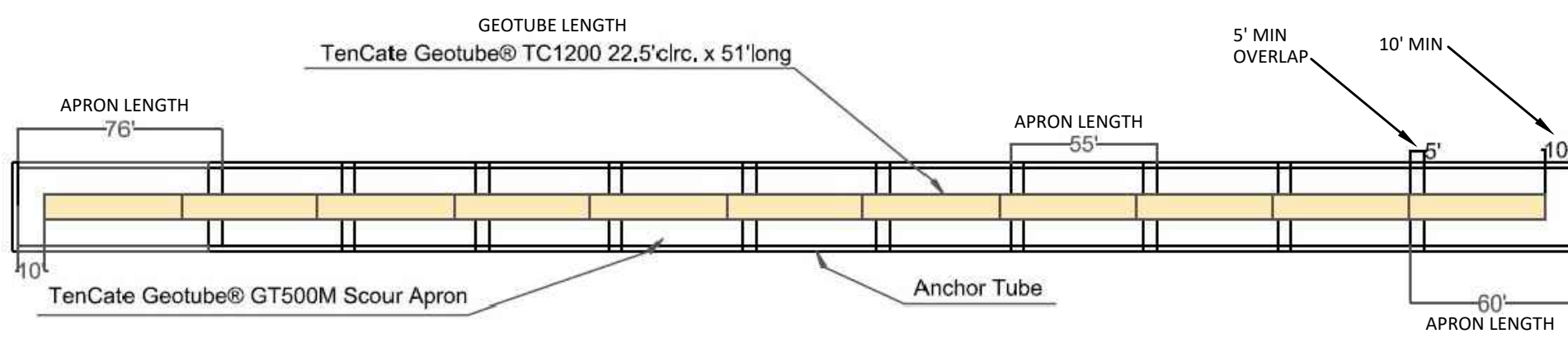
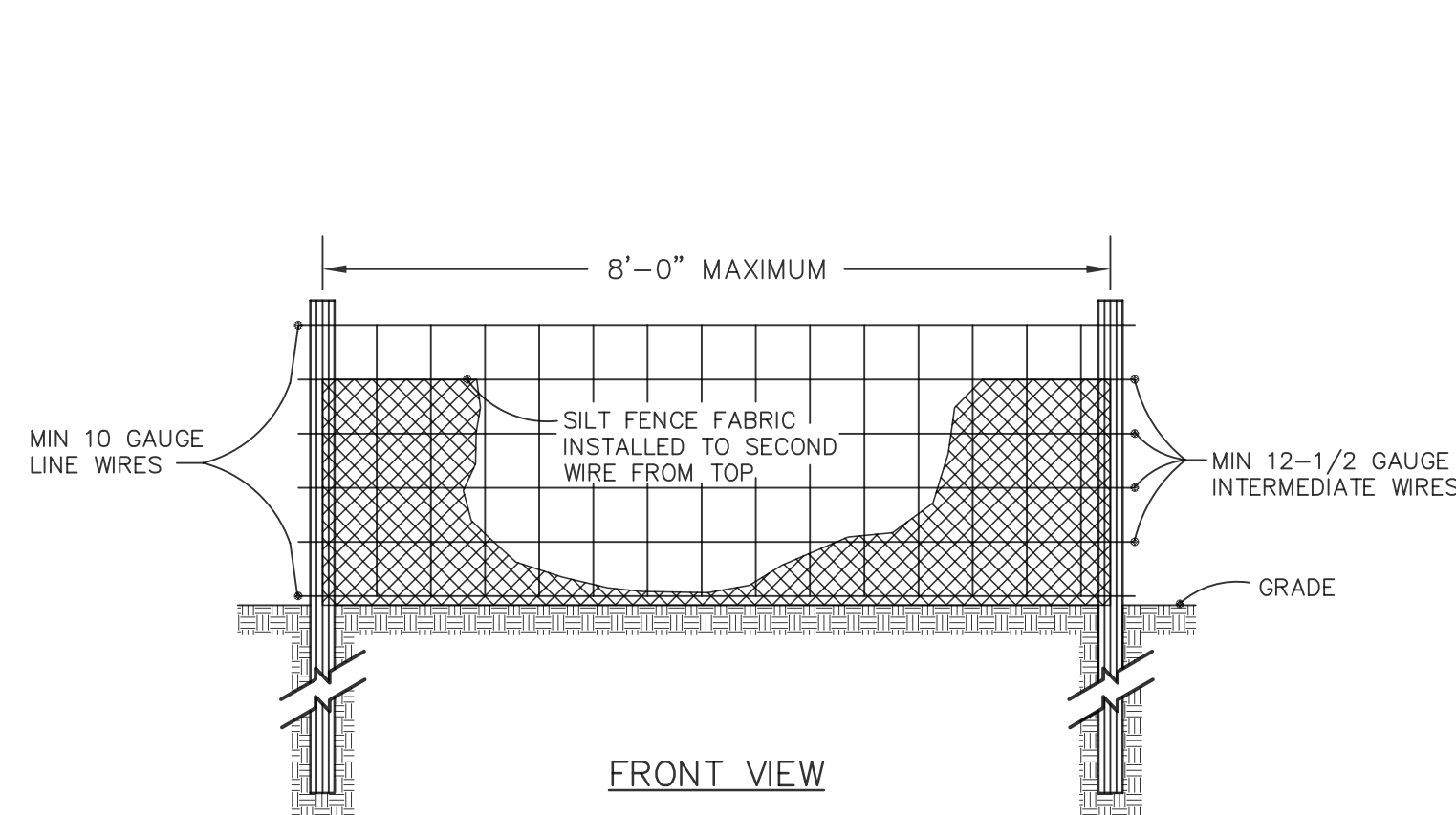


Ritz-Carlton Club Project

PLAN VIEW

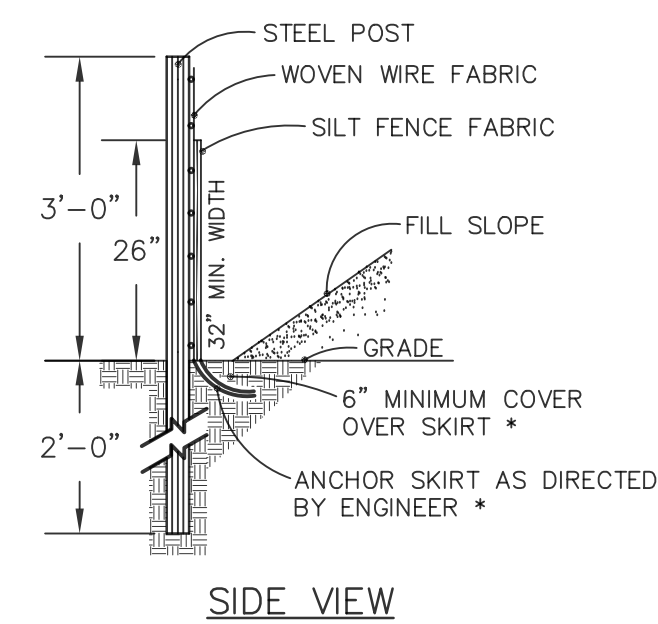
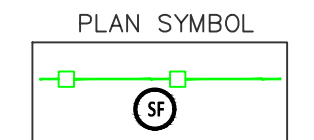


CONTIGUOUS BREAKWATER - STANDARD DIMENSIONS

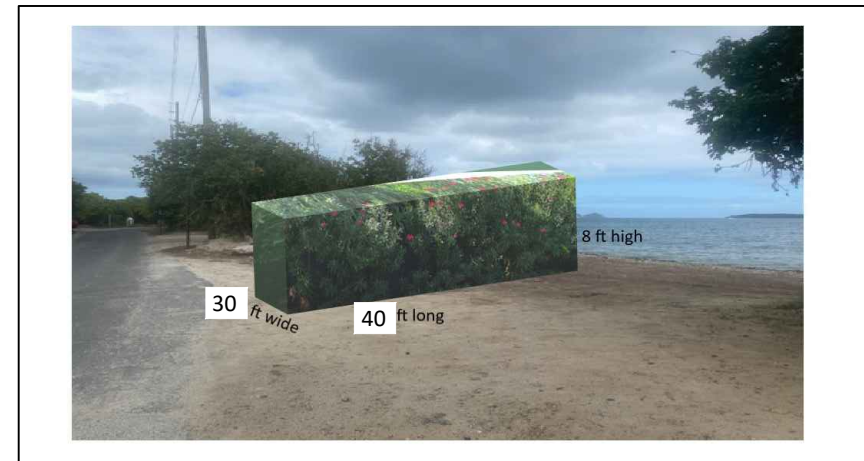


NOTE:

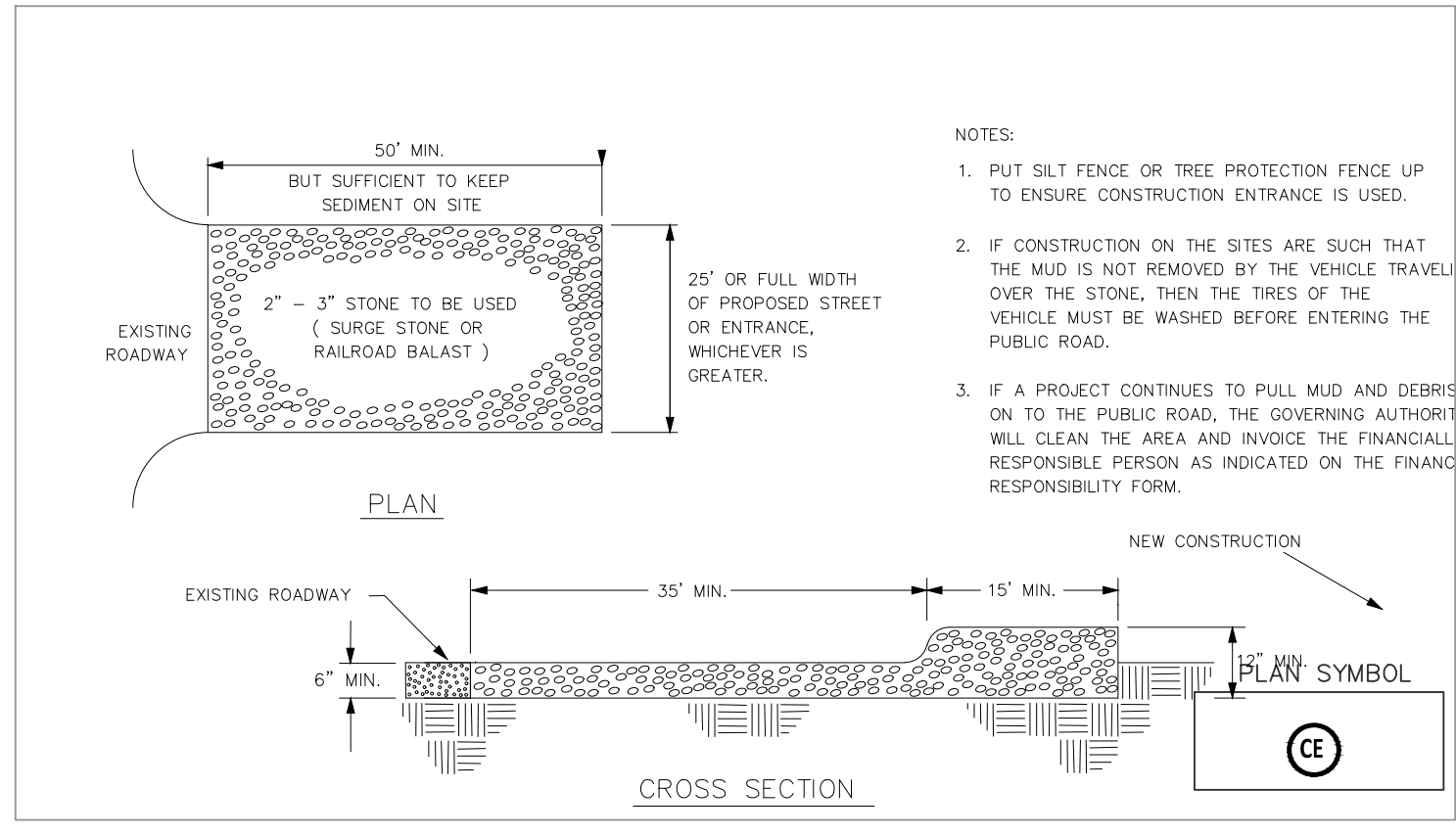
1. USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.
2. REMOVE SEDIMENT DEPOSITED AS NEEDED TO PROVIDE STORAGE VOLUME FOR THE NEXT RAIN AND TO REMOVE PRESSURE ON THE SILT FENCE.



STANDARD TEMPORARY SILT FENCE (N.T.S.)



STORAGE AREA CONCEALMENT



CONSTRUCTION ENTRANCE

GEOTUBE CONSTRUCTION SEQUENCE:

PROJECT NAME: RITZ CLUB GEOTUBE SHORELINE STABILIZATION

LOCATION: ESTATE NAZARETH, ST. THOMAS, USVI

DEVELOPER: THE RITZ-CARLTON CLUB, ST THOMAS, USVI
GREAT BAY CONDOMINIUM OWNERS ASSOCIATION
6910 GREAT BAY, ST. THOMAS, USVI 00802 (340) 643-8427

DESCRIPTION: THE PROJECT AREA WILL BE CLEANED AND ANY REUSABLE MATERIAL WILL BE STOCKPILED FOR FUTURE USE. EROSION CONTROL MEASURES (SILT FENCE) WILL BE INSTALLED BEFORE ANY CONSTRUCTION ACTIVITY BEGINS.

PROCURE AND MOBILIZE ALL NECESSARY EQUIPMENT TO SITE. THIS EQUIPMENT WILL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

- HOPPER** - One to one and a half cubic yards. Steep sides so the sand slides down easily to the throat of the hopper. It can be one that stands on legs or one that is suspended by a chain from an excavator.
- PUMP** - 800 gpm. Should come with hose (suction) etc. If pumping from the sea you can build some type of steel frame to keep the suction line up off the sea bed and prevent sucking up sand.
- GENERATOR** - only needed if using electric pump.
- 6" LAY FLAT TUBE**. Need at least 200'. Where the flex or lay flat hose goes into the tube you will need a 4" section of 6" PVC so the port sleeve can be strapped to the stinger. It needs to be inserted a couple of feet into the sleeve so the tip is inside the tube.
- EXCAVATOR** - to dump sand into hopper.

AFTER EROSION CONTROL MEASURES ARE IN PLACE AND SECURE, THE WORK AREA WILL BE ESTABLISHED AND PREPARED FOR THE DEPLOYMENT OF THE GEOTUBES.

THE GEOTEXTILE SCOUR APRON WILL BE LAID AND PLACED LEVEL FROM SIDE TO SIDE WITH A SLOPE OF NOT MORE THAN 1% FROM END TO END. ALIGNMENT POSTS WILL BE INSTALLED ON 15' CENTERS, CORRESPONDING TO THE LOOPS THAT ARE SEWN INTO THE SCOUR APRON.

ATTACH THE SCOUR APRON TO THE POSTS AND FILL ANCHOR TUBE. ONCE THE ANCHOR TUBE IS FILLED, PLACE THE GEOTUBE UNIT OVER THE INWARD EDGE OF THE APRON AND UNROLL THE GEOTUBE UNIT, ATTACHING THE LOOPS TO THE ALIGNMENT POSTS.

TO START THE GEOTUBE FILLING OPERATION, THE PUMP SHOULD BE AT A RATE OF BETWEEN 1000 AND 2500 gpm, AND THE PERCENT OF SAND SHOULD BE BETWEEN 10% AND 12%. AT ALL TIMES DURING THE FILLING OPERATION, THE GEOTUBE UNIT SHOULD BE OBSERVED BY A SITE INSPECTOR TO ENSURE THE FILLING IS UNIFORM OVER THE ENTIRE LENGTH OF THE GEOTUBE.

ONCE THE GEOTUBE IS AT THE FINAL ELEVATION, A CERTIFICATION SURVEY WILL BE PERFORMED TO DOCUMENT THE AS-BUILT CONDITIONS.

AFTER PRELIMINARY ACCEPTANCE BY THE OWNER, AN INSPECTION WITH DPNR/CZM STAFF WILL BE CONDUCTED, AND AFTER ACCEPTANCE OF ALL WORK BY DPNR/CZM, THE EROSION CONTROL MEASURES WILL BE REMOVED.

DETAILED INSTALLATION METHODOLOGY WILL BE PROVIDED FOR THE CONTRACTOR BY GEOTUBE. A GEOTUBE REPRESENTATIVE WILL BE ON-SITE TO ASSIST WITH COMMENCEMENT OF CONSTRUCTION ACTIVITY. TECHNICAL QUESTIONS MAY BE DIRECTED TO GEOTUBE / TENCATE REPRESENTATIVE BRYAN HAMILTON AT 678.451.5956.

APPROXIMATE SAND QUANTITIES:

22' CIRCUMFERENCE GEOTUBE - 11 @ 51' EACH	561 LF
27' SCOUR APRON	650 LF
SAND VOLUME IN GEOTUBES AND SCOUR TUBE	655 CY
SAND VOLUME FOR WASTES - 10%	66 CY

Geotube® Simulator		Output	
Input	11821	Maximum Circumference (Feet) (C1)	44.51
Project	Ritz Carlton Club	Maximum Average Water Table (Feet) (C2)	23.20
Line	Fully Submerged	Geotube® Basic Contact Width (ft)	6.52
Water Level	2.00	Geotube® Water Depth (ft)	1.50
Geotube® Circumference (ft)	22	Geotube® Cross Section Area (sq ft)	30.25
Relative Density of Fill Material	2.65	Geotube® Volume per Unit of Length (cu ft/ft)	1.50
Geotube® Fabric Type	TC1200-21000	Percentage of Maximum Fill Capacity	20.00
Geotube® Fabric Size	22.5	Fill Material Weight (lb)	15.00
Fill Unit Weight	120	Fill Material Volume (cu ft)	25.00
Fill Moisture Content	10	Fill Material Weight (lb)	15.00
Fill Moisture Content	10	Fill Material Volume (cu ft)	25.00

Geotube® Simulator Cross Section	
Input	11821
Project	Ritz Carlton Club
Line	Fully Submerged
Water Level	2.00
Geotube® Circumference (ft)	22
Relative Density of Fill Material	2.65
Geotube® Fabric Type	TC1200-21000
Geotube® Fabric Size	22.5
Fill Unit Weight	120
Fill Moisture Content	10
Fill Moisture Content	10

BCSC DOSPIVA
The Green Piece Engineering + Environment
Engineers • Surveyors • Planners
5001-12 Chandler's Wharf, Christiansburg, VA 00820
Phone: 340.776.7474 www.dospiva.com



STORAGE AREA & BREAKWATER PLAN

RITZ CARLTON CLUB

Estate Nazareth, Saint Thomas, US Virgin Islands

Designed By: _____
 Drawn By: jlb
 Checked By: jLB
 Scale: 1" = 40 ft
 Date: 01 FEBRUARY 2022
 Revised:
 1
 2
 3
 4
 5
 Project Number: 18X013
SU-1
 REVIEW

