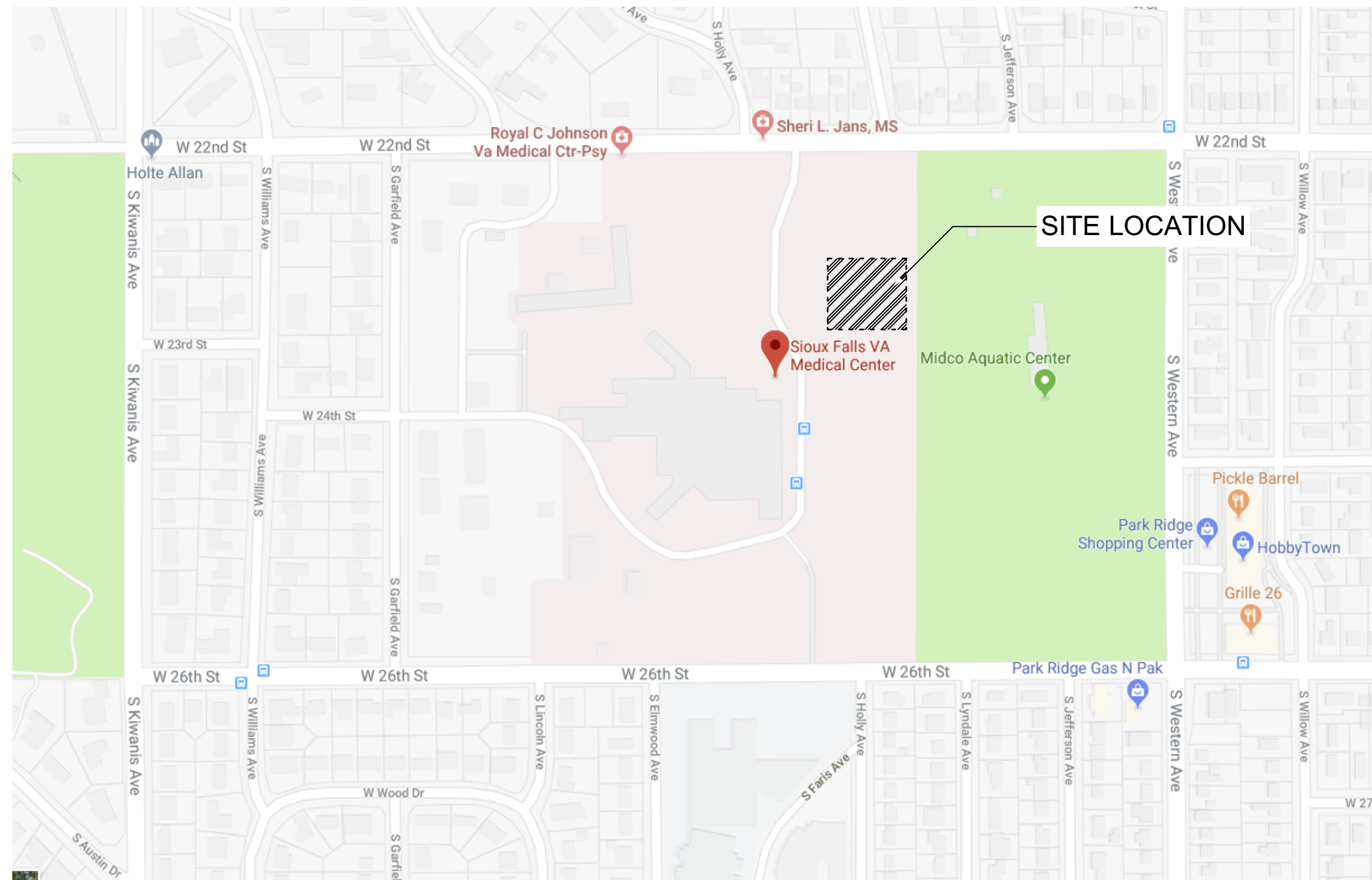


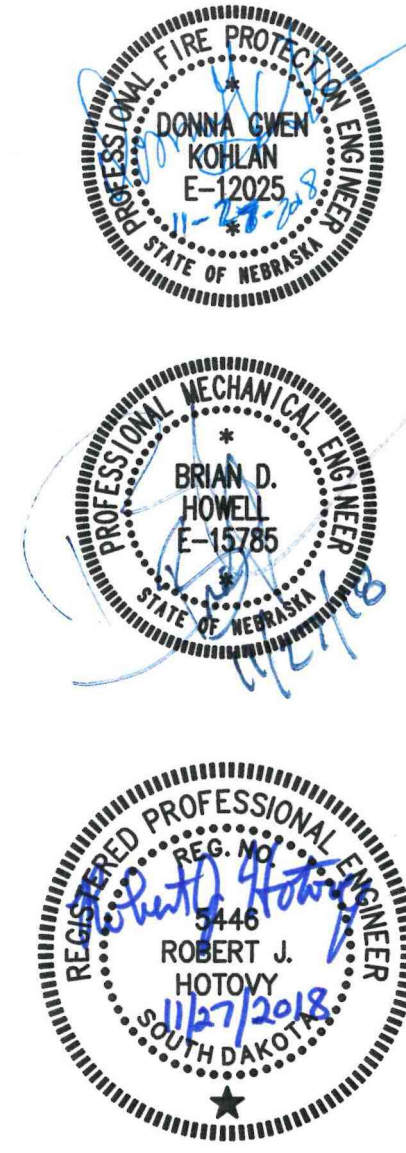
SIoux FALLS VA HEALTH CARE SYSTEM BUILDING 38 UPGRADE

2501 W 22nd St
SIoux FALLS, SD 57105

OWNER: NWVAHCS
CONTACT:
#Client Full Name
2501 W 22nd St
SIoux FALLS, SD 57105



GENERAL	
G1001	COVER SHEET
G1002	LIFE SAFETY
G1003	FIRST FLOOR PHASING PLAN
ARCHITECTURAL	
A0001	FIRST FLOOR DEMOLITION PLAN
AE101	FIRST FLOOR PLAN
AC101	FIRST FLOOR REFLECTED CEILING PLAN
AE201	ELEVATIONS AT ENTRY
AE301	ENLARGED PLANS AND TOILET ELEVATION
AE501	SCHEDULES & DETAILS
AF701	FIRST FLOOR FINISH PLAN AND FINISH SCHEDULE
FIRE PROTECTION	
FG101	GENERAL FIRE SUPPRESSION NOTES, DETAIL AND SYMBOLS
FD101	FIRE SUPPRESSION DEMOLITION PLAN
FX101	FIRE SUPPRESSION PLAN
MECHANICAL	
MG101	GENERAL MECHANICAL NOTES AND SYMBOLS
MD101	MECHANICAL DEMOLITION PLAN
MH101	HVAC PLAN
M-501	MECHANICAL DETAILS
M-701	MECHANICAL SCHEDULES
PLUMBING	
PG101	GENERAL PLUMBING NOTES AND SYMBOLS
PD101	PLUMBING DEMOLITION PLAN
PL101	PLUMBING PLAN
ELECTRICAL	
EG101	GENERAL ELECTRICAL NOTES AND SYMBOLS
ED101	ELECTRICAL DEMOLITION PLAN
EL101	LIGHTING PLAN
EP101	POWER AND SPECIAL SYSTEMS PLAN
E-501	ELECTRICAL SCHEDULES AND RISER DIAGRAM



C9 DRAWING INDEX

- GENERAL NOTES:**
- Construction hours may be 6 am to 6 pm. However demolition and other loud noise operation must be done after hours. The building will be occupied during normal business hours. Most contractor work will need to be completed during evenings and weekends.
 - Either exit is acceptable for accessing the work area and removing debris. However only one shall be used (contractor option) throughout the project.

ALTERNATES:
1. BASE BID TO REPLACE EXISTING HVAC DIFFUSERS.
ALTERNATE IS TO CLEAN EXISTING HVAC DIFFUSERS FOR REUSE.

C1 OWNER/TENANT INFORMATION

C3 PROJECT LOCATION MAP

D8 ALTERNATES

D9 GENERAL NOTES

A ABV ABOVE AFF ABOVE FINISHED FLOOR ASC ABOVE SUSPENDED CEILING ACC ACCESS ACFL ACCESS FLOOR AP ACCESS PANEL AC ACROUSTICAL ACPL ACROUSTICAL PLASTER ACT ACROUSTICAL TILE ADD ADDENDUM ADH ADHESIVE ADJ ADJACENT/ADJUSTABLE AGG AGGREGATE AIC AIR CONDITIONING ALT ALTERNATE AL ALUMINUM ANC ANCHOR ANCHORAGE AB ANCHOR BOLT ANOD ANODIZED APX APPROXIMATE ARCH ARCHITECTURAL AD AREA DRAIN ASB ASBESTOS AT ASPHALT TILE AUTO AUTOMATIC	B BP BACK PLASTER BSMT BASEMENT BW BOTH WAYS BRG BEARING BM BEARING PLATE BEL BELOW BET BETWEEN BVL BEVELED BIT BITUMINOUS BLK BLOCK BLO BLOCKING BO BOARD BS BOTH SIDES BOT BOTTOM BRK BRICK BRZ BRONZE BLDG BUILDING BUR BUILT UP ROOFING BBD BULLETIN BOARD	C CAB CABINET CPT CARPET CAS CASSETT CI CAST IRON GIP CAST IN PLACE CONCRETE CST CAST STONE CB CATCH BASIN CAL CALK (INO) CEM CEMENT CEM1 CEMENT CEM2 CEMENT CER CERAMIC CT CERAMIC TILE CHS CHAIR SEAT CHM CHAMFER CIR CIRCUMFERENCE CLR CLEAR (ANCE) CLS CLOSURE COL COLUMN COMB COMBINATION COMP COMPARTMENT COMPO COMPOSITION COMP COMPRESS (ED) (ION) CONC CONCRETE CMU CONCRETE MASONRY UNIT CONSTR CONSTRUCTION CONT CONTINUOUS OR CONTINUE CONTR CONTRACT (OR) CJ CORNER JOINT CPR COOPER CS CORNER GUARD CTR COUNTER CFL COUNTER FLASHING CFL COUNTER FLASHING CS COUNTERTOP FRS FIRE RESISTANT COATING FRS FIRE RESISTANT CUB CUBIC CYD CUBIC YARD	D DPR DAMPER DIP DAMP PROOFING DL DEAD LOAD DEM DEMOLISH/DEMOLITION DMT DEMOUNTABLE DEP DEPRESSED DET DETAIL DIA DIAGONAL DIAM DIAMETER DIM DIMENSION DM DIMENSION DIV DIVISION DOR DOOR DA DOUBLE ACTING DL DOUBLE LEAF DVA DOVETAIL ANCHOR DTS DOVETAIL ANCHOR SLOT DRAIN DRAIN DRAIN TILE DRAIN TILE DWR DRAWER DWG DRAWING DFW DRINKING FOUNTAIN DWB DUMBWATER	E E EAST ELEC ELECTRICAL (AL) ELEC ELECTRICAL PANELBOARD EWC ELECTRICAL WATER COOLER ELEV ELEVATOR EMER EMERGENCY ENC ENCLOSURE (URE) EQ EQUAL EQU EQUIPMENT ESC ESCALATOR EST ESTIMATE EXH EXHAUST EXST EXISTING EB EXPANSION BOLT EXP EXPOSED EXT EXTERIOR	F FB FACE BRICK POC FACE OF CONCRETE FOF FACE OF FINISH FOM FACE OF MASONRY FOS FACE OF STUDS FAS FASTEN, FASTENER FN FENCE FIB FIBERBOARD FG FIBERGLASS FIN FINISH (ED) FFE FINISHED FLOOR ELEVATION FLL FINISHED FLOOR LINE FA FIRE ALARM FEX FIRE EXTINGUISHER CABINET FHS FIRE HOSE STATION FIRE FIRE FRS FIRE RESISTANT COATING FRS FIRE RESISTANT CUB CUBIC CYD CUBIC YARD	G GAGE, GAUGE GAL GALVANIZED GI GALVANIZED IRON GP GALVANIZED STEEL SHEET GSK GASKET (ED) GC GENERAL CONTRACT GL GLASS, GLAZING GLB GLASS BLOCK GLF GLASS FIBER GSM GLAZED CONC. MASONRY UNITS GST GLAZED STRUCTURAL TILE GB GRAB BAR GRD GRADE, GRADING GRN GRANITE GRAV GRAVEL GF GROUND FACE GT GROUT GYP GYPSUM LATH GYP GYPSUM PLASTER GPT GYPSUM TILE GWB GYPSUM WALL BOARD	H HBD HARDBOARD HDW HARDWARE HWD HARDWOOD HJT HEAD JOINT HDR HEADER HTG HEATING HVAC HEATING/VENTILATING/AIR COND. HD HEAVY DUTY HT HEIGHT HC HOLLOW CORE HGM HOLLOW METAL HOR HORIZONTAL HWH HOT WATER HEATER	I I INCLUDE (D) (ING) ID INSIDE DIAMETER INS INSULATE (D) (ION) INT INTERIOR INV INVERT IPS IRON PIPE SIZE	J JC JANITOR'S CLOSET JT JOINT	K KPL KICK PLATE KIT KITCHEN KNO KNOCKOUT	L LBL LABEL LAB LABORATORY LAD LADDER LAG LAG BOLT LAM LAMINATE (D) LAV LAVATORY LAV LEFT HAND LT LIGHT LIC LIGHT CONTROL LP LIGHT PROOF LW LIGHTWEIGHT CONCRETE LMS LIMESTONE LTL LINTEL LL LIVE LOAD LVR LOUVER LPT LOW POINT	M MB MACHINE BELT MH MANHOLE MFR MANUFACTURE (ER) MAS MASONRY MCO MASONRY OPENING MTL MATERIAL MEX MAXIMUM MECH MECHANIC (AL) MC MEDIUM MEM MEMBER MEMB MEMBRANE MET METAL MFD METAL FLOOR DECKING MFR METAL ROOF DECKING M METER ML MILLIMETER MLW MILLWORK MM MINIMUM MIR MIRROR MIS MISCELLANEOUS MOD MOLDING, MouldING MOR MOR RECEPTOR MT MOUNT (ED) (ING) MOV MOVABLE MULL MULLION	N NAT NATURAL NICK NICKEL NRC NOISE REDUCTION COEFFICIENT NOM NOMINAL N NORTH NIC NOT IN CONTRACT NTS NOT TO SCALE	O OC CENTER OPG OPENING OJ OPEN WEB JOIST OPPOSITE OD OUTSIDE DIAMETER OH OVERHEAD OFCI OWNER FURNISHED CONTRACTOR INSTALLED	P PNL PANEL PBR PANIC BAR PTD PAPER TOWEL DISPENSER PTR PAPER TOWEL RECEPTOR PAR PARALLEL PAR PARALLEL PBD PARTICLE BOARD PTN PARTITION PDS PEDestal PERF PERFORATE (D) PERI PERIMETER PERI PERIMETER PLAS PLASTER PLAM PLASTIC LAMINATE PLM PLATE PG PLATE GLASS PLYWOOD PVC POLYVINYL CHLORIDE PE PORCELAIN ENAMEL PTC PORTLAND CEMENT CONCRETE PFC POUNDS PER CUBIC FOOT PLF POUNDS PER LINEAL FOOT PSF POUNDS PER SQUARE FOOT SQ SQUARE PCC PRECAST CONCRETE PFB PREFABRICATE (D) MOL MOLDED PRF PREFORMED PC PRESTRESSED CONCRETE PL PROPERTY LINE	Q QT QUARRY TILE	R RBT RABBIT, REBATE RAD RADIUS RWC RAINWATER CONDUCTOR REF REFERENCE REFLECT (ED) (IVE) (OR) REFR REFRIGERATOR REG REGISTER REIN REINFORCE (D) (ING) RCP REINFORCED CONCRETE PIPE REM REMOVE RES RESILIENT RET RETURN RA RETURN AIR REV REVISION (S) REVISED RH RIGHT HAND ROW RIGHT OF WAY RISER RD ROOF DRAIN RHF ROOF HATCH RFG ROOFING RM ROOM RO ROUGH OPENING RB RUBBER BASE RBT RUBBER TILE	S SGL SAFETY GLASS SCH SCHEDULE SCH SCREEN SCN SCANT SEALANT SEC SECTION STG SEATING SHEER SH SHELF, SHELVING SIM SIMILAR SL SLEEVE SC SOLID CORE SP SOUNDPROOF SOUTH SPEAKER SPECIAL SPEC SPECIFICATION (S) SS STAINLESS STEEL STD STANDARD STA STATION ST STEEL STG STORAGE SD STORM DRAIN STRUCT STRUCTURAL SCT STRUCTURAL CLAY TILE SUS SUSPENDED SYMM SYMMETRY (ICAL) SYN SYNTHETIC SYS SYSTEM	T TKBD TACK BOARD TEL TELEPHONE TEL TELEVISION TC TERRA COTTA TERR TERRAZZO THK THICK (NESS) THR THRESHOLD TPTN TOILET PARTITION TPD TOILET PAPER DISPENSER TOL TOLERANCE T&G TONGUE AND GROOVE TOL TOP OF SLAB TST TOP OF STEEL TW TOP OF WALL TOWEL TOWEL BAR TB TRANSOM TR TREAD T TYPICAL	U UC UNDERCUT UNF UNFINISHED UNO UNLESS NOTED OTHERWISE UR URINAL	V V V-JOINT (ED) VB VAPOR BARRIER VAR VARNISH VNR VENEER VERT VERTICAL VERT VERTICAL GRAIN VIN VINYL VBL VINYL BASE VTF VINYL FABRIC VT VINYL TILE VCT VINYL COMPOSITE TILE	W WSCOT WAINSCOT WALL TO WALL WH WALL HUNG WC WATER CLOSET WP WATERPROOFING WR WATER REPLENT WS WATER STOP WWF WELDED WIRE FABRIC W WEST WB WHEEL BUMPER WHD WIDTH, WIDE WIN WINDOW WG WIRE GLASS WM WIRE MESH W WITHOUT WD WOOD WPT WORKING POINT WI WROUGHT IRON WML WELDED WIRE MESH
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A5 DRAWING TITLE

DETAIL PLAN NO. (IN REFERENCE TO SHEET GRID AT TOP & RIGHT SIDE)

NOT TO SCALE

SECTION NO. SECTION DETAIL

SHEET NO.

DETAIL (IN REFERENCE TO SHEET GRID AT TOP & RIGHT SIDE)

SHEET NO. (DETAILS REFERENCE TO SHEET ON WHICH THEY OCCUR)

ELEV. NO. ELEVATION MARKER

STRUCTURAL COLUMN GRID

OFFICE 102 ROOM NAME & NUMBER

DOOR NUMBER

KEYNOTE

WALL TAG

LIGHT TAG

ELEVATION MARK

NEW SPOT ELEVATION

REVISION IDENTIFIER

CONTRACT LIMIT LINE

INDICATES NEW DOOR AND/OR WALL

INDICATES EXISTING DOOR AND/OR WALL

INDICATES DOOR AND/OR WALL TO BE REMOVED. SALVAGE DOORS FOR REUSE

INDICATES PATCH EXISTING WALLS AS REQUIRED FOR SMOOTH FINISH

PLAN NORTH

NORTH ARROW

MATERIAL IDENTIFICATION

ACROUSTICAL TILE (ACT)	(LARGE SCALE) ALUMINUM
BRICK	CONCRETE
CONCRETE BLOCK	CONCRETE BLOCK (SOLID)
EARTH	INSULATION (BAT)
EARTH (COMPACTED)	MORTAR (ALSO SAND PLASTER G/WB)
INSULATION (RIGID)	POROUS FILL (COMPACTED)
PLYWOOD OR PARTICLE BD	TILE (CERAMIC OR QUARRY)
STEEL (LARGE SCALE)	WOOD (ROUGH)
STONE	SHIM
WOOD (FINISH)	

F1 ABBREVIATION LIST

F5 SYMBOL KEY

F7 MATERIAL IDENTIFICATION

F9 DESIGNER LIST & STAMP

Revisions:	Date:	CONSULTANT	ARCHITECT/ENGINEER OF RECORD	STAMP	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title COVER SHEET	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105
			13100 watertown plank road suite 200 Elm Grove, WI 53122			Approved:		Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Building Number 38
			Nagel Architects Project Number: 438-18-105					Issue Date 11/27/2018	Drawing Number G1001
								Checked BJL	
								Drawn BFW	

SIoux FALLS VAMC
SIoux FALLS, SD
BUILDING 38 UPGRADE
CODES APPLIED:
IBC 2015
NFPA 101 LIFE SAFETY
NFPA 99 STANDARD FOR HEALTH CARE FACILITIES
NFPA 220 STANDARD ON TYPES OF BUILDING CONSTRUCTION
NFPA 221 STANDARD FOR FIRE WALLS AND FIRE BARRIER WALLS
AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
BUILDING INDUSTRY CONSULTING SOCIETY INTERNATIONAL (BICSI)

EXISTING CONDITIONS/ ASSUMPTIONS
CONSTRUCTION TYPE - IIIA (3A)
FULLY SPRINKLED

BUILDING CLASSIFICATION
OVERALL OCCUPANCY TYPE | B - BUSINESS | IBC 304.1

OCCUPANCY LOAD AND EXIT WIDTH

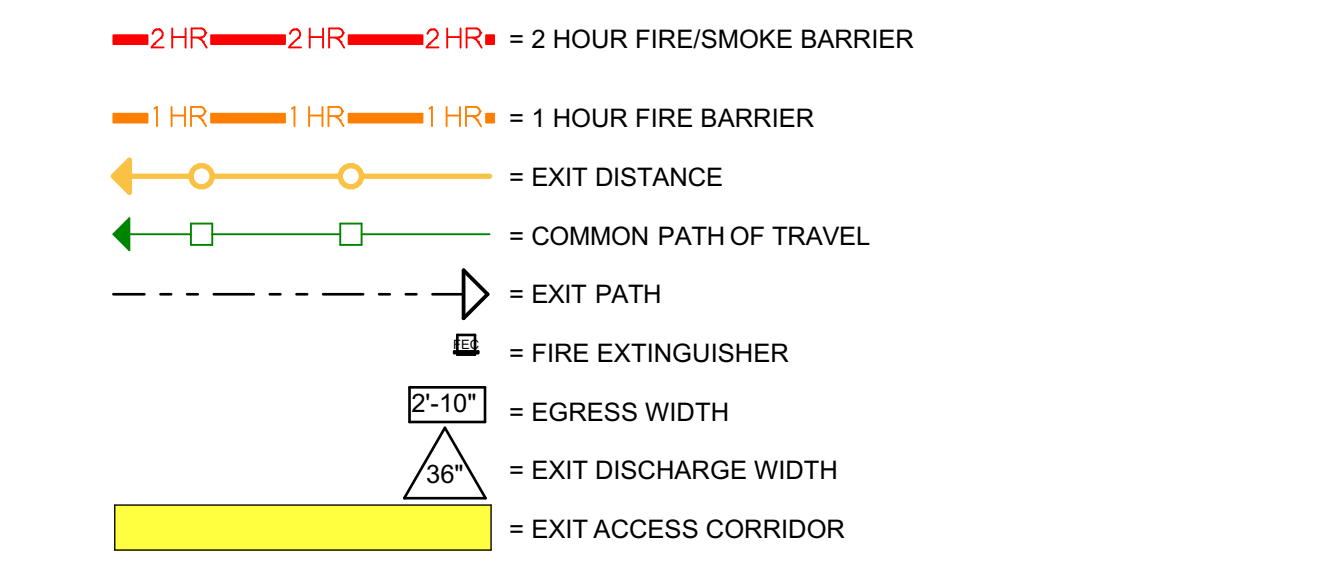
ROOM / AREA	OCCUPANCY	SQ. FT. / PERSON	# OF PERSONS	EXITS REQ.	REQ. EXIT WIDTH	NOTES
*107 / 954	A3	15 NET	61	2	36"	
108 / 2758	B	100 GROSS	28	1	36"	
141 / 4,173	B	100 GROSS	42	1	36"	
TOTAL AREA OCCUPANCY LOAD			246	2	36"	
*954	A3	15 NET	49	2	36"	

*ROOM 107 TO HAVE POSTED OCCUPANCY OF 49 PERSONS
TOTAL OCCUPANT LOAD = 295 PERSONS
EGRESS CAPACITY: 295 PERSONS x 0.15 INCHES/PERSON = 45" REQUIRED IBC 1015.3.2
EXITS PROVIDED: (3) EXITS @ 36", (1) EXIT @ 72"
TOTAL EXIT CAPACITY: 180"
EGRESS CAPACITY FOR EACH 36" DOOR IS 240 PERSONS; THE 72" DOOR IS 480 PERSONS
NUMBER OF EXITS REQUIRED: 2 MIN IBC 1006.3.1
MAXIMUM TRAVEL DISTANCE:
TYPE A OCCUPANCY: W/SPRINKLED = 250'
TYPE B OCCUPANCY: W/SPRINKLED = 300'
DEAD END CORRIDOR LIMIT: 50' IBC 1020.4
COMMON PATH OF TRAVEL IBC 1006.2.1
TYPE A OCCUPANCY: W/SPRINKLED = 75'
TYPE B OCCUPANCY: W/SPRINKLED = 100'
INTERIOR FINISHES IBC 803.11, NFPA 101 39.3.3
FLAME SPREAD RATINGS
STAIRWAYS: B
CORRIDORS: B
ROOMS: B*
CARPET RATING REQUIREMENT: B MIN
* C CRATING ADMINISTRATIVE SPACES AND ROOMS WITH 4 PERSONS OR LESS

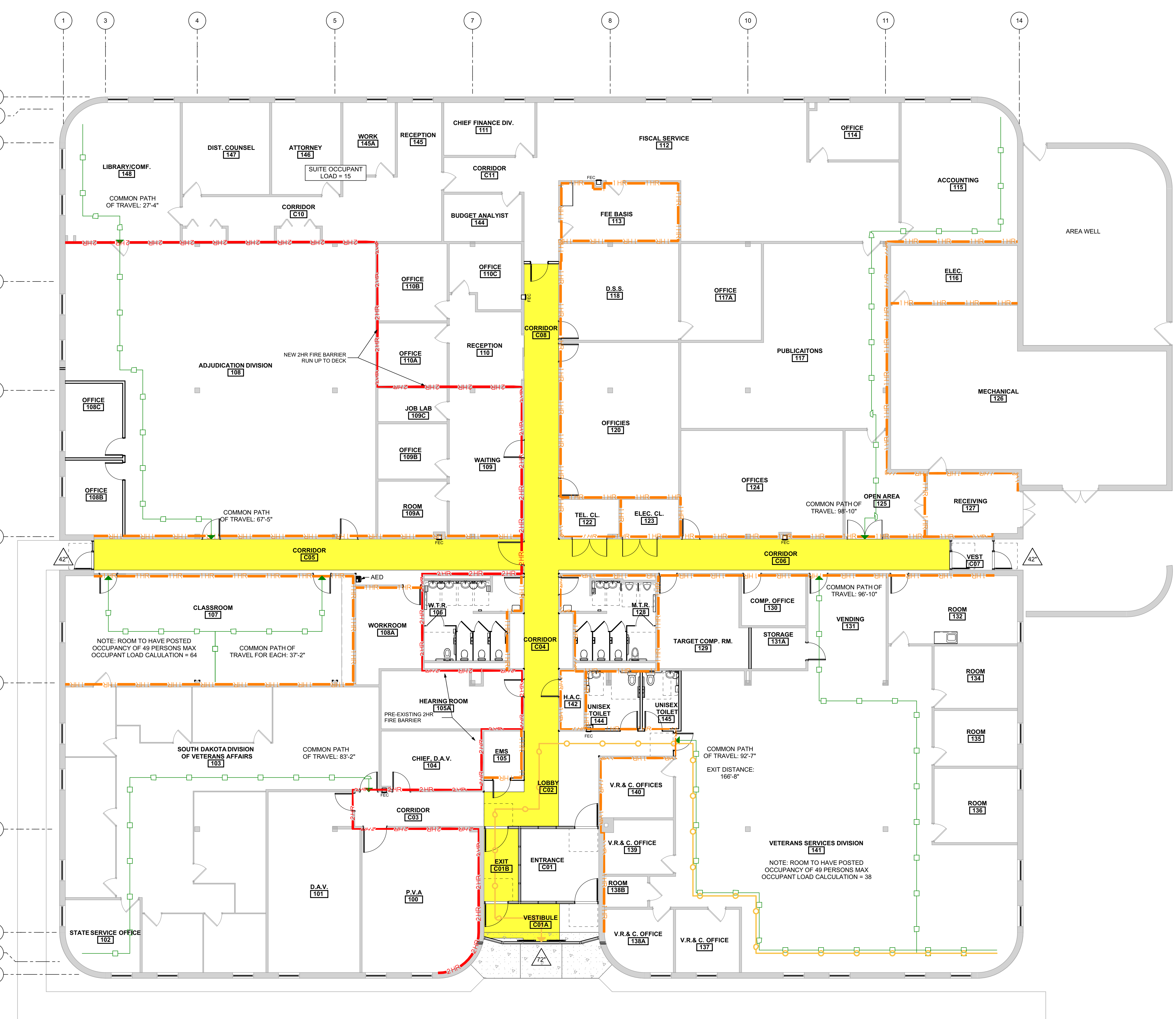
CONSTRUCTION

FIRE RATINGS	IN HOURS	IBC
EXTERIOR BEARING WALL	2	IBC 601
EXTERIOR NON-BEARING WALLS	1/0	IBC 602
INTERIOR BEARING WALLS	1	
PERMANENT PARTITIONS	0	
SHAFTS	1	IBC 708, 717.6 NFPA 101 8.6.5 (1)
COLUMNS	1	
TRUSSES, GIRDERS, BEAMS	1	
FLOOR CONSTRUCTION	1	
ROOF CONSTRUCTION	1/0	IBC 602
EXTERIOR DOORS & WINDOWS	1/0	
INNER COURT WALLS	N/A	
CORRIDORS	0	IBC 407.3 SMOKE PARTITION PER SECTION 710
PARAPETS		NOT REQUIRED
SMOKE COMPARTMENTS	N/A	NOR REQUIRED IN "B" OCCUPANCY

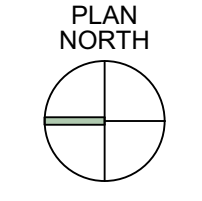
SANITARY CONSIDERATIONS IBC TABLE 2901.1
PLUMBING FIXTURES
OCCUPANCY BASED ON BUSINESS OFFICE: 295
PUBLIC, MALE: 1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50
TOTAL WATER CLOSETS/URNIALS REQUIRED: 4
WATER CLOSET: 4 PROVIDED
URNIALS: 2 PROVIDED
LAVATORIES: 3 REQUIRED
2 PROVIDED*
PUBLIC, FEMALE: 1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50
WATER CLOSETS: 4 REQUIRED
4 PROVIDED
LAVATORIES: 3 REQUIRED
4 PROVIDED
DRINKING FOUNTAINS: 3
*THE 2 UNISEX/ASSISTED FACILITIES WILL PROVIDE THE NECESSARY FIXTURE COUNT PER IBC 2902.1.2



F9 LIFE SAFETY LEGEND



F1 FIRST FLOOR LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"



Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

13100 watertown plank road
suite 200
Elm Grove, WI 53122

magel
architects

Nagel Architects Project Number: 438-18-105

STAMP

Office of
Construction
and Facilities
Management

VA U.S. Department
of Veterans Affairs

Drawing Title
LIFE SAFETY

Approved:

Phase
100% CONSTRUCTION
DOCUMENTATION

Project Title
BUILDING 38 UPGRADE

Project Number
438-18-105

Building Number
38

Location
2501 W 22nd ST SIOUX FALLS, SD 57105

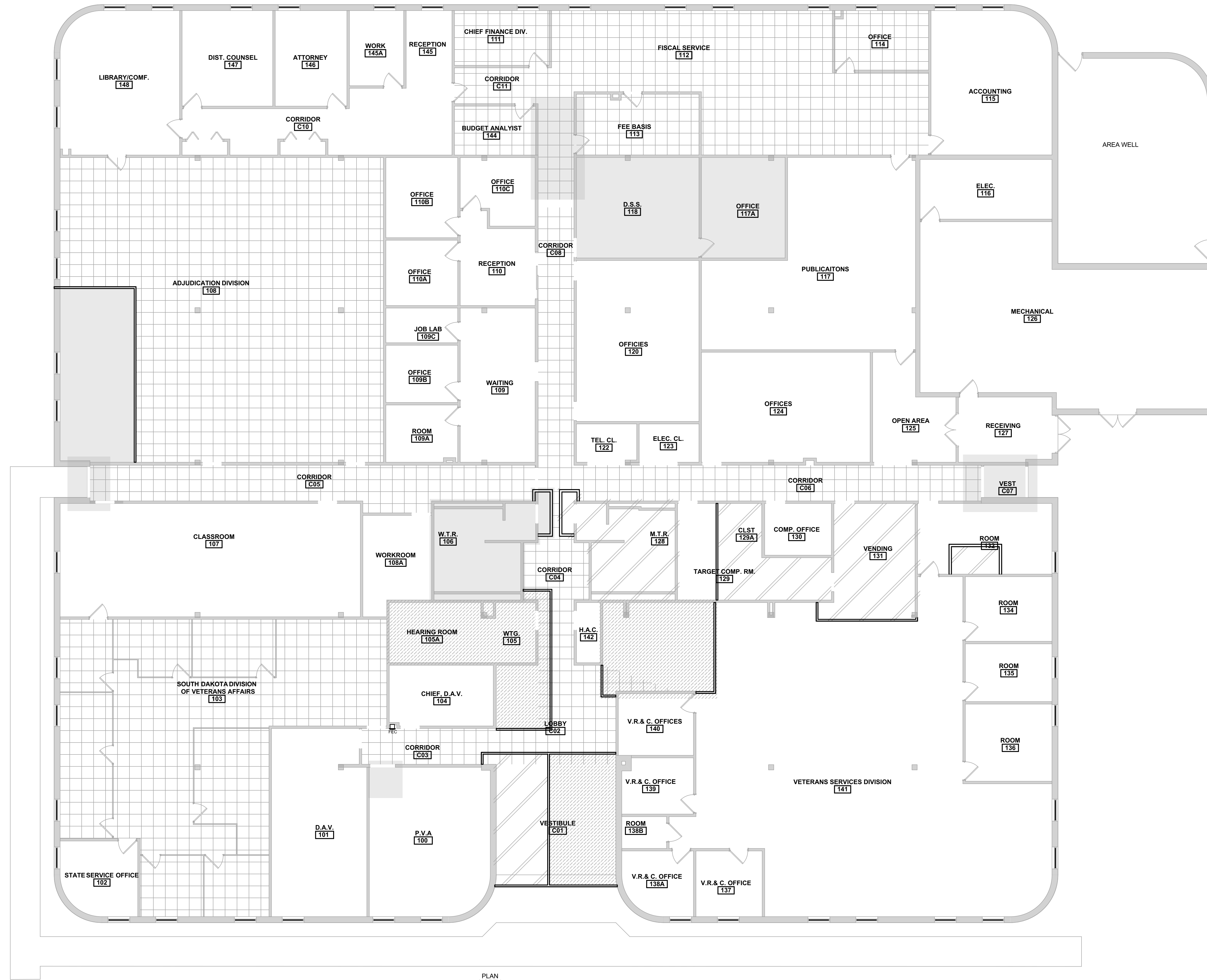
Issue Date
11/27/2018

Checked
BJL

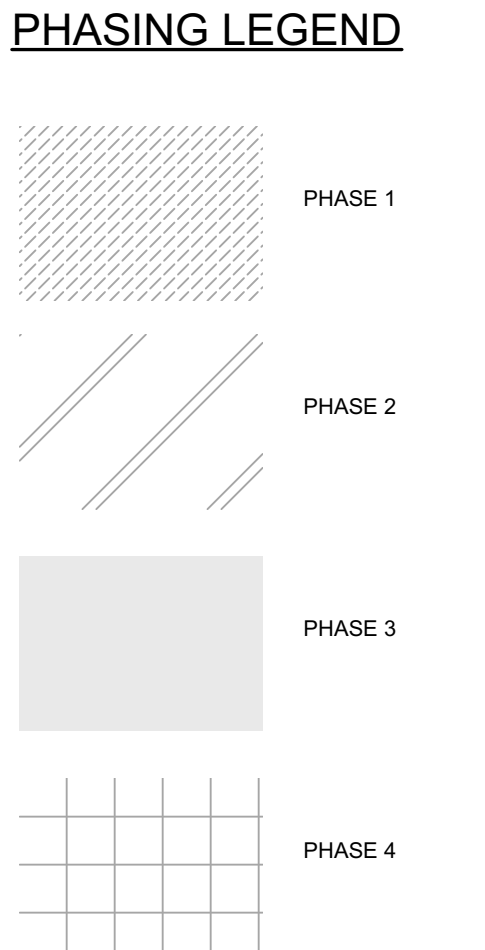
Drawn
BFW

Drawing Number
G1002

- CONSTRUCTION GENERAL NOTES**
- CONTRACTOR SHALL MAINTAIN REQUIRED PATHS OF EGRESS FROM OCCUPIED AREA OF EXISTING BUILDING.
 - CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE.
 - CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL SPACES IN THE BUILDING. ANY DISRUPTION IN SERVICES SHALL BE COORDINATED WITH THE OWNER.
 - CONTRACTOR SHALL PATCH ALL OPENINGS IN FLOOR, ROOF AND WALLS WHICH REMAIN AFTER ALTERATIONS TO BUILDING HAVE BEEN COMPLETED. PATCH TO MATCH EXISTING.
 - NEW WORK SHALL MATCH EXISTING WORK U.N.O.
 - [Hatched] INDICATES PARTITION TYPE. SEE AE501 FOR WALL ASSEMBLY INFORMATION.
 - ALL DRYWALL PARTITIONS SHALL BE TYPE 4, UNLESS NOTED OTHERWISE.
 - PROVIDE FIRE TREATED BLOCKING AT MILLWORK AND WALL HUNG ELEMENTS IN RATED WALLS.
 - [Hatched] INDICATES NEW MILLWORK. SEE AE501 FOR ELEVATIONS AND DETAILS.
 - GRID LINES SHOWN ARE BASED ON EXISTING CONSTRUCTION PLANS.
 - PROVIDE DUST CONTROL & WALK-OFF MATS AROUND THE CONSTRUCTION AREA.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING/REPLACING FURNITURE & DEMOLITION OF SYSTEM FURNITURE NOT BEING REINSTALLED.
 - CONTRACTOR WILL CLEAN UP AREAS UNDER CONSTRUCTION AS TO NOT INTERRUPT DAILY VA OPERATIONS.
 - CONTRACTOR SHALL REPLACE ALL NEW DOORS WITH NEW LEAFS AND REUSE HARDWARE FROM EXISTING DOOR U.N.O.



F1 FIRST FLOOR PHASING PLAN
 SCALE: 1/8" = 1' - 0"
 PLAN NORTH



Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

13100 watertown plank road
suite 200
Elm Grove, WI 53122

nagel
architects

Nagel Architects Project Number: 438-18-105

STAMP

Office of
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Management

VA U.S. Department
of Veterans Affairs

Drawing Title
FIRST FLOOR PHASING PLAN

Approved:

Phase
100% CONSTRUCTION
DOCUMENTATION

Project Title
BUILDING 38 UPGRADE

Location
2501 W 22nd ST SIOUX FALLS, SD 57105

Issue Date
11/27/2018

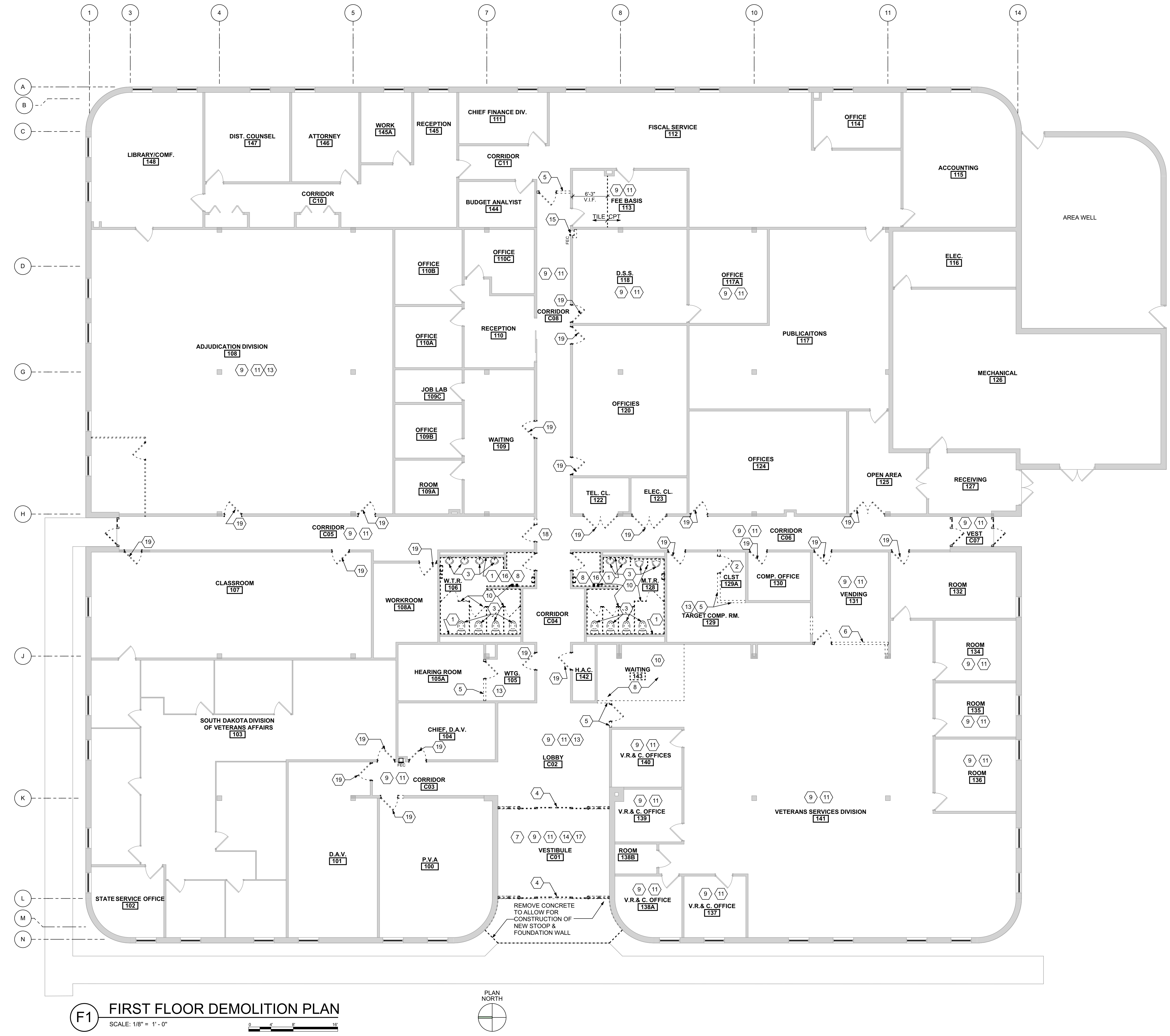
Checked
BJL

Drawn
BFW

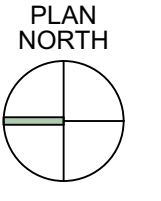
Project Number
438-18-105

Building Number
38

Drawing Number
G1003



F1 FIRST FLOOR DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



- DEMOLITION NOTES - GENERAL**
- ALL EXISTING LIGHTING, SWITCHES, RECEPTACLES, FIRE ALARM, DATA, AND OTHER ELECTRICAL DEVICES AND ASSOCIATED WIRING AND CONDUIT TO BE MOVED PER NEW CONSTRUCTION.
 - ALL WIRING PASSING THROUGH AREA OF DEMOLITION WHICH IS NOT PART OF THE DEMOLITION SHALL REMAIN SUPPORTED FROM STRUCTURE ABOVE CEILING. CONTRACTOR SHALL RESUPPORT WIRING AND LIGHTING IF NECESSARY AFTER DEMOLITION IS COMPLETED. MAINTAIN LIGHTING CIRCUITS AND FIRE ALARM SYSTEM SERVING AREA BEYOND SCOPE OF WORK.
 - PATCH AND SEAL ALL REMAINING OPENINGS THROUGH FLOORS AND WALL RESULTING FROM DEMOLITION OR NEW WORK WITH MATERIALS AND FINISHES TO MATCH EXISTING CONSTRUCTION AND TO MAINTAIN FIRE RATINGS AND/OR SEPARATIONS.
 - CONTRACTOR SHALL REMOVE, STORE AND REINSTALL EQUIPMENT OR ACCESSORIES IN APPROXIMATELY THE ORIGINAL LOCATIONS.
 - CONTRACTOR SHALL FIELD VERIFY NO CIRCUIT OUTSIDE OF CONSTRUCTION AREA IS AFFECTED BY DEMOLITION PRIOR TO ANY CIRCUITS BEING REMOVED.
 - ANY CIRCUITS ALTERED THAT WERE NOT PROPERLY INVESTIGATED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR/REPLACE.
 - EXISTING FURNITURE WILL BE REMOVED/DISPOSED OF BY CONTRACTOR.
 - CONTRACTOR SHALL REMOVE WALL PAPER AND PREPARE ALL WALLS TO RECEIVE PAINT.
 - CONTRACTOR TO SALVAGE FRAMES AND DOOR HARDWARE FOR REUSE U.N.O.

- DEMOLITION KEY NOTES**
- REMOVE WET WALL FINISH AND SHEATHING TO FULL HEIGHT IN ROOM.
 - EXISTING ELECTRICAL PANEL. REFER TO ELECTRICAL DRAWINGS FOR FURTHER INFORMATION.
 - REMOVE EXISTING PLUMBING EQUIP. VERIFY WITH OWNER/VANY SALVAGEABLE COMPONENTS. SAW CUT EXISTING CONCRETE FLOOR SLAB FOR REMOVAL OF EXISTING UNDER SLAB PLUMBING LINES WHICH ROUTE TO EXISTING MAINS. SEE PLUMB. DRAWINGS FOR FURTHER INFORMATION.
 - REMOVE GLAZING AND FRAMING. PATCH CEILING TO MATCH EXISTING.
 - REMOVE WALL SEGMENT, DOOR, AND FRAME FULL HEIGHT. SALVAGE FOR REUSE.
 - REMOVE WALL TO 4" BELOW EXISTING CEILING.
 - REMOVE ACCESSORIES IN VESTIBULE AND STORE FOR REINSTALLATION.
 - SAWCUT SLAB TO ACCOMMODATE NEW FIXTURE LOCATIONS.
 - REMOVE EXISTING FLOORING DOWN TO FLOOR SLAB CONDITION. PROVIDE SMOOTH SURFACE FOR NEW FLOORING.
 - REMOVE ALL TOILET AND URINAL PARTITIONS AND ALL BATHROOM ACCESSORIES.
 - REMOVE EXISTING BASE WHERE FLOORING IS REMOVED. PATCH AND REPAIR ANY SUBSTRATE DAMAGED AND PROVIDE FLAT SURFACE TO ACCEPT NEW BASE.
 - REMOVE EXISTING WALL, FLOORING, AND CEILING TO ACCEPT NEW WALL LOCATION. SALVAGE DOOR, FRAME, HARDWARE AND CEILING TILES IN THIS LOCATION ONLY FOR REUSE.
 - REMOVE EXISTING CEILING GRID. REMOVE AND REUSE EXISTING TILES. TIE INTO EXISTING/ADJACENT GRID.
 - REMOVE PEDI-MAT AND INFILL WITH LIGHTWEIGHT CONCRETE. PROVIDE LEVEL SURFACE TO ACCEPT NEW FLOORING.
 - REMOVE AND RELOCATE EXISTING FIRE EXTINGUISHER CLOSET AND MAINTAIN EXISTING FIRE RATING.
 - REMOVE ALL WALL COVERING AND TILE. PREPARE SURFACE FOR NEW FINISH.
 - ALTER EQUIPMENT AND FIXTURES IN EXISTING GYPSUM BOARD CEILINGS TO ACCOMMODATE NEW CONSTRUCTION.
 - REMOVE DOOR AND FRAME. ALL DOOR HARDWARE TO BE SALVAGED AND REUSED IN NEW DOOR.
 - REMOVE DOOR, DOOR FRAME REMAINS. SALVAGE ALL DOOR HARDWARE FOR REUSE AT SAME LOCATION.


E9 GENERAL & KEYNOTES

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

13100 watertown plank road
suite 200
Elm Grove, WI 53122



Nagel Architects Project Number: 438-18-105

STAMP

Office of
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and Facilities
Management

VA U.S. Department
of Veterans Affairs

Drawing Title
**FIRST FLOOR DEMOLITION
PLAN**

Approved:
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Phase
100% CONSTRUCTION
DOCUMENTATION

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BUILDING 38 UPGRADE

Location
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Issue Date
11/27/2018

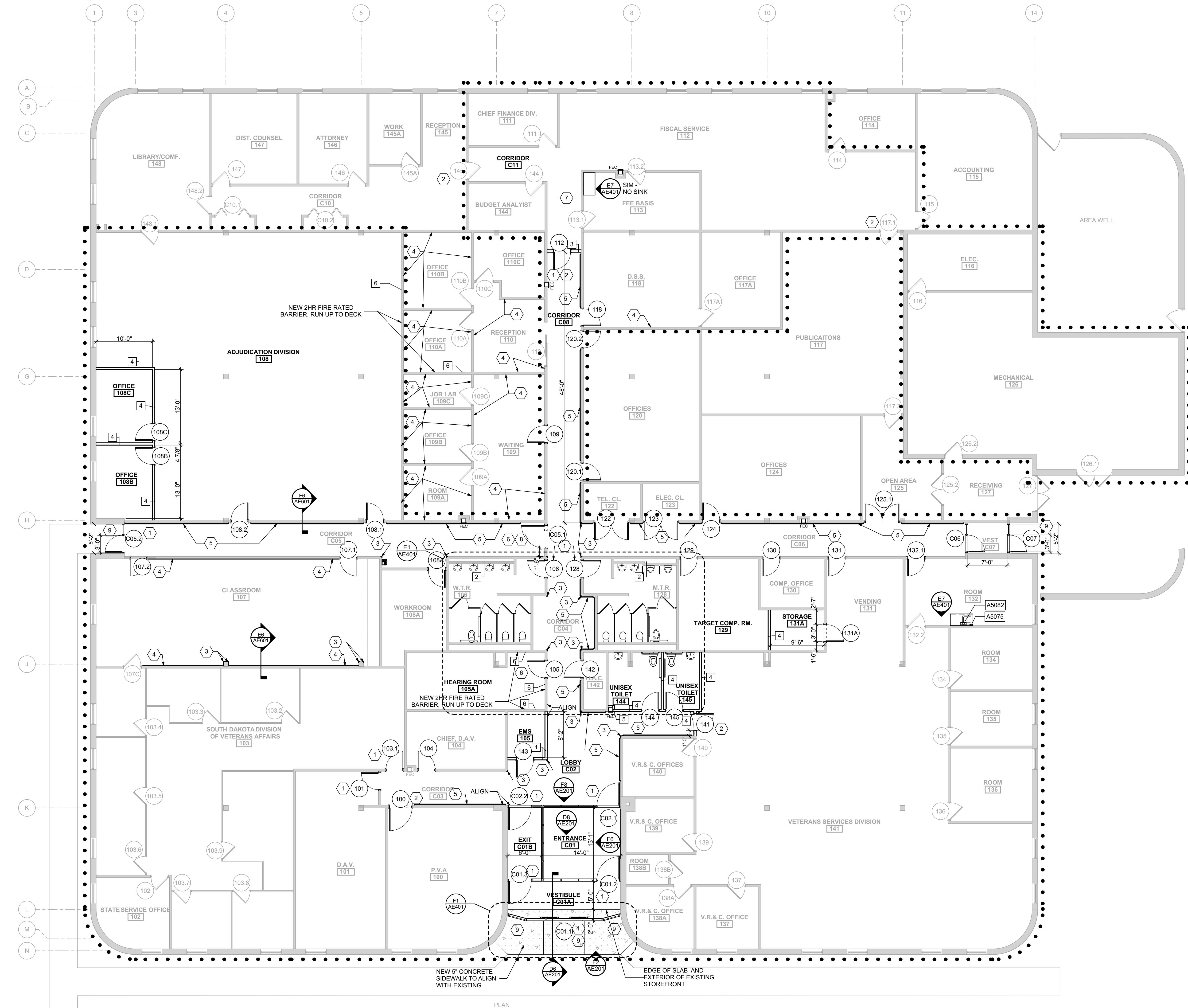
Checked
BJL

Drawn
BFW

Project Number
438-18-105

Building Number
38

Drawing Number
AD001



F1 FIRST FLOOR PLAN
 SCALE: 1/8" = 1' - 0"
 PLAN NORTH

- CONSTRUCTION GENERAL NOTES**
- CONTRACTOR SHALL MAINTAIN REQUIRED PATHS OF EGRESS FROM OCCUPIED AREA OF EXISTING BUILDING.
 - CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE.
 - CONTRACTOR SHALL MAINTAIN CONTINUOUS UTILITY SERVICE TO ALL SPACES IN THE BUILDING. ANY DISRUPTION IN SERVICES SHALL BE COORDINATED WITH THE OWNER.
 - CONTRACTOR SHALL PATCH/ALL OPENINGS IN FLOOR, ROOF AND WALLS WHICH REMAIN AFTER ALTERATIONS TO BUILDING HAVE BEEN COMPLETED. PATCH TO MATCH EXISTING.
 - NEW WORK SHALL MATCH EXISTING WORK U.N.O.
 - [Symbol] INDICATES PARTITION TYPE. SEE AE501 FOR WALL ASSEMBLY INFORMATION.
 - ALL DRYWALL PARTITIONS SHALL BE TYPE 4, UNLESS NOTED OTHERWISE.
 - PROVIDE FIRE TREATED BLOCKING AT MILLWORK AND WELD HUNG ELEMENTS IN RATED WALLS.
 - [Symbol] INDICATES NEW MILLWORK. SEE AE501 FOR ELEVATIONS AND DETAILS.
 - GRID LINES SHOWN ARE BASED ON EXISTING CONSTRUCTION PLANS.
 - PROVIDE DUST CONTROL & WALK-OFF MATS AROUND THE CONSTRUCTION AREA.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING/REPLACING FURNITURE & DEMOLITION OF SYSTEM FURNITURE NOT BEING REINSTALLED.
 - CONTRACTOR WILL CLEAN UP AREAS UNDER CONSTRUCTION AS TO NOT INTERRUPT DAILY VA OPERATIONS.
 - CONTRACTOR SHALL REPLACE ALL NEW DOORS WITH NEW LEAFS AND REUSE HARDWARE FROM EXISTING DOOR U.N.O.

- FLOOR PLAN KEY NOTES:**
- AUTOMATIC DOOR OPERNER TO BE INSTALLED
 - CARD READER TO BE INSTALLED
 - 8 FT HIGH CORNER GUARD
 - 12" HIGH CHAIR RAIL W/ TOP MOUNTED AT 36" AFF
 - HANDRAIL W/ TOP MOUNTED AT 36" AFF
 - NEW FIRE RATED DOOR AND FRAME. SEE DOOR SCHEDULE
 - PATCH/AND BLEND FINISH WHERE EXISTING WALL WAS. VA TO PROVIDE MATERIAL.
 - NEW MAGNETIC HOLD OPEN
 - LLUMAR R20 SR PS8 SECURITY FILM OR EQUAL TO BE APPLIED TO ALL NEW EXTERIOR GLAZING
- SCOPE OF WORK

BIM Server: Nagel BIM Server V01 - Bimcloud Base: for ARCHICAD 21/18005_VA_Silver Falls_Building 38.rvt
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 VA FORM 08 - 6231

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

13100 watertown plank road
 suite 200
 Elm Grove, WI 53122

Nagel Architects Project Number: 438-18-105

STAMP

Office of
 Construction
 and Facilities
 Management

VA U.S. Department
 of Veterans Affairs

Drawing Title
FIRST FLOOR PLAN

Approved:

Phase
100% CONSTRUCTION DOCUMENTATION

Project Title
BUILDING 38 UPGRADE

Location
 2501 W 22nd ST SIOUX FALLS, SD 57105

Issue Date
 11/27/2018

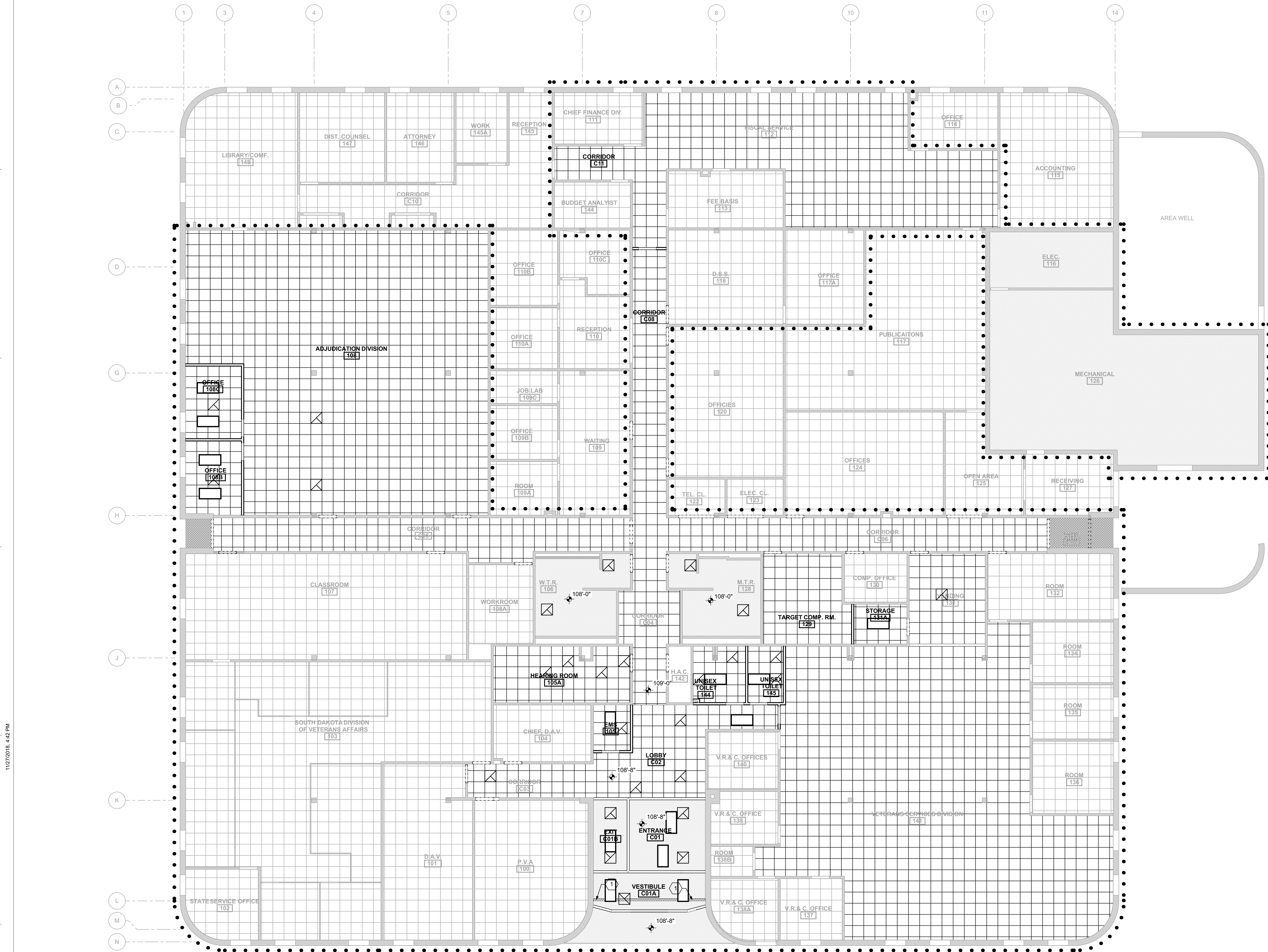
Checked
 BJL

Drawn
 BFW

Project Number
 438-18-105

Building Number
 38

Drawing Number
AE101



- REFLECTED CEILING LEGEND**
- 2x4 LIGHT FIXTURE
 - EXISTING 2x4 LIGHT FIXTURE
 - 2x2 LIGHT FIXTURE
 - 1x4 LIGHT FIXTURE
 - NEW OR CLEANED DIFFUSER, SEE MECH DRAWINGS
 - DRYWALL SOFFIT @ HEIGHT NOTED
 - RECESSED CAN LIGHT
 - EXIT SIGN, VERIFY QTY & LOCATION W/ FIRE MARSHALL
 - 10'-0" CEILING HEIGHT
 - EXISTING CEILING GRID
 - NEW CEILING GRID/TILE
 - EXISTING GYP. CEILING

- REFLECTED CEILING GENERAL NOTES**
1. WHERE NEW WALLS PENETRATE EXISTING CEILING SYSTEMS TO REMAIN, REMOVE EXISTING CEILING SYSTEM AS REQUIRED AND PATCH TO MATCH EXISTING CEILING SYSTEM TO NEW WALL.
 2. HVAC SUPPLY AND RETURN GRILLES, IF SHOWN, ARE FOR CONCEPT ONLY. SEE HVAC DRAWINGS FOR EXACT SIZE & TYPE OF DIFFUSERS.
 3. EXISTING LIGHT FIXTURES TO REMAIN ARE NOT INDICATED ON THE CEILING PLAN.
 4. CEILING HEIGHTS ARE INDICATED ON THE ROOM FINISH SCHEDULE, SHEET AE601.
- REFLECTED CEILING KEY NOTES**
- PATCH GWS CEILING TO MATCH EXISTING

F9 RCP LEGEND & NOTES

F1 FIRST FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1' - 0"



BIM Server: Nagel BIM Server V01 - Bimcloud Base for ARCHICAD 21/18005_VA_Shoux Falls, Building 38-TW
 11/27/2018, 4:42 PM
 VA FORM 08 - 6231

Revisions: _____ Date: _____	CONSULTANT	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 Nagel Architects Project Number: 438-18-105	STAMP Office of Construction and Facilities Management 	Drawing Title FIRST FLOOR REFLECTED CEILING PLAN Approved: _____	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number AC101
	Checked BJL	Drawn BFW	Issue Date 11/27/2018	Issue Date 11/27/2018	Issue Date 11/27/2018	Issue Date 11/27/2018	Issue Date 11/27/2018

A

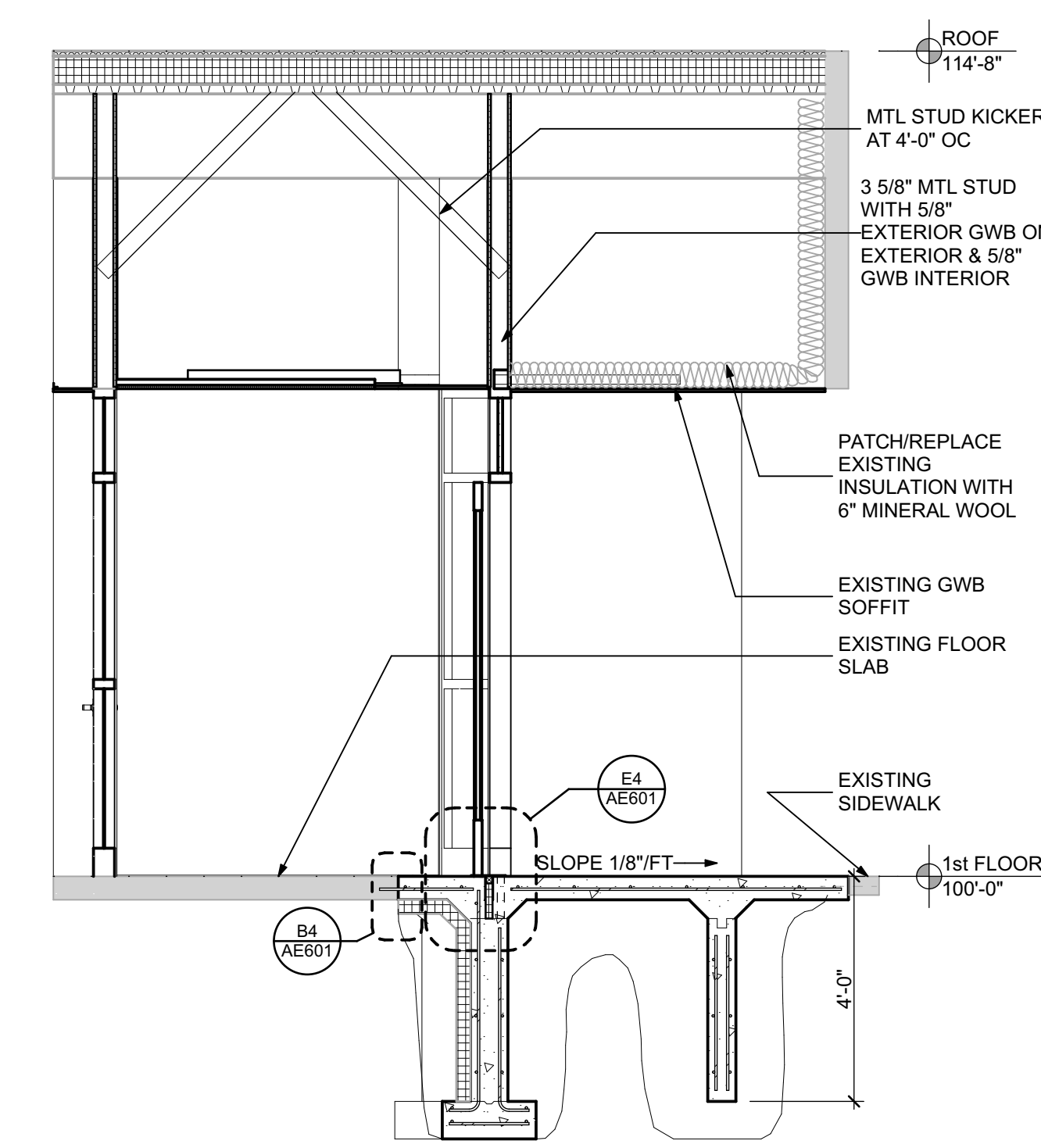
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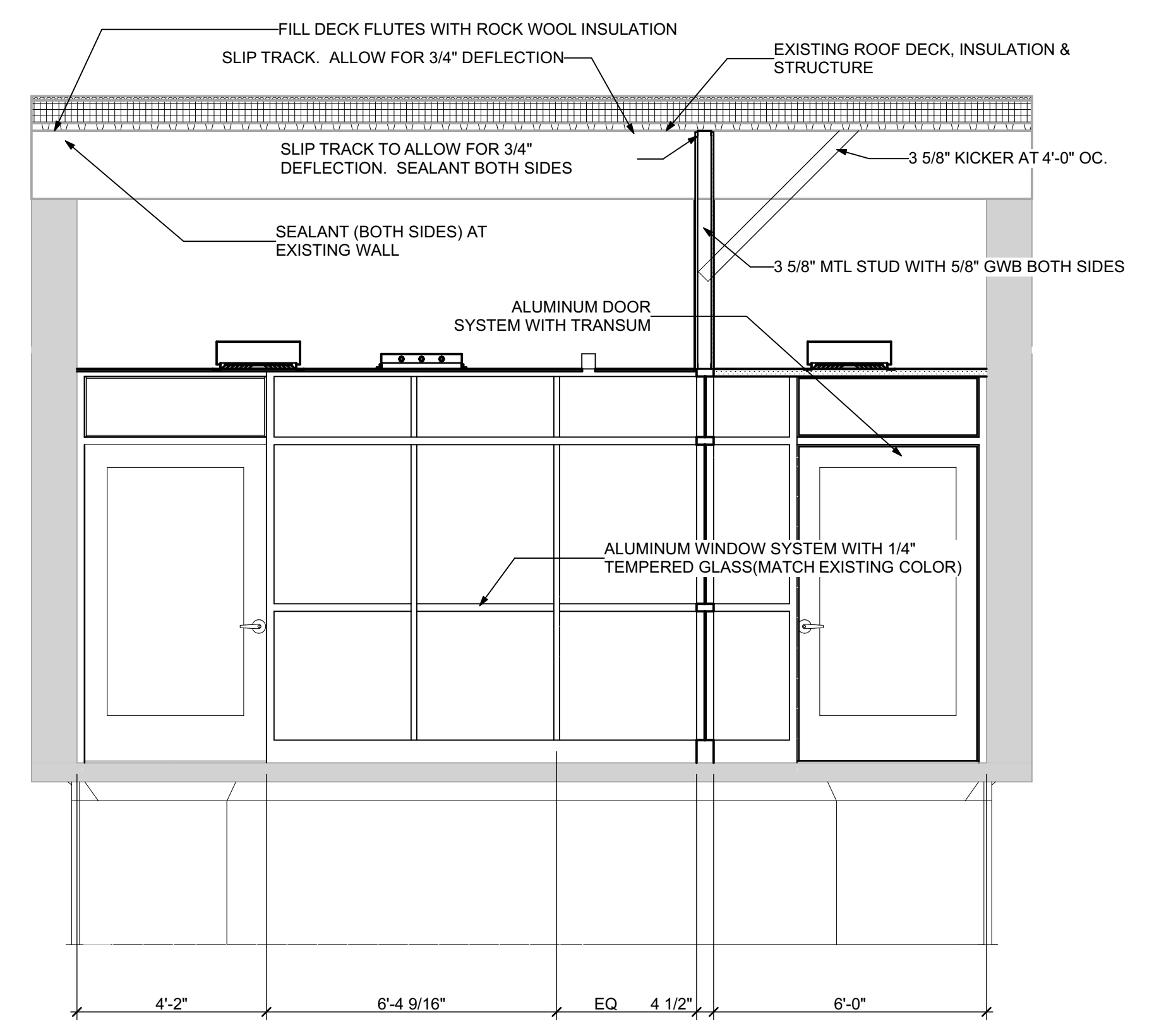
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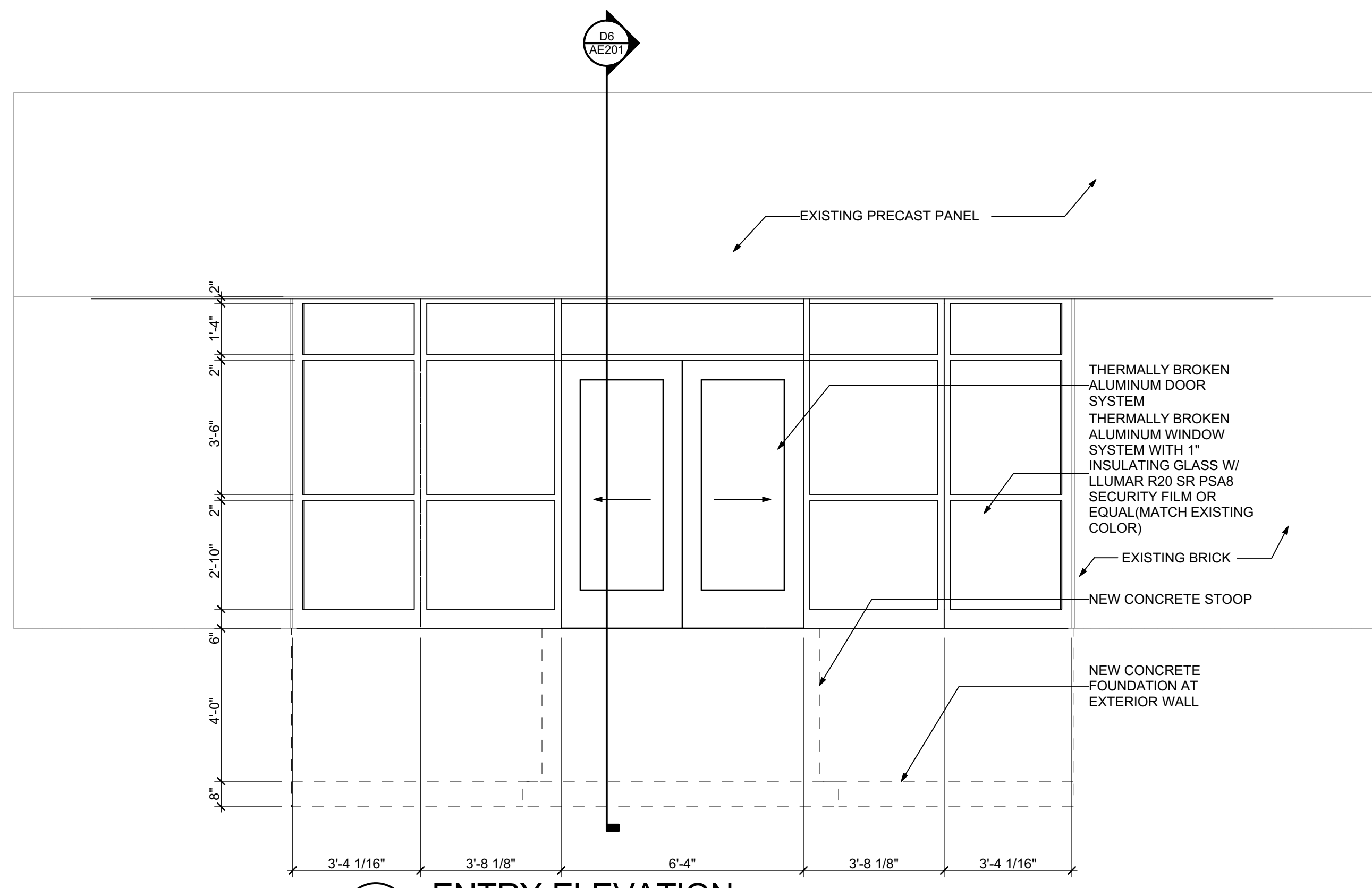
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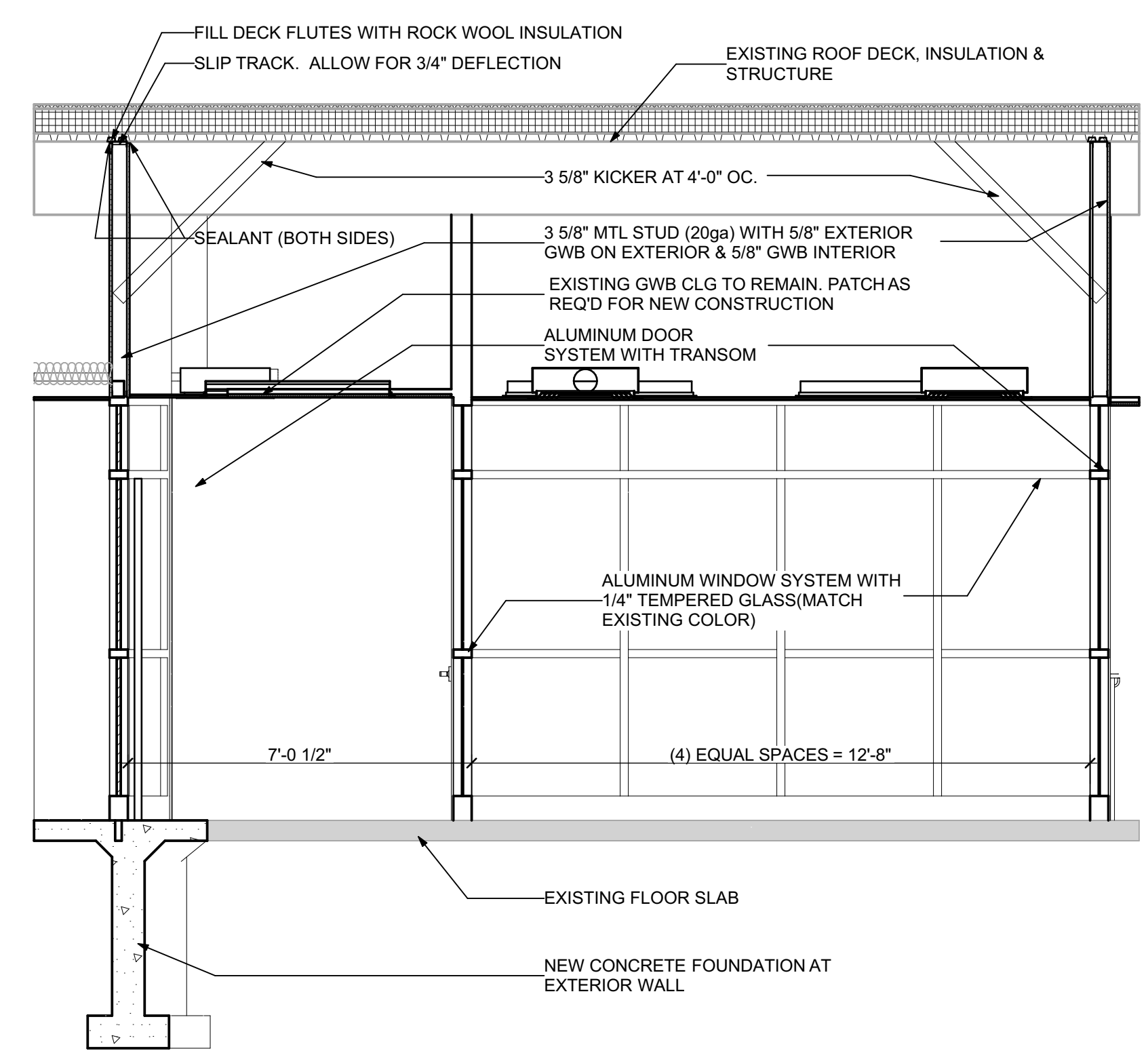
D6 ENTRY WALL SECTION
SCALE: 3/8" = 1' - 0"



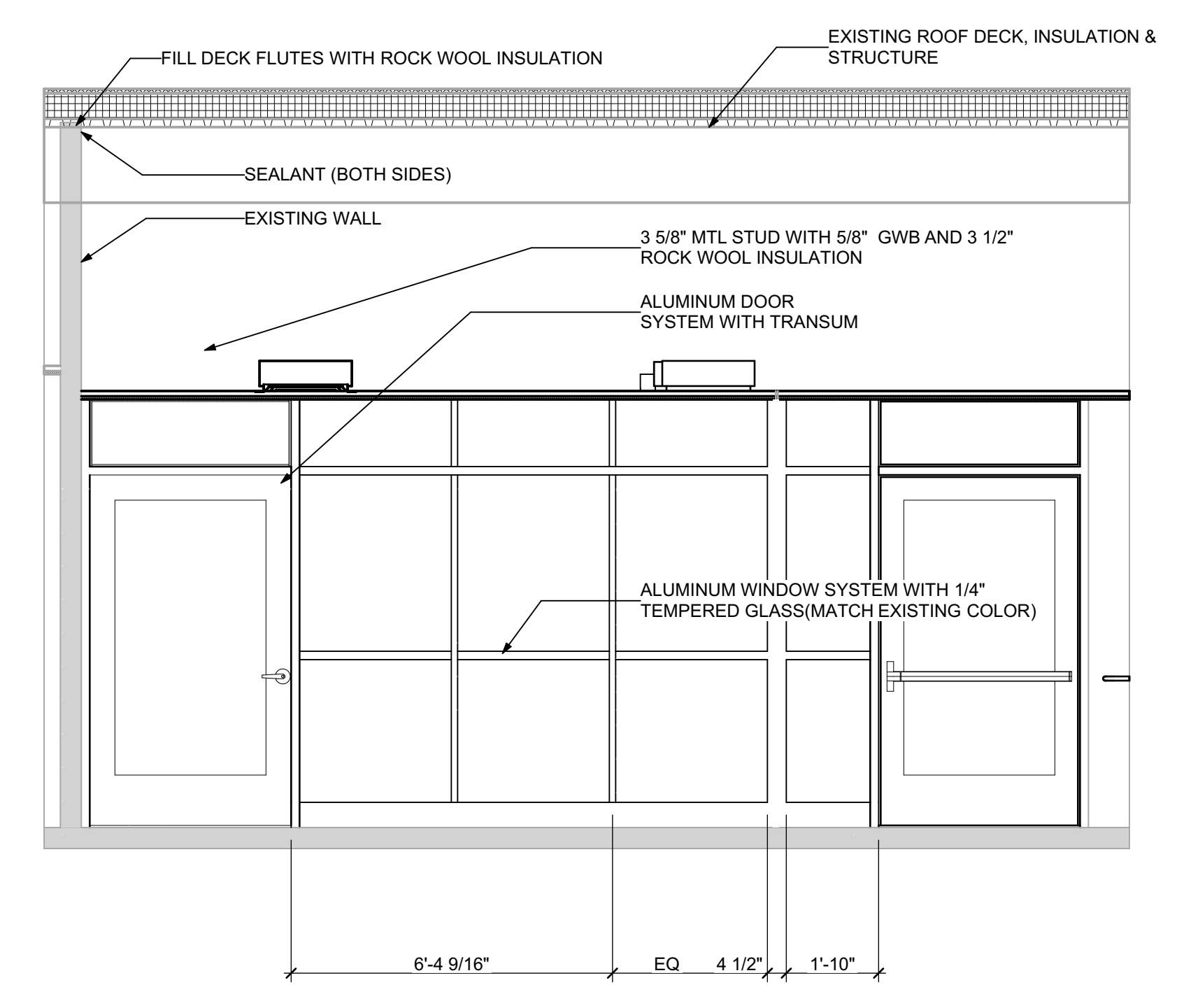
D8 VESTIBULE ELEVATION -LOOKING WEST 2
SCALE: 3/8" = 1' - 0"



F2 ENTRY ELEVATION
SCALE: 3/8" = 1' - 0"



F6 VESTIBULE ELEVATION -LOOKING NORTH
SCALE: 3/8" = 1' - 0"



F8 VESTIBULE ELEVATION -LOOKING WEST
SCALE: 3/8" = 1' - 0"

11/27/2018, 4:42 PM
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VA FORM 08 - 6231

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD
13100 watertown plank road
suite 200
Elm Grove, WI 53122
nagel
architects
Nagel Architects Project Number: 438-18-105

STAMP

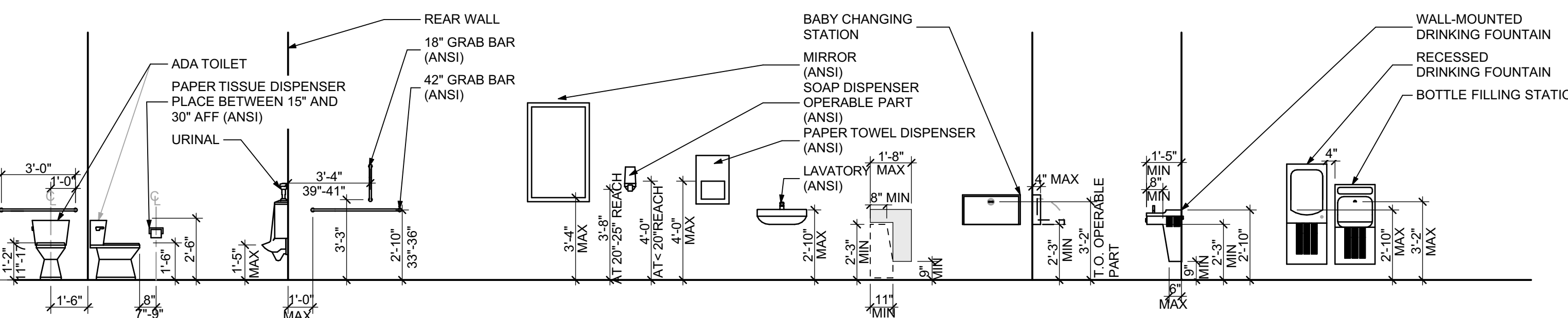
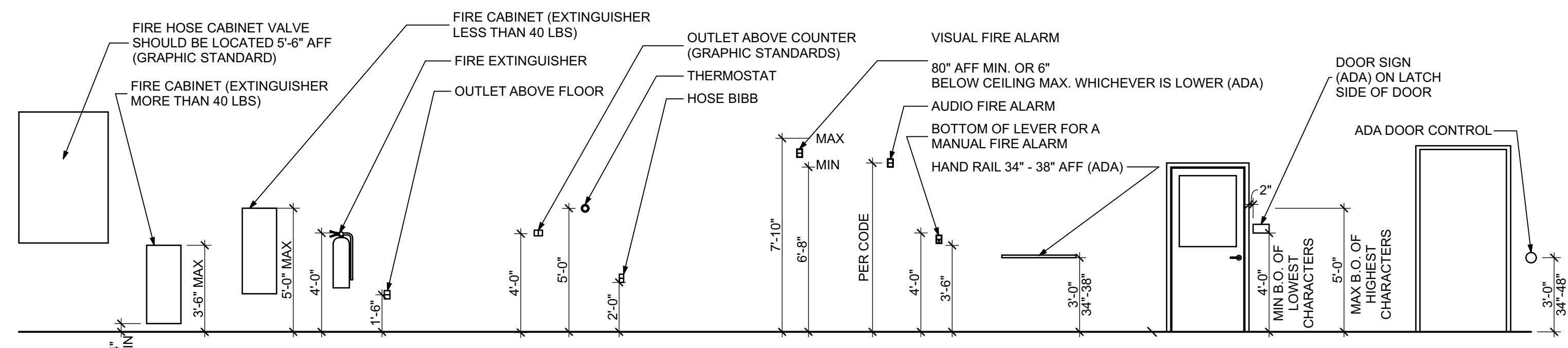
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title
ELEVATIONS AT ENTRY
Approved:

Phase
100% CONSTRUCTION DOCUMENTATION

Project Title
BUILDING 38 UPGRADE
Location
2501 W 22nd ST SIOUX FALLS, SD 57105
Issue Date
11/27/2018
Checked
BJL
Drawn
BFW

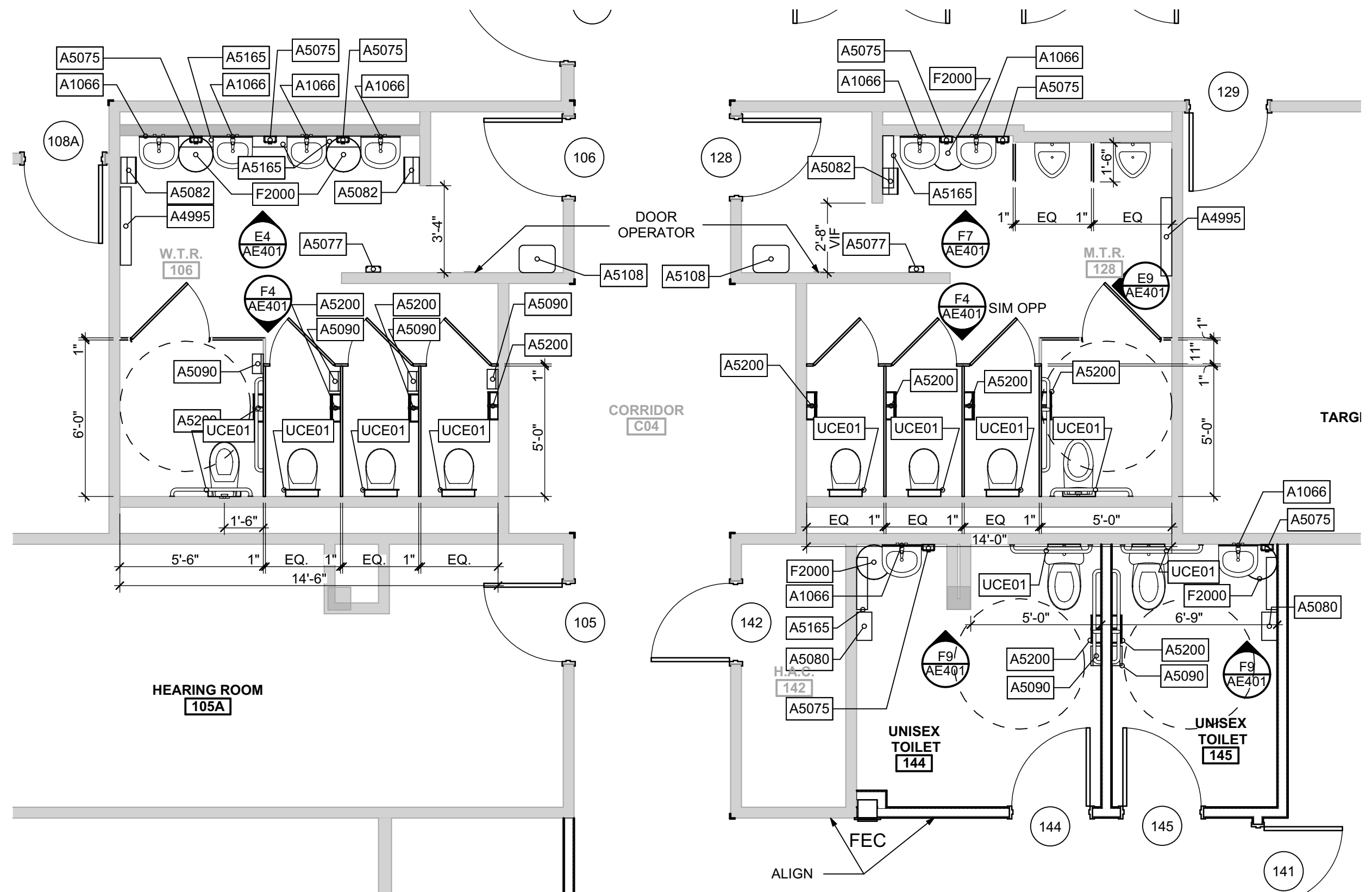
Project Number
438-18-105
Building Number
38
Drawing Number
AE201



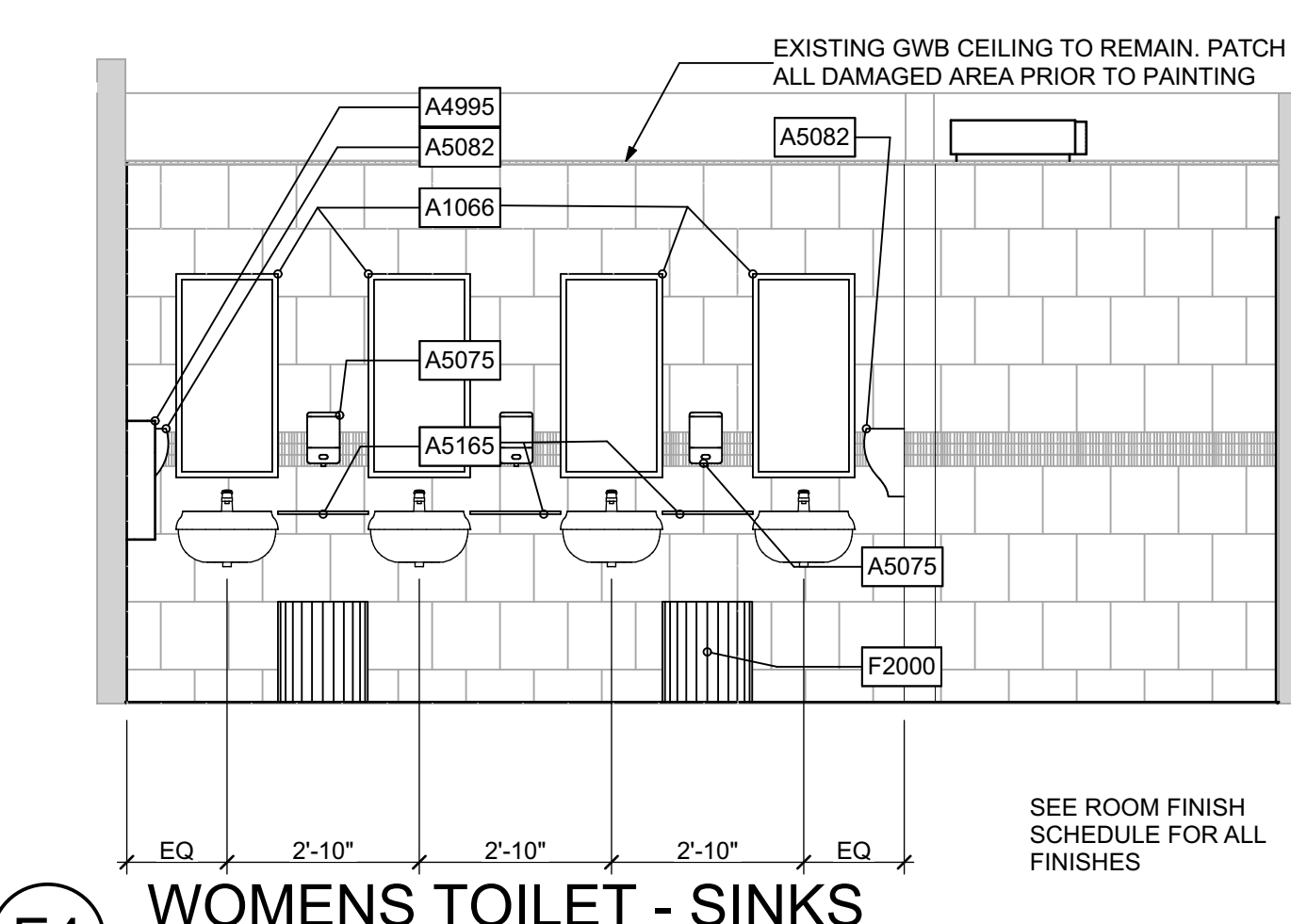
B1 MOUNTING HEIGHTS

ROOM NUMBER	ROOM NAME	JSN	DESCRIPTION	QTY	ACQ/INS	REMARKS
106	W.T.R.	A1066	Mirror, Float Glass	4	CC	
106	W.T.R.	A4995	Table, Diaper Changing, Wall Mounted	1	CC	
106	W.T.R.	A5075	Dispenser, Soap	3	VC	
106	W.T.R.	A5076	Shelf, 5in Depth, SS, Surface Mounted R1	3	VC	
106	W.T.R.	A5077	Dispenser, Hand Sanitizer, Hands free	1	VC	
106	W.T.R.	A5082	Dispenser, Paper Towel, Sensor, Hands Free	2	VC	
106	W.T.R.	A5090	Dispenser, Sanitary Napkin, SS, Surface Mounted	4	CC	
106	W.T.R.	A5108	Waste Disposal Unit, Sharps	1	VC	
106	W.T.R.	A5200	Dispenser, Toilet Tissue, SS, 2-Roll, Surface Mntd	4	VC	
106	W.T.R.	F2000	Basket, Wastepaper	2	VV	
106	W.T.R.	UCE01	Dispenser, Toilet Seat Cover	4	CC	
128	M.T.R.	A1066	Mirror, Float Glass	2	CC	
128	M.T.R.	A4995	Table, Diaper Changing, Wall Mounted	1	CC	
128	M.T.R.	A5075	Dispenser, Soap	2	VV	
128	M.T.R.	A5076	Shelf, 5in Depth, SS, Surface Mounted R1	1	VC	
128	M.T.R.	A5077	Dispenser, Hand Sanitizer, Hands free	1	VC	
128	M.T.R.	A5082	Dispenser, Paper Towel, Sensor, Hands Free	1	VC	
128	M.T.R.	A5108	Waste Disposal Unit, Sharps	1	VC	
128	M.T.R.	A5200	Dispenser, Toilet Tissue, SS, 2-Roll, Surface Mntd	4	VC	
128	M.T.R.	F2000	Basket, Wastepaper	1	VV	
128	M.T.R.	UCE01	Dispenser, Toilet Seat Cover	4	CC	
132	ROOM	A5075	Dispenser, Soap	1	VC	SEE AE101
132	ROOM	A5082	Dispenser, Paper Towel, Sensor, Hands Free	1	VC	SEE AE101
141	VETERANS SERVICES DIVISION	A5075	Dispenser, Soap	1	VC	
141	VETERANS SERVICES DIVISION	A5077	Shelf, 5in Depth, SS, Surface Mounted R1	1	VC	
141	VETERANS SERVICES DIVISION	A5080	Dispenser, Paper Towel	1	VC	
144	UNISEX TOILET	A1066	Mirror, Float Glass	1	CC	
144	UNISEX TOILET	A5075	Dispenser, Soap	1	VC	
144	UNISEX TOILET	A5077	Shelf, 5in Depth, SS, Surface Mounted R1	1	VC	
144	UNISEX TOILET	A5080	Dispenser, Paper Towel	1	VC	
144	UNISEX TOILET	A5090	Dispenser, Sanitary Napkin, SS, Surface Mounted	1	CC	
144	UNISEX TOILET	A5200	Dispenser, Toilet Tissue, SS, 2-Roll, Surface Mntd	1	VC	
144	UNISEX TOILET	F2000	Basket, Wastepaper	1	VV	
144	UNISEX TOILET	UCE01	Dispenser, Toilet Seat Cover	1	CC	
145	UNISEX TOILET	A1066	Mirror, Float Glass	1	CC	
145	UNISEX TOILET	A5090	Dispenser, Sanitary Napkin, SS, Surface Mounted	1	CC	
145	UNISEX TOILET	A5200	Dispenser, Toilet Tissue, SS, 2-Roll, Surface Mntd	1	VC	
145	UNISEX TOILET	F2000	Basket, Wastepaper	1	VV	
145	UNISEX TOILET	UCE01	Dispenser, Toilet Seat Cover	1	CC	

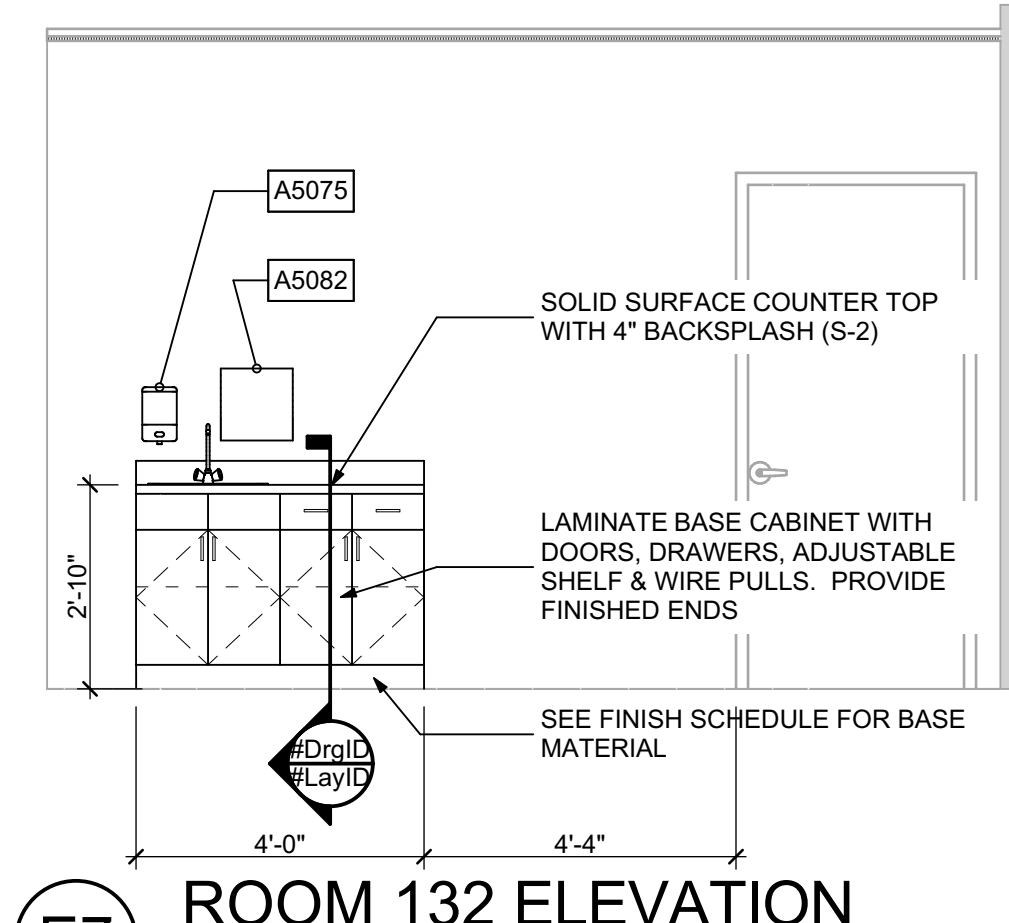
Acquisition Code Legend
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 V - GOVERNMENT FURNISHED, CONTRACTOR INSTALLED
 VV - GOVERNMENT FURNISHED AND INSTALLED



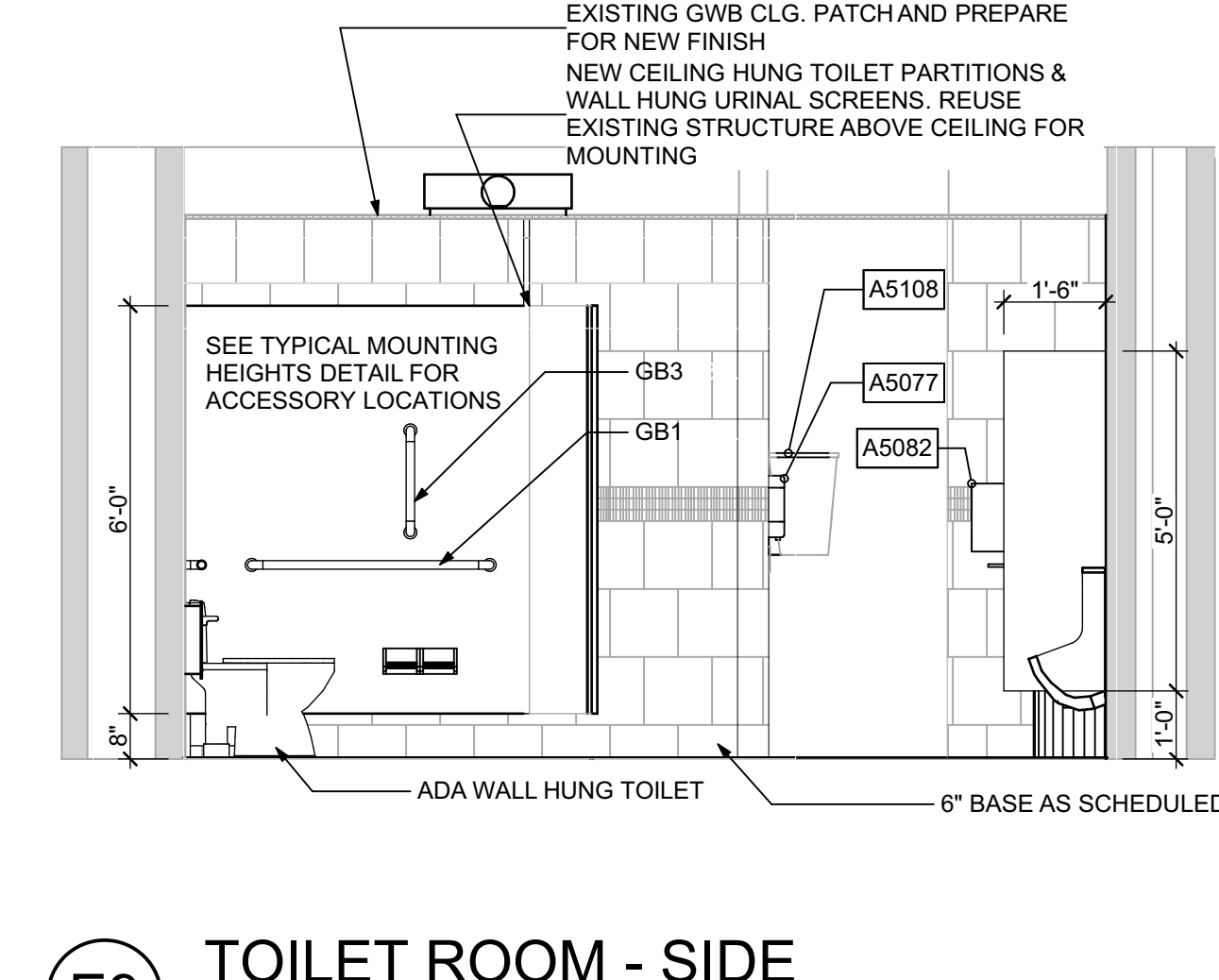
E1 1st FLOOR 1/4" EQUIPMENT PLAN
 SCALE: 1/4" = 1'-0"



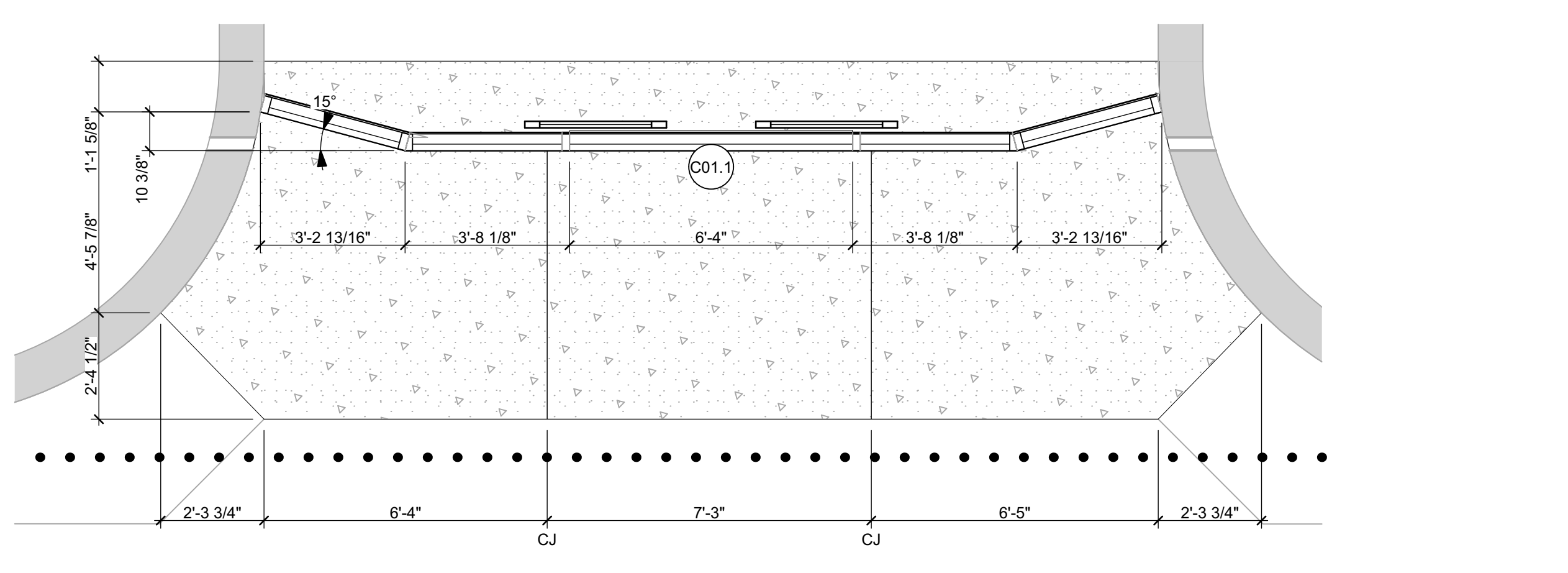
E4 WOMENS TOILET - SINKS
 SCALE: 3/8" = 1'-0"



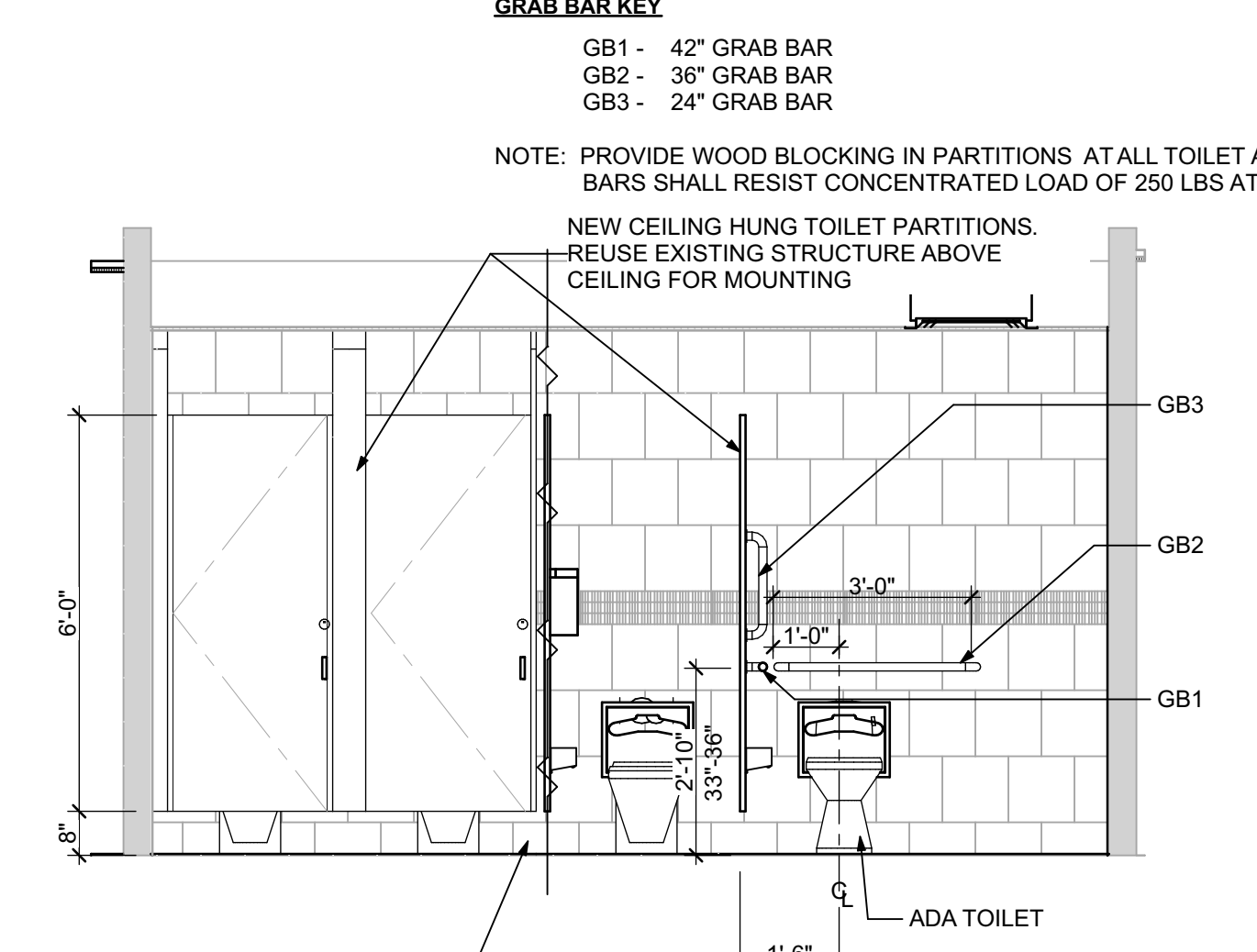
E7 ROOM 132 ELEVATION
 SCALE: 3/8" = 1'-0"



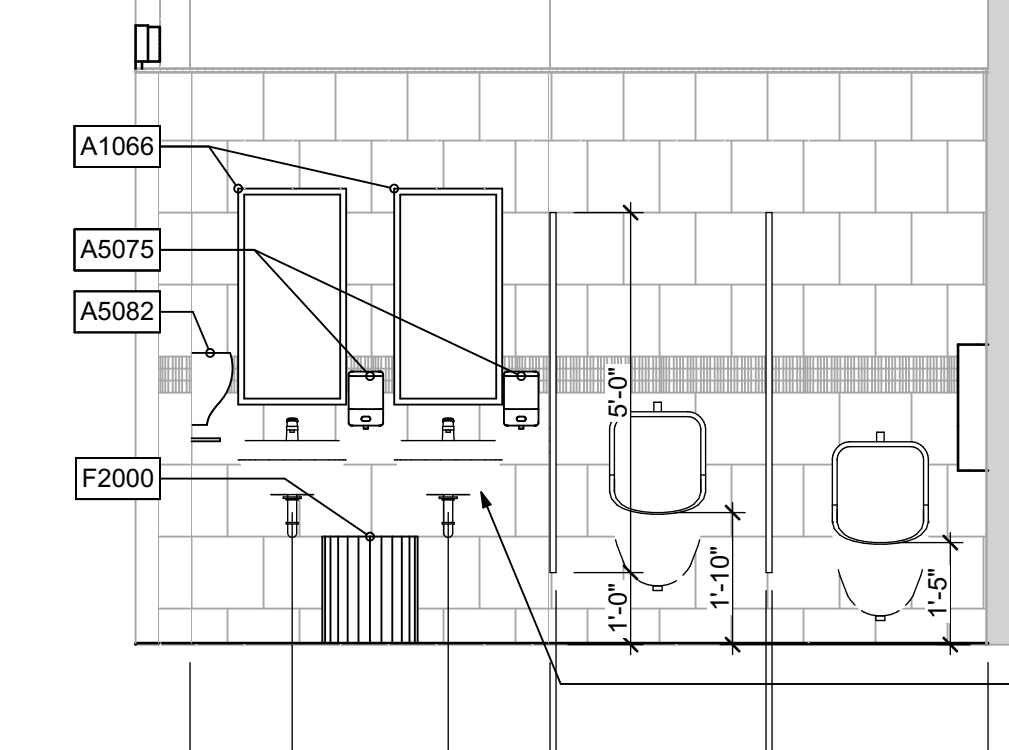
E9 TOILET ROOM - SIDE
 SCALE: 3/8" = 1'-0"



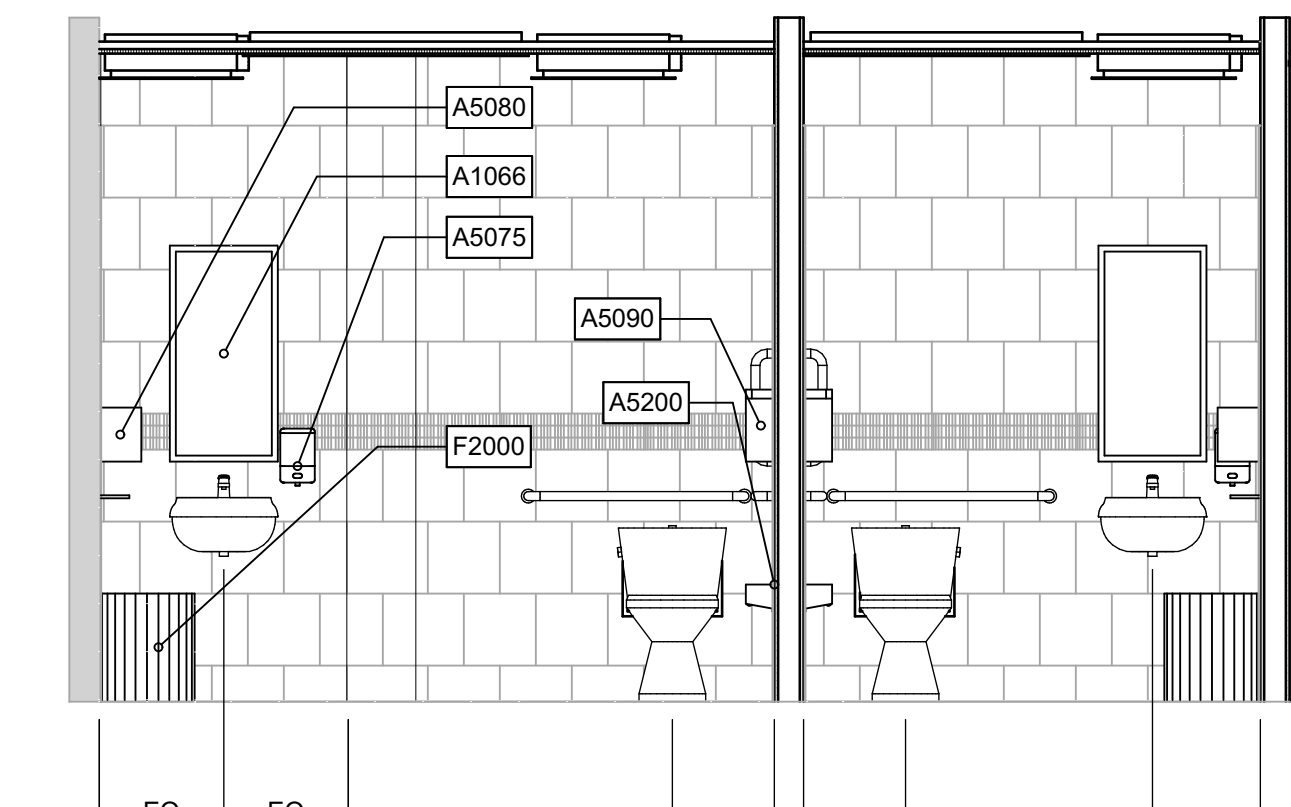
F1 1st FLOOR 3/8" ENLARGED PLAN
 SCALE: 3/8" = 1'-0"



F4 TOILET ROOM - WATER CLOSETS/STALLS
 SCALE: 3/8" = 1'-0"



F7 MENS TOILET - SINKS/URINALS
 SCALE: 3/8" = 1'-0"



F9 TOILETS 144 & 145
 SCALE: 3/8" = 1'-0"

Revisions:	Date:

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

13100 watertown plank road
 suite 200
 Elm Grove, WI 53122

nagel
 architects

Nagel Architects Project Number: 438-18-105

Office of Construction and Facilities Management

U.S. Department of Veterans Affairs

ENLARGED PLANS AND TOILET ELEVATION

100% CONSTRUCTION DOCUMENTATION

BUILDING 38 UPGRADE

2501 W 22nd ST SIOUX FALLS, SD 57105

11/27/2018

Checked: BJL
 Drawn: BFW

AE401

A

B

C

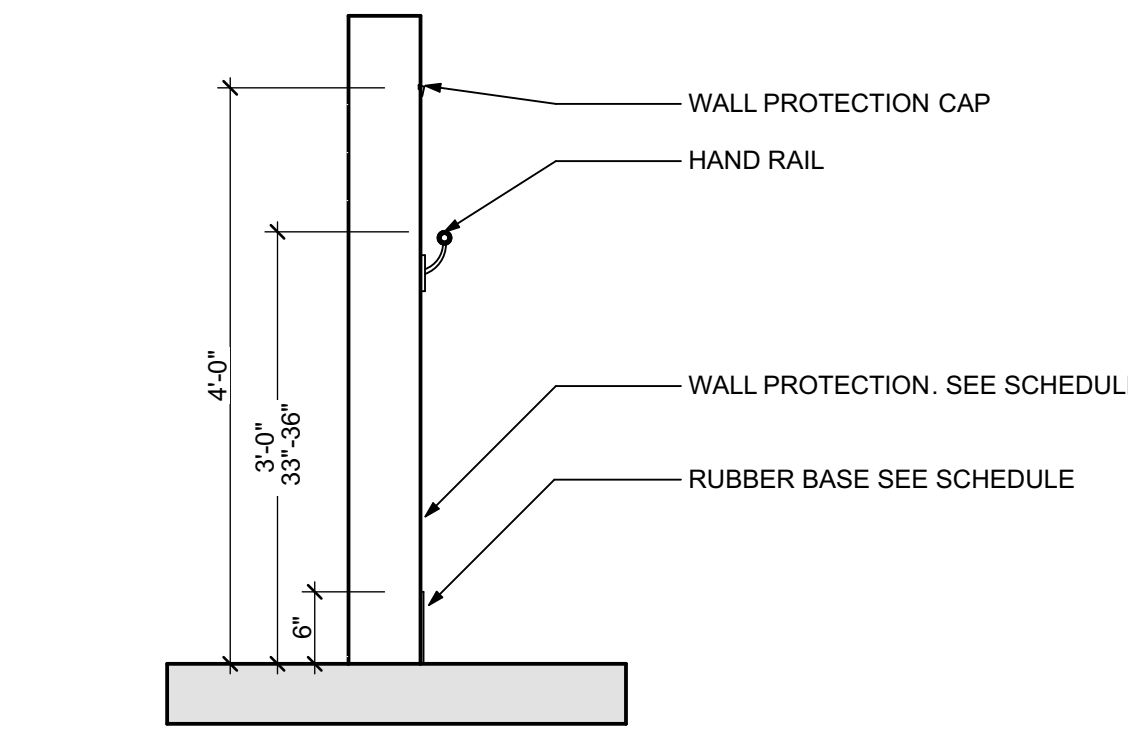
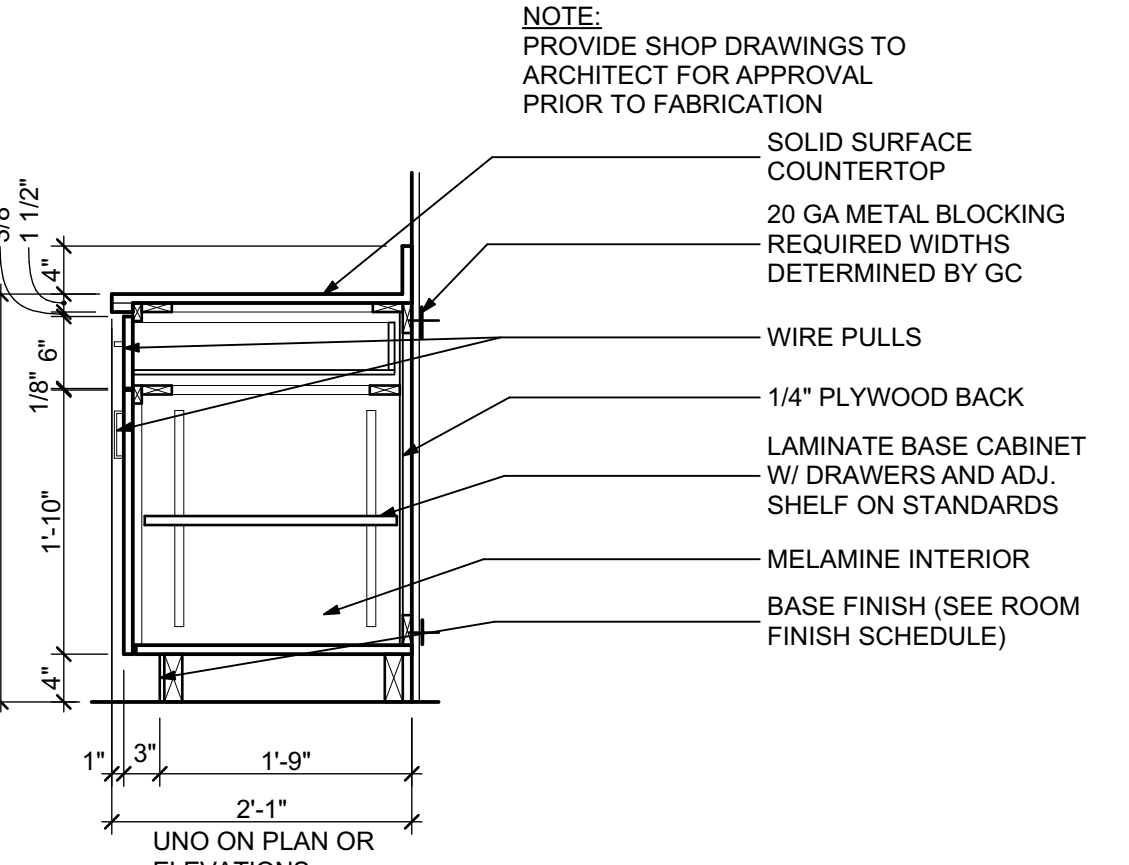
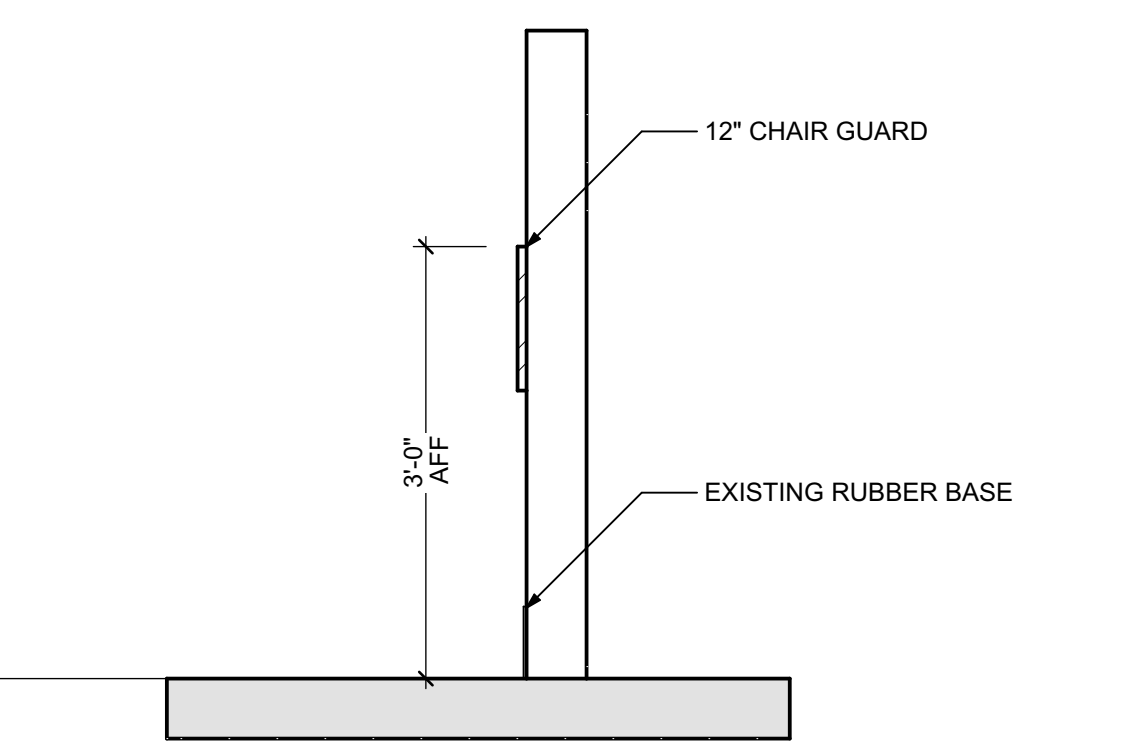
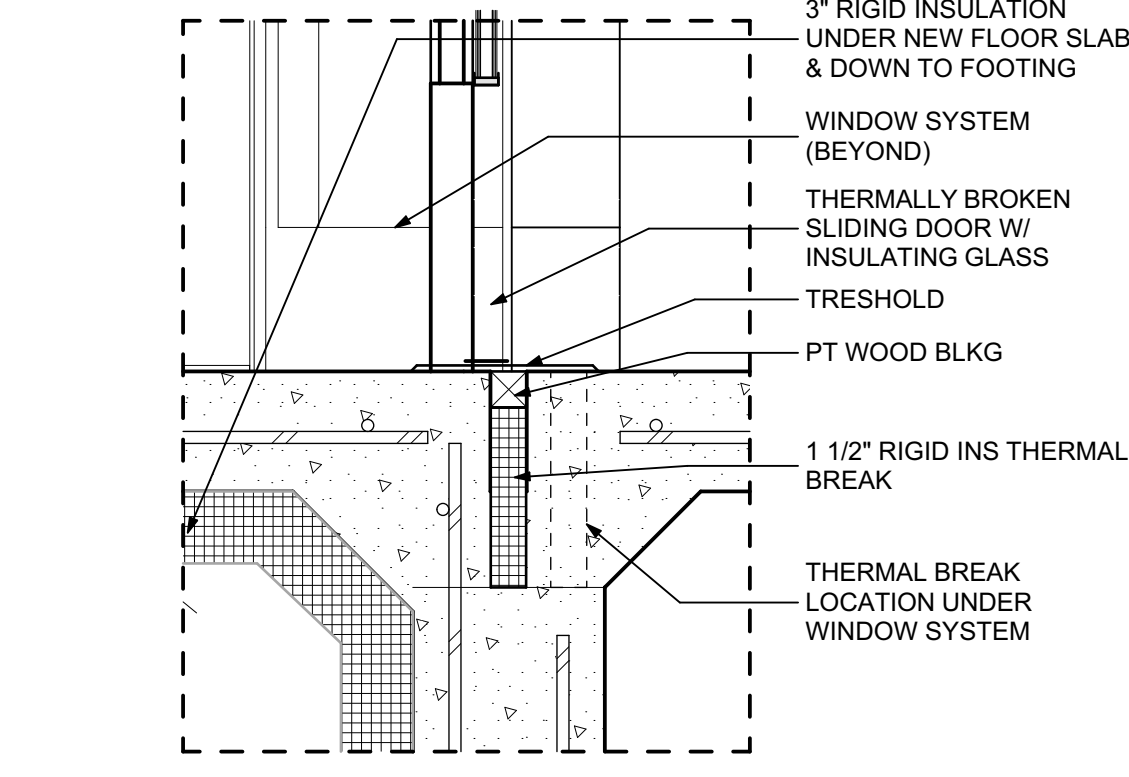
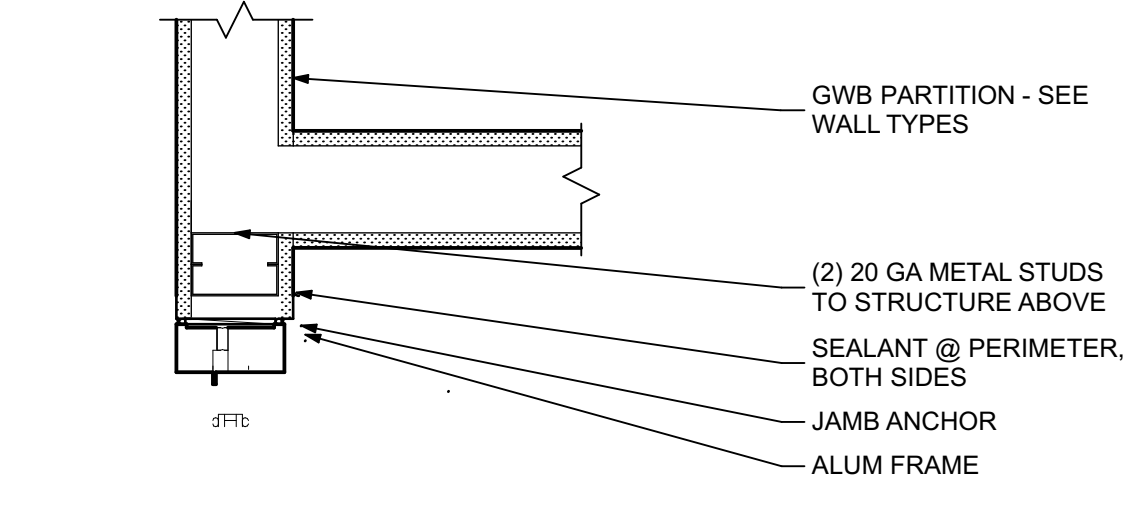
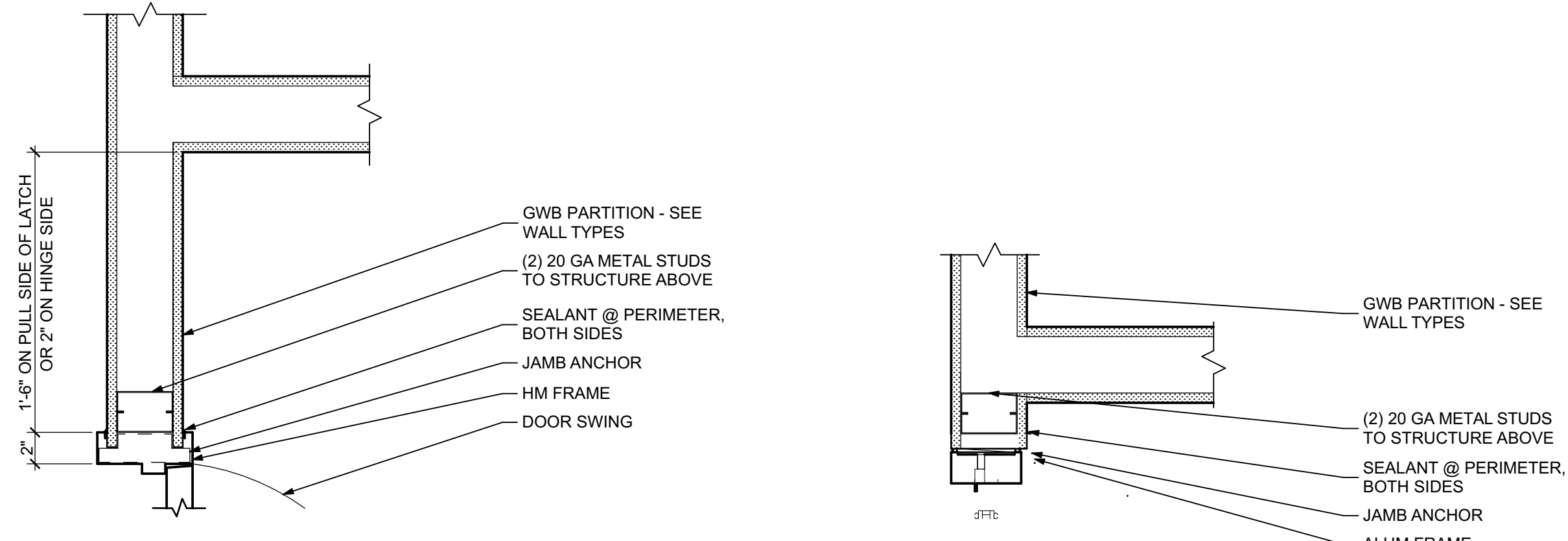
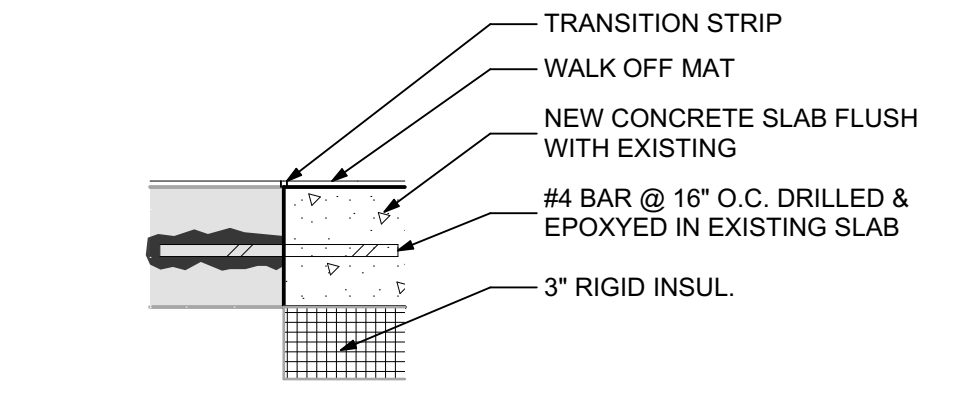
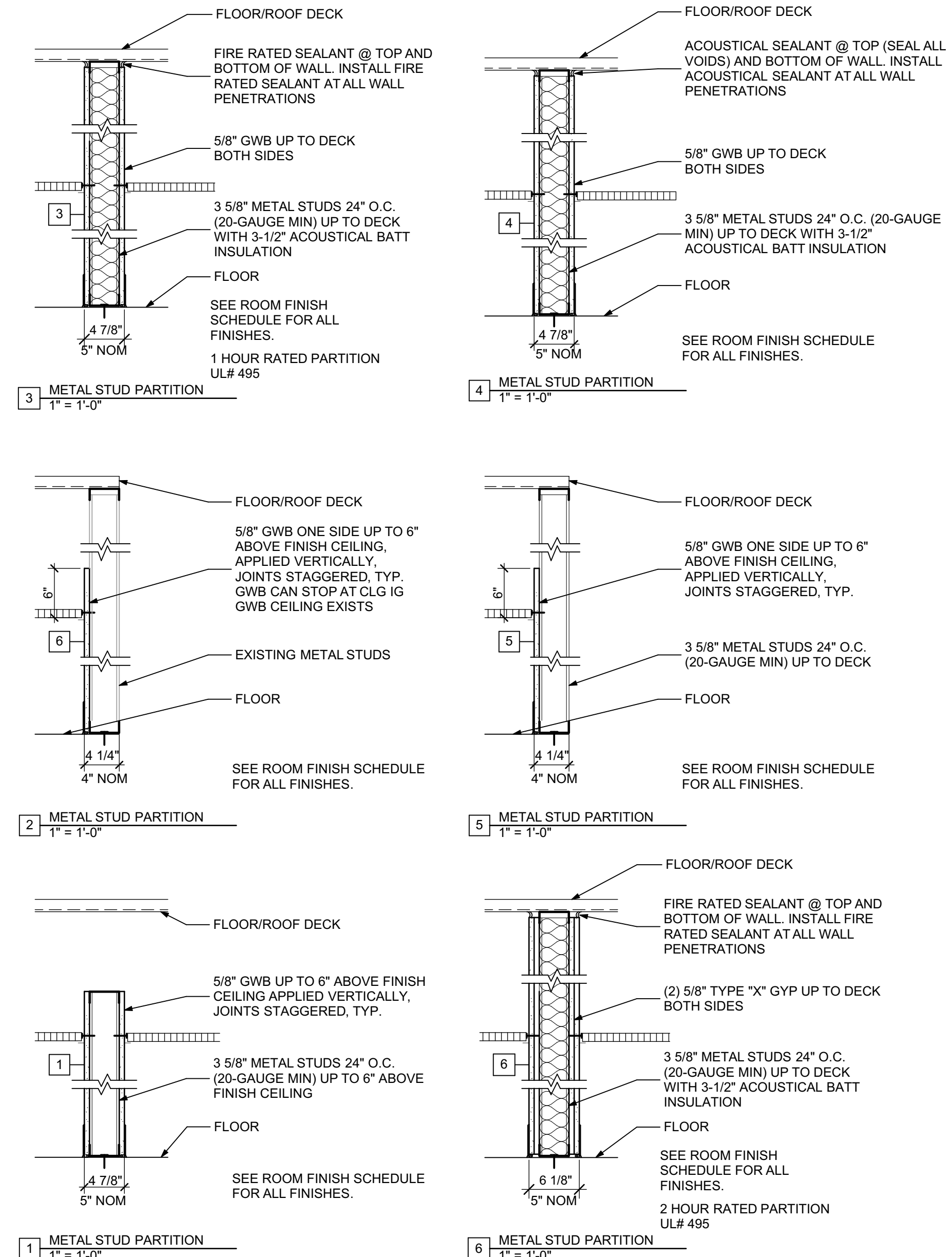
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E

F

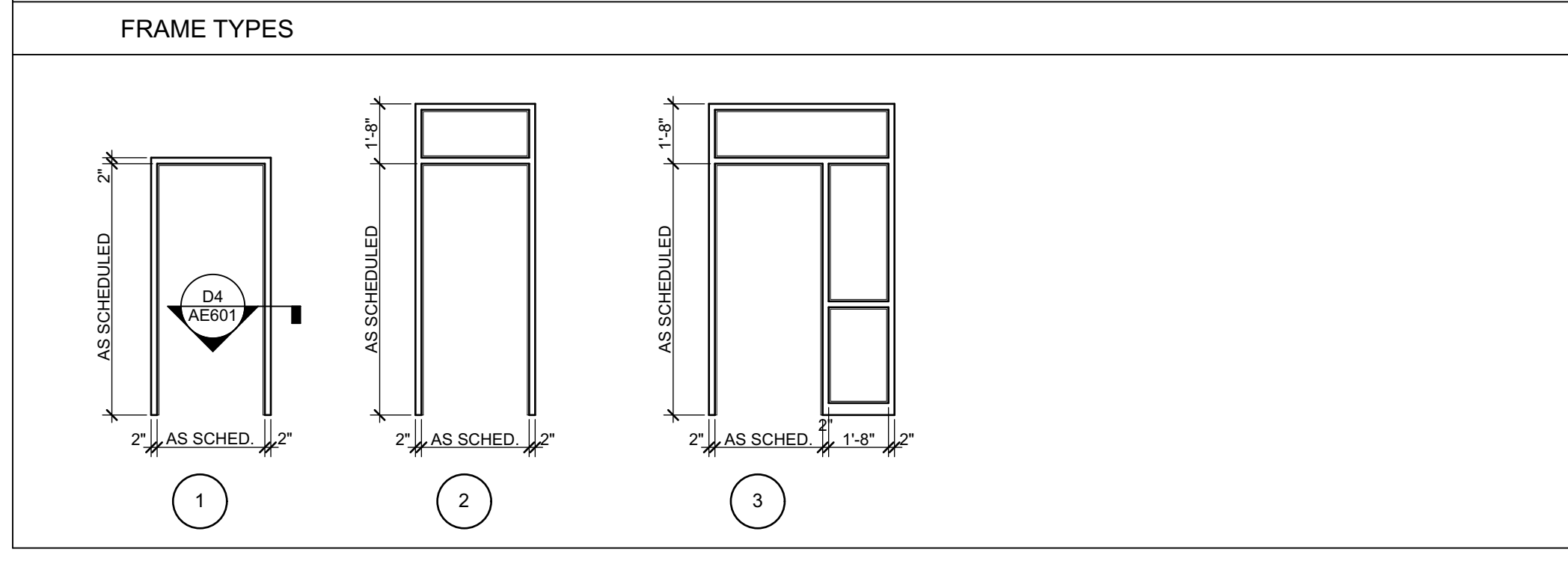
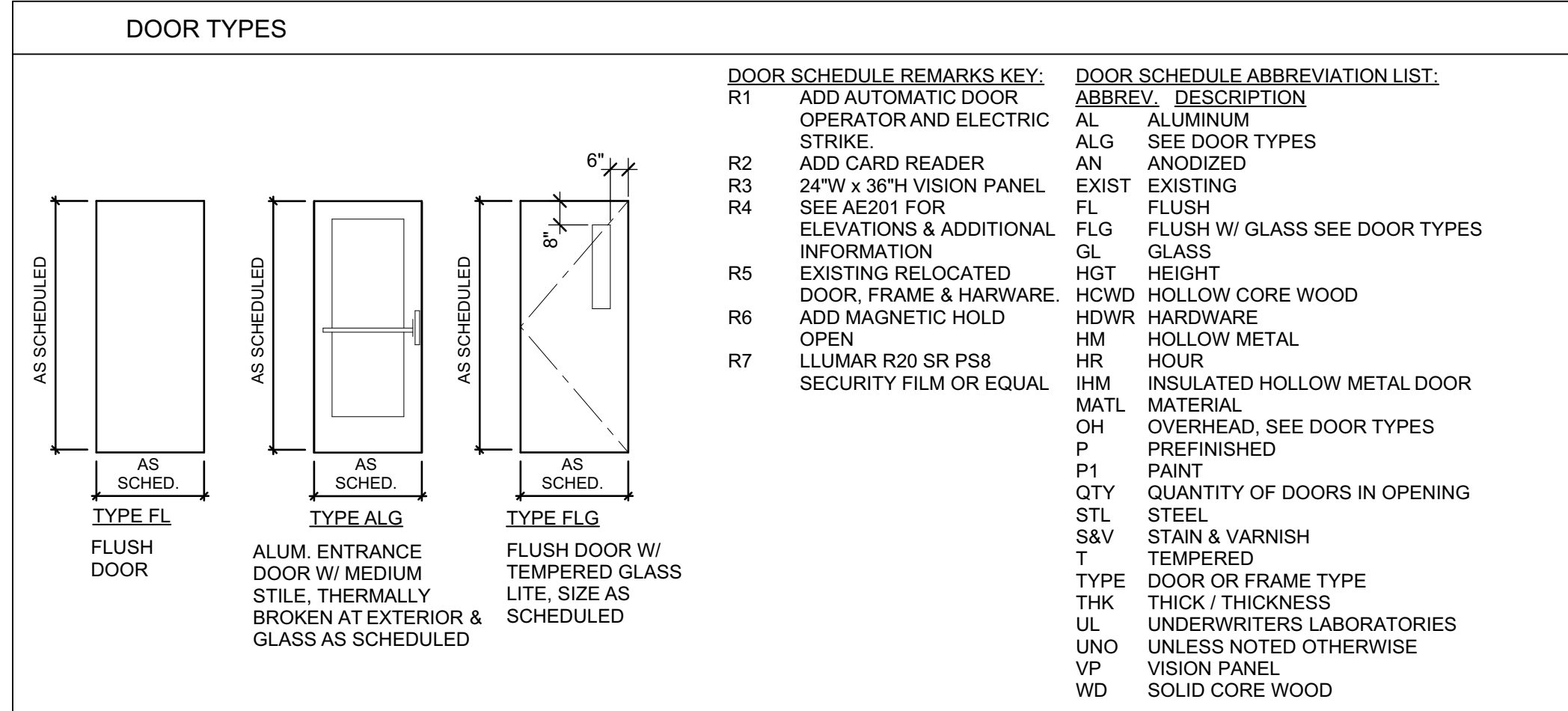
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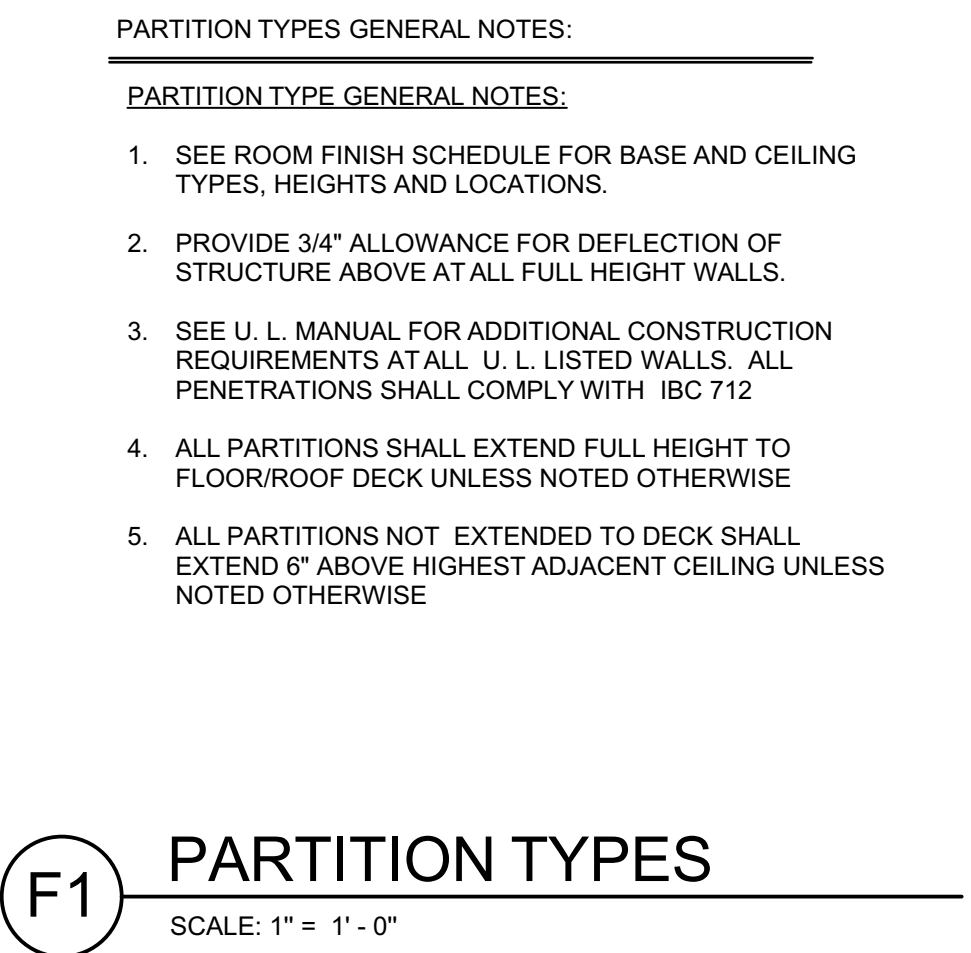


NO.	DOOR										FRAME			ASSEMBLY			REMARKS
	WD	HGT	THK	MTL	TYPE	FIN	GLAZE	MTL	TYPE	FIN	DETAIL			FIRE RATING	HARDWARE		
											HEAD	JAMB	SILL				
100	4'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR		HM	1	P3				90 MIN	HW-3G		
101	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								90 MIN	EX		
103.1	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								90 MIN	EX		
104	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								90 MIN	EX		
105	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								90 MIN	HW-5D		
106	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
107.1	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
107.2	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
108.1	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
108.2	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
108A	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
108B	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR		HM	1	P3				-	HW-3G		
108C	3'-0"	7'-0"	0'-1 3/4"	WD	FL	A		H	1	P3				-	HW-3G		
109	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								90 MIN	EX		
112	3'-0"	6'-8"	0'-1 3/4"	WD	FLG	ACR	FR-1	HM	1	P3				3/4 HR	HW-5D	R1, R2, R3	
118	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
120.1	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR								3/4 HR	EX		
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145	3'-0"	7'-0"	0'-1 3/4"	WD	FL	ACR		HM	1	P3				3/4 HR	HW-2G		
C01.1	6'-0"	6'-10"	0'-1 3/4"	AL	ALG	AN	IG-1	AL	*	AN				-	HW-E9	R1, R2, R4, R7 (2) EQ DOORS	
C01.2	4'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	MG-1	AL	*	AN				-	HW-5D	R4	
C01.3	4'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	MG-1	AL	*	AN				-	HW-1	R4	
C02.1	4'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	MG-1	AL	*	AN				-	HW-5D	R4	
C02.2	4'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	MG-1	AL	*	AN				-	HW-1	R4	
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C05.2	3'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	IG-1	AL	3	AN				-	HW-E4	R1, R7	
C06	3'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	MG-1	AL	3	AN				-	HW-1		
C07	3'-0"	7'-0"	0'-1 3/4"	AL	ALG	AN	IG-1	AL	3	AN				-	HW-E4	R7	

C7 DOOR & FRAME SCHEDULE



F8 DOOR & FRAME TYPES
SCALE: 1/4" = 1' - 0"

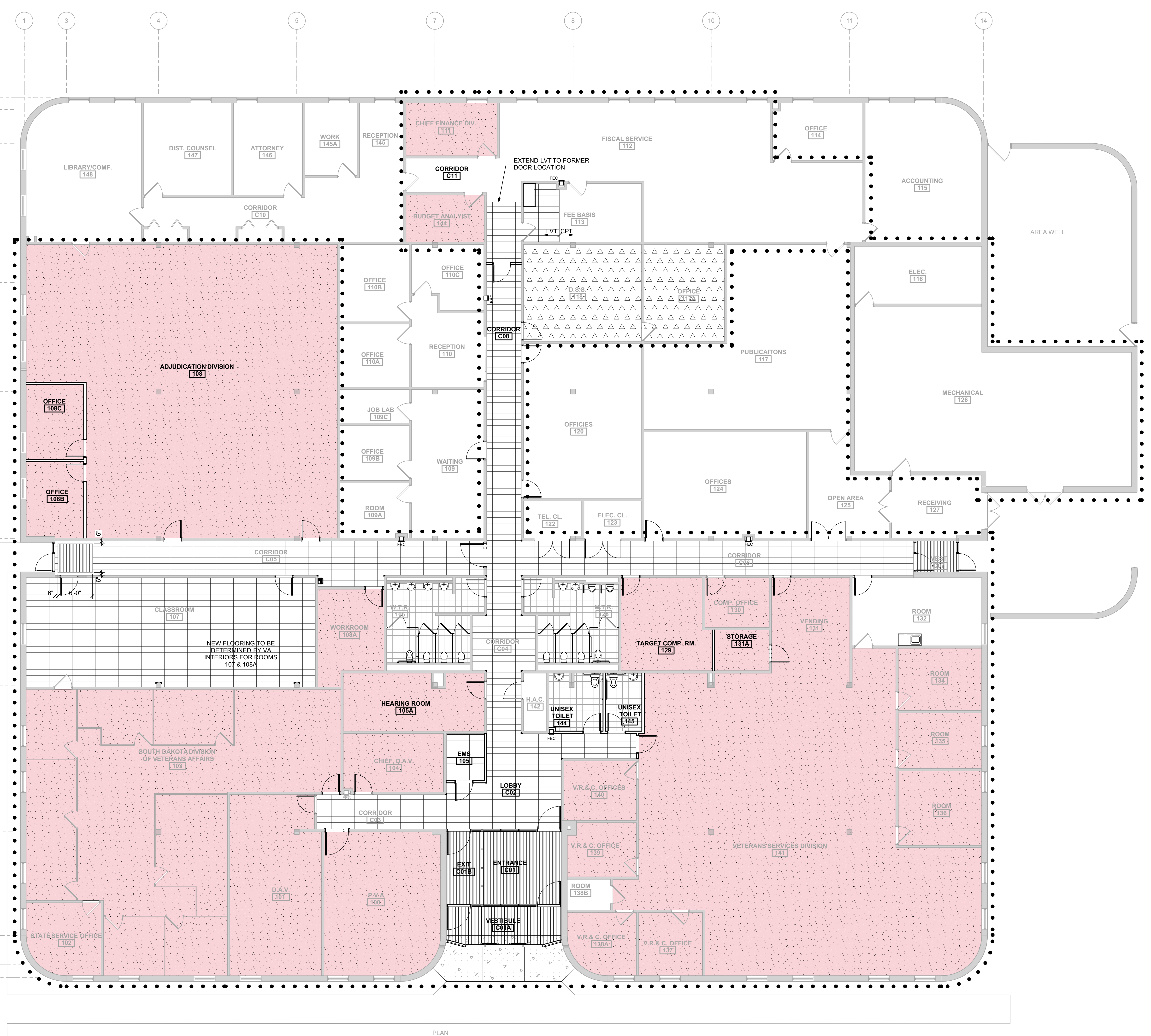


F4 TYP. BASE CABINET SECTION
SCALE: 3/4" = 1' - 0"

F6 HANDRAIL DETAIL
SCALE: 3/4" = 1' - 0"

<p>Revisions:</p>		<p>CONSULTANT</p>	<p>ARCHITECT/ENGINEER OF RECORD</p> <p>13100 watertown plank road suite 200 Elm Grove, WI 53122</p> <p>nagel architects</p> <p>Nagel Architects Project Number: 438-18-105</p>	<p>STAMP</p>	<p>Office of Construction and Facilities Management</p> <p>VA U.S. Department of Veterans Affairs</p>	<p>Drawing Title</p> <p>SCHEDULES & DETAILS</p> <p>Approved:</p>	<p>Phase</p> <p>100% CONSTRUCTION DOCUMENTATION</p>	<p>Project Title</p> <p>BUILDING 38 UPGRADE</p> <p>Location 2501 W 22nd ST SIOUX FALLS, SD 57105</p> <p>Issue Date 11/27/2018</p> <p>Checked BJL</p> <p>Drawn BFW</p>	<p>Project Number</p> <p>438-18-105</p> <p>Building Number</p> <p>38</p> <p>Drawing Number</p> <p>AE601</p>
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A
B
C
D
E
F



F1 FIRST FLOOR FINISH PLAN
SCALE: 1/8" = 1' - 0"

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS				CEILING		REMARKS
				NORTH	EAST	SOUTH	WEST	MATL	CLG HGT	
102	STATE SERVICE OFFICE	CPT1	RB1	P1	P1	P1	P1	P1	EX	9'-0"
103	SOUTH DAKOTA DIVISION OF V...	CPT1	RB1	P1	P1	P1	P1	P1	EX	9'-0"
105	EMS	LVT1	RB1	P1	P1	P1	P1	P1	AT1	9'-0"
105A	HEARING ROOM	CPT1	EX	EX	EX	EX	EX	EX	EX	9'-0"
106	W.T.R.	PT1	PT1	PT2,3	PT2,3	P1	PT2,3	EX-P4	EX	8'-0"
107	CLASSROOM	LVT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
108	ADJUDICATION DIVISION	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
108A	WORKROOM	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
108B	OFFICE	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
108C	OFFICE	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
112	FISCAL SERVICE	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
113	FEE BASIS	CPT1	RB1	P1	P1	P1	P1	EX	9'-0"	
117A	OFFICE	CPT3	RB1	P1	P1	P1	P1	EX	9'-0"	
118	D.S.S.	CPT3	RB1	P1	P1	P1	WVC2	EX	9'-0"	
128	M.T.R.	PT1	PT1	PT2,3	PT2,3	PT2,3	PT2,3	EX-P4	9'-0"	
129	TARGET COMP. RM.	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
131	VENDING	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
131A	STORAGE	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
134	ROOM	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
135	ROOM	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
136	ROOM	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
137	V.R. & C. OFFICE	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
138A	V.R. & C. OFFICE	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
139	V.R. & C. OFFICE	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
140	V.R. & C. OFFICES	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
141	VETERANS SERVICES DIVISION	CPT1	RB1	P1	P1	P1	P1	AT1	9'-0"	
144	BUDGET ANALYST	CPT1	RB1	EX	EX	EX	EX	EX	EX	9'-0"
144	UNISEX TOILET	PT1	PT1	PT2,3	P1	PT2,3	PT2,3	AT2	9'-0"	
145	UNISEX TOILET	PT1	PT1	PT2,3	P1	PT2,3	PT2,3	AT2	9'-0"	
C01	ENTRANCE	CP2	EX	EX	EX	EX	EX	EX	EX	8'-8"
C01A	VESTIBULE	CP1	EX	EX	EX	EX	EX	EX	EX	8'-8"
C01B	EXIT	CP2	EX	EX	EX	EX	EX	EX	EX	8'-8"
C02	LOBBY	LVT1.2	RB1	P1	P1	P1	P1	AT1	8'-8"	
C03	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	
C04	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	
C05	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	
C06	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	
C07	VEST	CP1	RB1	P1	P1	P1	P1	P1	8'-8"	
C08	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	
C11	CORRIDOR	LVT1.2	RB1	WVC1	WVC1	WVC1	WVC1	AT1	9'-0"	

C8 ROOM FINISH SCHEDULE
GENERAL ROOM FINISH NOTES:
1. ROOMS NOT LISTED IN THE ROOM FINISH SCHEDULE HAVE EXISTING FINISHES TO REMAIN

FINISH MATERIAL LEGEND

- FLOOR: CPT3 CARPET
- CPT1 CARPET
- CP1 WALK-OFF MAT
- LVT1 LUXURY VINYL TILE
- PT1 PORCELAIN TILE
- BASE: RB1 RUBBER BASE
- WALLS: P1 PAINT, COLOR; P2 PAINT, COLOR; P3 PAINT, COLOR; P4 PAINT, COLOR; PT2 PORCELAIN TILE; PT3 MOSAIC ACCENT TILE
- CEILING: AT1 ACOUSTICAL CEILING TILE, 2X2; AT2 VINYL COVERED GWB, 2X2; P4 PAINT - SEE ABOVE
- REMARKS: R1

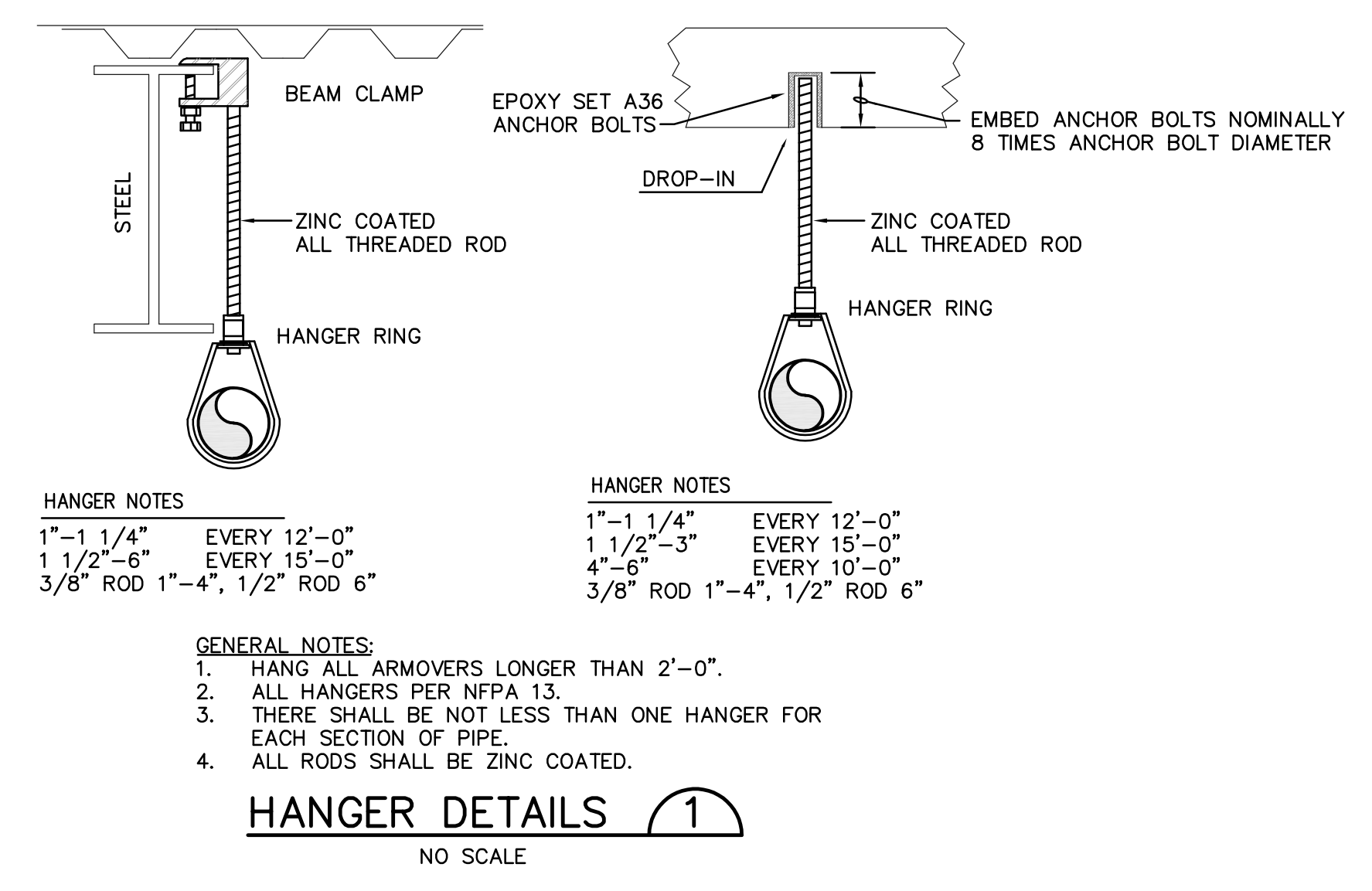
F8 FINISH MATERIAL LIST
SCALE: 1/8" = 1' - 0"

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VA FORM 08 - 6231

<p>Revisions:</p>	<p>CONSULTANT</p>	<p>ARCHITECT/ENGINEER OF RECORD</p> <p>13100 watertown plank road suite 200 Elm Grove, WI 53122</p> <p>nagel architects</p> <p>Nagel Architects Project Number: 438-18-105</p>	<p>STAMP</p> <p>Office of Construction and Facilities Management</p> <p>VA U.S. Department of Veterans Affairs</p>	<p>Drawing Title</p> <p>FIRST FLOOR FINISH PLAN AND FINISH SCHEDULE</p> <p>Approved:</p>	<p>Phase</p> <p>100% CONSTRUCTION DOCUMENTATION</p>	<p>Project Title</p> <p>BUILDING 38 UPGRADE</p> <p>Location 2501 W 22nd ST SIOUX FALLS, SD 57105</p> <p>Issue Date 11/27/2018</p> <p>Checked BJL</p> <p>Drawn BFW</p>	<p>Project Number</p> <p>438-18-105</p> <p>Building Number</p> <p>38</p> <p>Drawing Number</p> <p>AF701</p>
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three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 three eighths inch = one foot
 one eighth inch = one foot

FIRE PROTECTION SYMBOLS LEGEND			
NOTE: VALVES, PIPING AND FITTINGS DRAWN SUBDUED ON NEW WORK PLANS ARE EXISTING ITEMS. BOLD ITEMS ARE TO PROVIDED NEW. SEE ARCHITECTURAL, HVAC AND LIGHTING PLANS FOR SYMBOLS INSTALLED WITH THE REFLECTED CEILING GRIDS THAT HAVE BEEN PROVIDED ON THE FIRE SPRINKLER PLANS.			
—#”F—	SPRINKLER MAIN PIPING WITH SIZE OF PIPE		PIPE CAP/PLUG
F	SPRINKLER MAIN		PIPE CONCENTRIC REDUCER
	ZONE CONTROL SUPERVISED SHUT-OFF VALVE		TEE WITH PIPE OUTLET DOWN
	SPRINKLER OR STANDPIPE RISER		TEE WITH PIPE OUTLET UP
	ELBOW - OUTLET DOWN		SIDEWALL STYLE SPRINKLER
	ELBOW - OUTLET UP		RECESSED STYLE SPRINKLER
	PIPE BREAK (PIPE EXTENDS BEYOND WHAT IS SHOWN)		PENDENT STYLE SPRINKLER
	NEW CONNECTION POINT		CONCEALED STYLE SPRINKLER
	POINT OF DISCONNECT		UPRIGHT STYLE SPRINKLER
			SECTION OF PIPE TO BE DEMOLISHED
NOTE: SEE SHEET EG101 FOR FIRE ALARM SYMBOLS.			



GENERAL FIRE SUPPRESSION DEMOLITION NOTES:

- A. DRAWINGS INDICATE APPROXIMATE ROUTING OF PIPING, DUCTWORK AND MAJOR COMPONENTS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND ROUTING PRIOR TO REMOVAL OR RELOCATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL OF MISCELLANEOUS MECHANICAL ITEMS LOCATED ON OR IN ANY WALLS TO BE REMOVED.
- B. ALL OPENINGS THROUGH WALLS NOT BEING REUSED SHALL BE PATCHED WITH LIKE MATERIALS AND PAINTED TO MATCH EXISTING.
- C. KEEP EXISTING SPRINKLER SYSTEM IN SERVICE AS MUCH AS IS FEASIBLE. PROVIDE FIRE WATCH IF OUTAGE IS TO BE OVER 4 HOURS IN DURATION.
- D. CONTRACTOR TO NOTIFY COR (LSM FOR LIFE SAFETY) OF OUTAGE REQUEST 10 DAYS PRIOR TO MINOR OUTAGES AND 15 DAYS PRIOR TO MAJOR OUTAGES.

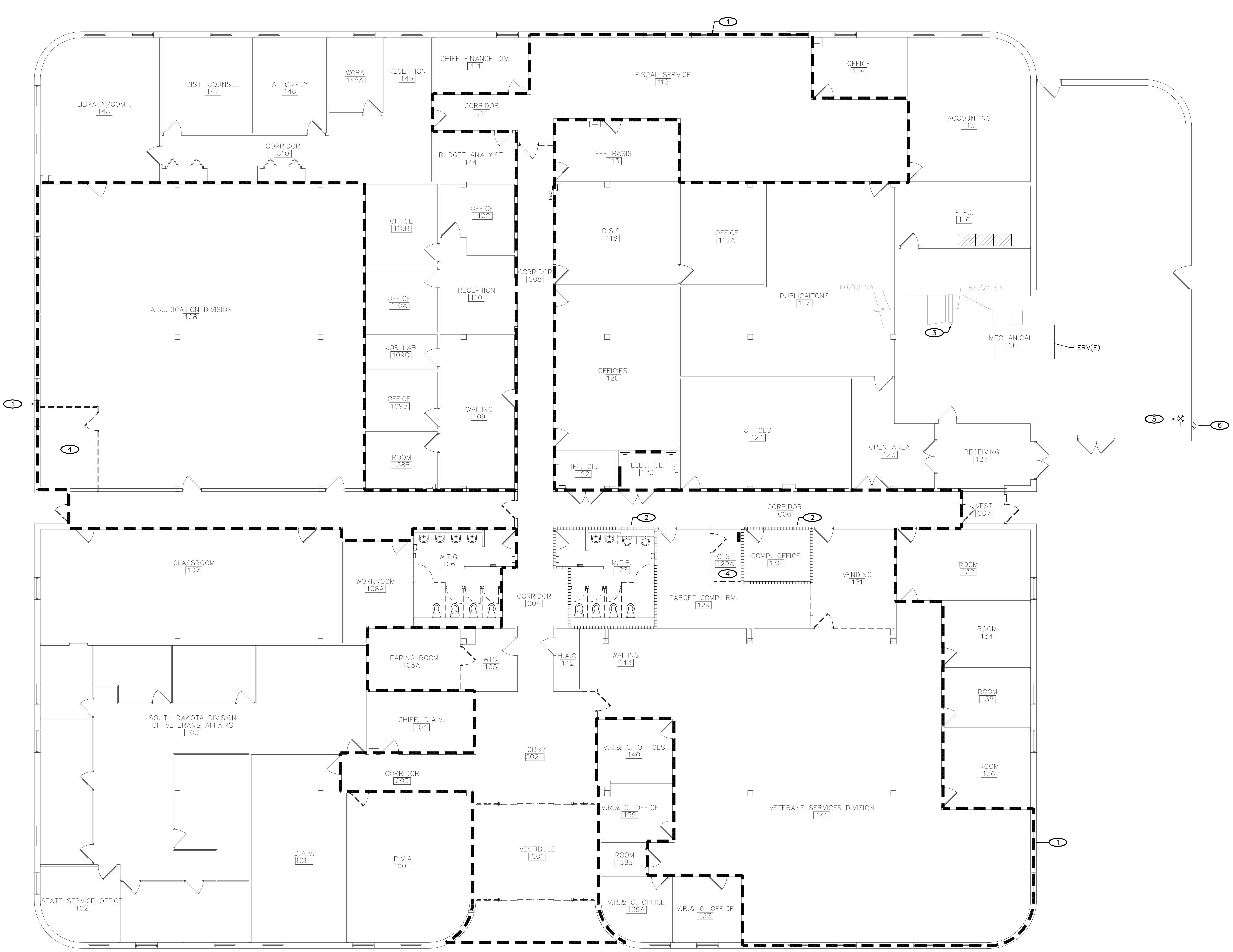
FIRE SUPPRESSION GENERAL NOTES:

1. FIRE PROTECTION WORK SHALL INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:
 - A. ENTIRE FACILITY IS CURRENTLY PROTECTED WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM. REVISE EXISTING SYSTEM PER GUIDELINES ON SHEETS FD101 AND FX101.
 - B. UPON COMPLETION OF THIS PROJECT, THE FIRE SPRINKLER SYSTEM SHALL REMAIN A COMPLETE AND OPERABLE SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF THE DEPARTMENT OF VETERANS ADMINISTRATION INCLUDING ALL PIPING AND ALL VALVES, ETC. PROVIDE NEW VALVES AND FIRE PROTECTION EQUIPMENT WHERE NOTED ON THE PLANS.
 - C. ALL AREAS OF THE BUILDING INDICATED SHALL BE SPRINKLERED ACCORDING TO THE LATEST EDITION OF APPLICABLE NFPA STANDARDS, SPECIFICALLY NFPA 13 & 25. ENTIRE SYSTEM SHALL BE INSTALLED PER THE REQUIREMENTS OF THE DEPARTMENT OF VETERAN'S AFFAIRS (VA). THIS FACILITY IS SERVICED BY THE SIOUX FALLS, SOUTH DAKOTA FIRE DEPARTMENT. FIREPROOF ALL WALL PENETRATIONS.
 - D. COORDINATE CONSTRUCTION TO KEEP EXISTING SPRINKLER SYSTEMS IN SERVICE AS LONG AS POSSIBLE. COORDINATE WITH INTERIM LIFE SAFETY MEASURES (ISLM) IN SPEC SECTION GENERAL REQUIREMENTS. PROVIDE FIRE WATCH IN ACCORDANCE WITH CURRENT FIRE CODES FOR AREAS OF THE BUILDING THAT ARE OUT OF SERVICE.
2. DESIGN SHALL BE BASED ON HYDRAULIC CALCULATIONS PER NFPA 13 AND VA SPEC 21 13 13, WITH SHOP DRAWINGS PREPARED ACCORDING TO THE REQUIREMENTS OF THE VA. CALCULATIONS SHALL BEGIN WITH THE REMOTE AREA SPRINKLERS AND END AT THE CONNECTION TO THE SITE DOMESTIC WATER MAIN.
3. DRAWINGS ARE DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT OF THE SYSTEM. COORDINATE THE SPRINKLER SYSTEM LAYOUT WITH ALL ARCHITECTURAL, STRUCTURAL, HVAC, PLUMBING AND ELECTRICAL COMPONENTS, BOTH NEW AND EXISTING ITEMS TO REMAIN. PROVIDE OFFSETS AS NECESSARY TO AVOID CONFLICTS.
4. THE LAYOUT SHOWN IS TO DEPICT THE GENERAL AREAS TO BE SERVED. THE EXACT NUMBER, TYPE, COVERAGE, ETC., OF SPRINKLERS SHALL BE DETERMINED BY THE CONTRACTOR AND SHALL BE SUBJECT TO APPROVAL BY ALL AUTHORITIES HAVING JURISDICTION, SPECIFICALLY, THE DEPARTMENT OF VETERAN'S AFFAIRS.
5. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES AND HEIGHTS, AND LOCATIONS OF EXPOSED STRUCTURE. COORDINATE ALL SPRINKLER LOCATIONS IN AS AESTHETIC SPACING AS POSSIBLE. CONTRACTOR SHALL ALSO CONFIRM EXISTING CEILING LOCATIONS.
6. ALL PIPING AND SPRINKLERS IN EXPOSED AREAS SHALL BE COORDINATED WITH DUCTWORK AND LIGHTS. EXPOSED SPRINKLERS SHALL BE UPRIGHT UNLESS SPECIFICALLY SHOWN OTHERWISE ON THE DRAWINGS. PROVIDE ADDITIONAL SPRINKLERS AS NECESSARY.
7. ALL SPRINKLERS IN GYP. BOARD AND LAY-IN CEILINGS SHALL BE RECESSED PENDENT TYPE WITH FACTORY APPLIED WHITE POLYESTER FINISH IN PUBLIC AREAS, UNLESS NOTED OTHERWISE.
8. PROVIDE AUXILIARY DRAINS FOR ALL LOW SPOTS, TYPICAL.
9. SPRINKLER TYPES AND LOCATIONS, AND SPRINKLER PIPING SHOWN FOR AESTHETIC AND COORDINATION PURPOSES. ACTUAL SYSTEM LAYOUT SHALL BE BASED ON HYDRAULIC DESIGN AND SHOP DRAWINGS. SPRINKLERS SHOWN ADJACENT TO AIR OUTLETS/INLETS AND LIGHT FIXTURES SHALL BE LOCATED 6" MINIMUM FROM BOTH. ALL SPRINKLERS IN LAY-IN CEILINGS SHALL BE INSTALLED WITHIN THE CENTER OF CEILING TILE. NOTIFY CONTRACTING OFFICER OF CONFLICTS. NOTE: PROVIDE HIGHER TEMPERATURE RATED SPRINKLERS IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES FOR ANY SPRINKLER INSTALLED WITHIN 30 INCHES OF A SUPPLY AIR DIFFUSER.
10. SPRINKLER CONTRACTOR TO FIELD VERIFY EXISTING SPRINKLER SYSTEM FOR AREAS OF THE BUILDING WHERE THE SYSTEM IS BEING REMOVED, MODIFIED OR REMODELED PRIOR TO CREATION OF THEIR SHOP DRAWING SUBMITTAL. VERIFY PIPE SIZES AND LOCATION.
11. SPRINKLER CONTRACTOR SHALL COORDINATE ALL CEILING HEIGHTS WITH GENERAL CONTRACTOR BEFORE MAKING FINAL PIPE DROPS TO SPRINKLERS. A COST EXTRA IS NOT ACCEPTED IF CEILING HEIGHTS CHANGE PRIOR TO INSTALLATION OF THE SPRINKLER DROPS AND THE COORDINATION DID NOT OCCUR.
12. ALL EXPOSED PIPING SHALL BE PAINTED. PAINT COLOR TO MATCH CEILING FINISH IN AREA OF PIPE AND SHALL INCLUDE RED BANDING IN ACCORDANCE WITH NFPA 13 DESIGN GUIDELINES. SPRINKLER INSTALLER SHALL BE RESPONSIBLE FOR PROVIDING PROTECTIVE COVERING OVER THE SPRINKLERS OF ALL EXPOSED PIPING DURING THE PAINTING OF THE PIPING AND REMOVAL OF COVERING UPON COMPLETION AND PRIOR TO PLACING SYSTEM INTO SERVICE. PROVIDE PIPE MATERIAL ACCEPTABLE FOR PAINTING.
13. SUPPORT ALL PIPING FROM STRUCTURE. SEE DETAIL 1 ON THIS SHEET.
14. COORDINATE WITH PLUMBING, ELECTRICAL AND MECHANICAL HVAC WORK. DO NOT INSTALL SPRINKLER PIPING BELOW MECHANICAL EQUIPMENT OR WITHIN CLEARANCE SPACES FOR MECHANICAL OR ELECTRICAL EQUIPMENT.
15. ALL HOLES FOR PIPING AND CONDUIT SHALL BE DRILLED OR CORE DRILLED, NO BREAKING OF CONCRETE OR C.M.U. SHALL BE PERMITTED.
16. APPLICABLE UL CONSTRUCTION DETAILS SHALL BE USED WHERE RATED ASSEMBLIES ARE PENETRATED BY SPRINKLER PIPING SYSTEM.
17. CONTRACTOR SHALL PROVIDE UL LISTED THROUGH-PENETRATION FIRESTOP SYSTEMS AT ALL PIPE OPENINGS THROUGH FIRE RATED WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL FIRE WALLS.
18. PROVIDE SPRINKLER PROTECTION BELOW ALL EXPOSED DUCTS, SUSPENDED MECHANICAL AND ELECTRICAL EQUIPMENT, AND FIXED STRUCTURES THAT ARE 4'-0" AND GREATER IN WIDTH, AS REQUIRED BY THE LATEST EDITION OF NFPA 13.
19. ROUTE SPRINKLER PIPING AS HIGH AS POSSIBLE THROUGHOUT STRUCTURE, UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS.
20. ALL MATERIALS FOR THIS PROJECT SHALL COMPLY WITH THE "BUY AMERICAN" REQUIREMENTS OUTLINED IN THE CONTRACT SPECIFICATIONS.
21. CEILING GRID PROVIDED FOR COORDINATION PURPOSES. SEE ARCHITECTURAL PLANS FOR FINAL GRID AND CEILING HEIGHTS.
22. ROUTE SPRINKLER PIPING AROUND ELECTRICAL, DATA, IT, COMM AND ALL OTHER ROOMS DESIGNATED TO ELECTRICAL COMPONENTS AND/OR PANELS. PROTECT THESE AREAS WITH SIDEWALL SPRINKLER(S) AS APPLICABLE.
23. ALL NEW SPRINKLER DROPS SHALL BE INSTALLED ON FLEXIBLE DROPS.

NOTE:
 DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FARRIS ENGINEERING PLANS.

Revisions: _____ Date: _____	CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title GENERAL FIRE SUPPRESSION NOTES, DETAIL AND SYMBOLS Approved: _____ _____ _____	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number FG101
	Checked BDH Drawn LMB							

three inches = one foot
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one half inch = one foot
three eighths inch = one foot
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one eighth inch = one foot



- DEMOLITION KEYNOTES:** ()
- 1 BOLD DASHED LINE IDENTIFIES AREA OF REMODEL. EXCEPT WHERE SPECIFICALLY NOTED DIFFERENTLY, REMOVE ALL SPRINKLERS AND CORRESPONDING 1" ARM-OVER PIPING TO ALLOW FOR CEILING AND WALL REMOVAL. PROVIDE NEW LAYOUT THAT MEETS THE REQUIREMENTS OF THE NEW FLOOR PLAN. ALL AFFECTED AREAS ARE CURRENTLY DESIGNED FOR, AND SHALL REMAIN, A LIGHT HAZARD OCCUPANCY. IF EXISTING SPRINKLERS ARE FOUND TO BE INSTALLED ON FLEXIBLE DROP SUPPORTS, DO NOT REMOVE SPRINKLERS OR FLEXIBLE DROPS. CAREFULLY REMOVE EXISTING CEILING AND PROVIDE TEMPORARY HANGAR SUPPORT TO STRUCTURE. RE-INSTALL FLEXIBLE DROPS IN LOCATIONS THAT MEET NEW FLOOR PLAN AND PROVIDE NEW AS NECESSARY TO MEET PROPER COVERAGE REQUIREMENTS AND DISTANCE TO NEW WALLS. FIELD VERIFY EXISTING CONDITIONS. WORK SHALL BE CONDUCTED IN PHASES. EXISTING SYSTEM SHALL REMAIN IN SERVICE AS LONG AS POSSIBLE. SEE ARCHITECTURAL PHASING PLANS FOR FURTHER REQUIREMENTS.
 - 2 NO SPRINKLER WORK REQUIRED WITHIN BOUNDARY.
 - 3 REMOVE EXISTING SIDEWALL STYLE SPRINKLER PROTECTING UNDER LARGE DUCT TO ALLOW FOR DUCT PIECE SHOWN HATCHED TO BE REMOVED AND UPGRADED. PROVIDE NEW SIDEWALL PROTECTION WHEN HVAC UPGRADE AT THIS LOCATION HAS BEEN COMPLETED.
 - 4 ROOM IS TO BE COMPLETELY REMOVED AS PART OF REMODEL. ENSURE PROPER PROTECTION IS PROVIDED WITH NEW FLOOR PLAN. IF EXISTING PIPING IN THIS AREA IS NO LONGER NEEDED WITH NEW LAYOUT, REMOVE AND CAP AT NEAREST MAIN.
 - 5 EXISTING WET PIPE AUTOMATIC FIRE SPRINKLER RISER. RISER INCLUDES A BACKFLOW PREVENTER, COMBINATION MAIN DRAIN/INSPECTOR'S TEST VALVE, FLOW SWITCH AND PRESSURE GAUGE. ALL VALVES AND THE FLOW SWITCH ARE SUPERVISED BY THE BUILDING'S FIRE ALARM SYSTEM.
 - 6 EXISTING WALL MOUNTED FIRE DEPARTMENT CONNECTION IS INSTALLED AT THIS LOCATION WITH AN OUTSIDE BELL STROBE DEVICE INSTALLED ABOVE THE FDC THAT IS CONNECTED TO THE RISER FLOW SWITCH. THE FDC PIPING IS EQUIPPED WITH A BYPASS LOOP WITH A SUPERVISED SHUT-OFF VALVE THAT IS NORMALLY CLOSED TO ALLOW FOR PROPER FULL FLOW TESTING OF THE BACKFLOW PREVENTER.

FIRE SUPPRESSION DEMOLITION PLAN
 SCALE: 1/8" INCH = 1 FOOT
 12" 0' 5' 10' 15'

Revisions: Date:	CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP 	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title FIRE SUPPRESSION DEMOLITION PLAN Approved: . . .	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number FD101
	Checked DGK Drawn DGK							

MECHANICAL SYMBOLS LEGEND

(AS APPLICABLE)

GENERAL MECHANICAL NOTES

Table containing mechanical symbols and descriptions for PIPING AND SPECIALTIES, VALVES, DUCTWORK, FITTINGS, H.V.A.C., MISCELLANEOUS, and MEDICAL PIPING.

- A. CROSSHATCHING INDICATES EXISTING ITEMS AND ASSOCIATED MATERIALS SHALL BE REMOVED.
B. DRAWINGS INDICATE APPROXIMATE ROUTING OF PIPING, DUCTWORK AND MAJOR COMPONENTS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND ROUTING PRIOR TO REMOVAL OR RELOCATION.
C. EXISTING INSULATION DAMAGED DURING DEMOLITION / CONSTRUCTION ACTIVITIES SHALL BE REPAIRED WITH SIMILAR MATERIALS.
D. ALL OPENINGS THROUGH WALLS AND FLOOR SLABS NOT BEING REUSED SHALL BE PATCHED WITH LIKE MATERIALS AND PAINTED TO MATCH EXISTING.
E. ALL OPENINGS THROUGH ROOF NOT BEING REUSED SHALL BE PATCHED WITH LIKE MATERIALS AND SEALED WATERTIGHT.
F. COORDINATE WITH COTR AND ALL TRADES FOR SHUTDOWN OF EXISTING SYSTEMS. EXISTING SYSTEMS EFFECT OTHER AREAS OF THE HOSPITAL AND SHALL REMAIN OPERATIONAL DURING NORMAL BUSINESS HOURS.

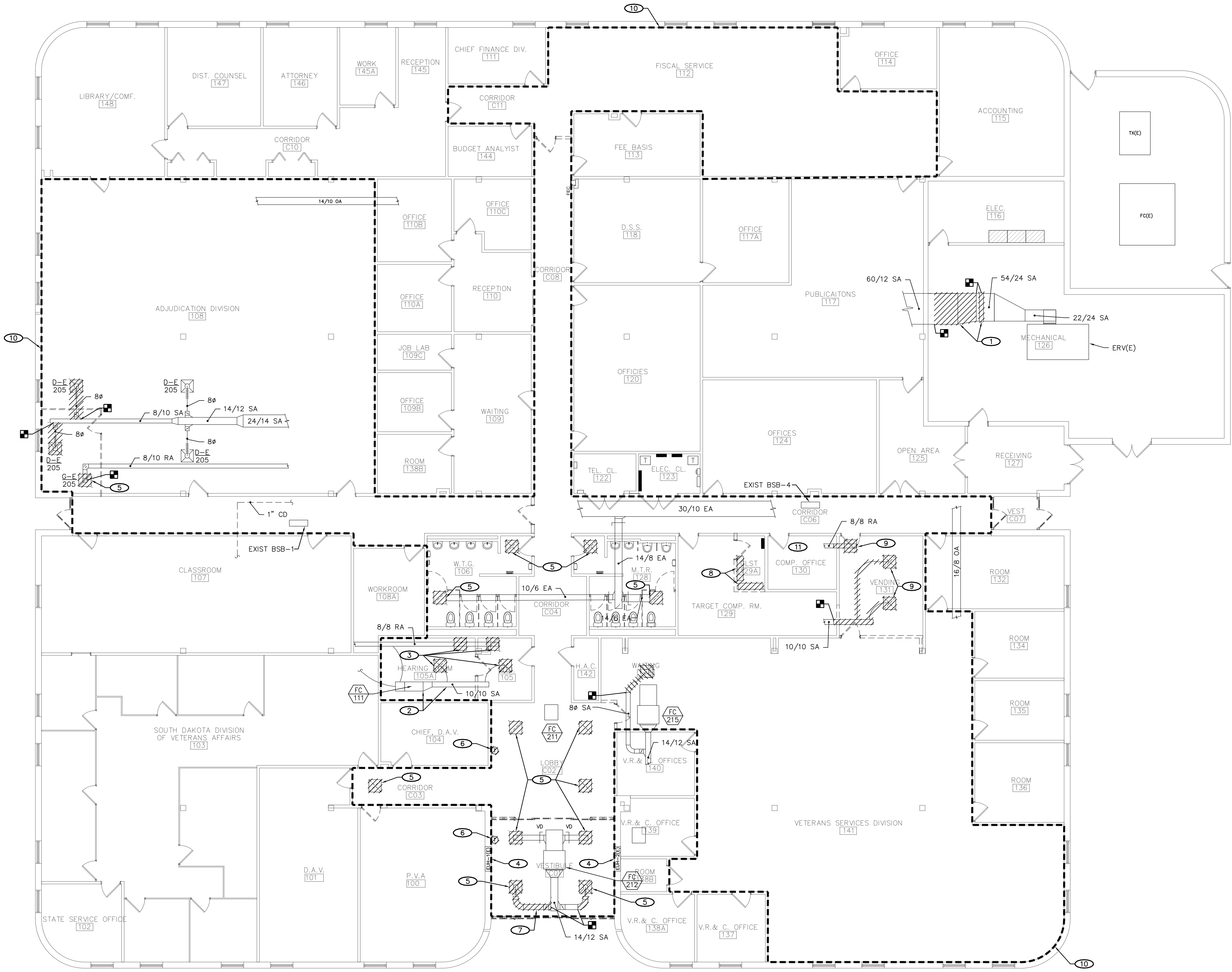
GENERAL HVAC DEMOLITION NOTES

- A. LIGHT LINE WEIGHT INDICATES EXISTING ITEMS AND ASSOCIATED MATERIALS TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED UNDER THIS CONTRACT.
B. ROUTING INDICATED ON DRAWINGS IS APPROXIMATE AND DOES NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR TO FIELD VERIFY DUCT SIZE AND SERVICE PRIOR TO FINAL CONNECTION.
C. HVAC WORK SHALL NOT BE LOCATED OVER ELECTRICAL, DATA, OR COMMUNICATION EQUIPMENT ROOMS.
D. SUPPORT ALL DUCTWORK, PIPING, EQUIPMENT, ETC. FROM BUILDING STRUCTURE.
E. ALL DUCT SIZES SHOWN ARE CLEAR AIRWAY DIMENSIONS. INCREASE SHEET METAL SIZE TO ACCOMMODATE DUCT LINER AS REQUIRED.
F. ELBOWS SHALL BE CONSTRUCTED WITH CENTERLINE RADIUS OF NOT LESS THAN 1-1/2 TIMES THE WIDTH OF DUCT.
G. SIZE TRANSITIONS WITH A MINIMUM SLOPE OF 1:4.
H. PROVIDE DRAW BANDS AND SEAL END OF DUCT INSULATION ON ALL FLEXIBLE CONNECTIONS.
I. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED, SMOKE RATED OR COMBINATION FIRE & SMOKE RATED SEPARATIONS.
J. COORDINATE ALL GRILLE, REGISTER AND DIFFUSER LOCATIONS WITH REFLECTED CEILING PLAN, LIGHT FIXTURES, SPRINKLER HEADS, COMMUNICATION/SOUND DEVICES AND FIRE ALARM DEVICES.
K. INSTALL ESCUTCHEON PLATES ON ALL ROUND DUCT WALL PENETRATIONS.
L. INSTALL WALL ANGLE FOR ALL RECTANGULAR DUCT PENETRATIONS THROUGH WALLS.
M. FOR EXPOSED DUCTWORK THOROUGHLY CLEAN, REMOVE ALL SHIPPING LABELS AND OTHER IDENTIFICATION TAGS.
N. PROVIDE DUCT MOUNTED ACCESS DOOR AT FIRE DAMPER, SMOKE DAMPER OR COMBINATION FIRE/SMOKE DAMPERS TO ALLOW FOR MAINTENANCE AND VISUAL INSPECTION PER NFPA REQUIREMENTS.
O. VOLUME DAMPERS ABOVE INACCESSIBLE CEILINGS SHALL HAVE EXTENSION RODS AND ESCUTCHEON PLATES.
P. LOCATE AND INSTALL EQUIPMENT TO PROVIDE ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES.
Q. ALL OPENINGS IN WALLS AND FLOORS FOR PIPING SHALL BE CORE DRILLED OR SAW CUT, UNLESS OTHERWISE NOTED.
R. ALL HVAC PIPING WORK SHALL BE LOCATED ABOVE CEILINGS, IN A PIPE CHASE, OR OTHER CONCEALED LOCATIONS, UNLESS OTHERWISE NOTED.
S. INSTALL SECTIONAL VALVES ON EACH BRANCH AND/OR RISER SERVING TWO OR MORE HYDRONIC TERMINALS OR EQUIPMENT CONNECTIONS.
T. INSTALL SHUTOFF VALVES ON INLET AND OUTLET OF EACH MECHANICAL EQUIPMENT ITEM AND/OR EACH HYDRONIC TERMINAL.
U. SLOPE HVAC PIPING TO DRAIN VALVES. PROVIDE MANUAL AIR VENTS AT HIGH POINTS AND AT TOP OF RISERS.
V. SEAL ALL HVAC PENETRATIONS. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS OR CEILINGS WITH MATERIALS APPROPRIATE FOR RATING.
W. PIPING IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF BUILDING INSULATION AND VAPOR BARRIER.
X. COORDINATE INSTALLATION OF BUILDING INSULATION TO RUN CONTINUOUS BETWEEN PIPING AND EXTERIOR WALL SURFACE.
Y. PVC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM UNLESS THE PIPING IS INSTALLED IN A PRE-APPROVED RATED ASSEMBLY.

NOTICE: DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FARRIS ENGINEERING PLANS.

Project information block including Consultant (FARRIS ENGINEERING), Architect/Engineer of Record (Nagel architects), Office of Construction and Facilities Management, Drawing Title (GENERAL MECHANICAL NOTES AND SYMBOLS), Phase (100% CONSTRUCTION DOCUMENTATION), Project Title (BUILDING 38 UPGRADE), Project Number (438-18-105), Building Number (38), Location (2501 W 22nd ST SIOUX FALLS, SD 57105), Issue Date (11/27/2018), Checked (BDH), Drawn (LMB), and Drawing Number (MG101).

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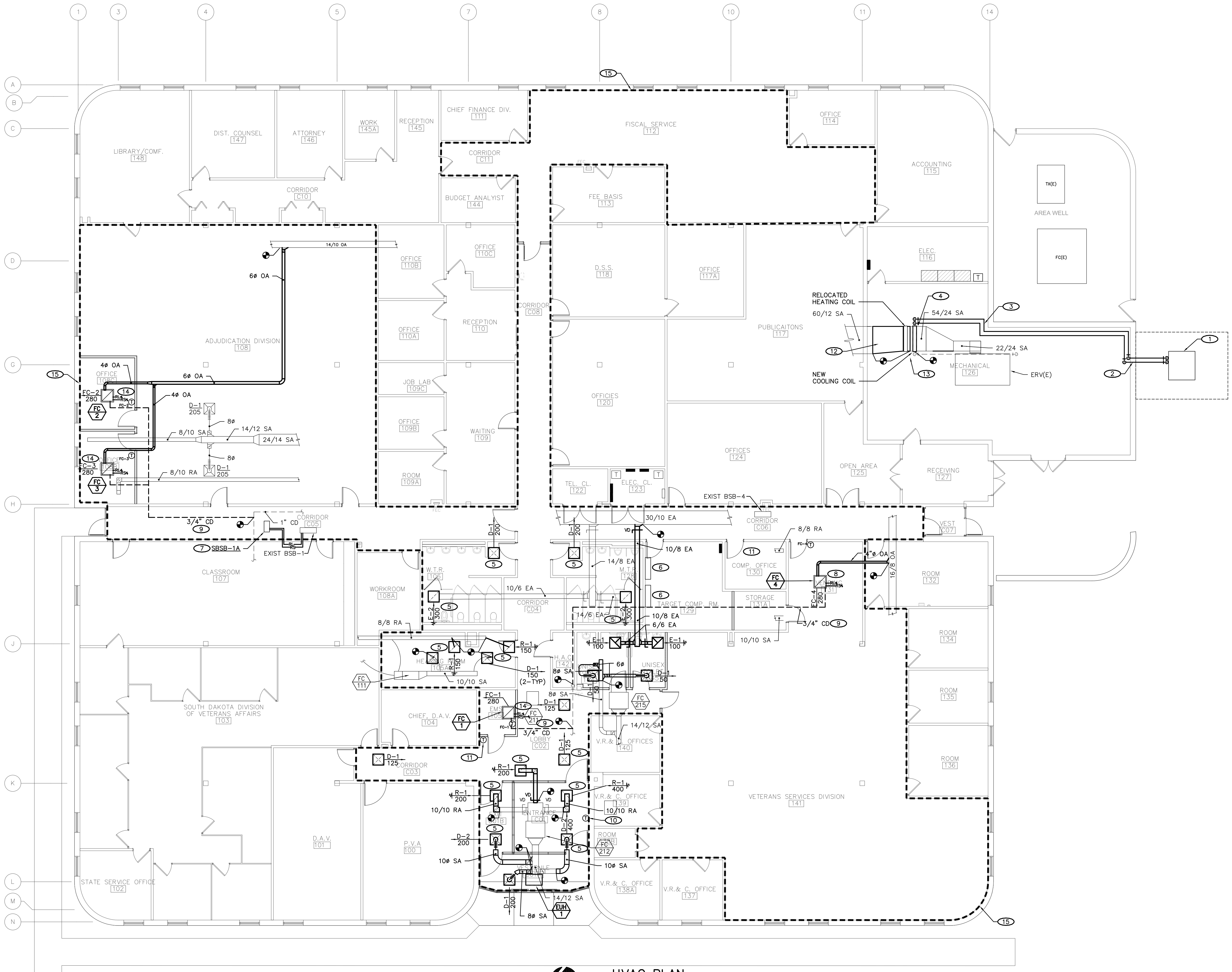


- MECHANICAL KEYNOTES:** (C)
- 1 REMOVE PORTION OF SUPPLY DUCT FROM EXISTING ERV TO ALLOW FOR THE INSTALLATION OF A NEW DX COOLING COIL AND NEW DUCT TRANSITION. REMOVE HEATING COIL AND RELOCATE.
 - 2 EXISTING FAN COIL UNIT AND SUPPLY DUCT TO REMAIN.
 - 3 RELOCATE EXISTING DIFFUSERS AND GRILLES FOR NEW CEILING.
 - 4 EXISTING UNIT HEATERS TO REMAIN.
 - 5 EXISTING DIFFUSERS AND GRILLES TO BE REMOVED AND REUSED. SEE SHEET MH101 FOR NEW LOCATION, COORDINATE WITH ARCHITECTURAL RCP.
 - 6 REMOVE AND RELOCATE EXISTING THERMOSTAT PER NEW PLAN.
 - 7 SHIFT DUCTWORK AS NECESSARY TO ALLOW INSTALLATION OF NEW DIFFUSER.
 - 8 REMOVE EXISTING DUCTLESS SPLIT UNIT AND RELOCATE TO ADJACENT WALL.
 - 9 REMOVE DIFFUSERS AND GRILLES. CAP EXISTING DUCTWORK.
 - 10 REMOVE EXISTING GRILLES/DIFFUSERS WITHIN OUTLINED AREAS UNLESS NOTED OTHERWISE. SEE SHEET MH-101 FOR DUCTWORK ALTERNATE INFORMATION TO CLEAN RATHER THAN REPLACE SELECT DIFFUSERS/GRILLES.
 - 11 DIFFUSERS/GRILLES TO REMAIN.

MECHANICAL DEMOLITION PLAN
 SCALE: 1/8" INCH = 1 FOOT
 NORTH

Revisions:	Date:	CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 Nagel Architects Project Number: 438-18-105	STAMP 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title MECHANICAL DEMOLITION PLAN Approved: . .	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number MD101
		Checked BDH	Drawn LMB						

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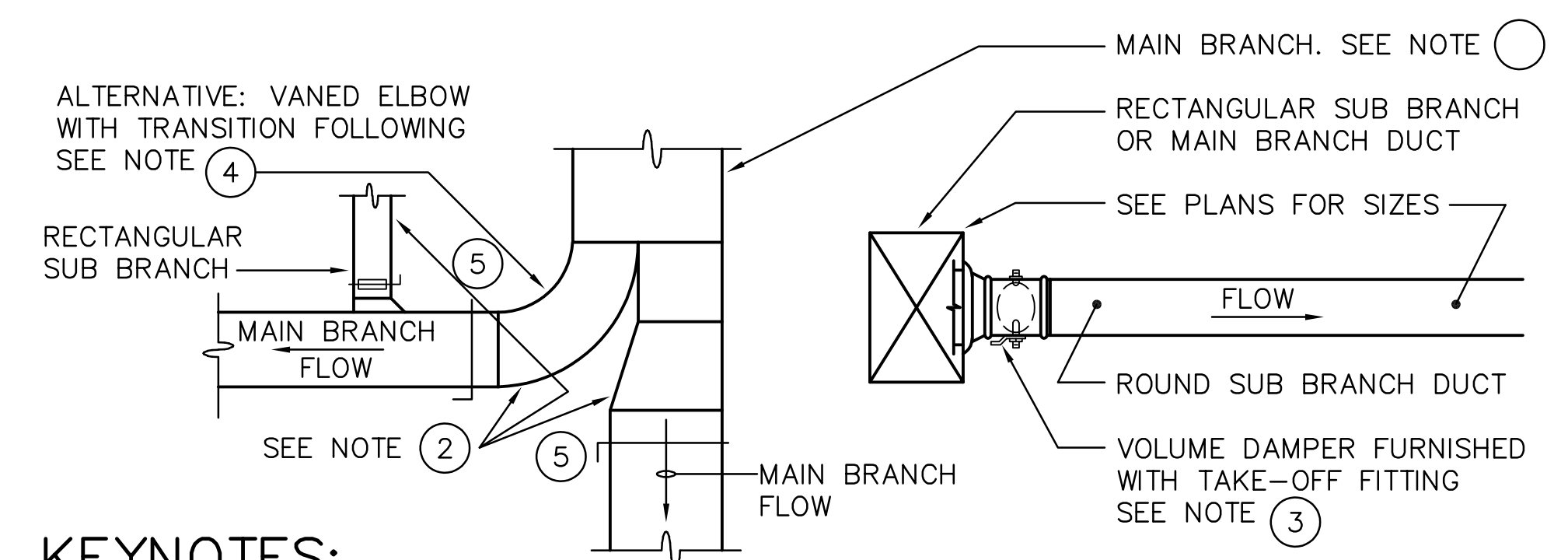
- MECHANICAL KEYNOTES:** (C)
- MOUNT CONDENSING UNIT FOR ERV COOLING COIL ON A 4" CONCRETE PAD. PROVIDE MANUFACTURER'S CLEARANCES FOR CONDENSING UNIT.
 - PROVIDE WALL PENETRATION FOR REFRIGERANT LINES AND SEAL WEATHER TIGHT.
 - SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATION AND MOUNT AS HIGH AS POSSIBLE.
 - INSTALL COOLING COIL IN SUPPLY AIR DUCT OF ERV. PROVIDE NEW DUCTWORK AND TRANSITIONS AS REQUIRED.
 - REINSTALL EXISTING DIFFUSERS AND GRILLES IN NEW CEILING AND ADD DUCTWORK AS REQUIRED. COORDINATE WITH ARCHITECTURAL. BALANCE DIFFUSERS TO NEW INDICATED AIRFLOW REQUIREMENTS. CONTRACTOR SHALL CLEAN AND REPAIR, IF NECESSARY, EXISTING GRILLES TO LIKE NEW CONDITION.
 - RELOCATE EXISTING DUCTLESS SPLIT UNIT TO WALL, COORDINATE LOCATION WITH OWNER. REROUTE ASSOCIATED REFRIGERANT LINES AND CONDENSATE AS REQUIRED. COORDINATE WITH OWNER FOR SHUTDOWN.
 - INSTALL NEW SUB BC CONTROLLER, CONNECT TO EXISTING MAIN BC CONTROLLER PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE CONNECTION AND TIMING WITH COTR TO MINIMIZE THE DOWNTIME OF THE AREAS SERVED BY THE MAIN BC CONTROLLER. SIZE REFRIGERANT LINES BASED ON A CONNECTED LOAD OF 60 MBH AND PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH ELECTRICAL FOR SHUTDOWN. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES. PROVIDE ADDITIONAL REFRIGERANT SO THAT EACH NEW AND EXISTING FAN COIL UNIT IS FULLY OPERATIONAL. INSULATE REFRIGERANT PIPING WITH CLOSED CELL INSULATION.
 - ROUTE NEW REFRIGERANT LINES FROM VRV CASSETTE TO EXISTING BC CONTROLLER BSB-4. INSTALL AND SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL REFRIGERANT SO THAT EACH NEW AND EXISTING FAN COIL UNIT IS FULLY OPERATIONAL. INSULATE REFRIGERANT PIPING WITH CLOSED CELL INSULATION.
 - CONNECT NEW 3/4" CONDENSATE PIPING TO NEW 3/4" CONDENSATE PIPING IN AREA OF WORK. INSULATE CONDENSATE PIPING WITH CLOSED CELL INSULATION. PROVIDE EACH FAN COIL CASSETTE WITH A FACTORY INTEGRAL CONDENSATE PUMP.
 - NEW T-STAT LOCATION FOR FC-212.
 - NEW T-STAT LOCATION FOR FC-211.
 - NEW DUCT TRANSITION TO GO FROM HEATING COIL 54"x24" TO EXISTING DUCT 60"x12".
 - MAINTAIN MAXIMUM AVAILABLE SEPARATION BETWEEN NEW COOLING COIL AND RELOCATED HEATING COIL.
 - ROUTE NEW REFRIGERANT LINES FROM VRV CASSETTE TO NEW SUB BC CONTROLLER BSB-1A. INSTALL AND SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL REFRIGERANT SO THAT EACH NEW AND EXISTING FAN COIL UNIT IS FULLY OPERATIONAL. INSULATE REFRIGERANT PIPING WITH CLOSED CELL INSULATION.
 - PROVIDE AND INSTALL NEW DIFFUSERS/GRILLES IN ALL LOCATIONS WITH NEW CEILINGS. REFER TO ARCHITECTURAL FOR EXACT LOCATIONS WITH NEW CEILINGS. OUTLINE SHOWS APPROXIMATE LOCATIONS. APPROXIMATE QUANTITIES OF DIFFUSERS/GRILLES THAT ARE NOT SPECIFICALLY CALLED OUT ON PLAN ARE LISTED BELOW (FOR ESTIMATING PURPOSES ONLY)
- D-1 - 36
D-2 - 1
R-1 - 14

DEDUCT ALTERNATE #1
CONTRACTOR SHALL PROVIDE PRICING DEDUCT ALTERNATE FOR CLEANING AND REPAIRING EXISTING DIFFUSERS/GRILLES INSTEAD OF REPLACING. DEDUCT TO APPLY TO DIFFUSERS/GRILLES NOT SPECIFICALLY CALLED OUT ON PLANS TO BE REPLACED.

HVAC PLAN
SCALE: 1/8" INCH = 1 FOOT
12" 0' 5' 10' 15'

CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900		ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105		STAMP 	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title HVAC PLAN Approved:	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number MH101
Revisions:		Date:						Checked BDH Drawn LMB	

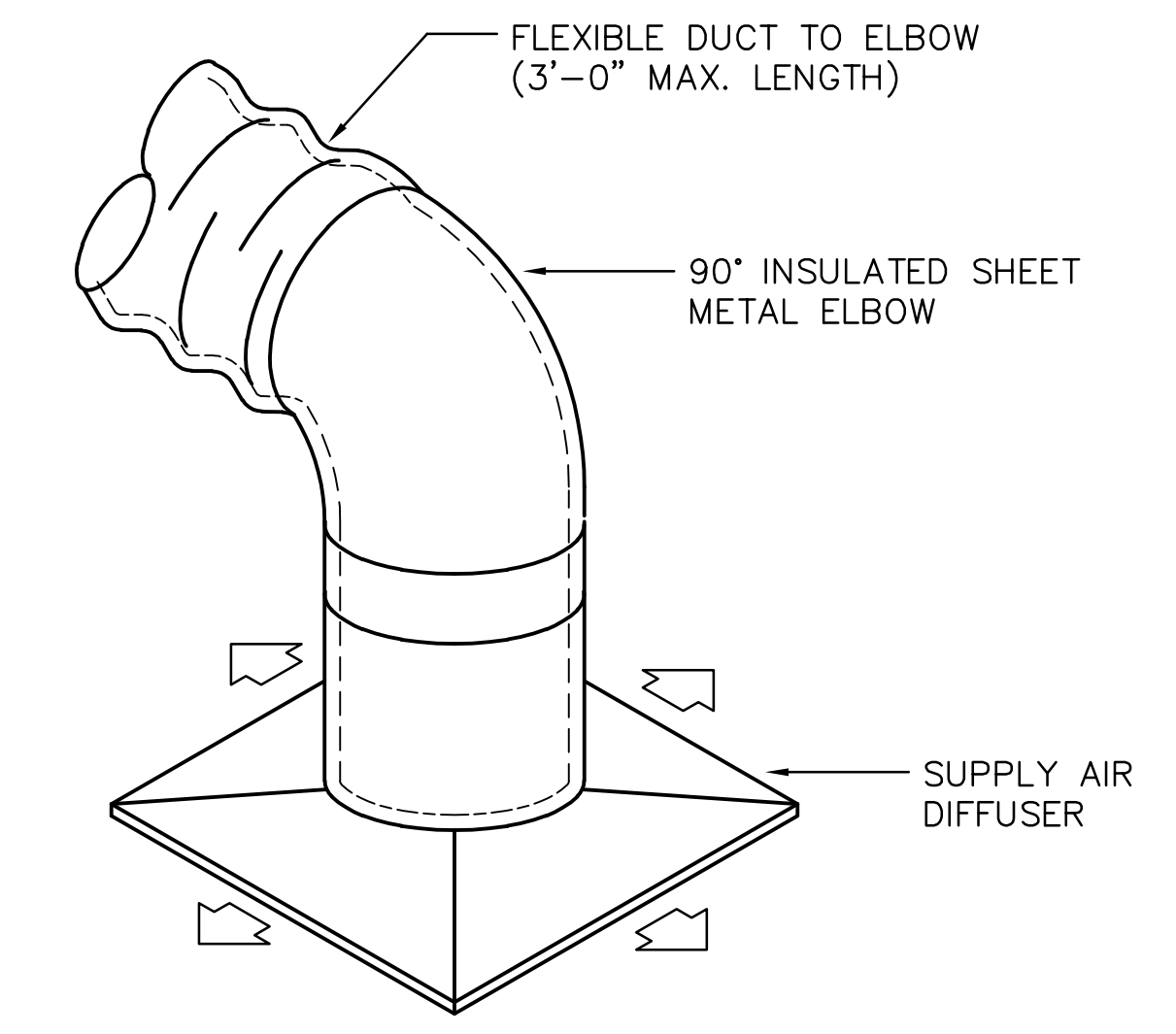
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KEYNOTES:

- ① DUCT SPLITS TO DIVIDE FLOW SHALL BE PROPORTIONATE TO SUM TOTAL OF BRANCH DUCT CFM SHOWN ON FLOOR PLANS.
- ② ELBOW RADIUS, TAKE-OFF ANGLE AND TRANSITION ANGLE SHALL BE PER SMACNA RECOMMENDATIONS.
- ③ ROUND DUCT TAKE-OFFS FROM RECTANGULAR DUCTS SHALL BE MADE WITH A HIGH EFFICIENCY FLANGED AND GASKETED FITTING. THE MOUNTING GROOVE SHALL BE SO CONSTRUCTED AS TO ENSURE CONSTANT FIT CONTROL. BALANCING DAMPERS SHALL BE FACTORY INSTALLED WITH SPRING LOADED RETRACTABLE BEARINGS AND A POSITIVE LOCKING WING NUT FOR EASY READJUSTMENT WHEN NEEDED. FITTING SHALL BE FULLY GASKETED ON ALL FLANGES AND CORNERS FOR HIGH EFFICIENCY TAKE-OFF FITTINGS.
- ④ ALL ELBOWS SHALL BE RADIUS TYPE, EXCEPT WHERE SPACE RESTRICTIONS NECESSITATE USING 90° MITERED VANED ELBOWS.
- ⑤ VOLUME DAMPERS SHALL BE PROVIDED ON ALL LOW PRESSURE SUPPLY DUCT BRANCHES AND ON ALL RETURN AND EXHAUST DUCT BRANCHES.

TYPICAL LOW PRESSURE DUCT DETAIL 1
 NO SCALE



ALL DUCTWORK TO BE INSULATED DOWN TO AND INCLUDING DIFFUSER NECK AND BACK OF DIFFUSER.

DIFFUSER CONNECTION DETAIL 2
 NO SCALE

CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900 Revisions: _____ Date: _____	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP 	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title MECHANICAL DETAILS	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105
				Approved: _____ . . .	Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Building Number 38	Drawing Number M-501
				Issue Date 11/27/2018	Checked BDH	Drawn LMB	

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AIR COOLED CONDENSING UNIT SCHEDULE

MARK	SERVES	CAPACITY @ EVAP. MBH	AMBIENT TEMP.	COMPRESSORS			CONDENSER FANS			MANUFACTURER & MODEL NO.	REMARKS	
				No.	RLA(EA)	LRA(EA)	KW(EA)	No.	HPI(EA)			FLA(EA)
ACCU-1	CC-1	198	95° F	2	12.60	-	-	2	1	3.30	AAON CFA-015-B	1, 2

REMARKS:
 1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
 2. MANUFACTURER AS SPECIFIED OR APPROVED EQUAL.

DX COOLING COIL SCHEDULE

MARK	SERVES	CFM	COIL SIZE		CAPACITY MBH	E.A.T.		L.A.T.		MAX. AIR P.D. (WG)	MIN. ROWS	FACE VEL. (FPM MAX)	MAX. FINS/FT.	REMARKS	
			WIDTH	HEIGHT		TOTAL	SENS.	DB	WB						DB
CC-1	ACCU-1	4,500	54"	24"	168.0	101.0	78° F	67° F	56° F	54° F	1	6	500	12	1, 2

REMARKS:
 1. COIL AND ACCU SHALL PROVIDED BY SAME MANUFACTURER
 2. MANUFACTURER AS SPECIFIED OR APPROVED EQUAL.

REGISTER - GRILLE - DIFFUSER SCHEDULE

MARK	FUNCTION	TYPE	CFM RANGE	MAX N.C.	SIZE (INCHES)	BORDER OR FRAME	MATERIAL			FINISH	ACCESS.	MANUFACTURER & MODEL NO.	REMARKS
							ALUM.	STEEL	WB				
D-1	SUPPLY	SQUARE FACE NOMINAL PNL.	0 - 225	25	8" Ø NECK	24 x 24 LAY-IN	X			STND. WHITE		TITUS TMS	1, 2, 4
D-2	SUPPLY	SQUARE FACE NOMINAL PNL.	200 - 350	25	10" Ø NECK	24 x 24 LAY-IN	X			STND. WHITE		TITUS TMS	1, 2, 4
R-1	RETURN	PERF. PANEL 24 x 24 FACE	-	25	22 x 22 SQ NECK	24 x 24 LAY-IN	X			STND. WHITE		TITUS PAR	1, 2, 4
E-1	EXHAUST	PERF. PANEL 12 x 24 FACE	0 - 150	25	10 X 10 SQ NECK	24 x 24 LAY-IN	X			STND. WHITE		TITUS PAR	1, 2, 4
E-2	EXHAUST	PERF. PANEL 24 x 24 FACE	150 - 400	25	22 x 22 SQ NECK	24 x 24 LAY-IN	X			STND. WHITE		TITUS PAR	1, 2, 4
RB	REBALANCE	-	-	-	-	-	-	-	-	-	-	-	3

REMARKS:
 1. PROVIDE SPECIFIC NOISE CRITERIA (NC) DATA FOR EACH LINE ITEM WITH SHOP DRAWINGS.
 2. MANUFACTURER & MODEL NO. SHOWN AS BASIS OF DESIGN. PROVIDE SPECIFIED MODEL OR UNIT EQUAL IN PERFORMANCE AND CONSTRUCTION.
 3. REBALANCE EXISTING REGISTER/GRILLE/DIFFUSER TO CFM SHOWN.
 4. MANUFACTURER AS SPECIFIED OR APPROVED EQUAL.

MECHANICAL / ELECTRICAL COORDINATION SCHEDULE

		ABBREVIATION					
E	ELECTRICAL CONTRACTOR	HP	HORSEPOWER	4X	NEMA 4X	V	VOLTAGE
M	MECHANICAL CONTRACTOR	KW	KILOWATTS	PH	PHASE	VFD	VARIABLE FREQUENCY
I	INTEGRAL WITH EQUIPMENT	MR	PER MANUFACTURER'S	RE	REVERSING		DRIVE
C	COMBINATION STARTER AND SAFETY SWITCH		RECOMMENDATION	RV	REDUCED VOLTAGE	2S	TWO SPEED
CB	CIRCUIT BREAKER	NF	NON-FUSED	SF	FUSE HOLDER WITH SWITCH	3S	THREE SPEED
FLV	FULL VOLTAGE	NR	NON-REVERSING	SS	SAFETY SWITCH		
FLA	FULL LOAD AMPS	N1	NEMA 1	SH	HP-RATED SWITCH		
		3R	NEMA 3R	ST	THERMAL ELEM. SWITCH		

REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

MARK	DESCRIPTION	RATING			DISCONNECT			MOTOR STARTER			REMARKS	
		LOAD	V	PH	FURNISH/INSTALL BY	TYPE	RATING (AMPS)	FUSE SIZE	ENCL.	FURNISH/INSTALL BY		TYPE/ NEMA SIZE
FC-1	FAN COIL CASSETTE	.35 A	208/230	1	E / E	SH	20	-	N1	-	-	-
FC-2	FAN COIL CASSETTE	.35 A	208/230	1	E / E	SH	20	-	N1	-	-	-
FC-3	FAN COIL CASSETTE	.35 A	208/230	1	E / E	SH	20	-	N1	-	-	-
FC-4	FAN COIL CASSETTE	.35 A	208/230	1	E / E	SH	20	-	N1	-	-	-
SBSB-1A	SUB BRANCH SELECTOR BOX	.64 A	208/230	1	E / E	SH	20	-	N1	-	-	-
EUH-1	ELECTRIC CABINET UNIT HEATER	3 KW	208	3	MI	-	-	-	-	-	-	-
ACCU-1	AIR COOLED CONDENSING UNIT	31 FLA	480	3	E / E	SS	30	MR	3R	-	-	-

GENERAL NOTES:
 A. CONTRACTOR SHALL VERIFY/COORDINATE ALL RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE SUCH RATINGS ARE OTHER THAN AS INDICATED ON MECHANICAL/ELECTRICAL COORDINATION SCHEDULE, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS INDICATED SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED EQUIPMENT.
 B. ALL FRACTIONAL HORSEPOWER MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.
 C. HORSEPOWER RATED SWITCHES (SH) FOR 120 V MOTORS LESS THAN 1/2 HP. PROVIDE FUSEHOLDER WITH SWITCH, FUSED PER MANUFACTURER'S RECOMMENDATION AND NEC REQUIREMENTS. FOR 120 V MOTORS RATED 1/2 HP OR 3/4 HP. PROVIDE HP RATED TOGGLE SWITCH (WHERE BRANCH CIRCUIT OVERCURRENT DEVICE MEETS NEC REQUIREMENTS FOR SHORT-CIRCUIT PROTECTION) OR FUSED SAFETY SWITCH.

VARIABLE REFRIGERANT FLOW (VRF) ZONING SYSTEM SCHEDULE

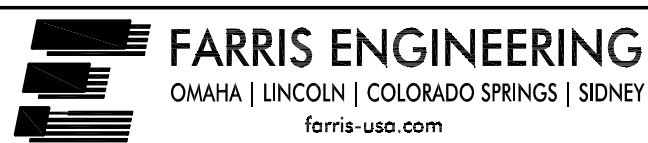

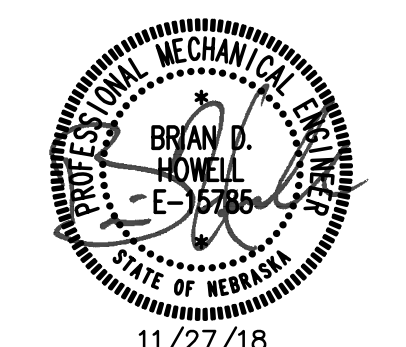

MARK	ARRANGEMENT	CFM MAX/MIN	COOLING DATA		HEATING DATA CAP (MBH)	MANUFACTURER & MODEL NO.	REMARKS
			TOTAL (MBH)	SENSIBLE (MBH)			
FC-1	CEILING CASSETTE	370 / 280	12.0	8.6	13.5	MTSUBISHI PLY-FY-P12NCMU-E	1, 2, 3, 4, 5, 6, 7
FC-2	CEILING CASSETTE	370 / 280	12.0	8.6	13.5	MTSUBISHI PLY-FY-P12NCMU-E	1, 2, 3, 4, 5, 6, 7
FC-3	CEILING CASSETTE	370 / 280	12.0	8.6	13.5	MTSUBISHI PLY-FY-P12NCMU-E	1, 2, 3, 4, 5, 6, 7
FC-4	CEILING CASSETTE	370 / 280	12.0	8.6	13.5	MTSUBISHI PLY-FY-P12NCMU-E	1, 2, 3, 4, 5, 6
SBSB-1A	SUB BRANCH SELECTOR BOX	-	60.0	-	60.0	MTSUBISHI CMB-P108NU-GB	1, 2, 3, 5, 6

REMARKS:
 1. CONNECT TO EXISTING BRANCH SELECTOR BOX (BS-1) AS INDICATED ON PLANS OR PER MANUFACTURER'S RECOMMENDATION.
 2. PROVIDE BACNET INTERFACE TO EXISTING CONTROL SYSTEM.
 3. PROVIDE WITH INTEGRAL CONDENSATE PUMP AND OVERFLOW SWITCH TO SEND ALARM TO BAS AND SHUTDOWN UNIT.
 4. PROVIDE THERMOSTAT TO MATCH EXISTING THERMOSTATS IN BUILDING 38.
 5. INSTALL FAN COILS AND SIZE REFRIGERANT PIPING AS PER MANUFACTURER'S RECOMMENDATION. PROVIDE REFRIGERANT AS REQUIRED TO MAKE SYSTEM FULLY OPERATIONAL.
 6. MANUFACTURER AS SPECIFIED OR APPROVED EQUAL.
 7. CONNECT TO NEW SUB BRANCH SELECTOR BOX SBSB-1A AS INDICATED ON PLANS.

CABINET AND UNIT HEATER (ELECTRIC)

MARK	TYPE	ARRANGEMENT	CFM	HEATING CAP. (KW)	EXT. S.P.	FAN RPM	MANUFACTURER & MODEL NO.	REMARKS
EUH-1	ELECTRIC CABINET UNIT HEATER	RECESSED CEILING	250	3.0	-	-	INDECCO CUI	1, 2, 3, 4

REMARKS:
 1. SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.
 2. PROVIDE WITH FACTORY INSTALLED DISCONNECT
 3. PROVIDE WITH FACTORY INSTALLED THERMOSTAT
 4. MANUFACTURER AS SPECIFIED OR APPROVED EQUAL.

	CONSULTANT  FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122  Nagel Architects Project Number: 438-18-105	STAMP  11/27/18	Office of Construction and Facilities Management  U.S. Department of Veterans Affairs	Drawing Title MECHANICAL SCHEDULES Approved: - - -	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number M-701		
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MECHANICAL SYMBOLS LEGEND (AS APPLICABLE)

PIPING AND SPECIALTIES			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
RD	REFRIGERANT DISCHARGE	PGR	PROPYLENE GLYCOL RETURN
RL	REFRIGERANT LIQUID	PGS	PROPYLENE GLYCOL SUPPLY
RS	REFRIGERANT SUCTION	FOR	FUEL OIL RETURN
CD	COIL CONDENSATE DRAIN	FOS	FUEL OIL SUPPLY
LPS (XX)	LOW PRESSURE STEAM (PRESSURE)	FOV	FUEL OIL VENT
MPS (XX)	MEDIUM PRESSURE STEAM (PRESSURE)	CR	CONDENSER WATER RETURN
HPS (XX)	HIGH PRESSURE STEAM (PRESSURE)	CS	CONDENSER WATER SUPPLY
LPC	LOW PRESSURE CONDENSATE	HPWR	HEAT PUMP WATER RETURN
MPC	MEDIUM PRESSURE CONDENSATE	HPWS	HEAT PUMP WATER SUPPLY
HPC	HIGH PRESSURE CONDENSATE	D	PITCH OF PIPE, RISE (R) OR DROP (D)
PC	PUMPED CONDENSATE	R	PIPE ANCHOR - MAIN
MU	MAKE-UP WATER	X	PIPE ANCHOR - INTERMEDIATE
HCR	HOT/CHILLED WATER RETURN	H	HANGER - ROD
HCS	HOT/CHILLED WATER SUPPLY	H	HANGER - SPRING
HWR	HEATING WATER RETURN	H	ALIGNMENT GUIDE
HWS	HEATING WATER SUPPLY	FC	FLEX CONNECTOR
CWR	CHILLED WATER RETURN	EL	EXPANSION - LOOP
CWS	CHILLED WATER SUPPLY	EJ	EXPANSION - JOINT
EGR	ETHYLENE GLYCOL RETURN		
EGS	ETHYLENE GLYCOL SUPPLY		

PLUMBING			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	DOMESTIC COLD WATER PIPING	AW	ACID WASTE BELOW FLOOR OR GRADE
---	DOMESTIC HOT WATER SUPPLY	AW	EXIST ACID WASTE BELOW FLOOR/GRADE
---	DOMESTIC HOT WATER RECIRC.	AW	ACID WASTE ABOVE FLOOR OR GRADE
---	PIPE REMOVAL	GW	GREASE WASTE BELOW FLOOR OR GRADE
SAN	SANITARY BELOW FLOOR OR GRADE	GW	EXIST GREASE WASTE BELOW FLOOR/GRADE
SAN	EXISTING SANITARY BELOW FLOOR/GRADE	GW	GREASE WASTE ABOVE FLOOR OR GRADE
SAN	SANITARY ABOVE FLOOR OR GRADE	OSW	OIL/SAND BELOW FLOOR OR GRADE
ST	STORM BELOW FLOOR OR GRADE	OSW	EXISTING OIL/SAND BELOW FLOOR/GRADE
ST	EXISTING STORM BELOW FLOOR/GRADE	OSW	OIL/SAND ABOVE FLOOR OR GRADE
ST	STORM ABOVE FLOOR OR GRADE	SCW	SOFTENED COLD WATER PIPING
SO	STORM OVERFLOW BELOW FLOOR/GRADE	PD	PUMPED DISCHARGE
SO	EXIST. STORM OVERFLOW BELOW FLOOR/GRADE	V	VENT PIPING
SO	STORM OVERFLOW ABOVE FLOOR/GRADE	AV	ACID VENT PIPING
		CA	COMPRESSED AIR

VALVES			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	GATE VALVE		STOP/CHECK GATE VALVE (ARROW IND. FLOW)
	ANGLE GATE VALVE		SPRING GATE CHECK VALVE (ARROW IND. FLOW)
	BALL VALVE		SWING GATE CHECK VALVE (ARROW IND. FLOW)
	LOCKABLE BALL VALVE		ANGLE STOP/CHECK VALVE
	BUTTERFLY VALVE		2-WAY ELECTROMOTOR VALVE
	GLOBE VALVE		2-WAY AIRMOTOR VALVE
	ANGLE GLOBE VALVE		2-WAY MANUAL VALVE
	PLUG VALVE		3-WAY ELECTROMOTOR VALVE
	DIAPHRAGM VALVE		3-WAY AIRMOTOR VALVE
	DIAPHRAGM ACTUATED VALVE		3-WAY MANUAL VALVE
	VALVE IN VERTICAL LINE		SAFETY PRESSURE RELIEF VALVE
	HOSE GATE VALVE		PRESSURE RELIEF VALVE
	HOSE GLOBE VALVE		TEMPERATURE MIXING VALVE
	HOSE ANGLE VALVE		AUTO FLOW VALVE
	SOLENOID VALVE		FLOAT VALVE
	POST INDICATOR VALVE		LOCK SHIELD
			CIRCUIT SETTER

FITTINGS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	ELBOW		ELBOW - DOUBLE BRANCH
	LONG RADIUS ELBOW		ELBOW - SIDE OUTLET UP
	SHORT RADIUS ELBOW		ELBOW - SIDE OUTLET DOWN
	45° ELBOW		ELBOW - OUTLET DOWN
	TEE		ELBOW - OUTLET UP
	CROSS		TEE - OUTLET DOWN
	LATERAL		TEE - OUTLET UP
	TEE - SINGLE SWEEP		TEE - SIDE OUTLET DOWN
			TEE - SIDE OUTLET UP
			SIAMESE CONNECTION

MISCELLANEOUS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EQUIPMENT IDENTIFICATION TAG (ELECTRICAL CONNECTION REQUIRED)		NEW CONNECTION POINT
	DETAIL REFERENCE SHEET REFERENCE		POINT OF DISCONNECT
	SECTION CUT REFERENCE SHEET REFERENCE		OUTSIDE AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		VENTILATION AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		EXHAUST AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		RELIEF OR RETURN AIR
	ELECTRICAL TRANSFORMER - SHOWN FOR COORDINATION PURPOSES ONLY		SUPPLY AIR
			MIXED AIR
			RELIEF OR RETURN FAN
			EXHAUST FAN
			TYPICAL
			WATER CLOSET
			URINAL
			LAVATORY
			SINK
			DRINKING FOUNTAIN
			ELECTRIC WATER COOLER
			SERVICE SINK
			SHOWER
			DOMESTIC WATER HEATER
			MOP SINK BASIN
			LIGHT LINEWORK = EXISTING OR DEMOLITION
			DARK LINEWORK = NEW

MECHANICAL SYMBOLS LEGEND (AS APPLICABLE)

MISCELLANEOUS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EQUIPMENT IDENTIFICATION TAG (ELECTRICAL CONNECTION REQUIRED)		NEW CONNECTION POINT
	DETAIL REFERENCE SHEET REFERENCE		POINT OF DISCONNECT
	SECTION CUT REFERENCE SHEET REFERENCE		OUTSIDE AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		VENTILATION AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		EXHAUST AIR
	ELECTRICAL PANEL - SHOWN FOR COORDINATION PURPOSES ONLY		RELIEF OR RETURN AIR
	ELECTRICAL TRANSFORMER - SHOWN FOR COORDINATION PURPOSES ONLY		SUPPLY AIR
			MIXED AIR
			RELIEF OR RETURN FAN
			EXHAUST FAN
			TYPICAL
			WATER CLOSET
			URINAL
			LAVATORY
			SINK
			DRINKING FOUNTAIN
			ELECTRIC WATER COOLER
			SERVICE SINK
			SHOWER
			DOMESTIC WATER HEATER
			MOP SINK BASIN
			LIGHT LINEWORK = EXISTING OR DEMOLITION
			DARK LINEWORK = NEW


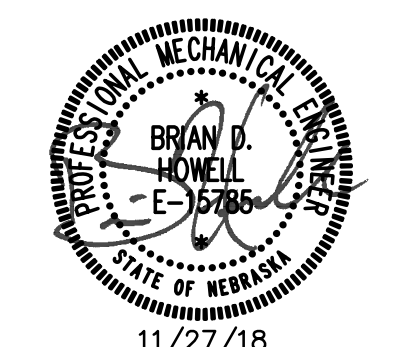

GENERAL PLUMBING DEMOLITION NOTES

- CROSSHATCHING INDICATES EXISTING ITEMS AND ASSOCIATED MATERIALS SHALL BE REMOVED.
- DRAWINGS INDICATE APPROXIMATE ROUTING OF PIPING, DUCTWORK AND MAJOR COMPONENTS AND DO NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR SHALL FIELD VERIFY EXACT SIZE AND ROUTING PRIOR TO REMOVAL OR RELOCATION. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVAL OF MISCELLANEOUS MECHANICAL ITEMS LOCATED ON OR IN ANY WALLS TO BE REMOVED.
- EXISTING INSULATION DAMAGED DURING DEMOLITION / CONSTRUCTION ACTIVITIES SHALL BE REPAIRED WITH SIMILAR MATERIALS.
- ALL OPENINGS THROUGH WALLS AND FLOOR SLABS NOT BEING REUSED SHALL BE PATCHED WITH LIKE MATERIALS AND PAINTED TO MATCH EXISTING.
- ALL OPENINGS THROUGH ROOF NOT BEING REUSED SHALL BE PATCHED WITH LIKE MATERIALS AND SEALED WATERTIGHT.

GENERAL PLUMBING NOTES

- LIGHT LINE WEIGHT INDICATES EXISTING ITEMS AND ASSOCIATED MATERIALS TO REMAIN. BOLD LINE WEIGHT INDICATES NEW WORK TO BE INSTALLED UNDER THIS CONTRACT.
- ROUTING INDICATED ON DRAWINGS IS APPROXIMATE AND DOES NOT INCLUDE ALL OFFSETS, FITTINGS, VALVES, ETC. CONTRACTOR TO FIELD VERIFY PIPE SIZE AND SERVICE PRIOR TO FINAL CONNECTION. COORDINATE LOCATION OF PLUMBING PIPING WORK WITH LIGHTING, STRUCTURAL MEMBERS, HVAC, PIPING SYSTEMS, ETC. PROVIDE OFFSETS AND CLEARANCES OR RELOCATE PLUMBING WORK AS REQUIRED TO AVOID CONFLICTS WITH WORK OF ALL OTHER TRADES.
- PLUMBING WORK SHALL NOT BE LOCATED OVER ELECTRICAL, DATA OR COMMUNICATION EQUIPMENT ROOMS. PLUMBING WORK SHALL NOT BE LOCATED ABOVE ELECTRICAL / DATA / COMMUNICATION EQUIPMENT OR PANELS.
- SUPPORT ALL PLUMBING PIPING, EQUIPMENT, ETC. FROM BUILDING STRUCTURE. HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBERS OR RUN THROUGH JOIST WEBS IF POSSIBLE. DO NOT USE WIRE OR PERFORATED METAL TO SUPPORT PIPING. DO NOT SUPPORT PIPING FROM OTHER PIPING, DUCTWORK AND/OR ELECTRICAL CONDUITS. DO NOT SUPPORT FROM BOTTOM CHORD OF BAR JOIST OR FROM METAL ROOF DECK.
- ROUTE ABOVE GRADE DRAINAGE PIPING AS HIGH AS POSSIBLE AND COORDINATE WITH OTHER TRADES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SEALING PENETRATIONS THROUGH FIRE RATED, SMOKE RATED OR COMBINATION FIRE & SMOKE RATED SEPARATIONS. SEE SPECIFICATIONS FOR FIRE & SMOKE RATED SEALANTS. SEE ARCHITECTURAL PLANS FOR RATED SEPARATIONS.
- INSTALL ESCUTCHEON PLATES ON ALL WALL AND FLOOR PENETRATIONS SERVING EXPOSED PLUMBING PIPING.
- ALL OPENINGS IN WALLS AND FLOORS FOR PIPING SHALL BE CORE DRILLED OR SAW CUT, UNLESS OTHERWISE NOTED.
- LOCATE AND INSTALL EQUIPMENT TO PROVIDE ALL CODE AND MANUFACTURER'S RECOMMENDED CLEARANCES. KEEP HVAC PIPING, DUCTWORK, ETC. OUT OF CLEARANCE AREAS.
- ALL PLUMBING PIPING WORK SHALL BE LOCATED ABOVE CEILINGS, IN A PIPE CHASE, OR OTHER CONCEALED LOCATIONS, UNLESS OTHERWISE NOTED. LOCATE AND ARRANGE VALVES, DRAIN FITTINGS, ETC. TO BE ACCESSIBLE THROUGH LAY-IN CEILINGS, ACCESS PANELS OR ACCESS DOORS. PROVIDE ACCESS PANEL OR ACCESS DOOR FOR ALL VALVES, DRAIN FITTINGS, ETC. AT NON-ACCESSIBLE LOCATIONS.
- INSTALL SECTIONAL VALVES ON EACH BRANCH AND/OR RISER SERVING TWO OR MORE PLUMBING FIXTURES OR EQUIPMENT CONNECTIONS. INSTALL VALVES ADJACENT TO MAIN.
- INSTALL SHUTOFF VALVES ON INLET AND OUTLET OF PLUMBING EQUIPMENT.
- INSTALL STOPS AT EACH PLUMBING FIXTURE EXCEPT AT FLUSHMETER LOCATIONS.
- SEAL ALL PLUMBING PIPING PENETRATIONS. SEAL PENETRATIONS THROUGH RATED WALLS, FLOORS OR CEILINGS WITH MATERIALS APPROPRIATE FOR RATING.
- PIPING IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF BUILDING INSULATION AND VAPOR BARRIER.
- COORDINATE INSTALLATION OF BUILDING INSULATION TO RUN CONTINUOUS BETWEEN PIPING AND EXTERIOR WALL SURFACE.
- COORDINATE EXACT LOCATION OF FLOOR DRAINS AND FLOOR SINKS. TOP OF GRATE SHALL BE 1/8" BELOW FINISHED FLOOR ELEVATION.
- COMPLY WITH LOCAL UTILITY COMPANY RULES AND REGULATIONS FOR ALL GAS METER INSTALLATIONS. COORDINATE EXACT LOCATION OF GAS CONNECTIONS WITH EQUIPMENT SUPPLIED.
- COPPER PIPING LOCATED ABOVE GRADE SHALL BE TYPE "L"; COPPER PIPING LOCATED BELOW GRADE SHALL BE TYPE "K" AND RUN CONTINUOUS WITHOUT JOINTS BELOW GRADE. TYPE "M" COPPER SHALL NOT BE USED ON PRESSURIZED PIPING SYSTEMS.
- DRAINAGE PIPING 3 INCHES AND SMALLER SHALL SLOPE NO LESS THAN 1/4 INCH PER FOOT. DRAINAGE PIPING 4 INCHES AND LARGER SHALL SLOPE NO LESS THAN 1/8 INCH PER FOOT.
- INSTALL WALL CLEAN OUTS (WCO) WHEN LOCATED BEHIND A WATER CLOSET AT 30" A.F.F. OR AT 42" A.F.F. ABOVE CABINETS ON ALL SANITARY & STORM STACKS.
- COORDINATE EXACT STORM PIPE CONNECTIONS WITH STORM DRAIN LOCATIONS SHOWN ON ARCHITECTURAL ROOF PLAN.
- INSTALL VENT-THRU-ROOF (VTR) A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKE.
- REMOVE, REPAIR AND REPLACE WALLS, FLOORS, ROOFS AND CEILINGS TO MATCH EXISTING, WHERE NECESSARY FOR PIPING AND FIXTURE REMOVAL & INSTALLATION.
- PVC PIPING SHALL NOT BE INSTALLED IN ANY RETURN AIR PLENUM UNLESS THE PIPING IS INSTALLED IN A PRE-APPROVED RATED ASSEMBLY.
- PROVIDE ACCESSIBLE SHUTOFF VALVE INSIDE THE BUILDING FOR EACH WALL HYDRANT.

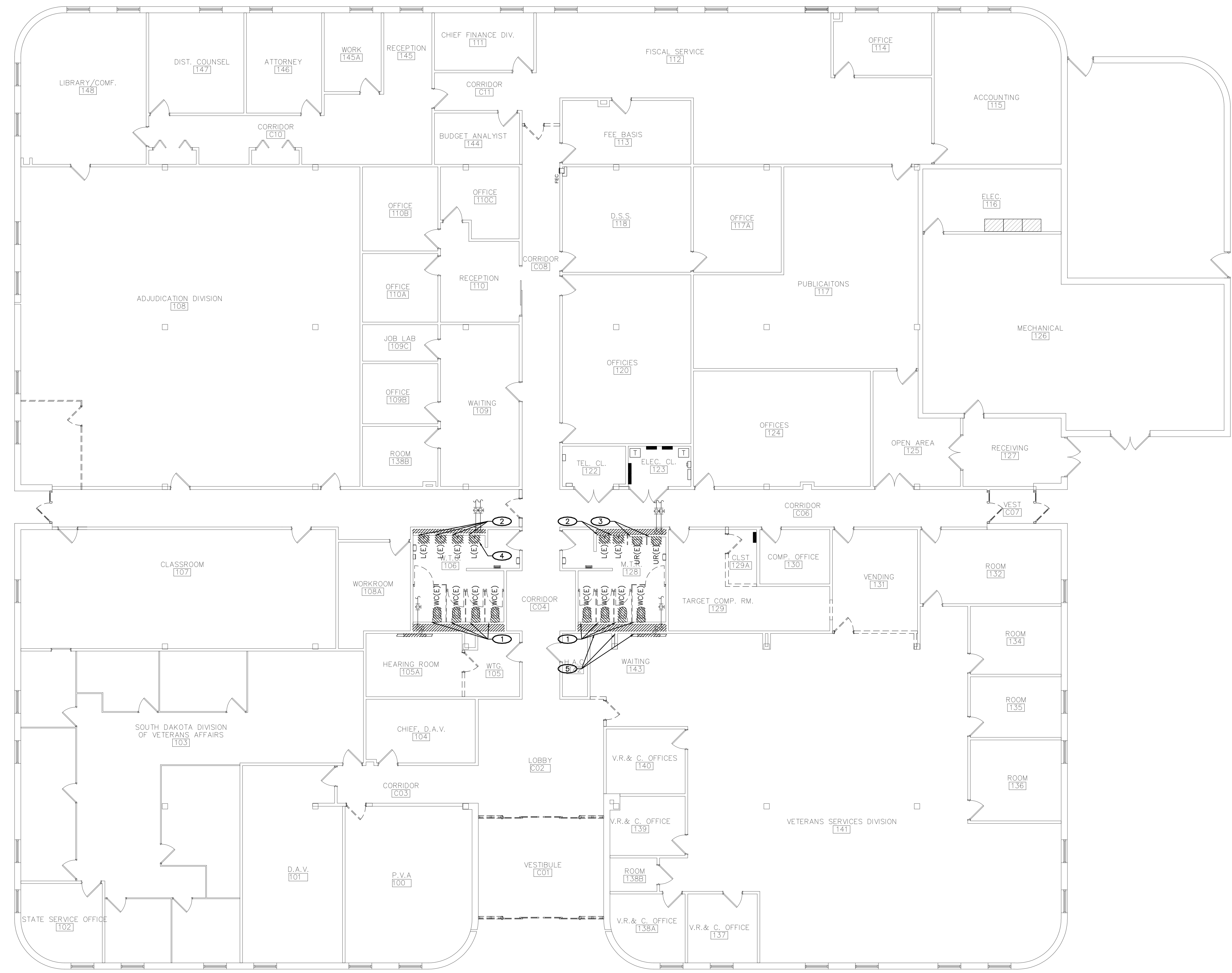
NOTICE:
DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FARRIS ENGINEERING PLANS.

Revisions:	DATE	CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> <small>farris-usa.com</small> FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122  Nagel Architects Project Number: 438-18-105	STAMP  11/27/18	Office of Construction and Facilities Management  U.S. Department of Veterans Affairs	Drawing Title GENERAL PLUMBING NOTES AND SYMBOLS Approved:	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105	
							Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Issue Date 11/27/2018	Checked BDH	Drawn XX

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 one quarter inch = one foot
 three eighths inch = one foot
 one eighth inch = one foot

PLUMBING KEYNOTES: (○)

- ① REMOVE WATER CLOSETS COMPLETE INCLUDING CW CONNECTIONS, CARRIERS AND SANITARY SEWER BACK TO THE MAIN.
- ② REMOVE LAVATORIES COMPLETE INCLUDING CW AND HW CONNECTIONS, CARRIERS AND SANITARY SEWER BACK TO THE MAIN.
- ③ REMOVE URINALS COMPLETE INCLUDING CW AND HW CONNECTIONS, CARRIERS AND SANITARY SEWER BACK TO THE MAIN.
- ④ REMOVE MOLD ON WALL FROM FLOOR TO APPROXIMATELY 48" AFF.
- ⑤ REMOVE PORTIONS OF WALL AND FLOOR TO ALLOW FOR INSTALLATION OF TWO NEW LAVATORIES AND WATER CLOSETS, COORDINATE WITH ARCHITECTURAL.

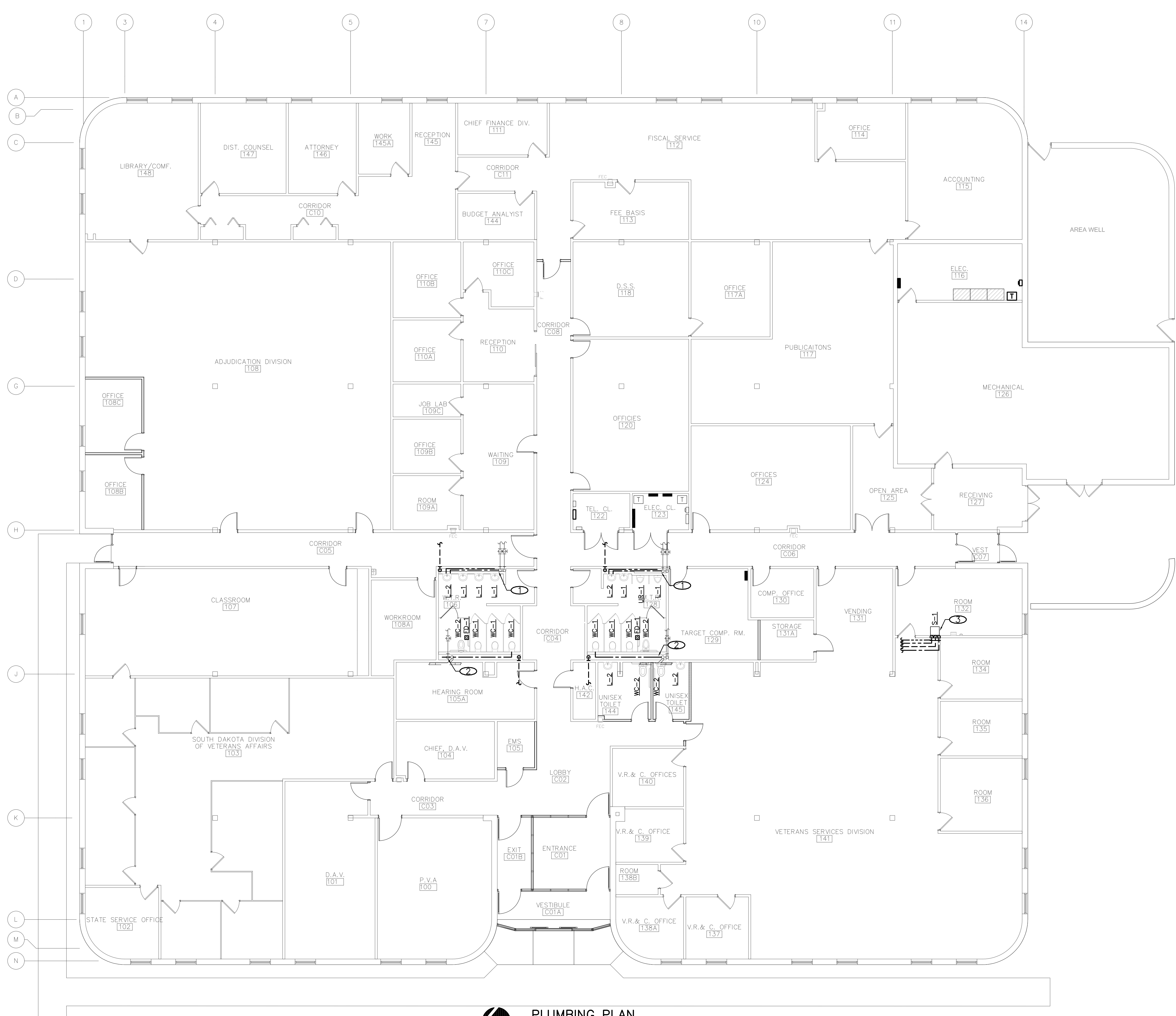


PLUMBING DEMOLITION PLAN
 SCALE: 1/4" INCH = 1 FOOT

		CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> <small>farris-usa.com</small> FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD <small>13100 watertown plank road suite 200 Elm Grove, WI 53122</small> nagel architects <small>Nagel Architects Project Number: 438-18-105</small>	STAMP 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title PLUMBING DEMOLITION PLAN Approved: - - -	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number PD101 Checked BDH Drawn XX	
Revisions: _____ Date: _____										

1 2 3 4 5 6 7 8 9

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- PLUMBING KEYNOTES:** (O)
- 1 CONNECT TO EXISTING CW, HW AND SANITARY SEWER FOR NEW LAVATORIES AND URINAL.
 - 2 CONNECT TO EXISTING CW AND SANITARY SEWER FOR NEW WATER CLOSETS.
 - 3 CONNECT TO EXISTING CW, HW, AND SANITARY SEWER. CONTRACTOR TO VERIFY NEAREST WATER SANITARY AND VENT PIPING TO CONNECT NEW PIPING. COORDINATE ROUTING OF NEW PIPING WITH EXISTING CONDITIONS.

PLUMBING PLAN
 SCALE: 1/8" INCH = 1 FOOT
 12" 0' 5' 10' 15'

CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900		ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105		STAMP 11/27/18	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs		Drawing Title PLUMBING PLAN		Phase 100% CONSTRUCTION DOCUMENTATION		Project Title BUILDING 38 UPGRADE		Project Number 438-18-105	
					Approved: . . .				Location 2501 W 22nd ST SIOUX FALLS, SD 57105		Building Number 38		Drawing Number PL101	
Revisions:		Date: .						Issue Date 11/27/2018		Checked BDH		Drawn XX		

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 one eighth inch = one foot
 one eighth inch = one foot

ELECTRICAL SYMBOLS LEGEND
(AS APPLICABLE)

SWITCHING		COMMUNICATIONS	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
\$a	SINGLE POLE SWITCH - LETTER INDICATES SWITCH LEG	◀W	TELEPHONE OUTLET - WALL MOUNTED
\$2	DOUBLE POLE SWITCH	◀#	TELEPHONE OUTLET BOX
\$3	THREE-WAY SWITCH	◀#	DATA OUTLET BOX
\$4	FOUR-WAY SWITCH	◀#	PHONE OUTLET BOX - CEILING MOUNTED
\$D	DIMMER SWITCH	◀#	DATA OUTLET BOX - CEILING MOUNTED
\$H	HORSEPOWER RATED SWITCH	◀#	WIRELESS ACCESS POINT - CEILING MOUNTED
\$F	FUSED SWITCH	◀#	COMBINATION TELEPHONE/DATA OUTLET BOX - ONE JACK EACH
\$TE	THERMAL ELEMENT	◀#	DATA OUTLET BOX - BLANK PLATE, 1" CONDUIT
\$M	MOMENTARY CONTACT SWITCH	◀#	MICROPHONE OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY)
\$K	KEY OPERATED SWITCH	◀#	LINE INPUT OUTLET - WALL MOUNTED (NUMBER INDICATES QUANTITY)
		◀#	INTERCOMPAGING SPEAKER - CEILING MOUNTED
		◀#	INTERCOMPAGING SPEAKER - WALL MOUNTED
		◀#	INTERCOMPAGING SPEAKER HORN - WALL MOUNTED
		◀#	SOUND SYSTEM SPEAKER - CEILING MOUNTED
		◀#	SOUND SYSTEM SPEAKER - WALL MOUNTED

LIGHTING		FIRE ALARM	
LABEL INFORMATION	LETTER INDICATES LUMINAIRE MARK, NUMBER INDICATES ZONE IDENTIFIER, NO NUMBER INDICATES SINGLE ZONE	◀#	HEAT DETECTOR - COMBINATION
◯	LUMINAIRE	◀#	HEAT DETECTOR - FIXED TEMPERATURE
◯	LUMINAIRE - LAMPS SWITCHED SEPARATE	◀#	HEAT DETECTOR - FIXED TEMPERATURE (CONNECTED TO ELEVATOR RECALL)
◯	LUMINAIRE WITH AUXILIARY LIGHT	◀#	SMOKE DETECTOR
◯	LUMINAIRE - EMERGENCY	◀#	SMOKE DETECTOR - DUCT MOUNTED
◯	LUMINAIRE - NIGHT LIGHT	◀#	SMOKE DETECTOR (CONNECTED TO ELEVATOR RECALL)
◯	WALL MOUNTED LUMINAIRE	◀#	FIRE ALARM MANUAL STATION
◯	WALL MOUNTED LUMINAIRE - EMERGENCY	◀#	FIRE ALARM HORN - WALL MOUNTED
◯	WALL MOUNTED LUMINAIRE - NIGHT LIGHT	◀#	FIRE ALARM VISUAL SIGNAL - WALL MOUNTED
◯	STRIP LUMINAIRE	◀#	FIRE ALARM COMBINATION HORN/VISUAL - WALL MOUNTED
◯	STRIP LUMINAIRE - EMERGENCY	◀#	FIRE ALARM SPEAKER - WALL MOUNTED
◯	STRIP LUMINAIRE - NIGHT LIGHT	◀#	FIRE ALARM COMBINATION SPEAKER/VISUAL - WALL MOUNTED
◯	LUMINAIRE - NIGHT LIGHT	◀#	FIRE ALARM BELL - WALL MOUNTED
◯	LUMINAIRE - EMERGENCY	◀#	

POWER DEVICES		SECURITY	
◯	SINGLE RECEPTACLE	◀#	PUSHBUTTON STATION
◯	DUPLEX RECEPTACLE	◀#	PUSHBUTTON STATION, 'P' INDICATES PILOT
◯	FOUR-PLEX RECEPTACLE - TWO DUPLEX RECEPTACLES	◀#	DOOR MONITOR SWITCH
◯	RANGE RECEPTACLE	◀#	DOOR SWITCH
◯	SPECIAL RECEPTACLE	◀#	DOOR BELL CHIME/BUZZER
◯	DUPLEX RECEPTACLE - GROUND-FAULT CIRCUIT-INTERRUPTER	◀#	DOOR CONTACT
◯	DUPLEX RECEPTACLE - ISOLATED GROUND	◀#	
◯	DUPLEX RECEPTACLE - WEATHER-RESISTANT GROUND-FAULT CIRCUIT-INTERRUPTER	◀#	
◯	DUPLEX RECEPTACLE - ON APPLIANCE CIRCUIT	◀#	
◯	DUPLEX RECEPTACLE - TAMPER-RESISTANT	◀#	
◯	DUPLEX RECEPTACLE - ARC-FAULT RATED	◀#	
◯	DUPLEX RECEPTACLE - MOUNTED IN MILLWORK	◀#	
◯	DUPLEX RECEPTACLE - MOUNTED BELOW COUNTER	◀#	
◯	DUPLEX RECEPTACLE - CEILING MOUNTED	◀#	
◯	DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED	◀#	
◯	SPLIT-WIRE RECEPTACLE	◀#	
◯	JUNCTION BOX	◀#	

RACEWAYS		MISCELLANEOUS	
◯	HOME RUN TO PANEL	NF	NON-FUSED
◯	UNSWITCHED LIGHTING CIRCUIT	WP	WEATHER-PROOF
◯	MASTER SATELLITE FIXTURE CONNECTION	WG	WIRE GUARD
◯	EMERGENCY CIRCUIT	XP	EXPLOSION PROOF
◯	NIGHT LIGHTING CIRCUIT	305/103R	RATE OF IMPACT/IND. POLES/FUSING RED/ODDMA ENCL. NO.
◯	SOUND SYSTEM RACEWAY	H◀#	PROJECTOR INPUT STATION - LETTER INDICATES TYPE
		H◀#	PROJECTOR CONTROL STATION
		H◀#	LIGHT LINENWORK - EXISTING OR DEMOLITION
		H◀#	DARK LINENWORK - NEW

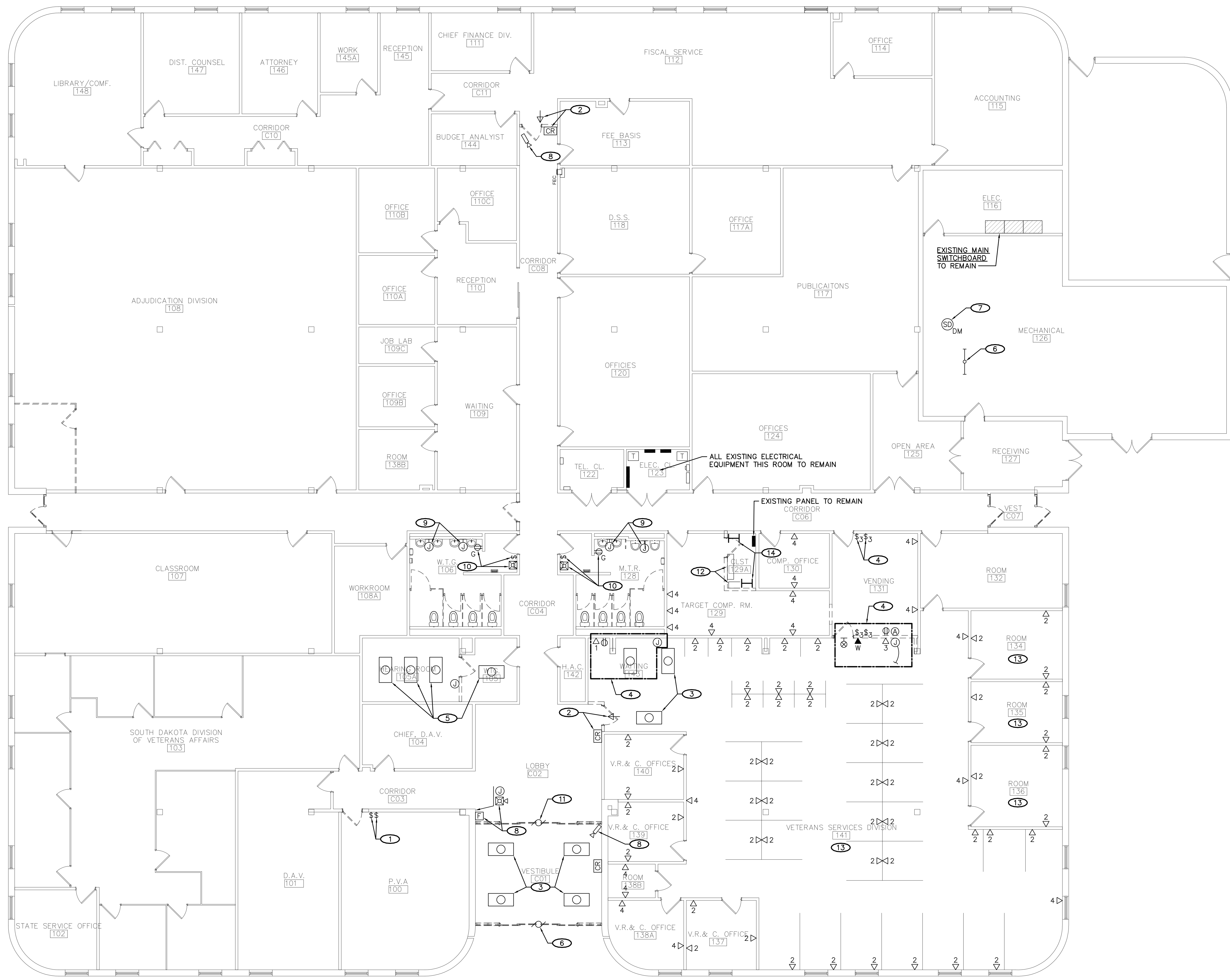
- GENERAL ELECTRICAL DEMOLITION NOTES**
 APPLY TO ALL ELECTRICAL SHEETS
- A. COMPLETELY REMOVE ALL ELECTRICAL WIRING, CONDUIT, SWITCHES, DISCONNECTS, LUMINAIRES, AND ASSOCIATED ANCILLARY EQUIPMENT SHOWN. ITEMS INDICATED FOR REMOVAL ARE ONLY SUGGESTIVE OF THE AMOUNT OF DEMOLITION WORK INVOLVED. PERFORM A SITE INVESTIGATION TO AID IN DETERMINING THE COMPLETE EXTENT OF DEMOLITION WORK.
 - B. COORDINATE AND SCHEDULE ALL NECESSARY POWER OUTAGES WITH THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING WITH SUCH WORK SO OPERATIONS IN ADJACENT OCCUPIED PORTIONS OF THE BUILDING ARE NOT INTERRUPTED OR RESTRICTED WITHOUT PRIOR APPROVAL.
 - C. REMOVE ALL EXISTING BRANCH CIRCUITS INDICATED AS COMPLETELY AS POSSIBLE. REMOVE EXISTING CONDUCTORS COMPLETELY FROM THEIR RACEWAYS AND DO NOT REUSE EXCEPT WHERE SPECIFICALLY INDICATED. WHERE AN EXISTING DEVICE IS REMOVED FROM AN EXISTING CIRCUIT, PROVIDE NEW WIRING AND MAINTAIN CONTINUITY OF EXISTING CIRCUIT.
 - D. REMOVE EXISTING LUMINAIRES, LAMPS, BALLASTS, AND RELATED COMPONENTS INDICATED AS COMPLETELY AS POSSIBLE. DELIVER EQUIPMENT CONSIDERED SALVAGEABLE BY THE OWNER'S REPRESENTATIVE AND NOT SHOWN FOR REUSE TO THE OWNER'S STORAGE LOCATION. REMOVE NON-SALVAGEABLE EQUIPMENT FROM THE SITE. PROPERLY DISPOSE OF LAMPS AND BALLASTS CONSIDERED HAZARDOUS WASTE.
 - E. REMOVE EXISTING SURFACE MOUNTED BOXES, CONDUIT, SURFACE METAL RACEWAY, WIREWAY, ETC. INDICATED AS COMPLETELY AS POSSIBLE. PATCH ABANDONED PENETRATIONS FROM REMOVED FASTENERS. ABANDON IN PLACE NON-ACCESSIBLE BOXES SHOWN REMOVED AND COVER WITH STAINLESS STEEL COVER PLATES. ABANDON IN PLACE NON-ACCESSIBLE CONDUIT SHOWN REMOVED AND CAP OFF IN A SUITABLE MANNER PER LOCAL INSPECTOR'S REQUIREMENTS. RACEWAYS STUBBED FROM A CONCRETE FLOOR OR WALL 2 INCHES BELOW ADJACENT SURFACE, GROUT, AND SCREED.
 - F. COORDINATE REUSED EXISTING BOX AND CONDUIT LOCATIONS WITH NEW WORK LOCATIONS.
 - G. REMOVE ELECTRICAL WORK AT ALL MECHANICAL EQUIPMENT SHOWN REMOVED. COORDINATE EQUIPMENT REMOVAL LOCATIONS WITH MECHANICAL DRAWINGS.

- GENERAL ELECTRICAL NOTES**
 APPLY TO ALL ELECTRICAL SHEETS
- A. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF ROUGH-IN ABOVE FINISHED FLOOR (AFF).
 - B. INSTALL ALL CONDUCTORS IN CONTINUOUS RACEWAY. PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTOR.
 - C. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT PHASE CONDUCTOR - EXCEPTION: WHERE AN EQUIPMENT MANUFACTURER REQUIRES A MULTIWIRE BRANCH CIRCUIT FOR ONLY ONE UTILIZATION EQUIPMENT AND WHERE ALL UNGROUNDED CONDUCTORS OF THAT CIRCUIT ARE OPENED SIMULTANEOUSLY BY THE BRANCH CIRCUIT OVERCURRENT DEVICE.
 - D. CONCEAL ALL CONDUITS IN NEW WALLS, EXISTING STUD WALLS, OR ABOVE SUSPENDED CEILINGS.
 - E. WHERE CONDUIT CANNOT BE CONCEALED IN EXISTING WALL OR CEILING CAVITIES, INSTALL CONDUCTORS IN SURFACE METAL RACEWAYS, SURFACE CONDUIT OR METAL SURFACE RACEWAY AT ENGINEER'S DISCRETION.
 - F. PAINT SURFACE CONDUIT IN FINISHED AREAS, WHEN ALLOWED, TO MATCH SURROUNDING SURFACES. COORDINATE FINISHES WITH ARCHITECT.
 - G. METAL SURFACE RACEWAYS SHALL BE WIREMOLD #500, #700, OR #V2400 SERIES WITH FACTORY IVORY FINISH OR APPROVED EQUIVALENT. METAL SURFACE RACEWAYS FOR TELEVISION CABLE SHALL BE WIREMOLD #7700 OR LARGER. METAL SURFACE RACEWAYS FOR TELECOMMUNICATIONS CABLES SHALL BE #V2400 OR LARGER. COMPLY WITH EIA/TIA STANDARDS FOR CABLE BENDING RADIUS.
 - H. INSTALL EXPOSED OR CONCEALED RACEWAY NEAR METAL CORRUGATED SHEET ROOF DECKING SO NEAREST OUTER RACEWAY SURFACE IS NOT LESS THAN 6 INCHES FROM THE NEAREST SURFACE OF THE ROOF DECKING. EXCEPTION: RIGID METAL CONDUIT AND INTERMEDIATE METAL CONDUIT SHALL NOT BE REQUIRED TO MAINTAIN THIS CLEARANCE.
 - I. PATCH, PAINT, REPAIR OR REPLACE ALL WALLS, CEILINGS, OR OTHER BUILDING ELEMENTS DISTURBED DURING INSTALLATION OF ELECTRICAL WORK.
 - J. USE ROOM NUMBERS ASSIGNED BY OWNER AND NOT ROOM NUMBERS LISTED ON DRAWINGS FOR LABELING OF PANELBOARD DIRECTORIES, FIRE ALARM PANEL PROGRAMMING, ETC. INCLUDE A DESCRIPTION OF LOAD SUCH AS LIGHTS, RECEPTACLES, MECHANICAL UNIT LOCATIONS, ETC. ON TYPED PANELBOARD DIRECTORIES.
 - K. LOCATIONS AND QUANTITIES OF OCCUPANCY SENSORS ON THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE ONLY THE ROOM/AREA CONTROLLED BY THE SENSORS. PROVIDE ADDITIONAL SENSORS AND RELATED EQUIPMENT FOR COMPLETE COVERAGE AND SWITCHING ARRANGEMENTS INDICATED.
 - L. REFER TO MECHANICAL/ELECTRICAL COORDINATION SCHEDULE SHEET M-701 FOR ADDITIONAL REQUIREMENTS ON DISCONNECTS, MOTOR STARTERS, ETC.
 - M. CONNECT SMOKE AND FIRE/SMOKE DAMPERS TO 120V POWER AND CONTROL WITH FIRE ALARM SYSTEM. VERIFY EXACT QUANTITY AND LOCATION OF DAMPERS WITH MECHANICAL DRAWINGS.
 - N. COORDINATE LOCATION OF RECESSED LUMINAIRES, SPEAKERS, ETC. WITH FIRE RATED CEILINGS. PROVIDE ENCLOSURES TO MAINTAIN THE FIRE INTEGRITY RATING OF THE CEILING. COORDINATE EXACT LOCATIONS OF FIRE RATED CEILINGS WITH ARCHITECTURAL DRAWINGS.

NOTICE:
 DO NOT SCALE DRAWINGS. VERIFY ALL DIMENSIONS AND CLEARANCES FROM ARCHITECTURAL, STRUCTURAL, SHOP AND OTHER APPROPRIATE DRAWINGS OR AT SITE. LAY OUT AND COORDINATE ALL WORK PRIOR TO INSTALLATION TO PROVIDE CLEARANCES REQUIRED FOR OPERATION, MAINTENANCE, AND CODES. VERIFY NON-INTERFERENCE WITH OTHER WORK. DO NOT FABRICATE PRIOR TO VERIFICATION OF CLEARANCES FOR ALL TRADES. THIS NOTICE APPLIES TO ALL FARRIS ENGINEERING PLANS.

CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact: Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 Nagel Architects Project Number: 438-18-105	STAMP 11/27/18	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title GENERAL ELECTRICAL NOTES AND SYMBOLS	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105
				Approved:	Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Building Number 38	Drawing Number EG101
Revisions:	Date:	Issue Date 11/27/2018	Checked RJH	Drawn SCT			

three inches = one foot
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one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

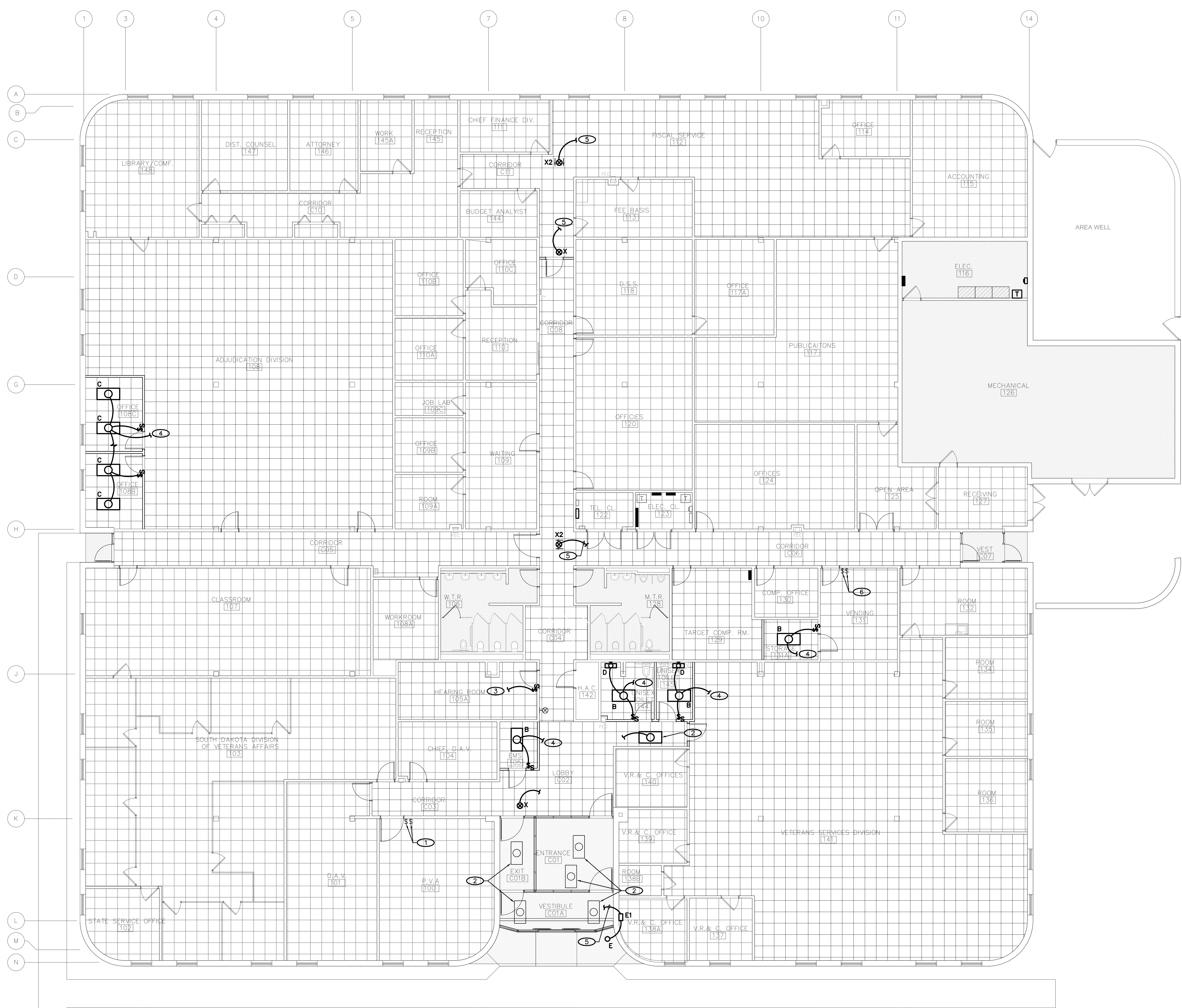


- ELECTRICAL KEYNOTES:** (○)
- 1 EXISTING SWITCHES SHALL BE RELOCATED FOR INSTALLATION OF NEW DOOR.
 - 2 EXISTING CARD READER AND MOTION SENSOR SHALL BE RELOCATED.
 - 3 EXISTING LUMINAIRE SHALL BE RELOCATED.
 - 4 REMOVE DEVICES AND LUMINAIRES INDICATED.
 - 5 LUMINAIRES INDICATED SHALL BE RECONNECTED TO NEW CONTROLS.
 - 6 REMOVE LUMINAIRE FOR INSTALLATION OF NEW COIL IN EXISTING DUCT. REINSTALL AND RECONNECT LUMINAIRE AFTER COIL IS INSTALLED.
 - 7 EXISTING DUCT DETECTOR SHALL BE RELOCATED.
 - 8 EXISTING DEVICES INDICATED SHALL BE RELOCATED.
 - 9 EXISTING J-BOX FROM PREVIOUSLY REMOVED LUMINAIRE SHALL BE REMOVED. REMOVE ANY REMAINING WIRING AND MAINTAIN CIRCUIT CONTINUITY TO CEILING LUMINAIRES AS REQUIRED.
 - 10 REMOVE EXISTING DEVICE INDICATED TO ALLOW REMOVAL OF TILE/SHEATHING. REINSTALL DEVICE AND CONNECT TO EXISTING WIRING AFTER NEW SHEATHING/TILE IS INSTALLED.
 - 11 DISCONNECT AUTOMATIC DOOR OPERATOR.
 - 12 EXISTING MINI-SPLIT BLOWER RELOCATED BY MECHANICAL. DISCONNECT UNIT AND EXTEND WIRING TO NEW LOCATION.
 - 13 IN THIS ROOM REMOVE ALL DATA JACKS, FACEPLATES AND CABLES BACK TO EXISTING DATA RACKS IN ROOM 129A. THIS SHALL INCLUDE REMOVAL FROM CHANNELS AND BOXES WITHIN OFFICE CUBICLE PARTITIONS. RETAIN ALL EXISTING BOXES AND RACEWAYS FOR USE BY NEW TELECOMMUNICATIONS SYSTEM.
 - 14 EXISTING DATA RACKS SHALL BE RELOCATED.

ELECTRICAL DEMOLITION PLAN
SCALE: 1/8" INCH = 1 FOOT
12" 0' 5' 10' 15'

Revisions:	Date:	CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP PROFESSIONAL ENGINEER REG. NO. 11270 BRIAN HOWELL ELECTRICAL 11/27/18	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title ELECTRICAL DEMOLITION PLAN Approved: .	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number ED101
		Checked: RJH Drawn: SCT							

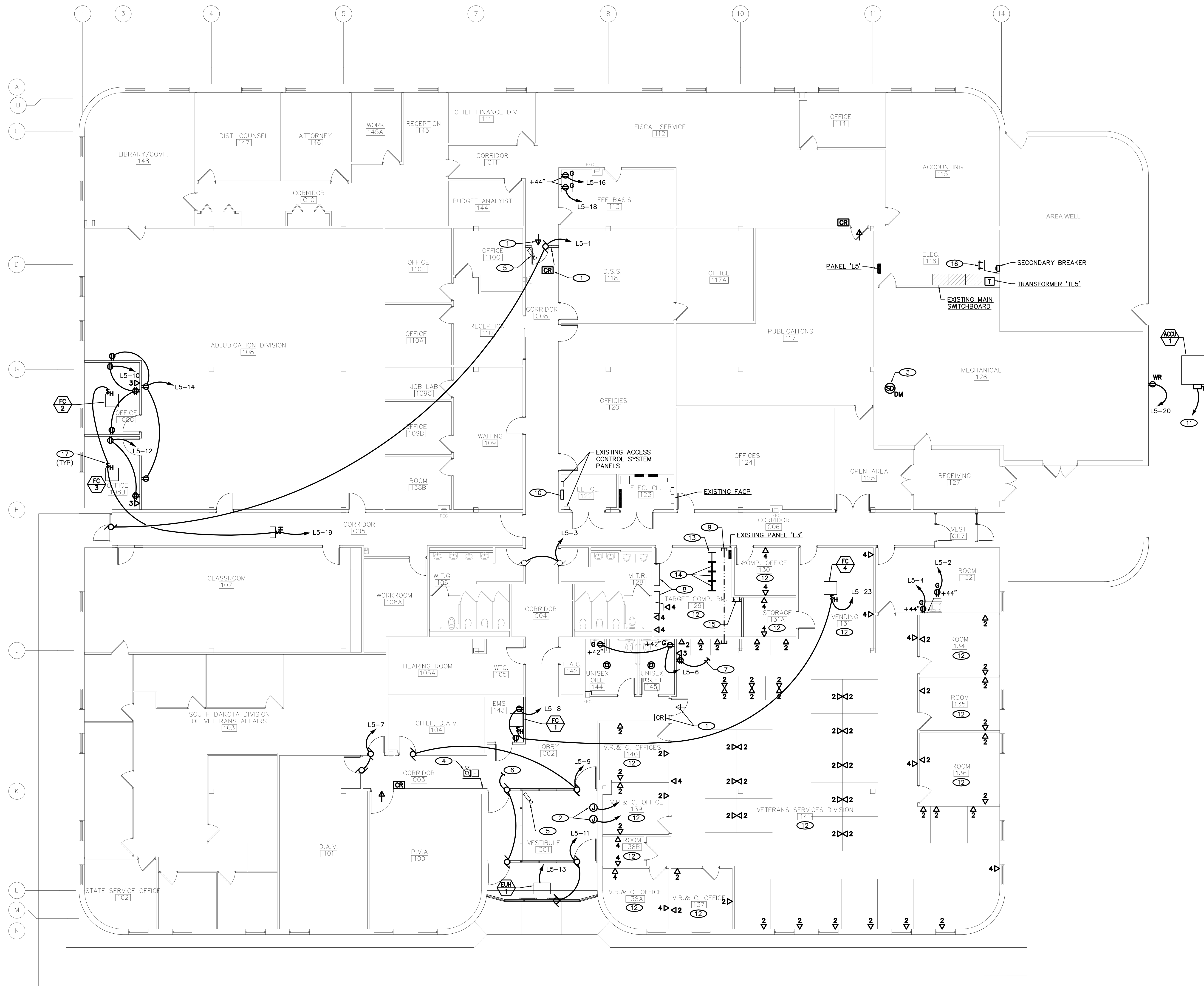
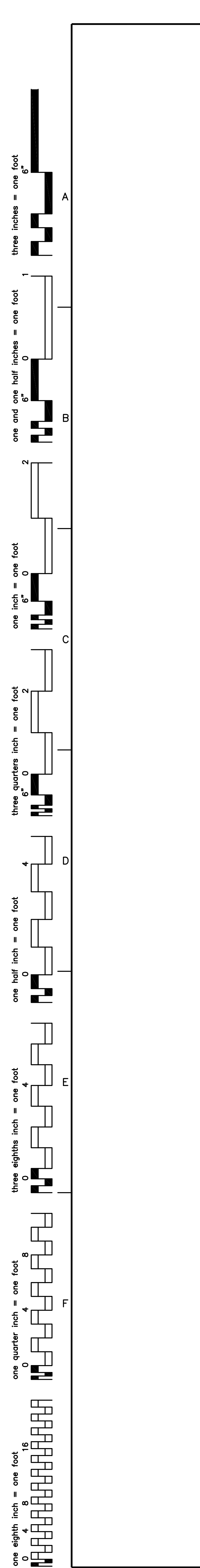
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three eighths inch = one foot
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- ELECTRICAL KEYNOTES:** (○)
- 1 INSTALL EXISTING RELOCATED SWITCHES IN NEW BOX AND CONNECT TO CONTROL EXISTING LUMINAIRES. LOCATE TOP OF BOX AT 48 INCHES ABOVE FINISHED FLOOR.
 - 2 RELOCATED LUMINAIRE. CONNECT TO EXISTING SWITCHING AND CIRCUIT SERVING LUMINAIRES IN LOBBY.
 - 3 PROVIDE NEW WALL BOX SENSOR AND CONNECT ALL EXISTING LUMINAIRES IN THIS ROOM TO BE CONTROLLED FROM WALL BOX SENSOR.
 - 4 CONNECT TO UNSWITCHED LEG OF CIRCUIT THAT FORMERLY SERVED LUMINAIRES IN THIS AREA.
 - 5 CONNECT TO UNSWITCHED LEG OF CIRCUIT SERVING LUMINAIRES IN THIS ROOM.
 - 6 INSTALL NEW SINGLE POLE SWITCHES FOR CONTROL OF LUMINAIRES IN THIS AREA. LOCATE TOP OF BOX AT 48 INCHES ABOVE FINISHED FLOOR. PROVIDE BLANK 2-GANG COVER PLATE AT FORMER SWITCH LOCATION.

LIGHTING PLAN
 SCALE: 1/8" INCH = 1 FOOT
 12" 0' 10' 15'

CONSULTANT FARRIS ENGINEERING <small>OMAHA LINCOLN COLORADO SPRINGS SIDNEY</small> Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900 Revisions: _____ Date: _____	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP 11/27/18	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title LIGHTING PLAN	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105
				Approved: _____ _____	Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Building Number 38	Drawing Number EL101



- ELECTRICAL KEYNOTES:** (○)
- ① INSTALL RELOCATED CARD READER AND MOTION SENSOR AND RECONNECT TO EXISTING ACCESS CONTROL SYSTEM.
 - ② PROVIDE J-BOX ABOVE CEILING FOR FUTURE SECURITY SCREENING MACHINES. ROUTE 1" EMPTY CONDUIT FROM EACH BOX TO PANEL 'L5'.
 - ③ INSTALL RELOCATED DUCT DETECTOR DOWN STREAM FROM PRESENT LOCATION TO ALLOW INSTALLATION OF COOLING COIL. CONNECT DUCT DETECTOR TO EXISTING FIRE ALARM CIRCUIT.
 - ④ INSTALL RELOCATED FIRE ALARM DEVICES AND CONNECTION TO EXISTING SIGNAL AND NOTIFICATION CIRCUITS.
 - ⑤ INSTALL RELOCATED CAMERA. REROUTE EXISTING DATA LINE TO NEW CAMERA LOCATION.
 - ⑥ CONNECT DOOR OPERATORS INDICATED TO CIRCUIT THAT FORMERLY SERVED LOBBY DOORS.
 - ⑦ CONNECT TO EXISTING RECEPTACLE CIRCUIT THAT SERVED RECEPTACLE REMOVED FROM THE EAST WALL IN THIS ROOM.
 - ⑧ RECONNECT EXISTING RELOCATED INDOOR BLOWERS OF MINI SPLIT SYSTEM TO THE POWER WIRING FROM EXISTING OUTDOOR UNIT.
 - ⑨ PROVIDE 12 INCH BY 4 INCH CABLE TRAY IN ROOM 129 WHERE SHOWN ABOVE DATA RACKS AND INTO CEILING SPACE OF ROOM 141.
 - ⑩ NEW ACCESS CONTROL PANEL WITH EIGHT DOOR CONTROL CARD. PROVIDE SPACE WITHIN BOX FOR ADDITION OF FUTURE EIGHT DOOR CONTROL CARD. CONNECT POWER SUPPLY TO EXISTING 120 VOLT CIRCUIT SERVING ADJACENT ACCESS CONTROL PANELS. POWER SUPPLIES FOR ACCESS CONTROL DEVICES AT DOORS SHALL BE LOCATED IN THIS ROOM ALSO.
 - ⑪ CONNECT TO NEW 45/3 BREAKER AT EXISTING MAIN SWITCHBOARD WITH 3-#6, 1-#10 GRD. IN 1 INCH CONDUIT. CONDUIT ROUTING SHALL FOLLOW PATH OF REFRIGERANT LINES IF POSSIBLE.
 - ⑫ PROVIDE NEW JACKS, FACEPLATES AND CATEGORY 6 CABLES AS SPECIFIED TO EXISTING LOCATIONS INDICATED IN THESE ROOMS. THIS SHALL INCLUDE ROUTING AND INSTALLATION IN EXISTING OFFICE CUBICLE RACEWAY AND BOXES. TERMINATE ON EXISTING PATCH PANELS AND TEST CABLES.
 - ⑬ RELOCATE/ROTATE ONE (1) EXISTING DATA RACK.
 - ⑭ PROVIDE THREE (3) NEW DATA RACKS PER SPECIFICATIONS. PROVIDE PATCH PANELS AS REQUIRED ONE (1) RACK FOR RE-CABLED OUTLETS PER KEYNOTE 12.
 - ⑮ PROVIDE TELECOMMUNICATIONS GROUND BAR PER SPECIFICATIONS. CONNECT TO MAIN GROUND BAR IN ROOM 116 WITH MINIMUM #3/0 WIRE. BOND GROUND BUS OF EXISTING PANEL 'L3' TO GROUND BAR ALONG WITH RACKS, CABLE TRAY AND OTHER METALLIC COMPONENTS PER SPECIFICATIONS.
 - ⑯ PROVIDE MAIN GROUND BAR TO MATCH TELECOMMUNICATIONS GROUND BAR. CONNECT TO MAIN SERVICE GROUNDING ELECTRODE WITH MINIMUM #3/0 WIRE.
 - ⑰ PROVIDE BUSSMAN OR EQUAL 'STY' 2-POLE SWITCH AND FUSE HOLDER. PROVIDE INDEPENDENT SUPPORT AND MOUNT ADJACENT TO MECHANICAL UNIT. TYPICAL OF SSSB-1A AND ALL 'FC' UNITS.

POWER AND SPECIAL SYSTEMS PLAN
 SCALE: 1/8" = 1 FOOT
 12" 0 5' 10' 15'

	CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 nagel architects Nagel Architects Project Number: 438-18-105	STAMP 	Office of Construction and Facilities Management U.S. Department of Veterans Affairs	Drawing Title POWER AND SPECIAL SYSTEMS PLAN Approved: .	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE Location 2501 W 22nd ST SIOUX FALLS, SD 57105 Issue Date 11/27/2018	Project Number 438-18-105 Building Number 38 Drawing Number EP101
Revisions:	Date:							

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TRANSFORMER SCHEDULE									
TRANSFORMER	VOLTAGE	MINIMUM KVA RATING	MOUNTING	CONDUCTORS		GROUNDING ELECTRODE	SYSTEM BONDING JUMPER	BREAKER SIZE (% FLA)	
				PRIMARY	SECONDARY			PRIMARY	SECONDARY
TL5	480V DELTA 208Y/120V	30	FLOOR	3-#6, 1-#10 GRD., 1" C.	4-#1, 1-#6 GRD., 2" C.	#6, 1/2" C.	#6	50/3	100/3

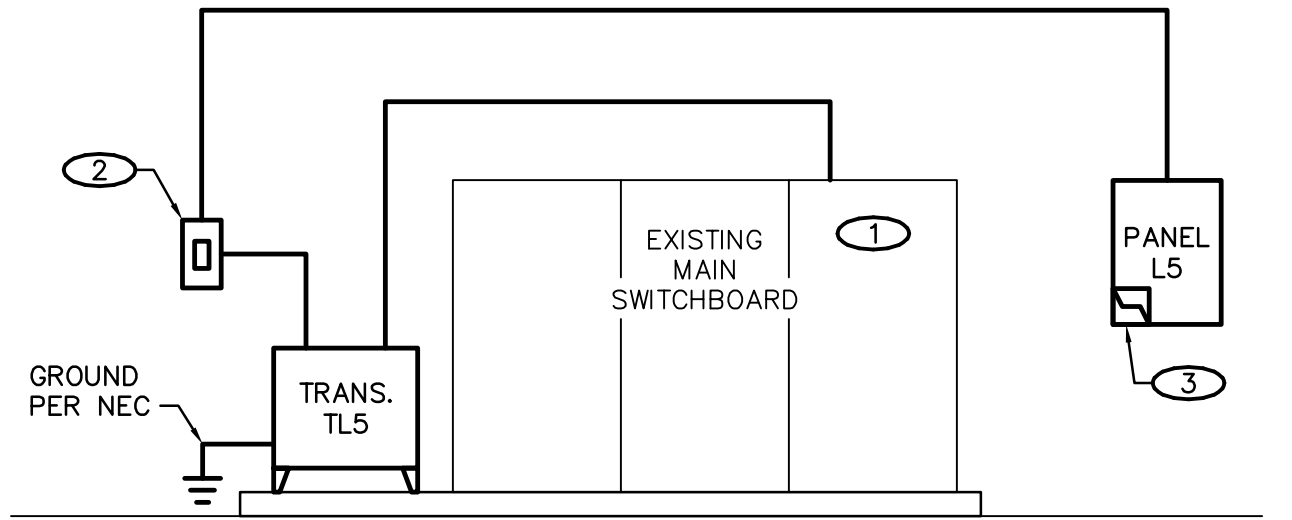
NOTE:
 THE CONTRACTOR SHALL VERIFY THAT THE SIZE OF EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER DOES NOT EXCEED THE AVAILABLE MOUNTING SPACE.

LUMINAIRE SCHEDULE												
MARK	DESCRIPTION	MANUFACTURER/SERIES	CATALOG NO.	LIGHT SOURCE		FINISH	MOUNTING	INPUT WATTS	VOLTS	ACCEPTABLE MANUFACTURERS	REMARKS	
				QTY	TYPE							
B	2 BY 4 RECESSED VOLUMETRIC TROFFER LED 3000 LUMENS	METALUX CRUZE	24CZ-LD5-3000-UNV-4000K-CD-1	--	LED	WHITE	RECESSED	21.6	277	1		
C	2 BY 4 RECESSED VOLUMETRIC TROFFER LED 4500 LUMENS	METALUX CRUZE	24CZ-LD5-4500-UNV-4000K-CD-1	--	LED	WHITE	RECESSED	35.7	277	1		
D	LED MIRROR LIGHT 1375 LUMENS	LITHONIA CONTEMP SQ. VANITY	FMV/SSL-24IN-MVOLT-4000K-90-EN	--	LED	WHITE	SURFACE	26	277			
E	EXTERIOR EMERGENCY LUMINAIRE	LIGHTALARMS SAF-T-RAY	SAF-2-LD9-DB-12VDC	2	9W LED	DARK BRONZE	SURFACE	5	12	2		
E1	REMOTE BATTERY PACK	LIGHTALARMS MC SERIES	9-MC-12G1-AH4D	0	--	WHITE	ABOVE CEILING	30	277	2		
X	SINGLE FACE LED EXIT SIGN	LIGHTALARMS GALAXY	1-XDND-B-RA	--	LED	BLK/BRUSH ALUMINUM	SURFACE	3.3	277	2	3.4	
X2	DOUBLE FACE LED EXIT SIGN	LIGHTALARMS GALAXY	2-XDND-B-RA	--	LED	BLK/BRUSH ALUMINUM	SURFACE	3.3	277	2	3.4	

- LUMINAIRE SCHEDULE REQUIREMENTS:**
- SUBMIT SHOP DRAWINGS FOR EACH LUMINAIRE AND DRIVER TYPE USED ON PROJECT.
 - ACCEPTABLE MANUFACTURERS LISTED ARE CAPABLE OF PROVIDING EQUIVALENT LUMINAIRES. SUBMIT PRODUCT AND ACCESSORIES EQUIVALENT OR SUPERIOR TO THE SPECIFIED LUMINAIRE IN PHOTOMETRIC PERFORMANCE, CONSTRUCTION QUALITY, INCLUDED ACCESSORIES, AND AESTHETICS. ADDITIONAL MANUFACTURERS NOT LISTED MAY ALSO BE SUBMITTED FOR APPROVAL PRIOR TO BID. APPROVAL WILL BE BASED ON AN ASSESSMENT OF THE PRODUCTS QUALITY, PHOTOMETRIC PERFORMANCE, INCLUDED ACCESSORIES, AND AESTHETICS.
 - ALL LUMINAIRES SHALL HAVE A U.L. LABEL. ALL LUMINAIRES USED IN EXTERIOR APPLICATIONS SHALL HAVE A U.L. WET LABEL.
 - VERIFY MOUNTING COMPATIBILITY OF LUMINAIRES WITH CEILING SYSTEMS/MATERIALS PRIOR TO ORDERING LUMINAIRES. NOTIFY ENGINEER OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
 - PROVIDE FACTORY INSTALLED INTEGRAL DISCONNECTING MEANS FOR LUMINAIRES PER 2017 NEC ARTICLE 410.130(G). NOTE THAT EXCEPTION NO. 4 WILL NOT BE ACCEPTED.
 - PHILIPS, OSRAM SYLVANIA, G.E., CREE, NICHIA, XICATO, AND SAMSUNG ARE ACCEPTABLE LED MANUFACTURERS.
 - PROVIDE LED LUMINAIRES WITH MINIMUM 5-YEAR WARRANTY AND INTEGRAL SURGE PROTECTION. LED MODULES, DRIVERS, AND POWER SUPPLIES SHALL BE FIELD-REPLACEABLE.
- LUMINAIRE SCHEDULE REMARKS:**
- LITHONIA, COLUMBIA, DAY-BRITE, H.E. WILLIAMS, AND METALUX ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
 - LITHONIA, DUAL-LITE, CHLORIDE, EMERGLITE, HUBBELL, AND SURE-LITES ARE ACCEPTABLE MANUFACTURERS FOR LUMINAIRE TYPE INDICATED.
 - REFER TO DRAWINGS FOR MOUNTING REQUIREMENTS SUCH AS WALL MOUNT, END MOUNT, CEILING MOUNT AND PROVIDE LUMINAIRES ACCORDINGLY. PROVIDE DIRECTIONAL CHEVRON ARROWS AS INDICATED ON PLANS.
 - PROVIDE WITH SELF-DIAGNOSTIC MAINTENANCE ELECTRONICS.

PANEL L5												
120/208 VOLT, 3 PHASE, 4 WIRE											AIC RATING: 10,000A	
100 AMP M.L.O. SURFACE MOUNTED												
CCT NO	LOAD V.A.	LOAD T E S C	LOAD DESCRIPTION	R E M	AMP SIZE	Ø	AMP SIZE	R E M	LOAD DESCRIPTION	R E M	LOAD V.A.	CCT NO
1	800		CORR C06, C08, DOOR OPERATORS	1	20	A	20	1	ROOM 132	X	1500	2
3	800		RESTROOMS 106, 128; DOOR OPERATORS	1	20	B	20	1	ROOM 132	X	1500	4
5			SPARE	1	20	C	20	1	TOILETS 144, 145	X	450	6
7	800		DAY 101, VA 103; DOOR OPS	1	20	A	20	1	ENS 143	X	400	8
9	800		VEST C01, DAV 104; DOOR OPERATORS	1	20	B	20	1	OFFICE 108C	X	800	10
11	800		VESTIBULE C01 DOOR OPERATORS	1	20	C	20	1	OFFICE 108B	X	600	12
13	3000		EUH-1; VEST, C01	3	20	A	20	1	ADJ DIVISION 108	X	600	14
15	-	-	-	-	-	B	20	1	FEE BASIS 113	X	1500	16
17	-	-	-	-	-	C	20	1	FEE BASIS 113	X	1500	18
19	235		FC-2, FC-3, S65B-1A	2	15	A	20	1	EXTERIOR CONDENSING UNIT RECP.	X	200	20
21	-	-	-	-	-	B	20	1	SPARE			22
23	125		FC-1, FC-4	2	15	C	20	1	SPARE			24
25	-	-	-	-	-	A	20	1	SPARE			26
27			SPARE	1	20	B	20	1	SPARE			28
29			SPARE	2	20	C	20	1	SPARE			30
31			SPACE ONLY			A			SPACE ONLY			32
33			SPACE ONLY			B			SPACE ONLY			34
35			SPACE ONLY			C			SPACE ONLY			36
37			SPACE ONLY			A			SPACE ONLY			38
39			SPACE ONLY			B			SPACE ONLY			40
41			SPACE ONLY			C			SPACE ONLY			42

REMARKS:
 G = PROVIDE GFI TYPE CIRCUIT BREAKER.
 L = PROVIDE LOCKING HANDLE DEVICE.
 S = PROVIDE SHUNT TRIP TYPE CIRCUIT BREAKER.



ONE-LINE RISER DIAGRAM
 NO SCALE

- ELECTRICAL KEYNOTES:** (○)
- PROVIDE TWO (2) 480 VOLT, 45/3, G.E. SPECTRA SELA SERIES BREAKERS FOR EXISTING SPACE AT EXISTING MAIN SWITCHBOARD. PROVIDE BUS CONNECTION KIT FOR BREAKERS AS REQUIRED.
 - PROVIDE 240 VOLT, 100 AMP ENCLOSED CIRCUIT BREAKER WALL MOUNTED NEAR TRANSFORMER. CIRCUIT BREAKER AIC RATING SHALL BE 10,000 AMPS.
 - PROVIDE A SURGE PROTECTIVE DEVICE (SPD) INTEGRAL WITH PANELBOARDS INDICATED. SPD SHALL BE DIRECTLY CONNECTED TO THE PANELBOARD BUS. THE SPD SHALL COMPLY WITH UL-1449 FOURTH EDITION AND PROVIDE SEVEN MODE (L-N, L-G, N-G) PROTECTION. SPD SHALL INCLUDE SURGE RATED INPUT FUSES, POWER STATUS INDICATOR LIGHTS AND SHALL BE RATED FOR A SURGE CURRENT OF 50,000 AMPS PER PHASE.

Revisions:	Date:	CONSULTANT FARRIS ENGINEERING OMAHA LINCOLN COLORADO SPRINGS SIDNEY farris-usa.com FE#: 182032 Contact : Brian Howell BHowell@Farris-USA.com 12700 West Dodge Rd. • Omaha, Nebraska (402) 330-5900	ARCHITECT/ENGINEER OF RECORD 13100 watertown plank road suite 200 Elm Grove, WI 53122 magel architects Nagel Architects Project Number: 438-18-105	STAMP PROFESSIONAL ENGINEER REG. NO. 11/27/18 Brian Howell	Office of Construction and Facilities Management VA U.S. Department of Veterans Affairs	Drawing Title ELECTRICAL SCHEDULES AND RISER DIAGRAM	Phase 100% CONSTRUCTION DOCUMENTATION	Project Title BUILDING 38 UPGRADE	Project Number 438-18-105
		Location 2501 W 22nd ST SIOUX FALLS, SD 57105	Issue Date 11/27/2018	Checked RJH	Drawn SCT	Building Number 38	Drawing Number E-501		