



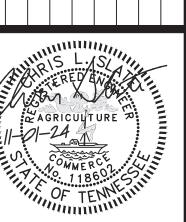
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> LAND SURVEYING LAND PLANNING 1020 WILLIAM BLOUNT DRIVE MARYVILLE, TENNESSEE

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CE.1

SWH DESIGNED: SWH DRAWN: CLS CHECKED: 11/03/22 1" = 30' SCALE:

DRAWING: 6323A-CE.1

PROJECT NO: SEI#6323A





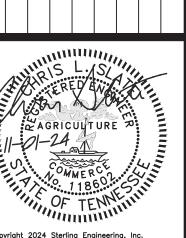
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CF 2

CL.Z	
DESIGNED:	SWH
DRAWN:	SWH
CHECKED:	CLS
DATE:	11/03/22
SCALE:	1" = 30'
DRAWING: 6323A-CE.2	

PROJECT NO: SEI#6323A





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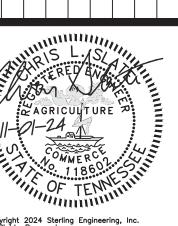
VT COUNTY

BLOUNT

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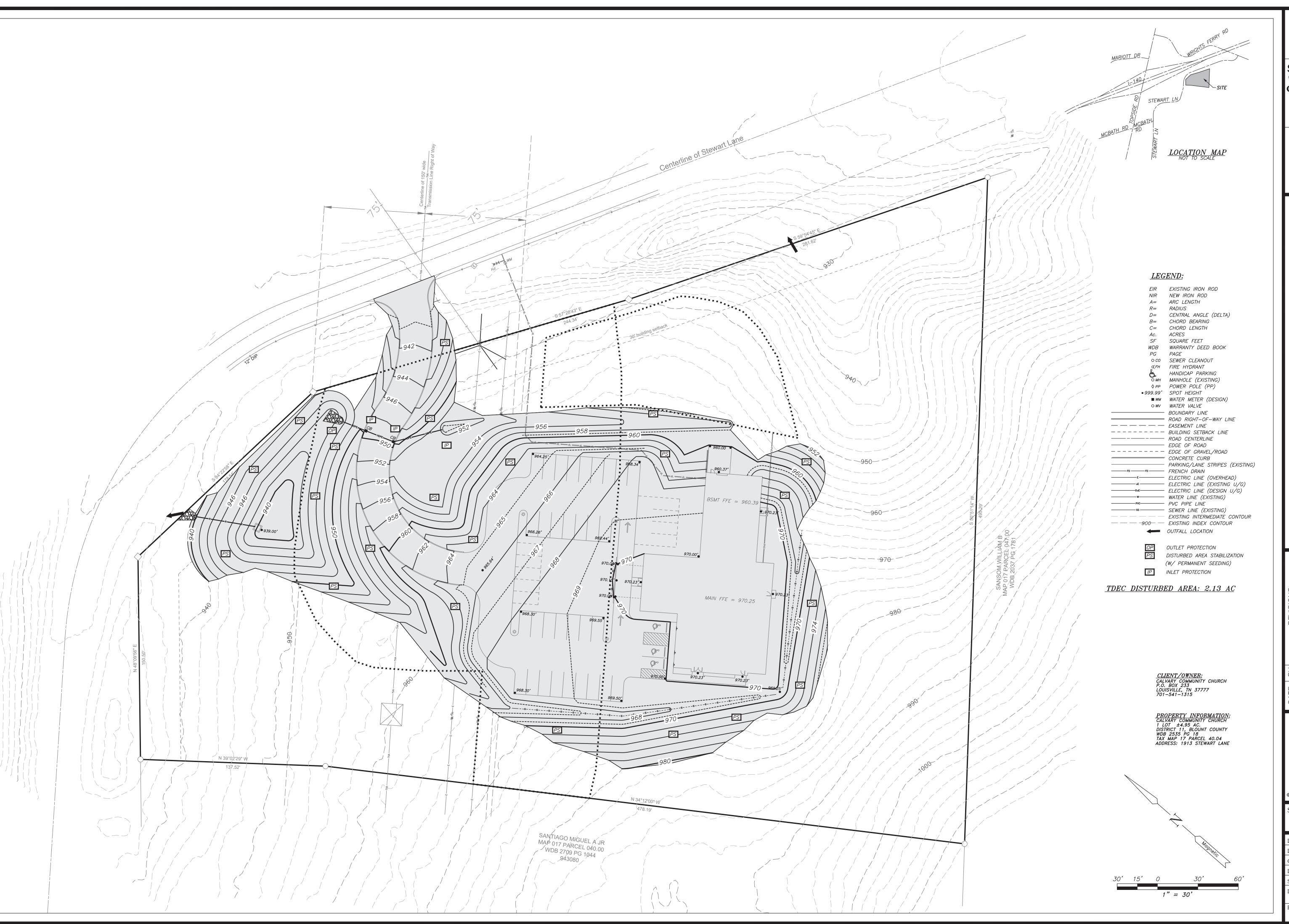
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SHEET CE.

DESIGNED: SWH
DRAWN: SWH
CHECKED: CLS
DATE: 11/03/22
SCALE: 1" = 30'
DRAWING:

6323A-CE.3PROJECT NO:

SEI#6323A





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CE.4

SWH DESIGNED: SWH DRAWN: CLS CHECKED: 11/03/22 1" = 30'

DRAWING: 6323A-CE.4 PROJECT NO:

SEI#6323A

1. The drainage area for the temporary silt fence shall be 2 acres or less, or the maximum drainage area size for a continuous silt fence shall be 1/4 acre per 100 feet of fence length. 2. Silt fences are used to intercept small amounts of sediment, reduce velocity, and have a longer life

than the temporary filter barrier. 4. When steel posts are used they shall have a projection for fastening wire to them. The wire fasteners should be evenly spaced with at least five per post.

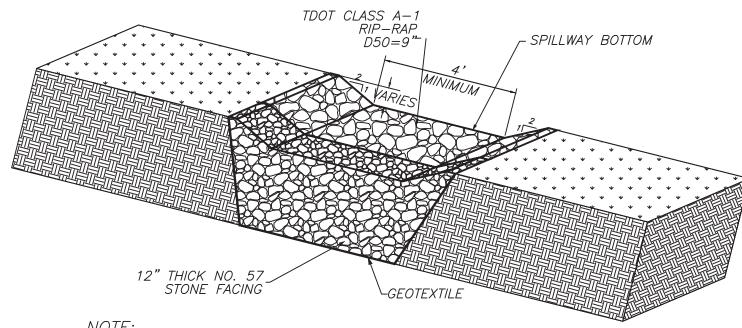
5. Filter cloth shall meet the requirements of the standard specification for geotextiles AASHTO designation: M288, sediment control. self supported.

6. The filter material shall be stapled to the wooden stakes; A minimum 10 inches of the fabric shall be extended into the trench. Heavy duty wire staples with 1/2 inch leg and 1 inch width shall be used and evenly spaced with at least four per post for silt fences and three per post for filter barriers. Filter material shall not be stapled to existing trees.

7. Silt fences and filter barriers should be placed along or near the ground contour. The bottom of fence or barrier at ground line should be on a zero percent (0%) grade, plus or minus five tenths of one percent (+0.5%).

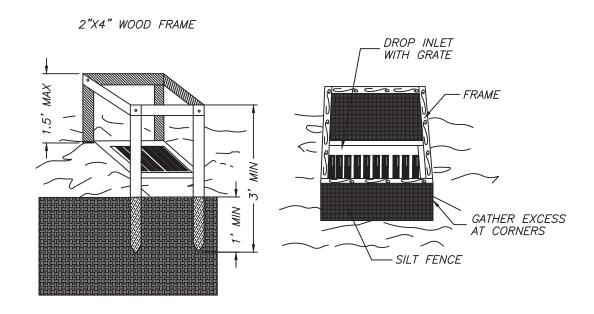
8. A pre assembled silt fence or filter barrier meeting the requirements of the drawing is acceptable in lieu of a field constructed silt fence or filter barrier.

DETAIL "B" SEDIMENT TRAP OUTLET (PERSPECTIVE VIEW)



1. COARSE AGGREGATE SHOULD BE TDOT #3, #357, OR #5 2. SEE CROSS SECTIONS FOR SPILLWAY DEPTHS

DETAIL "C" SILT FENCE INLET PROTECTION

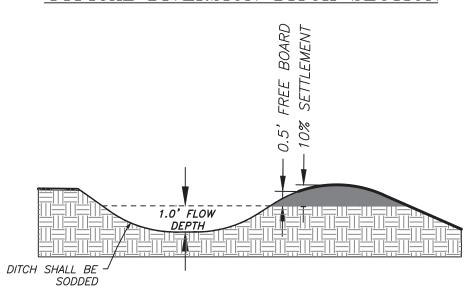


DETAIL "D" CONSTRUCTION ENTRANCE NOT TO SCALE 50' MIN. → INCHES ON GEOTEXTILE FABRIC UNDERLINER

12' FOR ONE

DIRECTIONAL OR 20; FOR TWO

DETAIL "E" TYPICAL DIVERSION DITCH SECTION



-SEE OUTLET (PERSPECTIVE VIEW) DETAIL SEDIMENT TRAP -WEIR LENGTH = 4.00' CROSS SECTION OF OUTLET DRY STORAGE 3799 CU. FT. -GEOTEXTILE TDOT CLASS A-1 RIPRAP

WET STORAGE 3799 CU. FT.

LEGEND:

GE PM VSS TB

OP

GT TO

BUFFER ZONE DISTURBED AREA STABILIZATION (W/ MULCHING ONLY) PS SO DC MA

DISTURBED AREA STABILIZATION (W/ TEMPORARY SEEDING) DISTURBED AREA STABILIZATION (W/ PERMANENT SEEDING) DISTURBED AREA STABILIZATION (W/ SODDING)

DUST CONTROL ON DISTURBED AREAS EROSION CONTROL MATTING W/ SEED

POLYACRYLAMIDE (PAM) VEGETATIVE STREAMBANK STABILIZATION

CD CE CRS DS CHECK DAM CONSTRUCTION EXIT CONSTRUCTION ROAD STABILIZATION

TACKIFIERS AND BINDERS

DEWATERING STRUCTURE SDC STREAM DIVERSION CHANNEL

> DIVERSION SLOPE DRAIN FILTER RING

GEOTEXTILES

GABION LEVEL SPREADER RIP-RAP

SEDIMENT BARRIER - HAY BALES SEDIMENT BARRIER - SILT FENCE

SEDIMENT TRAP INLET PROTECTION

TEMPORARY STREAM CROSSING OUTLET PROTECTION

SURFACE ROUGHENING GRADIENT TREATMENT

TOPSOILING SEDIMENT BASIN

BAFFLE - SEE TDEC MANUAL HEIGHT- SEE PLAN WIDTH- SEE PLAN

LENGTH- SEE PLAN

GENERAL NOTES:

1. The Contractor shall be responsible for obtaining all necessary permits prior to construction.

2. Erosion control measures such as straw bale barriers and silt fences shall be installed as necessary to prevent siltation onto adjoining properties and shall be maintained until permanent vegetation is established.

3. The Contractor shall notify the Engineer immediately if discrepancies or omissions are found or if clarifications are required on the plans.

4. Rip—Rap (18" depth) shall be installed at all pipe ends and as otherwise shown on the plan. Swales shall be matted and protected with straw bales until permanent vegetation is established. See details for additional information

5. Stone Construction Entrance/Exit (50' \times 20' \times 6"thick) to be installed before grading activities begin.

6. Pre-construction vegetation shall not be disturbed more than 15 days prior to any excavating activities.

7. All controls have been designed to withstand a 2 year, 24 hour storm event.

EROSION AND SEDIMENT CONTROL INSTALLATION/MAINTENANCE

1. The new General Permit requires that inspections of outfall points and ÉPSCs to be done twice each week at least 72 hours apart and before anticipated rain events. Inspection information should be recorded/written and maintained on-site and available for our review during inspections. The inspector must have proof of completion of TDEC Fundamentals of Erosion Prevention and Sediment Control Workshop/Course.

. Close attention shall be paid to locate damaged areas, end runs and undercutting.

3. Necessary repairs shall be accomplished immediately. 4. Should hay bales or silt fencing decompose or become ineffective, the ineffective section shall be immediately

5. Sediment deposits should be removed after each rainfall. The deposits must be removed when the level of deposition reaches approximately one half the height of the barrier.

6. Any sediment deposits remaining in place after the barrier is no longer required shall be dressed to conform to the existing grade, prepared and seeded or otherwise revegetated and stabilized. 7. Owner/Developer agree to monitor sediment traps, sediment basins, and retention ponds for sediment ratio.

8. Owner/Developer agree to contract with independent firm to perform required inspections and documentation. 9. A construction site assessment of the SWPPP shall be performed in accordance with part 3.1.2 of the Tennessee Construction General permit within one month of construction commencement. 10. Any offsite sediment accumulations shall be removed daily. Offsite accumulations deposited on private property

shall be removed by methods agreed upon by the contractor and the adjacent landowner(s).

11. If sediment enters waters of the State, TDEC—WPC will be notified immediately and consulted with concerning removal of said sediment if required.

12. Exposed litter, debris, chemicals, etc., shall be properly stored or disposed of prior to anticipated storm events. 13. Removal of standing muddy water from the site shall be accomplished with a pump/filter bag combination or said water will be diverted into existing sediment control devices via a pump.

14.Temporary or permanent stabilization for any area of the project must be completed no later than 15 days after the construction activity for said area has temporarily or permanently ceased. 15. Steep slopes (greater than or equal to 35%) shall be stabilized no later than 7 days after construction activity on these slopes has temporarily or permanently ceased.

SPILLS AND NON-STORMWATER CONTINGENCIES

'. Construction vehicles shall clean mud from their tires and body onsite so that the sediment will flow to the sediment control devices. Any sediment that ends up in the street or other places offsite shall be cleaned up with a shovel and broom or other means but shall not be washed away using water. The cleaned up sediment shall be placed back onsite or taken to another site with an approved and functioning sediment control plan. ?. Vehicles and equipment shall be fueled onsite near the construction exit in a designated containment area. Clean up any fuel spill immediately. Contaminated soils will be placed on heavy plastic and covered or placed in approved containers to prevent contact with stormwater. All fuel tanks shall be stored in the containment area. All oil, other vehicle fluids, solvents, paint, etc. shall be stored in a construction trailer or other approved container. 3. Concrete trucks shall wash out their equipment in a designated area near the construction exit where runoff from the cleaning will drain to the sediment control devices. No runoff from the cleanup shall be allowed to be discharged directly into a sediment basin, trap, pond, storm drain, ditch, stream or other stormwater conveyance. The contractor shall provide adequate signage on the project indicating the area as the concrete wash out area. 4. All hazardous materials such as empty or partially empty paint cans, oil cans, filters, cleaning fluid, etc. shall be disposed of by taking them to a hazardous material disposal site in accordance with State laws. All water runoff from washing of páint tools or other hazardous equipment shall not be discharged to a sediment basin, trap, pond, storm drain, ditch, stream or other stormwater conveyance and shall be disposed of in accordance with State laws. 5. Contractor is responsible for litter control and cleanup. No litter or construction debris shall be allowed to leave the construction site and shall not be allowed to enter a sediment basin, trap, pond, storm drain, ditch, stream or other

6. All chemicals and soluble materials stored on—site must either be stored in an enclosed, waterproof storage facility or provided with secondary containment capable of storing the contents of the total amounts of chemicals stored. Spill cleanup materials must be located within the immediate proximity of the materials as well.

7. Placement of port—a—potties on the project will not be located close to streams, wetlands or storm drains.

STANDARD NOTES:

1. This is a priority construction activity.

2. Adequate drainage, erosion and sediment control measures, best management practices and/or other stormwater management facilities shall be provided and maintained at all times during construction. damages to adjacent property and/or the construction site caused by the contractor's or property owner's failure to provide and maintain adequate drainage and erosion/sediment control for the construction area shall be the responsibility of the property owner and/or contractor.

3. Quality assurance of erosion prevention and sediment controls shall be conducted by qualified personnel performing site assessment at each outfall involving drainage totaling 10 or more acres, or five or more acres if draining to impaired or exceptional waters. this assessment will be conducted at each qualifying outfall within a month of construction commencement. (see cgp sec 3.1.2 for assessment language) 4. Fugitive sediment that has escaped the construction site must be removed so that it is not subsequently washed

into storm sewers and/or streams by the next rain and/or so that it does not pose a safety hazard to users of public streets. arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining land owner. 5. Sediment should be removed from sediment traps, silt fences, sedimentation ponds, other sediment controls when

design capacity has been reduced by 50%. 6. Litter, construction debris, and construction chemicals exposed to stormwater shall be picked up prior to anticipated

storm events or before being carried off the site by wind, or otherwise prevented from becoming a pollution source 7. Preconstruction vegetative ground cover shall not be destroyed, removed, or disturbed more than 15 days prior to

grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.

8. Existing vegetation should be preserved to the maximum extent practicable. 9. Temporary or permanent soil stabilization must be completed no later than 15 days after the construction activity in that portion of the site has permanently or temporarily ceased. steep slopes (>35%) must be permanently or

temporarily stabilized within 7 days. 10. Site inspections shall be performed at least twice weekly at a minimum of 72 hours apart on all unstabilized

CONSTRUCTION SEQUENCE

1. Install silt fences, sediment trap, and construction entrance.

2. No site grading can commence until a grading permit has been issued and no grading permit will be issued until all erosion and sediment control is in place according to the site specific SWPPP, and passes inspection. Contact Doug Chapman for inspection at (865)207-6742.

3. Install diversion ditches, and outlet protection.

4. Grade & stabilize site/roadways, install utilities, install inlet/outlet protection

5. De-silt sediment trap, and silt fence as required 6. Remove silt fence and convert sediment trap to detention pond upon

completion of all grading activities and establishment of permanent seeding.

A temporary sediment barrier consisting of a synthetic fabric stretched across and attached to supporting posts and entrenched.

To intercept and detain small amounts of sediment from disturbed areas during construction operations in order to prevent sediment form leaving the site or migrating to undesired locations. To decrease the velocity of sheet flows and low to moderate level channel flows. Construction Specifications:

1. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene varn and shall be certified by the manufacturer or supplier as being suitable for installation as a silt fence barrier and meeting the requirements of the Tennessee State Department of Transportation.

2. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of 0 to 120 degrees Fahrenheit.

3. If wooden stakes are used for silt fence construction, they must have a diameter of 2 inches when oak is used and 4 inches when pine is used. Wooden stakes must have a minimum length of 5 feet.

4. If steel posts (standard "U" or "T" section) are utilized for silt fence construction, they must have a minimum weight of 1.33 pounds per linear

foot and shall have a minimum length of 5 feet. 5. Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum mesh spacing of 6 inches.

6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface and not exceed 34 inches above ground elevation. 7. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter cloth shall be spliced together only at a support post, with a minimum 6 inch overlap, and securely sealed.

8. A trench shall be excavated approximately 4 inches wide and 4 inches deep on the upslope side of the proposed location of the silt fence. 9. When wire support is used, standard strength filter cloth may be used. Posts for this type of installation shall be placed a maximum of 10 feet apart. The wire mesh fence must be fastened securely to the upslope side of the posts using heavy duty wire staples at least one inch long, tie wires, or hog rings. The wire shall extend into the trench a minimum of two inches and shall not extend more than 34 inches above the original ground surface. The standard strength fabric shall be stapled or wired to the wire fence, and eight inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

10. When wire support is not used, extra strength filter cloth shall be used. Posts for this type of installation shall be placed a maximum of 6 feet apart. The filter fabric shall be fastened securely to the upslope side of the posts using one inch long heavy duty wire staples or tie wires and eight inches of the fabric shall be extended into the trench. The fabric shall not be stapled to existing trees.

11. If a silt fence is to be constructed across a ditch line or swale, the silt fence must be of sufficient length to eliminate end flows and the plan configuration shall resemble an arc or horseshoe with the ends oriented upslope, Extra strength filter fabric shall be used for this application with a maximum 3 foot spacing of the posts.

12. The 4 inch by 4 inch trench shall be backfilled and the soil compacted over the filter fabric.

13. Silt fences shall be removed when they have served their useful purpose or construction is complete. In no case shall the silt fence be removed before the upslope area has been permanently stabilized.

OUTLET PROTECTION NOTES:

1. The outlets of all pipes shall have outlet protection installed as per the detail drawings.

2. The bottom grade of the outlet protection shall be constructed with 0% slope along inside length and across the apron area. 3. Side slopes shall be a maximum of 2:1 to match with the existing ground

outside of the apron area. 4. Alignment shall be such that there are no bends in the horizontal

alignment of the outlet protection. 5. The apron shall be lined with riprap, grouted riprap, concrete, or gabion

baskets. The median diameter of the stone Ds shall be as shown on the profile sheets. 6. The gradation and quality and placement of riprap shall conform to the

standards and specifications of the TN. DOT spec. 3.19 riprap. 7. Filter cloth as shown in the detail will be placed between the riprap and the underlying soil to prevent soil movement into and through the riprap. The material for the filter cloth shall meet or exceed the standards and specifications of the TN. DOT. spec. 3.19 riprap. Minimum key depth at the

perimeter of the filter cloth shall be six (6) inches or more. 8. Erosion and sediment control shall be maintained down stream of the pipe outlets until such time as vegetation is reestablished and stabilized.

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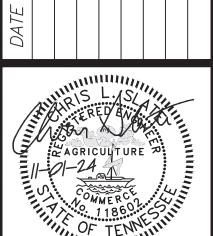
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020 WILLIAM BLOUNT DRIVE MARYVILLE, TENNESSEE 37802-8401 P.O. BOX 4878 MARYVILLE, TENNESSEE 37802-4878

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MMCNI



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CE.5

SWH DESIGNED: SWH DRAWN: CHECKED: 11/03/22 N.T.S. SCALE:

PROJECT NO: SEI#6323A

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