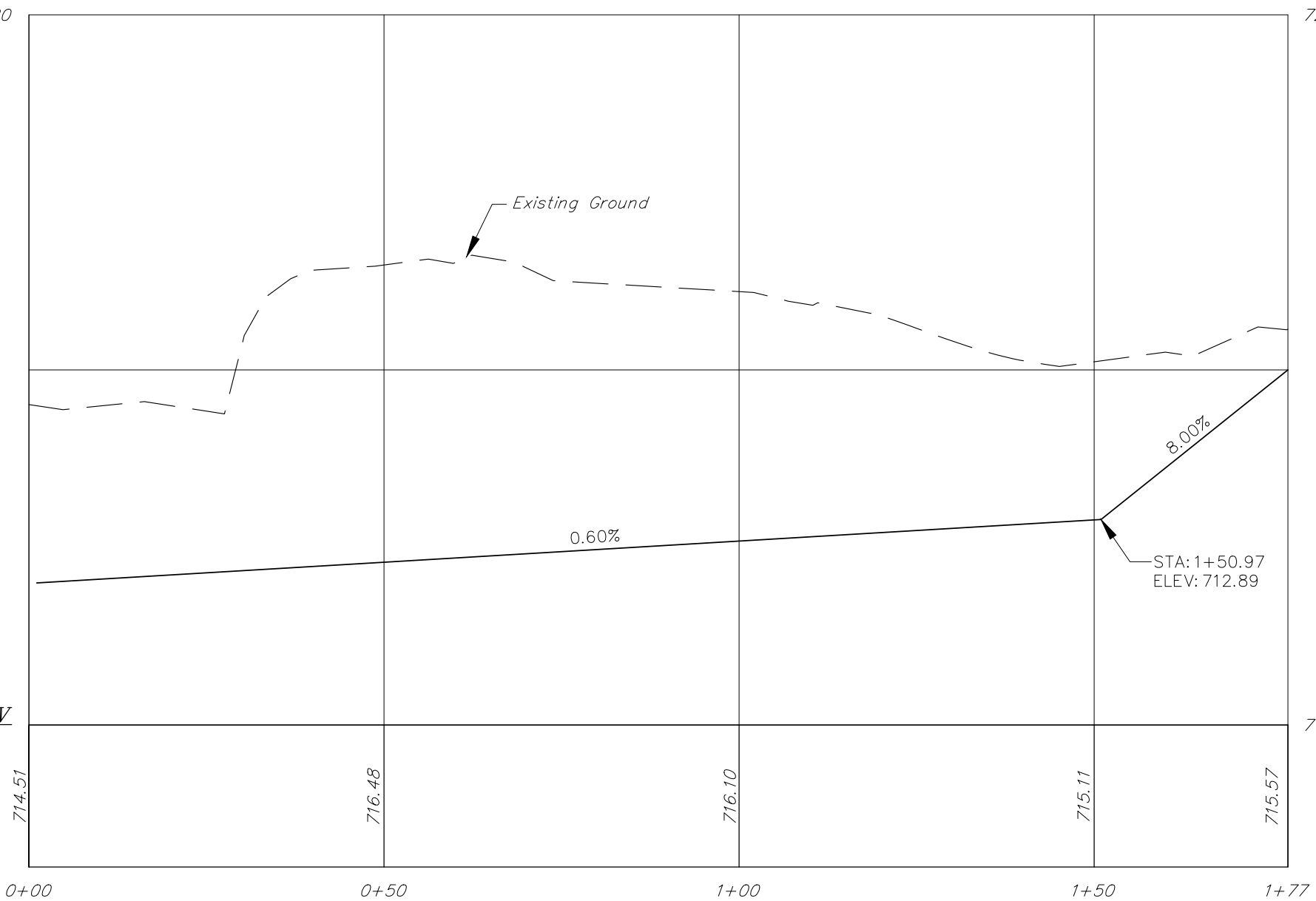


720

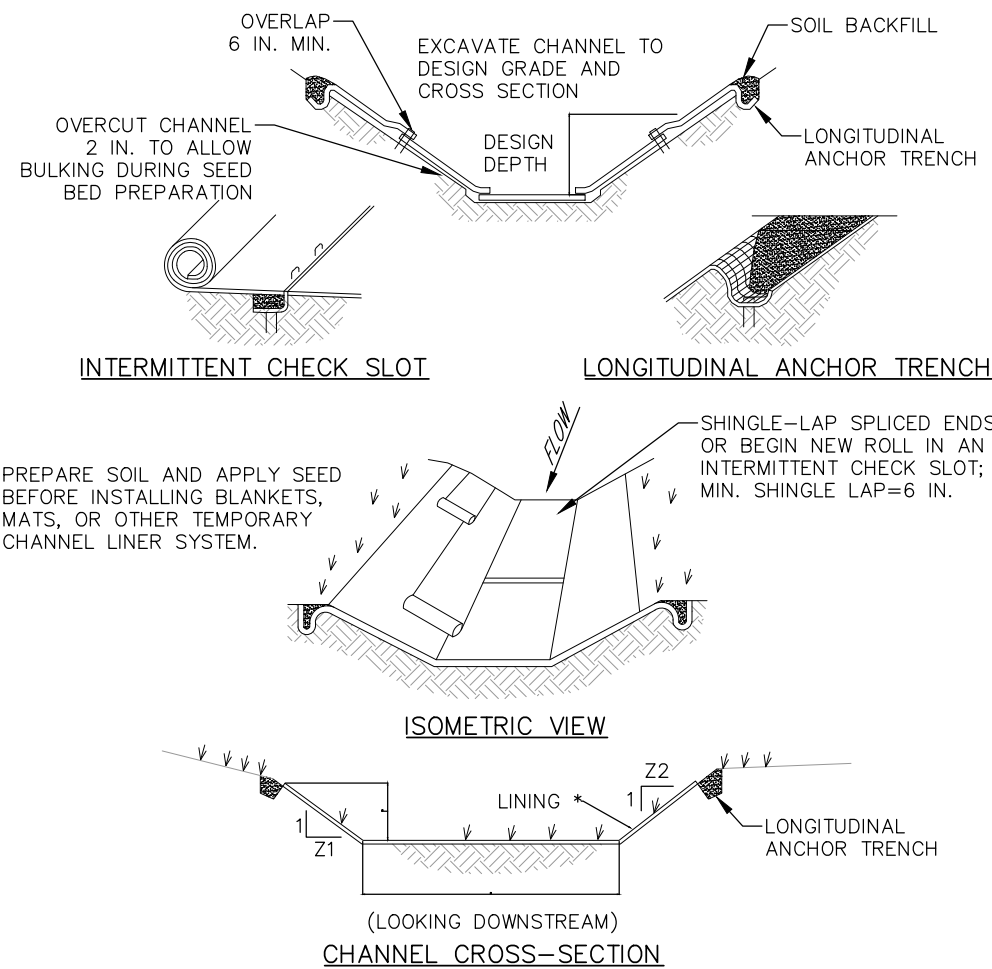
720

DATUM ELEV  
710.00



#### SWALE CENTERLINE

SCALE: HORZ.: 1" = 20'  
VERT.: 1" = 2'



#### CHANNEL CROSS-SECTION

\* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
1	All	2	1.3	8.0	3	3	N.A. Green S75

#### NOTES:

ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

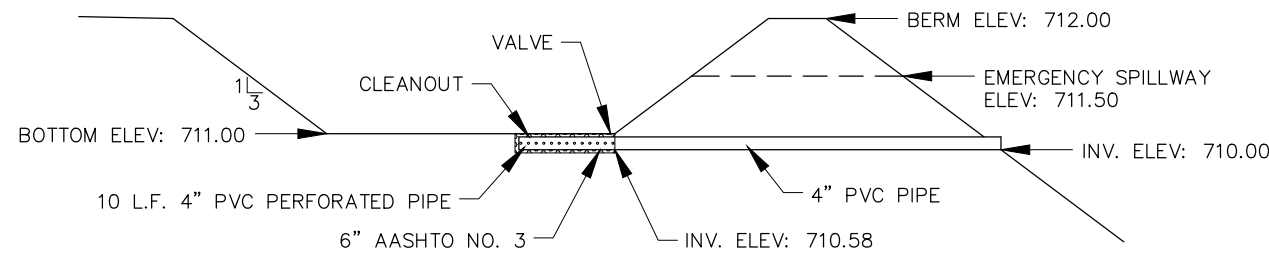
CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.

SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

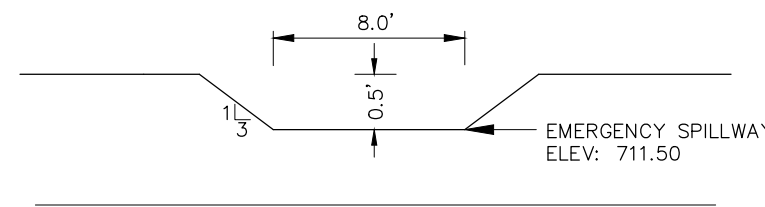
3  
ES4 VEGETATED CHANNEL

SCD #6-1  
NOT TO SCALE



#### 1 ES4 STORMWATER MANAGEMENT BASIN CROSS SECTION AND UNDERDRAIN DETAIL

NOT TO SCALE



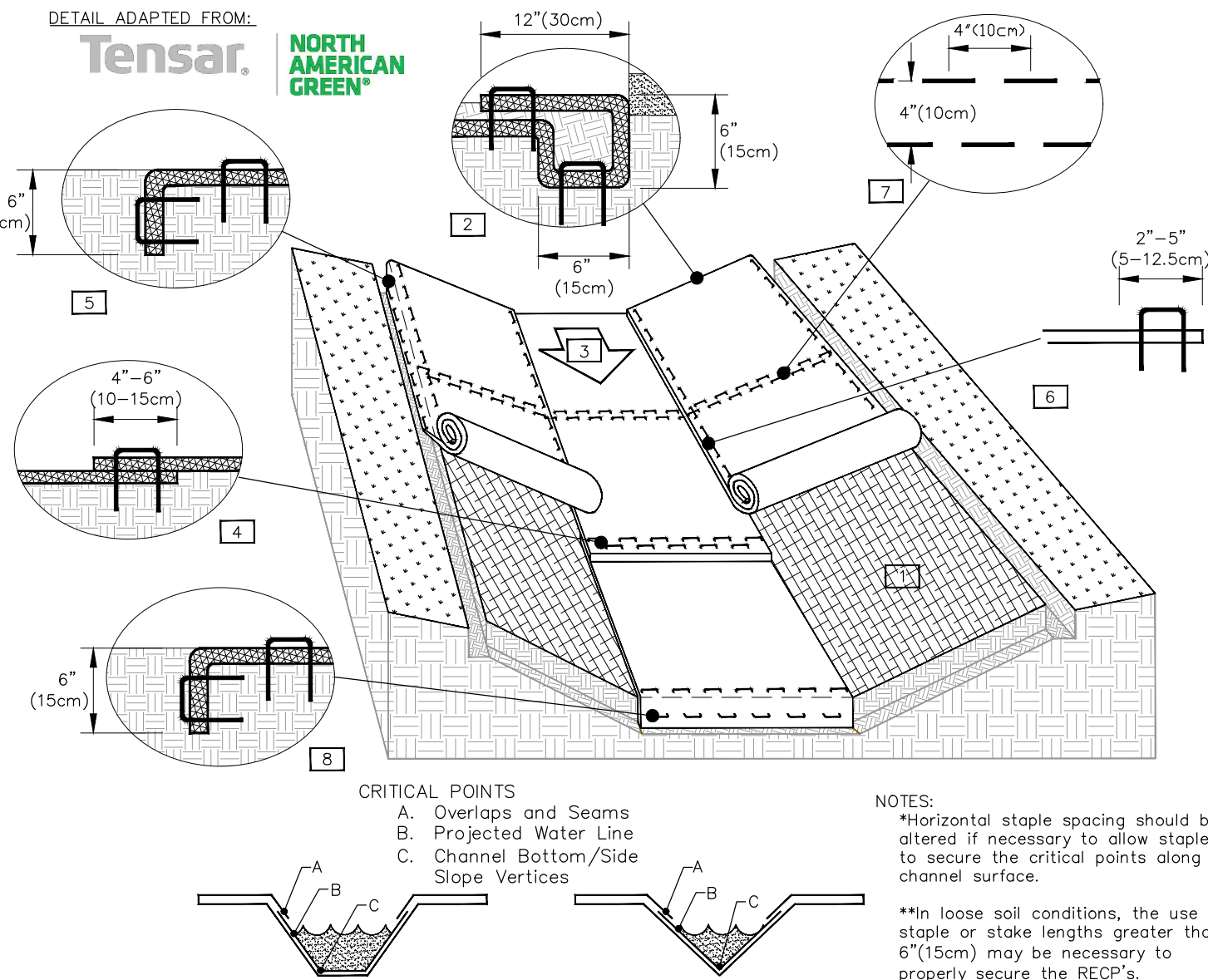
#### 2 ES4 STORMWATER MANAGEMENT BASIN EMERGENCY SPILLWAY

NOT TO SCALE

DETAIL ADAPTED FROM:

Tensar.

NORTH AMERICAN GREEN™



#### CRITICAL POINTS

- Overlaps and Seams
- Projected Water Line
- Channel Bottom/Side Slope Vertices

#### NOTES:

\*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

\*\*In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

#### CHANNEL INSTALLATION DETAIL

- Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
- Begin at the top of the channel by anchoring the RECPs in a 6" (15cm) deep X 6" (15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12" (30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.
- Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
- Place consecutive RECPs end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
- Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep X 6" (15cm) wide trench. Backfill and compact the trench after stapling.
- Adjacent RECPs must be overlapped approximately 2"-5" (5-12.5cm) (Depending on RECPs type) and stapled.
- In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 4" (10cm) apart and 4" (10cm) on center over entire width of the channel.
- The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6" (15cm) deep X 6" (15cm) wide trench. Backfill and compact the trench after stapling.

4  
ES4 EROSION CONTROL MATTING TENSAR / NORTH AMERICAN GREEN

NOT TO SCALE

#### ERONET™ S75® EROSION CONTROL BLANKET

##### DESCRIPTION

The short-term single net erosion control blanket shall be a machine-produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a lightweight photodegradable polypropylene netting having an approximate 0.50 x 0.50 in. (1.27 x 1.27 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approximately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for adjacent mats.

The S75 shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17.

MATERIAL CONTENT		
Matrix	100% Straw Fiber	0.5 lb/sy (0.27 kg/sm)
Netting	Top side only, lightweight photodegradable	1.5 lb/1000 sf (0.73 kg/100 sm)
Thread	Degradable	

STANDARD ROLL SIZES			
Width	6.67 ft (2.03 m)	8.0 ft (2.4 m)	16 ft (4.87 m)
Length	108 ft (32.92 m)	112 ft (34.14 m)	108 ft (32.92 m)
Weight ± 10%	40 lbs (18.14 kg)	50 lbs (22.68 kg)	96 lbs (43.54 kg)
Thread	80 sy (66.9 sm)	100 sq yd (83.61 sm)	192 sq yd (165.5 sm)

INDEX PROPERTY	TEST METHOD	TYPICAL
Thickness	ASTM D6525	0.50 in. (12.7 mm)
Resiliency	ECTC Guidelines	78.8%
Water Absorbency	ASTM D1117	301%
Mass/Unit Area	ASTM D6475	9.76 oz/sy (332 g/sm)
Swell	ECTC Guidelines	15%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	6.31 oz-in
Light Penetration	ASTM D6567	6.0%
Tensile Strength - MD	ASTM D6818	122.4 lbs/ft (1.81 kN/m)
Elongation - MD	ASTM D6818	36.1% 79.2 lbs/ft
Tensile Strength - TD	ASTM D6818	79.2 lbs/ft (1.17 kN/m)
Elongation - TD	ASTM D6818	26.8%
Biomass Improvement	ASTM D7322	301%

BREHM-LEBO ENGINEERING, INC.

CIVIL ENGINEERS & PLANNERS > SURVEYORS > STRUCTURAL ENGINEERS  
40 NORTH SECOND STREET  
CHAMBERSBURG, PA 17001  
PH: (717) 243-1404  
FAX: (717) 243-3001

PROFILE AND DETAILS

EROSION AND SEDIMENT CONTROL PLAN

FOR SOUTHAMPTON TOWNSHIP EQUIPMENT BUILDING

SOUTHAMPTON TOWNSHIP CUMBERLAND COUNTY

Drawn By: SJT  
Designed By: SJT  
Checked By: GSL  
File: 225H009  
Date: 03/01/23  
Scale: As Noted  
Deed: 237/942  
Drawing No.

ES4 of 7