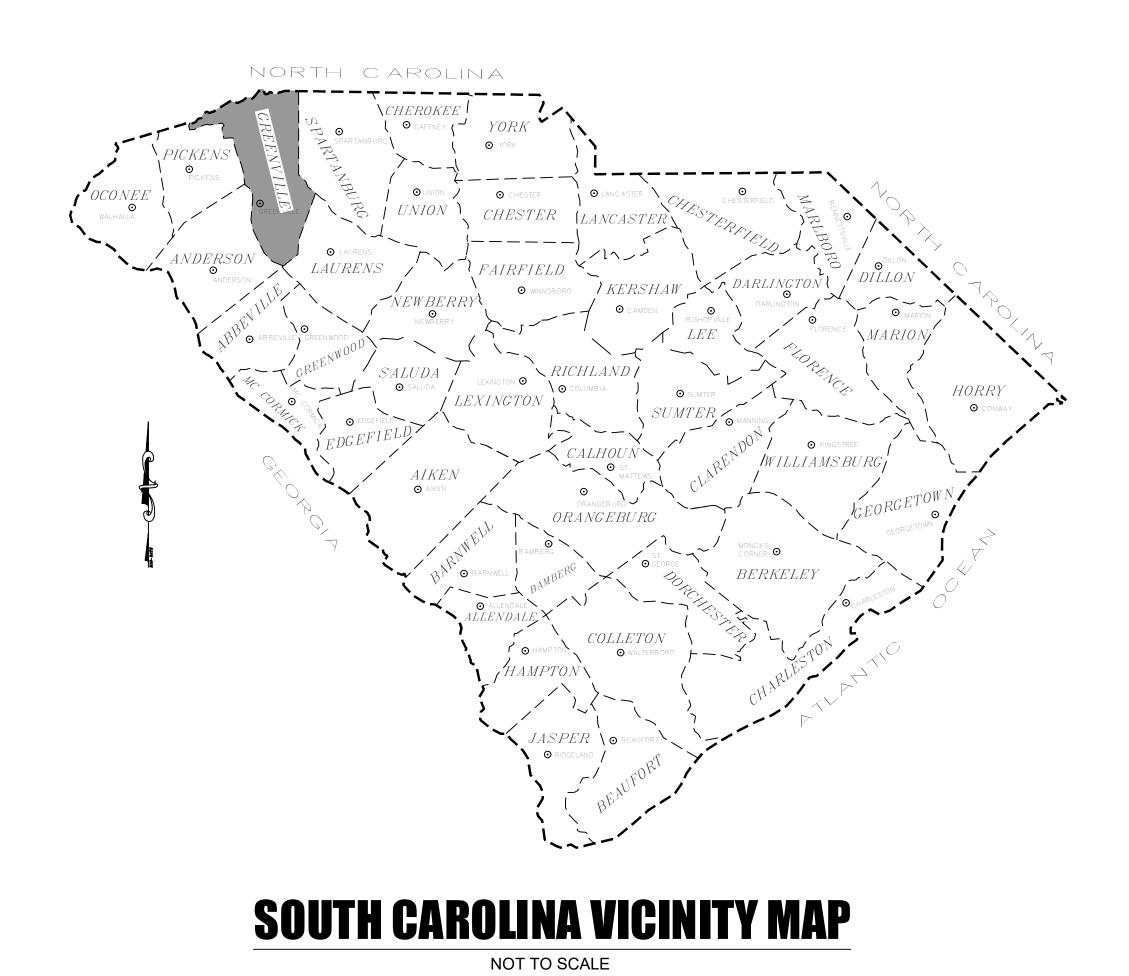
CITY OF TRAVELERS REST

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS MAIN STREET, CENTER STREET AND MCELHANEY ROAD

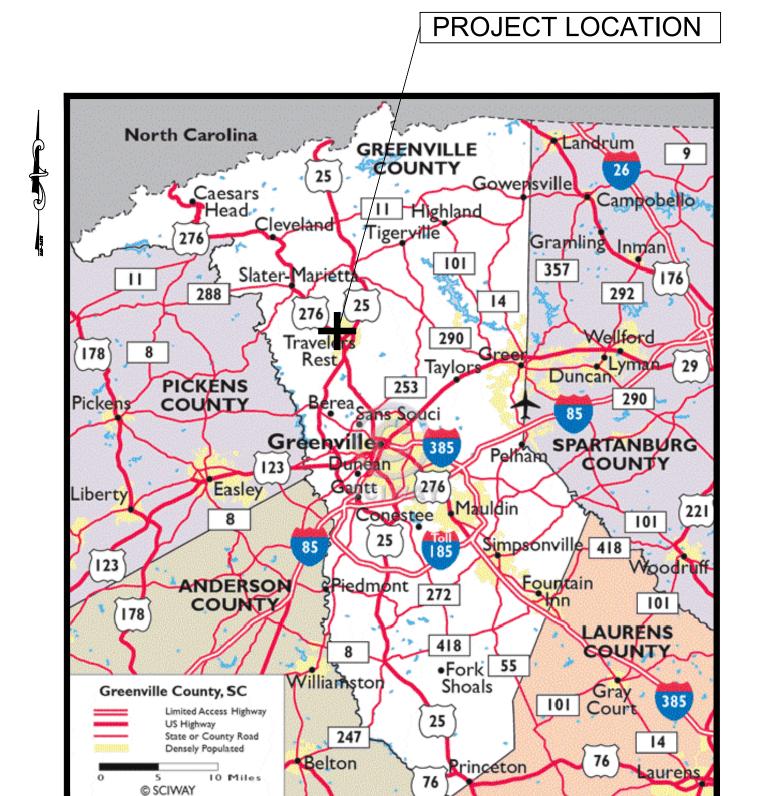


GENERAL NOTES:

- Location of existing utilities shown is approximate. Contractor to field verify location and depth of all existing underground utilities prior to commencing
- All equipment and material to be utilized by the contractor shall be included in
- 3. All construction shall conform to but not be limited, to Greenville County Stormwater regulations, SCDOT regulations, and ADA standards. Refer to SCDOT permit 250140 in bid documents.
- 4. Fill material shall be placed in 6" lifts (maximum) and 95% maximum dry density by the Standard Proctor Method, ASTM D-698.
- 5. All fill material shall be clean dirt free from roots, rocks, other organic material, construction/demolition debris and trash.
- Dispose of all materials in a SCDHEC approved landfill.
- 7. All markings to be 90 Mil thermoplastic in accordance with SCDOT 2007 Standard Specification Section 627.
- 8. Lane closures may not occur during the hours of 7-9 AM or 4-6 PM.
- 9. The entire disturbed area shall be fine graded and prepared to receive a minimum of 3" of topsoil.

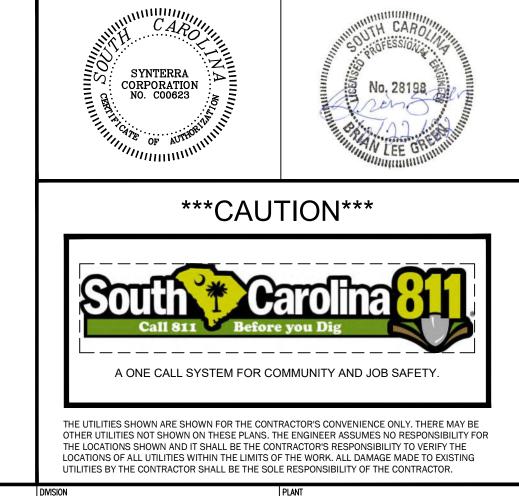
DRAWING INDEX

DRAWING	SHEET TITLE	SHEET NUMBER
C01	TITLE SHEET	1 OF 9
C02	EXISTING CONDITION AND DEMOLITION	I 2 OF 9
C03	SITE PLAN PHASE 1	3 OF 9
C04	THIS SHEET INTENTIONALLY LEFT OUT	4 OF 9
C05	SITE PLAN DETAILS	5 OF 9
C06	E&SC DETAIL	6 OF 9
C07	E&SC DETAIL	7 OF 9
C08	SIGNAL MODIFICATIONS	8 OF 9
C09	THIS SHEET INTENTIONALLY LEFT OUT	9 OF 9



Location Map

NOT TO SCALE



ISSUED FOR CONSTRUCTION

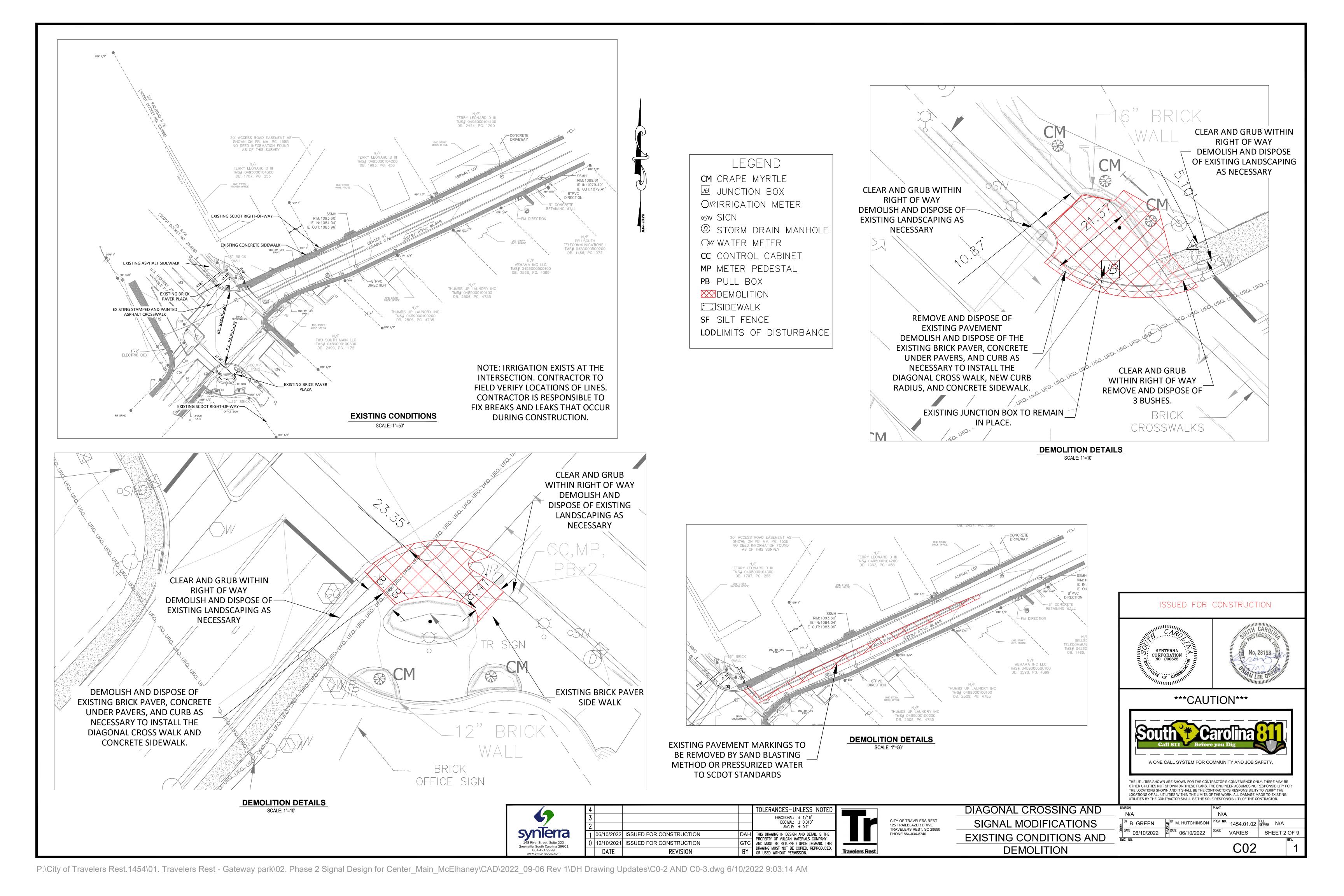
OLERANCES-UNLESS NOTE HIS DRAWING IN DESIGN AND DETAIL IS THE 06/10/2022 ISSUED FOR CONSTRUCTION ROPERTY OF VULCAN MATERIALS COMPANY) |12/10/2021| ISSUED FOR CONSTRUCTION AND MUST BE RETURNED UPON DEMAND. THIS DRAWING MUST NOT BE COPIED, REPRODUCED, OR USED WITHOUT PERMISSION.

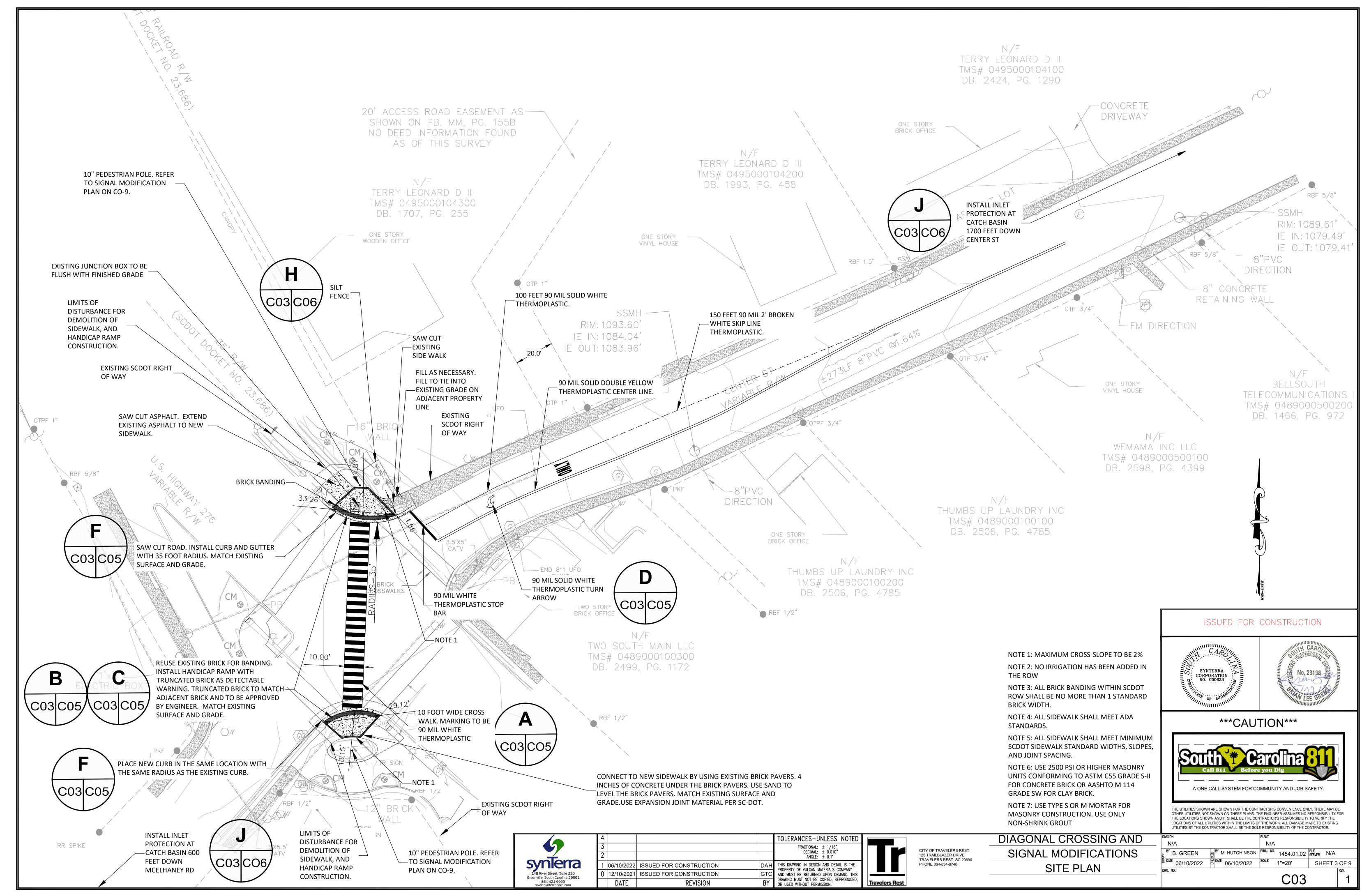


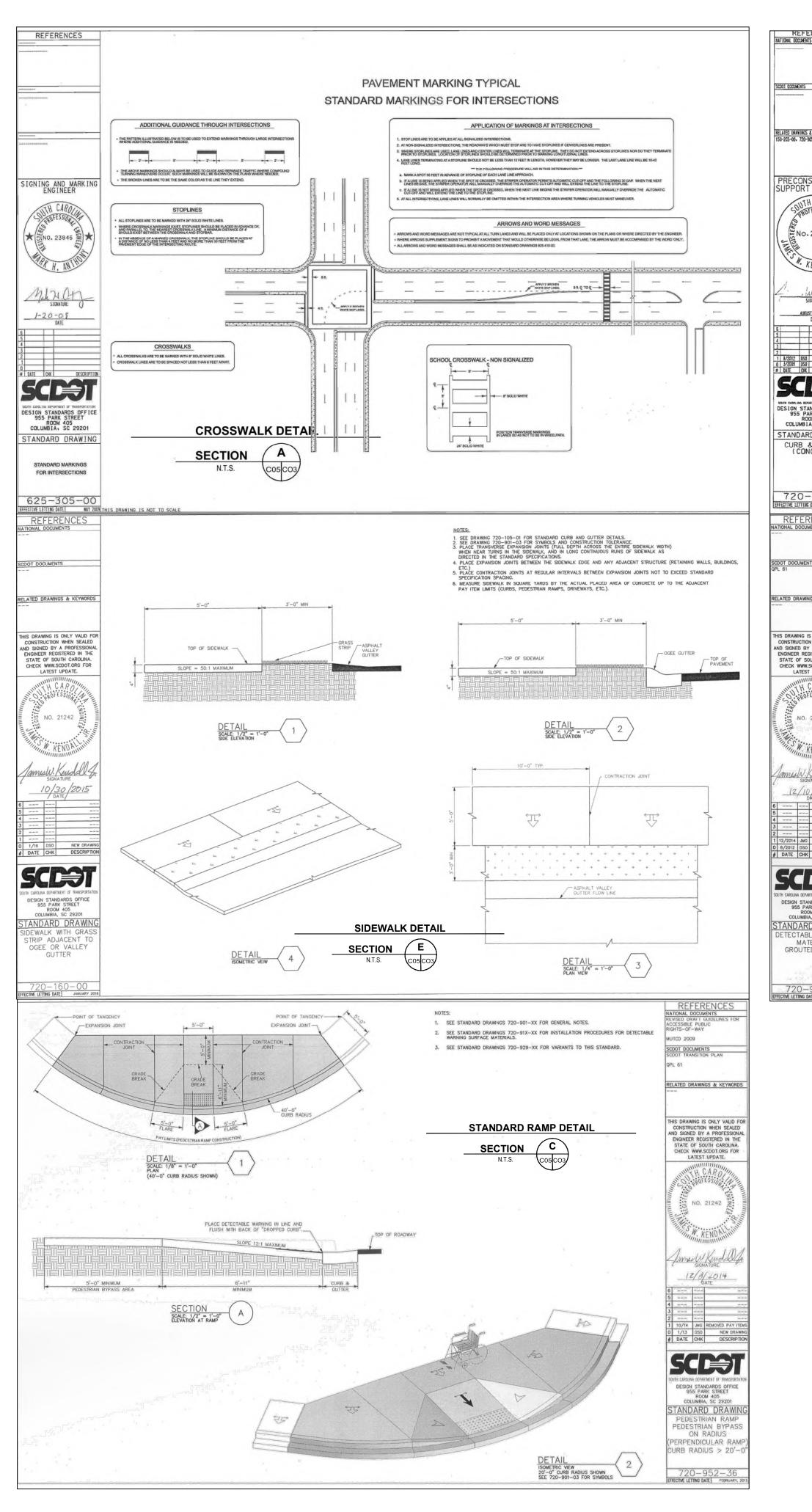
CITY OF TRAVELERS REST 25 TRAILBLAZER DRIVE TRAVELERS REST, SC 29690 PHONE 864-834-8740

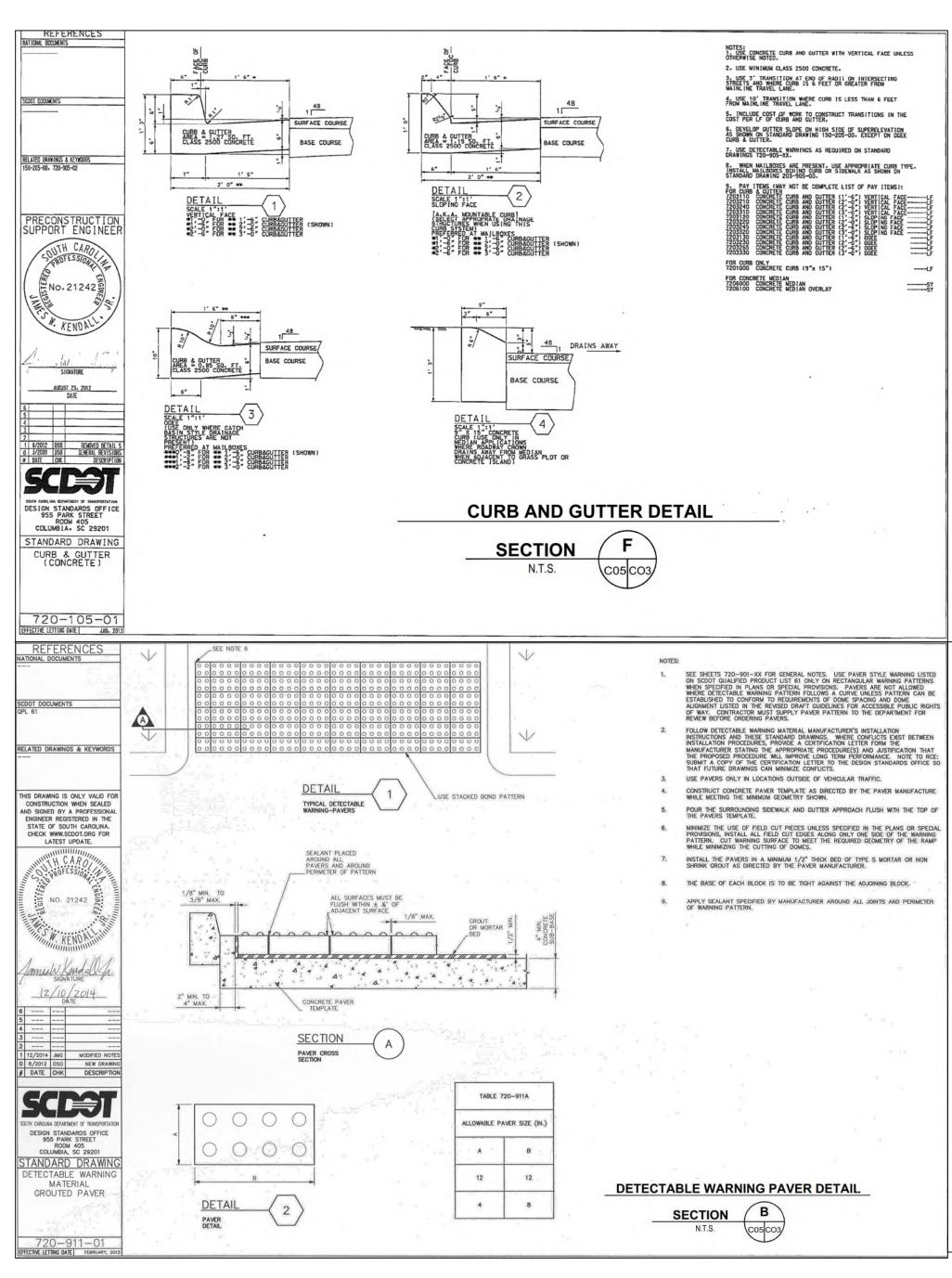
DIAGONAL CROSSING AND SIGNAL MODIFICATIONS **COVER SHEET**

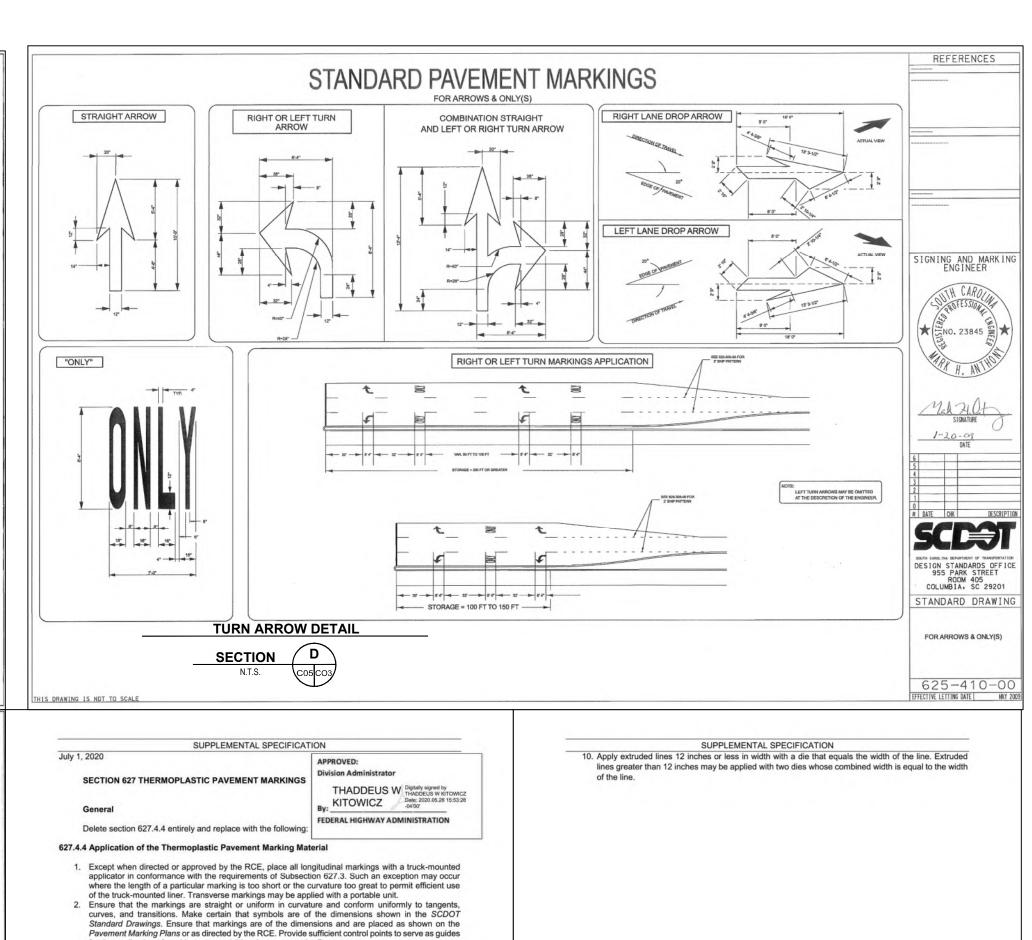
BY M. HUTCHINSON PROJ. NO. 1454.01.02 FILE SERVER N/A B. GREEN B DATE 06/10/2022 N.T.S. SHEET 1 OF 9 06/10/2022 CO'

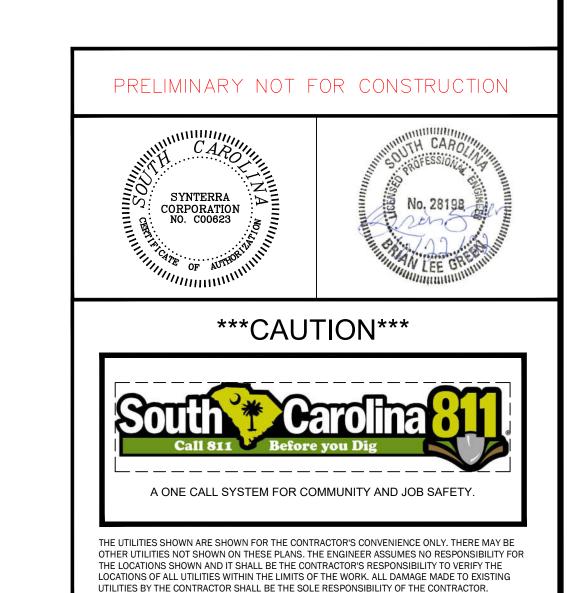








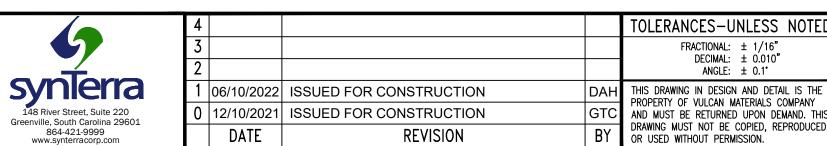




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THERMOPLASTIC MARKING DETAIL

SECTION





CITY OF TRAVELERS REST 125 TRAILBLAZER DRIVE TRAVELERS REST, SC 29690 PHONE 864-834-8740

for the application of markings at no additional expense to the Department.

3. Ensure that the finished line pavement markings are free from waviness and lateral deviation does not exceed 2 inches in 15 feet. Any greater deviation is sufficient cause for removal and correction of such

markings at no additional expense to the Department. Remove and correct symbol pavement markings not meeting the dimensional requirements shown in the SCDOT Standard Drawings. Protect the

pavement markings until dry by placing guarding or warning devices as necessary. If a vehicle crosses the wet marking, remove the pavement marking and any tracking lines made by the moving vehicle and apply new markings at no additional expense to the Department.

4. Place pavement markings only when the pavement is dry as determined by visual inspection or other approved method and the pavement temperature is 50°F or greater. No work is allowed when any moisture is visible on the pavement surface or pavement is wet. Provide each work crew with a handheld infrared non-contact thermometer with a temperature range of 0°F to 1000°F to verify the

minimum surface temperature. Measure pavement temperature away from heat generating

thermoplastic pavement markings. Remove the curing compound on new Portland cement concrete

Have on hand an adequate number of personnel experienced in the handling and application of this
type of material to ensure that the work is done properly. Run the marking machine only in the direction

 Perform work only during daylight hours unless specified otherwise. Ensure that all markings are sufficiently dry before sunset to permit crossing by traffic. Remove all protective devices before sunset

Apply the thermoplastic pavement marking material at a temperature between 390°F and 420°F that provides the best adhesion to the pavement as recommended by the manufacturer. Heat the material

niformly throughout, and ensure that it has a uniform disbursement of binder, pigment, and glass

Page 1 of 2

surfaces before application of pavement markings.

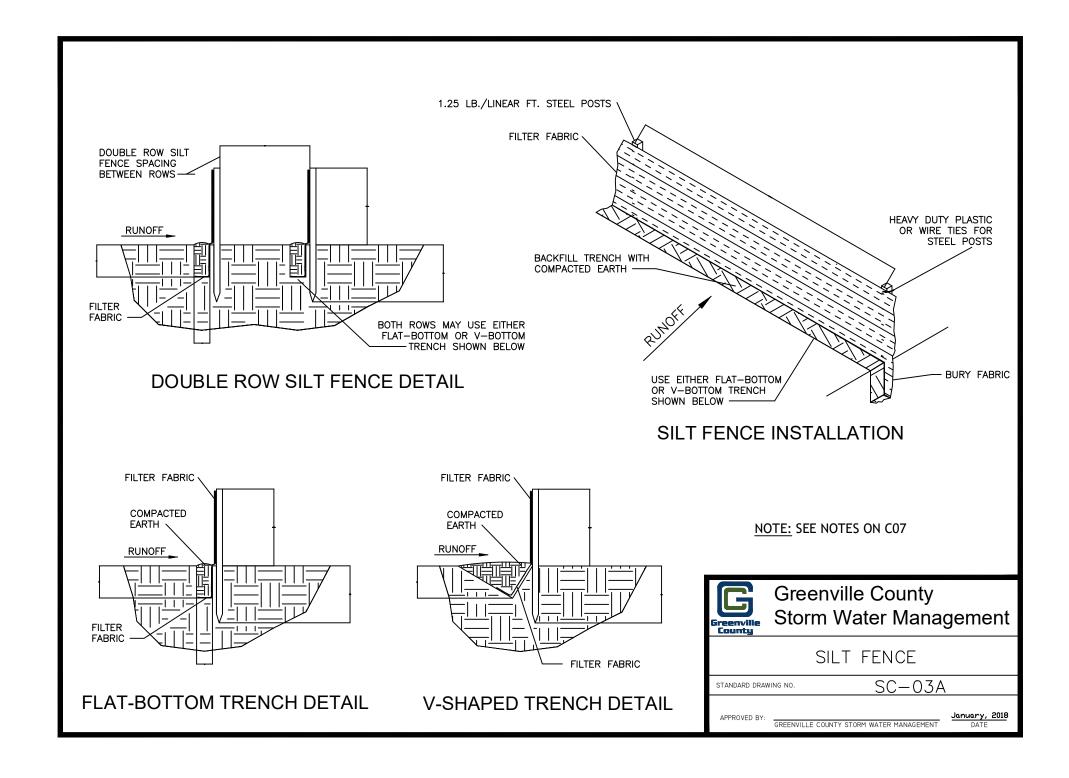
beads when applied to the surface of the pavement.

of normal traffic flow during marking operations.

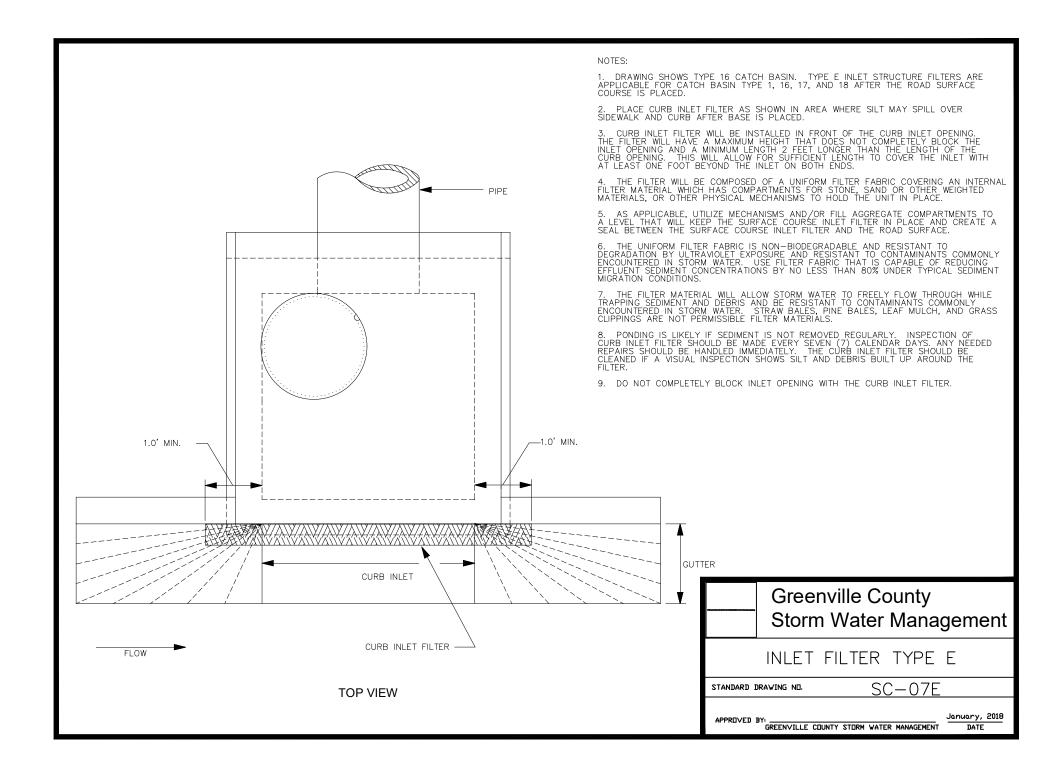
to allow free movement of traffic at night.

In Districts 2, 3, and 4, do not apply thermoplastic pavement markings between December 15 and March 15 unless approved by the RCE. Additionally, the RCE may disallow application on any day when the weather is cold and/or rainy and there is some question as to whether the surface temperature will be above 50°F for a period adequate to obtain quality pavement markings. Application may also be disallowed on any day when, in the opinion of the RCE, moisture conditions are not satisfactory for obtaining quality pavement markings.
 Ensure that new asphalt concrete surfaces are in place a minimum of 7 days before application of

DIAGONAL CROSSING AND
SIGNAL MODIFICATIONS
SITE PLAN DETAILS







INLET PROTECTION DETAIL SECTION

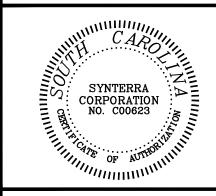
PLEASE REFER TO GREENVILLE COUNTY TECHNICAL SPECIFICATION EC-03: SEEDING & STABILIZATION FOR MORE DETAILS IN STABILIZATION, SEEDING, SEEDING AMENDMENTS, EROSION PREVENTION PRACTICES, SEEDING CONSTRUCTION REQUIREMENTS, SOD, PERMANENT GROUND COVER PLANTS, INSPECTION AND MAINTAINCE, AND DEAILED SEEDING TABLES.

MONTH			WORK DESCRIPTION
1.	2-4	5	
			Install sediment control devices.
			Demo existing brick pavers and curb.
			Begin construction. Establish vegetation.
			Remove temporary sediment control devices.
			Final inspection with agency.

SCDHEC STANDARD NOTES

- 1. If necessary, slopes, which exceed eight (8) vertical feet should be stabilized with synthetic or vegetative mats, in addition to hydroseeding. It may be necessary to install temporary slope drains during construction. Temporary berms may be needed until the slope is brought to grade.
- 2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after work has ceased, except as stated below.
- Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions stabilization measures must be initiated as soon as practicable.
- Where construction activity on a portion of the Site is temporarily ceased, and earth-disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the Site.
- 3. All sediment and erosion control devices shall be inspected once every calendar week. If periodic inspection or other information indicates that a BMP has been inappropriately, or incorrectly, the Permittee must address the necessary replacement or modification required to correct the BMP within 48 hours of identification.
- 4. Provide silt fence and/or other control devices, as may be required, to control soil erosion during utility construction. All disturbed areas shall be cleaned, graded, and stabilized with grassing immediately after the utility installation. Fill, cover, and temporary seeding at the end of each day are recommended. If water is encountered while trenching, the water should be filtered to remove sediment before being pumped back into any waters of the State.
- 5. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed once construction is complete and the site is stabilized.
- 6. The contractor must take necessary action to minimize the tracking of mud onto paved roadway(s) from construction areas and the generation of dust. The contractor shall daily remove mud/soil from pavement, as may be required.
- 7. Residential subdivisions require erosion control features for infrastructure as well as for individual lot construction. Individual property owners shall follow these plans during construction or obtain approval of an individual plan in accordance with S.C Reg. 72-300 et seq. and SCR100000.
- 8. Temporary diversion berms and/or ditches will be provided as needed during construction to protect work areas from upslope runoff and/or to divert sediment-laden water to appropriate traps or stable outlets.
- 9. All waters of the State (WoS), including wetlands, are to be flagged or otherwise clearly marked in the field. A double row of silt fence is to be installed in all areas where a 50-foot buffer can't be maintained between the disturbed area and all WoS. A 10-foot buffer should be maintained between the last row of silt fence and all WoS.
- 10. Litter, construction debris, oils, fuels, and building products with significant potential for impact (such as stockpiles of freshly treated lumber) and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.
- 11. A copy of the SWPPP, inspections records, and rainfall data must be retained at the construction site or a nearby location easily accessible during normal business hours, from the date of commencement of construction activities to the date that final stabilization is reached.
- 12. Initiate stabilization measures on any exposed steep slope (3H:1V or greater) where land-disturbing activities have permanently or temporarily ceased, and will not resume for a period of 7 calendar
- Standard NotesFebruary 2017 13. Minimize soil compaction and, unless infeasible, preserve topsoil.
- 14. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- 15. Minimize the discharge of pollutants from dewatering of trenches and excavated areas. These discharges are to be routed through appropriate BMPs (sediment basin, filter bag, etc.).
- 16. The following discharges from sites are prohibited:
- Wastewater from washout of concrete, unless managed by an appropriate control; Wastewater from washout and cleanout of stucco, paint, form release oils, curing
- compounds and other construction materials;
- ☐ Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- ☐ Soaps or solvents used in vehicle and equipment washing.
- 17. After construction activities begin, inspections must be conducted at a minimum of at least once every calendar week and must be conducted until final stabilization is reached on all areas of the construction site.
- 18. If existing BMPs need to be modified or if additional BMPs are necessary to comply with the requirements of this permit and/or SC's Water Quality Standards, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as reasonably possible.
- 19. A Pre-Construction Conference must be held for each construction site with an approved On-Site SWPPP prior to the implementation of construction activities. For non-linear projects that disturb 10 acres or more this conference must be held on-site unless the Department has approved otherwise.

PRELIMINARY NOT FOR CONSTRUCTION





CAUTION



THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE

OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

N/A N/A PROJ. NO. 1454.01.02 | FILE | N/A BY M. HUTCHINSON B. GREEN 関^{DATE} 06/10/2022 06/10/2022 N.T.S. SHEET 6 OF 9

synlerra 148 River Street, Suite 220 Greenville, South Carolina 29602 864-421-9999

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CITY OF TRAVELERS REST 125 TRAILBLAZER DRIVE TRAVELERS REST, SC 29690 PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS **E&SC DETAILS**



LOCATION OF CONCRETE PROJECT LOCATION—

Greenville County Technical Specification SC-14: CONCRETE WASHOUT

- 1.0 Construction Dewatering
- These procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to storm drain systems or to waterbodies

- Concrete waste management procedures and practices are implemented on construction projects where:
- Concrete or mortar is used as a construction material or where concrete dust and debris result from demolition activities. Slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as
- from saw cutting, coring, grinding, grooving, and hydro-concrete demolition. · Concrete trucks and other concrete-coated equipment are washed on-site. Where mortar-mixing

1.3 Concrete Slurry Wastes

- PCC and AC waste are not allowed to enter storm drains or waterbodies. Collect and properly place PCC and AC waste in a temporary concrete washout facility.
- Disposal of hardened PCC and AC waste in conformance with the Project Standard Specifications. Place a sign within 30 feet of each temporary concrete washout facility to inform concrete equipment
- operators to utilize the proper facilities. • The contractor will monitor on-site concrete working tasks, such as saw cutting, coring, grinding, and grooving to ensure proper methods are implemented
- Saw-cut PCC slurry is not be allowed to enter storm drains or waterbodies. Residue from grinding residue is not allowed to flow across the pavement and shall not be left on the surface of the
- Slurry residue is vacuumed, disposed in a temporary facility, and allowed to dry. Dry slurry residue
- is removed and disposed of in conformance with the provisions in the Project Standard
- · Residue from grooving and grinding operations is collected and disposed in accordance with the

1.4 Concrete Transit Truck Washout Procedures Temporary concrete washout facilities are located a minimum of 50 feet from storm drain inlets,

January 2018

open drainage facilities, waterbodies, creek banks, or perimeter control unless d by the Design Engineer. Each facility is located away from construction traffic or access areas to prevent disturbance or tracking.

January 2018

- Materials used to construct temporary concrete washout facilities shall be removed from the site of
- Holes, depressions, or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and stabilized.

- Install sign within 30 feet each washout facility to inform concrete equipment operators to utilize the proper facilities. Temporary concrete washout facilities are constructed above grade or below grade at the option of
- the Contractor. Temporary concrete washout facilities will be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations. · Temporary washout facilities have a temporary pit or bermed areas of sufficient volume to
- Washout of concrete mixer trucks are performed in designated areas only.
- · Concrete is washed only from mixer truck chutes into an approved concrete washout facility.
- Excess concrete is pumped in concrete pump bin back into concrete mixer truck.
- · Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and Once concrete wastes are washed into the designated area and allowed to harden, the concrete will
- be broken up, removed and disposed. 1.5 Above Grade Temporary Concrete Washout Facility
- Above Grade Temporary concrete washout facilities are constructed, with a minimum length of 10
- feet and minimum width of 10 feet, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be
- Plastic lining material is a minimum of <u>10-millimeter polyethylene sheeting</u> and is free of holes, tears, or other defects that compromise the impermeability of the materia

Portable delineators are applied only to a clean, dry surface.

- 1.6 Below Grade Temporary Concrete Washout Facility
 - length and minimum width of 10 feet. The quantity and volume is sufficient to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, upon approval of the Design Engineer. Lath and flagging shall be commercial type.
- Plastic lining material is a minimum of 10-millimeter polyethylene sheeting and is free of holes, tears or other defects that compromise the impermeability of the material.

. The soil base is prepared free of rocks or other debris that may cause tears or holes in the plastic

Clean out all temporary concrete washout facilities when they are 50% full.

January 2018

 When temporary concrete washout facilities are no longer required for the work, as determined by the Design Engineer, the hardened concrete shall be removed and disposed of in conformance with the provisions in the Project Standard Specifications.

SEEDING/STABILIZATON NOTES Greenville County Standard Notes

Initiating Temporary Stabilization

Acceptance of Temporary Stabilization

Temporary Cover by Seeding

Permanent Seeding Installation

Temporary Stabilization

Final Stabilization

oil that is srozen and/or when the 10-day forecasted low temperature remains below 35 degrees Fahrenheit; oil that is excessively wet;

Sod Bed Preparation

• Ensure the Sod bed is uniform and conforms to the finished grade of the Project.

• Lousen the Sod Bed to a minimum depth of 3 inches before placing Sod.

• Farmish and place topsail or compact in the Sod Bed in crease where the satisfing Sod Bed has little or no topsail,

• Lay Sod when Sod Bed in made. Moisten by Sod Beds before so als Idd.

Lime

Agricultural Granular Lime
Use agricultural grade, standard ground limestone for all permanent seeding applications and Sodding applications.

<u>Fast Acting Lime</u>
Use fast acting liquid and/or dry forms of lime for all temporary seeding and permanent seeding applications.

Soil that is excessively wet;
 Soil that is excessively dry (periods of heat or drought) unless watering is specified;
 Soil that is composed of compacted clay; and
 Soil than has been treated with pesticides.

sporary stabilization by seeding is required if the Project will not be worked for a period longer than 60 days. initiate temporary stabilization measures as soon as practicable for areas where initiating temporary stabilization measures within 7 days is infeasible (e.g., where snow cover, frazen ground, or drought conditions preclude stabilization). Temporary Cover by Mulch
Use temporary cover by mulch where it is not feasible or practicable to bring an area to final slope and grade. Finish the
surface so that permanents seeding can be performed without subsequent disturbance by additional grading. Following the preparation of the seedbed, sow seed per the seeding Tobies and apply on appropriate Mulch prior to a rainfall event that compacts the seedbed. The CONTRACTOR may add granular lime and fertilizer as necessary to enhance growth. •The ground is frozen and/or when the 10-day forecosted low temperature remains below 35 degrees Fahrenheit; Final Stabilization is defined that all land-disturbing activities at the construction site have been completed and that on all areas not covered by permanent structures, either ·The ground is excessively wet; or (1) A uniform (e.g., evenly distributed, without large bare areas) permanent vegetative cover with a density of 70 percent has a The ground is excessively dry (periods of drought) unless watering is specified. During periods of adverse conditions, use temporary cover by mulch. (2) Equivalent permanent stabilization measures (such as the use of landscaping mulch, riprap, pavernent, and gravel) have been implemented to provide effective cover for exposed partions of the construction sits not stabilized with permanent vegetation. Final stabilization by vegetation must be achieved with permanent perennial vegetation prior to issuing the Notice of Termination Straw or Hay with Tackifier When performing permanent seeding for permanent detention ponds, ensure that the detention pond is cleaned of any deposited sediment and groded to the required permanent detention basin configuration. Ensure the seedbed for the permanent seeding is established in accordance with this Specification. An acceptable method of preparing the seedbed on slopes is vertically tracking the seedbed up and seedbed up and down the slope with proper equipment. Acceptance of Permanent Seeding Before acceptance, a uniform prevenic septative cover with a density of 70% of each square yard of the seeded area is required. A well developed root system must be established to sufficiently survive dry periods and winter weather and be capable of restablishment in the spring. •Remove stones larger than two and one—half (2½) inches in any dimension, large dirt clods, roots, or other debris brought to the surface. Use compost if good seedbed material is not located on site or results of the soil test show the seedbed is excessively nutrient deficient to the extent of requiring costly fertilizer additions and or have excessively low pH values (lower than 5.0). Initiate Sod applications within 7 calendar days where land disturbing activities have permanently ceased on the Project. Initiate Sod applications measures as soon as practicable for areas where initiating Sod applications within 7 days is infeasible (e.g., where snow cover, frozen ground, or drought conditions preclude stabilization). Use Sod on slopes less than 2H:IV. Mulch Acceptance of Sod

Acceptance is confined in establishing a satisfactory stand of perennial grass. Sod application areas are acceptable when requirements including maintenance are met and a healthy, evenly colored, viable stand of grass is established. A satisfactor stand of grass must have a root system that is sufficient to survive dry periods and winter weather and is capable re-establishing in the spring.

Straw or Hay Mulch with Tackifier Straw or Hay Mulch with Tackiffer
Use material that is certified weed. Do not use on slopes steeper than 4H:1V, Anchor using one of the following tocking openia:

• Organic or Chemical Tockiffer

• Hydraulic Straw Tockiffers

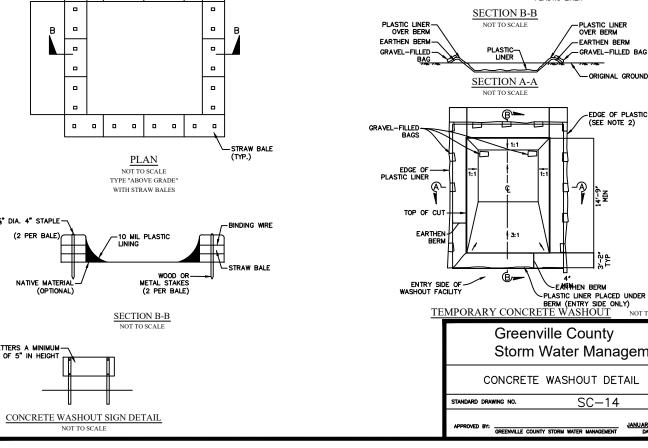
• Emulsified Aspholt Applying Straw or Hay Mulch Uniformly apply material at the rate of 2,000 pounds per core. Provide Sod with IVing, well-established growth, with a dense root mat of predominant grass Specified. Provide vigorous, well rooted, healthy turf, free from disease, insect pests, weeds, other grosses, stones, and any other harmful or detrimental materials. Only use from producer that participates in the USCC STA program. Do not use materials that have been treated with chemical preservatives as a compost mulch. Do <u>not</u> use mixed municipal solid waste compost. <u>Sod Installations</u>

Ensure Sod is not installed until the end of the project or when final stabilization is achieved on adjacent areas of the project that drain or discharge to the Sod application. Hydraulic Erosion Control Products (HECPs) Use as an allowable mulch for temporary cover by mulch, temporary cover by seeding or permanent cover by seeding applications. Do not use as a channel liner or for areas receiving concentrated flow. Temporary Erosion Control Blankets (ECB) and Turf Reinforcement Matting (TRM) Applying Granular Lime
A soil analysis is recommended prior to application. Apply at a rate within ±10% of weight recommendation of soil analysis. Do seed that 2,000 before of in a single application. Cover any parts of bridges, culverts, guardrails, signs, sidewalks, curb and gutters, catch basins, pipe ends, and other structures as necessary to prevent discoloration before spraying HECPs, organic or chemical tackiflers.

Road Medians & Shoulders Spring / Summer Road Median & Shoulders (during establishment, mow when Millet reaches 18-inches in height) Common Nees 4* Bottentos Nees 2 Plenting Plentin Committee Name of Baltonical Name Planting Plant Slopes & Buffers ECB and TRM APPLICATION TABLE ECB/TRM Type* Slope (H:V) Minimum Slope Length (ft) Temporary ECB or Type 1 TRM 6 2.1 Do not use sodding on slopes steeper than 2H:1V, and if sodding is mawed, do not place on slopes greater than 3H:1V, install Worm Season Sod between Morch 1st and September 1st. Install Cool Season Sod anythme during the year as long as the soil is and frazan. In and place Sod on the soil is mulch, it must be removed prior to performing permanent seeding

> . | . | . . . | . . . | . -EARTHEN BERM TYPE "ABOVE GRADE" WITH STRAW BALES (2 PER BALE) Greenville County Storm Water Managemer CONCRETE WASHOUT DETAIL SC-14 CONCRETE WASHOUT SIGN DETAIL PROVED BY:
> GREENVILLE COUNTY STORM WATER MANAGEMENT
>
> JANUARY, 20
>
> DATE

> > **CONCRETE WASHOUT DETAIL**



148 River Street, Suite 220 Greenville, South Carolina 29601

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CITY OF TRAVELERS REST 125 TRAILBLAZER DRIVE TRAVELERS REST, SC 29690 PHONE 864-834-8740

DIAGONAL CROSSING AND SIGNAL MODIFICATIONS **E&SC DETAILS**

Greenville County Technical Specification for:

SC-03 SILT FENCE

1.2 Design Requirements

1.2.1 General Design Requirements

Do not use Silt Fence for concentrated flows greater than 0.5 cfs.

Ensure the Silt Fence designs adhere to the following requirements:

Minimum 80% design removal efficiency goal for TSS

 Minimum Installed Fence Fabric Height: 18 inches Maximum Installed Fence Fabric Height: 24 inches

design life of the Silt Fence is less than 6 months.

Minimum Post Bury Depth: 18 inches

3 feet and a maximum spacing of 5 feet.

1.2.2 Specific Design Requirements

1.4 Construction Requirements

major land disturbing activities begin.

Do not place Silt Fence across channels.

1.4.2 Non-reinforced Silt Fence Installation

above the ground.

above the ground.

2. Backfill the trench with soil or gravel and compact.

Space posts on a maximum of 6-foot centers.

3. Backfill the trench with soil or gravel and compact.

1.4.1 General Installation

· Maximum Sheet Flow or Overland Slope Length: 100 feet

Maximum Slope Gradient (perpendicular to the Silt Fence line): 2H:1V

Maximum Non-reinforced Post and Reinforced Fence Post Spacing: 6 feet

design life of the Silt Fence is greater than 6 months (regardless of contributing slope).

The allowable Silt Fence land slope to allowable flow length ratio is shown in Table 1

abric into the 8-inch deep trench, extending 4 inches towards the upslope side of the trench.

When necessary, the height of the fence above ground may be greater than 24 inches.

fabric into the 8-inch deep trench, extending 4 inches towards the upslope side of the trench

5. On the downslope side of the trench, install steel posts to a minimum depth of 18 inches. Install posts protrude 1 to 2 inches minimum above the fabric, with no more than 3 feet of the post protruding

· Do not use Silt Fence as Porous Baffles in Sediment Basins or Sediment Traps.

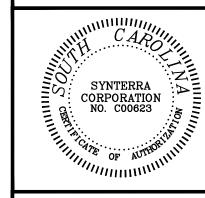
Do not place Silt Fence across channels.

1.0 Silt Fence

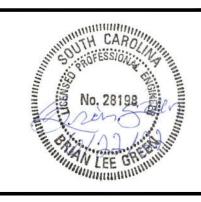
1.1 Description

Table 1: Silt Fence Land Slope to Flow Length Ratio Silt Fence is used as a temporary sediment control measure around sites where there will be soil disturbance due to construction activities. Silt Fence consists of filter fabric stretched across posts. T Provide material for Silt Fence complying with the requirements of this Specification, on the Plans and lower edge of the fence is vertically trenched into the ground and covered by compacted backfill. Silt details, or as approved by the Engineer. 1.3.1 Non-reinforced Silt Fence The non-reinforced Silt Fence system is composed of geotextile filter fabric and steel posts. 1.3.1.1 Steel Posts Design Silt Fence with an 80% design removal efficiency goal of the total suspended solids (TSS) in Furnish steel posts meeting the following minimum physical requirements: Minimum length of 5 feet. Composed of high strength steel with minimum yield strength of 50,000 psi.
 Standard "T" section with a nominal face width of 1.38 inches and nominal "T" length of 1.48 inches. Weighs 1.25 pounds per foot (± 8%). Painted with a water based baked enamel paint. The Design Aid located in Figure 8-17 in Appendix K may be used to properly design Silt Fence. 1.3.1.2 Geotextile Filter Fabric Provide a geotextile filter fabric meeting the requirements of Table 2. Ensure the filter fabric is composed of fibers consisting of long chain synthetic polymers composed of at least 85% by weight of polyolefins, polyesters, or polyamides. Ensure that the fibers are formed into a network so that the filaments or varus retain dimensional stability relative to each other. Do not treat or coat the filter fabric with materials which might adversely alter its physical properties after installation. Do not use fabric with defects or flaws that significantly affect its physical and/or filtering properties. Provide a filter fabric with a minimum roll width of 36 inches. Protect the filter fabric with a suitable wrapping for protection against moisture and extended ultraviolet Table 2: Minimum Geotextile Filter Fabric Performance and Physical Requirements Use standard non-reinforced Silt Fence when the contributing slope is less than or equal to 3% and the Use reinforced Silt Fence when the contributing slope is greater than 3% (regardless of design life) or the or Equivalent Solids (TSS) Tensile Strength ASTM D 4632 90 lbs When a double row of Silt Fence is called for on the Plans, the two rows shall have a minimum spacing of Ultraviolet Stability retained strength after 500 hrs of ultraviolet exp The reinforced Silt Fence system is composed of steel or other approved posts, geotextile filter fabric, and of 6-inch by 6-inch 14-gage wire mesh. Use steel posts and geotextile materials specified in Section 1.3.1. 6. Space posts on a maximum of 6-foot centers. Attach fabric and wire mesh to the steel posts using heavy-duty plastic or wire ties that are evenly spaced and placed in a manner to prevent sagging or tearing of the fabric and wire mesh. In all cases, Construct Silt Fence in accordance with the Plans or as approved by the Engineer. Install Silt Fence before affix ties in no less than 4 places spaced a maximum of 6-inches apart. Install Silt Fence across the slope along a line of uniform elevation (perpendicular to the direction of flow). 8. Install the filter fabric and wire mesh fabric to a minimum height of 18 inches and maximum of 24 Install Silt Fence a minimum 10 feet from the toe of steep slopes to provide sediment storage and access for inches above the ground. When necessary, the height of the fence above ground may be greater than In areas where conditions warrant, larger posts or reduced post spacing may be required to provide an adequate fence to handle the stress from sediment loading. When double row Silt Fence is specified on the Plans, the same design, material, and construction Where applicable or as directed by the Engineer, install Silt Fence checks every 100 feet at a maximum and at requirements are applicable. Double row Silt Fence shall have a minimum spacing of 3 feet and a 1.4.5 Inspection and Maintenance Inspect Silt Fence every seven (7) days and inspections are recommended within 24-hours after each 1. Excavate a trench approximately 4 inches wide and 8 inches deep and place 12 inches of geotextile rainfall event that produces %-inches or more of precipitation until final stabilization is achieved. Immediately correct any deficiencies. Check for sediment buildup and fence integrity. Check where runoff has eroded a channel beneath the Silt Fence, or where the Silt Fence has sagged or collapsed by fence 3. Bury 12 inches of fabric into the ground when pneumatically installing Silt Fence with a slicing Remove fabric and replace whenever it has deteriorated to such extent that it reduces the effectiveness of the Silt Fence system. In addition, review daily the location of Silt Fence in area where construction 4. Purchase geotextile fabric in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrap the fabric together at a support post with both ends fastened to the post, with activities have changed the natural contour and drainage runoff to ensure that the Silt Fence is properly located for effectiveness. Install additional Silt Fence as directed by the Engineer where deficiencies exist. On the downslope side of the trench, install steel posts to a minimum depth of 18 inches. Install posts protrude 1 to 2 inches minimum above the fabric, with no more than 3 feet of the post protruding Maintain Silt Fence until its capacity has been reached or erosion activity in the area has been stabilized. Remove sediment accumulated along the fence when it reaches approximately one-third (1/3) the height of the Silt Fence, especially if heavy rains are expected. Remove trapped sediment or stabilize on site. 7. Attach fabric to the steel posts using heavy-duty plastic or wire ties that are evenly spaced and placed If Silt Fence is located in an area where removing the sediment is not possible, install a second Silt Fence, in a manner to prevent sagging or tearing of the fabric. In all cases, affix ties in no less than 4 places spaced a maximum of 6 inches apart. Practices (BMPs) are no longer needed. Permanently stabilize disturbed areas resulting from Silt Fence 1.4.6 Acceptance 1. Excavate a trench approximately 4 inches wide and 8 inches deep and place 12 inches of geotextile The Engineer will approve all Silt Fence installations. 2. Extend the 6-inch by 6-inch 14-gage wire mesh into the trench to a minimum depth of 8 inches. 4. Purchase geotextile fabric and wire mesh in continuous rolls and cut to the length of the barrier to avoid joints. When joints are necessary, wrap the fabric together at a support post with both ends fastened to the post, with a 6-inch minimum overlap.

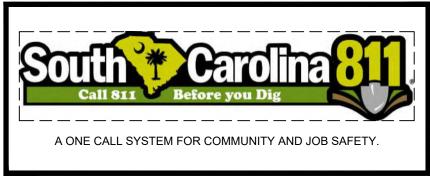




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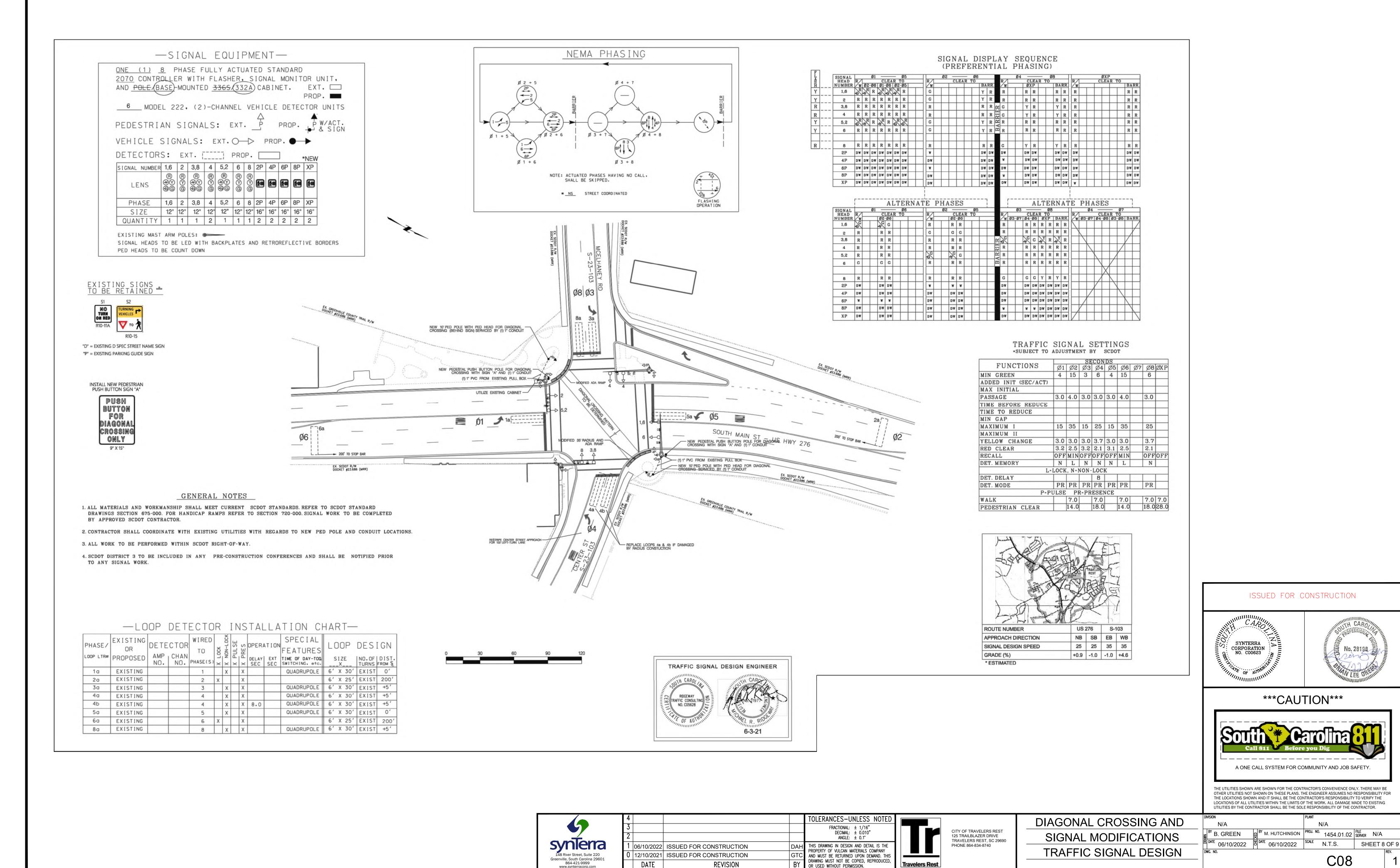
CAUTION



THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

N/A B. GREEN

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