

THE FOLLOWING DETAILS FOR THE ROADWAY & UTILITY CONSTRUCTION

SEEDING PROCEDURES

TEMPORARY SEEDING: ALL AREAS TO BE TEMPORARILY SEEDED SHALL BE PREPARED BY APPLYING ONE (1 TON OF AGRICULTURAL GRADE LIMESTONE PER ACRE PLUS FERTILIZER AT THE RATE OF 50-50-50 PER ACRE. UPON COMPLETION OF THIS PREPARATION. THE SITE SHALL BE SEEDED ACCORDING TO THE FOLLOWING SCHEDULE:

LB./ACRE FOR SPRING SEEDING (UP TO JUNE 15): (A) ANNUAL RYEGRASS, OR 96 OATS (B) SPRING OATS, OR 64 OATS, PLUS 20 ANNUAL (C) SPRING OATS PLUS ANNUAL RYEGRASS OR PERENIAL RYEGRASS FOR LATE SPRING AND SUMMER SEEDING (JUNE 16 TO AUGUST 15): LB. /ACRE (A) SUDANGRASS, OR (B) JAPANESE MILLET, OR

(C) WINTER WHEAT AFTER SEEDING, MULCH WITH HAY OR STRAW AT A RATE OF 3 TONS PER ACRE. IMMEDIATELY COMMENCE WITH A TEMPORARY SEEDING OF ALL DISTURBED AREAS THAT ARE NOT SUBJECT TO CONSTRUCTION TRAFFIC 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 3 TONS PER ACRE. • PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS IMMEDIATELY AFTER FINAL GRADING. MULCH IS TO BE USED AS NECESSARY FOR PROTECTION UNTIL SEEDING

LB./ACRE

IS ESTABLISHED. ANCHOR MULCH WITH SPECIFIED MULCH BINDERS APPLIED AT THE FOLLOWING RATES:

- RECYCLED CELLULOSE FIBER. 310 POUNDS PER 1,000 SQUARE YARDS. - WOOD FIBER. 210 POUNDS PER 1,000 SQUARE YARDS.

 NONASPHALTIC EMULSION. AT MANUFACTURER'S RECOMMENDED RATE. POLYVINYL ACETATE. AT MANUFACTURER'S RECOMMENDED RATE. - RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE. 310 POUNDS PER 1,000 SQUARE YARDS

APPLY WOOD FIBER MULCH HYDRAULICALLY IN ACCORDANCE WITH THE MANUFACTURER'S TANK-MIXING INSTRUCTIONS. IT MAY BE INCORPORATED AS AN INTEGRAL PART OF THE SLURRY AFTER THE SEED AND SOIL SUPPLEMENTS HAVE BEEN THOROUGHLY MIXED. APPLY UNIFORMLY AT THE RATE OF 210 POUNDS PER 1,000 SQUARE YARDS, UNLESS OTHERWISE INDICATED

MULCH TACTIFIERS AND SYNTHETIC BINDERS TO ANCHOR MULCH MUST CONTAIN NO SOLVENTS OR DILUTING AGENTS THAT ARE TOXIC TO PLANT OR ANIMAL LIFE. LIGHTWEIGHT PLASTIC, FIBER OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

DURING COLD WINTER/NONVEGETATIVE GROWTH SEASONS USE A EMULSION TACKIFIER (I.E. DIRTGLUE POLYMER EMULSION) FOR THE FOLLOWING TYPES OF APPLICATIONS:

NON-DRIVING SURFACE DUST CONTROL AND EROSION CONTROL APPLICATIONS OF ALL TYPES

- BANK STABILIZATION FOR ELIMINATING NATURAL AND MAN MADE DUST, EROSION, AND SEDIMENT POLLUTION

 TACKIFIER FOR HYDROSEEDING CAPPING OF STORAGE PILES

(C) ANNUAL RYEGRASS

(B) WINTER RYE, OR

(A) ANNUAL RYEGRASS, OR

FOR LATE SUMMER AND FALL SEEDING (AUGUST 15 ON):

- DUST CONTROL FOR TEMPORARY DRIVING SURFACES WITH EMPHASIS FOR CONSTRUCTION SITES AS AN ALTERNATIVE TO WATER SPRAYING - DRIVING SURFACES FOR HOT, DRY CLIMATES

ANY AREA RECEIVING TEMPORARY SEEDING WHICH WILL BE LEFT FOR A PERIOD LONGER THAN ONE YEAR SHALL BE SEEDED WITH THE PERMANENT SEEDING MIXTURES.

PERMANENT SEEDING OR REVEGETATION OF DISTURBED AREA: APPLY LIME - 275 LBS. /1,000 SQ.FT.

> FERTILIZER - N,P,K - 2.5, 5, 5 LBS./1,000 SQ.F1 MULCH WITH: 140 LBS. STRAW / 1,000 SQ.FT. SLOPES LESS THAN 3:1 - FORMULA D - 21 LBS. PER 1,000 S.Y.

TALL FESCUE - 15 LBS. PER 1.000 S.Y. CREEPING RED FESCUE - 6 LBS. PER 1,000 S.Y. MARCH 15 TO JUNE 1, OR AUGUST 1 TO OCTOBER 15 AREAS NOT MOWED LESS THAN 3:1 - FORMULA W - 10.5 LBS. PER 1,000 S.Y. TALL FESCUE - 7.5 LBS. PER 1,000 S.Y. BIRDSFOOT TREFOIL MIXTURE - 2.0 LBS. PER 1,000 S.Y. REDTOP - 1.0 LBS. PER 1,000 S.Y. APRIL 1 TO JUNE 15, OR AUGUST 16 TO SEPTEMBER 15

ALL DISTURBED LAWN AREAS - FORMULA B - 21 LBS. PER 1,000 S.Y. PERENNIAL RYEGRASS MIXTURE - 4 LBS. PER 1,000 S.Y. CREEPING RED FESCUE - 6 LBS. PER 1,000 S.Y. KENTUCKY BLUEGRASS MIXTURE - 11 LBS. PER 1,000 S.Y. MARCH 15 TO JUNE 1, OR AUGUST 1 TO OCTOBER 15

ROADWAY SEQUENCE OF CONSTRUCTION

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH

1. CONTRACTOR IS TO SET UP MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SIGNING. 2. CLEAR AND GRUB FOR SILT FENCE AND ROCK CONSTRUCTION ENTRANCE WITHIN THE LIMITS OF

DISTURBANCE DELINEATED ON THE PLAN DRAWING. LEGALLY DISPOSE OF REMOVED TREE 3. INSTALL SILT FENCE AND ROCK CONSTRUCTION ENTRANCE AS PER DETAILS WHERE INDICATED

ON PLAN DRAWING. 4. REMOVE EXISTING BITUMINOUS PAVEMENT WHERE NEEDED.

5. GRADE AREAS OF ROADWAY TO BE WIDENED OR CHANGED IN ALIGNMENT. INSTALL PIPE AND

INLETS FOR STORMWATER COLLECTION. START FROM OUTLET AND WORK UPHILL. 6. INSTALL SUBBASE, BITUMINOUS PAVEMENT, AND CURBING. STABILIZE ANY REAMAINING

DISTURBED AREAS IMMEDIATELY. 7. MILL AND OVERLAY ROADWAY AREAS ONLY TO BE RESURFACED.

8. UPON STABILIZATION OF UPLAND AREAS, REMOVE UNNECESSARY OR REDUNDANT CONTROL MEASURES. STABILIZATION SHOULD BE CONSIDERED WHEN UPLAND AREAS HAVE A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER.

UTILITY INSTALLATION NOTES

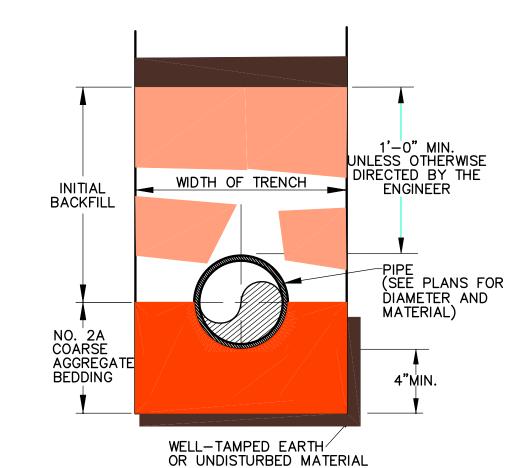
• START INSTALLATION OF UTILITIES AT THE DOWNSTREAM END.

PLACE EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH. CAP PIPES AT END OF DAY TO PREVENT SEDIMENT FROM ENDING.

• IF TRENCH DEWATERING REQUIRED, PUMP EFFLUENT MUST BE DISCHARGED THROUGH A SEDIMENT TRAPPING DEVICE.

BACKFILL TRENCH AT END OF DAY, STABILIZING DISTURBED AREAS IMMEDIATELY.

THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.



TRENCH RESTORATION & PIPE BEDDING DETAIL FOR GAS, WATER & SANITARY SEWER

EROSION AND SEDIMENT POLLUTION CONTROL NOTES

• ALL WORK WILL BE DONE IN ACCORDANCE WITH CHAPTER 102, EROSION CONTROL

• THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED • THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64. EROSION CONTROL RULES AND REGULATIONS. TITLE 25. PART 1. DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C. PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.

THE PROJECT SITE AT ALL TIMES. • EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.

• A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT

• ALL BMP'S SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. • IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE. THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS. MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.

• ROCK CONSTRUCTION ENTRANCES SHALL NOT OBSTRUCT ROADSIDE DRAINAGEWAYS. ENTRANCE GRADES SHOULD MATCH ROADSIDE SWALES OR AN APPROPRIATE SIZE PIPE SHOULD BE INSTALLED. WHEN PIPING, STABLE HEAD AND END WALLS SHOULD BE PROVIDED.

• SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGEWAYS IS NOT ACCEPTABLE. . HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.

• STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN. • UNTIL THE SITE IS STABILIZED. ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

• SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

• THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE • THE SITE WILL BE CONSIDERED TO BE PERMANENTLY STABILIZED WHEN ALL PERMANENT CONTROL MEASURES/FACILITIES HAVE BEEN COMPLETED AND ARE OPERATIONAL, TEMPORARY CONTROL MEASURES/FACILITIES REMOVED. AND UNIFORM EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED TO THE POINT WHERE THE SURFACE S CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS. THE STANDARD FOR

THIS VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA. ANY CHANGES TO THE EROSION AND SEDIMENTATION CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED EROSION AND SEDIMENTATION CONTROL PLANS TO THE DISTRICT FOR RE-REVIEW. THE REVISED PLANS MUST MEET ALL CURRENT STATE EROSION AND SEDIMENT POLLUTION CONTROL REQUIREMENTS, AS WELL AS DISTRICT

REQUIREMENTS. • THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND UP-KEEP OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS ON SITE. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR ALL PERMANENT EROSION CONTROLS ON THE SITE. • FILL BROUGHT TO THE PROPERTY SHOULD BE PLACED AND GRADED IMMEDIATELY.

THERE WILL NOT BE A TEMPORARY SOIL STOCKPILE • ANY WASTE MATERIAL FROM THE PROJECT SITE TO BE RECYCLED OR DISPOSED OF SHALL BE DONE SO IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS.

DURING THIS PHASE OF DEMOLITION, THE TOTAL AREA TO BE DISTURBED IS 26.06 ACRES

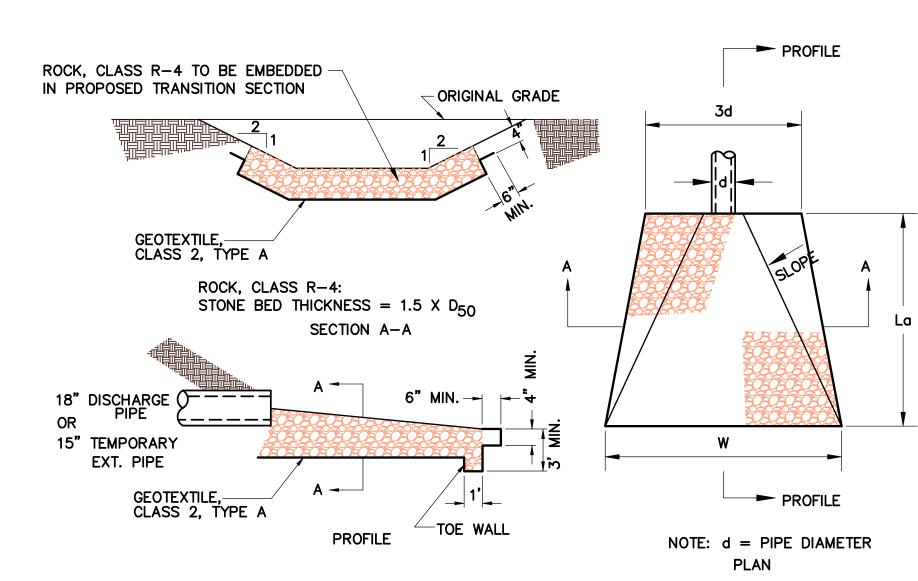
CHAPTER 93. WATER QUALITY STANDARDS SOME OF THE SITES WILL DISCHARGE INTO SWIFTWATER CREEK WHICH CLASSIFIED AS A HQ-CWF (A HIGH QUALITY COLD WATER FISH HABITAT). THE REMAINDER OF THE SITES WILL DISCHARGE INTO FOREST HILLS RUN WHICH IS ALSO CLASSIFIED AS A HQ-CWF (A HIGH QUALITY COLD WATER FISH HABITAT).

OKC- OPUAGA-LACKAWANNA CHANNERY LOAMS 8-15% SLOPES OxC- OPUAGA-LACKAWANNA EXTREMELY STONY LOAMS 8-25% SLOPES MoB- MORRIS EXTREMELY STONY SILT LOAM 0-8% SLOPES WpB- WELLSBORO EXTREMELY STONY LOAM 0-8% SLOPES

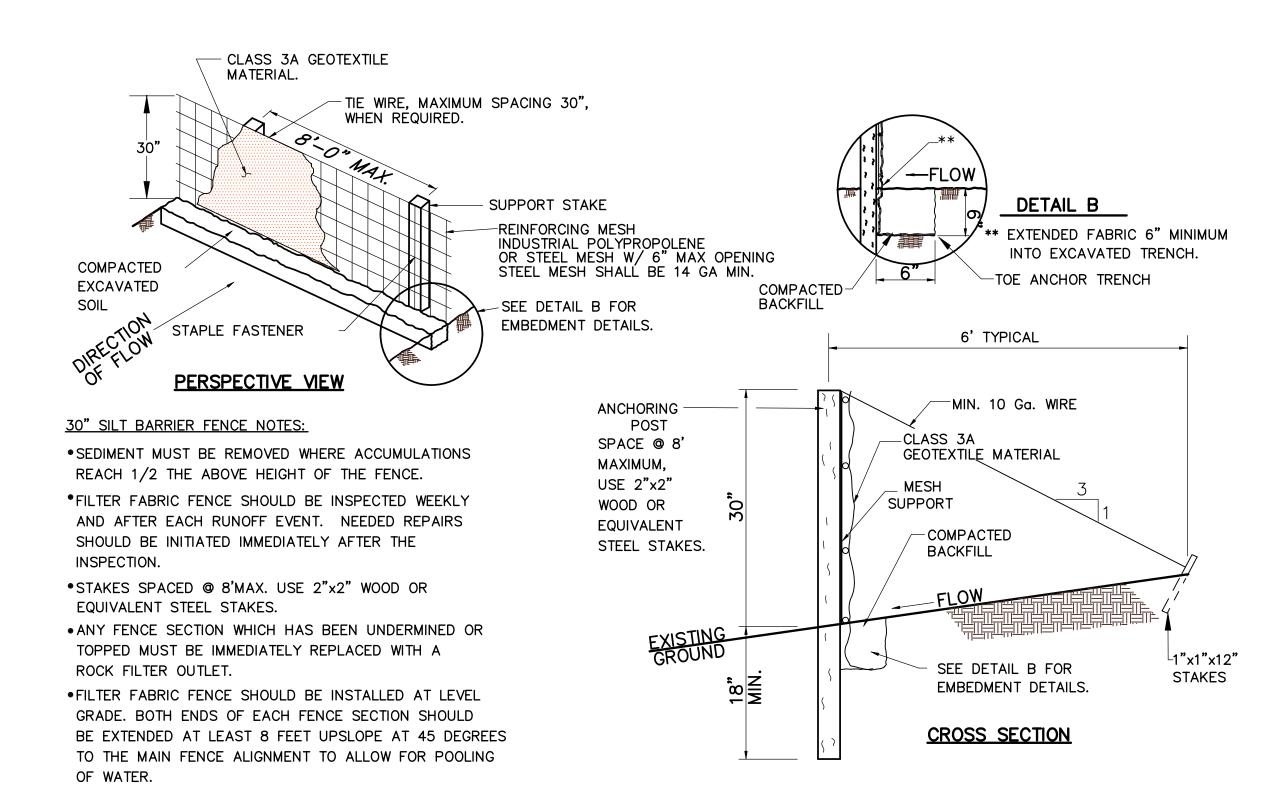
WyC- WYOMING GRAVELLY SANDY LOAM 8-15% SLOPES OxB- OPUAGA - LACKAWANNA EXTREMELY STONY LOAM 8-25% SLOPES WyB- WYOMING GRAVELY SANDY LOAM 3-8% SLOPES LbB- LACKAWANNA EXTREMELY STONY SOIL 0-8% SLOPES

WpC- WELLSBORO EXTREMELY STONY LOAM 8-25% SLOPES LBE- LACKAWANNA & BATH EXTREMELY STONY SOILS, STEEP CmA- CHIPPEWEA & NORWICH SILT LOAMS, 0 TO 25% SLOPES OxB- OPUAGA-LACKAWANNA EXTREMELY STONY LOAMS 0-8% SLOPES LbC- LACKAWANNA EXTREMELY STONY SOIL 8-25% SLOPES

LyE- LORDSTOWN & OQUAGA EXTREMELY STONY SOILS, 25-70% SLOPES FOR SOIL DESCRIPTIONS REFER TO SOIL SURVEY OF MONROE COUNTY, AUGUST 1981.



OUTLET PROTECTION DETAIL



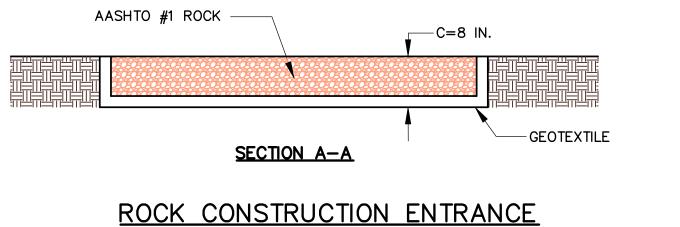
30" SILT BARRIER FENCE

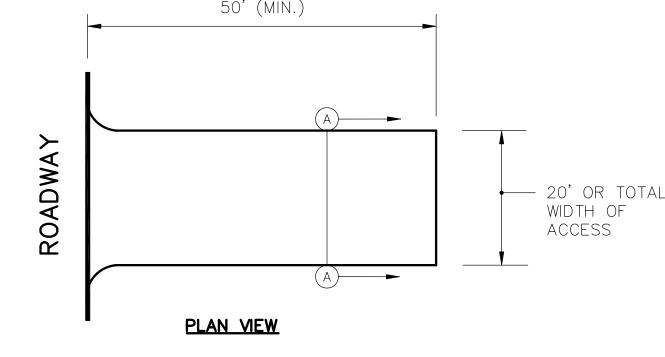
MAXIMUM SLOPE LENGTHS FOR FILTER FABRIC FENCES MAX. SLOPE LENGTH PECENT (FT) ABOVE FENCES 18"HIGH 30"HIGH SUPER 500 300

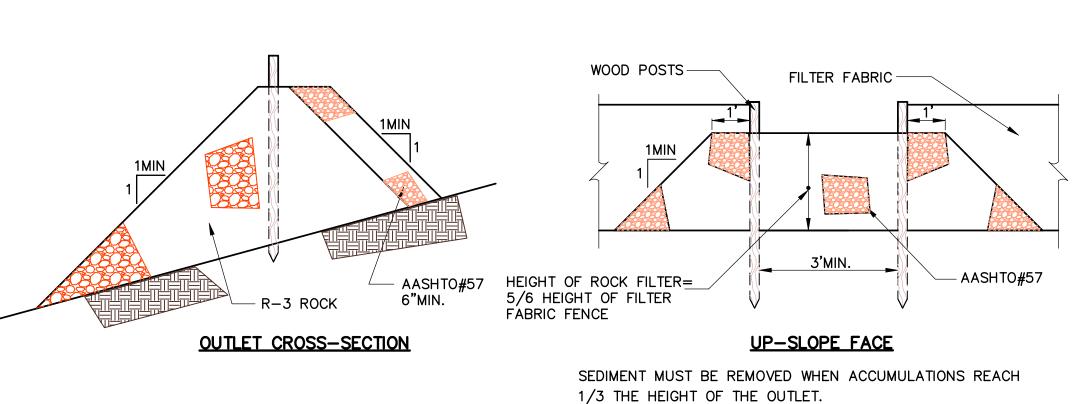
STAKE → STAPLES

JOINING FENCE SECTIONS

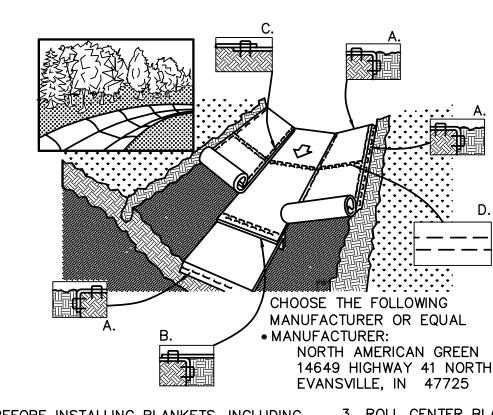
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE MAINTAINED TO THE SPECIFIED DIMENSIONS BE ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.







ROCK FILTER OUTLET



• THE DOUBLE NET STRAW BLANKET FEATURES AGRICULTURAL STRAW STITCHED WITH BIODEGRADABLE THREAD BETWEEN TWO NATURAL FIBER NETS. IT OFFERS EROSION PROTECTION FOR UP TO 12 MONTHS. AND ITS 100% ORGANIC COMPOSITION MAKES IT A POPULAR CHOICE FOR USE IN ENVIRONMENTALLY SENSITIVE AREAS. • STEEL PINS OR STAPLES ARE USED TO HOLD THE STRAW BLANKET IN PLACE. THE PINS OR STAPLES SHOULD BE SPACED NOT MORE THAN 3 FEET APART IN 3 ROWS FOR EACH STRIP. WITH ONE ROW ALONG EACH EDGE AND ONE ROW ALTERNATELY SPACED IN THE CENTER. AT THE OVERLAPPING EDGES OF PARALLEL STRIPS, STAPLES SHOULD BE SPACED AT 2 FEET OR LESS. AT ALL ANCHOR SLOTS, JUNCTION SLOTS, AND CHECK SLOTS, SPACING SHOULD BE 6 INCHES OR LESS. • SEED USING THE FOLLOWING FORMULA BIRDSFOOTTREFOIL, PLUS

 ϕ ϕ ϕ ϕ - ϕ \circ \circ $\Phi \circ \circ \circ$ 0 0 0 03.4 STAPLES PER SQ. YD For blankets with the optional North American Green DOT System[™] place staples/stakes through each of the WHITE colored dots. 30 LBS / ACRE

*2"-5"|-

- . PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP x 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED

AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH

OF THE BLANKET.

3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM. STAPLES/STAKES

SHOULD BE PLACED THROUGH EACH OF THE COLORED

DOTS CORRESPONDING TO THE APPROPRIATE STAPLE

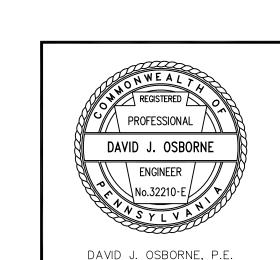
- 4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE
- SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP x 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

PATTERN.

. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED.

7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK

- SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF CHANNEL. 8. THE TERMINAL END OF THE BLANKETS MUST BE
- ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP x 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



LINING

FILTER BAG

PLAN VIEW

FILTER BAG

ELEVATION VIEW

WATER PUMPED FROM THE SEDIMENT STORAGE AREAS OF SEDIMENT BASINS.

FILTER BAGS SHOULD BE INSTALLED ACCORDING TO THE DETAILS SHOWN.

WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

SILTSACK-

1' MIN.

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

2 MIN

PUMPED WATER FILTER BAGS: FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM DISTURBED

AREAS PRIOR TO DISCHARGING TO WATERS OF THE COMMONWEALTH. THEY MAY ALSO BE USED TO FILTER

PUMPING RATES WILL VARY DEPENDING ON THE SIZE OF THE FILTER BAG, AND THE TYPE AND AMOUNT OF

FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWM WITH HIGH STRENGTH, DOUBLE

STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSE MUST BE

PUMPED WATER FILTER BAG

ISOMETRIC VIEW

N.T.S.

PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE

WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER,

BAG REMOVAL

BAGS SHALL BE LOCATED IN WELL-VEGETABLE (GRASSY) AREA. AND DISCHARGED ONTO STABLE, EROSION RESISTANT AREAS.

IF ROCK LINED, USE -

WELL VEGETATED, GRASSY AREA

WELL VEGETATED, GRASSY AREA

SEDIMENT DISCHARGED TO THE BAG.

SLOPES GREATER THAN 5%.

AND SECURELY CLAMPED.

INSTALLATION DETAIL

2"x2"x3/4"

BLOCK (TYP.)

1/4" NYLON ROPE

EXPANSION RESTRAINT

RUBBER

CLASS 2 GEOTEXTILE MATERIALS

2'MIN.CLEAN

IF SEEDING, USE N.A. GREEN

(OR EQUAL)

TYPICAL DITCH SECTION

WITH VEGETATION AND LINING

-DISCHARGE HOSE

 ot INTAKE HOSE

└INTAKE HOSE

• INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT

ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED.

• FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS

NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

• REMOVE LID FROM CATCH BASIN, DROP IN THE SILTSACK AND REPLACE THE LID.

SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL

• INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND

• COVER THE FLAPS WITH DIRT AND THE INSTALLATION IS COMPLETE.

• REMOVE FILLED SILTSACK, CLEAN & REUSE OR REPLACE IF DAMAGED.

• SLIDE 2 REBARS THROUGH THE POCKETS ON THE LONG SIDE FLAPS.

AFTER LIFTING BARS ARE IN PLACE REMOVE CATCH BASIN LID.

BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS.

ROADWAY SURFACE RECEIVES FINAL COAT.

DAMAGED FILTER BAGS SHOULD BE REPLACED.

AFTER EACH RUNOFF EVENT.

HOOK A LIFT SLING TO THE REBAR.

PICK THE SACK UP WITH HEAVY EQUIPMENT.

<u>FILTER BAG INLET PROTECTION</u>

"SILTSACK" MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC. (800-448-3636),

1/2 FULL.

EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED

-DISCHARGE HOSE

WELL VEGETATED AREA

S150 DOUBLE NET STRAW MAT

COVER MATERIAL

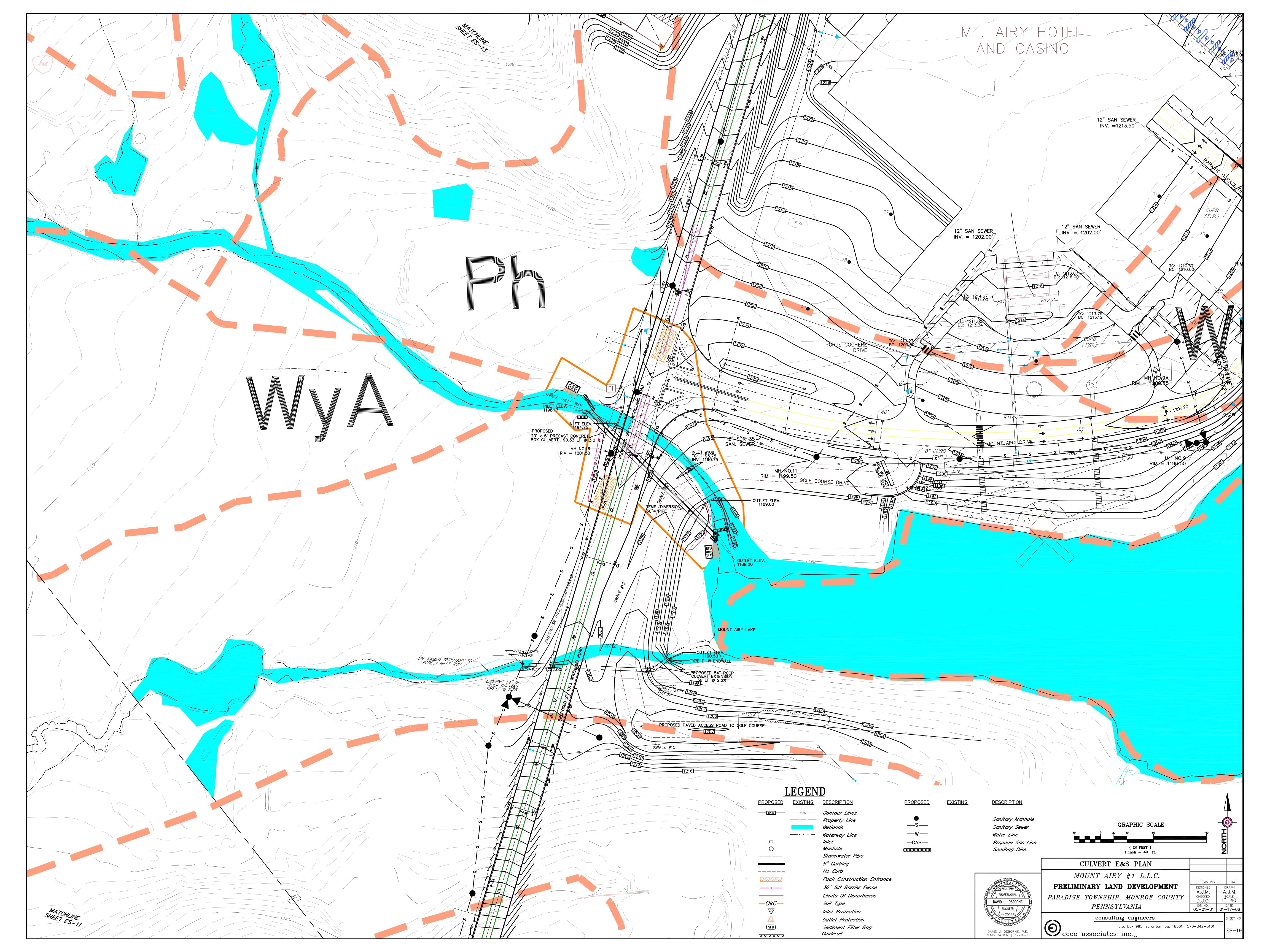
ROADWAY/UTILITY E&S DETAILS MOUNT AIRY #1 L.L.C. REVISIONS PRELIMINARY LAND DEVELOPMENT A.J.M. A.J.M. CHECKED PARADISE TOWNSHIP, MONROE COUNTY D.J.O. NONE

JOB NO. DATE

05-01-01 01-17-06 PENNSYLVANIA

consulting engineers ceco associates inc. p.o. box 995, scranton, pa. 18501 570-342-3101

<u>S150 - SHORT TERM DOUBLE NET EROSION BLANKET - SEEDED WITH BIRDSFOOTTREFOIL</u> PLUS TALL FESCUE FOR PROPOSED SWALE AT THE REAR OF THE PROPOSED BUILDING TO INLET #8



EROSION AND SEDIMENT POLLUTION CONTROL NOTES

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- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
- ALL BMP'S SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE STABILIZATION SPECIFICATIONS. DISTURBED AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
- ROCK CONSTRUCTION ENTRANCES SHALL NOT OBSTRUCT ROADSIDE DRAINAGEWAYS. ENTRANCE GRADES SHOULD MATCH ROADSIDE SWALES OR AN APPROPRIATE SIZE PIPE SHOULD BE INSTALLED. WHEN PIPING. STABLE HEAD AND END WALLS SHOULD BE PROVIDED.
- SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGEWAYS IS NOT ACCEPTABLE.
- HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE. • STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED WILL BE
- SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
- THE SITE WILL BE CONSIDERED TO BE PERMANENTLY STABILIZED WHEN ALL PERMANENT CONTROL MEASURES/FACILITIES HAVE BEEN COMPLETED AND ARE OPERATIONAL, TEMPORARY CONTROL MEASURES/FACILITIES REMOVED. AND UNIFORM EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS. THE STANDARD FOR THIS VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA.
- ANY CHANGES TO THE EROSION AND SEDIMENTATION CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED EROSION AND SEDIMENTATION CONTROL PLANS TO THE DISTRICT FOR RE-REVIEW. THE REVISED PLANS MUST MEET ALL CURRENT STATE EROSION AND SEDIMENT POLLUTION CONTROL REQUIREMENTS, AS WELL AS DISTRICT REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND UP-KEEP OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS ON SITE. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR ALL PERMANENT EROSION CONTROLS ON THE SITE.
- ANY WASTE MATERIAL FROM THE PROJECT SITE TO BE RECYCLED OR DISPOSED OF SHALL BE DONE SO IN ACCORDANCE WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE ROADWAYS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING.
- UNTIL THE SITE ACHIEVES FINAL STABILIZATION. THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES AND MAINTAIN AND MAKE AVAILABLE TO MONROE COUNTY CONSERVATION DISTRICT COMPLETE. WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE MONROE COUNTY CONSERVATION DISTRICT.
- THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE MONROE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR
- ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS
- A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS. • EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES. THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE MONROE COUNTY CONSERVATION DISTRICT TO AN ON-SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.
- ALL BMP'S SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
- AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON—VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTIC
- SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL
- SLOPES 3:1 AND STEEPER. • THE AREA OF DISTURBANCE FOR THIS PROJECT WILL BE 1.40 ACRES.

SEQUENCE OF CONSTRUCTION

ALL EARTHMOVING ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTHMOVING ACTIVITIES. EACH STAGE MUST BE COMPLETED BEFORE A SUBSEQUENT STAGE IS

- 1. THE CONTRACTOR IS TO SET UP HIS MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SIGNING. IMPLEMENT DETOUR.
- 2. CLEAR AND GRUB THE SITE FOR SILT BARRIER FENCE AS REQUIRED. THIS WORK INCLUDES THE REMOVAL OF SMALL TREES AND BRUSH ABOVE THE GROUND ELEVATION. 3. INSTALL ROCK CONSTRUCTION ENTRANCES, AND SILT BARRIER FENCE MARKED "SF" AS SHOWN ON
- 4. CONSTRUCT SEDIMENT FILTER BAGS FOR PUMPED WATER, AS INDICATED ON THE PLANS. THE SEDIMENT FILTER BAGS MUST BE CONSTRUCTED ACCORDING TO THE DETAIL BEFORE THE FIRST
- TRENCH IS EXCAVATED FOR PIPE INSTALLATION. 5. INSTALL THE TEMPORARY STREAM DIVERSION SYSTEM AND OUTLET PROTECTION. CONSTRUCT SANDBAG DIKES AT BOTH UPSTREAM AND DOWNSTREAM ENDS OF THE TWO 60" DIAMETER PIPES. DIVERT THE STREAM THROUGH THE TEMPORARY STREAM DIVERSION SYSTEM.
- 6. REMOVE EXISTING BRIDGE DECK AND SUPERSTRUCTURE, ABUTMENTS, AND WINGS. NO PORTION OF THE BRIDGE WILL BE PERMITTED TO BE DROPPED INTO THE CREEK. SHOULD ANY DEBRIS FALL INTO THE CREEK, IT MUST BE REMOVED IMMEDIATELY.
- 7. EXCAVATE AND INSTALL CONCRETE BOX CULVERT, WINGWALLS, APRON, AND OUTLET PROTECTION. BACKFILL AND GRADE SURROUNDING AREAS. STABILIZE ALL DISTURBED SLOPE AREAS WITH SEED, MULCH AND EROSION CONTROL MATTING IMMEDIATELY.
- 8. REMOVE TEMPORARY STREAM DIVERSION SYSTEM, SANDBAG DIKES, AND OUTLET PROTECTION.
- 9. REMOVE EXISTING PAVEMENT ON APPROACH ROADWAY AS NEEDED. GRADE APPROACH ROADWAY AND INSTALL BITUMINOUS CONCRETE PAVEMENT AND GUIDERAIL. REMOVE ROCK CONSTRUCTION ENTRANCES. STABILIZE REMAINING DISTURBED AREAS WITH SEED AND MULCH IMMEDIATELY.
- 10. REMOVE SEDIMENT FILTER BAGS, AND STABILIZE REMAINING AREAS WITH SEED AND MULCH IMMEDIATELY AFTER FINAL GRADING HAS CEASED.
- 11. REMOVE MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL SIGNING. DIVERT TRAFFIC ONTO NEW STRUCTURE.
- 12. UPON STABILIZATION OF UPLAND AREAS, REMOVE REMAINING CONTROL MEASURES SUCH AS SILT FENCE. STABILIZATION SHOULD BE CONSIDERED WHEN UPLAND AREAS HAVE A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER WITH A DENSITY OR PAVEMENT SURFACE CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS.
- 13. THE EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE REMOVED AND PROPERLY DISPOSED OF IN A PERMITTED LANDFILL BY THE CONTRACTOR WHEN THE PROJECT IS COMPLETE.

UTILITY INSTALLATION NOTES

- START INSTALLATION OF UTILITIES AT THE DOWNSTREAM END.
- PLACE EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH. CAP PIPES AT END OF DAY TO PREVENT SEDIMENT FROM ENDING.
- IF TRENCH DEWATERING REQUIRED. PUMP EFFLUENT MUST BE DISCHARGED THROUGH
- A SEDIMENT TRAPPING DEVICE. • BACKFILL TRENCH AT END OF DAY, STABILIZING DISTURBED AREAS IMMEDIATELY.
- THE TOTAL LENGTH OF EXCAVATED TRENCH OPEN AT ANY ONE TIME SHOULD NOT BE GREATER THAN THE TOTAL LENGTH OF UTILITY LINE THAT CAN BE PLACED IN THE TRENCH AND BACK-FILLED IN ONE WORKING DAY. NO MORE THAN 50 LINEAL FEET OF OPEN TRENCH SHOULD EXIST WHEN UTILITY LINE INSTALLATION CEASES AT THE END OF THE WORKDAY.

CHAPTER 93. WATER QUALITY STANDARDS

• STORMWATER RUNOFF WILL DISCHARGE INTO FOREST HILLS RUN WHICH IS CLASSIFIED AS A HQ-CWF (A HIGH QUALITY COLD WATER FISH HABITAT).

PRIMARY SOIL TYPES

Ph-PHILO SILT LOAM FOR SOIL DESCRIPTIONS REFER TO SOIL SURVEY OF MONROE COUNTY, AUGUST 1981.

2. SEED FORMULAS, SEE TABLE A.

	TABLE A				
FORMULA AND SPECIES	% BY WEIGHT	MINIMUM %		MAX. %	SEEDING RATE
			GERMINATION	WEED SEED	LBS. PER 1000 SY
FORMULA B					21.0 TOTAL
PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE) A COMBINATION OF IMPROVED CERTIFIED VARITIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20	98	90	0.15	4.0
CREEPING RED FESCUE OR CHEWINGS FESCUE.	30	98	85	0.15	6.0
• KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS) A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 25% OF THE TOTAL BLUEGRASS COMPONENT.	50	98	80	0.20	11.0
FORMULA C					9.0 TOTAL
CROWNVETCH (CORONILLA VARIA)	45	99	70	0.10	4.0
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	55	98	90	0.15	5.0
FORMULA D					21.0 TOTAL
• TALL FESCUE (FESTUCA ARUNDINACEA VAR KENTUCKY 31)	70	98	85	0.15	15.0
• CREEPING RED FESCUE OR CHEWINGS FESCUE	. 30	98	85	0.15	6.0
FORMULA E					10.0 TOTAL
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	100	98	90	0.15	10.0
FORMULA L					24.0 TOTAL
 HARD FESCUE MIXTURE (FESTUCA LONGIFOLIA) A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL HARD FESCUE COMPONENT. 	55	98	85	0.15	13.0
CREEPING RED FESCUE	35	98	85	0.15	8.5
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	10	98	90	0.15	2.5
FORMULA W					10.5 TOTAL
• TALL FESCUE (FESTUCA ARUNDINACEA VAR KENTUCKY 31)	70	98	85	0.15	7.5
BIRDSFOOT TREFOIL MIXTURE (LOTUS CORNICULATUS) A MIXTURE OF 1/2 VIKING AND 1/2 OF EITHER EMPIRE, NORCEN, OR LEO.	20	98	80*	0.10	2.0
• REDTOP (AGROSTIS ALBA)	10	92	80	0.15	1.0

805.3 <u>Construction</u> section 805 --- mulching

A) MULCHING SEEDED AREAS: PLACE MULCH, OF THE KIND INDICATED, IMMEDIATELY AFTER SEEDING OR CONCURRENTLY WITH THE SEEDING. UNLESS OTHERWISE INDICATED, PLACE ONLY STRAW OR WOOD CELLULOSE OVER TOPSOILED AREAS. USE HAY, STRAW, OR WOOD CELLULOSE IN OTHER AREAS. AS INDICATED OR SPECIFIED.

PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,240 POUNDS PER 1,000 SQUARE YARDS, OR AS OTHERWISE INDICATED. IF DIRECTED, INCREASE THE RATE OF APPLICATION, DEPENDING UPON THE MATERIAL USED, SEASON, SOIL CONDITIONS OR METHOD OF APPLICATION. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH, MACHINES WHICH CUT MULCH INTO SHORT PIECES WILL NOT BE PERMITTED. ANCHOR MULCH WITH SPECIFIED MULCH BINDERS APPLIED AT THE FOLLOWING RATES:

- RECYCLED CELLULOSE FIBER. 310 POUNDS PER 1,000 SQUARE YARDS.
- WOOD FIBER, 210 POUNDS PER 1,000 SQUARE YARDS.
- NONASPHALTIC EMULSION. AT MANUFACTURER'S RECOMMENDED RATE. POLYVINYL ACETATE. AT MANUFACTURER'S RECOMMENDED RATE.
- RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE. 210 POUNDS PER 1,000 SQUARE YARDS. APPLY WOOD FIBER MULCH HYDRAULICALLY IN ACCORDANCE WITH THE MANUFACTURER'S TANK-MIXING INSTRUCTIONS. IT MAY BE INCORPORATED AS AN INTEGRAL PART OF THE SLURRY AFTER THE SEED AND SOIL SUPPLEMENTS HAVE BEEN THOROUGHLY MIXED. APPLY UNIFORMLY AT THE RATE OF 320 POUNDS PER 1,000 SQUARE YARDS, UNLESS OTHERWISE INDICATED. MULCH TEMPORARY SEEDED AREAS WITH HAY.
- B) MULCHING PLANTED AREAS: UNIFORMLY MULCH ENTIRE PLANT PIT BASINS, SHRUB BEDS, AND OTHER AREAS AS DIRECTED TO A LOOSE DEPTH OF 3 INCHES, OR AS INDICATED. DO NOT MULCH AREAS PLANTED WITH CROWN VETCH OR REFORESTATION AREAS.
- PLACE MULCH EITHER BY HAND OR USING MECHANICAL SPREADING EQUIPMENT MANUFACTURED FOR THIS PURPOSE. TEST APPLICATION PROCEDURES TO ENSURE CONFORMANCE WITH DEPTH REQUIREMENTS. REDISTRIBUTE MULCH IN AREAS OF EXCESSIVE DEPTH. APPLY MULCH WITHIN 48 HOURS AFTER COMPLETION OF EACH PLANTED AREA.

RAIN. FIRE. OR OTHER CAUSES. AT INITIAL OR MODIFIED RATES. AS DIRECTED.

- C) MAINTENANCE: PROPERLY MAINTAIN MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. PROMPTLY REAPPLY MULCH MATERIALS WHICH BECOME DISLODGED OR LOST DUE TO WIND,
- AFTER MULCHING WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF A SLOPE FAILURE OCCURS, ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE, REPLACE THE MULCH, AS DIRECTED.

804.3 CONSTRUCTION

• FORMULA W

A) GENERAL: SPREAD SEEDS WHERE INDICATED AND AT THE RATES SPECIFIED IN TABLE A, OR AS OTHERWISE INDICATED. SPREAD SEEDS WITHIN THE FOLLOWING DATES, OR AS OTHERWISE INDICATED OR DIRECTED. • FORMULA B, D, & L --- MARCH 15 TO JUNE 1 AUGUST 1 TO OCTOBER 15

FORMULA C --- RYEGRASS PORTION: MARCH 1 TO OCTOBER 15 CROWN VETCH PORTION: ANYTIME EXCEPT SEPTEMBER AND OCTOBER --- MARCH 15 TO OCTOBER 15 • FORMULA E

AUGUST 15 TO SEPTEMBER 15 WHERE PROJECT CONDITIONS WARRANT, SEEDING DATES MAY BE EXTENDED. IF EXTENDED, EITHER APPLY FULL TREATMENT OR APPLY ONLY 50% OF THE PERMANENT SEEDING AND SOIL SUPPLEMENTS AND APPLY THE REMAINING 50% WITHIN THE NEXT SEEDING DATES, AS DIRECTED IN WRITING BY THE ENGINEER.

--- APRIL 1 TO JUNE 15

ON TOPSOILED AREAS, WHERE TEMPORARY SEEDING OR MULCHING HAS BEEN APPLIED, USE TILLAGE AND SOIL SUPPLEMENTS PRIOR TO PERMANENT SEEDING.

ON UNTOPSOILED AREAS, WHERE TEMPORARY SEEDING OR MULCHING HAS BEEN APPLIED, PERMANENT SEED AND/OR SOIL SUPPLEMENTS MAY BE APPLIED WITHOUT

B) TILLAGE: ON TOPSOILED AREAS, 3:1 AND FLATTER, THOROUGHLY LOOSEN THE SURFACE, TO A DEPTH OF AT LEAST 2 INCHES, BY DISKING, BY HARROWING, OR BY OTHER ACCEPTABLE METHODS UNTIL THE TILLAGE IS SATISFACTORY. ON UNTOPSOILED AREAS, 3:1 AND FLATTER, TILL ONLY AS DIRECTED. ALSO, TILL OR SCARIFY AREAS WHEN THE SURFACE IS GLAZED OR CRUSTED.

CORRECT SURFACE IRREGULARITIES BY FILLING ANY DEPRESSIONS AND LEVELING ROUGH OR UNEVEN AREAS. REMOVE ALL METAL OBJECTS, STONES LARGER THAN 2 INCHES IN ANY DIMENSION, AND OTHER DEBRIS OR OBJECTS DEEMED TO BE DETRIMENTAL TO MAINTENANCE OPERATIONS.

C) SOIL SUPPLEMENTS: UNIFORMLY APPLY SUPPLEMENTS TO THE AREAS TO BE SEEDED. PROPERLY DOCUMENT BULK DELIVERY, AS SPECIFIED IN SECTION 804.2 (a) 2. ON TOPSOILED AREAS, BLEND THE INITIAL SOIL SUPPLEMENTS INTO THE SOIL AT LEAST 2 INCHES, BY RAKING, DISKING, HARROWING, OR BY ANOTHER ACCEPTABLE METHOD. THE BLENDING OF THE SUPPLEMENTS INTO THE SOIL MAY BE PERFORMED DURING TILLAGE OPERATIONS.

PRIOR TO PROJECT COMPLETION, APPLY SLOW-RELEASE, NITROGEN FERTILIZER TO THE SURFACE OF FORMULA B, D, L, AND W SEEDED AREAS.

APPLY SOIL SUPPLEMENTS AS FOLLOWS. UNLESS OTHERWISE INDICATED: • PULVERIZED AGRICULTURAL LIMESTONE --- 800 POUNDS PER 1,000 S.Y. 10-20-20 ANALYSIS COMMERCIAL

--- 140 POUNDS PER 1,000 S.Y. FERTILIZER • 38-0-0 UREAFORM FERTILIZER --- 50 POUNDS PER 1,000 S.Y.

• 32-0-0 SULFUR COATED UREA --- 59 TO 50 POUNDS PER 1.000 S.Y. AS DIRECTED

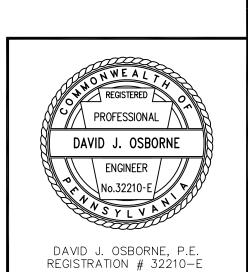
• 31-0-0 IBDU FERTILIZER --- 60 POUNDS PER 1,000 S.Y. D) MAINTENANCE: SATISFACTORILY MAINTAIN GRASS AND LEGUME AREAS WITHIN GRADING LIMITS, UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. HOW, AS INDICATED AND WHEN DIRECTED.

CONTROL PROHIBITED AND NOXIOUS WEED GROWTH WITHIN THE RIGHT OF WAY BY HERBICIDE SPRAYING OR CUTTING. THESE PLANTS ARE DEFINED BY LAW. AFTER THE SEEDING AND SOIL SUPPLEMENT WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF A SLOPE FAILURE OCCURS, ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR ESTABLISHMENT OF A NEW SLOPE, REAPPLY SOIL SUPPLEMENTS, THEN RESEED, AS SPECIFIED FOR THE ORIGINAL TREATMENT.

TEMPORARY SEEDING PROCEDURES

- ANY DISTURBED AREAS NOT SUBJECT TO CONSTRUCTION TRAFFIC WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL AT A RATE OF 2.5 TO 3 TONS PER ACRE.
- ANY AREA RECEIVING TEMPORARY SEEDING WHICH WILL BE LEFT FOR A PERIOD LONGER THAN ONE YEAR SHALL BE SEEDED WITH THE PERMANENT SEEDING MIXTURES. PERMANENT SEEDING OR REVEGETATION OF DISTURBED AREA:

E&S NOTES AND DETAILS FOR BRIDGE REPLACEMENT ONLY

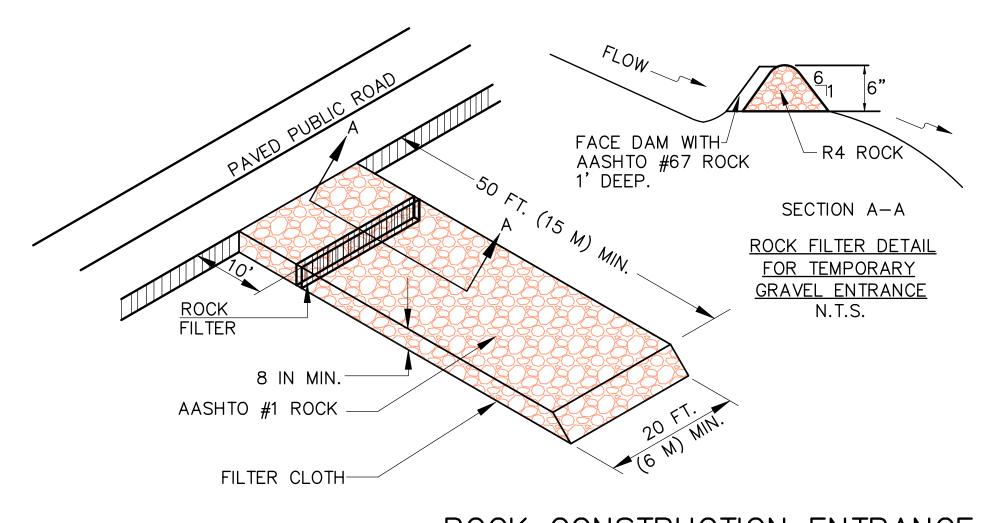


CULVERT E&S DETAILS MOUNT AIRY #1 L.L.C. PRELIMINARY LAND DEVELOPMENT PARADISE TOWNSHIP, MONROE COUNTY

PENNSYLVANIA consulting engineers

ceco associates inc., p.o. box 995, scranton, pa. 18501 570-342-3101

A.J.M.

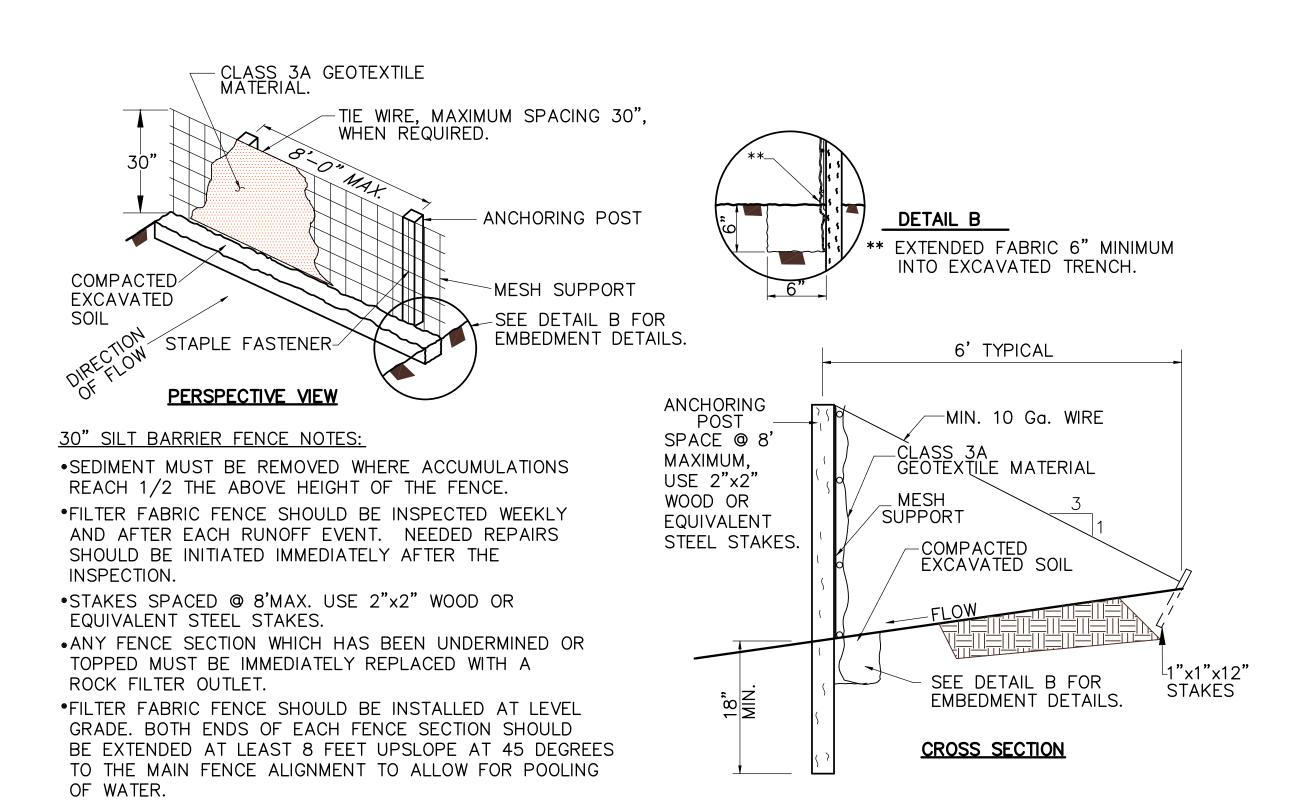


ROCK CONSTRUCTION ENTRANCE

N.T.S.

MAINTENANCE:

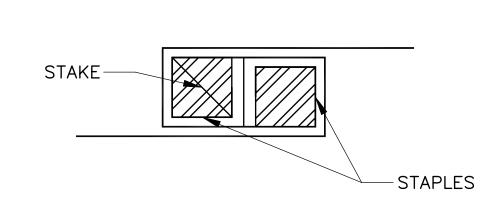
ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.



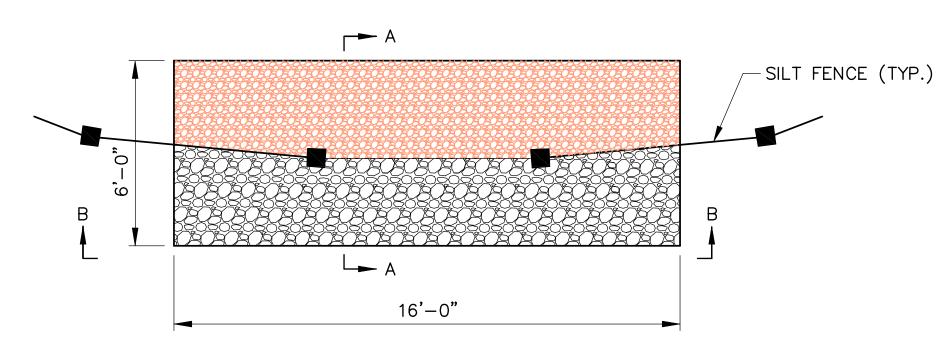
30" SILT BARRIER FENCE

MAXIMUM SLOPE LENGTHS FOR FILTER FABRIC FENCES

	1 ADINO	I LINULS			
PERCENT	MAX. SLOPE LENGTH (FT) ABOVE FENCES				
SLOPE	18"HIGH	30" HIGH	SUPER		
2	150	500	1,000		
5	100	250	500		
10	50	150	300		
15	35	100			
20	25	70	200		
25	20	55			
30	15	45	100		
35	15	40			
40	15	35	75		
45	10	30			
50	10	25	50		



JOINING FENCE SECTIONS
N.T.S.



NOTE:

INSTALL ROCK FILTER OUTLETS AS
DIRECTED WHERE SILT FENCING
CANNOT HANDLE THE CONDITIONS
OF THE SITE, AS DIRECTED IN NOTE
3 OF THE SILT BARRIER FENCE DETAIL.

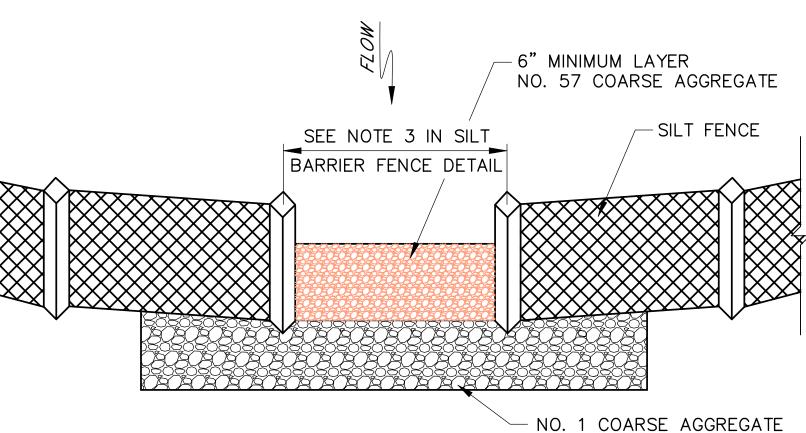
MAINTENANCE:
SEDIMENT MUST BE REMOVED WHERE

ACCUMULATIONS REACH 1/3 THE HEIGHT

OF THE OUTLETS OR REPLACED WITH

NEW ROCK.

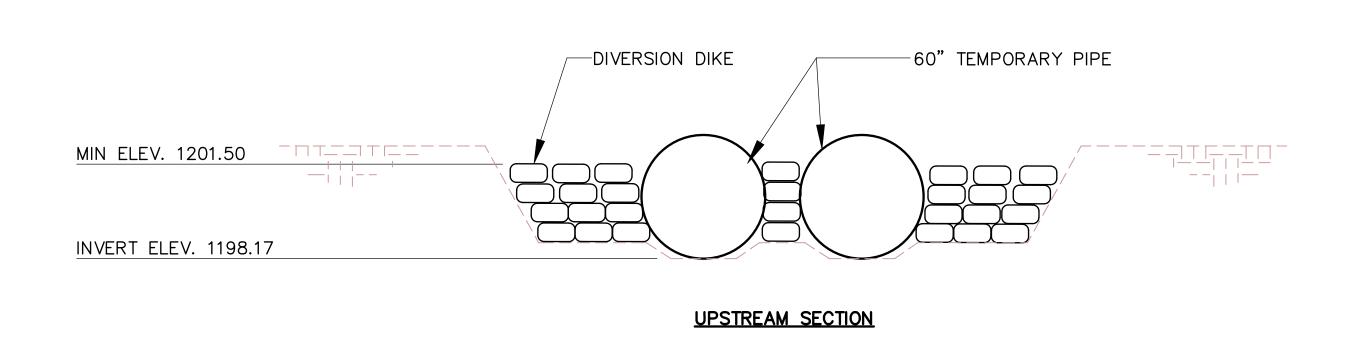
TYPICAL PLAN

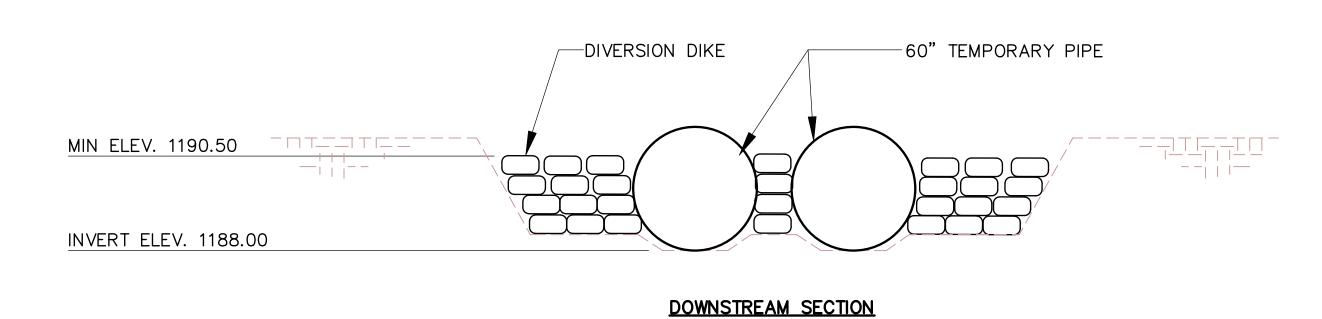


TYPICAL SECTION B-B

TYPICAL SECTION A-A

ROCK FILTER OUTLET FOR SILT BARRIER FENCE





TEMPORARY STREAM DIVERSION SYSTEM

FENCE

TYP.

DOUBLE CLAMP

TYP.

PUMP DISCHARGE

HOSE

FLOW

ROCK CLASS, R-4

NO.57 COARSE

AGGREGATE PLATFORM

SECTION B—B

FENCE

2'

9'

TYP.

TYP.

TYP.

INC.

SEDIMENT FILTER BAG

GEOTEXTILE, CLASS 4

EXISTING GROUND

1' (MIN.)

NO.57 COARSE

SEDIMENT FILTER BAG

SEDIMENT FILTER BAG

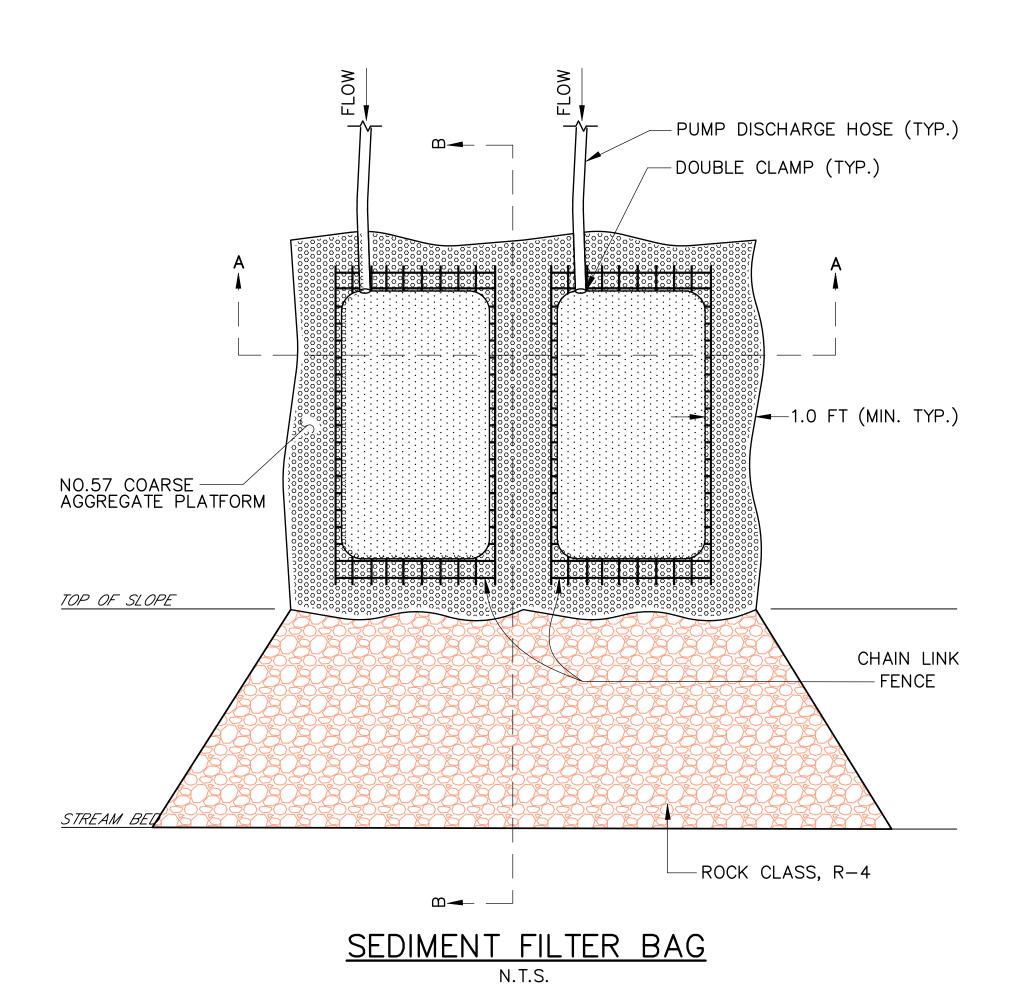
SEDIMENT FILTER BAG

SEDIMENT FILTER BAG

SECTION A-A

- GEOTEXTILE, CLASS 4

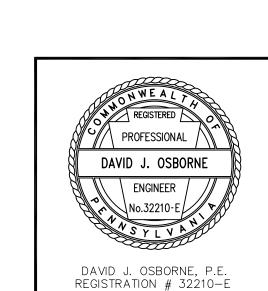
AGGREGATE PLATFORM



MAX. PUMP W L RATE 9' 12'

SEDIMENT FILTER BAG NOTES:

- 1. PRIOR TO SEDIMENT FILTER BAG INSTALLATION THE CONTRACTOR MUST MAKE PROVISIONS TO SUPPORT THE SEDIMENT FILTER BAG DURING THE REMOVAL PROCESS.
- 2. INSPECT AREA TO DETERMINE PATH DISCHARGE WATER WILL TAKE. STABILIZE ANY POTENTIALLY ERODABLE AREAS (STEEP SLOPES).
- 3. CONSTRUCT COURSE AGGREGATE PLATFORM SURFACE LEVEL. PLACE SEDIMENT FILTER BAG ON STABILIZED AREA.
- 4. USE A PUMP WITH A RATING IN GALLONS PER MINUTE OR 750 GALLONS PER MINUTE NOT TO EXCEED 50% OF THE MAXIMUM FLOW RATE LISTED ON THE BAG LABEL. DOUBLE CLAMP THE PUMP DISCHARGE HOSE FIRMLY TO THE BAG, AS SPECIFIED BY THE MANUFACTURER.
- 5. PROVIDE MACHINERY ACCESS TO THE BAG FOR DISPOSAL PURPOSES. PROVIDE METHOD OF BAG REMOVAL TO INCLUDE: LIFTING 1/2 FULL BAG WITHOUT TEARING, PROPER DISPOSAL, AND REUSE OF EXISTING PLATFORM. (PROVIDE METHOD OF REMOVAL TO ENGINEER FOR APPROVAL)
- 6. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
- 7. MONITOR AND EVALUATE THE ENTIRE PUMPING OPERATION TO ASSURE THAT THE BAG CONTINUES TO FUNCTION PROPERLY. REPLACE THE BAG WHEN THE CONTAINED SILT REDUCES THE BAGS FLOW TO APPROXIMATELY 50% OF THE RATE OF INITIAL DISCHARGE, OR THEN DIRECTED BY THE INSPECTOR—IN—CHARGE. DISPOSE OF SEDIMENT IN A MANNER SATISFACTORY TO THE ENGINEER. RESTORE THE AREA AS SPECIFIED IN SECTION 105.14.
- 8. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
- 9. AT LEAST ONE BACK UP BAG FOR SEDIMENT FILTER IS TO BE KEPT ON SITE.

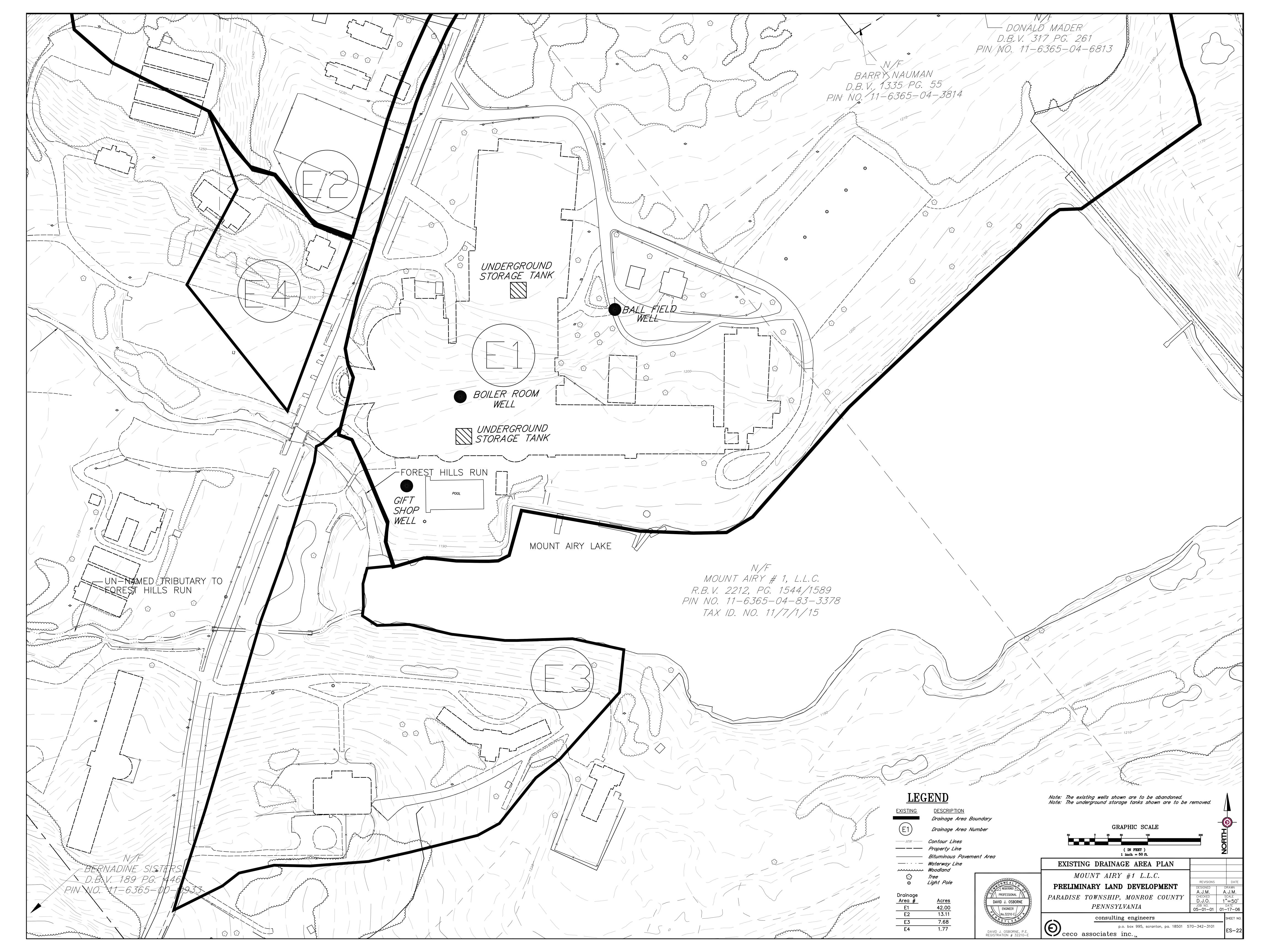


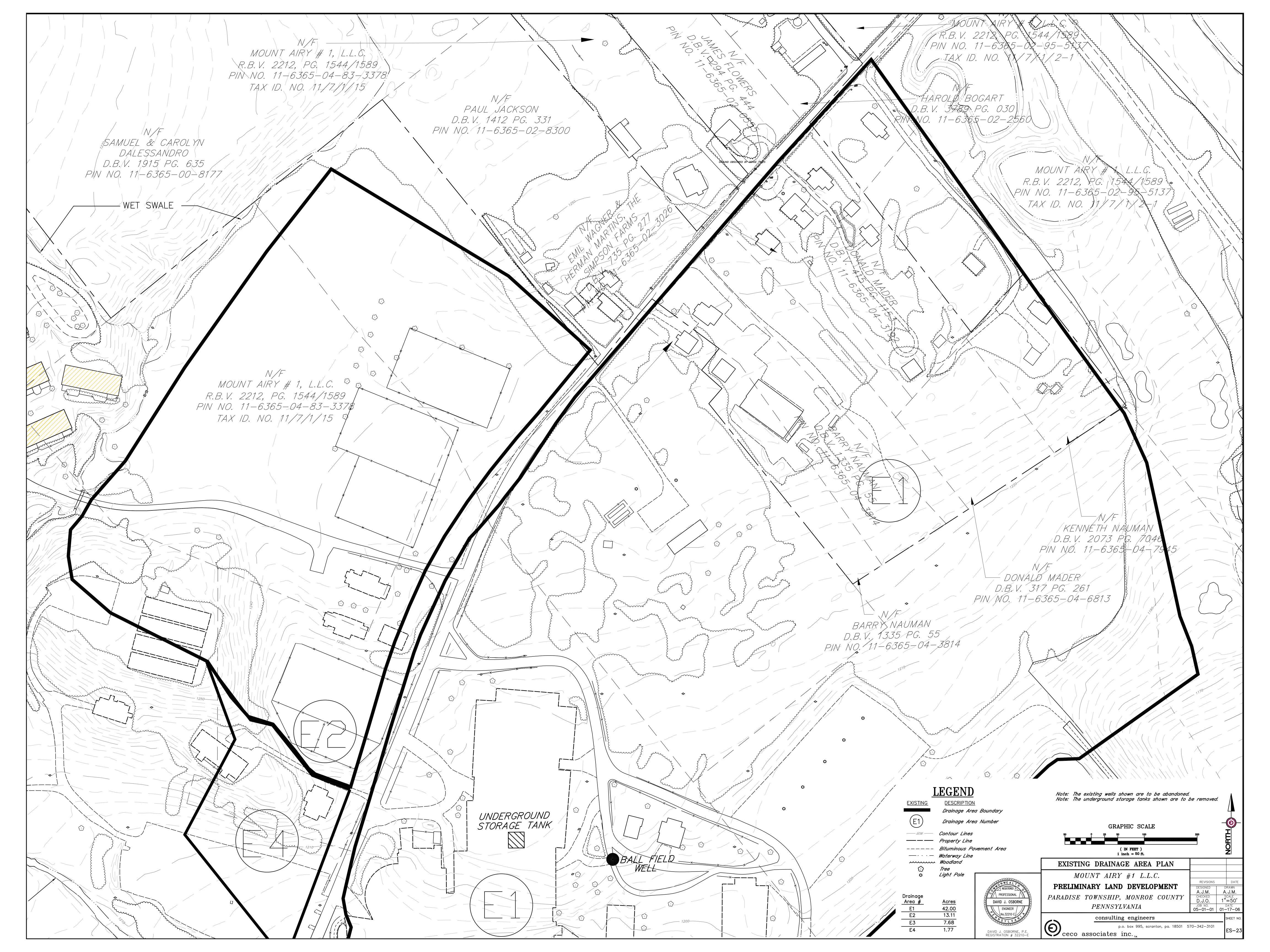
CULVERT E&S DETAILS		
MOUNT AIRY #1 L.L.C.		
	REVISIONS	D
PRELIMINARY LAND DEVELOPMENT	DESIGNED A.J.M.	DRAW A.J.N
PARADISE TOWNSHIP, MONROE COUNTY	CHECKED	SCALE
PENNSYLVANIA	D.J.O. JOB NO.	NON! DATE
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consulting engineers		SHEE

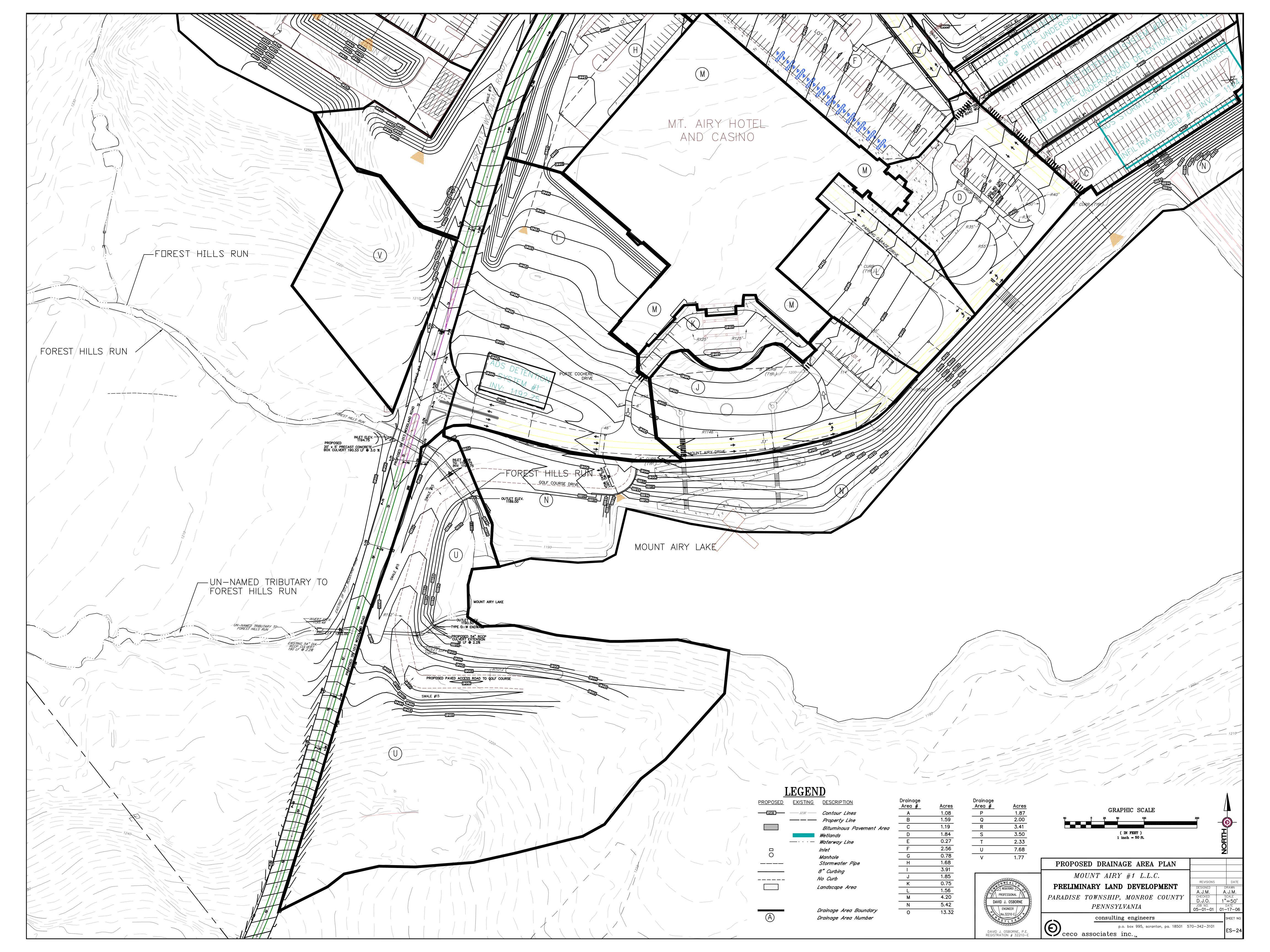
p.o. box 995, scranton, pa. 18501 570-342-3101

ceco associates inc.

E&S NOTES AND DETAILS FOR BRIDGE REPLACEMENT ONLY









MOUNT AIRY # 1 L.L.C. ROADWAY IMPROVEMENT PROJECT

PARADISE TOWNSHIP, MONROE COUNTY, PENNSYLVANIA

OWNER/APPLICANT:

MOUNT AIRY #1 L.L.C. 42 WOODLAND ROAD MOUNT POCONO, PA 18344

CONTACT: ROBERT McNICHOLS SR. (570) 947-9026

TOTAL PARCEL AREA = 889.98 ACRES

REVIEWING AGENCY

PA DEPARTMENT OF ENVIRONMENTAL PROTECTION NORTHEAST REGION 2 PUBLIC SQUARE WILKES-BARRE, PA 18711-0790 (570) 826-2511

PARADISE TOWNSHIP PLANNING COMMISSION RR1, BOX 1226 CRESCO, PA 18326 (570) 595-8840

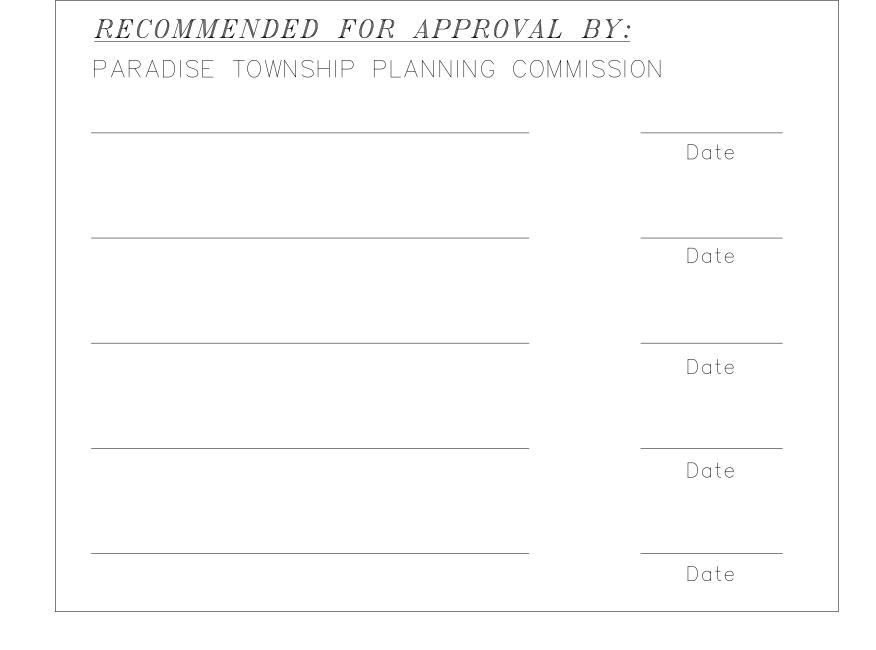
PARADISE TOWNSHIP SUPERVISORS RR1, BOX 1226 CRESCO, PA 18326 (570) 595-8840

INDEX OF SHEETS

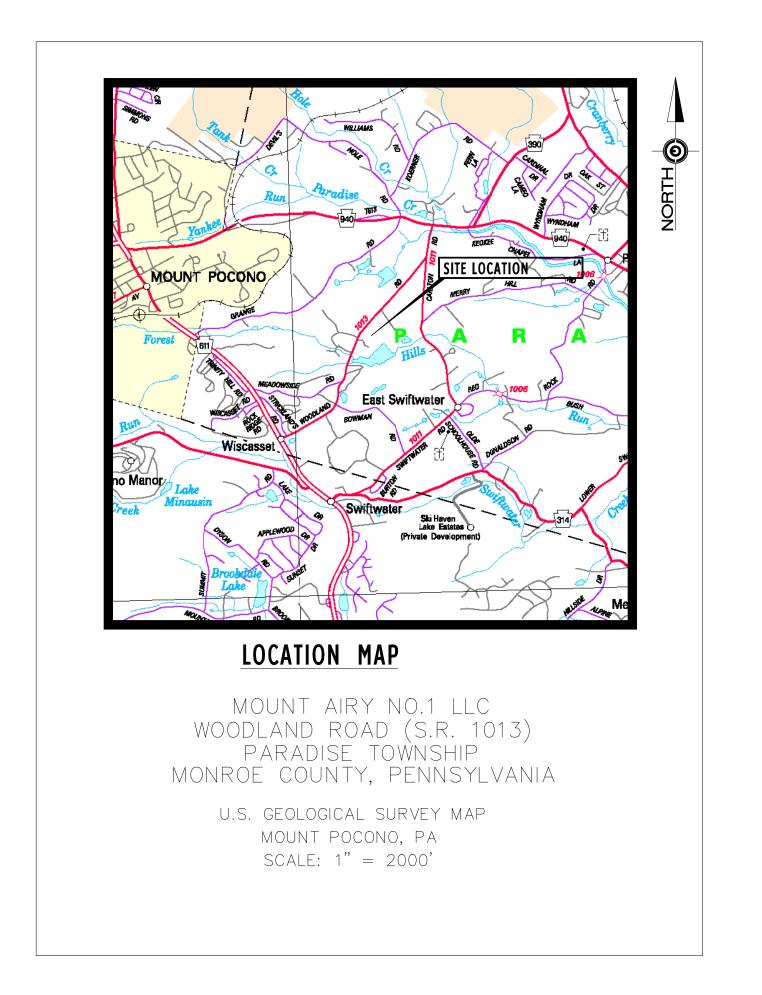
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- C 15PROFILE PLANS
- C 16PROFILE PLANS
- PROFILE PLANS C-17

RECOMMENDED FOR APPROVAL BY: PA DEPARTMENT OF ENVIRONMENTAL PROTECTION Date Date Date

SCALE IN FEET





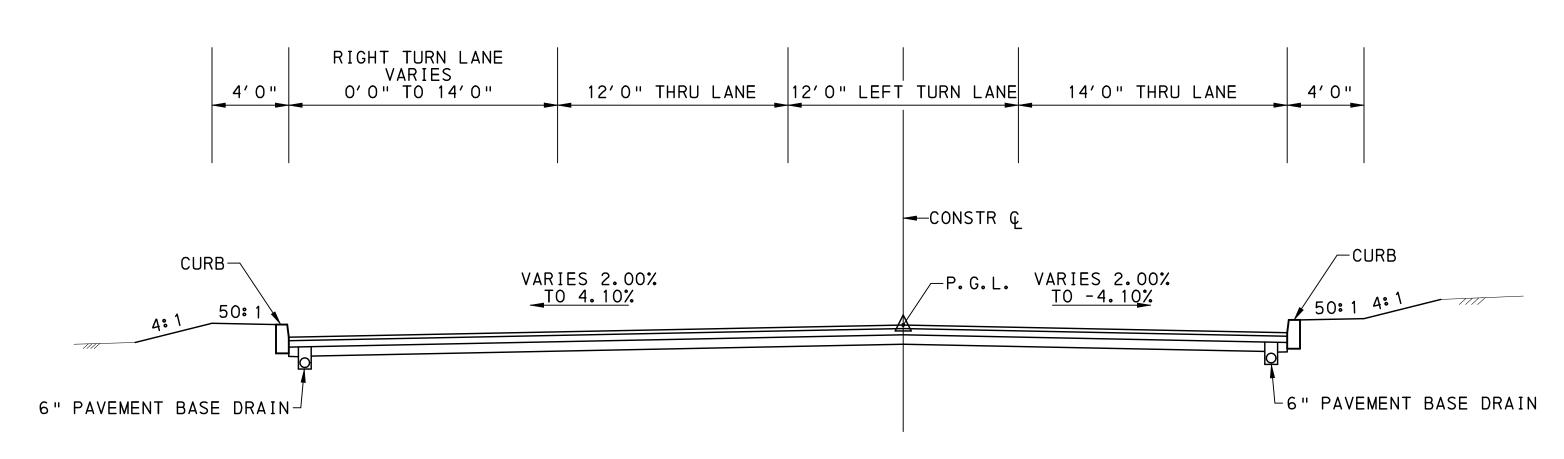


MOUNT AIRY #1 L.L.C. LAND DEVELOPMENT DESIGNED D.R.B. D.R.B. PARADISE TOWNSHIP, MONROE COUNTY PENNSYLVANIA TRAFFIC PLANNING & DESIGN, INC. | SANATOGA COMMONS, 2500 EAST HIGH STREET, SUITE 650 POTTSTOWN, PENNSYLVANIA 19464

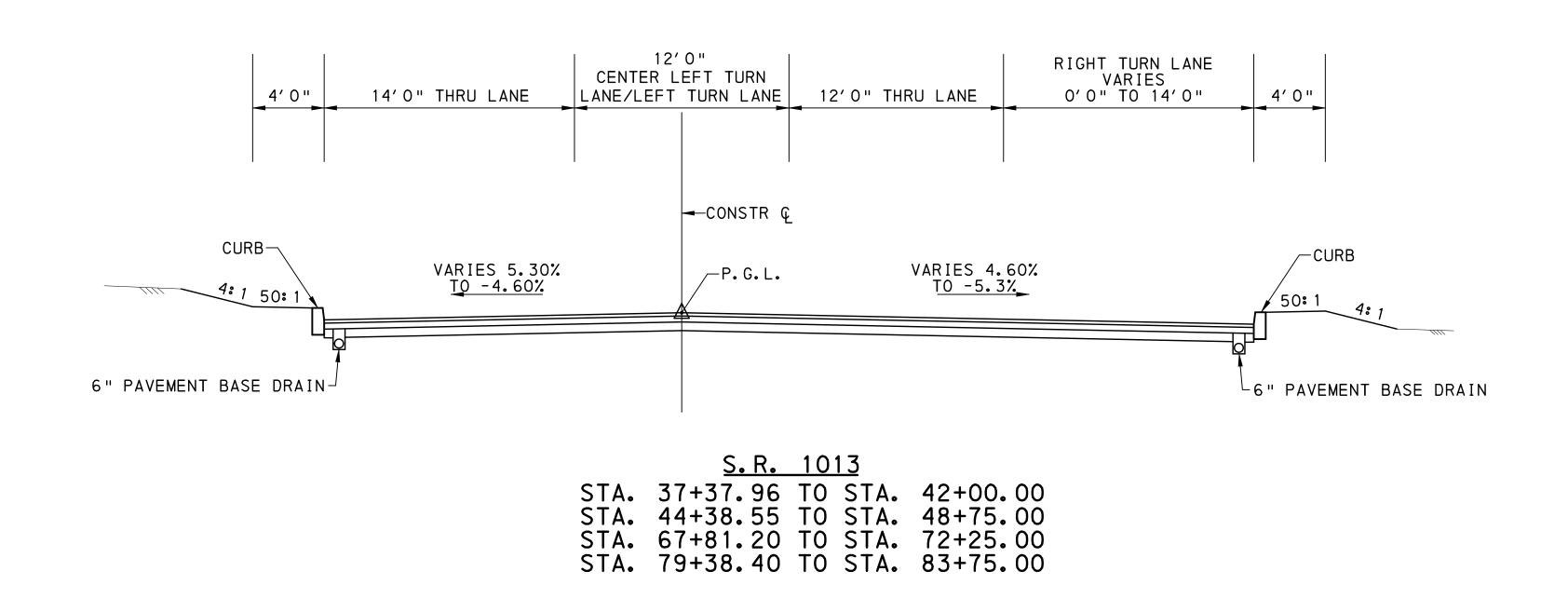
OFFICE (610)326-3100 FAX (610)326-9410

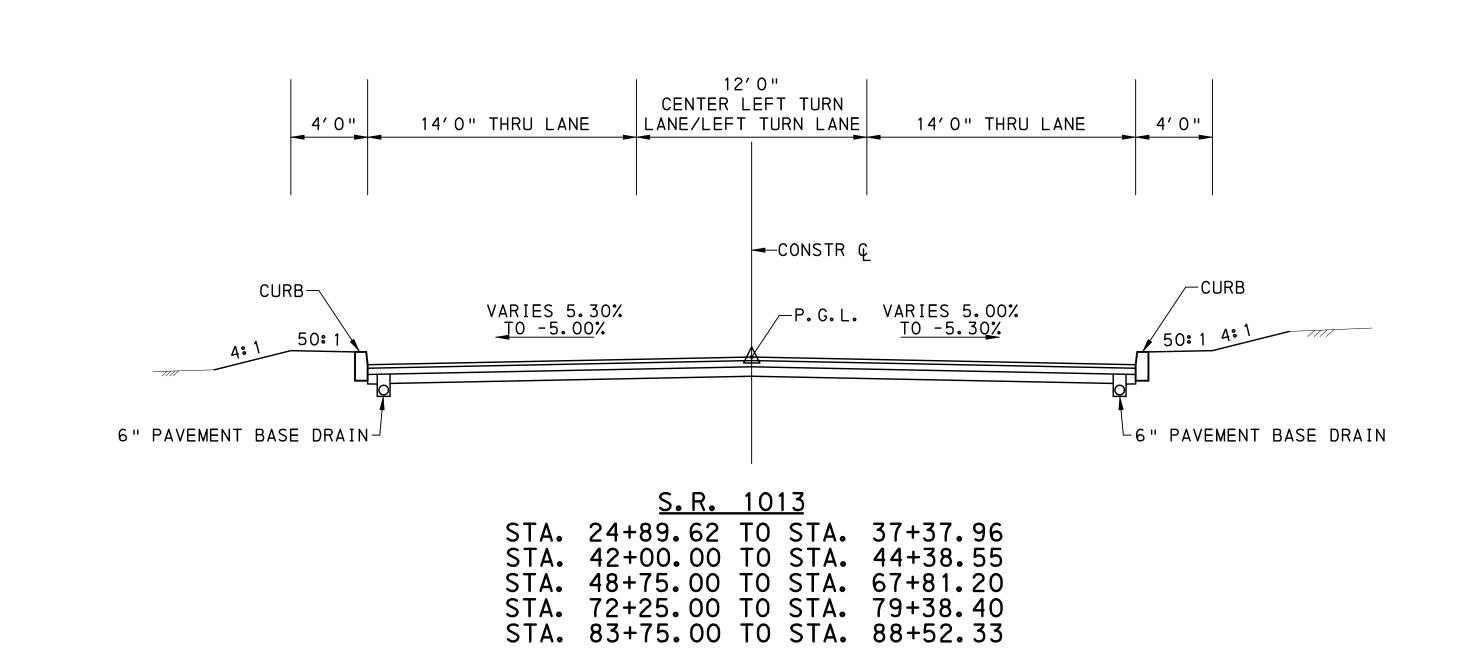
DANIEL R. BITTERLICH, P.E

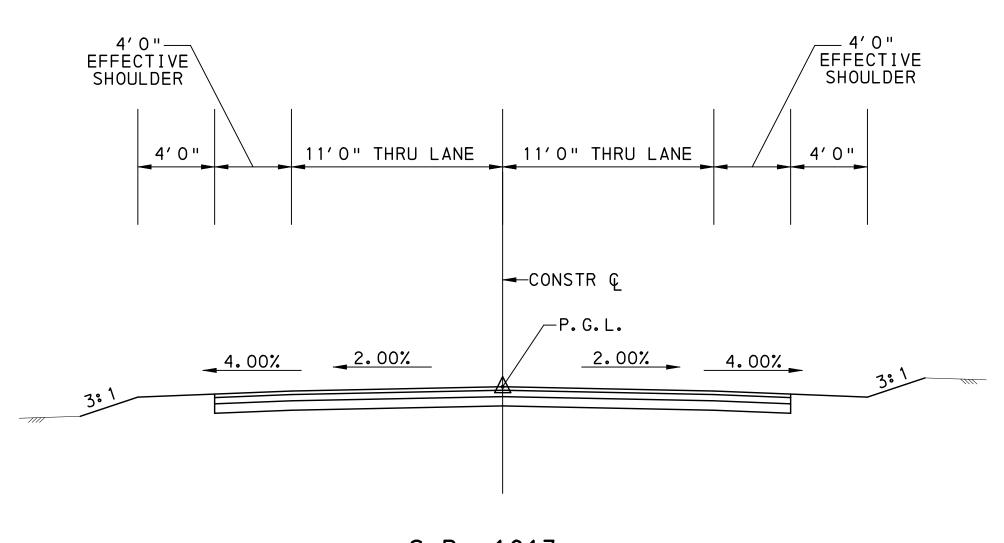
REGISTRATION # 071415



<u>S.R. 1013</u> STA. 20+50.00 TO STA. 24+89.62







<u>S.R. 1013</u> STA. 88+52.33 TO STA. 125+00.00

DANIEL R. BITTERLICH, P.E. REGISTRATION # 071415

