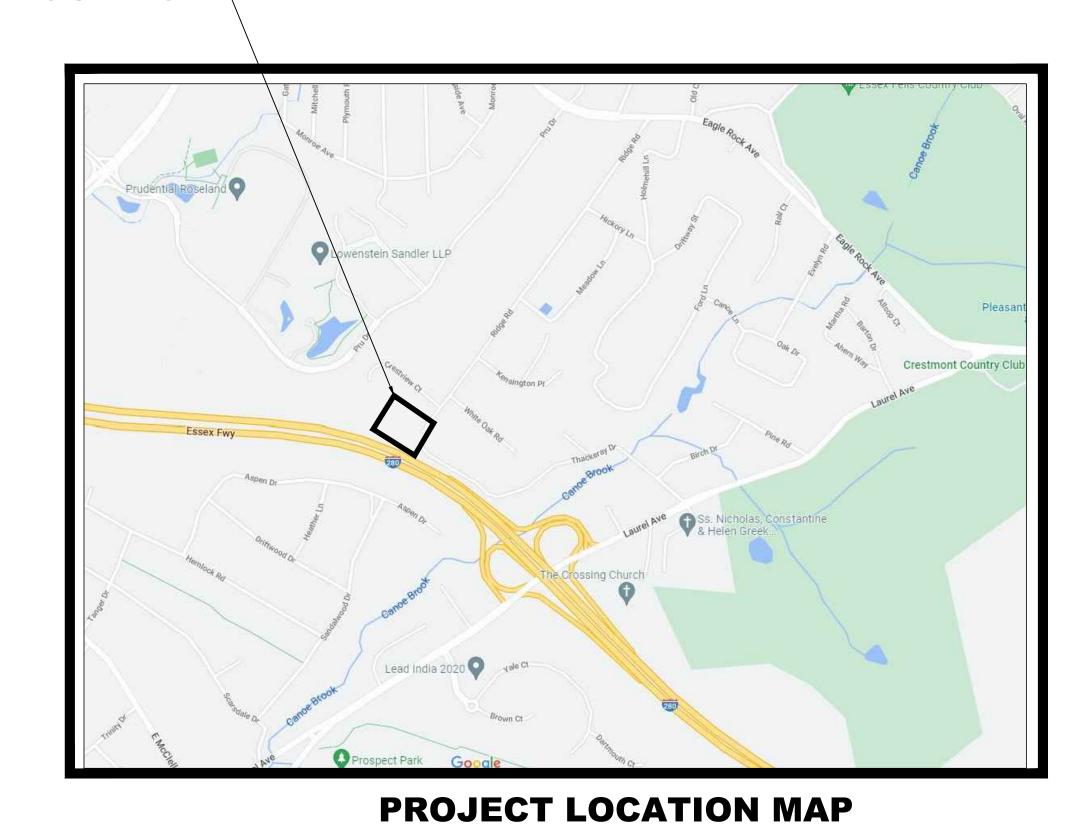
AUXILIARY WATER STORAGE TANK INSTALLATION AT RIDGE ROAD GROUND STORAGE TANK

PROJECT LOCATION

LIST OF UTILITIES AND EMERGENCY CONTACT INFORMATION						
WATER & SEWER	BOROUGH OF ROSELAND C/O WATER & SANITARY SEWER DEPT. 300 EAGLE ROCK AVENUE ROSELAND NJ 07068					
GAS:	PSE&G GAS DIVISION ATTN: THOMAS ZIMMERMAN 150 CIRCLE AVENUE CLIF TON NJ 07011 (973) 414 -1552 FAX (973) 478 -4302					
ELECTRIC:	PSE&G ELECTRIC DIVISION ATTN: SHARON MICCHELLI 50 CIRCLE AVENUE CLIFTON NJ 07011 (973) 365 -2819 FAX (973)772 -9442					
TELEPHONE:	VERIZON COMMUNICATIONS 540 BR OAD STREET NEWARK NJ 07101 (973) 649 -9900 FAX (973) 482 -0890					
CABLE:	COMCAST CABLE COMPANY ATTN: RICHARD GUGULSKI 650 LIBERTY AVENUE UNION NJ 07083					
STORM DRAIN:	ESSEX COUNTY DEPT. OF PUBLIC WORKS 900 BLOOMFIELD AVENUE VERONA NJ 07044					



SHEET INDEX					
SHEET#	DESCRIPTION				
T-1	TITLE SHEET				
G-1	LEGEND SHEET				
C-1	EXISTING CONDITIONS SITE PLAN				
C-2	PROPOSED CONDITIONS SITE PLAN				
D-1	CONSTRUCTION DETAILS I				
D-2	CONSTRUCTION DETAILS II				
D-3	CONSTRUCTION DETAILS III				
SESC-1	SOIL EROSION SEDIMENT CONTROL NOTES & DETAILS				

ROSELAND BOROUGH, ESSEX COUNTY, NEW JERSEY

JULY, 2022

REMINGTON & VERNICK **ENGINEERS**

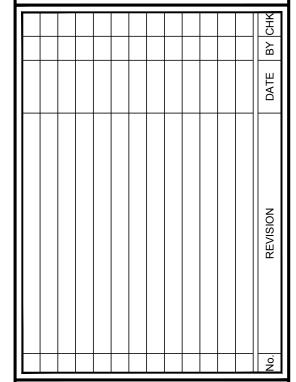
CHERRY HILL, NJ 08003 (856) 795-9595, FAX (856) 795-1882 WEB SITE ADDRESS : WWW.RVE.COM ~ENGINEERING EXCELLENCE~

2059 SPRINGDALE ROAD

NJ PROFESSIONAL ENGINEER LIC. No. 4213

PLANS WHICH DO NOT BEAF AN EMBOSSED SEAL ARE NOT VALID

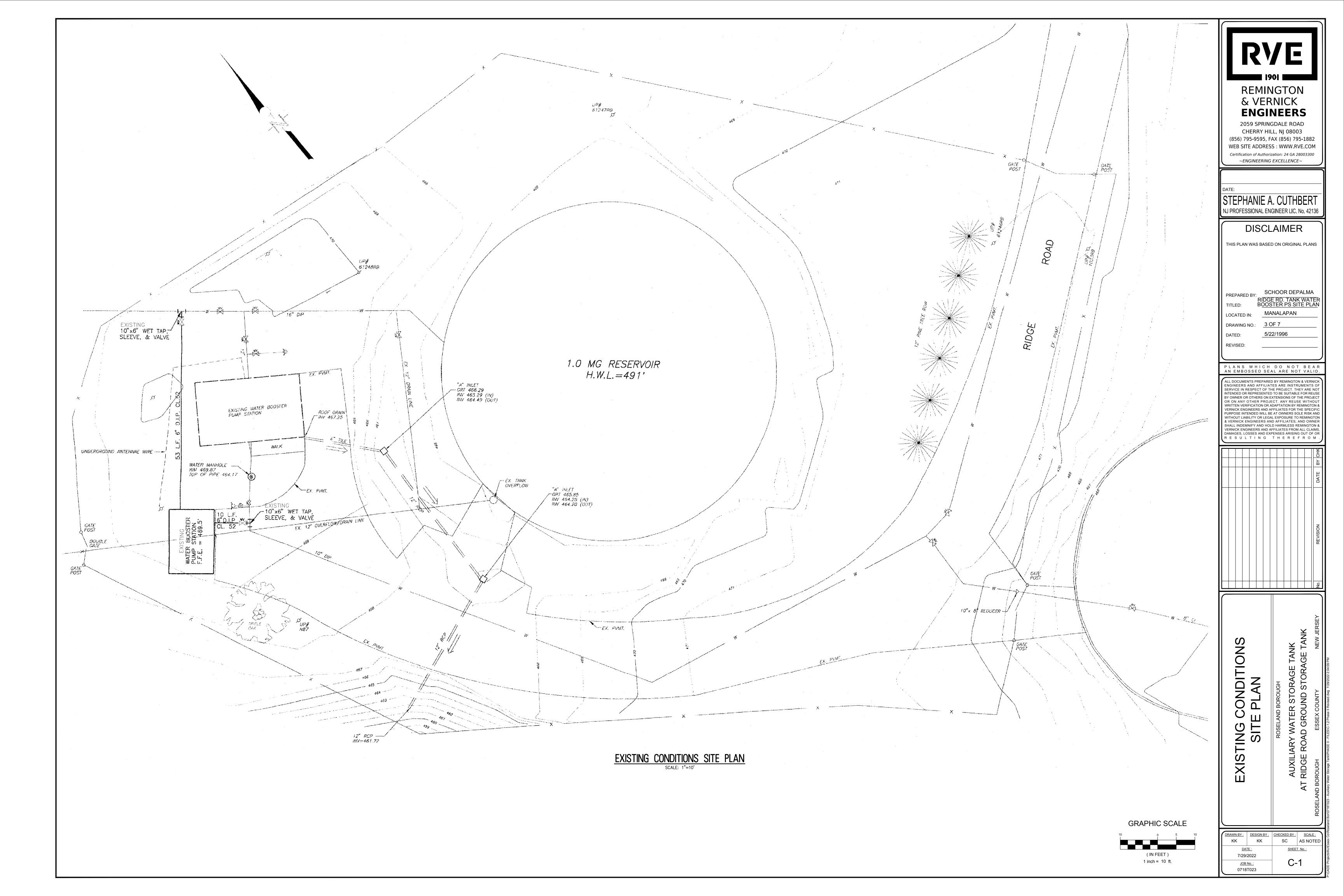
ALL DOCUMENTS PREPARED BY REMINGTON & VERNIC ERVICE IN RESPECT OF THE PROJECT, THEY ARE NO Y OWNER OR OTHERS ON EXTENSIONS OF THE PROJE VRITTEN VERIFICATION OR ADAPTATION BY REMINGTON ERNICK ENGINEERS AND AFFILIATES FOR THE SPEC THOUT LIABILITY OR LEGAL EXPOSURE TO REMING AMAGES, LOSSES AND EXPENSES ARISING OUT OF O ESULTING THEREFROI

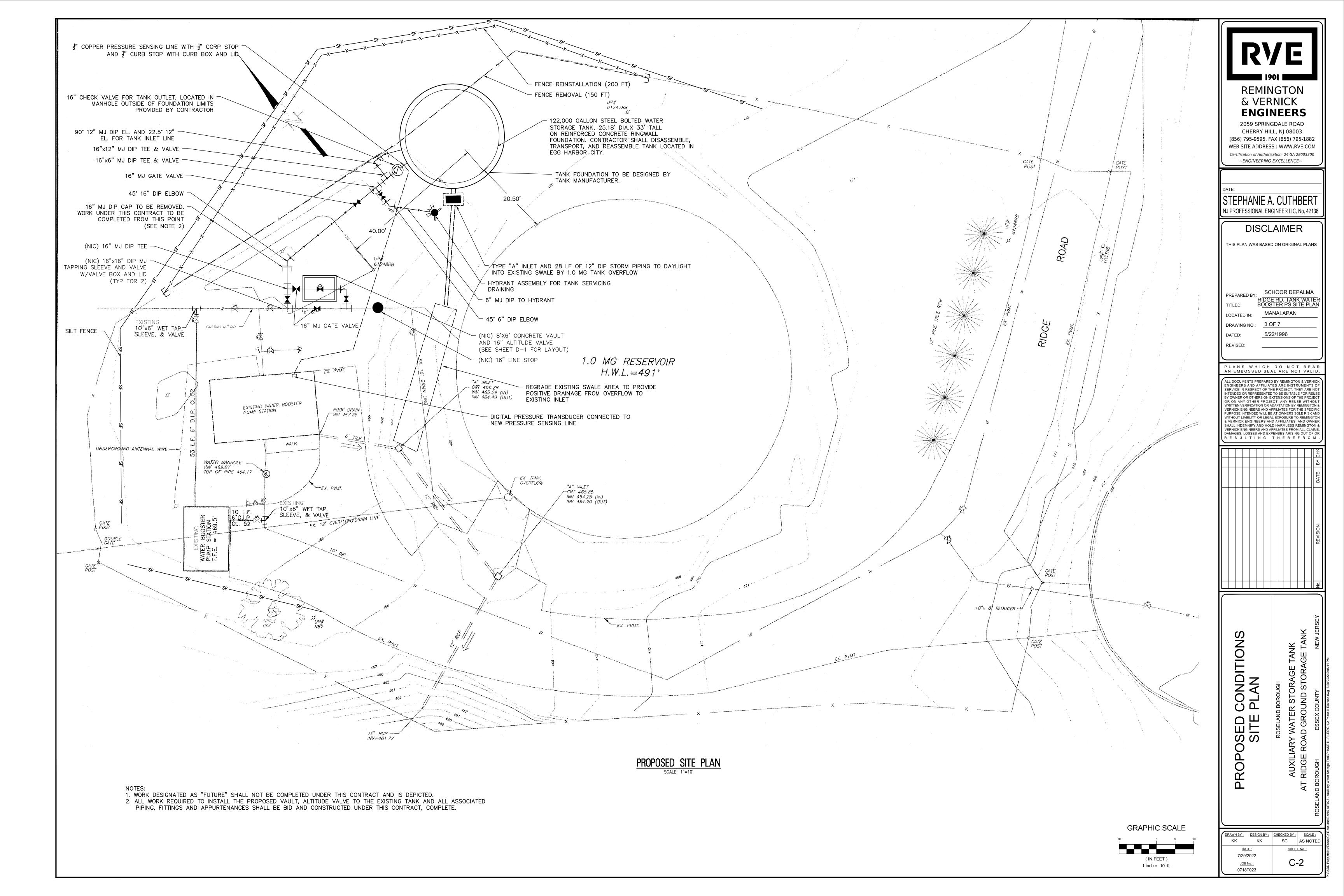


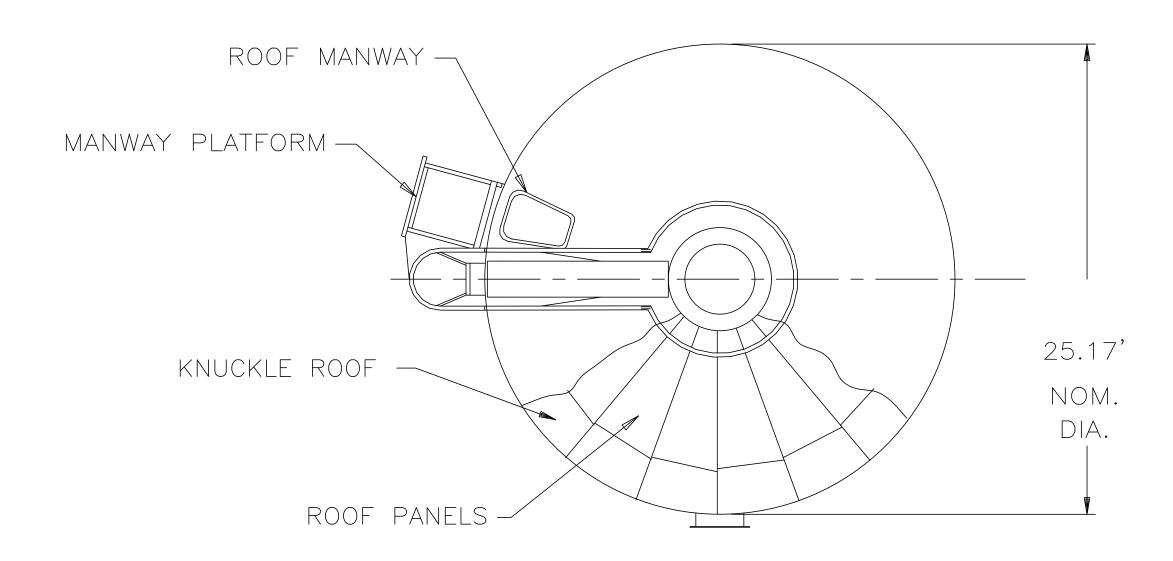
SHEET No.: 7/29/2022

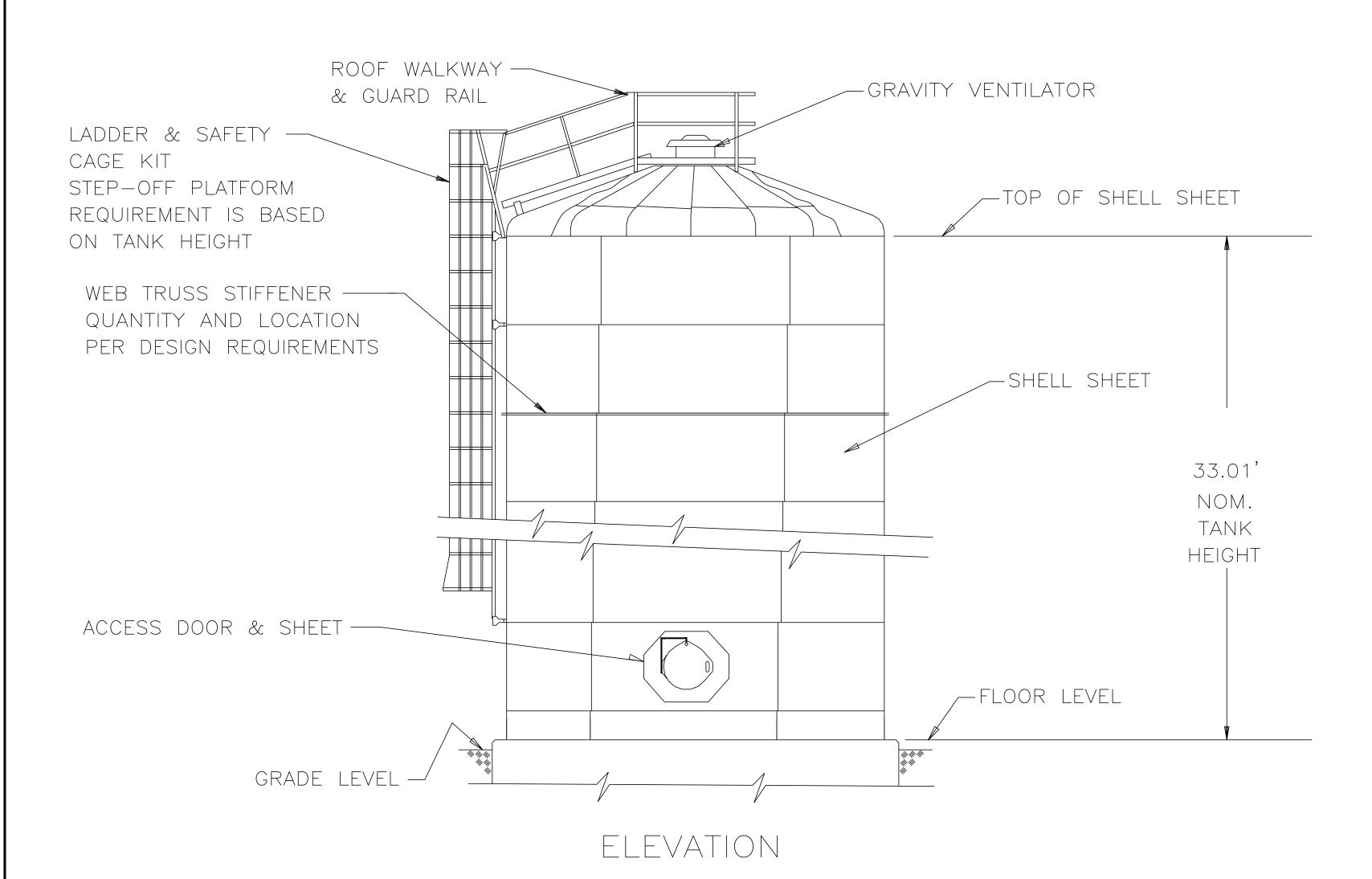
STANDARD LEGEND

М	DESCRIPTION	EXISTING	PROPOSED	ITEM	DESCRIPTION	EXISTING	PROPOSED	ITEM	DESCRIPTION	EXISTING	PROPOSED	1901
						PM						REMINGTO & VERNICE
	OVERHEAD WIRE SANITARY FORCE MAIN PIPE	—————————————————————————————————————	FM		BENCHMARK LOCATION	$\left(\begin{array}{c}BM\\X\end{array}\right)$			EDGE OF PAVEMENT			ENGINEE
	STORM SEWER PIPE ≤12"		D		CROWS FOOT	Y			CURB			2059 SPRINGDALE F
	STORM SEWER PIPE > 12"	(SIZE & TYPE) ————————————————————————————————————	======================================		AERIAL TARGET	+			PAVEMENT / CONC. / SIDEWALK	BITUMINOUS/ASPHALT	<u>· • · · · · · · · · · · · · · · · · · ·</u>	CHERRY HILL, NJ 08 (856) 795-9595, FAX (856)
	GAS SERVICE SANITARY SEWER PIPE ≤12"				CONCRETE MONUMENT	•	■ (SET)			CONCRETE	PAVEMENT, FULL DEPTH RESTORATION	WEB SITE ADDRESS: WWW Certification of Authorization: 24 C
	SANITARY SEWER PIPE ≤ 12 SANITARY SEWER PIPE > 12"	(SIZE & TYPE) 	<u>(SIZE & TYPE)</u> =		PK / MAG NAIL / DRILL HOLE / SPIKE	0	• (SET)			BRICK/PAVERS	PAVEMENT MILLING	~ENGINEERING EXCELLER
	ELECTRIC SERVICE	E	———Е———		DRILL HOLE W/ WINGS	- 0 -				STONE	DRIVEWAY RESTORATION, ASPHALT DRIVEWAY RESTORATION, BRICK DRIVEWAY RESTORATION, CONCRETE	
	FIBER OPTIC SERVICE	F0	F0		STAKE	Δ	▲ (SET)					STEPHANIE A. CUT
	TELEPHONE SERVICE		——т		HUB	Δ	△ (SET)					NJ PROFESSIONAL ENGINEER L
	COMMUNICATIONS SERVICE	c	c		PIN W/ CAP	©	• (SET)				DRIVEWAY RESTORATION, STONE	
	IRRIGATION PIPE		IRR	 >	IRON PIPE IRON PIN		• (SET)	\				
	WATER SERVICE		——————————————————————————————————————		CROSS CUT	×	★ (SET)	ORK	LIMIT OF EXCAVATION			
	WATER SHUT-OFF	w.So	WSO		DISK				GUIDE RAIL			
	WATER METER	w _s m	W _M		STONE	0			BOLLARD		⊘	
	WATER VALVE	wv ⊠	M NEW M RESET		REBAR	⊗		A	MAILBOX	M	M	
	WATER HYDRANT	HÇD	▼ NEW ▼ RESET		BASELINE		· + -	0	SIGNS	· · · +	 +	
	WELL	∞	•		CENTERLINE	·00 	·	~	FLAG POLE	\sim	•~	
	YARD HYDRANT	Ø	YH ✓		EASEMENT			ૐ	BENCH	_		
	METER PIT	⊙			RIGHT-OF-WAY			ш	PILE	(∅	
	GAS SHUT-OFF	ese	GSO						DETECTABLE WARNING SURFACE	E5553	B888	PLANS WHICH DO N AN EMBOSSED SEAL ARE
	GAS METER	6 M	GM		PROPERTY BOUNDARY			S	TYPICAL STRIPING			ALL DOCUMENTS PREPARED BY REMIN
	GAS VALVE	e <u>k</u>	NEW ⋈ RESET		ADJACENT PROPERTY BOUNDARY					<u>ا</u>	<u> </u>	SERVICE IN RESPECT OF THE PROJEC' INTENDED OR REPRESENTED TO BE SUIT BY OWNER OR OTHERS ON EXTENSIONS
		6	NINEW NICESET		RAILROAD TRACKS				ADA STRIPING	<u></u>	©	OR ON ANY OTHER PROJECT. ANY F WRITTEN VERIFICATION OR ADAPTATION VERNICK ENGINEERS AND AFFILIATES F PURPOSE INTENDED WILL BE AT OWNER
	GAS LINE MARKER		co		STATE BOUNDARY				TRAFFIC CONTROL BOX	TCB		WITHOUT LIABILITY OR LEGAL EXPOSUR & VERNICK ENGINEERS AND AFFILIAT SHALL INDEMNIFY AND HOLD HARMLES
	CLEANOUT	TO STATE OF THE ST	•		MUNICIPAL / COUNTY BOUNDARY				TRAFFIC LIGHT		(ARM TO SCALE)	VERNICK ENGINEERS AND AFFILIATES F DAMAGES, LOSSES AND EXPENSES AR R E S U L T I N G T H E R
	SEWER VENT	₩	DECET /						DEPT. OF TRANSPORTATION MANHOLE	<i>⊚</i>		
	INLET TYPE A		NEW RESET / RECONSTRUC		BORING LOCATION	♦ <i>B−#</i>	♦ B-#		STATE HIGHWAY DEPARTMENT	® MANHOLE SHD BOX		
	INLET TYPE B		NEW RESET RECONSTRUC		MONITORING WELL LOCATION	⊕ MW-#	● MW-#		RAILROAD CROSSING BEACON	∺		
	INLET TYPE E		NEW RESET RECONSTRUC	[⊤] ॼ	TEST PIT LOCATION	₽ 7₽−#	■ TP-#		CALL BOX	@		
	AREA DRAIN		•		FRESHWATER WETLAND FLAG	₹ FW-#			OIL FILL	€		
	MANHOLES	S SANITARY D DRAINAGE T TELEPHONE W WATER C CATV DU UNDERDRAIN	NEW RESET RECONSTRUC		FRESHWATER WETLAND LINE				UNDERGROUND STORAGE TANK LID	UST		
		₩ WATER © CATV @ UNDERDRAIN © ELECTRIC © GAS @ UNKNOWN	S NEW S KESET S KEGONSTROC	8	FRESHWATER WETLAND BUFFER				RISER PIPE	8		
	HEADWALL			5	EDGE OF WATER		<u> </u>		RAISED PAVEMENT MARKER	Ø	•	
	HEADWALL W/ WINGS			Z	STREAM CENTERLINE				TVDIOAL NODTU ADDOM			
	IRRIGATION CONTROL VALVE	^{(V}	M NEW M RESET						TYPICAL NORTH ARROW		USED ON STANDARD CONSTRUCTION SHEETS	
	IRRIGATION BOX	#R			GRASS/SOD	, , , , , , , , , , , , , , , , , , ,					EFER TO STATE PLANE COORDINATE SYSTEM.	
	IRRIGATION CONTROL BOX	<i>IR</i>		G	DECIDUOUS TREE	A CONTRACT OF THE STATE OF THE	SHADE ORNAMEI	NTAL	APR. APRON EL. ELEVATION ASB ASBESTOS CEMENT PIPE EX. EXISTING	PERF. PERFORATED PC POINT OF CURVATURE	SWL SINGLE WHITE LINE RE SYL SINGLE YELLOW LINE	
	SPRINKLER HEAD	©	•	Z	SHRUBS / BUSH	6	\odot		AFF ABOVE FINISHED FLOOR FFE FINISH FLOOR ELEVATIO ASB ASBESTOS FT FEET	PI POINT OF INFLECTION PT POINT OF TANGENCY		
	UNKNOWN VALVE	×		6	EVERGREENS		Jump.	<u>S</u>	AL ALUMINUM E.B.,W.B, EASTBOUND, WESTBOUN N.B.,S.B. NORTHBOUND, SOUTHBOUND	OUND PSI POUNDS PER SQUARE		
	COMMUNICATIONS PEDESTAL				STUMP		****	N	BL BASELINE GL GUTTER LINE BM BENCH MARK GR GRATE	PK PARKER KAYLON MAS	SONRY NAIL TEL TELEPHONE TEMP. TEMPORARY	
	COMMUNICATIONS LINE MARKER	ç			WOODS / TREE LINE			10	BIT. BITUMINOUS GALV. GALVANIZED BLDG. BUILDING HW HEADWALL	PVC POLYVINYL CHLORIDE PVC POINT OF VERTICAL CURVATURE		∥
	TELEPHONE PEDESTAL	77		📮	WIRE FENCE	////	//// //	A	BGS BELOW GROUND SURFACE HDPE HIGH DENSITY POLYETH	DOINT OF VERTION	UP UTILITY POLE	Ш
	TELEPHONE LINE MARKER	_ <u></u>			SPLIT RAIL FENCE				CL CENTERLINE INV. INVERT CIP CAST IRON PIPE IP IRON PIN	PVT POINT OF VERTICAL T R RADIUS	TANGENCY V VOLTS VAR. VARIES	
		- m			WOOD / VINYL FENCE			Ш	CONC. CONCRETE IN INCHES CMP CORRUGATED METAL PIPE JB JUNCTION BOX	RMC RIGID METALLIC CONI	RETE PIPE WM WATER METER IDUIT	
	ELEC. BOX	EM			CHAIN-LINK FENCE	xxx	xx	BR	CULV. CULVERT LSA LANDSCAPED AREA CS CARBON STEEL LF LINEAR FEET	R.O.W. RIGHT OF WAY R.R. RAILROAD		Z
	ELEC. METER	O							CF CUBIC FEET LST LANDSCAPE TIE CY CUBIC YARDS LOM LIMIT OF MILLING	RTE. ROUTE SAN. SANITARY		
	ELEC. TRANSFORMER PAD				TOP OF BANK / DITCH			A	CMU CONCRETE MASONRY UNIT LOP LIMIT OF PAVING D.C. DEPRESSED CURB MB MAILBOX	SS STAINLESS STEEL SWK. SIDEWALK		
	ELEC. VAULT				BOTTOM OF BANK / DITCH				DH DRILL HOLE MAX. MAXIMUM DIA. DIAMETER MIN. MINIMUM	SHD STATE HIGHWAY DEPARTMENT SHLD. SHOULDER		
	ELEC. LINE MARKER	<i>-<u>€</u>-</i>		<u>o</u>	CONTOUR (MAJOR)		5		DIP DUCTILE IRON PIPE MH MANHOLE DWY DRIVEWAY NO. NUMBER	STY. STORY STA. STATION		
	UTILITY POLE	STANDARD W/ LIGHT W/ SOLAR			CONTOUR (MINOR)		3		DYL DOUBLE YELLOW LINE N.T.S. NOT TO SCALE P PIPE			
	GUY ANCHOR	\prec		9	FLOW LINE / SWALE	>	— — > — — > —		DRAWING	NOMENCLATUR	RE REPRESENTATION	
	ELEC. OUTLET	⅌	G =		TIME OF CONCENTRATION	>	>				1 UNIT 27 SAN. MH #1210 27 STA.24+03 RIM=61.00	
	LIGHTS	[‡] POLE [™] AREA	₩ ₩	8	SPOT GRADE	_x ^{3.48}	_X 3.48		— c		STA.24+03 RIM=61.00 INV.=50.50(1) INV.=50.40(2)	DRAWN BY: DESIGN BY: CHECKE
	VENT	W/T O			ROADWAY GRADE	TC5. 45 GL 4. 95	TC5.45 GL4.95		SAN. MH. RIM=61.00 INV.=50.50(1) INV.=50.40(2)		INV.=50.40(2) 100 LF 2	DATE:
1		10			NONDIWAT GIVADE	GL4.95			$= = \frac{24''}{2} \frac{PVC}{S} = \frac{1}{S} \frac{(2)}{S} S \frac{12'' PVC}{S}$		= = = = = = = = = = = = = = = = = = =	7/29/2022 JOB No. :

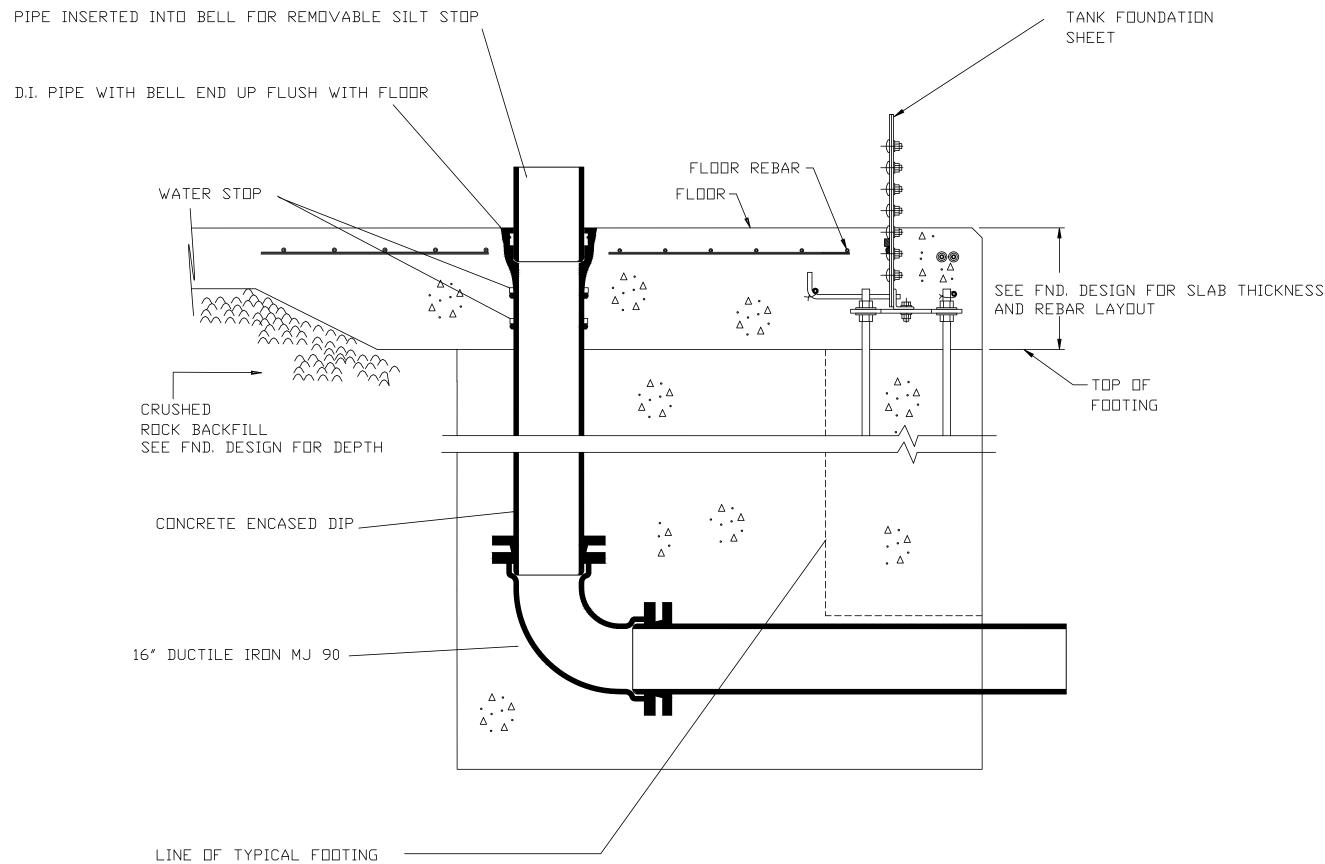




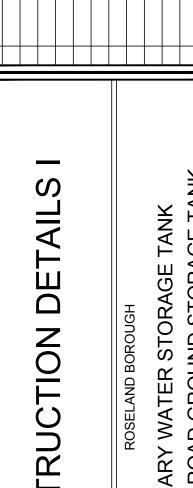




EXISTING TANK — PLAN VIEW
N.T.S.



OUTLET PIPE THROUGH FOUNDATION WITH SILT STOP



REMINGTON

ENGINEERS

2059 SPRINGDALE ROAD CHERRY HILL, NJ 08003 (856) 795-9595, FAX (856) 795-1882

WEB SITE ADDRESS : WWW.RVE.COM

~ENGINEERING EXCELLENCE~

STEPHANIE A. CUTHBERT

NJ PROFESSIONAL ENGINEER LIC. No. 42136

DISCLAIMER

THIS PLAN WAS BASED ON ORIGINAL PLANS

SCHOOR DEPALMA Y: RIDGE RD. TANK WATER BOOSTER PS SITE PLAN

MANALAPAN

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID

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OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS AND AFFILIATES FOR THE SPECIFIC

PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK ANI WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTOI & VERNICK ENGINEERS AND AFFILIATES; AND OWNE SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON

DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OIRES ULTING THEREFROM

LOCATED IN:

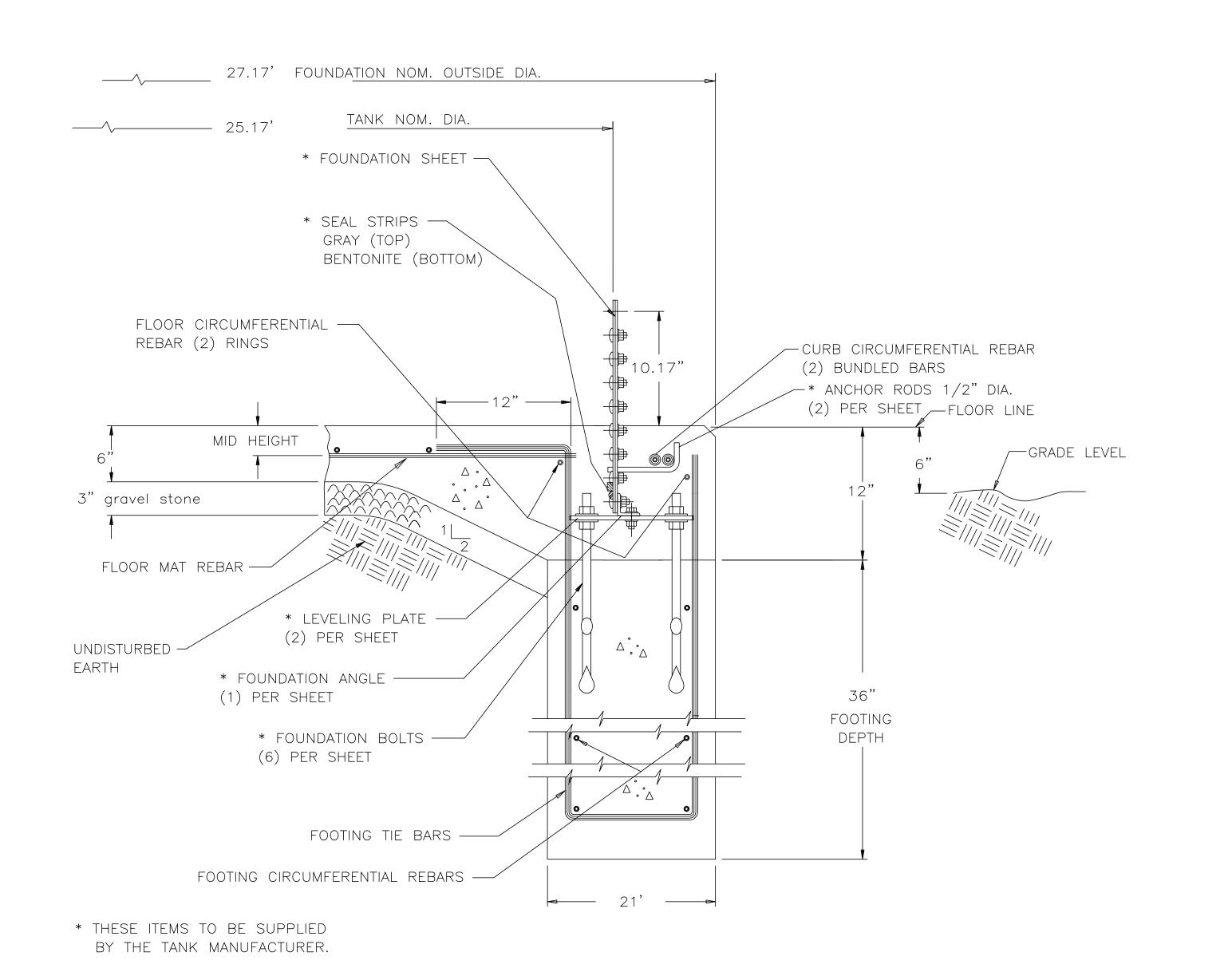
& VERNICK

SC AS NOTED 7/29/2022 D-1

JOB No. : 0718T023

NOTE: THE TANK DETAILS ARE PROVIDED FOR A SIMILAR TANK. THE DETAILS FOR THE TANK TO BE TRANSPORTED MAY DIFFER.

EXISTING TANK — PROFILE VIEW



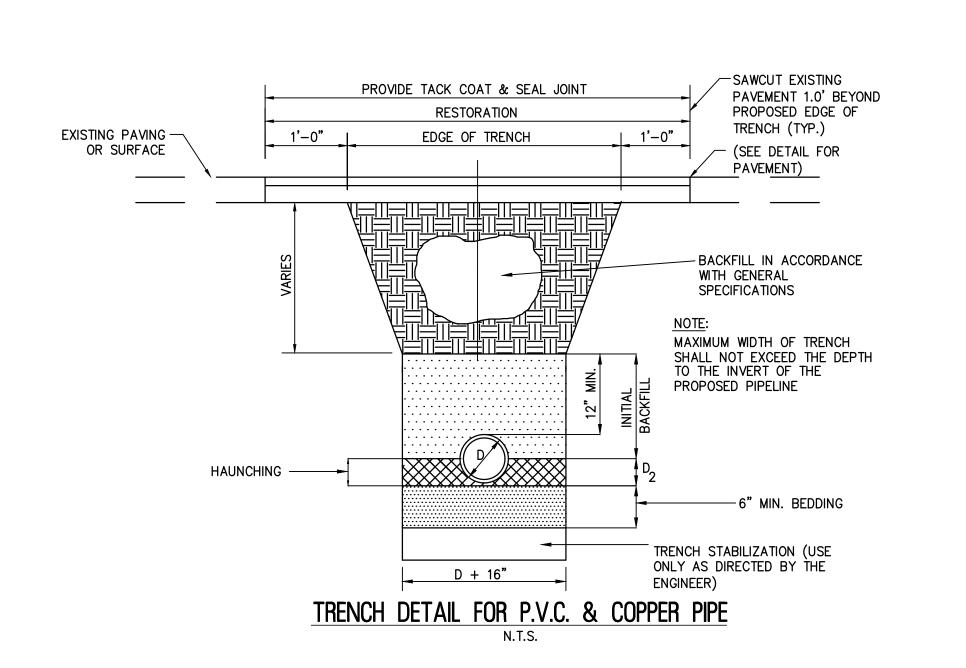
TYPICAL PIPE PENETRATION DETAIL THROUGH
THE FOUNDATION FLOOR WHEN THE PIPE IS LOCATED GREATER
THAN 6'-0" FROM THE TANK INSIDE WALL.

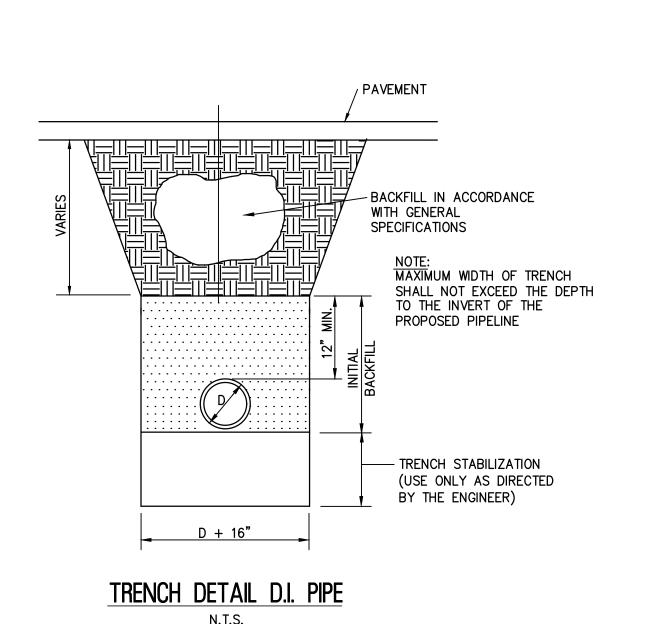
FOUNDATION O.D. — -GREATER THAN 6'-0"---GRAY & BENTONITE ---— 12" CONCRETE SEAL STRIP. APPLY DEPTH AS OUTLINED IN THE — 3" CRUSHED ROCK BUILDERS GUIDE. BACKFILL FLOOR REBAR -PIPE MUST HAVE WATER STOP (BY BUILDER) AROUND ENTIRE PERIMETER — 18" -— FOOTING I.D. OF PIPE PENETRATION — PIPE PENETRATION (SUPPLIED BY BUILDER)

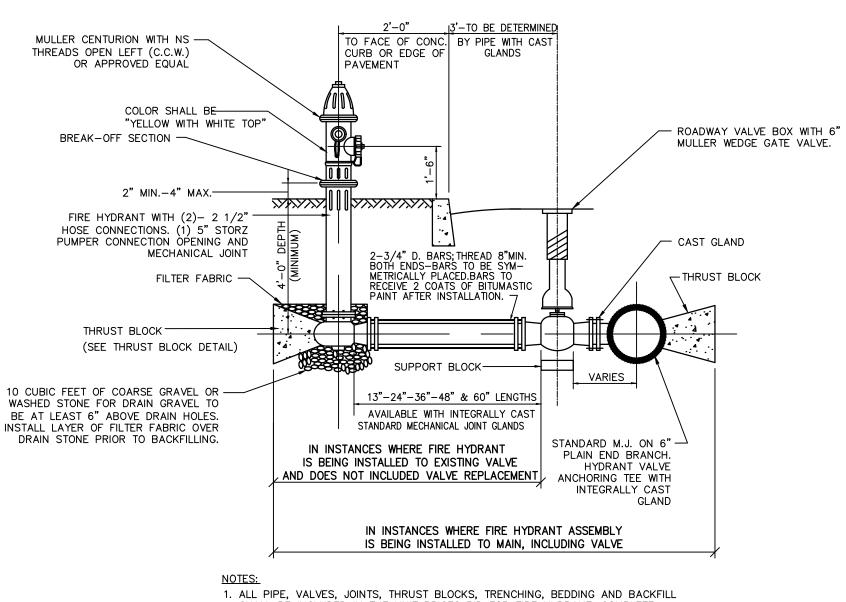
FOR FOUNDATION CONCRETE REINFORCEMENT STEEL REFER TO THE PROJECT SUBMITTAL DOCUMENTATION.

PIPE PENETRATION THROUGH FOUNDATION

SECTION THROUGH FOOTING







NOTES:

1. ALL PIPE, VALVES, JOINTS, THRUST BLOCKS, TRENCHING, BEDDING AND BACKFILL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR FIRE HYDRANT, COMPLETE. HYDRANT SHALL INCLUDE THE FOLLOWING: WEATHERSHIELD OPERATING NUTS; NOZZLE CAP NUTS; NOZZLE CONFIGURATION SHALL BE DDP (2 HOSE & 1 PUMPER); UPPER STANDPIPE LENGTH SHALL BE 10"; BOTTOM BASE CONNECTION SHALL BE 6" M.J. IN EPOXY BASE COATING & MUST BE UL TESTED CAN FM APPROVED.

FIRE HYDRANT ASSEMBLY DETAIL

RVE

REMINGTON & VERNICK ENGINEERS

2059 SPRINGDALE ROAD CHERRY HILL, NJ 08003 (856) 795-9595, FAX (856) 795-1882 WEB SITE ADDRESS: WWW.RVE.COM Certification of Authorization: 24 GA 28003300

~ENGINEERING EXCELLENCE~

DATE:

STEPHANIE A. CUTHBERT NJ PROFESSIONAL ENGINEER LIC. No. 42136

DISCLAIMER

THIS PLAN WAS BASED ON ORIGINAL PLANS

PREPARED BY: SCHOOR DEPALMA
RIDGE RD. TANK WATER
TITLED: BOOSTER PS SITE PLAN

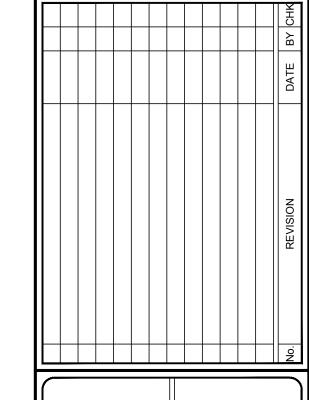
 LOCATED IN:
 MANALAPAN

 DRAWING NO.:
 3 OF 7

 DATED:
 5/22/1996

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TION DETAILS II

ROSELAND BOROUGH
AUXILIARY WATER STORAGE
T RIDGE ROAD GROUND STORA

 DRAWN BY:
 DESIGN BY:
 CHECKED BY:
 SCALE:

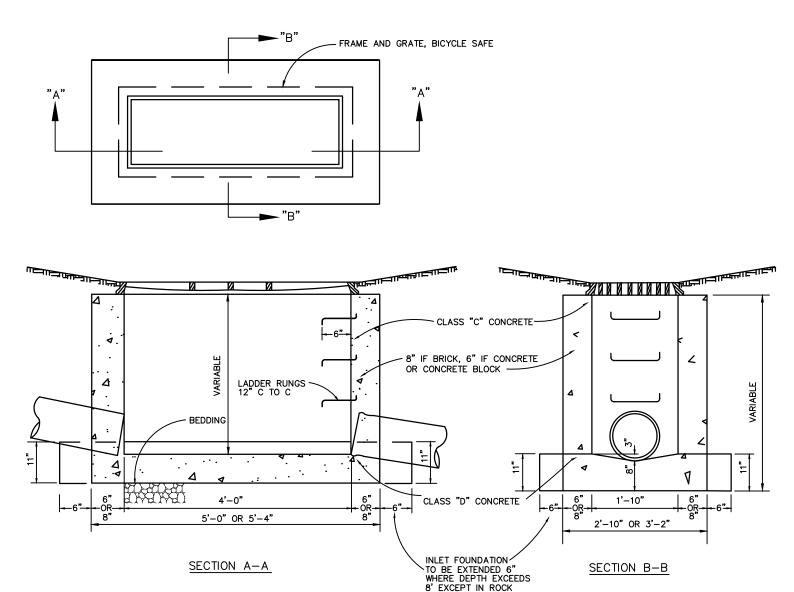
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 AS NOTED

 DATE:
 SHEET No.:

 7/29/2022
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DATE:
7/29/2022

JOB No.:
0718T023



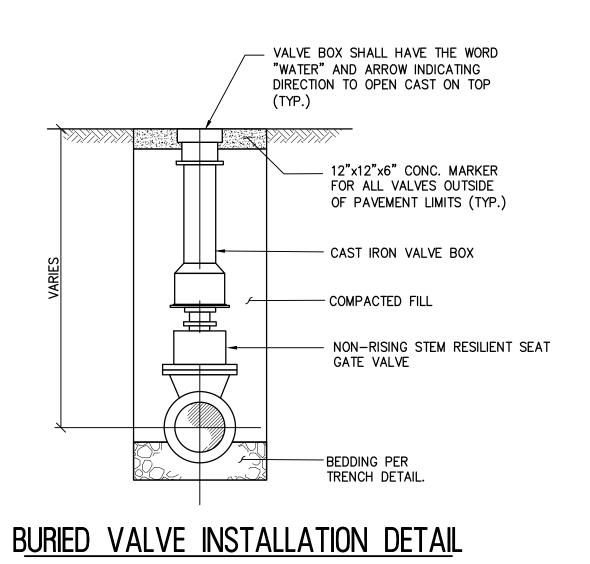
NOTES:

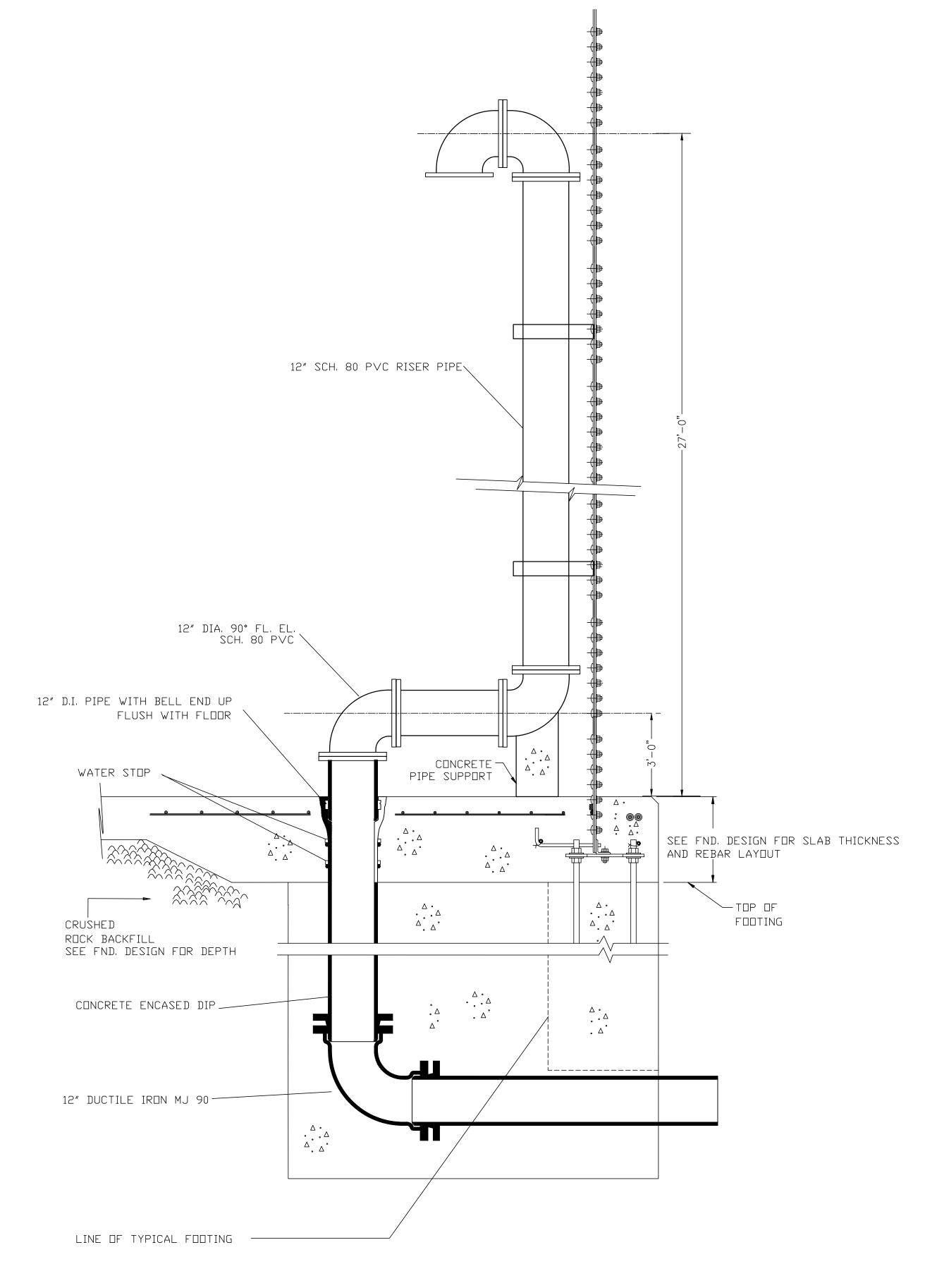
INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOM SHALL

- BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT THE RATE OF 2" PER FOOT
- THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE OR CONCRETE BLOCK, IF BRICK OR CONCRETE BLOCK IS USED THE BOTTOM SHALL BE AS SHOWN FOR
- CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT
- BE DISHED AND SLOPPED 1:2 CEMENT SAND MORTAR.

TYPE "A" INLET DETAIL

N.T.S.





INLET PIPE THROUGH FOUNDATION

N.T.S.



REMINGTON & VERNICK ENGINEERS

2059 SPRINGDALE ROAD CHERRY HILL, NJ 08003 (856) 795-9595, FAX (856) 795-1882 WEB SITE ADDRESS: WWW.RVE.COM Certification of Authorization: 24 GA 28003300

~ENGINEERING EXCELLENCE~

STEPHANIE A. CUTHBERT NJ PROFESSIONAL ENGINEER LIC. No. 42136

DISCLAIMER

THIS PLAN WAS BASED ON ORIGINAL PLANS

PREPARED BY:

RIDGE RD. TANK WATER
TITLED:

BOOSTER PS SITE PLAN

LOCATED IN: MANALAPAN

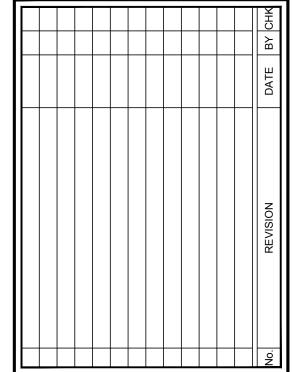
REVISED:

DRAWING NO.: 3 OF 7

DATED: 5/22/1996

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CONSTRUCTION DETAILS III

ROSELAND BOROUGH
ILIARY WATER STORAGE T
SE ROAD GROUND STORAG

AUXILI AT RIDGE ROSELAND BOROUGH

DRAWN BY: DESIGN BY: CHECKED BY: SCALE:

KK KK SC AS NOTED

DATE: SHEET No.:

7/29/2022

JOB No.:
0718T023

SOIL EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE "NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL" LAST REVISED JULY 1999. THESE MEASURES WILL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ALL SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 60 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, WILL BE TEMPORARILY SEEDED AND HAY MULCHED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL SUCH TIME WHEREBY PERMANENT RESTABILIZATION IS ESTABLISHED.
- 3. <u>SEEDING DATES</u>: THE FOLLOWING SEEDING DATES ARE BEST RECOMMENDED TO ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPSCD: <u>SPRING-3/1-5/15</u> AND <u>FALL-8/15-10/</u>1.
- 4. SEDIMENT FENCES ARE TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED.
- 5. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS AND REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET POINTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
- 6. MULCH MATERIALS SHALL BE UN-ROTTED SALT HAY OR SMALL GRAIN STRAW APPLIED AT THE RATE OF 70-90 POUNDS PER 1000 SQUARE FEET (1.5-2.0 TONS/ACRE). ADDITIONAL REQUIRED MULCH PRACTICES ARE PRESCRIBED IN THE STANDARDS.
- 7. ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
- 8. THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 72 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX- (973) 364-0784 EMAIL- HEPSCD@VERIZON.NET
- 9. THE APPLICANT MUST OBTAIN A DISTRICT ISSUED REPORT—OF—COMPLIANCE PRIOR TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY, NJ—DCA OR ANY OTHER CONTROLLING AGENCY, CONTACT THE DISTRICT AND GIVE ADVANCED NOTICE UPON COMPLETION OF THE RESTABILIZATION MEASURES. A PERFORMANCE DEPOSIT MAY BE POSTED WITH THE DISTRICT WHEN WINTER WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDRO—SEED.
- 10. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. ALL PUMP DEWATERING OPERATIONS SHALL BE DIRECTED TOWARD A FUNCTIONING SEDIMENT
- 11. ALL SURFACES ARE TO BE PROVIDED WITH 6 INCHES OF TOPSOIL PRIOR TO RE-SEEDING.

 12. ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
- 13. A CRUSHED STONE WHEEL CLEANING TRACKING—PAD IS TO BE INSTALLED AT ALL SITE EXITS USING 2 1/2" CRUSHED STONE TO A MINIMUM LENGTH OF 50 FEET. ALL DRIVEWAYS MUST BE PROVIDED WITH CRUSHED STONE UNTIL PAVING IS COMPLETE.
- 14. MAXIMUM SOIL SLOPES SHALL NOT EXCEED 2:1 UNLESS ADDITIONAL MEASURES ARE TAKEN AND APPROVED BY THE SOIL CONSERVATION DISTRICT. THESE "SPECIAL" MEASURES SHALL BE DESIGNED BY THE APPLICANT'S ENGINER.
- 15. THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED, IN WRITING, FOR THE SALE OF ANY PORTION OF THE PROJECT OR FOR THE SALE OF INDIVIDUAL LOTS. NEW OWNERS' INFORMATION SHALL BE PROVIDED. ADDITIONAL MEASURES DEEMED NECESSARY BY DISTRICT OFFICIALS SHALL BE IMPLEMENTED AS CONDITIONS WARRANT.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
- B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

A. APPLY LIMESTONE AND FERTILIZER. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50%

CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS:

SOIL TEXTURE
CLAY, CLAY LOAM, AND HIGH
ORGANIC SOIL

SANDY LOAM, LOAM, SILT LOAM
2
90

LOAMY SAND, SAND 1 45

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH

- B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED
- C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.
- D. SOILS HIGH ON SULFIDES OR HAVING A pH OF 4 OR LESS SHOULD BE MULCHED ONLY

3. SEEDING

- A. SEE TEMPORARY SEED MIXTURE FOR SPECIES AND APPLICATION RATES.

 B. APPLY SEED UNIFORMLY BY HAND, CYCLONE(CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. MULCH SHALL NOT BE INCLUDED IN A HYDROSEEDER TANK WITH SEED. SEED SHALL BE INCORPORATED INTO THE SOIL BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COURSE TEXTURED
- C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING

4. MULCHING

4. MULCHING
MULCHING IS REQUIRED ON ALL SEEDING.

OF THE NEW BRUNSWICK-TRENTON LINE.

- A. MULCH MATERIALS SHOULD BE UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH—BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER—BLOWERS MUST NOT GRIND THE MATERIAL.
- B. <u>SPREAD UNIFORMLY</u> BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE ARM THE APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90
- DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

 C. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE
- C. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

 1. PEG AND TWINE— DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISSCROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH
- TWO OR MORE ROUND TURNS.

 2. <u>MULCH NETTING</u>— STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
- 3. CRIMPER(MULCH ANCHORING TOOL)— A TRACTOR—DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
- D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

TEMPORARY SEEDING MIXTURE

- THIS SEEDING MIXTURE IS COMPOSED OF A SINGLE SPECIES WHICH GERMINATES QUICKLY IN ORDER TO REDUCE SOIL EROSION UNTIL A PERMANENT VEGETATIVE COVER CAN BE COVER ESTABLISHED. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

 *** COMMON NAME BOTANICAL NAME TERENNIAL RYE GRASS LOLIUM PERENNE
- THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE ONE (1) POUND/1000 SQUARE FEET OR 100 POUNDS/ACRE.

 RECOMMENDED SEEDING PERIODS ARE MARCH 1-MAY 15 AND AUGUST 15-OCTOBER 1. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND
- MAINTENANCE

 B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

A. APPLY LIMESTONE AND FERTILIZER. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS:

LOAMY SAND, SAND 2 90

PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH

- OF THE NEW BRUNSWICK—TRENTON LINE.

 B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COURSE SANDS SHOULD BE ROLLED
- TO FIRM THE SEEDBED WHEREVER FEASIBLE.

 C. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION.
 REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE
 CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
- D. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED THE AREA MUST BE RETULED AND FIRMED AS ABOVE
- 3. SEEDING
 A. SEE PERMANENT SEED MIXTURE FOR SPECIES AND APPLICATION RATES.
- B. APPLY SEED UNIFORMLY BY HAND, CYCLONE(CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. MULCH SHALL NOT BE INCLUDED IN A HYDRO—SEEDER TANK WITH SEED. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDING, SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COURSE TEXTURED SOIL
- C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE.

4. MULCHING MULCHING IS REQUIRED ON ALL SEEDING.

- A. MULCH MATERIALS SHOULD BE UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH—BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER—BLOWERS MUST NOT GRIND THE MATERIAL.
- B. <u>SPREAD UNIFORMLY</u> BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND—SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
- C. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

 1. PEG AND TWINE— DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS—CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
- 2. MULCH NETTING— STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
- 3. CRIMPER(MULCH ANCHORING TOOL)— A TRACTOR—DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
- D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

5. IRRIGATION

A. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE PERFORMED IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

6. TOP DRESSING *

- A. SPRING SEEDING WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-10-10 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET
- BETWEEN SEPTEMBER 1 AND OCTOBER 15.

 B. FALL SEEDING WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.
- B. FALL SEEDING WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.C. MIXTURES DOMINATED BY WEEPING LOVEGRASS OR LEGUMES MAY NOT NEED TOPDRESSING.
- * IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THIS FOLLOW-UP OF TOP DRESSING IS NOT

PERMANENT SEEDING MIXTURE (DRY)

THIS SEEDING MIXTURE IS COMPOSED OF DROUGHT—TOLERANT SPECIES WHICH CAN THRIVE WITH LOW MAINTENANCE. THE PROPRIETARY NAME OF THE MIXTURE IS RECLAIM CONSERVATION

MIX—DRY FORMULA AS MANUFACTURED BY LOFTS, INC., BOUND BROOK, N.J. 08805, (800)526—3890.

A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

COMMON NAME BOTANICAL NAME 40 CLEMFINE TALL FESCUE 20 WEEPING LOVEGRASS 10 RELIANT HARD FESCUE 10 JAMESTOWN CHEWINGS FESCUE 10 PALMER PERENNIAL RYE 5 WHITE CLOVER 5 BLACKWELL SWITCHGRASS BOTANICAL NAME FESTUCA ARUNDINACEA "CLEMFINE" FESTUCA LONGIFOLIA "RELIANT" FESTUCA RUBRA VAR. COMMUTATA "JAMESTO LOLIUM PERENNE "PALMER" TRIFOLIUM REPENS PANICUM VIRGATUM "BLACKWELL"	A TOILE OF	EQUAL QUALITI MIAT DE SUDSTITUTED	II ALTROVED DI CON CITICE.
40 CLEMFINE TALL FESCUE FESTUCA ARUNDINACEA "CLEMFINE" 20 WEEPING LOVEGRASS ERAGRASTIS CURVULA 10 RELIANT HARD FESCUE FESTUCA LONGIFOLIA "RELIANT" 10 JAMESTOWN CHEWINGS FESCUE FESTUCA RUBRA VAR. COMMUTATA "JAMESTO 10 PALMER PERENNIAL RYE LOLIUM PERENNE "PALMER"	_%_	COMMON NAME	BOTANICAL NAME
	40 20 10 10 10	WEEPING LOVEGRASS RELIANT HARD FESCUE JAMESTOWN CHEWINGS FESCUE PALMER PERENNIAL RYE WHITE CLOVER	ERAGRASTIS CURVULA FESTUCA LONGIFOLIA "RELIANT" FESTUCA RUBRA VAR. COMMUTATA "JAMESTO LOLIUM PERENNE "PALMER" TRIFOLIUM REPENS

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FOUR (4) POUNDS/1000 SQUARE FEET OR 175 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE

PERMANENT SEEDING MIXTURE (MOIST)

THIS SEEDING MIXTURE IS COMPOSED OF MOISTURE—TOLERANT SPECIES WHICH CAN THRIVE WITH LOW MAINTENANCE. THE PROPRIETARY NAME OF THE MIXTURE IS RECLAIM CONSERVATION MIX—MOIST FORMULA AS MANUFACTURED BY LOFTS, INC., BOUND BROOK, N.J. 08805, (800)526—3890. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
55 15	CLEMFINE TALL FESCUE	FESTUCA ARUNDINACEA "CLEMF
15	NASSAU KENTUCKY BLUEGRASS	POA PRATENSIS "NASSAU"
10	PALMER PERENNIAL RYE	LOLIUM PERENNE "PALMER"
10	LASER POA TRIVIALIS	POA TRIVIALIS "LASER"
5	STREAKER REDTOP	AGROSTIS ALBA "STREAKER"
5	REED CANARY GRASS	PHLARIS ARUNDINACEA

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FIVE (5) POUNDS/1000 SQUARE FEET OR 220 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

UD SUILING

- TOPSOIL SHOULD BE USED WHERE SOILS ARE: SANDS, GRAVELY SOILS, CLAYS, SILTY CLAYS, VERY SHALLOW, OR WHERE THEY ARE EXTREMELY ACID (LESS THAN pH4.0) OR SALTY (COND—ACTIVITY GREATER THAN 1.0 MILLIMHOS PER CENTIMETER); OR WHERE TOPSOIL IS AVAILABLE ON SITE AND ASSURANCE OF IMPROVED VEGETATIVE GROWTH IS DESIRED.
- 1. MATERIALS
 A. TOPSOIL SHOULD BE FRIABLE AND LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH. A PH RANGE OF 5.0-7.5 IS ACCEPTABLE. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER). TOPSOIL HAULED IN FROM OFF SITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.

2 STRIPPING AND STOCKPILING

- A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND/OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
- B. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
 C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO 6.5. IN LIEU OF SOIL TESTS, SEE LIME RATE GUIDE IN SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER.
- D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL
- SOIL.

 E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF—SITE ENVIRONMENTAL DAMAGE.

F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH TEMPORARY SEEDING STANDARDS PREVIOUSLY DESCRIBED HEREIN.

- SITE PREPARATION
 A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
- B. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL pH TO 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
- C. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
 D. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS.
- 4. APPLYING TOPSOIL
 A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY.
 B. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A pH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A

MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE.

SPECIAL NOTES

- 1. TEMPORARY STABILIZATION ALL EXPOSED AREAS NOT TO BE CONSTRUCTED UPON WITHIN 30 DAYS SHOULD RECEIVE TEMPORARY STABILIZATION, ACCORDING TO THE TEMPORARY VEGETATIVE COVER SPECIFICATIONS.
- 2. PERMANENT STABILIZATION ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED SHOULD BE SEEDED WITHIN 10 DAYS OF FINAL GRADING, ACCORDING TO THE PERMANENT SEEDING SPECIFICATIONS.

TOTAL AREA OF DISTURBANCE: ______ACRES

STORMWATER MAINTENANCE SCHEDULE

A CONTINUOUS MAINTENANCE PROGRAM IS CRITICAL TO THE LONG—TERM PERFORMANCE OF THE OVERALL STORMWATER MANAGEMENT SYSTEM AT THE LIVINGSTON TOWNSHIP MUNICIPAL SERVICES AND POLICE BUILDING. THIS MAINTENANCE PROGRAM WILL BE PERFORMED BY THE FOLLOWING:

ROBERT SCHAEFER
LIVINGSTON TOWNSHIP ENGINEER & STORMWATER
MANAGEMENT COORDINATOR
TOWNSHIP OF LIVINGSTON
ENGINEERING DEPARTMENT
357 S. LIVINGSTON AVENUE
LIVINGSTON, NJ 07039
PHONE: 973-535-7950

E-MAIL: engineering@livingstonnj.org

ACCESS
ALL INLETS, MANHOLES AND WATER QUALITY UNITS, EXISTING AND PROPOSED, WILL BE EASILY ACCESSIBLE IN THE PARKING AREA. THE CHAMBERS IN THE UNDERGROUND DETENTION SYSTEM WILL BE ACCESSIBLE THROUGH THE PROPOSED MANHOLES LOCATED AT THE CORNERS OF THE BASIN AREAS AS WELL AS THROUGH THE INSPECTION PORTS.

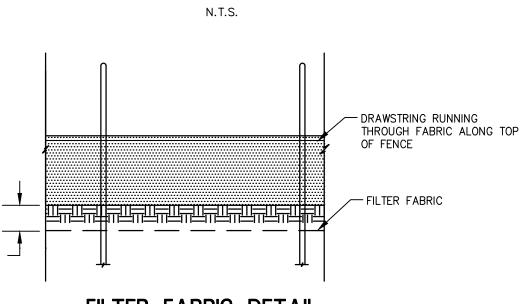
STRUCTURAL INSPECTION EVERY INLET, MANHOLE, OUTLET STRUCTURE AND WATER QUALITY UNIT, EXISTING AND PROPOSED, SHALL BE INSPECTED QUARTERLY AND THE UNDERGROUND CHAMBERS SHALL BE INSPECTED BI—ANNUALLY TO CHECK FOR ANY POSSIBLE SIGNS OF STRUCTURAL DAMAGE. ANY DAMAGE FOUND STRUCTURALLY SHALL BE REPAIRED ACCORDINGLY BEFORE THE NEXT POSSIBLE MAJOR RAIN STORM. FOR ANY STORM SEWER STRUCTURE OR UNDERGROUND CHAMBER WITH EXCESSIVE OR PERMANENT DAMAGE, IT SHALL BE REMOVED AND REPLACED IF IT BECOMES A THREAT TO SAFETY AND/OR PERFORMANCE.

TRASH AND DEBRIS REMOVAL
ANY TRASH AND DEBRIS ACCUMULATION WITHIN THE INLETS,
MANHOLES, OUTLET STRUCTURES, UNDERGROUND CHAMBERS AND
WATER QUALITY UNITS SHALL BE REMOVED AND PROPERLY
DISPOSED. INSPECTION OF EACH OF THESE STRUCTURES SHALL
BE PERFORMED MONTHLY AND AFTER ALL MAJOR RAIN STORMS.

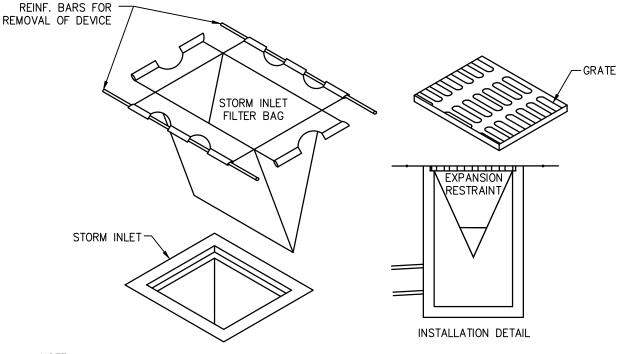
SEDIMENT REMOVAL
ACCUMULATED SEDIMENT IN EXCESS OF TWELVE INCHES WITHIN THE INLETS, MANHOLES, OUTLET STRUTURES, UNDERGROUND CHAMBERS AND WATER QUALITY UNITS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. INSPECTIONS SHALL BE MADE ANNUALLY AND SEDIMENT REMOVED AS REQUIRED.

A' HIGH SNOW FENCE OR APPROVED EQUAL

TREE PROTECTION DURING CONSTRUCTION

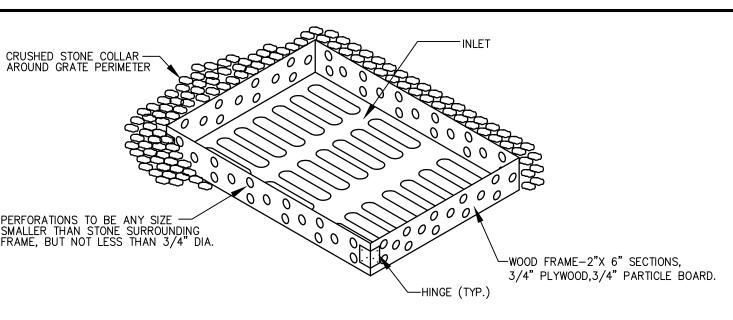


FILTER FABRIC DETAIL OR APPROVED EQUAL

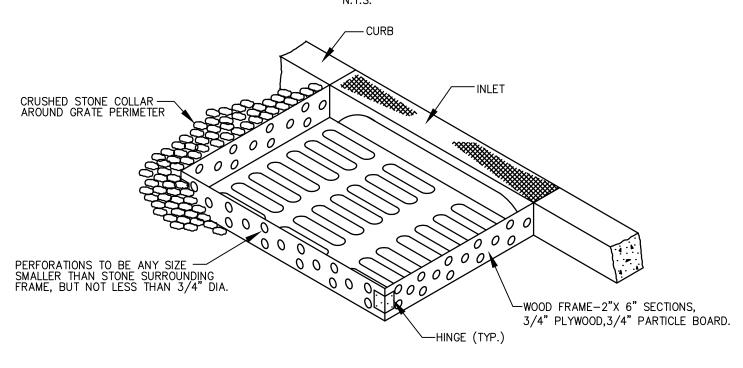


NOTE:
STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS MUST BE PROTECTED UNTIL
THE DRAINAGE AREAS ARE STABILIZED. THE STORM INLET FILTER BAGS SHALL BE EMPTIED ONTO TOPSOIL
STOCKPILE WHEN APPROXIMATELY HALF (1/2) FULL AND REINSTALLED UNDAMAGED; DAMAGED BAGS SHALL BE
REPLACED WITH NEW BAGS. CONTRACTOR SHALL COMPLETE MAINTENANCE AND REPAIRS WITHIN ONE (1) DAY.

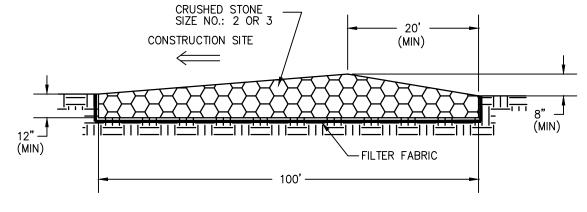
STORM INLET FILTER BAG DETAIL



INLET SEDIMENT PROTECTION STRUCTURE

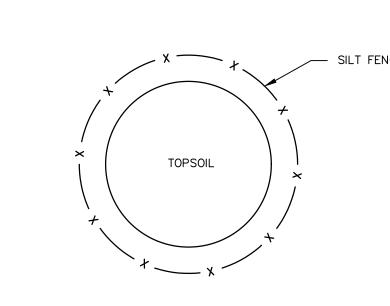


INLET SEDIMENT PROTECTION STRUCTURE

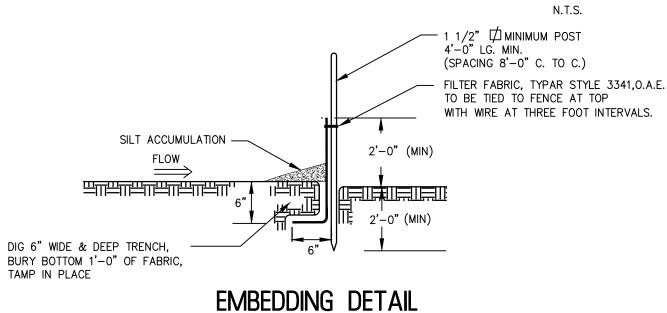


STABILIZED CONSTRUCTION ENTRANCE

(SEE PLAN FOR WIDTH)
N.T.S.



STOCKPILE DETAIL NOTE: STOCKPILE SLOPES NOT TO EXCEED 3:1



N.T.S.

THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!



REMINGTON & VERNICK ENGINEERS

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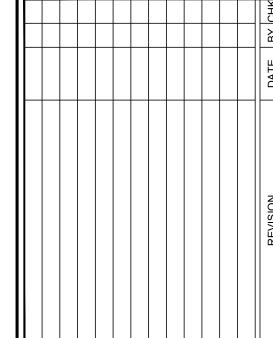
~ENGINEERING EXCELLENCE~

STEPHANIE A. CUTHBERT NJ PROFESSIONAL ENGINEER LIC. No. 42136

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& DETAILS

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SOIL EROSION & SEDIMEN CONTROL NOTES & DETAIL ROSELAND BOROUGH AUXILIARY WATER STORAGE TARIDGE ROAD GROUND STORAGE

CHECKED BY: SCALE:
AS NOTED

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