 | 12/18/2024 |
| 9 | CCD #001 | 1/29/2025 |

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:**

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


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| 3 | ADDENDUM #3 | 11/18/2024 |
| 4 | ADDENDUM #4 | 11/26/2024 |
| 9 | CCD #001 | 1/29/2025 |

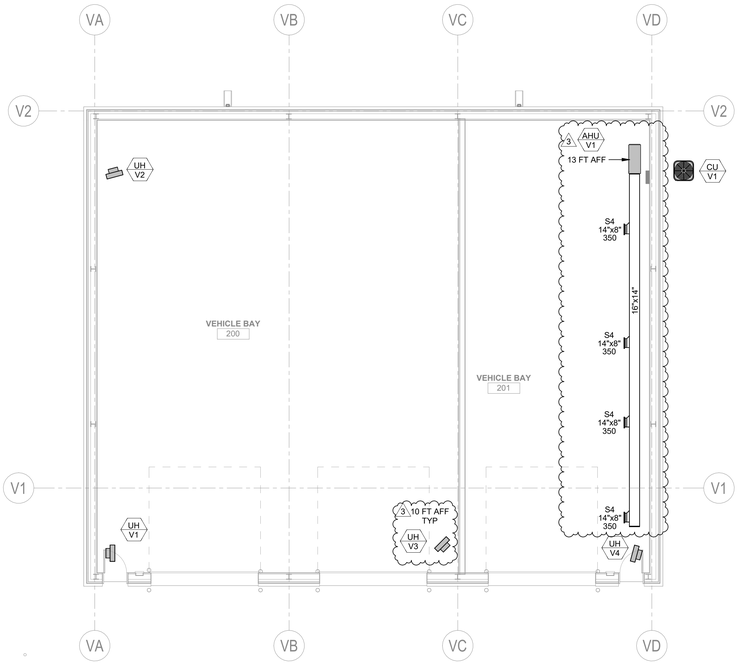
STATE OF MISSOURI
ELISE EVOCATION KAMENSKOPEK
NUMBER PE-2012032916
01-29-25
PROFESSIONAL ENGINEER

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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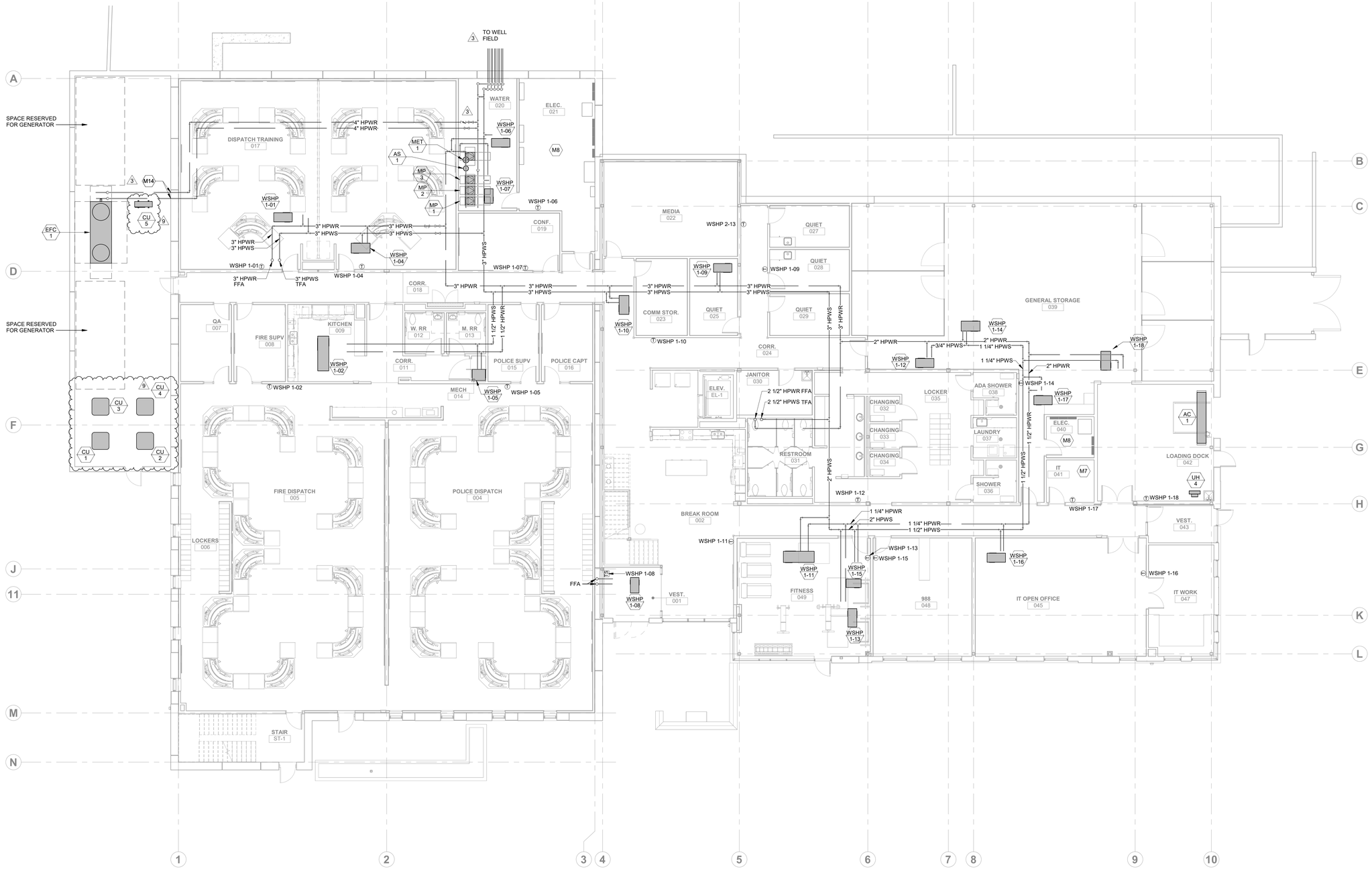



PROFESSIONAL SEAL

M-103

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

VEHICLE BUILDING - HVAC PLAN




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

NORTH

**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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| 9 | CCD #001 | 1/29/2025 |

STATE OF MISSOURI
ELSIE STOCKTON KIRCHHOFER
NUMBER PE-2012033916
PROFESSIONAL ENGINEER
01-29-25

PROFESSIONAL SEAL

M-111

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

LOWER LEVEL - PIPING 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.

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


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| 9 | CCD #001 | 1/29/2025 |

KLINE STOCKTON KAEMMERER
NUMBER PE-2013033916
PROFESSIONAL ENGINEER
STATE OF MISSOURI

PROFESSIONAL SEAL

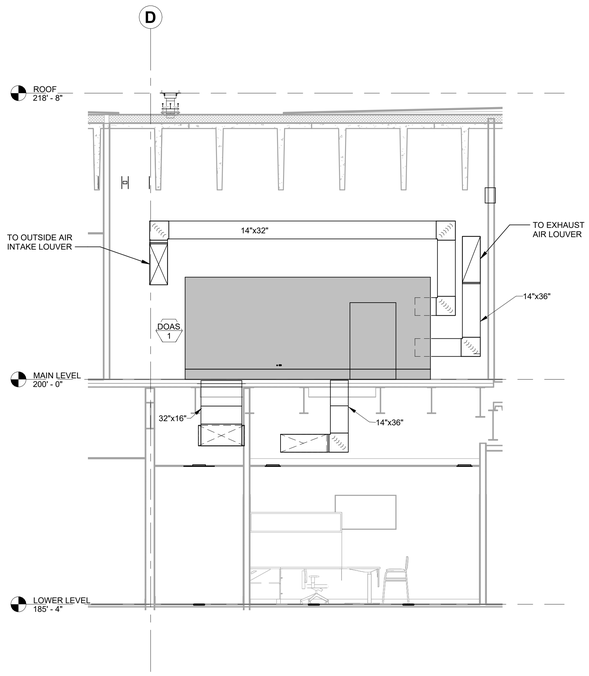
M-112

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

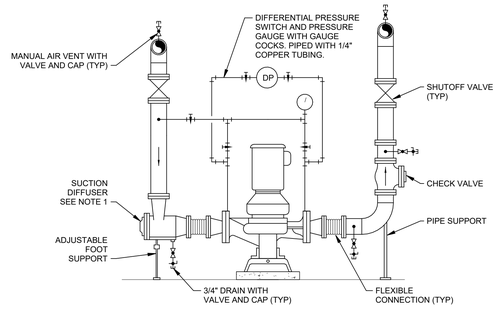
1 MAIN LEVEL HVAC PIPING PLAN
1/8" = 1'-0"

NORTH

MAIN LEVEL - PIPING PLAN

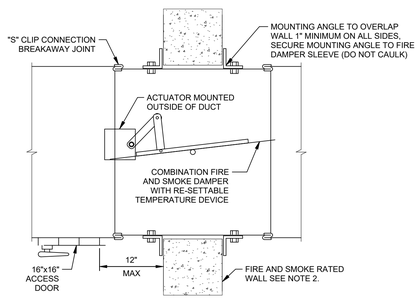



9 DOAS 1
1/4" = 1'-0"



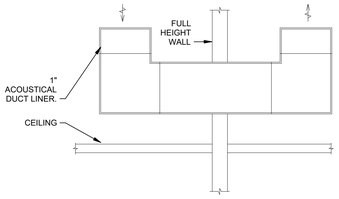

NOTES:
1. INCLUDE INTEGRAL STRAINER, MAINTAIN REQUIRED SERVICE CLEARANCE FOR STRAINER REMOVAL.

8 FLOOR MOUNTED IN-LINE PUMP
NOT TO SCALE

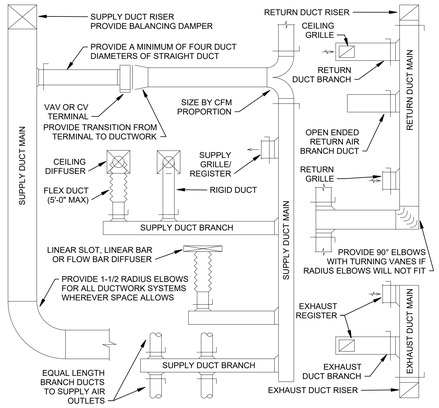



NOTES:
1. INSTALL FIRE/SMOKE DAMPER PER MANUFACTURERS RECOMMENDATION AND NFPA STANDARDS
2. MAKE WALL OPENING 1/8" PER FOOT LARGER THAN DAMPER DIMENSIONS WITH 1/4" MINIMUM REQUIRED, MAXIMUM 1".
3. DIVISION 15 CONTRACTOR SHALL PROVIDE CONTROL AIR CONNECTION TO ALL SMOKE DAMPERS. DIVISION 16 CONTRACTOR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

7 FIRE/SMOKE DAMPER DETAIL
NOT TO SCALE

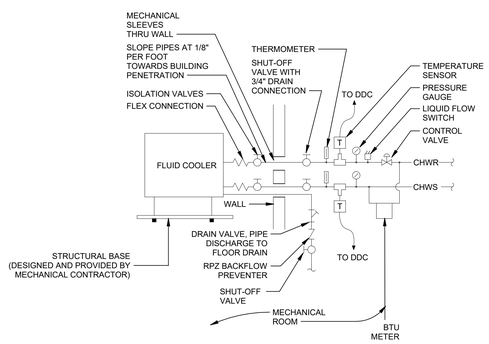



6 TRANSFER DUCT DETAIL
NOT TO SCALE

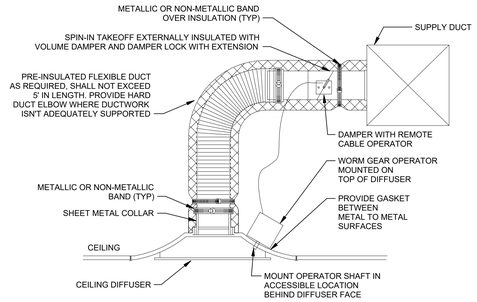



NOTES:
1. REFER TO HVAC FLOOR PLANS FOR DUCT SIZES.
2. REFER TO SCHEDULES FOR GRILLES, REGISTERS, DIFFUSERS AND TERMINAL SIZES AND TYPES.
3. PROVIDE A MANUAL TYPE BALANCING DAMPER FOR EACH SUPPLY OUTLET AND RETURN INLET.
4. ALL DUCT RUNOUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS DIFFUSER NECK SIZE, UNLESS 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

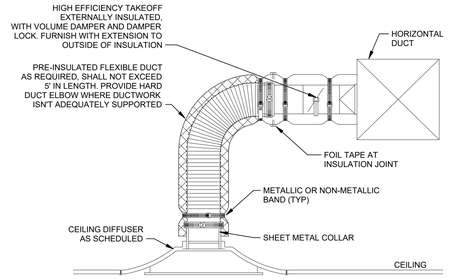



4 FLUID COOLER DETAIL
NOT TO SCALE

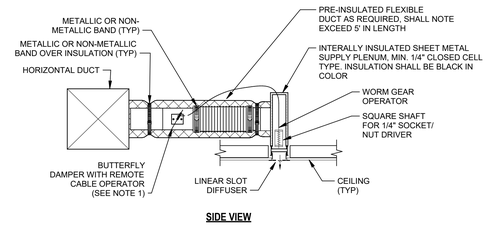



NOTES:
1. FURNISH REMOTE CABLE OPERATORS WHERE BALANCING DAMPERS ARE LOCATED IN-ACCESSIBLE LOCATIONS SUCH AS ABOVE HARD CEILINGS.

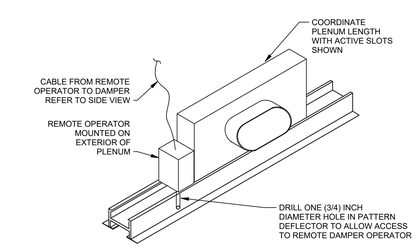
3 HARD CEILING DIFFUSER DETAIL
NOT TO SCALE




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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

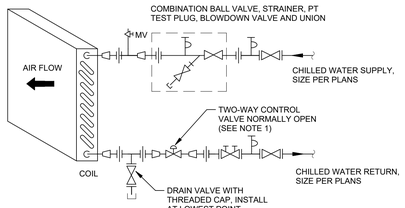



PROFESSIONAL SEAL

M-501

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

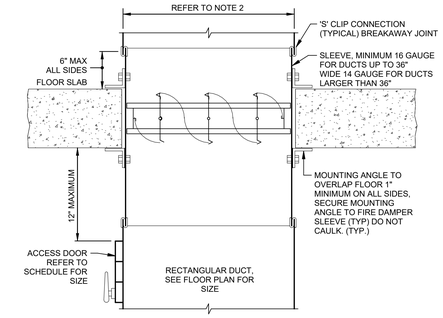



NOTES:
1. SEE SPECIFICATION FOR HANGER TYPE AND SIZES.

## 9 PIPE SUPPORT DETAIL
NOT TO SCALE

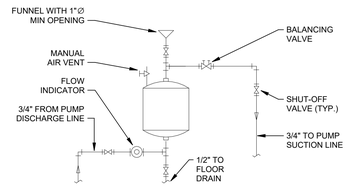



## 8 FLOOR MOUNTED WHSP DETAIL
NOT TO SCALE

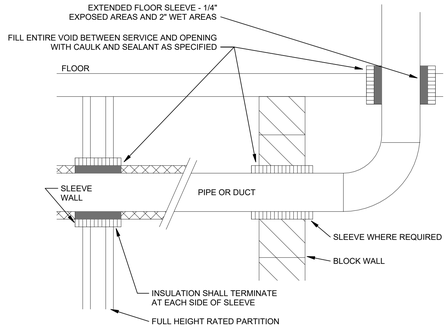



NOTES:
1. INSTALL FIRE DAMPER PER MANUFACTURERS RECOMMENDATION AND NFPA STANDARDS.
2. DIVISION 23 CONTRACTOR TO COORDINATE FLOOR OPENING WITH DIVISION 01 CONTRACTOR TO ALLOW DAMPER CURTAIN TO BE INSTALLED OUTSIDE AIRSTREAM.

## 7 FLOOR FIRE DAMPER DETAIL
NOT TO SCALE

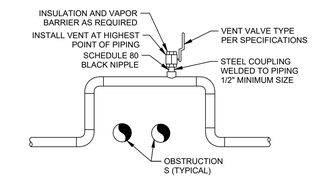



## 6 CHEMICAL SHOT FEEDER DETAIL
NOT TO SCALE

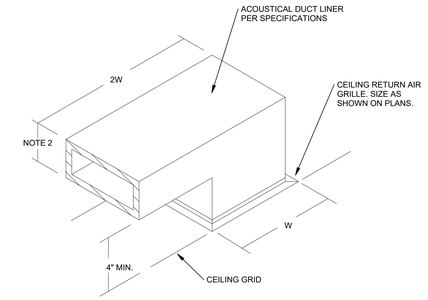



NOTES:
1. VAPOR BARRIER (WHERE REQUIRED) AND INSULATION TO BE FITTED TIGHT TO SLEEVE. SEAL WITH CONTINUOUS BEAD OF NON-HARDENING CAULKING.

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

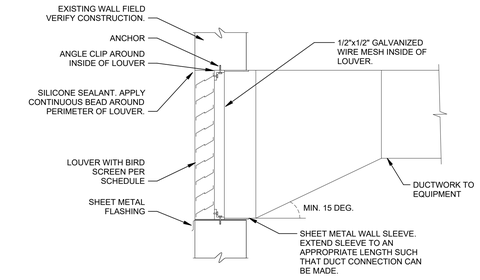



## 4 HIGH POINT MANUAL AIR VENT - STEEL PIPE
NOT TO SCALE

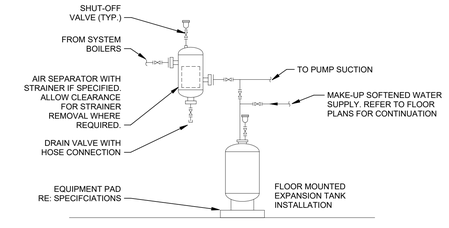



NOTES:
1. ALL INTERIOR SURFACES OF DUCT BOOTS INCLUDING FASTENERS SHALL BE BLACK IN COLOR.
2. REFER TO FLOOR PLAN FOR NECK SIZE.

## 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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:




PROFESSIONAL SEAL

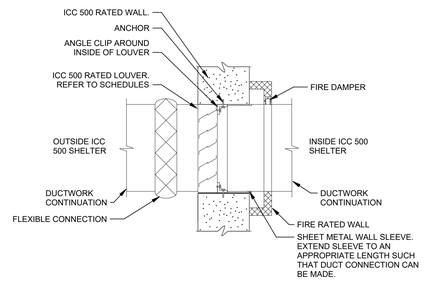
M-502

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

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

PROFESSIONAL SEAL

M-503

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

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.

## IN ROW COOLING CONDENSING UNIT SCHEDULE

| PLAN MARK | SERVICE | MANUFACTURER | MODEL | REFRIGERANT | TH (KW) | SH (BTUH) | AMB TEMP (DEG.F) | ELECTRICAL | | | | | MIN SCOP | OPTIONS | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | VOLTAGE | PHASE | MCA | MOCP | | | | |
| CU 1 | IRC 1 | SCHNEIDER | ACCU301 | 410A | 30 | 30 | 110 | 480 | 3 | 23.1 | 40 | | 3.2 | | 1-4 |
| CU 2 | IRC 2 | SCHNEIDER | ACCU301 | 410A | 30 | 30 | 110 | 480 | 3 | 23.1 | 40 | | 3.2 | | 1-4 |
| CU 3 | IRC 3 | SCHNEIDER | ACCU301 | 410A | 30 | 30 | 110 | 480 | 3 | 23.1 | 40 | | 3.2 | | 1-4 |
| CU 4 | IRC 4 | SCHNEIDER | ACCU301 | 410A | 30 | 30 | 110 | 480 | 3 | 23.1 | 40 | | 3.2 | | 1-4 |
| CU 5 | IRC 5 | SCHNEIDER | ACCU100 | R32 | 10 | 10 | 110 | 208 | 1 | 22.9 | 40 | | 3.2 | | 1-4 |

NOTES:
1. CONTRACTOR SHALL VERIFY WITH EQUIPMENT SUPPLIER EXACT ROUTING AND SIZE OF INSULATED REFRIGERANT PIPING. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
2. SENSIBLE CAPACITY BASED ON 105 DEGREES AMBIENT.
3. MOUNT ON CONCRETE PAD WITH NEOPRENE VIBRATION ISOLATION PAD AND PER MANUFACTUER IOM INSTRUCTIONS.
4. PROVIDE FLOODED RECEIVER AND WINTER ACCESSORIES KIT FOR OPERATION DOWN TO -10 DEG F.

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## IN ROW COMPUTER ROOM COOLING UNIT SCHEDULE

| PLAN MARK | MANUFACTURER | MODEL | UNIT TYPE | SUPPLY FAN | COOLING | | FILTER MERV | ELECTRICAL | | | | | OPTIONS | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AIRFLOW (CFM) | TOTAL (KW) | SENSIBLE (MBH) | | VOLTAGE | PHASE | FLA | MCA | MOCP | | |
| IRC 1 | SCHNEIDER | ACRD301S | IN ROW | 3200 | 30 | 25 | 8 | 208 | 1 | 8.0 | 9.3 | 15 | | 1-5 |
| IRC 2 | SCHNEIDER | ACRD301S | IN ROW | 3200 | 30 | 25 | 8 | 208 | 1 | 8.0 | 9.3 | 15 | | 1-5 |
| IRC 3 | SCHNEIDER | ACRD301S | IN ROW | 3200 | 30 | 25 | 8 | 208 | 1 | 8.0 | 9.3 | 15 | | 1-5 |
| IRC 4 | SCHNEIDER | ACRD301S | IN ROW | 3200 | 30 | 25 | 8 | 208 | 1 | 8.0 | 9.3 | 15 | | 1-5 |
| IRC 5 | SCHNEIDER | ACRD101S | IN ROW | 1500 | 10 | 0 | 8 | 208 | 1 | 4.1 | 4.4 | 15 | | 1-5 |

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. PIPE CONDENSATE AND REFRIGERANT OUT THE BOTTOM OF THE UNIT.
4. PROVIDE BALL VALVE AND UNION.
5. IN ROW COOLING UNITS PROVIDED WITH HOT ISLE/COLD ISLE CONTAINMENT. HOT ISLE IS BETWEEN UNITS, NO HOTTER THAN 95 DEGREES. MAINTAIN COLD ISLE AT 75 DEGREES F. SEE TECHNOLOGY SHEETS FOR SERVER RACKS LAYOUT AND SIZES.

## 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 |

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 |
| PFB | POWER FUSE BLOCK |
| 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 JOINT OPERATIONS FACILITY

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

| | | |
|---|---|---|
| 3 | ADDENDUM #3 | 11/18/2024 |
| 9 | CCD #001 | 1/29/2025 |




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.

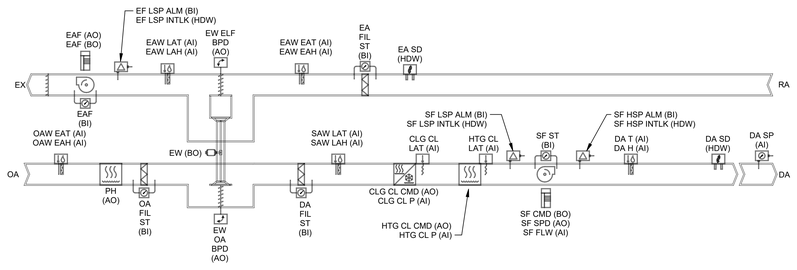
ENERGY RECOVERY OPERATION:
1. WHEN THE OUTSIDE AIR DRY-BULB TEMPERATURE IS HIGHER THAN THE RELIEF AIR DRY-BULB TEMPERATURE, THE FIXED-PLATE HX FACE-AND-BYPASS DAMPERS SHALL BE POSITIONED FOR 0% BYPASS. WHEN THE OUTSIDE AIR DRY-BULB TEMPERATURE IS LESS THAN THE RELIEF AIR DRY-BULB TEMPERATURE AND THE 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.

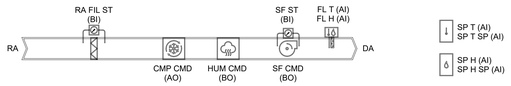
FILTER STATUS
1. A DIFFERENTIAL PRESSURE SWITCH SHALL MONITOR THE DIFFERENTIAL PRESSURE ACROSS THE FILTER WHEN THE FAN IS RUNNING. IF THE SWITCH CLOSES DURING NORMAL OPERATION A DIRTY FILTER ALARM SHALL ANNUNCIATE AT THE BAS.

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).

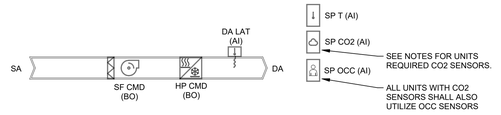
**NOTES:**

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.

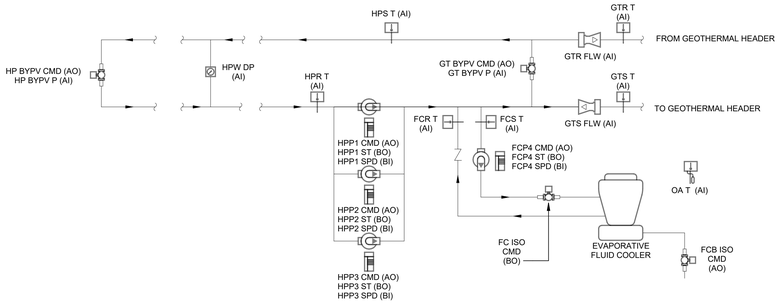
**SEQUENCE OF OPERATION - CONT.**

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
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

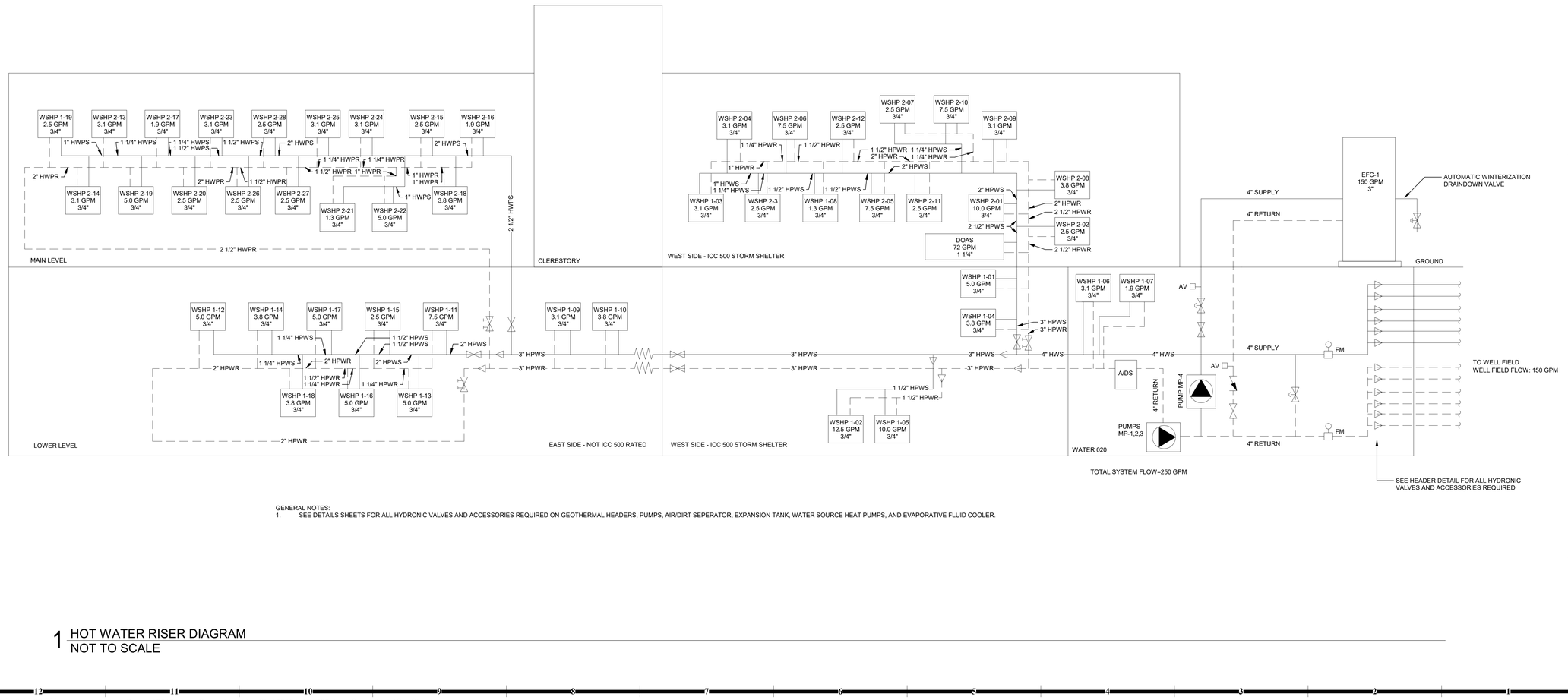



PROFESSIONAL SEAL

M-623

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

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:




PROFESSIONAL SEAL

M-624

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

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
- 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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

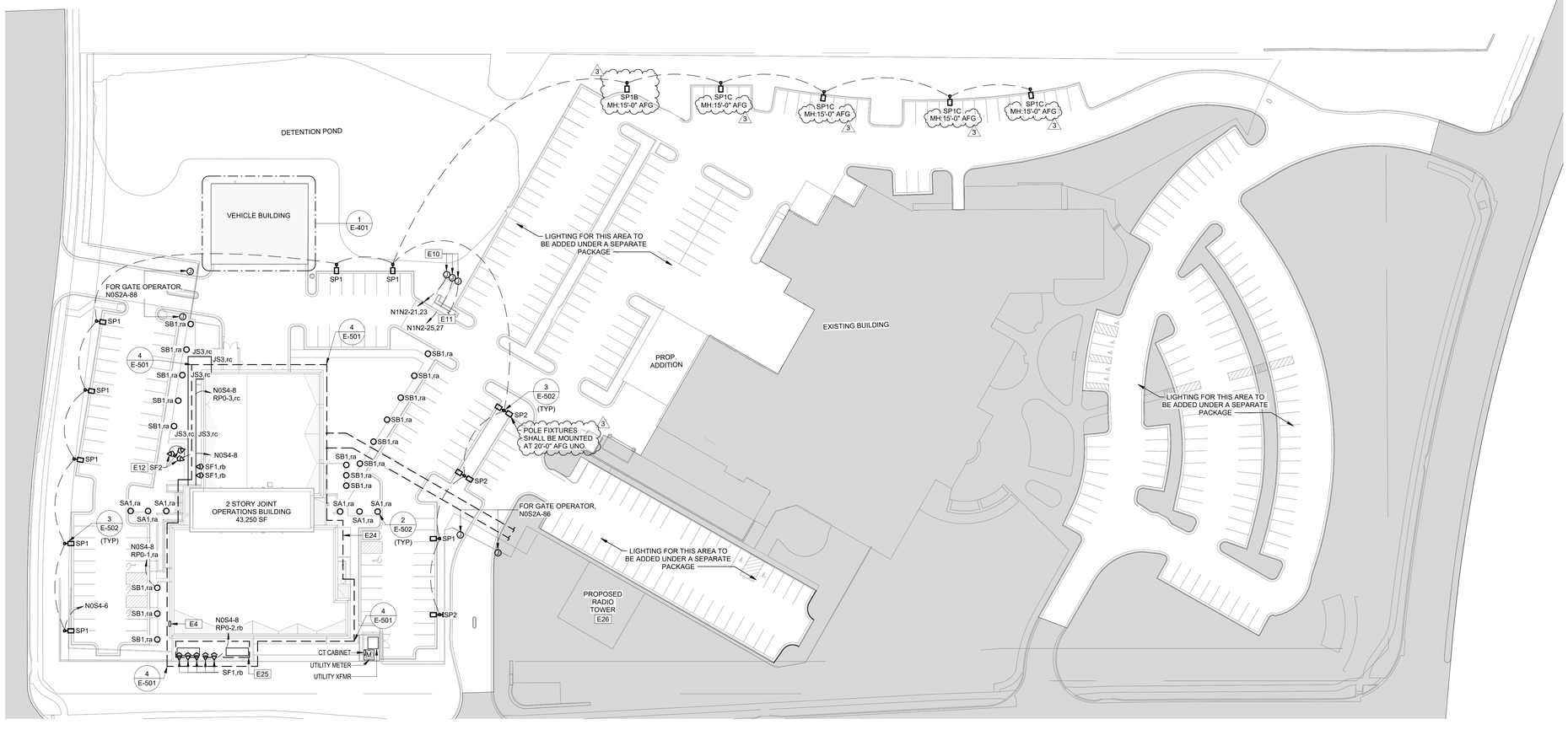
STATE OF MISSOURI — JONATHON M. LEE — NUMBER PE-2021003163 — 10/30/2024 — PROFESSIONAL ENGINEER

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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# 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
JONATHON M. LEE
NUMBER PE-2021003162
REGISTERED PROFESSIONAL ENGINEER
11/18/2024

PROFESSIONAL SEAL

ES101

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

ELECTRICAL SITE PLAN

## 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 |
| 9 | CCD #001 | 1/29/2025 |

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003143
1/28/2025
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

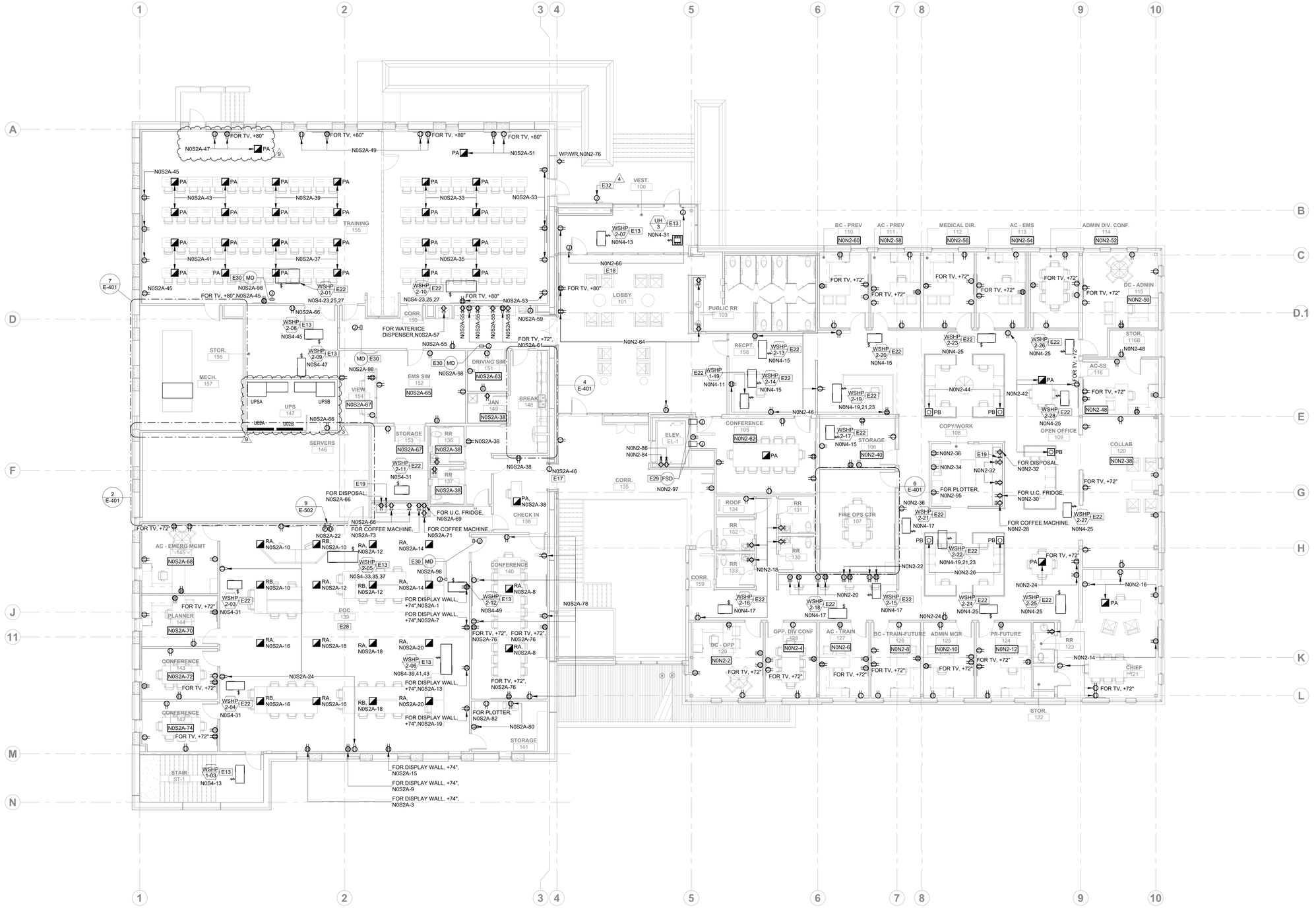
E-100

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

LOWER LEVEL - POWER PLAN

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

NORTH




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

NORTH

**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.

E32 PROVIDE RECESSED KNOX REMOTE POWER BOX FOR WHOLE BUILDING SHUTDOWN. CONNECT TO SHUNT TRIP BREAKERS IN N0S4DP AND N0N4. PROVIDE WITH TAMPER SWITCH CONNECTED TO BUILDING AUTOMATION SYSTEM. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH DIVISION 23 AND ARCHITECT.


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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 |
| 9 | CCD #001 | 1/29/2025 |

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021023141
PROFESSIONAL ENGINEER
1/28/2025

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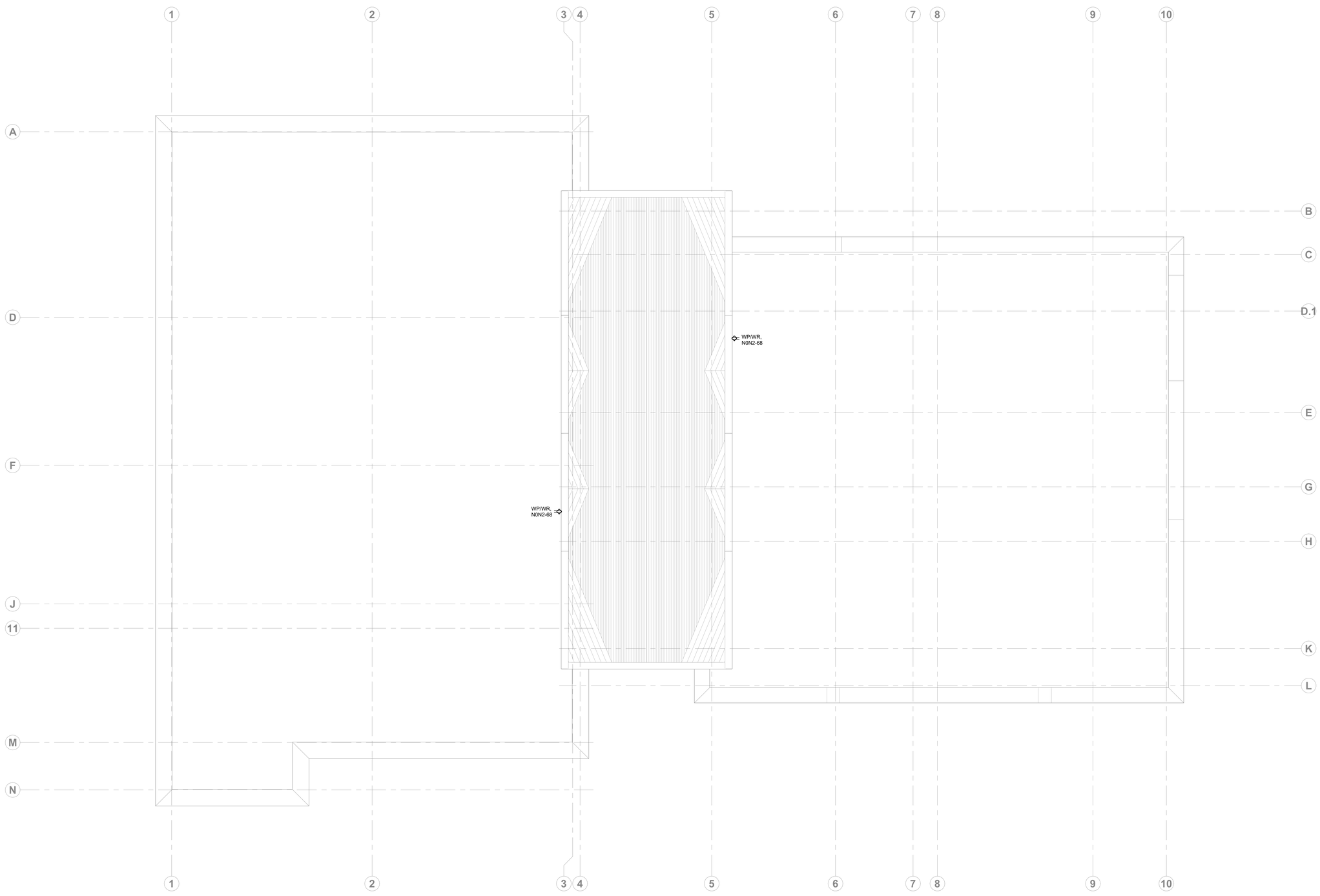
E-101

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
10/20/2024
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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

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PACKAGE 2: CONSTRUCTION SET

REVISION DATES:

| | | |
|---|---|---|
| 4 | ADDENDUM #4 | 11/26/2024 |
| 9 | CCD #001 | 1/29/2025 |

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003163
11/28/2025
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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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PACKAGE 2: CONSTRUCTION SET

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| | | |
|---|---|---|
| 8 | ASI 003 | 12/18/2024 |

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12/18/2024
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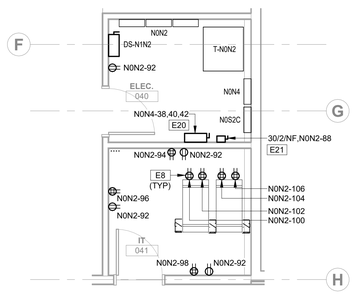
**E-111**

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

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

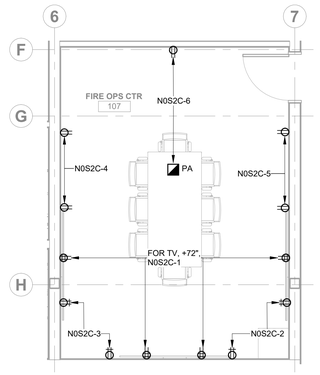
NORTH

MAIN LEVEL - LIGHTING PLAN



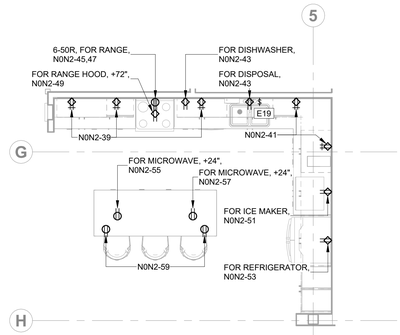

NORTH

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



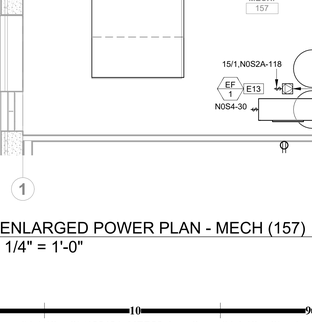

NORTH

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



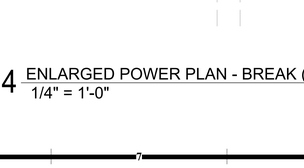

NORTH

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



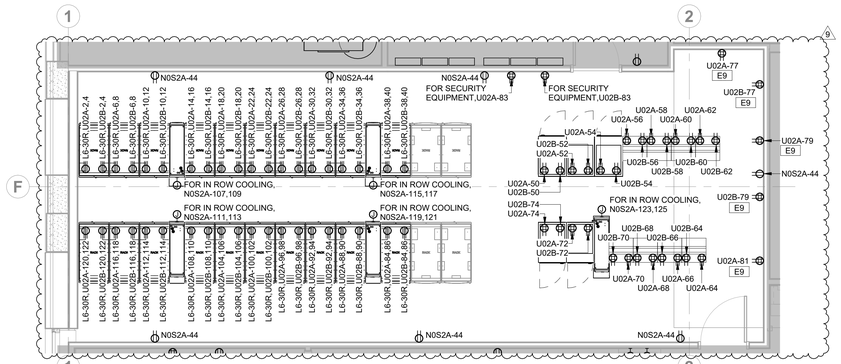

NORTH

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



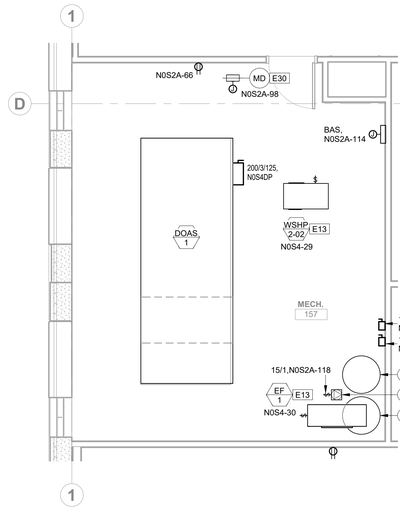

NORTH

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



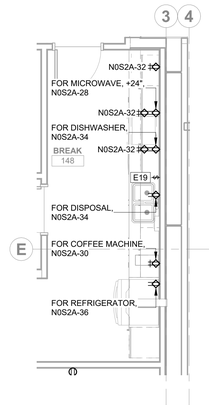

NORTH

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



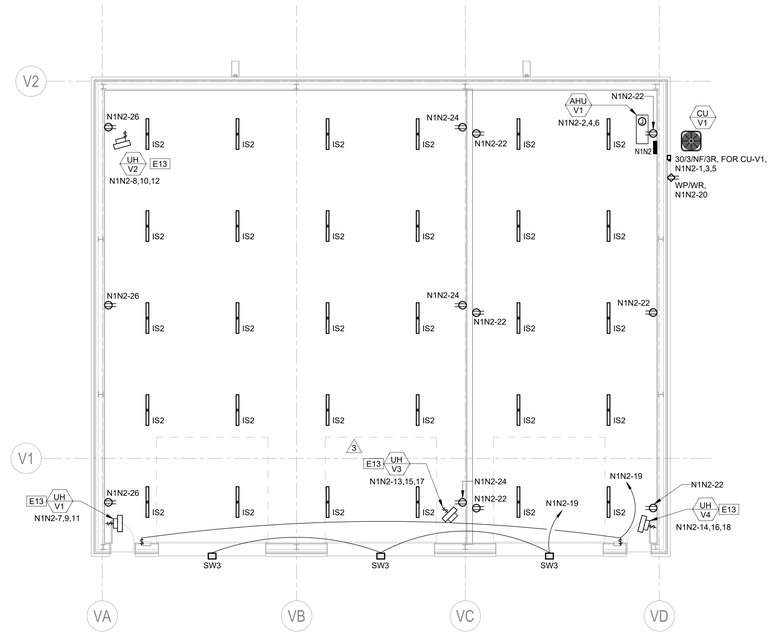

NORTH

## 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
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REVISION DATES:

| | | |
|---|---|---|
| 3 | ADDENDUM #3 | 11/18/2024 |
| 9 | CCD #001 | 1/29/2025 |

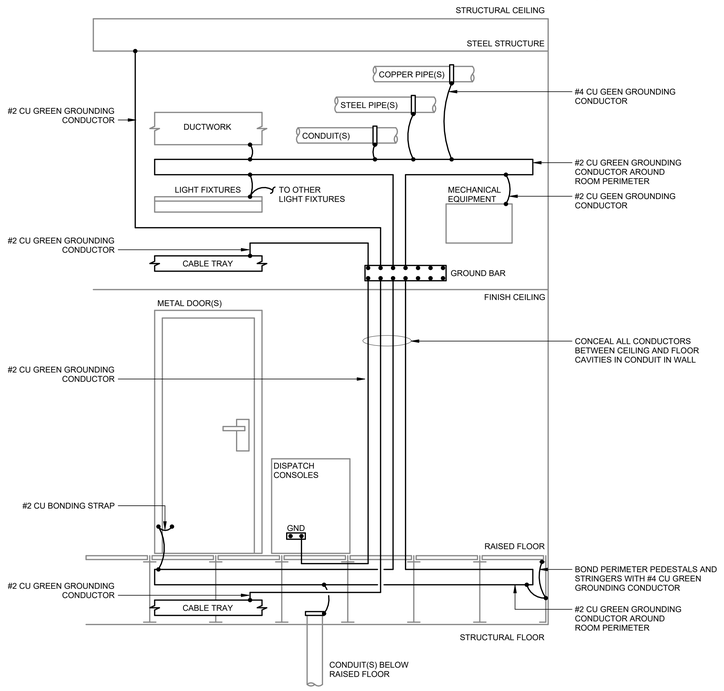
STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2012003161
1/28/2025
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

# E-401

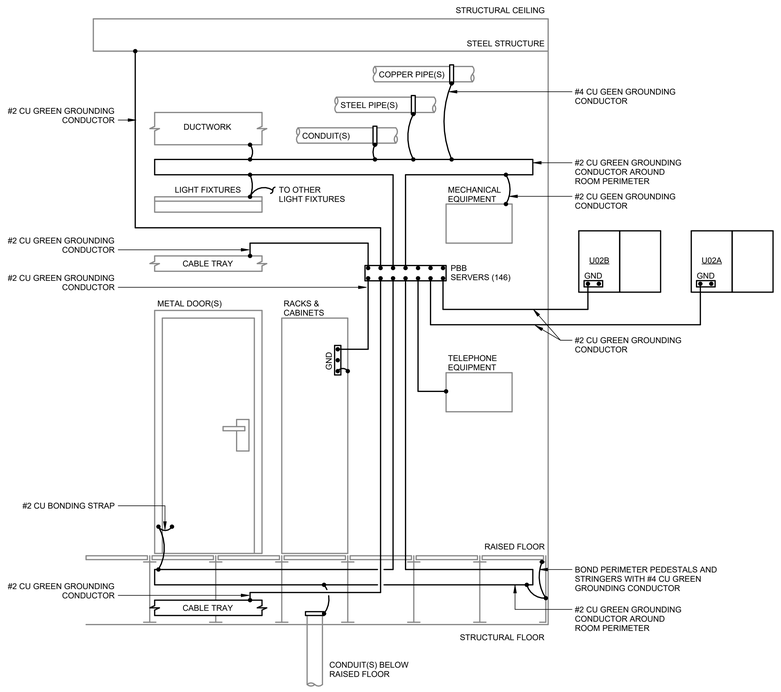
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ENLARGED ELECTRICAL PLANS



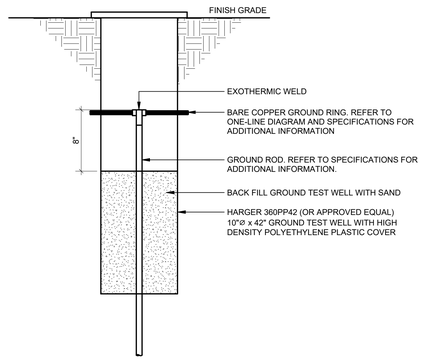

NOTES:
- MOTOROLA R56 COMPLIANCE IS A DELEGATED DESIGN. INFORMATION SHOWN IN THIS DIAGRAM IS FOR THE GROUNDING SYSTEM BACKBONE ONLY. PROVIDE ADDITIONAL CONDUCTORS, CONNECTIONS, CONDUITS, ETC. AS NECESSARY FOR A FULLY MOTOROLA R56 COMPLIANT SYSTEM TO THE SATISFACTION OF THE RADIO EQUIPMENT INSTALLER.
- 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

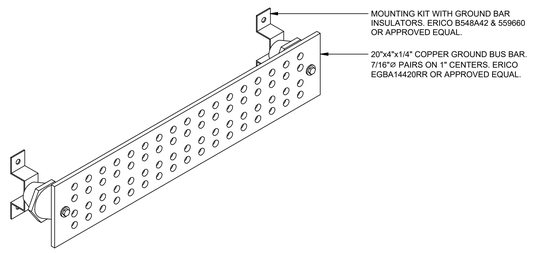



NOTES:
- MOTOROLA R56 COMPLIANCE IS A DELEGATED DESIGN. INFORMATION SHOWN IN THIS DIAGRAM IS FOR THE GROUNDING SYSTEM BACKBONE ONLY. PROVIDE ADDITIONAL CONDUCTORS, CONNECTIONS, CONDUITS, ETC. AS NECESSARY FOR A FULLY MOTOROLA R56 COMPLIANT SYSTEM TO THE SATISFACTION OF THE RADIO EQUIPMENT INSTALLER.
- 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.

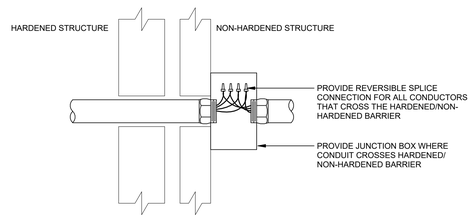
## 5 GROUNDING DIAGRAM - SERVERS (146)
NOT TO SCALE




## 4 GROUND TEST WELL DETAIL
NOT TO SCALE

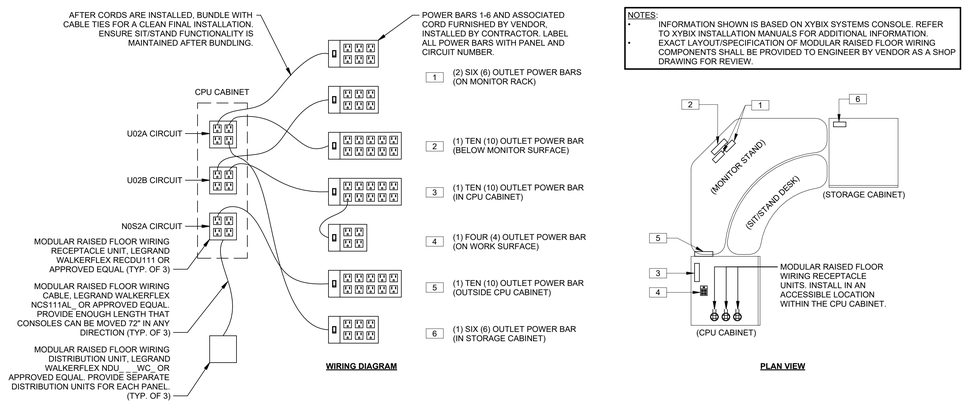



## 3 MAIN GROUND BUS BAR
NOT TO SCALE




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




## 1 DISPATCH CONSOLE WIRING DIAGRAM
NOT TO SCALE

HOEFER WELKER
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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

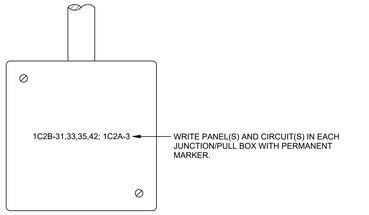
REVISION DATES:

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

E-501

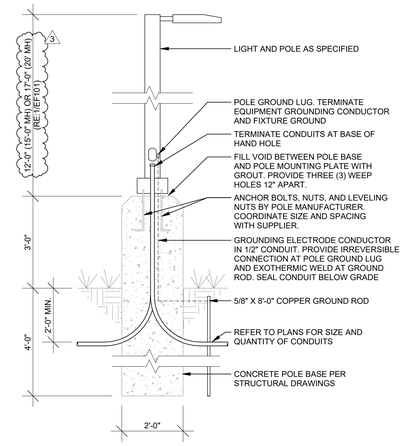
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL DETAILS



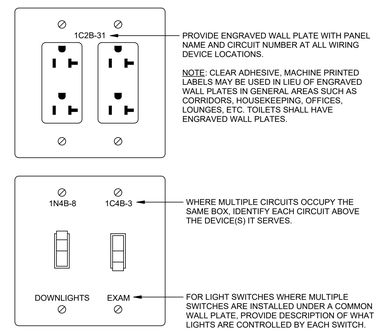

NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

## 6 ELECTRICAL RACEWAY IDENTIFICATION DETAIL
NOT TO SCALE



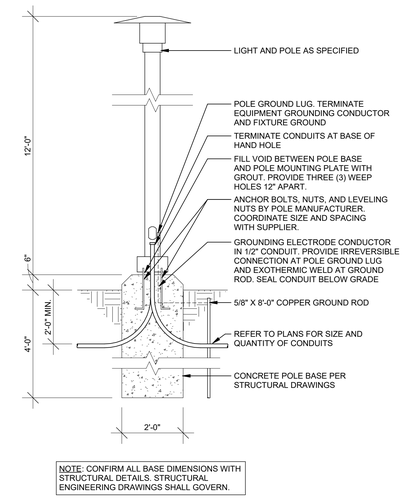

NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

## 3 POLE BASE DETAIL - TALL BASE
NOT TO SCALE



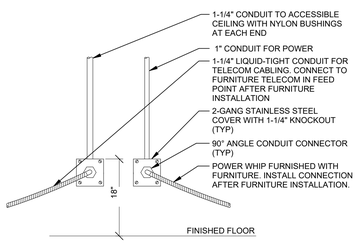

NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

## 5 WIRING DEVICE IDENTIFICATION DETAIL
NOT TO SCALE

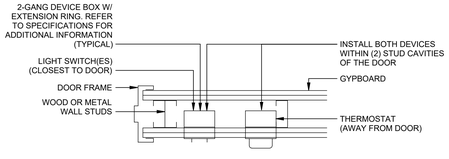



NOTE: CONFIRM ALL BASE DIMENSIONS WITH STRUCTURAL DETAILS. STRUCTURAL ENGINEERING DRAWINGS SHALL GOVERN.

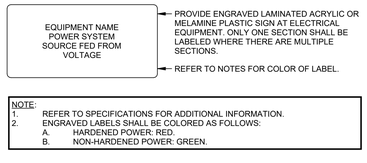
## 2 POLE BASE DETAIL - SHORT BASE
NOT TO SCALE




## 9 WALL OUTLET DETAIL FOR ELECTRIFIED PARTITION
NOT TO SCALE

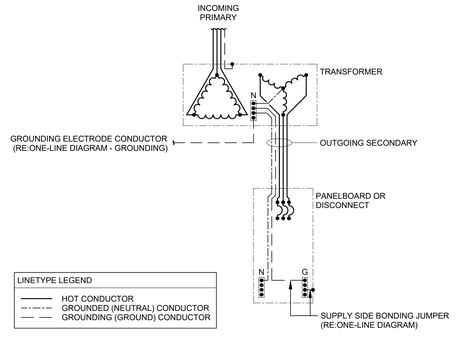



## 8 ROOM THERMOSTAT/LIGHT SWITCH DETAIL
NOT TO SCALE

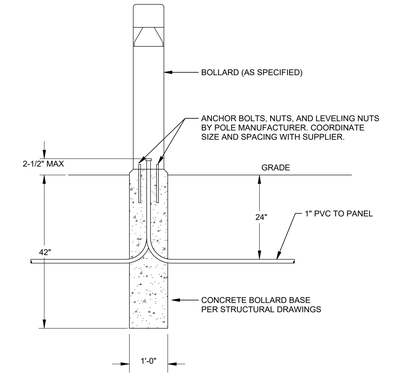



NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. ENGRAVED LABELS SHALL BE COLORED AS FOLLOWS:
   A. HARDENED POWER: RED.
   B. NON-HARDENED POWER: GREEN.

## 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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# 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
JONATHON M. LEE
NUMBER PE-2021003162
11/18/2024
PROFESSIONAL ENGINEER

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 | 4820 | | | | | 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 | 1662 | | | | | 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 | 1621 | | | 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 | 6391 | | | | | | | | | | | 32 |
| 33 | | | | | | | | | 2573 | 6391 | | | 3 | 40 | 10 | 8 | | CU-1 | 34 |
| 35 | WSHP 2-05 | | | | 15 | 3 | | | | | 2573 | 6391 | | | | | | | 36 |
| 37 | | | | | | | 2573 | 6391 | | | | | | | | | | | 38 |
| 39 | | | | | | | | | 2573 | 6391 | | | 3 | 40 | 10 | 8 | | CU-2 | 40 |
| 41 | WSHP 2-06 | | | | 15 | 3 | | | | | 2573 | 6391 | | | | | | | 42 |
| 43 | | | | | | | 2573 | 6391 | | | | | | | | | | | 44 |
| 45 | WSHP 2-08 | | | | 15 | 1 | | | 2327 | 6391 | | | 3 | 40 | 10 | 8 | | CU-3 | 46 |
| 47 | WSHP 2-09 | | | | 15 | 1 | | | | | 1911 | 6391 | | | | | | | 48 |
| 49 | WSHP 2-12 | | | | 15 | 1 | 1801 | 6391 | | | | | | | | | | | 50 |
| 51 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 6391 | | | 3 | 40 | 10 | 8 | | CU-4 | 52 |
| 53 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | | -- | 6391 | | | | | | | 54 |
| 55 | | | | | | | 4703 | 0 | | | | | | | | | | | 56 |
| 57 | EFC-1 | | 10 | 10 | 25 | 3 | | | 4703 | 0 | | | 3 | 15 | -- | -- | | SPARE | 58 |
| 59 | | | | | | | | | | | 4703 | 0 | | | | | | | 60 |
| 61 | | | | | | | 5423 | 0 | | | | | | | | | | | 62 |
| 63 | MP-1 | | 10 | 10 | 30 | 3 | | | 5423 | 0 | | | 3 | 15 | -- | -- | | SPARE | 64 |
| 65 | | | | | | | | | | | 5423 | 0 | | | | | | | 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 | 55976 | | | | | | | | | | | 80 |
| 81 | MP-4 | | | | 20 | 3 | | | 581 | 54712 | | | 3 | 250 | | 350 | OL | T-N0S2 | 82 |
| 83 | | | | | | | | | | | 581 | 60784 | | | | | | | 84 |
| | | | **TOTAL LOAD:** | | | | 142012 VA | | 135674 VA | | 141833 VA | | | | | | | | |
| | | | **TOTAL AMPS:** | | | | 516 A | | 490 A | | 515 A | | | | | | | | |
| | | | **LOAD BALANCE:** | | | | 2.28% | | -2.93% | | 2.15% | | | | | | | | |

| LOAD CLASSIFICATION | CONN. LOAD | DEMAND FACTOR | ESTIMATED DEMAND |
|---|---|---|---|
| COOLING | 14110 VA | 100.00% | 14110 VA |
| LIGHTING | 18953 VA | 125.00% | 23691 VA |
| MOTORS | 60379 VA | 100.00% | 60379 VA |
| RECEPTACLES | 120320 VA | 54.16% | 65160 VA |
| MISC EQUIP | 205757 VA | 100.00% | 205757 VA |

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

| PANELBOARD TOTALS | |
|---|---|
| **TOTAL CONN. LOAD:** | 419519 VA |
| **TOTAL EST. DEMAND LOAD:** | 369097 VA |
| **TOTAL CONN. CURRENT:** | 505 A |
| **TOTAL EST. DEMAND CURRENT:** | 444 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 | | | | 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 | | | | | | | | | | SPARE | 92 |
| 93 | RCPT-009-DISHWASHER | | | | 20 | 1 | | | 1380 | 2382 | | | 2 | 40 | 10 | 8 | | CU-5 | 94 |
| 95 | RCPT-009-MICROWAVE 1 | | | | 20 | 1 | | | | | 1200 | 2382 | | | | | | | 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 | | | | | | GEN 1 - MISC HEATERS | 106 |
| 107 | PWR-IN ROW COOLING A | | | | 15 | 2 | | | | | | | 2 | 20 | | | | GEN 2 - BATTERY CHARGER | 108 |
| 109 | | | | | | | 832 | 1500 | | | | | 1 | 20 | | | | GEN 2 - COOLANT HEATER | 110 |
| 111 | PWR-IN ROW COOLING B | | | | 15 | 2 | | | | | | | 2 | 20 | | | | GEN 2 - MISC HEATERS | 112 |
| 113 | | | | | | | | | 832 | 500 | | | 1 | 20 | | | | PWR-157-BAS | 114 |
| 115 | PWR-IN ROW COOLING C | | | | 15 | 2 | | | | | | | 2 | 20 | | | | PWR-020-FACP | 116 |
| 117 | | | | | | | 832 | 500 | | | | | 1 | 15 | | | | RP1 & AQUASTAT | 118 |
| 119 | PWR-IN ROW COOLING D | | | | 15 | 2 | | | | | | | 2 | 80 | | | | EWH1 | 120 |
| 121 | | | | | | | 832 | 6000 | | | | | | | | | | | 122 |
| 123 | PWR-IN ROW COOLING E | | | | 15 | 2 | | | | | | | 2 | 80 | | | | EWH2 | 124 |
| 125 | | | | | | | | | 426 | 6000 | | | | | | | | | 126 |
| | | | **TOTAL LOAD:** | | | | 42776 VA | | 40312 VA | | 47584 VA | | | | | | | | |
| | | | **TOTAL AMPS:** | | | | 360 A | | 336 A | | 400 A | | | | | | | | |
| | | | **LOAD BALANCE:** | | | | -0.85% | | -7.38% | | 10.20% | | | | | | | | |

| LOAD CLASSIFICATION | CONN. LOAD | DEMAND FACTOR | ESTIMATED DEMAND |
|---|---|---|---|
| LIGHTING | 160 VA | 125.00% | 200 VA |
| RECEPTACLES | 79520 VA | 56.29% | 44760 VA |
| MISC EQUIP | 50992 VA | 100.00% | 50992 VA |

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

| PANELBOARD TOTALS | |
|---|---|
| **TOTAL CONN. LOAD:** | 130672 VA |
| **TOTAL EST. DEMAND LOAD:** | 95952 VA |
| **TOTAL CONN. CURRENT:** | 363 A |
| **TOTAL EST. DEMAND CURRENT:** | 266 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 | PWR - LOADING DOCK DOOR | | | | 20 | 2 | 250 | 720 | | | | | 1 | 20 | | | | RCPT-040/041-ELEC. IT | 92 |
| 93 | | | | | | | | | 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 | | | | | 0 | 2018 | | | | | | | 126 |
| | | | **TOTAL LOAD:** | | | | 29208 VA | | 28094 VA | | 24568 VA | | | | | | | | |
| | | | **TOTAL AMPS:** | | | | 248 A | | 239 A | | 205 A | | | | | | | | |
| | | |

## 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 | | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 1 | 2 |
| 3 | RCPT-004-POLICE CONSOLE 1D | | | | 20 | 1 | | 500 | 900 | | | | | | | 4 |
| 5 | RCPT-004-POLICE CONSOLE 2A | | | | 20 | 1 | | | 500 | 900 | | | | | | 6 |
| 7 | RCPT-004-POLICE CONSOLE 2B | | | | 20 | 1 | 500 | 900 | | | | | | | RCPT-146-CABINET 2 | 8 |
| 9 | RCPT-004-POLICE CONSOLE 2C | | | | 20 | 1 | | | 500 | 900 | | | | | | 10 |
| 11 | RCPT-004-POLICE CONSOLE 2D | | | | 20 | 1 | | 500 | 900 | | | | | | RCPT-146-CABINET 3 | 12 |
| 13 | RCPT-004-POLICE CONSOLE 3A | | | | 20 | 1 | 500 | 900 | | | | | | | | 14 |
| 15 | RCPT-004-POLICE CONSOLE 3B | | | | 20 | 1 | | | 500 | 900 | | | | | RCPT-146-CABINET 4 | 16 |
| 17 | RCPT-004-POLICE CONSOLE 3C | | | | 20 | 1 | | 500 | 900 | | | | | | | 18 |
| 19 | RCPT-004-POLICE CONSOLE 3D | | | | 20 | 1 | 500 | 900 | | | | | | | RCPT-146-CABINET 5 | 20 |
| 21 | RCPT-004-POLICE CONSOLE 4A | | | | 20 | 1 | | | 500 | 900 | | | | | | 22 |
| 23 | RCPT-004-POLICE CONSOLE 4D | | | | 20 | 1 | | 500 | 900 | | | | | | RCPT-146-CABINET 6 | 24 |
| 25 | RCPT-005-FIRE CONSOLE 1A | | | | 20 | 1 | 500 | 900 | | | | | | | | 26 |
| 27 | RCPT-005-FIRE CONSOLE 1B | | | | 20 | 1 | | 500 | 900 | | | | | | RCPT-146-CABINET 7 | 28 |
| 29 | RCPT-005-FIRE CONSOLE 1C | | | | 20 | 1 | | | 500 | 900 | | | | | | 30 |
| 31 | RCPT-005-FIRE CONSOLE 1D | | | | 20 | 1 | 500 | 900 | | | | | | | RCPT-146-CABINET 8 | 32 |
| 33 | RCPT-005-FIRE CONSOLE 2B | | | | 20 | 1 | | 500 | 900 | | | | | | | 34 |
| 35 | RCPT-005-FIRE CONSOLE 2C | | | | 20 | 1 | | | 500 | 900 | | | | | RCPT-146-CABINET 9 | 36 |
| 37 | RCPT-005-FIRE CONSOLE 3B | | | | 20 | 1 | 500 | 900 | | | | | | | | 38 |
| 39 | RCPT-005-FIRE CONSOLE 3C | | | | 20 | 1 | | 500 | 900 | | | | | | RCPT-146-CABINET 10 | 40 |
| 41 | RCPT-005-FIRE CONSOLE 4A | | | | 20 | 1 | | | 500 | 0 | | | | | | 42 |
| 43 | RCPT-005-FIRE CONSOLE 4B | | | | 20 | 1 | 500 | 0 | | | | | | | SPARE (FUTURE CABINET 11) | 44 |
| 45 | RCPT-005-FIRE CONSOLE 4C | | | | 20 | 1 | | 500 | 0 | | | | | | | 46 |
| 47 | RCPT-005-FIRE CONSOLE 4D | | | | 20 | 1 | | | 500 | 0 | | | | | SPARE (FUTURE CABINET 12) | 48 |
| 49 | RCPT-017-TRAINING CONSOLE 1A | | | | 20 | 1 | 500 | 1200 | | 1 | 20 | | | | | 50 |
| 51 | RCPT-017-TRAINING CONSOLE 1B | | | | 20 | 1 | | 500 | 1200 | 1 | 20 | | | | RCPT-146-AV RACK 13 | 52 |
| 53 | RCPT-017-TRAINING CONSOLE 1C | | | | 20 | 1 | | | 500 | 1200 | 1 | 20 | | | RCPT-146-AV RACK 14 | 54 |
| 55 | RCPT-017-TRAINING CONSOLE 1D | | | | 20 | 1 | 500 | 500 | | 1 | 20 | | | | RCPT-146-AV RACK 15 | 56 |
| 57 | RCPT-017-TRAINING CONSOLE 1E | | | | 20 | 1 | | 500 | 500 | 1 | 20 | | | | RCPT-146-AV RACK 16 | 58 |
| 59 | RCPT-017-TRAINING CONSOLE 2A | | | | 20 | 1 | | | 500 | 500 | 1 | 20 | | | RCPT-146-RACK 17 | 60 |
| 61 | RCPT-017-TRAINING CONSOLE 2B | | | | 20 | 1 | 500 | 500 | | 1 | 20 | | | | RCPT-146-RACK 18 | 62 |
| 63 | RCPT-017-TRAINING CONSOLE 2C | | | | 20 | 1 | | 500 | 500 | 1 | 20 | | | | RCPT-146-RACK 19 | 64 |
| 65 | RCPT-017-TRAINING CONSOLE 2D | | | | 20 | 1 | | | 500 | 500 | 1 | 20 | | | RCPT-146-RACK 20 | 66 |
| 67 | RCPT-017-TRAINING CONSOLE 2E | | | | 20 | 1 | 500 | 500 | | 1 | 20 | | | | RCPT-146-RACK 21 | 68 |
| 69 | SPARE | | -- | -- | 20 | 1 | | 0 | 500 | 1 | 20 | | | | RCPT-146-RACK 22 | 70 |
| 71 | SPARE | | -- | -- | 20 | 1 | | | 0 | 1200 | 1 | 20 | | | RCPT-146-RACK 23 | 72 |
| 73 | SPARE | | -- | -- | 20 | 1 | 0 | 1200 | | 1 | 20 | | | | RCPT-146-AV RACK 24 | 74 |
| 75 | SPARE | | -- | -- | 20 | 1 | | 0 | 0 | 1 | 20 | | | | RCPT-146-AV RACK 25 | 76 |
| 77 | RCPT-146-WALL POWER A | | | | 20 | 1 | | | 600 | 0 | | | | | SPARE (FUTURE CABINET 26) | 78 |
| 79 | RCPT-146-WALL POWER B | | | | 20 | 1 | 700 | 0 | | 2 | 30 | -- | -- | | | 80 |
| 81 | RCPT-146-WALL POWER C | | | | 20 | 1 | | | 700 | 0 | | | | | SPARE (FUTURE CABINET 27) | 82 |
| 83 | RCPT-146-SECURITY EQUIPMENT | | | | 20 | 1 | | | | 1200 | 900 | | | | | 84 |
| 85 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 28 | 86 |
| 87 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | | 88 |
| 89 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | RCPT-146-CABINET 29 | 90 |
| 91 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | | 92 |
| 93 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | RCPT-146-CABINET 30 | 94 |
| 95 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | | 96 |
| 97 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 31 | 98 |
| 99 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | | 100 |
| 101 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | RCPT-146-CABINET 32 | 102 |
| 103 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | | 104 |
| 105 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | RCPT-146-CABINET 33 | 106 |
| 107 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | | 108 |
| 109 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 34 | 110 |
| 111 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | | 112 |
| 113 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | RCPT-146-CABINET 35 | 114 |
| 115 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | | 116 |
| 117 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 900 | | | | | RCPT-146-CABINET 36 | 118 |
| 119 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 900 | | | | | 120 |
| 121 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 900 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 37 | 122 |
| 123 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | -- | | | | | EQUIPPED SPACE | 124 |
| 125 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | -- | | 1 | -- | -- | -- | | EQUIPPED SPACE | 126 |
| | | | | **TOTAL LOAD:** | | | 23200 VA | 20600 VA | 22400 VA | | | | | | | |
| | | | | **TOTAL AMPS:** | | | 196 A | 172 A | 189 A | | | | | | | |
| | | | | **LOAD BALANCE:** | | | 6.47% | -6.58% | 2.84% | | | | | | | |

| LOAD CLASSIFICATION | CONN. LOAD | DEMAND FACTOR | ESTIMATED DEMAND |
|---|---|---|---|
| RECEPTACLES | 66200 VA | 57.55% | 38100 VA |

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

| PANELBOARD TOTALS | |
|---|---|
| **TOTAL CONN. LOAD:** | 66200 VA |
| **TOTAL EST. DEMAND LOAD:** | 38100 VA |
| **TOTAL CONN. CURRENT:** | 184 A |
| **TOTAL EST. DEMAND CURRENT:** | 106 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 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 1 | 2 |
| 3 | RCPT-004-POLICE CONSOLE 1D | | | | 20 | 1 | | | 0 | 0 | | | | | | 4 |
| 5 | RCPT-004-POLICE CONSOLE 2A | | | | 20 | 1 | | | | | | | | | | 6 |
| 7 | RCPT-004-POLICE CONSOLE 2B | | | | 20 | 1 | 0 | 0 | | | | | | | RCPT-146-CABINET 2 | 8 |
| 9 | RCPT-004-POLICE CONSOLE 2C | | | | 20 | 1 | | | 0 | 0 | | | | | | 10 |
| 11 | RCPT-004-POLICE CONSOLE 2D | | | | 20 | 1 | | | | | | | | | | 12 |
| 13 | RCPT-004-POLICE CONSOLE 3A | | | | 20 | 1 | 0 | 0 | | | | | | | | 14 |
| 15 | RCPT-004-POLICE CONSOLE 3B | | | | 20 | 1 | | | 0 | 0 | | | | | RCPT-146-CABINET 4 | 16 |
| 17 | RCPT-004-POLICE CONSOLE 3C | | | | 20 | 1 | | | | | | | | | | 18 |
| 19 | RCPT-004-POLICE CONSOLE 3D | | | | 20 | 1 | 0 | 0 | | | | | | | RCPT-146-CABINET 5 | 20 |
| 21 | RCPT-004-POLICE CONSOLE 4A | | | | 20 | 1 | | | 0 | 0 | | | | | | 22 |
| 23 | RCPT-004-POLICE CONSOLE 4D | | | | 20 | 1 | | | | | | | | | RCPT-146-CABINET 6 | 24 |
| 25 | RCPT-005-FIRE CONSOLE 1A | | | | 20 | 1 | 0 | 0 | | | | | | | | 26 |
| 27 | RCPT-005-FIRE CONSOLE 1B | | | | 20 | 1 | | | 0 | 0 | | | | | RCPT-146-CABINET 7 | 28 |
| 29 | RCPT-005-FIRE CONSOLE 1C | | | | 20 | 1 | | | | | | | | | | 30 |
| 31 | RCPT-005-FIRE CONSOLE 1D | | | | 20 | 1 | 0 | 0 | | | | | | | RCPT-146-CABINET 8 | 32 |
| 33 | RCPT-005-FIRE CONSOLE 2B | | | | 20 | 1 | | | 0 | 0 | | | | | | 34 |
| 35 | RCPT-005-FIRE CONSOLE 2C | | | | 20 | 1 | | | | | | | | | RCPT-146-CABINET 9 | 36 |
| 37 | RCPT-005-FIRE CONSOLE 3B | | | | 20 | 1 | 0 | 0 | | | | | | | | 38 |
| 39 | RCPT-005-FIRE CONSOLE 3C | | | | 20 | 1 | | | 0 | 0 | | | | | RCPT-146-CABINET 10 | 40 |
| 41 | RCPT-005-FIRE CONSOLE 4A | | | | 20 | 1 | | | | | | | | | | 42 |
| 43 | RCPT-005-FIRE CONSOLE 4B | | | | 20 | 1 | 0 | 0 | | | | | | | SPARE (FUTURE CABINET 11) | 44 |
| 45 | RCPT-005-FIRE CONSOLE 4C | | | | 20 | 1 | | | 0 | 0 | | | | | | 46 |
| 47 | RCPT-005-FIRE CONSOLE 4D | | | | 20 | 1 | | | | | | | | | SPARE (FUTURE CABINET 12) | 48 |
| 49 | RCPT-017-TRAINING CONSOLE 1A | | | | 20 | 1 | 0 | 0 | | 1 | 20 | | | | | 50 |
| 51 | RCPT-017-TRAINING CONSOLE 1B | | | | 20 | 1 | | | 0 | 0 | 1 | 20 | | | RCPT-146-AV RACK 13 | 52 |
| 53 | RCPT-017-TRAINING CONSOLE 1C | | | | 20 | 1 | | | | | 1 | 20 | | | RCPT-146-AV RACK 14 | 54 |
| 55 | RCPT-017-TRAINING CONSOLE 1D | | | | 20 | 1 | 0 | 0 | | 1 | 20 | | | | RCPT-146-AV RACK 15 | 56 |
| 57 | RCPT-017-TRAINING CONSOLE 1E | | | | 20 | 1 | | | 0 | 0 | 1 | 20 | | | RCPT-146-AV RACK 16 | 58 |
| 59 | RCPT-017-TRAINING CONSOLE 2A | | | | 20 | 1 | | | | | 1 | 20 | | | RCPT-146-RACK 17 | 60 |
| 61 | RCPT-017-TRAINING CONSOLE 2B | | | | 20 | 1 | 0 | 0 | | 1 | 20 | | | | RCPT-146-RACK 18 | 62 |
| 63 | RCPT-017-TRAINING CONSOLE 2C | | | | 20 | 1 | | | 0 | 0 | 1 | 20 | | | RCPT-146-RACK 19 | 64 |
| 65 | RCPT-017-TRAINING CONSOLE 2D | | | | 20 | 1 | | | | | 1 | 20 | | | RCPT-146-RACK 20 | 66 |
| 67 | RCPT-017-TRAINING CONSOLE 2E | | | | 20 | 1 | 0 | 0 | | 1 | 20 | | | | RCPT-146-RACK 21 | 68 |
| 69 | SPARE | | -- | -- | 20 | 1 | | | 0 | 0 | 1 | 20 | | | RCPT-146-RACK 22 | 70 |
| 71 | SPARE | | -- | -- | 20 | 1 | | | | | 1 | 20 | | | RCPT-146-RACK 23 | 72 |
| 73 | SPARE | | -- | -- | 20 | 1 | 0 | 0 | | 1 | 20 | | | | RCPT-146-AV RACK 24 | 74 |
| 75 | SPARE | | -- | -- | 20 | 1 | | | 0 | 0 | 1 | 20 | | | RCPT-146-AV RACK 25 | 76 |
| 77 | RCPT-146-WALL POWER A | | | | 20 | 1 | | | | | 2 | 30 | -- | -- | SPARE (FUTURE CABINET 26) | 78 |
| 79 | RCPT-146-WALL POWER B | | | | 20 | 1 | 0 | 0 | | | | | | | | 80 |
| 81 | SPARE | | -- | -- | 20 | 1 | | | 0 | 0 | 2 | 30 | -- | -- | SPARE (FUTURE CABINET 27) | 82 |
| 83 | RCPT-146-SECURITY EQUIPMENT | | | | 20 | 1 | | | | | | | | | | 84 |
| 85 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 28 | 86 |
| 87 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | | 88 |
| 89 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | RCPT-146-CABINET 29 | 90 |
| 91 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | | 92 |
| 93 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | RCPT-146-CABINET 30 | 94 |
| 95 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | | 96 |
| 97 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 31 | 98 |
| 99 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | | 100 |
| 101 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | RCPT-146-CABINET 32 | 102 |
| 103 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | | 104 |
| 105 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | RCPT-146-CABINET 33 | 106 |
| 107 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | | 108 |
| 109 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 34 | 110 |
| 111 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | | 112 |
| 113 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | RCPT-146-CABINET 35 | 114 |
| 115 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | | 116 |
| 117 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | 0 | | | | | RCPT-146-CABINET 36 | 118 |
| 119 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | | -- | 0 | | | | | 120 |
| 121 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | 0 | | 2 | 30 | 10 | 10 | | RCPT-146-CABINET 37 | 122 |
| 123 | EQUIPPED SPACE | | -- | -- | -- | 1 | | | -- | -- | | | | | EQUIPPED SPACE | 124 |
| 125 | EQUIPPED SPACE | | -- | -- | -- | 1 | -- | -- | | 1 | -- | -- | -- | | EQUIPPED SPACE | 126 |
| | | | | **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 | | | | | | | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | 2500 | 2500 | | | | | | | | 8 |
| 9 | UH-V1 | | 10 | 10 | 30 | 3 | | | 2500 | 2500 | 3 | 30 | 10 | 10 | UH-V2 | 10 |
| 11 | | | | | | | | | | | | | | | | 12 |
| 13 | | | | | | | 2500 | 1100 | | | | | | | | 14 |
| 15 | UH-V3 | | 10 | 10 | 30 | 3 | | | 2500 | 1100 | 3 | 15 | | | UH-V4 | 16 |
| 17 | | | | | | | | | | | | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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 | | | | | 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:

| | | |
|---|---|---|
| 9 | CCD #001 | 1/29/2025 |

STATE OF MISSOURI
JONATHON M. LEE
NUM

## 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

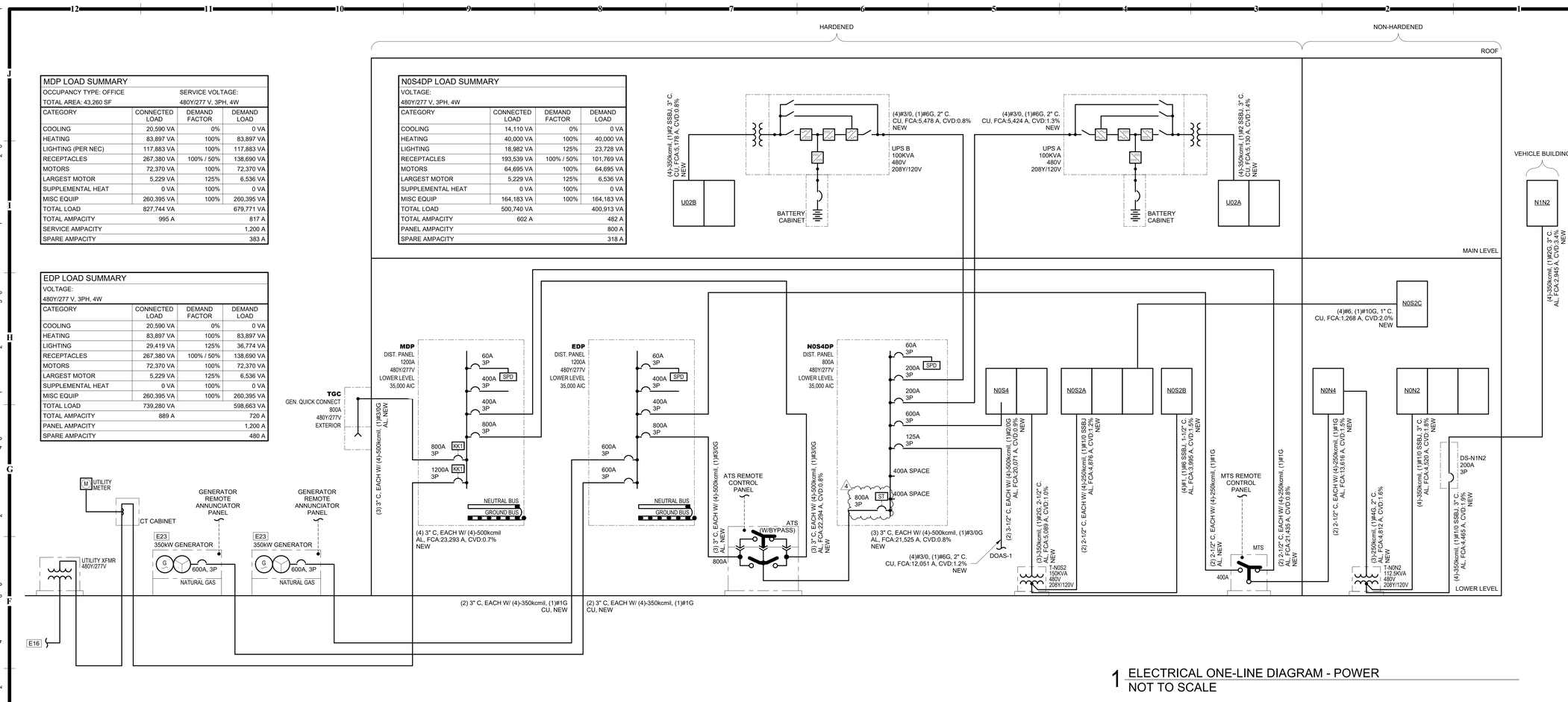
ISSUE DATE: NOVEMBER 1, 2024
HOEFER WELKER #: 138191

ELECTRICAL SCHEDULES

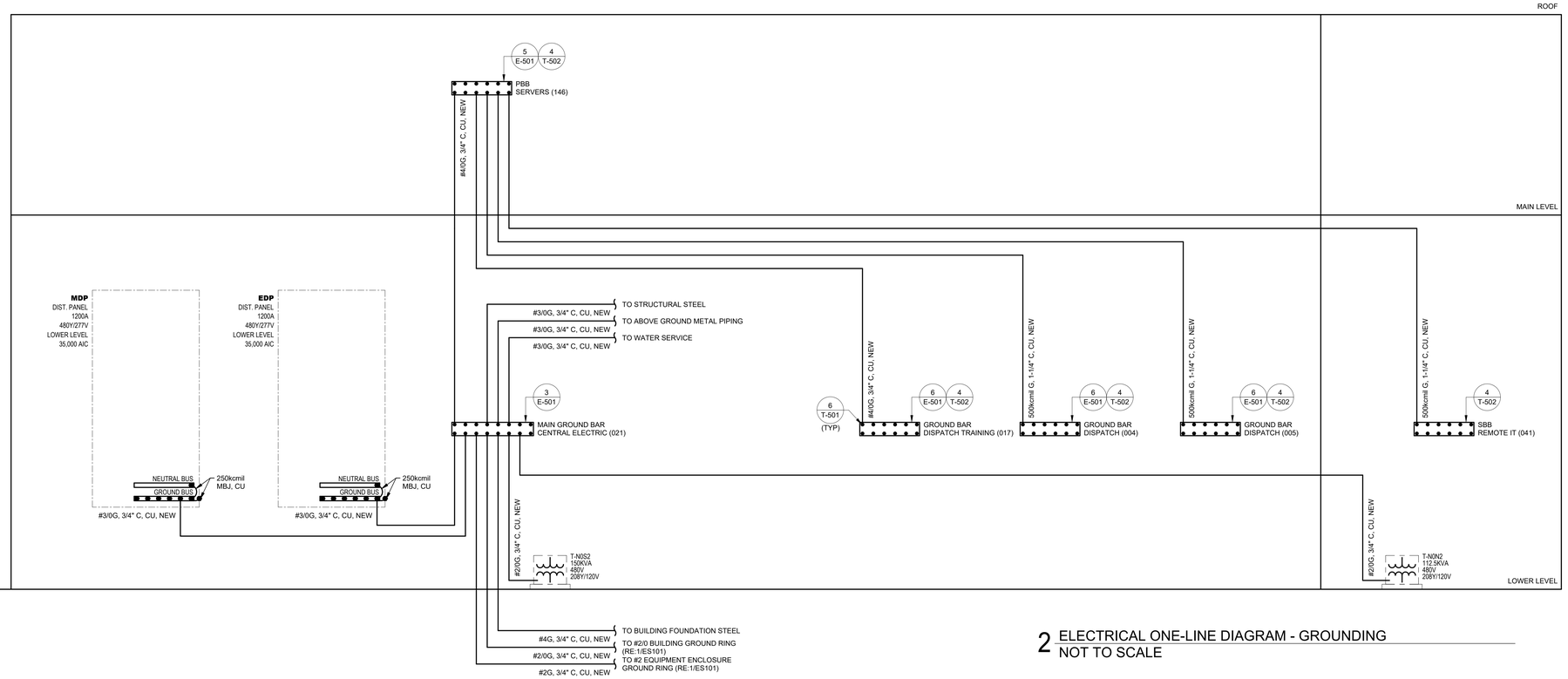
| MDP LOAD SUMMARY | | | |
|---|---|---|---|
| OCCUPANCY TYPE: OFFICE | | SERVICE VOLTAGE: | |
| TOTAL AREA: 43,260 SF | | 480Y/277 V, 3PH, 4W | |
| CATEGORY | CONNECTED LOAD | DEMAND FACTOR | DEMAND LOAD |
| COOLING | 20,590 VA | 0% | 0 VA |
| HEATING | 83,897 VA | 100% | 83,897 VA |
| LIGHTING (PER 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

PACKAGE 2: CONSTRUCTION SET

2 NE TUDOR RD
LEE'S SUMMIT, MISSOURI 64086

REVISION DATES:

| | | |
|---|---|---|
| 4 | ADDENDUM #4 | 11/26/2024 |

STATE OF MISSOURI
JONATHON M. LEE
NUMBER PE-2021003162
11/25/2024
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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REVISION DATES:

| | | |
|---|---|---|
| 3 | ADDENDUM #3 | 11/18/2024 |

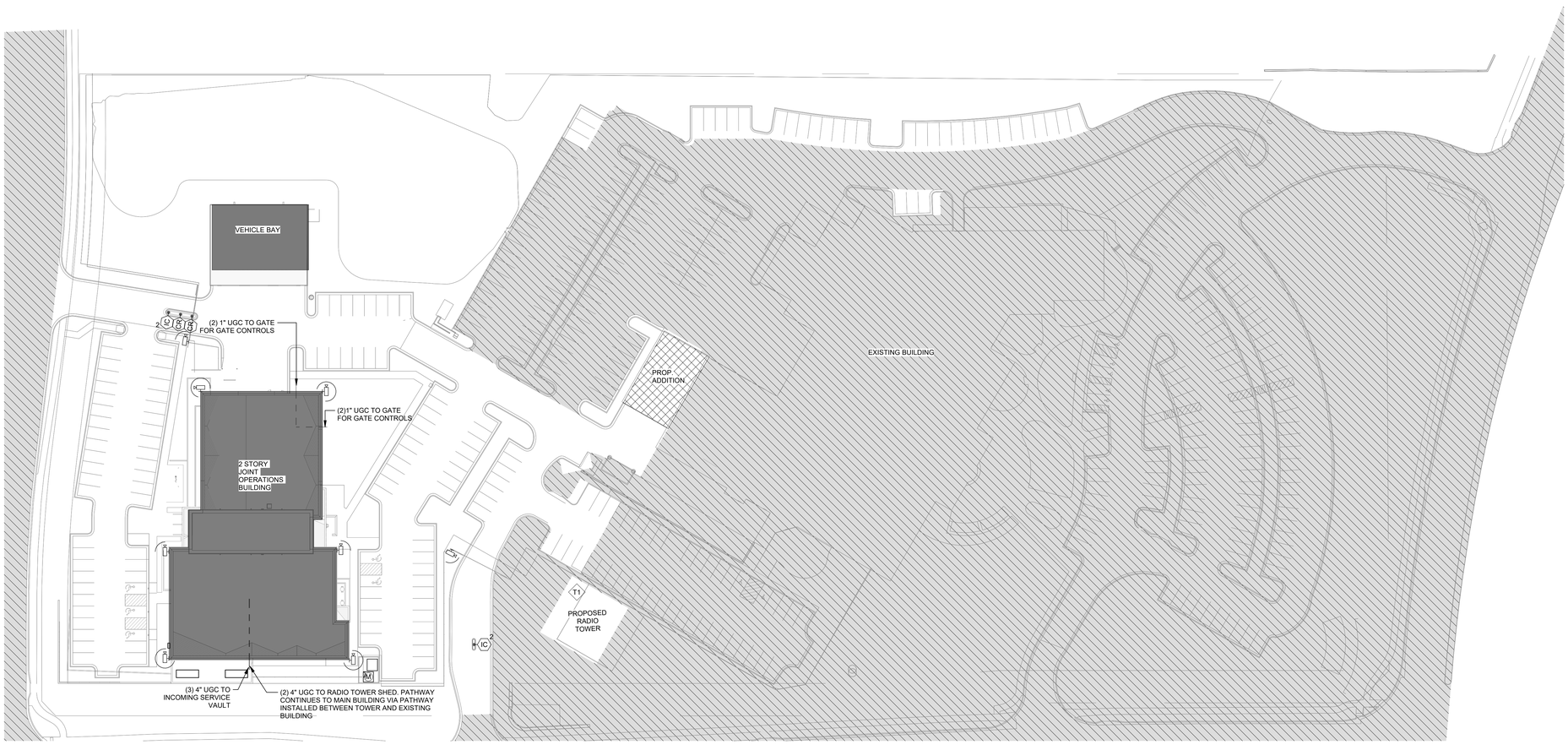
JONATHON M. LEE — STATE OF MISSOURI — NUMBER PE-2021003161 — 11/8/2024 — REGISTERED PROFESSIONAL ENGINEER

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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

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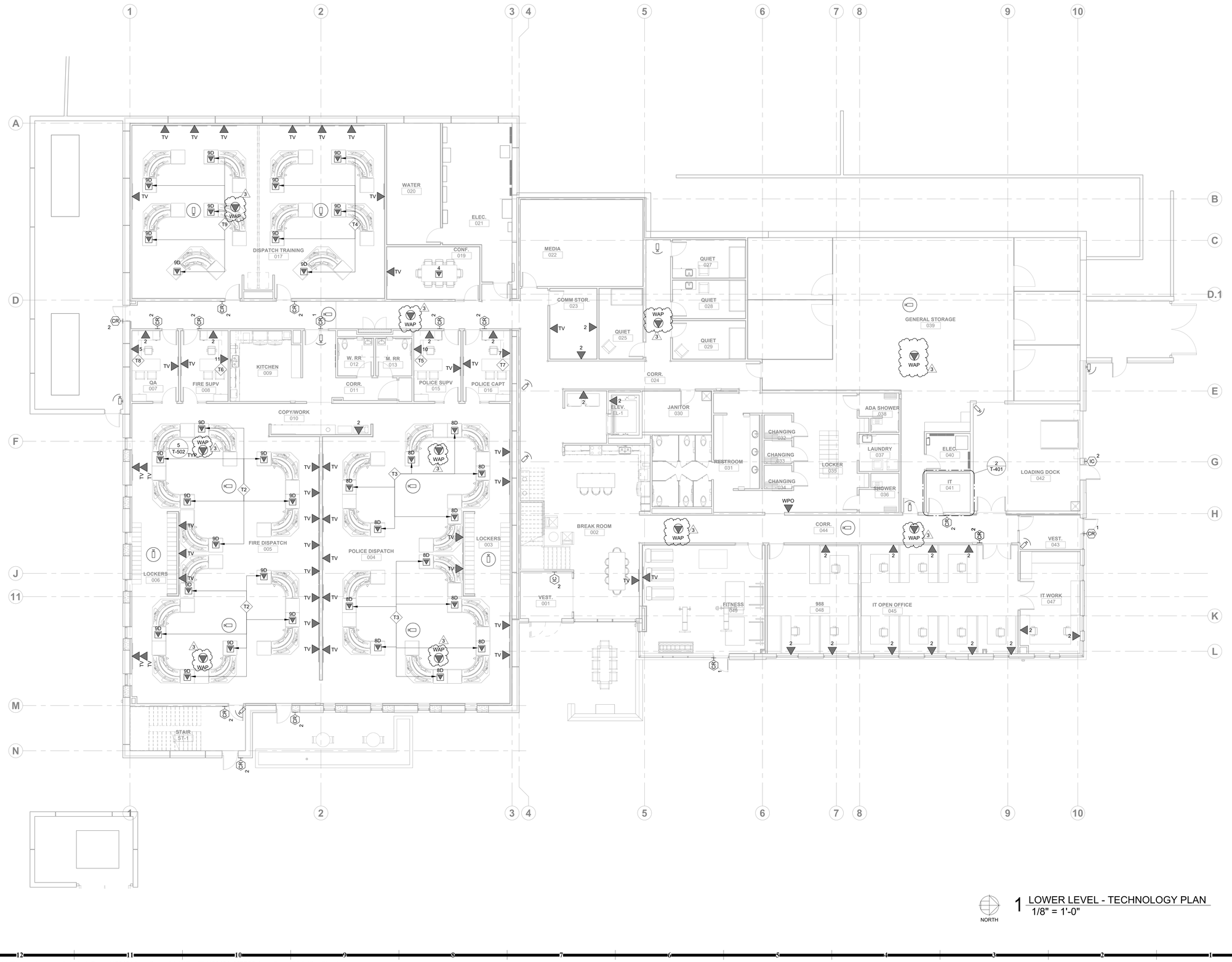
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JONATHON M. LEE
NUMBER PE-2021003162
10/30/2024
PROFESSIONAL ENGINEER

PROFESSIONAL SEAL

TS100

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

TECHNOLOGY SITE PLAN




NORTH

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

**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 (5) 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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# LEE'S SUMMIT JOINT OPERATIONS FACILITY

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PROFESSIONAL SEAL

T-100

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

NORTH

MAIN LEVEL - TECHNOLOGY PLAN




NORTH

1 LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN
1/8" = 1'-0"

**GENERAL NOTES:**

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.


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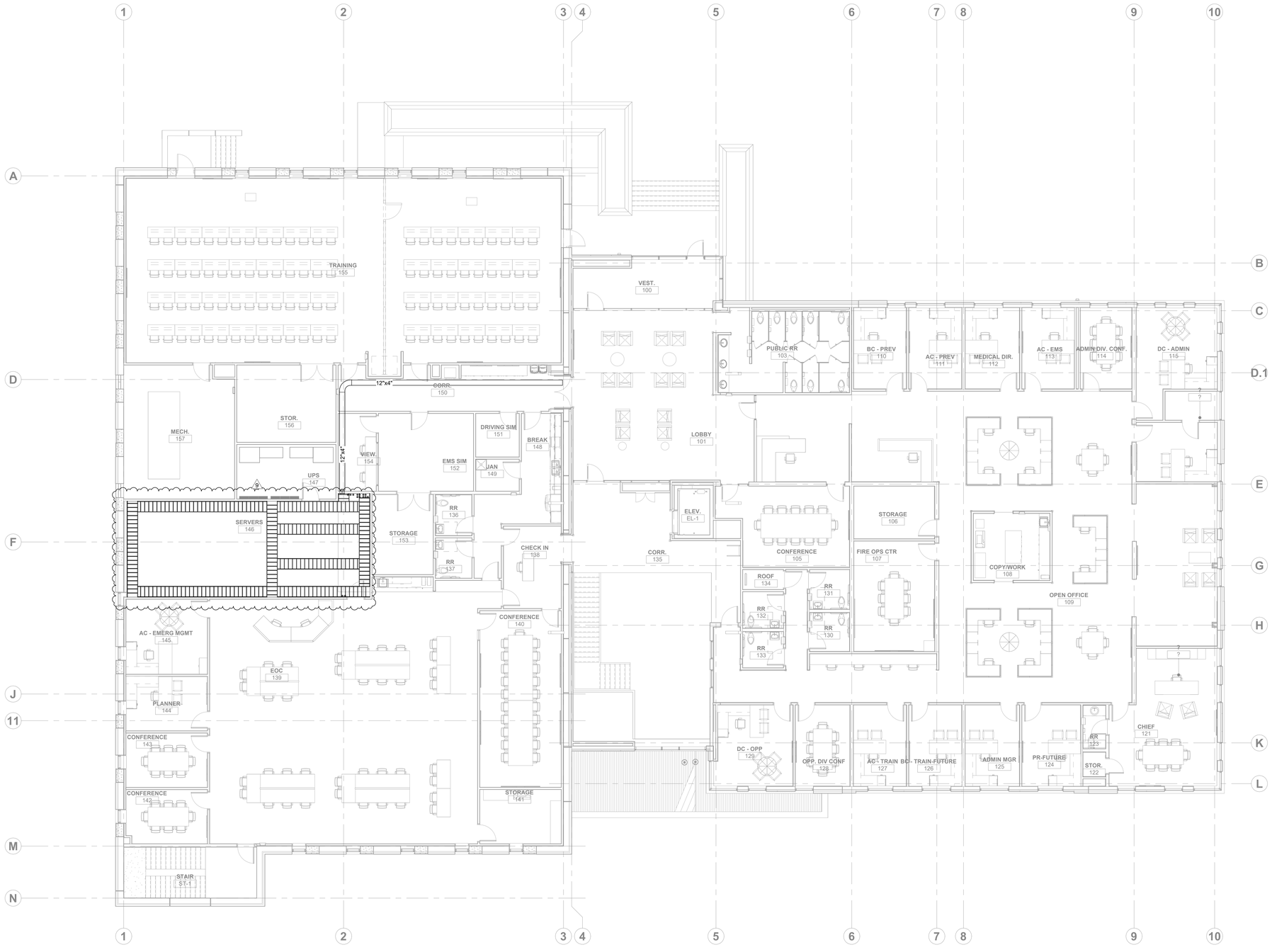
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LOWER LEVEL - TECHNOLOGY CABLE TRAY PLAN




NORTH

1 MAIN LEVEL - TECHNOLOGY CABLE TRAY PLAN
1/8" = 1'-0"

**GENERAL NOTES:**

1. REFER TO SHEET TG001 FOR GENERAL TECHNOLOGY NOTES.

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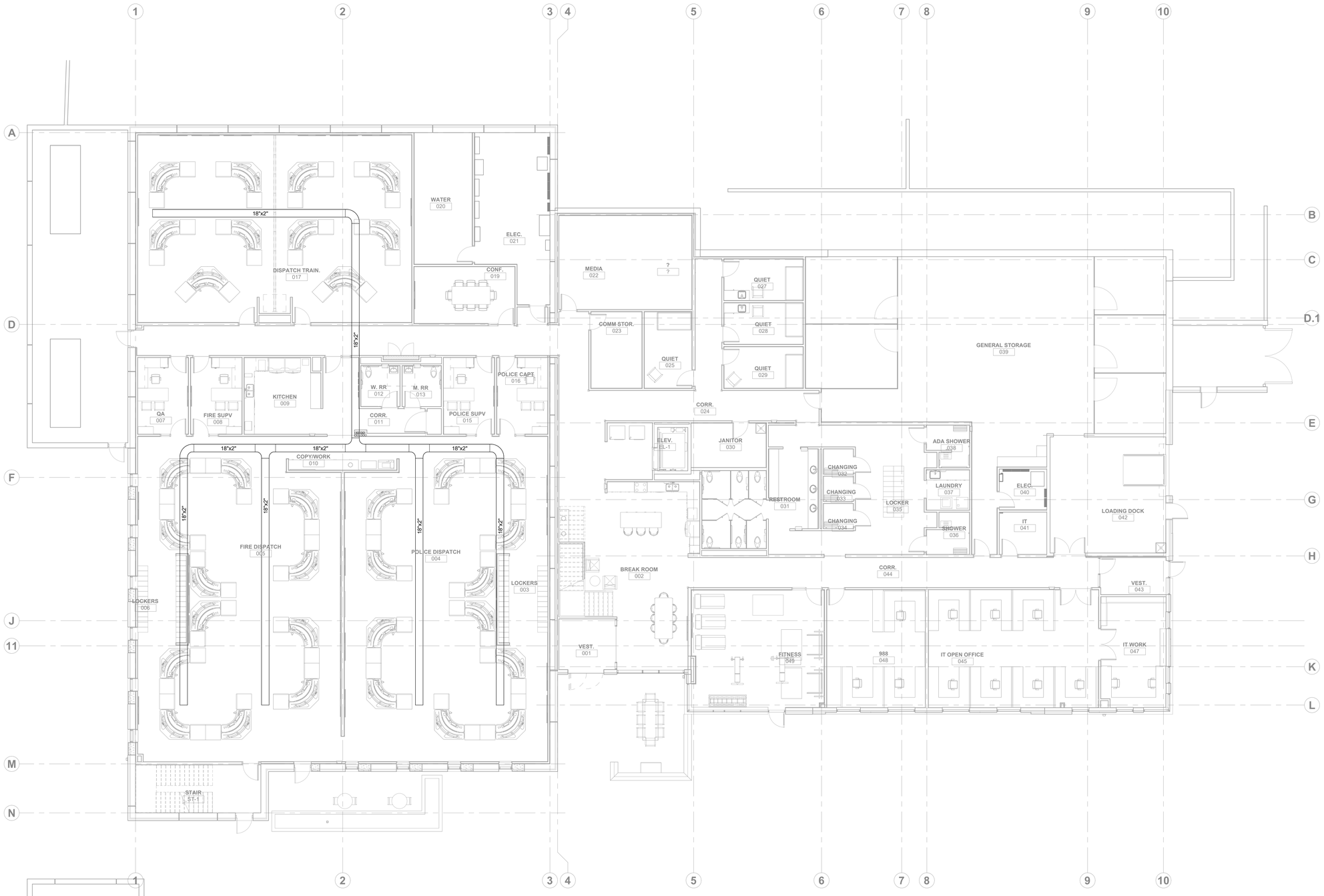
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T-111

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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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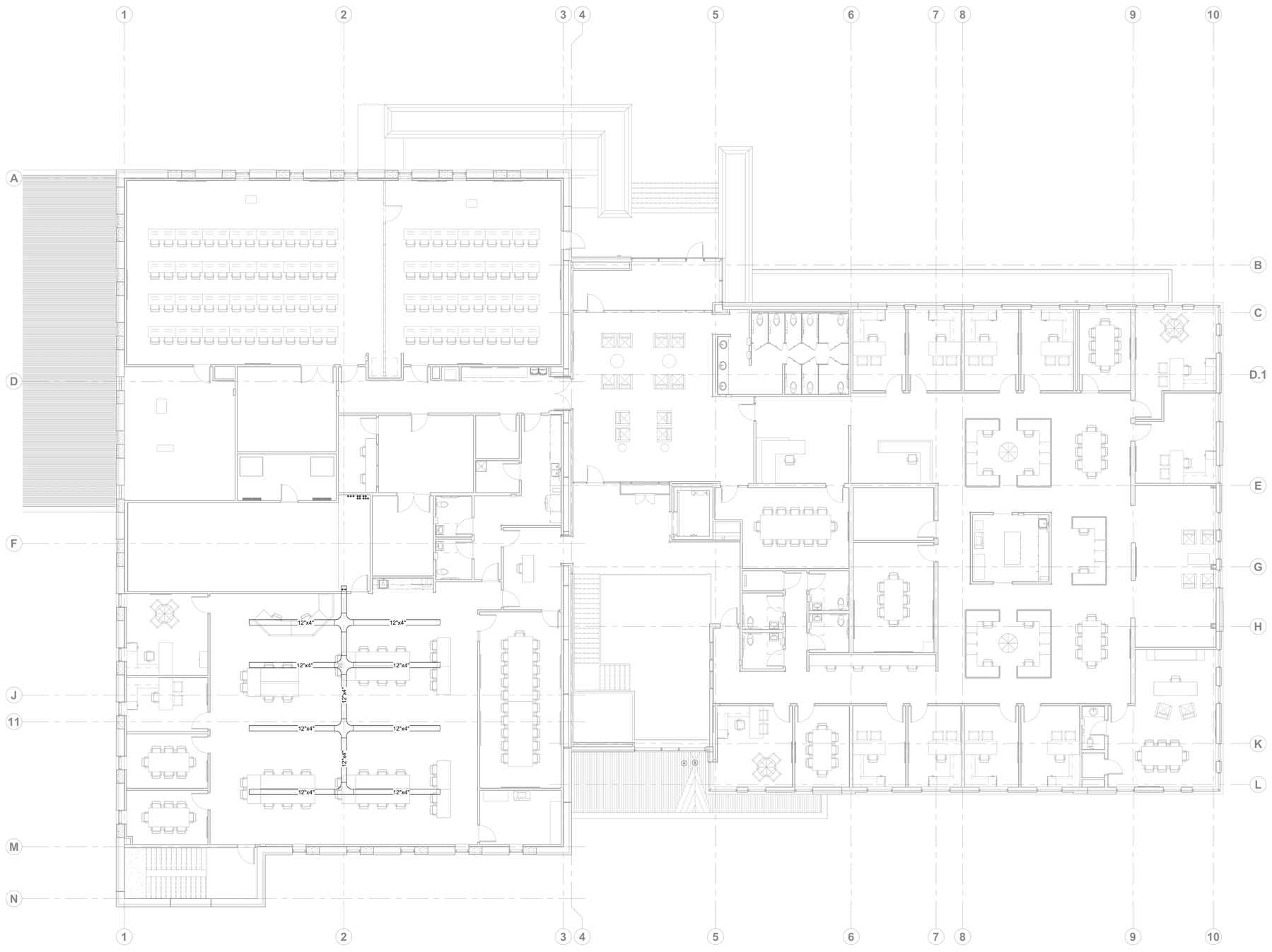
T-120

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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

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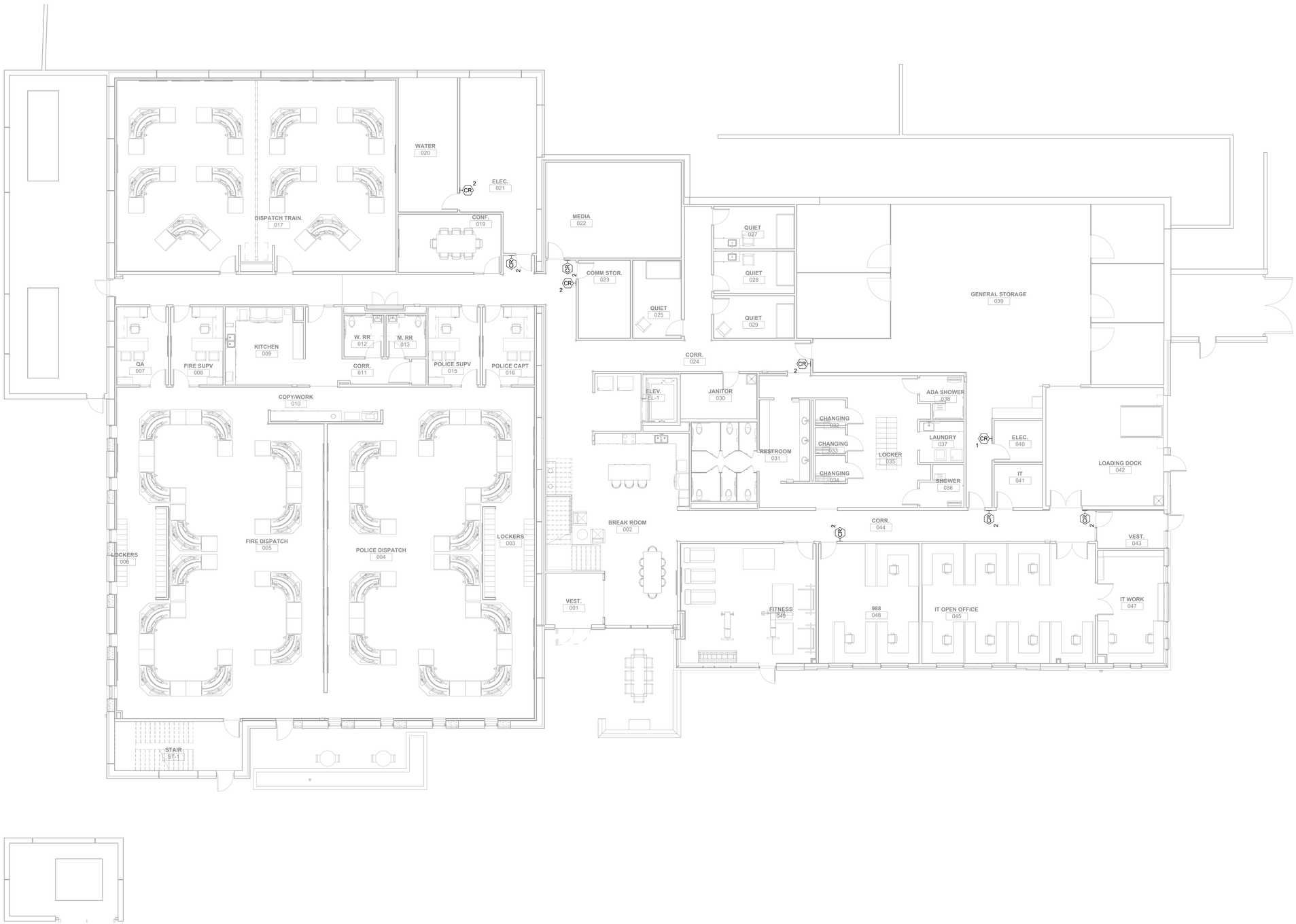
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PROFESSIONAL SEAL

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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