

July 31, 2020

**Re: Route 133 Pump Station Improvement Project
Brookfield Water Pollution Control Authority
Brookfield, CT
Addendum No. 1
Langan Project No.: 190011048**

Dear Bidder:

You are hereby notified of the changes and clarifications below to the Construction Document set for the above-referenced project. The Construction Document set shall be amended as follows:

1. The construction drawings have been revised to address the following changes:
 - Sheet CS101, Remove note which states contractor shall paint concrete blocks (match existing).
 - Sheet CS501, 12-foot diameter wet well detail has been revised to state the 12-inch DIP CI 52 connector pipe between existing and proposed wet well.
 - Sheet E-02, LP Storage Tank Installation Detail, has been revised to show concrete anchors. The LP Installation Notes have been revised.
2. Bid Sheet
 - Item 14, Repair Driveway quantity has been revised.
 - Item 24, Allowance for Rock has been added.
3. Contract Item
 - Item 14, Repair Driveway has been revised.
 - Item 24, Allowance for Rock has been added.

Below are the questions received to date followed by the responses in bold text:

- Question 1: For the excavation of the new wet well and propane tank locations.
- a. Are there any existing site borings?

Response: There are no existing borings data available.

- b. At what depth is the ground water level?

Response: There is no existing boring information available to determine the exact depth of ground water. An allowance for dewatering was provided in the contract documents in the event that groundwater is encountered.

- c. Can allowance be added to the bid form for rock excavation?

Response: **An allowance for rock excavation has been included in the contractor documents for 50 cubic yards.**

Question 2. For the two propane tanks provided by Mitchell. Is the Town taking ownership of the tanks?

Response: **The Brookfield WPCA will be taking ownership of the propane tanks.**

Question 3. Will the two new underground propane tanks require a concrete hold down slab or anchor?

Response: **Concrete anchors have been provided on Sheet E-02, LP Storage Tank Installation Detail. Refer to LP Installation Note # 3.**

Question 4. Is the Town of Brookfield waving the building permit fees for this project?

Response: **No permit fees will be waived.**

Question 5. The existing pump station driveway are not paved. Do we have to install new pavement?

Response: **No, the contractor does not have to install new pavement. The contractor is required to restore the item 4 driveway as noted in the contract documents.**

Question 6. The existing pump station is not paved, and it is a gravel base, do we have to install a new stabilized construction entrance on top of the existing gravel base as detailed on drawing CS501?

Response: **The contractor is required to keep the CTDOT Route 133 Road clean at all times. The contractor will be required to place the stabilized construction entrance if the road cannot be kept clean.**

Question 7. Drawing CS101 details a new 12" diameter ductile iron pipe between the two wet wells and drawing CS501 details a PVC SDR 35 pipe. Please clarify which type of pipe is needed.

Response: **The wet well detail on Sheet CS501 has been revised to state the 12-inch DIP CL 52 pipe to connect the existing and proposed wet well.**

Question 8. Can we provide a link seal with stainless steel hardware to seal the 12" pipe to the existing wet well?

Response: **Link seal with stainless steel hardware will be an acceptable product to use to seal the 12-inch pipe to the existing wet well.**

Question 9. What type of seal do we provide for the 12" pipe to the new wet well, a boot or link seal?

Response: See response to question number 8.

Question 10. In specification section S-4 Wet Well, five paragraphs down from the top of the specification state to provide a flexible joint on the pipe 24" outside of the wet well wall. Provide us the type and manufacturer of the 12" flexible joint required?

Response: This is a bell and spigot joint to be placed no more than 24-inches outside the existing wet well.

Question 11. On drawing CS101 there is a note to fill in the existing generator intake louver with masonry. At the pre-bid meeting the owner noted he did not want the existing louver removed. Please clarify how we are to infill the opening.

Response: The exterior louver will remain. The inside wall will be repaired with masonry blocks. The contractor is no longer responsible for painting the masonry blocks. Sheet CS101 has been revised to remove the note which states "contractor shall paint concrete blocks (match existing)."

Question 12. Drawing CS101 there is a note to remove and dispose of the existing generator and fuel tank.

a. Is the contractor responsible for disposal of the fuel inside of the tank?

Response: The contractor is responsible for removing the fuel inside the tank.

b. Do we have to remove and dispose of the existing concrete housekeeping pad under the existing generator?

Response: The existing concrete housekeeping pad under the existing generator will remain.

c. Do we have to remove and dispose of the existing generator's exhaust pipe?

Response: The contractor is responsible for removing and disposing of the existing generator's exhaust pipe. The contractor will patch the opening with concrete.

d. Does the existing exhaust pipe have asbestos?

Response: To the best of the WPCA Brookfield's knowledge, the exhaust pipe does not have asbestos.

Question 13. Is this product acceptable?

Response: At this time, we cannot comment on specific products. We recommend that you review the product specification noted within the contract documents.

Question 14. On drawing CS101 under the notes for construction sequence, note # 3, it is noted for the contractor to provide an exfiltration test of the wet well. Is the contractor responsible to provide the water for the test?

Response: The contractor will be able to use the water from the well on-site.

Question 15. On drawing E-02 under LP installation notes, note # 1, it is noted to provide galvanized schedule 40 black iron for the underground pipe from the tanks to the generator. Mitchell company the specified propane installer wants to provide poly plastic gas line sleeved in plastic well pipe in place of the black iron pipe. Is plastic gas line acceptable? Mitchell claims this pipe arrangement is what they normally install for all the Brookfield generator projects.

Response: See revised LP Storage Tank Installation Note #1 on Sheet E-02 for clarification.

END OF ADDENDUM NO. 1

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ITEM NO.	EST. QUANTITY	UNIT	ITEM WITH UNIT PRICES	UNIT PRICES (IN NUMBERS)		AMOUNT BID	
				Dollars	Cents	Dollars	Cents
11	1	L.S.	Remove Existing Generator, Fuel Tank and associated components				
			L.S.				
12	1	L.S.	Repair Pump Station Building Wall with concrete blocks				
			L.S.				
13	2,000	S.F.	Lawn Restoration				
			S.F.				
14	1	L.S.	Repair Driveway				
			L.S.				
15	120	L.F.	Silt Fence				
			L.F.				
16	1	EA.	Stabilized Construction Entrance				
			Ea.				
17	1	L.S.	Electrical Connection				
			L.S.				
18	40	L.F.	Gas Line				
			L.F.				

ITEM NO.	EST. QUANTITY	UNIT	ITEM WITH UNIT PRICES (IN WORDS)	UNIT PRICES (IN NUMBERS)		AMOUNT BID	
				Dollars	Cents	Dollars	Cents
19	3	EA.	Bollards				
			Ea.				
20	1	L.S.	Wet Well and Sewer Line Sheeting and Shoring				
			L.S.				
21	1	L.S.	As-Built				
			LS.				
22	1	F.L.S.	Allowance for Dewatering				
			FLS.	\$7,500	00	\$7,500	00
23	1	F.L.S.	Miscellaneous Additional Work				
			FLS.	\$25,000	00	\$25,000	00
24	50	C.Y.	Allowance for Rock				
			C.Y.				
SUMMATION OF BASE BID ITEMS							
				DOLLARS			
				CENTS			
				(\$ _____)			

The summation of the bid for this contract is based on the prices for the various items. This summation is made with the understanding that it is not a part of the bid and is solely a matter of information for convenience in comparing the bids at the time of opening.

The undersigned proposes to commence work within ten (10) calendar days of receipt of written notice from the Owner so to do, and shall complete the work in all respects except for maintenance and final pavement within 45 calendar days following service of said notice. The undersigned is also aware of the provision of payment to the Owner for liquidated damages should he fail to complete the work within the time stipulated above.

Accompanying this proposal, under separate cover, is a cashier's check, certified check or bid bond for _____ dollars (\$_____) payable to the Owner.

In case this Proposal is accepted by the Owner and the undersigned shall fail to execute the Contract with, and deliver Contract Bonds to the Owner in accordance with the information for Bidders, then the said cashier's check, certified check, or the amount of the Bid Bond shall become the property of the Owner and shall be the maximum obligation of the Contractor or his Surety for the aforesaid failure of the Contractor, otherwise it shall be returned to the undersigned upon request.

If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within ninety (90) days after the date of opening of the bids, or any time thereafter before this bid is withdrawn, the undersigned shall, within ten (10) days after the date of such mailing, telegraphing, or delivering of such notice, execute and deliver a contract in the Form of Contract attached hereto, and Contract Bonds as hereinafter specified. The undersigned hereby designates the above address as his office to which such notice of acceptance may be mailed, telegraphed or delivered.

The bidder hereby acknowledges the receipt of the following issues of addenda, if any, distributed by the Engineer:

Addendum No. _____	Dated _____	Addendum No. _____	Date _____
Addendum No. _____	Dated _____	Addendum No. _____	Date _____
Addendum No. _____	Dated _____	Addendum No. _____	Date _____

The Brookfield Water Pollution Control Authority reserves the right to reject any and all bids for any reason, to waive any informality in the bidding and to award the Contract to the lowest responsible and qualified bidder or the responsible and qualified bidder with the lowest combination of **Base Bid and Alternates, where applicable**, selected by the Authority.

**CONTRACT ITEM 14
REPAIR DRIVEWAY**

Sect. 14.01 DESCRIPTION

Under this item, the Contractor shall furnish all labor, materials, and equipment necessary to place Item 4 in accordance with the plans and specifications. This driveway is to be maintained throughout construction. The driveway shall be ready to be placed asphalt at the end of construction.

Sect. 14.02 GENERAL REQUIREMENTS

This Item does not include work described in, or payable under, other items in this contract.

Section 14.03 METHOD OF MEASUREMENT

This work to repair the item 4 driveway shall be measured by the lump sum to restore the driveway to existing conditions.

Section 14.04 BASIS OF PAYMENT

The lump sum bid price for this item shall be full payment for furnishing all labor, equipment and materials, including the preparation, placing of item 4, and rolling necessary to complete the driveway repair as shown on the drawings and specified herein.

CONTRACT ITEM 24 ALLOWANCE FOR ROCK

Sect. 24.01 DESCRIPTION

Under this Item, the Contractor shall excavate rock and remove boulders in pipe trenches and excavations, including disposing of surplus excavated rock, backfilling of trenches with acceptable material to the original level of rock, dewatering the trench, and protecting existing structures, as shown, specified, or ordered.

Sect. 24.02 GENERAL REQUIREMENTS

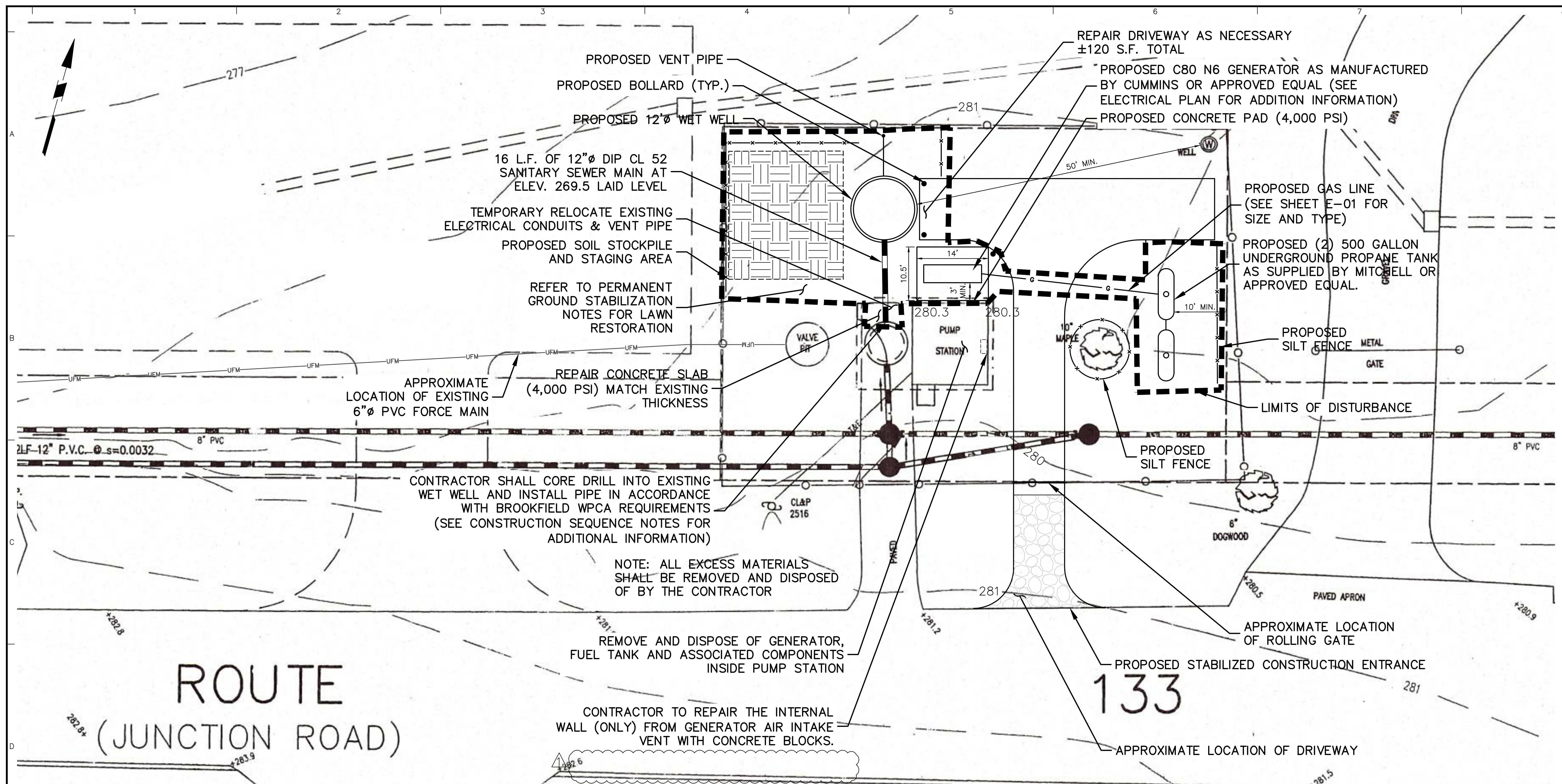
This Item does not include work described in, or payable under, other items in this contract.

Sect. 24.03 METHOD OF MEASUREMENT

The quantity to be measured for payment under this Item shall be the number of cubic yards of rock contained within the planes defined by the existing rock surface and the payment lines shown or ordered; and boulders, or masonry in excess of 1 cubic yard. Removal of concrete paving after sawcutting shall not be measured under this Item, but shall be considered included in the Contractor's unit bid price for other appropriate items.

Sect. 24.04 BASIS OF PAYMENT

The price per cubic yard bid under this Item shall cover all costs of excavating rock and removing boulders, suitable backfill material, disposal of rock and all related labor and materials.



- GENERAL NOTES**
- BASEMAP INFORMATION IS TAKEN FROM A ROUTE 133 PLAN AND PROFILE AS-BUILT, PREPARED BY C.G. ENGINEERS, INC. REVISED DATED OCTOBER 4, 2004.
 - THE CONTRACTOR SHALL HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR OR CONSTRUCTION MANAGER SHALL CONTACT THE OWNERS OF ALL UTILITIES AFFECTING THE SITE PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THE EXACT LOCATION OF UTILITIES FROM THE OWNERS PRIOR TO CONSTRUCTION. UNDERGROUND UTILITIES CALL CENTER OF CONNECTICUT (800)-922-4455.
 - THE CONTRACTOR IS TO STRICTLY ADHERE TO ALL OF THE RULES AND REGULATIONS OF THE BROOKFIELD WPCA IF THERE IS A CONFLICT BETWEEN SAID RULES AND REGULATIONS AND THE CONTRACT DOCUMENTS. THE RULES AND REGULATIONS SHALL GOVERN.
 - ALL ELECTRICAL WORK SHALL BE PERFORMED AS REQUIRED BY APPLICABLE SECTIONS OF THE NATIONAL ELECTRICAL CODE, LATEST EDITION, GOVERNING LOCAL CODES, LAWS AND REGULATIONS.
 - THE CONTRACTOR SHALL EXERCISE CARE DURING CONSTRUCTION TO PREVENT DAMAGE TO ANY EXISTING PIPES. DAMAGES TO ANY EXISTING UTILITIES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
 - 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.
 - UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL LEAVE SITE IN A NEAT AND CLEAN MANNER.
 - 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.
 - THE CONTRACTOR WILL HAVE ACCESS TO WATER ONSITE FROM THE EXISTING WELL.
 - THE CONTRACTOR WILL HAVE ACCESS TO (1) 20-AMP CIRCUIT. ANYTHING IN EXCESS OF THAT, THE CONTRACTOR WILL PROVIDE IN ACCORDANCE WITH ARTICLE 55 IN THE GENERAL CONDITIONS IN THE CONTRACT DOCUMENTS.
 - THE CONTRACTOR MUST COORDINATE WITH THE OWNER ON THEIR PROCEDURES TO ENSURE THERE IS LIMITED DOWN TIME FOR THE PUMP STATION. THE DOWN TIME SHALL NOT EXCEED 4 HOURS.

- 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 SILT FENCE AS INDICATED ON THE PLAN.
 - CONTRACTOR SHALL INSTALL WET WELL, INCLUDING SHEETING AND SHORING AND ASSOCIATED COMPONENTS, WITHOUT INTERRUPTING THE EXISTING SERVICE. AFTER WET WELL IS INSTALLED, CONTRACTOR SHALL PROVIDE AN EXFILTRATION TEST ON THE WET WELL IN ACCORDANCE WITH BWPCA RULES AND REGULATIONS.
 - CONTRACTOR SAW CUT EXISTING WET WELL CONCRETE PAD AND TEMPORARILY RELOCATE ELECTRICAL CONDUITS.
 - CONTRACTOR SHALL CONNECT THE PROPOSED SEWER PIPE TO THE EXISTING WET WELL. THIS WILL BE CONDUCTED DURING LOW FLOW AND DURING PERIODS OF DRY WEATHER. THE CONTRACTOR MUST MAKE THE CONNECTION TO THE EXISTING WET WELL BETWEEN 11PM TO 5AM. THE CONTRACTOR IS TO FOLLOW ALL TOWN OF BROOKFIELD, CT NOISE ORDINANCE REQUIREMENTS DURING NIGHTTIME HOUR OF OPERATIONS. THE BWPCA WILL PUMP THE WET WELL DRY FOR THE CONNECTION AND STOP FLOW UP TO A PERIOD OF 4 HOURS. THE CONTRACTOR SHALL HAVE A LICENSE WASTEWATER HAULER ON-SITE AT THE TIME OF THE CONNECTION. IN THE EVENT THE WASTEWATER HAULER CONTAINER IS FULL PRIOR TO THE CONNECTION COMPLETED, THE WASTEWATER HAULER SHALL EMPTY THE VEHICLE AT A PUMP STATION LOCATION SPECIFIED BY BROOKFIELD WATER POLLUTION CONTROL AUTHORITY AND RETURN ON-SITE.
 - CONTRACTOR SHALL INSTALL CONCRETE PADS, BOLLARDS, GENERATOR, PROPANE TANK, AND ASSOCIATED COMPONENTS, WITHOUT INTERRUPTING THE EXISTING SERVICE.
 - REFER TO THE ELECTRICAL DRAWINGS FOR THE CONSTRUCTION SEQUENCE TO CONNECT THE PROPOSED GENERATOR INTO SERVICE.
 - CONTRACTOR SHALL REMOVE EXISTING GENERATOR, FUEL TANK AND ASSOCIATED COMPONENTS.
 - CONTRACTOR SHALL REPAIR PUMP STATION BUILDING WALL WITH CONCRETE BLOCKS.
 - CONTRACTOR SHALL REPAIR DRIVEWAY. NOTE, THE DRIVEWAY SHALL BE IN THE SAME CONDITION PRIOR TO THE START OF CONSTRUCTION. IF THE CONTRACTOR NEEDS TO REPAIR ADDITIONAL AREAS OF THE DRIVEWAY, THE CONTRACTOR SHALL REPAIR THE AREAS IDENTIFIED BY BWPCA AND BE AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL REMOVE EXCESS EXCAVATED MATERIAL, GENERATOR, FUEL TANK, CONSTRUCTION DEBRIS, ETC. FROM THE SITE.
 - TOPSOIL, SEED, AND MULCH ALL DISTURBED AREAS AS SOON AS PRACTICAL IN ACCORDANCE WITH THE PERMANENT GROUND STABILIZATION NOTES.

- EROSION & SEDIMENT CONTROL NOTES**
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
 - SILT FENCE SHALL BE INSTALLED AS SHOWN ON DRAWING PRIOR TO BEGINNING ANY CLEARING AND GRUBBING.
 - ALL TOPSOIL TO BE STRIPPED FROM THE AREA BEING DEVELOPED SHALL BE STOCKPILED AND IMMEDIATELY SEEDED WITH LOLIUM PERENNE ARISTATUM OR LOLIUM PERENNE MULTIFLORUM FOR TEMPORARY STABILIZATION. LOLIUM PERENNE ARISTATUM SHALL BE USED FOR WINTER SEEDING AND LOLIUM PERENNE MULTIFLORUM SHALL BE USED FOR SPRING AND SUMMER SEEDING.
 - PAVED ROADWAYS SHALL BE KEPT CLEAN AT ALL TIMES.
 - STORMWATER FROM DISTURBED AREAS MUST BE PASSED THROUGH AN EROSION CONTROL DEVICE BEFORE BEING DISCHARGED BEYOND DISTURBED AREAS OR INTO OTHER DRAINAGE SYSTEMS.
 - EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE SUITABLY STABILIZED.
 - ALL SITE RESTORATION SHALL BE PERFORMED IN A TIMELY MANNER TO LIMIT THE LENGTH OF TIME ANY AREA IS EXPOSED AND UNSTABLE.

PERMANENT GROUND STABILIZATION

SPECIES	LBS. PER ACRE	PER 1000 S.F.
SPREADING FESCUE	15	0.3
CHEWINGS RED FESCUE	15	0.3
KENTUCKY BLUEGRASS	25	0.6
PERENIAL RYEGRASS	10	0.2
SEEDBED PREPARATION		
LIMESTONE (50% Ca + MgO ⁵)		
CLAY, CLAY LOAM, HIGH ORGANIC SOIL	8000	180
SANDY LOAM, LOAM, SILT LOAM	6000	135
LOAMY SAND, SAND	4000	90
FERTILIZER (10-20-10 OR EQUIV.)	500	11

7-31-20	Addendum 1	▲
Date	Description	No.

REVISIONS

SIGNATURE: W. CHARLES UTSCHIG JR.
DATE SIGNED: 0019262
PROFESSIONAL ENGINEER CT Lic. No.

LANGAN

Langan CT, Inc.
One North Broadway, Suite 910
White Plains, NY 10601
T: 914.323.7400 F: 914.323.7401 www.langan.com

Project: **ROUTE 133 PUMP STATION IMPROVEMENTS**

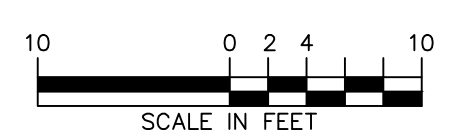
FAIRFIELD COUNTY BROOKFIELD CONNECTICUT

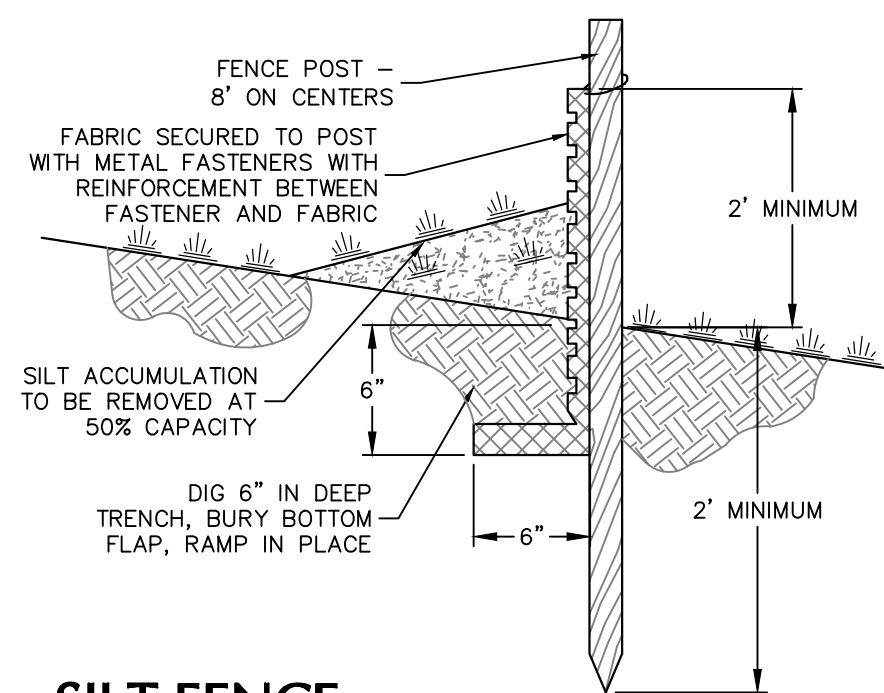
Drawing Title: **PUMP STATION IMPROVEMENT PLAN**

Project No.: 190011048
Drawing No.: CS101

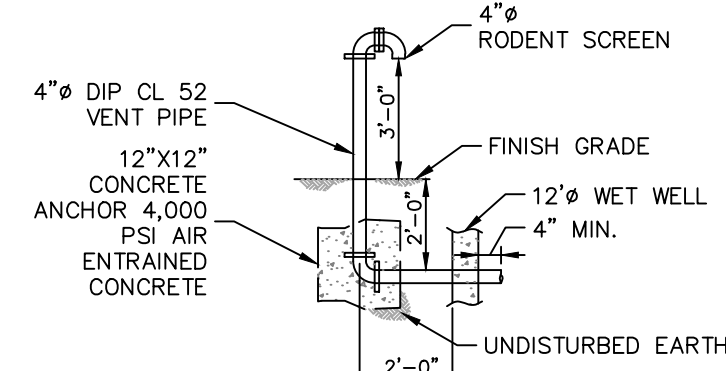
Date: JUNE 5, 2020
Drawn By: EK
Checked By: CU

Sheet 2 of 5



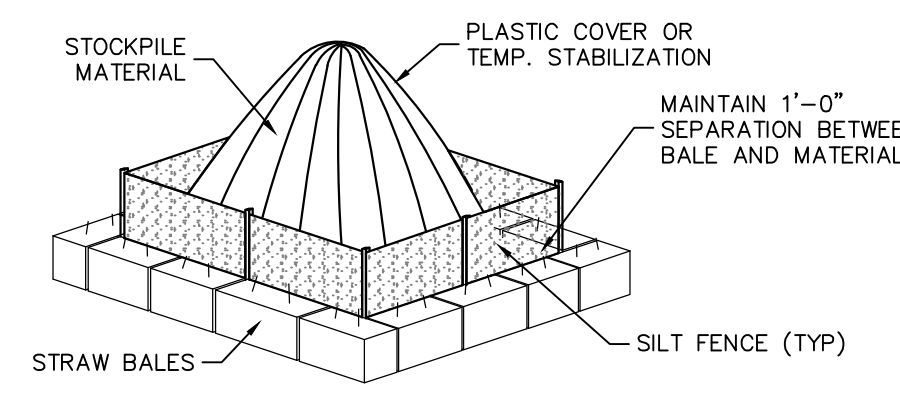


SILT FENCE
SCALE: NTS



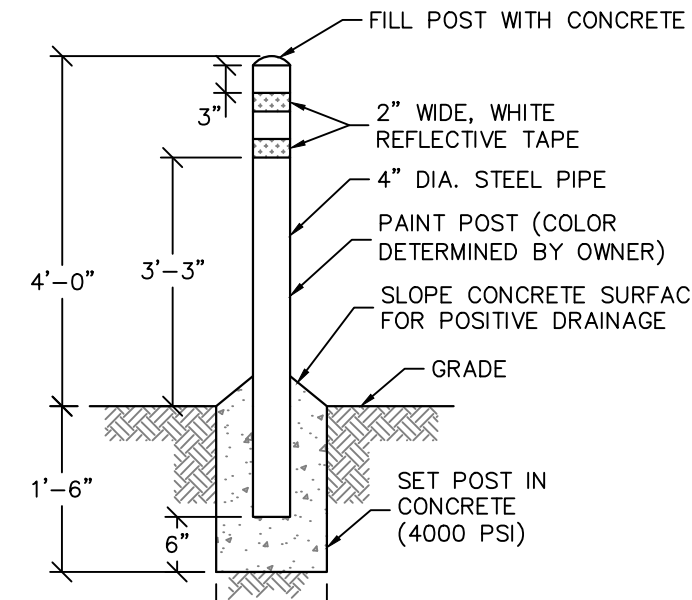
NOTES:
1. VENT PIPE PENETRATION SHALL BE LINK SEAL MODEL #CS-6 OR APPROVED EQUAL.

VENT DETAIL
SCALE: NTS

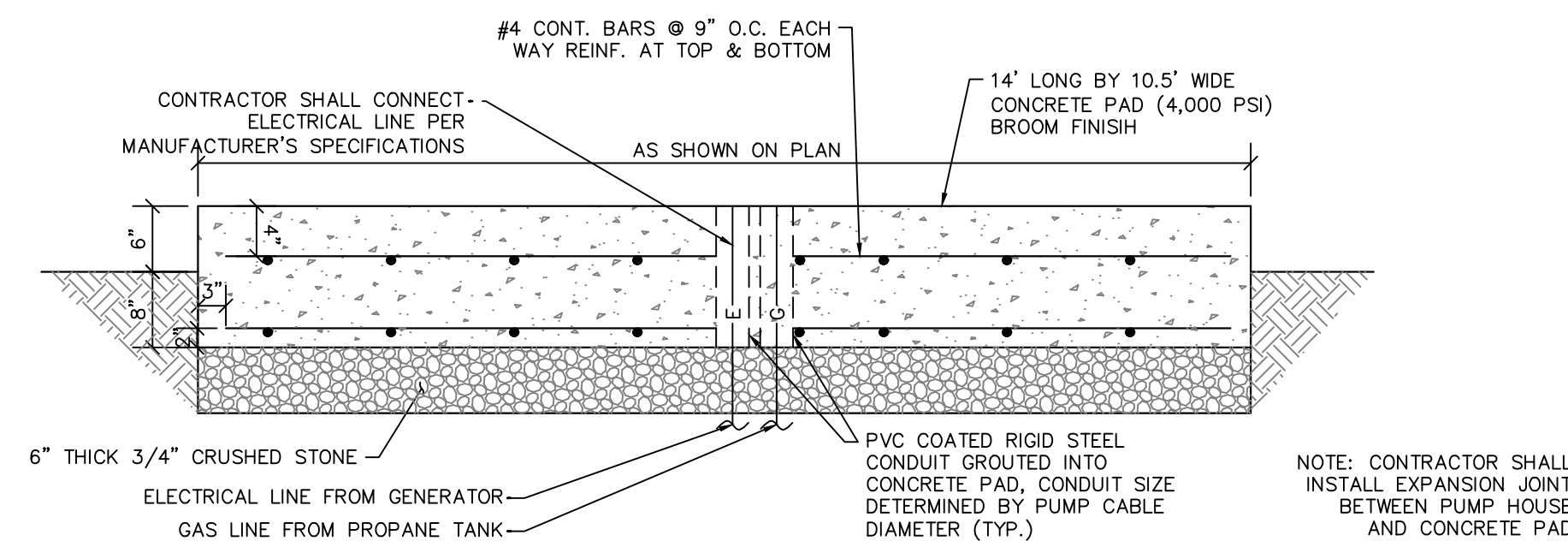


NOTE:
STOCKPILE SHALL BE COVERED ENTIRELY BY AN ANCHORED PLASTIC COVER OR SEEDED IF NOT IN USE AFTER 14 DAYS.

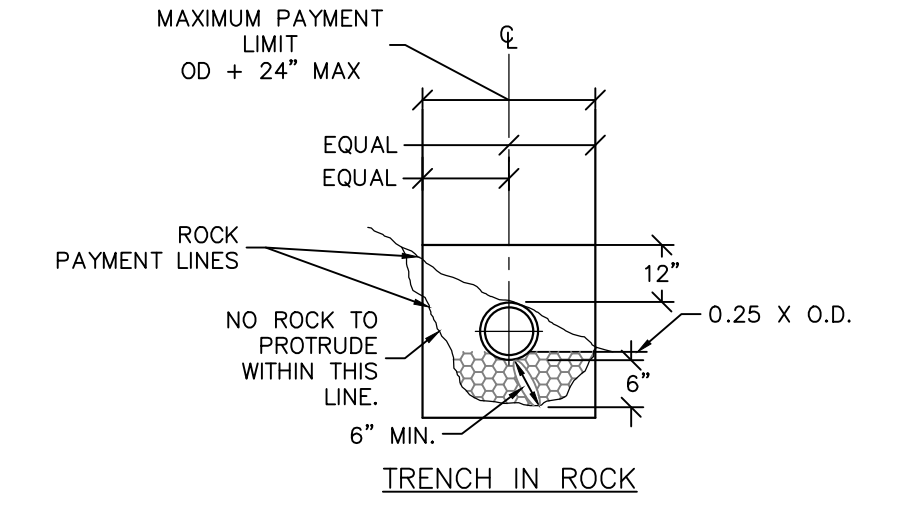
STOCKPILE CONTROL
SCALE: NTS



TYPICAL BOLLARD DETAIL
SCALE: NTS

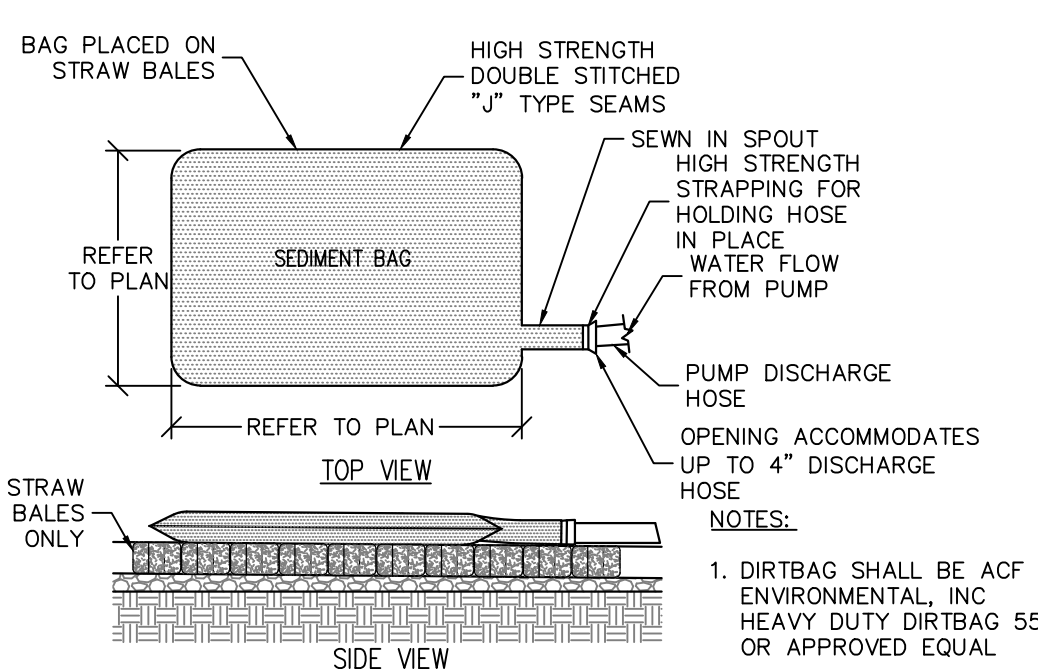


CONCRETE PAD DETAIL
SCALE: NTS

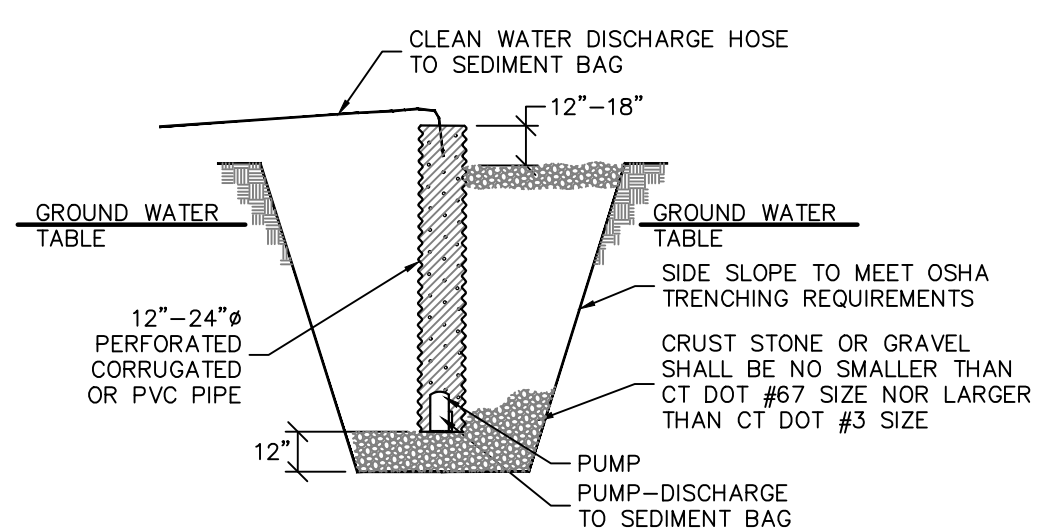


NOTES:
1. NO TRENCH CONTAINING SEWER SHALL BE BACKFILLED UNTIL THE WPCA HAS COMPLETED AN INSPECTION OF AND APPROVED THE WORK.
2. PROVIDE METALLIC MARKING TAPE 18" BELOW GRADE LABELED "SEWER" OVER THE MAINS, SERVICE LINES & FORCE MAINS.

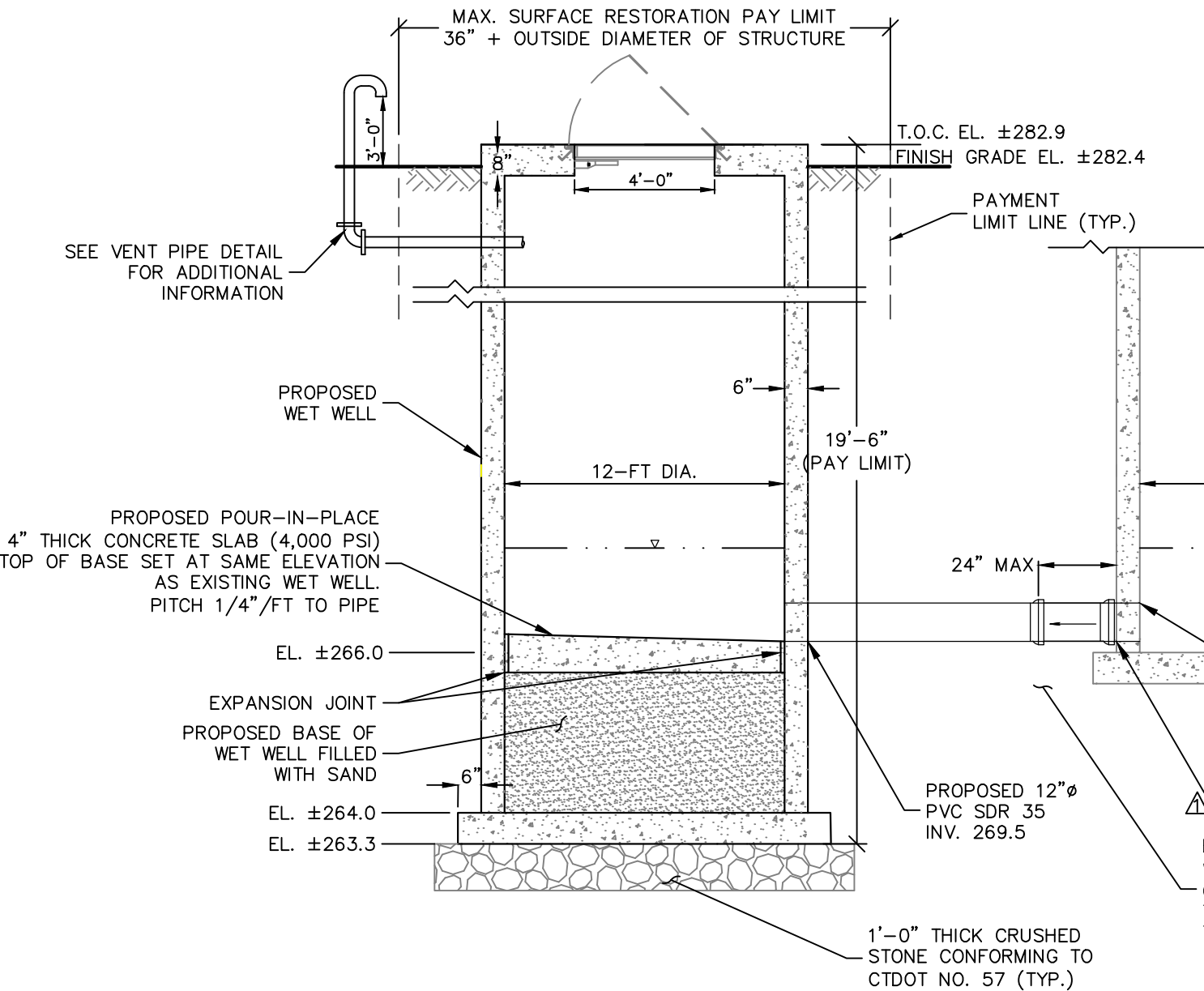
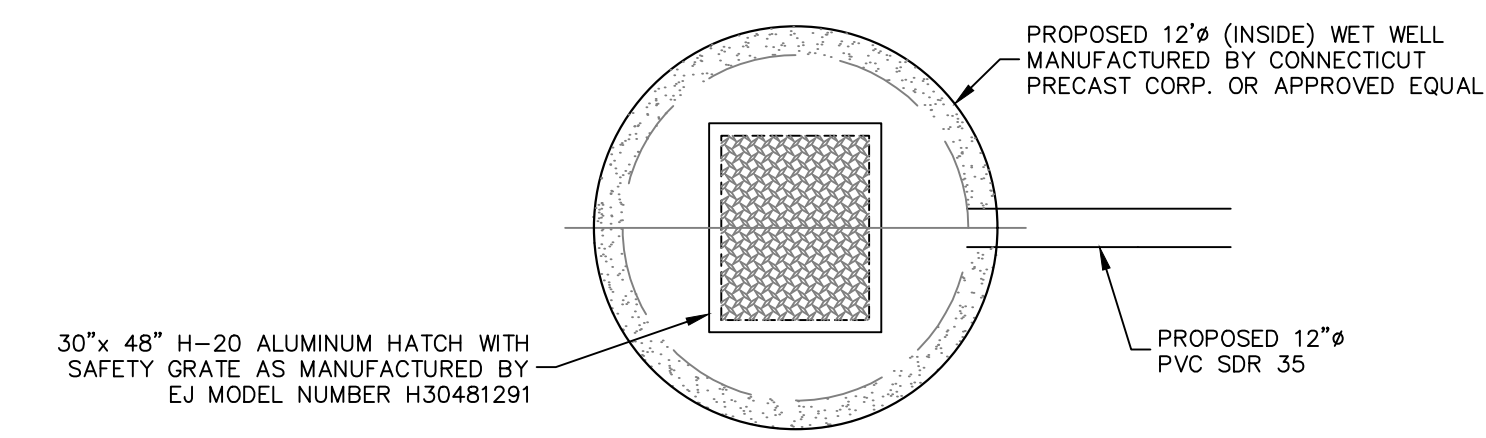
TRENCH SECTIONS FOR FLEXIBLE PIPE
SCALE: NTS



SEDIMENT BAG CONTROL SYSTEM
SCALE: NTS



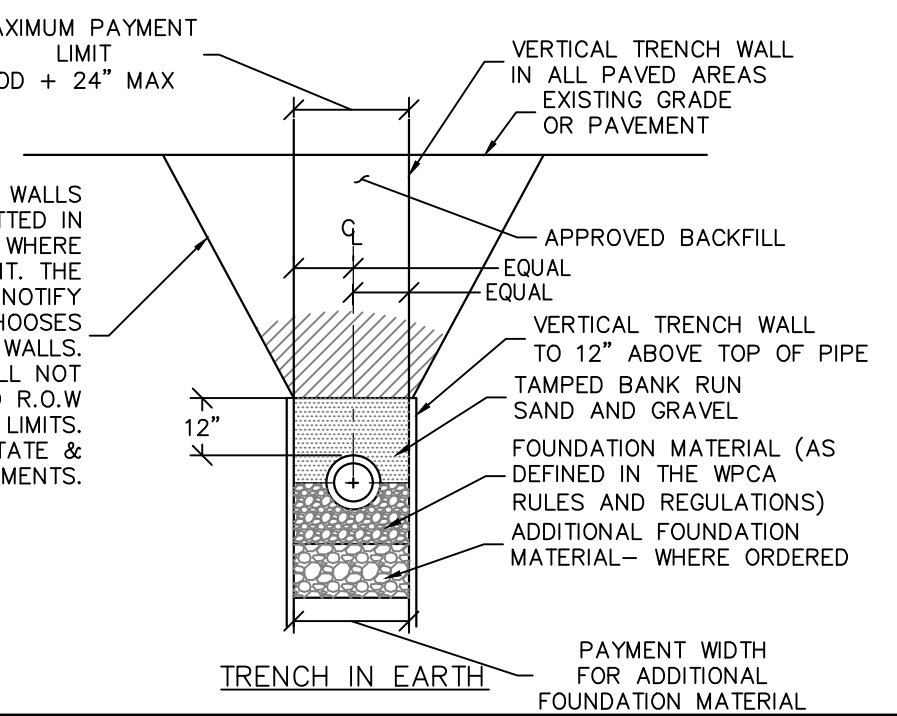
SUMP PIT
SCALE: NTS



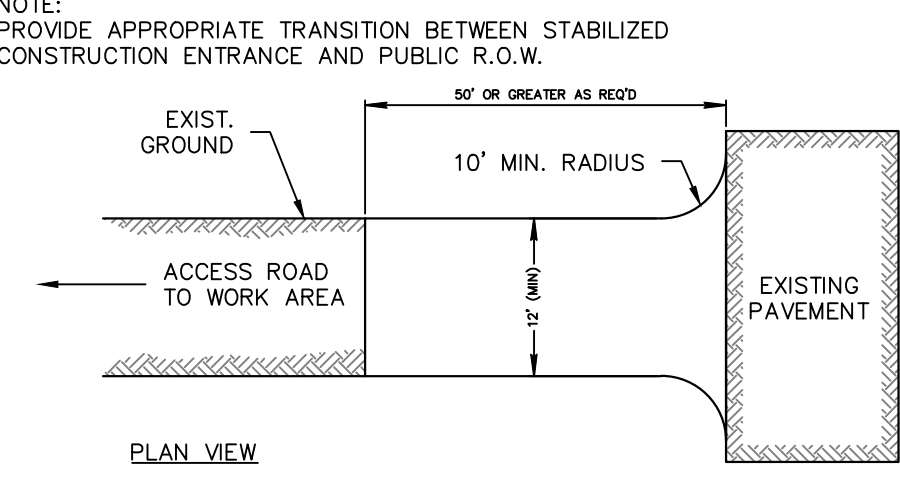
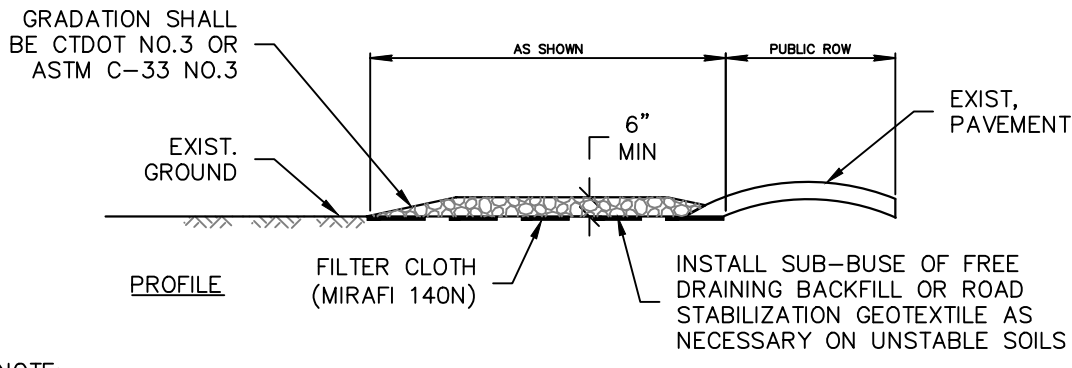
PUMP STATION NOTES:
1. THE CONTRACTOR SHALL PROVIDE STRUCTURAL CALCULATIONS (INCLUDING BUOYANCY CALCULATIONS) FOR THE WET WELL AND VALVE CHAMBER ASSUMING WATER AT GRADE ELEVATION. THE CALCULATIONS SHALL BE SIGNED & SEALED BY A CONNECTICUT PROFESSIONAL ENGINEER AS PART OF THE SHOP DRAWING SUBMITTAL. THE STRUCTURES ARE TO BE DESIGNED FOR A LIVE LOADING OF HS-20 PER AASHTO.
2. AREAS OF ALUMINUM IN CONTACT WITH CONCRETE SHALL BE PROVIDED WITH A BITUMASTIC COATING. AREAS IN WHICH DISSIMILAR METALS ARE IN CONTACT SHALL BE PROVIDED WITH NON-METALLIC ISOLATORS.

PRECAST CONCRETE
1. ALL PRECAST CONCRETE WORK SHALL BE IN COMPLETE ACCORDANCE WITH THE REQUIREMENTS OF ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", AND ACI 301, "SPECIFICATIONS FOR CONCRETE BUILDINGS", LATEST EDITIONS, AND IN ACCORDANCE WITH THE GENERAL NOTES ON CONCRETE CONSTRUCTION ON THIS SHEET.
2. PRECAST CONCRETE SHALL BE MANUFACTURED WITH PROCEDURES AND TESTING REQUIREMENTS IN ACCORDANCE WITH PCI MNL116, "MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF STRUCTURAL CONCRETE PRODUCTS".
3. ALL PRECAST CONCRETE SHALL BE DESIGNED BY THE MANUFACTURER'S ENGINEER. DESIGN SHALL BE PREPARED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF CONNECTICUT.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PRECAST CONCRETE ELEMENTS & BUOYANCY CALCULATIONS FOR REVIEW BY PROJECT ENGINEER. DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.

12' DIA. WET WELL
SCALE: NTS



CONSTRUCTION SPECIFICATIONS:
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.
2. THE STANDPIPE DIAMETER AND NUMBER OF PERFORATIONS SHALL BE COMPATIBLE WITH THE PUMP SIZE BEING USED.
3. IF EXCESSIVE MOVEMENT OF FINE SOIL PARTICLES FROM THE SURROUNDING EXISTING SOILS IS ANTICIPATED, A PROPERLY DESIGNED GEOTEXTILE SHALL BE PLACED BETWEEN THE EXISTING SOILS AND THE CRUSHED STONE OR GRAVEL BACKFILL.



STABILIZED CONSTR. ENTRANCE
SCALE: NTS

- GENERAL NOTES**
- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CONNECTICUT BUILDING CODE, WHICH IS THE ADOPTED BUILDING SUBCODE FOR THE PROJECT SITE.
 - PROVIDE TEMPORARY BRACING AS REQUIRED TO SUPPORT LOADS TO WHICH PROPOSED STRUCTURES MAY BE SUBJECT DURING CONSTRUCTION.
 - 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.
 - 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.
 - 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.
 - ALL WORK TO BE CONSTRUCTED IN COMPLIANCE WITH THE "STANDARD DETAILS" AND "SEWER USE REGULATIONS" OF THE BROOKFIELD WATER POLLUTION CONTROL AUTHORITY.
 - 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.
 - UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL LEAVE SITE IN A NEAT AND CLEAN MANNER.
 - 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.
 - 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.
 - 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.
 - 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.
 - ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE TO AN APPROVED LOCATION BY OWNER.

- EXCAVATION, FOUNDATION AND BACKFILLING**
- 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.
 - THE SUBGRADE FOR SLAB SHALL BE PROOF ROLLED, ANY SOFT SPOTS REMOVED AND FILLED WITH SATISFACTORY MATERIAL AND RECOMPACTED.
 - 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.
 - 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.
 - 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.
 - ALL EXCAVATIONS AND BACKFILL OPERATIONS SHALL CONFORM WITH CURRENT OSHA REQUIREMENTS AND STANDARDS.
 - 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.

7-31-20	Addendum 1	▲
Date	Description	No.

REVISIONS

SIGNATURE: W. CHARLES UTSCHIG JR.
DATE SIGNED: PROFESSIONAL ENGINEER CT Lic. No. 0019262



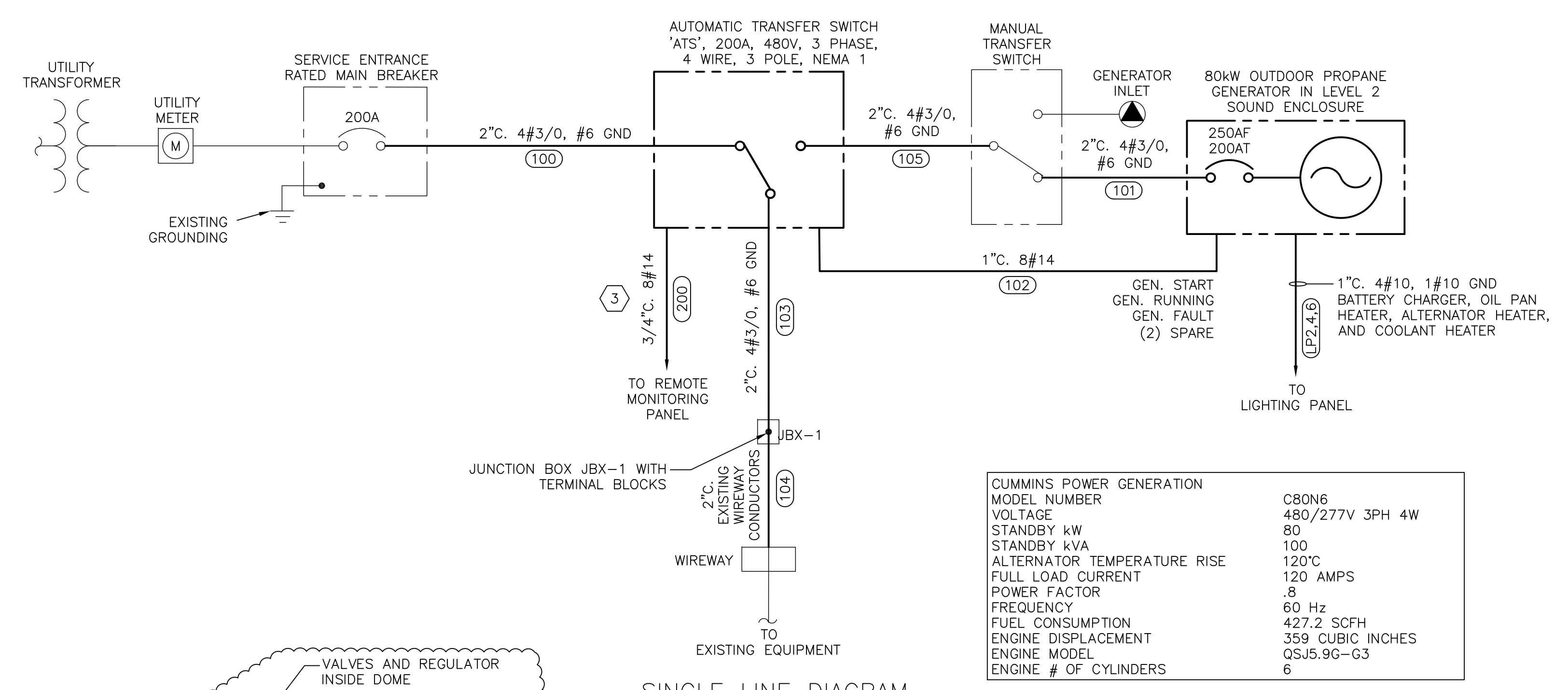
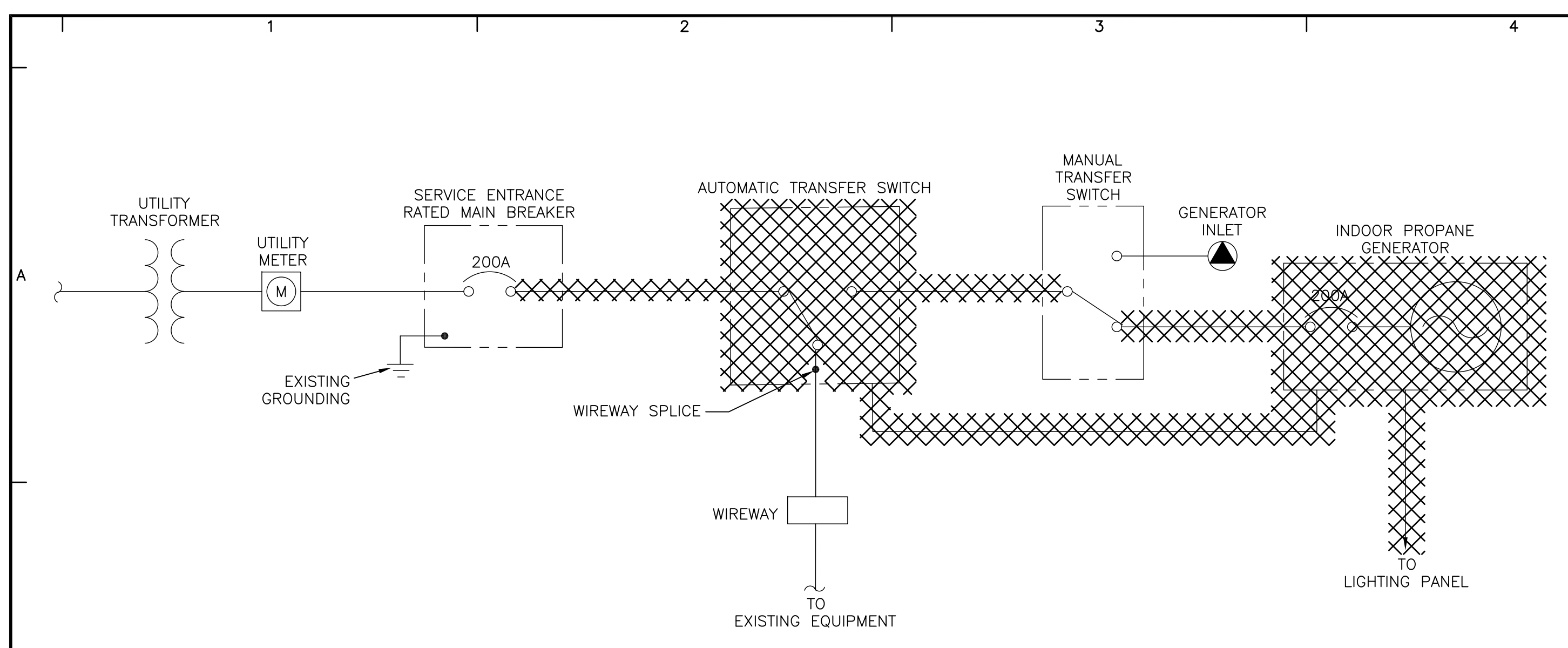
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ROUTE 133 PUMP STATION IMPROVEMENTS

BROOKFIELD CONNECTICUT

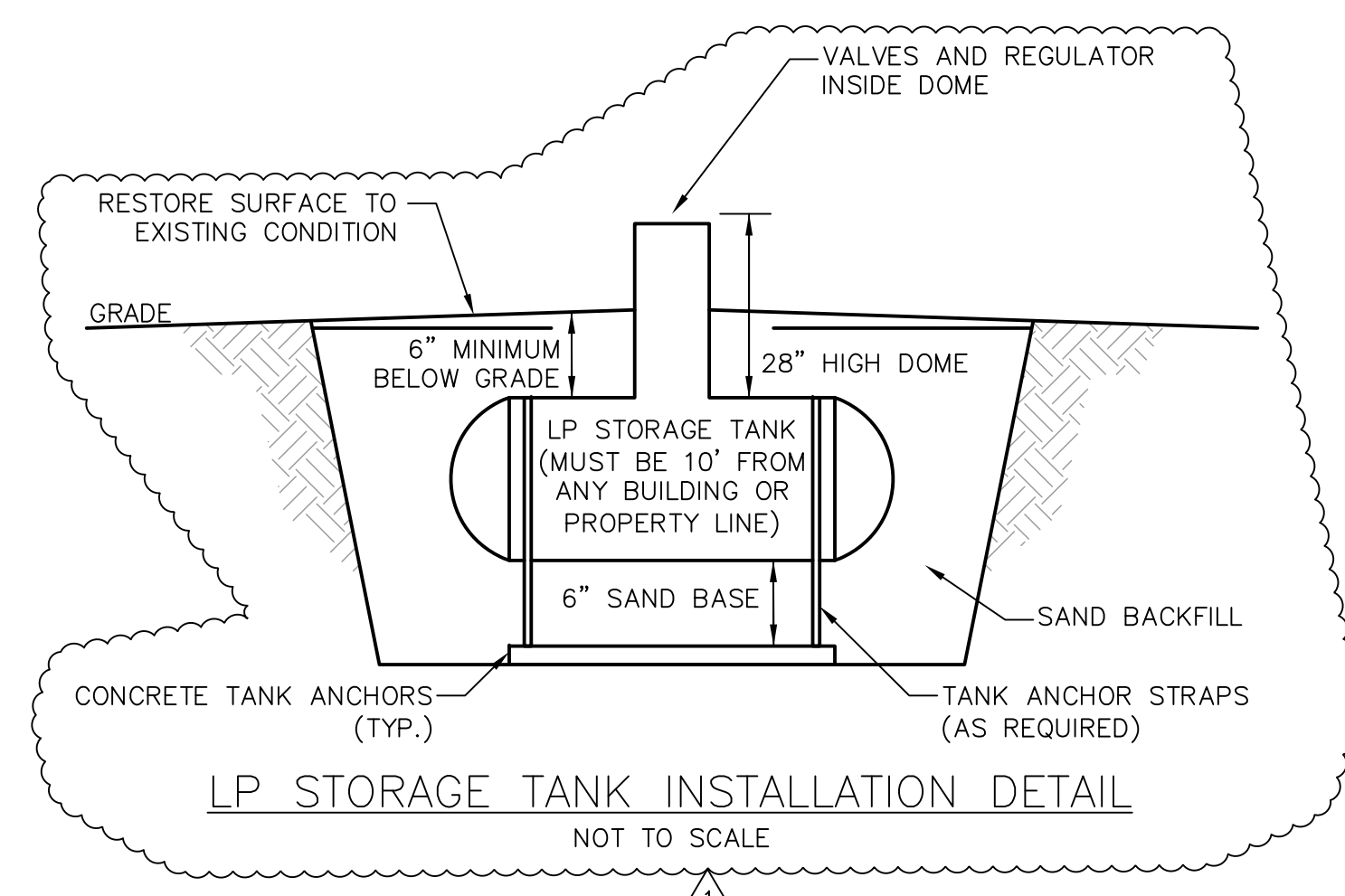
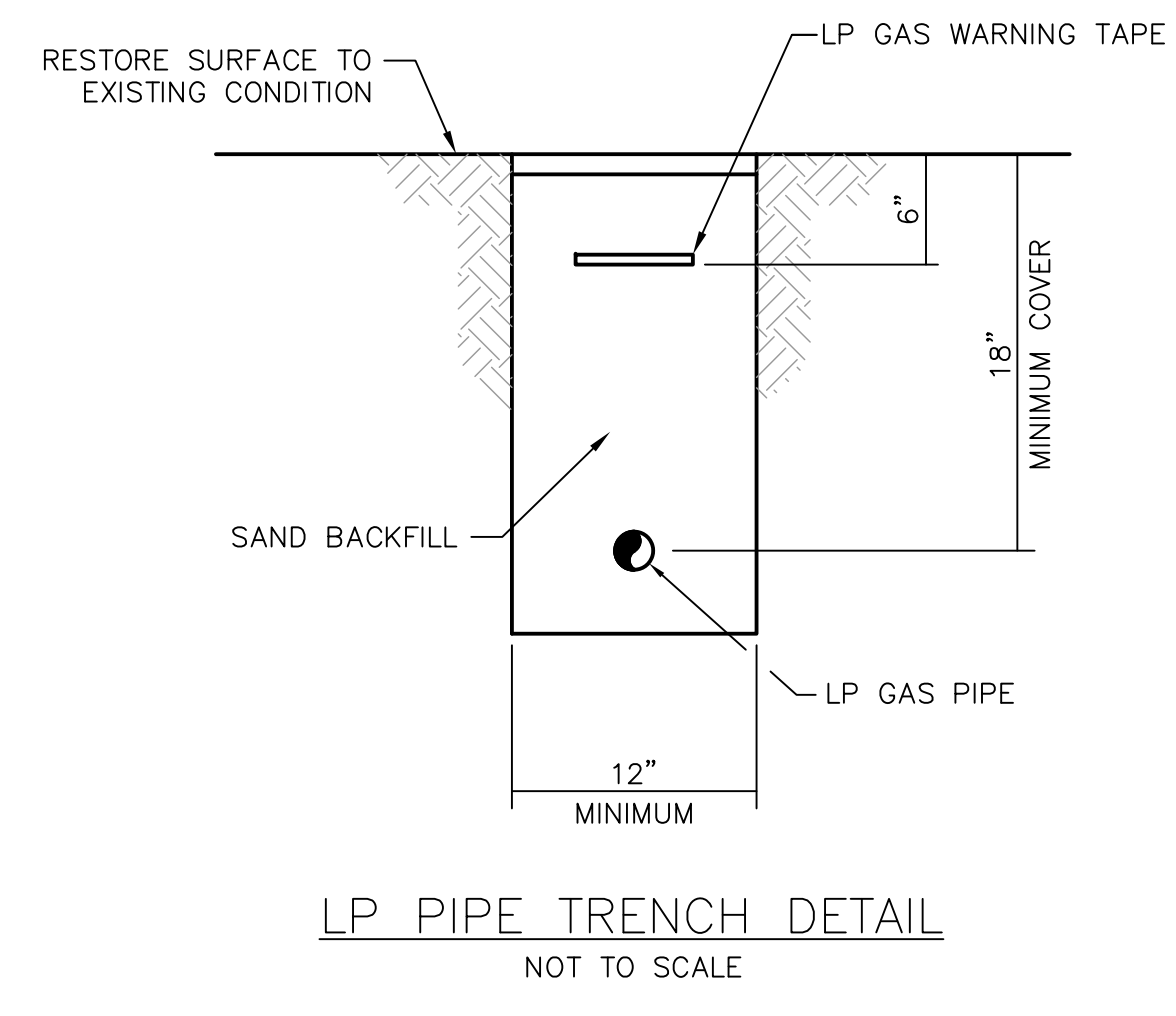
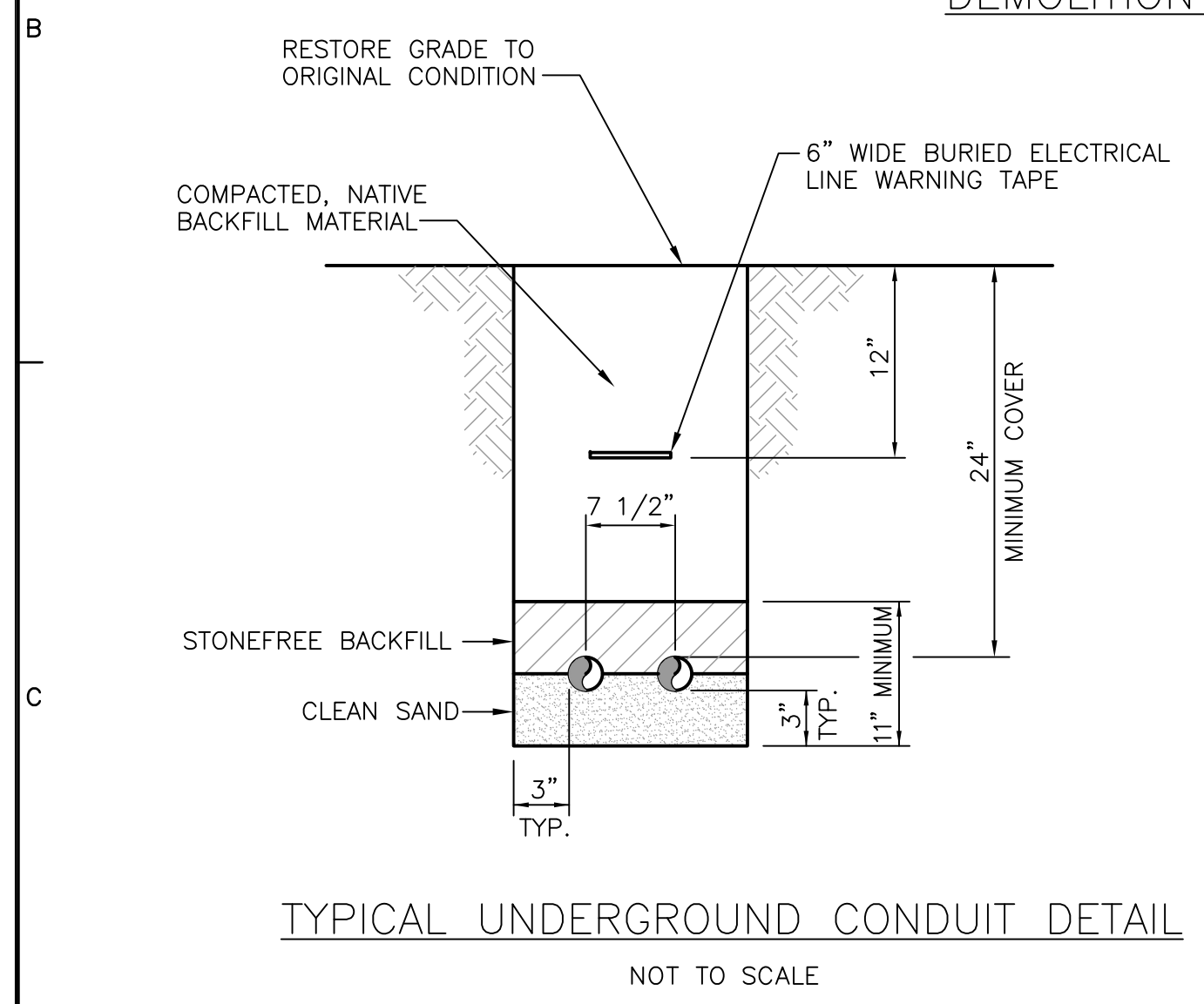
SITE DETAILS

Project No.	Drawing No.
190011048	CS501
Date	JUNE 5, 2020
Drawn By	EK
Checked By	CU
Sheet 3 of 5	



GENERATOR DATA

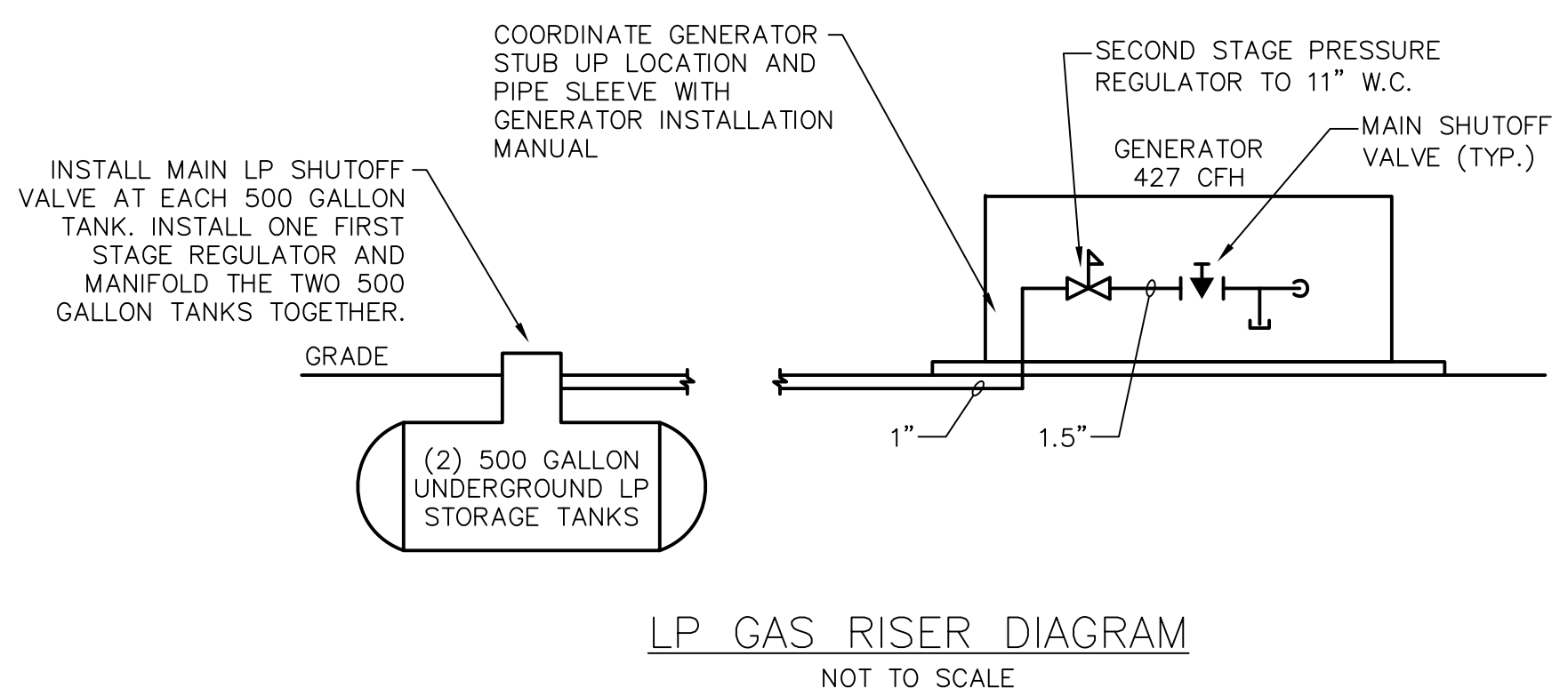
CUMMINS POWER GENERATION MODEL NUMBER	C80N6
VOLTAGE	480/277V 3PH 4W
STANDBY kW	80
STANDBY kVA	100
ALTERNATOR TEMPERATURE RISE	120°C
FULL LOAD CURRENT	120 AMPS
POWER FACTOR	.8
FREQUENCY	60 Hz
FUEL CONSUMPTION	427.2 SCFH
ENGINE DISPLACEMENT	359 CUBIC INCHES
ENGINE MODEL	QSJ5.9G-G3
ENGINE # OF CYLINDERS	6



- LP INSTALLATION NOTES:**
- GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE OR APPROVED EQUAL FOR ALL INTERIOR AND UNDERGROUND INSTALLATIONS. ALL ABOVE GRADE, OUTDOOR INSTALLATIONS SHALL BE GALVANIZED SCHEDULE 40 BLACK STEEL GAS PIPING OR APPROVED EQUAL. UNDERGROUND PIPING SHALL HAVE 6" WIDE WARNING TAPE INSTALLED ABOVE GAS PIPING.
 - PROVIDE AND INSTALL TWO 500 GALLON UNDERGROUND LP STORAGE TANKS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DELEGATED DESIGN SUBMITTAL OF PROPANE TANKS. INSTALLATION AND TESTING SHALL BE PERFORMED BY A CERTIFIED PROPANE TANK INSTALLER AND SHALL COMPLY WITH ALL LOCAL RULES AND REGULATIONS.
 - PROVIDE CONCRETE ANCHORING DESIGN PLANS SIGNED AND SEALED BY A CONNECTICUT LICENSED PROFESSIONAL ENGINEER.
 - PROPOSED EXCAVATION FOR PROPOSED LP STORAGE TANK: PROVIDE CONCRETE ANCHORING TO EACH TANK, PROVIDE 6" OF SAND BELOW TANK FOR BASE, ONE 17LB ANODE BAG CONNECTED TO TANK (INSTALLED PER MANUFACTURER'S REQUIREMENTS), BACKFILL ENTIRE HOLE WITH SAND, AND GRADE SAND AWAY FROM HOUSING DOME. CONTRACTOR IS RESPONSIBLE FOR THE SAFE DISPOSAL OF ALL EXCAVATED SOIL. SEE LP STORAGE TANK INSTALLATION DETAIL.

120/208 V. 3 PHASE 60HZ 4 WIRE LIGHTING PANEL 'LP' SCHEDULE

SERVICE	C/B	KVA	NO.	A	B	C	N	NO.	KVA	C/B	SERVICE
MAIN BREAKER	50A 3P		1					2		30A 3P	GENERATOR LOAD CENTER
OUTDOOR LIGHTS	20A		7					8		20A	DAY TANK
SPARE	20A		9					10		20A	RECEPTACLES
INDOOR LIGHTS	20A		11					12		20A	EXHAUST FAN
HOIST	20A 2P		13					14		20A 2P	WATER PUMP
PUMP CONTROL PANEL	20A		17					18		20A	ENGINE BLOCK HEATER
WET WELL FANS	20A		19					20		20A	GRINDER PIT LIGHTS & RECEPT
WET WELL LIGHT	20A		21					22		20A	VALVE VAULT LIGHT & RECEPT
CHART RECORDER/FLOW	20A		23					24		20A	ALARM PANEL



- ELECTRICAL KEY NOTES:**
- PROVIDE 30A, 3 POLE BREAKER TO MATCH EXISTING WESTINGHOUSE PANEL.
 - DEMOLISH ENGINE BLOCK HEATER AND ALL ASSOCIATED CONDUIT AND WIRE TO SOURCE. RETAIN 20A, 1 POLE BREAKER AND RE-LABEL AS SPARE.
 - REPLACE EXISTING MONITORING SIGNALS WITH NEW SIGNALS FROM GENERATOR AND ATS. PROVIDE CONTROL CONDUIT AND WIRE AS INDICATED TO PROVIDE SIGNALS FOR THE FOLLOWING:
 - ATS NORMAL POSITION
 - ATS EMERGENCY POSITION
 - GENERATOR RUNNING
 - GENERATOR FAULT

LEGEND

—	EXISTING
—	NEW
XXXX	DEMOLITION

PANEL MTD: SURFACE TYPE: NQ

MANUFACTURER: WESTINGHOUSE MAIN LUGS: _____

MAIN BREAKER: 50A FEEDER ENTRY: _____

FEEDER SIZE: _____ ENCLOSURE: NEMA 1

BRANCH BREAKERS: _____ GUTTERS: TOP _____ BOTTOM _____

NO. POLES AMPS. SIDES _____

PANEL LOADING SCHEDULE

PHASE	WATTS (KW)
A	
B	
C	
CONNECTED LOAD	
SPARE	
TOTAL LOAD	

LIGHTING PANEL 'LP' SCHEDULE

Date	Description	No.
7/27/20	ADDENDUM NO. 1	1

REVISIONS

Date	Description	No.

SIGNATURE _____ DATE SIGNED _____



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Project
ROUTE 133 PUMP STATION IMPROVEMENTS

FAIRFIELD COUNTY BROOKFIELD CONNECTICUT

Drawing Title
ELECTRICAL SINGLE LINE, SCHEDULES, AND DETAILS

Project No.	19001048	Drawing No.	E-02
Date	5/19/2020	Checked By	HRS
Drawn By	NM	Sheet	5 of 5

