SITE PREPERATION NOTES:

1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION,SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
2. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
3. TOP SOIL SHOULD BE HANDLED WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
4. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE–STABILIZATION STRUCTURES, CHANNEL STABILIZATION STRUCTURES, SEDIMENT BASINS, AND WATERWAYS.

SEED BED PREPARATION NOTES:

1. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10–10–10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE–HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE–HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.
2. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING–TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
3. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVE A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID–PRODUCING SOILS FOR SPECIFIC REQUIREMENTS

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION NOTES

1. PLANT HARDINESS ZONE IS 6B.
2. MULCHING IS REQUIRED FOR ALL SEEDING.
3. TEMPORARY STABILIZATION IS BASED ON RECOMMENDATIONS FROM THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" MANUAL.

TABLE 7–2
TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATE AND DEPTH

SEED SELECTIONS	SEEDING RATE [1] (POUNDS)		OPTIMUM SEEDING DATE [2] BASED ON PLANT HARDINESS ZONE[3]			OPTIMUM SEED DEPTH [4] (INCHES)
	PER ACRE	PER 1000 SQ. FT.	ZONE 5B, 6S	ZONE 6B	ZONE 7A, B	
COOL SEASON GRASSES						
1. PERENNIAL RYEGRASS	100	1.0	3/15 – 6/1 8/1 – 9/15	3/1 – 5/15 8/15 – 10/01	2/15 – 5/1 8/15 – 10/15	0.5
2. SPRING OATS	86	2.0	3/15 – 6/1 8/1 – 9/15	3/1 – 5/15 8/15 – 10/1	2/15 – 5/1 8/15 – 10/15	1.0
3. WINTER BARLEY	96	2.2	8/1 – 9/15	8/15 – 10/1	8/15 – 10/15	1.0
4. ANNUAL RYEGRASS	100	1.0	3/15 – 6/1 8/1 – 9/15	3/15 – 6/1 8/1 – 9/15	2/15 – 5/1 8/15 – 10/15	0.5
5. WINTER CEREAL RYE	112	2.8	8/1 – 11/1	8/1 – 11/15	8/1 – 12/15	1.0
WARM SEASON GRASSES						
6. PEARL MILLET	20	0.5	6/1 – 8/1	5/15 – 8/15	5/1 – 9/1	1.0
7. MILLET (GERMAN OR HUNGARIAN)	30	0.7	6/1 – 8/1	5/15 – 8/15	5/1 – 9/1	1.0

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE COR SHALL BE NOTIFIED FORTY–EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2.5 TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
4. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
5. A SUB–BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB–BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
6. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1"–2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
7. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT OF WAYS WILL BE REMOVED IMMEDIATELY.
8. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
9. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON–VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
10. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
11. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
13. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
14. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #3.

TOPSOIL NOTES

TOPSOIL SHALL BE IN ACCORDANCE WITH ASTM D 5268, WITH A pH RANGE OF 6 TO 7.5. TOPSOIL SHALL HAVE A MINIMUM OF 3 PERCENT (BY WEIGHT) ORGANIC MATERIAL CONTENT; FREE OF STONES 1 INCH OR LARGER IN ANY DIMENSION AND EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH. THERE IS TO BE A MINIMUM OF 6" TOPSOIL COVER, WHERE SEEDING, FERTILIZING AND MULCHING IS TO TAKE PLACE. SOLUBLE SALTS SHOULD NOT EXCEED 500 PPM. TOPSOIL AND SUBSOIL ON SITE REMOVED DURING CLEARING AND GRUBBING MAY BE REUSED IN LANDSCAPE AREAS IF DETERMINED SUITABLE FOR PLANTING.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION NOTES

1. PLANT HARDINESS ZONE IS 6B.
2. MULCHING IS REQUIRED FOR ALL SEEDING.
3. PERMANENT STABILIZATION IS BASED ON RECOMMENDATIONS FROM THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" MANUAL.
4. REFERENCE THE "PERMANENT VEGATATIVE MIXTURES, PLANTING RATES AND PLANTING DATES" (TABLE 4–3) FROM THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY FROM JANUARY 2014 FOR THE FOLLOWING SEED MIXTURES: LAWN AREAS: USE SEED MIXTURES #15 OR #12. WET AREAS (STORMWATER BASINS AND SWALES): USE SEED MIXTURES #9 OR #11. SWALES SHALL BE SEED MIXTURE #9. SEED MIXTURE #9 MUST BE PLANTED BETWEEN FEBRUARY 1 – APRIL 30

TABLE 4–3

SEED MIXTURE[2]	PLANTING RATE/3		PLANTING DATES O = OPTIMAL PLANTING PERIOD A = ACCEPTABLE PLANTING PERIOD — PLANT HARDINESS ZONES (SEE FIGURE 4–1)									MAINTE–NANCE LEVEL/4	REMARKS
			ZONE 5B, 6A			ZONE 6B			ZONE 7A, 7B				
	LBS/ACRE	LBS/1000 SQ.FT.	3/15 – 5/31	6/1 – 7/31	8/1 – 10/1	3/1 – 4/30	5/1 – 8/14	8/15 – 10/15	2/1 – 4/30	5/1 – 8/14	8/15 – 10/30		
1. SWITCHGRASS AND/OR COASTAL PANICGRASS PLUS OR FLATPEA	15 15 20	.35 .35 .45	O			O			O			C–D	
2. DEERTONGUE OR SWITCHGRASS REDTOP	15 20 1	.35 .45 .1	O			O			O			C–D	USE DEERTONGUE IF PH<4.0 SWITCHGRASS IS SUPERIOR WILDLIFE PLANT. USE FOR WATERWAYS. REDTOP PROVIDES QUICK COVER.
3. SWITCHGRASS DEERTONGUE LITTLE BLUESTEM SHEEP FESCUE PLUS PARTRIDGE PEA	15 10 20 20 10	.35 .25 .45 .45 .25	O			O			O			C–D	PINELAND MIXTURES.
4. SWITCHGRASS BIG BLUESTEM LITTLE BLUESTEM SAND LOVEGRASS COASTAL PANICGRASS	10 5 5 4 10	.25 .10 .10 .10 .25	O			O			O			C–D	NATIVE WARM–SEASON MIXTURE
5. BERMUDAGRASS ZOYSIAGRASS (SEED) ZOYSIAGRASS (SPRIGS)	15 30	.35 .70	O			O			O			A–D	BERMUDAGRASS HAS SUPERIOR SALT TOLERANCE. ZOYSIA HAS GREATER WATER TOLERANCE.
COOL SEASON SEED MIXTURES	130	3	A	A[5]	O	A	A[5]	O	A	A[5]	O		GENERAL LOW – MAINTENANCE MIXTURE

MULCHING NOTES

MULCHING IS REQUIRED ON ALL SEEDING.

A. MULCH MATERIALS SHALL 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 (70–90 POUNDS PER 1000 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. SPREAD UNIFORMLY 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 THE AREA INTO APPROXIMATELY 1000 SQUARE FOOT SECTIONS AND DISTRIBUTE 70–90 POUNDS WITHIN EACH SECTION.

C. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF THE SLOPES, AND COSTS.

1. PEG AND TWINE – DRIVE 8–10 INCH WOODEN PEGS TO WITHIN 2–3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVE BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS–CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTING – STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS OVER MULCH 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 3–4 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 CONTOURS OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH–BINDERS – MAY BE USED TO ANCHOR SALT HAY OR STRAW MULCHES. APPLICATIONS SHALL BE HEAVIER AT EDGES WHERE WINDS CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHALL BE UNIFORM IN APPEARANCE. USE THE FOLLOWING:

(1) SYNTHETIC OR ORGANIC BINDERS – BINDERS SUCH AS CURASOL, DCA–70, PETRO–SET, AND TERRA–TACK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

(2) WOOD–FIBER OR PAPER–FIBER MULCH AT THE RATE OF 1500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

SEQUENCE OF CONSTRUCTION

1. INSTALL ALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES, AS INDICATED ON THE PLANS. (APPROX. 1 WEEK)
2. INSTALL ROCK CONSTRUCTION ENTRANCE, WHERE INDICATED ON PLANS. (APPROX. 1 DAY)
3. PRIOR TO COMMENCING ANY EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL SCHEDULE AN ON–SITE PRE–CONSTRUCTION MEETING WITH THE COR TO INSPECT AND DETERMINE THAT ALL EROSION AND SEDIMENT CONTROL DEVICES HAVE BEEN PROVIDED IN ACCORDANCE WITH THE PLANS. (APPROX. 1 WEEK)
4. BEGIN WWTP PLAN WORK (APPROX. 48 WEEKS)
5. LIMIT DISTURBANCE TO THE MINIMUM NECESSARY TO PERFORM CONSTRUCTION AND PROVIDE STABILIZATION TO DENUDED AREAS AS REQUIRED.
6. MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED ABOVE AND SHOWN ON PLANS.
7. AFTER THE ENTIRE SITE HAS BEEN STABILIZED, NOTIFY COR OF INTENT TO REMOVE SEDIMENT CONTROL MEASURES, AND REMOVE ALL EROSION AND SEDIMENT CONTROL MEASURES. (APPROX. 1 MONTH)

STANDARD EROSION AND SEDIMENT GENERAL NOTES

1. AREA OF DISTURBANCE = LESS THAN 1 ACRE.
2. EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS.
3. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMPS MUST BE STABILIZED IMMEDIATELY.
4. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT FROM SITE WITHOUT CROSSING CONSTRUCTION ENTRANCE.
5. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
6. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESIDING, RESULTING AND RENTING MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE STALLED WILL BE REQUIRED.

DEWATERING NOTES

1. WHERE GROUNDWATER IS ENCOUNTERED, THE WATERS PUMPED OUT OF THE EXCAVATED AREAS CONTAIN SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER. CONTRACTOR SHALL EMPLOY THE FOLLOWING MEASURES:

A) SEDIMENT CONTROL BAGS SHALL BE USED AS DEWATERING DEVICES DURING THE CONSTRUCTION PROCESS.
B) BAGS SHALL BE LOCATED FOR EASE OF CLEAN–OUT AND DISPOSAL OF THE TRAPPED SEDIMENT AND TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND PEDESTRIAN TRAFFIC. BAGS SHALL NOT BE PLACED DIRECTLY INTO RECEIVING WATERS.
C) SEDIMENT CONTROL BAGS MUST BE LOCATED AWAY FROM RECEIVING WATERS AND DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.
D) CONTINUOUSLY MONITOR AND MAINTAIN DEWATERING OPERATIONS TO ENSURE EROSION CONTROL, STABILITY OF EXCAVATIONS AND CONSTRUCTED SLOPES, THAT EXCAVATION DOES NOT FLOOD, AND THAT DAMAGE TO SUBGRADES AND PERMANENT STRUCTURES IS PREVENTED.
E) PREVENT SURFACE WATER FROM ENTERING EXCAVATIONS BY GRADING, DIKES, OR OTHER MEANS.

2. UPON APPROVAL FROM E&S INSPECTOR, REMOVE DEWATERING DEVICE WHEN NO LONGER REQUIRED FOR CONSTRUCTION.

DUST CONTROL NOTES

THE FOLLOWING METHODS SHALL BE USED FOR DUST CONTROL:

1. MULCHING, REFER TO SPECIFICATIONS. EXPOSED SOILS SHALL BE STABILIZED WITH MULCH IN ACCORDANCE WITH SECTION 15–1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
2. TEMPORARY VEGETATIVE COVER MAY BE USED ON SOILS EXPOSED FOR PERIODS OF TWO TO SIX MONTHS WHICH ARE NOT BEING GRADED, NOT UNDER ACTIVE CONSTRUCTION OR NOT SCHEDULED FOR PERMANENT SEEDING WITHIN 60 DAYS.
3. TILLAGE, TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS.
4. SPRINKLING OF THE SITE UNTIL THE SURFACE IS WET.
5. BARRIERS, SUCH AS SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
6. CALCIUM CHLORIDE MAY BE USED IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.
7. CRUSHED STONE OR COARSE GRAVEL MAY BE USED TO COVER SURFACE.

MAINTENANCE OF DEVICES

1. THE CONTRACTOR MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND AFTER EACH PRECIPITATION EVENT BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL TO ASCERTAIN THAT THE BMP'S ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION TO THE WATERS OF THE STATE. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT, AND INCLUDE:

(A) A SUMMARY OF SITE CONDITIONS, BMP'S AND COMPLIANCE AND
(B) THE DATE, TIME AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION.

2. EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY FOUR (24) HOURS AFTER AN EVENT WHICH GENERATES 0.25 INCHES OF RAIN IN A TWENTY FOUR (24) HOUR PERIOD. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. SEDIMENT MUST BE REMOVED AS INDICATED BELOW. REMOVED DEPOSITS SHALL BE SPREAD UNIFORMLY ON THE SITE AWAY FROM CONSTRUCTION AND ABOVE CONTROL DEVICES. ANY DEPOSITS REMAINING IN PLACE AFTER THE DEVICE ARE NO LONGER REQUIRED MAY BE DRESSED, PREPARED TO CONFORM TO THE EXISTING GRADE AND SEEDED.

(A) SILT FENCE – FILTER FENCE TO BE CLEANED ONCE SEDIMENT LEVEL REACHES 1/2 THE FENCE HEIGHT.
(B) ROCK CONSTRUCTION ENTRANCE – ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH PREVENT FLOWING OF SEDIMENT ONTO PUBLIC ROAD RIGHT–OF–WAY. ENTRANCE WILL BE RECONSTRUCTED WHEN CLOGGED WITH SEDIMENTS. MATERIALS MUST BE WASHED COMPLETELY FREE OF ALL FOREIGN MATERIALS OR NEW ROCK USED TO REBUILD THE FILTER.
(C) PROTECTION – INLET PROTECTION TO BE CLEANED ONCE BAG IS HALF FILLED.

3. WHERE BMP'S ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND CO–PERMITTEE SHALL IMMEDIATELY CONTACT THE REVIEWING ENTITY, BY PHONE OR PERSONAL CONTACT. FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NON–COMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

(A) ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION:
(B) THE PERIOD OF NON–COMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE:
(C) STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NON–COMPLIANCE: AND
(D) THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NON–COMPLIANCE CONDITIONS.

CONSTRUCTION DOCUMENTS

Revisions:	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

Reilly ASSOCIATES SINCE 1950
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.6880
www.reillyengineering.com

REGISTERED PROFESSIONAL ENGINEER
JOSEPH S. DURKIN
ENGINEER
NO. 0280-5-E

ARCHITECT/ENGINEERS:

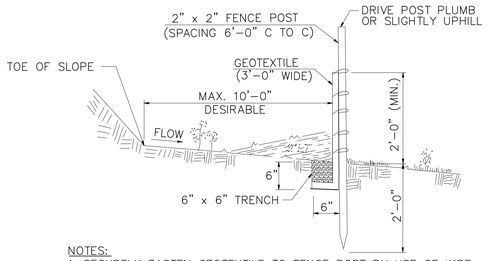
NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570–253–0846 OFFICE 570–253–1935 FAX
WWW.NEINFRA.COM

Drawing Title: EROSION AND SEDIMENTATION NOTES	Project Title: MODERNIZE WASTEWATER TREATMENT PLANT		Project Number: 561A4-13-108
			Building Number:
Approved: Project Director - - VA NJHCS PLANNING AND ENGINEERING	Location: 151 KNOLLCROFT ROAD, LYONS, NJ		Drawing Number: CW-402
	Date: 07/19/2018	Checked: J.S.D.	Drawn: B.V.N

Office of Construction and Facilities Management
Department of Veterans Affairs

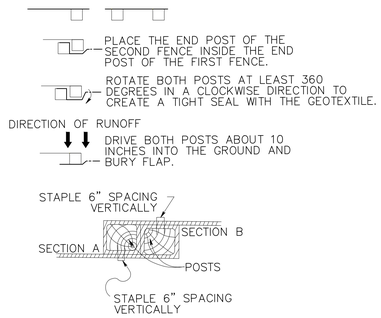
Dwg. 25 of 38

VA FORM 08–6231



NOTES:
1. SECURELY FASTEN GEOTEXTILE TO FENCE POST BY USE OF WIRE TIES, HOG RINGS, STAPLES, OR POCKETS. FOUR TO SIX FASTENERS PER POST.
2. BURY BOTTOM 1'-0" OF GEOTEXTILE AND TAMP IN PLACE.
3. SECURELY FASTEN ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE TO A POST BY WRAPPING EACH END OF THE GEOTEXTILE AROUND THE POST TWICE AND ATTACHING AS SPECIFIED IN NOTE 1 ABOVE. DO NOT SPLICE INDIVIDUAL ROLLS AT LOW POINTS.
4. SET SILT FENCE WITHIN PROJECT LIMITS. 10'-0" IS DESIRABLE.

1 SILT FENCE
CW-403 SCALE:NTS

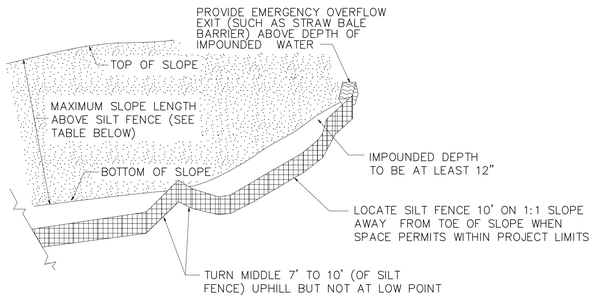


2 ATTACHING TWO SILT FENCE
CW-403 SCALE:NTS

STABILIZATION FOR MULCH ONLY NOTES:

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. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
2. PROTECTIVE MATERIALS
A. UNROTTED SMALL-GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.
B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.
C. WOOD FIBER OR PAPER FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.
D. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC MAY BE USED.
E. WOOD CHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOOD CHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.
F. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.
3. MULCH ANCHORING- SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES. 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 PATTER. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS. MULCH NETTINGS- STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG. CRIMPER MULCH ANCHORING COULTER TOOL- A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS THE USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR. LIQUID MULCH BINDERS APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE. USE ONE OF THE FOLLOWING:
A. ORGANIC AND VEGETABLE BASED BINDERS- NATURALLY OCCURRING, POWDER BASED, HYDROPHILLIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTO-TOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.
B. SYNTHETIC BINDERS- HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

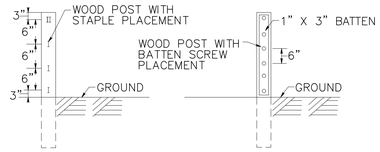
FASTENER FOR WOOD POSTS				
	GAUGE	CROWN	LEGS	STAPLES/POST
WIRE STAPLES	17 MIN. WIDE	3/4" LONG	1/2"	5 MIN.
		LENGTH	PHILLIPS HEADS	SCREW/POST
SCREWS		2"	2"	6 MIN.



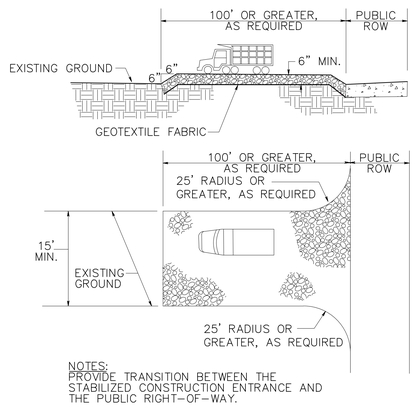
CRITERIA FOR SILT FENCE PLACEMENT	
LAND SLOPE (PERCENT)	MAXIMUM SLOPE LENGTH ABOVE FENCE (FEET)
<2	100
2 TO 5	75
5 TO 10	50
10 TO 20	25
>20 *	15
* IN AREAS WHERE THE SLOPE IS GREATER THAN 20%, PROVIDE A FLAT AREA LENGTH OF 10 FEET BETWEEN THE TOE OF THE SLOPE AND THE FENCE TO BE PROVIDED.	

4 SILT FENCE ON A STEEP OR LONG GRADE
CW-403 SCALE:NTS

FASTENER PLACEMENT



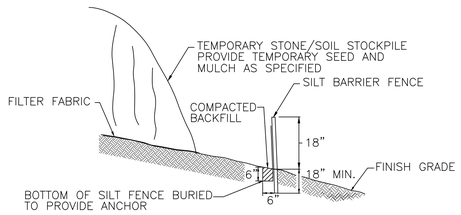
3 SILT FENCE FASTENER REQUIREMENTS
CW-403 SCALE:NTS



NOTES:
PROVIDE TRANSITION BETWEEN THE STABILIZED CONSTRUCTION ENTRANCE AND THE PUBLIC RIGHT-OF-WAY.

PROFILE AND PLAN VIEW

5 STABILIZED CONSTRUCTION DRIVEWAY
CW-403 SCALE:NTS



NOTES:
1. SILT FENCE SHALL BE PLACED AT LEAST 8 FEET FROM THE TOE OF SLOPE.
2. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

6 TEMPORARY STOCK PILE CONTROL DETAIL
CW-403 SCALE:NTS

CONSTRUCTION DOCUMENTS

Revisions	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

Reilly ASSOCIATES SINCE 1930
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.6880
www.reillyengineering.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH S. DURKIN ENGINEER NO. 039815-E

ARCHITECT/ENGINEERS:

NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570-253-0846 OFFICE 570-253-1935 FAX
WWW.NEINFRA.COM

Drawing Title: EROSION AND SEDIMENTATION DETAILS

Approved: Project Director
-
-
VA NJHCS PLANNING AND ENGINEERING

Project Title: MODERNIZE WASTEWATER TREATMENT PLANT

Location: 151 KNOLLCROFT ROAD, LYONS, NJ

Date	Checked	Drawn
07/19/2018	J.S.D.	B.V.N.

Project Number: 561A4-13-108
Building Number:
Drawing Number: CW-403
Dwg. 26 of 38

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

GENERAL CONSTRUCTION NOTES

DESIGN CODES AND SPECIFICATIONS

BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-08)
STEEL CONSTRUCTION MANUAL, FOURTEENTH EDITION
STRUCTURAL WELDING CODE – STEEL (AWS D1.1)

CONCRETE

A. REINFORCED CONCRETE DESIGN FOLLOWS ACI 318-08 EXCEPT FOR LIQUID CONTAINMENT STRUCTURES WHICH ARE DESIGNED IN ACCORDANCE WITH ACI 350-06, "CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES AND COMMENTARY."

B. UNLESS NOTED OTHERWISE, ALL CONCRETE SHOWN IS STRUCTURAL CONCRETE WITH A 5000 psi 28-DAY COMPRESSIVE STRENGTH AND TYPE II PORTLAND CEMENT. REFER TO SECTION 033053 OF THE SPECIFICATION.

C. REINFORCEMENT WILL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615 GRADE 60, DEFORMED AND SHALL BE EPOXY COATED.

D. DETAIL, FABRICATE AND ERECT REINFORCING BARS IN ACCORDANCE WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT," (AC 315-99)

E. UNLESS OTHERWISE SHOWN, ALL REINFORCING STEEL SHALL BE PROVIDED WITH MINIMUM CONCRETE COVER AS FOLLOWS:

FOUNDATION SLABS – TOP REINFORCING. 2"
– BOTTOM REINFORCING. 3"

WALLS – 2"

F. LAP SPLICES AND EMBEDMENTS FOR REINFORCEMENT SHALL FOLLOW THE CHART SHOWN ON THIS DRAWING UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

G. ANY REVISIONS TO JOINT PLACEMENT, POUR SEQUENCING OR REINFORCING SPLICES MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO SUBMITTAL OF REINFORCING STEEL SHOP DRAWINGS.

H. CURE CONCRETE AT A MINIMUM TEMPERATURE OF 50° FOR SEVEN DAYS, FOLLOWING THE CRITERIA OF ACI 308-R01.

I. CONCRETE SURFACES SHALL BE FINISHED PER SECTION 03300 OF THE SPECIFICATION.

J. CHAMFER EXPOSED CONCRETE EDGES 3/4" X 3/4" UNLESS OTHERWISE NOTED.

K. EQUIPMENT PAD DIMENSIONS, HOUSEKEEPING PAD DIMENSIONS AND OPENINGS FOR HATCHES, DUCTS AND PIPES MUST BE COORDINATED WITH APPROVED EQUIPMENT SHOP DRAWINGS, AND WITH THE REQUIREMENTS SHOWN ON OTHER DRAWINGS, THIS PROJECT SET.

L. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING STABILITY AND PREVENTING FLOATATION OF STRUCTURES DURING ALL PHASES OF CONSTRUCTION.

STEEL

A. DETAILING, FABRICATION, AND ERECTION OF STEEL TO CONFORM TO THE STEEL CONSTRUCTION MANUAL OF THE AISC.

B. STEEL MATERIAL SPECIFICATIONS:

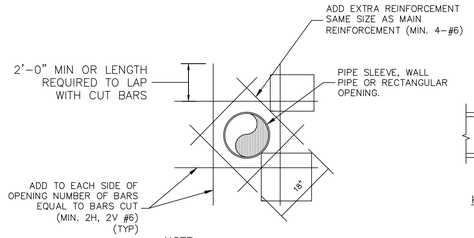
HSS RECT.	ASTM A500, GRADE B, Fy=46KSI
PLATE	ASTM A36
ANCHOR RODS	ASTM F1554, GRADE 36

C. ALL WELDS TO BE MADE WITH E70XX ELECTRODES.

D. ALL CONNECTIONS SHALL BE 1/4" FILET WELDED UNLESS NOTED OTHERWISE.

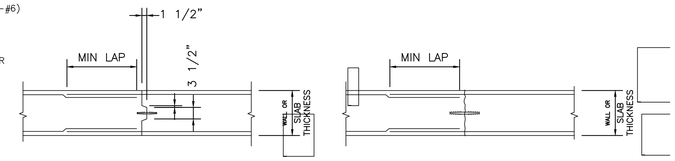
E. STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED IN ACCORDANCE WITH SSPC SP-2 AND SP-3 AND COATED WITH A MINIMUM 2 MILS OF FABRICATORS STANDARD RUST INHIBITIVE PRIMER.

F. ALL EXISTING FIELD DIMENSIONS, ELEVATIONS, AND CONDITIONS AFFECTING WORK UNDER THIS CONTRACT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS AND COMMENCING ANY WORK.



NOTE:
PLACE REINFORCEMENT IN BOTH FACES.
ALL BARS 2" CLEAR.

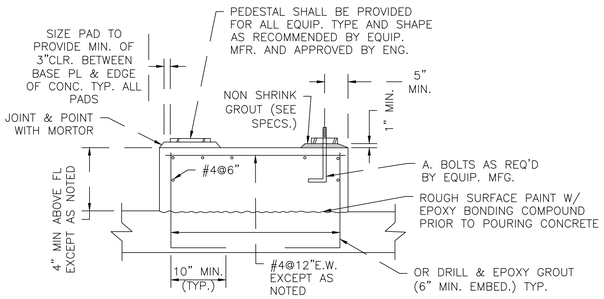
2 / S-001 WALL/SLAB OPENING REINFORCEMENT
SCALE:N.T.S.



KEYED CONSTRUCTION JOINT
ROUGHENED CONSTRUCTION JOINT

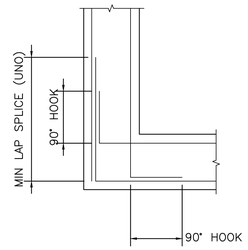
NOTE:
A. USE PVC WATERSTOP, 6" W/O BULB, FOR ALL CONSTRUCTION JOINTS EXCEPT WHERE OTHERWISE INDICATED.

3 / S-001 CONCRETE CONSTRUCTION JOINT DETAILS
SCALE:N.T.S.

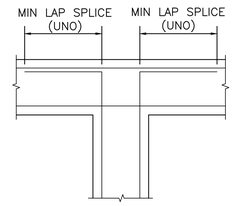


NOTE:
1. CONTRACTOR TO PAINT ALL PADS FOR EQUIPMENT AND CONTROL PANELS SAFETY YELLOW.

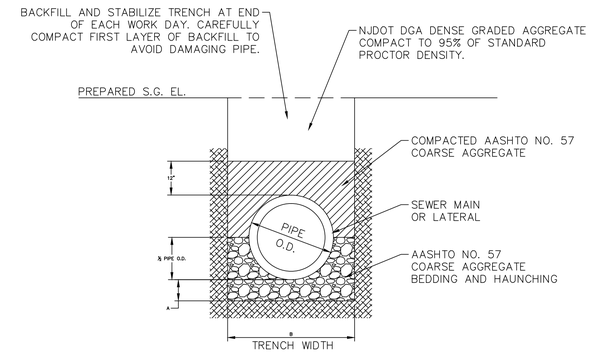
8 / S-001 EQUIPMENT PAD DETAIL
SCALE:N.T.S.



4 / S-001 CORNER WALL REINFORCEMENT DETAIL
SCALE:N.T.S.



5 / S-001 INTERIOR WALL REINFORCEMENT DETAIL
SCALE:N.T.S.



9 / S-001 TYPICAL GRAVITY SANITARY SEWER TRENCH DETAIL
SCALE:NOT TO SCALE

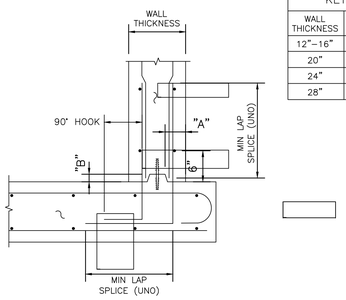
SIZE/O.D.	A	B
UP TO 36"	6" MIN.	O.D. + 1'4"
36" AND LARGER	6" MIN.	O.D. + 1'4"
LATERAL	4" MIN.	O.D. + 1'4"

PIPE O.D. REFERS TO PIPE BARREL SECTION NOT PIPE BELL SECTION.

BAR SCHEDULE		
BAR SIZE	MIN LAP SPLICE LENGTH (INCHES)	
	TOP BARS	OTHER BARS
3	17	15
4	23	20
5	29	25
6	34	30
7	50	44
8	57	50
9	70	62
10	87	76
11	99	87

NOTES:
WITH REFERENCE TO ACI 350-06 SECTION 12.2.3
F'c=5,000 PSI Fy=60,000 PSI.
TOP BARS ARE HORIZONTAL BARS WITH 12" OF CONCRETE CAST BELOW
LAP SPLICES ARE TENSION LAPS, CLASS B.
MINIMUM CLEAR COVER IS 2 INCHES. MINIMUM SPACING IS 5 INCHES.

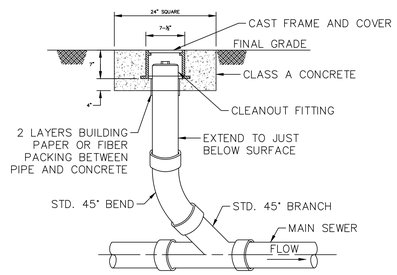
1 / S-001 SPLICE AND EMBEDMENT CHART
SCALE:N.T.S.



KEY DIMENSIONS		
WALL THICKNESS	DIM "A"	DIM "B"
12"-16"	3 1/2"	1 1/2"
20"	6"	2"
24"	8"	2"
28"	10"	2"

6 / S-001 KEYED WALL/SLAB JOINT DETAIL
SCALE:N.T.S.

INSTALLATION OF LATERAL CLEANOUT



NOTE: ALL LATERAL AND CLEANOUT PIPING TO MATCH SIZE AND TYPE OF MAIN SEWER PIPE AT CONNECTION.

7 / S-001 CLEANOUT DETAIL
SCALE:NOT TO SCALE

CONSTRUCTION DOCUMENTS

Revisions	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

Reilly ASSOCIATES SINCE 1930
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.6880
www.reillyengineering.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOSEPH S. DURKIN ENGINEER NO. 039954-E

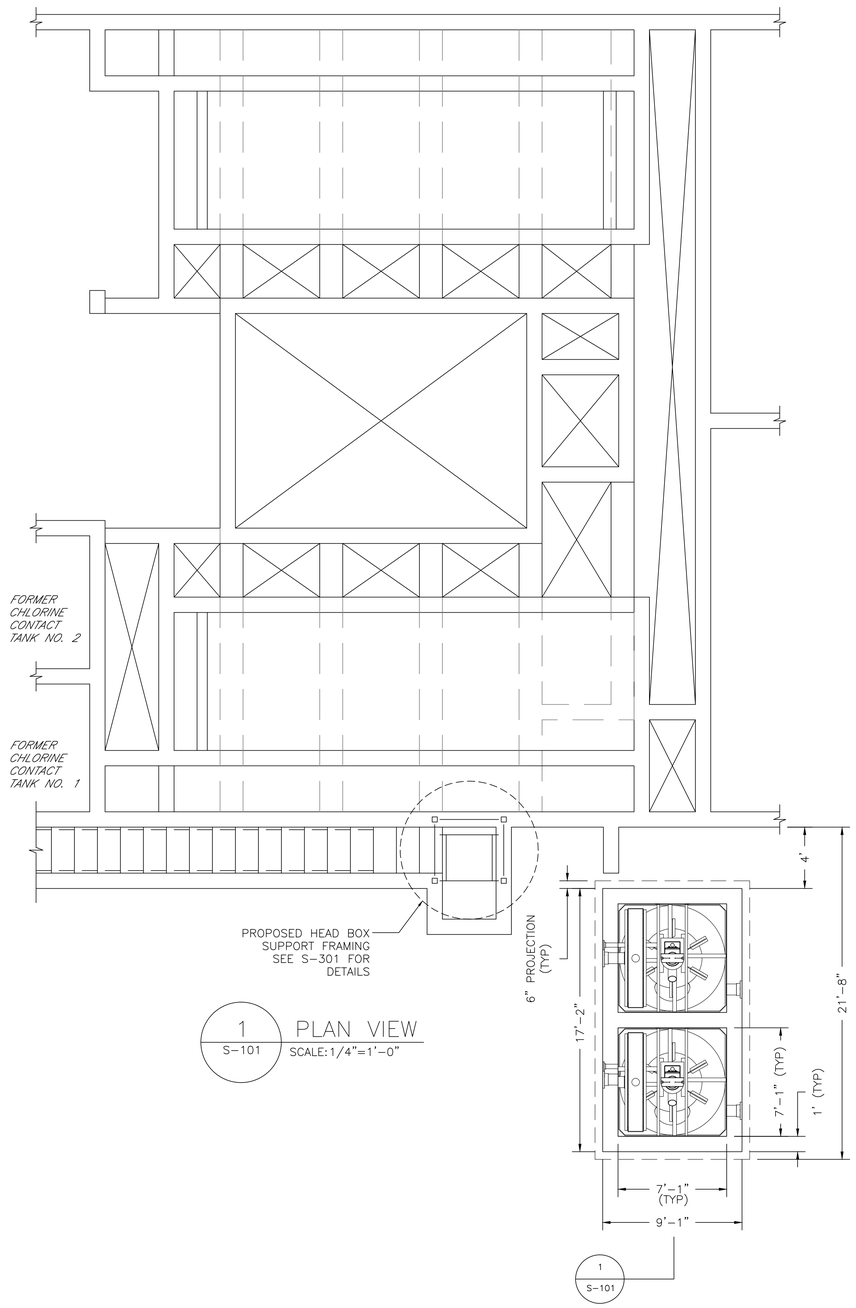
ARCHITECT/ENGINEERS:

NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570-253-0846 OFFICE 570-253-1935 FAX
WWW.NEINFRA.COM

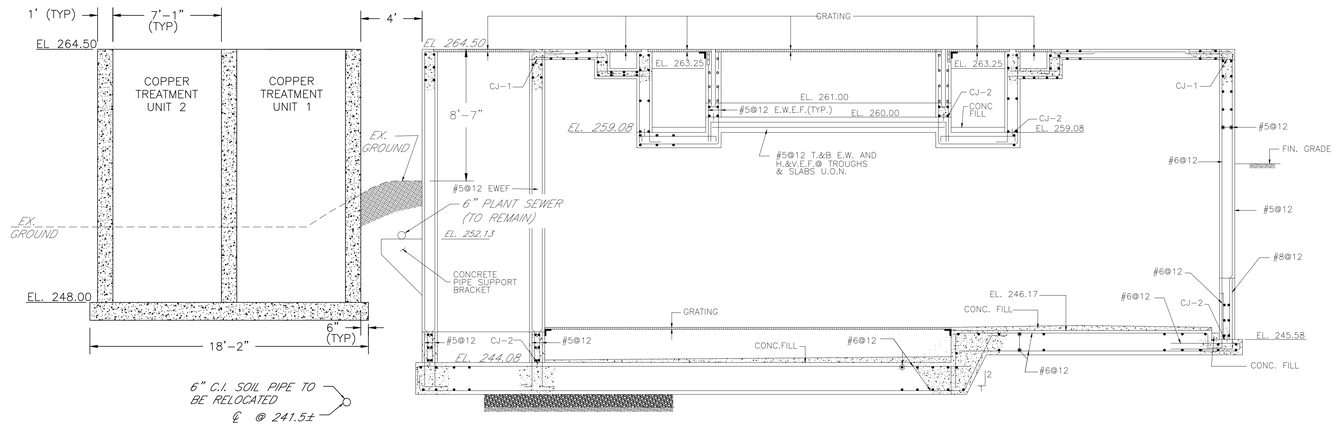
Drawing Title: STRUCTURAL DETAILS AND NOTES
Approved Project Director: - - VA NJHCS PLANNING AND ENGINEERING
Project Title: MODERNIZE WASTEWATER TREATMENT PLANT
Location: 151 KNOLLCROFT ROAD, LYONS, NJ
Date: 07/19/2018 | Checked: J.S.D. | Drawn: C.E.T.
Project Number: 561A4-13-108
Building Number:
Drawing Number: S-001
Dwg. 27 of 38

Office of Construction and Facilities Management
Department of Veterans Affairs

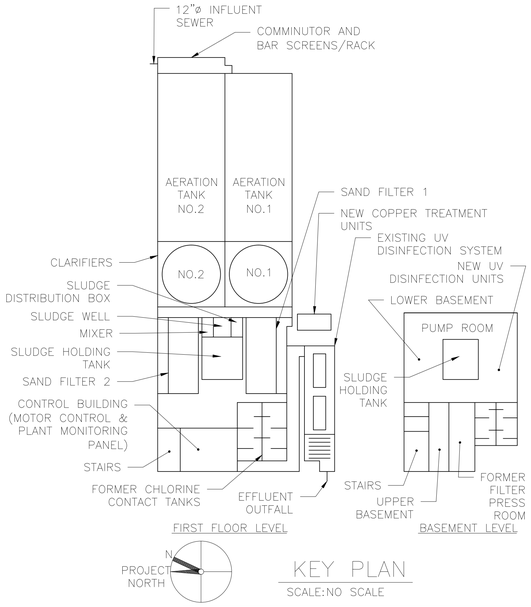
VA FORM 08-6231



1 S-101 PLAN VIEW
SCALE: 1/4"=1'-0"



2 S-101 SECTION
SCALE: 1/4"=1'-0"



KEY PLAN
SCALE: NO SCALE

CONSTRUCTION DOCUMENTS

Revisions	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

Reilly ASSOCIATES SINCE 1930
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.6880
www.reillyengineering.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH S. DURKIN
ENGINEER
NO. 039954

ARCHITECT/ENGINEERS:

NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570-253-0846 OFFICE 570-253-1935 FAX
WWW.NEINFRA.COM

Drawing Title
COPPER TREATMENT UNITS
STRUCTURAL PLAN AND SECTION

Approved Project Director
-
-
VA NJHCS PLANNING AND ENGINEERING

Project Title
MODERNIZE WASTEWATER TREATMENT PLANT

Location
151 KNOLLCROFT ROAD, LYONS, NJ

Date	Checked	Drawn
07/19/2018	J.S.D	C.E.T.

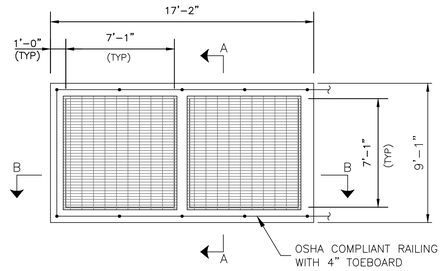
Project Number
561A4-13-108

Building Number

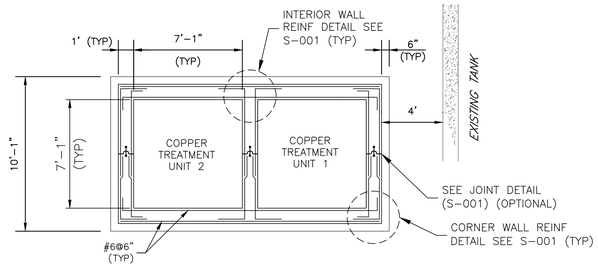
Drawing Number
S-101
Dwg. 28 of 38

Office of Construction and Facilities Management
Department of Veterans Affairs

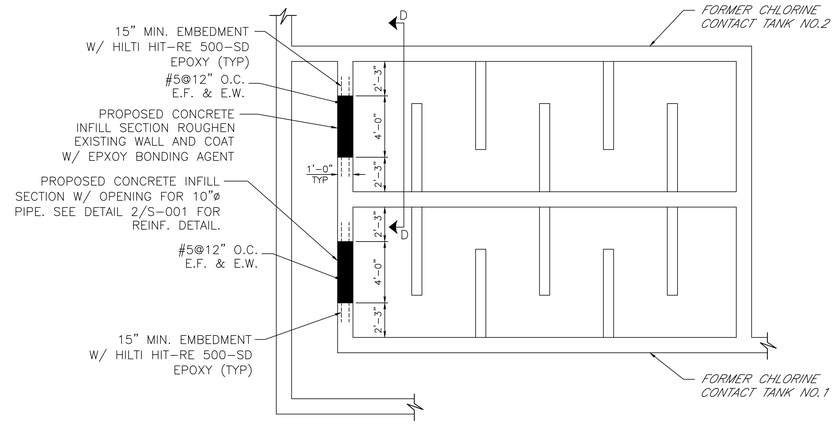
VA FORM 08-6231



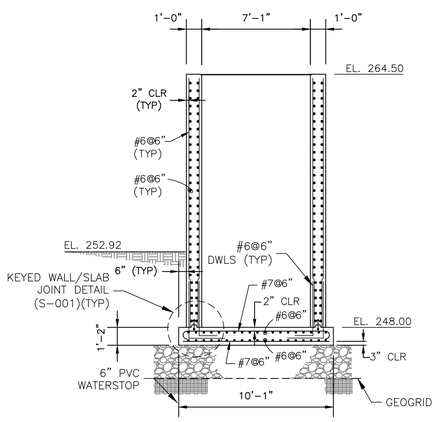
1 S-301 PLAN @ EL. 264.50
SCALE: 1/4" = 1'-0"



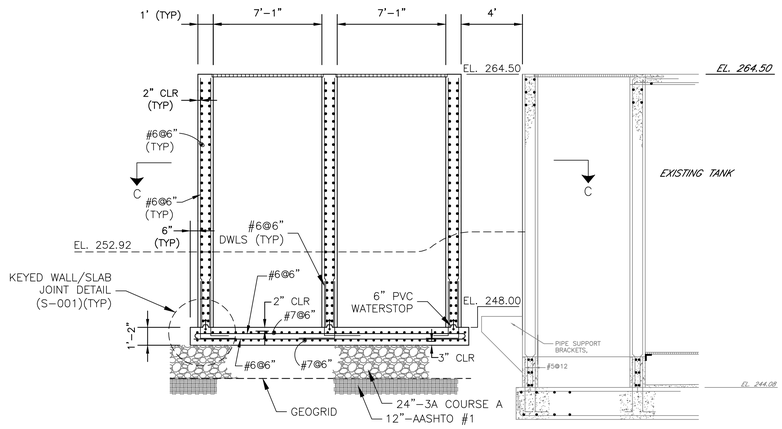
C S-301 WALL SECTION @ EL. 260.00
SCALE: 1/4" = 1'-0"



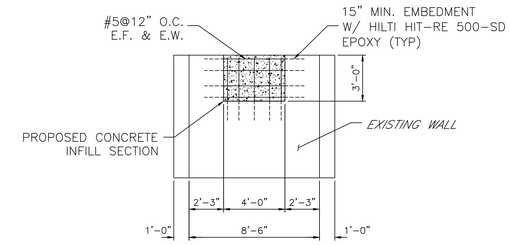
2 S-301 FORMER CHLORINE TANK PLAN
SCALE: 1/4" = 1'-0"



A S-301 SECTION
SCALE: 1/4" = 1'-0"



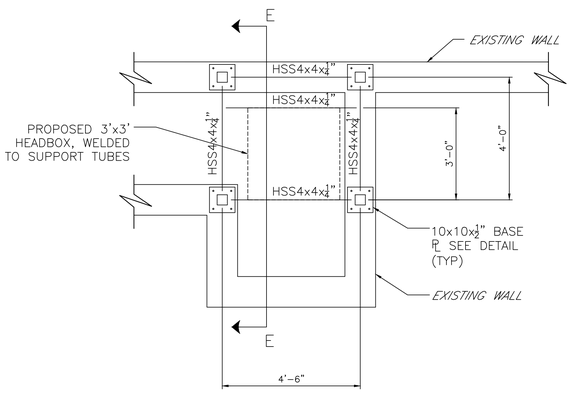
B S-301 SECTION
SCALE: 1/4" = 1'-0"



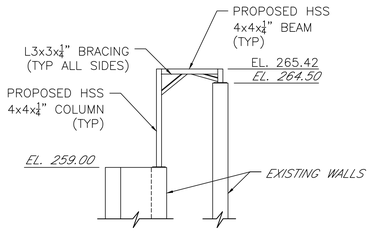
D S-301 CHLORINE TANK SECTION
SCALE: 1/4" = 1'-0"

NOTES:

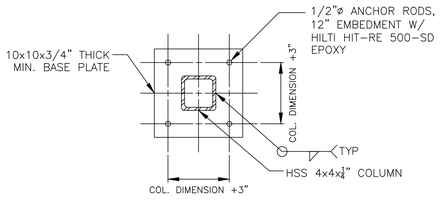
1. REFER TO SHEET S-001 FOR GENERAL NOTES AND DETAILS.
2. COORDINATE PIPE AND EQUIPMENT LOCATIONS WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND DRAWINGS OF OTHER DISCIPLINES.
3. PROVIDE TYPE II (MODERATE SULFATE RESISTANT) CEMENT.
4. TANKS REQUIRE HYDROSTATIC TESTING AS PER ACI 350.1-10.
5. GRATINGS ARE FLUSH MOUNTED.



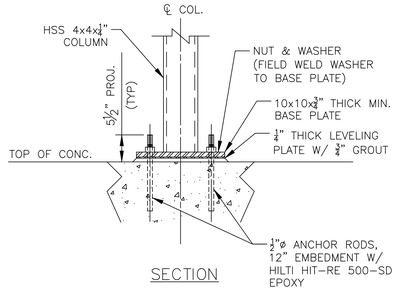
3 S-301 HEAD BOX SUPPORT FRAMING PLAN
SCALE: 1/2" = 1'-0"



E S-301 HEAD BOX SUPPORT SECTION
SCALE: 1/4" = 1'-0"

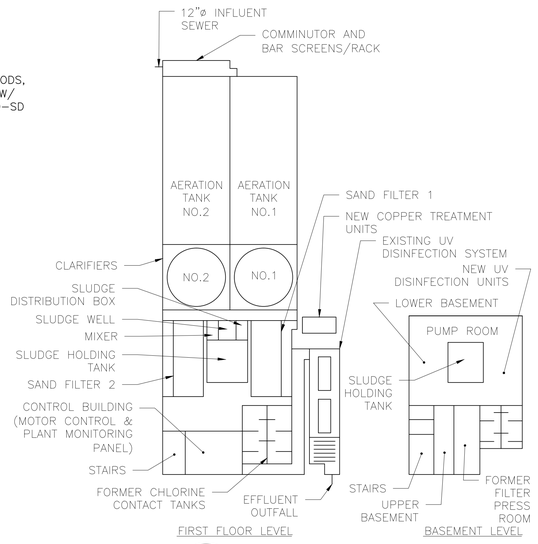


PLAN



SECTION

F S-301 TYPICAL BASE PLATE DETAILS
N.T.S.



KEY PLAN
SCALE:NO SCALE

CONSTRUCTION DOCUMENTS

Revisions:	Date
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

CONSULTANTS:

Reilly ASSOCIATES SINCE 1950
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.8880
www.reillyengineering.com

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER JOSEPH S. DURKIN NO. 026815-E

ARCHITECT/ENGINEERS:

NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570-253-0846 OFFICE 570-253-1935 FAX
WWW.NEINFRA.COM

Drawing Title: COPPER TREATMENT UNITS STRUCTURAL PLANS AND SECTIONS

Approved Project Director: - - VA NJHCS PLANNING AND ENGINEERING

Project Title: MODERNIZE WASTEWATER TREATMENT PLANT

Location: 151 KNOLLCROFT ROAD, LYONS, NJ

Date: 07/19/2018 | Checked: J.S.D | Drawn: C.E.T.

Project Number: 561A4-13-108

Building Number:

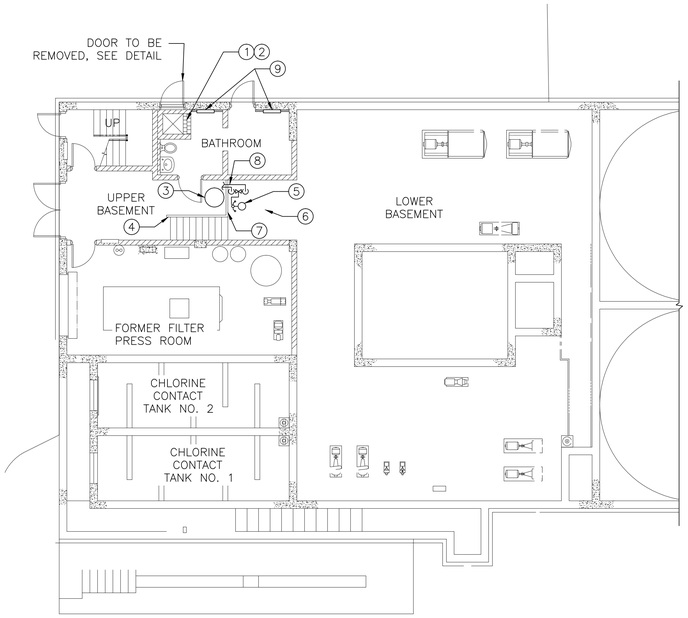
Drawing Number: S-301

Dwg. 29 of 38

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

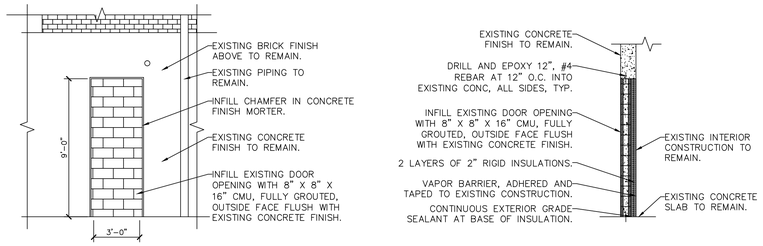


PROJECT NORTH

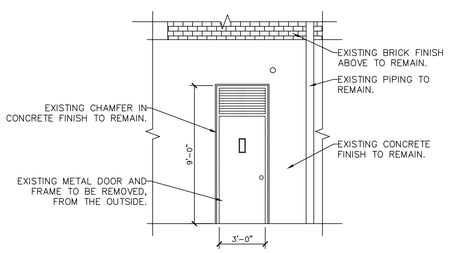
1 / A-101 BASEMENT ARCHITECTURAL PLAN
SCALE: 1/8"=1'-0"

KEYED NOTES – DETAIL 1

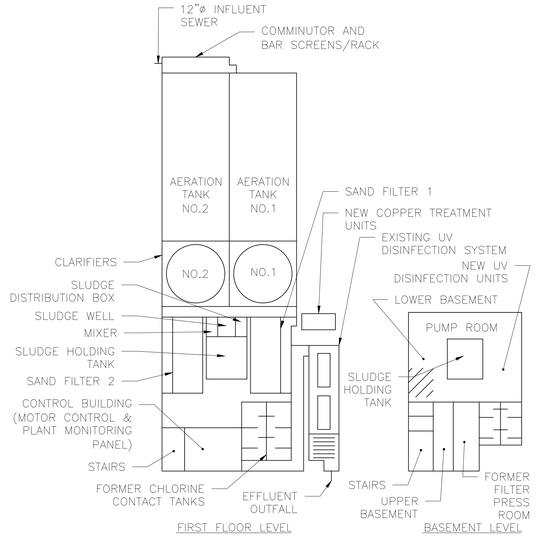
1. REMOVE EXISTING TILE FROM 36"X10" SILL ENTERING SHOWER TO SUBSTRATE, READY FOR NEW TILE.
2. INSTALL NEW SLIP RESISTANT 8"x8" DALTILE, QUARRY TEXTURES FLOORING TILE, OR EQUAL, ON 36"x10" SILL ENTERING SHOWER, INCLUDE EDGE CAP TILES, COLOR – TO BE SELECTED FROM TILE MANUFACTURES FULL LIST OF STANDARD COLORS BY VA COR.
3. EXISTING HEATER TO REMAIN.
4. EXISTING GUARD RAIL TO REMAIN.
5. NEW STAND ALONE, SELF SUPPORTED EMERGENCY SHOWER AND EYEWASH WITH TEMPERATURE MIXING VALVE.
6. EXISTING CONCRETE SLAB TO REMAIN.
7. EXISTING 6' HIGH CONCRETE WALL TO REMAIN.
8. NEW PIPING TO TAP INTO EXISTING PIPE AND BE TIGHT TO WALL.
9. EXISTING WALL HEATER REMOVED BY ELECTRICAL CONTRACTOR, COORDINATE REMOVAL, PAINT AND PATCH TO MATCH EXISTING.



3 / A-101 ELEVATION AND SECTION OF NEW WALL DETAIL
SCALE: 1/4"=1'-0"



2 / A-101 ELEVATION OF EXISTING DOOR REMOVAL DETAIL
SCALE: 1/4"=1'-0"



PROJECT NORTH

KEY PLAN
SCALE: NO SCALE

CONSTRUCTION DOCUMENTS

Revisions:	Date
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–

CONSULTANTS:

Reilly ASSOCIATES SINCE 1950
ENGINEERING / ENVIRONMENTAL / SURVEYING
49 South Main Street
Suite 200
Pittston, PA 18640
tel: 570.654.2473
fax: 570.654.6880
www.reillyengineering.com

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOSEPH S. DURKIN
ENGINEER
NO. 039815-E

ARCHITECT/ENGINEERS:

NEI
NORTHEAST INFRASTRUCTURE, LLC
1100 CHURCH STREET HONESDALE, PA 18431
570-253-0846 OFFICE 570-253-1935 FAX
WWW.NEINFRA.COM

Drawing Title: ARCHITECTURAL PLAN

Approved: Project Director
–
–
VA NJHCS PLANNING AND ENGINEERING

Project Title: MODERNIZE WASTEWATER TREATMENT PLANT

Location: 151 KNOLLCROFT ROAD, LYONS, NJ

Date	Checked	Drawn
07/19/2018	M.M.	D.J.P.

Project Number: 561A4-13-108

Building Number:

Drawing Number: A-101

Dwg. 30 of 38

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231