

PROJECT: CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

320 RECYCLE CENTER RD
YORK, SC 29745

OWNER:
YORK COUNTY SOLID WASTE
COLLECTION & RECYCLING
220 PUBLIC WORKS ROAD
YORK, SC 29745
P: (803) 628-3181
steven.williams@yorkcountygov.com

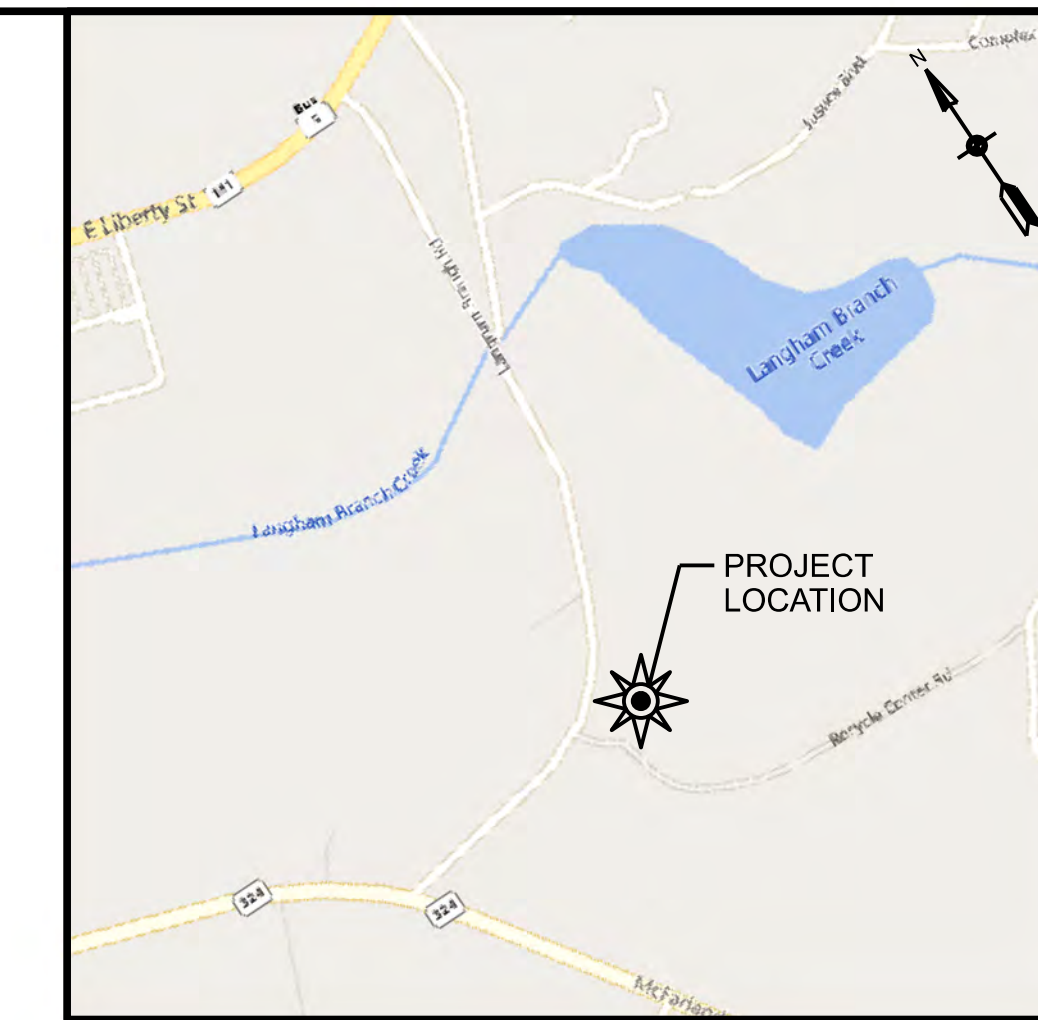
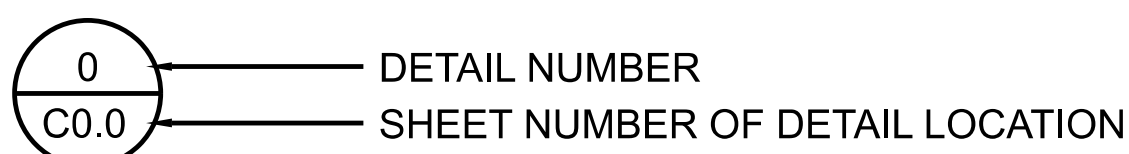
PLANS PREPARED BY:
CAMPCO ENGINEERING, INC.
156 OAKLAND AVENUE, SUITE 100
ROCK HILL, SC 29730
P: (803) 327-7121
WWW.CAMPCOENGINEERING.COM



OVERVIEW MAP

SCALE: 1"=60'

DETAIL REFERENCE SYMBOL



PROJECT LOCATION MAP
SCALE: NTS

DRAWING INDEX

- C1.0 COVER SHEET
- C1.1 SURVEY
- C1.2 CIVIL SITE SPECIFICATIONS
- C1.3 CIVIL SITE SPECIFICATIONS
- C2.0 SITE DEMOLITION/ SITE PLAN
- C3.0 GRADING/ EROSION CONTROL PLAN
- C3.1 STORM DRAINAGE & EROSION CONTROL DETAILS
- S1.01 CONCRETE PAD PLAN, SECTION, & GENERAL NOTES

GENERAL CONSTRUCTION NOTES

1. EXISTING PLANIMETRIC AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM SURVEY BY R. JOE HARRIS & ASSOCIATES DATED 05-03-2024.
2. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE FIELD OR ON THE PLANS.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE SAFETY STANDARDS AND REQUIREMENTS.
4. ALL EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT SOUTH CAROLINA 811 AT WWW.SC811.COM OR CALL 811 - 72 HOURS PRIOR TO DIGGING.
5. THE CONTRACTOR SHALL COORDINATE RELOCATION/REMOVAL OF EXISTING UTILITIES WITH THE UTILITY OWNER AS APPLICABLE.
6. THE CONTRACTOR SHALL REPAIR ALL EXISTING CONDITIONS DAMAGED BY CONSTRUCTION TO THE ORIGINAL CONDITION.
7. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR THE PROJECT ON SHEETS C1.2 - C1.3 AND THE REQUIREMENTS OF YORK COUNTY, SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC), AND THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT), WHERE APPLICABLE.
8. FOR SCDOT STANDARD DRAWINGS REFERENCED IN THE CONSTRUCTION PLANS SEE THE SCDOT STANDARD DRAWING MANUAL.
9. ALL MATERIALS, CONSTRUCTION, AND PLANS ARE TO COMPLY WITH CURRENT YORK COUNTY STANDARD SPECIFICATIONS AND DETAILS.
10. THE DESIGN OF ALL EROSION CONTROL AND STORMWATER MANAGEMENT FEATURES FOR WATER QUALITY AND WATER QUANTITY AND OTHER BMPs, STORM DRAIN PIPING AND MANHOLES, CULVERTS, DITCHES, SWALES AND OTHER CHANNELS, ALL OUTFALLS TO THEIR RECEIVING WATERS, IN ADDITION TO ALL ROAD INFRASTRUCTURE, SANITARY SEWER AND WATER UTILITIES, AS PRESENTED HEREIN, HAS BEEN COMPLETED FROM FIELD SURVEY INFORMATION PREPARED BY A LICENSED SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR.



THIS DRAWING IS THE PROPERTY OF CAMPCO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

**CONCRETE PAD
ADDITION FOR
RECOVERED
MATERIALS
PROCESSING
FACILITY**

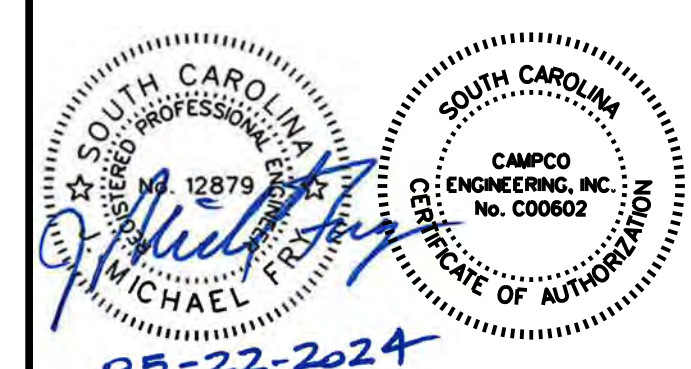
320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS

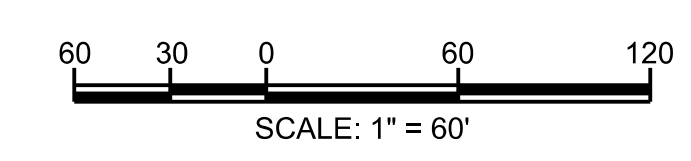
NO.	DATE	DESCRIPTION

COVER SHEET



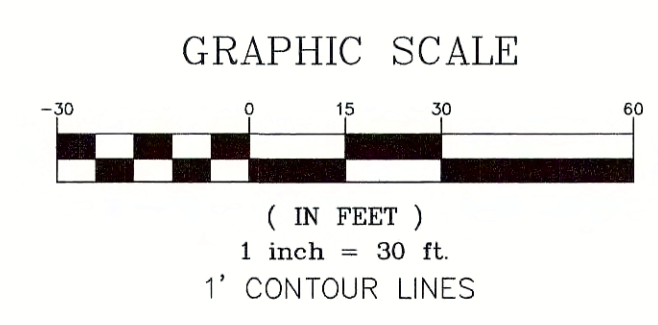
CE: 9902 ISSUED: 05-22-2024
SCALE: 1"=60' CAD FILE: 9902CVC1.0

C1.0



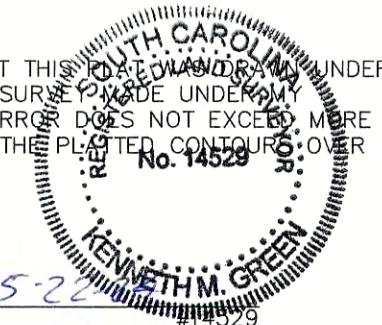
- LINETYPE LEGEND:
- EX GRAVEL
 - EX EDGE OF PAVEMENT
 - EX TOE
 - EX TOP
 - EX STORM
 - EX TREE LINE
 - EX CONCRETE

- LEGEND:
- △ - TEMPORARY BENCH MARK (TBM)
 - ⊕ - SIGN
 - ⊕ - FIRE HYDRANT



I, KENNETH M. GREEN, CERTIFY THAT THIS SURVEY WAS MADE UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION, THAT THE VERTICAL ERRORS ARE NOT EXCEED MORE THAN ONE-HALF THE INTERVAL OF THE PLOTTED CONTOUR LINES OVER 90% OF THE COVERED AREA.

Kenneth M. Green
KENNETH M. GREEN, PLS



Campco Engineering, Inc.
Consulting Engineers since 1974

1. THIS DRAWING IS THE PROPERTY OF CAMPCO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS		
NO.	DATE	DESCRIPTION

SURVEY

CE: 9902 ISSUED: 05-22-2024
SCALE: 1"=XXX' CAD FILE: 9902_SURVEY

C1.1

SOILS FOR EARTHWORK

PART 1 - GENERAL

- 1.1 SUMMARY
- A. Section Includes:
- Subsoil materials.
 - Topsoil materials.
- 1.2 DEFINITIONS
- A. Backfill: Soil materials used to fill an excavation.
- Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Layer placed between the subbase course and asphalt paving.
- C. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Layer supporting slab-on-grade used to minimize capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations.
- Additional Excavation: Excavation below subgrade elevations as directed by Engineer. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.
- G. Fill: Soil materials used to raise existing grades.
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding 1 cu. yd. for bulk excavation or 3/4 cu. yd. for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:
- Rock Excavation, Trench: Late-model, track-mounted hydraulic excavator; equivalent to Caterpillar Model N, 235D LC; measured according to SAE J-1179.
 - Rock Excavation, Mass: Late-model, track-mounted loader with a hydraulically operated power ripper; equivalent to Caterpillar Model No. D-8N, Heavy Duty; measured according to SAE J-1732.
3. This classification does not include materials such as loose rock, concrete, or other materials that can be removed by means other than drilling and blasting, but which for any reason, such as economic reasons, the Contractor chooses to remove by drilling and blasting.
- I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- J. Subbase Course: Layer placed between the subgrade and base course for asphalt paving, or layer placed between the subgrade and a concrete pavement or walk.
- K. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
- L. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and other deleterious materials.
- M. Unsatisfactory Soils: Soils located below the design subgrade elevation and in excess of the topsoil striping, which are determined unsatisfactory by the geotechnical engineer.
- N. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.3 QUALITY ASSURANCE

- A. Furnish each subsoil and topsoil material from single source throughout Work.
- B. Perform Work according to SCDHEC, SCDOT, and local municipality standards.

PART 2 - PRODUCTS

- 2.1 MATERIALS
- A. Subsoil:
- Satisfactory Soils:
 - Excavated and reused material, imported borrow, select or local borrow, structural.
 - Graded.
 - Free of lumps larger than 3 inches, rocks larger than 2 inches, and debris.
 - Plasticity index of 20 or less.
 - Maximum dry density of at least 90 pounds per cubic feet when tested by the Standard Proctor Method (ASTM D698).
 - Comply with ASTM D2487 Group Symbol GW, GP, ML, SW, SP, and SM.
 - Topsoil:
 - Satisfactory Soils:
 - Excavated and reused material.
 - Graded and single screened.
 - Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter.
 - Comply with ASTM D2487 Group Symbol OH, PT, SM, and ML.
- B. Satisfactory Soils:
- Imported borrow.
 - Friable loam.
 - Reasonably free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter.
 - Single screened.
 - pH: 6.5 to 7.5.
 - Inorganic Material: Minimum 4 percent and maximum 25 percent.
 - Comply with ASTM D2487 Group Symbol OH, PT, SM, and ML.

2.2 SOURCE QUALITY CONTROL

- A. Testing and Analysis:
- Subsoil Material: Comply with ASTM D698.
 - Topsoil Material: Comply with ASTM D698.
 - If tests indicate materials do not meet specified requirements, change material and retest.

PART 3 - EXECUTION

- 3.1 INSTALLATION
- A. Excavation:
- Excavate subsoil and topsoil from designated areas.
 - Strip topsoil to full depth of topsoil in designated areas.
 - Remove excess excavated materials, subsoil, and topsoil not intended for reuse from Site.
 - Remove excavated materials not meeting requirements for subsoil and topsoil materials from Site.
- B. Stockpiling:
- Stockpile excavated material meeting requirements for subsoil and topsoil materials.
 - Stockpile materials on Site at locations as designated by Engineer.
 - Stockpile in sufficient quantities to meet Project schedule and requirements.
 - Separate differing materials with dividers or stockpile apart to prevent intermingling of soil types or contamination.
 - Stockpile topsoil maximum 10 feet high.
 - Direct surface water away from stockpile to prevent erosion or deterioration of materials.
 - Stockpile hazardous materials on impervious material and cover to prevent erosion and leaching until they are disposed.

3.2 CLEANING

- A. Stockpile:
- Remove stockpile and leave area in clean and neat condition.
 - Grade Site surface to prevent freestanding surface water.

AGGREGATES FOR EARTHWORK

PART 1 - GENERAL

- 1.1 SUMMARY
- A. Section Includes:
- Coarse aggregate materials.
 - Fine aggregate materials.
- 1.2 SUBMITTALS
- A. Product Data: Submit name of imported materials source.
- B. Manufacturer's Certificate: Products meet or exceed specified requirements.
- 1.3 QUALITY ASSURANCE
- A. Furnish each aggregate material from single source throughout Work.
- B. Perform Work according to SCDOT and local municipality standards.

PART 2 - PRODUCTS

- 2.1 MATERIALS
- A. Coarse Aggregate:
- Comply with SCDOT standard.
 - Gravel:
 - Description: Coarse stone, crushed, gravel.
 - Washed Stone: Pit run, angular crushed, natural.
 - Quality: Free of shale, clay, friable material, and debris.
 - Grading:
 - Comply with ASTM C136/C136M and ASTM D2487; Group Symbol GW, GP, GM, and GC.
 - Percent Passing According to Sieve Size:
 - 2 Inches: 100.
 - 1 Inch: 95.
 - 3/4 Inch: 95 to 100.
 - 5/8 Inches: 75 to 100.
 - 3/8 Inches: 55 to 85.
 - No. 4: 35 to 60.
 - No. 16: 15 to 35.
 - No. 40: 10 to 25.
 - No. 200: 5 to 10.
3. Pea Gravel:
 - Description: Pea Gravel.
 - Stone: Natural and washed.
 - Quality: Free of clay, shale, and organic matter.
 - Grading:
 - Comply with ASTM C136/C136M and ASTM D2487; Group Symbol GM and GC.
 - Minimum Size: 1/4 inch.
 - Maximum Size: 5/8 inch.
- B. Fine Aggregate:
- Comply with SCDOT standard.
 - Sand:
 - Description: Natural river or bank sand, washed.
 - Quality: Free of silt, clay, loam, friable or soluble materials, and organic matter.
 - Grading:
 - Comply with ASTM C136/C136M and ASTM D2487; Group Symbol SW, SP, SM, and SC.
 - Percent Passing According to Sieve Size:
 - No. 4: 100.
 - No. 14: 10 to 100.
 - No. 50: 5 to 90.
 - No. 100: 4 to 30.
 - No. 200: Zero.

2.2 SOURCE QUALITY CONTROL (COORDINATE W/2.2, 2.3, & 2.4)

- A. Testing and Analysis:
- Coarse-Aggregate Material: Comply with ASTM C136/C136M and ASTM D698.
 - Fine Aggregate Material - Testing and Analysis: Perform according to ASTM C136/C136M and ASTM D698.
 - If tests indicate materials do not meet specified requirements, change material and retest.

PART 3 - EXECUTION

- 3.1 INSTALLATION
- A. Excavation:
- Excavate aggregate materials from Site locations as indicated and as specified in Section 312213 - Rough Grading, 312316 - Excavation.
 - Remove excess excavated coarse-aggregate and fine-aggregate materials not intended for reuse from Site.
 - Remove excavated materials not meeting requirements for coarse aggregate and fine aggregate from Site.
- B. Stockpiling:
- Stockpile materials on Site at locations as designated by Engineer.
 - Stockpile excavated material meeting requirements for coarse-aggregate and fine-aggregate materials.
 - Stockpile in sufficient quantities to meet Project schedule and requirements.
 - Separate different aggregate materials with dividers or stockpile apart to prevent intermingling of aggregate types or contamination.
 - Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
 - Stockpile unsuitable materials on impervious material and cover to prevent erosion and leaching until they are disposed.
- 3.2 CLEANING
- A. Stockpile:
- Remove stockpile and leave area in clean and neat condition.
 - Grade Site surface to prevent freestanding surface water.

GEOTEXTILES FOR EARTHWORK

PART 1 - GENERAL

- 1.1 SUMMARY
- A. Section Includes:
- Turf reinforcement mats (TRMs).
 - Nonwoven geotextile material.
- 1.2 SUBMITTALS
- A. Product Data: Manufacturer information including tensile strength, elongation, thickness, UV resistance, and other material specifications.
- B. Shop Drawings: Fabric layout, seam locations, and overlap details in installation drawings.
- C. Manufacturer's Certificate: Products meet or exceed specified requirements.
- D. Manufacturer Instructions: Installation requirements, including storage and handling procedures.
- E. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- G. Qualifications Statements:
 - Qualifications for manufacturer and installer.
 - Manufacturer's approval of installer.
- 1.3 CLOSEOUT SUBMITTALS
- A. Project Record Documents: Record actual locations of geotextile material, including placement depth.
- 1.4 QUALITY ASSURANCE
- A. Perform work according to governing agency standards.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Comply with ASTM D4873.
- B. Store materials according to manufacturer instructions.
- C. Protection:
 - Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - Provide additional protection according to manufacturer instructions.

PART 2 - PRODUCTS

- 2.1 TRM
- A. Manufacturers:
 - Furnish materials according to governing agency standards, or as directed in plans.
- 2.2 NONWOVEN GEOTEXTILE MATERIALS
- A. Manufacturers:
 - Furnish materials according to governing agency standards.
- 2.3 SOURCE QUALITY CONTROL
- A. Provide shop inspection and testing of completed assembly.
- B. Certificate of Compliance:
 - If manufacturer is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at manufacturer's facility conforms to Contract Documents.
 - Specified shop tests are not required for Work performed by approved manufacturer.

PART 3 - EXECUTION

- 3.1 EXAMINATION
- A. Verify that underlying surface is smooth and free of ruts or protrusions that could damage geotextile material.
- 3.2 PREPARATION
- A. Subgrade Material and Compaction Requirements: As specified in Section 312323 - Fill.
- 3.3 INSTALLATION
- A. Geotextile Material:
 - Lay and maintain smooth and free of tensile stresses, folds, wrinkles, or creases.
 - Ensure that material is in direct contact with subgrade.
 - Orientate with long dimension of each sheet parallel to direction of slope.
 - Minimum Unseamed Joints Overlap: 12 inches.
- B. Securement Pins:
 - Insert through geotextile midway between edges of overlaps and minimum 2 inches from free edges.
 - Minimum Spacing:
 - Slopes Steeper than 3 Horizontal on 1 Vertical: 24 inches o.c.
 - Slopes 3 Horizontal on 1 Vertical to 4 Horizontal on 1 Vertical: 3 feet o.c.
 - Slopes Flatter than 4 Horizontal on 1 Vertical: 5 feet o.c.
 - Ensure that washer bears against geotextile.
- C. Seams:
 - Minimum Seamed Joints Overlap: 18 inches at longitudinal and transverse joints.
 - Seams across Slope: Lap upper panel over lower panel.
 - Sewn Seams:
 - Continuously sew seams on slopes steeper than 1 vertical on 2 horizontal.
 - Stitch Type: As recommended by geotextile manufacturer.
 - Tie off thread at the end of each seam to prevent unraveling.
 - Thermal Seams:
 - As recommended by geotextile manufacturer.
 - Comply with ASTM D4886.
- D. Penetrations: As indicated and recommended by geotextile manufacturer.
- E. Repairing Damaged Geotextiles:
 - Repair torn or damaged geotextile by placing patch of same type of geotextile over damaged area minimum of 12 inches beyond edge of damaged area, and fasten as recommended by geotextile manufacturer.
 - Remove and replace geotextile rolls which cannot be repaired.
- F. Fill and Cover:
 - Place fill to prevent tensile stress or wrinkles in geotextile.
 - Place fill from bottom of side-slopes upward.
 - Do not drop fill from height greater than 3 feet.
- 3.4 FIELD QUALITY CONTROL
- A. Testing: According to ASTM D4354.
- B. Equipment Acceptance: Adjust, repair, modify, or replace components failing to perform as specified and rerun tests.
- 3.5 PROTECTION
- A. Ballast: Adequate to prevent uplift of material by wind.
- B. UV Exposure: Do not leave material uncovered for more than 14 days after installation.
- C. Do not use staples or pins to hold geotextiles in place where located adjacent to other geosynthetic layers that could be damaged.
- D. Do not operate equipment directly on top of geotextile.

SITE CLEARING

PART 1 - GENERAL

- 1.1 SUMMARY
- A. Section Includes:
- Removing surface debris.
 - Removing designated paving, curbs, and concrete.
 - Removing designated trees, shrubs, and other plant life.
 - Removing abandoned utilities.
- 1.2 QUALITY ASSURANCE
- A. Conform to applicable code for environmental requirements and disposal of debris.
- B. Perform Work according to SCDHEC standards.

PART 2 - PRODUCTS

- 2.1 MATERIALS
- A. Except for materials indicated to be stockpiled or to remain Owner's property, cleared materials shall become contractor's property and shall be removed from the site.

PART 3 - EXECUTION

- 3.1 EXAMINATION
- A. Verify existing plant life designated to remain is tagged or identified.
- B. Identify waste area for placing removed materials.
- 3.2 PREPARATION
- A. Call local utility line information service at 811 not less than three (3) working days before performing Work.
 - Request underground utilities to be located and marked within and surrounding construction areas.
- B. Protect and maintain benchmarks and survey control points from disturbance during construction.
- C. Provide erosion-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- D. Locate and clearly flag trees and vegetation to remain or to be relocated.
- E. Protect existing site improvements to remain from damage during construction.
 - Restore damaged improvements to their original condition, as acceptable to Owner.
- 3.3 PROTECTION
- A. Locate, identify, and protect utilities indicated to remain from damage.
- B. Protect bench marks, survey control points, and existing structures from damage or displacement.
- 3.4 CLEARING
- A. Clear areas required for access to Site and execution of Work to minimum depth of 6 inches.
- B. Remove trees and shrubs within areas indicated on the plans. Remove stumps, main root ball, root system to depth of 18 inches, and surface rock.
- C. Clear undergrowth and deadwood, without disturbing subsoil.
- D. Use only hand methods for grubbing within drip line of remaining trees.
- 3.5 REMOVAL
- A. Remove debris, rock, and extracted plant life from Site.
- B. Remove paving, curbs, and concrete, as indicated.
- C. Partially remove paving, curbs, and concrete as indicated. Neatly saw cut edges at right angle to surface.
- D. Remove abandoned utilities. Indicated removal termination point for underground utilities on record documents.
- E. Continuously clean-up and remove waste materials from Site. Do not allow materials to accumulate on Site.
- F. Do not burn or bury materials on Site. Leave Site in clean condition.



Campo Engineering, Inc.
Consulting Engineers since 1974

1. THIS DRAWING IS THE PROPERTY OF CAMPO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS

NO.	DATE	DESCRIPTION

CIVIL SITE SPECIFICATIONS



05-22-2024

CE: 9902 ISSUED: 05-22-2024
SCALE: NA CAD FILE: 9902DTC1.2

C1.2

ROUGH GRADING

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 1. Excavating topsoil.
 2. Excavating subsoil.
 3. Cutting, grading, filling, rough contouring, and compacting. Site for Site structures, building pads, parking areas, and drives.
- 1.2 SUBMITTALS
 - A. Product data, if applicable.
 1. Drainage fabric.
 2. Geosynthetics.
 - B. Materials Source: Name of imported materials suppliers, if applicable.
 - C. Manufacturer's Certificate: Products meet or exceed specified requirements.
 - D. Test Reports: Submit test reports indicating suitability of all materials proposed to be supplied from off-site.
- 1.3 CLOSEOUT SUBMITTALS
 - A. Project Record Documents: Record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.
- 1.4 QUALITY ASSURANCE
 - A. Perform Work according to ASTM C136, ASTM D2419, and ASTM D2434.
 - B. Perform Work according to SCDOT standards, within road right-of-way.

PART 2 - PRODUCTS

- 2.1 MATERIALS
 - A. Topsoil: Satisfactory soils as specified in Section 310513 – Soils for Earthwork.
 - B. Subsoil Fill: Satisfactory soils as specified in Section 310513 – Soils for Earthwork.
 - C. Structural Fill: Satisfactory soils as specified in Section 310513 – Soils for Earthwork.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Verify survey bench mark and intended elevations for Work are as indicated.
- 3.2 PREPARATION
 - A. Call local utility line information service at 811 not less than three (3) working days before performing Work.
 1. Request underground utilities to be located and marked within and surrounding construction areas.
 - B. Identify required lines, levels, contours, and datum.
 - C. Notify utility owner to remove and/or relocate utilities.
 - D. Protect utilities indicated to remain from damage.
 - E. Protect plant life, lawns, and other features remaining as portion of final landscaping.
 - F. Protect bench marks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- 3.3 TOPSOIL EXCAVATION
 - A. Remove sod and grass before stripping topsoil.
 - B. Excavate topsoil from entire Site without mixing with foreign materials for use in finish grading.
 - C. Do not excavate wet topsoil.
 - D. Stockpile in area designated on Site to depth not exceeding ten (10) feet and protect from erosion.
 - E. Do not remove topsoil from Site.
- 3.4 SUBSOIL EXCAVATION
 - A. Excavate subsoil from areas to be further excavated, relandscaped, or regraded.
 - B. Do not excavate wet subsoil or excavate and process wet material to obtain optimum moisture content.
 - C. When excavating through roots, perform Work by hand and cut roots with sharp axe.
 - D. Remove excess subsoil not intended for reuse, from Site.
 - E. Benchling Slopes: Horizontally bench existing slopes greater than 4:1 to key placed fill material to slope to provide firm bearing.
 - F. Stability: Replace damaged or displaced subsoil as specified for fill.
- 3.5 FILLING
 - A. Fill areas to contours and elevations with unfrozen materials.
 - B. Place fill material in continuous layers and compact according to schedule at end of this Section.
 - C. Maintain optimum moisture content of fill materials to attain required compaction density.
 - D. Slope grade away from building minimum 2 percent slope for minimum distance of 10 feet, unless noted otherwise.
 - E. Make grade changes gradual. Blend slope into level areas.
 - F. Repair or replace items indicated to remain damaged by excavation or filling.
 - G. Install Work according to SCDOT standards, within road right-of-way.
- 3.6 TOLERANCES
 - A. Top Surface of Subgrade: Plus or minus 1/10 foot from required elevation.
- 3.7 APPROVAL OF SUBGRADE
 - A. Notify Architect and Testing Agency when excavations have reached required subgrade.
 - B. If Architect or Testing Agency determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
 1. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - C. Proof roll subgrade with heavy pneumatic-tired equipment with a minimum loaded weight of 25 tons to identify soft pockets and areas in excess yielding. Do not proof roll wet or saturated subgrades.
 - D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities and retest, as directed by Architect.
- 3.8 FIELD QUALITY CONTROL
 - A. Perform laboratory material tests according to ASTM D698.
 - B. Perform in place compaction tests according to following:
 1. Density Tests: ASTM D1556, ASTM D2167, and/or ASTM D2922, as applicable.
 2. Moisture Tests: ASTM D3017.
 - C. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.
 - D. Frequency of Tests: once per lift of backfill.
- 3.9 SCHEDULES
 - A. Structural Fill (within limits of building pad):
 1. To subgrade elevation at 6" thick lifts.
 2. Compact uniformly to minimum 98 percent of maximum density.
 - B. Structural Fill (outside limits of building pad):
 1. To subgrade elevation at 6" thick lifts.
 2. Compact uniformly to minimum 95 percent of maximum density.
 - C. Subsoil Fill:
 1. To subgrade elevation at 8" thick lifts.
 2. Compact uniformly to minimum 95 percent of maximum density.
 - D. Topsoil Fill:
 1. To finished grade at 6" thick.
 2. Compact uniformly to minimum 90 percent of maximum density.

EXCAVATION

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 1. Soil densification.
 2. Excavating for building foundations.
 3. Excavating for paving, roads, and parking areas.
 4. Excavating for slabs on grade.
 5. Excavating for Site structures.
 6. Excavating for landscaping.
- 1.2 SUBMITTALS
 - A. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property, include structural calculations to support plan.
 - B. Shop Drawings: Indicate soil densification grid for each size and configuration footing requiring soils densification.
- 1.3 QUALITY ASSURANCE
 - A. Perform Work according to SCDOT standards, within road right-of-way.
 - B. Licensed Professional: Professional engineer experienced in design of specified Work and licensed in State of South Carolina.

PART 2 - EXECUTION

- 2.1 PREPARATION
 - A. Utility Service Locator:
 1. Call local utility service-line information at 811 not less than three (3) working days before performing Work.
 2. Request that underground utilities be located and marked within and immediately surrounding Site.
 3. Identify required lines, levels, contours, and data.
 - B. Existing Utilities:
 1. Notify utility owner to remove and/or relocate utilities.
 2. Protect from damage utilities indicated to remain.
 - C. Protect plant life, lawns, and other features designated to remain as portion of final landscaping.
 - D. Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- 2.2 SOIL DENSIFICATION BY VIBRO-COMPACTION
 - A. Description:
 1. Vibro-compact substrates below footing bearing surfaces for footings as indicated before excavating Site.
 2. Densify existing subsoils with relative density rating of "compact to dense" to attain relative density rating of "very dense."
 3. Densify subsoils to depth, as directed by a Geotechnical Engineer.
 - B. Equipment:
 1. Depth Vibrator: Poker type with follower tubes with visible marking every 12 inches to enable insertion depth measurement.
 2. Motion: radial in horizontal plane.
 3. Eccentric Force, as directed by a Geotechnical Engineer.
 4. Data Acquisition System: Record amps or pressure of vibrator motor over time and depth.
 - C. Procedure:
 1. Perform densification in presence of Geotechnical Engineer.
 2. Perform densification directly under each footing with vibrator inserted in grid pattern at maximum 6 feet o.c.
 3. Arrange compaction grid for each footing for maximum number of insertion points, and with outermost insertion points within bearing area of footings.
 4. Adjust compaction grid arrangement and spacing as directed by Geotechnical Engineer to achieve required densification.
 5. Excavate to maximum specified depth, densify soils for 30 seconds or other time as directed by Geotechnical Engineer, and withdraw vibrator every 12 inches while repeating densification at each increment.
 6. If subsurface obstruction prevents vibrator insertion to specified depth, request instructions from Geotechnical Engineer to compensate for obstruction.
 - D. Tolerances:
 1. Maximum Deviation from Center of Completed Compaction: 8 inches from indicated position.
 2. Maximum Deviation from Vertical: 4 degrees during vibrator insertion.

EXCAVATION

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditions encountered, including rock, soil materials, and obstructions.
 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, contractor shall replace with satisfactory soil materials at no additional cost to the Owner.
- B. Underpin adjacent structures which may be damaged by excavation Work.
- C. Excavate subsoil to accommodate building foundations, slabs on grade, paving, Site structures, and construction operations.
- D. Excavate to working elevation for piling Work.
- E. Compact disturbed load-bearing soil in direct contact with foundations to original bearing capacity, as specified in Section 312323 – Fill
- F. Slope banks with machine to angle of repose or less until shored.
- G. Do not interfere with 45-degree bearing splay of foundations.
- H. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- I. Trim excavation and remove loose matter.
- J. Removal of Deleterious Materials:
 1. Remove lumped subsoil, boulders, and rock up to 1 cu. yd. measured by volume.
 2. Remove larger material as specified in Section 312323 – Fill.
- K. Notify Engineer of unexpected subsurface conditions.
- L. Correct over-excavated areas with structural fill Type as specified in Section 312323 – Fill.
- M. Remove excavated material from Site not intended for reuse.
- N. Repair or replace items indicated to remain that have been damaged by excavation.

EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 2. Excavation for Underground Basins, and Mechanical or Electrical Utility Structures: Excavate to elevations and dimensions indicated within a tolerance of plus or minus 1 inch. Do not disturb bottom of excavations intended for bearing surface.

EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.

EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit, unless otherwise indicated.
 1. Clearance: 12 inches on each side of pipe or conduit, unless otherwise indicated.
- C. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe elevation to allow for bedding course. Hand excavate for bell of pipe.
 1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill may be used when approved by Engineer.
 1. Fill unauthorized excavations under other construction or utility pipe as directed by Engineer.

FIELD QUALITY CONTROL

- A. Request visual inspection of bearing surfaces by Geotechnical Engineer and/or Engineer before installing subsequent Work.

PROTECTION

- A. Prevent displacement or loose soil from falling into excavation and maintain soil stability.
- B. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- C. Protect structures, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that may be created by earth operations.

FILL

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 1. Backfilling building perimeter to subgrade elevations.
 2. Backfilling Site structures to subgrade elevations.
 3. Fill under slabs on grade.
 4. Fill under paving.
 5. Fill for over-excavation.
- 1.2 SUBMITTALS
 - A. Product Data: Geotextile fabric indicating fabric and construction.
 - B. Materials Source: Submit name of imported materials suppliers, if applicable.
 - C. Manufacturer's Certificate: Products meet or exceed specified requirements.
- 1.3 QUALITY ASSURANCE
 - A. Perform Work according to SCDOT standards within road right-of-way.

PART 2 - PRODUCTS

- 2.1 MATERIALS
 - A. Subsoil Fill: Satisfactory soils as specified in Section 310513 – Soils for Earthwork.
 - B. Structural Fill: Satisfactory soils as specified in Section 310513 – Soils for Earthwork.
 - C. Granular Fill: Aggregates as specified in Section 310516 – Aggregates for Earthwork.
- 2.2 ACCESSORIES
 - A. Geotextile Fabric: As specified in Section 310519.13 – Geotextiles for Earthwork.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Verify that subdrainage, dampproofing, and waterproofing installations have been inspected.
 - B. Verify that underground tanks are anchored to their own foundations to avoid flotation after backfilling.
 - C. Verify structural integrity of unsupported walls to support loads imposed by fill.
- 3.2 PREPARATION
 - A. Compact subgrade to specified density requirements for subsequent backfill materials.
 - B. Soft Subgrade:
 1. Cut out soft areas of subgrade not capable of compaction in place.
 2. Backfill with structural fill and compact to density equal to or greater than specified requirements for subsequent fill material.
 3. Scarify subgrade surface to depth of 6 inches.
- 3.3 BACKFILLING
 - A. Backfill areas to contours and elevations.
 - B. Systematically backfill to allow maximum time for natural settlement.
 - C. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces, and do not backfill with frozen materials.
 - D. Maximum Compacted Depths:
 1. Place material in continuous layers to following depths:
 - a. Subsoil Fill: 8 inches.
 - b. Structural Fill: 6 inches.
 - c. Granular Fill: 6 inches.
 - E. Use placement method that does not disturb or damage foundation perimeter drainage, utilities in trench, or other site features.
 - F. Maintain optimum moisture content of fill materials to attain required compaction density.
 - G. Structures:
 1. Backfill against supported foundation walls.
 2. Backfill simultaneously on each side of unsupported foundation walls until supports are in place.
 3. Slope grade away from building minimum 2 percent slope for minimum distance of 10 feet.
 - H. Make gradual grade changes, and blend slope into level areas.
 - I. Remove surplus backfill materials from Site.
- 3.4 TOLERANCES
 - A. Top Surface of Backfilling within Building Areas: Plus or minus 1 inch from required elevations.
 - B. Top Surface of Backfilling under Paved Areas: Plus or minus 1 inch from required elevations.
 - C. Top Surface of General Backfilling: Plus or minus 1 inch from required elevations.
- 3.5 FIELD QUALITY CONTROL
 - A. Perform laboratory material tests according to ASTM D698.
 - B. In-Place Compaction Testing:
 1. Density Tests: ASTM D1556/D1556M, ASTM D2167, and/or ASTM D6938, as applicable.
 2. Moisture Tests: ASTM D6031/6031M.
 - C. If tests indicate that Work does not meet specified requirements, remove Work, replace, compact, and retest.
 - D. Testing Frequency: Once per lift of backfill.
 - E. Proof-roll compacted fill surfaces under slabs on grade and all paving areas. Refer to Section 3.7 of Rough Grading Specification (312213) for additional information.
- 3.6 PROTECTION
 - A. Reshape and recompact fills subjected to vehicular traffic during construction.



Campo Engineering, Inc.
Consulting Engineers since 1974

1. THIS DRAWING IS THE PROPERTY OF CAMPO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.
2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSTRUED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

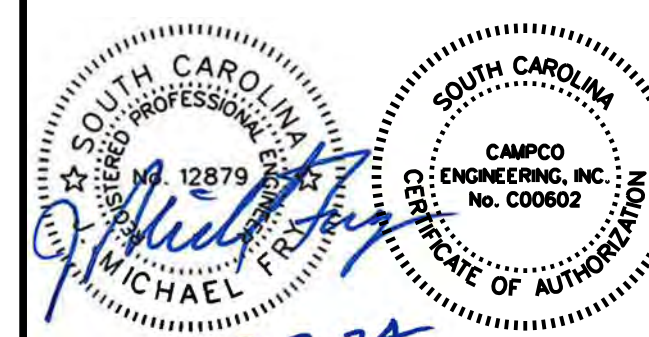
320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS

NO.	DATE	DESCRIPTION

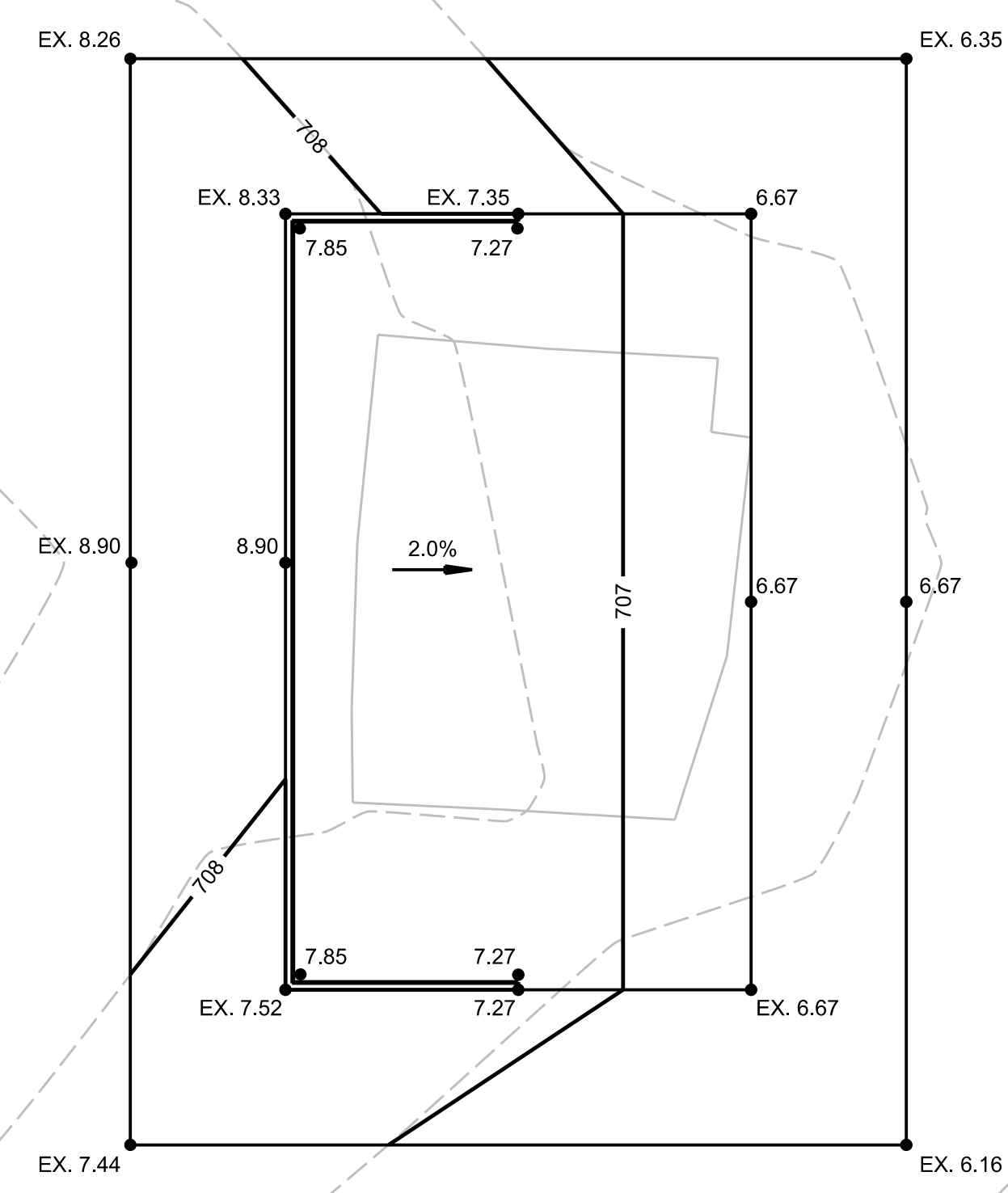
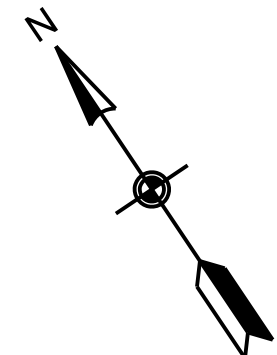
CIVIL SITE SPECIFICATIONS



CE: 9902	ISSUED: 05-22-2024
SCALE: NA	CAD FILE: 9902DTC1.3

C1.3

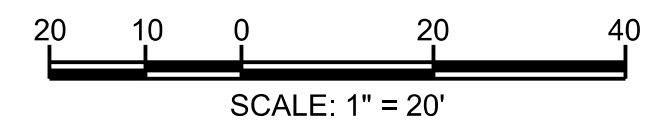
GRADING



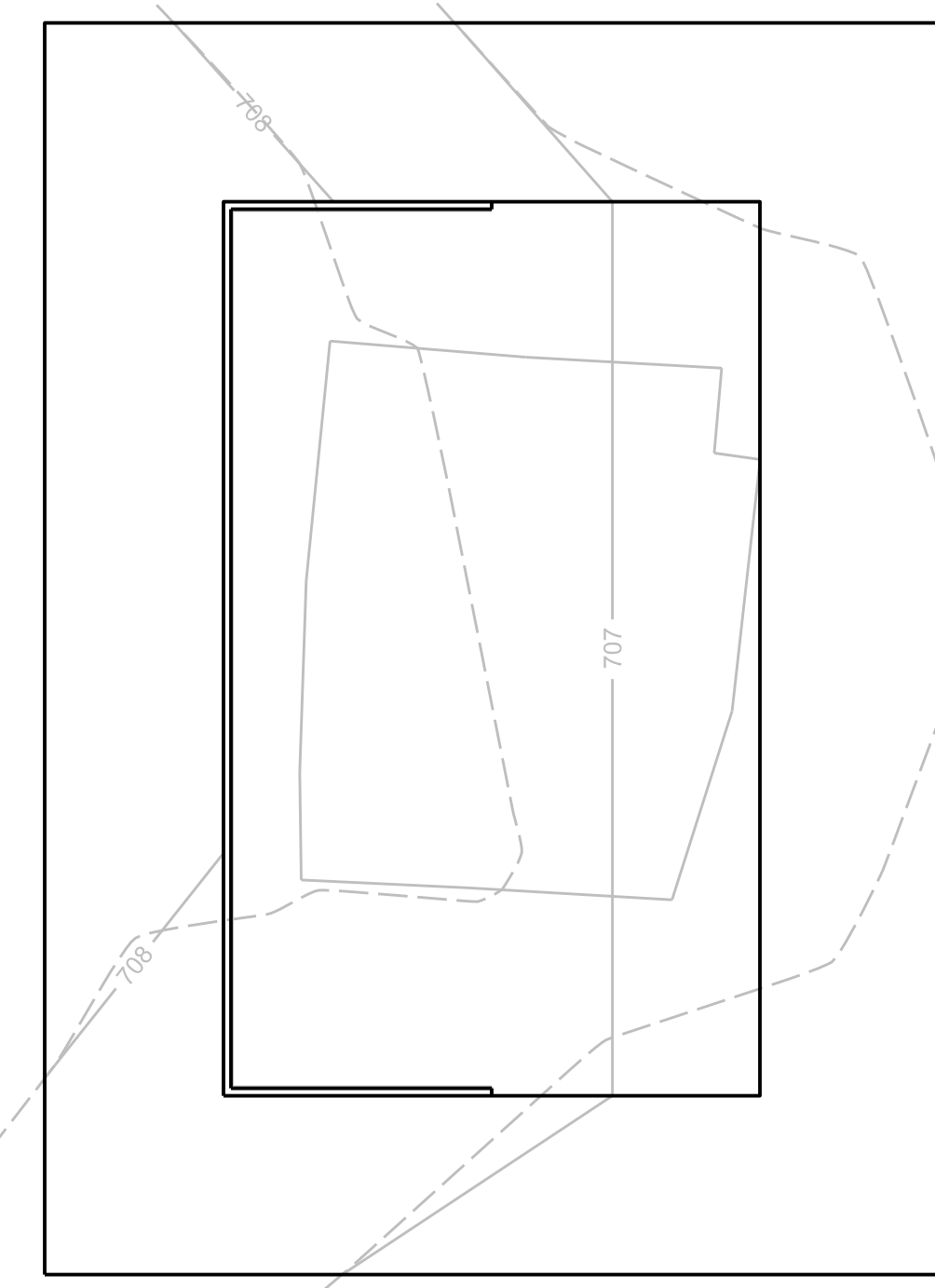
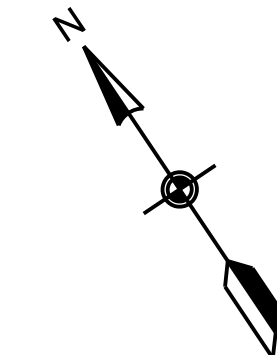
RECYCLE CENTER RD

GRADING NOTES:

1. CONTOURS ARE TO FINISH GRADE.
2. GRADE AND FINISH AREAS SUCH THAT POSITIVE DRAINAGE OCCURS AT EACH DRAINAGE INLET AS DESIGNED.
3. FINISHED GRADE SPOT ELEVATIONS ARE IDENTIFIED AS ●.
4. ADD 700 TO ALL SPOT ELEVATIONS UNLESS OTHERWISE NOTED.



EROSION CONTROL



RECYCLE CENTER RD

MAINTENANCE NOTES

1. INSPECT SEDIMENT FENCE EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING.
2. IF THE SEDIMENT FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY.
3. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 3/4 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED.
4. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE.
5. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED.
6. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

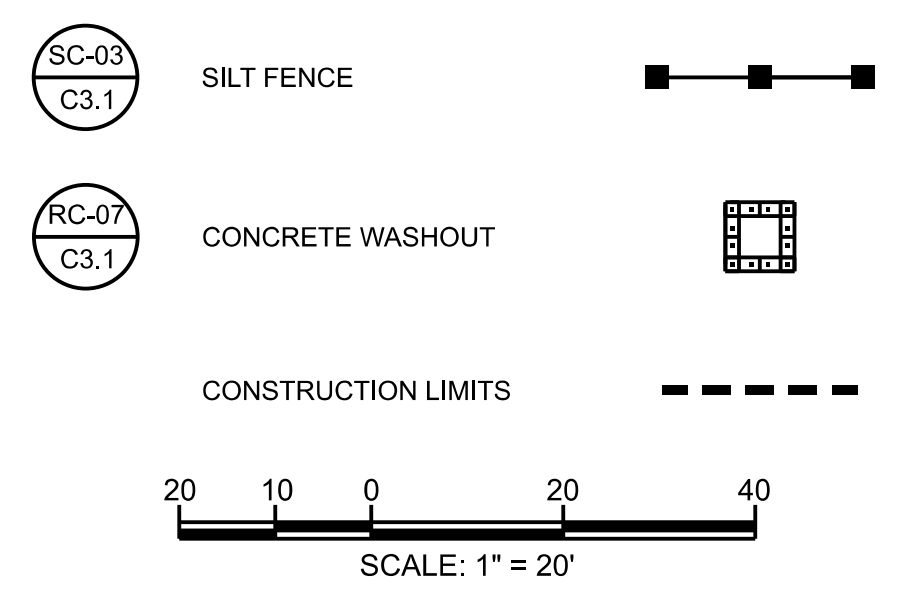
EROSION CONTROL CONSTRUCTION SCHEDULE

1. OBTAIN SEDIMENT AND EROSION CONTROL PERMIT FROM SCDHEC. SCHEDULE A PRE-CONSTRUCTION MEETING ON-SITE. CONTACT THE SCDHEC EQC REGIONAL OFFICE 48 HOURS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES.
2. CLEAR AND GRUB AREAS FOR INSTALLATION OF PERIMETER CONTROLS.
3. INSTALL SEDIMENT FENCES AND CONCRETE WASHOUT.
4. SCHEDULE AN ON-SITE CONFERENCE WITH THE OWNER'S REPRESENTATIVE AND YORK COUNTY COMPLIANCE INSPECTOR, IF REQUIRED BY THE PERMIT.
5. CLEAR AND GRUB REMAINDER OF SITE.
6. GRADE SITE.
7. INSTALL GEOGRID REINFORCED MAT SUBGRADE AREA.
8. INSTALL CONCRETE PAD AND CONCRETE KNEE WALL.
9. AFTER SITE IS STABILIZED, REMOVE ALL REMAINING TEMPORARY EROSION CONTROL MEASURES, AND REPAIR AND STABILIZE DISTURBED AREAS. ACQUIRE PERMISSION FROM OWNER'S REPRESENTATIVE AND YORK COUNTY REPRESENTATIVE, PRIOR TO REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES.

EROSION CONTROL NOTES:

1. LOCATION OF EXISTING UTILITIES AND OTHER SITE FEATURES SHALL BE FIELD VERIFIED PRIOR TO INITIATING CONSTRUCTION ACTIVITIES. THE ENGINEER SHALL BE NOTIFIED WITH ANY DISCREPANCIES.
2. AREA OF DISTURBANCE: 0.60 ACRES
3. EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE SCDHEC STORM WATER MANAGEMENT BMP HANDBOOK.
4. CONTRACTOR SHALL INSTALL ADDITIONAL MEASURES TO CONTROL EROSION AND/OR OFF-SITE SEDIMENT AS REQUIRED BY SCDHEC AND/OR THE LOCAL GOVERNING AGENCY.
5. REFER TO THIS SHEET FOR EROSION CONTROL CONSTRUCTION SCHEDULE, AND SHEET C3.1 FOR EROSION CONTROL MAINTENANCE SCHEDULE/STANDARD NOTES.
6. THERE IS FLOOD PLAIN PRESENT ON THIS SITE. FIRM PANEL NO. 45091C0277E, COMMUNITY: YORK COUNTY, DATED: 09-26-2008
7. WITHIN SEVEN CALENDAR DAYS, TEMPORARY STABILIZATION MEASURES SHALL BE COMPLETED ON TOPSOIL STOCKPILES. THE BURIAL OF ANY CELLULOSE DEBRIS WILL NEED TO BE PLATTED. THE REMOVAL OF SOIL OR WASTE FROM THE PROPOSED SITE WILL NEED TO BE TAKEN TO A PERMITTED LANDFILL OR ANOTHER PERMITTED SITE WITH A VALID LAND DISTURBANCE PERMIT. THE ASSOCIATED SITE WOULD ALSO BE REQUIRED TO PROVIDE THE APPROPRIATE EROSION AND SEDIMENT CONTROL NECESSARY TO RETAIN SEDIMENT ON SITE (WITHIN THE LIMITS OF DISTURBANCE PERMITTED).

LEGEND



Campo Engineering, Inc.
Consulting Engineers since 1974

THIS DRAWING IS THE PROPERTY OF CAMPO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

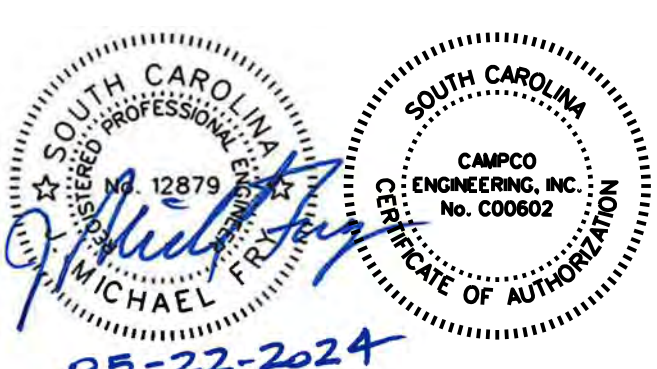
CONCRETE PAD
ADDITION FOR
RECOVERED
MATERIALS
PROCESSING
FACILITY

320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS		
NO.	DATE	DESCRIPTION

GRADING/
EROSION CONTROL
PLAN



05-22-2024

CE: 9902 ISSUED: 05-22-2024
SCALE: 1"=20' CAD FILE: 9902GPECC3.0

C3.0



Campro Engineering, Inc. Consulting Engineers since 1974

THIS DRAWING IS THE PROPERTY OF CAMPRO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.

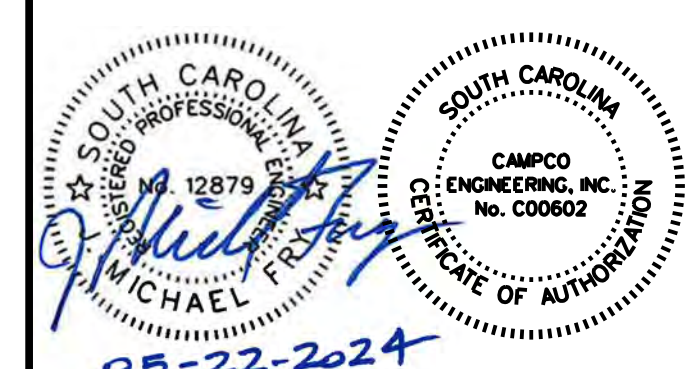
CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS		
NO.	DATE	DESCRIPTION

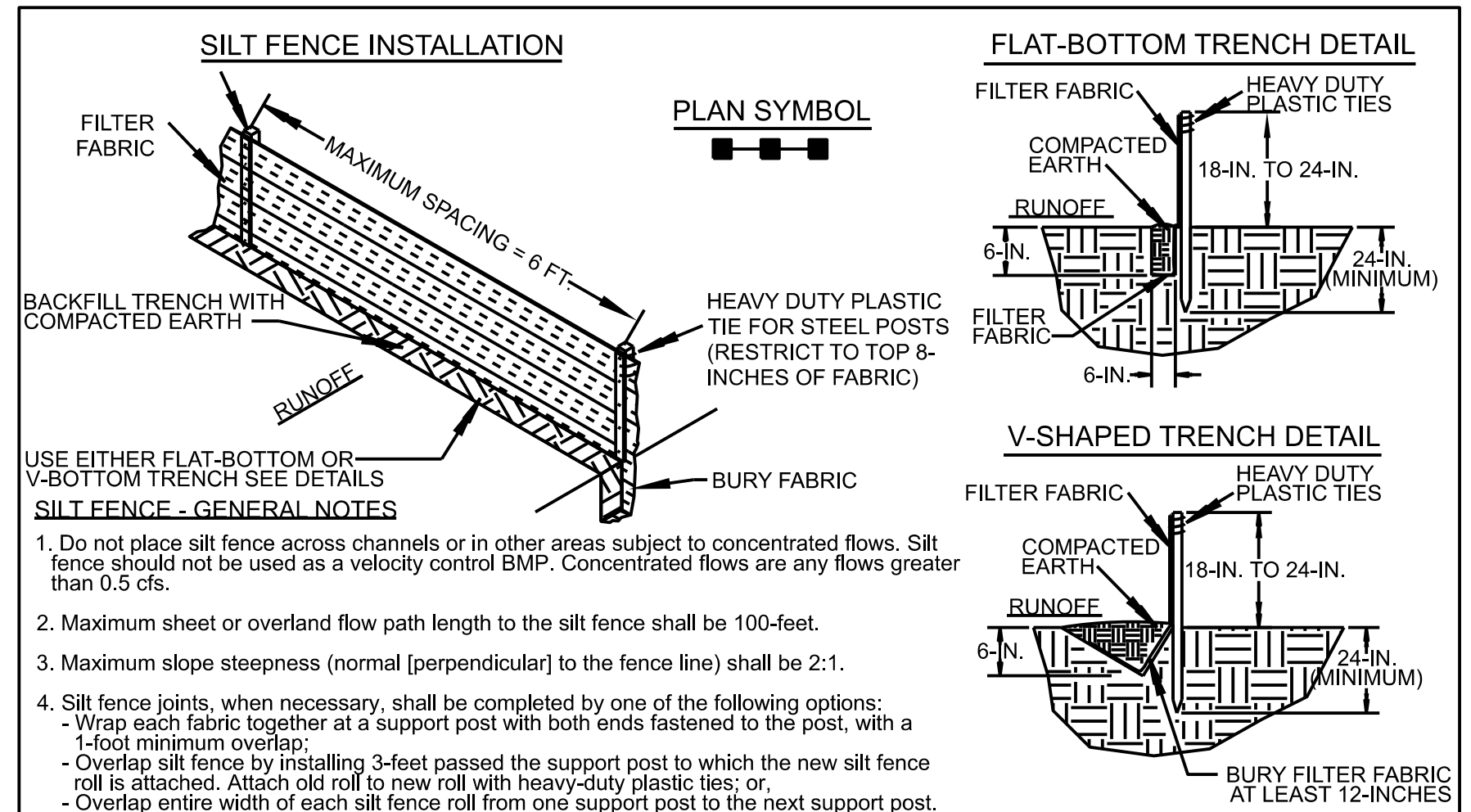
EROSION CONTROL DETAILS



05-22-2024

YORK COUNTY STANDARD EROSION CONTROL NOTES:

- THIS SITE IS CONSIDERED TO BE A LARGER COMMON PLAN (LCP) OR IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT, AS DEFINED BY YORK COUNTY ORDINANCE AND SCDHEC REGULATIONS. STORMWATER DETENTION AND WATER QUALITY REQUIREMENTS SHALL BE REQUIRED FOR LAND DISTURBANCE DURING THE DEVELOPMENT OF ANY AND ALL LOTS WITHIN THIS LARGER COMMON PLAN.
 - STORMWATER QUANTITY OR DETENTION MEASURES SHALL BE IMPLEMENTED WHERE TWO (2) OR MORE ACRES ARE DISTURBED OR ARE PLANNED TO BE DISTURBED.
 - STORMWATER WATER QUALITY MEASURES SHALL BE IMPLEMENTED WHERE FIVE (5) OR MORE ACRES IN THIS LCP ARE DISTURBED OR ARE PLANNED TO BE DISTURBED.
 - ALL PERMANENT STORMWATER MANAGEMENT FACILITIES AND BEST MANAGEMENT PRACTICES (BMPs) SHALL REQUIRE A COVENANT FOR PERMANENT STORMWATER SYSTEM MAINTENANCE AND RESPONSIBILITY FORM TO BE RECORDED WITH THE YORK COUNTY REGISTRAR OF DEEDS. THIS AGREEMENT SHALL CONSTITUTE A COVENANT RUNNING WITH THE LAND, AND SHALL BE BINDING UPON THE RESPONSIBLE PARTIES, HEIRS, ADMINISTRATORS, EXECUTORS, ASSIGNS AND ANY OTHER SUCCESSORS IN INTEREST. THE PROVISIONS OF THIS AGREEMENT MUST ALSO IDENTIFY A SOURCE OF FUNDING TO SUPPORT FOR FUTURE REQUIRED MAINTENANCE AND UPKEEP ACTIVITIES, AND AN ENTITY RESPONSIBLE FOR GENERAL UPKEEP, MAINTENANCE AND REPAIR.
 - NO PERMANENT BMPs CAN BE CONSTRUCTED ON A NUMBERED LOT, PROPERTY WHICH CONTAINS STORMWATER MANAGEMENT AND/OR WATER QUALITY FEATURES (PERMANENT BMPs) SHALL NOT BE NUMBERED AS LOTS AND SHALL BE SET ASIDE AS STORM DRAINAGE EASEMENTS WITHIN OPEN SPACE OR GREEN SPACE.
 - ALL PERMANENT BMPs TO BE IMPLEMENTED TO MEET THESE REQUIREMENTS WILL NEED TO BE APPROVED PRIOR TO ANY DISTURBANCE BEING PERMITTED.
 - ALL ASSOCIATED PERMITS, PLANS, FEES, ETC. MUST BE EXECUTED PRIOR TO THE DISTURBANCE OF ANY LAND ASSOCIATED WITH THIS PLAN AND/OR BUILDING PERMIT.
- THE DESIGN OF ALL EROSION CONTROL AND STORMWATER MANAGEMENT FEATURES FOR WATER QUALITY AND WATER QUANTITY AND OTHER BMPs, STORM DRAIN PIPING AND THEIR RECEIVING WATERS, IN ADDITION TO ALL ROAD INFRASTRUCTURE, SANITARY SEWER AND WATER UTILITIES, AS PRESENTED HEREIN, HAS BEEN COMPLETED FROM FIELD SURVEY INFORMATION PREPARED BY A LICENSED SOUTH CAROLINA LAND SURVEYOR.
- FOLLOWING THE PRE- CONSTRUCTION CONFERENCE, CONTACT YORK COUNTY ENVIRONMENTAL COMPLIANCE AT (803) 909-7250 NOT LESS THAN 48 HOURS BEFORE COMMENCEMENT OF THE LAND-DISTURBING ACTIVITY. THE PERMITTEE SHALL ALSO CONTACT YORK COUNTY AFTER THE REMOVAL OF THE TEMPORARY SEDIMENT CONTROL MEASURES AND THE CONVERSION OF ANY BMPs REQUIRED TO BE CONVERTED INTO PERMANENT CONTROL MEASURES, ONCE THE SITE HAS BEEN FINALLY STABILIZED.
- NO STAGE OF WORK, RELATED TO THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES, SHALL PROCEED TO THE NEXT SUBSEQUENT STAGE OF WORK, ACCORDING TO THE SEQUENCE SPECIFIED IN THE APPROVED C-SWPP STAGED CONSTRUCTION AND INSPECTION CONTROL SCHEDULE UNTIL IT IS INSPECTED AND APPROVED BY YORK COUNTY, OR AN AMENDED C-SWPP AND ENGINEERED PLAN IS APPROVED BY YORK COUNTY PRIOR TO COMMENCING THE WORK.
- THE PERMITTEE ENGAGED IN OR CONDUCTING THE LAND-DISTURBING ACTIVITY SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES AND FACILITIES DURING THE DEVELOPMENT OF A SITE, AS REQUIRED BY THE APPROVED PLAN OR ANY PROVISION OF THE YORK COUNTY STORMWATER ORDINANCE, OPERATIONS AND MAINTENANCE CONDITIONS SHALL BE INCLUDED IN THE PLAN OUTLINING HOW THE PERMITTEE AND OWNER INTENDS TO PROVIDE FOR OPERATIONS AND MAINTENANCE DURING AND POST CONSTRUCTION.
- STOCKPILES SHALL BE TEMPORARY AND SHALL BE LEVELED TO CONFORM TO SURROUNDING ELEVATION AS A PRECONDITION FOR ANY OF THE FOLLOWING, WHICHEVER OCCURS FIRST:
 - REQUEST FOR A NOTICE OF TERMINATION, OR
 - REQUEST FOR YORK COUNTY ACCEPTANCE OF A ROAD OR STREET IN ACCORDANCE WITH THE ROAD/STREET ACCEPTANCE REQUIREMENTS OF CHAPTER 154 - SUBDIVISION CODE OF THE YORK COUNTY CODE OF ORDINANCES.
- THE BURIAL OF ANY CELLULOSE DEBRIS IS REQUIRED TO BE PLATTED. THE REMOVAL OF SOIL OR WASTE FROM THE PROPOSED SITE IS REQUIRED TO BE TAKEN TO A PERMITTED LANDFILL OR ANOTHER PERMITTED SITE WITH A VALID LAND DISTURBANCE PERMIT AS ALL OWED BY STATE AND FEDERAL REGULATIONS. THE ASSOCIATED SITE WOULD ALSO BE REQUIRED TO PROVIDE THE APPROPRIATE EROSION AND SEDIMENT CONTROL NECESSARY TO RETAIN SEDIMENT ON SITE (WITHIN THE LIMITS OF DISTURBANCE PERMITTED).
- AREAS AT FINAL GRADE SHALL RECEIVE PERMANENT STABILIZATION MEASURES WITHIN 14 CALENDAR DAYS OF REACHING FINAL GRADE.
- THE RESPONSIBILITY FOR MAINTAINING ALL PERMANENT EROSION AND SEDIMENT CONTROL MEASURES AND FACILITIES, INCLUDING EASEMENTS, AFTER SITE LAND-DISTURBING ACTIVITY IS COMPLETED SHALL LIE WITH THE LANDOWNER OR PERSON IN POSSESSION OR CONTROL INCLUDING THE DEVELOPER, THE DEVELOPER'S DESIGNEE, OR ANY HOMEOWNER'S ASSOCIATION, PROPERTY OWNER'S ASSOCIATION OR OTHER COMMON OWNER ENTITY ESTABLISHED FOR THE GOVERNANCE/ADMINISTRATION OF A SUBDIVISION OR COMMON PLAN OF DEVELOPMENT, EXCEPT FACILITIES AND MEASURES INSTALLED WITHIN ROAD OR STREET RIGHTS-OF-WAY OR EASEMENTS ACCEPTED FOR MAINTENANCE BY YORK COUNTY.
- FOR DEVELOPMENTS WHICH ESTABLISH A HOMEOWNER'S ASSOCIATION, PROPERTY OWNER'S ASSOCIATION OR OTHER COMMON OWNER ENTITY, PROVISIONS FOR LONG TERM MAINTENANCE OF SITE STORMWATER FACILITIES AND/OR BMPs, AS OUTLINED IN THE APPROVED PLAN, SHALL BE DEFINED IN A SIGNED AND RECORDED COVENANT FOR PERMANENT STORMWATER SYSTEM MAINTENANCE AND RESPONSIBILITY. THE PROVISIONS OF THIS COVENANT SHALL ALSO IDENTIFY A SOURCE OF FUNDING TO SUPPORT FUTURE REQUIRED MAINTENANCE AND UPKEEP ACTIVITIES, AND THE ENTITY RESPONSIBLE FOR GENERAL UPKEEP, MAINTENANCE AND REPAIR.
- APPROVED PLANS REMAIN VALID FOR FIVE YEARS FROM THE DATE OF AN APPROVAL.



- #### SILT FENCE - GENERAL NOTES
- Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
 - Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
 - Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
 - Silt fence joints, when necessary, shall be completed by one of the following options:
 - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap;
 - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
 - Overlap entire width of each silt fence roll from one support post to the next support post.
 - Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
 - Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
 - Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 Page 1 of 2

NOT TO SCALE

REVISION DATE

- #### SILT FENCE - POST REQUIREMENTS
- Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics:
 - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
 - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
 - Weight 1.25 pounds per foot (± 8%)
 - Posts shall be equipped with projections to aid in fastening of filter fabric.
 - Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
 - Install posts to a minimum of 24-inches. A minimum height of 1 to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
 - Post spacing shall be at a maximum of 6-feet on center.

- #### SILT FENCE - INSPECTION & MAINTENANCE
- The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
 - Regular inspections of silt fence shall be conducted once every calendar week and, as recommended within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.
 - Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
 - Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
 - Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
 - Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
 - Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
 - Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

- #### SILT FENCE - FABRIC REQUIREMENTS
- Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
 - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
 - Free of any treatment or coating which might adversely alter its physical properties after installation;
 - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
 - Have a minimum width of 36-inches.
 - Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
 - 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
 - Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
 - Filter Fabric shall be installed at a minimum of 24-inches above the ground.
 - Wire backed silt fence is required where contributing slope exceeds 3%.

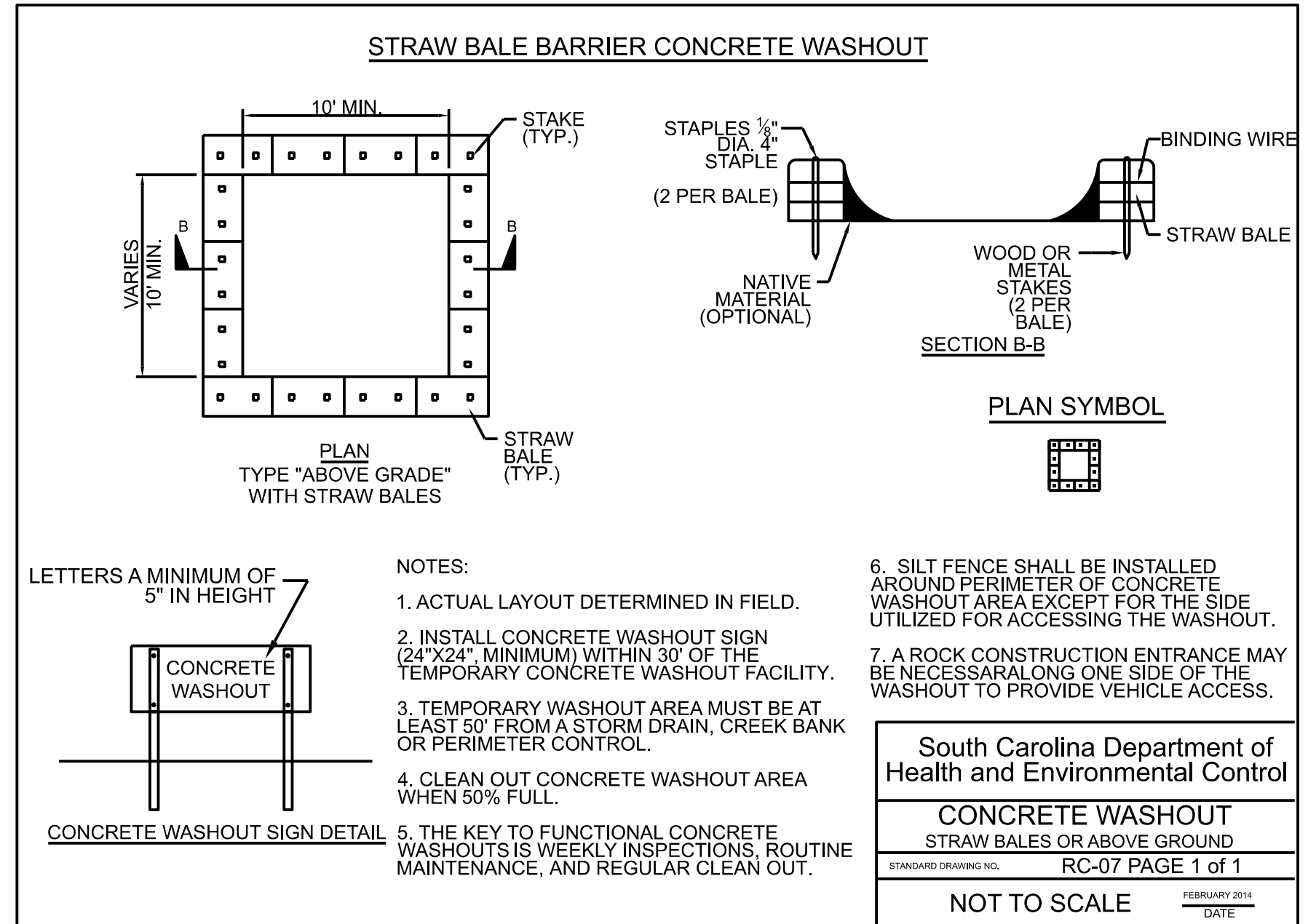
South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 2 of 2

GENERAL NOTES

REVISION DATE



- #### CONCRETE WASHOUT SIGN DETAIL
- LETTERS A MINIMUM OF 5" IN HEIGHT
- CONCRETE WASHOUT
- NOTES:
- ACTUAL LAYOUT DETERMINED IN FIELD.
 - INSTALL CONCRETE WASHOUT SIGN (24"x24" MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 - TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
 - CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
 - THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.

South Carolina Department of Health and Environmental Control

CONCRETE WASHOUT

STRAW BALES OR ABOVE GROUND

STANDARD DRAWING NO. RC-07 PAGE 1 of 1

NOT TO SCALE

REVISION DATE

1 YORK COUNTY STANDARD EROSION CONTROL NOTES

CONCRETE WASHOUT STRAW BALES OR ABOVE GROUND

STANDARD DRAWING NO. RC-07 PAGE 1 of 1

NOT TO SCALE

REVISION DATE

CE: 9902 ISSUED: 05-22-2024
SCALE: NA CAD FILE: 9902DTC3.1

C3.1

GENERAL STRUCTURAL NOTES

GENERAL:

- THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR ROUGHING-IN MEASUREMENTS, OR TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
- THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVELS, CONDITIONS AND DIMENSIONS AT THE JOB SITE AND AS SHOWN ON THE DRAWINGS. THEY SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE RESPONSIBLY FOR SAFETY BEFORE COMMENCING WORK. THE CONTRACTOR AND SUBCONTRACTORS SHALL LAY OUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.
- PROTECTION:
 - THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE AND ALL LOCAL, STATE AND FEDERAL LAWS. THE ENGINEER AND HIS EMPLOYEES ARE NOT RESPONSIBLE FOR SAFETY PROCEDURES ON THIS PROJECT. THIS IS THE CONTRACTOR'S RESPONSIBILITY.
 - PROVIDE ALL SHORING, BRACING AND SHEETING AS REQUIRED FOR THE PROPER EXECUTION OF THE WORK. REMOVE WHEN THE WORK IS COMPLETED.
 - PROVIDE AND MAINTAIN GUARD LIGHTS AT ALL BARRICADES, RAILINGS, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS AND ALL TRENCHES OR PITS ADJACENT TO PUBLIC WALKS OR ROADS.
 - AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR HEAT) SO AS TO MAINTAIN ALL WORK, MATERIALS, APPARATUS AND FIXTURES FREE FROM DAMAGE.
 - THE CONTRACTOR SHALL PAY FOR ALL DAMAGES TO ADJACENT STRUCTURES, SIDEWALKS AND TO STREETS OR OTHER PUBLIC PROPERTY OR TO ANY PUBLIC UTILITIES.
 - AT THE END OF THE DAY'S WORK COVER ALL WORK LIKELY TO BE DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION SHALL BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.
- IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR'S FAILING TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
- THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS TOGETHER WITH THE CIVIL DRAWINGS TO LOCATE STEPPED FOOTINGS, DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, REGLETS, BOLT SETTING, SLEEVES, DIMENSIONS, ETC. POTENTIAL CONFLICTS SHALL BE TRANSMITTED TO THE A/E BEFORE PROCEEDING WITH THE WORK.
- SUBMIT SHOP DRAWINGS OF ELECTRONIC PDF FOR A/E REVIEW BEFORE STARTING FABRICATION.
- NO SHOP DRAWINGS SHALL BE SUBMITTED FOR A/E REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS MUST BE MADE GOOD BY CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY ENGINEER AND EVEN THOUGH WORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS.
- THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THAT HIS INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY. WHERE CRITICAL DIMENSIONS CANNOT BE DETERMINED FROM THE PLANS, OR WHERE NEW WORK ADJOINS EXISTING CONSTRUCTION, OR WHERE ONE MATERIAL ADJOINS AN IN-PLACE MATERIAL, CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AS REQUIRED TO COMPLETE SHOP DRAWINGS AND INSTALLATION. REPORT ANY DISCREPANCIES EXCEEDING 3% BETWEEN FIELD MEASURED DIMENSIONS AND SCALED DRAWING DIMENSIONS TO ARCHITECT BEFORE PROCEEDING WITH THE WORK.

EARTHWORK:

- CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL CONCRETE CAN BE PLACED IN THE DRY.
- SEE GEOTECH. FOR TENSAR BX1200 GRID SUBGRADE STABILIZATION & SUBMIT TO CIVIL/STRUCT FOR REVIEW.

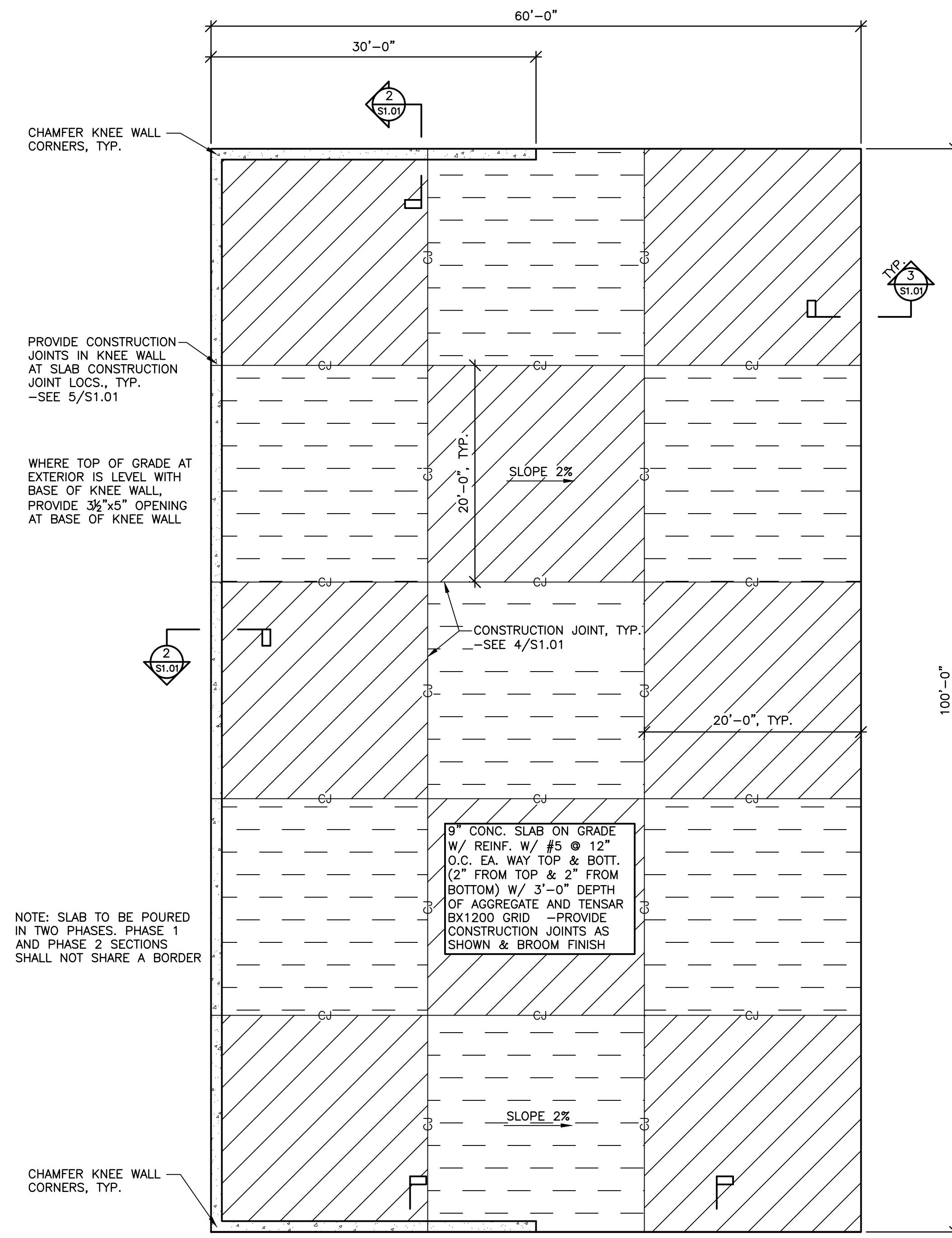
CONCRETE:

- CONCRETE DESIGN AND REINFORCEMENT IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 318) AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (A.C.I. 315).
- ALL CONCRETE WORK IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING" (ACI 301). PRODUCTION OF CONCRETE, DELIVERY, PLACING AND CURING TO BE IN ACCORDANCE WITH "HOT/COLD WEATHER CONCRETING" (A.C.I. 305R).
- NO ADMIXTURES PERMITTED WITHOUT THE REVIEW OF ARCHITECT/ENGINEER.
- FOR ALL CONCRETE TO BE PLACED IN SLABS (INCLUDING SLABS ON GRADE) THE SLUMP SHALL NOT EXCEED 4". NO WAIVERS OF THIS REQUIREMENT SHALL BE CONSIDERED. SLUMP FOR OTHER CONCRETE SHALL NOT EXCEED 5". SLAB ON GRADE SHALL BE CAST IN ALTERNATE SECTION HAVING A MAXIMUM AREA OF 1600 S.F. AND A MAXIMUM LENGTH OF 20 FT. NO PUMP MIX. DEPOSIT DIRECTLY FROM CHUTE.
- CEMENT CONTENT FOR STRENGTH & MIX DESIGN NOTES:
5000PSI CONC. - 7 BAGS MIN. W/ 0.50 MAX. W/C RATIO
PROVIDE 45 PCY DRAMIX 3D 55/60LB STEEL FIBER FOR IMPACT STRENGTH
DEPOSIT DIRECTLY FROM CHUTE ALLOWING INCREASED COARSE AGGREGATE CONTENT
INITIAL WET CURE TO ENSURE DENSE SURFACE - SEE NOTES BELOW
- ALL CONCRETE SHALL BE CONTROLLED CONCRETE, NORMAL WEIGHT WITH COMPRESSIVE STRENGTH AS FOLLOWS:
MUD SLAB AS REQUIRED. Fc' = 2,000 PSI
SLAB ON GRADE Fc' = 5,000 PSI NON AIR-ENTRAINED

- PROVIDE 15 MIL. VAPOR BARRIER TO RETAIN MOISTURE IN MIX OVER THE AGGREGATE SUBGRADE LAYER THAT WATER WOULD BLEED INTO AND BE ABSORBED.
- CONCRETE EVAPORATION RETARDER/CURING AIDS:
EVAPORATION RETARDER BELOW TEMPORARILY REDUCES MOISTURE LOSS FROM CONCRETE SURFACES AWAITING FINISHING IN HOT, DRY, AND WINDY CONDITIONS. EVAPORATION RETARDERS ARE NOT CURING COMPOUNDS.
ABSORPTIVE COVER: AASHTO M 182, CLASS 2, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ./SQ. YD. DRY.
MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET.
WATER: POTABLE
EVAPORATION RETARDER: WATERBORNE, MONOMOLECULAR FILM FORMING, MANUFACTURED FOR APPLICATION

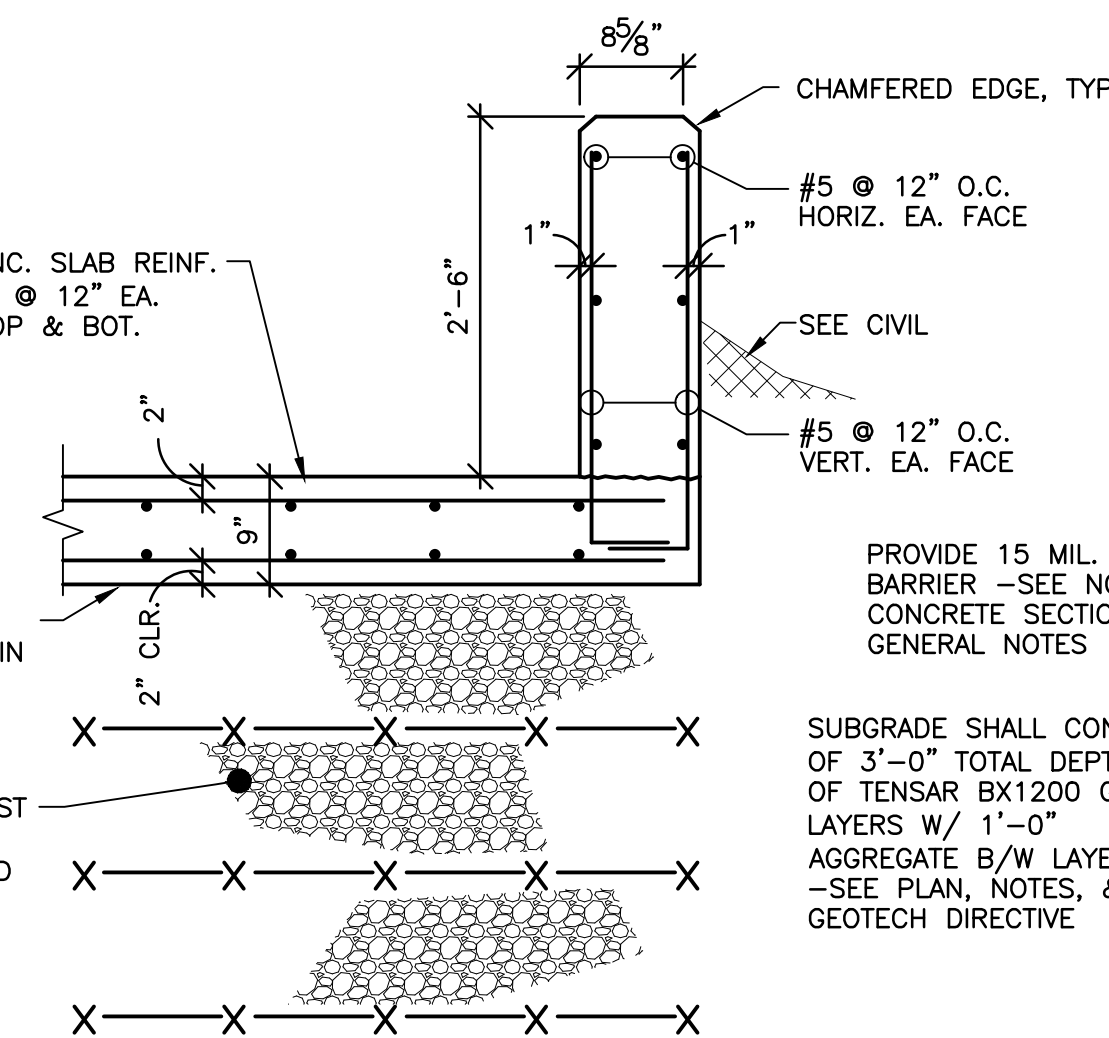
REINFORCING STEEL: (SHOP DRAWING REQUIRED)

- TO BE NEW BILLET STEEL CONFORMING TO THE LATEST A.S.T.M. A615 GRADE 60 SPECIFICATIONS, FABRICATED IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE OF THE C.R.S.I. AND PLACED IN ACCORDANCE WITH A.C.I. 315 AND A.C.I. MANUAL OF STANDARD PRACTICE.
- ALL DOWELS FOR WALLS TO BE SECURED IN POSITION PRIOR TO CONCRETING. DRILLING OR PUSHING THE DOWELS INTO POSITION IN WET CONCRETE IS NOT PERMITTED.
- CONCRETE COVER AS DETAILED ON DRAWINGS.
- SLAB AND BEAM REINFORCEMENT: PLACED IN ACCORDANCE WITH REINFORCING DIAGRAMS, LAPPED 36 BAR DIAMETER OR MINIMUM 18". BOTTOM BARS SPLICED ONLY AT SUPPORTS. TOP BARS SPLICED ONLY AT MID-SPAN. ALL TOP BARS HOOKED AT NON-CONTINUOUS EDGES (U.O.N.). ALL HOOKS TO BE STANDARD 90 DEGREE OR 180 DEGREE HOOKS AS REQUIRED (U.O.N.).
- ADDED REINFORCEMENT: PROVIDE ADDITIONAL CORNER BARS BENT 2 FT. MINIMUM EACH WAY AT CORNERS IN OUTER FACES OF ALL BEAMS TO MATCH ALL HORIZONTAL BARS NOT DETAILED WITH A HOOKED END.
- THE CONTRACTOR SHALL INFORM THE REBAR DETAILER OF HIS PROPOSED REBAR SUPPORT METHOD AND CONSTRUCTION SEQUENCES. ALL SUPPORT ITEMS AND SPLICES REQUIRED SHALL BE SO DETAILED AND PROVIDED.
- SEE THE REQUIREMENT FOR STEEL FIBER ADMIXTURE FOR IMPACT STRENGTH

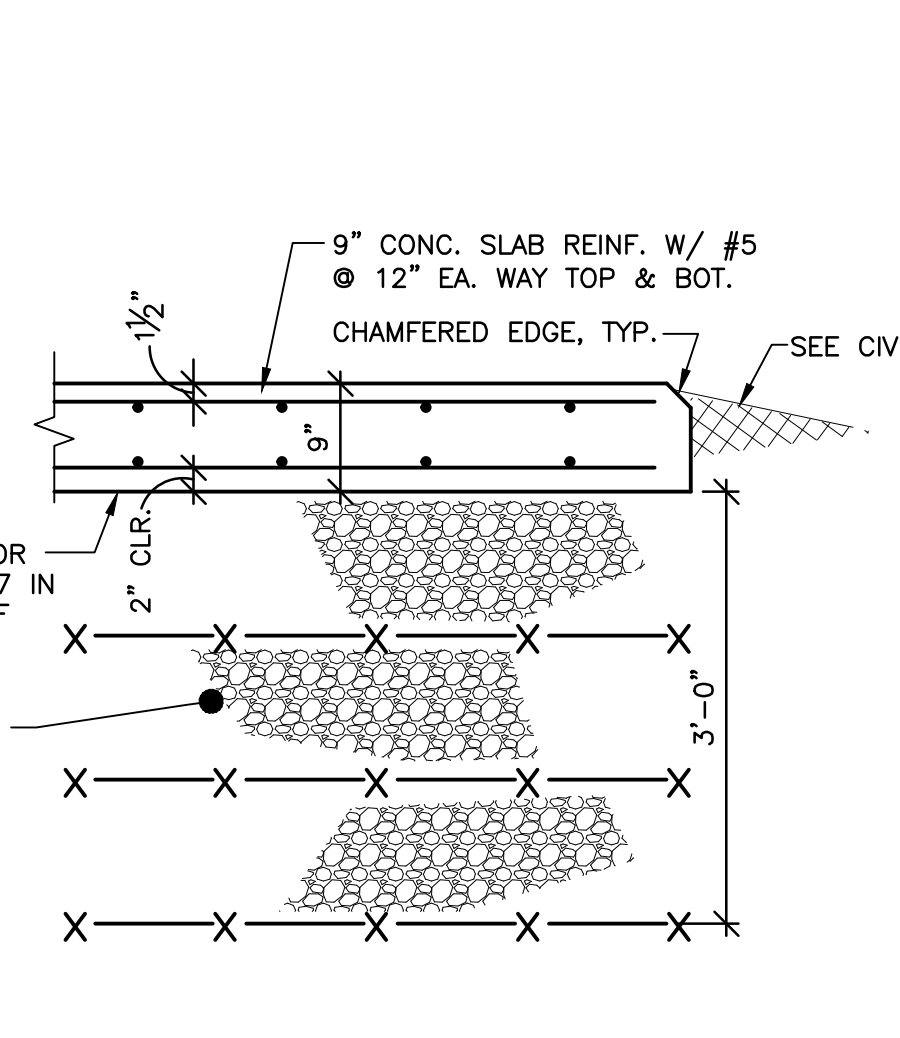


1 CONCRETE SLAB PLAN
SCALE: 1/8"=1'-0"

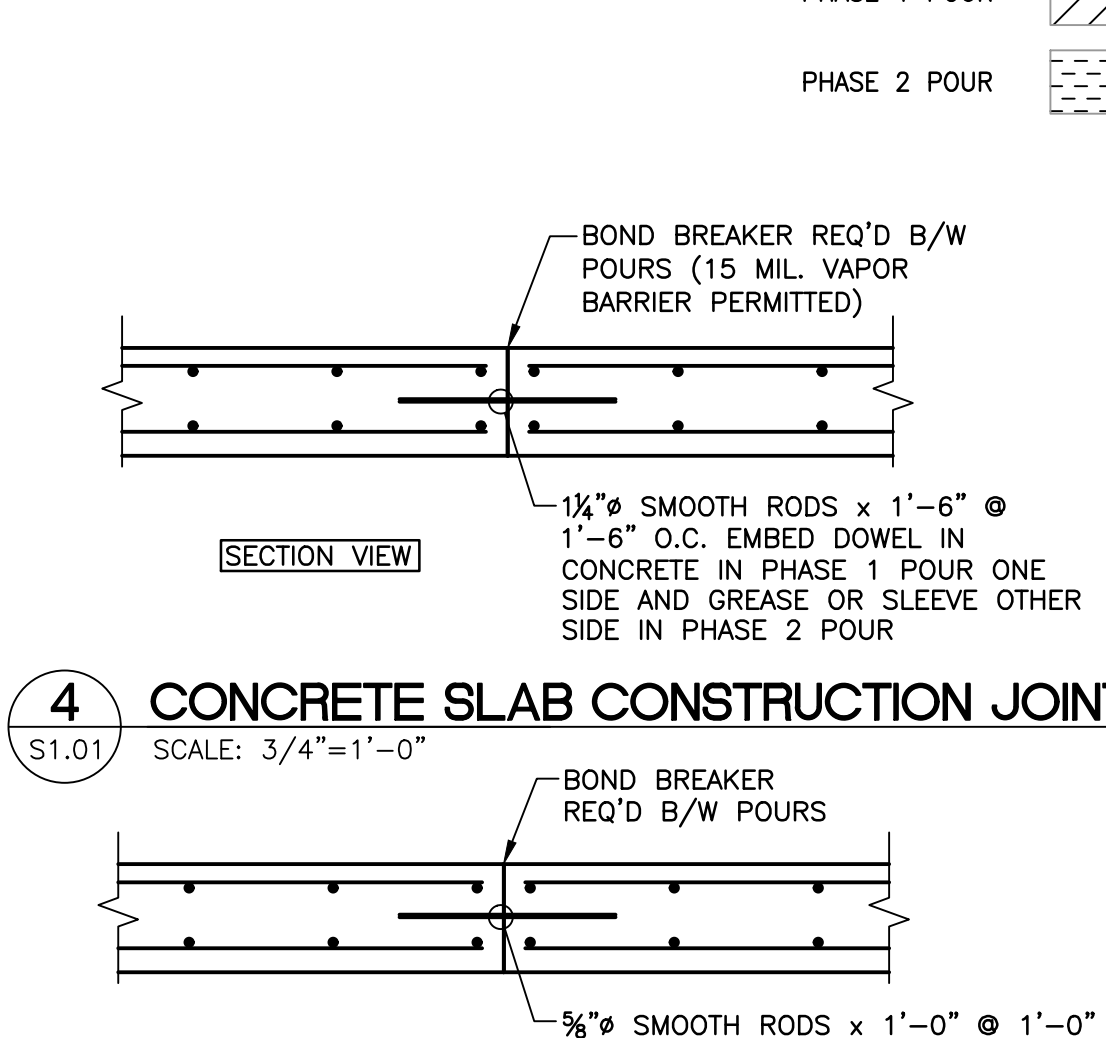
- NOTES:
- CONTRACT DRAWINGS SHALL NOT BE USED FOR SHOP DRAWINGS.
 - SEE THIS SHEET FOR GENERAL NOTES
 - CONCRETE MIX DESIGN MUST BE SUBMITTED FOR E.O.R. REVIEW. COLLABORATION BETWEEN CONCRETE SUPPLIER AND E.O.R. RECOMMENDED BEFORE SUBMITTAL. SEE DESIGN REQUIREMENTS IN GENERAL NOTES
 - CHAIRS AND STANDEES FOR REINF. MATS MUST BE SIZED FOR INNER MAT BEARING TOP AND BOTTOM WITH PROPER CLEARANCES ATTAINED. NOT MORE.
 - SPECIAL INSPECTIONS ARE REQUIRED FOR THE REVIEW OF THE IN-PLACE REINFORCING, AND TO OBSERVE THE PLACEMENT AND VERIFY THE MIX DESIGN OF THE CONCRETE. THE SUB-GRADE TENSAR LAYERS SHALL ALSO BE MONITORED TO VERIFY PROPER PLACEMENT.



2 SECTION AT KNEE WALL
SCALE: 3/4"=1'-0"



3 EDGE OF SLAB SECTION
SCALE: 3/4"=1'-0"



4 CONCRETE SLAB CONSTRUCTION JOINT
SCALE: 3/4"=1'-0"

5 KNEE WALL CONSTRUCTION JOINT
SCALE: 3/4"=1'-0"



THIS DRAWING IS THE PROPERTY OF CAMPO ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS, AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSTRUED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS ON THIS PROJECT.



1171 Market Street, Suite 203
Fort Mill, SC 29708
704-408-1698

CONCRETE PAD ADDITION FOR RECOVERED MATERIALS PROCESSING FACILITY

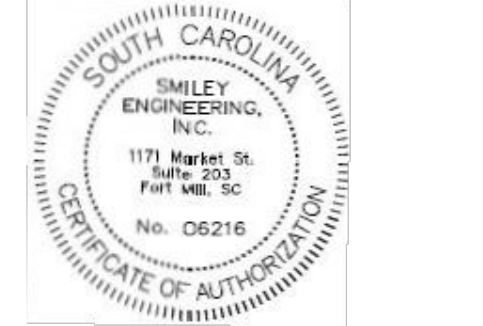
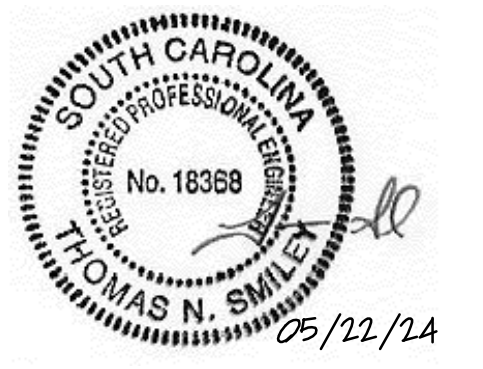
320 RECYCLE CENTER RD
YORK, SC 29745



REVISIONS

NO.	DATE	DESCRIPTION

CONCRETE PAD PLAN, SECTION, & GENERAL NOTES



CE: 9902 ISSUED: 05-22-24
SCALE: AS SHOWN CAD FILE:

S1.01