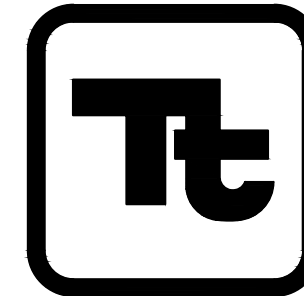


# EROSION & SEDIMENTATION CONTROL PLAN

## PENNSYLVANIA PIPELINE PROJECT- BECKERSVILLE STATION

### BRECKNOCK TOWNSHIP, BERKS COUNTY

PENNSYLVANIA  
NOVEMBER 2016



PREPARED BY:  
**TETRA TECH**

www.tetrattech.com

1134 TWIN STACKS DRIVE  
DALLAS, PA 18612  
T: (570) 674-8648 | F: (570) 674-8651  
DATE: NOVEMBER 21, 2016  
COVER SHEET 1 OF 11  
REVISION #1 - 4.22.16  
REVISION #2 - 5.13.16  
REVISION #3 - 7.01.16  
REVISION #4 - 10.18.16  
REVISION #5 - 2.6.17

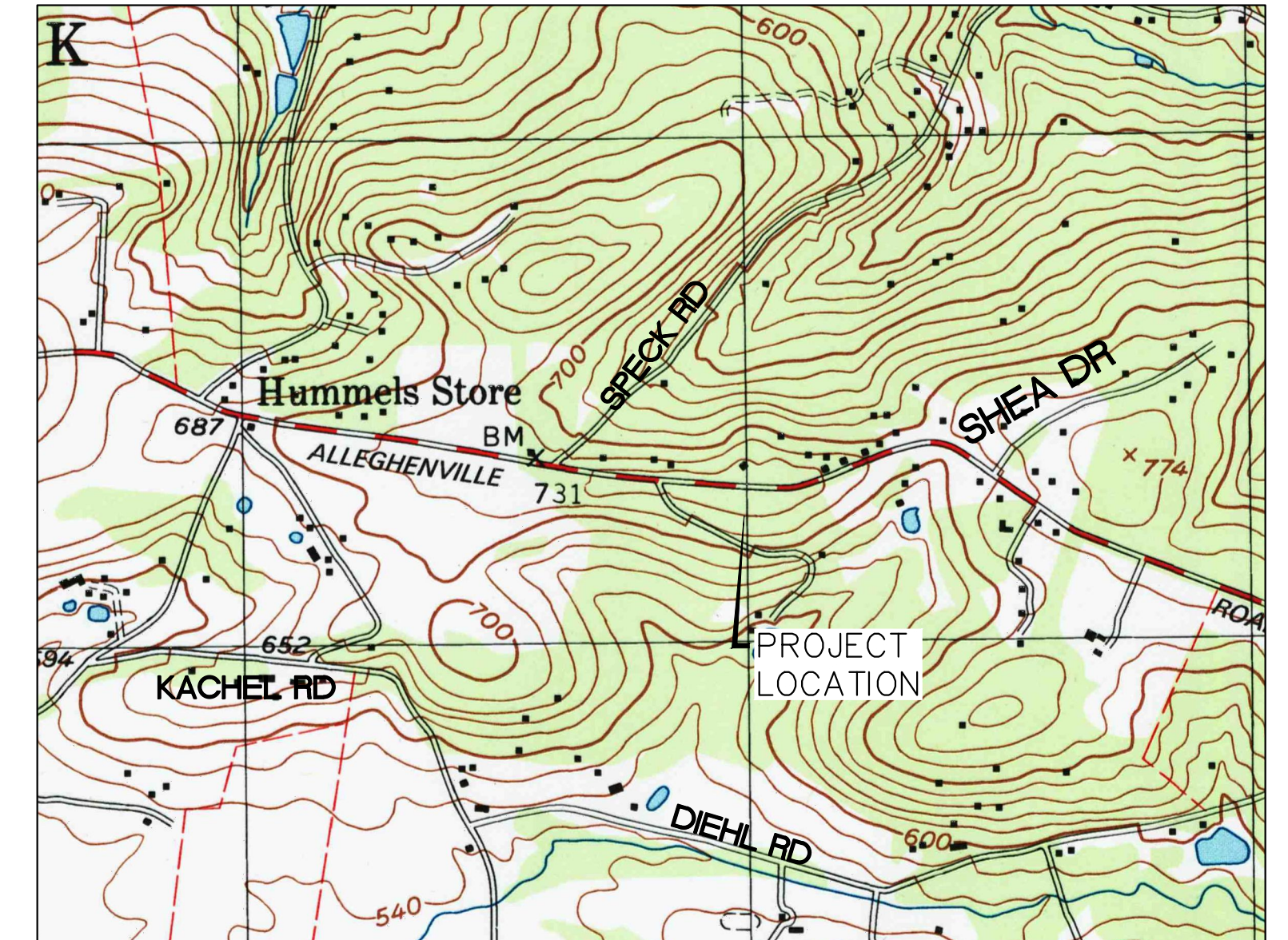
#### DRAWING INDEX

SHEET No.	DRAWING TITLE
1	COVER SHEET AND NOTES
2	OVERALL SITE PLAN
3	EROSION CONTROL / GRADING PLAN
4	E & S BLANKET PLACEMENT PLAN
5	PRE-POST DEVELOPED D.A. PLAN
6	CONSTRUCTION DETAILS
7	BASIN #1 CONSTRUCTION DETAILS
8	CONSTRUCTION DETAILS
9	CONSTRUCTION DETAILS
10	CONSTRUCTION DETAILS
11	CONSTRUCTION DETAIL

PREPARED FOR:  
SUNOCO PIPELINE L.P.  
525 FRITZTOWN ROAD  
SINKING SPRING, PENNSYLVANIA 19608  
610-670-3200

#### GENERAL NOTES

- DEVELOPER/ OWNER: SUNOCO PIPELINE, LP  
525 FRITZTOWN ROAD  
SINKING SPRING, PA. 19608  
610-670-3200
- CURRENT TAX IDENTIFICATION #: 34-5302-02-56-2952  
INSTRUMENT #2014027505, RECORDED 8-25-2014  
TOTAL PARCEL SIZE = 17.45 AC
- PUBLIC SEWER AND WATER WILL NOT BE PROVIDED. THE FACILITY IS UNMANNED.
- EXISTING CONTOURS AND FEATURES COMPILED FROM WWW.PASDA.PSU.EDU.  
EXISTING CONTOURS ARE BASED ON NAVD 88 DATUM.
- NO PORTION OF THE SITE LIES WITHIN ANY 100 YEAR FLOOD ZONES,  
AS PER F.E.M.A. MAPPING, FIRM PANEL 629 OF 700,  
MAP #42011C0629G, EFFECTIVE DATE IS 06/03/2012.
- THERE ARE NO WETLANDS WITHIN THE DISTURBED AREA OF THE SITE.
- THE ASSOCIATED STORM WATER MANAGEMENT REPORT FOR THIS PROJECT IS TITLED:  
EROSION AND SEDIMENTATION CONTROL PLAN  
PENNSYLVANIA PIPELINE PROJECT  
BECKERSVILLE STATION EXPANSION ACTIVITIES  
BRECKNOCK TOWNSHIP  
BERKS COUNTY, PA  
MARCH, 2016
- THE SITE LIES WITHIN A 50% RELEASE RATE DISTRICT OF THE CONESTOGA RIVER  
ACT 167 STORMWATER MANAGEMENT PLAN.
- UN-NAMED TRIBUTARY TO MUDDY CREEK IS LISTED AS "HQ-TSF" UNDER CHAPTER 93.
- THE PADOT DRIVEWAY HOP NO. 05048641 WAS ISSUED ON 7/17/2014.
- SUNOCO LOGISTICS PARTNERS, LP WILL BE RESPONSIBLE FOR PERMANENT INSPECTION  
AND MAINTENANCE OF ALL STORMWATER MANAGEMENT FACILITIES.
- BRECKNOCK TOWNSHIP AND ITS AUTHORIZED AGENTS HAVE THE RIGHT, BUT NOT THE  
DUTY TO ENTER THE PROPERTY TO PERFORM INSPECTIONS OF STORMWATER FACILITIES.  
ACCESS AND INSPECTIONS WITHIN THE SECURED AREA CAN ONLY BE COMPLETED WITH  
AUTHORIZED REPRESENTATIVES OF THE PROPERTY OWNER.
- THE EXISTING WELL AND SEPTIC SYSTEM ON THE PARCEL WILL BE ABANDONED IN  
ACCORDANCE WITH DEP AND TOWNSHIP REGULATIONS, IF THE BUILDING IS DEMOLISHED.
- SITE LIGHTING WILL BE ACCOMPLISHED WITH POLE MOUNTED FIXTURES.  
LIGHTS WILL REMAIN IN THE "OFF" POSITION UNLESS NIGHTTIME WORK IS ANTICIPATED.
- THERE ARE NO ADVERTISING SIGNS PROPOSED FOR THIS SITE.
- IT IS REQUIRED BY BRECKNOCK TOWNSHIP THAT ALL SITE LIGHTING SHALL REMAIN IN  
THE OFF MODE DURING ALL NIGHT TIME HOURS. THE SITE LIGHTING SHALL BE DESIGNED  
TO BE MANUALLY OPERATED BY SUNOCO PERSONNEL ONLY WHEN NECESSARY DURING  
NIGHT TIME HOURS OF OPERATION WHEN SUNOCO PERSONNEL ARE ON-SITE.
- LADDER RUNGS SHALL BE PROVIDED FOR ALL STORM SEWER INLETS AND MANHOLES  
WITH A DEPTH OF 4 FEET OR GREATER.
- ALL STORM MANHOLES SHALL HAVE THE WORD "STORM" CAST ON THE TOP MANHOLE COVER.



LOCATION MAP  
BECKERSVILLE STATION  
MORGANTOWN QUADRANGLE  
BRECKNOCK TOWNSHIP, BERKS COUNTY,  
PENNSYLVANIA

0 1000 2000  
SCALE IN FEET  
SCALE: 1"=1000'

#### LEGEND

- EXISTING R/W
- PROPERTY LINE
- (---) SOIL BOUNDARY
- SETBACK LINE
- 730 --- EXISTING CONTOURS
- 735 --- PROPOSED CONTOURS
- - - Tc FLOW PATH
- - - PRE-DEV DA BOUNDARY
- - - POST-DEV DA BOUNDARY
- CFS---CFS---CFS--- COMPOST FILTER SOCK (SIZE VARIES)
- [Symbol] STABILIZED ROCK CONSTRUCTION ENTRANCE
- LOD---LOD---LOD--- LOD/ESCGP-2 BOUNDARY = 5.985 AC
- [Symbol] S-150 NA GREEN EROSION BLANKETS
- [Symbol] PADOT TYPE M PRECAST INLET
- [Symbol] 4' DIA. PADOT PRECAST STORM MH
- [Symbol] STORM PIPE W/ FES RIPRAP APRON
- [Symbol] SILTSACK INLET PROTECTION
- 8' HEIGHT "SIMTEK" FENCE

CALL BEFORE YOU DIG!  
PENNSYLVANIA LAW REQUIRES  
3 WORKING DAYS NOTICE FOR  
CONSTRUCTION PHASE AND 10 WORKING  
DAYS IN DESIGN STAGE - STOP CALL  
Pennsylvania One Call System, Inc.  
1-800-242-1776

SUNOCO PIPELINE L.P. ACKNOWLEDGES THAT  
ANY REVISION TO THE APPROVED DRAINAGE PLAN MUST  
BE APPROVED BY THE TOWNSHIP AND THE BERKS CO.  
CONSERVATION DISTRICT

SUNOCO PIPELINE L.P. DATE

I, TIMOTHY J. CONNOLLY JR., P.E.,  
CERTIFY THAT THE PROPOSED DETENTION BASIN IS NOT  
UNDERLAIN BY CARBONATE GEOLOGY.

*Timothy J. Connolly Jr.* 2/6/2016  
TIMOTHY J. CONNOLLY JR., P.E. DATE

I, TIMOTHY J. CONNOLLY JR., P.E., ON THIS DATE  
HEREBY CERTIFIES THAT THE DRAINAGE PLAN MEETS ALL DESIGN  
STANDARDS AND CRITERIA OF THE BRECKNOCK TOWNSHIP  
STORMWATER MANAGEMENT ORDINANCE

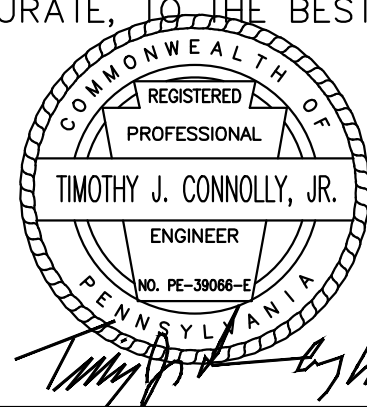
*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE

I, TIMOTHY J. CONNOLLY JR., P.E.,  
HEREBY CERTIFY THAT THE PLAN FOR SOIL EROSION AND  
SEDIMENT CONTROL MEET THE REQUIREMENTS, STANDARDS  
AND SPECIFICATIONS OF THE COUNTY CONSERVATION DISTRICT.

*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE

#### ENGINEER CERTIFICATION

I, TIMOTHY J. CONNOLLY JR., P.E., A LICENSED PROFESSIONAL  
ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA,  
DOES HEREBY CERTIFY THAT THE ACCOMPANYING APPLICATION,  
PLANS AND SUPPORTING DOCUMENTATION ARE TRUE AND  
ACCURATE, TO THE BEST OF MY KNOWLEDGE.



*Timothy J. Connolly Jr.* 2/6/2017  
TIMOTHY J. CONNOLLY JR., P.E. DATE  
PE-39066-E  
1134 TWIN STACKS DRIVE, DALLAS, PA. 18612

PROPOSED STORM PIPE TABLE

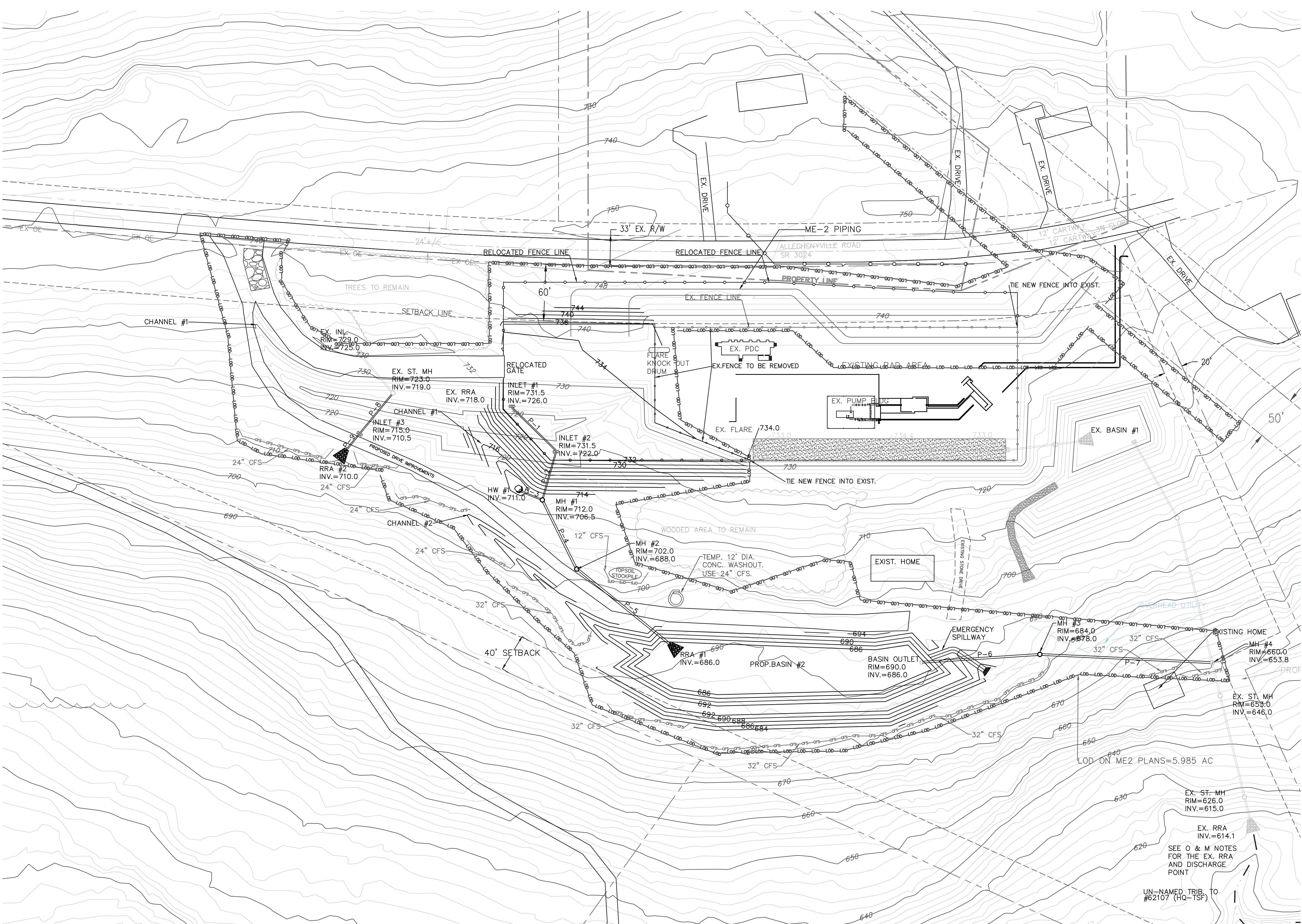
INLET	TG	INV	PIPE	LENGTH	SIZE	SLOPE
INL 1	731.50	726.00				
INL 2	731.50	722.00	P-1	65	15"	6.15%
			P-2	49	15"	31.63%
MH 1	712.00	706.50				
HW 1	-----	711.00				
MH 1	712.00	706.50	P-3	22	15"	20.45%
MH 2	702.00	688.00	P-4	78	15"	23.72%
RRA 1	-----	686.00	P-5	125	15"	1.60%
BASIN OUTLET	690.00	686.00				
MH 3	684.00	678.00	P-6	125	15"	6.40%
MH 4	660.00	653.80	P-7	181	15"	13.37%
EX. ST. MH.	653.00	646.00	EX.	35	15"	22.29%
EX. ST. MH.	626.00	615.00	EX.	106	15"	29.25%
EX. RRA	-----	614.10	EX.	24	15"	3.75%
EX. INL.	729.00	725.00				
EX. ST. MH.	723.00	719.00	EX. PIPE	52	15"	11.54%
INL 3	715.00	710.50	P-8	52	15"	16.35%
RRA 2	-----	710.00	P-9	22	15"	2.27%

ALL INLETS ARE PADOT TYPE M PRECAST CONCRETE.  
 ALL MANHOLES ARE 4' DIAMETER PRECAST CONCRETE.  
 ALL STORM INLETS AND MANHOLES >4' MUST HAVE LADDER RUNGS  
 ALL MANHOLES SHALL HAVE THE WORD "STORM" ON COVER.  
 ALL STORM PIPE IS SLOPP, ADS-N12 OR APPROVED EQUAL.  
 PLACE "SILTSACK" FILTER BAGS IN ALL INLETS.  
 ALL INLETS SHALL CONTAIN A PAINTED MARKER THAT STATES, "NO DUMPING, DISCHARGES TO STREAMS".  
 FOR PIPE P-6, USE RCCP.

LONG TERM OPERATION AND MAINTENANCE NOTES FOR THE RIPRAP APRON NEAR THE UNNAMED TRIBUTARY PIPE DISCHARGE:  
 1. PROVIDE TEMPORARY CONSTRUCTION FENCING AROUND THE EXISTING RRA.  
 2. ANY DISTURBED AREAS NEAR THE EXISTING RRA SHOULD BE RE-SEEDED WITH NATIVE VEGETATION.  
 3. PROVIDE MONTHLY INSPECTIONS OF THE DISCHARGE POINT AND AFTER ALL RAINFALLS OVER 1" IN DEPTH.  
 4. INSPECTOR SHOULD LOOK FOR ANY EROSION OF THE STREAMBED, STREAM BANK STABILITY, ANY SIGNS OF SEDIMENT/DEBRIS ACCUMULATION AND THE PRESENCE OF NATIVE VEGETATION AND ANY INVASIVE SPECIES.  
 5. CORRECT ALL MAINTENANCE ISSUES IN A TIMELY MANNER.

**LEGEND**

- EXISTING R/W
- - - - - PROPERTY LINE
- SOIL BOUNDARY
- SETBACK LINE
- 730 --- EXISTING CONTOURS
- 735 --- PROPOSED CONTOURS
- - - - - Tc FLOW PATH
- - - - - PRE-DEV DA BOUNDARY
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- CFS --- CFS --- CFS --- COMPOST FILTER SOCK (SIZE VARIES)
- STABILIZED ROCK CONSTRUCTION ENTRANCE
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- RIPRAP APRON
- SILTSACK INLET PROTECTION
- 8' HEIGHT "SIMTEK" FENCE



0 50 100  
 SCALE: 1"=50'

3  
 OF  
 11

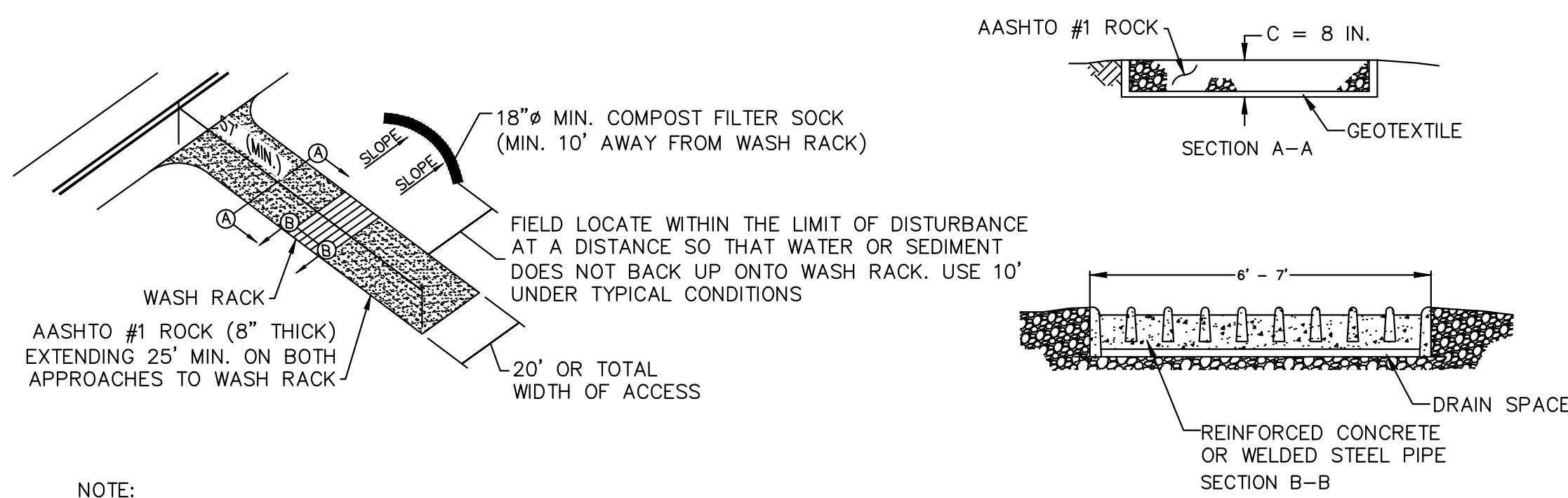
**TETRA TECH**  
 www.tetrattech.com  
 1134 TWIN STACKS DRIVE  
 DALLAS, PA 18612  
 T: (570) 674-8648 | F: (570) 674-8651

MARK	DATE	DESCRIPTION	BY
1	4/22/16	REVISED PER EXISTING SURVEY	GZ
2	5/13/16	REVISED PER LTL LETTER (4/20/16)	GZ
3	7/01/16	REVISED PER LTL LETTER (6/7/16)	GZ
4	10/18/16	REVISED PER PA DEP REVIEW	GZ
5	2/4/17	REVISED PER PA DEP REVIEW (2.1.17)	TC

PPP - BECKERSVILLE PUMP STATION  
 BRECKNOCK TOWNSHIP, BERKS COUNTY

E&S PLAN - EROSION CONTROL

DATE: 03/11/16
PROJECT NO.: 2121C-PB-00136
DRAWN BY: GZ
CHECKED BY: TC
SCALE: 1"=50'
FILE: BASEPLAN
NAME: ES3
COPYRIGHT TETRA TECH INC.



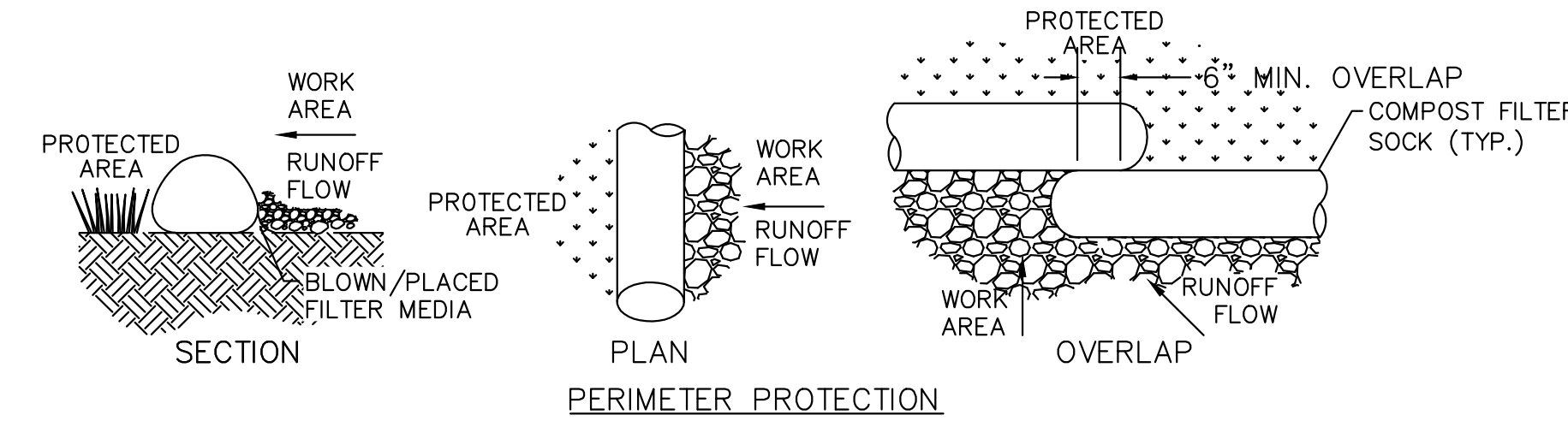
NOTE:

- WASH RACK ONLY REQUIRED IN HQ OR EV WATERSHED AREAS. TYPICAL ROCK CONSTRUCTION ENTRANCE ACCEPTABLE IN ALL OTHER AREAS. (THIS SITE IS LOCATED WITHIN AN HQ OR EV WATERSHED, A WASH RACK WILL BE REQUIRED)
- REASONABLE METHODS WHICH ARE SANCTIONED BY THE PADEP AS ALTERNATIVES TO INSTALLATION OF TIRE WASH STATIONS ON PUBLIC ROAD ACCESS POINTS FOR GATHERING PIPELINE PROJECTS IN EV/HQ WATERSHEDS INCLUDE:
- FOR PAVED SURFACE PUBLIC ROADS: USE OF A VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT.
  - FOR DIRT OR GRAVEL SURFACE PUBLIC ROADS: RIGOROUS MANUAL REMOVAL OF MUD/DIRT FROM VEHICLE/EQUIPMENT TIRES PRIOR TO EXITING CONSTRUCTION SITE, SUPPLEMENTED BY IMMEDIATE RECOVER, BY MANUAL OR MECHANICAL MEANS, OF SOIL WHICH MAY BECOME DISCHARGED ONTO PUBLIC ROADWAYS. DUST CONTROL AND/OR COMPACTION VIA ROLLING OF THE DIRT PUBLIC ROAD SURFACE WILL BE IMPLEMENTED AS NEEDED.

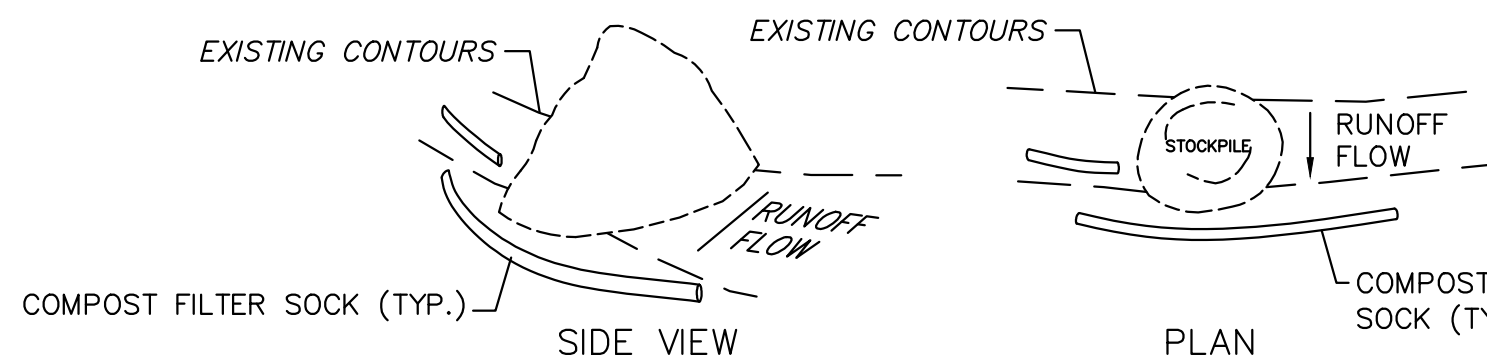
A PREDICATE FOR UTILIZING ALTERNATIVE 1 AND 2 ABOVE IS THAT THE ROCK PAD CONSTRUCTION ENTRANCE MUST BE EXTENDED TO A MINIMUM TOTAL LENGTH OF 100 FEET AND MUST BE CONSTANTLY MAINTAINED INCLUDING STRUCTURE THICKNESS TO INSURE ITS EFFECTIVENESS REMAINS INTACT AT ALL TIMES.

FREQUENCY OF MECHANICAL AND/OR MANUAL CONTROLS WILL BE DEPENDENT UPON CONSTRUCTION TRAFFIC INTENSITY, WEATHER AND SOIL MOISTURE CONDITIONS. AT A MINIMUM FOR PAVED ROADS - ANY DAY IN WHICH CONSTRUCTION TRAFFIC IS EXITING THE ROCK CONSTRUCTION ENTRANCE, THE VACUUM TRUCK SWEEPER OR SWEEPER WITH A CATCH BIN ATTACHMENT SHALL CLEAN THE ROADWAY AT THE END OF THE WORK DAY AND PRIOR TO ANY FORECASTED RAIN EVENT. THE REQUIREMENT IS TO NOT INTRODUCE SEDIMENT LOAD FROM CONSTRUCTION TRAFFIC ONTO PUBLIC ROAD SURFACES AND INTO ROAD DITCHES WHICH WILL FLOW INTO THE EV/HQ WATER RESOURCES WHICH ARE THE SUBJECT OF THE INCREASED PROTECTION MEASURES.

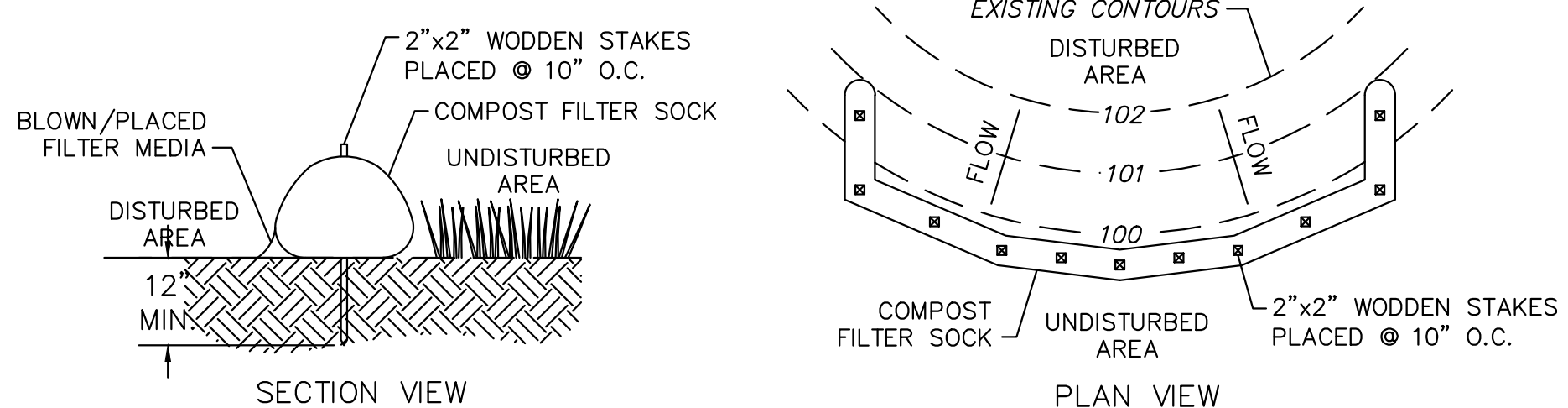
**AASHTO #1 ROCK CONSTRUCTION ENTRANCE**  
NOT TO SCALE



**PERIMETER PROTECTION**



**STOCKPILE CONTAINMENT**



COMPOST STANDARDS	
ORGANIC MATTER CONTENT	80%-100% (DRY WEIGHT BASIS)
ORGANIC	FIBROUS & ELONGATED
pH	5.5-8.0
MOISTURE CONTENT	35%-55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m MAXIMUM

MAXIMUM SLOPE LENGTHS FOR COMPOST FILTER SOCK				
% SLOPE	12" DIAMETER	18" DIAMETER	24" DIAMETER	32" DIAMETER
2 (OR LESS)	520	700	1000	1300
5	250	350	500	650
10	150	250	300	400
15	100	190	250	350
20	70	140	200	250
25	50	90	150	180
30	40	70	100	125
35	35	60	90	100
40	30	50	70	90
45	25	40	60	70
50	20	30	50	60

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE SOCK SHALL NOT EXCEED THAT SHOWN ON FIGURE 4.2 IN ATTACHMENT 3.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE FILTER SOCK SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

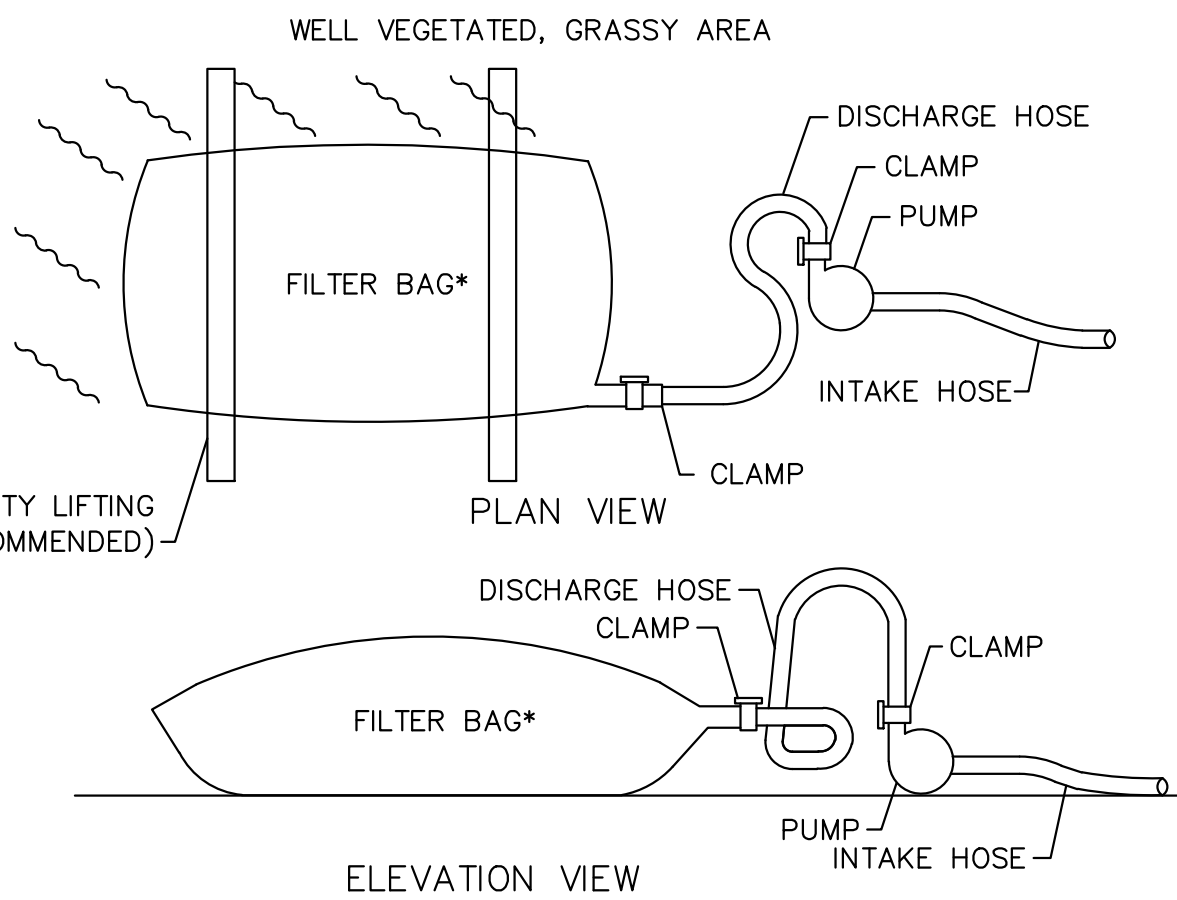
**COMPOST FILTER SOCK**  
NOT TO SCALE

NOTES:

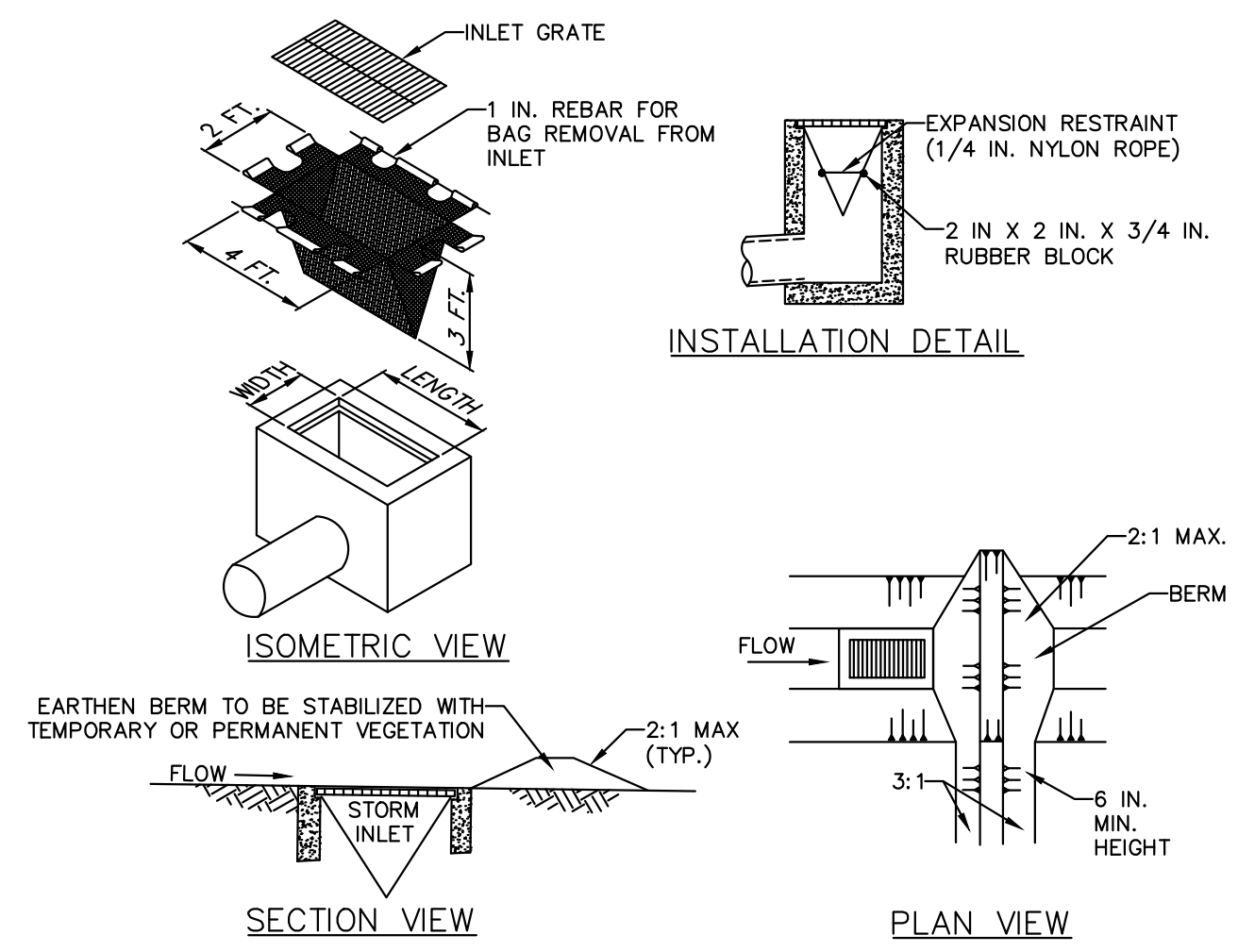
- LOW VOLUME FILTER BAGS SHALL BE MADE OF NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE-STITCHED "J" SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 lb/in
GRAB TENSILE	ASTM D-4632	205 lb
PUNCTURE	ASTM D-4833	110 lb
MULLEN BURST	ASTM D-3786	350 psi
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 Sieve

- SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FULL. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
- BAGS SHALL BE LOCATED IN WELL VEGETATED (GRASSY) AREAS, AND DISCHARGE INTO STABLE, EROSION RESISTANT AREAS, WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER SLOPE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
- NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
- THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED.
- THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



**PUMPED WATER FILTER BAG**  
NOT TO SCALE

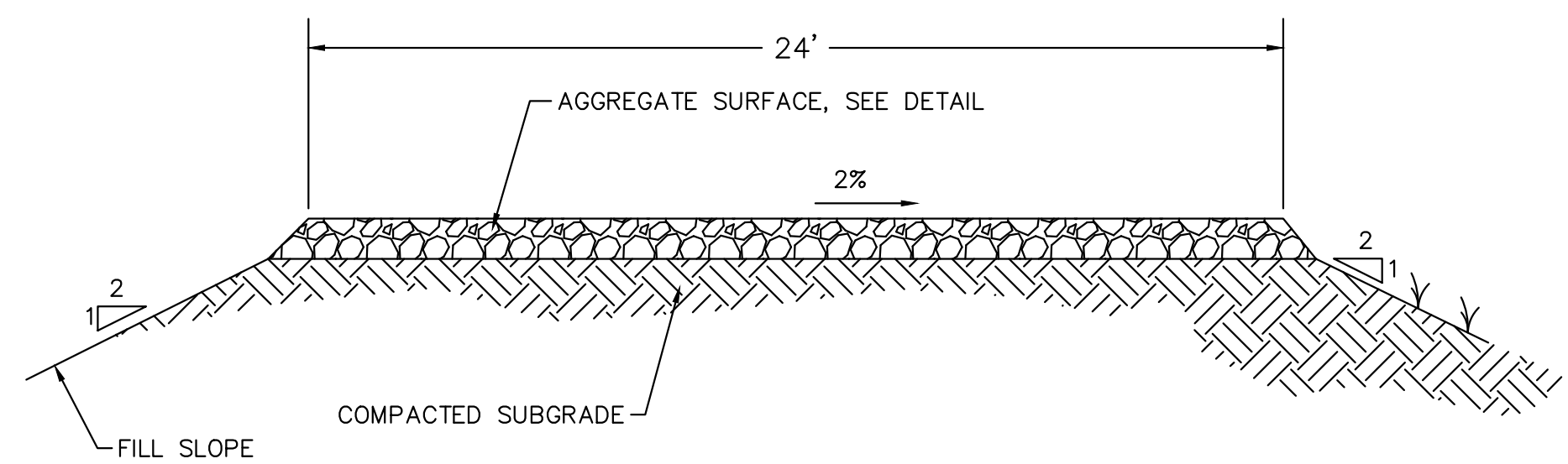


**INSTALLATION DETAIL**

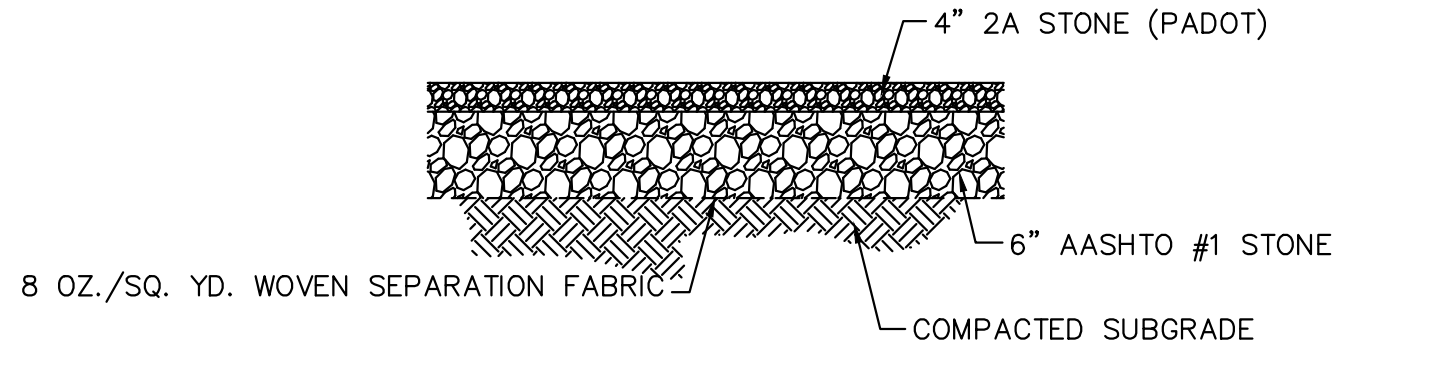
NOTES:

- MAXIMUM DRAINAGE AREA = 1/2 ACRE.
- INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
- ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
- AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
- INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
- DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

**STANDARD CONSTRUCTION DETAIL #4-16**  
**FILTER BAG INLET PROTECTION - TYPE M INLET**  
NOT TO SCALE



**24' WIDE AGGREGATE ACCESS ROAD DETAIL**  
NOT TO SCALE

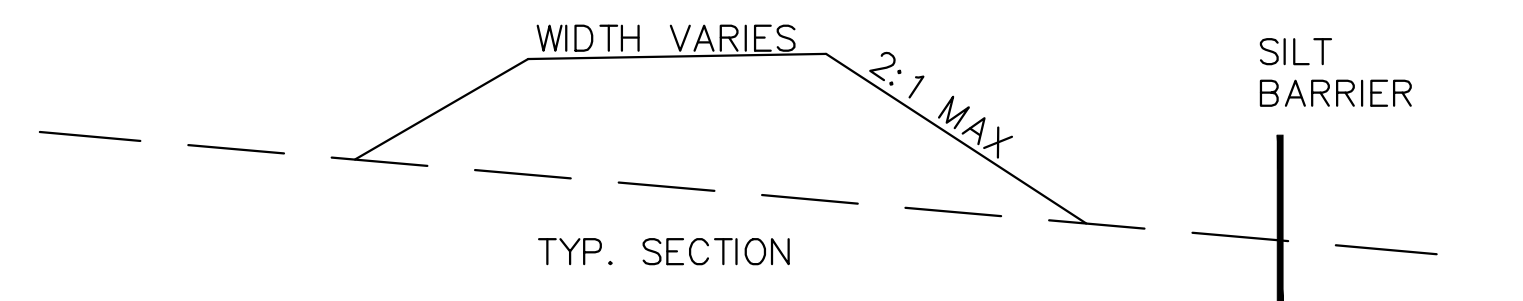


**AGGREGATE SURFACE FOR PUMP STA. PAD & ACCESS ROAD**  
NOT TO SCALE

TOPSOIL STOCKPILE INSTALLATION:

- INSTALL SILT BARRIER AS SHOWN.
- CLEAR TREES, IF NECESSARY.
- PLACE STRIPPED TOPSOIL IN LAYERS, COMPACT WITH DOZER TRACKS DURING SPREADING.
- SLOPES SHOULD NOT EXCEED 2H:1V.
- STOCKPILE HEIGHTS SHALL NOT EXCEED 35'.
- DO NOT PLACE STOCKPILES WITHIN 50' OF STREAMS

PROVIDE TEMPORARY SEEDING OF ALL TOPSOIL STOCKPILES



- NOTES:
- SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.
  - PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE
  - SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
  - BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE PROJECT LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
  - THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

**EROSION CONTROL BLANKET - SLOPE INSTALLATION**  
NOT TO SCALE

9 OF 11

**TETRA TECH**

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MARK	DATE	DESCRIPTION	BY
1	4/22/16	REVISED PER EXISTING SURVEY	GZ
2	5/13/16	REVISED PER LTL LETTER (4/20/16)	GZ
3	7/01/16	REVISED PER LTL LETTER (6/7/16)	GZ
4	10/18/16	REVISED PER PA DEP REVIEW	GZ
5	2/4/17	REVISED PER PA DEP REVIEW (2.1.17)	TC

PPP - BECKERSVILLE PUMP STATION  
BRECKNOCK TOWNSHIP, BERKS COUNTY

E&S PLAN - CONSTRUCTION DETAILS

DATE: 03/11/16
PROJECT NO.: 2121C-PB-00136
DRAWN BY: GZ
CHECKED BY: TC
SCALE: AS NOTED
FILE: BASEPLAN
NAME: CONSTDET9
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