TOWN OF WOODSTOCK

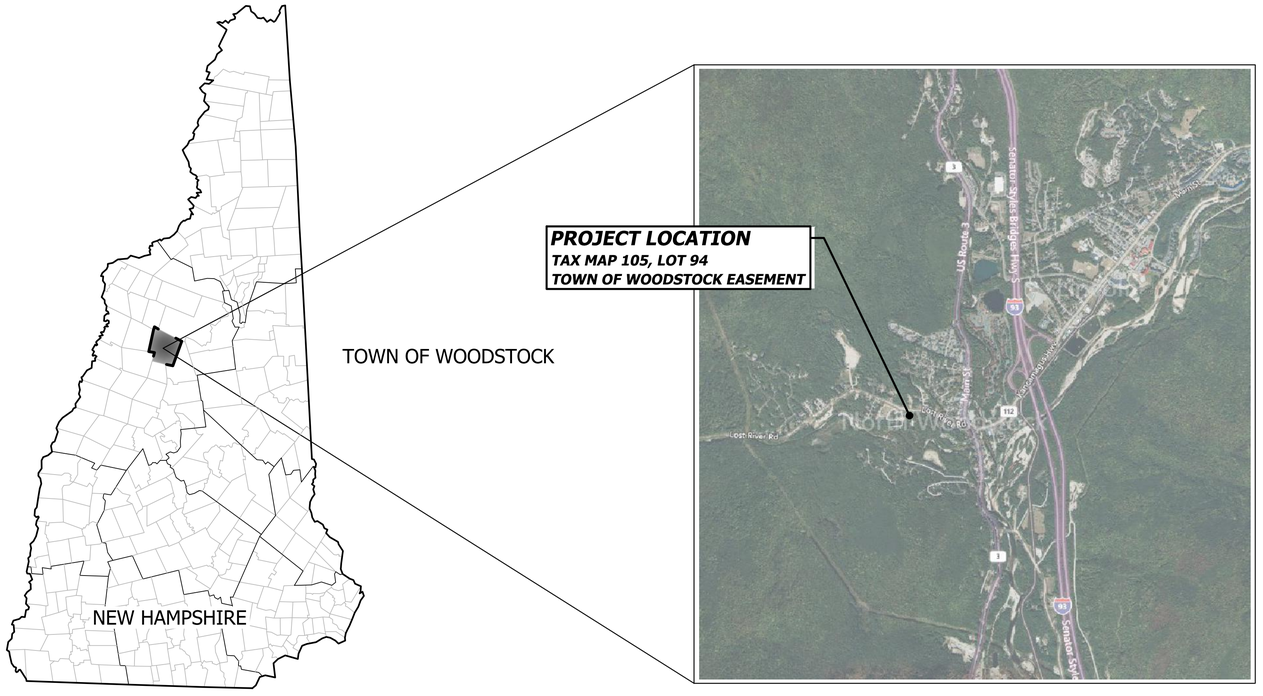
SEWAGE PUMP STATION IMPROVEMENTS

GORDON POND BROOK PUMP STATION

NH ROUTE 112

WOODSTOCK, NEW HAMPSHIRE

APRIL 2024



LOCATION PLAN

SCALE: 1" = 2000'

OWNER:

TOWN OF WOODSTOCK, NH
165 LOST RIVER ROAD
PO BOX 156
WOODSTOCK, NH 03262
(603) 745-8752

ENGINEER & SURVEYOR:

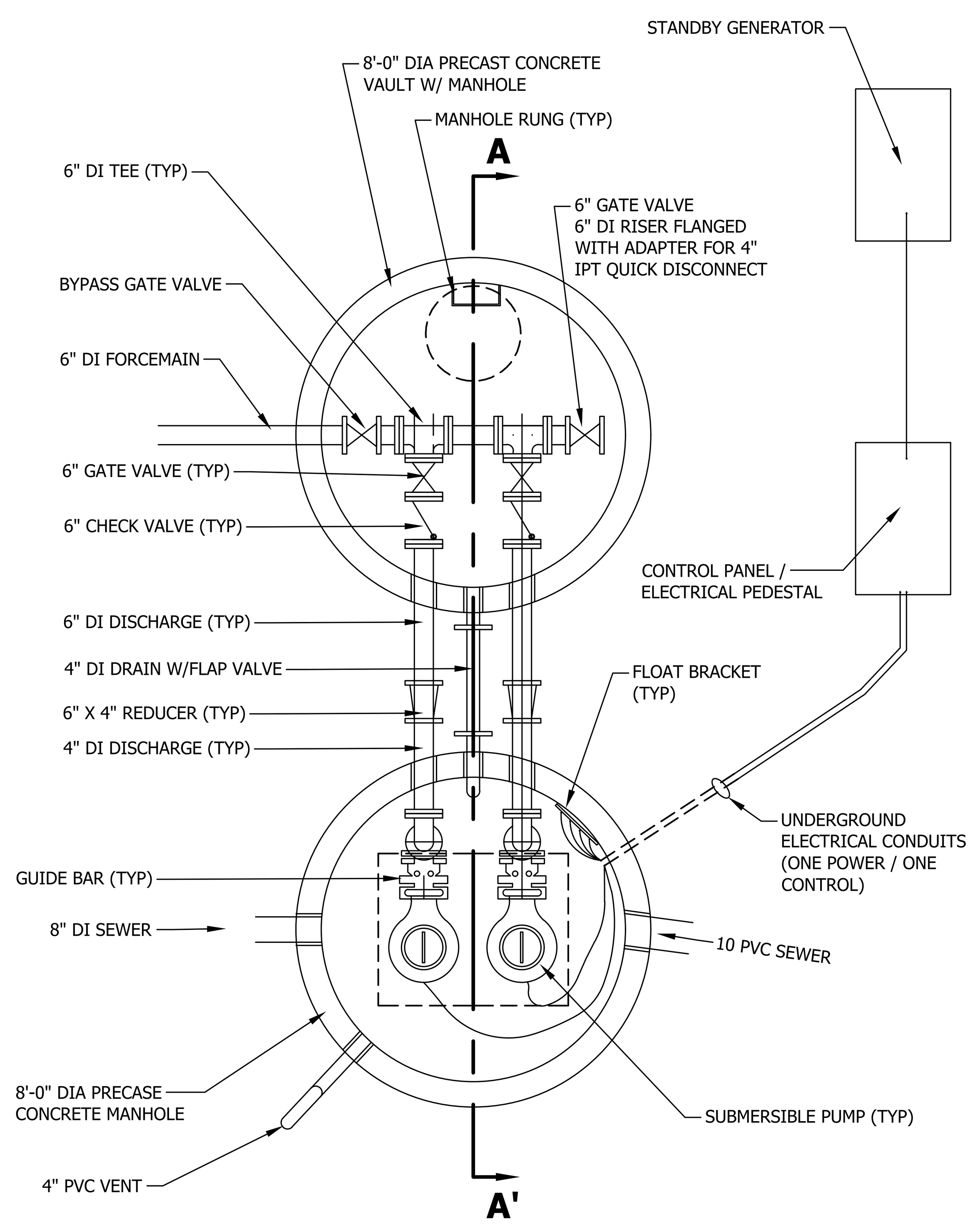
horizons Engineering

34 SCHOOL STREET
LITTLETON, NH 03561
(603) 444-4111

INDEX OF SHEETS

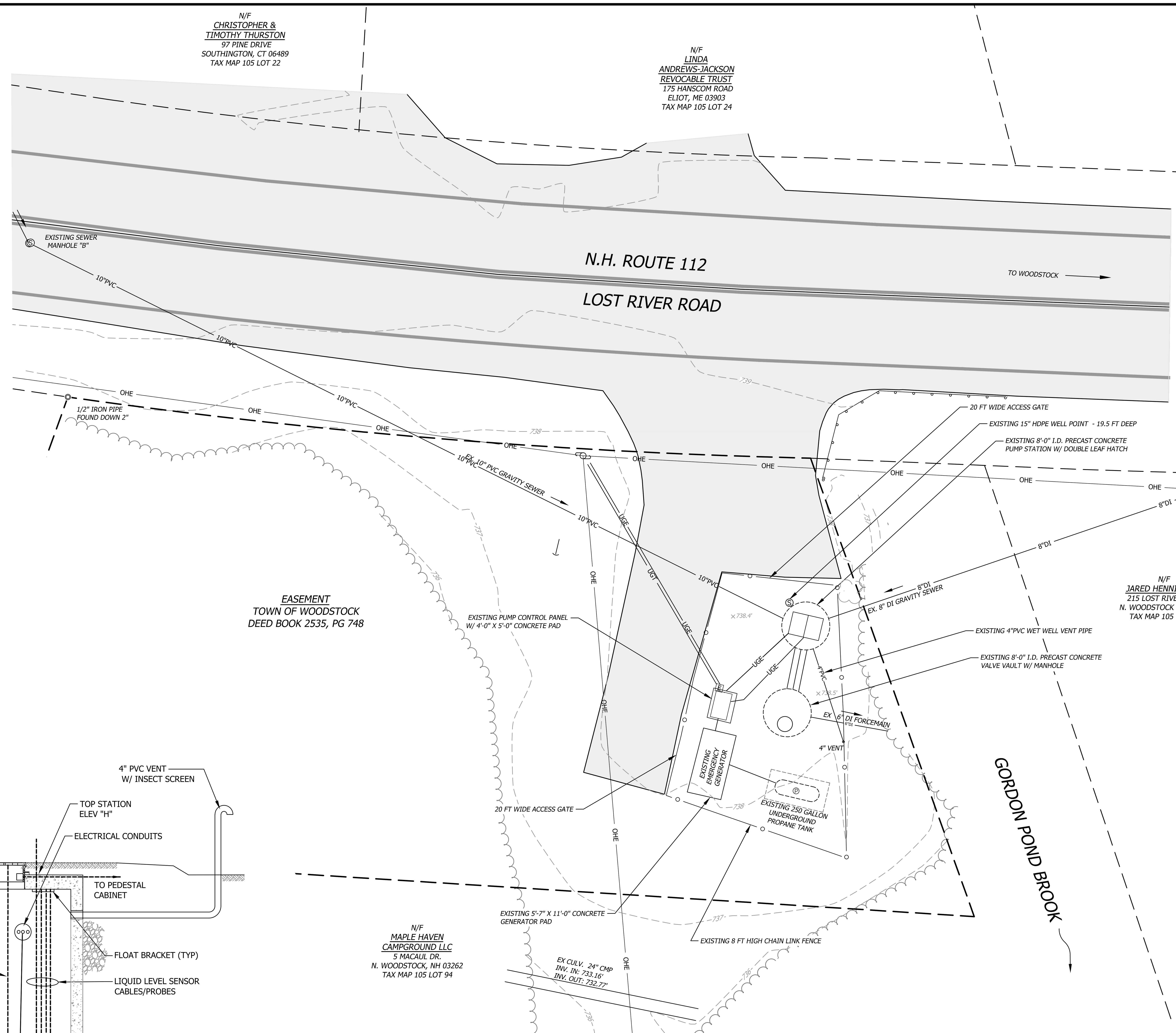
FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING



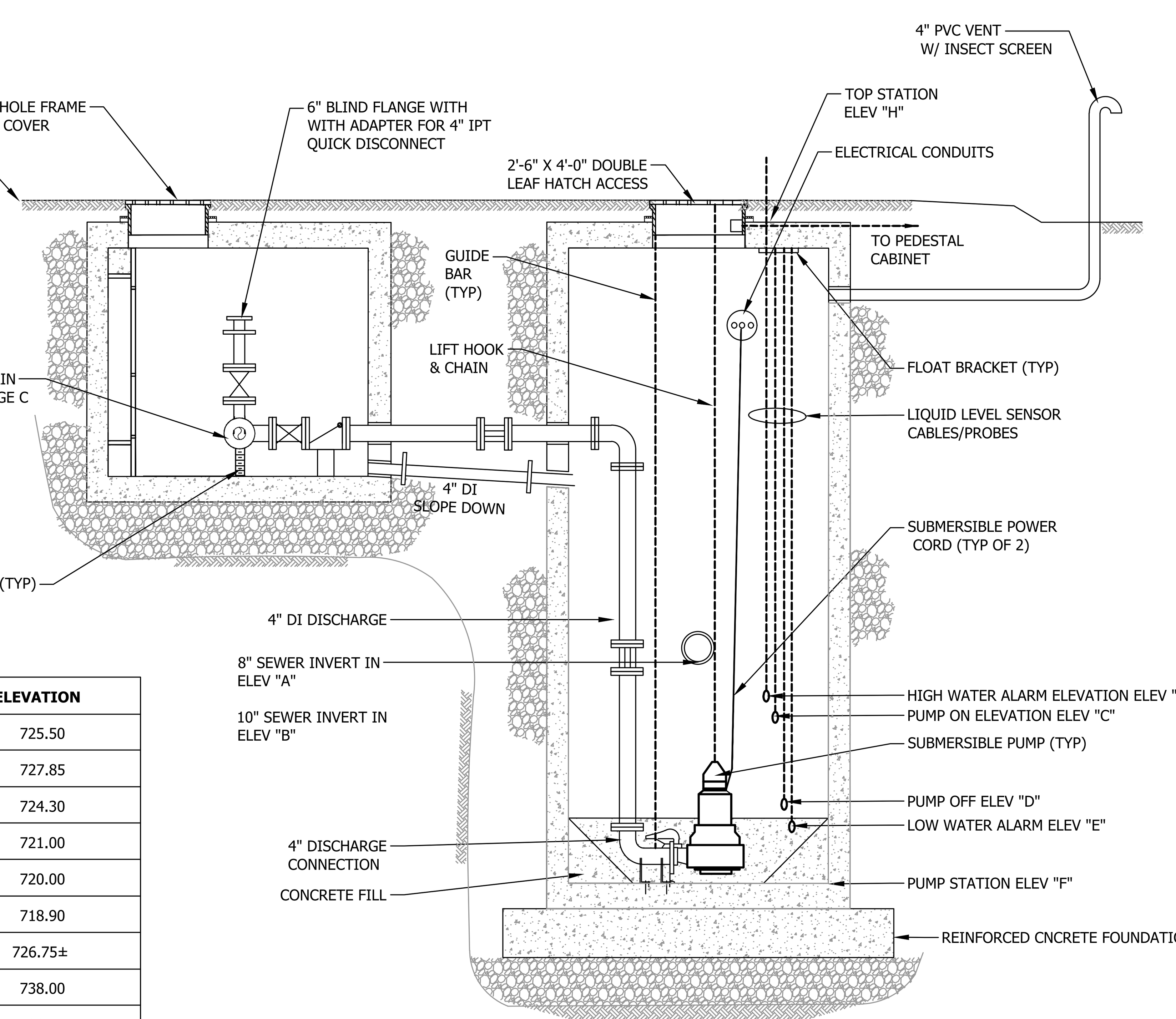
EXISTING PLAN VIEW

NO SCALE



GENERAL NOTES

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND "TECHNICAL SPECIFICATIONS FOR GORDON POND BROOK PUMP STATION" DATED JANUARY 2024."
2. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
3. ALL WORK SHALL BE PERFORMED WITHIN THE PROPERTY OF, AND EASEMENTS SECURED BY, THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATA COLLECTION AND PREPARATION OF RECORD DRAWINGS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTROLLING EROSION IN ALL AREAS DISTURBED BY HIS ACTIONS. COSTS FOR REQUIRED EROSION CONTROL, REGARDLESS OF WHETHER OR NOT SUCH MEASURES ARE SHOWN ON THE ENGINEERING DRAWINGS, SHALL BE BORNE BY HIM.
6. UTILITY LOCATIONS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION AND PROTECTION OF EXISTING UTILITIES AND SHALL REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE AT HIS OWN EXPENSE. ALL UTILITIES ENCOUNTERED SHALL BE LOCATED BY DEPTH AND TIES AND SHOWN BY THE CONTRACTOR ON HIS "AS BUILT" DRAWINGS. HAND EXCAVATION SHALL BE DONE WHEREVER UNDERGROUND UTILITIES ARE SHOWN OR ANTICIPATED. THE CONTRACTOR SHALL CONTACT DIG SAFE AND THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION IN ORDER TO VERIFY EXISTING CONDITIONS AND UTILITY LOCATIONS.
7. THE PROJECT SITE IS NOT LOCATED WITHIN A FEMA DESIGNATED 100-YEAR RECURRENCE INTERVAL FLOODPLAIN.
8. REPLACEMENT OF THE SUBMERSIBLE SEWAGE PUMP GUIDE RAILS WILL LIKE REQUIRE BYPASS PUMPING OF INCOMING WASTEWATER. BYPASS CAN BE ACCOMPLISHED FROM EXISTING SEWER MANHOLE "A" AND EXISTING SEWER MANHOLE "B" AS SHOWN ON SHEET C2.1 TO THE EXISTING QUICK CONNECT COUPLING IN THE PUMP STATION VALVE VAULT



POINT	ELEVATION
A	725.50
B	727.85
C	724.30
D	721.00
E	720.00
F	718.90
G	726.75±
H	738.00
I	738.50
J	725.00

SECTION VIEW A-A'

NO SCALE

SITE SPECIFIC NOTES

1. OWNER OF RECORD
   TOWN OF WOODSTOCK EASEMENT
   PO BOX 156
   N. WOODSTOCK, NH 03262
   BOOK 2535 PAGE 748
2. PLAN REFERENCES:
   A. "TOWN OF WOODSTOCK, NEW HAMPSHIRE WASTEWATER SYSTEM IMPROVEMENTS, RTE 112 SEWER EXTENSION AND PUMP STATION, GORDON POND BROOK PUMP STATION, SHEET 7." DATED AUGUST 2002. ENGINEERED BY CAMP DRESSER & MCKEE INC. AND ON FILE AT THE TOWN OF WOODSTOCK.
3. DEED REFERENCE:
   A. "EASEMENT DEED FROM DANIEL C. & JUNE T. BERRY TO THE TOWN OF WOODSTOCK." DATED MAY 2, 2001. RECORDED AT THE GRAFTON COUNTY REGISTRY OF DEEDS IN BOOK 2535 PAGE 748.
4. THE HORIZONTAL DATUM IS ON THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83 (2011). THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE ORTHOMETRIC HEIGHT WAS COMPUTED USING GEOID 18.
5. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN OCTOBER OF 2023 WITH TOPCON HIPER V DUAL FREQUENCY SURVEY GRADE GNSS RECEIVERS.
6. THIS IS NOT A BOUNDARY SURVEY. THE EASEMENT BOUNDARY WAS COMPILED FROM THE DEEDS OF RECORD, REFERENCE PLANS AND EVIDENCE FOUND IN THE FIELD. ABUTTING PROPERTY LINES ARE APPROXIMATE PER THE TOWN OF WOODSTOCK TAX MAPS.

EXISTING CONDITIONS PLAN

0 5 10 20 40
SCALE IN FEET

LEGEND

- IRON PIPE FOUND
- SEWER MANHOLE
- UTILITY POLE
- GUY WIRE
- VAULT
- EASEMENT LINE
- ABUTTER PROPERTY LINE
- CONTOUR - MAJOR INTERVAL
- CONTOUR - MINOR INTERVAL
- CHAINLINK FENCE
- TREELINE
- OVERHEAD ELECTRIC (OHE)
- UNDERGROUND ELECTRIC (UGE)
- UNDERGROUND TELEPHONE (UGT)
- PAVEMENT

FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

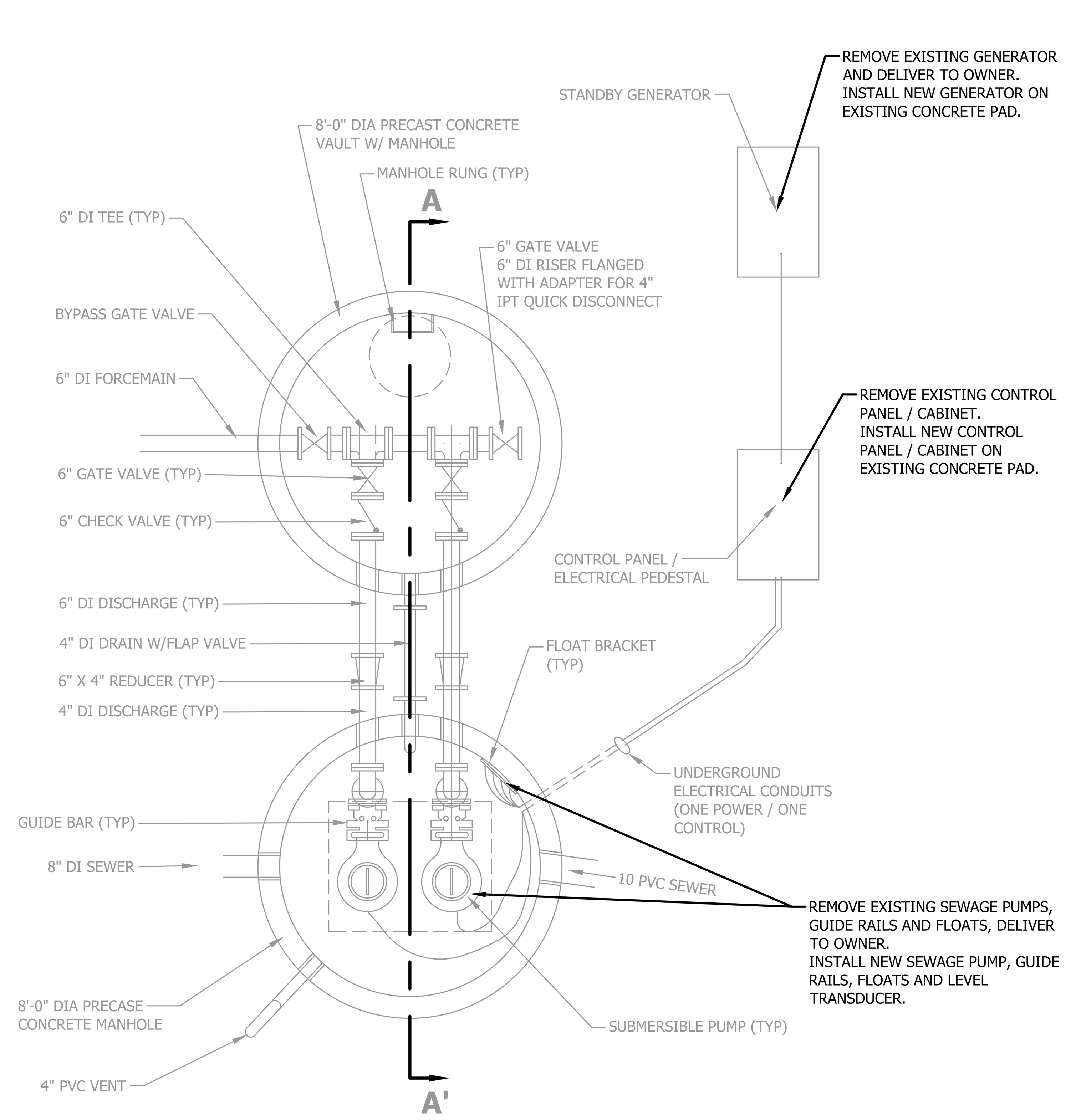
EXISTING CONDITIONS PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
1	04/2024	EXISTING SEWER MANHOLES "A" & "B", ADD GENERAL NOTES 7 & 8	SML	LJM

STATE OF NEW HAMPSHIRE
Stephen M. LaFrance
No. 7765
LICENSED
PROFESSIONAL ENGINEER

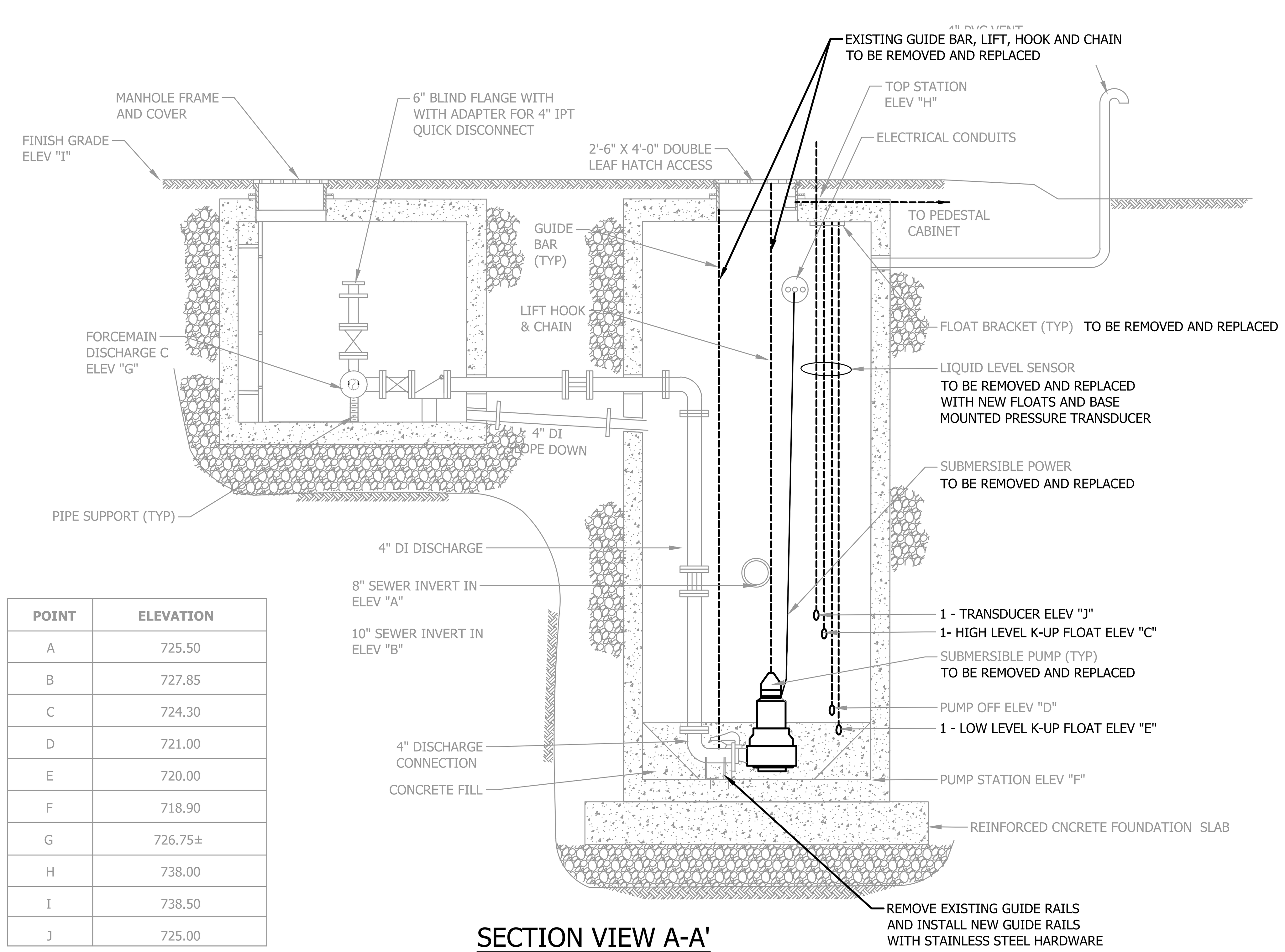
DATE: JAN 2024	PROJECT #: 230492
ENGIN'D BY: SML	DRAWN BY: LJM
CHECK'D BY: SML	ARCHIVE #: H-___

SHEET C2.1



IMPROVEMENTS PLAN VIEW

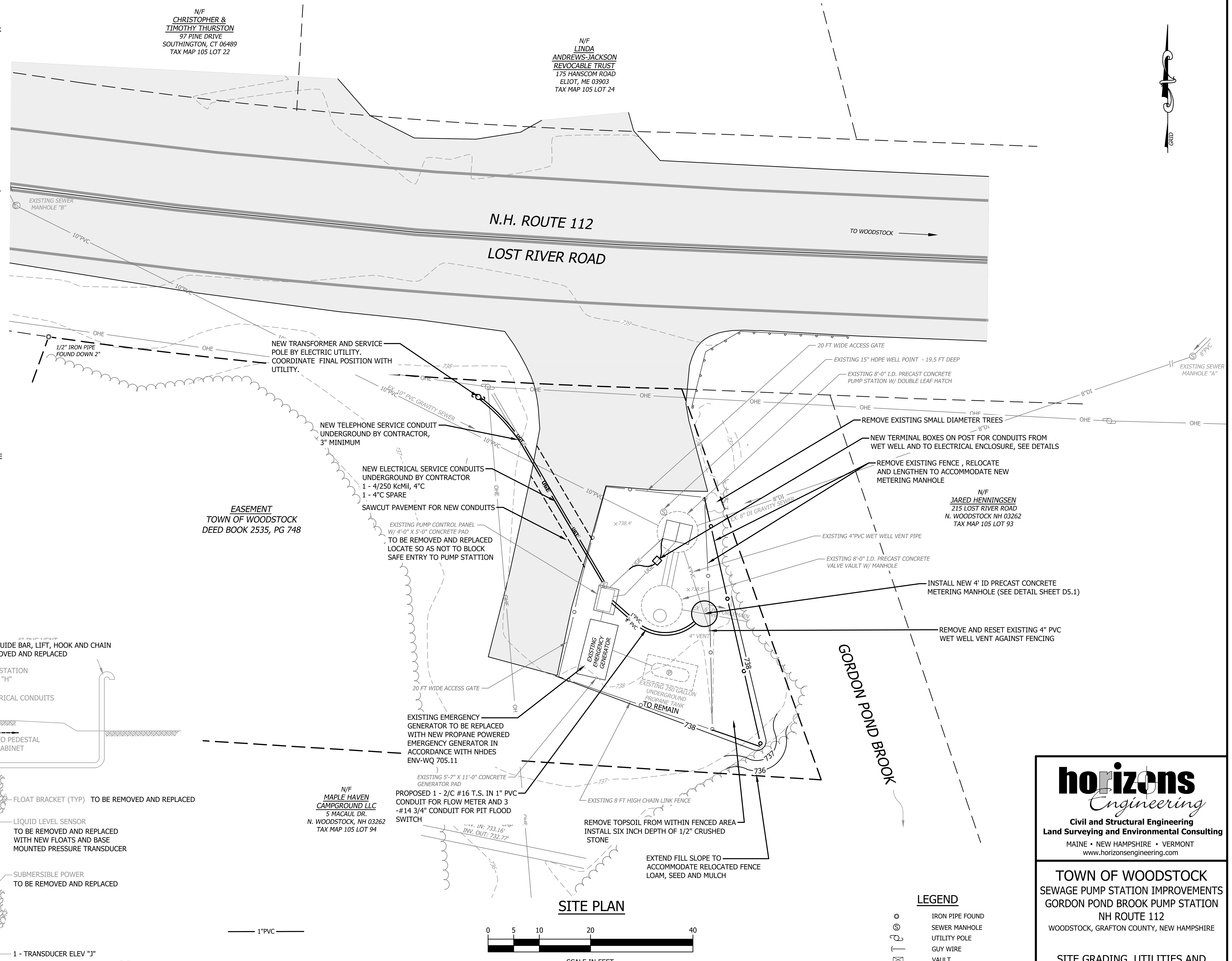
NO SCALE



POINT	ELEVATION
A	725.50
B	727.85
C	724.30
D	721.00
E	720.00
F	718.90
G	726.75±
H	738.00
I	738.50
J	725.00

SECTION VIEW A-A'

NO SCALE



SITE PLAN

LEGEND

- IRON PIPE FOUND
- SEWER MANHOLE
- UTILITY POLE
- GUY WIRE
- VAULT
- EASEMENT LINE
- ABUTTER PROPERTY LINE
- CONTOUR - MAJOR INTERVAL
- CONTOUR - MINOR INTERVAL
- CHAINLINK FENCE
- TREELINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- PAVEMENT

FOR REVIEW NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

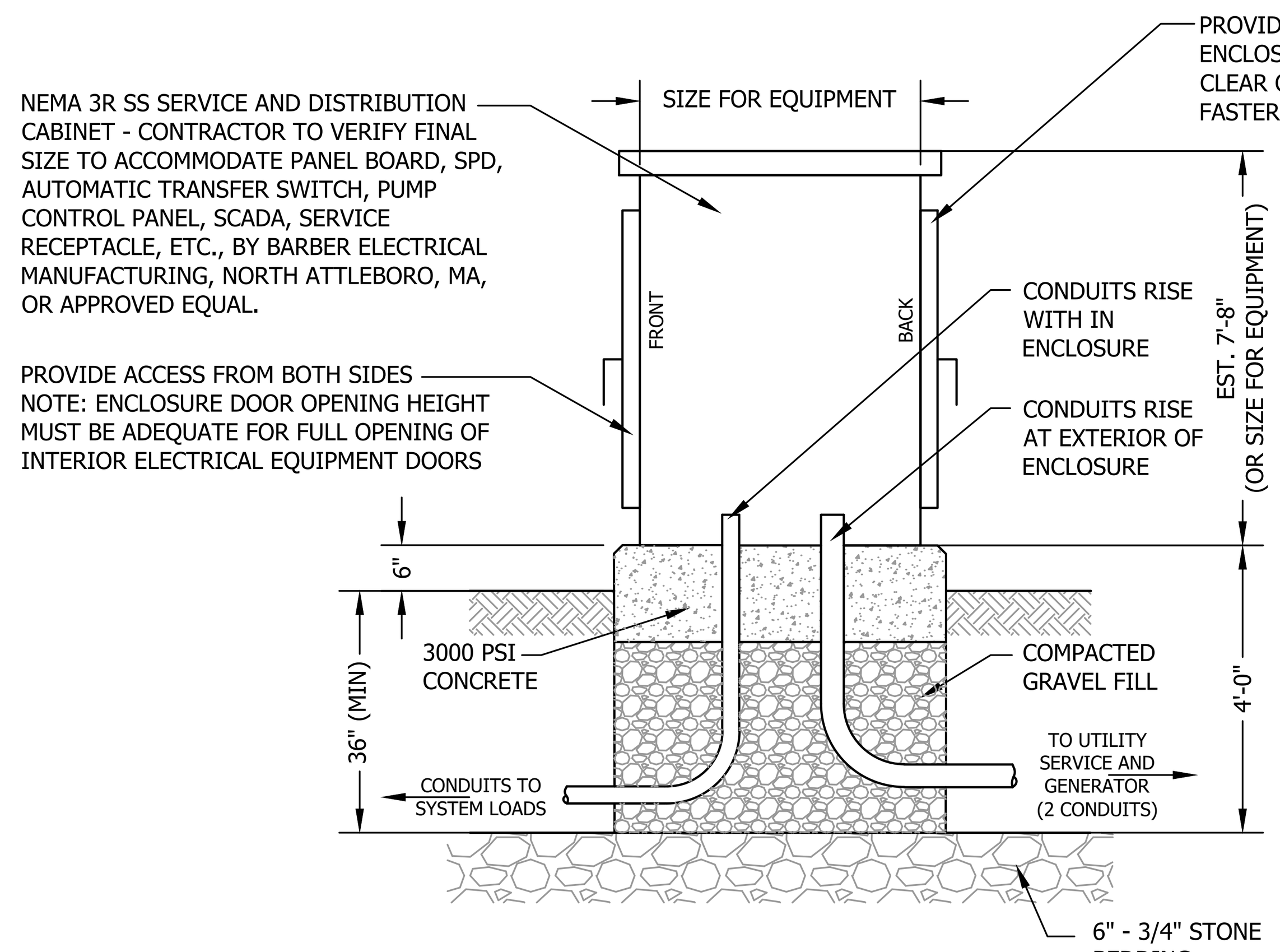
SITE GRADING, UTILITIES AND EROSION CONTROL PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
1	04/2024	EXISTING SEWER MANHOLES "A" & "B", ADD GENERAL NOTES 7 & 8; EXPAND GENERATOR REPLACEMENT NOTE	SML	LJM

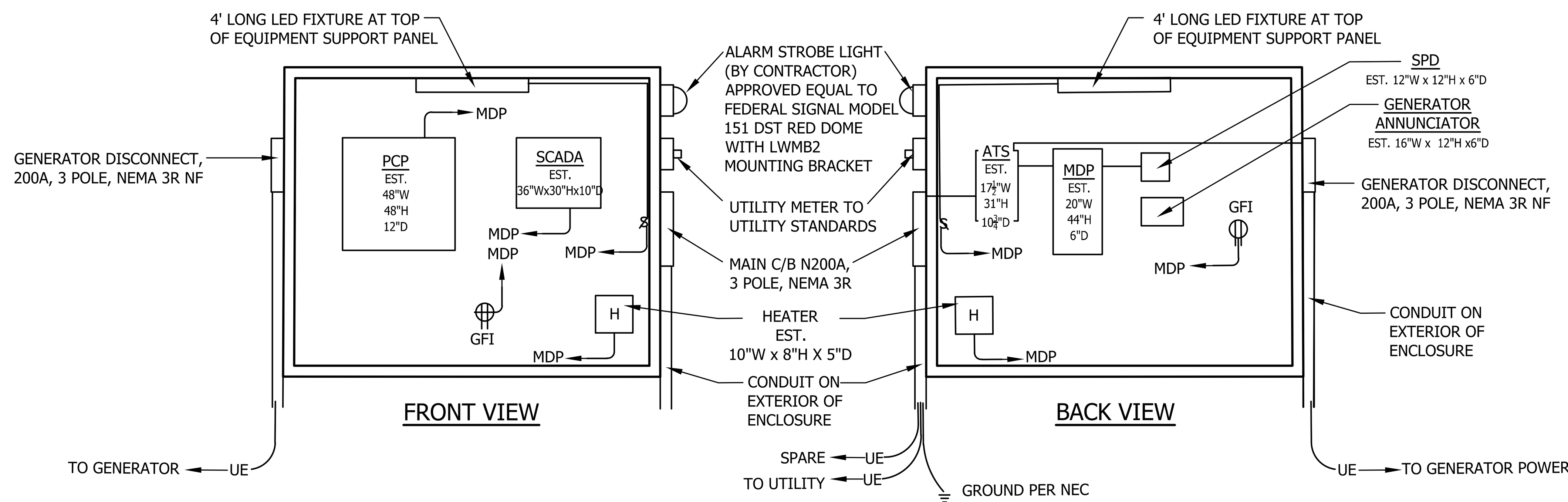
STATE OF NEW HAMPSHIRE — Stephen M. LaFrance No. 7785 LICENSED PROFESSIONAL ENGINEER

DATE: JAN 2024	PROJECT #: 230492
ENGIN'D BY: SML	DRAWN BY: LJM
CHECK'D BY: SML	ARCHIVE #: H-___

SHEET C2.2



EQUIPMENT ENCLOSURE



ELECTRICAL EQUIPMENT ENCLOSURE DETAILS

PROPOSED ARRANGEMENT [1]

NOT TO SCALE

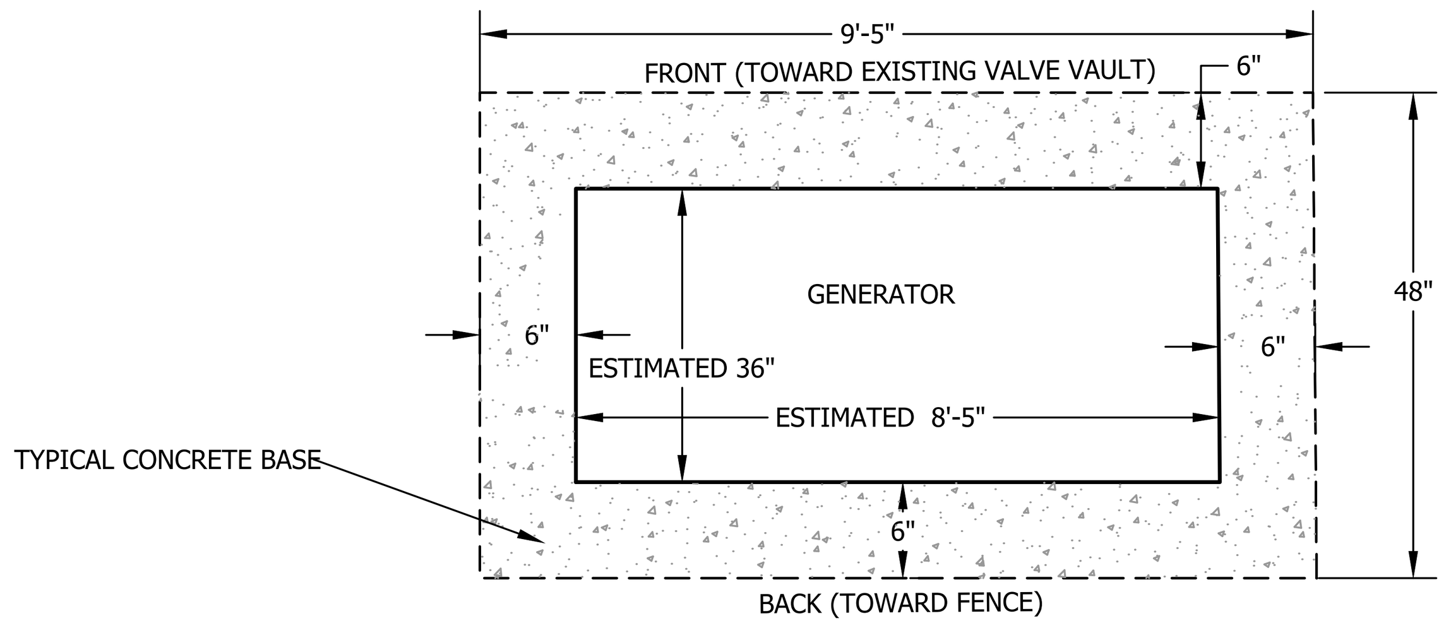
[1] CONTRACTOR MAY PROPOSE ALTERATE EQUIPMENT LAYOUTS FOR FRONT AND BACK OF ENCLOSURE

NOTES:
1. CONTRACTOR MUST CONFIRM ACTUAL SIZES OF ALL EQUIPMENT TO BE INSTALLED WITHIN ENCLOSURE AND ADJUST ENCLOSURE SIZE AS REQUIRED TO ACCOMMODATE EQUIPMENT AND CONFORM TO SPECIFICATIONS AND CODES.
2. IF ENCLOSURE DOORS HAVE A FIXED CENTER MULLION. THE MULLION MUST BE LOCATED SO INTERIOR EQUIPMENT PANEL DOORS CAN BE OPENED TO NOT LESS THAN 90°.

PANEL 'MDP' DIAGRAM

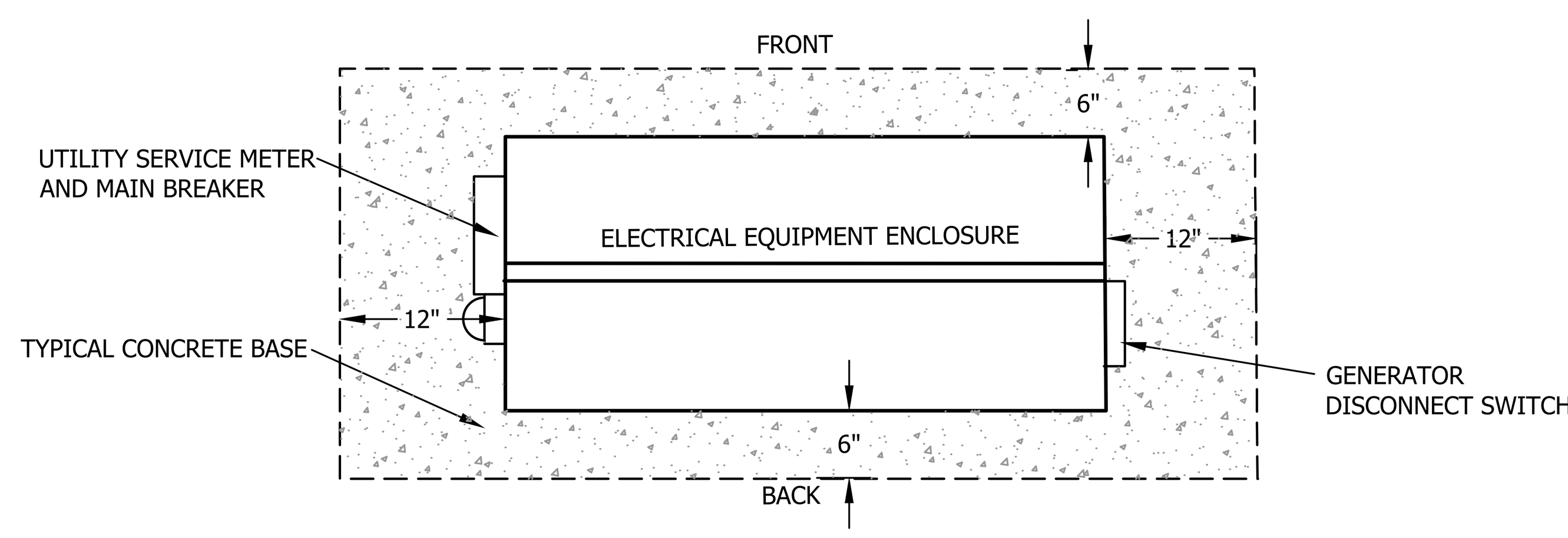
DIRECTORY	KVA LOAD A	KVA LOAD B	KVA LOAD C	AWG SIZE	CKT #	POLES	BRKR	BRKR	POLES	CKT #	AWG SIZE	KVA LOAD A	KVA LOAD B	KVA LOAD C	DIRECTORY
PUMP CONTROL PANEL	.			1/0	1	3	125	**	3	2	**	.			SPD *
		.			3					4			.		
			.		5					6				.	
SERVICE RECEPTACLE - GEN	0.2			#10	7	1	20	20		8	#12	0.4			SERVICE RECEPTACLE - ENCL
ENGINE HEATER - GEN *		1.5		#10	4	1	20	20		10	#12		0.4		BATTERY CHARGER - GEN *
SCADA *			1.5	#12	11	1	20	15		12	#12			0.1	ENCLOSURE LIGHTS
PANEL HEATER ENCL (FRONT)	0.5			#12	13	1	20	20		14	#12	0.5			PANEL HEATER ENCL (REAR)
SPARE		.			15	1	20	20		16			.		SPARE
SPARE			.		17	1	20	20		18				.	SPARE
SPARE	.				19	1	20	20		20		.			SPARE
SPACE		.			21					22			.		SPACE
SPACE			.		23					24				.	SPACE
SPACE	.				25					26		.			SPACE
SPACE		.			27					28			.		SPACE
SPACE			.		29					30				.	SPARE
SUB-TOTAL							NEUTRAL BUS / GROUND BUS								SUB-TOTAL (BASE BID ONLY)

VOLTAGE:	208/120V, 3Ph, 4w, 60Hz		PANEL: 'MDP'
MAIN BREAKER:	225A MLO		
MOUNTING:	SURFACE		LOCATION: ELECTRICAL EQUIP ENCLOSURE
SC RATING:	22,000 AIC	TOTAL KVA: .	
NOTES:	*PROVIDE WITH HANDLE LOCKS		FEEDER:
	**RATED PER SPD MFGR RECOMMENDATION		4-250 KCMIL, 1-#2Gr; 3"c



TYPICAL GENERATOR BASE MODIFICATION

NOTE:
1. PROVIDE BOND OUTS FOR CONDUITS AND FUEL LINES IN ACCORDANCE WITH RECOMMENDATIONS OF THE APPROVED EQUIPMENT.



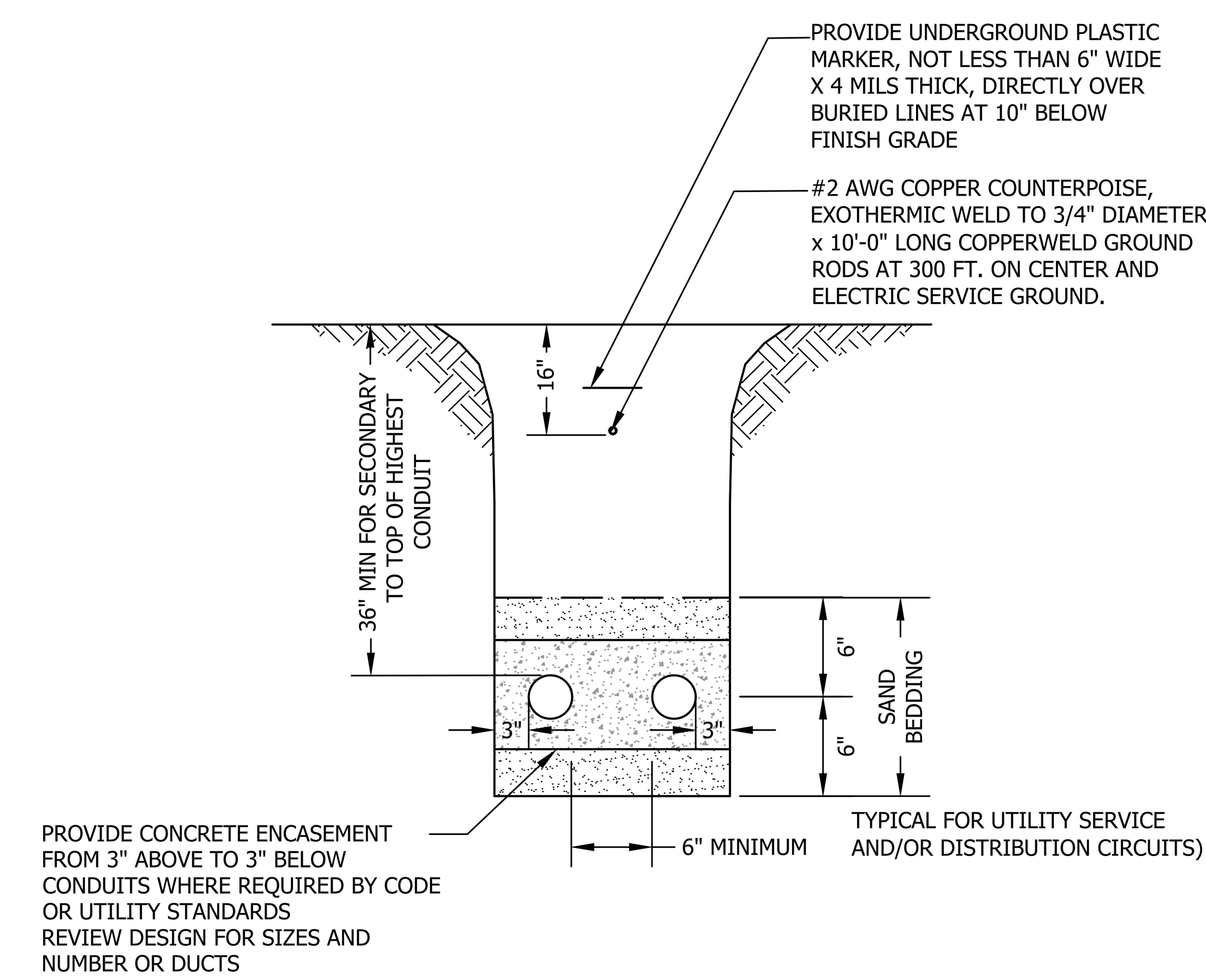
ELECTRICAL EQUIPMENT ENCLOSURE DETAIL

NOT TO SCALE

NOTES:
1. COORDINATE FINAL DIMENSIONS WITH APPROVED EQUIPMENT DIMENSIONS .

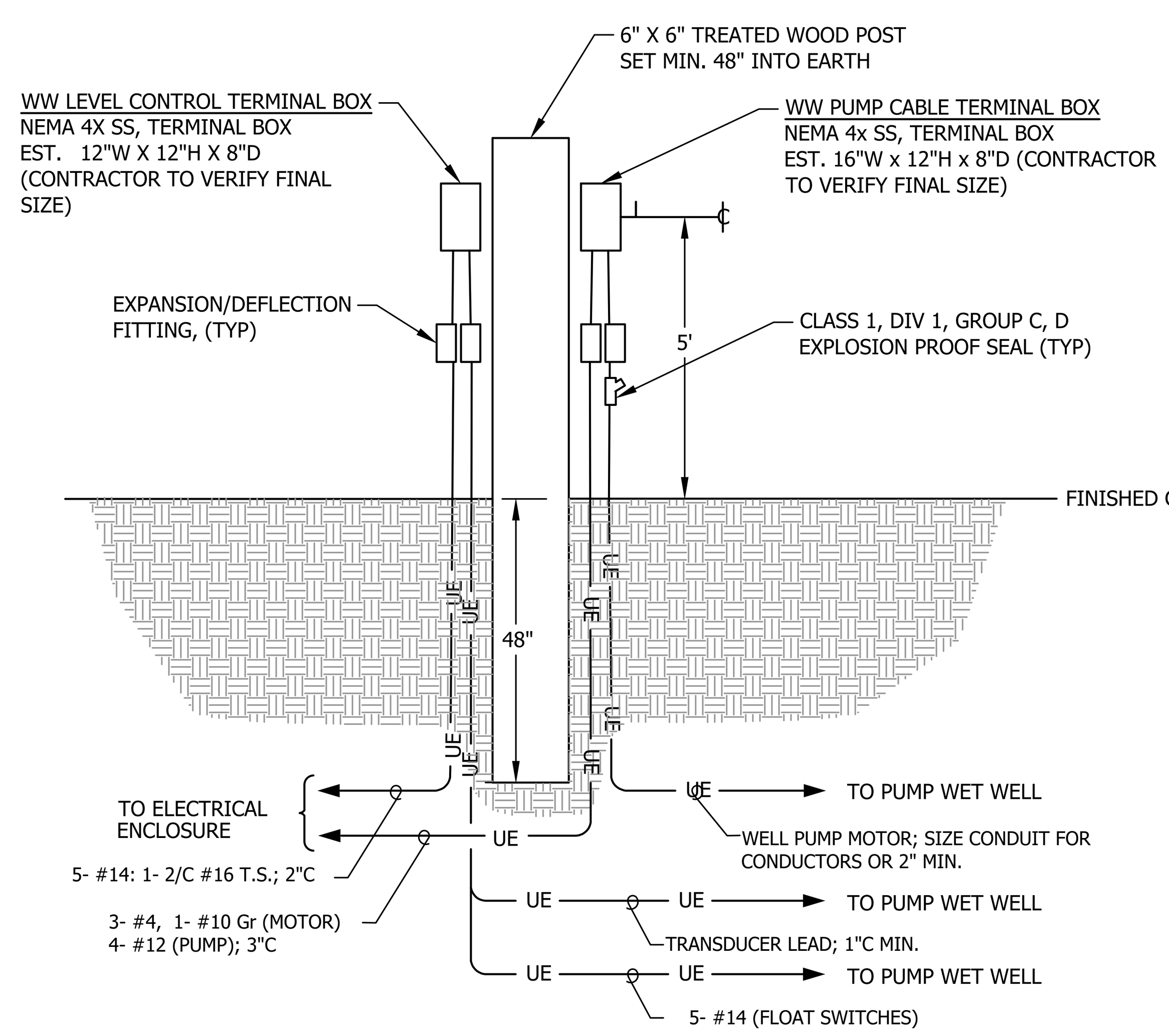
LEGEND

—UE—	UNDERGROUND ELECTRICAL
—UT—	UNDERGROUND TELEPHONE
	CONNECTION TO FIXED EQUIPMENT
	DISCONNECT/CIRCUIT BREAKER
	DUPLEX RECEPTACLE
$	SINGLE POLE SWITCH, 48" ABOVE BASE
ATS	AUTOMATIC TRANSFER SWITCH
ENCL	ENCLOSURE
GFI	GROUND FAULT PROTECTED
GEN	GENERATOR
PCP	PUMP CONTROL PANEL
SPD	SURGE PROTECTION DEVICE
WP	WEATHER PROOF
WW	WET WELL



CONCRETE CONDUIT / DITCH DETAIL

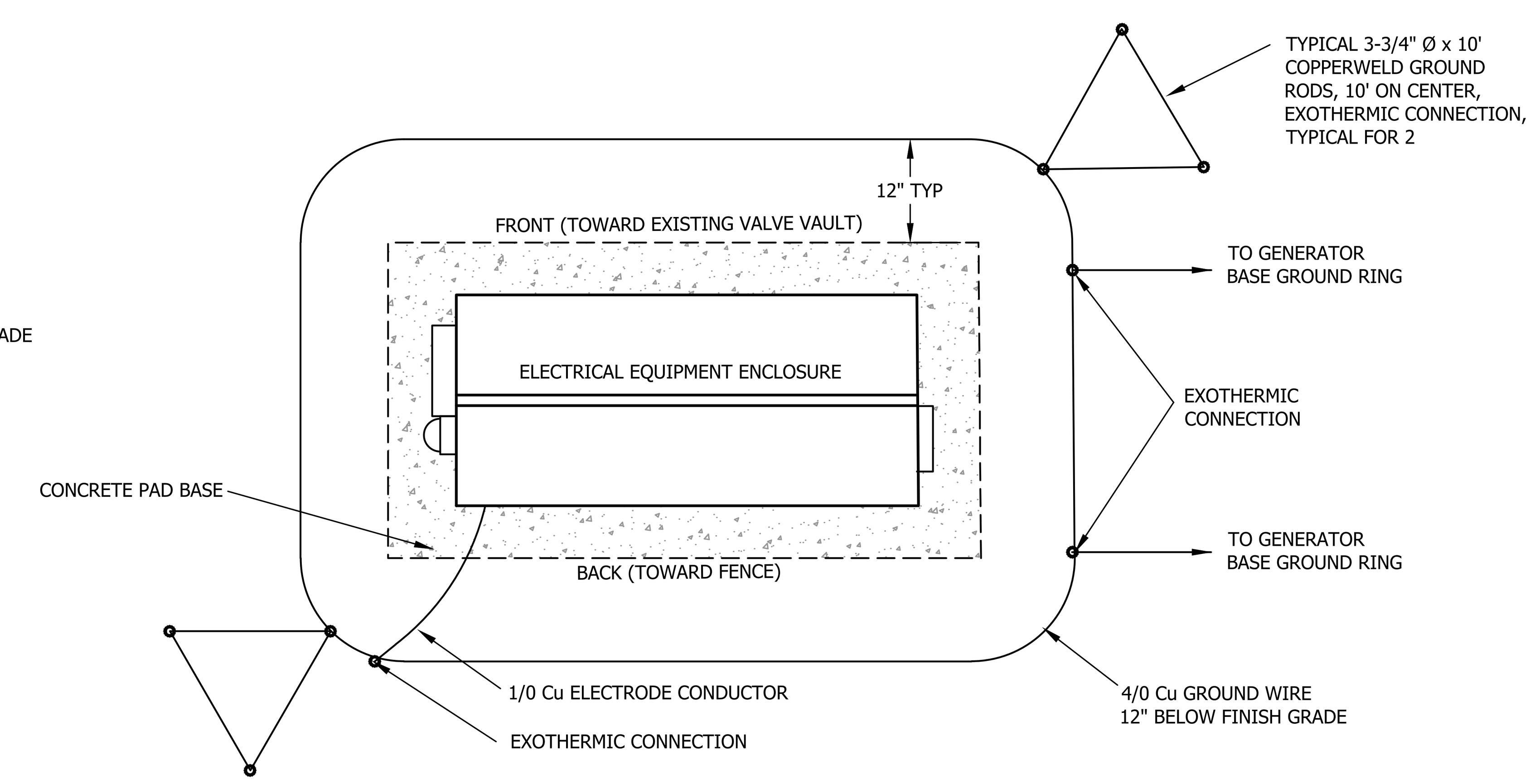
NOT TO SCALE



TYPICAL TERMINAL BOX ON POST DETAIL

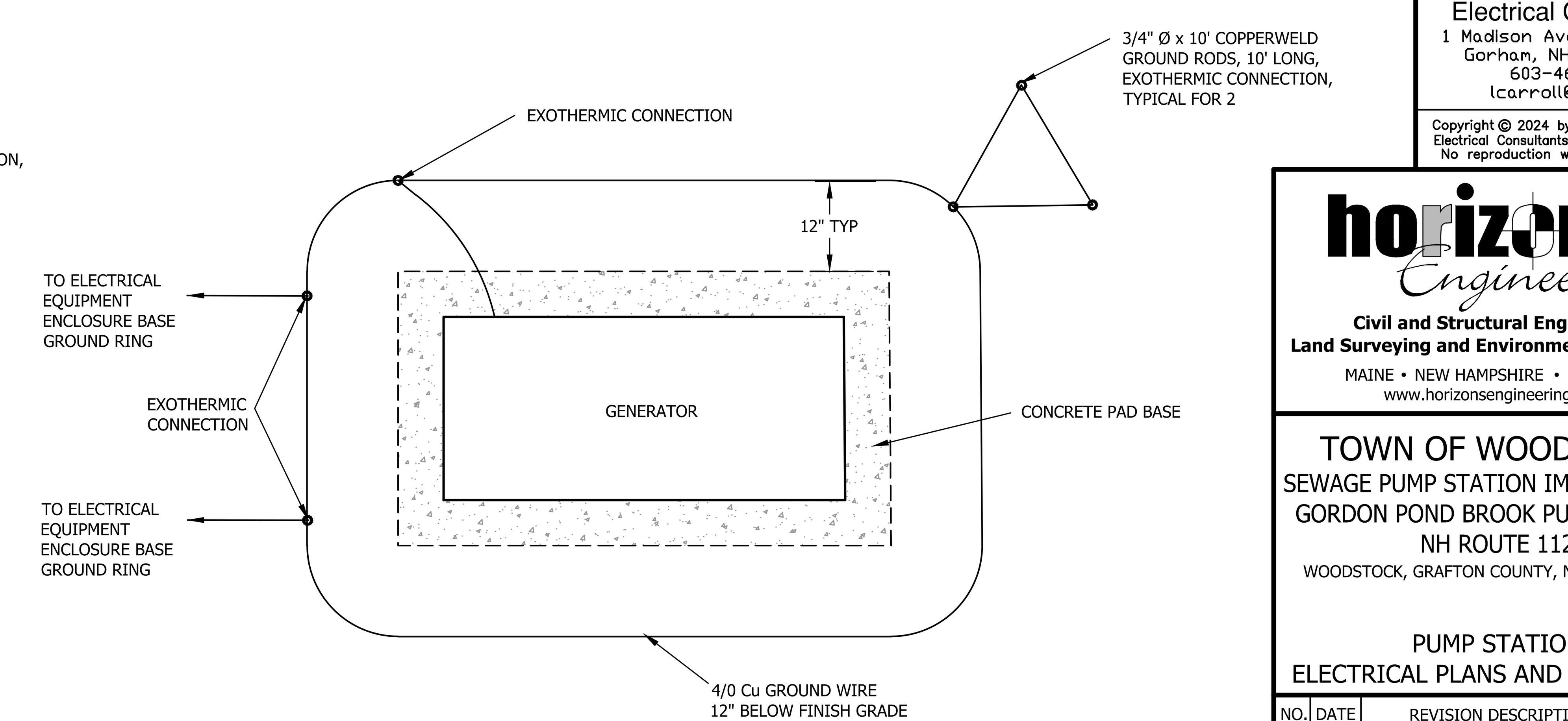
NOT TO SCALE

NOTES:
1. TERMINAL BOXES TO INCLUDE BACK MOUNTING PLATE WITH TERMINAL STRIPS (BY CONTRACTOR) FOR ALL CONNECTIONS. TERMINALS EQUAL TO ALLEN-BRADLEY BULLETIN 1492, SCREW TERMINAL WITH PRESSURE PLATE RATED 600V AND CIRCUIT AMPACITY INVOLVED BUT NOT LESS THAN OF 15A.
2. EXISTING CONDUITS FROM WET WELL TO BE INTERCEPTED AND ROUTED TO NEW POST. NEW CONDUITS TO BE INSTALLED FROM NEW POST TO NEW ELECTRICAL ENCLOSURE



TYPICAL ELECTRICAL DISTRIBUTION ENCLOSURE GROUNDING

NOT TO SCALE



TYPICAL GENERATOR GROUNDING

NOT TO SCALE

ELECTRICAL DESIGN BY:
Lee F. Carroll, PE
Electrical Consultants
1 Madison Ave P.O. Box 357
Gorham, NH 03581-0357
603-466-5065
lcarroll@ne.rr.com

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

PUMP STATION
ELECTRICAL PLANS AND SCHEDULES

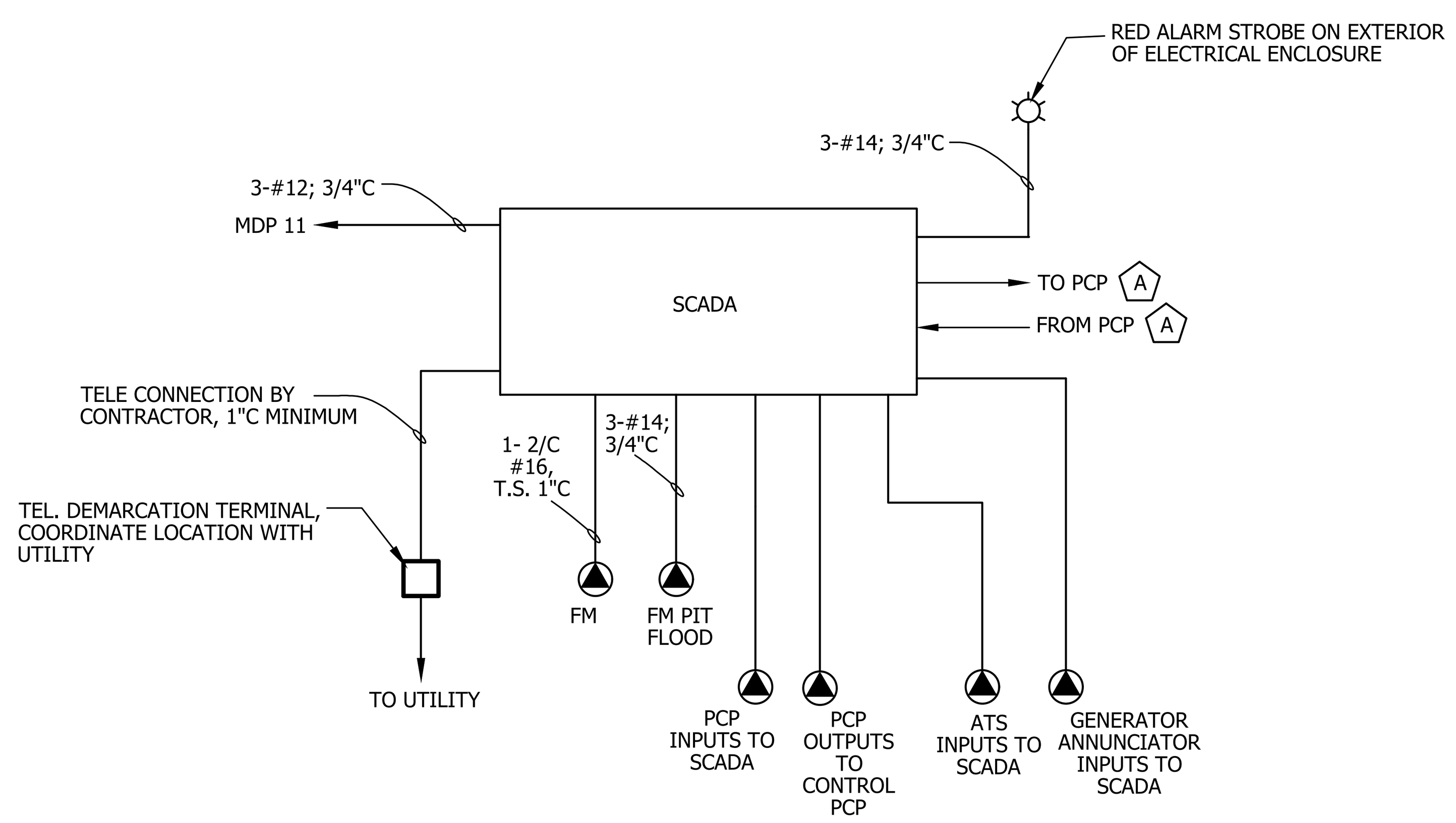
NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: JAN 2024	PROJECT #: 230492
ENGIN'D BY: SML	DRAWN BY: LJM
CHECK'D BY: SML	ARCHIVE #: H-___

SHEET E3.1

FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

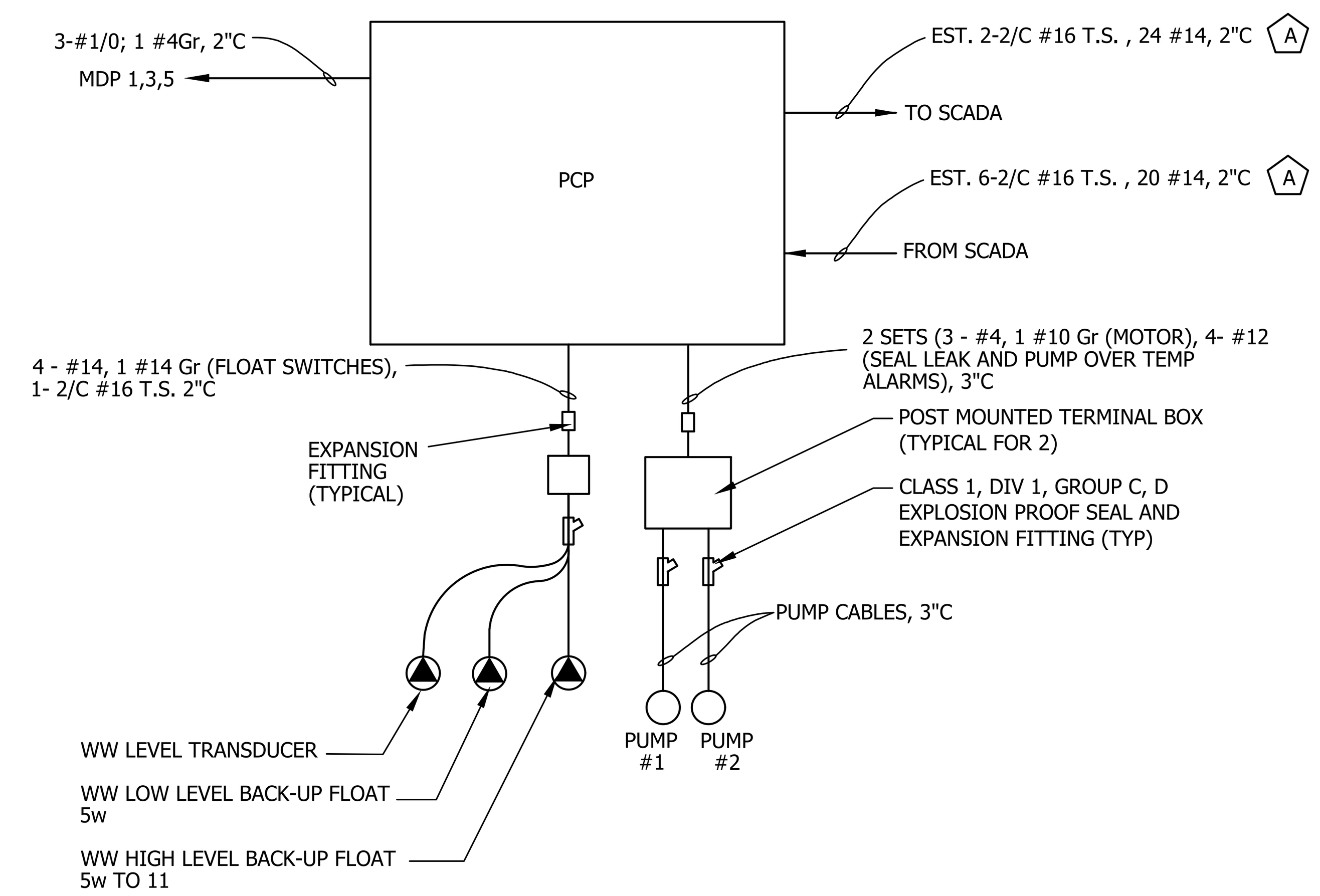


TYPICAL SCADA INTERCONNECTIONS

NOT TO SCALE

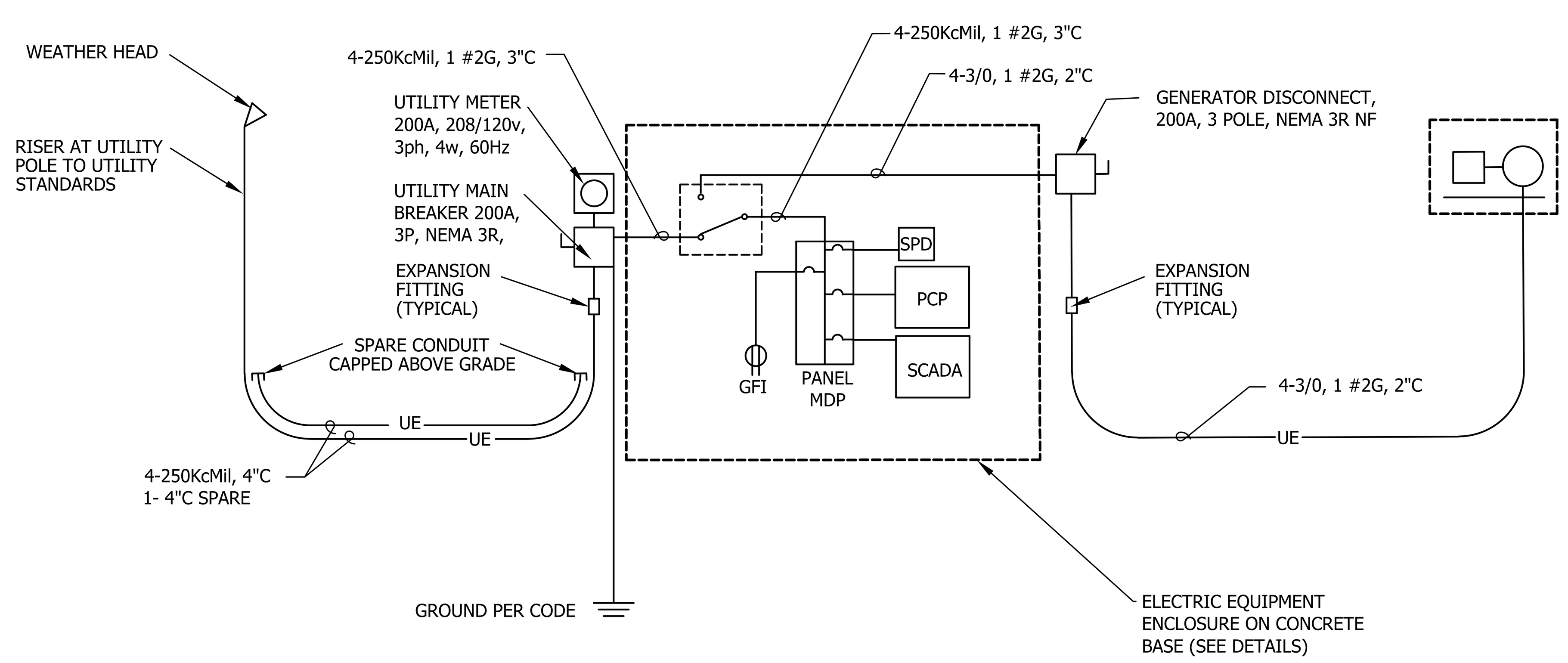
NOTE:

(A) COORDINATE FINAL WIRING REQUIREMENTS WITH SCADA AND PCP DESIGNS. INTERWIRING MAY BE CAT 5 OR ETHERNET CABLE, AS UNIT PLC's PERMIT.



TYPICAL PCP INTERCONNECTIONS

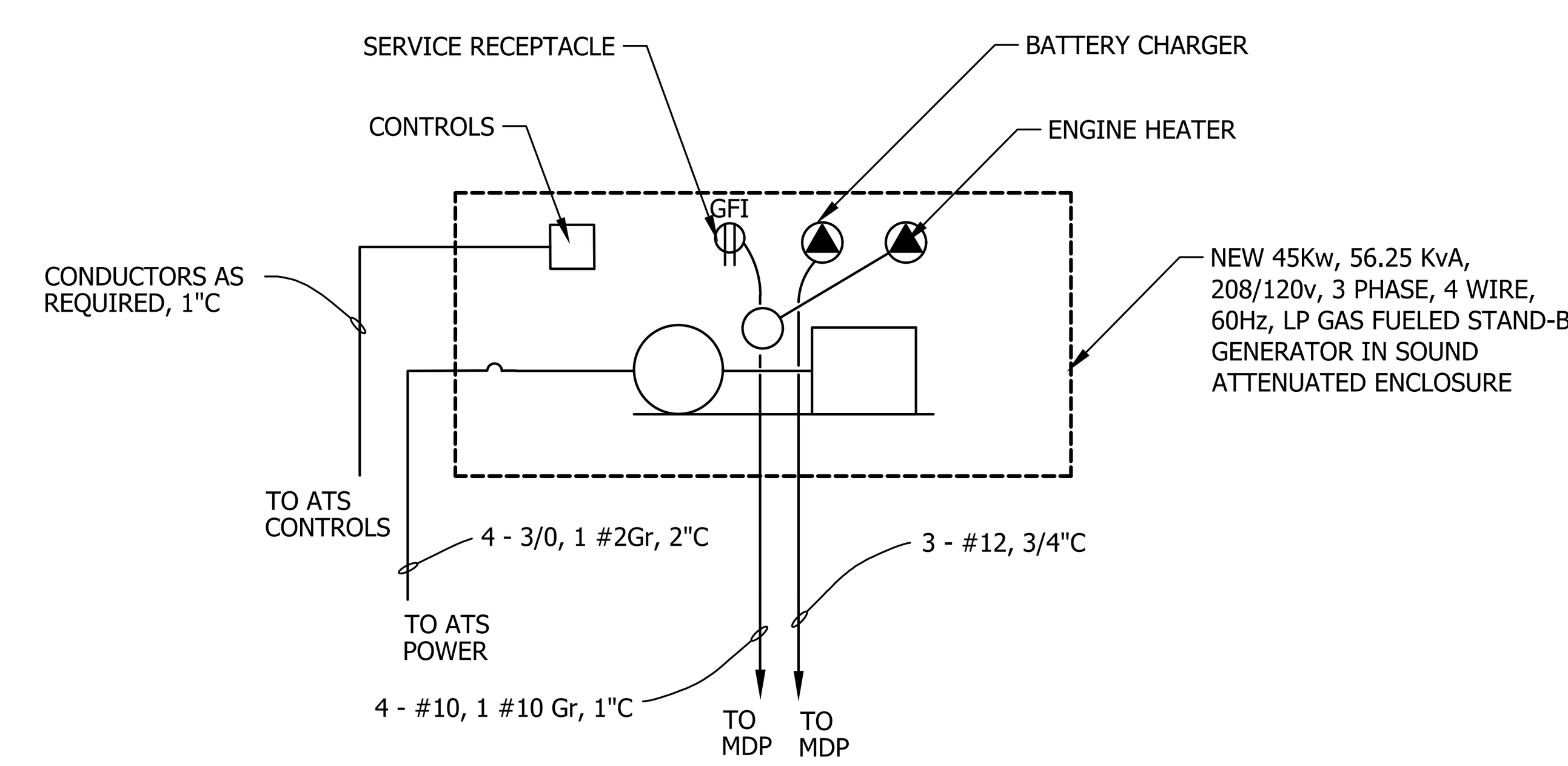
NOT TO SCALE



ELECTRICAL ONE LINE DIAGRAM

NOT TO SCALE

(BASED ON UTILITY TRANSFORMERS BEING POLE MOUNTED)



TYPICAL CONDUIT AND WIRING INTERFACE FOR STAND-BY GENERATOR

NOT TO SCALE

ELECTRICAL DESIGN BY:
Lee F. Carroll, PE
Electrical Consultants
1 Madison Ave P.O. Box 357
Gorham, NH 03581-0357
603-466-5065
lcarroll@ne.rr.com

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

PUMP STATION
WIRING DIAGRAMS AND DETAILS

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE:	PROJECT #:
JAN 2024	230492
ENGIN'D BY:	DRAWN BY:
SML	LJM
CHECK'D BY:	ARCHIVE #:
SML	H-___

SHEET E3.2

FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

SEWER NOTES

1. GENERAL

CONSTRUCTION OF ALL COMPONENTS OF THE SANITARY SEWER SYSTEM SHALL CONFORM TO THE MOST CURRENT VERSION OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES ENV-WQ 700.

2. TYPES OF SEWERS

A. THERE SHALL BE NO CONNECTION BETWEEN SANITARY SEWERS AND STORM SEWERS.
B. RUNOFF FROM ROOFS, STREETS, AND OTHER AREAS AND GROUNDWATER FROM FOUNDATION DRAINS, SUMP PUMPS, OR OTHER SUBSURFACE DRAINS SHALL BE EXCLUDED FROM SANITARY SEWERS.

3. SEWER SIZE AND COVER

A. MINIMUM PIPE SIZE FOR GRAVITY SEWER MAINS SHALL BE 8 INCHES.
B. MINIMUM PIPE SIZE FOR GRAVITY SEWER SERVICES SHALL BE 4 INCHES.
C. MINIMUM PIPE SIZE FOR FORCE MAIN SEWER SERVICES SHALL BE 2 INCHES.
D. SANITARY SEWERS SHALL HAVE 6 FEET MINIMUM COVER IN ALL ROADWAY LOCATIONS AND 4 FEET MINIMUM COVER IN ALL CROSS-COUNTRY LOCATIONS.

4. PIPE AND FITTING MATERIALS:

A. DUCTILE IRON PIPE

DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION:
(1) AWWA C151 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL OR SAND LINED MOLDS, FOR WATER OR OTHER LIQUIDS;
(2) AWWA C150 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A 536 IRON CASTINGS; AND
(3) JOINTS SHALL BE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL-AND-SOCKET TYPE;

B. PVC (POLY VINYL CHLORIDE) PIPE

PVC PIPE AND FITTINGS SHALL BE APPROVED FOR SEWAGE SERVICE AND CONFORM TO THE FOLLOWING:
(1) PVC PIPE USED FOR GRAVITY SEWERS SHALL BE TYPE SDR 35 CONFORMING TO ASTM D3034;
(2) PVC PIPE USED FOR FORCE MAINS SHALL BE TYPE SDR 26 CONFORMING TO ASTM D2241 OR ASTM D1785;
(3) JOINTS SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE HAVING OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D3212.

5. BEDDING

PIPE BEDDING SHALL BE SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67. BEDDING SHALL EXTEND FROM THE SPRING LINE OF THE PIPE TO A MINIMUM DEPTH OF 6" BELOW THE BOTTOM OF THE PIPE OUTSIDE SURFACE.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
20-55% PASSING	⅜ INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

6. MANHOLES

A. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C478.
B. MANHOLES SHALL BE DESIGNED FOR H-20 LOADING.
C. HORIZONTAL JOINTS BETWEEN BARREL SECTIONS SHALL BE OF AN OVERLAPPING TYPE WHICH SHALL DEPEND UPON A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT FOR WATER TIGHTNESS.
D. PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
(1) ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
(2) CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
(3) ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
(4) NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.

7. PROTECTION OF WATER SUPPLIES

A. THERE SHALL BE NO PHYSICAL CONNECTION BETWEEN A PUBLIC OR PRIVATE WATER SUPPLY SYSTEM AND A SEWER OR SEWER APPURTENANCE WHICH WOULD PERMIT THE PASSAGE OF SEWAGE OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SEWER OR SEWER MANHOLE.

B. NO SEWER SHALL BE LOCATED WITHIN THE WELL PROTECTIVE RADII ESTABLISHED IN ENV-WS 300 FOR ANY PUBLIC WATER SUPPLY WELLS OR WITHIN 100 FEET OF ANY PRIVATE WATER SUPPLY WELL.

C. SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.

D. A DEVIATION FROM THE SEPARATION REQUIREMENTS OF (B) OR (C) ABOVE SHALL BE ALLOWED WHERE NECESSARY TO AVOID CONFLICT WITH SUBSURFACE STRUCTURES, UTILITY CHAMBERS, AND BUILDING FOUNDATIONS, PROVIDED THAT THE SEWER IS CONSTRUCTED IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENTS SPECIFIED IN ENV-WQ 704.06.

E. WHENEVER SEWERS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
(1) VERTICAL SEPARATION OF THE SEWER AND WATER MAIN SHALL BE NOT LESS THAN 18 INCHES, WITH WATER ABOVE SEWER; AND
(2) SEWER PIPE JOINTS SHALL BE LOCATED AT LEASE 6 FEET HORIZONTALLY FROM THE WATER MAIN.

STANDARD TRENCH NOTES - SEWER

1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.

2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.

100% PASSING	1 INCH SCREEN
90-100% PASSING	¾ INCH SCREEN
20-55% PASSING	⅜ INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

3. SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A ½ INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.

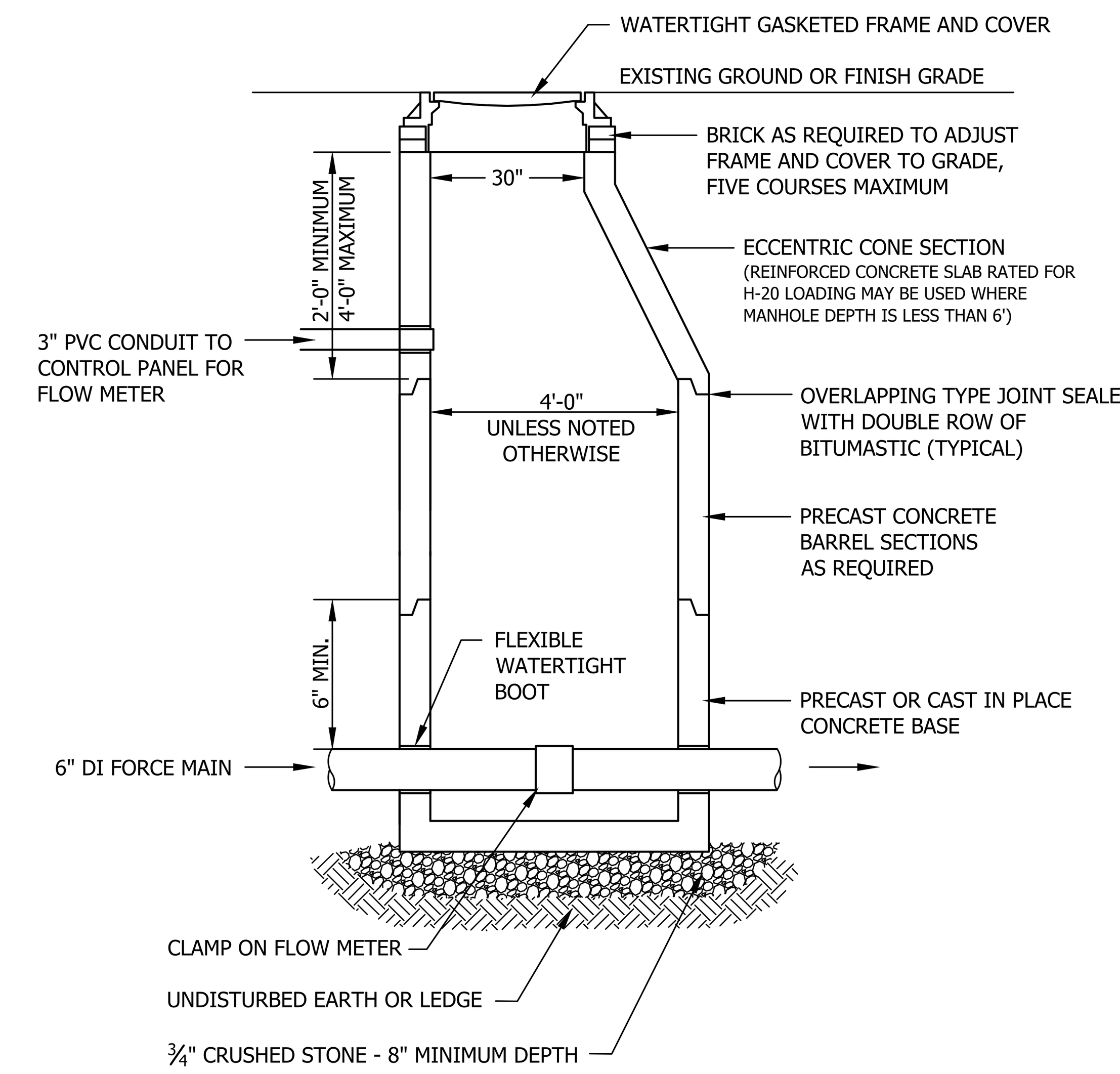
4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.

TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUNDED TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE

5. BASE COURSE FOR TRENCH REPAIR SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

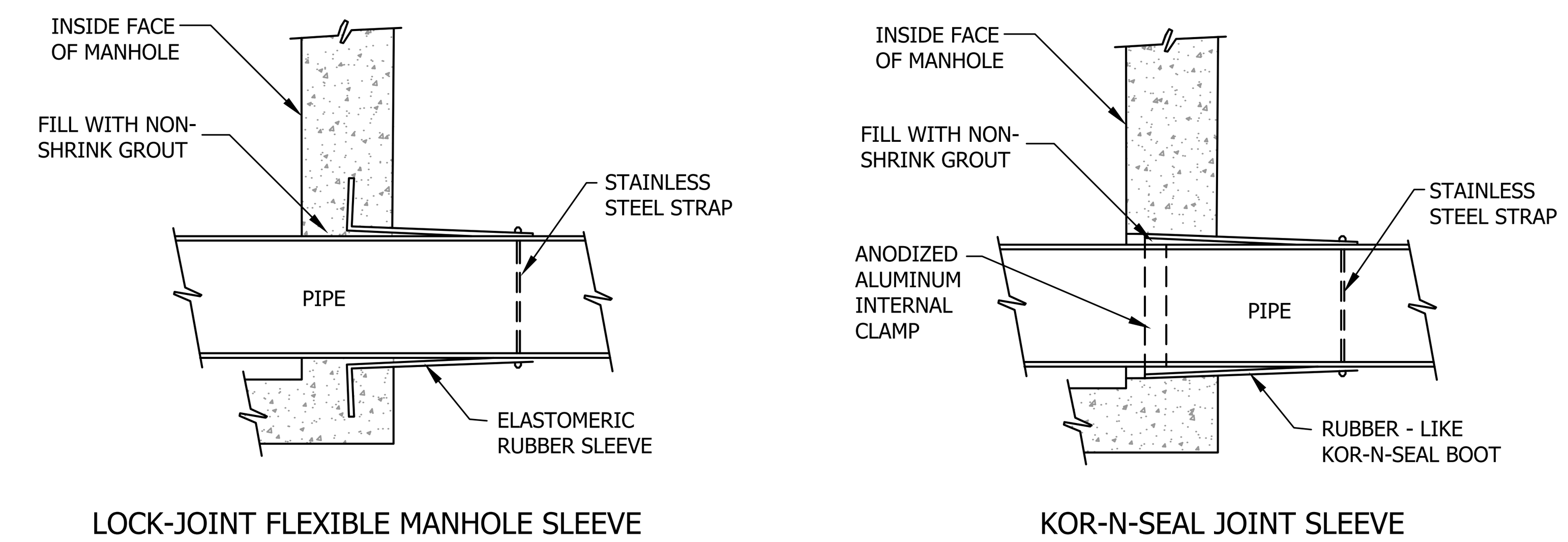
6. SHEETING: ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.

7. TRENCH DIMENSIONS: W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.



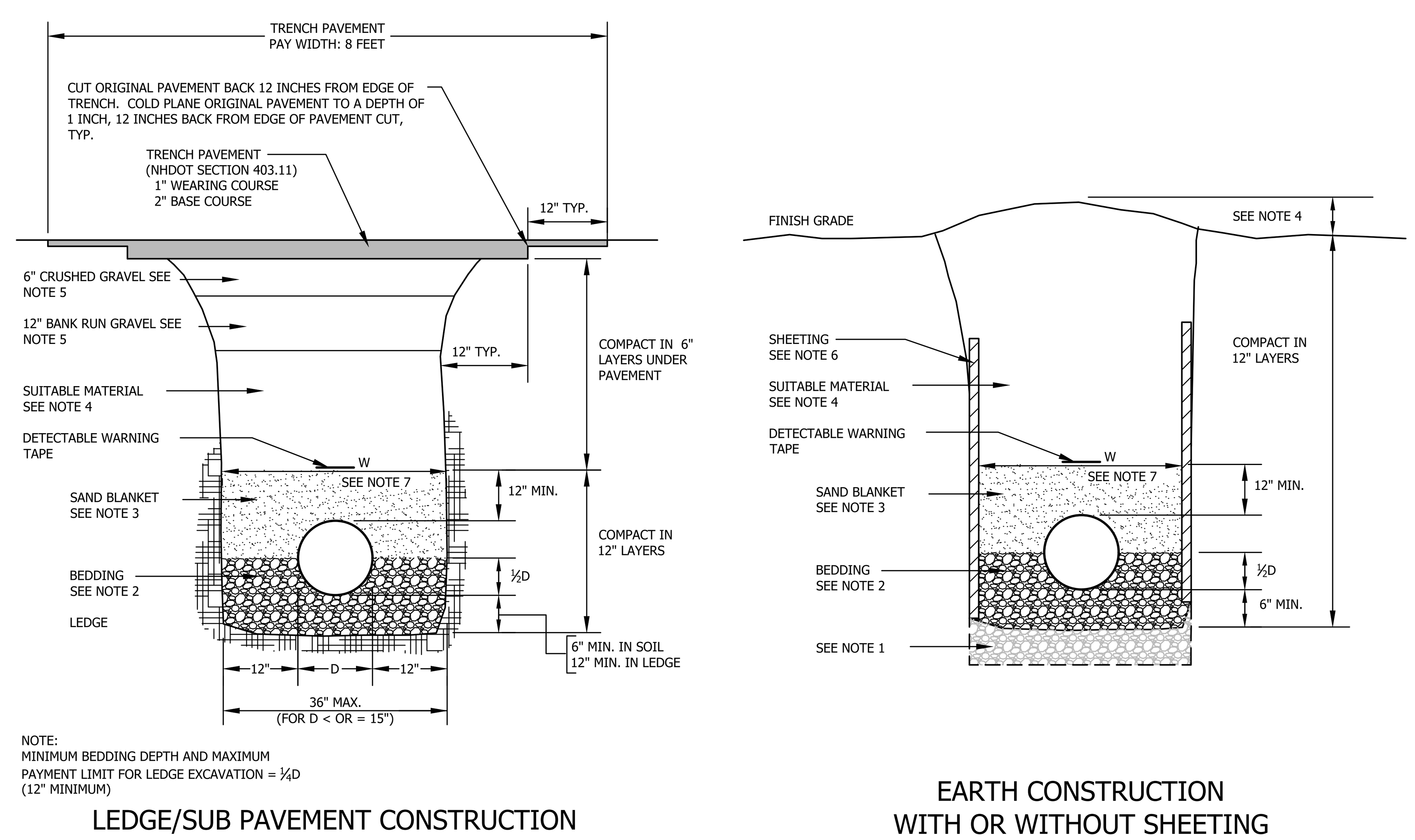
FLOW METERING MANHOLE DETAIL

NOT TO SCALE



JOINTING DETAILS

NOT TO SCALE



STANDARD TRENCH SECTIONS

NOT TO SCALE

FOR REVIEW
NOT FOR CONSTRUCTION

DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

STANDARD SANITARY SEWER NOTES AND DETAILS

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

STATE OF NEW HAMPSHIRE · Stephen M. LaFrance No. 7765 · LICENSED · PROFESSIONAL ENGINEER

DATE: JAN 2024	PROJECT #: 230492
ENGIN'D BY: SML	DRAWN BY: LJM
CHECK'D BY: SML	ARCHIVE #: H-___

SHEET D1.1

last revised: 2007 DEC 26

SEEDING RECOMMENDATIONS

1. **GRADING AND SHAPING**
   A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

2. **SEEDBED PREPARATION**
   A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

   B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE AMENDED WITH ORGANIC MATTER AND TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. **ESTABLISHING VEGETATION**
   A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:

   -AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.
   -NITROGEN (N), 50 LBS., PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.
   -PHOSPHATE (P_2O_5), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.
   -POTASH (K_2O), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SQ. FT.

   (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10).

   B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

   C. SEEDING GUIDE:

USE	SEEDING MIXTURE (SEE 3D)	SOIL TYPE: DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILL-WAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR

   D. SEEDING RATES:

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL:	42	0.95
B TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.25
CROWN VETCH **OR**	15 **OR**	0.35 **OR**
FLATPEA	30	0.75
TOTAL:	40 **OR** 55	0.95 **OR** 1.35
C TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL:	50	1.20

   E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO SEPTEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.

   F. TEMPORARY SEEDING RATES:

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.5	BEST FOR FALL SEEDING. SEED FROM AUGUST TO SEPTEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.0	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE NOT IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND SEPTEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

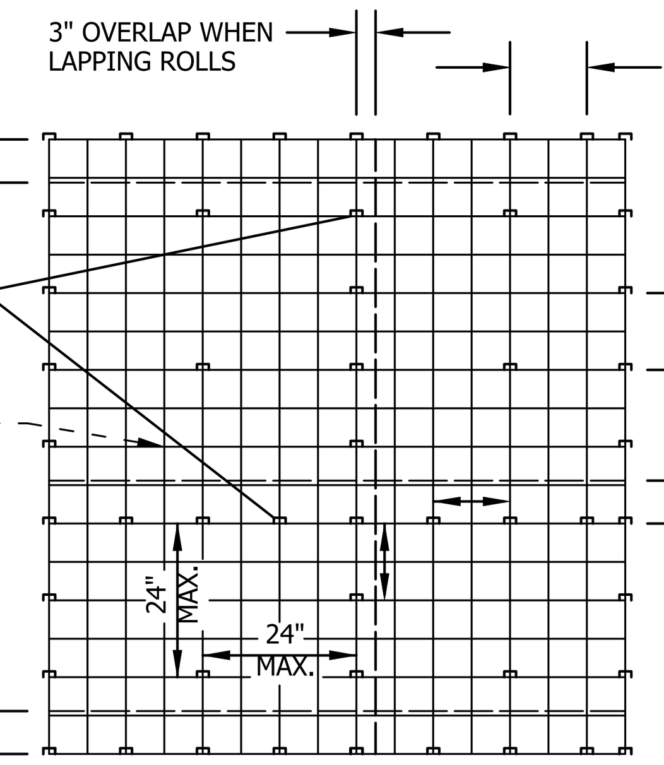
4. **MULCH**
   A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.

   B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.

5. **MAINTENANCE TO ESTABLISH A STAND**
   A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.

   B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.

   C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.



MULCH NETTING DETAIL
SOURCE: USDA SOIL CONSERVATION SERVICE
NO SCALE

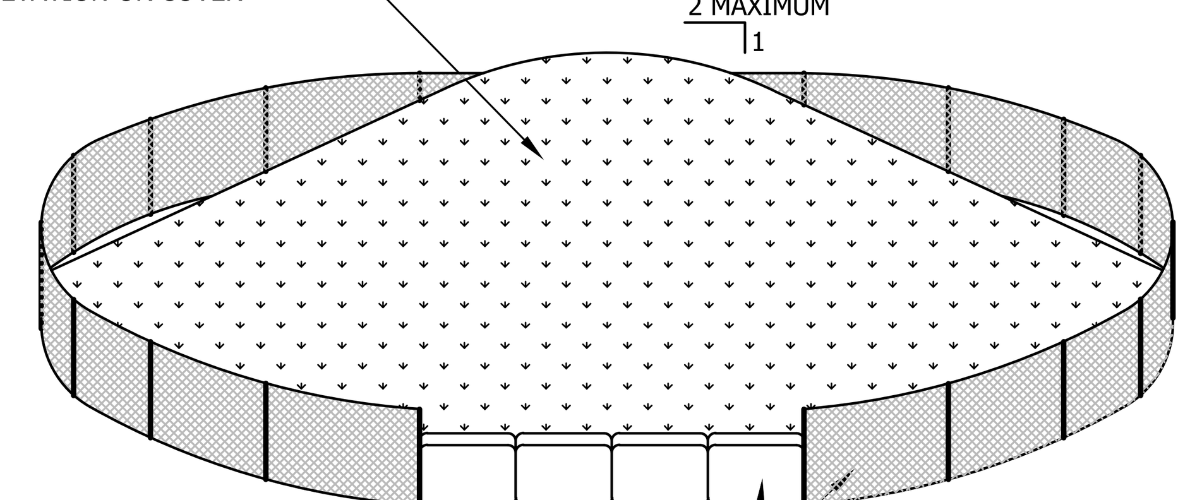
EROSION CONTROL GENERAL NOTES

A. KEEP SITE MODIFICATION TO A MINIMUM
1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.
2. EXPOSE AREAS OF BARE SOIL TO EROSIVE ELEMENTS FOR THE SHORTEST TIME POSSIBLE.
3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.
4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.
5. AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.

B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES
1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.
2. PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.
3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.
4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.
5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.
6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.

C. PROTECT AREA AFTER CONSTRUCTION.
1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEEDED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.
2. MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.
3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.
4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.
5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, REFER TO 'COLD WEATHER SITE STABILIZATION REQUIREMENTS'.

D. INVASIVE SPECIES AND FUGITIVE DUST
1. THE PROJECT SHALL NOT CONTRIBUTE TO THE SPREAD OF INVASIVE SPECIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EVALUATE WORK AREAS FOR THE PRESENCE OF INVASIVE SPECIES, AND IF FOUND SHALL TAKE NECESSARY MEASURES TO PREVENT THEIR SPREAD IN ACCORDANCE WITH RSA 430:51-57 AND AGR 3800. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PREVENT THE INTRODUCTION OF INVASIVE SPECIES BY INSPECTING AND CLEANING ALL EQUIPMENT ARRIVING ON SITE.
2. FUGITIVE DUST SHALL BE CONTROLLED IN ACCORDANCE WITH ENV-A 1000.



SOIL STOCKPILING IS TO BE USED WHERE TOPSOIL IS NECESSARY FOR REGRADING AND VEGETATING DISTURBED AREAS.

TEMPORARY STOCKPILE STABILIZATION MEASURES INCLUDE VEGETATIVE COVERS, MULCH, NON-VEGETATIVE COVERS, AND PERIPHERAL SEDIMENT TRAPPING BARRIERS. THE STABILIZATION MEASURE(S) SELECTED SHOULD BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, AND REQUIRED PERIOD OF USE.

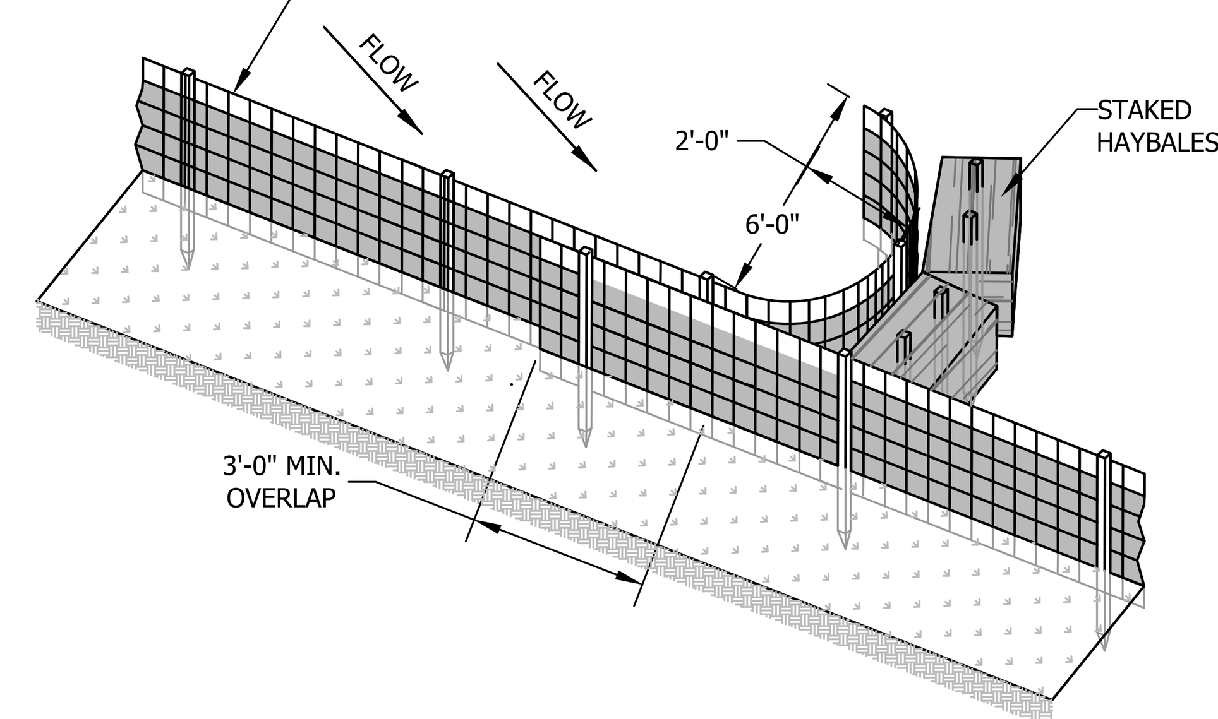
INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES AND THEN STABILIZED WITH VEGETATION OR COVERED.

SOIL STOCKPILING DETAIL
NOT TO SCALE

COLD WEATHER SITE STABILIZATION REQUIREMENTS

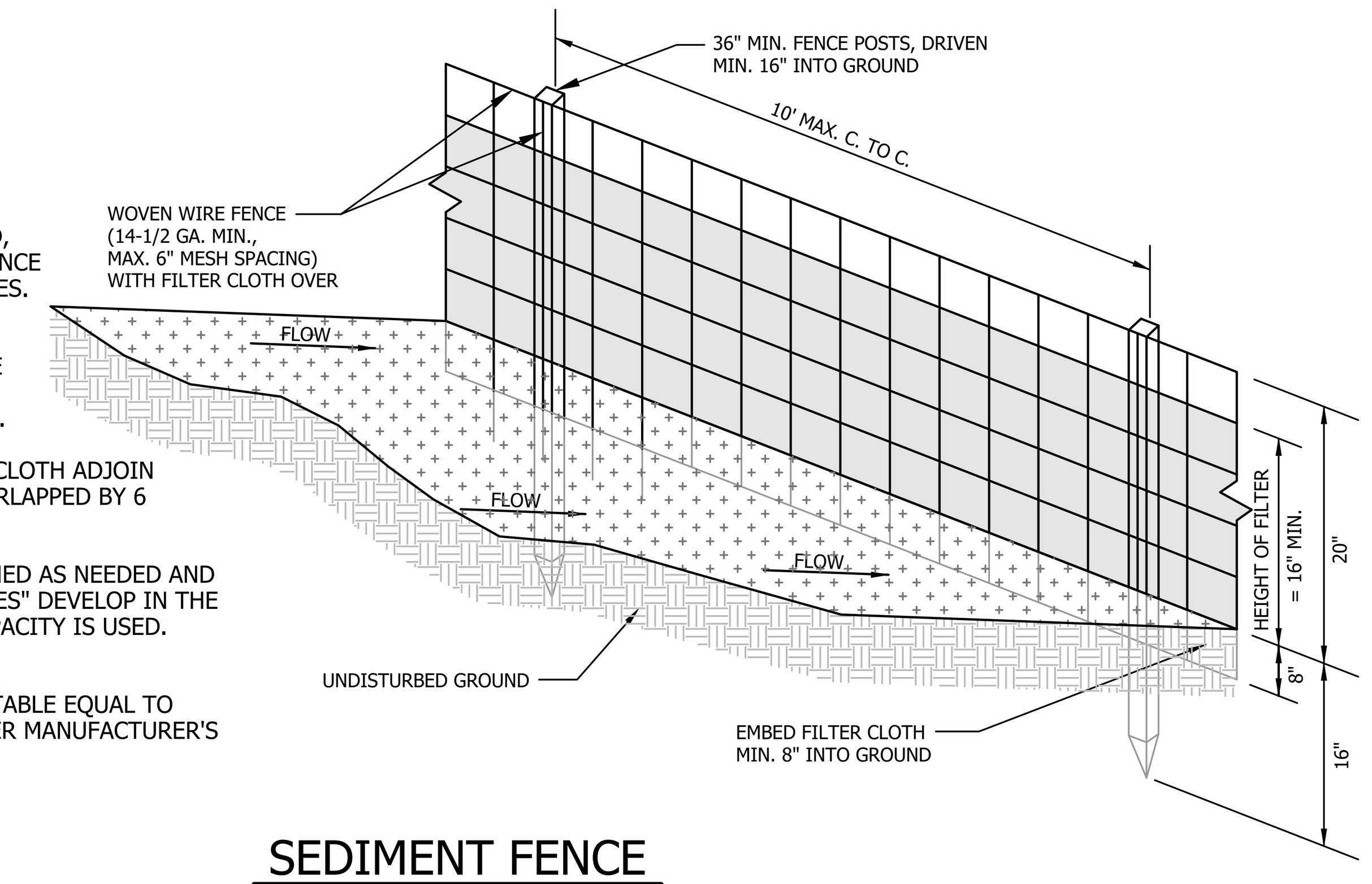
TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:

1. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1 ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
2. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE, SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
3. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEEDED AND COVERED WITH PROPERLY INSTALLED AND ANCHORED EROSION CONTROL MATTING OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
5. INSTALLATION OF EROSION CONTROL MATTING SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
6. ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN 1 DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
7. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
8. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM NO. 304.1 OR 304.2.



SEDIMENT FENCE POCKET
NO SCALE

CONSTRUCTION NOTES FOR SEDIMENT FENCE
1. WOVEN WIRE FENCE, IF REQUIRED, TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF CAPACITY IS USED.
5. 12" DIAMETER FILTREXX SILTSOXX SHALL BE CONSIDERED AN ACCEPTABLE EQUAL TO SEDIMENT FENCE IF INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.



SEDIMENT FENCE
NO SCALE

CONSTRUCTION SEQUENCE

1. INSTALL CONSTRUCTION ENTRANCE, SEE DETAIL.
2. CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
3. INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
4. GRUB SITE WITHIN GRADING LIMITS.
5. STRIP AND STOCKPILE TOPSOIL AND INSTALL EROSION CONTROL MEASURES.
6. INSTALL/ADJUST SEDIMENT FENCE, CHECK DAMS, AND HAYBALES, AS REQUIRED.
7. CONSTRUCT PERMANENT STORMWATER CONTROLS AS SOON AS PRACTICAL. DO NOT DIRECT STORMWATER TOWARD TREATMENT BASINS, PONDS, SWALES, DITCHES AND LEVEL SPREADERS UNTIL THEY HAVE BEEN STABILIZED.
8. PROCEED WITH WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM LENGTH OF TIME THAT DISTURBED EARTH MAY BE LEFT UNSTABILIZED IS 45 DAYS.
9. BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

   AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
10. INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
11. PLACE TOPSOIL, SEED AND MULCH.
12. MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.

FOR REVIEW
NOT FOR CONSTRUCTION

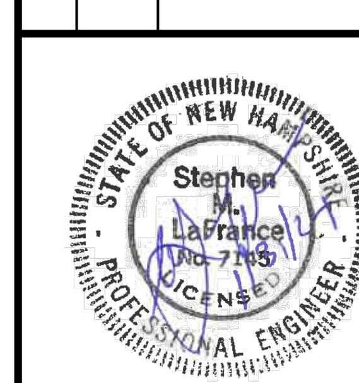
DATE OF PRINT
APRIL 01 2024
HORIZONS ENGINEERING

horizons Engineering
Civil and Structural Engineering
Land Surveying and Environmental Consulting
MAINE • NEW HAMPSHIRE • VERMONT
www.horizonsengineering.com

TOWN OF WOODSTOCK
SEWAGE PUMP STATION IMPROVEMENTS
GORDON POND BROOK PUMP STATION
NH ROUTE 112
WOODSTOCK, GRAFTON COUNTY, NEW HAMPSHIRE

EROSION CONTROL NOTES, DETAILS AND CONSTRUCTION SEQUENCE

NO.	DATE	REVISION DESCRIPTION	ENG	DWG



DATE: JAN 2024	PROJECT #: 230492
ENGIN'D BY: SML	DRAWN BY: LJM
CHECK'D BY: SML	ARCHIVE #: H-___

SHEET D1.2

last revised: 2018-APR-18