CONSTRUCTION DRAWINGS

CLIENT / OWNER

BROOKFIELD WPCA

53A COMMERCE ROAD UNIT 1, BROOKFIELD, CT 06804

TELEPHONE: 203-775-7319

CONTACT: ROGER PRINZ

CIVIL ENGINEER

LANGAN CT, INC

1 NORTH BROADWAY SUITE 910 WHITE PLAINS, NY 10601

TEL: 914-323-7422

CONTACT: LAUREN MCMAHON, PE

ELECTRICAL ENGINEER

KEYSTONE ENGINEERING GROUP, INC.

3936 QUAKER BRIDGE ROAD HAMILTON, NJ 08619

TEL: 609-512-5803

CONTACT: HALEY SCOTT, E.I.T.

STRUCTURAL ENGINEER

INTEGRAL ENGINEERING SERVICES, PLLC

27 MAIN STREET DOBBS FERRY, NY 10522

TEL: 914-774-0343

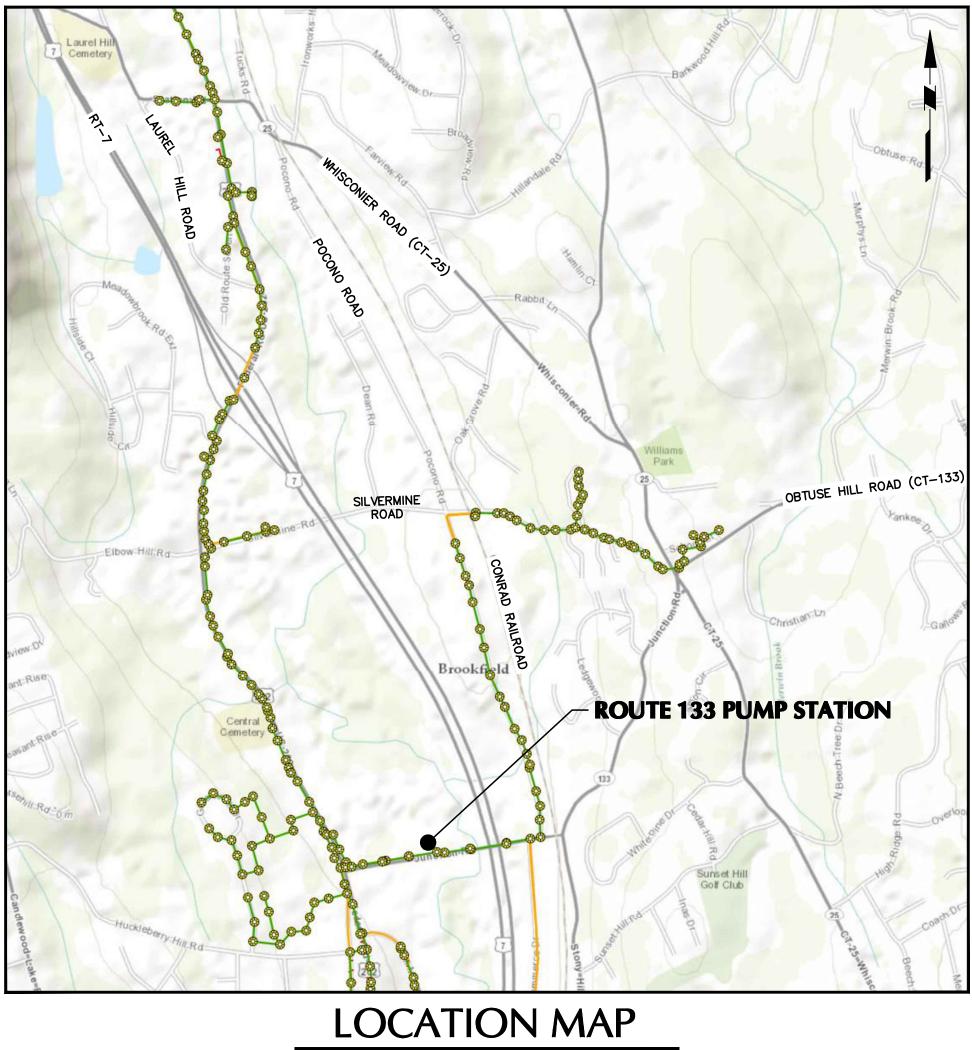
CONTACT: SIRUS MIANDOABI, P.E.

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FOR

PHASE II - ROUTE 133 PUMP STATION IMPROVEMENTS IN

TOWN OF BROOKFIELD FAIRFIELD COUNTY, CONNECTICUT



N.T.S.





	D	AWING LIST		
		CIVIL (LANGAN)		
DRAWING NO.	PAGE NO.	DRAWING TITLE		
CS001	1 OF 4	COVER SHEET		
CU101	2 OF 4	UTILITY PLAN		
CU501	3 OF 4	CONSTRUCTION DETAILS (1 OF 2)		
CU502	4 OF 4	CONSTRUCTION DETAILS (2 OF 2)		
	ELECTRI	CAL AND HVAC (KEYSTONE)		
DRAWING NO.	PAGE NO.	DRAWING TITLE		
ED-101	1 OF 7	ELECTRICAL DEMOLITION PLAN AND SINGLE LINE		
E-001	2 OF 7	ELECTRICAL LEGEND AND SYMBOLS		
E-100	3 OF 7	ELECTRICAL SITE PLAN		
E-101	4 OF 7	ELECTRICAL POWER PLAN		
E-601	5 OF 7	ELECTRICAL SINGLE LINE DIAGRAM		
E-602	6 OF 7	ELECTRICAL INTERCONNECT AND DETAILS		
E-603	7 OF 7	ELECTRICAL DETAILS		
	STRUCTUR	RAL (INTEGRAL ENGINEERING)		
DRAWING NO.	PAGE NO.	DRAWING TITLE		
S-001	1 OF 4	GENERAL NOTES		
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S-100	3 OF 4	PLANS		
S-200	4 OF 4	SECTIONS & DETAILS		

PHASE II - 133 PUMP **STATION** COVER SHEET

CONNECTICUT

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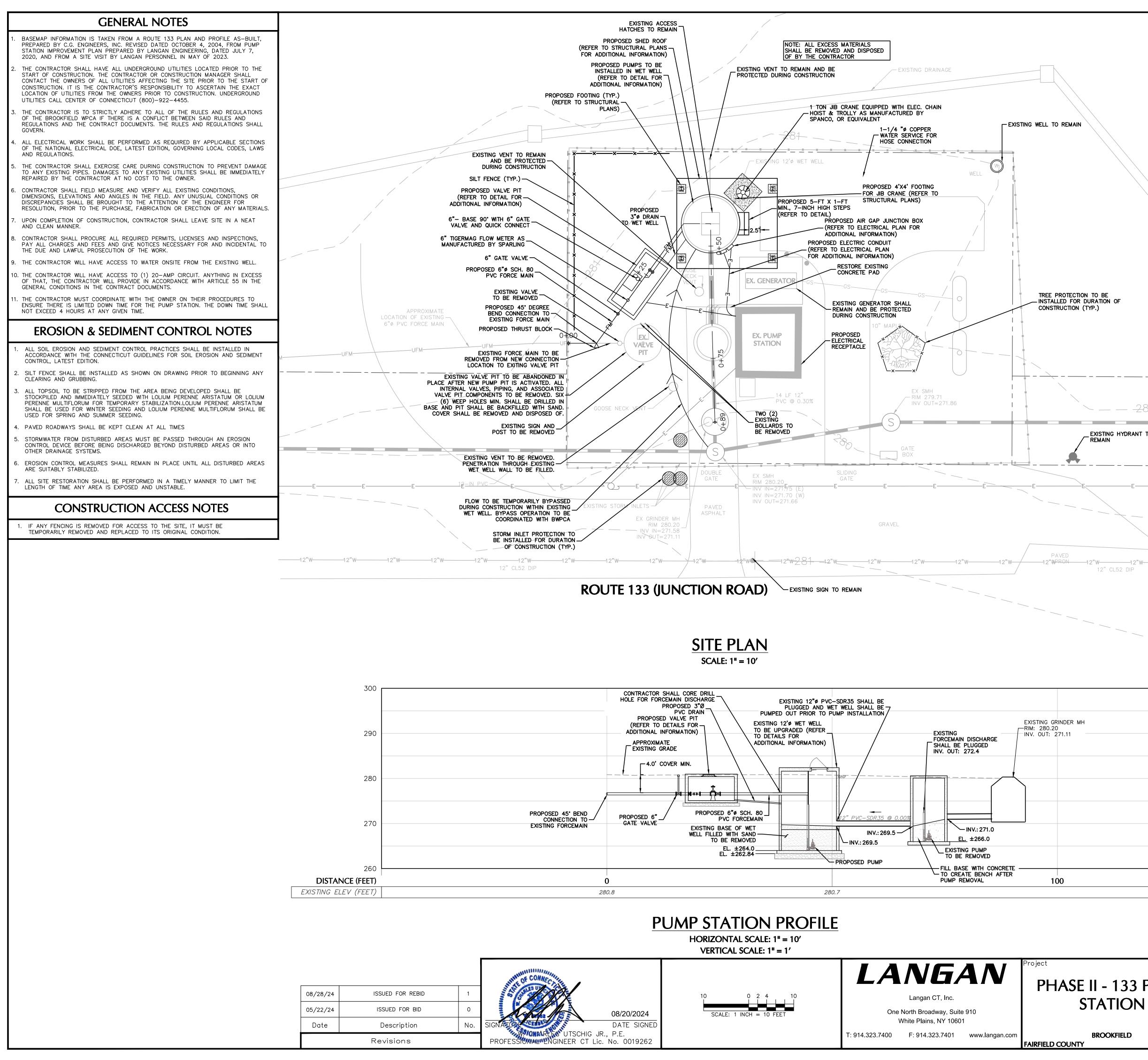
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Sheet **1** of **4**

BROOKFIELD



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LL TO REMAIN	•	
REE PROTECTION TO BE STALLED FOR DURATION OF DNSTRUCTION (TYP.)		
281		20'-WIDE UTILITY EASEMENT
EXISTING HYDRANT TO REMAIN		8" PVC
EE	———Е-———	——E————E————E—————E————
PAVED 2"WPRON 12"W 12" W 12" CL52 DIP	12"W12	2"W 12"W 12"W 12"W 12"W 12"W 12"W
2"WPRON12"W12"W	12"W12	2"W 12"W 12"W 12"W 12"W 12"W 12"W 12"W 1
2"\# PRON1 2"\#12"\#	12"W 12	GENERAL CONSTRUCTION SEQUENCE THE WORK AS PROPOSED SHALL BE UNDERTAKEN AND COMPLETED DURING PERIODS OF DRY WEATHER. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, AND THE BROOKFIELD WATER POLLUTION CONTROL AUTHORITY (BWPCA) 48-HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. INSTALL EROSION CONTROL MEASURES AS INDICATED ON THE PLAN.
2"MPRON 12"W 12" W 12" CL52 DIP	300	 CONTRACTOR SHALL TEMPORARILY PLUG EQUALIZING PIPE IN WET WELL TO CREATE WORKING CONTRACTOR SHALL INSTALL THE WEILL THE CONTRACTOR SHALL INSTALL PROPOSED VALVE BOX AND FORCEMAIN CONTRACTOR SHALL INSTALL THE NEW FORCEMAIN INSTALLATION CONTRACTOR SHALL INSTALL THE PLANE HE EXISTING 4" THE KEY PLANE AND SAND FROM THE WELL. THE CONTRACTOR SHALL INSTALL PROPORED VALVE BOX AND FORCEMAIN CONTRACTOR SHALL INSTALL THE PLANE AND FORCEMAIN SERVICE. AFTER THE 12" PIPE IS PLUGGED, THE CONTRACTOR SHALL INSTALL PLUG EQUALIZING PIPE IN WET WELL TO CREATE WORKING CONTROL SHALL INSTALL THE NEW PUMPS IN THE WET WELL IN ACCORDANCE WITH THE VELL. THE CONTRACTOR SHALL INSTALL THE NEW PUMPS IN THE WET WELL IN ACCORDANCE WITH THE
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BROOKFIELD

UTILITY PLAN

Sheet **2** of **4**

CU101

MAY 22, 2024

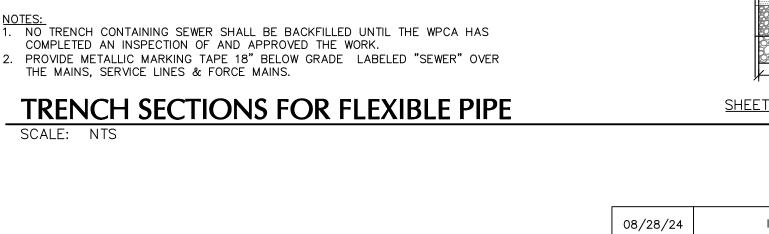
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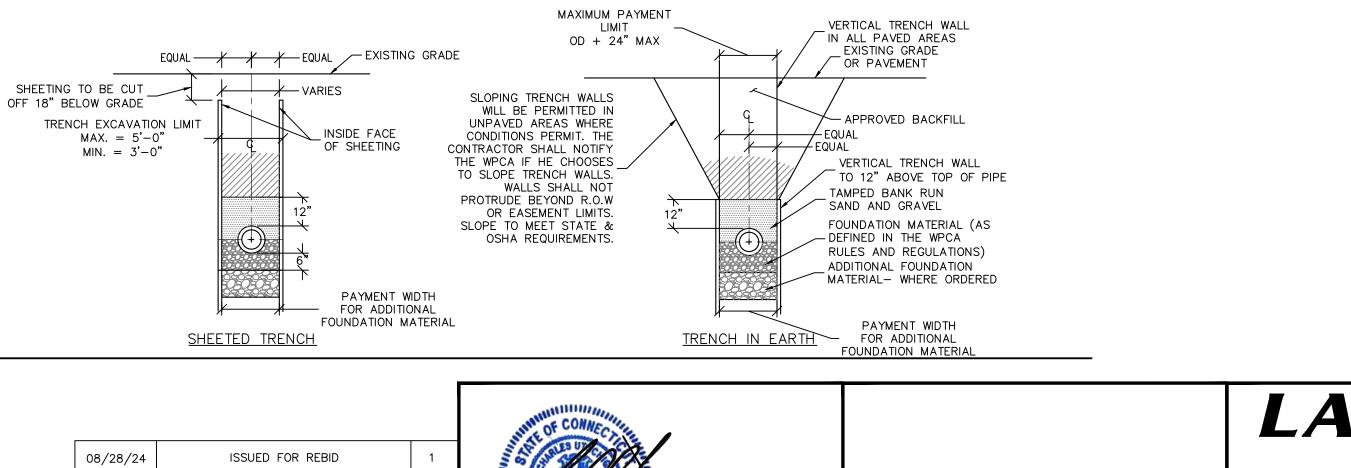
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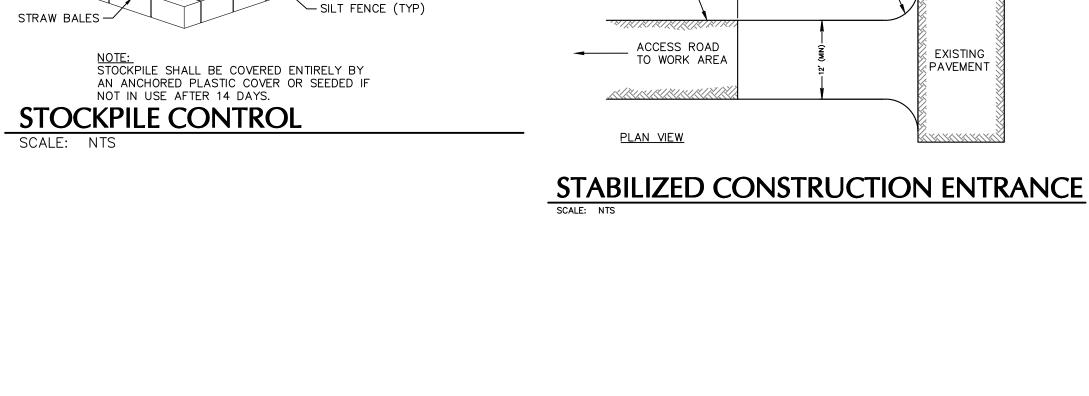


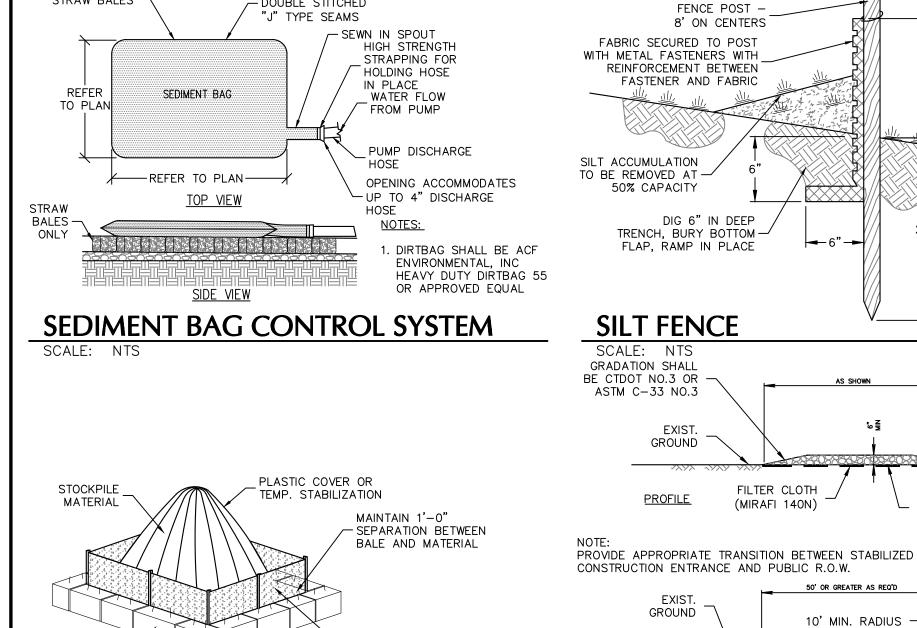
08/20/2024

TSCHIG JR., P.E.

GINEER CT Lic. No. 0019262

DATE SIGNED





TRENCHING REQUIREMENTS

CRUST STONE OR GRAVEL

THAN CT DOT #3 SIZE

SHALL BE NO SMALLER THAN

CT DOT #67 SIZE NOR LARGER

SCALE: NTS BAG PLACED ON HIGH STRENGTH STRAW BALES - DOUBLE STITCHED

PUMP-DISCHARGE

TO SEDIMENT BAG

TO SEDIMENT BAG

DEWATERING SUMP PIT (IF NEEDED)

GROUND WATER

12"-24"ø

PERFORATED

CORRUGATED

OR PVC PIPE

−12"−18"

CLEAN WATER DISCHARGE HOSE 1. PIT DIMENSIONS TO BE PROVIDED BY A LICENSED CT ENGINEER RETAINED BY THE CONTRACTOR. ALL DEWATERING. CALCULATIONS AND PLANS SHALL BE SUBMITTED DURING THE SHOP DRAWING REVIEW PROCESS. GROUND WATER PUMP SIZE BEING USED. SIDE SLOPE TO MEET OSHA

2. THE STANDPIPE DIAMETER AND NUMBER OF PERFORATIONS SHALL BE COMPATIBLE WITH THE 3. IF EXCESSIVE MOVEMENT OF FINE SOIL PARTICLES FROM THE SURROUNDING EXISTING SOILS IS ANTICIPATED, A PROPERLY DESIGNED GEOTEXTILE

AND THE CRUSHED STONE OR GRAVEL BACKFILL

2' MINIMUM

2' MINIMUM

PUBLIC ROW

INSTALL SUB-BASE OF FREE

DRAINING BACKFILL OR ROAD

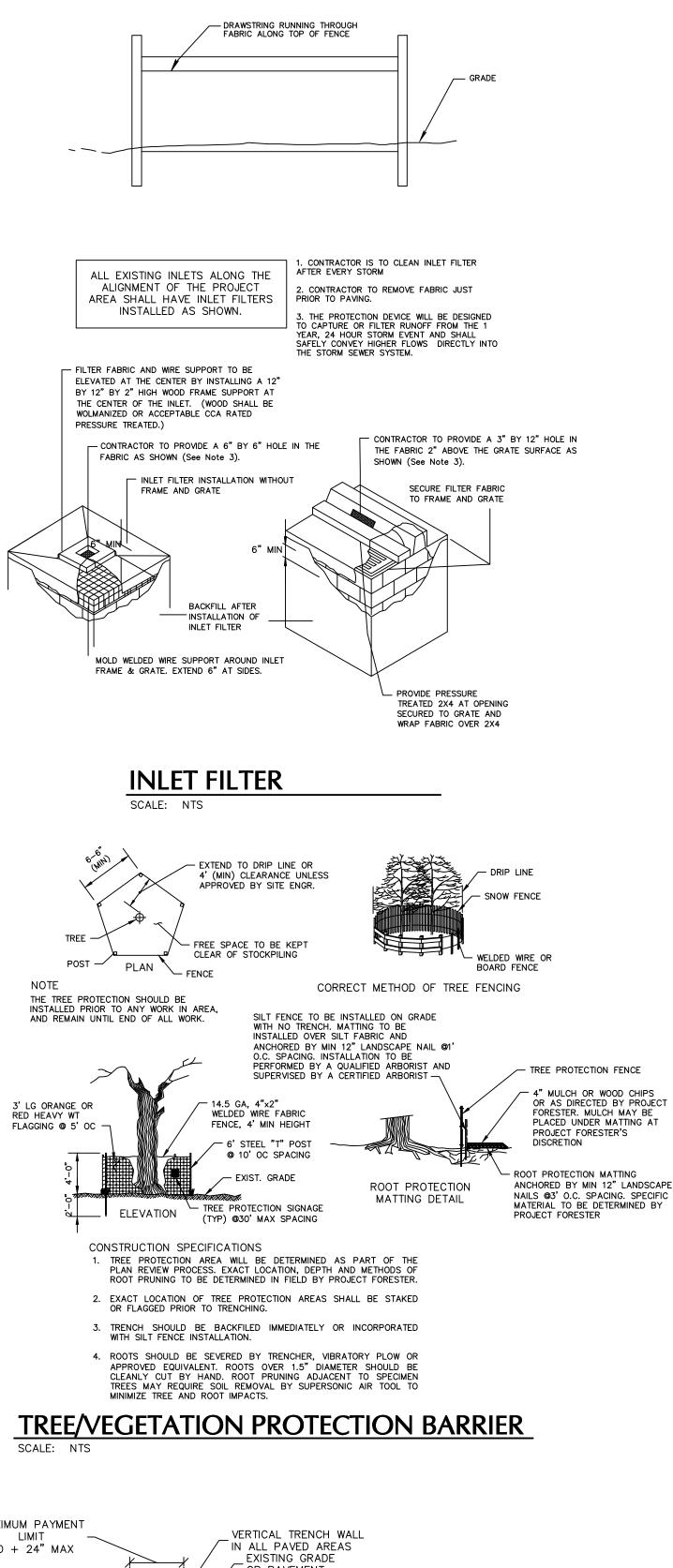
STABILIZATION GEOTEXTILE AS

NECESSARY ON UNSTABLE SOILS

EXIST,

PAVEMENT

SHALL BE PLACED BETWEEN THE EXISTING SOILS





GENERAL NOTES 1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CONNECTICUT BUILDING CODE, WHICH IS THE ADOPTED BUILDING SUBCODE FOR THE PROJECT SITE.

- 2. PROVIDE TEMPORARY BRACING AS REQUIRED TO SUPPORT LOADS TO WHICH PROPOSED STRUCTURES MAY BE SUBJECT DURING CONSTRUCTION.
- 3. CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, ELEVATIONS AND ANGLES IN THE FIELD. ANY UNUSUAL CONDITIONS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION, PRIOR TO THE PURCHASE, FABRICATION, OR ERECTION OF ANY MATERIALS.
- 4. THE CONTRACTOR SHALL EXERCISE CARE DURING CONSTRUCTION TO PREVENT DAMAGE TO ANY EXISTING PIPES. DAMAGE TO ANY EXISTING UTILITIES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 5. AVAILABLE INFORMATION AS TO THE LOCATION OF EXISTING SUBSTRUCTURES AND UTILITIES HAS BEEN COLLECTED FROM THE FILES & VARIOUS SOURCES. THE RESULTS OF SUCH INVESTIGATIONS, SHOWN ON THE CONTRACT DRAWINGS, ARE NOT GUARANTEED AS TO ACCURACY
- 6. ALL WORK TO BE CONSTRUCTED IN COMPLIANCE WITH THE "STANDARD DETAILS" AND "SEWER USE REGULATIONS" OF THE BROOKFIELD WATER POLLUTION CONTROL AUTHORITY.
- 7. ALL EXISTING ELEVATIONS, LOCATION AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND APPURTENANCES WERE GATHERED FROM BEST AVAILABLE SOURCES AND IS NOT GUARANTEED AS TO EXACTNESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL LOCATIONS, ELEVATIONS AND DIMENSIONS PRIOR TO ORDERING ANY MATERIALS. ALL SHOP DRAWINGS SHALL CONTAIN THE FIELD VERIFIED LOCATIONS, ELEVATIONS, AND DIMENSIONS
- 8. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL LEAVE SITE IN A NEAT AND CLEAN MANNER.
- 9. THE CONTRACTOR SHALL PROCURE ALL REQUIRED PERMITS, LICENSES, AND INSPECTIONS, PAY ALL CHARGES AND FEES AND GIVE NOTICES NECESSARY FOR AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
- 10. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS HEREIN AND THE CONNECTICUT SOIL EROSION AND SEDIMENT CONTROL RULES AND REGULATIONS.
- 11. NO MATERIAL SHALL BE PLACED OR ANY DISTURBANCE PERMITTED BEYOND THE PROJECT PROPERTY LINE OR RIGHT-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER DIRECTLY INVOLVED.
- 12. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT AND SUPPORT, IF NECESSARY, ALL EXISTING UTILITIES WHICH MUST BE CROSSED. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE UTILITY OWNER.
- 13. ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE TO AN APPROVED LOCATION BY OWNER.

EXCAVATION, FOUNDATION AND BACKFILLING

- 1. ALL FOUNDATIONS SHALL BE FOUNDED ON FIRM, UNDISTURBED SOIL. ALL SOFT SPOTS OR OVER-EXCAVATION OF FOOTINGS SHALL BE FILLED WITH ACCEPTABLE FILL MATERIAL AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY. ALL FOOTING EXCAVATIONS SHALL BE FINISHED BY HAND.
- 2. THE SUBGRADE FOR SLAB SHALL BE PROOF ROLLED, ANY SOFT SPOTS REMOVED AND FILLED WITH SATISFACTORY MATERIAL AND RECOMPACTED. 3. BACKFILL SHALL BE PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO A MINIMUM DENSITY OF
- 95% (UNDER SLABS-ON-GRADE AND FOOTINGS) AND 90% ELSEWHERE OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557 MODIFIED PROCTOR.
- 4. BACKFILL SHALL CONSIST OF NON-EXPANSIVE, FREE-DRAINING, WELL GRADED SAND AND GRAVEL, FREE OF DEBRIS AND ORGANIC MATERIAL. FILL UNDER SLAB-ON-GRADE SHALL BE IN CONFORMANCE WITH ASTM D448, SIZE 10.
- 5. CONTRACTOR WILL BE RESPONSIBLE FOR, AND SHALL SAFEGUARD AND PROTECT, ALL EXCAVATIONS AND EXISTING STRUCTURES DURING CONSTRUCTION OF FOUNDATIONS BY PROPER SAFEGUARDS WHICH MAY INCLUDE BRACING. IF ANY DAMAGE TO EXISTING STRUCTURES RESULTS DURING CONSTRUCTION, REPAIR/REPLACEMENT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL REPAIRS/REPLACEMENT MUST BE DONE TO THE SATISFACTION OF THE ENGINEER.
- 6. ALL EXCAVATIONS AND BACKFILL OPERATIONS SHALL CONFORM WITH CURRENT OSHA REQUIREMENTS AND STANDARDS.
- 7. THE DESIGN AND OPERATION OF THE GROUNDWATER CONTROLS DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. A PLAN FOR DEWATERING SHALL BE SUBMITTED TO THE ENGINEER DURING SHOP DRAWING SUBMITTAL PHASE DETAILING THE CONTRACTORS PLAN FOR DEWATERING.

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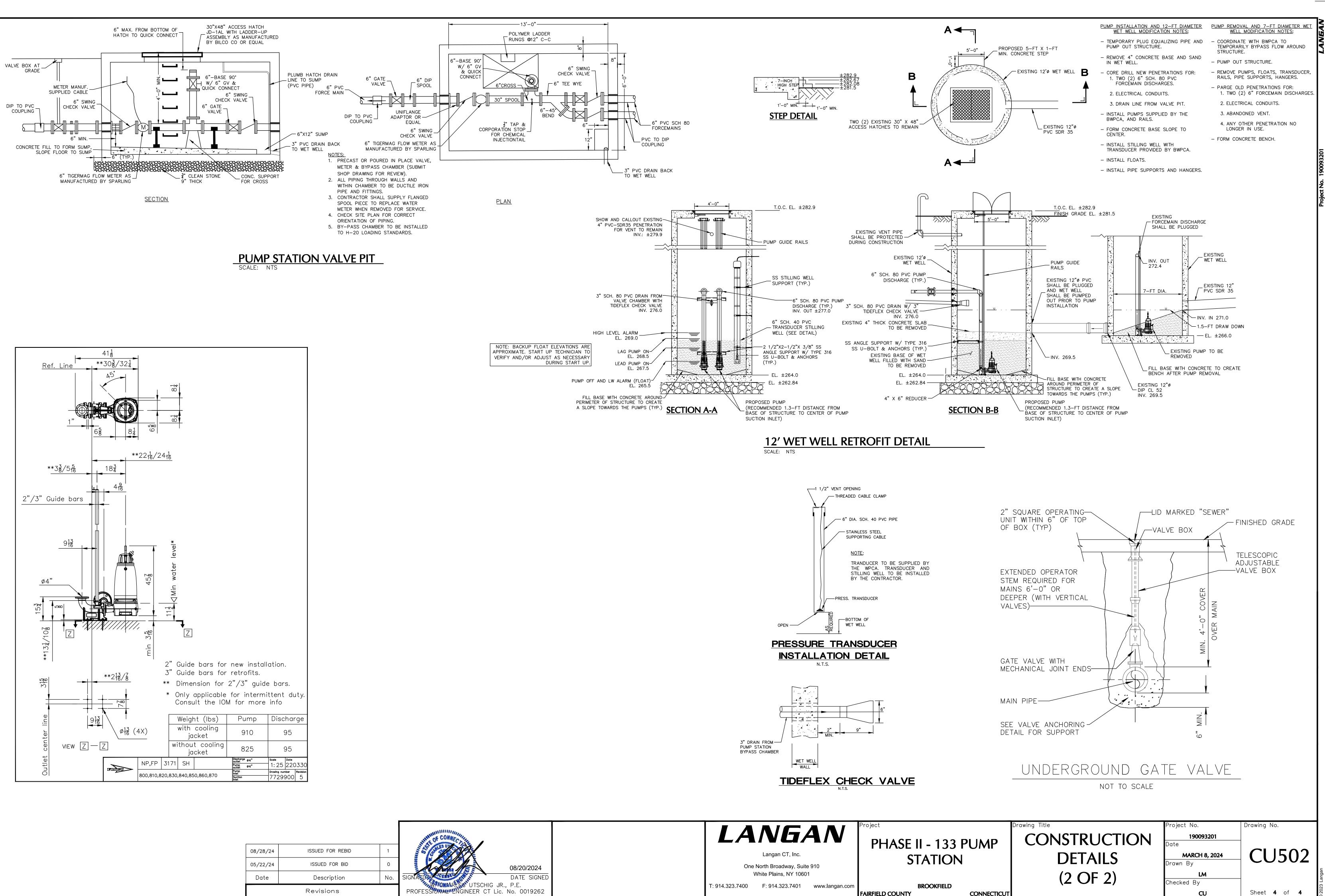
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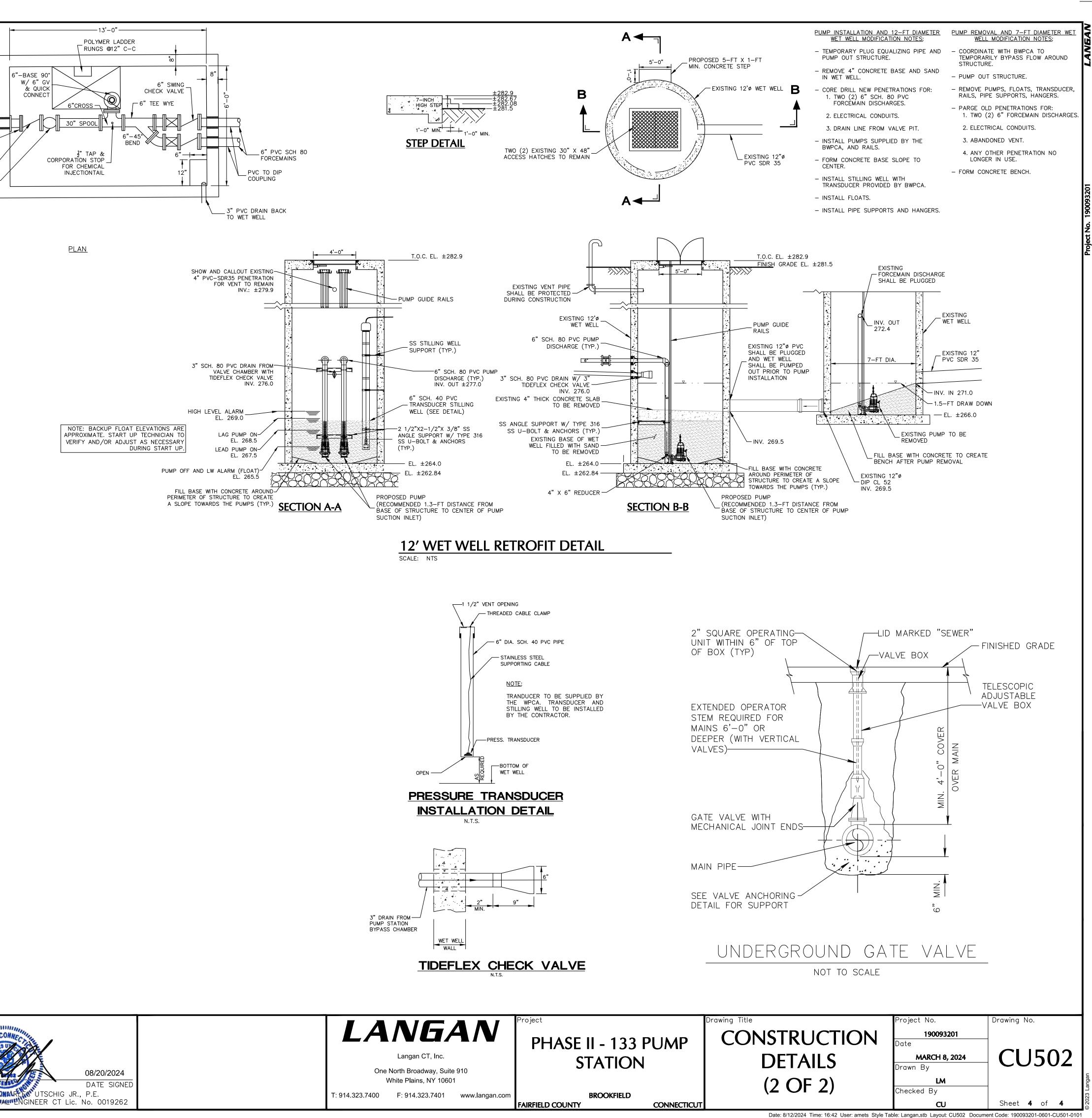
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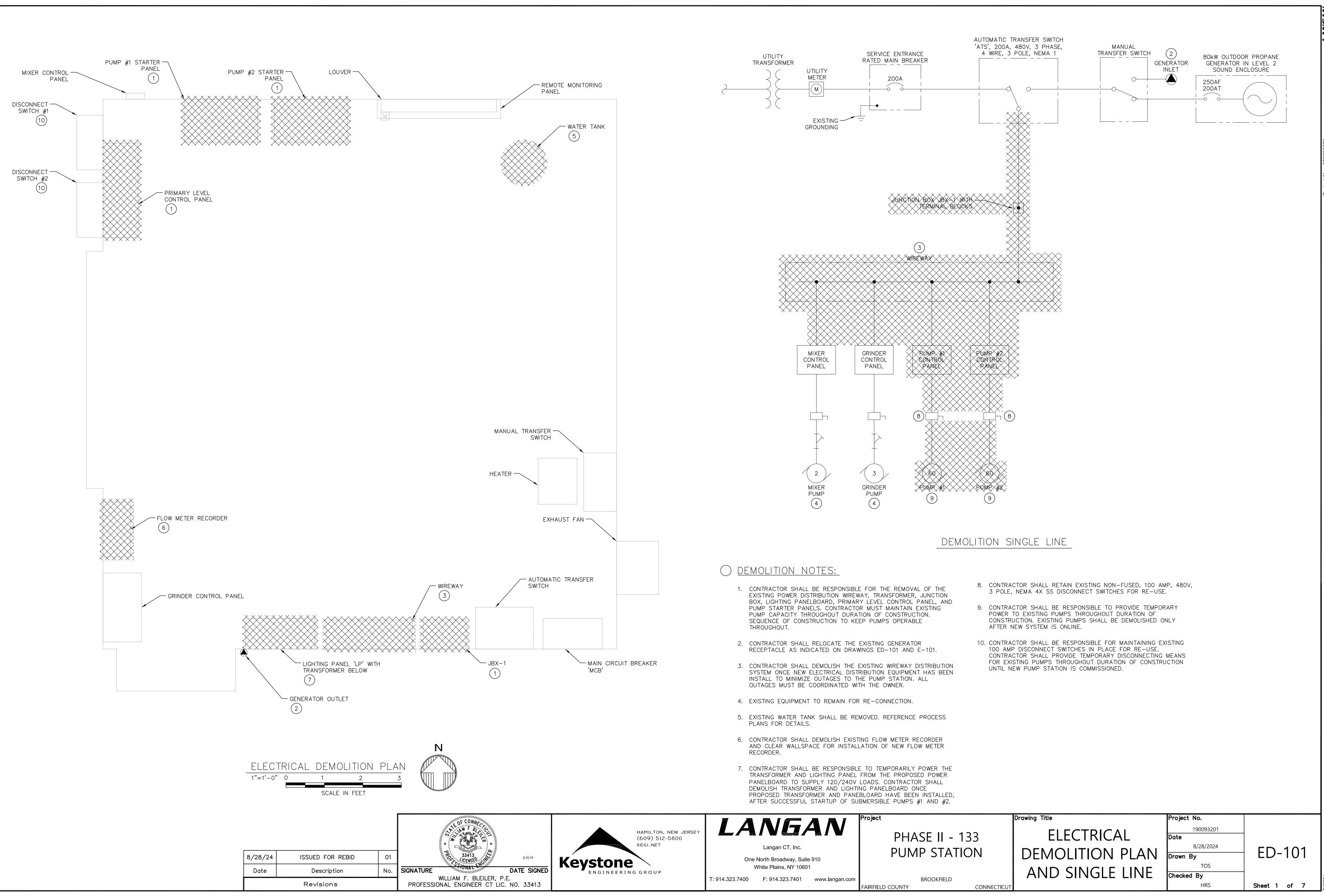
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FLOOR	WALL	6" AFF UNLESS OTHERWISE NOTED	—	CONTACT (SHOWN NORMALLY OPEN)	XX AT XX AF	CIRCUIT BREAKER XX AT = AMP TRIP	A	LIGHTING FIXTURE A = TYPE
вох Ø _х		DUPLEX RECEPTACLE X=CIRCUIT (TYP. ALL)	//	CONTACT		XX AF = AMP FRAME	\bowtie	CEILING MOUNTED SPOT FIXTURE K = TYPE
Θ	÷	RECEPTACLE-SINGLE		(SHOWN NORMALLY CLOSED)	Σ	FVNR STARTER		EMERGENCY LIGHT H = TYPE
		DOUBLE DUPLEX RECEPTACLE		THERMAL OVERLOAD	Γ.			EXIT SIGN H = TYPE
\bigcirc	К И	DATA OUTLET	CR XX CRXX	CONTACTOR COIL XX DENOTE #		6 PULSE VFD	Н	(WHERE THE ARROW INDICATES PATH OF EGRESS AND THE SH TRIANGLES INDICATE THE FACE ''EXIT'' DISPLAYED)
		TELEPHONE OUTLET	ETM	ELAPSED TIME METER	Ŕ		⊢₿G	REMOTE EMERGENCY HEAD G = TYPE
	●×	SPECIAL PURPOSE RECEPTACLE X = VOLTAGE OR PURPOSE		FACTORY WIRING		18 PULSE VFD	ΗK	EXTERIOR WALL MOUNTED FIXTURE K = TYPE
QQ,	PPP,	C COUNTERTOP POWER STRIP		FIELD WIRING			•)	EXTERIOR POLE MOUNTED FIXTURE F = TYPE
[J	JUNCTION OR PULL BOX MOTOR STARTER		FUTURE INDICATING LAMP (LETTER DENOTES COLOR) R = RED	桌 孝	SOFT START		EXTERIOR POLE MOUNTED DOUBLE ARM FIXTURE F = TYPE
	$\mathbf{X}_{\mathbf{R}_1}$	R1 = DESIGNATION DISCONNECT SWITCH	R	R = RED G = GREEN A = AMBER Y = YELLOW		ACTUATED VALVE		
	Ø	HOA SWITCH	0 0	SWITCH	⊡ ¬×	DISCONNECT SWITCH X = FUSE RATING (IF SHOWN)		<u>NG SYMBOLS</u> unless otherwise noted
	● €	STOP/LOCKOUT EMERGENCY POWER SHUT-OFF	000	LIMIT SWITCH	3 ×%Z	LINE REACTOR	S	SINGLE POLE WALL SWITCH
	×	SWITCH MOTOR	Š	FLOAT SWITCH	3 ***2	X = FILTER IMPEDANCE	S ₂	DPDT WALL SWITCH
		X = HORSEPOWER		PRESSURE SWITCH		MOTOR STARTER R1 = DESIGNATION	S₃ ċ	3-WAY WALL SWITCH
						POWER TRANSFORMER	S₄ Ś _D	4-WAY WALL SWITCH DIMMER SWITCH
	А	BBREVIATIONS	م م	TEMPERATURE SWITCH	△ ↓ ↓ 50KVA 480V- 200/208V 5.5%Z	50KVA = SIZE 480V = PRIMARY DELTA 120/208V = WYE SECONDARY	S _P	SWITCH WITH PILOT
3P 4X	3 POLE NEMA 4X			FLOW SWITCH	5.5%Z	120/208V = WYE SECONDARY 5.5%Z = IMPEDANCE		MANUAL MOTOR STARTER SWITCH
A AC AF	AMP ALTERNATI AMP FRAM	NG CURRENT	orth	FUSED CUTOUT SWITCH	\pm \Box	FUSE	Š _{os}	OCCUPANCY SENSOR SWITCH
AFF AT	ABOVE FIN AMP TRIP	IISHED FLOOR	OFF ON	ON/OFF SWITCH	<u>+</u>	GROUND	Śĸ	KEY-OPERATED SWITCH
ATS AWG BLDG		C TRANSFER SWITCH WIRE GUAGE	ه ' ه ×	TIMING RELAY		INDICATING LAMP (LETTER DENOTES COLOR) R = RED	S _{XP}	EXPLOSION PROOF SWITCH
CKT CMD CP	CIRCUIT COMMAND CONTROL I		<u>ک</u> ه پ	NORMALLY CLOSED TIME TO OPEN X = INITIAL DELAY SETTING	R	G = GREEN A = AMBER	PC	PHOTO ELECTRIC CONTROL
DIA DIV	DIAMETER DIVISION					Y = YELLOW	OS	OCCUPATION SENSOR, CEILING MOUNTED
		CT SWITCH UNIT HEATER I PROOF (NEMA 8)			(×)	ELECTRIC MOTOR 5 = HORSEPOWER	DS	DOOR SWITCH
FDBK FVNR	FEEDBACK FULL VOLT	AGE NON REVERSING	INSTRUMENT S	SYMBOL DECODER	К	KIRK KEY		LIGHTING CONTACTOR R1 = DESIGNATION
GND HOA HP	GROUND HAND-OFF HORSE PO	AULT CIRCUIT INTERRUPTER - AUTOMATIC WER	MEASURED	DISPLAY OR OUTPUT FUNCTION	КК	2 CYLINDER KIRK KEY	: LC-1	LIGHTING CONTACTOR REMOTE PUS BUTTON ON-OFF CONTROL LC-1 = CONTACTOR CONTROLL
HVAC JB KA	HEAT-VEN JUNCTION KILOAMPEF			AAA XXX YY	М	MOTOR ACTUATOR		
KCMIL KV	. 1000 CIRC KILOVOLT	ULAR MILS	UNIQUE IDENTIFIER	CHEMICAL IDENTIFIER	S	SOLENOID ACTUATOR		
KVA KW	KILOVOLT KILOWATT			(IF APPLICABLE)	ST	SHUNT-TRIP	CITCULLING AND	RACEWAY SYMBOLS

	ALTERNATING CURRENT
	AMP FRAME ABOVE FINISHED FLOOR
AT	AMP TRIP
ATS AWG	
BLDG	BUILDING
CKT CMD	
CP	CONTROL PANEL
DIA DIV	DIAMETER DIVISION
DS	DISCONNECT SWITCH
EUH EXP	ELECTRIC UNIT HEATER EXPLOSION PROOF (NEMA 8)
FDBK	FEEDBACK
FVNR GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND HOA	GROUND
HOA HP	HAND-OFF-AUTOMATIC HORSE POWER
HVAC	HEAT-VENT-AIR CONDITIONING
JB KA	JUNCTION BOX KILOAMPERE
KCMIL	1000 CIRCULAR MILS
KV KVA	KILOVOLT AMPERE
KW LTG	KILOWATT LIGHTING
MAX	MAXIMUM
MC MCC	
MCP	MOTOR CIRCUIT PROTECTOR
MFR MIN	
MS	MOTOR STARTER
	NOT APPLICABLE NORMALLY CLOSED
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S
N.O.	ASSOCIATION NORMALLY OPEN
No. PH.	NUMBER
OR Φ	PHASE
PNL PSI	PANEL POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
QTY RGS	QUANTITY RIGID GALVANIZED STEEL
RVSS	REDUCED VOLTAGE SOLID STATE
SP SS	SPARE STAINLESS STEEL
STP TYP.	
	TRANSIENT VOLTAGE SURGE SUPRESSION
U.O.N. V	UNLESS OTHERWISE NOTED VOLT
VAC	VOLTS ALTERNATING CIRCUIT
VFD W	VARIABLE FREQUENCY DRIVE WIRE
WPIU	WEATHERPROOF IN-USE
	WEATHER RESISTANT TRANSFORMER

	FIRST LETTER 'A'	SUCCEEDING LETTERS 'B'
М	IEASURED VARIABLE	DISPLAY OR OUTPUT FUNCTION
A		ALARM
B C	BURNER —	– CONTROL
D E	DIFFERENTIAL VOLTAGE	DIFFERENTIAL PRIMARY ELEMENT
F G H I J	HAND CURRENT	– GLASS HIGH INDICATE SCAN
K L M N	TIME LEVEL MALFUNCTION	CONTROL STATION LOW/LIGHT MIDDLE
N O P Q	– PRESSURE	
R S	REMOTE SPEED/FREQUENCY	INTEGRATE/TOTALIZE RECORD/PRINT SWITCH
T U V	VIBRATION	TRANSMIT MULTIFUNCTION VALVE
W X Y Z	LIMIT STATUS	– RELAY COMPUTING OR SIGNAL CONVERTING DRIVE/ACTUATE

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DATE SIGNE WILLIAM F. BLEILER, P.E. ONAL ENGINEER CT LIC. NO. 33413

8/20/24





<u>ols</u>

- TYPE
- DUNTED SPOT FIXTURE
- TYPE
- ′ LIGHT TYPE
- YPE
- THE ARROW INDICATES THE OF EGRESS AND THE SHADED SLES INDICATE THE FACE WITH
- DISPLAYED) MERGENCY HEAD
- TYPE
- WALL MOUNTED FIXTURE TYPE
- POLE MOUNTED FIXTURE
- ΓΥΡΕ
- POLE MOUNTED RM FIXTURE
- YPE

<u>30LS</u>

- . SWITCH
- ALL SWITCH
- ALL SWITCH
- VITCH
- TH PILOT
- OTOR STARTER SWITCH
- Y SENSOR SWITCH
- ATED SWITCH
- PROOF SWITCH
- ECTRIC CONTROL
- ON SENSOR, DUNTED
- ГСН
- CONTACTOR
- DESIGNATION CONTACTOR REMOTE PUSH
- -OFF CONTROL CONTACTOR CONTROLLED

- [CIRCUIT SIZE] CIRCUIT DESIGNATOR, WHERE 'XXX' REPRESENTS THE CIRCUIT NUMBER AND [CIRCUIT SIZE] REPRESENTS CIRCUIT COMPOSITION, SEE THE CIRCUIT DECODER
 - HOMERUN LPB-3 = LIGHTING PANEL "B", CIRCUIT 3XXX = CONDUIT NUMBER
 - EXISTING CONDUIT
 - NEW, ABOVEGROUND CONDUIT
 - NEW, UNDERGROUND CONDUIT
 - UNDERGROUND ELECTRICAL DUCT BANK

BARE COPPER GROUND CONDUCTOR, 2/0 UNLESS OTHERWISE NOTED

- SITE PLAN POWER OR UTILITY POLE
- CADWELD OR MECHANICAL BONDING
- GROUND ROD
- GROUNDING TEST WELL
- AIR TERMINAL
- PHASE II 133 PUMP STATION

<u>GENERAL NOTES:</u>

- 1. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF LATEST APPLICABLE VERSION OF THE INTERNATIONAL BUILDING CODE (IBC) AND NATIONAL ELECTRICAL CODE (NFPA 70) AS ADOPTED BY THE AHJ (AUTHORITY HAVING JURISDICTION), AND UNDERWRITER'S LABORATORIES (UL) REQUIREMENTS.
- 2. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER. REFER TO NECA 1 - GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION AND OTHER APPLICABLE NECA STANDARDS. CONDUIT PLANS ARE DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW ALL TURNS, BENDS, FITTINGS, AND SPECIAL INTRICACIES. THIS DOES NOT LIMIT CONTRACTOR'S LIABILITY FOR THE INSTALLATION OF A SOUND AND COMPLETE SYSTEM THAT COMPLIES WITH THE N.E.C. AND LOCAL CODES AND REGULATIONS.
- 3. PRIOR TO PURCHASING ANY MATERIALS OR COMMENCING WORK, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, CONDUIT SIZES AND LOCATIONS, EQUIPMENT, ETC. SHOWN ON THE DRAWINGS OR AFFECTING THIS WORK AND SHALL REPORT ANY DEVIATIONS TO THE ENGINEER.
- 4. COORDINATE ALL WORK WITH STRUCTURAL, MECHANICAL, AND OTHER CRAFTS AS REQUIRED. CONTRACTOR SHALL APPRISE HIMSELF OF ALL WORK SHOWN ON OTHER DRAWING FOR VARIOUS ASPECTS OF THIS PROJECTS AND COORDINATE ACCORDINGLY.
- 5. PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT COMPLETELY TO PROVIDE FULLY OPERATIONAL SYSTEMS.
- 6. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 7. WHERE CONDUIT SIZE AND FILL IS NOT DEFINED ON THE SINGLE LINE OR INTERCONNECTION DIAGRAM, PROVIDE 3/4" CONDUIT WITH 2 #12 AWG AND #12 AWG GROUND CONDUCTORS FOR SINGLE PHASE AND 3/4" CONDUIT WITH 3#12 AWG AND #12 AWG GROUND CONDUCTOR FOR 3 PHASE.
- 8. ALL 120V OR GREATER WIRING FOR DEDICATED OR MULTIPLE CIRCUITS IN THE SAME RACEWAY SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR.

MECHANICAL COORDINATION:

- 1. CONTRACTOR SHALL COORDINATE CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING OR INSTALLING EQUIPMENT. CONTRACTOR SHALL FURNISH EQUIPMENT COMPATIBLE FOR THE VOLTAGES SHOWN ON THE MECHANICAL DRAWINGS.
- 2. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS, AND THE MECHANICAL DRAWINGS.

DEMOLITION AND MODIFICATION



- TO BE MODIFIED HATCH
- DEMOLITION HATCH

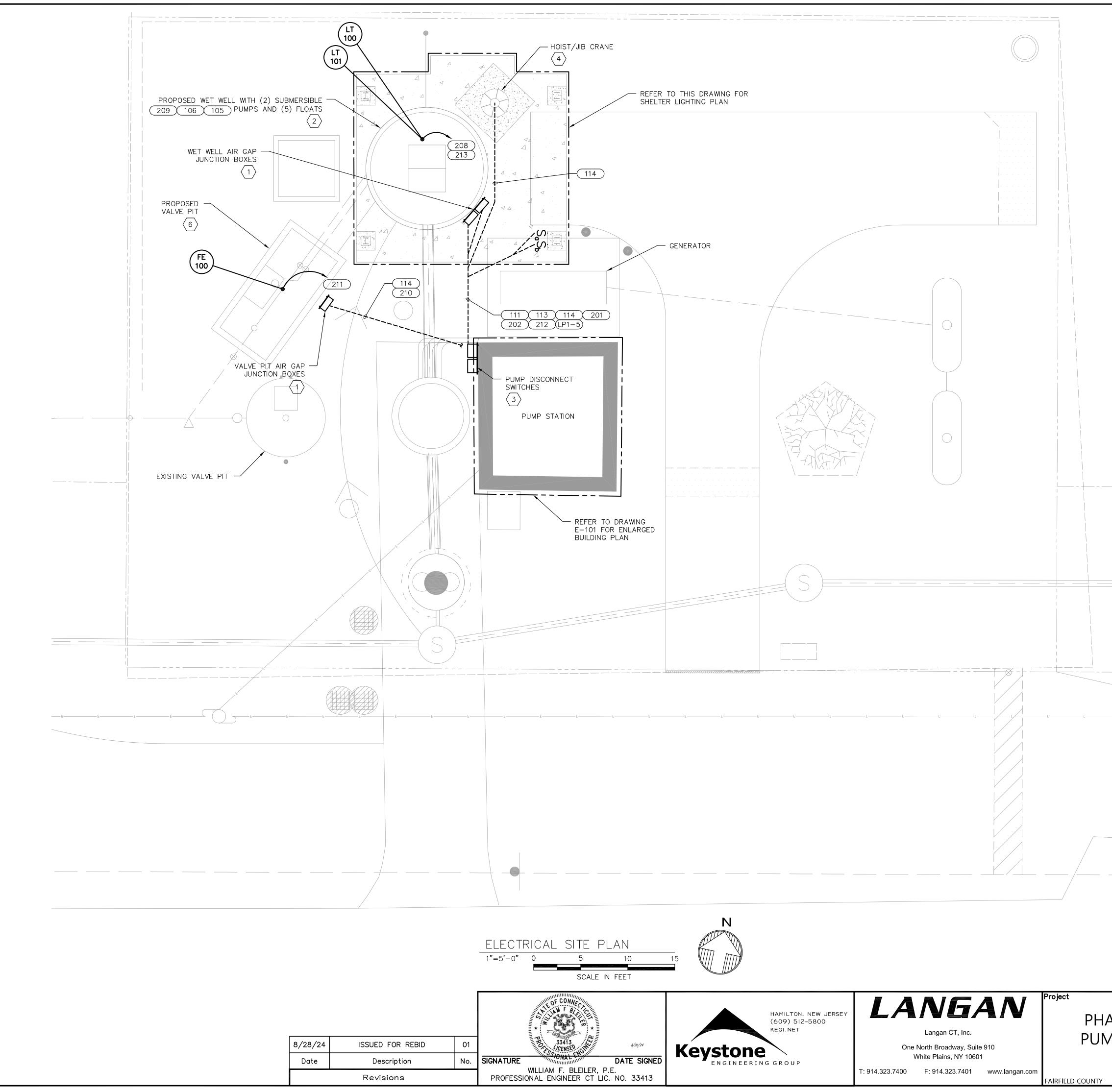
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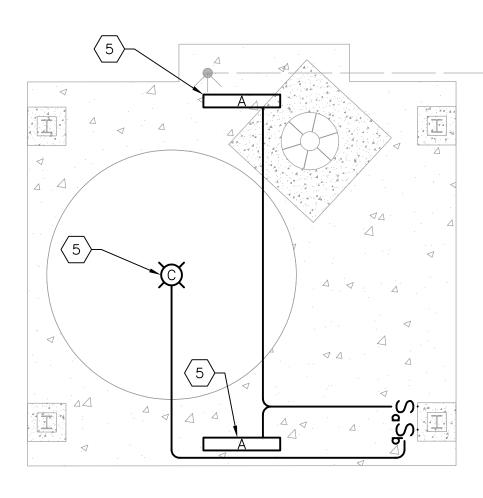
190093201 Date 8/28/2024 Drawn By TOS Checked By HRS

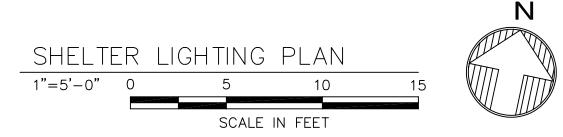
Project No.

E-001

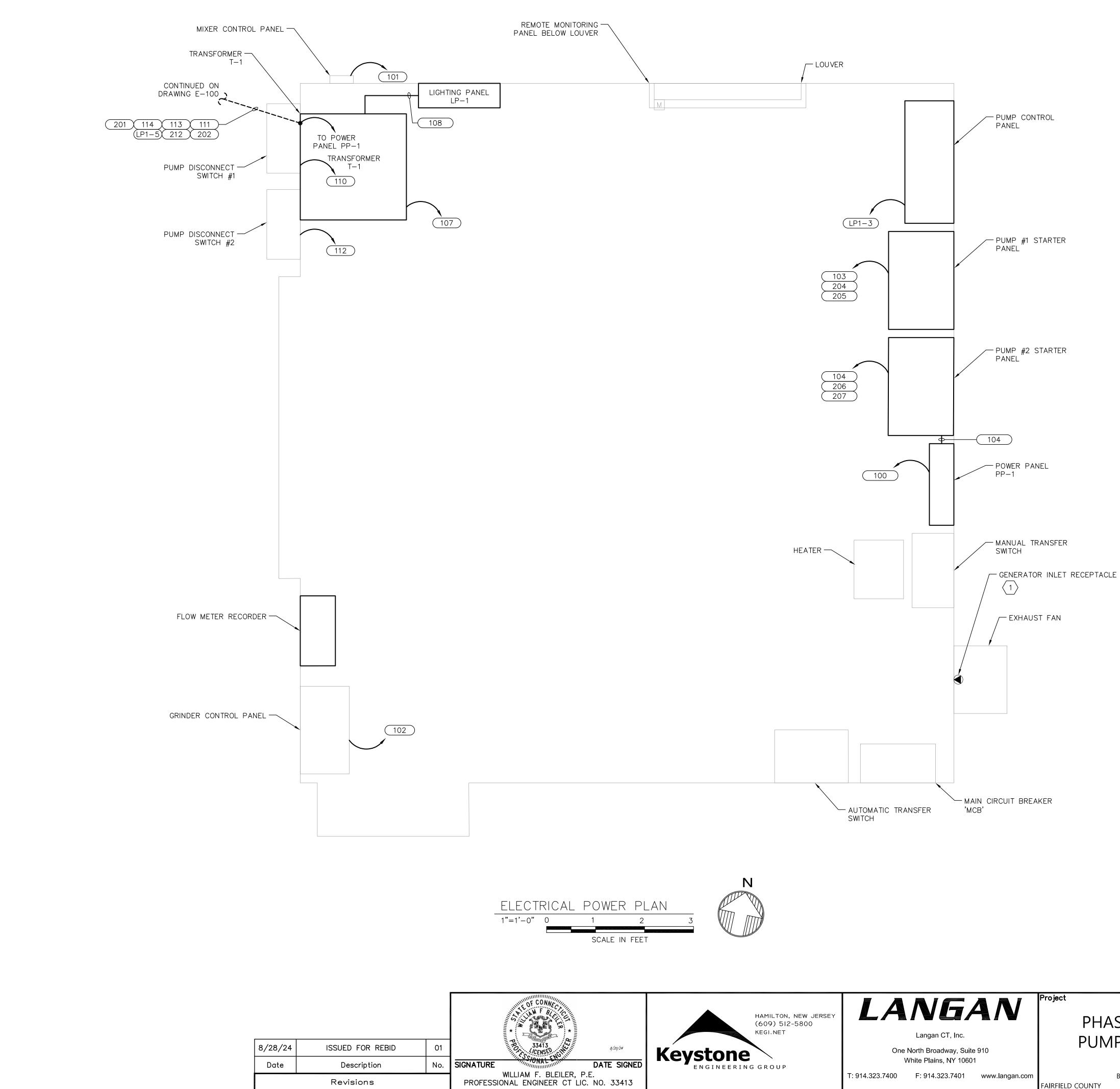


- 1. SEE DRAWING E-603 FOR AIR GAP ENCLOSURE DETAILS. AIR GAP ENCLOSURE SHALL BE MOUNTED 3'-0" FROM WET WELL AND VALVE PIT HATCHES MINIMUM, AND 5'-0" FROM WET WELL AND VALVE PIT VENTS MINIMUM.
- 2. THIS AREA IS A CLASS I DIVISION 1 LOCATION. ALL ELECTRICAL INSTALLATIONS TO BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 501.
- 3. CONTRACTOR SHALL RETAIN AND RE-USE EXISTING 100 AMP DISCONNECT SWITCHES FOR NEW PUMPS. CONTRACTOR SHALL PROVIDE TEMPORARY DISCONNECT SWITCHES TO FEED EXISTING PUMPS UNTIL NEW STATION IS COMMISSIONED.
- 4. HOIST/JIB CRANE SHALL BE INSTALLED OUTSIDE OF ALL CLASSIFIED AREAS, 3'-0" FROM WET WELL AND VALVE PUT HATCHES MINIMUM, AND 5'-0" FROM WET WELL AND VALVE PIT VENTS MINIMUM.
- 5. INSTALL LIGHT FIXTURES ON WET WELL SHELTER CEILING. PROVIDE NEMA 4X LIGHT SWITCH, MOUNTED TO WET WELL SHELTER POST, FOR TYPE 'A' FIXTURES. PROVIDE SEPARATE NEMA 4X LIGHT SWITCH, MOUNTED TO WET WELL SHELTER POST, FOR TYPE 'C' FIXTURE.
- 6. THIS AREA IS CLASS I, DIVISION 2 LOCATION. ALL ELECTRICAL INSTALLATIONS TO BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 501.





	Drawing Title	Project No.	
		190093201	
ASE II - 133	ELECTRICAL	Date	
/IP STATION		8/28/2024	- E-100
IF STATION	SITE PLAN	Drawn By	
		TOS	
BROOKFIELD		Checked By	
CONNECTICUT		HRS	Sheet 3 of 7



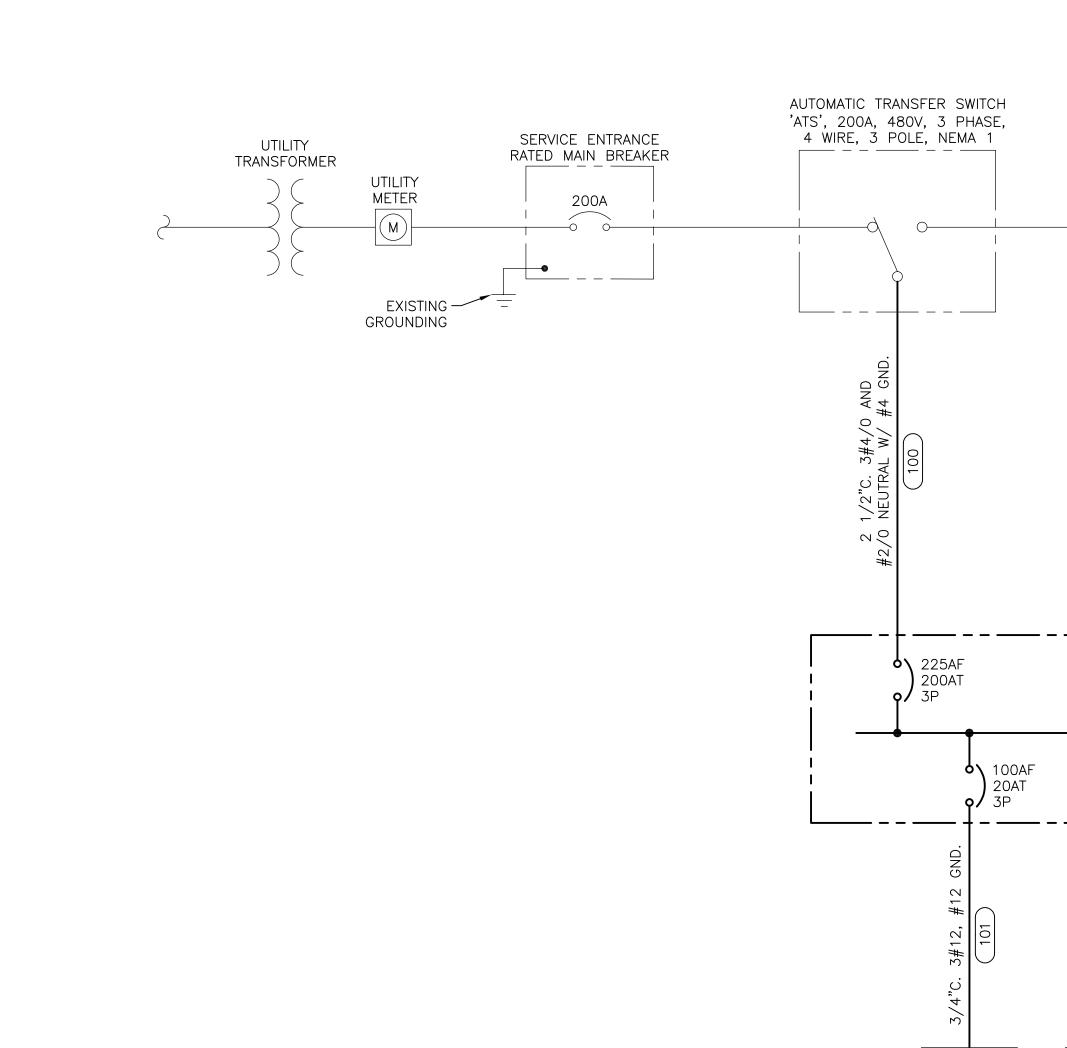
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- 1. CONTRACTOR SHALL SECURELY RE-MOUNT EXISTING GENERATOR RECEPTACLE ON BUILDING EXTERIOR FOR FUTURE CONNECTION OF PORTABLE GENERATOR.
- 2. PROVIDE 3/4" CONDUIT WITH 3 #12 AWG.

Drawing Title Project No. 190093201 ELECTRICAL PHASE II - 133 Date 8/28/2024 E-101 PUMP STATION POWER PLAN Drawn By TOS Checked By BROOKFIELD Sheet 4 of 7

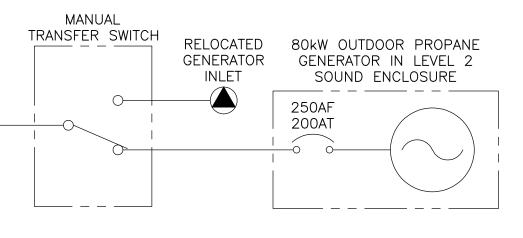
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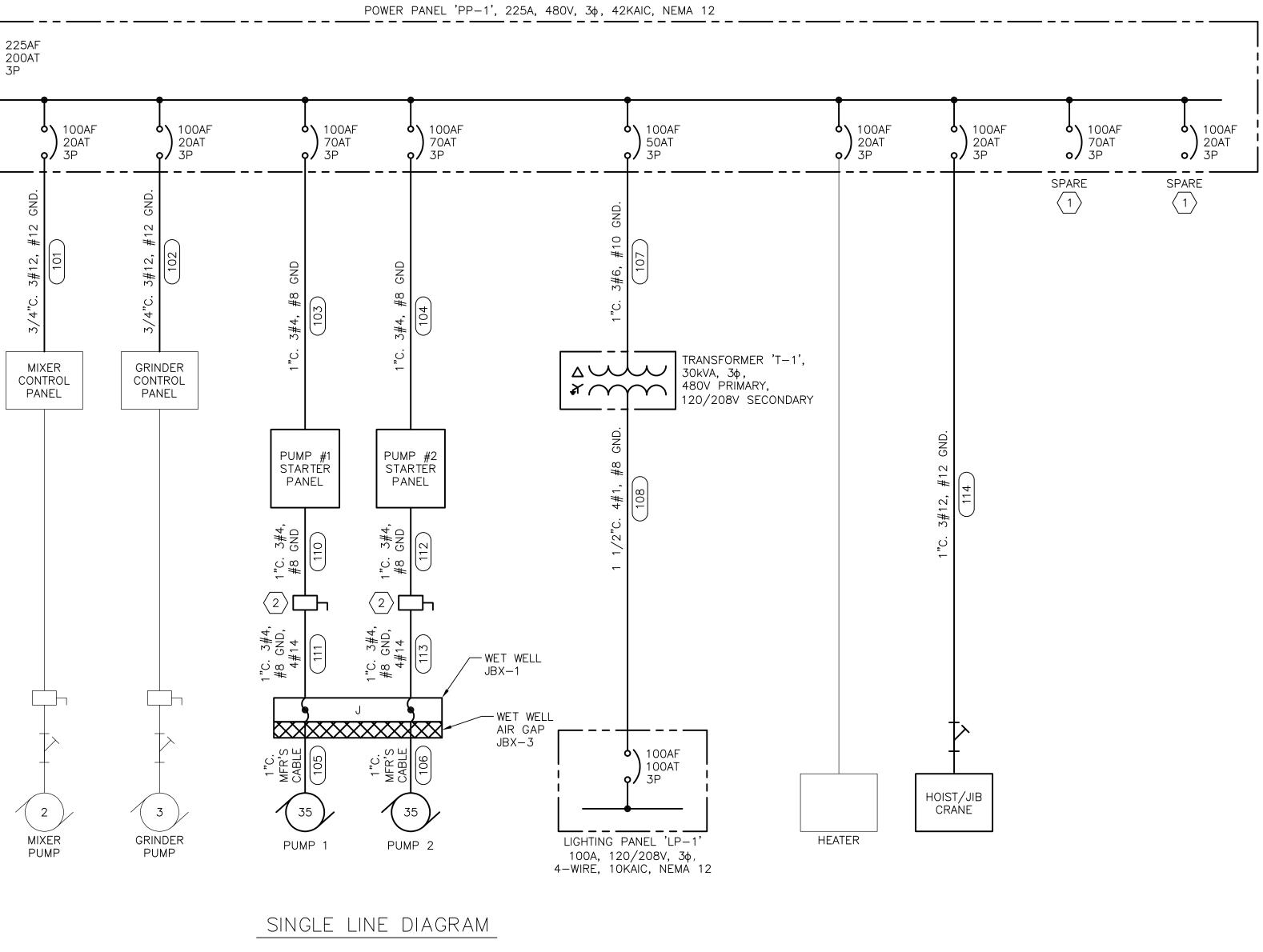
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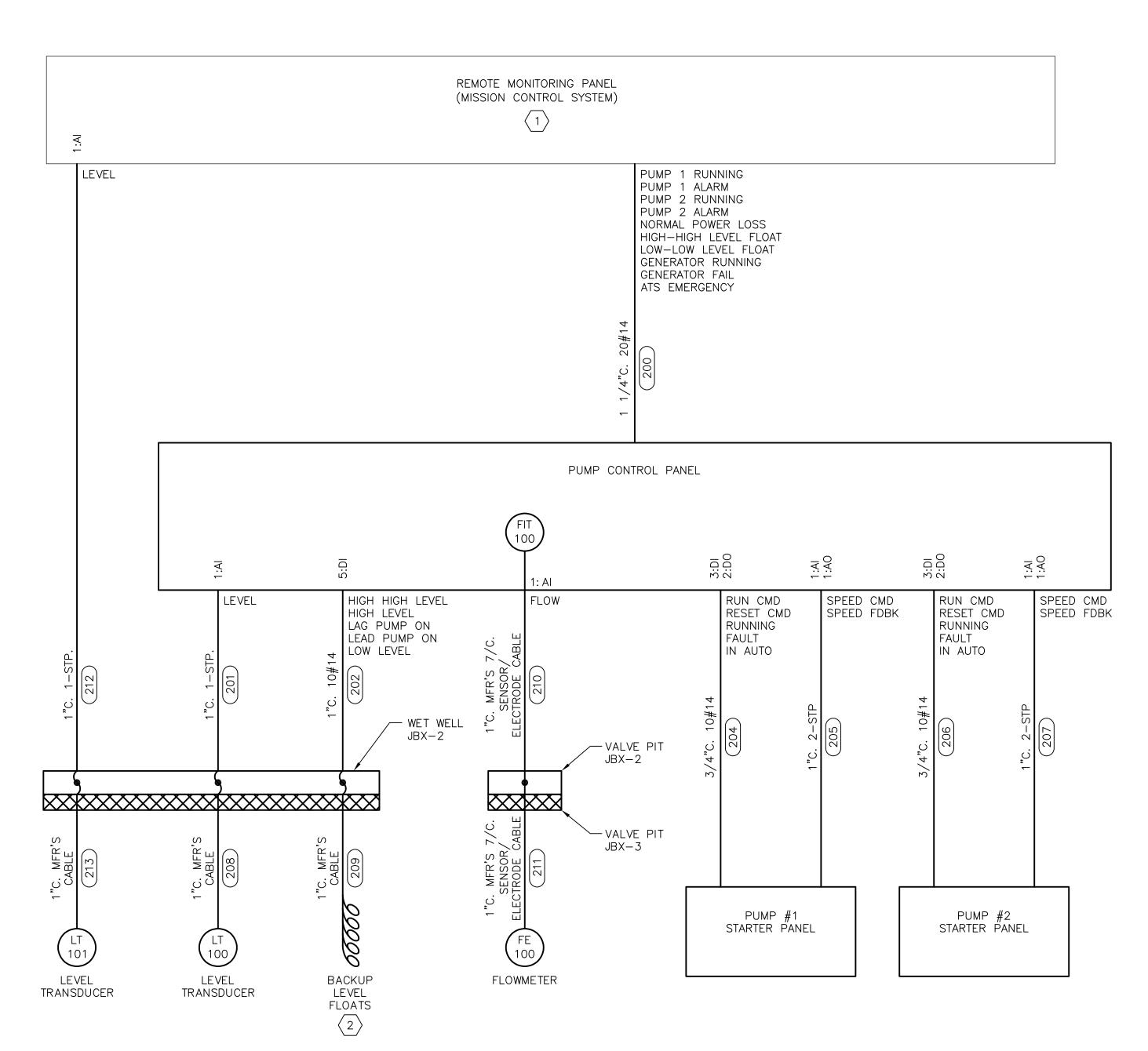






- 1. CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS AS REQUIRED, WITH A MINIMUM OR ONE SPARE BREAKER PER EACH SIZE IN-USE BREAKER.
- 2. CONTRACTOR SHALL RETAIN AND RE-USE EXISTING 100 AMP DISCONNECT SWITCHES FOR NEW PUMPS. CONTRACTOR SHALL PROVIDE TEMPORARY DISCONNECT SWITCH TO FEED EXISTING PUMPS UNTIL NEW STATION IS COMMISSIONED.

	Drawing Title	Project No.	
	ELECTRICAL	190093201	-
HASE II - 133		Date 8/28/2024	
IMP STATION	SINGLE LINE	Drawn By	E-601
		TOS	
BROOKFIELD	DIAGRAM	Checked By	-
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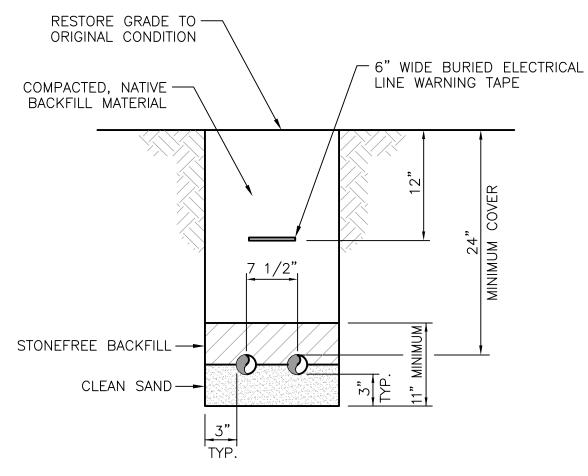


INTERCONNECTION DIAGRAM

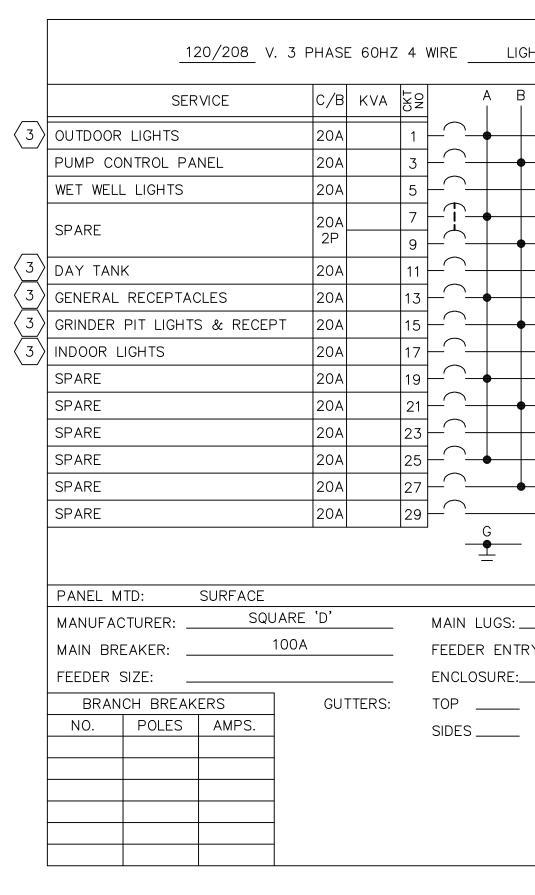
TYPE	MANUFACTURER AND SERIES	DESCRIPTION	VOLTS (WATTS)	REMARKS
A	CURRENT LIGHTING COLUMBIA LXEP	4' ENCLOSED AND GASKETED LED FIXTURE; FIBERGLASS HOUSING WITH F1 WEATHERABILITY RATING AND TAMPER RESISTANT LATCHES; DEEP FROSTED ACRYLIC LENS, IMPACT MODIFIED; WET LOCATION LISTED; 4000K COLOR TEMP, MEDIUM LUMEN OUTPUT	120 (47)	
С	CURRENT LIGHTING BEACON SRT2 EDGE-LIT	CEILING MOUNTED EDGE-LIT LED FIXTURE; DIE-CAST ALUMINUM TAMPER RESISTANT HOUSING WITH CORROSION RESISTANT POWDER COAT FINISH, SILICONE GASKETED; WET LOCATION LISTED; 4000K, 70 CRI COLOR TEMP, 14700 LUMENS, TYPE 5 CONCENTRATED DISTRIBUTION	120 (140)	

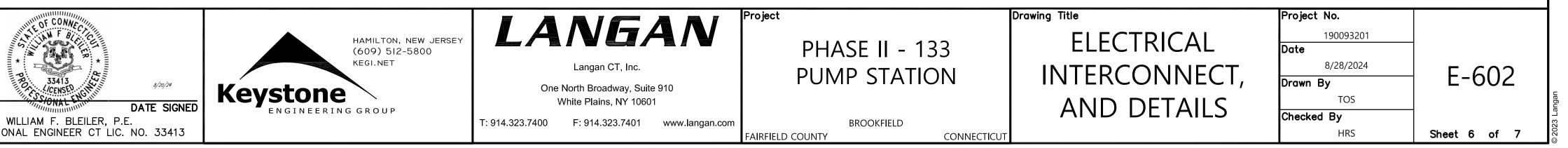
LIGHTING FIXTURE SCHEDULE

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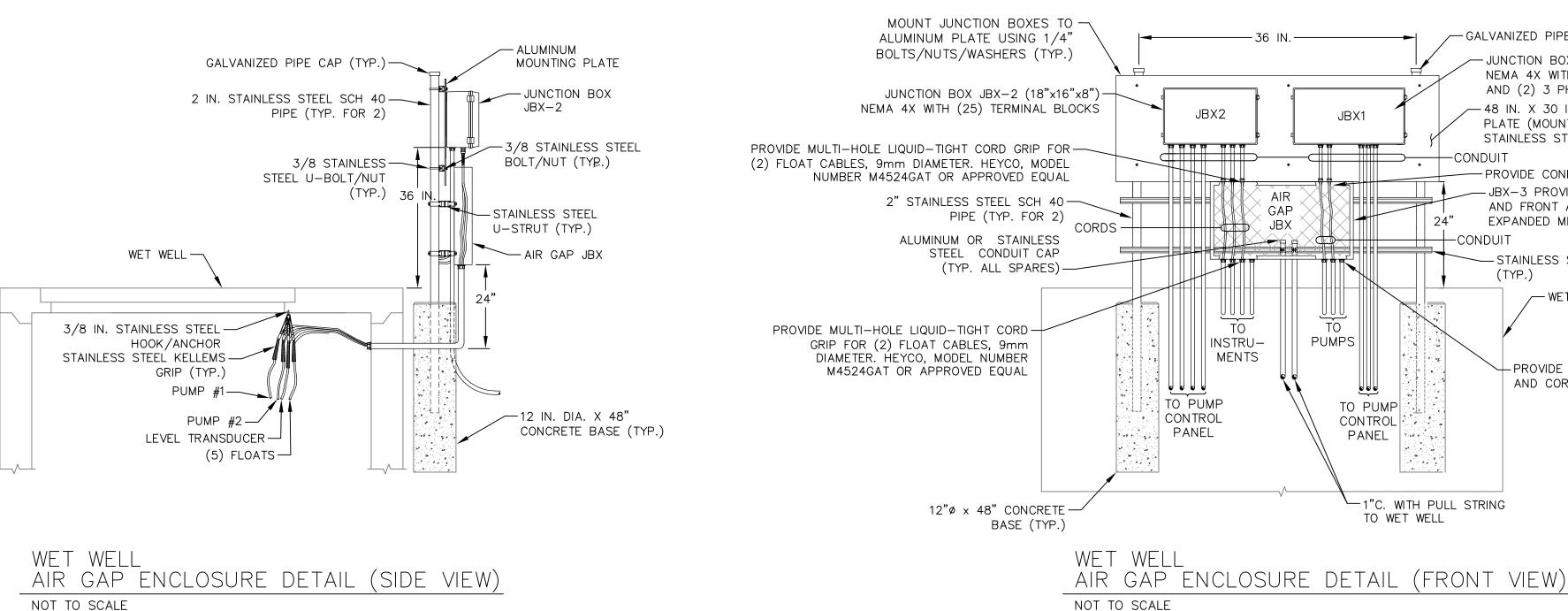


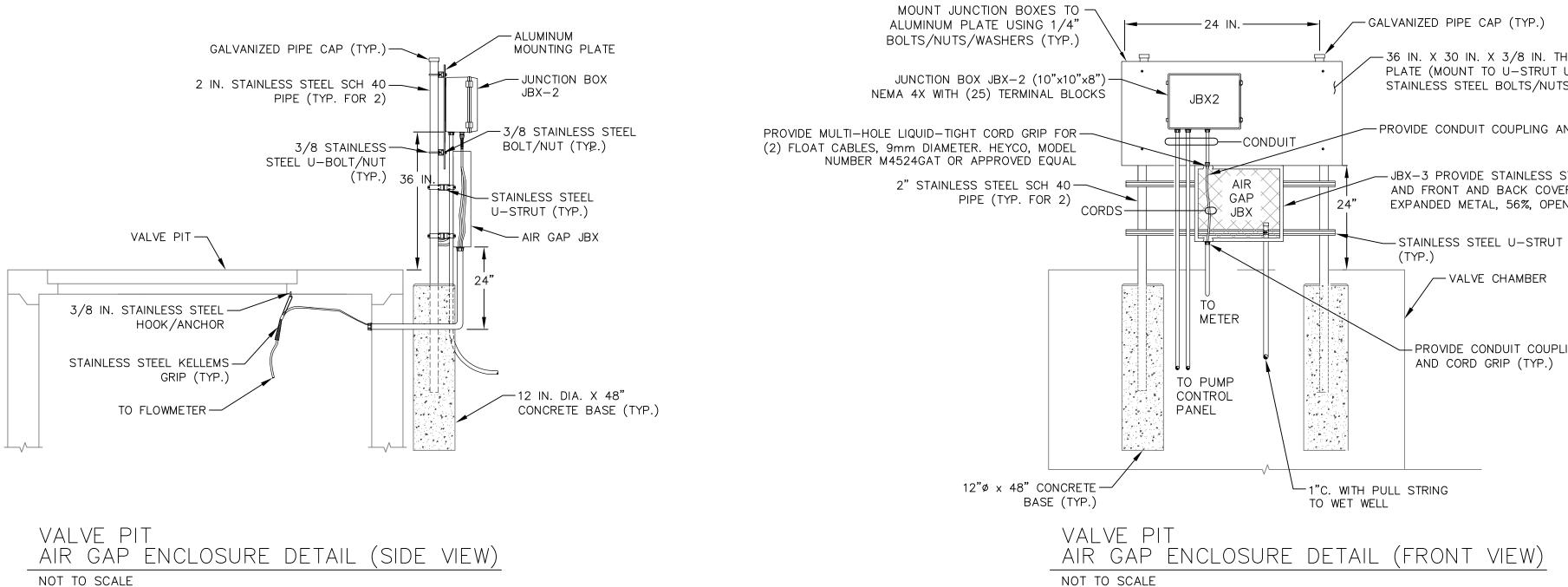
- 1. REMOTE MONITORING PANEL IS EXISTING, ONLY NEW SIGNALS ARE SHOWN. EXISTING SIGNALS ARE TO REMAIN UNLESS OTHERWISE NOTED.
- 2. FLOATS SHALL BE RACK MOUNTED.
- 3. TERMINATE EXISTING CIRCUITRY WIRING IN NEW LIGHTING PANEL.
- 4. CONTRACTOR SHALL FIELD VERIFY EXISTING LIGHTING PANEL LOADS FOR RECONNECTION. CONTRACTOR SHALL COORDINATE WITH OWNER TO CONFIRM ALL EXISTING LOADS ARE TO BE RE-POWERED.
- 5. PROVIDE EPD TYPE CIRCUIT BREAKER.

GHTIN	IG	PAN	IEL		LF	21	SCHEDULE	
3 C	C N		L NO N CK	KVA	C/B	Ś	SERVICE	
		<u> </u>	2		20A	INDOOR L	IGHTS	3
,		\frown	4		20A	SPARE		
	•	<u> </u>	6		20A	CHART RE	ECORDER/FLOW	$\langle 3$
		·	8					
•		<u> Ţ_</u> _1	10	20A	20A 3P	GENERATO	DR LOAD CENTER	$\left \left< 3\right.\right $
	,	<u> </u>	12					
		<u> </u>	14		20A	EXHAUST	FAN	$\left \left< \frac{3}{2}\right.\right $
•		<u> </u>	16		20A	VALVE VA	ULT LIGHTS & RECEPT	$\left \left\langle \mathbf{J}\right\rangle \right $
	•	\frown	18		20A	REMOTE N	IONITORING PANEL	$\left \left\langle \overline{z}\right\rangle \right $
		<u> </u>	20		20A	SPARE		
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					UTAL	LOAD		l

LIGHTING PANEL 'LP-1' PANEL SCHEDULE

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- PROVIDE CONDUIT COUPLING AND CORD GRIP (TYP.) - JBX-3 PROVIDE STAINLESS STEEL JUNCTION BOX AND FRONT AND BACK COVERS OF 1/2#13 FLATTENED EXPANDED METAL, 56%, OPEN AREA (18" HEIGHT MIN.)

- STAINLESS STEEL U-STRUT (TYP.)

- WET WELL

- PROVIDE CONDUIT COUPLING AND CORD GRIP (TYP.)

 \sim 36 IN. X 30 IN. X 3/8 IN. THICK ALUMINUM PLATE (MOUNT TO U-STRUT USING 3/8 IN. STAINLESS STEEL BOLTS/NUTS/WASHERS

- PROVIDE CONDUIT COUPLING AND CORD GRIP (TYP.)

- JBX-3 PROVIDE STAINLESS STEEL JUNCTION BOX AND FRONT AND BACK COVERS OF 1/2#13 FLATTENED EXPANDED METAL, 56%, OPEN AREA (18" HEIGHT MIN.)

/--- VALVE CHAMBER

PROVIDE CONDUIT COUPLING AND CORD GRIP (TYP.)

DETAILS

ELECTRICAL

Project No.

Date

Drawn By

Checked By

190093201

8/28/2024

TOS

HRS

BROOKFIELD

CONNECTICU

Drawing Title

Sheet 7 of 7

E-603

GENERAL NOTES:

- 1) NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL STRUCTURAL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF A SIMILARLY NATURE, VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
- 2) STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS, SITE CIVIL, AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER PRIOR TO PERFORMING WORK.
- DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONAL INFORMATION.
- 4) SEE ARCHITECTURAL DRAWINGS FOR WATER/DAMPROOFING AND FIREPROOFING DETAILS AND REQUIREMENTS.
- 5) THESE DRAWINGS DO NOT DEFINE SCOPE OF CONTRACTS.
- 6) AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONDITIONS OF THE JOBSITE, INCLUDING SAFETY OF PERSONS AND PROPERTY. THE ARCHITECT'S OR ENGINEER'S PRESENCE OR REVIEW OF WORK DOES NOT INCLUDE THE ADEQUACY OF THE CONTRACTOR'S MEANS OR METHODS OF CONSTRUCTION.
- 7) SHORING, BRACING AND PROTECTION OF EXISTING AND ADJACENT STRUCTURES DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PROTECT AND MAINTAIN THE INTEGRITY OF ADJACENT STREETS, BUILDINGS AND STRUCTURES.
- 5) ALL WELDING SHALL BE PERFORMED BY QUALIFIED WELDING IN ACCORDANCE WITH AWS SPECIFICATIONS, LATEST EDITION. ALL WELDING ELECTRODES SHALL 8) ALL EXISTING DIMENSIONS AND LOCATIONS OF EXISTING STRUCTURES ON DRAWINGS SHALL BE VERIFIED BY FIELD MEASUREMENTS. ANY DISCREPANCIES SHALL BE CONFORM TO AWS A5.1 GRADE E-70XX. BARE ELECTRODES AND GRANULAR FLUX SHALL CONFORM TO A.W.S. A5.17, F70 A.W.S. FLUX CLASSIFICATION (USE LOW REPORTED TO THE ENGINEER. HYDROGEN ELECTRODES FOR A572, GRADE 50 STEEL).
- 9) DRAWINGS HAVE BEEN PREPARED BASED ON AVAILABLE KNOWLEDGE OF EXISTING CONDITIONS. IF, DURING DEMOLITION, EXCAVATION, OR CONSTRUCTION ACTUAL 6) ALL WELDS NOT SPECIFICALLY CALLED OUT SHALL BE AT LEAST THE MINIMUM WELD SIZE AS SPECIFIED BY THE AISC MANUAL OF STEEL DESIGN, LATEST EDITION. CONDITIONS ARE DISCOVERED TO DIFFER FROM THOSE INDICATED ON DRAWINGS, ENGINEER SHALL BE NOTIFIED IMMEDIATELY. ALL FIELD SPLICES AND CONNECTIONS SHALL BE WELDED OR BOLTED USING HIGH STRENGTH BOLTS.

FOUNDATION NOTES:

1) WALL FOOTINGS SHALL BEAR ON SOIL WITH A MINIMUM BEARING CAPACITY OF 1 TSF, SUBJECT FIELD VERIFICATION

2) FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED SOIL AT A MINIMUM OF 3'-6" BELOW FINISHED GRADE. ALL FOOTINGS SHALL BE FORMED.

- 3) PROVIDE DOWELS IN FOUNDATIONS FOR ALL WALLS, COLUMNS, AND SHEAR WALLS OF SAME NUMBER AND SIZE AS THE VERTICAL REINFORCEMENT ABOVE, U.O.N.
- PROVIDE WATER STOPS IN ALL VERTICAL CONSTRUCTION JOINTS. 10) CUTS, HOLES, COPES, ETC. REQUIRED FOR WORK OF OTHER TRADES IF ANY SHALL BE APPROVED BY THE ENGINEER AND SHALL BE SHOWN ON THE SHOP DRAWINGS 5) SLABS ON GRADE SHALL BE PLACED ON SELECT FILL COMPACTED TO 90 PERCENT MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557) AND HAVE A VAPOR AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL NOT BE PERMITTED BARRIER OF 6MIL POLYETHYLENE FILM WITH EDGES LAPPED 6" OVER A 4" GRAVEL BED.
- FOUNDATION WALLS SHALL BE FORMED TO PRODUCE A SMOOTH AND UNIFORM FINISH.

CONCRETE NOTES:

- 1) CONCRETE WORK SHALL CONFORM TO ACI-318. IN CASE OF CONFLICT, THE NEW YORK STATE BUILDING CODE SHALL TAKE PRECEDENCE
- 2) ALL FOOTINGS FOUNDATION WALLS, FRAMED SLABS SHALL BE CONTROLLED AIR ENTRAINED CONCRETE HAVING A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 14) SHOP AND ERECTION DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. NO FABRICATION OF STEEL SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS. 5000-PSI IN 28 DAYS, ASTM TYPE 1 WITH 4" SLUMP, AND HAVE PROPERTIES TO RESIST SEVER WEATHERING POTENTIAL
- 15) ALL NEW EXPOSED EXTERIOR STEEL SHALL BE PROTECTED AGAINST CORROSION. STRUCTURAL STEEL MEMBERS SHALL RECEIVE THREE (3) COATS OF CORROSION 3) ALL REINFORCING SHALL BE A MINIMUM OF GRADE 60 INHIBITING PAINT; ONE (1) SHOP APPLIED PRIMER COAT AND ON INTERMEDIATE COAT APPLIED AFTER ERECTION OF TNEMEC 135 CHEMBUILD AT 4.0-6.0 MILS DRY 4) ALL DOWELS TO BE HOT-DIP GALVANIZED WITH NUT AND WASHER TO FIT ALONG TOP OF FOUNDATION WHERE SILL PLATES ARE TO BE ANCHORED, EXTEND 16" INTO FILM THICKNESS. THE FINISH COAT SHALL BE TNEMEC V73 ENDURA SHIELD AT 2.0-3.0 MILLS DRY FILM THICKNESS. PAINT SYSTEMS: TNEMEC, BENJAMIN MOORE CONCRETE BELOW, AND WITH HOOKS MINIMUM OF 4" COROTECH DTM, SHERWIN WILLIAMS PRO AKYLID, OR APPROVED EQUAL. DO NOT PAINT IN SHOP SURFACES WITHIN TWO (2) INCHES OF FIELD WELDS, CONTACT 5) REINFORCING CONCRETE SHALL HAVE A MINIMUM CLEAR COVER AS FOLLOWS: SURFACES OF HIGH-STRENGTH BOLTED FRICTION CONNECTIONS AND BEARING SURFACES. THE FINISH COAT'S COLOR SHALL BE COORDINATED WITH THE OWNER/ARCHITECT.
- a. CONCRETE POURED AGAINST EARTH 3"
- b. CONCRETE EXPOSED TO EARTH OR WEATHER
- i. #5 OR SMALLER 1½"
- ii. #6 OR LARGER 2"
- c. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTRACT WITH GROUND
- i. COLUMNS (TIES & MAIN REINFORCING) 1¹/₂"
- ii. SLABS, WALLS, JOISTS #14 OR #18 BARS 11/2"
- iii. #11 OR SMALLER ¾"
- iv. BEAMS (STIRRUPS AND MAIN REINFORCING) 11/2"
- d. CLEAR COVER SHALL BE CLEARLY SHOWN ON ALL REBAR DETAIL DRAWINGS
- 6) ALL REINFORCING SHALL BE SECURELY HELD IN POSITION WHILE PLACING CONCRETE. IF NECESSARY, ADDITIONAL BARS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT
- 7) THE CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LOCATIONS OF ALL OPENINGS, IF NECESSARY. OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE INSTALLED ONLY AFTER APPROVAL BY THE STRUCTURAL ENGINEER IS OBTAINED. 9) MIN ONE (1) PORTABLE FIRE EXTINGUISHER, MIN 2A RATING PROVIDED WHERE AMMUNITION IS STORED. NO SMOKING
- 8) LOCATION OF ALL CONSTRUCTION JOINTS NOT SHOWN ON DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL PRIOR TO DETAILING OF REINFORCING. ALL CONSTRUCTION JOINTS TO BE CLEARLY SHOWN ON REBAR DETAIL DRAWINGS. ENGINEER MAY REQUIRE ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS.
- 9) COLD WEATHER CONCRETE CONSTRUCTION SHALL BE IN COMPLIANCE WITH ACI 318.

BACK-FILL GENERAL NOTES:

- 1) ONLY GRANULAR SOILS TO BE USED FOR BACK-FILL
- 2) VIBRATORY PLATE HAMMER TO BE USED IN 6-8" LIFTS, BUT NO MORE THAN 10".
- 3) MOISTURE CONTENT OF SOIL TO BE MONITORED PRIOR TO COMPACTION (OPTIMAL MOISTURE CONTENT= 11%)
- 4) 90% OF DRY DENSITY COMPACTION RECOMMENDED
- 5) SEE FOUNDATION NOTES FOR ADDITIONAL INFORMATION.

WOOD FRAMING NOTES:

- 1) ALL WOOD TO BE DF-L NO. 1 OR EQ/GREATER, U.O.N.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2020 NYS RESIDENTIAL BUILDING CODE
- 3) ALL CONNECTIONS TO BE MADE PER MANUFACTURER'S INSTRUCTIONS, RECOMMENDATIONS AND FASTENING REQUIREMENTS.
- 4) LVL'S SHALL HAVE A MINIMUM OF 2 ROWS OF 16D NAILS 12" OC FOR BEAMS LESS THAN 12", 3 ROWS FOR GREATER THAN 12"
- 5) APPROPRIATE SIMPSON STRONG-TIE CONNECTORS TO BE INSTALLED AND USED FOR THEIR INTENDED PURPOSE
- 6) HURRICANE TIES TO BE MIN 18-GA LTS
- 7) COLUMNS CAPS TO BE CC/ECC/ECCU U.O.N.
- 8) TOP FLANGE JOIST HANGERS JB/JBA TO BE USED FOR ALL ASYMMETRIC LOADED BEAMS, FACE MOUNTED JOIST HANGERS LU28/LUS28 TO BE USED FOR SYMMETRIC LOADED BEAMS ONLY.
- ALL IN-WALL POSTS TO BE CONTINUOUSLY BRACED TO SHEATHING WHERE AVAILABLE.
- 10) ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED KILN-DRIED AND PAINTED. IF WOOD IS NOT KILN-DRIED, ALLOW 2-4 MONTHS TO DRY AND THEN PAINT. PAINT SHALL BE EXTERIOR GRADE AND APPLIED WITH PRIMER OR PER MANUFACTURERS INSTRUCTIONS (MINIMUM 2 COATS)

STEEL FRAMING NOTES:

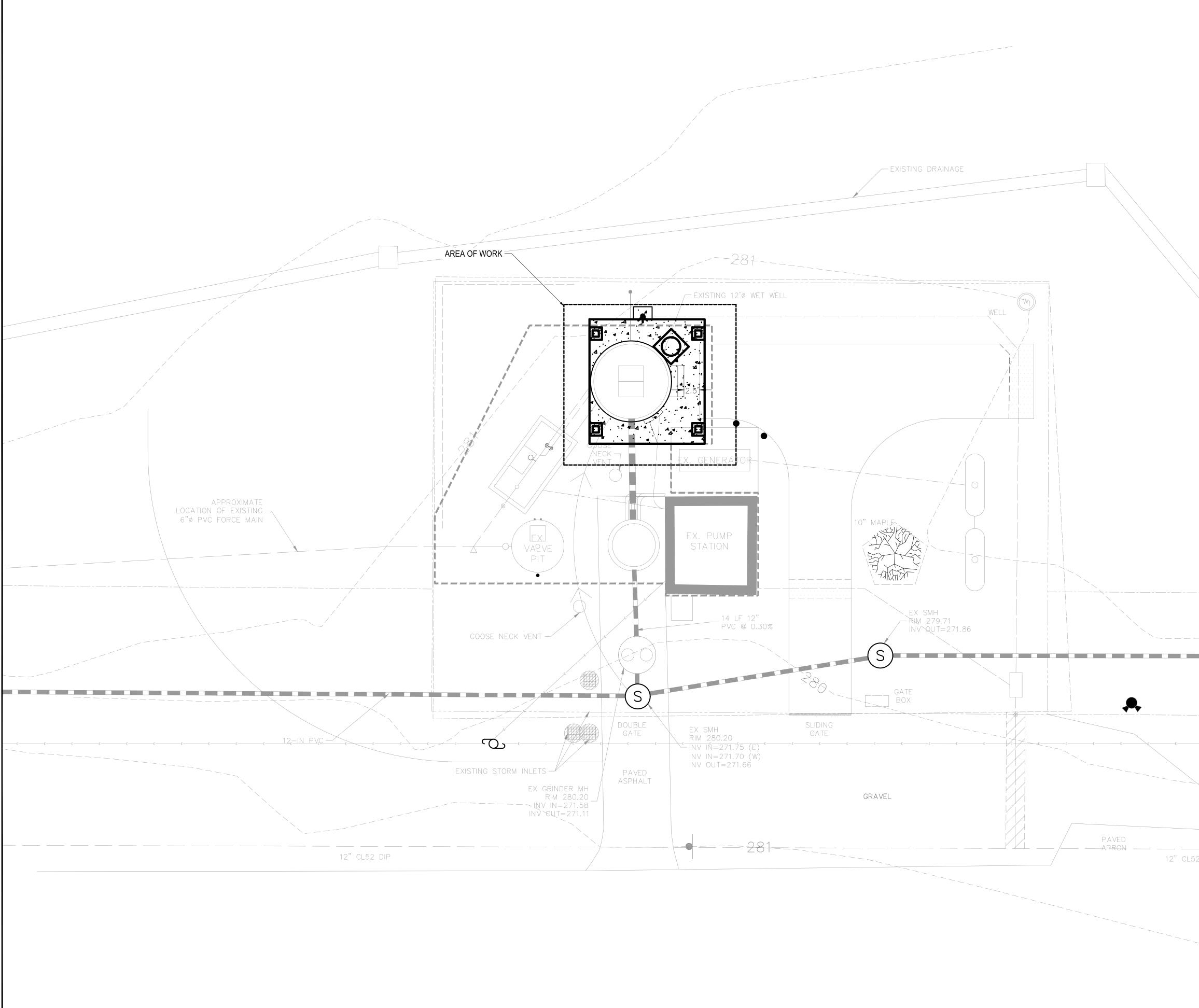
1) ALL NEW STEEL (INCLUDING THE STEEL USED IN CONNECTIONS) SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS:

- a. STEEL: W-SECTIONS SHALL BE STANDARD A992, GRADE 50, WITH A MINIMUM YIELD STRENGTH OF 50 KSI. PLATES AND ANGLES SHALL BE STANDARD A36, WITH A MINIMUM YIELD STRENGTH OF 36 KSI. HSS SHALL BE STANDARD A500 Gr.B.
- b. BOLTS: 3/4" MINIMUM, ASTM A325 N BEARING TYPE BOLTS UNLESS OTHERWISE NOTED
- 2) ALL STRUCTURAL STEEL WORK SHALL CONFIRM TO THE FOLLOWING GOVERNING STANDARDS:
- a. AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", LATEST EDITION
- b. THE AMERICAN WELDING SOCIETY (AWS D1.1) "STRUCTURAL WELDING CODE STEEL", LATEST EDITION
- 3) STEEL CONNECTIONS SHALL BE STANDARD AISC FRAMED BM CONNECTIONS UNLESS NOTED OTHERWISE
- 4) SHOP AND FIELD CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS MAY BE BOLTED OR WELDED
- 8) SPLICES SHALL BE DESIGNED TO DEVELOP THE FULL CAPACITY OF THE MEMBER AT THE POINT OF SPLICE UNLESS OTHERWISE NOTED. MEMBERS SHALL NOT BE SPLICED AT THE POINTS OF MAXIMUM STRESS.
- 9) ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND ACCEPTANCE IS GRANTED. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTABILITY AND THE CONTRACTOR'S BID SHALL INCLUDE THE COST OF THOSE SPECIFIC DETAILS SHOWN ON THE DRAWINGS. IN ANY EVENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE CONNECTION DETAILS WHICH THEY PROPOSE. ANY ALTERNATE DETAIL SUBMITTED BY THE CONTRACTOR SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
- 11) ALL BMS SHALL BE FABRICATED WITH NATURAL CAMBER UP.
- 12) STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND DRAWINGS RELATED TO OTHER TRADES (IF ANY). THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND COORDINATING DIMENSIONS, CLEARANCES, ETC. WITH THE WORK OF OTHER TRADES.
- 13) THE CONTRACTOR SHALL COORDINATE ALL MISCELLANEOUS STEEL DETAILING REQUIREMENTS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS (IF ANY).

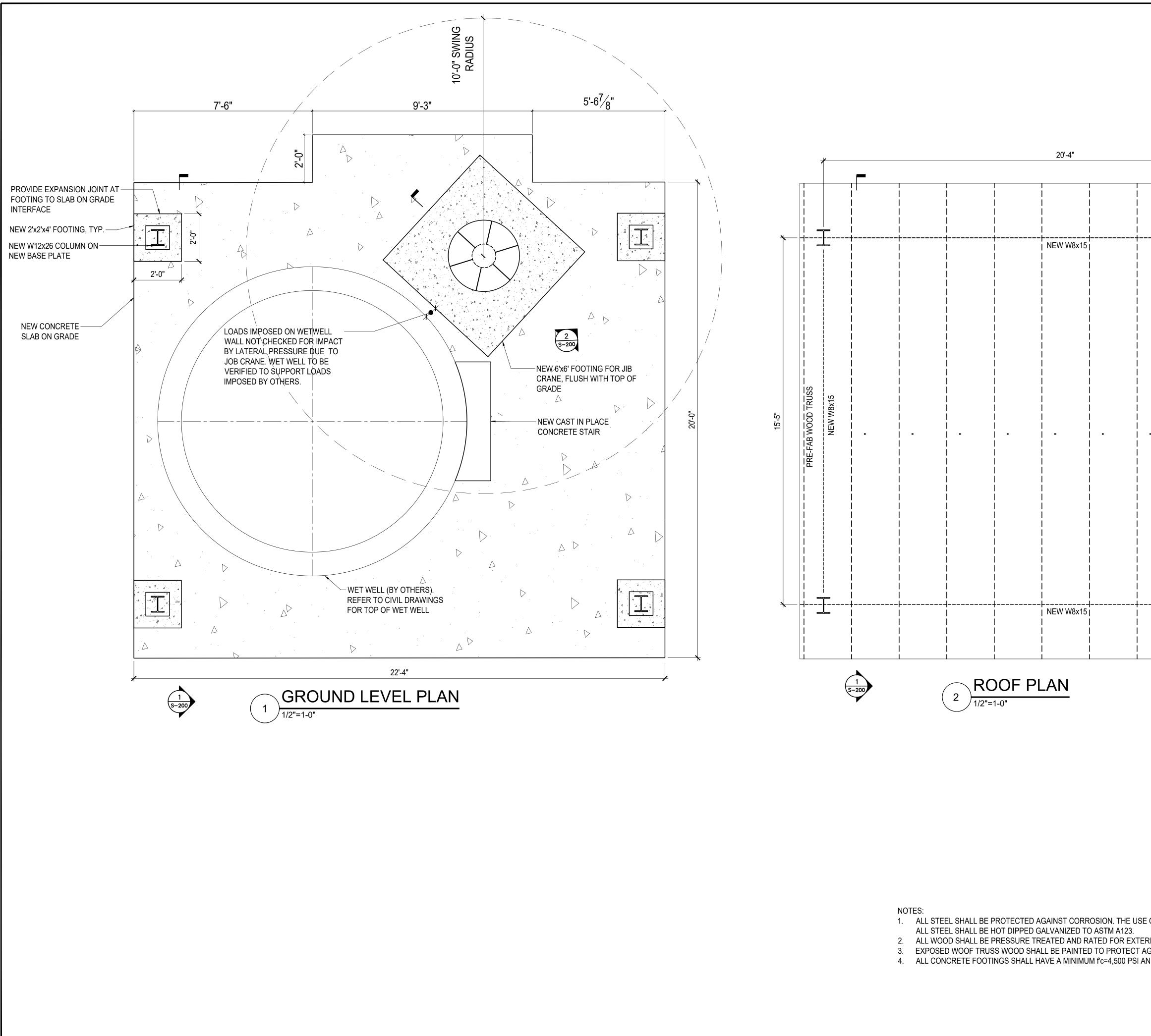
POWDER ACTUATED FASTENER (PAF) NOTES:

- 1) USER SHALL BE TRAINED & CERTIFIED BY THE MANUFACTURER PRIOR TO USE. DO NOT USE IN EXPLOSIVE OR FLAMMABLE ATMOSPHERE.
- 2) SPECIAL PRECAUTIONS MAY BE REQUIRED, INCLUDING BUT NOT LIMITED TO: CERTIFICATE OF FITNESS, MATERIAL STORAGE & HANDLING. PRIOR TO USE CONFIRM REQUIREMENTS FROM MUNICIPAL BUILDING & FIRE DEPARTMENT(S).
- 3) CONTROLLED ACCESS AND SAFETY ZONES AND BARRIERS SHALL BE ESTABLISHED PRIOR TO USE OF PAF INSTALLATION DEVICE.
- 4) ALL TOOLS SHALL BE CLEANED & MAINTAINED PER MANUFACTURER'S SPECIFIC INSTRUCTIONS. CHECK ALL TOOLS PRIOR TO EACH DAY'S USE.
- 5) DO NOT LOAD TOOL UNLESS IT IS TO BE USED IMMEDIATELY. DO NOT LEAVE LOADED TOOL UNATTENDED.
- 6) CHECK COLOR OF EACH POWER LOAD BEFORE INSERTING INTO THE TOOL CHAMBER. IN THE EVENT OF MISFIRE, HOLD THE TOOL FIRMLY AGAINST THE WORK SURFACE FOR A PERIOD OF THIRTY (30) SECONDS, THEN FOLLOW MANUFACTURER'S EXPLICIT INSTRUCTIONS IN THE OPERATORS MANUAL.
- 7) PROPER DISPOSAL OF SPENT & UNSPENT CARTRIDGES REQUIRED TO PREVENT SAFETY & ENVIRONMENTAL HAZARDS.
- 8) KEEP HANDS CLEAR OF BARREL END, NEVER POINT TOOL AT ANYONE.

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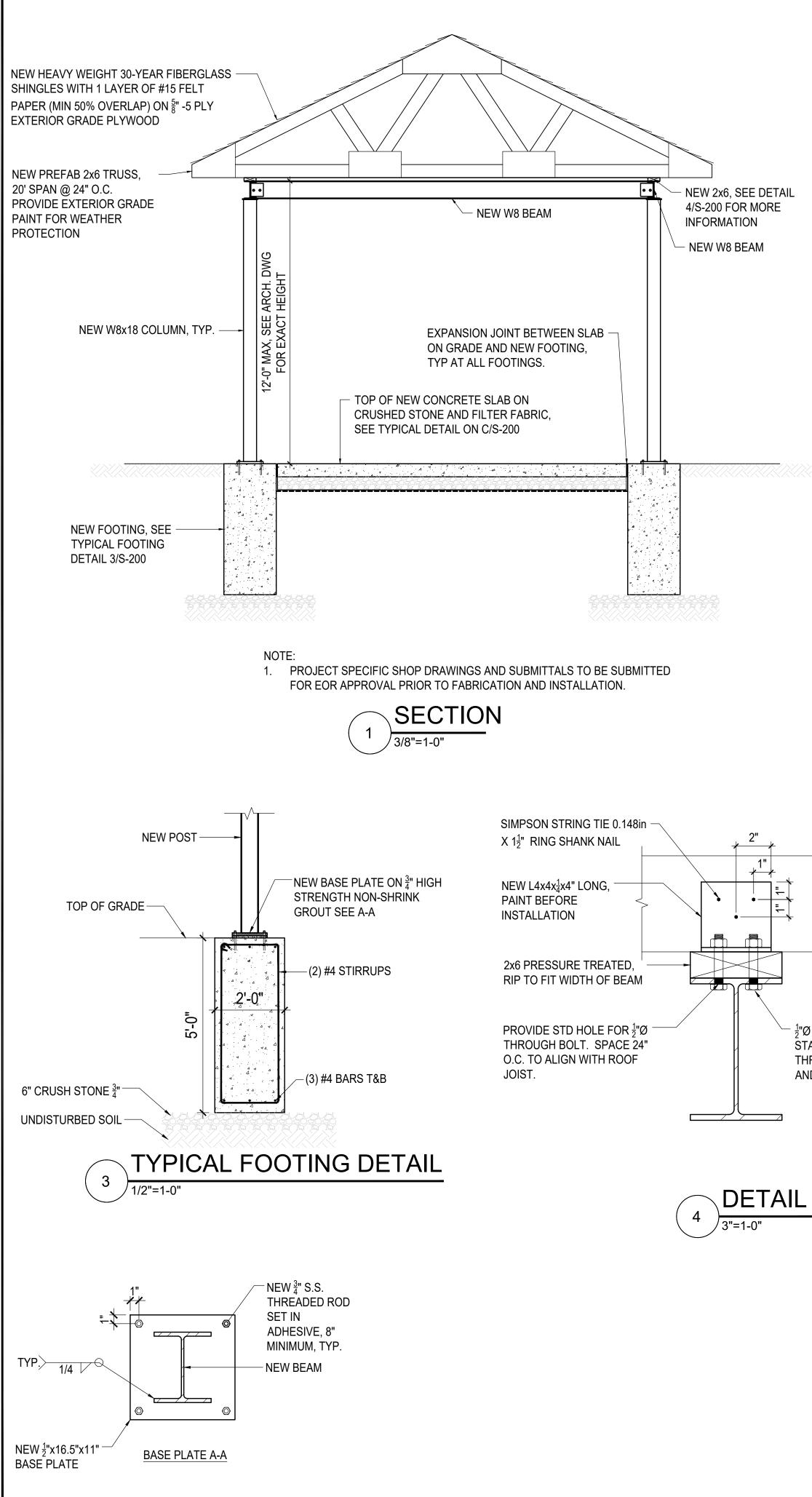
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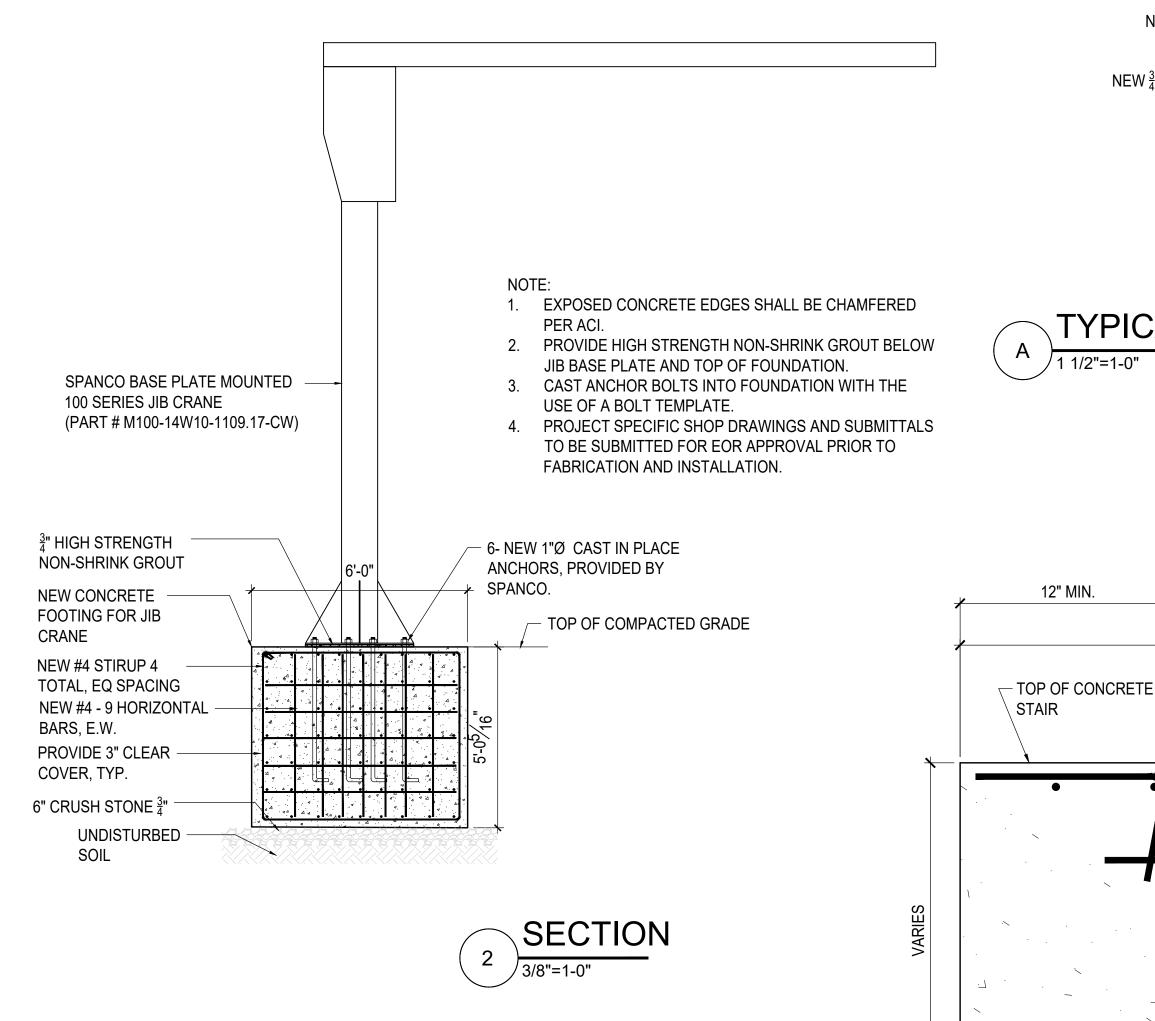


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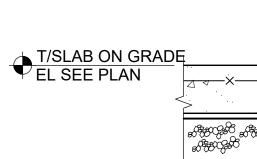




¹/₂"Ø GRADE 302 STAINLESS STEEL THROUGH BOLT, BUT AND WASHER, TYP.,

/ 1 1/2"=1-0"

В



NEW BEAM NEW ³ / ₄ Ø A325 BOLT NEW ³ / ₄ Ø A325 BOLT NEW L6x4x ³ / ₈ x 6" LONG <u>1/4</u> TYPICAL BEAM TO BEAM CONNECTION 1/2"=1-0"	Integral Engineering Services 27 Main Street : a Dobbs Ferry, NY 10522 914-274-8874 : 0 914-774-0343 : m info@integralengrg.com : e www.integralengrg.com : w Owner
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