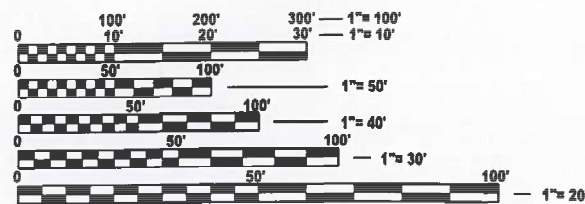


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06-13-2025 LETTING ITEM 131

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36	500-MEN-1	9TH STREET PUMP STATION - ELECTRICAL / INSTRUMENTATION & CONTROL PLAN
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38	500-EN-3	9TH STREET PUMP STATION - ELECTRICAL / INSTRUMENTATION & CONTROL PLAN
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40	999-A-1	ARCHITECTURAL - STANDARD DETAILS
41	999-S-1	STRUCTURAL - STANDARD DETAILS
42	999-H-1	HVAC - STANDARD DETAILS
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44	999-E-1	ELECTRICAL - STANDARD DETAILS
45	999-N-1	INSTRUMENTATION AND CONTROL - STANDARD DETAILS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

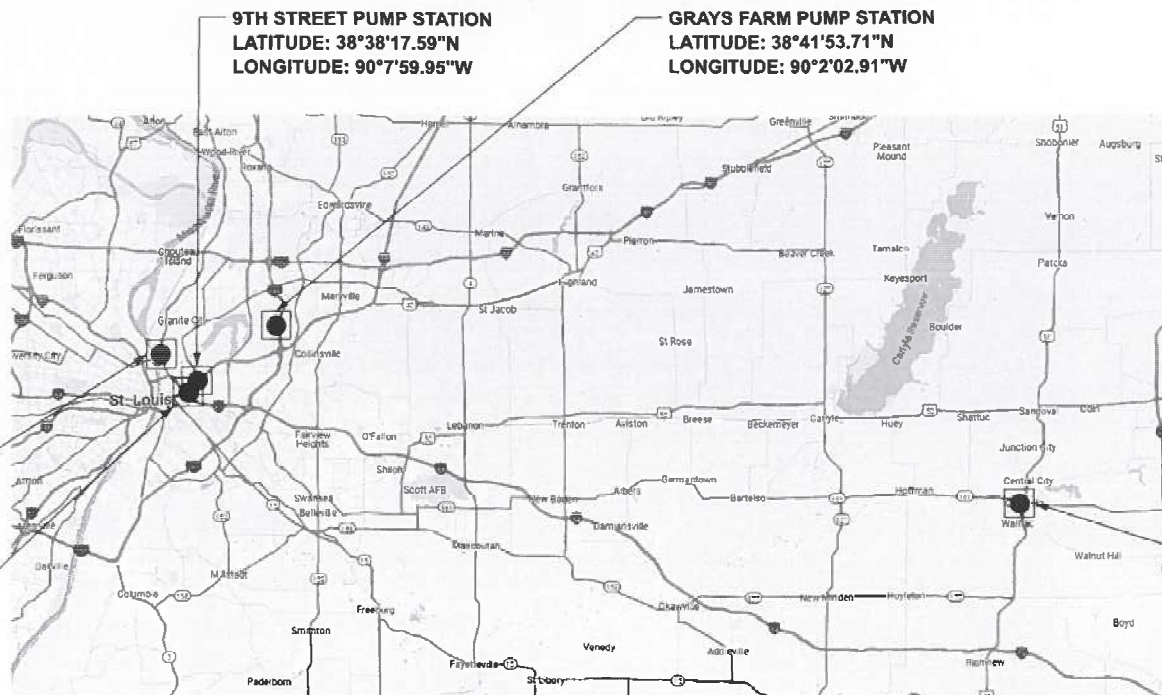
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: CHERYL KEPLAR
PROJECT MANAGER: RICHARD BARBEE

CONTRACT NO. 76U37

VENICE PUMP STATION
LATITUDE: 38°40'16.56"N
LONGITUDE: 90°10'31.01"W

BOWMAN PUMP STATION
LATITUDE: 38°38'03.65"N
LONGITUDE: 90°8'31.17"W



VARIOUS COUNTIES

LOCATION MAP (NTS)

9TH STREET PUMP STATION
LATITUDE: 38°38'17.59"N
LONGITUDE: 90°7'59.95"W

GRAYS FARM PUMP STATION
LATITUDE: 38°41'53.71"N
LONGITUDE: 90°2'02.91"W

CENTRALIA PUMP STATION
LATITUDE: 38°31'44.68"N
LONGITUDE: 89°8'10.06"W



Jeffrey A. Gratz
03/14/2025



Shawn D. Reimes
03/14/2025



Peter M. Larson
03/14/2025



Jay T. Bielanski
03/14/2025



Aric H. Bergstrom
03/14/2025

DATE: 03/14/2025
EXPIRATION: 11/30/2025
SHEET NUMBERS: 1-4, 7

DATE: 03/14/2025
EXPIRATION: 11/30/2026
SHEET NUMBERS: 24-31, 40, 41

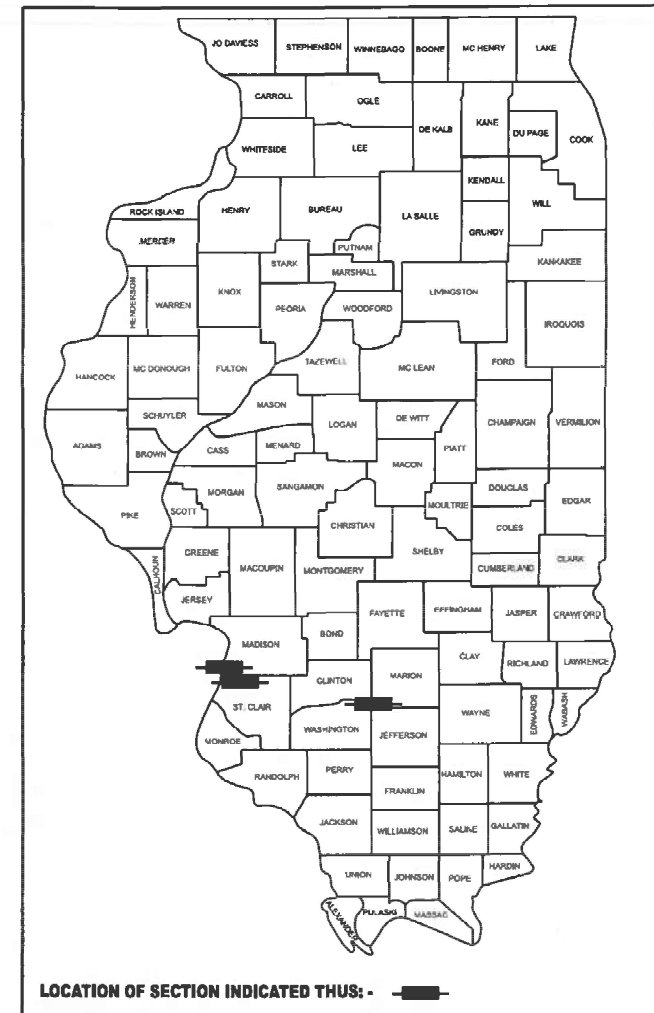
DATE: 03/14/2025
EXPIRATION: 11/30/2025
SHEET NUMBERS: 5, 12-23, 32-35, 42-43

DATE: 03/14/2025
EXPIRATION: 11/30/2025
SHEET NUMBERS: 8-10, 36-39, 44

DATE: 03/14/2025
EXPIRATION: 11/30/2025
SHEET NUMBERS: 6, 11, 45

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIES	45	1
		ILLINOIS	CONTRACT NO. 76U37	

D-98-031-25



LOCATION OF SECTION INDICATED THUS: -

DONOHUE
230 WEST MONROE STREET, SUITE 2925
CHICAGO, IL 60606
312-236-9147

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 18, 2025
Loren Rensin REGIONAL ENGINEER

May 9, 2025
Scott E. H. ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2025
Cheryl Keplar DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

STATE HIGHWAY STANDARDS:

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
701601-09	LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSIBLE MEDIAN
701901-10	TRAFFIC CONTROL DEVICES

GENERAL NOTES:

1. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL TEMPORARY FACILITIES WITH THE FINAL LOCATION OF THE NEW WORK.
2. ANY NOTIFICATION TO ANY AGENCY MUST BE MADE THROUGH THE ENGINEER. NOTIFICATION SHALL BE MADE TO THE AGENCIES AND UTILITIES AT LEAST 10 DAYS PRIOR TO ANY CONSTRUCTION IN THE AREA AND SHALL COMPLY WITH ALL RESTRICTIONS FOR EQUIPMENT MOVEMENTS AND CLEARANCES IN REGARDS TO THEIR FACILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF ALL EMERGENCY SERVICES.
3. UTILITIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA:

AMEREN ILLINOIS ELECTRIC
AT&T
CHARTER/SPECTRUM COMM.
CITY OF EAST ST. LOUIS
CLEARWAVE FIBER LLC
IL AMERICAN WATER - EAST ST. LOUIS
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.
5. IDOT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUBCONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSE WORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 681-346-3360 AND/OR THE HCCTP COORDINATOR AT 619-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
6. A FIELD SURVEY WAS NOT PERFORMED AND THE PLANS WERE CREATED USING EXISTING PLANS.

COMMITMENTS:

1. NONE THIS CONTRACT

MODEL: 001-G-2
FILE NAME: D876U37-shr-genote.dgn

	USER NAME = sbremer	DESIGNED - JG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	VARIOUS PUMP STATION IMPROVEMENTS STATE HIGHWAY STANDARDS, GENERAL NOTES, AND COMMITMENTS	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - DD	REVISED -			VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	2
		CHECKED - JG	REVISED -			CONTRACT NO. 76U37				
	PLOT DATE = 3/7/2025	DATE - 3/14/2025	REVISED -			ILLINOIS FED. AID PROJECT				
SCALE: SHEET 2 OF 45 SHEETS STA. TO STA.										

MODEL: 001-G-3
FILE NAME: D876U37-shr-SQG.dgn

	USER NAME = sbremer	DESIGNED - JG	REVISED -
		DRAWN - DD	REVISED -
		CHECKED - JG	REVISED -
	PLOT DATE = 3/7/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS GENERAL SUMMARY OF QUANTITIES			
SCALE:	SHEET 3 OF 45 SHEETS	STA.	TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	3
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

				CONSTR. CODE		
				MADISON	ST. CLAIR	MARION
100% STATE				ROADWAY		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0044		
				URBAN		
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	583	0	583	0
* 66900530	SOIL DISPOSALANALYSIS	EACH	1	0	1	0
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0	1	0
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0	1	0
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	0	4	0
67100100	MOBILIZATION	L SUM	1	0.4	0.4	0.2
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.8	0.2	0
X0301028	PUMP STATION SCADA EQUIPMENT	L SUM	1	0	1	0
X0320034	HEATING AND VENTILATION	L SUM	1	0.4	0.4	0.2
X0783300	PUMP STATION ELECTRICAL WORK	L SUM	1	0.4	0.4	0.2
X0900086	PRECAST PUMP STATION BUILDING	L SUM	1	0	1	0
* SPECIALTY ITEM						

001-G-3

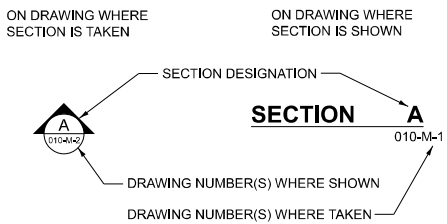
REV - MS

GENERAL LEGEND

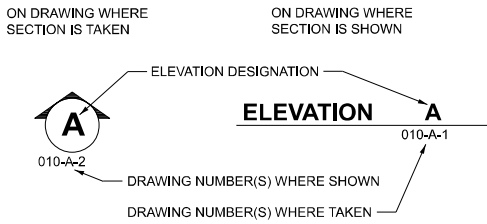
DISCIPLINE IDENTIFIER

DISCIPLINE	DISCIPLINE IDENTIFIER
GENERAL	G
CIVIL KEY	CK
CIVIL NOTES	CN
CIVIL REMOVAL	CR
CIVIL FACILITIES	CF
CIVIL GRADING	CG
CIVIL EROSION CONTROL	CE
CIVIL PIPING	CP
REMOVALS	R
ARCHITECTURAL	A
STRUCTURAL	S
PROCESS-MECHANICAL	M
PLUMBING	P
HVAC	H
ELECTRICAL	E
INSTRUMENTATION AND CONTROL	N

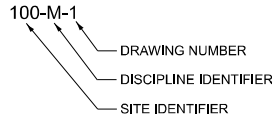
SECTION DESIGNATION



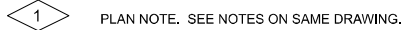
CASEWORK ELEVATION DESIGNATION



DRAWING NUMBER DESIGNATION



PLAN NOTE DESIGNATION



STANDARD DETAIL DESIGNATION

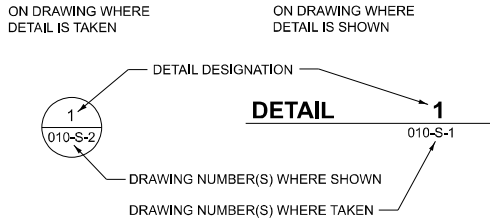


NOTE:

STANDARD DETAILS ARE LOCATED ON DRAWINGS THAT HAVE BEEN ASSIGNED A SITE IDENTIFIER OF 999 FOLLOWED BY A DISCIPLINE IDENTIFIER. THESE DRAWINGS ARE PLACED LAST IN THE DRAWING SET.

EXAMPLE: 999-M-1

DETAIL DESIGNATION



AREA DESIGNATION

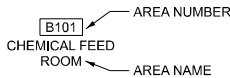
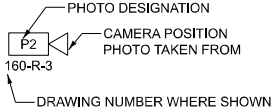


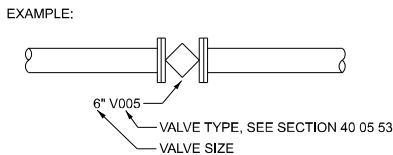
PHOTO DESIGNATION



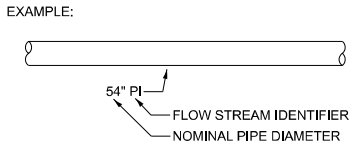
HATCH PATTERNS

	NON-RIGID INSULATION		BAR GRATING
	RIGID INSULATION		CHECKERED PLATE
	SAND OR FILL		PLANK GRATING
	FREE DRAINING FILL		2' x 2' SUSPENDED ACOUSTICAL CEILING
	ROUGH CARPENTRY (NOMINAL SIZE INDICATED)		GYPSUM BOARD CEILING, REFER TO ROOM FINISH SCHEDULE FOR FINISH
	CONCRETE		
	CONCRETE BLOCK		
	FACE BRICK		
	PRECAST CONCRETE PLANK		
	EARTH OR BACKFILL		
	ROCK		
	REMOVAL		

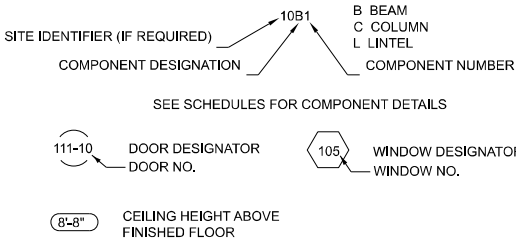
VALVE IDENTIFICATION



PIPE IDENTIFICATION



STRUCTURAL COMPONENT IDENTIFICATION



ABBREVIATIONS

ACT	ACOUSTICAL TILE	F/	FACE OF	N	NEW	T	TOP
AD	ACCESS DOOR	FCA	FLANGED COUPLING ADAPTOR	NIC	NOT IN CONTRACT	T	TREAD
ADDL	ADDITIONAL	FD	FLOOR DRAIN	NO, or #	NUMBER	T/	TOP OF
AFF	ABOVE FINISHED FLOOR	FE	FIRE EXTINGUISHER	NOM	NOMINAL	T/S	TOP OF STEEL
AL	ALUMINUM	FEC	FIRE EXTINGUISHER CABINET	NR	NON-RATED	T&B	TOP AND BOTTOM
ALT	ALTERNATE	FF	FINISH FLOOR	NTS	NOT TO SCALE	T & G	TONGUE & GROOVE
APPROX	APPROXIMATE	FFE	FINISH FLOOR ELEVATION			TDC	TRAFFIC DECK COVERING
ARCH	ARCHITECTURAL	FH	FULL HEIGHT	OC	ON CENTER	TEMP	TEMPERED
AVG	AVERAGE	FHC	FIRE HOSE CABINET	OD	OUTSIDE DIAMETER	THK	THICK
		FIN	FINISH	OFI	OWNER FURNISHED ITEM	TOC	TOP OF CONCRETE or CURB
B	BOTTOM	FL or FLR	FLOOR	OFOI	OWNER FURNISHED	TOP	TOP OF PARAPET
B/	BOTTOM OF	FLG	FLANGE		OWNER INSTALLED	TOS	TOP OF STEEL
BF	BLIND FLANGE	FO	FINISHED OPENING	OPNG or OPN'G	OPENING	TOW	TOP OF WALL
BFP	BACKFLOW PREVENTER	FOC	FACE OF CONCRETE	OPPO	OPPOSITE	TYP	TYPICAL
BLDG	BUILDING	FOS	FACE OF STUD	P&ID	PROCESS AND		
BLK	BLOCK	FOUND	FOUNDATION		INSTRUMENTATION DIAGRAM	UNO	UNLESS NOTED OTHERWISE
BLKG	BLOCKING	FOW	FACE OF WALL	P. LAM.	PLASTIC LAMINATE		
BM	BEAM	FRP	FIBER REINFORCED PLASTIC	PC	PORTLAND CEMENT	VB	VINYL BASE
BOB	BOTTOM OF BEAM	FS	FLOOR SINK	PCP	PRE-STRESSED CONCRETE	VCT	VINYL COMPOSITION TILE
BOT	BOTTOM	FS	FULL SIZE	PIPE		VER	VERIFY
BRD	BOARD	FSD	FULL SIZE DETAIL	PJF	PREFORMED JOINT FILLER	VERT	VERTICAL
		FT	FEET	PL	PLATE	VIF	VERIFY IN FIELD
		FTG	FOOTING	PLAS	PLASTIC		
		FV	FIELD VERIFY	PLYWD	PLYWOOD	W	WIDE
				PR	PAIR	W/	WITH
		GA	GAUGE	PREP	PREPARATION	WC	WATER CLOSET
		GALV	GALVANIZED	PROJ	PROJECTION	WD	WOOD
		G.B.	GRAB BAR	PT	PAINT	WL	WATER LEVEL
		GCMU	GLAZED CONCRETE MASONRY UNIT	PVC	POLYVINYL CHLORIDE	WO	WITHOUT
				QT	QUARRY TILE	WP	WATERPROOFING
		GL	GLASS			WS	WATERSTOP
		GR	GRADE			WWF	WELDED WIRE FABRIC
		GYP BD	GYPSUM BOARD				
				R	RISER	YR	YEAR
		H	HIGH	R or RAD	RADIUS		
		HB	HOSE BIB	RC	ROOF CONDUCTOR		
		H/C	HANDICAPPED	RCP	REINFORCED CONCRETE PIPE		
		HDWD	HARDWOOD	RCP	REFLECTED CEILING PLAN		
		HDWR	HARDWARE	RD	ROOF DRAIN		
		HM	HOLLOW METAL	REC	RECESSED		
		HORZ	HORIZONTAL	RED	REDUCER		
		HP	HIGH POINT	REDW'D	REDWOOD		
		HT	HEIGHT	REF	REFERENCE		
		HWL	HIGH WATER LEVEL	REFL	REFLECTED		
				REINF	REINFORCE/REINFORCING		
				REQ'D	REQUIRED		
		ID	INSIDE DIAMETER	RES	RESILIENT		
		INSUL	INSULATION	REV	REVISION/REVISED		
		INT	INTERIOR	RM	ROOM		
		INV	INVERT	RO	ROUGH OPENING		
				SCHED	SCHEDULE		
		JAN	JANITOR	SD	SUMP DISCHARGE		
				SECT	SECTION		
		KITCH	KITCHEN	SHT	SHEET		
		LAV	LAVATORY	SIM	SIMILAR		
		LEV	LEVEL	SPA	SPACE OR SPACING		
		LIG	LAY-IN-GRID CEILING	SPECS	SPECIFICATIONS		
		LLH	LONG LEG HORIZONTAL	SQ	SQUARE		
		LLV	LONG LEG VERTICAL	SR	SHORT RADIUS		
		LP	LOW POINT	SS or SST	STAINLESS STEEL		
		LR	LONG RADIUS	STD	STANDARD		
		LTG	LIGHTING	STL	STEEL		
		LTWT	LIGHT WEIGHT	STRUCT	STRUCTURAL		
		LWL	LOW WATER LEVEL	SUSP	SUSPENDED		
				SV	STAIN AND VARNISH		
EA	EACH	MAINT	MAINTENANCE				
ECC	ECCENTRIC	MAT'L	MATERIAL				
EF	EACH FACE	MAX	MAXIMUM				
EJ	EXPANSION JOINT	MB	MACHINE BOLT				
EL	ELEVATION	MECH	MECHANICAL				
ELEC	ELECTRICAL	MET	METAL				
ELEV or EL	ELEVATION	MEZZ	MEZZANINE				
ELL	ELBOW	MFR	MANUFACTURER				
ELEV	ELEVATOR	MH	MANHOLE				
EQ	EQUAL	MIN	MINIMUM				
EQUIP	EQUIPMENT	MISC	MISCELLANEOUS				
EW	EACH WAY	MJ	MECHANICAL JOINT				
EWC	ELECTRICAL WATER COOLER	MO	MASONRY OPENING				
EXIST or (X)	EXISTING	MULL	MULLION				
EXP	EXPANSION						
EXP JT	EXPANSION JOINT						
EXT	EXTERIOR						

NOTE:

- THIS IS STANDARD LEGEND. NOT ALL OF THE INFORMATION SHOWN ON THIS LEGEND IS NEEDED IN THESE CONTRACT DRAWINGS.
- WORK IN THIS CONTRACT SHOWN FULL-TONE UNLESS OTHERWISE NOTED.

FLOW STREAM IDENTIFIERS

FM	FORCE MAIN
SW	STORMWATER
V	VENT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS
GENERAL LEGEND, SYMBOLS, AND ABBREVIATIONS

SCALE: SHEET 4 OF 45 SHEETS STA. TO STA.

001-G-4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	4
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



USER NAME = ddrescher	DESIGNED - JG	REVISED -
	DRAWN - DD	REVISED -
	CHECKED - JG	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

PLUMBING / HVAC ABBREVIATIONS AND SYMBOLS

PLUMBING LEGEND

	HW - HOT WATER PIPE (ON PLUMBING DRAWINGS)
	HWRE - HOT WATER RECIRCULATING PIPE (ON PLUMBING DRAWINGS)
	HWS - HEATING WATER SUPPLY PIPE (ON HVAC DRAWINGS)
	HWR - HEATING WATER RETURN PIPE (ON HVAC DRAWINGS)
	PIPE (REFER TO FLOW STREAM IDENTIFIERS)
	BELOW SLAB OR BURIED PIPE (REFER TO FLOW STREAM IDENTIFIERS)
	VENT
	ELBOW FITTING (TURNED DOWN)
	ELBOW FITTING (TURNED UP)
	TEE OUTLET UP
	TEE OUTLET DOWN
	PIPE ANCHOR
	PIPE HANGER
	PIPE GUIDE
	CAP
	EXPANSION JOINT
	UNION
	FLANGE
	VENT THRU ROOF
	FLOOR DRAIN
	CLEANOUT
	FLOOR CLEANOUT
	WALL CLEANOUT
	HUB DRAIN
	ROOF DRAIN
	OVERFLOW DRAIN
	TRENCH DRAIN
	YARD HYDRANT
	WALL HYDRANT
	HOSE BIBB
	REDUCER (CONCENTRIC)
	REDUCER (ECCENTRIC)
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	GATE VALVE
	ANGLE STOP
	GLOBE VALVE
	PLUG VALVE
	PRESSURE REDUCING VALVE
	RELIEF OR SAFETY VALVE
	CONTROL VALVE (2-WAY)
	CONTROL VALVE (3-WAY)
	BALANCING VALVE
	MANUAL AIR VENT
	STRAINER
	BACKFLOW PREVENTER
	WATER HAMMER ARRESTOR

	ACCESS DOOR
	DUCT (FIRST FIG. IS SIDE SHOWN)
	DUCT SECTION (RETURN)
	DUCT SECTION (SUPPLY)
	DUCT LINING
	RETURN, EXHAUST OR SUPPLY GRILLE W/ MVD
	ELBOW DOWN
	ELBOW W/ TURNING VANES
	MANUAL VOLUME DAMPER
	FLEXIBLE CONNECTOR
	SMOKE DETECTOR
	STAT, T=TEMP, H=HUMIDITY, P=PRESSURE, G=GAS GAS MONITORED
	SENSOR WITH DISPLAY AND ADJUSTMENT
	SENSOR WITHOUT DISPLAY OR ADJUSTMENT
	FIRE DAMPER
	MOTOR OPERATED DAMPER
	GRAVITY BACKDRAFT DAMPER
	PRESSURE GAUGE
	THERMOMETER

AI	INSTRUMENT AIR	HWRE	HOT WATER RECIRCULATION
AHP	AIR (HIGH PRESSURE)	HWS	HEATING WATER SUPPLY
AV	ACID VENT	RHG	REFRIGERANT (HOT GAS)
AW	ACID WASTE	RL	REFRIGERANT (LIQUID)
CAI	COMBUSTION AIR INLET	RS	REFRIGERANT (SUCTION)
CAV	COMBUSTION AIR VENT	SAN	SANITARY SEWER
CND	CONDENSATE	SLP	STEAM (LOW PRESSURE)
CGR	COOLING GLYCOL RETURN	SW	STORM SEWER
CGS	COOLING GLYCOL SUPPLY	TMW	TEMPERED WATER
CR	CONDENSATE RETURN	TPW	TEPID WATER
CWR	CHILLED WATER RETURN	TWRE	TEMPERED WATER RETURN
CWS	CHILLED WATER SUPPLY	V	VENT
F	FIRE SPRINKLER	W1	POTABLE CITY WATER
NG	GAS (NATURAL)	W2	NON-POTABLE CITY WATER
HGR	HEATING GLYCOL RETURN	W3	PLANT EFFLUENT WATER (NOT-POTABLE)
HGS	HEATING GLYCOL SUPPLY		
HPHW	HIGH PRESSURE HOT WATER		
HPW	HIGH PRESSURE WATER		
HW	HOT WATER		
HWR	HEATING WATER RETURN		

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MVD	MANUAL VOLUME DAMPER
BDD	BACKDRAFT DAMPER	OA	OUTSIDE AIR
BOD	BOTTOM OF DUCT	PSIG	POUND PER SQUARE INCH (GAUGE)
CL	CENTER LINE ELEVATION	THRU	THROUGH
DFU	DRAINAGE FIXTURE UNIT	TOD	TOP OF DUCT
EL	ELEVATION	VTR	VENT THROUGH ROOF
EXP	EXPLOSION PROOF	WSFU	WATER SUPPLY FIXTURE UNIT
H-O-A	HAND-OFF-AUTO SWITCH	VIF	VERIFY IN FIELD
HP	HIGH POINT		
LP	LOW POINT		

EQUIPMENT / FIXTURE TAG IDENTIFIERS

ACU	AIR CONDITIONING UNIT	LAV	LAVATORY
ACCU	AIR COOLED CONDENSING UNIT	MAU	MAKE-UP AIR UNIT
AHU	AIR HANDLING UNIT	MCD	MOTOR CONTROL DAMPER
ASHP	AIR SOURCE HEAT PUMP	MS	MOP SINK
B	BOILER	OAL	OUTSIDE AIR LOUVER
BS	BRANCH SELECTOR	P	PUMP
CO	CLEANOUT	RAL	RELIEF AIR LOUVER
CP	CIRCULATING PUMP	RD	ROOF DRAIN
CS	COUNTERTOP SINK	RG	RETURN GRILLE
DEH	DEHUMIDIFIER	RH	RELIEF HOOD
EAL	EXHAUST AIR LOUVER	RHP	RADIANT HEATING PANEL
EEW	EMERGENCY EYEWASH STATION	RPZ	REDUCED ZONE PRESSURE BACKFLOW PREVENTER
EF	EXHAUST FAN	RTU	ROOFTOP UNIT
EG	EXHAUST GRILLE	SD	SUPPLY DIFFUSER
EH	ELECTRIC HEATER	SF	SUPPLY FAN
EUH	ELECTRIC UNIT HEATER	SG	SUPPLY GRILLE
EWC	ELECTRIC WATER COOLER	SHR	SHOWER
EW	ELECTRIC WATER HEATER	SP	SUMP PUMP
EWS	EMERGENCY WASH STATION	SPCP	SUMP PUMP CONTROL PANEL
FCU	FAN COIL UNIT	SS	SERVICE SINK
FD	FLOOR DRAIN	TOP	TEMPERATURE CONTROL PANEL
GDCP	GAS DETECTION CONTROL PANEL	TG	TRANSFER GRILLE
GUH	GAS UNIT HEATER	TMV	THERMOSTATIC MIXING VALVE
GWH	GAS WATER HEATER	UR	URINAL
HB	HOSE BIB	UV	VARIABLE AIR VOLUME BOX
HD	HUB DRAIN	VAV	WATER COOLED CONDENSING UNIT
HPHW	HIGH PRESSURE HOT WATER SYSTEM	WCCU	WATER COOLED CONDENSING UNIT
HPW	HIGH PRESSURE WATER SYSTEM	WC	WATER CLOSET
HUH	HOT WATER UNIT HEATER	WH	WALL HYDRANT
HWC	HOT WATER CONVECTOR	WHA	WATER HAMMER ARRESTOR
ICD	INSULATED MOTOR CONTROL DAMPER	WSHP	WATER SOURCE HEAT PUMP
IH	INTAKE HOOD		

ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ATS	AUTOMATIC TRANSFER SWITCH
C	CONTACTOR/CONDUIT/COIL
CB	CIRCUIT BREAKER
CKT, CCT	CIRCUIT
DISC	DISCONNECT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
HF	HARMONIC FILTER
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
J	JUNCTION BOX
KVA	KILOVOLT AMPERE
KW	KILOWATT
LC	LIGHTING CONTACTOR
LCP	LOCAL CONTROL PANEL
LED	LIGHT EMITTING DIODE
LP	LIGHTING PANEL
LSIGA	LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND, ARC FLASH
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MH	MANHOLE
MV	MEDIUM VOLTAGE MANHOLE
NEC	NATIONAL ELECTRICAL CODE (ANSI/NFPA-70)
NEU, N	NEUTRAL
NC	NORMALLY CLOSED
NF	NON FUSED
NGR	NEUTRAL GROUND RESISTOR
NO	NORMALLY OPEN
OL	OVERLOAD RELAY
P	PHASE/POLE
PC	PHOTOCELL
PMG	PADMOUNT GEAR
PMT	PADMOUNT TRANSFORMER
PP	POWER PANEL
PVC	POLY VINYL CHLORIDE
SCCR	SHORT CIRCUIT CURRENT RATING
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
SWBD	SWITCH BOARD
SWGR	SWITCHGEAR
V	VOLTS
VFC	VENDOR FURNISHED CABLE
VFD	VARIABLE FREQUENCY DRIVE
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

ONE-LINE SYMBOLS

	MAGNETIC STARTER AND MOLDED CASE CIRCUIT BREAKER (UPPER NUMERAL INDICATES FRAME SIZE) (LOWER NUMERAL INDICATES TRIP SETTING) (CL - INDICATES CURRENT LIMITING CIRCUIT BREAKER) (M - INDICATES MOTOR CIRCUIT PROTECTOR)
	(FVNR - INDICATES FULL VOLTAGE NON-REVERSING) (FVR - INDICATES FULL VOLTAGE REVERSING) (SSRV - INDICATES SOLID STATE REDUCED VOLTAGE) (TSTW - INDICATES TWO SPEED TWO WINDING) (TSSW - INDICATES TWO SPEED SINGLE WINDING) (CONT - INDICATES CONTACTOR) (AUXILIARY CONTACTS - (2a TWO N.O.),(1b ONE N.C.) (NUMERAL INDICATES NEMA SIZE)
	COMBINATION MAGNETIC STARTER WITH MOLDED CASE CIRCUIT BREAKER (FVNR - INDICATES FULL VOLTAGE NON-REVERSING) (FVR - INDICATES FULL VOLTAGE REVERSING) (SSRV - INDICATES SOLID STATE REDUCED VOLTAGE) (TSTW - INDICATES TWO SPEED TWO WINDING) (TSSW - INDICATES TWO SPEED SINGLE WINDING) (CONT - INDICATES CONTACTOR) (AUXILIARY CONTACTS - (2a TWO N.O.),(1b ONE N.C.) (NUMERAL INDICATES NEMA SIZE)
	KEY INTERLOCK
	DELTA
	WYE GROUND
	ATS
	GENERATOR
	DRAW-OUT LV POWER CIRCUIT BREAKER
	DRAW-OUT CIRCUIT BREAKER (NUMERAL INDICATES DEVICE NUMBER)
	FUSED SWITCH (NUMERAL INDICATES FUSE SIZE)
	MEDIUM-VOLTAGE TERMINATION
	CURRENT TRANSFORMER AND PROTECTIVE DEVICE (NUMERAL INDICATES DEVICE NUMBER)
	LIGHTNING ARRESTOR
	UTILITY METER

ELECTRICAL ABBREVIATIONS AND SYMBOLS

PLAN SYMBOLS

	LED FIXTURE - RECESSED (LETTER DENOTES TYPE)		MANUAL STARTER WITH PILOT LIGHT
	LED FIXTURE - SURFACE/SUSPENDED (LETTER DENOTES TYPE)		THREE PHASE MAGNETIC STARTER
	LED FIXTURE - WALL MOUNTED (LETTER DENOTES TYPE)		INFORMATION OUTLET
	LED OR HID FIXTURE - WALL MOUNTED (LETTER DENOTES TYPE)		THREE PHASE COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH
	LED OR HID FIXTURE - POLE MOUNTED FIXTURE (LETTER DENOTES TYPE)		SINGLE PHASE MAGNETIC STARTER
	LED OR HID FIXTURE - SURFACE/SUSPENDED (LETTER DENOTES TYPE)		NON-FUSED DISCONNECT SWITCH (NUMERAL INDICATES SWITCH RATING)
	EMERGENCY BATTERY LIGHT		FUSED DISCONNECT SWITCH - 3 POLE UNLESS OTHERWISE INDICATED (UPPER NUMERAL INDICATES SWITCH RATING) (LOWER NUMERAL INDICATES FUSE RATING)
	REMOTE HEAD FOR EMERGENCY BATTERY LIGHT		3-PHASE MANUAL MOTOR SWITCH
	EXIT LIGHT WITH INDICATING DIRECTIONAL ARROW		TERMINAL CABINET (ITC - INDICATES INSTRUMENTATION) (TTC - INDICATES TELEPHONE)
	COMBO EMERGENCY LIGHT/EXIT SIGN		MOTOR
	SWITCH (SINGLE POLE, 2-POLE, 3-WAY, 4-WAY)		JUNCTION BOX
	MOMENTARY CONTACT SWITCH - CENTER OFF		HANDHOLE
	SWITCH / PILOT LIGHT		MANHOLE
	DUPLEX GROUNDED RECEPTACLE - 120V		SURVEILLANCE CAMERA
	EXPLOSIONPROOF SIMPLEX GROUNDED RECEPTACLE - 120V		GROUND ROD
	TELEPHONE OUTLET, WALL MOUNT WITH 3/4\"/>		GROUND TEST WELL
	DATA INFORMATION OUTLET		AIR TERMINAL
	RECESSED CEILING SPEAKER		CONDUIT STUB
	VOLUME CONTROL		CONDUIT TURNING UP OR TO OBSERVER
	WALL SPEAKER		CONDUIT TURNING DOWN OR AWAY FROM OBSERVER
	SMOKE DETECTOR		FLEXIBLE CONDUIT CONNECTION
	FIRE ALARM HORN		HOMERUN CIRCUIT OR CONDUCTORS
	FIRE ALARM HORN AND STROBE		DIRECT BURIAL CABLE
	FIRE ALARM STROBE		UNDERGROUND ELECTRICAL DUCT, CONCRETE ENCASED.
	FIRE ALARM PULL STATION		OVERHEAD ELECTRIC
	HEAT DETECTOR		
	FLOW SWITCH		
	MOTION DETECTOR		
	CONNECTION TO EQUIPMENT		
	SPECIAL PURPOSE RECEPTACLE, NEMA TYPE AND AMPERE RATING AS INDICATED		
	DUPLEX GROUNDED RECEPTACLE - 120V MOUNTED ABOVE COUNTERS OR WORK BENCHES		
	3 WAY OR 4 WAY nLIGHT AIR SWITCHES		

PANELBOARDS

BUILDING NO.	010LP1-4
LIGHTING OR POWER PANEL AS INDICATED	
PANEL NO.	
CIRCUIT NO.	

DEVICE NUMBER	FUNCTION
27	UNDervOLTAGE RELAY
32	REVERSE POWER RELAY
46	PHASE-BALANCE CURRENT RELAY
47	PHASE-SEQUENCE VOLTAGE RELAY
50	INSTANTANEOUS OVERCURRENT
51	AC TIME OVERCURRENT RELAY
51N	GROUND OVERCURRENT
52	AC CIRCUIT BREAKER
59	OVERVOLTAGE RELAY
67	AC DIRECTIONAL OVERCURRENT
81	OVER/UNDER FREQUENCY RELAY
86	LOCKOUT RELAY
87	DIFFERENTIAL
89	POTENTIAL TRANSFORMER

MOTOR CONTROL CENTER

BUILDING NO.	010MCC-1
MCC, SWITCHBOARD OR SWITCHGEAR AS INDICATED	
MCC NO.	

NOTE:

- THIS IS A STANDARD LEGEND. NOT ALL OF THE INFORMATION SHOWN ON THIS LEGEND IS NEEDED IN THESE CONTRACT DRAWINGS.
- WORK IN THIS CONTRACT SHOWN FULL TONE UNLESS OTHERWISE NOTED.

001-G-5

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS
GENERAL PLUMBING LEGEND / HVAC LEGEND / ELECTRICAL LEGEND

SCALE: SHEET 5 OF 45 SHEETS STA. TO STA.

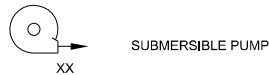
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	5
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 001-G-5
FILE NAME: D876U37-sh11-gennote.dgn



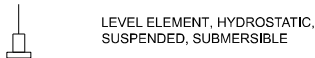
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	DRAWN - DD	REVISED -
	CHECKED - JG	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

P&ID SYMBOLS



NOTE ON 'XX':

AS : ADJUSTABLE SPEED
CS-1 : CONSTANT SPEED (SINGLE SPEED)
CS-2 : CONSTANT SPEED (TWO SPEED)
CS-R : CONSTANT SPEED (REVERSING)
MS : MECHANICAL SHIV (ADJUSTABLE)



INSTRUMENT SYMBOLS

	FIELD MOUNTED	PANEL MOUNTED ACCESSIBLE TO OPERATOR	PANEL MOUNTED INACCESSIBLE TO OPERATOR	MOTOR STARTER MOUNTED ACCESSIBLE TO OPERATOR	MOTOR STARTER MOUNTED INACCESSIBLE TO OPERATOR
DISCRETE INSTRUMENTS					
PROGRAMMABLE CONTROLLER-BASED FUNCTIONS					
PANEL MOUNTED OIU FUNCTIONS					
PC BASED HMI WORKSTATION FUNCTIONS					

INPUTS & OUTPUTS (I/O) TO PLC OR DISTRIBUTED CONTROL SYSTEM



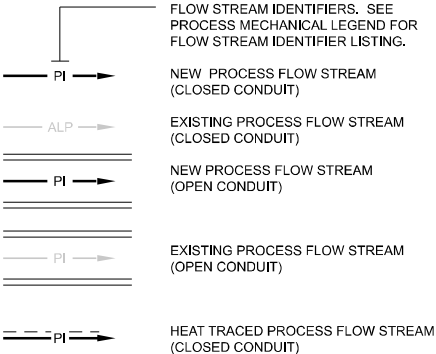
UNIVERSAL INPUT/OUTPUT
(I/O = I/O POINT TYPE)

I/O POINT TYPES:
AI (ANALOG INPUT)
AO (ANALOG OUTPUT)
DI (DIGITAL INPUT)
DO (DIGITAL OUTPUT)
RO (RELAY OUTPUT)
RTD (RESISTANCE TEMPERATURE DETECTOR)

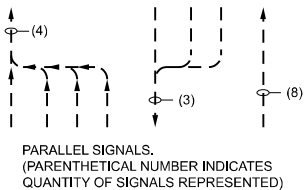
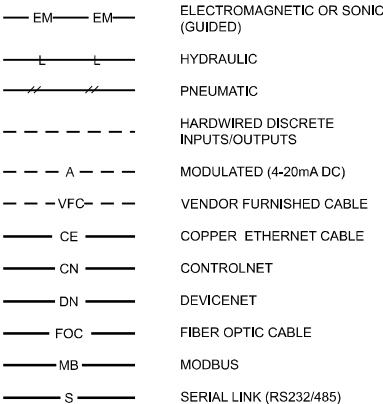
NOTE ON 'X':

X = TOTAL NUMBER OF I/O WHERE MORE THAN ONE I/O IS REQUIRED. IF QUANTITY IS NOT SHOWN THEN ONE I/O IS REQUIRED.

LINE IDENTIFICATION
PROCESS FLOW



SIGNALS



INSTRUMENT IDENTIFICATION LETTERS

LETTER	FIRST LETTER (S)		SUCCEEDING LETTERS		
	PROCESS OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (*)		ALARM (W. LOGGING)	ANNUNCIATE	
B	BURNER, FLAME, COMBUSTION		USERS CHOICE (*)	USERS CHOICE (*)	USERS CHOICE (*)
C	USERS CHOICE (*)			CONTROL	
D	USERS CHOICE (*)	DIFFERENTIAL			
E	VOLTAGE		PRIMARY ELEMENT		
F	FLOW RATE	RATIO			FEEDBACK
G	USERS CHOICE (*)		GLASS, VIEWING DEVICE		
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME OR TIME SCHEDULE	TIME RATE OF CHANGE	KEYPAD (DATA ENTRY)	CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
M	MOTOR, MOISTURE, HUMIDITY	MOMENTARY			MONITORING
N	USERS CHOICE (*)		USERS CHOICE (*)	USERS CHOICE (*)	USERS CHOICE (*)
O	USERS CHOICE (*)		ORIFICE		
P	PRESSURE OR VACUUM		POINT (TEST CONNECTION)		
Q	QUANTITY OR HEAT DUTY	INTEGRATE			
R	RADIATION		RECORD, TREND, LOG		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	UNIVERSAL/MULTIVARIABLE (*)		MULTIFUNCTION (*)	MULTIFUNCTION (*)	MULTIFUNCTION (*)
V	VIBRATION, MECHANICAL ANAL.			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE, TORQUE		WELL		
X	UNCLASSIFIED (*)	X AXIS	UNCLASSIFIED (*)	UNCLASSIFIED (*)	UNCLASSIFIED (*)
Y	EVENT, STATE, OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z AXIS		DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

(*) WHEN USED, AN EXPLANATION IS SHOWN ADJACENT TO SYMBOL.

COMPONENT DESIGNATORS

- ◆ INDIVIDUAL CONTROLS COMPONENT.
- ◆◆ CONTROLS COMPONENT FURNISHED AS PART OF A MANUFACTURER'S OR VENDOR'S PACKAGED SYSTEM.
- ◆◆◆ EXISTING RELOCATED CONTROLS COMPONENT.
- ◆◆◆◆ OWNER FURNISHED CONTROLS COMPONENT.
- * INDIVIDUAL MECHANICAL COMPONENT.
- * * MECHANICAL COMPONENT FURNISHED AS PART OF A MANUFACTURER'S OR VENDOR'S PACKAGED SYSTEM.
- * * * EXISTING RELOCATED MECHANICAL COMPONENT.
- * * * * OWNER FURNISHED MECHANICAL COMPONENT.
- INDIVIDUAL ELECTRICAL COMPONENT.
- ELECTRICAL COMPONENT FURNISHED AS PART OF A MANUFACTURER'S OR VENDOR'S PACKAGED SYSTEM.
- EXISTING RELOCATED ELECTRICAL COMPONENT.
- OWNER FURNISHED ELECTRICAL COMPONENT.

COMPONENT DESIGNATORS ARE NOT INTENDED TO ENCOMPASS PIPING, CONDUIT, WIRING, OR CONCRETE STRUCTURES.

MODEL: 001-G-6
FILE NAME: D876U37-shit-gennote.dgn



USER NAME = sbremer	DESIGNED - JG	REVISED -
	DRAWN - DD	REVISED -
	CHECKED - JG	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS
GENERAL INSTRUMENTATION & CONTROLS LEGEND

SCALE: SHEET 6 OF 45 SHEETS STA. TO STA.

001-G-6

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	6
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

SPACE ENVIRONMENT AND HAZARDOUS RATINGS SCHEDULE					
SEE MATERIALS SCHEDULE FOR REQUIRED CONSTRUCTION MATERIALS FOR VARIOUS EXPOSURES					
BUILDING	SPACE NO.	SPACE NAME	EXPOSURE	HAZARDOUS RATING	HAZARD NOTES
100 - VENICE PUMP STATION	100	VENICE PUMP STATION	DRY 2	CLASS I, DIVISION 2, GROUP D (CI, D2)	3
200 - BOWMAN PUMP STATION	200	BOWMAN PUMP STATION	DRY 2	UNCLASSIFIED	--
300 - CENTRAILIA PUMP STATION	300	CENTRAILIA PUMP STATION	DRY 2	CLASS I, DIVISION 2, GROUP D (CI, D2)	3
400 - GRAYS FARM PUMP STATION	400	GRAYS FARM PUMP STATION	DRY 2	UNCLASSIFIED	--
500 - 9TH ST. ELECTRICAL BUILDING	500	9TH ST. ELECTRICAL ROOM	DRY 2	UNCLASSIFIED	--
501 - 9TH ST. GENERATOR BUILDING	501	9TH ST. GENERATOR ROOM	DRY 2	UNCLASSIFIED	--
502 - 9TH ST. PUMP STATION	502	9TH ST. PUMP STATION	WET 3	CLASS I, DIVISION 2, GROUP D (CI, D2)	3

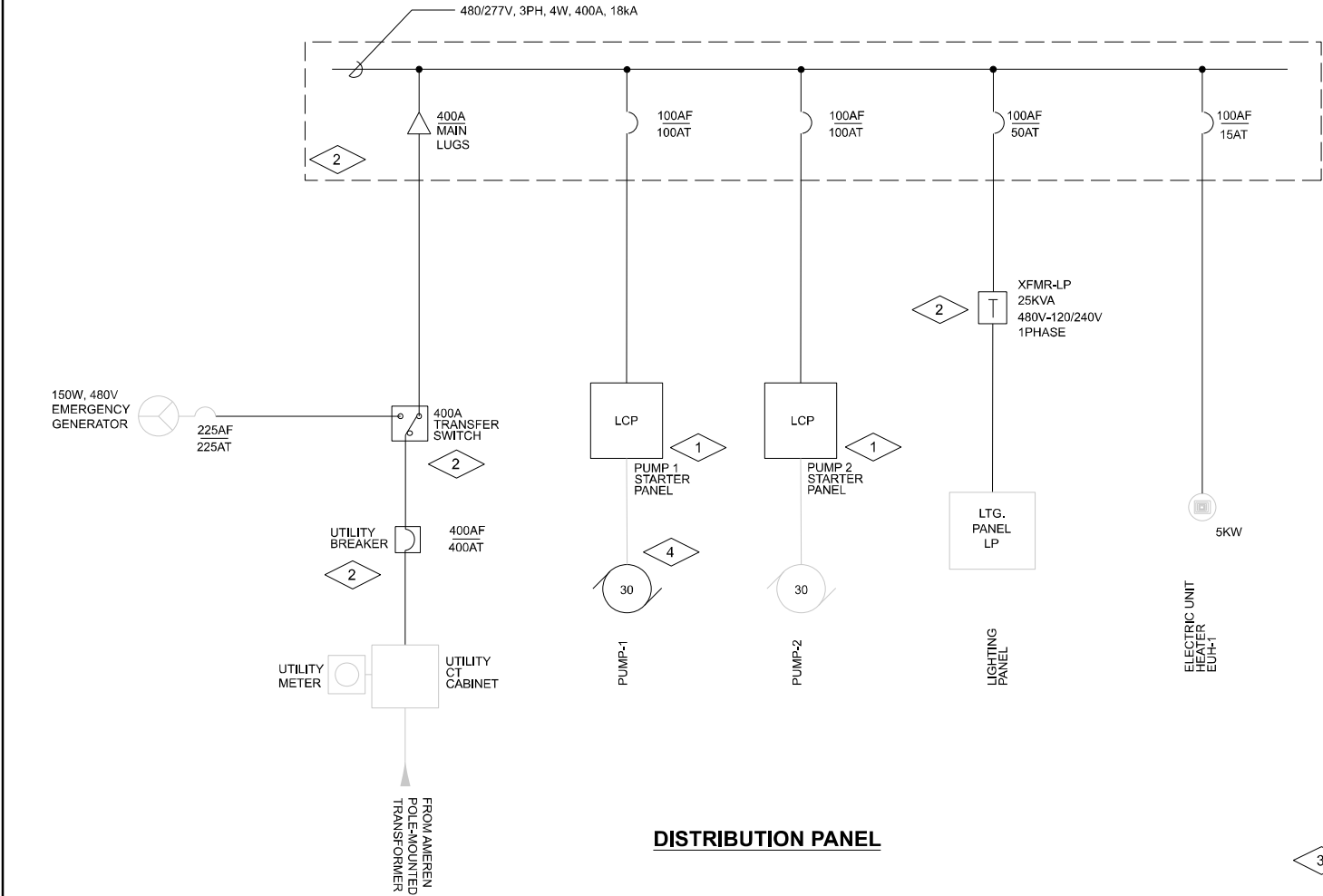
MATERIALS SCHEDULE							
SEE SPACE ENVIRONMENT AND HAZARDOUS RATINGS SCHEDULE FOR AREAS ASSOCIATED WITH EXPOSURES LISTED							
REQUIREMENTS GIVEN IN DETAILED SPECIFICATIONS SUPERCEDE MATERIALS GIVEN IN THIS SCHEDULE							
EXPOSURE	ANCHOR BOLTS/FASTENERS	PIPING NUTS AND BOLTS (7)	HANGERS AND SUPPORTS (12)	CONDUIT (13)	ENCLOSURES (3)(8)	DUCTWORK	PLUMBING PIPING
CHEMICAL 1	316SST	316SST	316SST	SCH 80 PVC	NEMA 4X - FRP	316SST	PVC, CPVC, OR SST
CHEMICAL 2	316SST	316SST	FRP	SCH 80 PVC	NEMA 4X - FRP	PVC OR FRP	PVC OR CPVC
CHEMICAL 3	NON-METALLIC	316SST	FRP	SCH 80 PVC	N/A	PVC OR FRP	PVC OR CPVC
DRY 1	GALVANIZED STEEL	CARBON STEEL (10)	GALVANIZED STEEL	EMT	NEMA 1 (9) - CAST OR STEEL	ALUMINUM	COPPER, PVC, OR CPVC
DRY 2	GALVANIZED STEEL	CARBON STEEL (10)	GALVANIZED STEEL	GRS	NEMA 1 (9) - CAST OR STEEL	ALUMINUM	COPPER, PVC, OR CPVC
DRY 3	GALVANIZED STEEL	CARBON STEEL (10)	GALVANIZED STEEL	GRS	NEMA 9 - SST	ALUMINUM	PVC, CPVC, OR SST
EXTERIOR	316SST	316SST (11)	316SST (6)	PVC COATED (6)	NEMA 4X - 316SST	ALUMINUM (5)	SST
WET 1	GALVANIZED STEEL	N/A	GALVANIZED STEEL	EMT (1)	NEMA 1 - STEEL	GALVANIZED STEEL	COPPER
WET 2	GALVANIZED STEEL	CARBON STEEL (10)	GALVANIZED STEEL	GRS (2)	NEMA 4 - STEEL	ALUMINUM	PVC, CPVC, OR SST
WET 3	316SST	316SST	316SST	PVC COATED	NEMA 4X - 316SST	316SST	PVC, CPVC, OR SST
WET 4	316SST	316SST	316SST	N/A (4)	N/A (4)	N/A (4)	PVC
NOTES (X):							
1. GRS FROM FLOOR TO 6'-0" ABOVE.							
2. FIBERGLASS CONDUIT ALLOWABLE IN PIPING GALLERIES AND TUNNELS.							
3. HAZARDOUS RATING GIVEN IN SPACE ENVIRONMENT AND HAZARDOUS RATING SCHEDULE TAKES PRECEDENCE; NEMA 7 FOR CLASS I AND NEMA 9 FOR CLASS II AREAS.							
4. NOT ALLOWED ON INTERIOR WALLS OF WATER HOLDING STRUCTURES.							
5. PROVIDE PREINSULATED DUCTWORK SYSTEM FOR TEMPERED AIR APPLICATIONS.							
6. ALUMINUM WHERE SUPPORTED FROM ALUMINUM RAILING.							
7. UNLESS OTHERWISE SPECIFIED IN THE DETAILED PIPING SYSTEMS SPECIFICATIONS.							
8. NEMA 7 ENCLOSURES LOCATED IN EXTERIOR, WET 2, OR WET 3 LOCATIONS SHALL PROVIDED WITH AN O-RING OR GASKET IN COVER TO PREVENT WATER ENTRY.							
9. ENCLOSURES FOR PLCS, EQUIPMENT CONTROL PANELS, AND OTHER CONTROL ENCLOSURES SHALL BE NEMA 12.							
10. COATED ALONG WITH PIPING SYSTEM.							
11. FOR PIPING SYSTEMS BEING COATED PROVIDE CARBON STEEL NUTS AND BOLTS.							
12. PROVIDE DISSIMILAR METAL SEPARATION WHERE METALLIC CONDUIT MATERIALS DIFFER FROM METALLIC HANGERS AND SUPPORTS MATERIALS.							

HAZARD NOTES

1. ENTIRE ENCLOSED AREA.
2. AREAS WITHIN 3'-0" RADIUS OF VENTS ARE CI, D1, AREA BETWEEN 3'-0" AND 5'-0" RADIUS OF VENTS ARE CI, D2.
3. AREAS WITHIN 3'-0" RADIUS OF VENTS ARE CI, D2.
4. AREAS WITHIN 3'-0" OF REMOVABLE/OPENABLE ACCESS HATCHES ARE CI, D2 TO A HEIGHT 1'-6" ABOVE DECK.
5. AREAS WITHIN 3'-0" OF DOORS OR OTHER EXTERIOR WALL OPENINGS ARE CI, D2.
6. AREAS WITHIN 10'-0" OF EQUIPMENT OR OPEN CHANNELS ARE CI, D2.
7. ENVELOPE INCLUDES ALL LOCATIONS WITHIN 10'-0" Laterally, UP TO 1'-6" ABOVE AND ALONG EXTERIOR FACE OF ENCLOSING WALLS AND 1'-6" ABOVE ADJACENT GRADE OR FLOOR SURFACES.
8. AREAS WITHIN 5-FEET HORIZONTALLY AND 10'-0" ABOVE ARE CI, D1, AREA BETWEEN 5'-0" AND 10'-0" HORIZONTALLY AND BETWEEN 10'-0" AND 25'-0" ABOVE ARE CI, D2.
9. AREAS WITHIN 5'-0" RADIUS OF VENTS ARE CI, D1, AREA BETWEEN 5'-0" AND 10'-0" RADIUS OF VENTS ARE CI, D2.
10. AREAS WITHIN 5'-0" RADIUS OF VENTS ARE CI, D2.
11. AREAS WITHIN 5'-0" OF DOORS, VENTS, AND EXTERIOR WALL OPENINGS ARE CI, D1, AREA BETWEEN 5'-0" AND 10'-0" OF OPENINGS ARE CI, D2.
12. AREAS WITHIN 5'-0" OF DOORS AND EXTERIOR WALL OPENINGS ARE CI, D2.
13. AREAS WITHIN 3'-0" RADIUS OF HAZARDOUS MATERIAL EQUIPMENT ARE CI, D2.
14. AREAS WITHIN 5'-0" RADIUS OF HAZARDOUS MATERIAL EQUIPMENT ARE CI, D1.
15. AREAS WITHIN 10'-0" RADIUS OF DIGESTER GAS VALVES OR PIPING APPURTENANCES ARE CI, D1.
16. AREAS WITHIN 10'-0" RADIUS OF DIGESTER GAS VALVES OR PIPING APPURTENANCES ARE CI, D2.
17. AREAS WITHIN 3'-0" RADIUS OF ODOR CONTROL EQUIPMENT AND POINTS OF LEAKAGE SUCH AS DAMPERS AND FLANGES ARE CI, D2.
18. AREAS WITHIN A 10'-0" ENVELOPE OF ALL FIXTURES, APPURTENANCES, AND HOUSING ARE CI, D1, THE AREAS WITHIN A 15'-0" ENVELOPE ABOVE AND 5-FOOT ENVELOPE ON ALL SIDES OF THE OF THE D1 ENVELOPE ARE CI, D2.
19. AREAS WITHIN EQUIPMENT PROCESSING DRIED SLUDGE ARE CII, D1.
20. AREAS WITHIN A 10'-0" ENVELOPE OF EQUIPMENT PROCESSING DRIED SLUDGE ARE CII, D2.
21. AREAS WITHIN TANKS STORING DRIED SLUDGE ARE CII, D1.
22. AREAS WITHIN A 10'-0" ENVELOPE OF TANKS STORING DRIED SLUDGE ARE CII, D2.
23. AREAS ARE CLASSIFIED AS A CI, D2 UNTIL PROPOSED SEPARATION AND VENTILATION IS COMPLETED.
24. AREAS WITHIN 10'-0" OF NATURAL GAS OR DIGESTER GAS VALVES AND APPURTENCES ARE CLASSIFIED AS A CI, D1 AND ENCLOSED AREAS ARE CLASSIFIED AS CI, D2 UNTIL NATURAL GAS AND DIGESTER GAS PIPING HAS BEEN REMOVE AND PROPOSED SEPARATION AND VENTILATION IS COMPLETED.

MODEL: 001-G-7
FILE NAME: D876U37-shit-gennote.dgn

MODEL: 007-ER-1
FILE NAME: D876U37-sh1-007.dgn



GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- SEE SUMMARY OF WORK SPECIAL PROVISION FOR PROJECT SEQUENCES AND CONSTRAINTS.
- FULL TONE COMPONENTS SHALL BE SALVAGED FOR RE-USE; PROTECT EQUIPMENT. SALVAGE ELECTRICAL EQUIPMENT FROM GENERATOR BUILDING SHOWN ON DRAWING 500-R-2. HALF TONE EQUIPMENT AND MATERIALS SHALL REMAIN.

PLAN NOTES:

- PUMP STARTER PANEL AND LEVEL CONTROL PANELS SHALL BE SALVAGED TO OWNER. SALVAGE THE INDQUIP MOTOR PROTECTION RELAYS WITHIN MOTOR STARTER PANELS FOR RE-USE.
- SALVAGE EQUIPMENT FOR RE-USE.
- RE-LABEL CIRCUIT AS SPARE.
- SALVAGE PUMP-1 FROM WET WELL TO BE REFURBISHED BY SENDING BACK TO THE MANUFACTURER (FLYGT). ONCE REFURBISHED, THE PUMP SHALL BE RETURNED TO OWNER. PROTECT CONDUIT AND CONDUCTORS FOR RE-USE.

SURFACE MOUNTED NEMA 1									
120 / 240 V, 1 PHASE, 3 WIRE									
RATING 10KA SCCR									
PANEL SCHEDULE LP									
100A MAIN BREAKER									
100A MAIN BUS									
100A GRD. BUS									
CKT. NO.	TRIP/P	DESCRIPTION	PHASE			DESCRIPTION	TRIP/P	CKT. NO.	
			A	B	C				
1	20/1	PUMP LEVEL CONTROL PANEL	.			MAIN BREAKER	100/2	2	
3	20/1	ROOM LIGHTS		.				4	
5	20/2	UNKNOWN			.	MONITOR SCADA PANEL	20/1	6	
7			.			SUMP	20/1	8	
9	20/1	BATTERY CHARGER		.		BLOCK HEATER	20/1	10	
11	20/2	UNKNOWN			.	BLOWER	20/1	12	
13			.			LOUVER	20/1	14	
15	20/1	EXTERIOR LIGHTING		.		SPACE		16	
17		SPACE			.	SPACE		18	
19		SPACE	.			SPACE		20	
21		SPACE		.		SPACE		22	
23		SPACE			.	SPACE		24	
25		SPACE	.			SPACE		26	
27		SPACE		.		SPACE		28	
29		SPACE			.	SPACE		30	
31		SPACE	.			SPACE		32	
33		SPACE		.		SPACE		34	
35		SPACE			.	SPACE		36	
37		SPACE	.			SPACE		38	
39		SPACE		.		SPACE		40	
41		SPACE			.	SPACE		42	
TOTALS:			-	-	-				



USER NAME = sbremer	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
	CHECKED - JB	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
ELECTRICAL DISTRIBUTION AND PANEL SCHEUDLE REMOVALS

SCALE: SHEET 8 OF 45 SHEETS STA. TO STA.

007-ER-1

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	8
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 007-E-2
FILE NAME: D876U37-sh1+007.dgn



USER NAME = sbremer	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
	CHECKED - JB	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
ELECTRICAL DISTRIBUTION PANEL SCHEUDLES

SCALE: SHEET 10 OF 45 SHEETS STA. TO STA.

007-E-2

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	10
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- SEE SUMMARY OF WORK SPECIAL PROVISION FOR PROJECT SEQUENCES AND CONSTRAINTS.
- NEW EQUIPMENT INSTALLED IN EXISTING PANELBOARD SHALL MATCH EXISTING MANUFACTURER, STYLE, RATING, AND COLOR.
- PROVIDE NECESSARY APPURTENANCES FOR INSTALLATION OF NEW EQUIPMENT IN EXISTING PANELBOARD.

PLAN NOTES:



- RE-USE EXISTING CIRCUIT BREAKER.
- INVESTIGATE AND LABEL UNMARKED BREAKERS.

2

2

1

SURFACE MOUNTED NEMA		PANEL SCHEDULE			100A MAIN BREAKER			
120 / 240 V, 1 PHASE, 3 WIRE		501-LP-1			100A MAIN BUS			
RATING 10KA SCCR					100A GRD. BUS			
CKT. NO.	TRIP/P	DESCRIPTION	PHASE			DESCRIPTION	TRIP/P	CKT. NO.
			A	B	C			
1	20/1	SPARE	●			MAIN BREAKER	100/2	2
3	20/1	ROOM LIGHTS		●				4
5	20/2	UNKNOWN			●	SPARE	20/1	6
7			●			SUMP	20/1	8
9	20/1	BATTERY CHARGER		●		BLOCK HEATER	20/1	10
11	20/2	UNKNOWN			●	BLOWER	20/1	12
13			●			LOUVER	20/1	14
15	20/1	EXTERIOR LIGHTING		●		501-EF-1 EXHAUST FAN GENERATOR BUILDING	20/1	16
17		SPACE			●	SPACE		18
19		SPACE	●			SPACE		20
21		SPACE		●		SPACE		22
23		SPACE			●	SPACE		24
25		SPACE	●			SPACE		26
27		SPACE		●		SPACE		28
29		SPACE			●	SPACE		30
31		SPACE	●			SPACE		32
33		SPACE		●		SPACE		34
35		SPACE			●	SPACE		36
37		SPACE	●			SPACE		38
39		SPACE		●		SPACE		40
41		SPACE			●	SPACE		42
TOTALS:			-	-	-			

<u>SURFACE MOUNTED NEMA</u> <u>1</u>		PANEL SCHEDULE 500-LP-1		<u>100A</u> MAIN BREAKER			
<u>120 / 240</u> V, <u>1</u> PHASE, <u>3</u> WIRE				<u>100A</u> MAIN BUS			
<u>RATING 10kA SCCR</u>				<u>100A</u> GRD. BUS			
CKT. NO.	TRIP/P	DESCRIPTION	PHASE		DESCRIPTION	TRIP/P	CKT. NO.
			A	B			
1	100/2	MAIN BREAKER	●		LIGHTING PANELBOARD 501-LP-1	100/2	2
3				●			4
5	60/2	SURGE PROTECTION DEVICE 500-SPD-2	●		500-TCP-1 TEMPERATURE CONTROL PANEL	20/1	6
7				●	LEVEL CONTROL PANEL	20/1	8
9	20/1	SPARE	●		MONITOR (SCADA) PANEL	20/1	10
11	20/1	SPARE		●	LIGHTING ELECTRICAL BUILDING	20/1	12
13	20/1	SPARE	●		RECEPTACLES ELECTRICAL BUILDING	20/1	14
15	20/1	SPARE		●	500-EF-1 EXHAUST FAN ELECTRICAL BUILDING	20/1	16
17	20/1	SPARE	●		SPARE	20/1	18
19	20/1	SPARE		●	SPARE	20/1	20
21	20/1	SPARE	●		SPARE	20/1	22
23	20/1	SPARE		●	SPARE	20/1	24
25	20/1	SPARE	●		SPARE	20/1	26
27	20/1	SPARE		●	SPARE	20/1	28
29	20/1	SPARE	●		SPARE	20/1	30
31	20/1	SPARE		●	SPARE	20/1	32
33	20/1	SPARE	●		SPARE	20/1	34
35	20/1	SPARE		●	SPARE	20/1	36
37	20/1	SPARE	●		SPARE	20/1	38
39	20/1	SPARE		●	SPARE	20/1	40
41	20/1	SPARE	●		SPARE	20/1	42
TOTALS:			-	-			

9TH STREET PUMP STATION
MONITOR PANEL



CH1: UTILITY POWER LOSS (NC)
CH2: HIGH WATER ALARM (NO)
CH3: GENERATOR FAILURE (NO)
CH4: PUMP 1 FAILURE (NC)
CH5: PUMP 2 FAILURE (NC)
CH6: LOW WATER ALARM (NO)
CH7: GENERATOR INTRUSION
CH8: METER CABINET INTRUSION



CH9: ELECTRICAL ROOM INTRUSION
CH10: ELECTRICAL ROOM LOW TEMP
CH11: ELECTRICAL ROOM HIGH TEMP
CH12: SPARE
CH13: SPARE
CH14: SPARE
CH15: SPARE
CH16: SPARE

CHANNEL 3

CHANNEL 7

CHANNEL 1

CHANNEL 8

CHANNEL 9

CHANNEL 10

CHANNEL 11

CHANNEL 4

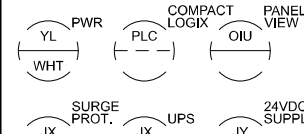
CHANNEL 5

CHANNEL 6

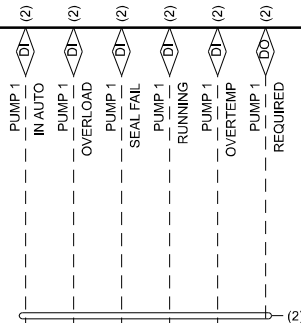
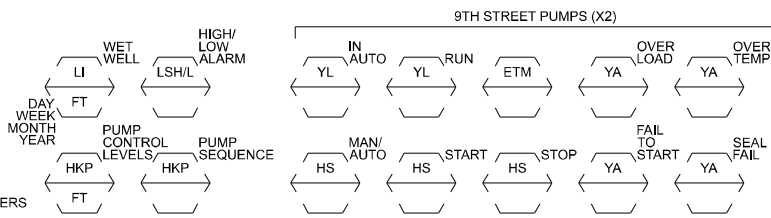
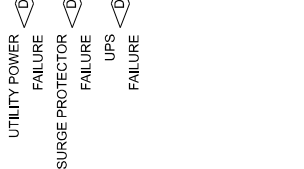
CHANNEL 2

120V

9TH STREET PUMP STATION
LEVEL CONTROL PANEL



120V



9TH STREET
GENERATOR PANEL

GENERATOR FAILURE



GENERATOR
BUILDING
INTRUSION

9TH STREET
METER CABINET

LOSS OF UTILITY

INTRUSION



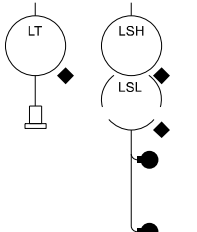
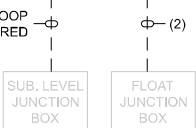
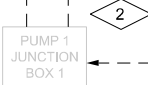
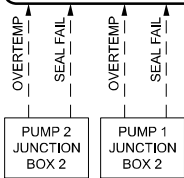
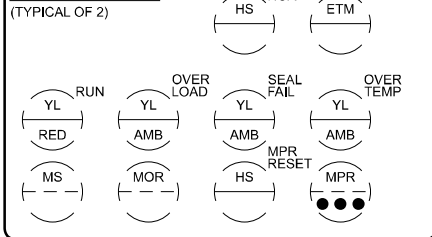
CONTROL
BUILDING
INTRUSION

TEMPERATURE
CONTROL PANEL

LOW TEMP

HIGH TEMP

9TH STREET PUMP 1
STARTER PANEL
(TYPICAL OF 2)



9TH STREET PUMP 1

9TH STREET PUMP 2

PUMP STATION

PLAN NOTES:

- DIALER UNIT IS A MISSION COMMUNICATIONS MYDRO. PROVIDE 16-CHANNEL DISCRETE INPUT CARD COMPATIBLE WITH EXISTING UNIT.
- PROVIDE STEEL SEPARATION BARRIER IN JUNCTION BOXES CONTAINING CONDUCTORS OF MIXED POTENTIAL (480VAC, 120VAC, 24VDC).
- REMOVE EXISTING FLYGT PUMP MODEL CP-3201, REFURBISH, AND DELIVER TO OWNER AS SPARE. FURNISH AND INSTALL NEW FLYGT PUMP MODEL 3202.LT3.618 - SEE DRAWING 500-MEN-1 FOR ADDITIONAL DETAILS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
PROCESS & INSTRUMENTATION DIAGRAM

SCALE: SHEET 11 OF 45 SHEETS STA. TO STA.

009-N-1



USER NAME = sbremer	DESIGNED - JG	REVISED -
	DRAWN - JG	REVISED -
	CHECKED - AB	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	11
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 100-R-1
FILE NAME: D876U37-sh1-100.dgn



USER NAME = ddrescher	DESIGNED - PL	REVISED -
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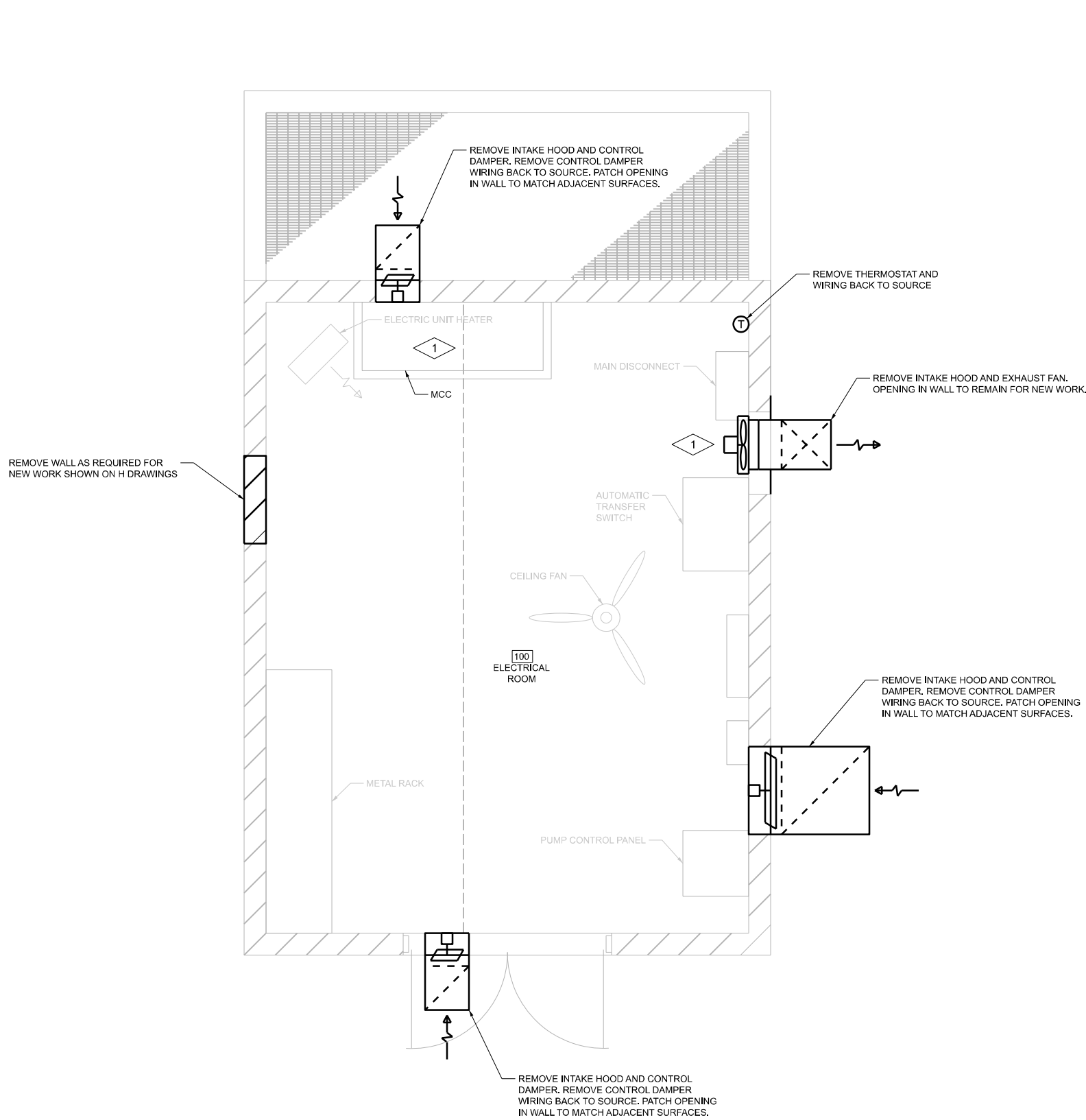
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VENICE PUMP STATION
REMOVAL PLAN

SCALE: SHEET 12 OF 45 SHEETS STA. TO STA.

100-R-1

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	12
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



GRADE PLAN

GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- FULL TONE COMPONENTS TO BE REMOVED.
- SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
- REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR, FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
- WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE. REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
- REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAVLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
- REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
- WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.

PLAN NOTES:

- DISCONNECT AND PROTECT CONDUIT AND CONDUCTORS ROUTING FROM EXHAUST FAN FOR RE-USE. ENSURE CIRCUIT BREAKER 2 OF LIGHTING PANEL LOCATED WITHIN MCC IS OFF BEFORE REMOVING CONDUIT AND CONDUCTORS.

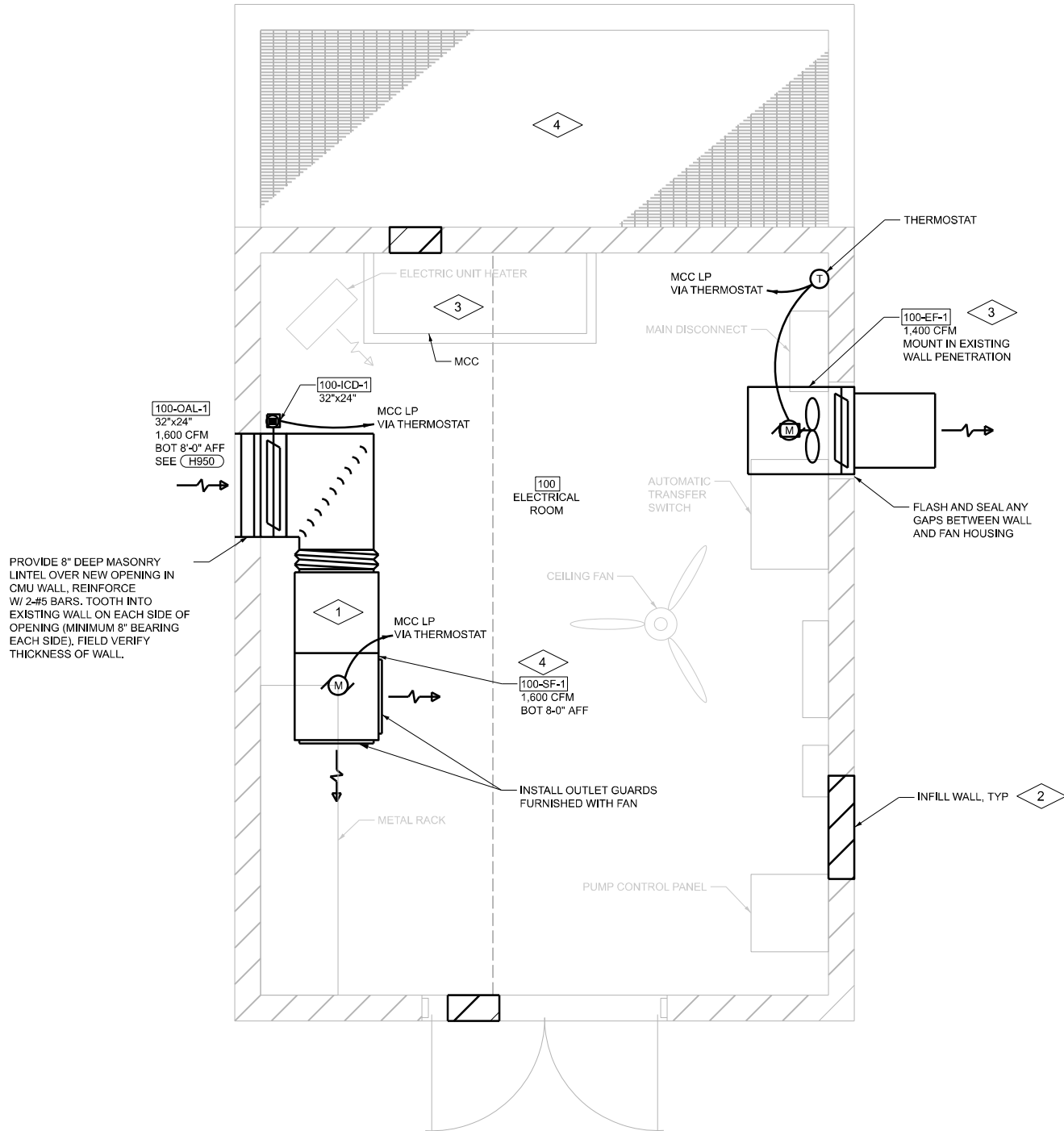


GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:

1. (4) 20"x20"x2" MERV 13 FILTERS.
2. 8" CMU MASONRY FINISH TO MATCH EXISTING.
3. USE SPARE 1-POLE 20A CIRCUIT BREAKER WITHIN LIGHTING PANEL; PANELBOARD LOCATED WITHIN MCC. PROVIDE CONDUIT AND CONDUCTORS TO 100-EF-1, 100-SF-1, AND 100-ICD-1 VIA THERMOSTAT. RE-LABEL PANEL SCHEDULE ACCORDINGLY.
4. CONTRACTOR SHALL CLEAN EXISTING PUMP STATION SUMP / WET WELL. SEE CLEANING AND WASTE MANAGEMENT SPECIAL PROVISION.



GRADE PLAN

SCALE: 0 1' 2'

100-SHE-1

MODEL: 100-SHE-1
FILE NAME: D876U37-sh1-100.dgn



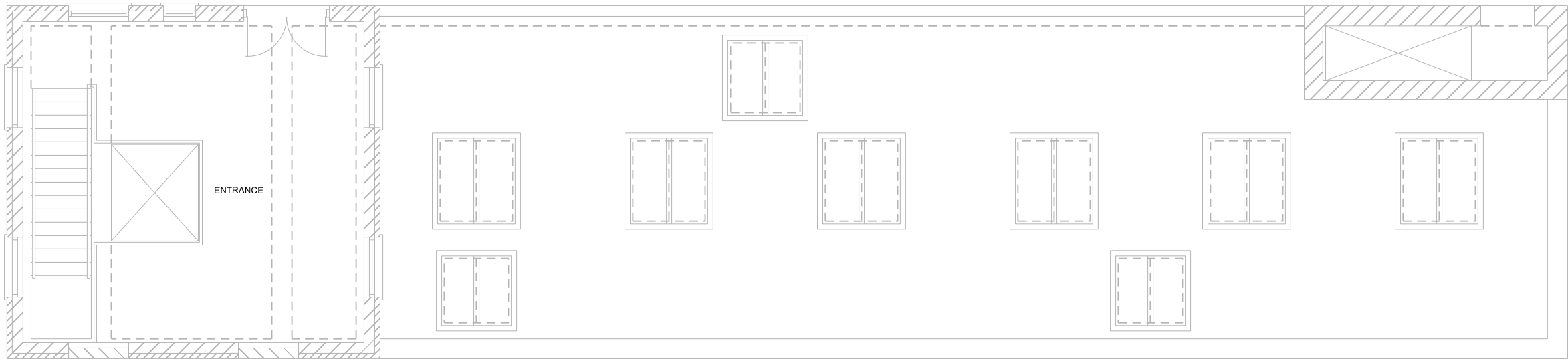
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

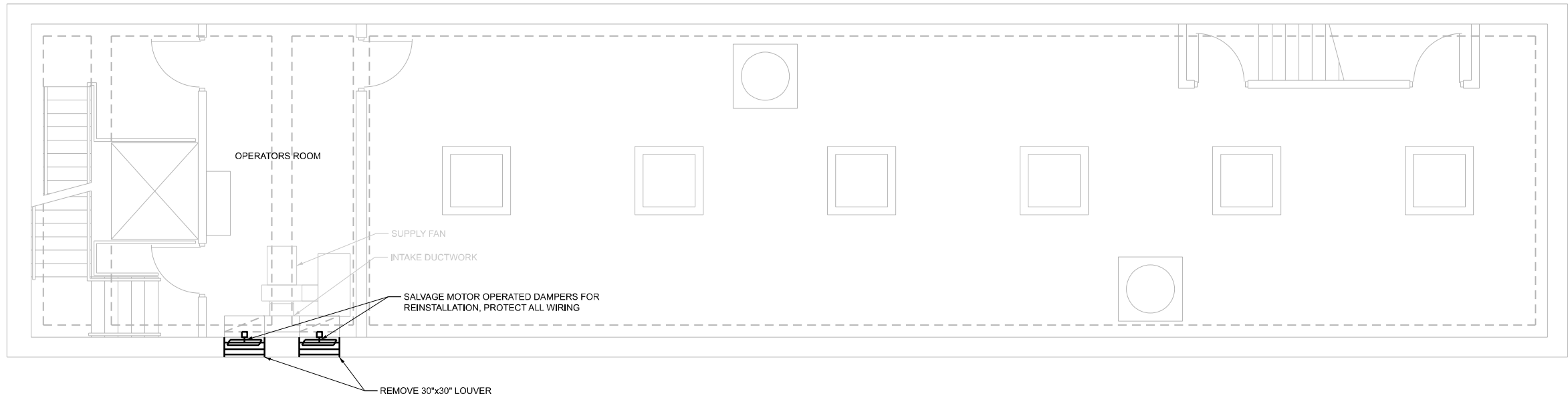
**VENICE PUMP STATION
STRUCTURAL / HVAC / ELECTRICAL PLAN**

SCALE: SHEET 13 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	13
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



OVERALL GRADE PLAN



OVERALL LOWER PLAN



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. FULL TONE COMPONENTS TO BE REMOVED.
3. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
4. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR. FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
5. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE, REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
6. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
7. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
8. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.

SCALE: 0 1' 4'

200-R-1

MODEL:
FILE NAME:



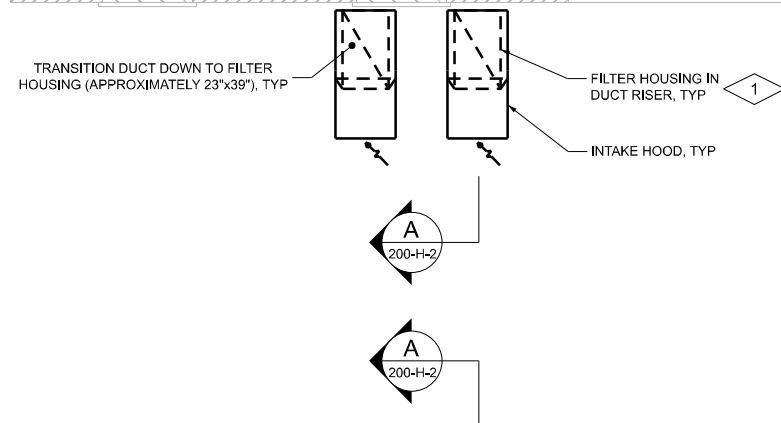
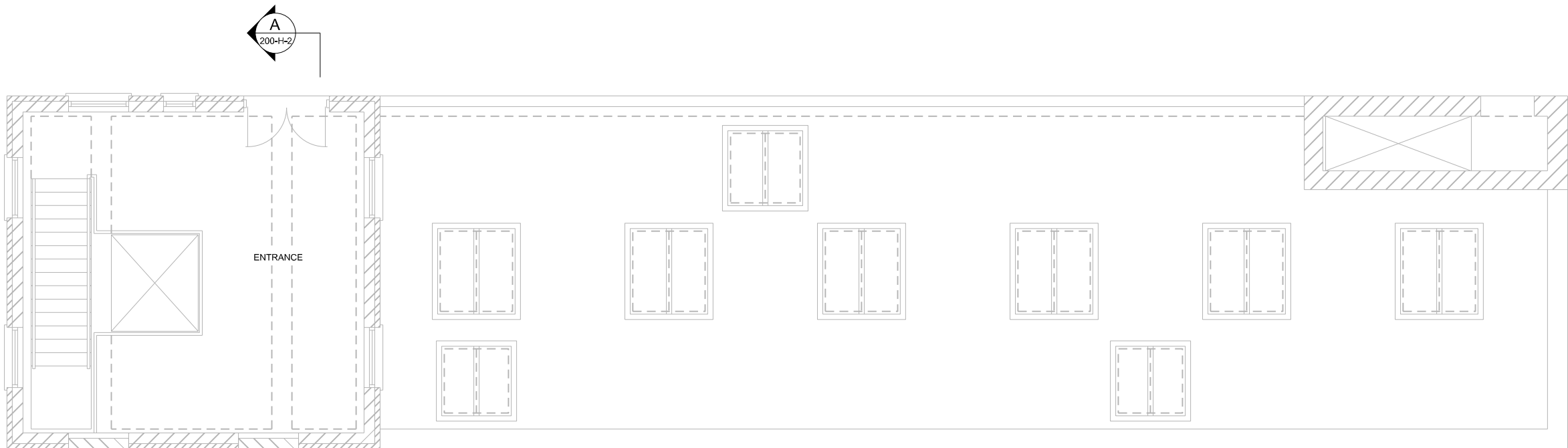
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PLOT DATE	=	DATE	-		REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

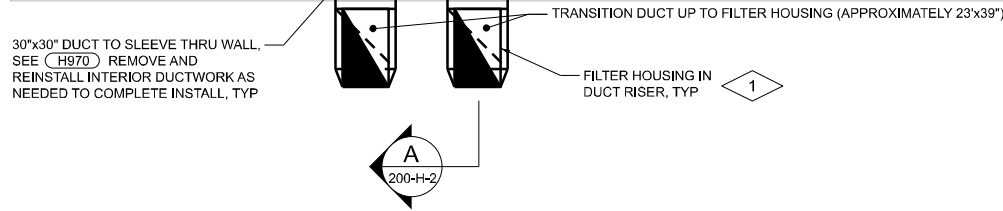
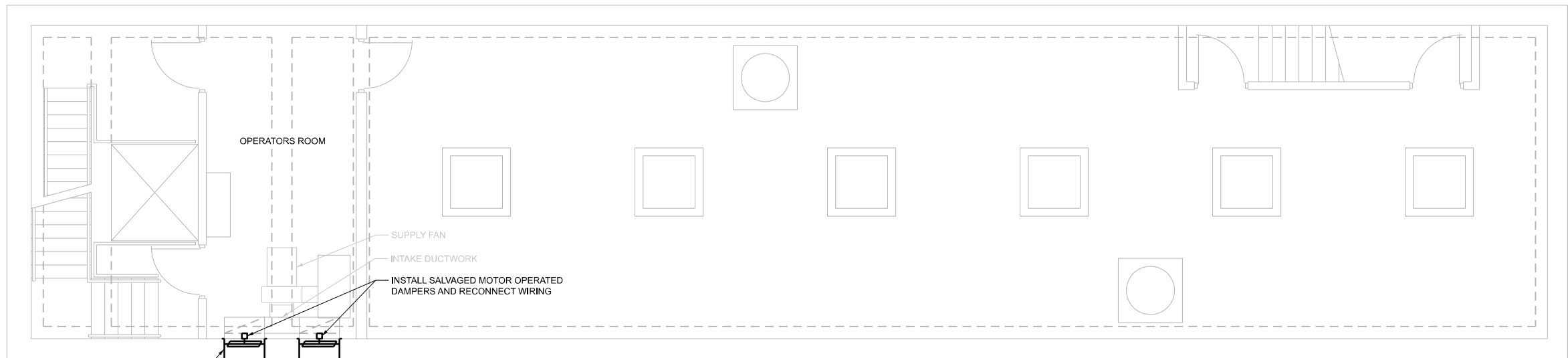
BOWMAN PUMP STATION
REMOVAL
PLAN

SCALE: SHEET 14 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	14
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



OVERALL GRADE PLAN



OVERALL LOWER PLAN



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:

1. (3) 24"x24"x2" MERV 8 FILTERS. VERIFY SIZE AND QUANTITY.

SCALE: 0 1' 4'

200-H-1



USER NAME = sbremer	DESIGNED - PL	REVISED -
	DRAWN - PL	REVISED -
	CHECKED - JP	REVISED -
	DATE - 3/10/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOWMAN PUMP STATION
HVAC
PLAN

SCALE: SHEET 15 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	15
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 200-H-1
FILE NAME: D876U37-sh1+200.dgn

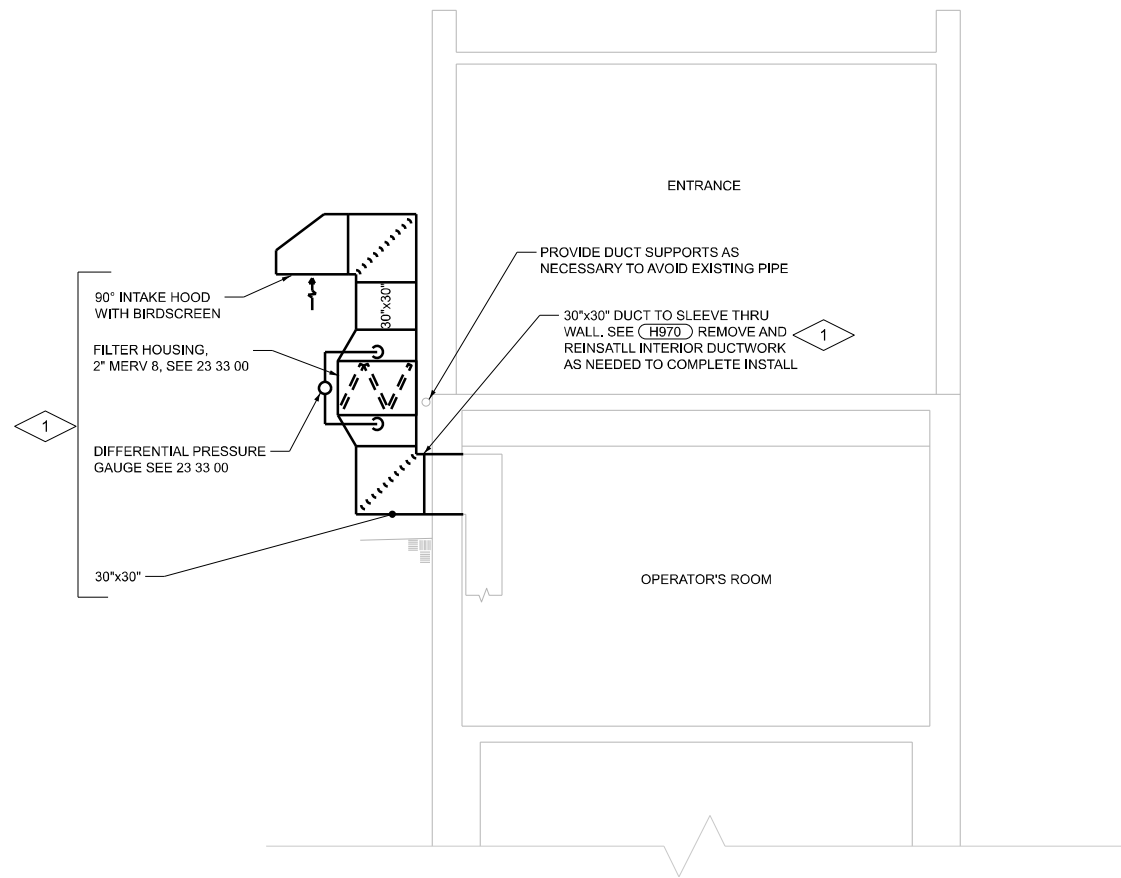
GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:



1. TYPICAL OF TWO LOCATIONS. SEE SHEET 200-H-1 FOR LOCATIONS.



SECTION A
200-H-1

SCALE: 0 1' 4'

MODEL: 200-H-2
FILE NAME: D876U37-sh1-200.dgn



USER NAME	= sbremer	DESIGNED	- PL	REVISED	-
		DRAWN	- PL	REVISED	-
		CHECKED	- JP	REVISED	-
PLOT DATE	= 3/10/2025	DATE	- 3/10/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOWMAN PUMP STATION
HVAC
SECTION

SCALE: SHEET 16 OF 45 SHEETS STA. TO STA.

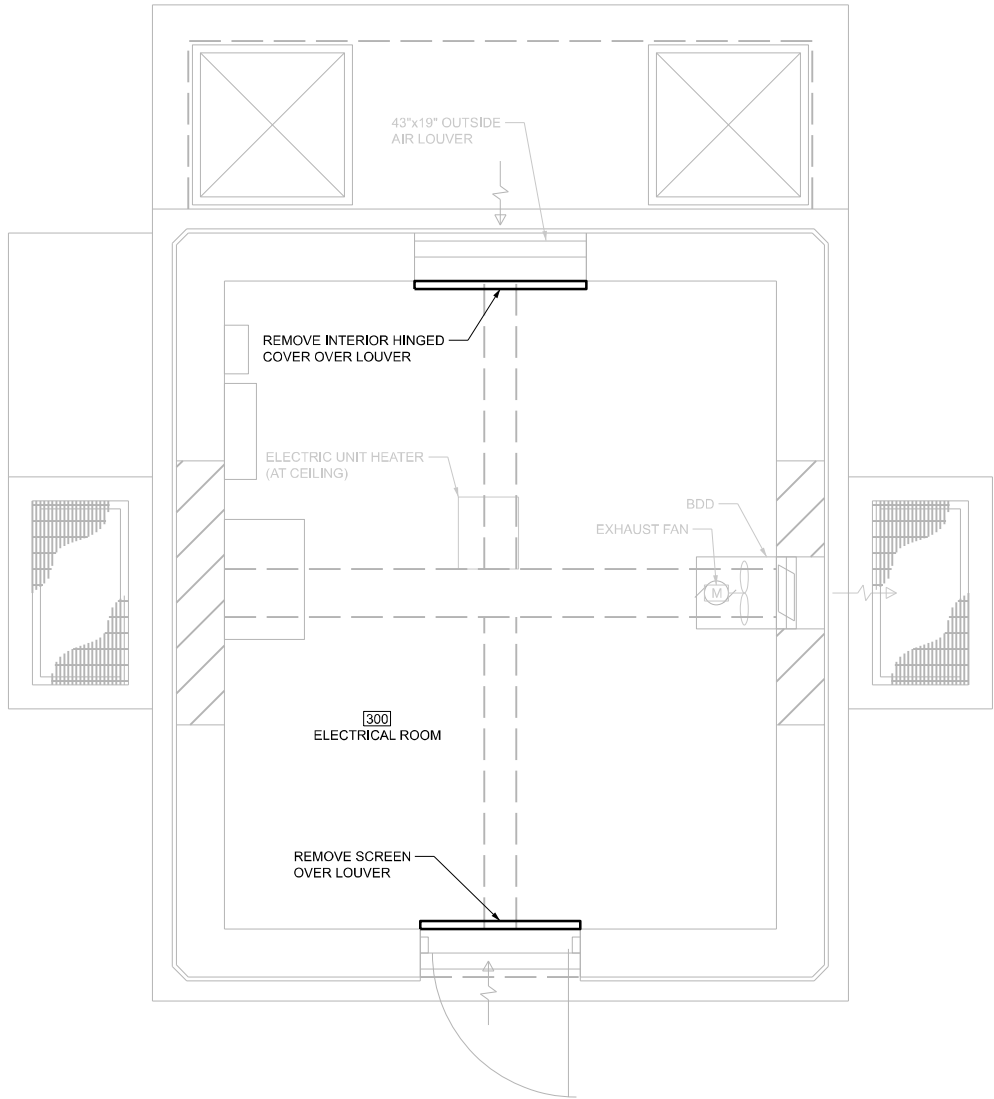
200-H-2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	16
CONTRACT NO. 76U37				
		ILLINOIS	FED. AID PROJECT	



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. FULL TONE COMPONENTS TO BE REMOVED.
3. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
4. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR. FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
5. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE. REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
6. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
7. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
8. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.



GRADE PLAN

SCALE: 0 1' 2'

MODEL: 300-R-1
FILE NAME: D876U37-shr-300.dgn

	USER NAME = ddrescher	DESIGNED - PL/BF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CENTRALIA PUMP STATION REMOVAL PLAN				F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - PL/BF	REVISED -						VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	17
		CHECKED - JP/JB	REVISED -						CONTRACT NO. 76U37				
	PLOT DATE = 3/11/2025	DATE - 3/11/2025	REVISED -						ILLINOIS FED. AID PROJECT				
					SCALE:	SHEET 17 OF 45 SHEETS	STA.	TO STA.					

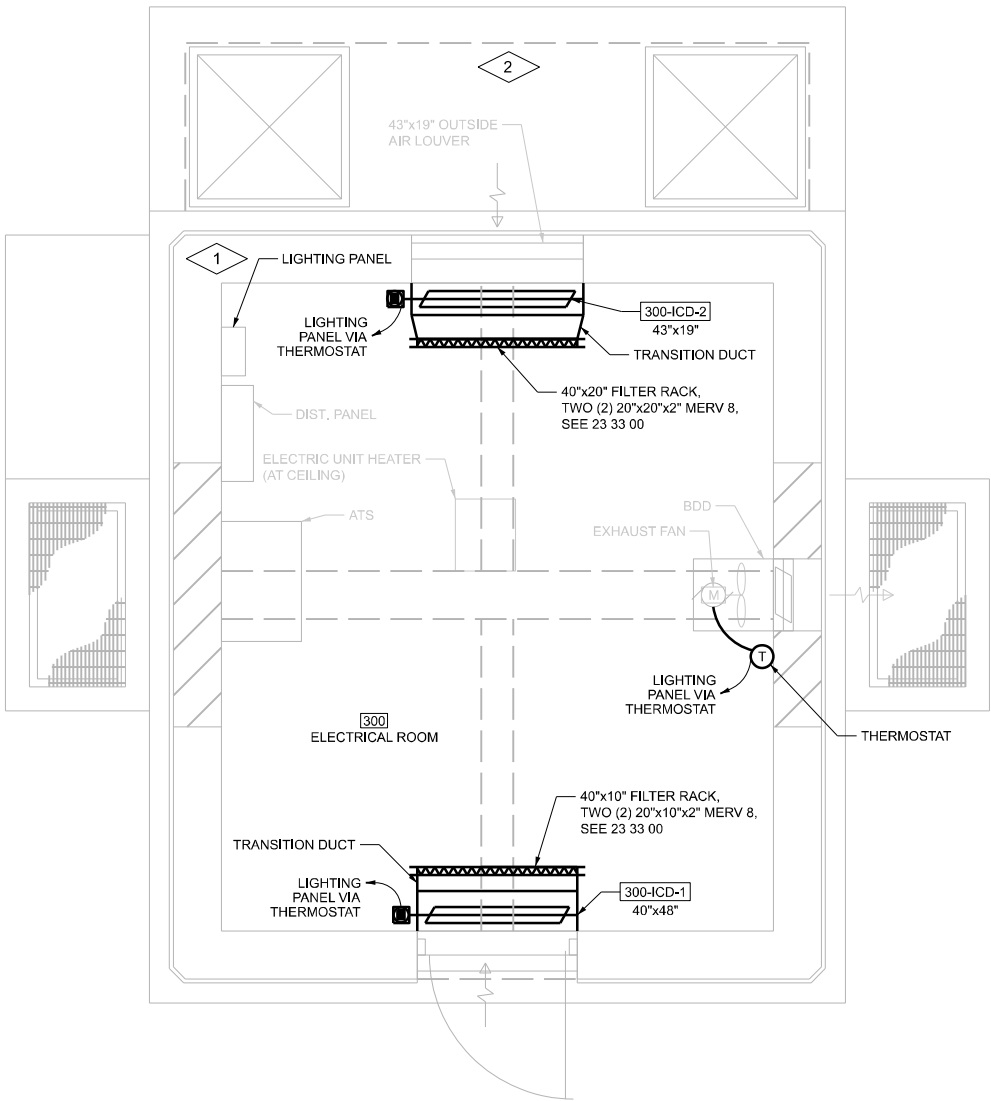


GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:

1. EXTEND CONDUIT AND CONDUCTORS FROM LIGHTING PANEL CIRCUIT 7 TO EXHAUST FAN, 300-ICD-1 AND 300-ICD-2 VIA THERMOSTAT. RE-LABEL PANEL SCHEDULE ACCORDINGLY.
2. CONTRACTOR SHALL CLEAN EXISTING PUMP STATION SUMP / WET WELL. SEE CLEANING AND WASTE MANAGEMENT SPECIAL PROVISION.



GRADE PLAN

SCALE: 0 1' 2'

300-HE-1

MODEL: 300-HE-1
FILE NAME: D876U37-sh1t-300.dgn



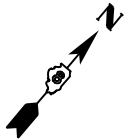
USER NAME	= ddrescher	DESIGNED	- PL/BF	REVISED	-
		DRAWN	- PL/BF	REVISED	-
		CHECKED	- JP/JB	REVISED	-
PLOT DATE	= 3/11/2025	DATE	- 3/11/2025	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CENTRALIA PUMP STATION
HVAC / ELECTRICAL
PLAN**

SCALE: SHEET 18 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	18
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

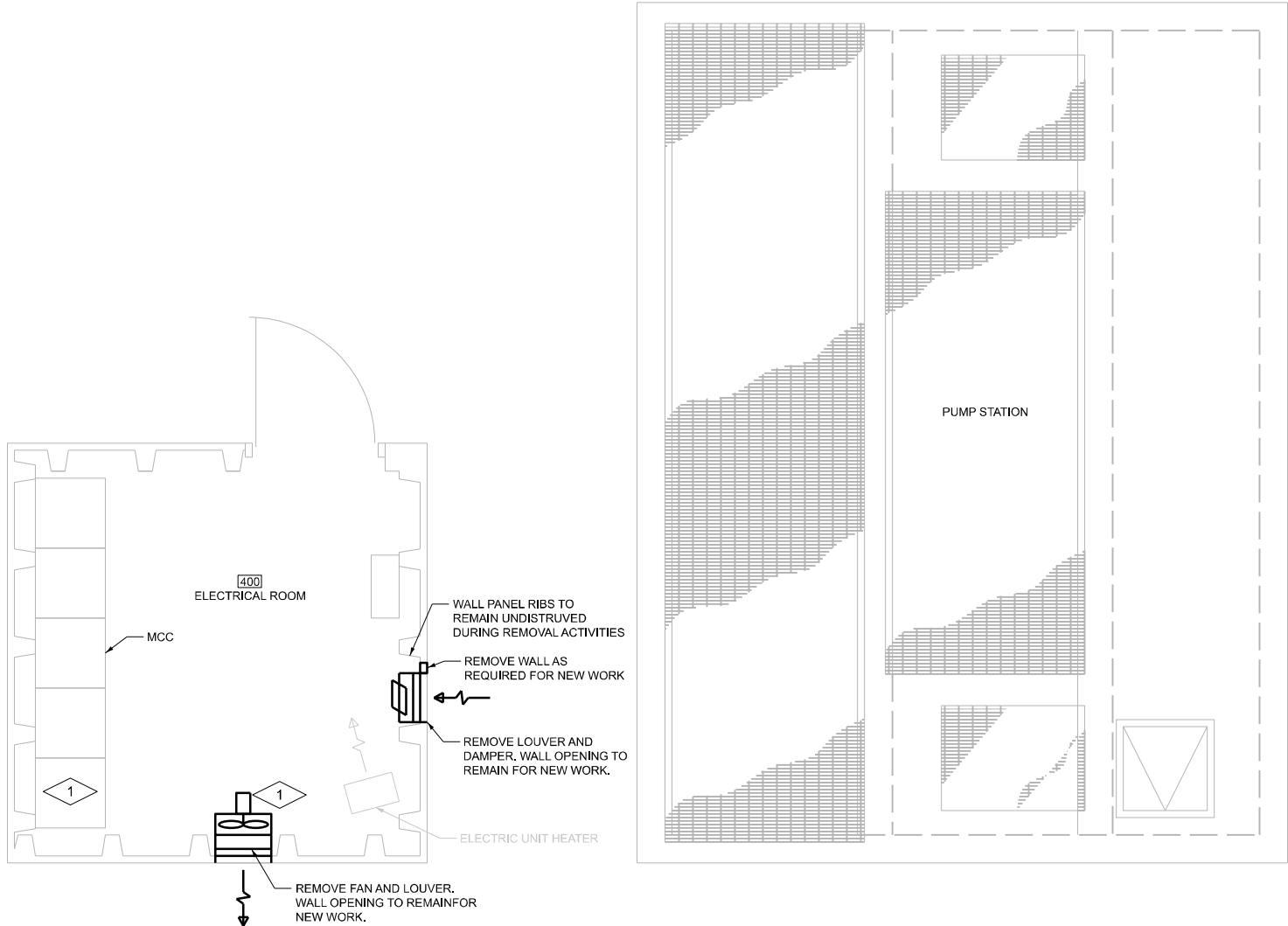


GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. FULL TONE COMPONENTS TO BE REMOVED.
3. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
4. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR. FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
5. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE, REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS, WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
6. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
7. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
8. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.

PLAN NOTES:

1. DISCONNECT AND PROTECT CONDUIT AND CONDUCTORS ROUTING FROM EXHAUST FAN FOR RE-USE. ENSURE CIRCUIT BREAKER 5 OF LIGHTING PANEL LOCATED WITHIN MCC IS OFF BEFORE REMOVING CONDUIT AND CONDUCTORS.



GRADE PLAN

SCALE: 0 1' 2'

MODEL: 400-R-1
FILE NAME: D876U37-sh1-400.dgn



USER NAME	= ddrescher	DESIGNED -	PL/BF	REVISED -	
		DRAWN -	PL/BF	REVISED -	
		CHECKED -	JP/JB	REVISED -	
PLOT DATE	= 3/11/2025	DATE	= 3/11/2025	REVISED -	

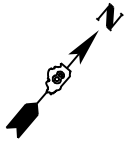
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRAYS FARM PUMP STATION
REMOVAL
PLAN

SCALE: SHEET 19 OF 45 SHEETS STA. TO STA.

400-R-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	19
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

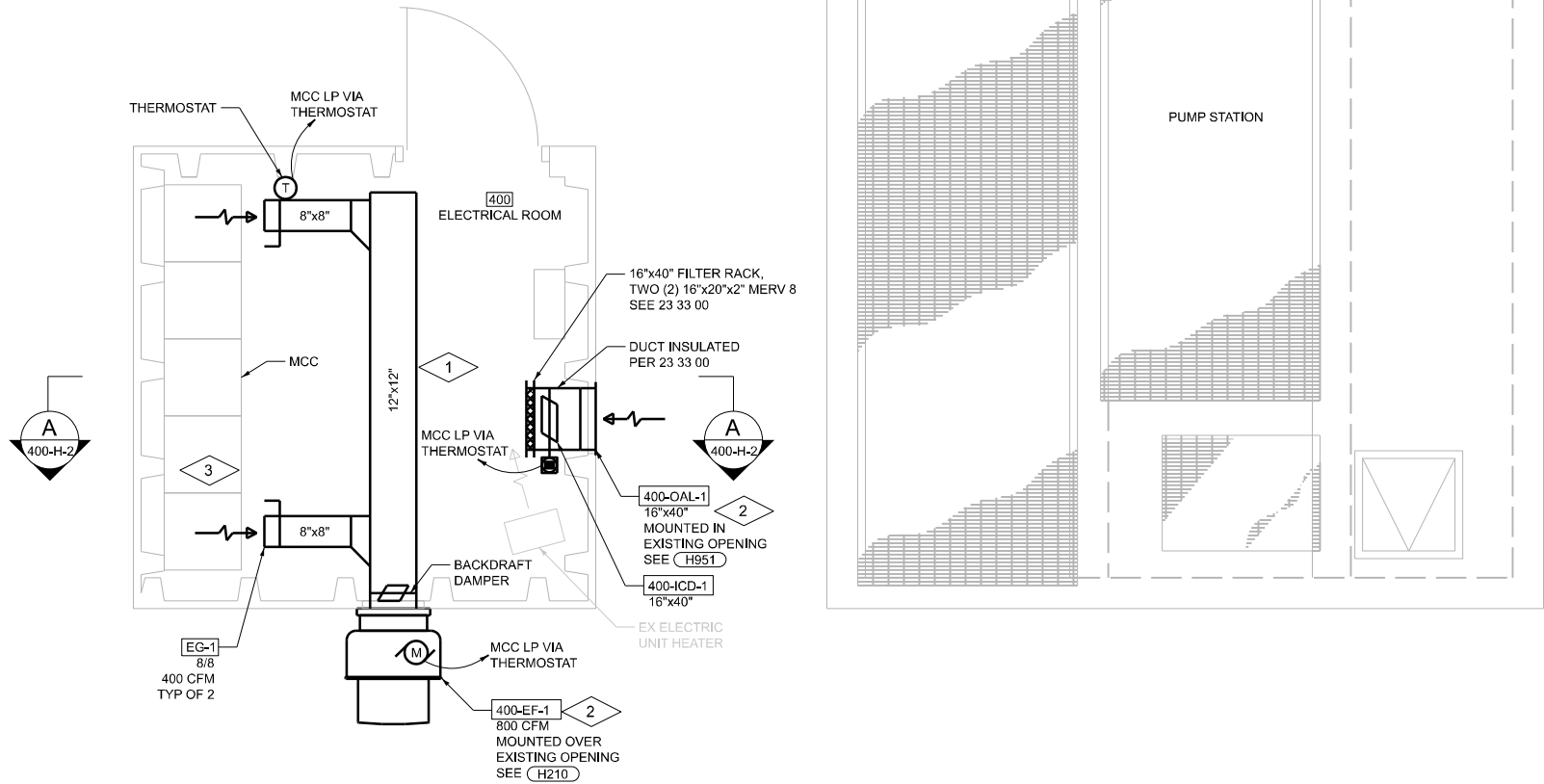


GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:

1. LOWER OR REPLACE EXISTING SPACE LIGHTING TO MITIGATE SHADOWING DUE TO NEW DUCTWORK.
2. EXPAND EXISTING WALL OPENING FOR EQUIPMENT
3. RE-TERMINATE EXISTING CONDUIT AND CONDUCTORS FROM MCC PANELBOARD CIRCUIT BREAKER 5 TO 400-EF-1, 400-SF-1, AND 400-ICD-1 VIA THERMOSTAT. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.



GRADE PLAN

SCALE: 0 1' 2'

400-SHE-1

MODEL: 400-SHE-1
FILE NAME: D876U37-sh1-400.dgn



USER NAME	= ddrescher	DESIGNED	- AP/PL/BF	REVISED	-
		DRAWN	- AP/PL/BF	REVISED	-
		CHECKED	- SR/JP/JB	REVISED	-
PLOT DATE	= 3/14/2025	DATE	- 3/14/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

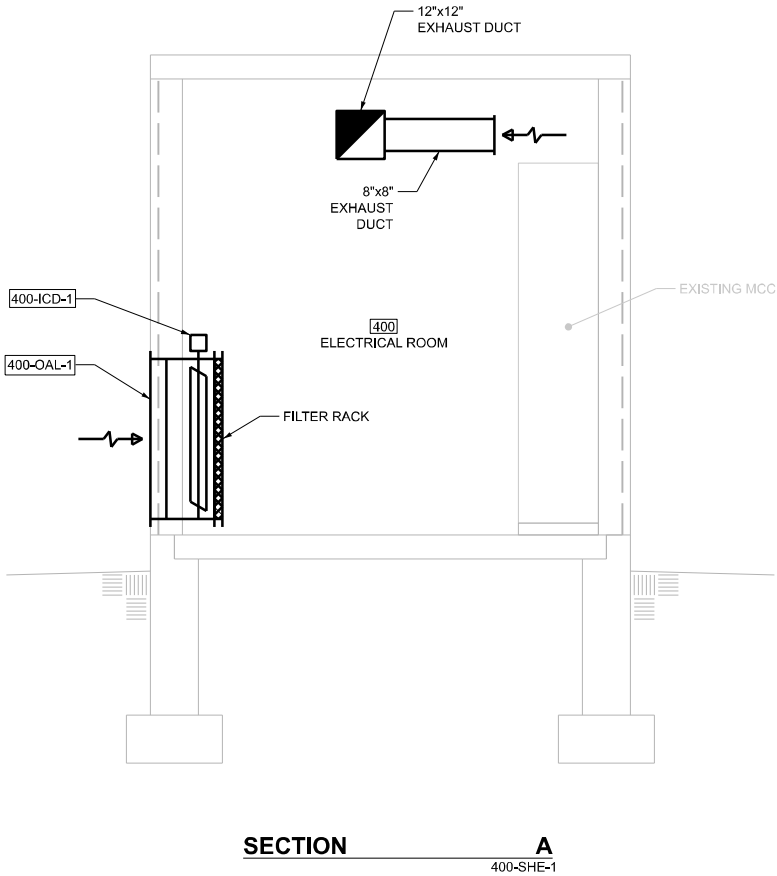
GRAYS FARM PUMP STATION
STRUCTURAL / HVAC / ELECTRICAL
PLAN

SCALE: SHEET 20 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	20
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.



SCALE: 0 1' 2'

MODEL: 400-H-2
FILE NAME: D876U37-sh1-400.dgn



USER NAME	= ddrescher	DESIGNED	- PL/BF	REVISED	-
		DRAWN	- PL/BF	REVISED	-
		CHECKED	- JP/JB	REVISED	-
PLOT DATE	= 3/14/2025	DATE	- 3/14/2025	REVISED	-

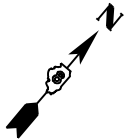
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRAYS FARM PUMP STATION
HVAC
SECTION

SCALE: SHEET 21 OF 45 SHEETS STA. TO STA.

400-H-2

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	21
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



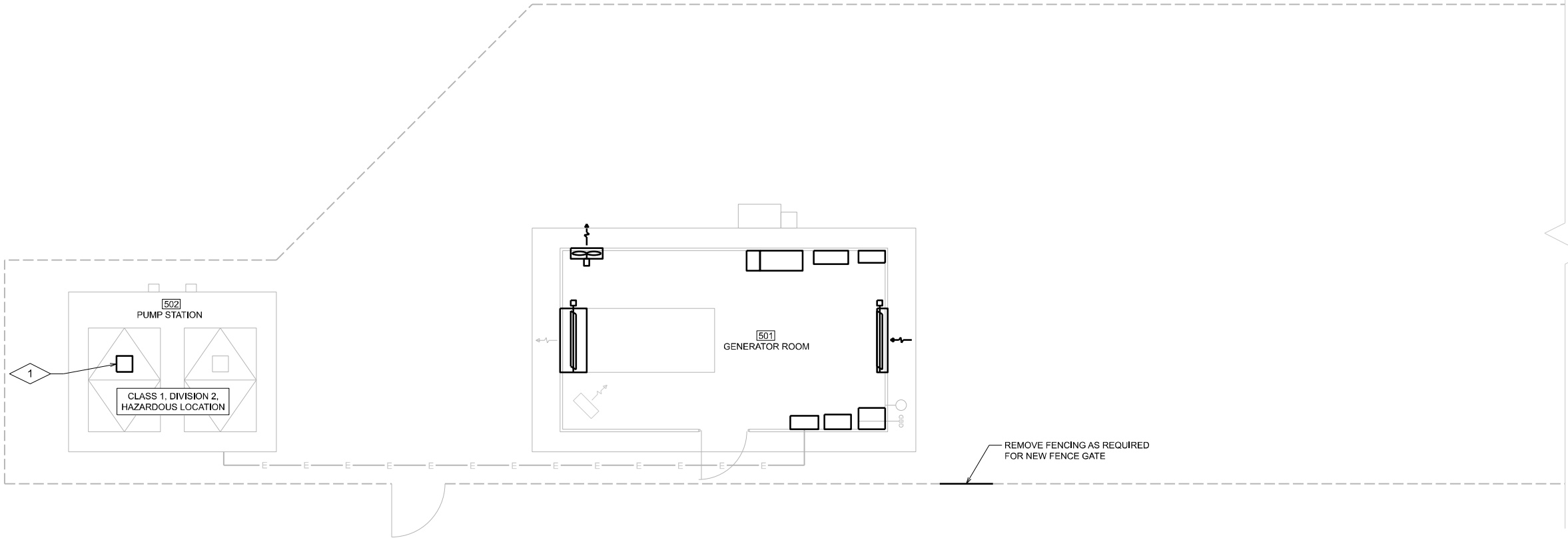
GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. FULL TONE COMPONENTS TO BE REMOVED.
3. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
4. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR. FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
5. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE. REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
6. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
7. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
8. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.

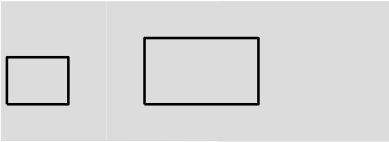
PLAN NOTES:



1. SALVAGE PUMP-1 FROM WET WELL TO BE REFURBISHED BY SENDING BACK TO THE MANUFACTURER (FLYGT). ONCE REFURBISHED, THE PUMP SHALL BE RETURNED TO OWNER.



OVERALL GRADE PLAN



KEY PLAN

SCALE: 0 1' 4'

500-R-1

MODEL: 500-R-1
FILE NAME: D876U37-sh1-removal-500.dgn



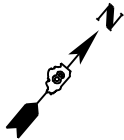
USER NAME = ddrescher	DESIGNED - PL	REVISED -
	DRAWN - PL	REVISED -
	CHECKED - JP	REVISED -
PLOT DATE = 3/11/2025	DATE - 3/11/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
REMOVAL PLAN

SCALE: SHEET 22 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	22
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

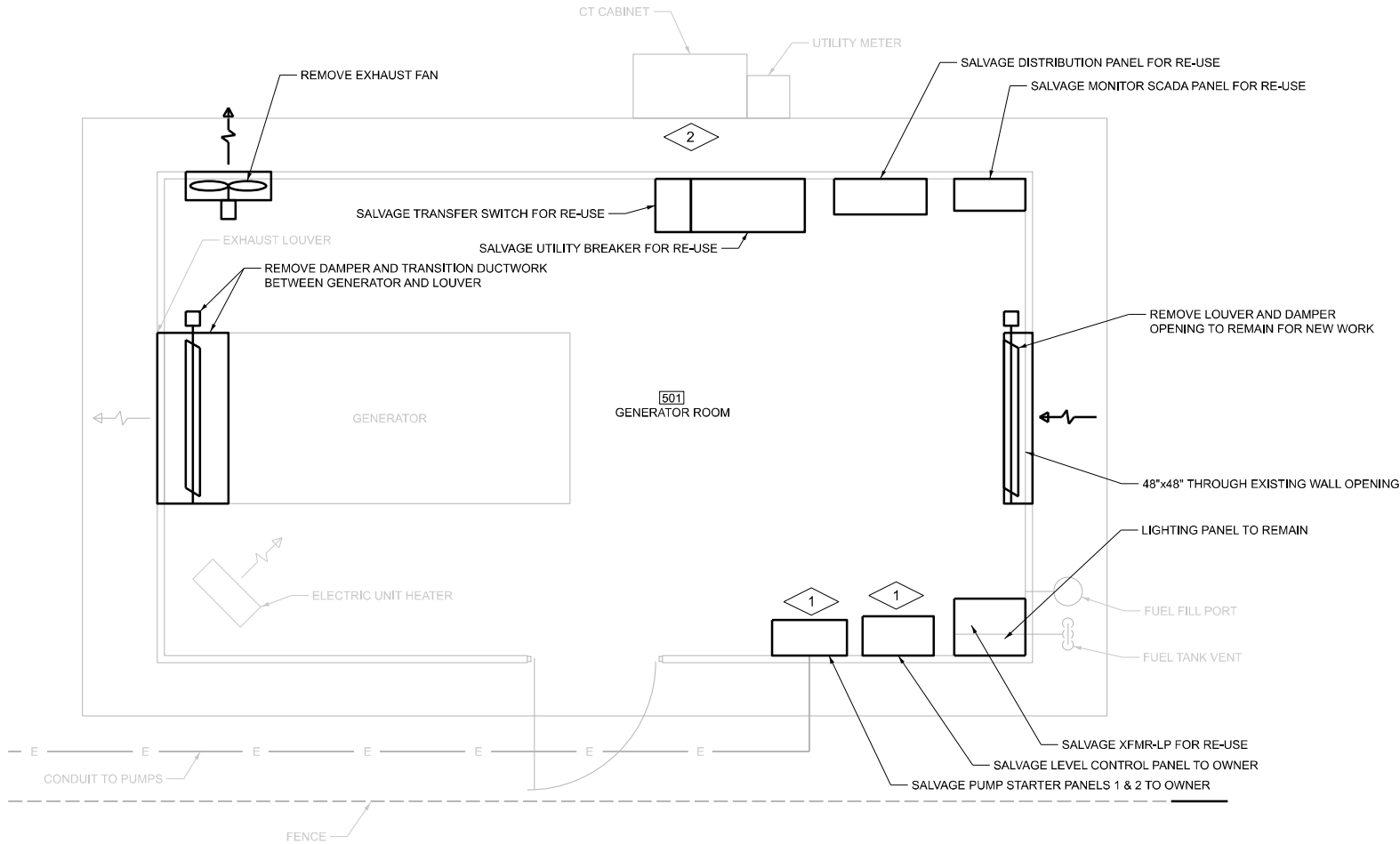


GENERAL NOTES:

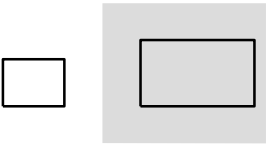
1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. FULL TONE COMPONENTS TO BE REMOVED AND SALVAGED FOR RE-USE. HALF TONE COMPONENTS TO REMAIN. CONDUIT AND CONDUCTORS FROM SALVAGED EQUIPMENT TO BE REMOVED TO SOURCE.
3. SAWCUT AND REMOVE CONCRETE TO THE LIMITS NOTED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE REINFORCEMENT AND EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH ADJACENT FINISHED SURFACE.
4. REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS FOR MATERIALS AND EQUIPMENT BEING REMOVED. IN EXPOSED AREAS NOT COVERED BY NEW CONSTRUCTION, REMOVE CONCRETE ANCHORS, ANCHOR BOLTS, AND OTHER EMBEDMENTS 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR. FINISH SURFACE TO MATCH ADJACENT FINISHED SURFACE.
5. WHERE EQUIPMENT IS INDICATED TO BE REMOVED, REMOVE ALL ASSOCIATED POWER AND CONTROL WIRING AND CONDUIT BACK TO SOURCE. REMOVE JUNCTION BOXES AND PULL BOXES ASSOCIATED WITH THE REMOVED CONDUITS. WHERE CONDUIT SYSTEM CONTAINS CIRCUITS TO OTHER EQUIPMENT THAT REMAINS, RETAIN THESE CIRCUITS AND RELOCATE EXISTING CONDUIT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR THE INSTALLATION OF NEW EQUIPMENT.
6. REMOVE ALL SUPPORTS ASSOCIATED WITH REMOVED PIPING, DUCTWORK, CONDUIT, AND EQUIPMENT. REMOVE RODS AND FASTENERS FROM CEILINGS, FLOORS, AND WALLS WITH CARE. WHERE SURFACE HAS BEEN MARRED, CHIPPED, SPAWLED, ETC. AS A RESULT OF REMOVAL, PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
7. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVED PAD. PATCH SURFACE WITH PATCHING MORTAR AND FINISH TO MATCH ADJACENT FINISHED SURFACE.
8. WHERE OPENINGS ARE LEFT IN WALLS, SLABS, OR CEILINGS DUE TO REMOVED PIPING, DUCTWORK, EQUIPMENT, OR OTHER WORK, PATCH OPENING TO MATCH ADJACENT SURFACES UNLESS NOTED OTHERWISE. THE PERIMETER OF OPENINGS IN CONCRETE WALLS AND SLABS EXPOSED TO EARTH, WEATHER, OR WATER SHALL BE LINED WITH A GASKET TYPE WATERSTOP PRIOR TO PATCHING OF THE WALL. OPENINGS IN PRECAST CONCRETE ROOF MEMBERS ARE TO BE PATCHED WITH CONCRETE AND DOWELED TO THE EXISTING ROOF MEMBERS UNLESS NOTED OTHERWISE. ROOFING SYSTEM SHALL BE PATCHED TO PREVENT ANY LEAKING AT THE OPENING.
9. SALVAGED ELECTRICAL EQUIPMENT FROM THE GENERATOR BUILDING WILL BE RE-USED IN NEW BUILDING. ENSURE IT STAYS IN USABLE CONDITION.
10. PROTECT NEEDED CONDUIT PENETRATION FOR RE-USE AND REMOVE REMAINING CONDUIT. PATCH ANY OTHER OPENINGS WITH STEEL PLATE AND MAKE CONNECTION WATER TIGHT. EXISTING CONDUIT RUN UNDERGROUND TO PUMPS TO REMAIN FOR RE-USE.

PLAN NOTES:

1. PUMP STARTER PANELS AND LEVEL CONTROL PANEL ARE TO BE SALVAGED TO OWNER. SALVAGE THE INDQUIP MOTOR PROTECTION RELAYS WITHIN THE STARTER PANELS FOR RE-USE.
2. PROTECT CONDUIT PENETRATION THROUGH WALL FOR RE-USE.



ENLARGED GRADE PLAN



KEY PLAN

SCALE: 0 1' 2'

500-R-2



USER NAME	= ddrescher	DESIGNED	- PL	REVISED	-
		DRAWN	- PL	REVISED	-
		CHECKED	- JP	REVISED	-
PLOT DATE	= 3/14/2025	DATE	- 3/14/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
REMOVAL PLAN

SCALE: SHEET 23 OF 45 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	23
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 500-R-2
FILE NAME: D876U37-sh1-removal-500.dgn

CODE COMPLIANCE NOTES:

CODE: INTERNATIONAL BUILDING CODE 2018 EDITION.

CHAPTER 3
REFERENCE IBC SECTION 306
OCCUPANCY TYPE: LOW-HAZARD FACTORY INDUSTRIAL F-1

CHAPTER 5
TYPE OF CONSTRUCTION: IIB (TABLE 601)
ALLOWABLE BUILDING AREA: 15,500 SF PER STORY (TABLE 506.2)
TOTAL AREA OF NEW ELECTRICAL BUILDING: 311 SF
TOTAL AREA OF EXISTING GENERATOR BUILDING: 226 SF
TOTAL AREA OF NEW AND EXISTING BUILDINGS: 537 SF

REFERENCE TABLE 504.3
TOTAL ALLOWABLE BUILDING HEIGHT: 55 FT.
ACTUAL BUILDING HEIGHT: 11'-4" (NEW ELECTRICAL BUILDING)
ACTUAL BUILDING HEIGHT: 10'-0" (EXISTING GENERATOR BUILDING)

REFERENCE TABLE 504.4
ALLOWABLE NO. OF STORIES: 2
ACTUAL NO. OF STORIES: 1 (NEW ELECTRICAL BUILDING)
ACTUAL NO. OF STORIES: 1 (EXISTING GENERATOR BUILDING)

CHAPTER 6
REFERENCE TABLE 601
FIRE RESISTIVE REQUIREMENTS
EXTERIOR BEARING WALLS: 0 HR.
INTERIOR BEARING WALLS: 0 HR.
STRUCTURAL FRAMES: 0 HR.
PARTITIONS: 0 HR.
SHAFT ENCLOSURES: 0 HR. (NOT APPLICABLE)
FLOOR: 0 HR.
ROOF: 0 HR.

REFERENCE 503.1.2
BUILDINGS ON SAME LOT.
CONSIDER EXISTING GENERATOR BUILDING AND NEW ELECTRICAL BUILDING AS PORTIONS OF ONE BUILDING.
BUILDING HEIGHT, NUMBER OF STORIES OF EACH BUILDING AND THE AGGREGATE BUILDING AREA ARE WITHIN LIMITATIONS SPECIFIED IN SECTIONS 504 AND 506.

REFERENCE TABLE 602
FIRE SEPARATION FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE (TABLE 602)
>30 FT.
TYPE IIB
OCCUPANCY GROUP F-1
0 HR. FIRE-RESISTANCE RATING

CHAPTER 7
REFERENCE TABLE 705.8
MAXIMUM AREA OF EXTERIOR WALL OPENINGS
EXTERIOR WALL OPENINGS: (30 OR GREATER) TABLE 705.8
UNPROTECTED NON-SPRINKLERED
MAXIMUM ALLOWABLE AREA OF EXTERIOR WALL OPENINGS: NO LIMIT

CHAPTER 10
REFERENCE TABLE 1004.1.2
AREA PER OCCUPANT: 100 SF PER OCCUPANT (INDUSTRIAL AREAS)
TOTAL BUILDING OCCUPANT LOAD: 3 OCCUPANTS (BASED ON 100 SF /OCCUPANT)
SEE CODE PLAN FOR OCCUPANT LOAD DISTRIBUTION THROUGHOUT BUILDING

EGRESS WIDTH (REFERENCE IBC 1005.1)
MINIMUM WIDTH OF EGRESS COMPONENTS SHALL BE DETERMINED BY MULTIPLYING THE OCCUPANT LOAD BY 0.3 FOR STAIRS AND 0.2 FOR ALL OTHER COMPONENTS
SEE CODE PLAN FOR ACTUAL OCCUPANT LOADS AND MAXIMUM ALLOWABLE NO. OF OCCUPANTS PER MEANS OF EGRESS.

REFERENCE TABLE 1006.2.1
COMMON PATH OF EGRESS: 75 FT. WITHOUT SPRINKLER SYSTEM

REFERENCE TABLE 1006.2.1
SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY
WITHOUT SPRINKLER SYSTEM
OCCUPANCY: GROUP F
OCCUPANT LOAD: <30
MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE: 75 FT.

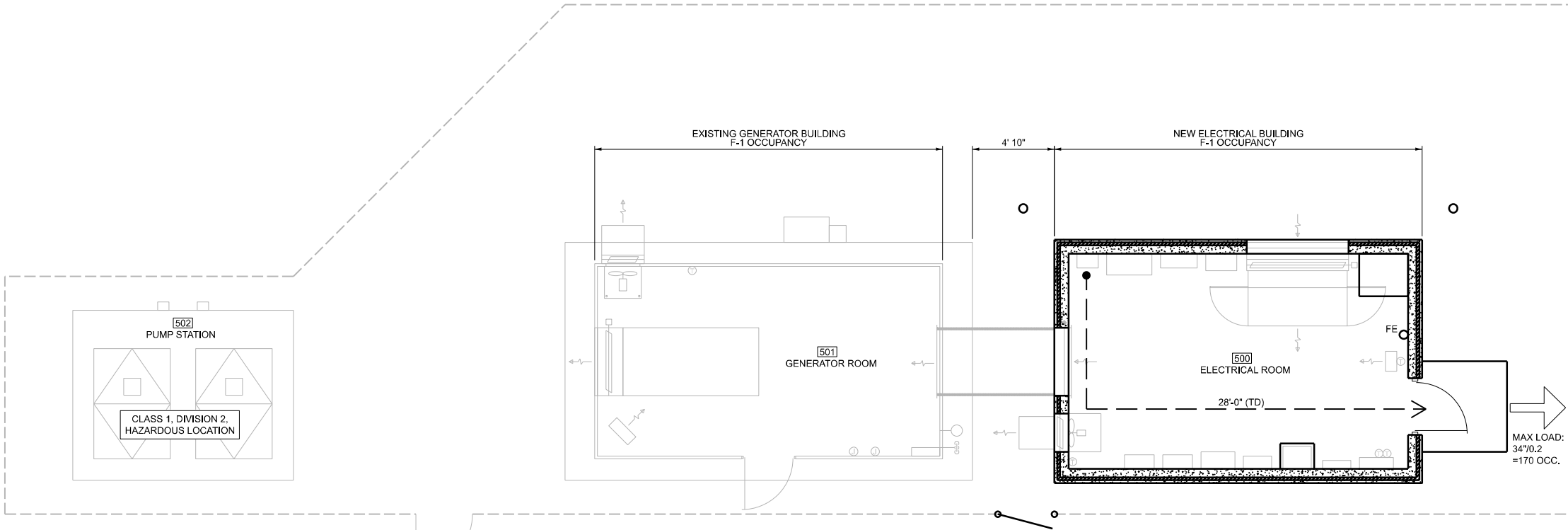
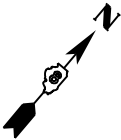
REFERENCE TABLE 1006.3.2(2)
STORIES WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES
OCCUPANCY: GROUP F
WITHOUT SPRINKLER SYSTEM
MAXIMUM OCCUPANT LOAD PER STORY: 49
MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE: 75 FT.

REFERENCE TABLE 1017.2
EXIT ACCESS TRAVEL DISTANCE:
LOW-HAZARD FACTORY INDUSTRIAL F-1 OCCUPANCY: 200 FT.
WITHOUT SPRINKLER SYSTEM

REFERENCE TABLE 1020.2
MINIMUM CORRIDOR WIDTH: 36 IN. WITH OCCUPANT LOAD < 50 (NOT APPLICABLE)
ACCESS TO MECHANICAL SYSTEMS OR EQUIPMENT: 24 IN.

REFERENCE SECTION 1010.1.2.1
DOORS SHALL SWING IN THE DIRECTION OF EGRESS WHERE SERVING AN OCCUPANT LOAD OF 50 OR MORE PERSONS.

REFERENCE 1010.1.10
ALL EXIT DOORS AT ELECTRICAL ROOMS OVER 6 FT. WIDE WITH EQUIPMENT OVER 1,200 AMPERES SHALL BE PROVIDED WITH PANIC EXIT HARDWARE. DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL..



GRADE LEVEL CODE PLAN

LEGEND

- MAX LOAD:
XX"/0.X
=XXX OCC.
- EXIT LOCATION
EGRESS COMPONENT WIDTH/
CAPACITY FACTOR = MAX OCC. LOAD
- XX(TD) → TRAVEL DISTANCE
- FE FIRE EXTINGUISHER

OCCUPANT LOAD TABLE					
ROOM NO.	LOCATION	USE GROUP	AREA (SF)	AREA PER OCC.	OCCUPANT LOAD
500	ELECTRICAL ROOM	FACTORY INDUSTRIAL F-1	254	100	2.54
TOTAL:					3

SCALE: 0 1' 4'

500-A-1

MODEL: 500-A-1

FILE NAME: D876U37-sh1t-4S-500.dgn



USER NAME = ddrescher	DESIGNED - AP	REVISED -
	DRAWN - AP	REVISED -
	CHECKED - SR	REVISED -
PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

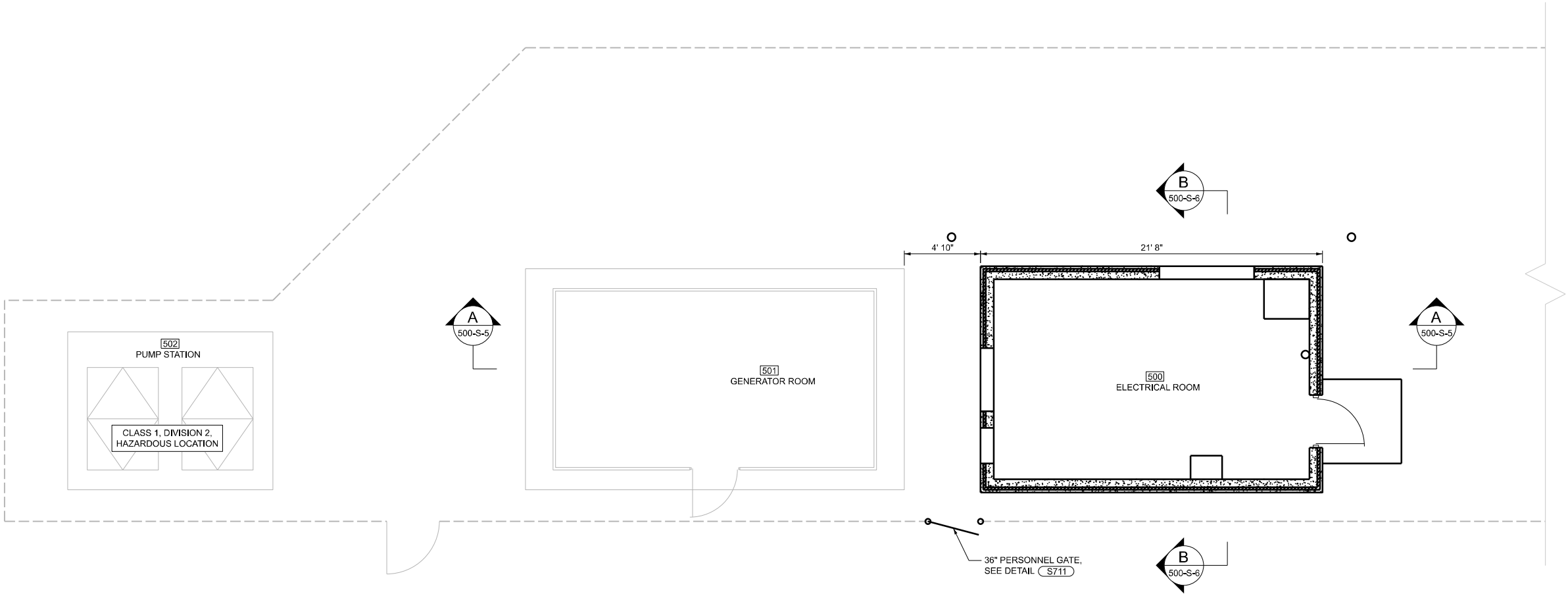
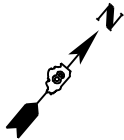
9TH STREET PUMP STATION
ARCHITECTURAL CODE PLAN

SCALE: SHEET 24 OF 45 SHEETS STA. TO STA.

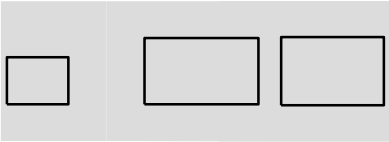
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	24
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

- 1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- 2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE



OVERALL GRADE PLAN



KEY PLAN

SCALE: 0 1' 4'

MODEL: 500-S-1
FILE NAME: D876U37-sh1t-4S-500.dgn



USER NAME	= ddrescher	DESIGNED	- AP	REVISED	-
		DRAWN	- AP	REVISED	-
		CHECKED	- SR	REVISED	-
PLOT DATE	= 3/14/2025	DATE	- 3/14/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
STRUCTURAL
PLAN

SCALE: SHEET 25 OF 45 SHEETS STA. TO STA.

500-S-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	25
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

MODEL: 500-S-3
FILE NAME: D876U37-sh1t+AS-500.dgn



USER NAME	= ddrescher	DESIGNED	- AP	REVISED	-
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PLOT DATE	= 3/14/2025	DATE	- 3/14/2025	REVISED	-

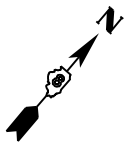
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
STRUCTURAL
PLAN

SCALE: SHEET 27 OF 45 SHEETS STA. TO STA.

500-S-3

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	27
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



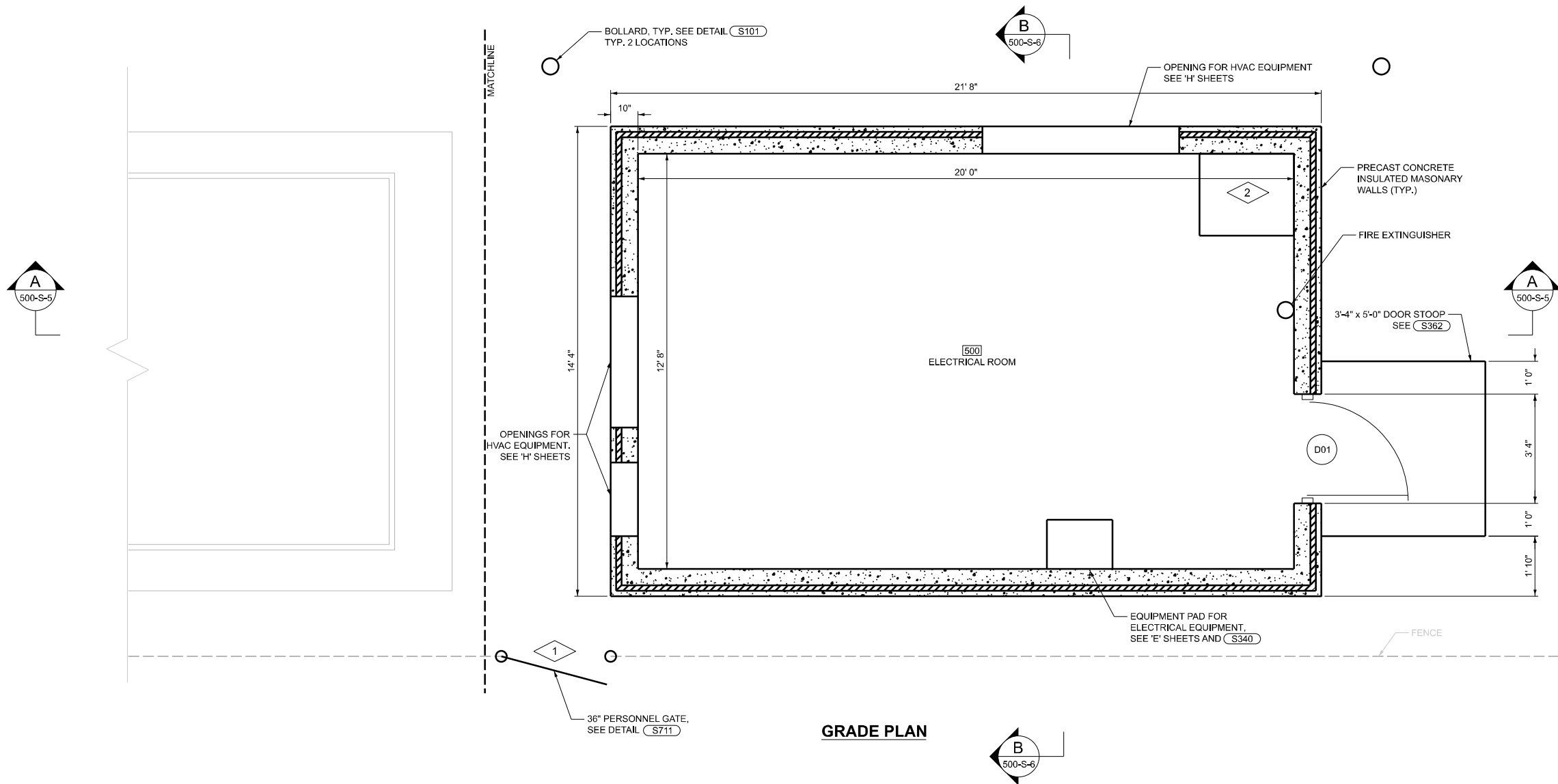
GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE

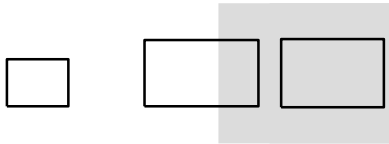
PLAN NOTES:



- LOCATE 36" PERSONNEL GATE IN BETWEEN EXISTING FENCE POSTS SUCH THAT NEW GATE POSTS DO NOT INTERFERE WITH EXISTING FENCE POSTS. CONNECT EXISTING CHAIN LINK FABRIC TO NEW GATE POSTS. TYPICAL EACH SIDE. REMOVE EXISTING ROCKS AND GRADE AREA BETWEEN NEW PERSONNEL GATE AND PARKING TO THE SOUTH WITH GRAVEL THAT MATCHES EXISTING GRAVEL.
- PROVIDE METAL SHOP DESK. THE DESK SHALL HAVE AN ADJUSTABLE WORKING SURFACE HEIGHT OF 36 TO 42 INCH AND SHALL BE APPROXIMATELY 34.5 INCHES WIDE BY 30 INCHES DEEP. THE UNIT SHALL HAVE A REAR TOP SHELF RISER, A 3.5 INCH HIGH DRAWER ON NYLON ROLLERS AND A LARGE STORAGE COMPARTMENT WITH LOCKING DOOR AND AN ADJUSTABLE SHELF. THE UNIT SHALL HAVE 14 GA. CORNER POSTS AND A MINIMUM 20 GA. TOP AND SHALL HAVE A GRAY ENAMEL PAINTED FINISH. FINAL LOCATION SHALL BE APPROVED BY THE OWNER IN THE FIELD.



GRADE PLAN

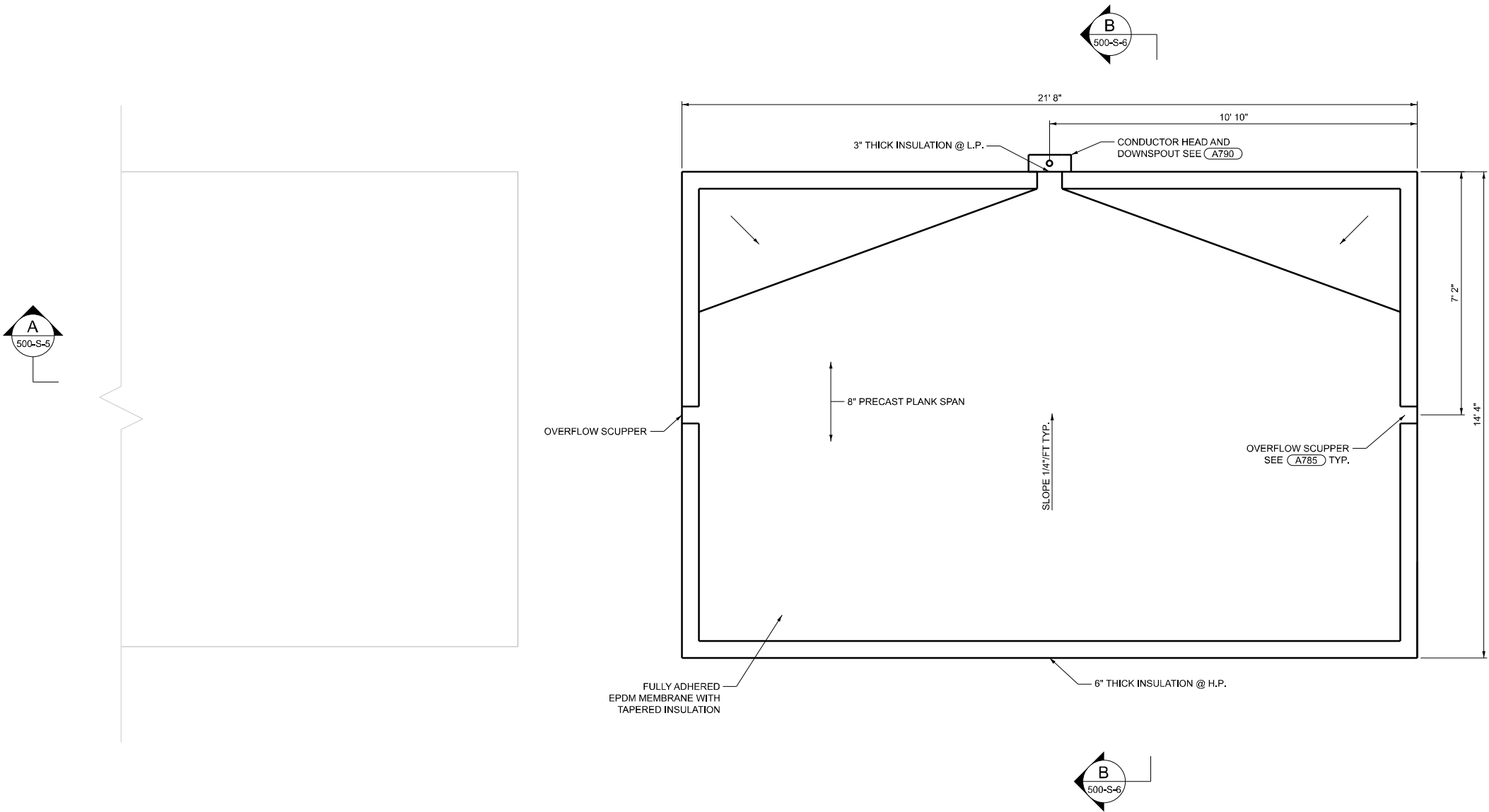
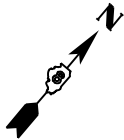


KEY PLAN

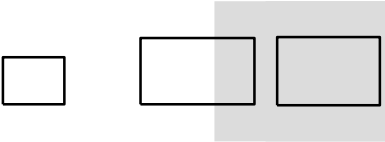
SCALE: 0 1' 2'

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE



ROOF PLAN



KEY PLAN

SCALE: 0 1' 2'

500-S-4

MODEL: 500-S-4
FILE NAME: D876U37-sh1t-4S-500.dgn



USER NAME	= ddrescher	DESIGNED	- AP	REVISED	-
		DRAWN	- AP	REVISED	-
		CHECKED	- SR	REVISED	-
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

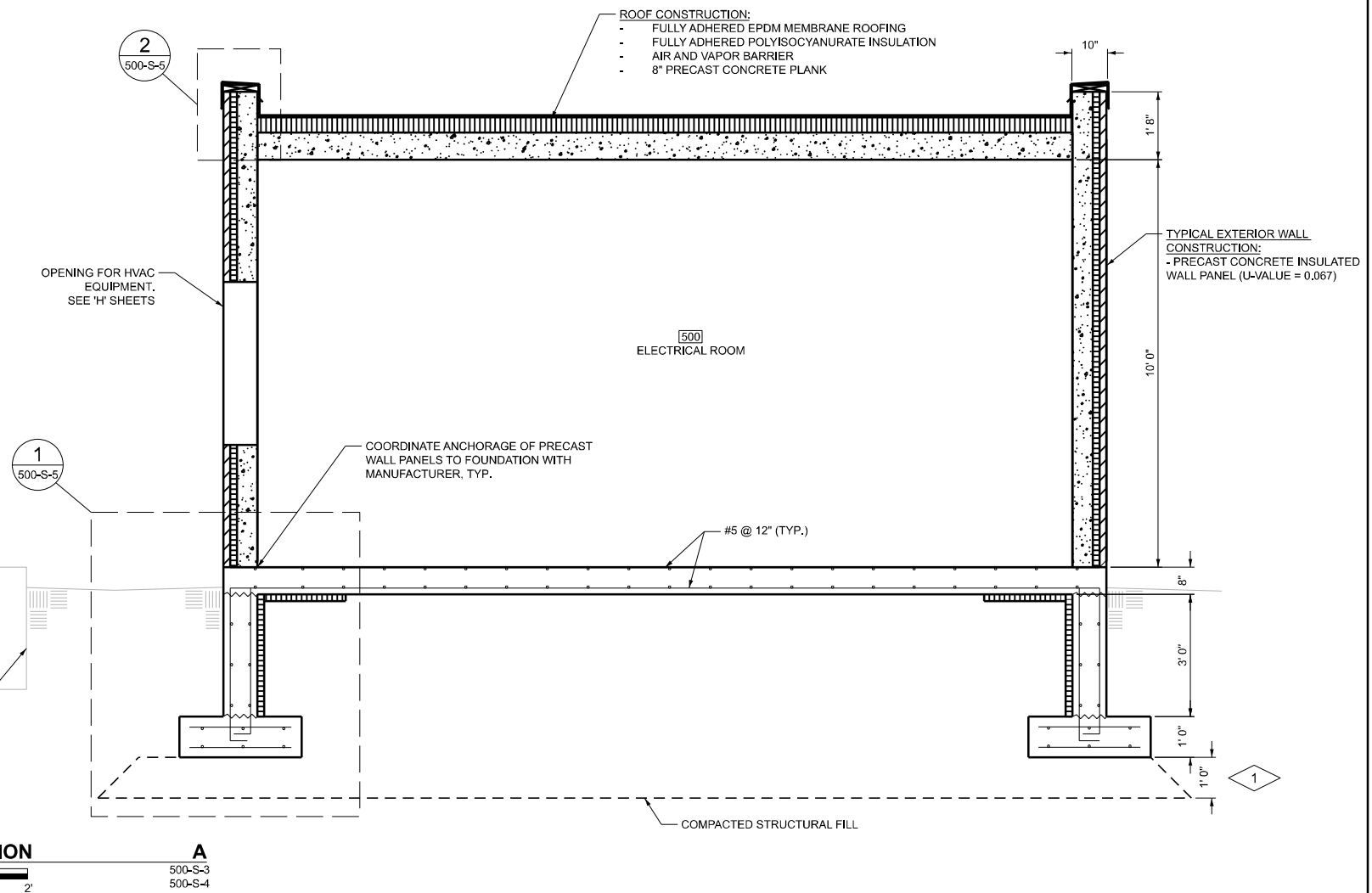
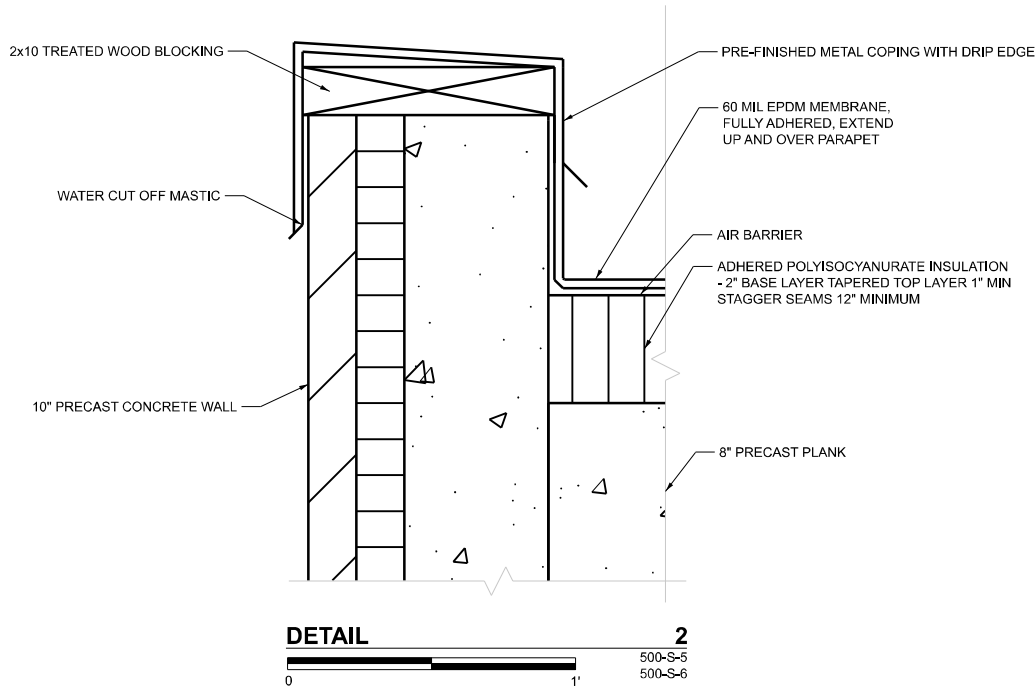
9TH STREET PUMP STATION
STRUCTURAL
PLAN

SCALE: SHEET 28 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	28
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS
DIMENSIONS, AND ELEVATIONS PRIOR TO
CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE
ENVIRONMENT/HAZARDOUS RATING SCHEDULE
REGARDING ENVIRONMENTAL CONDITIONS
ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE
MATERIALS OF CONSTRUCTION TO BE USED WITHIN
EACH SPACE

1. OVEREXCAVATE MATERIAL BELOW STRUCTURE AND REPLACE WITH COMPACTED STRUCTURAL FILL WITHIN THE INFLUENCE ZONE. MINIMUM DEPTH OF OVEREXCAVATION BELOW STRUCTURE AS NOTED. ACTUAL LIMITS OF OVEREXCAVATION SHALL BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION.



A
500-S-3
500-S-4

SCALE: AS NOTED

	USER NAME = ddrescher	DESIGNED - AP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	9TH STREET PUMP STATION STRUCTURAL SECTION AND DETAILS					F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AP	REVISED -							VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	29
		CHECKED - SR	REVISED -		CONTRACT NO. 76U37									
	PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -											
					SCALE:	SHEET 29 OF 45 SHEETS	STA.	TO STA.						

MODEL: 500-S-5
FILE NAME: D876U37-sht-AS-500.dgn



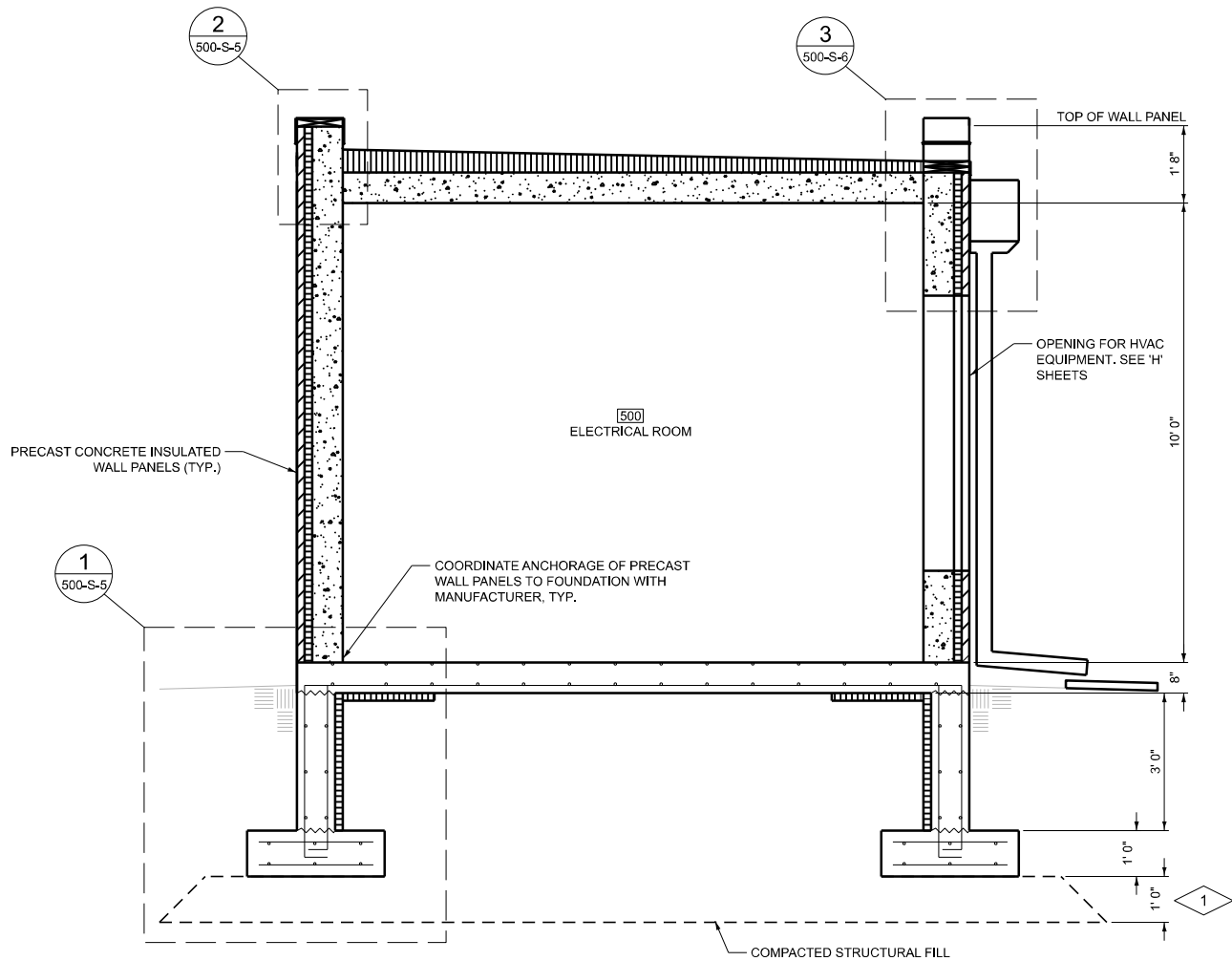
GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE

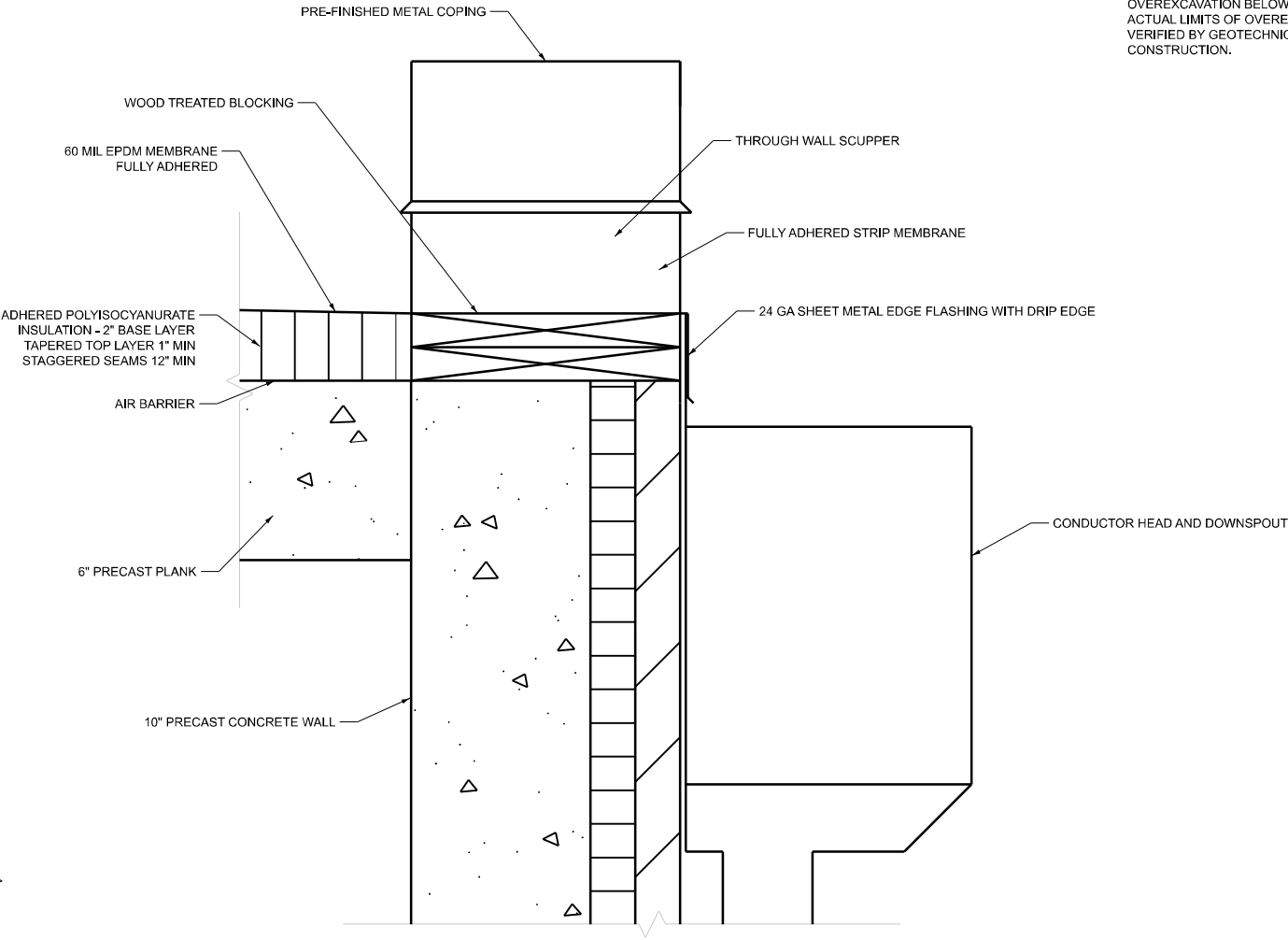
PLAN NOTES:



1. OVEREXCAVATE MATERIAL BELOW STRUCTURE AND REPLACE WITH COMPACTED STRUCTURAL FILL WITHIN THE INFLUENCE ZONE. MINIMUM DEPTH OF OVEREXCAVATION BELOW STRUCTURE AS NOTED. ACTUAL LIMITS OF OVEREXCAVATION SHALL BE FIELD VERIFIED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION.



SECTION B
500-S-3
500-S-4
0 1' 2'



DETAIL 3
500-S-5
500-S-6
0 1'

MODEL: 500-S-6
FILE NAME: D876U37-sh11-4S-500.dgn



USER NAME = ddrescher	DESIGNED - AP	REVISED -
	DRAWN - AP	REVISED -
	CHECKED - SR	REVISED -
PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

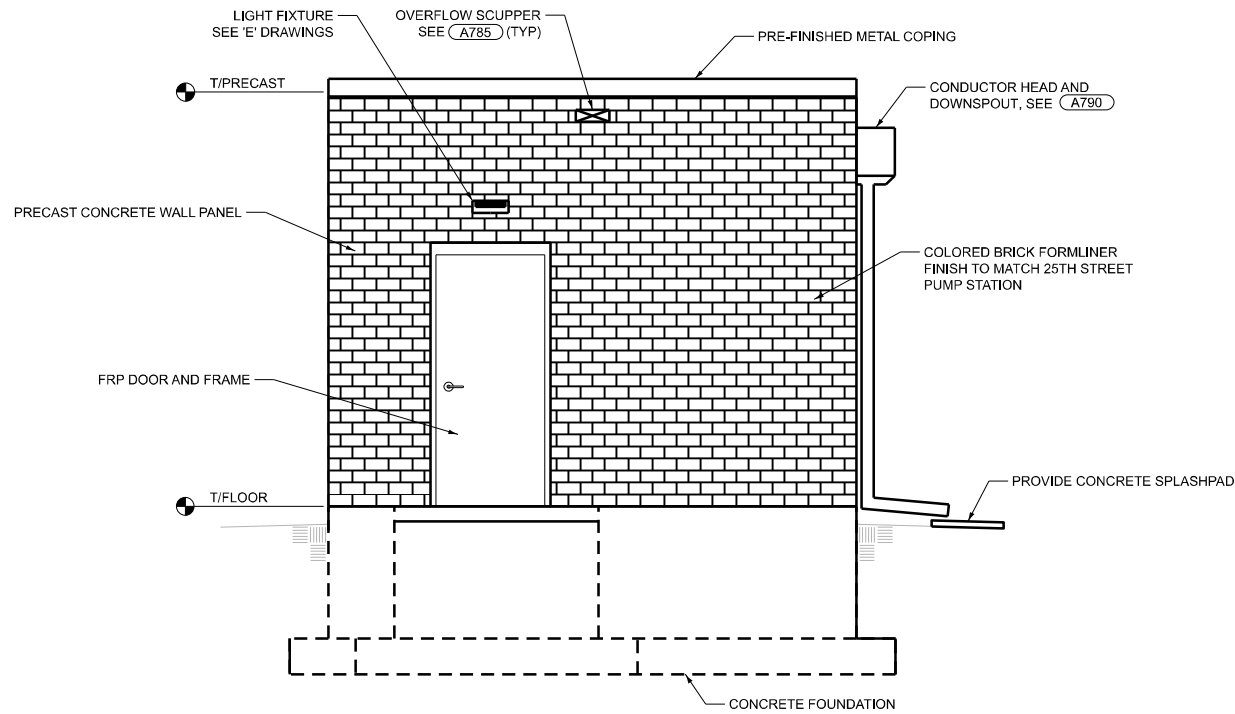
9TH STREET PUMP STATION
STRUCTURAL
SECTION AND DETAIL

SCALE: SHEET 30 OF 45 SHEETS STA. TO STA.

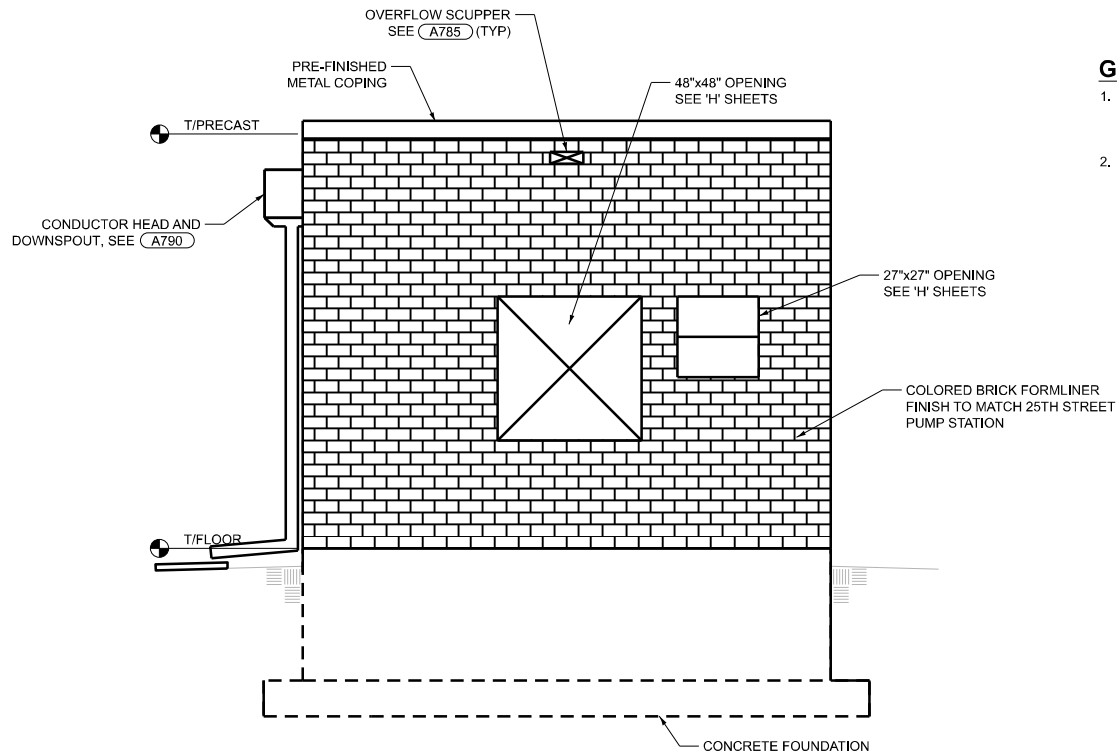
500-S-6

SCALE: AS NOTED

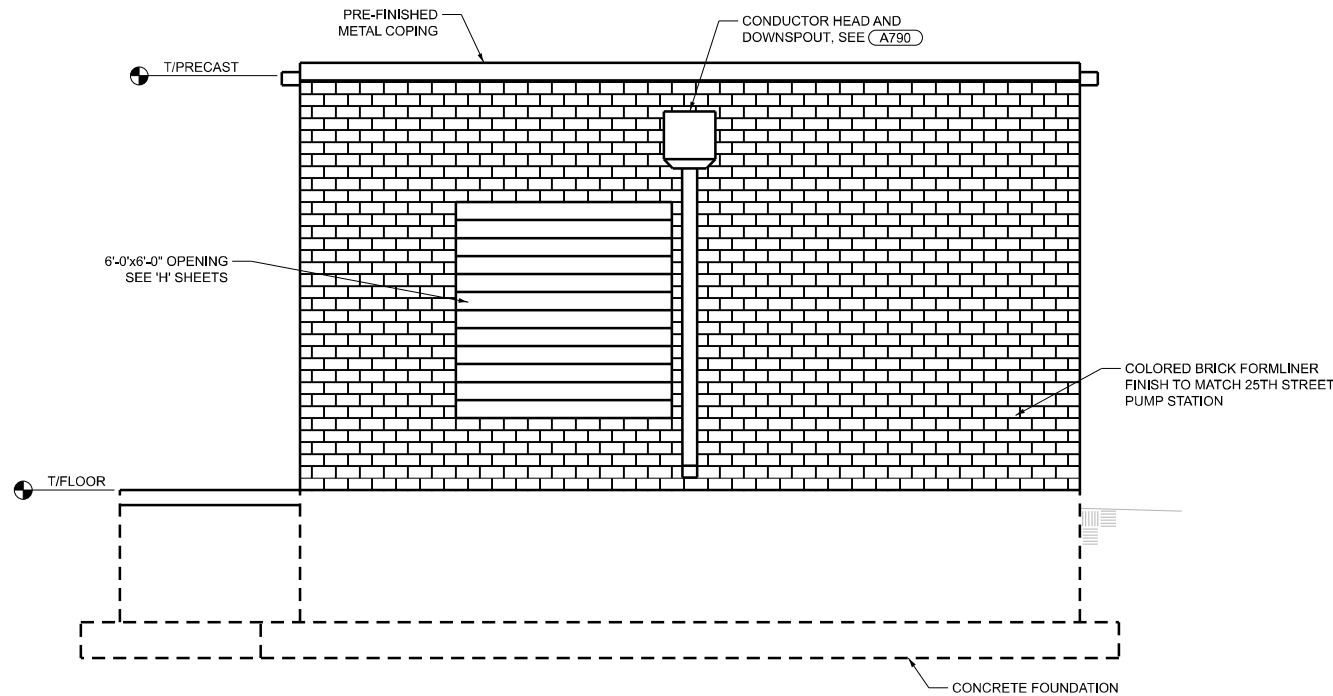
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	30
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



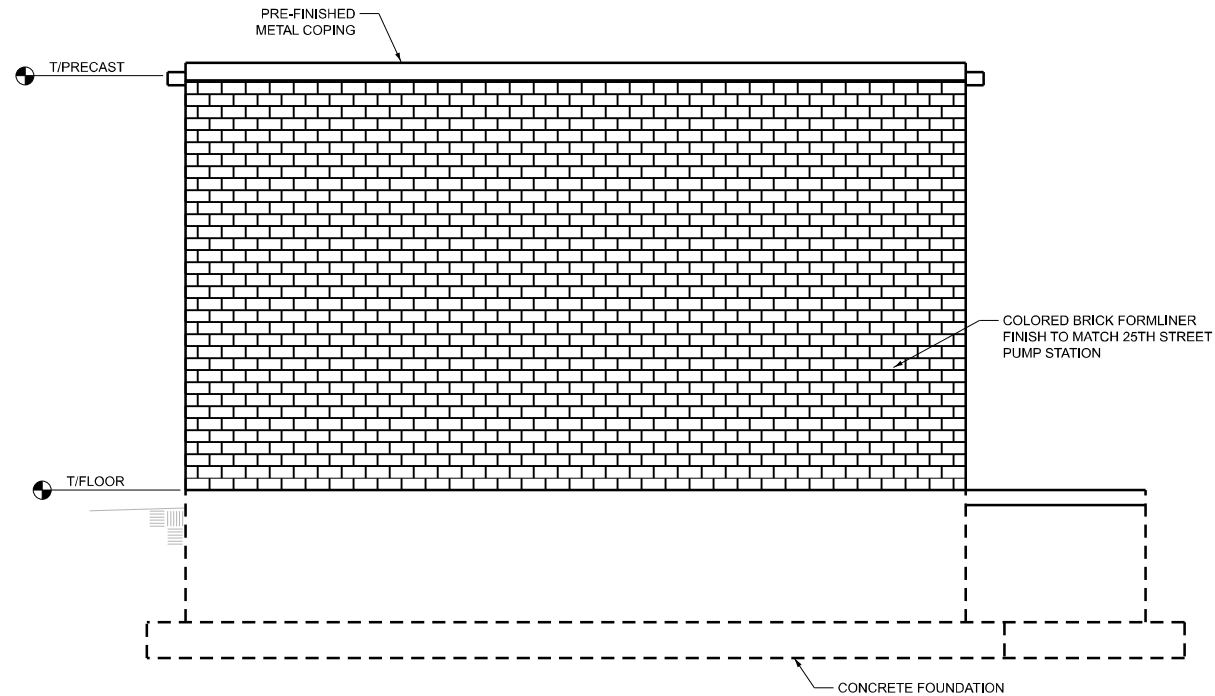
EAST ELEVATION



WEST ELEVATION



NORTH ELEVATION



SOUTH ELEVATION

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE

GRADE PLAN

SCALE: 0 3' 8'

500-S-7



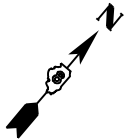
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	CHECKED - JP	REVISED -
PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
STRUCTURAL
ELEVATIONS

SCALE: SHEET 31 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	31
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



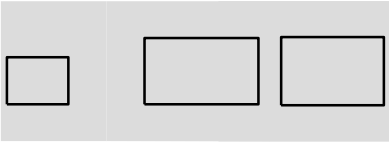
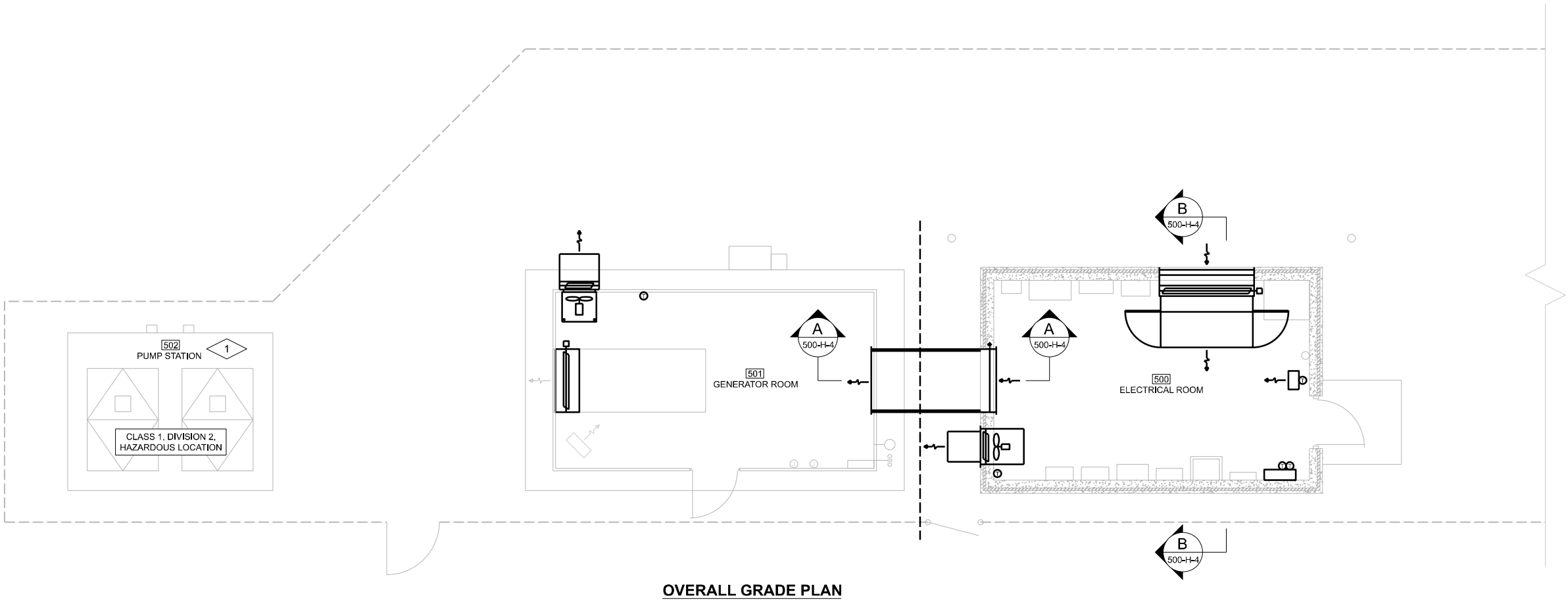
GENERAL NOTES:

- 1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- 2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE

PLAN NOTES:



- 1. CONTRACTOR SHALL CLEAN EXISTING PUMP STATION SUMP / WET WELL. SEE CLEANING AND WASTE MANAGEMENT SPECIAL PROVISION.



KEY PLAN

SCALE: 0 1' 4'

500-H-1

MODEL: 500-H-1
FILE NAME: D876U37-sh-H-500.dgn



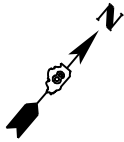
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		CHECKED	- JP	REVISED	-
PLOT DATE	= 3/11/2025	DATE	- 3/11/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
HVAC
PLAN

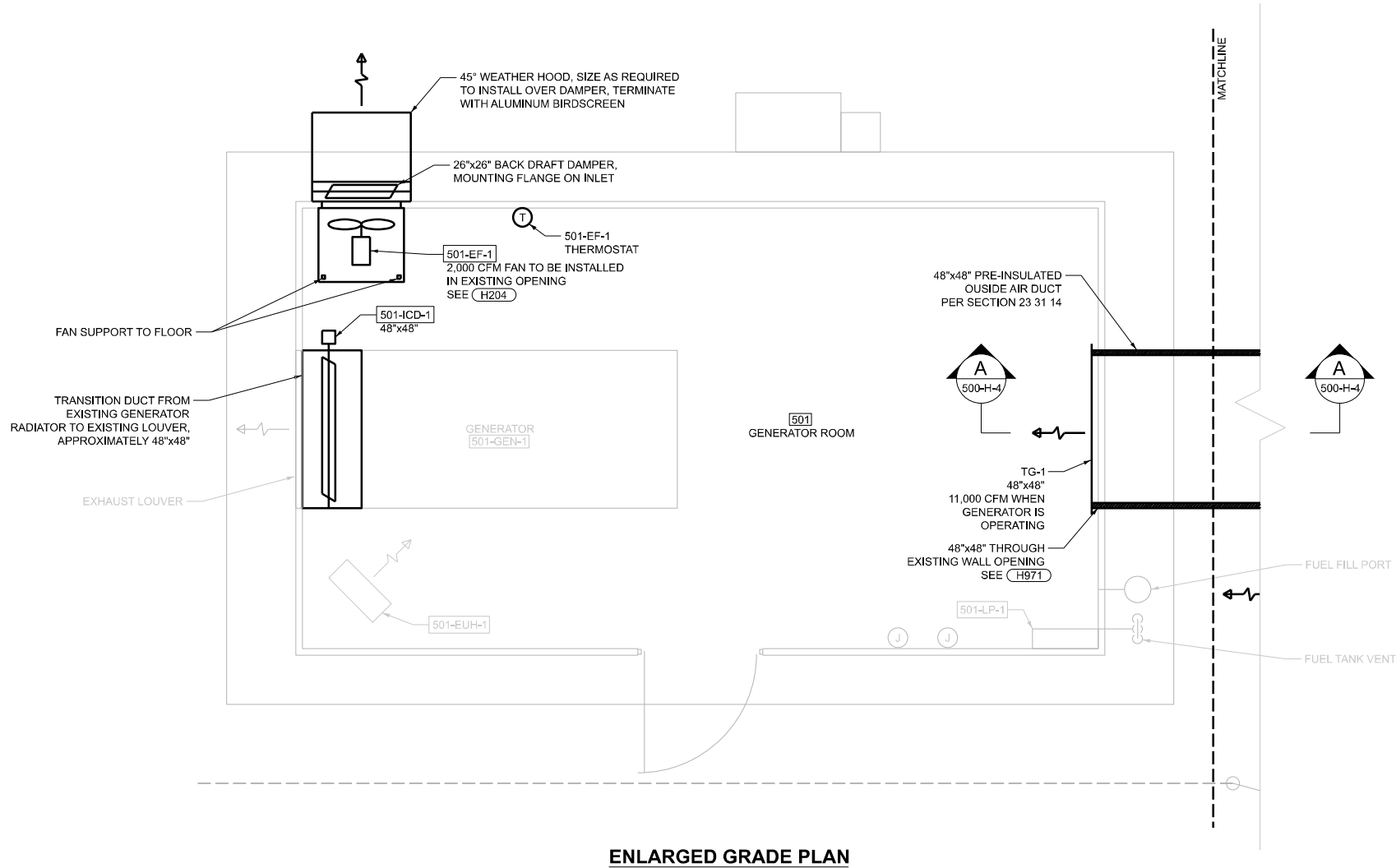
SCALE: SHEET 32 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	32
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE



KEY PLAN

SCALE: 0 1' 2'

500-H-2

MODEL: 500-H-2
FILE NAME: D876U37-sh1-H-500.dgn



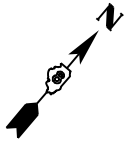
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PLOT DATE	= 3/11/2025	DATE	= 3/11/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
HVAC
PLAN

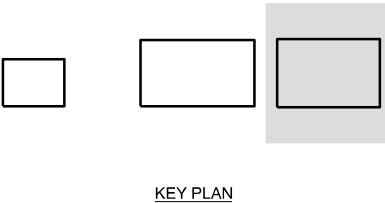
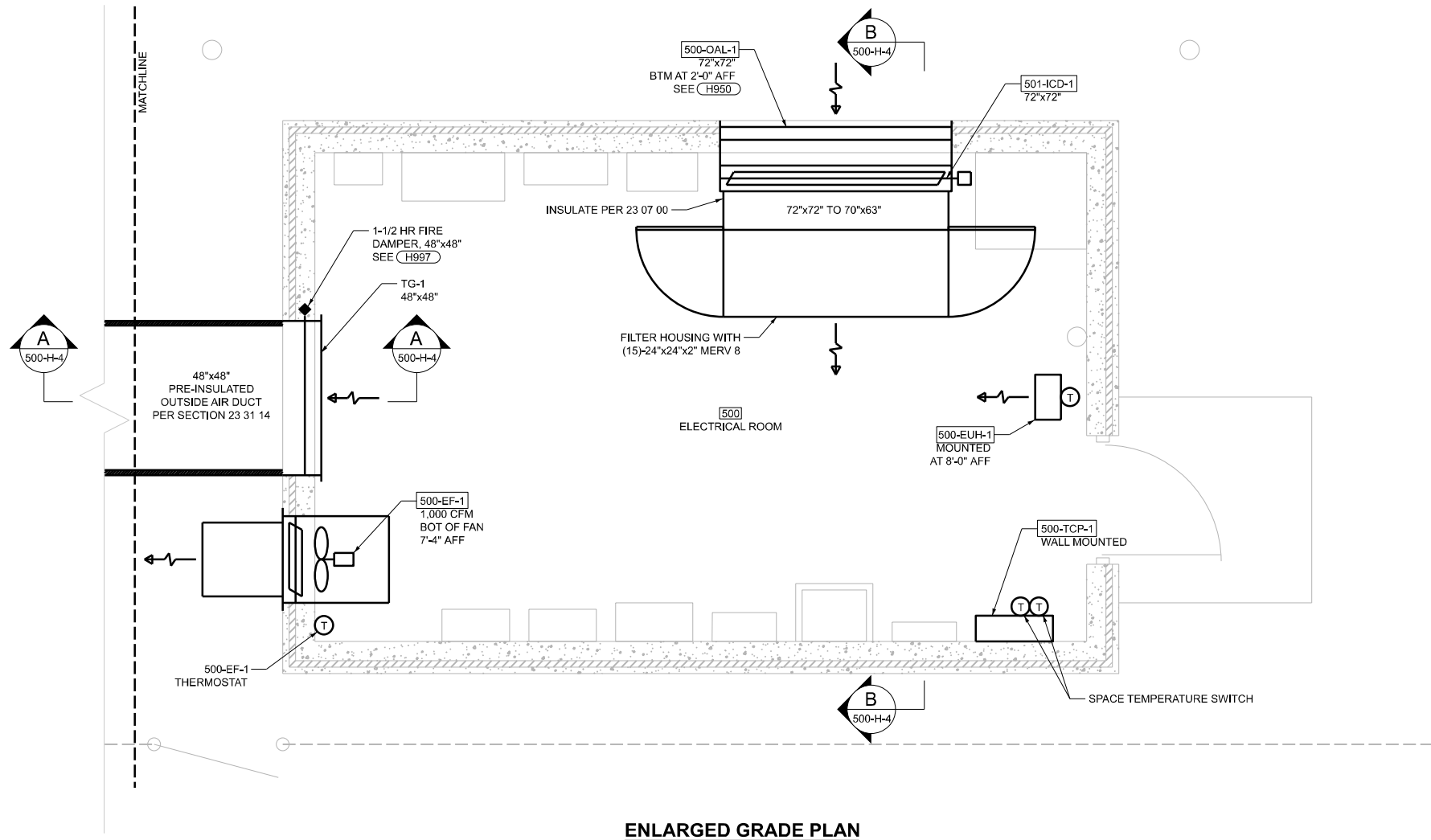
SCALE: SHEET 33 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	33
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE



SCALE: 0 1' 2'

500-H-3

MODEL: 500-H-3
FILE NAME: D876U37-sh1-H-500.dgn



USER NAME = ddrescher	DESIGNED - PL	REVISED -
	DRAWN - PL	REVISED -
	CHECKED - JP	REVISED -
PLOT DATE = 3/11/2025	DATE - 3/11/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

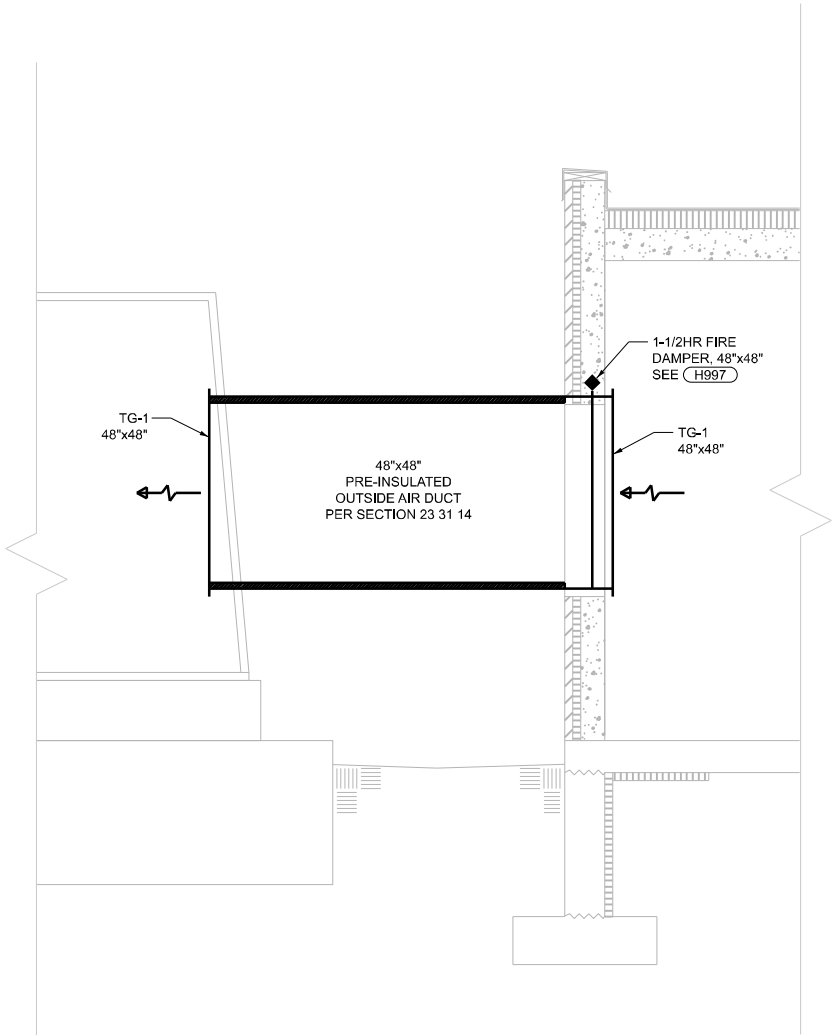
9TH STREET PUMP STATION
HVAC
PLAN

SCALE: SHEET 34 OF 45 SHEETS STA. TO STA.

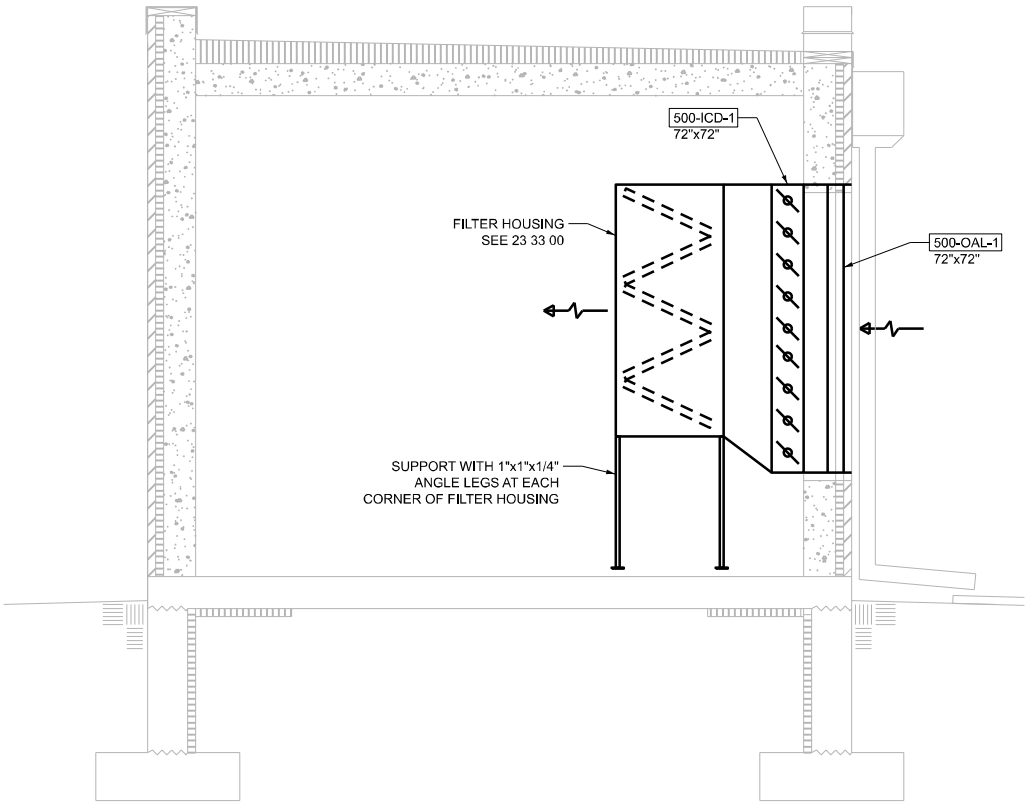
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	34
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE



SECTION A
500-H-1
500-H-2
500-H-3



SECTION B
500-H-1
500-H-3

SCALE: 0 1' 2'

MODEL: 500-H-4
FILE NAME: D876U37-sh1-H-500.dgn



USER NAME	= ddrescher	DESIGNED	- PL	REVISED	-
		DRAWN	- PL	REVISED	-
		CHECKED	- JP	REVISED	-
PLOT DATE	= 3/11/2025	DATE	- 3/11/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

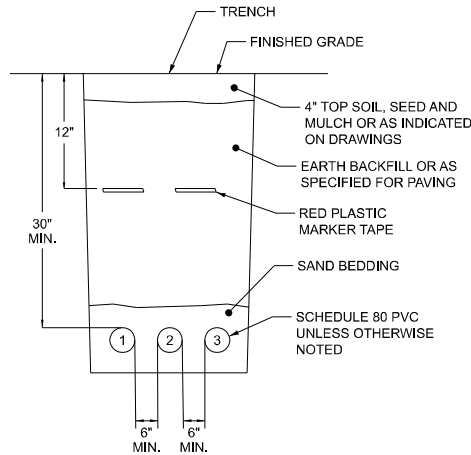
9TH STREET PUMP STATION
HVAC
SECTIONS

SCALE: SHEET 35 OF 45 SHEETS STA. TO STA.

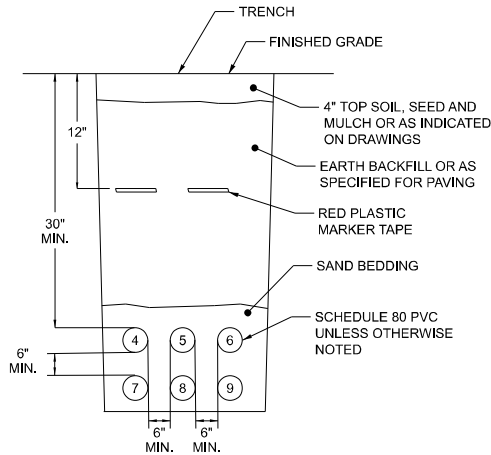
500-H-4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	35
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

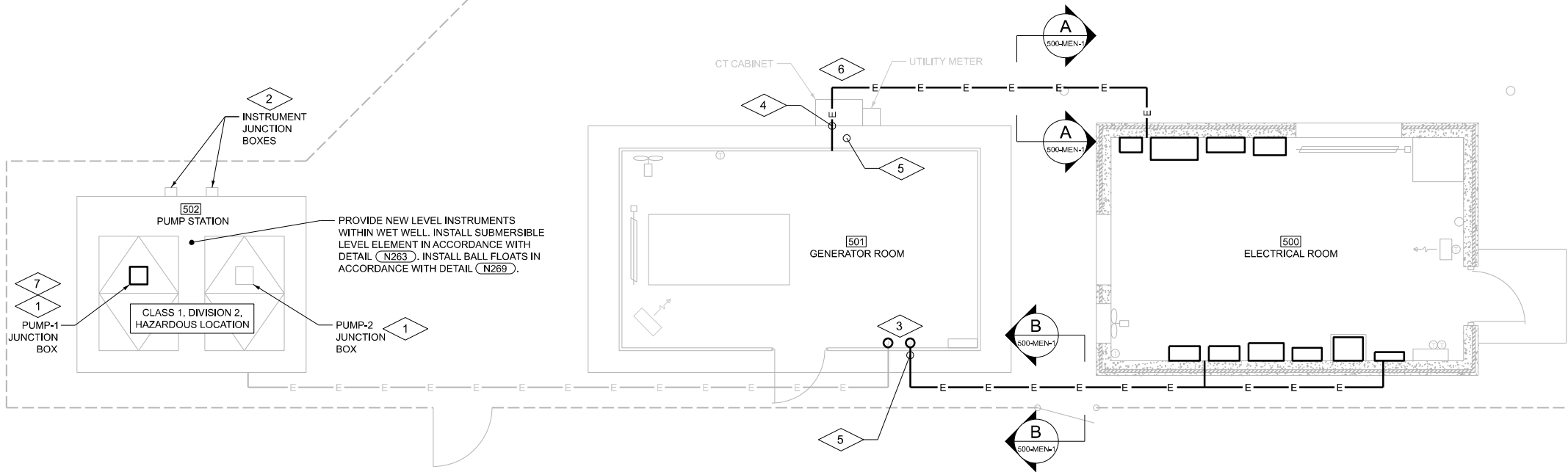
DUCTBANK SCHEDULE					
NUMBER	SIZE	FROM	TO	CONTENTS	REMARKS
1	3-1/2"	UTILITY CT CABINET	500-MCB-1	POWER	480V
2	2"	501-GEN-1	500-ATS-1	POWER	480V
3	2"	STRUCTURE 501	MONITOR PANEL	DISCRETE CONTROL	SEE DRAWING 500-EN-2 PLAN NOTES
4	1"	500-LP-1	501-LP-1	POWER	240V
5	1"	PUMP #1 STARTER PANEL	JBX TO PUMPS	POWER	480V
6	1"	PUMP #2 STARTER PANEL	JBX TO PUMPS	POWER	480V
7	3/4"	500-DP-1	501-EUH-1	POWER	480V
8	1"	LEVEL CONTROL PANEL	JBX TO PUMPS	ANALOG CONTROL	SEE DRAWING 500-MEN-1 PLAN NOTES
9	1"	LEVEL CONTROL PANEL	JBX TO PUMPS	DISCRETE CONTROL	SEE DRAWING 500-MEN-1 PLAN NOTES



CONDUIT SECTION A
NTS 500-MEN-1



CONDUIT SECTION B
NTS 500-MEN-1



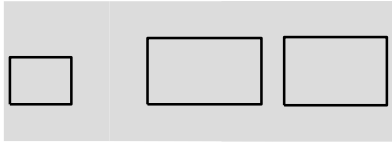
OVERALL GRADE PLAN

GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.
- SEE SUMMARY OF WORK SPECIAL PROVISION FOR PROJECT SEQUENCES AND CONSTRAINTS.
- CONDUIT ELBOWS IN UNDERGROUND DUCT BANKS SHALL BE PVC COATED GRS OR FIBERGLASS CONDUIT.
- CONDUIT STUB-UPS SHALL BE PVC COATED GRS CONDUIT.
- CONTRACTOR SHALL VERIFY CONDUIT DUCT BANK LAYOUTS. CONTRACTOR SHALL MODIFY CONDUIT LOCATIONS IN DUCT BANK TO SUIT FIELD CONDITIONS.

PLAN NOTES:

- PROVIDE QUANTITY (4) #14 XHHW CONDUCTORS FROM EACH PUMP JUNCTION BOX TO THE RESPECTIVE PUMP MOTOR STARTER FOR OVERTEMP AND SEAL FAIL SENSORS.
- PROVIDE QUANTITY (1) #16 SHIELDED TWISTED PAIR FROM THE SUBMERSIBLE LEVEL JUNCTION BOX AND QUANTITY (4) #14 XHHW CONDUCTORS FROM THE BALL FLOAT JUNCTION BOX TO THE 9TH STREET LIFT STATION LEVEL CONTROL PANEL.
- PROVIDE JUNCTION BOXES WITH TERMINAL STRIPS TO INTERCEPT PUMP CONDUCTORS AND CONTROLS. PROVIDE SEPARATE JUNCTION BOX FOR POWER AND CONTROL CONDUCTORS. PROVIDE A STAINLESS STEEL BARRIER WITHIN JUNCTION BOX FOR ANALOG AND DISCRETE CONTROL CONDUCTORS.
- USE EXISTING WALL PENETRATION FOR NEW CONDUIT ROUTING FROM 500-ATS-1 TO 501-GEN-1. ATTACH TO EXISTING COUPLING.
- PENETRATE EXISTING GENERATOR BUILDING WALL FOR BURIED CONDUIT AND CONDUCTORS FROM ELECTRICAL BUILDING ACCORDING TO DUCTBANK SCHEDULE. SEE DETAIL (E017).
- APPROXIMATE LOCATION OF EXISTING AMEREN OVERHEAD POLE: FIELD VERIFY EXACT LOCATION OF ELECTRIC SERVICE FROM OVERHEAD POLE TO UTILITY METER.
- NEW PUMP SHALL BE FLYGT MODEL 3202.LT3.618, WITH CAPACITY OF 3,000 GPM AT 26 TDH. POWER FROM EXISTING FEED. EXISTING DISCHARGE PIPING TO REMAIN AND BE RE-USED.



KEY PLAN

SCALE: 0 1' 4'

500-MEN-1



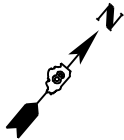
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		DRAWN	- BF/JG	REVISED	-
		CHECKED	- JB/AB	REVISED	-
PLOT DATE	= 3/12/2025	DATE	- 3/12/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
ELECTRICAL / INSTRUMENTATION & CONTROL
PLAN

SCALE: SHEET 36 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	36
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

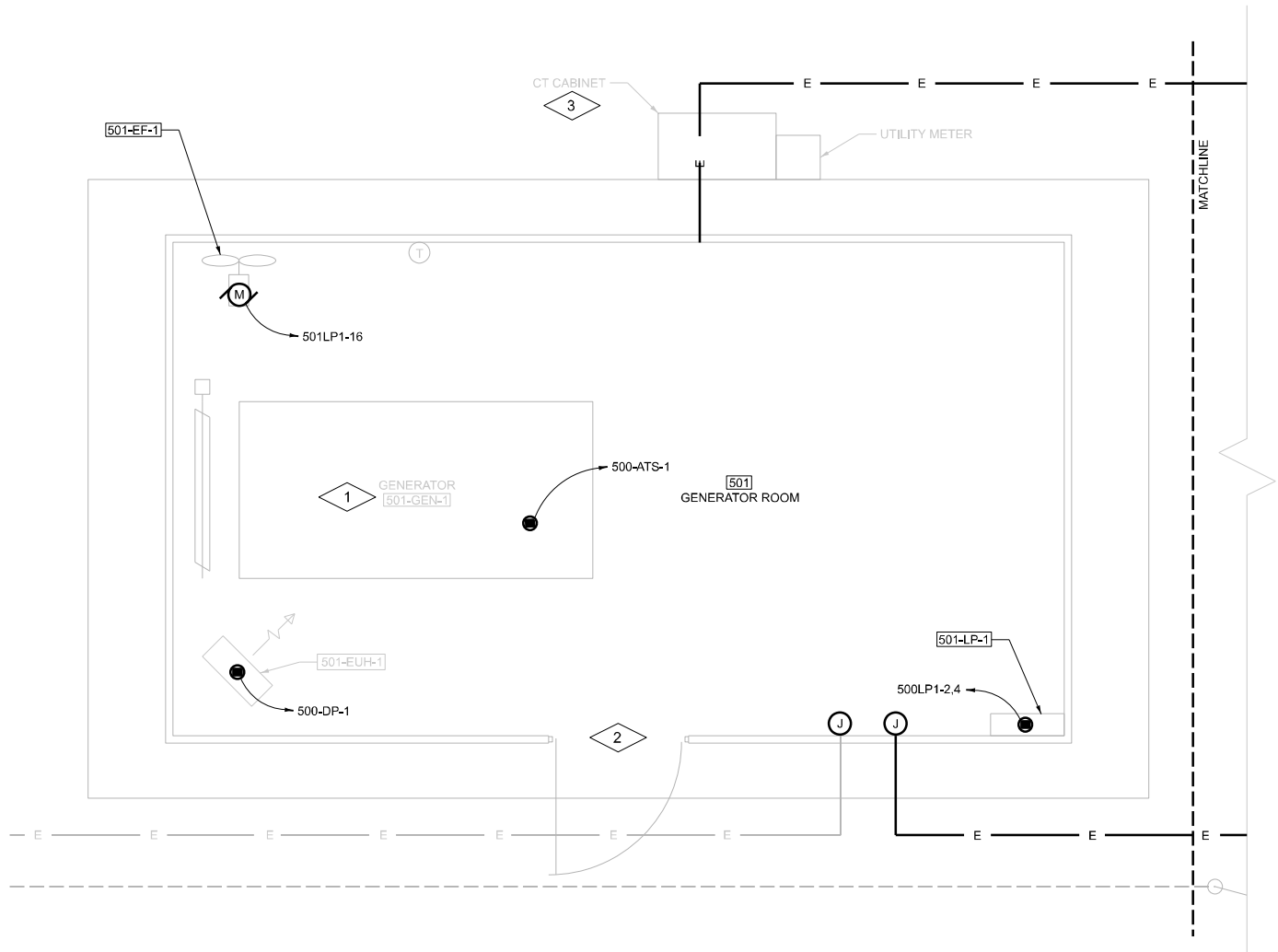


GENERAL NOTES:

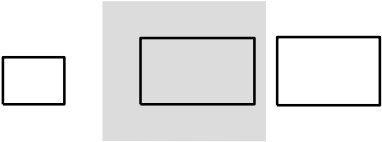
1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:

1. PROVIDE QUANTITY (2) #14 XHHW CONDUCTORS FROM THE GENERATOR PANEL TO THE MONITOR PANEL.
2. PROVIDE QUANTITY (2) #14 XHHW CONDUCTORS FROM THE DOOR INTRUSION SWITCH TO THE MONITOR PANEL.
3. PROVIDE QUANTITY (4) #14 XHHW CONDUCTORS FROM THE METER CABINET TO THE MONITOR PANEL.



ENLARGED GRADE PLAN



KEY PLAN

SCALE: 0 1' 2'

500-EN-2

MODEL: 500-EN-2
FILE NAME: D876U37-sh1t-E-500.dgn



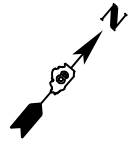
USER NAME = ddrescher	DESIGNED - BF/JG	REVISED -
	DRAWN - BF/JG	REVISED -
	CHECKED - JB/AB	REVISED -
PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
ELECTRICAL / INSTRUMENTATION & CONTROL
PLAN

SCALE: SHEET 37 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	37
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



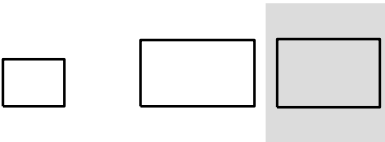
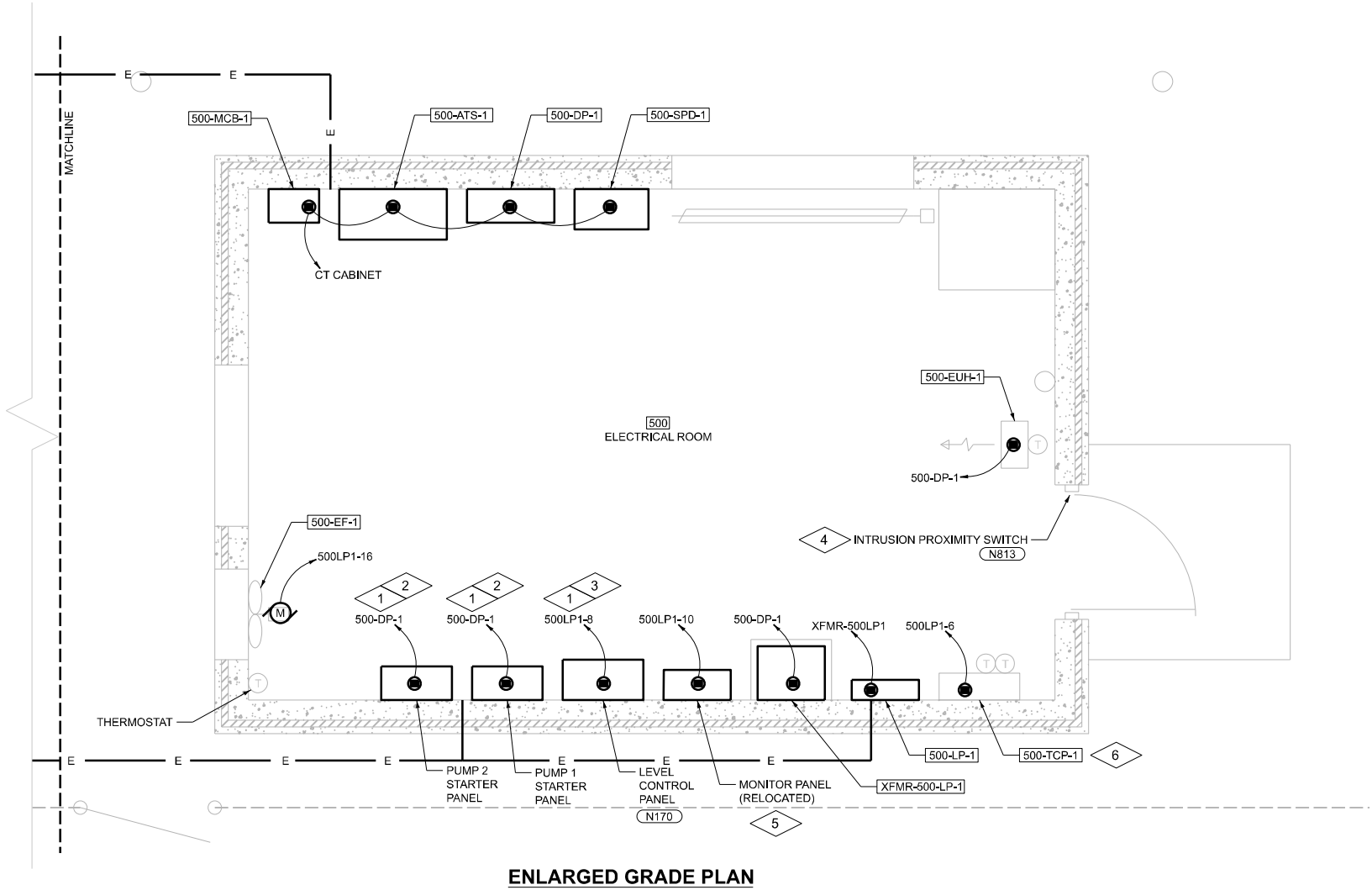
GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
2. REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.
3. INSTALL SALVAGED ELECTRICAL EQUIPMENT FROM GENERATOR BUILDING IN THE NEW BUILDING IN APPROPRIATE LOCATIONS SHOWN ON THIS DRAWING.

PLAN NOTES:



1. PROVIDE NEW PUMP STARTER PANELS AND LEVEL CONTROL PANEL. DO NOT RE-USE OLD, WITH THE EXCEPTION OF THE INDQUIP MOTOR PROTECTION RELAYS WHICH WILL BE SALVAGED AND REINSTALLED IN THE NEW MOTOR STARTER PANELS.
2. PROVIDE QUANTITY (12) #14 THHN/THWN CONDUCTORS FROM EACH PUMP STARTER PANEL TO THE LEVEL CONTROL PANEL.
3. PROVIDE QUANTITY (8) #14 THHN/THWN CONDUCTORS FROM THE LEVEL CONTROL PANEL TO THE MONITOR PANEL.
4. PROVIDE QUANTITY (2) #14 THHN/THWN CONDUCTORS FROM THE INTRUSION PROXIMITY SWITCH TO THE MONITOR PANEL.
5. RE-INSTALL SALVAGED MONITOR PANEL. PROVIDE MISSION COMMUNICATIONS MYDRO EXPANSION CARD FOR 8 ADDITIONAL DISCRETE INPUT CHANNELS. CONFIGURE ONE CHANNEL FOR ELECTRICAL ROOM INTRUSION.
6. PROVIDE QUANTITY (4) #14 THHN/THWN CONDUCTORS FROM THE TEMPERATURE CONTROL PANEL TO THE MONITOR PANEL.



KEY PLAN

SCALE: 0 1' 2'

500-EN-3

MODEL: 500-EN-3
FILE NAME: D876U37-sh1-E-500.dgn



USER NAME = ddrescher	DESIGNED -	BF/JG	REVISED -
	DRAWN -	BF/JG	REVISED -
	CHECKED -	JB/AB	REVISED -
	DATE -	3/14/2025	REVISED -

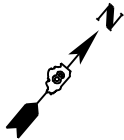
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
ELECTRICAL / INSTRUMENTATION & CONTROL
PLAN

SCALE: SHEET 38 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	38
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

FIXTURE SCHEDULE								
TYPE	DESCRIPTION	LED PACKAGE/ LUMEN OUTPUT	DISTRIBUTION	VOLTAGE	COLOR TEMPERATURE	MOUNTING	LOCATION LISTING	REMARKS
A	HOLOPHANE EMS L24 MAFL MD 80CRI 40K	4000LM	MEDIUM	MVOLT	4000K	CEILING	DRY LOCATION	ENCLOSED AND GASKETED, ACRYLIC FROSTED LENS, 24"
B	HOLOPHANE HLWPC2 P10 WALLPACK FCO LED	3100LM	T3M	MVOLT	4000K	WALL	WET LOCATION	EXTERIOR WALL PACK LED, PHOTOCELL, BLACK, INTEGRAL EM BATTERY, MOUNT 1'-0" ABOVE DOOR



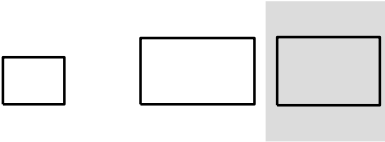
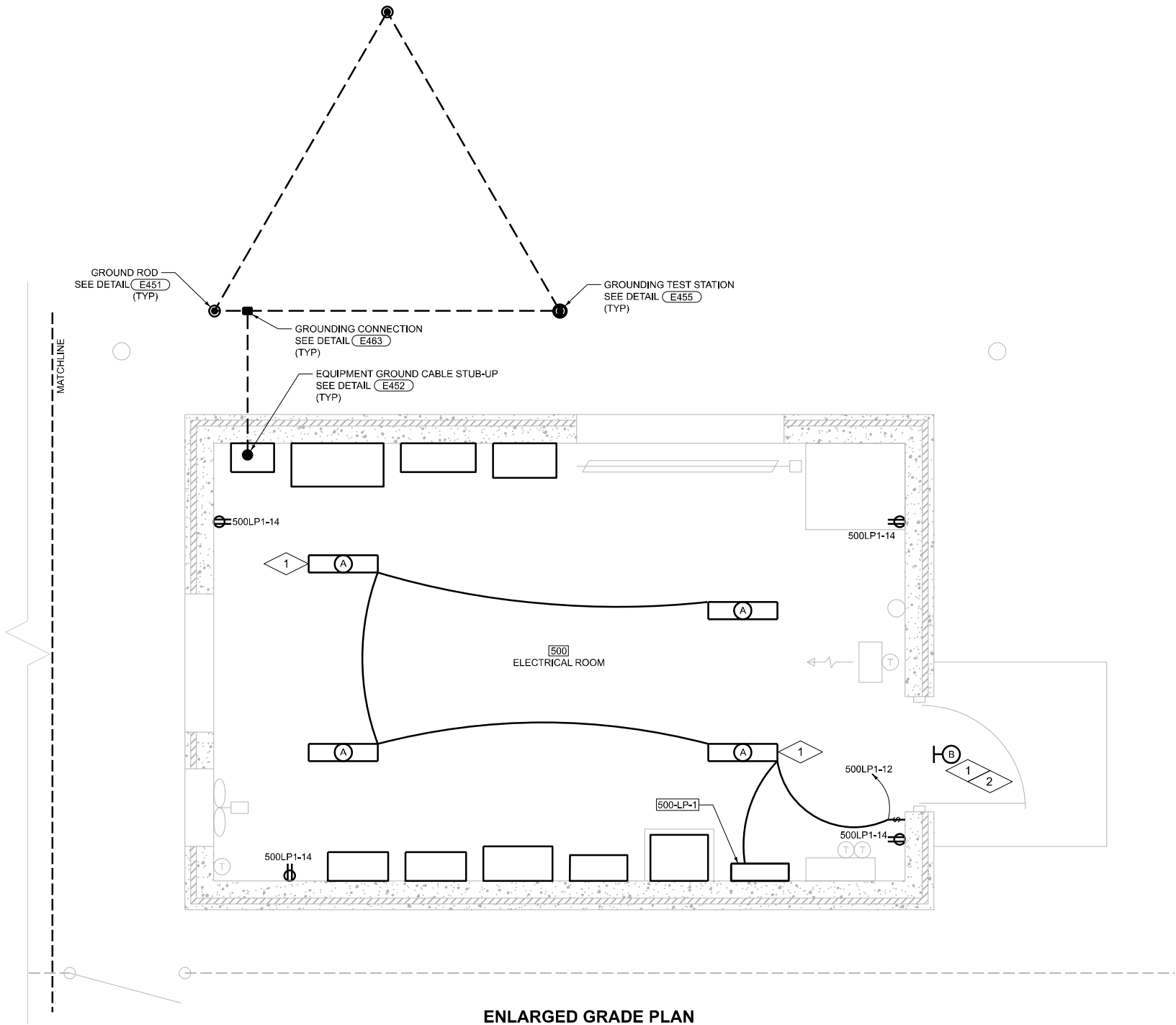
GENERAL NOTES:

- CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.
- REFER TO 001 SERIES OF DRAWINGS FOR THE SPACE ENVIRONMENT/HAZARDOUS RATING SCHEDULE REGARDING ENVIRONMENTAL CONDITIONS ANTICIPATED WITHIN EACH SPACE AND ALLOWABLE MATERIALS OF CONSTRUCTION TO BE USED WITHIN EACH SPACE.

PLAN NOTES:



- PROVIDE FIXTURE WITH INTEGRAL EMERGENCY BATTERY.
- MOUNT ACCORDING TO DRAWING 500-S-7.



KEY PLAN

SCALE: 0 1' 2'

500-E-4

MODEL: 500-E-4
FILE NAME: D876U37-shit-E-500.dgn



USER NAME = ddrescher	DESIGNED - BF	REVISED -
	DRAWN - BF	REVISED -
	CHECKED - JB	REVISED -
PLOT DATE = 3/14/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

9TH STREET PUMP STATION
LIGHTING, RECEPTACLE, AND GROUNDING
PLAN

SCALE: SHEET 39 OF 45 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	39
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

GENERAL STRUCTURAL NOTES

GENERAL

1. THE GENERAL STRUCTURAL NOTES AND STANDARD STRUCTURAL DETAILS APPLY TO THE ENTIRE PROJECT UNLESS SPECIFICALLY NOTED OTHERWISE.

DESIGN CRITERIA

1. DESIGN AND CONSTRUCT IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, 2009 EDITION.

2. SUPERIMPOSED DESIGN LOADS

- A. ROOF LIVE LOAD 3 TON
B. ROOF DEAD LOAD 2 TON
C. SNOW LOAD:
1. GROUND SNOW LOAD, Pg 20 PSF
2. FLAT ROOF SNOW LOAD, Pf 15.25 PSF + DRIFT
3. SNOW EXPOSURE FACTOR, Ce 1.0
4. SNOW LOAD IMPORTANCE FACTOR, I 1.1
5. THERMAL FACTOR, Ct 1.0
D. WIND LOAD:
1. BASIC WIND SPEED, V 114 MPH
2. IMPORTANCE FACTOR, I 1.0
3. WIND EXPOSURE C
4. INTERNAL PRESSURE COEFF, Gcpi +/- 0.18 PSI

3. SEISMIC DESIGN DATA:

- A. ZIP CODE 62201-1537
B. IMPORTANCE FACTOR, I 1.25
C. MAPPED SPECTRAL RESPONSE ACCELERATIONS
1. Ss 0.458 g
2. S1 0.161 g
D. SITE CLASS D
E. SPECTRAL RESPONSE COEFFICIENTS
1. Sds 0.438g
2. Sd1 0.245g
F. SEISMIC DESIGN CATEGORY D

FOUNDATIONS

1. CONTRACTOR TO CONFIRM SOIL CAPACITIES.
NET ALLOWABLE ASSUMED SOIL BEARING CAPACITIES: 2000 PSF
2. PLACE FOOTINGS ON NATURAL UNDISTURBED EARTH OR STRUCTURAL FILL.
3. PLACE FILL AGAINST FOUNDATION WALLS ENCLOSING INTERIOR SPACES AFTER CONSTRUCTION SUCH AS CROSS WALLS, BEAMS OR SLABS ARE IN PLACE TO BRACE WALL AND SUCH CONSTRUCTION HAS REACHED ITS DESIGN STRENGTH.
4. TO MINIMIZE LATERAL FORCES AGAINST THE STRUCTURE DUE TO WEDGING ACTION OF THE SOIL, BEGIN COMPACTION OF EACH LAYER AT THE STRUCTURE WALL.

REINFORCEMENT

1. REINFORCEMENT STEEL
A. DEFORMED BARS: ASTM A615 - GRADE 60
2. UNLESS NOTED OTHERWISE PROVIDE CLEAR COVER FOR REINFORCEMENT AS FOLLOWS:
A. CAST AGAINST:
1. EARTH: 3 INCHES
2. MUD SLAB: 2 INCHES
B. EXPOSED TO EARTH, WEATHER, OR WATER
1. SLABS
A. #5 BARS OR SMALLER: 1 1/2 INCHES
B. #6 THROUGH #11 BARS: 2 INCHES
2. WALLS, BEAMS, AND COLUMNS: 2 INCHES
C. NOT EXPOSED TO EARTH, WEATHER, OR WATER
1. SLABS AND WALLS
A. #3 THROUGH #7 BARS: 1 INCH
B. #8 THROUGH #11 BARS: 1 1/2 INCHES
2. BEAMS AND COLUMNS: 1 1/2 INCHES
3. PLACE DOWELS BEFORE PLACING CONCRETE.
4. DO NOT FIELD WELD OR FIELD BEND REINFORCING BARS.

CONCRETE

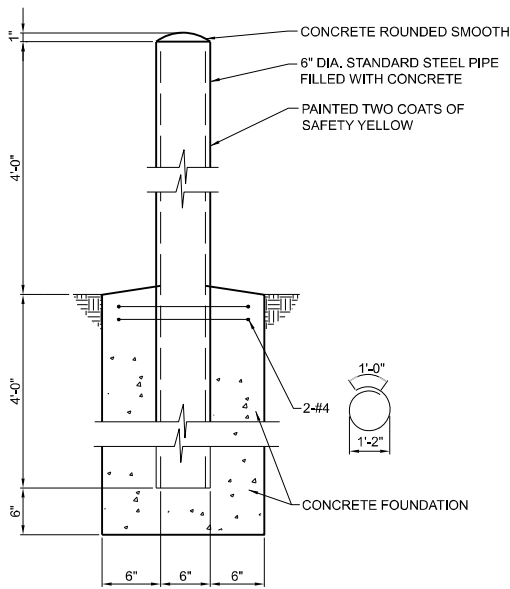
1. DESIGN STRENGTH
A. INTERIOR EQUIPMENT BASES, FENCE POST PIERS, CONCRETE FILLETS IN TANKS, AND WHERE SPECIFICALLY NOTED
CLASS B: F'C = 3000 PSI
B. ALL LOCATIONS, EXCEPT WHERE CLASS B SPECIFIED
CLASS A: F'C = 4500 PSI
C. CONCRETE TOPPING: F'C = 4000 PSI
D. STRUCTURAL PRECAST CONCRETE F'C = 4000 PSI
2. UNLESS NOTED OTHERWISE, CONSTRUCTION JOINTS SHOWN ARE OPTIONAL CONSTRUCTION JOINTS NOT SHOWN SHALL BE APPROVED BY ENGINEER.
3. BEFORE CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE CLEANED, LAITANCE REMOVED, AND SURFACE WETTED. REMOVE STANDING WATER.
4. CONSTRUCTION JOINTS SHALL HAVE ROUGHENED SURFACES. SURFACE SHALL HAVE AMPLITUDE OF 1/4 IN. MIN.
5. PROVIDE 3/4 IN. CHAMFER ON EXTERNAL CORNERS OF EXPOSED EDGES OF CONSTRUCTION JOINTS.
6. VERIFY EQUIPMENT PAD AND CURB LOCATIONS, DIMENSIONS, AND ELEVATIONS WITH EQUIPMENT MANUFACTURERS.

MISCELLANEOUS

1. VERIFY PERTINENT EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING CONSTRUCTION AND/OR FABRICATION.
2. DO NOT FIELD CUT PRESTRESSING STRANDS IN PRECAST PRESTRESSED CONCRETE MEMBERS WITHOUT WRITTEN APPROVAL OF FABRICATOR AND ENGINEER.
3. FOR ADDITIONAL OPENINGS, ANCHORS, AND EMBEDDED ITEMS SEE ARCHITECTURAL, PROCESS, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS.

REMOVALS

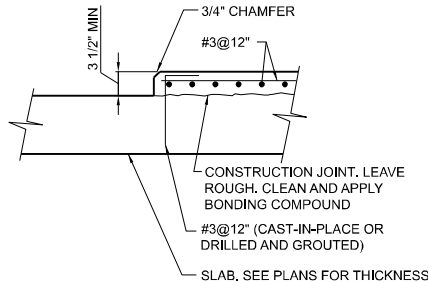
1. REMOVE ALL CONCRETE ANCHORS, ANCHOR BOLTS AND OTHER EMBEDMENTS A MINIMUM OF 1" BEYOND FINISHED SURFACE AND PATCH SURFACE WITH PATCHING MORTAR TO MATCH EXISTING.
2. REMOVE EXISTING CONCRETE PADS OF ANY EQUIPMENT BEING REMOVED. REMOVE CONCRETE AND REINFORCEMENT A MINIMUM OF 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE PAD WILL NOT COVER ROUGH SURFACE OF REMOVAL. PATCH BACK TO FINISHED SURFACE WITH PATCHING MORTAR.
3. SAWCUT AND REMOVE CONCRETE TO LIMITS NOTED. REMOVE CONCRETE AND REINFORCEMENT A MINIMUM 1" BEYOND FINISHED SURFACE AT ANY LOCATION WHERE NEW CONCRETE WILL NOT COVER ROUGH SURFACE OF REMOVAL. PATCH BACK TO FINISHED SURFACE WITH PATCHING MORTAR.



SECTION

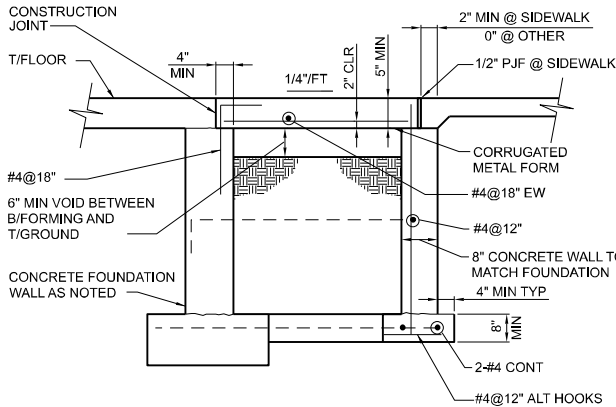
GUARD POST DETAIL S101

NTS



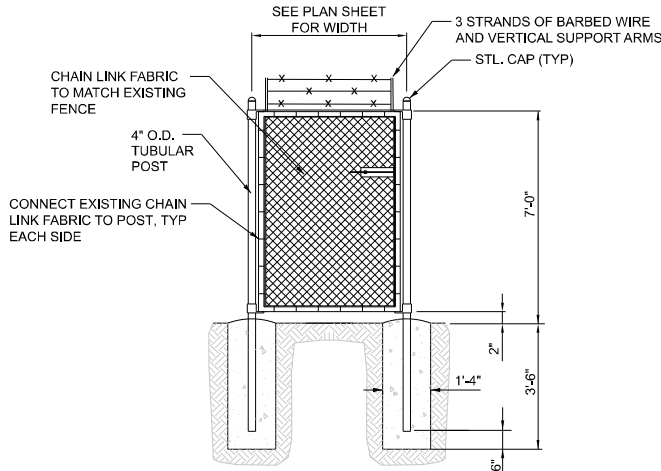
EQUIPMENT PAD DETAIL S340

NTS



DOOR STOOP DETAIL S362

NTS



PERSONNEL GATE WITH BARBED WIRE S711

NTS

MODEL: 999-S-1
FILE NAME: D876U37-sjt1-details.dgn



USER NAME = sbremer	DESIGNED - AP	REVISED -
	DRAWN - AP	REVISED -
	CHECKED - SR	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS
STRUCTURAL STANDARD DETAILS

SCALE: SHEET 41 OF 45 SHEETS STA. TO STA.

999-S-1

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	41
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				

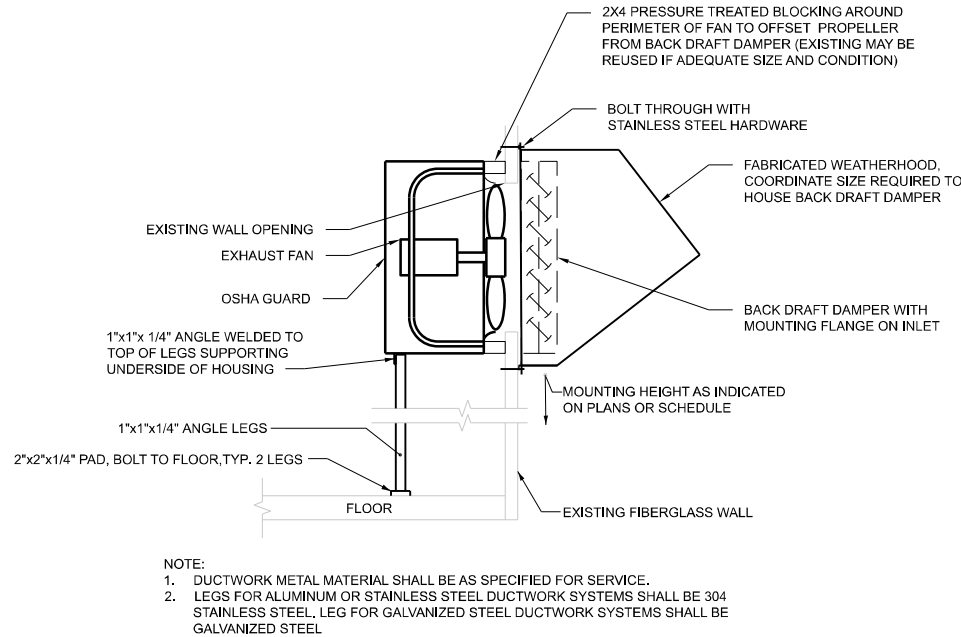
FAN SCHEDULE														SECTION 23 34 23
TAG NUMBER	MANUFACTURER	MODEL	TYPE	AIRFLOW DATA				FAN RPM	DRIVE	SONES	ELECTRICAL DATA			REMARKS
				AIRFLOW (CFM)	ESP (IN. WC)	TSP (IN. WC)	BHP				HP	VOLTS/Φ	RPM	
100-SF-1	GREENHECK	SQ-160-VG	CENTRI INLINE	1,600	0.30	0.39	0.19	803	DIRECT	6	3/4	120/1	1,140	1,2,3,6,7,8,9,10
100-EF-1	GREENHECK	AER-20-VG	AXIAL WALL	1,400	0.00	0.18	0.07	912	DIRECT	9.5	1/4	120/1	925	5,7,11,12
400-EF-1	GREENHECK	CUE-100-VG	CENTRI WALL UPBLAST	800	0.25	0.40	0.11	1,243	DIRECT	7	1/4	120/1	1,725	1,2,3,4,5,7
500-EF-1	GREENHECK	AER-20-VG	AXIAL WALL	1,000	0.25	0.38	0.19	1,404	DIRECT	15	1/2	120/1	1,750	2,3,5,7,11,12
501-EF-1	GREENHECK	AER-20-VG	AXIAL WALL	2,000	0.13	0.33	0.26	1,072	DIRECT	13	1/2	120/1	1,075	2,3,7,13,14

TSP SHALL INCLUDE ESP AND ALL LOSSES ASSOCIATED WITH SCHEDULED ACCESSORIES INCLUDING FILTERS, BACKDRAFT DAMPERS, AND WALL HOUSINGS.

- 1 ALUMINUM CONSTRUCTION.
- 2 STAINLESS STEEL FASTENERS.
- 3 NEMA 1 INTEGRAL DISCONNECT.
- 4 ALUMINUM BIRDSCREEN.
- 5 GRAVITY OPERATED DAMPER.
- 6 SLOPED FILTER BOX 2IN PLEATED.
- 7 ECM MOTOR WITH INTEGRAL SPEED CONTROL DIAL FOR BALANCING PURPOSES ONLY.
- 8 VIBRATION ISOLATORS.
- 9 INLINE AND SIDE OUTLET. SEE PLAN FOR ORIENTATION.
- 10 OUTLET GUARD(S).
- 11 WALL HOUSING FLUSH WITH EXTERIOR. INTERIOR MOTOR ACCESS. OSHA GUARD.
- 12 GALVANIZED 45° WEATHERHOOD WITH BIRDSCREEN.
- 13 COORDINATE SIZE TO MATCH EXISTING OPENING. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.
- 14 OSHA GUARD (NO WALL HOUSING).

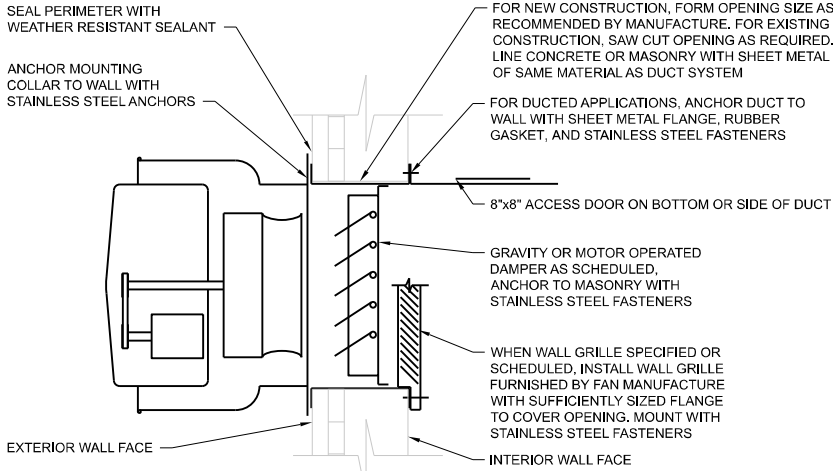
AIR INLET AND OUTLET SCHEDULE										SECTION 23 37 13	
TAG NUMBER	MANUFACTURER	MODEL	SERVICE	MAX. APD (IN W.C.)	MAX. NC	PATTERN	FINISH	MATERIAL	REMARKS		
EG-1	TITUS	55FL	EXHAUST	0.10	40	SD	WBE	ALUM			
TG-1	TITUS	55FL	TRANSFER	0.10	40	SD	WBE	ALUM			

- SD 3/4" BLADE SINGLE DEFLECTION.
- WBE WHITE BAKED ENAMEL.
- ALUM ALUMINUM.



PROPELLER EXHAUST FAN WITH STAND
NTS

H204



WALL MOUNTED CENTRIFUGAL EXHAUST FAN DETAIL
NTS

H210

ELECTRIC HEATER SCHEDULE															SECTION 23 82 38
TAG NUMBER	MANUFACTURER	MODEL	TYPE	OUTPUT (MBH)	MOUNT. HEIGHT (FT)	AIR DATA			ELECTRICAL DATA			MOTOR DATA			REMARKS
						AIRFLOW (CFM)	THROW (FT)	ΔT (°F)	KW	VOLT/Φ	AMP	HP	VOLT/Φ	RPM	
500-EUH-1	QMARK	MUH03	HORIZ PROP	17	8	400	12	27	5	480/3	4	1/4	480/3	1,600	1,2

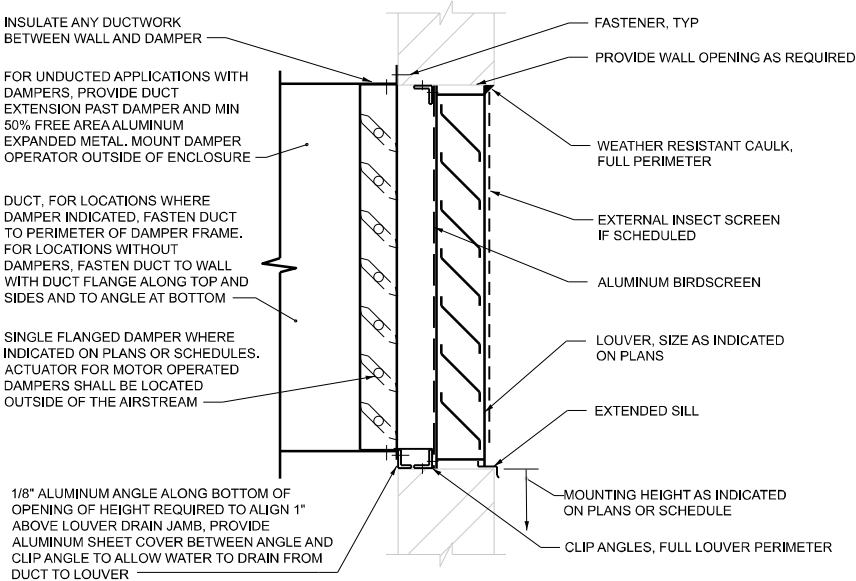
- 1 INTEGRAL THERMOSTAT.
- 2 INTEGRAL DISCONNECT.

MOTOR OPERATED DAMPER SCHEDULE													SECTION 23 09 23
TAG NUMBER	MANUFACTURER	MODEL	FUNCTION	BLADES	CFM	WIDTH (IN.)	HEIGHT (IN.)	FAIL POSITION	NEMA	VOLTS	SERVICE	MOUNTING	REMARKS
100-ICD-1	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	1,600	32	24	CLOSED	2	120VAC	100-SF-1	DUCT	
300-ICD-1	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	300	40	8	CLOSED	2	120VAC	EX.EF	LOUVER	1
300-ICD-2	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	800	43	19	CLOSED	2	120VAC	EX.EF	LOUVER	1
400-ICD-1	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	800	16	40	CLOSED	2	120VAC	400-EF-1	DUCT	
500-ICD-1	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	11,000	72	72	OPEN	2	CC	GENERATOR	LOUVER	2
501-ICD-1	GREENHECK	ICD-45	OPEN/CLOSE	PARALLEL	7,500	48	48	OPEN	2	CC	GENERATOR	LOUVER	1,2

- CC CONTRACTOR'S CHOICE.
- 1 MATCH SIZE TO EXISTING LOUVER. FIELD VERIFY DIMENSIONS PRIOR TO FABRICATION.
 - 2 PROOF OF OPEN LIMIT SWITCH.

WALL LOUVER SCHEDULE											SECTION 08 91 00
TAG NUMBER	MANUFACTURER	MODEL	SERVICE	CFM	WIDTH (IN.)	HEIGHT (IN.)	DEPTH (IN.)	MAX. APD (IN W.C.)	MAX. FREE AREA VEL. (FPM)	REMARKS	
100-OAL-1	GREENHECK	EVH-501	INTAKE	1,600	32	24	5	0.07	658	1,2,4	
400-OAL-1	GREENHECK	EVH-501	INTAKE	800	16	40	5	0.028	408	1,3,4	
500-OAL-1	GREENHECK	EVH-501	INTAKE	11,000	72	72	5	0.06	535	1,2,4	

- 1 ALUMINUM BIRDSCREEN.
- 2 EXTENDED SILL.
- 3 FLANGED FRAME.
- 4 KYNAR FINISH.



TYPICAL LOUVER DETAIL
NTS

H950

MODEL: 999-H-1
FILE NAME: D876U37-sh11-details.dgn



USER NAME = sbremer	DESIGNED - PL	REVISED -
	DRAWN - PL	REVISED -
	CHECKED - JP	REVISED -
PLOT DATE = 3/10/2025	DATE - 3/14/2025	REVISED -

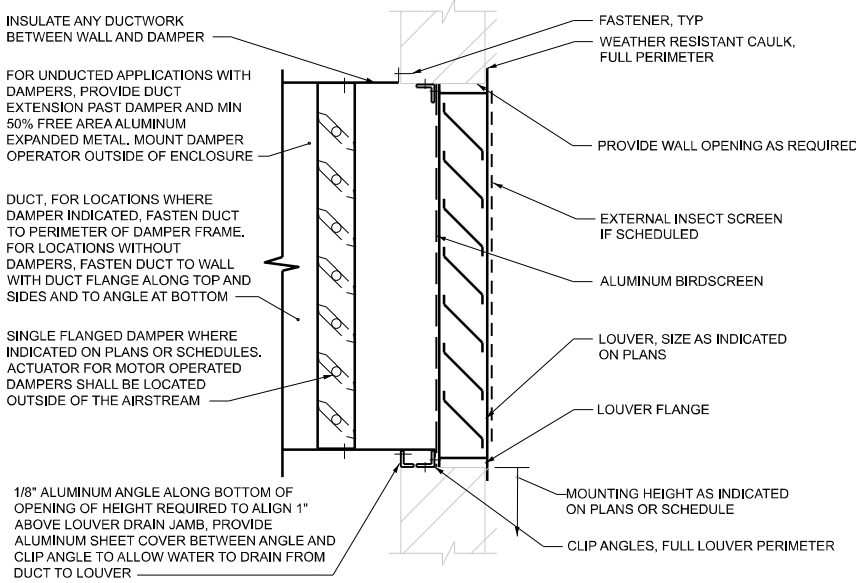
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**VARIOUS PUMP STATION IMPROVEMENTS
HVAC STANDARD DETAILS**

SCALE: SHEET 42 OF 45 SHEETS STA. TO STA.

999-H-1

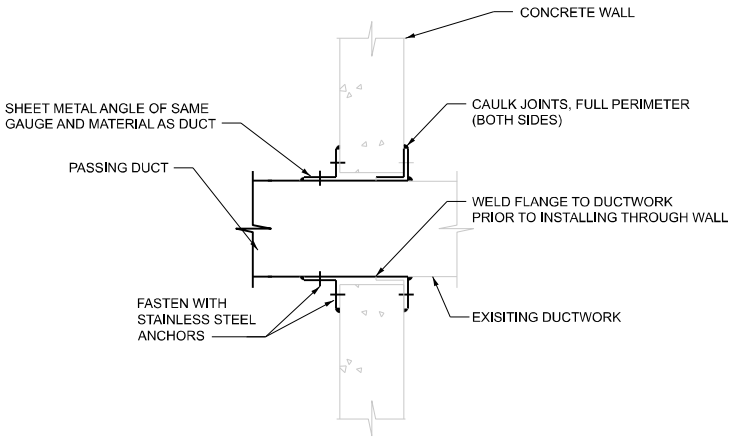
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	42
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				



NOTE: ALL FASTENERS SHALL BE OF STAINLESS STEEL CONSTRUCTION

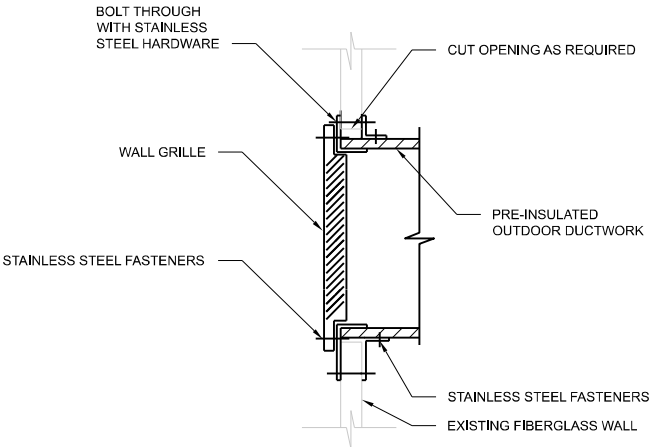
TYPICAL LOUVER DETAIL H951

NTS



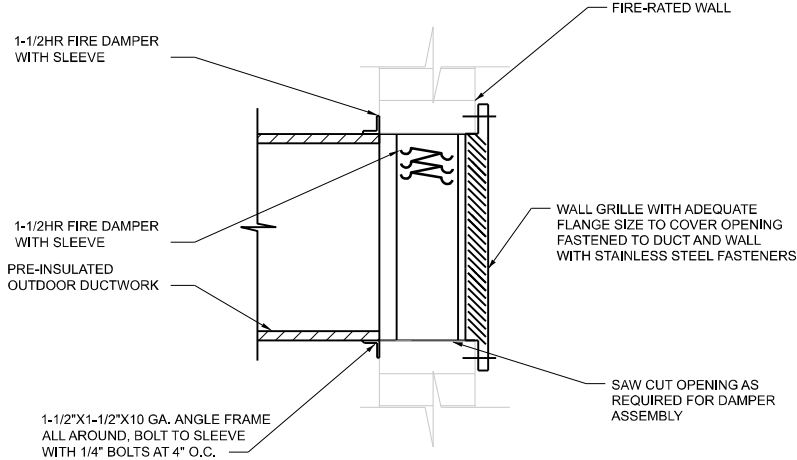
TYPICAL DUCT WALL PENETRATION DETAIL H970

NTS



DUCT WALL PENETRATION DETAIL H971

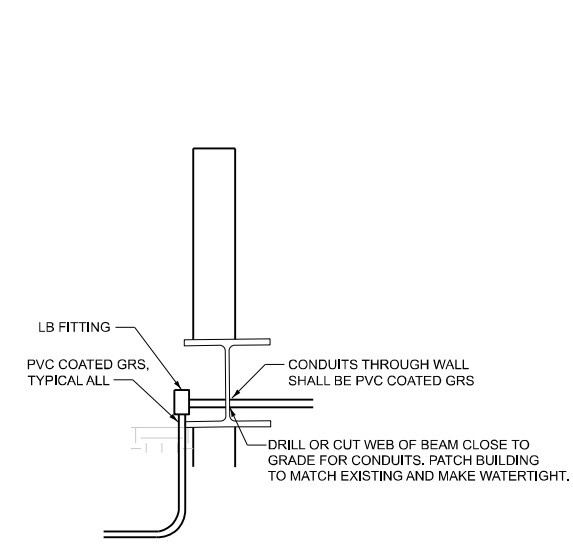
NTS



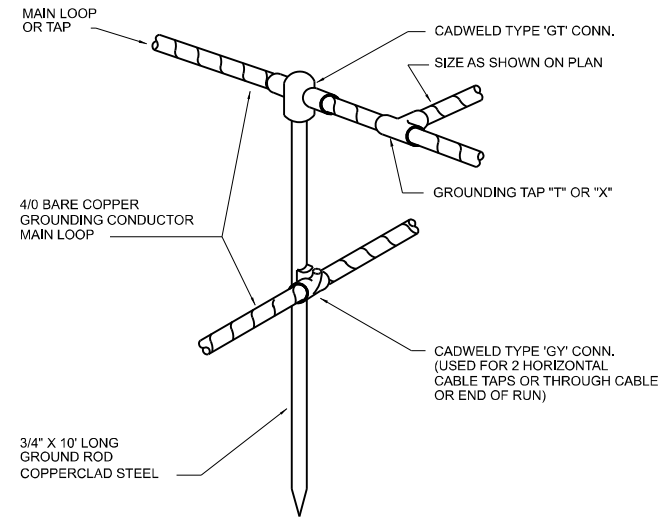
DUCT THROUGH MASONRY WALL WITH FIRE DAMPER DETAIL H997

NTS

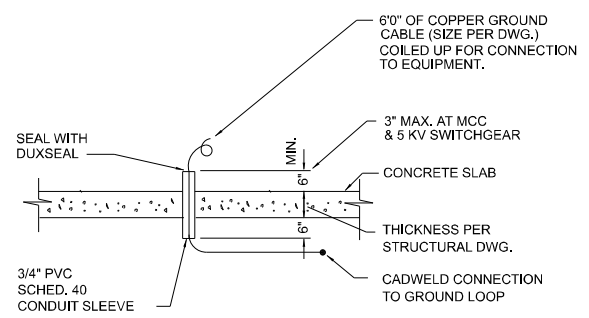
MODEL: 999-H-2
FILE NAME: D876U37-sh11-details.dgn



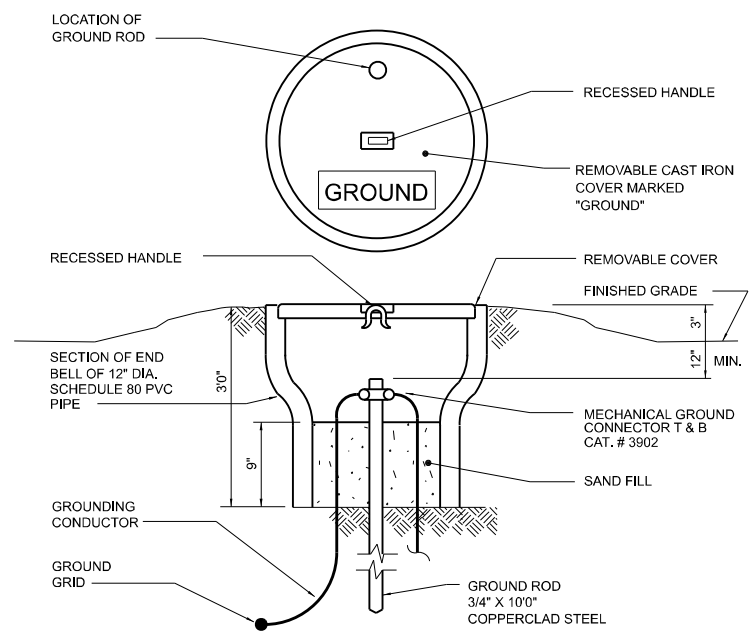
CONDUIT ENTRY THRU EXISTING WALL DETAIL **E017**
NTS



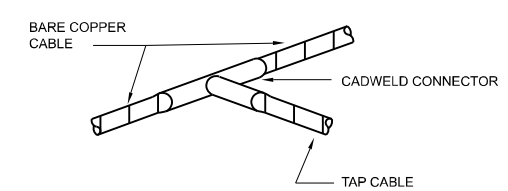
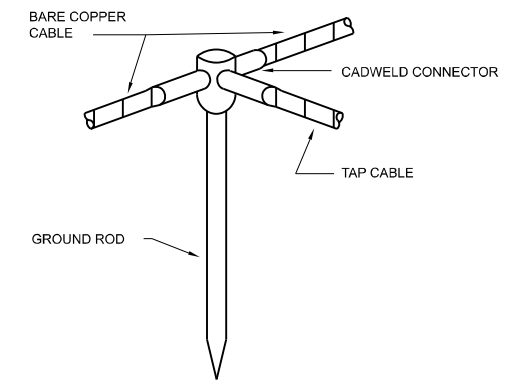
CONDUCTOR TO GROUND ROD CONNECTION DETAIL **E451**
NTS



EQUIPMENT GROUND CABLE STUB-UP **E452**
NTS

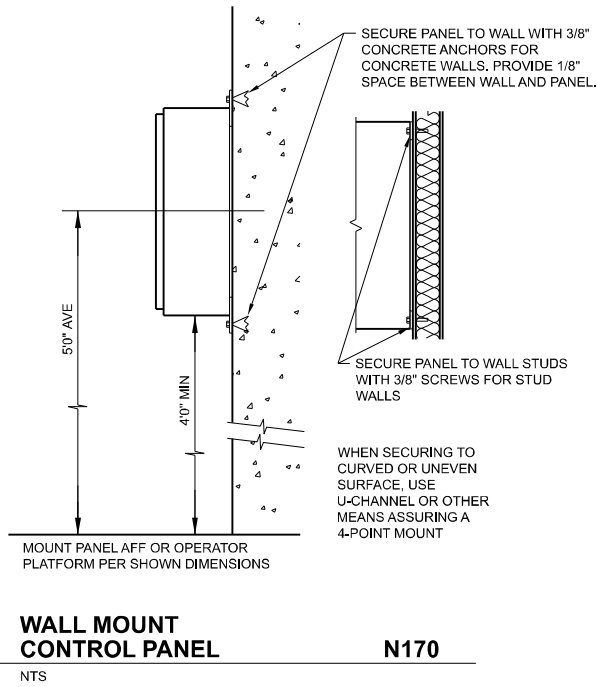
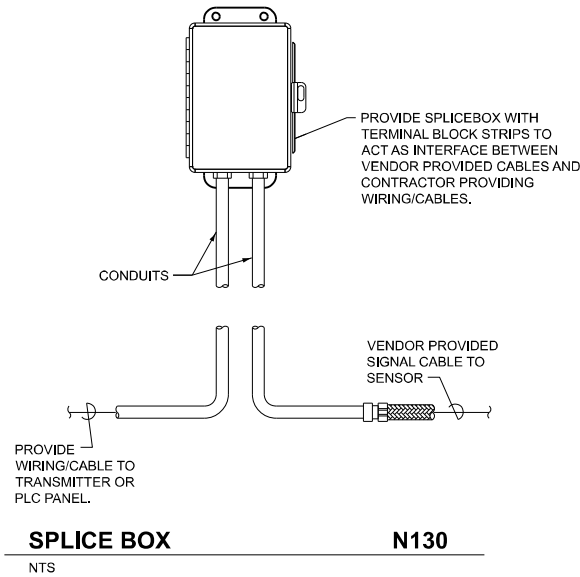


GROUNDING TEST STATION DETAIL **E455**
NTS



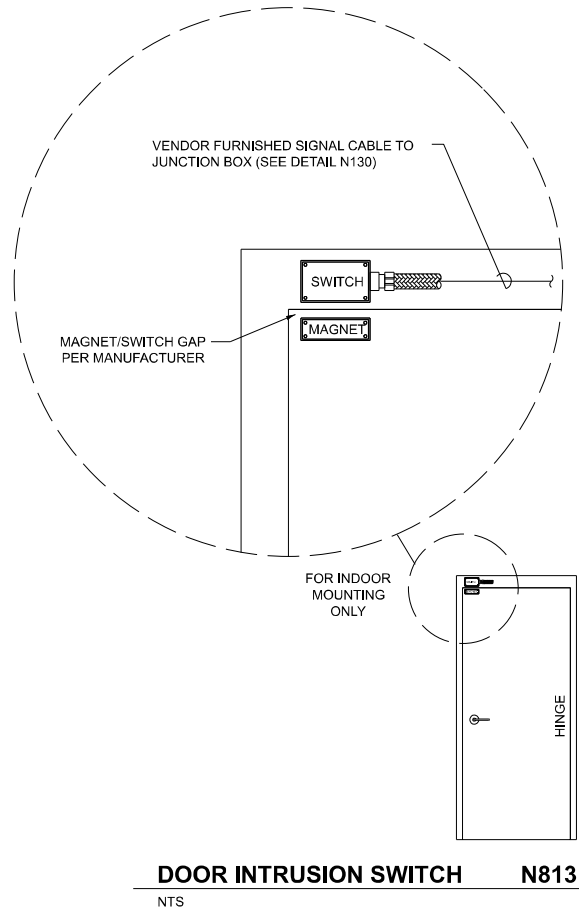
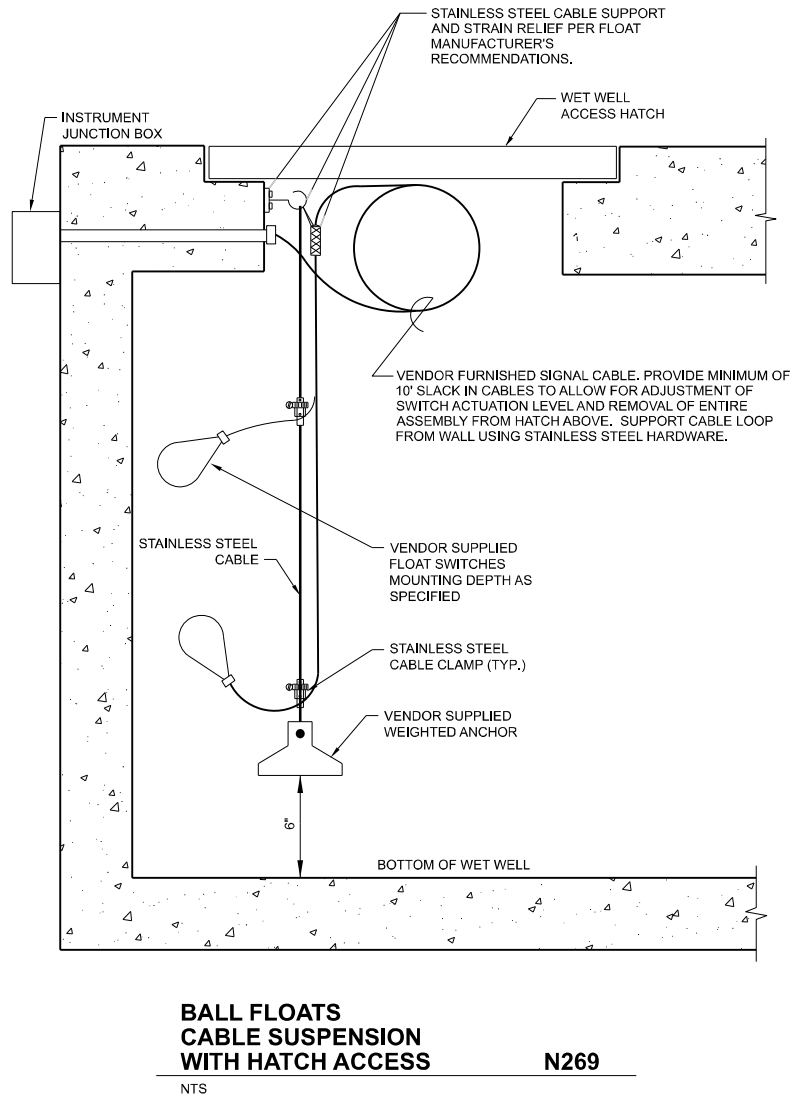
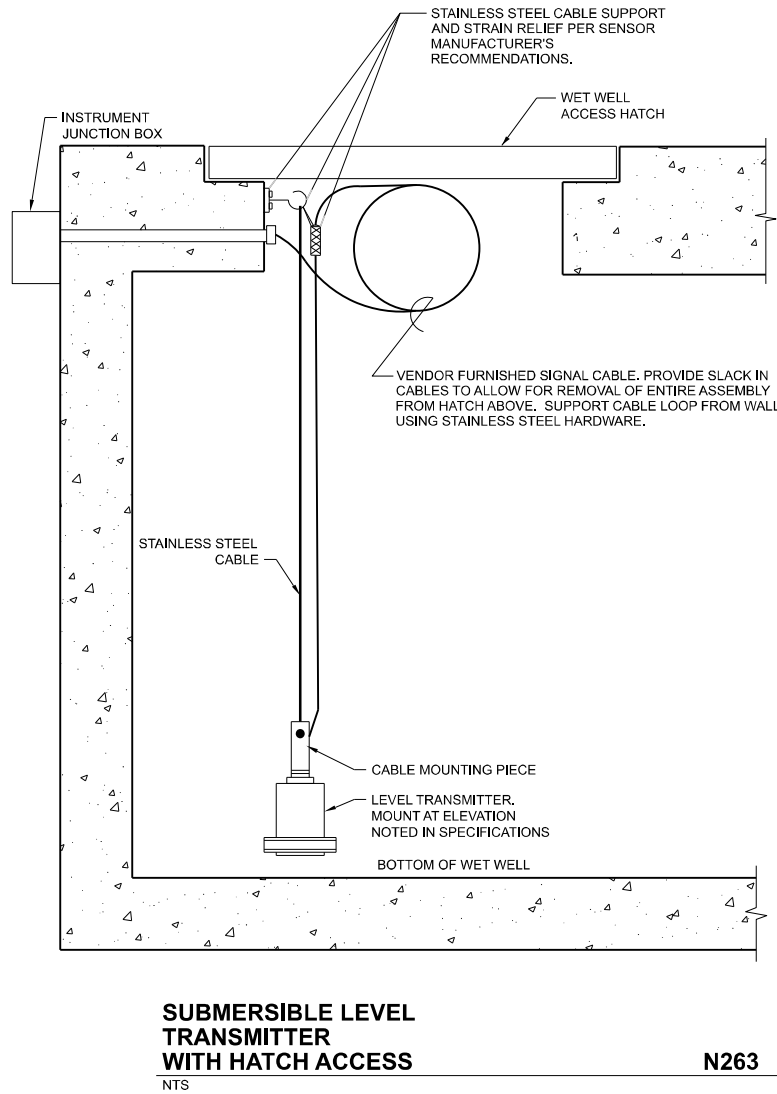
GROUNDING CONNECTION DETAIL **E463**
NTS

MODEL: 999-E-1
FILE NAME: D876U37-sh11-details.dgn



GENERAL NOTES:

1. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS PRIOR TO CONSTRUCTION AND/OR FABRICATION.



MODEL: 999-N-1
FILE NAME: D876U37-sh11-details.dgn



USER NAME	= sbremer	DESIGNED	- JG	REVISED	-
		DRAWN	- JG	REVISED	-
		CHECKED	- AB	REVISED	-
PLOT DATE	= 3/10/2025	DATE	= 3/14/2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

VARIOUS PUMP STATION IMPROVEMENTS
INSTRUMENTATION AND CONTROL STANDARD DETAILS

SCALE: SHEET 45 OF 45 SHEETS STA. TO STA.

999-N-1

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIES	VARIOUS DIST 8 PS 2025-1	VARIOUS	45	45
CONTRACT NO. 76U37				
ILLINOIS FED. AID PROJECT				