

NO.	DATE	REVISIONS

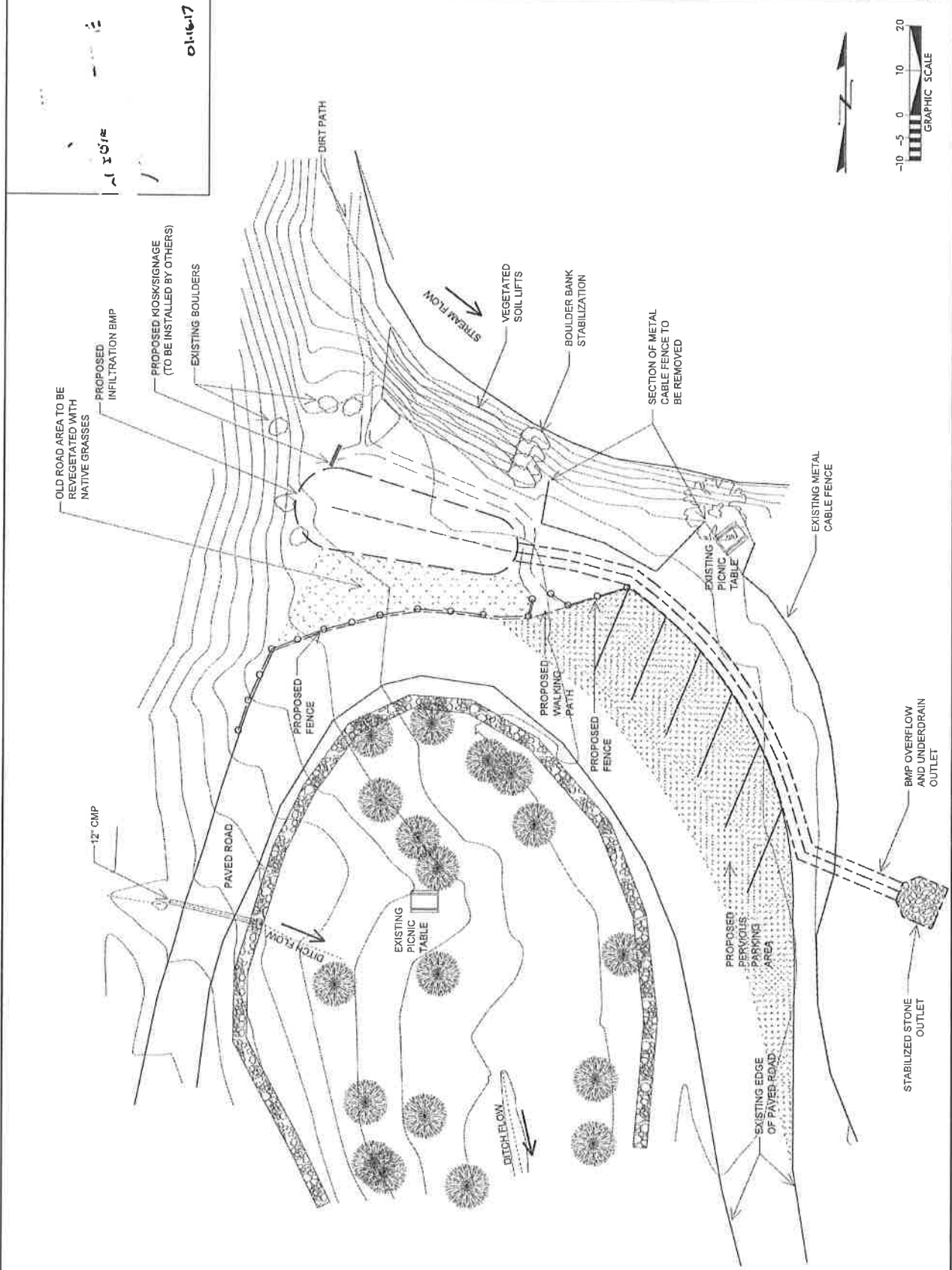
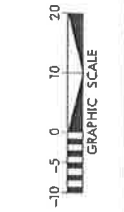
01-16-17



STATE NATURAL CAVE
SEOUATCHIE - MARION COUNTY, TN

SEOUATCHIE CAVE
STATE NATURAL AREA
MARION COUNTY, TN

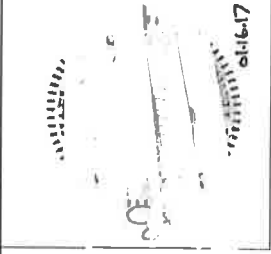
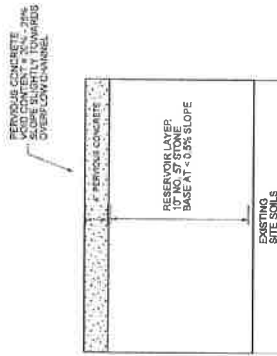
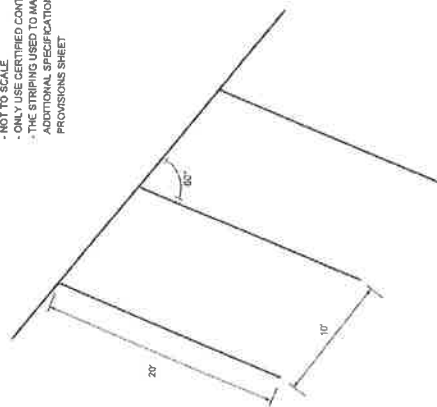
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DATE: 01-16-17
SHEET 3 OF 8



PERVIOUS CONCRETE DETAIL

NOTES:

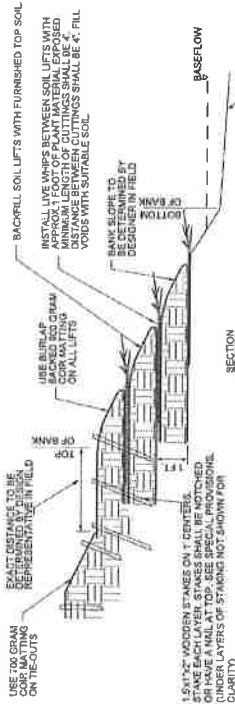
- NOT TO SCALE
- ONLY USE CERTIFIED CONTRACTOR FOR THE INSTALLATION OF THE CONCRETE
- THE STRIPING USED TO MARK THE PARKING LOT STALLS SHALL BE 4" WIDE. SEE ADDITIONAL SPECIFICATIONS IN THE TECHNICAL SPECIFICATIONS AND SPECIAL PROVISIONS SHEET



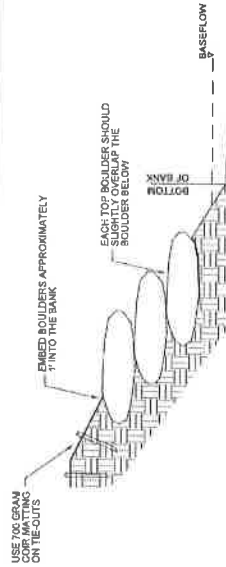
VEGETATED SOIL LIFT DETAIL

NOTES:

- NOT TO SCALE
- THE EXISTING BANK HAS BEEN BUILT FROM CHERY SOIL. THIS MATERIAL IS TO BE EXCAVATED AND REMOVED FROM THE SITE BEFORE THE SOIL LIFTS ARE INSTALLED.
- SOIL LIFT MATERIAL IS TO BE FURNISHED TOP SOIL.
- TOP SOIL MAY BE SALVAGED FROM OTHER EXCAVATION ON SITE IF APPROVED BY THE DESIGNER.
- ALL CONSTRUCTION OF THE VEGETATED SOIL LIFTS SHALL AVOID CONTACT WITH THE ADJACENT STREAM
- THE TOP LAYER OF SOIL AND VEGETATION (APPROXIMATELY 0.2' OF THE EXISTING BANK SHALL BE EXCAVATED AND STOCKPILED TO BE MIXED INTO FURNISHED TOP SOIL TO MAKE LIFTS. THE EFFORT WILL AVOID PRESERVE AND TRANSFER THE EXISTING SEED BANK.
- USE 100 GRAM PER SQUARE FOOT OF SEED MIXTURE AS REPRESENTATIVE IN FIELD.
- USE 100 GRAM PER SQUARE FOOT OF SEED MIXTURE AS REPRESENTATIVE IN FIELD.



BOULDER BANK STABILIZATION



NOTES:

- NOT TO SCALE
- THE BOULDER BANK STABILIZATION STRUCTURE WILL BE BUILT ADJACENT TO THE VEGETATED SOIL LIFT AND BE INTO THE RIGHT SIDE OF THE SOIL LIFT.
- THE BANK TIE IN LOCATIONS OF THE BOULDER BANK STABILIZATION STRUCTURE WILL CLOSELY FOLLOW THE SAME POINTS IN THE VEGETATED SOIL LIFT.

GENERAL NOTES:

LIMITS OF DISTURBANCE: 0.2 ACRE
 THE CONTRACTOR SHALL INSTALL AND MAINTAIN THROUGHOUT THE PROJECT CONSTRUCTION ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THESE PLANS AND IN ACCORDANCE WITH APPLICABLE EROSION AND SEDIMENT CONTROL REGULATIONS. THE CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION.

ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TENNESSEE EROSION AND SEDIMENT CONTROL REGULATIONS U.S. DEPARTMENT OF AGRICULTURE, AND U.S. SOIL CONSERVATION SERVICE REGULATIONS.

EROSION CONTROL PLAN

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY, RELOCATED WHEN AND AS NECESSARY, AND SHALL BE CHECKED AFTER EVERY RAINFALL. SEEDED AREAS SHALL BE CHECKED REGULARLY AND SHALL BE RESEEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS.

STABILIZATION IS THE BEST FORM OF EROSION CONTROL. ALL DISTURBED AREAS THAT ARE NOT OTHERWISE STABILIZED SHALL BE AMENDED AND SEEDED. TEMPORARILY OR PERMANENTLY IN ACCORDANCE WITH THE TENNESSEE SEDIMENT CONTROL REGULATIONS. PERMANENT SEEDING AND GRASS ESTABLISHMENT ARE REQUIRED PRIOR TO PROJECT COMPLETION AND ACCEPTANCE.

CONTRACTOR SHALL PROVIDE GROUND COVER ON EXPOSED SLOPES WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUND COVER FOR ALL DISTURBED AREAS SHALL BE PROVIDED WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION.

WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY.

DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.

MULCHING

SEEDBED AREAS ARE TO BE PROTECTED BY SPREADING STRAW MULCH UNIFORMLY TO FORM A CONTINUOUS BLANKET (75% COVERAGE = 2 TONS PER ACRE) FOR THE PROPOSED MAINTENANCE AND MULCHING OPERATIONS. ALTERNATE METHODS OF SEEDING AND MULCHING MAY BE PROPOSED UPON SUBMISSION TO THE ENGINEER OF CALCULATIONS SHOWING THE EQUIVALENCY OF THE PROPOSED METHOD.

TEMPORARY SEED MIX:

COMMON NAME	SCIENTIFIC NAME	PLANTING RATE PER ACRE (LBS)	TIME PERIOD
FOXTAIL BRISTLEGRASS	SETARIA ITALICA	10	4/1 - 1/1/1
BROWN TOP MILLET	UROCHLOA BANGSA	10	4/1 - 1/1/1
RYE GRAIN	SECALE CEREALE	30	1/1/1 - 4/1
WHEAT	TRITICUM AESTIVUM	30	1/1/1 - 4/1

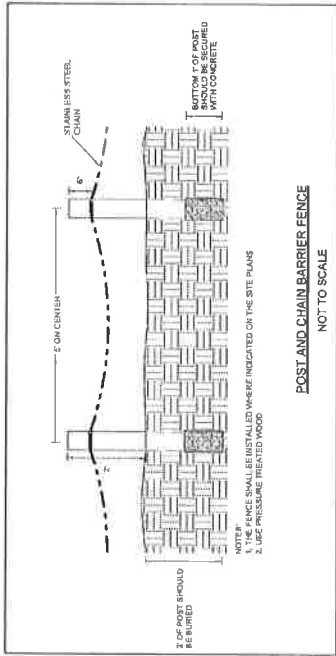
PERMANENT SEED MIX:

COMMON NAME	SCIENTIFIC NAME	PLANTING RATE PER ACRE (LBS)
SWITCHGRASS	PANICUM VIRGATUM	10
RIVERBANK WILD RYE	ELYMUS RIPARIUS	10
EASTERN GAMMA GRASS	TRIPSACUM DACTYLOIDES	5
DEER TONGUE	PANICUM CLANDESTINUM	2
SHONYI TICKSEED	BIDENS ARISTOSA	2
FOX SEDGE	CAREX VULPINOIDEA	2
BLACKEYED SUSAN	RUBBECKIA HIRTA	1
CARDINAL FLOWER	LOBELIA CARDINALIS	1
RIVER OATS	CHASMANTHUM LATIFOLIUM	1

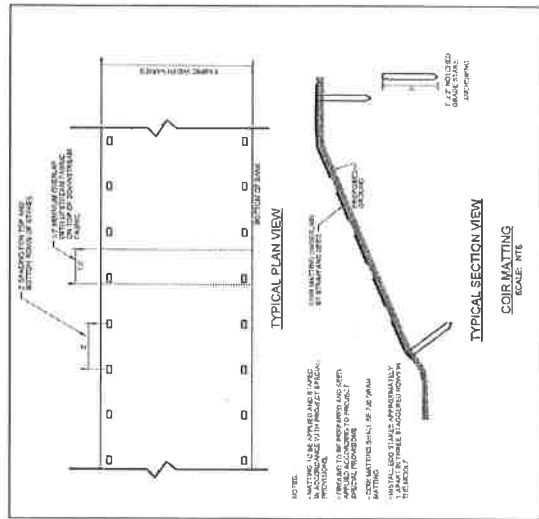
IF ANY OF THE ABOVE SPECIES ARE NOT AVAILABLE A COMPARABLE WARM OR COOL SEASON NATIVE GRASS OR FORB WILL BE USED AS A REPLACEMENT. ADDITIONAL NATIVE WILD FLOWERS MAY BE ADDED TO THIS MIX AS APPROVED BY TDEC NATURAL AREA STAFF.

SEQUENCE OF CONSTRUCTION FOR PROJECT

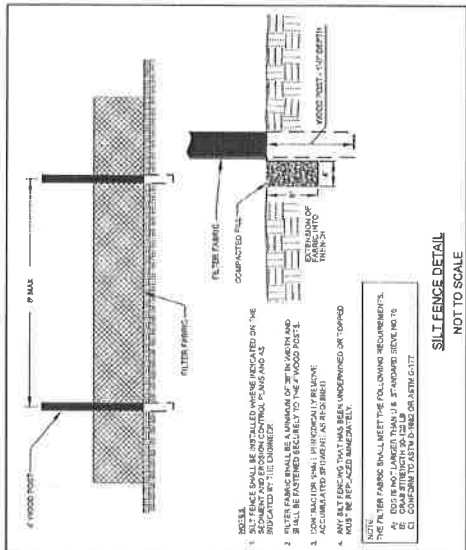
- IDENTIFY THE LIMITS OF DISTURBANCE AND ALL SENSITIVE AREAS OF THE SITE. INSTALL SILT FENCE AS INDICATED WITHIN THESE PLANS EXCEPT WHERE SILT FENCE WOULD CONFLICT WITH THE INSTALLATION OF THE VEGETATED SOIL LIFTS.
- INSTALL ALL EXISTING VEGETATED SOIL LIFTS AS INDICATED BY THE DESIGNER. THEN VEGETATE VEGETATED SOIL LIFTS AS INDICATED WITHIN THESE PLANS. TOP SOIL MAY BE EXCAVATED ON SITE AS APPROVED BY THE DESIGNER.
- INSTALL SILT FENCE THAT WAS NOT INSTALLED AS A PART OF ITEM A.
- REMOVE PAVED ROAD TO EXTENT INDICATED WITHIN THESE PLANS.
- INSTALL INFILTRATION BMP AS INDICATED IN THESE PLANS.
- INSTALL PERVIOUS PARKING AREA AS INDICATED WITHIN THESE PLANS.
- INSTALL FENCE AND KIOSK AS INDICATED WITHIN THESE PLANS.
- INSTALL ALL SEED/STRAW AND PERMANENT STABILIZATION MEASURES THROUGHOUT THE SITE PRIOR TO DEMOBILIZATION FROM THE SITE.



POST AND CHAIN BARRIER FENCE
NOT TO SCALE



COIR MATTING
SCALE: 1/8"

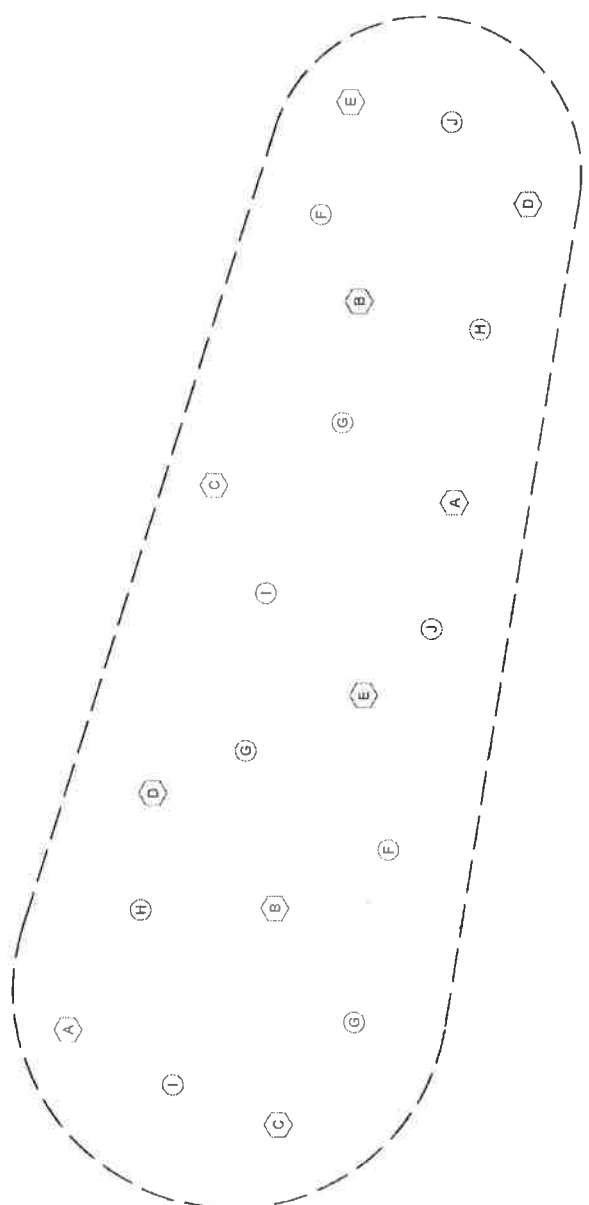


SILT FENCE DETAIL
NOT TO SCALE



REVISIONS

NO.	DATE	DESCRIPTION
1	11-15-17	



COMMON NAME	SCIENTIFIC NAME	SYMBOL ON PLAN	TOTAL STEMS
RED CHOKEBERRY	ARONIA ARBUTIFOLIA	A	2
DENSE ST. JOHN'S WORT	HYPERICUM DENSIFLORUM	B	2
SPICEBUSH	LINDERA BENZOIN	C	2
DEERBERRY	VACCINIUM STAMINELM	D	2
POSSUMHAW VIBURNUM	VIBURNUM NUDUM	E	2
	HERBACEOUS PERENNIALS		
BLUE WOOD ASTER	ASTER CORDIFOLIUS	F	2
SWAMP ROSE-MALLOW	HIBISCUS MOSCHEUTOB	G	3
DENSE BUZZING STAR	LIATRIS SPICATA	H	2
CARDINAL FLOWER	LOBELIA CARDINALIS	I	2
BLACKEYED SUSAN	RUDBECKIA HIRTA	J	2

- NOTES:
- SHRUBS SHALL BE OF 2 - 3 GALLON STOCK
 - HERBACEOUS PERENNIALS SHALL BE OF 3 - 6" POTS
 - DO NOT SUBSTITUTE SPECIES UNLESS APPROVED OF BY THE DESIGNER
 - PREPARE AND PLANT THE VEGETATION BEFORE INSTALLING THE MULCH LAYER