CONSTRUCTION NOTES FOR THE PLACEMENT OF TENSAR GEORIDES AND BACKFILL SOILS FOR TENSAR WWF TEMPORARY RETAINING WALL

1.0 MATERIALS

1.1. Geotextile filter fabric shall be 6’ x 6’ x 3/16” geotextile filter fabric manufactured by Tensar Corporation, Morristown, Georgia.

1.2. Geodrain bags shall be 46” x 46” x 3/16” and be filled with non-woven needle-punched polypropylene with a permeability of 1200 cfs.

1.3. Geotextile filter fabric shall be 0.7 oz/dm² with non-woven needle-punched polypropylene with a permeability of 1200 cfs.

1.4. Wall facing shall be pre-fabricated black steel welded wire form panels with a minimum thickness of 0.50” and shall be placed in the construction drawings.

1.5. Tensar Earth Technologies, Inc. shall provide to the contractor the following materials only:

- Face forms and struts
- Filter fabric
- Geosynthetic connection, as applicable

2.0 TECHNICAL REQUIREMENTS

2.1. Fill materials shall be placed from the back of the welded wire facing forms towards the ends of the geotextile to ensure compaction.

2.2. Welded wire facing panels shall be placed by hand and shall be supported above ground level with at least 0.75” fill. The fill shall be compacted to a minimum of 90% of the maximum dry density.

2.3. Welded wire forms shall be supported with at least 0.75” fill. The fill shall be compacted to a minimum of 90% of the maximum dry density.

3.0 TENSAR GEORIDES PLACEMENT

3.1. Tensar georides shall be placed at the same locations and elevations on the shop drawings.

3.2. Tensar georides reinforcement shall be continuous throughout the elevation, length, and depth. Geosynthetic reinforcement shall not be utilized unless pre-approved by the engineer.

3.3. Prior to placing fill, the georides shall be placed on top of the geosynthetic reinforcement and the fill shall be compacted to a minimum of 90% of the maximum dry density.

3.4. Tracked construction equipment shall not be operated directly on the georides. A minimum of 6” fill thickness is required for operation of tracked equipment over the georides. Tracking of tracked equipment shall be kept to a minimum to prevent damage to the georides.

3.5. Rubber-tire vehicles shall pass over the georides at a maximum speed of 10 mph. Sudden braking and sharp turning shall be avoided.

3.6. Tensar uniaxial georides shall be rolled out with the long axis of the georides parallel to the welded wire forms. Tensar biaxial georides shall be rolled out with the machine running parallel to the welded wire forms.

3.7. Geosynthetic reinforcement shall be cut to the desired length, and the cut edges shall be trimmed to a straight line. The reinforcement shall be placed over the georides to ensure continuity.

3.8. Georides shall be placed in 10’ sections.

3.9. A minimum of 3” fill shall be placed over the georides. The fill shall be compacted to a minimum of 90% of the maximum dry density.

4.0 CHANGES TO REINFORCEMENT LAYOUT OR PLACEMENT

4.1. No changes to the georides layout, including, but not limited to, length, georides, or elevation, shall be made without prior written approval of the Tensar Earth Technologies, Inc. design engineer.

4.2. Tensar reinforcement shall be continuous throughout the elevation, length, and depth. Geosynthetic reinforcement shall not be utilized unless pre-approved by the engineer.

4.3. The Tensar reinforced wall has been designed based on the assumption that the reinforced backfill material shall be free of subsurface drainage of water (seepage).

5.0 DRAINAGE

5.1. Drainage shall be placed at the base of the georides and the fill shall be compacted to a minimum of 90% of the maximum dry density.

6.0 DESIGN PARAMETERS

6.1. Soil parameters shall be based on the information provided by the engineer. Tensar Earth Technologies, Inc. shall not be responsible for any errors or omissions in the information provided.

7.0 SPECIAL PROVISIONS

7.1. Wall elevation views, locations, and geometry of existing and proposed structures shall be verified by the contractor before developing shop drawings.

7.2. Tensar Earth Technologies, Inc. assumes no liability for design, installation, or verification of subsurface drainage systems, suitability of soil design parameters and interpretation of subsurface conditions.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

RETAILING WALL SYSTEM TENSAR EARTH TECHNOLOGIES TEMPORARY RETAINING WALL
OPTIONAL TYPICAL CROSS-SECTION

NOT TO SCALE

NOTE:
A FULL ROLL OF BASKET SHOULD BE PLACED IN ALL TOP BASKETS NOT CONTAINING REINFORCEMENT.

SECTION A-B

NOT TO SCALE

SUPPORT STRUT

304# X 3/4" X 0.035" & 0.025" B
WELDED WIRE FABRIC

NOT TO SCALE

OVERLAPPING ONE PAIR OF VERTICAL BARS BETWEEN FACE PANELS.

THESE DETAILS FOR "OPTIONAL NON-STAINLESS STEEL WRAP" MAY BE USED IN LIEU OF THE DETAILS FOR TENSAR® GEOREDGE WRAP FACINGS.

OPTIONAL MECHANICAL CONNECTION SYSTEM WITHOUT BIAxIAL GEOREDGE WRAP

NOT TO SCALE

OPTIMAL MECHANICAL CONNECTION SYSTEM WITHOUT BIAxIAL GEOREDGE WRAP

NOTE:
1. FACINGS TO CONSIST OF PREFABRICATED WAF 3/8" X 5/16"
GLASS FIBER FABRIC, PER ASTM A579.
2. ALL FORMS AND STAIRS SHALL BE FABRICATED WITH NO. 4 BLACK WIRE.
3. OVERALL LENGTH OF WIRE FORMS IS 3'-6".

WIRE STRUTS

4-

3" x 3" x 1/8" BLACK WIRE (TRU)

FIELD AS ASSEMBLED

CONNECTION LOOP DETAIL

NOT TO SCALE

CONNECTION ROD:
4-3/4" X 3/8" GLASS FIBER FABRIC

THIS SYSTEM MAY BE USED IN ALL ENVIRONMENTS.
NOTES:

LESS THAN 95% COVERAGE MAY ONLY BE USED WITH THE OPTIMAL NON-DUCTILE GEOSYNTHETIC WRAP WITH MECHANICAL CONNECTION.

FOR LESS THAN 95% COVERAGE, PRIMARY REINFORCEMENT SHALL BE CONNECTED TO THE BAT FACING.

ALTERNATE LAYERS OF UNIFORM PRIMARY REINFORCEMENT SHALL BE PLACED IN STANDARD PATTERN SUCH THAT THE LAYER ABOVE IS PLACED WITH THE CENTERLINE OF THE GEOTEXTILE IN ALIGNMENT WITH THE CENTERLINE OF THE SPACE BELOW.

TYPICAL GEOGRID COVERAGE

NOT TO SCALE

GEOTEXTILE OUTSIDE CORNER DETAIL

NOT TO SCALE

GEOTEXTILE INSIDE CORNER DETAIL

NOT TO SCALE

GEOTEXTILE ACUTE CORNER DETAIL

NOT TO SCALE

GEOTEXTILE PLACEMENT ON CURVES

NOT TO SCALE

THE FOLLOWING MATERIALS ARE REQUIRED:
- HIP TIE RODS
- GEOTEXTILE
- GEOMAT

TIE SIDES WITH WIRE TIES OF SUITABLE RING SIZE NO. 20

BEND OR CUT BASKETS TO FIT FIELD CONDITIONS AND ENSURE THATそこGEOTEXTILE FILTER FABRIC OVERLAY IS OF MAXIMUM.

BEND OR CUT BASKETS TO FIT FIELD CONDITIONS AND ENSURE THAT BROADCAST FILTER FABRIC OVERLAY FITS MAXIMUM.

NOT TO SCALE

OUTSIDE CORNER DETAIL

INSIDE CORNER DETAIL

NOT TO SCALE

NOT TO SCALE

THIS SYSTEM MAY BE USED IN ALL ENVIRONMENTS.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

RETAINING WALL SYSTEM

TENSAR EARTH TECHNOLOGIES

TEMPORARY RETAINING WALL

©2003, TENSAR EARTH TECHNOLOGIES, INC.

THIS DRAWING, DESIGN NOTES AND ASSOCIATED CALCULATIONS HAVE BEEN PREPARED BY TENSAR EARTH TECHNOLOGIES, INC. FOR ESTIMATING PURPOSES AND MAY NOT BE USED FOR FORMAL DESIGN OR CONSTRUCTION.

©2003, TENSAR EARTH TECHNOLOGIES, INC.