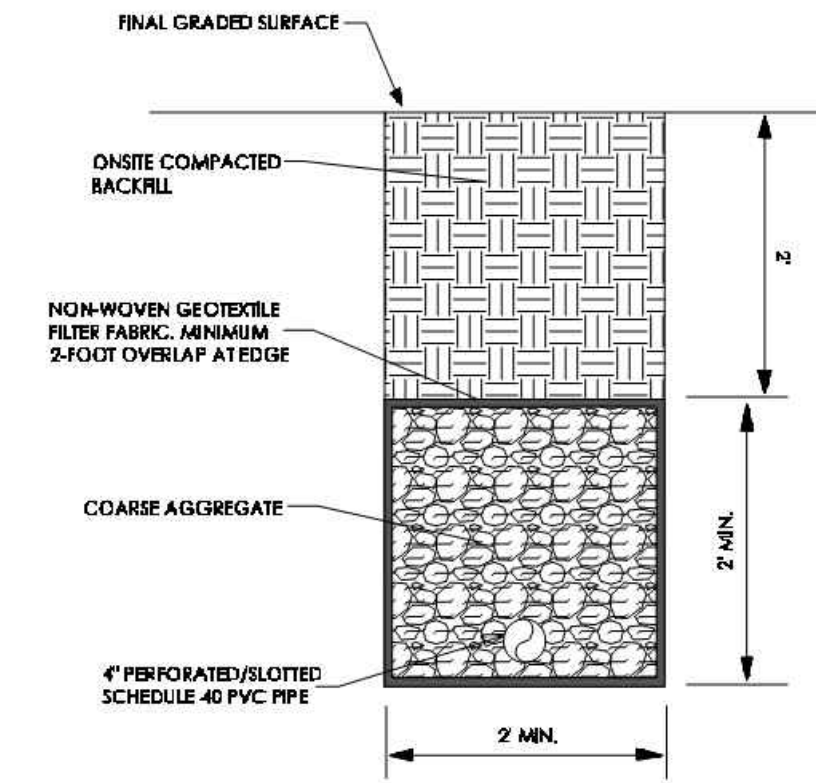
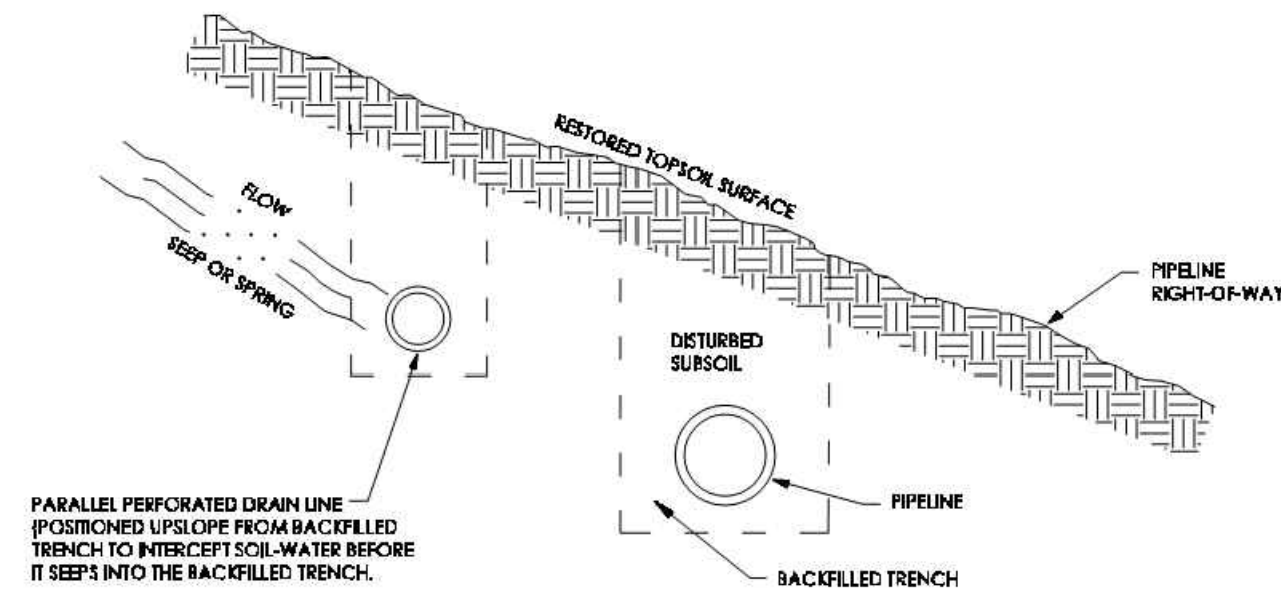


**ATTACHMENT F
PERCHED WETLAND INFORMATION**



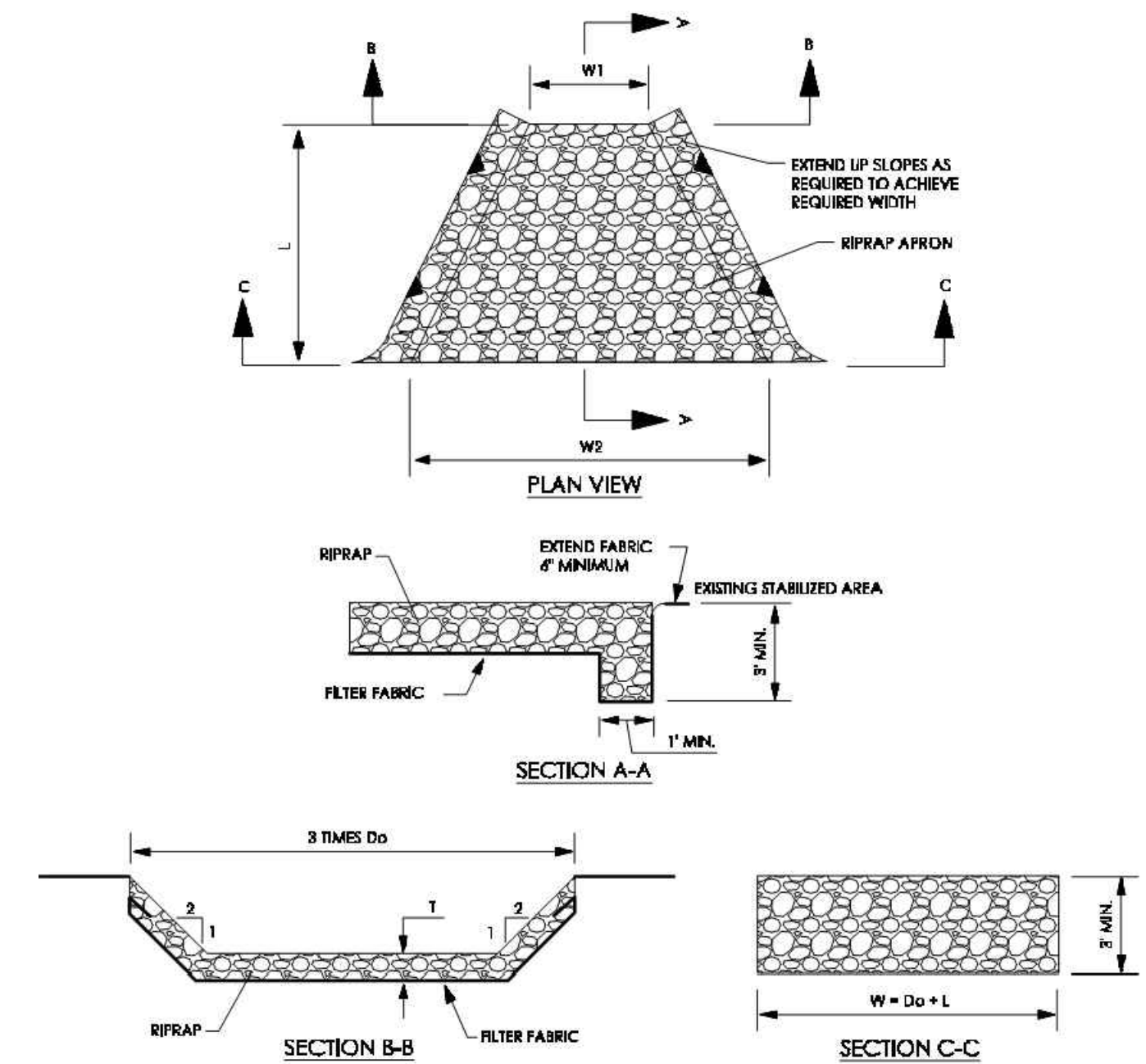
FRENCH DRAINS CAN BE CONSTRUCTED TO PASSIVELY DRAIN WATER AWAY FROM THE TRENCH AREA. THESE DRAINS CAN BE INSTALLED AT SEEPAGE AREAS ENCOUNTERED DURING CONSTRUCTION. THESE DRAINS SHOULD BE SLOPED AT A MINIMUM OF 2% TO THE OUTLET LOCATIONS.

1 SUBSURFACE DRAIN (FRENCH DRAIN)
DET12 SCALE: N.T.S.



PARALLEL DRAINAGE TILES CAN BE INSTALLED AT SEEPAGE AREAS ENCOUNTERED DURING CONSTRUCTION. THE DRAINS MAY BE PERFORATED PVC OR GEOCOMPOSITE DRAIN STRIPS PLACED BETWEEN THE SEEPAGE AREA ON THE PIPELINE TO INTERCEPT SOIL-WATER BEFORE IT SEEPS INTO THE OPEN OR BACKFILLED TRENCHLINE. THESE DRAINS SHOULD BE SLOPED AT A MINIMUM OF 2% TO THE OUTLET LOCATIONS.

2 SEEP INTERCEPT DRAIN PARALLEL TO TRENCH
DET12

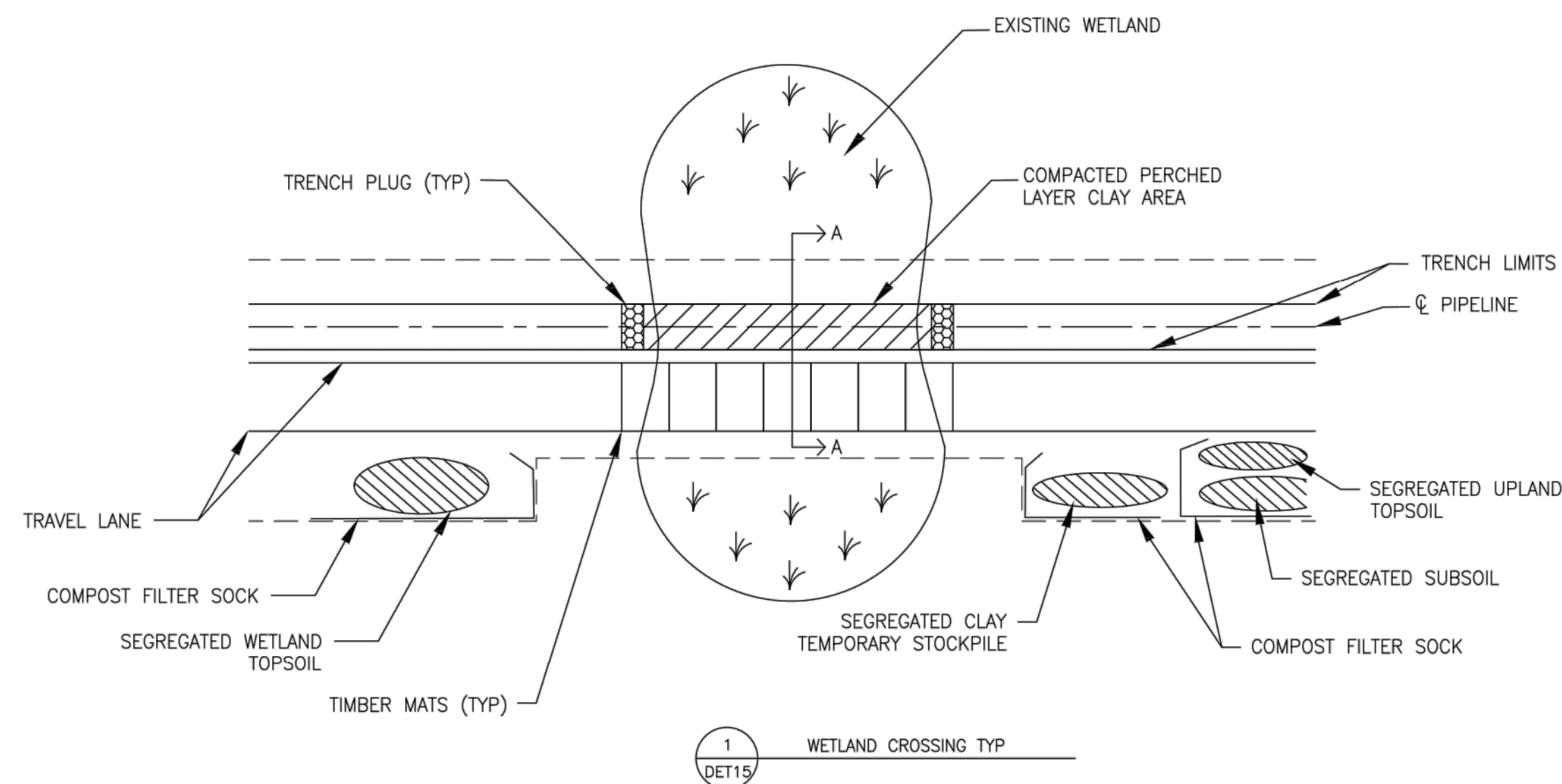


APRON ID	L* (FT)	W1 (FT)	W2 (FT)	D50 (IN)	T (FT)	RIPRAP	CY OF STONE
DRAIN OUTLET	4	2	6	3	1	R-3	2.00

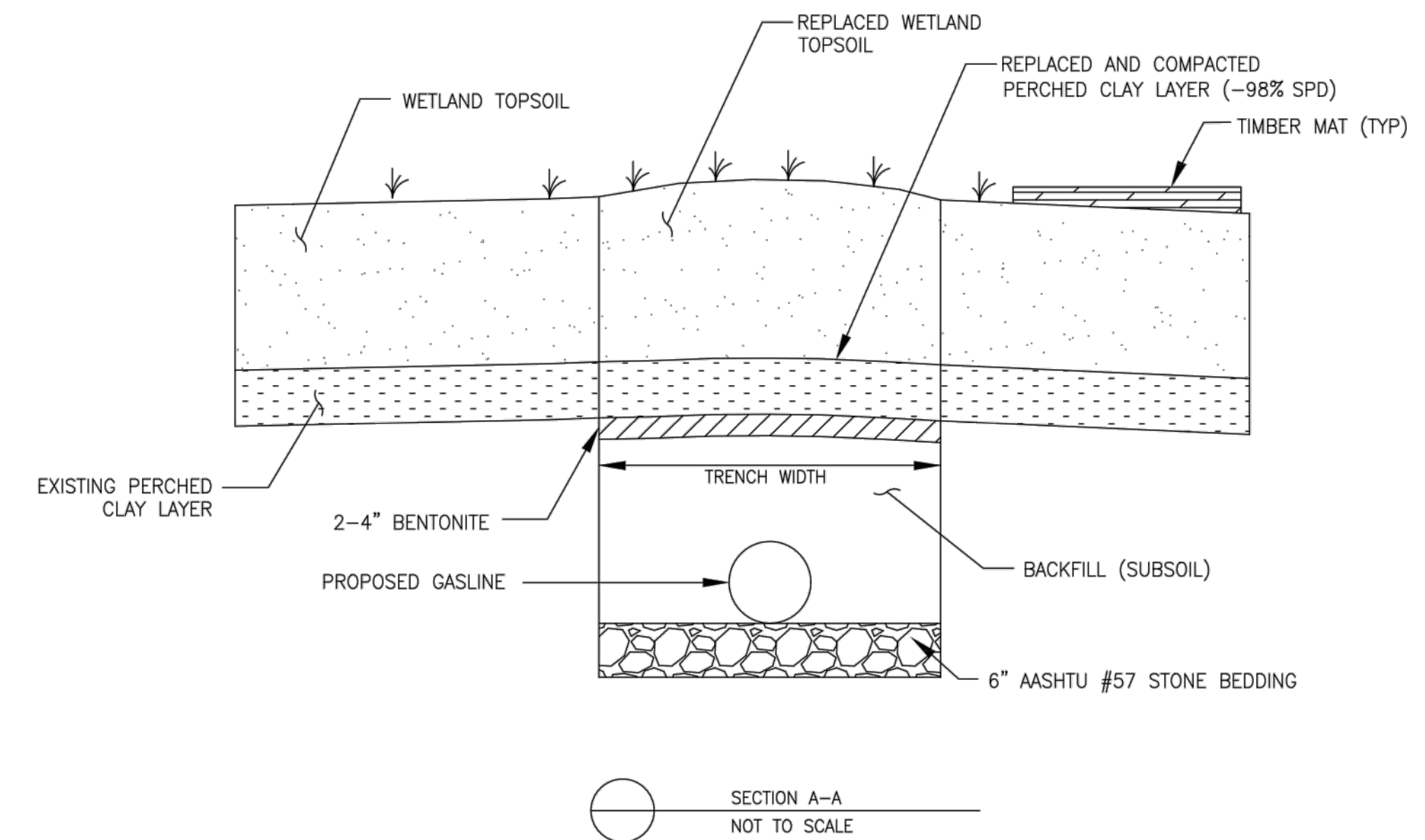
NOT TO SCALE

OUTLET PROTECTION STRUCTURES PREVENT SCOUR AND EROSION AND DISCHARGE OUTLETS BY DISSIPATING THE ENERGY AND REDUCING VELOCITIES. THE ILLUSTRATION BELOW SHOWS A TYPICAL APPLICATION OF AN APRON LINED WITH ROCK RIPRAP.

3 ROCK OUTLET PROTECTION
DET12 SCALE: N.T.S.



1 WETLAND CROSSING TYP
DET15



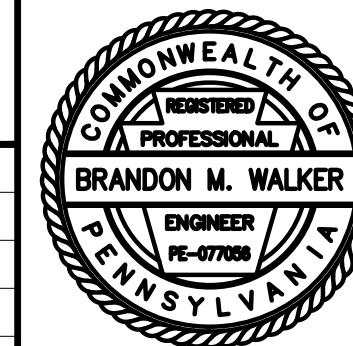
SECTION A-A
NOT TO SCALE

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 Last Plotted: 2018-07-31 (7:51:2018 6:54 PM)

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> EXISTING CONTOURS (INDEX) EXISTING CONTOURS (INTERMEDIATE) EXISTING PROPERTY LINE EXISTING STREAM ASSUMED FLOODWAY (50 FEET) STREAM BUFFER (100 FEET) EXISTING WETLAND FEMA 100 YEAR FLOODPLAIN TREE/BRUSH LINE | <ul style="list-style-type: none"> PROPOSED PIPELINE LIMIT OF DISTURBANCE/PERMIT BOUNDARY ACCESS ROAD CENTERLINE PROPOSED SILT FENCE (BY TYPE) PROPOSED COMPOST FILTER SOCK PROPOSED RIGHT OF WAY DIVERSION PROPOSED TRENCH PLUG | <ul style="list-style-type: none"> OSF PROPOSED ORANGE SAFETY FENCE PROPOSED TIMBER MAT PROPOSED EROSION CONTROL BLANKET PROPOSED STONE CONSTRUCTION ENTRANCE WATERSHED BOUNDARY MRB2 SOIL TYPE BOUNDARY AND SOIL BOUNDARY MFL LAND USE TYPE BOUNDARY AND LAND USE BOUNDARY |
|--|--|---|

GENERAL NOTES:

REV NO	DATE	DESCRIPTION OF REVISION	CHK	APP
2	08/01/18	REVISED PER CCD/DEP REVIEW	ARG	BMW
1	12/05/17	REVISED PER CCD/DEP REVIEW	LJS	JWR



FALCON ETHANE PIPELINE SYSTEM
SHELL PIPELINE COMPANY LP

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EROSION & SEDIMENT CONTROL DETAILS - DET17
ALLEGHENY, BEAVER, AND WASHINGTON COUNTIES

SCALE	AS SHOWN	DATE	09/14/2017	REVISION	2
DRAWN	JWR				

SPLC-GOM-AE-SD119735