Case # BZA-09-25-00911 Charleston County BZA Meeting of December 1, 2025

Applicant/Property Owner: Willy Taylor of Dominion Energy South Carolina, Inc.

Representative: Taylor Reeves of Stantec Consulting Services Inc.

Property Location: 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards Road –

East Area

TMS#: 578-00-00-155

Zoning District: Mount Pleasant Overlay (Residential Area) Zoning District

Request:

Variance request to reduce the required 25-foot vegetated buffer by 10 feet, resulting in a 15-foot buffer, in connection with the existing and proposed expansion of the electrical substation.

Requirement:

The Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), Chapter 6 Use Regulations, Article 6.4 Use Conditions, Sec. 6.4.17.B.2. Utility Service, Major: Above ground Structures that have a cumulative area of greater than 100 square feet established in connection with Utility Substations, Electrical or Telephone Switching Facility, Sewage Collector or Trunk Lines, or Utility Pumping Station shall have a vegetated buffer of 25 feet from all property lines, or the minimum Setback of the base Zoning District, whichever is greater.

Chapter 9 Development Standards, Article 9.4 Landscaping, Screening, and Buffers, Sec. 9.4.4 Landscape Buffers, Table 9.4.4-3, Buffer Depth and Landscaping Standards



CHAPTER 6 | USE REGULATIONS

ARTICLE 6.4 USE CONDITIONS

The following use conditions shall apply to Principal Uses in any Zoning District where these uses are allowed as "Conditional Uses" or "Special Exceptions" as shown in Table 6.1-1, *Use Table*.

Sec. 6.4.17 Utility Service, Major

- A. Sewage Disposal Facilities, Water and Sewage Treatment Facilities, Water Storage Tanks, Electric or Gas Power Generation Facility.
 - 1. Any Structure established in connection with Water Storage Tanks, Water and Sewage Treatment Facilities, Sewage Disposal Facilities or Electric or Gas Power Generation Facilities shall have a vegetated buffer of not less than 50 feet from any property line, in compliance with Chapter 9, Development Standards, buffer standards.
- B. Utility Substations, Electrical or Telephone Switching Facility, Sewage Collector or Trunk Lines, Utility Pumping Station, and Water Mains.
 - 1. Above ground Structures that have a cumulative area of 100 square feet or less, associated with underground Utilities such as meters, necessary for maintenance and monitoring shall have a vegetated buffer of 10 feet from all property lines, in compliance with CHAPTER 9, *Development Standards*, buffer standards;
 - 2. Above ground Structures that have a cumulative area of greater than 100 square feet established in connection with Utility Substations, Electrical or Telephone Switching Facility, Sewage Collector or Trunk Lines, or Utility Pumping Station shall have a vegetated buffer of 25 feet from all property lines, or the minimum Setback of the base Zoning District, whichever is greater; and
 - 3. The accessory storage of vehicles and equipment on the premises shall be prohibited except in the Rural Commercial (RC), Community Commercial (CC), Rural Industrial (RI) or Industrial (IN) Zoning Districts.



CHAPTER 9 | DEVELOPMENT STANDARDS

ARTICLE 9.4 LANDSCAPING, SCREENING, AND BUFFERS

Sec. 9.4.4 Landscape Buffers

A. Right-of-Way Buffers.

- 1. Applicability. Right-of-Way buffers shall be required adjacent to road Rights-of-Way and ingress/egress Easements for all uses except for agricultural and Residential Uses existing on or prior to November 20, 2001. Minor Subdivisions may not have to comply with the requirements of this Section if the Zoning and Planning Director determines that compliance is not necessary to satisfy the purposes of this Ordinance.
- 2. *Buffer Types by Roadway*. Landscape Buffers are required along Roadways in accordance with Table 9.4.4-1, *Buffer Types by Roadway*. Streets, Rights-of-Way, and ingress/egress Easements not indicated in this table shall comply with the Type B buffer requirements.
- 3. Development within Buffer Areas.
 - a. No Development, storage, or display may occur within required buffer areas except for sidewalks and permitted drives and Signs;
 - b. All buffer areas shall accommodate the required Plant materials;
 - c. Drainage swales and stormwater Detention ponds may be placed in the buffer only when Protected Trees and Grand Trees are not endangered and when they meander through the buffer in a natural manner; and

d. Stormwater ponds and swales may not occupy more than 25 percent of the buffer depth.

Table 9.4.4-1, Buffer Types by Roadway							
Abbapoola Road	G	Main Road (Limehouse Bridge to Maybank Hwy.)	1				
Ashley Hall Road	В	Main Road Corridor Overlay Zoning District	[3]				
Hwy. 61/Ashley River Road (Saint Andrews Boulevard to Sam Rittenberg Boulevard)	В	Main Road (Bees Ferry Road to Limehouse Bridge)	G				
Hwy. 61/Ashley River Road (Mark Clark Expressway to Church Creek)	E	Manse Road	G				
Hwy. 61/Ashley River Road (Church Creek to Muirfield Parkway/MacLaura Hall Ave.) [1]	ı	Mark Clark Expressway	I				
Hwy. 61/Ashley River Road (Muirfield Parkway/ MacLaura Hall Avenue intersection to Charleston County Line) [1]	J	Mary Ann Point Road	E				
Bears Bluff Road	ı	Mathis Ferry Road [1]	G				
Bees Ferry Road	G	Maybank Highway Corridor Overlay Zoning District [Johns Island]	[2]				
Belvedere Road	G	Maybank Highway Corridor Overlay Zoning District [James Island]	[4]				
Betsy Kerrison Parkway [1]	1	Maybank Highway (Main Road to Rockville)	1				
Bohicket Road [1]	ı	Meeting Street	В				
Botany Bay Road [1]	ı	Murraywood Road	G				
Brownswood Road	G	Old Georgetown Road	G				
Cane Slash Road	G	Liberia Road	G				



- [1] Denotes Scenic Road designation that shall require protection under the provisions of this Ordinance of all Trees 6 inches or greater in Diameter Breast Height (DBH) which are located within Rights-of-Way.
- [2] Buffer type as described in the Johns Island Maybank Highway Corridor Overlay Zoning District.
- [3] Buffer type as described in the Main Road Corridor Overlay District.
- [4] Buffer type as described in the James Island Maybank Highway Corridor Overlay Zoning District.
- 4. Buffer Depth and Planting Standards. (See Table 9.4.4-3)
 - 5. The Zoning and Planning Director is authorized to reduce the depth of a required Right-of-Way buffer as follows:
 - a. A required Right-of-Way buffer not within an Overlay Zoning District may be reduced by up to one-third its depth when the following circumstance exist:
 - 1. The Parcel is located on a Corner Lot with required Right-of-Way buffers of 35 feet or more; or
 - 2. The area of all the required buffers, including land use buffers and Tree protection areas, exceeds 30 percent of the site.
 - b. A required Right-of-Way buffer of 35 feet or less located within the Urban/Suburban Area defined by the Urban Growth Boundary (UGB) and not within an Overlay Zoning District may be reduced as follows:
 - 1. When no parking or vehicular use area is located between the building and the Right-of-Way, the required buffer may be reduced to no less than eight feet (Type A land use buffer) provided the site layout and building elevations meet all applicable sections of Article 9.5, *Architectural and Landscape Design Standards*.
 - 2. When no more than 10 parking spaces are located between the Building and the Right-of-Way the required buffer may be reduced to no less than 15 feet (Type B buffer) provided the site layout and Building elevations meet all applicable sections of Article 9.5, *Architectural and Landscape Design Standards*.
 - 3. Buffers required on Parcels that are part of redevelopment that preserves existing Structures may be reduced up to a depth no less than 10 feet (Type A land use buffer) in order to meet the parking and Tree preservation requirements of this Ordinance.
 - 4. Buffers are not required along newly created internal Rights-of-Way and ingress/egress Easements on Parcels containing exclusively Duplex, Triplex, Fourplex, or Single Family Attached Dwellings.
 - c. The Zoning and Planning Director may require additional site improvements., including but not limited to, enhanced Building architecture and materials and/or increased plant material sizes and density when a buffer reduction is granted.

B. Land Use Buffers.

- 1. *Applicability.* Land use buffers shall be provided in accordance with the standards of this Section. In the case of conflict between the land use buffer requirements of this section and those contained in CHAPTER 6, *Use Regulations*, of this Ordinance, the land use buffer requirements contained in CHAPTER 6, *Use Regulations*, shall govern.
- 2. Single-Family Detached Dwelling Units on individual Lots are exempt from the land use buffer requirements of this Section.
- 3. The Zoning and Planning Director is authorized to modify or waive the buffer or landscape planting requirements and may require that additional plant material be added within remaining buffers or elsewhere on the site, as described below:
 - a. When buffers will not serve any useful purpose due to the location of the following as determined by the Zoning and Planning Director: fences, walls, berms, or landscaping of at least equivalent height, opacity, and maintenance; uses; vehicles; buildings; structures; or storage; parking; loading; display or service areas; or
 - b. The Zoning and Planning Director is authorized to allow a one-third reduction of required buffers, if all required buffers would exceed 25 percent of the site proposed for Development.
- 4. *Determination of Required Buffers.* The following procedure shall be used in determining which of the buffer types in Table 9.4.4-2, *Land Use Buffers*, apply:
 - a. Determine the type of proposed use for the site being developed. (Column 1);
 - b. Determine the residential use type (if residential) or the Zoning District that exists on the adjacent Parcel. This is the "Adjacent Site's Use or Zoning";



- c. At the intersection of the proposed use and the use or zoning of the adjacent site, identify the land use buffer type (A, B, C, D, E, or F) required along the developing site's boundary(ies); and
- d. Lastly, refer to Table 9.4.4-3, *Buffer Depth and Landscaping Standards*, for the applicable buffer type.
- 5. *Land Use Buffer Table.* Land use buffers are required along Side and Rear Yards in accordance with the requirements of the following table:

Table 9.4.4-2, Land Use Buffers									
				Use	or Zoning of A	djacent Site	:		
Proposed Use	Residential Type		Гуре	Civic/Institutional	Commercial Type		Industrial Type		Agricultural
		2		Civic/institutional	1	2	1	2	Agricultural
Agricultural	В	В	В	-	-	-	-	-	-
Residential Type 1	-	-	-	-	-	-	-	-	-
Residential Type 2	Α	-	Α	В	В	С	E	F	В
Residential Type 3	В	А	-	А	В	С	E	F	В
Civic/Institutional	В	В	Α	-	В	С	D	Е	В
Commercial Type 1	В	В	В	A	-	С	D	E	В
Commercial Type 2	D	D	С	D	-	-	D	D	D
Industrial Type 1	Н	Н	Н	F	Е	В	-	А	G
Industrial Type 2	J	J	J	J	G	В	Α	-	<u> </u>

General Notes:

Residential Use Types:

Type 1 = Single family Detached and undeveloped Residential Lots; Type 2 = Duplex and Single family Attached; Type 3 = Triplexes, Fourplexes, and Multi-Family and all other residential use types, including Manufactured Housing Parks

Commercial Use Types:

Type 1 = Any commercial use allowed by right in an RO, GO, or NC district and undeveloped Commercial Lots; Type 2 = all other commercial uses Industrial Use Types:

Type 1 = Any industrial or commercial use that is first allowed in an industrial (IN) Zoning District and undeveloped Industrial Lots; Type 2 = Waste-Related uses and Recycling Centers.

6. Buffer Depth and Landscaping Standards.

Table 9.4.4-3, Buffer Depth and Landscaping Standards													
Charles I			Buffer Type										
Standard			С	D			G	Н					
MINIMUM BUFFER DEPTH (feet from property line) [1]		15	20	25	35	40	50	60	75	100			
MINIMUM LAND USE BUFFER LANDSCAPING (Plants per 100 linear feet) [2] [3]													
Canopy Trees [4]	2	2	2	3	4	5	6	7	9	12			
Understory Trees (at least 50 percent evergreen)		3	4	4	6	7	9	10	12	15			
Shrubs	20	25	30	35	40	45	50	55	60	75			



TABLE NOTES:

- 1. Buffers may be traversed by permitted driveways and pedestrian ways.
- 2. The retention of natural buffers is required along all road or street Rights-of-Way of Buffer Type C designation or greater. The Zoning and Planning Director is authorized to waive or modify the minimum buffer planting requirements when an undisturbed natural buffer exists that is the same depth and amount of plant material as that which is required.
- 3. Bradford Pears cannot be used to fulfill any of the Tree requirements of this Ordinance. Any exotic species proposed by a designer are subject to approval by the Zoning and Planning Director.
- 4. Palmetto Trees may be substituted to fulfill the Canopy Tree requirements. These Trees are to be planted at a ratio of three Palmetto Trees for each Canopy Tree and are to be planted in groupings of three.

GENERAL NOTES:

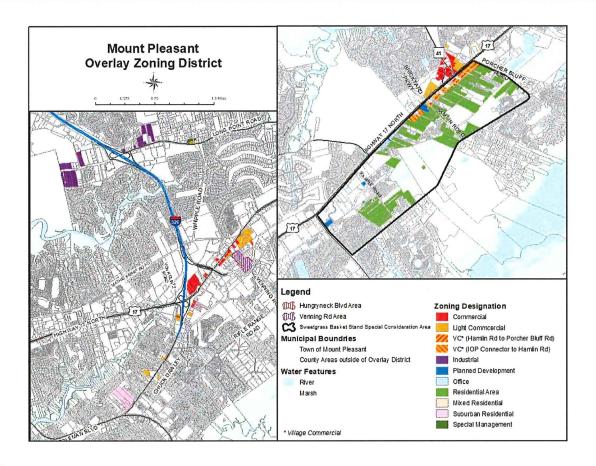
- 1. The Zoning and Planning Director shall be authorized to require the installation of Berms within required buffers where deemed necessary to protect the visual quality of a road corridor or ensure land use compatibility.
- 2. All Trees with a Diameter Breast Height (DBH) of eight inches or greater within buffers shall be preserved.

C. General.

- 1. Location of Buffers. Buffers shall be located along the perimeter of a Lot or Parcel and shall extend to the boundary of the Lot or Parcel. They shall not be located on any portion of public Right-of-Way. Where drainage or other utility Easements exist along property lines, required Landscape Buffers shall be located adjacent to the Easement and may be reduced in width by the width of the Easement, but in no case shall the buffer width be less than 10 feet and shall be located adjacent to the Easement. Required buffers shall be noted on all Plats, plans and permit requests submitted for review and approval under this Ordinance.
- 2. Plant Material within Buffers. Plant material shall be selected and spaced properly to allow the Plants to thrive considering site specific conditions. Plant materials located adjacent to public Drainage Easements and Right-of-Ways shall be selected and placed so as not to impede access or maintenance, including low-lying lateral branches. Additionally, plant material within required buffers that contain Utility Easements shall be selected and located to minimize pruning for future maintenance and clearance of such Utilities. All selections are subject to the review and approval of the Zoning and Planning Director and may also require modifications (substitutions and relocation) of plant materials on proposed landscape plans when necessary to assure access and ease of maintenance to any Easements or Rights-of-Way and to preserve the public health, safety, and welfare.
- 3. *Use of Buffers.* The Zoning and Planning Director is authorized to allow On-Premises Signs, Fences, Walls, Berms, mailboxes, access to community Boat Ramps, permitted driveways, and sidewalks within required buffers. Other improvements may be allowed within buffers if the Zoning and Planning Director determines that such improvements will not detract from the intended purpose and function of the buffer or have any adverse effect on adjacent property.

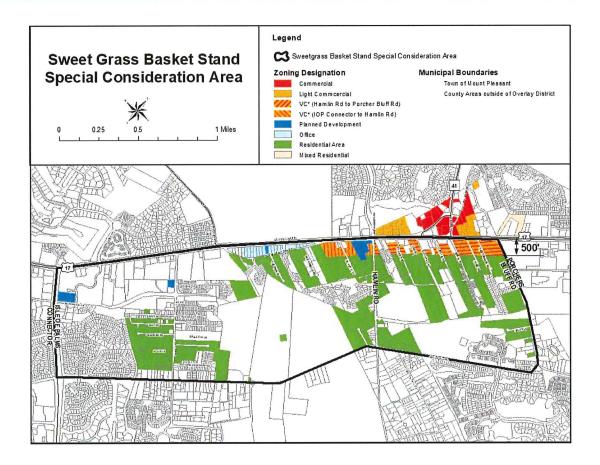
Effective on: 12/6/2022, as amended





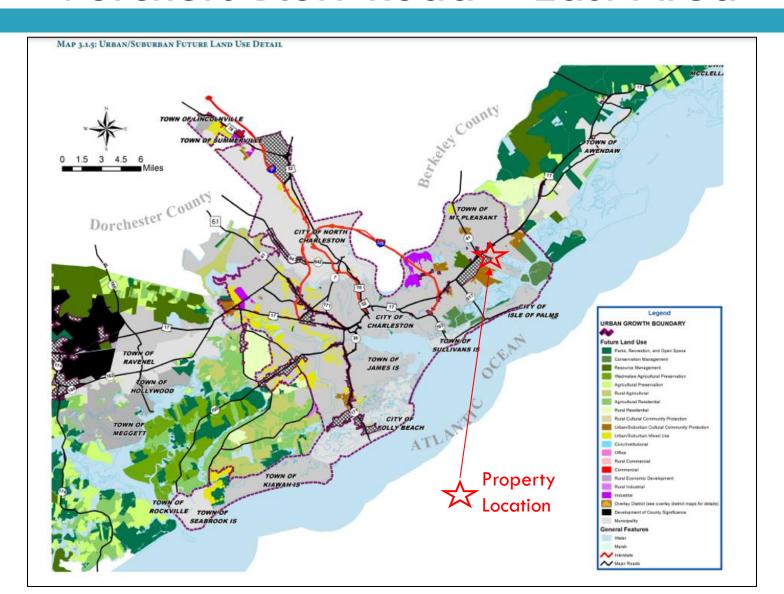
Map 5.4.A

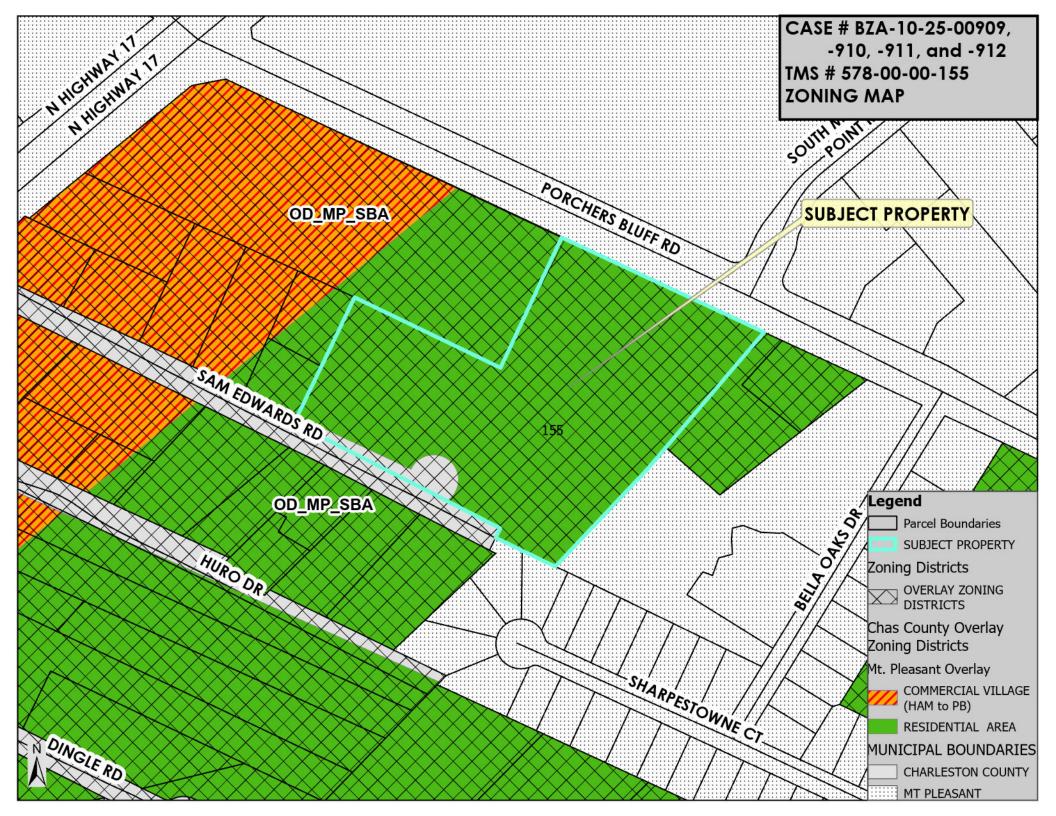


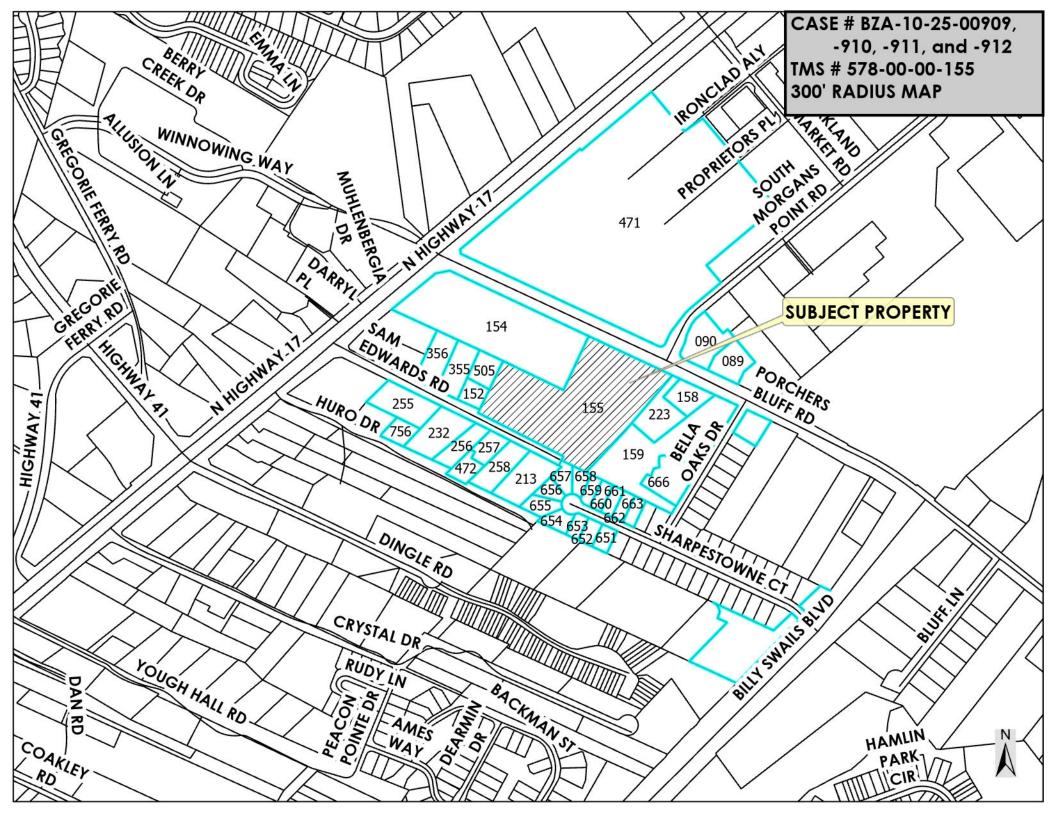


Map 5.4.B

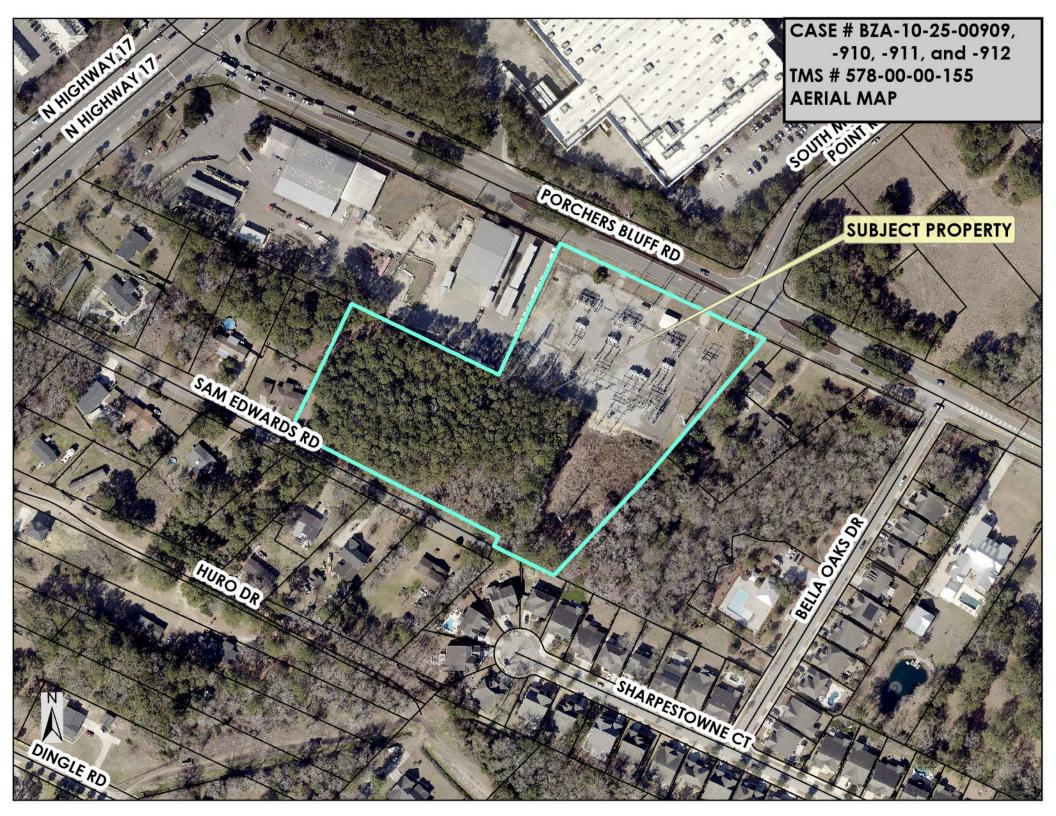
Location Map Porchers Bluff Road — East Area











Case # BZA-10-25-00910

BZA Meeting of December 1, 2025

Subject Property: 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards

Road - East Area

Proposal: Variance to allow more than one curb cut per 250' of frontage (permit the existing curb cuts to remain) and to waive the requirement to install a sidewalk along the site frontage for the existing and proposed expansion of the electrical substation.



Case # BZA-10-25-00911

BZA Meeting of December 1, 2025

Subject Property: 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards

Road - East Area

Proposal: Variance to reduce the required 25' vegetated buffer along Sam Edwards Road by 10', resulting in a 15' buffer for the existing and proposed expansion of the electrical substation.



Case # BZA-10-25-00912

BZA Meeting of December 1, 2025

Subject Property: 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards

Road - East Area

Proposal: Variance to allow an 8.5' chain-linked fence within the required right-of-way landscape buffer to secure both the existing and proposed expansion of the electrical substation.



Subject Property





Sam Edwards Road





Porchers Bluff Road





Staff Review:

The applicant and property owner, Willy Taylor of Dominion Energy South Carolina, Inc., represented by Taylor Reeves of Stantec Consulting Services Inc., has submitted three variance requests associated with the existing and proposed expansion of an electrical substation. The subject property is identified as TMS # 578-00-00-155, located at 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards Road, in the East Area of Charleston County. The property and surrounding parcels are located within the Mount Pleasant Overlay (Residential Area) Zoning District.

The applicant is requesting the following variances:

- BZA-10-25-00910: To allow more than one curb cut per 250 feet of frontage (to permit the existing curb cuts to remain) and to waive the requirement to install a sidewalk along the site frontage.
- BZA-10-25-00911: To reduce the required 25-foot vegetated buffer by 10 feet, resulting in a 15-foot buffer.
- BZA-10-25-00912: To allow an 8.5-foot chain-link fence within the required rightof-way landscape buffer to secure both the existing and proposed substation facilities.

In addition to the above referenced variances, the applicant is requesting a Special Exception for a Major Utility Service to allow for the expansion of the existing electrical substation (BZA-10-25-00909).

The subject property is currently under Site Plan Review (ZSPR-10-24-01069) for the proposed expansion. The applicant's letter of intent explains, "This project increases the footprint of the existing Hamlin Substation which is currently owned and operated by Dominion Energy South Carolina, Inc. The existing electrical substation is located at 1145 Porchers Bluff Road (S- 51), in Charleston County TMS 578-00-00-155. The project combines 2.74 acres of this substation property with two adjacent undeveloped parcels that measure 1.95 acres from TMS 578-00-00-199, and 2.04 acres from TMS 578-00-00-200, all properties owned by Dominion Energy. The total disturbed area for this project is 3.0 acres as displayed on the construction drawings. The disturbed area occurs in the undeveloped wooded parcels. Disturbance consists of clearing and grubbing the site to install one wet pond made of bulkhead construction, stormwater drainage structures with outlet protection. The proposed site work intends to expand the electrical substation. The expansion will include gravel areas for the new equipment and gravel driveway. The proposed access connects to Sam Edwards Road (S-2429). Expansion of the existing electrical substation requires approximately 2 acres of new impervious surfaces to be added to the site. Additional stormwater runoff and volume generated from the post-development conditions is handled by the new wet pond that maintains the existing drainage patterns."

Applicant's request -00910:

"The proposed development requests a variance from the requirement of one curb cut per 250' frontage. The existing substation utilizes the existing curb cuts, in order to maintain the functionality of the site the owner requests for the existing curb cuts to remain and would request a variance from this requirement."

ZLDR requirement -00910:

The Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), Chapter 9 Development Standards, Article 9.3 Off-Street Parking and Loading, Sec. 9.3.7 Design, E.3. Access states, "Curb cuts for ingress and egress drives are allowed in accordance with Table 9.3.7-2, Number of Ingress/Egress Drives." Sec. 9.3.11 Pedestrian Ways

- A. Where Required. Pedestrian ways shall:
- 1. Be provided in all non-residential Development and Major Subdivisions within the Urban and Suburban Areas of the County; and
- 2. Link surrounding Roadways with Building entrances and between the proposed Development and uses on adjoining Lots.

Applicant's request -00911:

"The proposed development for this site requires 25' buffer along all property lines. This site plan requests a variance to reduce the 25' buffer requirement to a 15' buffer along Sam Edwards Road. The 15' buffer is in accordance with the standard zoning requirements for this location. Due to the reduction of buffer requested the development proposes to provide opaque privacy fencing along all buffer lines."

ZLDR requirement -00911:

Chapter 6 Use Regulations, Article 6.4 Use Conditions, Sec. 6.4.17.B.2. Utility Service, Major: Above ground Structures that have a cumulative area of greater than 100 square feet established in connection with Utility Substations, Electrical or Telephone Switching Facility, Sewage Collector or Trunk Lines, or Utility Pumping Station shall have a vegetated buffer of 25 feet from all property lines, or the minimum Setback of the base Zoning District, whichever is greater.

Chapter 9 Development Standards, Article 9.4 Landscaping, Screening, and Buffers, Sec. 9.4.4 Landscape Buffers, Table 9.4.4-3, Buffer Depth and Landscaping Standards

Applicant's request -00912:

"The proposed development requests a variance from the fencing requirement which does not allow for chain link fencing to exceed 4' in height. The development requests for the existing chain-link fencing located onsite to remain for the existing substation facing Sam Edwards Road. This allows for the assurance of safety from public to access the site. The developer agrees to update the fencing onsite to utilize opaque fencing

throughout the site. Photos of the existing substation have been included for reference." **ZLDR requirement -00912:**

Chapter 9 Development Standards, Article 9.5 Architectural and Landscape Design Standards, Sec. 9.5.2. Architectural Design Guidelines, H. Fencing

1. Any proposed Fencing that will be constructed within a Right-of-Way Buffer shall not exceed four feet in height. Chain-link, wire, and barbed wire Fencing are prohibited within the Right-of-Way Buffers. An architectural detail and Fence location plan shall be submitted to the Zoning and Planning Director for review and approval for all such Fencing.

A site visit was conducted by staff on November 12, 2025. Additional information pertaining to this request is provided in the attached materials.

Planning Director Review and Report regarding Approval Criteria of §3.10.6:

§3.10.6(1): There are extraordinary and exceptional conditions pertaining to the particular piece of property;

Response:

There may be extraordinary and exceptional conditions pertaining to the subject property, which consists of 7.096 acres owned by Dominion Energy South Carolina, Inc. The property is currently developed with an existing electrical substation and is proposed for expansion to support regional utility infrastructure. The applicant's letter of intent notes that the existing substation infrastructure, site configuration, and operational requirements of a Major Utility Service use necessitate deviations from certain development standards that are typically applied to commercial projects. Specifically, the need to maintain existing curb cuts for operational access, install security fencing exceeding standard height limits, and reduce buffer widths in limited areas are driven by the unique functional and safety requirements of a utility substation. Additionally, the presence of existing infrastructure, and the need to secure the site while minimizing disturbance to surrounding residential areas contribute to the exceptional conditions of the property. These factors limit the applicant's ability to fully comply with certain zoning requirements without compromising the operational integrity or safety of the facility. Therefore, based on the sitespecific constraints and the specialized nature of the proposed use, the requests may meet this criterion.

§3.10.6(2): These conditions do not generally apply to other property in the vicinity;

Response: The conditions present on the subject property do not generally apply to other properties in the vicinity. The surrounding parcels are

primarily residential in nature and are not developed with or intended for Major Utility Service uses. The subject property is uniquely developed with an existing electrical substation and is proposed for expansion to support regional infrastructure needs. According to the applicant's letter of intent, "No. The proposed substation expansion project is a standalone project, and additional expansions are not anticipated at this time. The surrounding uses are residential. The proposed substation expansion does not anticipate having adverse impacts to the surrounding parcels." The operational and security requirements of the substation, combined with the need to maintain existing infrastructure and access, create site-specific conditions that are not shared by neighboring residential properties. Therefore, the requests may meet this criterion.

§3.10.6(3): Because of these conditions, the application of this Ordinance to the particular piece of property would effectively prohibit or unreasonably

restrict the utilization of the property;

Response: The application of the Ordinance to the subject property would unreasonably restrict its utilization for the proposed expansion of a Major Utility Service. The unique operational and safety requirements of an electrical substation (such as the need for multiple access points, enhanced security fencing, and flexibility in buffer design) make strict adherence to certain zoning standards impractical in this context. The applicant's letter of intent states, "No. The allowance of the proposed variance request would still allow for development to occur within the property limits for the proposed use among others." Without the requested variances, the applicant would face limitations in expanding the substation in a safe, functional, and efficient manner. Therefore, the requests may meet this criterion.

§3.10.6(4): The authorization of a variance will not be of substantial detriment to adjacent property or to the public good, and the character of the zoning district will not be harmed by the granting of the variance;

Response: The authorization of the requested variances is not expected to result in substantial detriment to adjacent properties or the public good, nor is it anticipated to negatively impact the character of the Mount Pleasant Overlay (Residential Area) Zoning District. The proposed expansion is a continuation of an existing utility use that has been established on the site and is designed to operate with minimal disruption to surrounding residential areas. The applicant's letter of intent states, "No. The proposed development is an extension of the substation that is already established in this area. The proposed development will follow what has been

accepted with the existing substation; the expansion will follow the same intent." Staff finds no evidence that granting the variances would substantially harm adjacent properties or alter the established character of the zoning district. Therefore, the requests <u>may meet</u> this criterion.

§3.10.6(5):

The Board of Zoning Appeals shall not grant a variance the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a nonconforming use of land, or to change the zoning district boundaries shown on the official zoning map. The fact that property may be utilized more profitably, should a variance be granted, may not be considered grounds for a variance;

Response:

The requested variances do not authorize a use that is not otherwise permitted in the Mount Pleasant Overlay (Residential Area) Zoning District. The expansion of the Major Utility Service use is permitted by Special Exception and is being reviewed separately under that process. Additionally, the variances do not extend a nonconforming use, alter zoning district boundaries, or rely on economic benefit as justification. Therefore, the requests <u>meet</u> this criterion.

§3.10.6(6): **Response:**

The need for the variance is not the result of the applicant's own actions;

The need for the requested variances is not the result of the applicant's own actions but rather stems from the operational requirements of expanding a critical utility facility to meet increased energy demands. The applicant's letter of intent explains that the expansion necessitates additional impervious surface area, which in turn requires stormwater management infrastructure, specifically, a permanent Best Management Practice (BMP) facility. Accommodating this infrastructure within the site layout has led to the request for a buffer reduction. Additionally, the applicant acknowledges that certain existing site conditions, such as fencing and curb cuts, were developed under previous standards and are now out of compliance with current regulations. The applicant is proactively seeking variances to bring the site into compliance as part of the expansion effort. As stated in the applicant's letter of intent, "In efforts to meet today's high demands for energy, the substation operator is faced with the need to expand its current footprint at this location. The expansion of new impervious areas requires attenuation of additional stormwater runoff generated from the development. This program warrants the need for a buffer reduction along Sam Edwards from 25' buffer to 15' buffer to allow for permanent BMP. Under this review, the conditions of the existing substation have been noted to be out of compliance. The operator acknowledges the need to request these variances." Therefore, the requests <u>may meet</u> this criterion.

§3.10.6(7): Granting of the variance does not substantially conflict with the

Comprehensive Plan or the purposes of the Ordinance;

Response:

Granting the requested variances does not substantially conflict with the Charleston County Comprehensive Plan or the purposes of the Zoning and Land Development Regulations Ordinance (ZLDR). The Comprehensive Plan supports the continued provision and expansion of essential public utilities in a manner that is compatible with surrounding land uses and minimizes adverse impacts. The requested variances are intended to facilitate the expansion of an existing electrical substation, which serves a critical infrastructure role in the region. The applicant's letter of intent states, "No. The variance will allow for the substation to continue to serve the surrounding areas." Staff finds no evidence that the requested variances would undermine the intent of the Comprehensive Plan or the ZLDR. Therefore, the requests may meet this criterion.

Board of Zoning Appeals' Action:

According to Article 3.10 Zoning Variances, Section §3.10.6 Approval Criteria of the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), (adopted July 18, 2006), The Board of Zoning Appeals has the authority to hear and decide appeals for a Zoning Variance when strict application of the provisions of this Ordinance would result in unnecessary hardship (§3.10.6A). A Zoning Variance may be granted in an individual case of unnecessary hardship if the Board of Zoning Appeals makes and explains in writing their findings (§3.10.6B Approval Criteria).

In granting a variance, the Board of Zoning Appeals may attach to it such conditions regarding the location, character, or other features of the proposed building or structure as the Board may consider advisable to protect established property values in the surrounding area or to promote the public health, safety, or general welfare (§3.10.6C). The Board of Zoning Appeals may approve, approve with conditions or deny Case #BZA-10-25-00910, -00911, and -00912 [Variance requests associated with the existing and proposed expansion of an electrical substation located at TMS # 578-00-00-155, 1145 Porchers Bluff Road, 1162 and 1170 Sam Edwards Road, in the East Area of Charleston County] based on the BZA's "Findings of Fact", unless additional information is deemed necessary to make an informed decision.

In the event the BZA decides to approve the application, Staff recommends the

following conditions:

- 1. Prior to zoning permit approval, the applicant shall complete the site plan review process.
- The applicant shall work with staff to provide opaque privacy fencing along all required buffer lines. The fencing shall be visually compatible with the surrounding residential area in terms of material and design, subject to staff review and approval.

Staff Recommendation:

Based on the analysis of the seven variance approval criteria outlined in §3.10.6 of the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR), staff finds that the requests may meet all applicable criteria. The variances are necessary to accommodate the operational and safety requirements of a Major Utility Service use and are not anticipated to result in substantial detriment to adjacent properties or the public good.

Therefore, staff recommends approval of the variances, subject to conditions that ensure the project remains consistent with the intent of the ZLDR and mitigates any potential adverse impacts.

ZONING VARIANCE APPLICATION Charleston County Board of Zoning Appeals (BZA)

Property Information						
Subject Property Address: 1145 Porchers Bluff Rd, 1162, 1170 Sam Edwards Rd						
Tax Map Number(s): 5780000155, 5780000199, 5780000200						
Current Use of Property: Vacant/Existing util	ity power substation					
Proposed Use of Property: Expansion of exis	ting utility power substat	ion				
Zoning Variance Description:						
Applicant Information (Required)						
Applicant Name (please print): Willy Taylor,	PE					
Name of Company (if applicable): DOMINION	N ENERGY SOUTH CAI	ROLINA, INC	G.			
Mailing Address:						
City:	State:			Z	Zip Code:	
Email Address:			Phone #:			
Applicant Signature: Willer 30					Date: 8/	5/2025
Representative Information (Complete	e only if applicable. Atto	rney, Builder	, Engineer,	Survey	or etc.)	
Print Representative Name and Name of Con	npany:					
Mailing Address:						
City:	State:			Zip Co	de:	
Email Address:			Phone #:			
Designation of Agent (Complete only if t	the Applicant listed abo	ve is not the	Property C	wner.)		
I hereby appoint the person named as Applic	ant and/or Representat	tive as my (ou	ur) agent to	repres	sent me (us)	in this application.
Property Owner(s) Name(s) (please print):					mode to the state of the state	
Name of Company (if applicable, LLC etc.):						
Property Owner(s) Mailing Address:						
City:	State:	Zip Code:		Р	hone #:	
Property Owner(s) Email Address:						
Property Owner(s) Signature:		1		D	ate:	
FOR OFFICE USE ONLY:						
Zoning District: DMD_SSP Flood Zon	neshaded X + X	(535 b)	e Filed: 10	124	25	Fee Paid: \$250cc
Application #: 324 - 10 - 25 - 00	AII TMS #:578-	00-00	155	1	Staff Initia	als:
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Stantec Consulting Services Inc.

4969 Centre Pointe Drive Suite 200 North Charleston SC 29418-6952

Phone: (843) 740-7700 Fax: (843) 740-7707

To:

Charleston County Board of Zoning Appeals

Company:

Charleston County - Zoning/Planning

Address:

Charleston County - Public Services Building

4045 Bridge View Drive North Charleston, SC 29405

Phone:

(843) 202-7200

Date: File: August 15, 2025

215618358

Reference:

Dominion Hamlin Substation – Zoning Variance Application

Description of Request:

Please describe your proposal in detail. You may attach a separate sheet if necessary. Additionally, you may provide any supporting materials that are applicable to your request (photographs, letter of support, etc.)

From:

Taylor Reeves

This project increases the footprint of the existing Hamlin Substation which is currently owned and operated by Dominion Energy South Carolina, Inc. The existing electrical substation is located at 1145 Porchers Bluff Road (S-51), in Charleston County TMS 578-00-00-155. The project combines 2.74 acres of this substation property with two adjacent undeveloped parcels that measure 1.95 acres from TMS 578-00-00-199, and 2.04 acres from TMS 578-00-00-200, all properties owned by Dominion Energy.

The total disturbed area for this project is 3.0 acres as displayed on the construction drawings. The disturbed area occurs in the undeveloped wooded parcels. Disturbance consists of clearing and grubbing the site to install one wet pond made of bulkhead construction, stormwater drainage structures with outlet protection. The proposed site work intends to expand the electrical substation. The expansion will include gravel areas for the new equipment and gravel driveway. The proposed access connects to Sam Edwards Road (S-2429).

Expansion of the existing electrical substation requires approximately 2 acres of new impervious surfaces to be added to the site. Additional stormwater runoff and volume generated from the post-development conditions is handled by the new wet pond that maintains the existing drainage patterns.

The proposed development would like to request a variance from the following requirements;

- 1. The proposed development for this site requires 25' buffer along all property lines. This site plan requests a variance to reduce the 25' buffer requirement to a 15' buffer along Sam Edwards Road. The 15' buffer is in accordance with the standard zoning requirements for this location. Due to the reduction of buffer requested the development proposes to provide opaque privacy fencing along all buffer lines.
- 2. The proposed development requests a variance from the requirement of one curb cut per 250' frontage. The existing substation utilizes the existing curb cuts, in order to maintain the functionality of the site the owner requests for the existing curb cuts to remain and would request a variance from this requirement.



August 15, 2025 Charleston County Board of Zoning Appeals Page 2 of 3

Reference: Dominion Hamlin Substation – Zoning Variance Application

3. The proposed development requests a variance from the fencing requirement which does not allow for chain link fencing to exceed 4' in height. The development requests for the existing chainlink fencing located onsite to remain for the existing substation facing Sam Edwards Road. This allows for the assurance of safety from public to access the site. The developer agrees to update the fencing onsite to utilize opaque fencing throughout the site. Photos of the existing substation have been included for reference.

Applicant's response to Article 3.10 Zoning Variances, Section 3.10.6 Approval Criteria:

- 1. Are there extraordinary and exceptional conditions pertaining to the subject property? Explain: Response: The proposed development's use requires allowances from the traditional zoning requirements established for commercial zoning projects.
- 2. Do these conditions generally apply to other property in the vicinity or are they unique to the subject property? Explain.
 - Response: No. The proposed substation expansion project is a standalone project and additional expansions are not anticipated at this time. The surrounding uses are residential. The proposed substation expansion does not anticipate having adverse impacts to the surrounding parcels.
- 3. Because of these extraordinary and exceptional conditions, would the application of this Ordinance to the subject property effectively prohibit or unreasonably restrict the utilization of the property? Explain:

 Response: No. The allowance of the proposed variance request would still allow for development to occur within the property limits for the proposed use among others.
- 4. Will the authorization of a variance be a substantial detriment to adjacent property or to the public good? Will the character of the zoning district be harmed if this variance is granted? Explain: Response: No. The proposed development is an extension of the substation that is already established in this area. The proposed development will follow what has been accepted with the existing substation, the expansion will follow the same intent.
- 5. The BZA shall not grant a variance the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a Nonconforming Use of Land, or to change the zoning district boundaries shown on the Official Zoning Map. The fact that property may be utilized more profitably if a Zoning Variance is granted shall not be considered grounds for granting a Zoning Variance. Does the variance request meet this criterion?

 Response: Yes.
- 6. Is the need for the variance the result of your own actions? Explain:
 Response: Yes. In efforts to meet today's high demands for energy, the substation operator is faced with the need to expand its current footprint at this location. The expansion of new impervious areas requires attenuation of additional stormwater runoff generated from the development. This program warrants the need for a buffer reduction along Sam Edwards from 25' buffer to 15' buffer to allow for permanent BMP. Under this review, the conditions of the existing substation have been noted to be out of compliance. The operator acknowledges the need to request these variances.



August 15, 2025 Charleston County Board of Zoning Appeals Page 3 of 3

Reference: Dominion Hamlin Substation – Zoning Variance Application

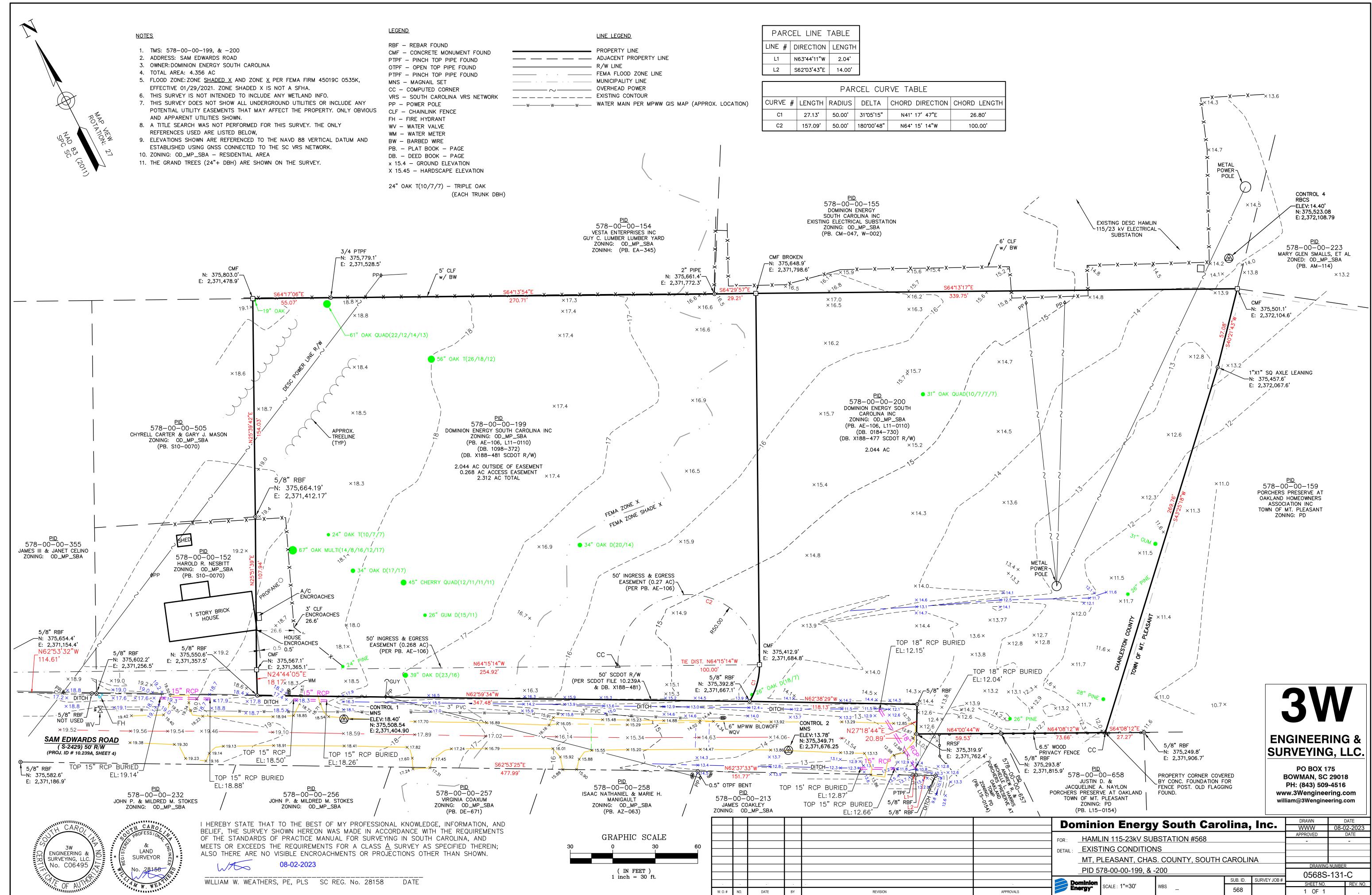
 Does the variance substantially conflict with the Charleston County Comprehensive Plan or the purposes of the Ordinance? Explain:
 Response: No. The variance will allow for the substation to continue to serve the surrounding areas.

Thank you,
Stantec Consulting Services Inc.

Taylor Reeves

Project Manager Phone: 843-560-4942

Taylor.Reeves@stantec.com





Stantec Consulting Services Inc.

4969 Centre Pointe Drive, Suite 200 North Charleston, SC 29418 (843) 740-7700

DOMINION ENERGY SOUTH CAROLINA

220 OPERATIONS WAY, MC J46 CAYCE, SC 29033 TEL (803) 217-2052 CONTACT: WILLIAM TAYLOR

PROJECT LOCATION

VICINITY MAP (N.T.S)

HAMLIN SUBSTATION EXPANSION

CHARLESTON COUNTY, SC TMS# 578-00-00-155

<u>SUBJECT</u>

PLANNING AND ZONING

ROADS AND DRAINAGE

TELEPHONE SERVICE ELECTRICAL POWER

NPDES STORMWATER

NPDES LAND DIST.

WATER/ SEWER

SHEET INDEX

SHEET NO.	SHEET TITLE
C0.0	COVER SHEET
C0.1	CONSTRUCTION NOTES
C0.2	SWPPP NOTES
C1.0	EXISTING CONDITIONS
C1.1	DEMOLITION PLAN
C2.0	EROSION CONTROL
C2.1	EROSION CONTROL DETAILS
C2.2	EROSION CONTROL DETAILS
C2.3	EROSION CONTROL DETAILS
C3.0	SITE PLAN
C3.1	SITE DETAILS
C4.0	GRADING AND DRAINAGE PLAN
C4.1	STORM AND GRADING PROFILES

C4.10

GRADING AND DRAINAGE DETAILS

USE OF THIS DRAWING FOR QUANTITY PRELIMINARY UNTIL ALL APPLICABLE F				
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North Charleston, SC 29418

Copyright Reserved

TMS #578-00-00-155 TOTAL 2.74 AC. UPLAND: 2.74 AC. WETLAND: 0.0 AC IMPERVIOUS AREA: 2.05 AC. TOTAL DISTURBED AREA: 3.0 AC FIRM PANEL45019C0535K (EFF. 1/29/2021) ZONING: MP-O VILLAGE COMMERCIAL AREA **ADJACENT PARCELS:** TMS #578-00-00-159 (ADJACENT) OWNED BY PORCHERS PRESERVE AT OAKLAND HOMEOWNERS ASSOCIATION, INC. TMS 578-00-00-505 (ADJACENT) OWNED BY: CHYRELL CARTER & GARY J. MASON

TMS 578-00-00-152 (ADJACENT)

OWNED BY: HAROLD NESBITT

TOTAL SITE AREA:

PROJECT CONTACTS MUNICIPALITY / UTILITY PROVIDER TELEPHONE: CHARLESTON COUNTY PLANNING & ZONING (843) 202-7200 CHARLESTON COUNTY ENGINEERING (843) 202-7600 CHARLESTON WATER SYSTEMS (843) 727-6800 SCDHEC BUREAU OF WATER - STORMWATER (843) 953-8421

(843) 953-0240

SCDHEC BUREAU OF WATER - COASTAL DIV.

Drawing No.

Project No.

215618358

Charleston County, SC

Scale

AS NOTED

Revision

COVER SHEET

GENERAL NOTES:

DOMINION ENGERY 200 OPERATIONS WAY CAYCE, SC 29033

STANTEC CONSULTING SERVICES, INC BRYAN KIZER, P.E. 4969 CENTRE POINTE DR, SUITE 200 NORTH CHARLESTON, SC 29418 TEL: (843) 740-7700

- 1. BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY WILLIAM W. WEATHERS, PE, PLS AS SHOWN ON "DOMINION ENERGY SOUTH CAROLINA, INC. FOR HAMLIN 115-23KV SUBSTATION #568 EXISTING CONDITIONS MT. PLEASANT, CHAS. COUNTY, SOUTH CAROLINA PID 578-00-00-199, & -200" DATED
- 578-00-00-155, TMS 578-00-00-199, TMS 578-00-00-200, TOTAL AREA 7.096 ACRES, PREPARED FOR & OWNED BY DOMINION ENERGY OF SOUTH CAROLIN. PREPARED BY WILLIAM W. WEATHERS,
- 3. ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON SOUTH CAROLINA STATE PLANE COORDINATE SYSTEM 1983. DISTANCES SHOWN HEREON ARE HORIZONTAL (GROUND) DISTANCES, NOT GRID DISTANCES.

2. PROPERTY LINE ABANDONMENT PLAT FOR DESC HAMLIN ELECTRICAL SUBSTATION #568, COMBINING TMS

4. VERTICAL DATUM USED WAS NGVD88; SC NAD83 GRID COORDINATE SYSTEM.

IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO CONTINUING WORK.

- 5. THIS PROPERTY IS LOCATED IN FLOOD ZONES X AND SHADED X, PER FEMA FIRM COMMUNITY PANEL 45019C0535K, EFFECTIVE 01/29/2021.
- 6. CONTRACTOR IS TO VERIFY ALL INFORMATION CONTAINED HEREIN PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY PRIOR TO CONSTRUCTION.
- 7. ALL CONSTRUCTION, METHODS, MATERIALS, AND WORKMANSHIP, NOT OTHERWISE INDICATED IN THESE PLANS. SHALL CONFORM TO THE SPECIFICATIONS OF THE CHARLESTON COUNTY PERMITTING STANDARDS & PROCEDURES MANUAL AND SCDOT. FURTHERMORE, ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AND PRIVATE AGENCIES HAVING JURISDICTION OVER THE WORK, LATEST EDITIONS. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES OR CONFLICTS ON THE CONSTRUCTION PLANS IN THE FIELD, AND/OR DOCUMENTS
- 8. CONTRACTOR TO COORDINATE WITH OWNER AND ENSURE ALL APPLICABLE CONSTRUCTION AND LAND DISTURBANCE PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING ANY WORK

PREPARED BY OTHERS. PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, HE/SHE SHALL

- 9. CONTRACTOR AND/OR OWNER IS RESPONSIBLE FOR COORDINATING CONSTRUCTION WITH UTILITY COMPANIES, ADJACENT LAND DEVELOPMENTS OR OTHER AFFECTED THIRD PARTIES.
- 10. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCIES FOR THE EXACT FIELD LOCATIONS OF ALL WATER, SEWER, ELECTRIC, TELEPHONE, TELEVISION AND ANY OTHER UNDERGROUND AND OVERHEAD UTILITY 72 HOURS BEFORE COMMENCING CONSTRUCTION. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE CONTRACT DRAWINGS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTHS OF ALL UNDERGROUND UTILITIES ALONG THE
- 11. PRIOR TO COMMENCING WITH THE EXCAVATION, CONTRACTOR SHALL NOTIFY SC811 AT 811 FOR LOCATIONS OF UNDERGROUND UTILITIES. ANY UTILITIES DAMAGED THAT ARE NOT TO BE REMOVED SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 12. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST
- 13. ALL POINTS AND MONUMENTS SHALL BE SURVEYED PRIOR TO COMMENCEMENT OF CONSTRUCTION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF
- 14. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.
- 15. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION UNAVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO COMMENCEMENT OF CONSTRUCTION.

- 1. DURING THE CONSTRUCTION AND MAINTENANCE OF THE THIS PROJECT, ALL SAFETY REGULATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY
- 2. WHEN APPLICABLE, THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY THE SCDOT AND APPLICABLE LOCAL AGENCIES PRIOR TO COMMENCEMENT OF
- 3. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
- 4. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH AND SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB-CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
- 5. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AN REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
- 6. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATION. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATION.
- 7. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF OVERHEAD AND BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UTILITIES.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.

SHOP DRAWING SUBMITTAL:

OF SHOP DRAWINGS.

OBIOINIAI CUEET ABOUD

- 1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE OWNER'S ENGINEER; 2 SETS OF HARD COPIES AND 1 ELECTRONIC FOR REVIEW.
- 1.1. THE CONTRACTOR, OR THE CONTRACTORS SUPPLIER, MUST INCLUDE WITH THE SHOP DRAWING SUBMITTAL A REFERENCE TO THE GOVERNING MUNICIPALITIES STANDARDS SHOWING COMPLIANCE WITH SAID MUNICIPALITIES REQUIREMENTS.
- ie, SHOP DRAWING SUBMITTAL FOR A FIRE HYDRANT SHALL INCLUDE A REFERENCE TO CHARLESTON COUNTY WATER AND SEWER "POTABLE WATER MAINS" APPENDIX G 02665.
- THIS SHALL BE COMPLETED FOR EVERY SUBMITTAL TO ASSURE AN EXPEDITED REVIEW
- 2. SHOP DRAWINGS WILL BE REVIEWED AND RETURNED TO THE CONTRACTOR WITHIN 15 BUSINESS DAYS FROM CONFIRMED RECEIPT BY THE OWNER OR THE OWNERS ENGINEER.
- 3. SHOP DRAWINGS NOT RECEIVED IN THE PROPER FORMAT WILL BE RETURNED TO THE CONTRACTOR FOR REVISIONS PRIOR TO REVIEW.

EROSION CONTROL NOTES:

- 1. IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEUING, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE
- 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 MEASURE MUST BE INITIATED -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 INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- 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.
- 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
- 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.
- 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
- 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
- 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
- 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 DAYS.
- 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;
- -SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING. 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCED 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 BMP'S NEED TO BE MODIFIED OR IF ADDITIONAL BMP'S 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
- 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

<u>CLEARING AND DEMOLITION:</u>

- 1. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. ALL DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION. THE CONTRACTOR MUST PROVIDE PERMANENT GRASS GROWTH OVER ALL DISTURBED AREAS
- 2. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED. PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY
- 3. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS OR AS DIRECTED BY THE OWNER.

PROJECT CLOSEOUT NOTE:

UPON COMPLETION OF CONSTRUCTION FOR THIS PROJECT, THE OWNER SHALL PROVIDE CHARLESTON COUNTY AND/OR SCDHEC WITH ADDITIONAL SUBMITTAL ITEMS (REPORTS, APPLICATIONS. VIDEO, ETC.) AS REQUIRED.

AS-BUILT NOTE:

THE ENGINEER/OWNER SHALL PROVIDE THE OWNER WITH AN AS-BUILT SURVEY OF THE SITE (TIED TO THE STATE PLANE COORDINATE SYSTEM), TO INCLUDE ALL STORM DRAINAGE LINES, BOTH EXISTING AND NEWLY INSTALLED. SURVEY SHALL ALSO INCLUDE THE PIPE SIZE, MATERIAL, AND INVERT ELEVATIONS, IN COMPLIANCE WITH THE CHARLESTON COUNTY REQUIREMENTS AND NPDES PERMIT. DETENTION POND AS—BUILT SHALL INCLUDE ALL CONTOURS AND SPOT ELEVATIONS INSIDE THE POND, AS WELL AS THE OUTLET STRUCTURE WEIR/ORIFICE ELEVATIONS AND SIZES, AS REQUIRED BY THE CHARLESTON COUNTY REQUIRÉMENTS AND NPDES PERMIT.

2. ALL REINFORCED CONCRETE PIPE SHALL, AT A MINIMUM, BE ASTM C76, CLASS III

<u>DRAINAGE</u>

- 1. ALL NEW STORM PIPES, BEDDING, TRENCHING, STORM BOXES, ETC. IN THE CITY RIGHTS-OF-WAY AND/OR CITY OWNED AND MAINTAINED DRAINAGE EASEMENTS SHALL BE INSTALLED PER CURRENT SCDOT SPECIFICATIONS, LOCATED ON THE INTERNET AT http://www.scdot.org/doing/construction_standardspec.aspx. STANDARD SCDOT DETAIL DRAWINGS CAN BE LOCATED AT THE FOLLOWING WEBSITE, http://www.scdot.org/doing/sd_book.aspx.
- 3. REINFORCED CONCRETE PIPE INSTALLED UNDER PAVEMENT AND/OR PARALLEL TO THE EDGE OF PAVEMENT IN PUBLIC RIGHTS-OF-WAY SHALL HAVE O-RING JOINTS IN ACCORDANCE WITH ASTM C443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
- 4. SUBMERGED DRAINAGE SYSTEMS SHALL HAVE 0-RING JOINTS IN ACCORDANCE WITH ASTM C C443 AND/OR AASHTO M315. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
- 5. WHERE TONGUE AND GROOVE STORM PIPE IS ALLOWED, REINFORCED CONCRETE PIPE SHALL BE PER ASTM C 76, CLASS III. JOINTS SHALL BE SEALED WITH RAMNECK OR EQUIVALENT PER AASHTO M198. THE JOINTS SHALL BE SECURELY WRAPPED WITH FILTER FABRIC 18" IN WIDTH.
- 6. ALL NEW STORM DRAINAGE LINES SHALL BE LAID UPGRADE AFTER CONFIRMATION OF EXISTING INVERT ELEVATION.
- 7. CHARLESTON COUNTY MAINTAINS THE RIGHT TO ALLOW ALTERNATE PIPE INSTALLATIONS OR TYPE OF PIPE FOR ALL PROJECTS ON A CASE-BY-CASE BASIS
- 8. PIPE LENGTHS SHOWN ARE APPROXIMATE AND CENTER TO CENTER ON DRAINAGE STRUCTURES OR TO END OF PIPE. CONTRACTOR SHALL VERIFY ALL
- 9. ALL STORM DRAIN PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR O NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS
- 10. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.
- 11. FOR CONSTRUCTION OF THE DROP INLET WALLS EITHER BRICK MASONRY OR CLASS 3000 CONCRETE MAY BE USED. FOR CONCRETE THE WALLS ARE TO BE 6" THICK WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. FOR BRICK THE WALLS ARE TO BE 8" THICK.
- 12. THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6 IN. THICK CLASS 3000 CONCRETE WITH A REINFORCING STEEL AREA OF 0.20 SQ. INCH PER FT. WIRE MESH MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQ. IN. PER FT. IS MET.
- 14. IF DESIRED THESE ITEMS MAY BE PRECAST PRIOR TO INSTALLATION IN LIEU OF BEING CAST IN PLACE. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE ONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE SCOOT STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX
- 15. REINFORCING STEEL SHALL BE DEFORMED AND SHALL CONFORM TO AASHTO M 31, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
- 16. IF STRUCTURE DEPTH EXCEEDS 4'-6", METAL STEPS ARE TO BE PLACED ON WALL. SEE STEP STANDARD DRAWING 719-16. 17. CASTING SHALL CONFORM TO AASHTO M 105, CLASS 35B AND THE ALTERNATE LOAD TEST OF AASHTO M 306. CASTINGS SHALL ALSO MEET THE LOADING
- REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-621 (LATEST EDITION).
- a. STEEL GRATES AND FRAME MAY BE USED IN LIEU OF CAST IRON AS LONG AS THE LOADING AND HYDRAULIC REQUIREMENTS ARE MET, AND ARE ON COOT LIST OF APPROVED SUPPLIERS.
- b. STEEL GRATES SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
- c. STEEL GRATES AND FRAMES SHALL BE DIMENSIONED TO BE INTERCHANGEABLE WITH EACH PIECE OF THE CAST IRON GRATE AND FRAME SHOWN. MUST HAVE A POSITIVE MEANS TO RETAIN THE GRATE IN THE FRAME
- d. STRENGTH REQUIREMENTS OF STEEL GRATES AND FRAMES MUST MEET FEDERAL SPECIFICATION RR-F-621 (LATEST EDITION). 18. THE LONGEST DIMENSIONS OF THE OPENING IN THE IRON GRATE SHOULD BE ORIENTED IN THE DIRECTION OF FLOW IF PRACTICAL
- 19. AS SHOWN BY THIS DRAWING THE FRAME IS SET LEVEL, BUT THE ENGINEER MAY SET SAME ON SLOPE AS REQUIRED BY LOCAL DRAINAGE CONDITIONS.
- 20. AFTER THE FRAME IS SET IN ITS FINAL POSITION, IT IS TO BE ENCASED WITH CONCRETE AS SHOWN BY DRAWING.
- 21. THE INSIDE OF THE OUTLET PIPE SHALL BE FLUSH WITH FLOOR OF BASIN, UNLESS OTHERWISE SHOWN ON PLANS (SUMP).
- 22. THE SOFFIT (INSIDE TOP OF PIPE) OF THE OUTLET PIPE SHOULD BE NO HIGHER THAN THE SOFFIT OF THE INLET PIPE, UNLESS OTHERWISE SHOWN ON PLANS. 23. SHOULD THE CONTRACTOR ENCOUNTER UNSUITABLE MATERIAL, THEN THE CONTRACTOR WILL ENGAGE THE OWNER'S GEOTECHNICAL ENGINEER TO VERIFY UNSUITABLE MATERIAL AND MAKE RECOMMENDATIONS ON THE REMOVAL AND THE PLACEMENT AND TYPE OF NEW BEDDING AND BACKFILL MATERIAL. THE RECOMMENDATIONS BY THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE SUBMITTED TO THE OWNER AND CIVIL ENGINEER FOR CONCURRENCE PRIOR TO

PAVING AND GRADING

- 1. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAR, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS
- 3. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.

REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED

- 4. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
- 5. UNLESS OTHERWISE NOTED, ALL GRADING, ROCKING AND PAVING TO CONFORM TO SCDOT STANDARD SPECIFICATIONS, LATEST EDITION.
- 6. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE APPROPRIATE MUNICIPAL AUTHORITY OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS.
- 7. STRIP WORK LIMITS, REMOVING ALL ORGANIC MATTER WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TREES, BRUSH AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING OR GRADING SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- 8. IMMEDIATELY FOLLOWING FINE GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY
- 9. ALL FILLS WITHIN PUBLIC RIGHT-OF-WAYS AND EASEMENTS, ALONG WITH FILL WITHIN THE SUBSTATION SITE, SHALL BE ENGINEERED. ADDITIONALLY, ANY FILLS OUTSIDE OF PUBLIC RIGHT-OF-WAYS WHICH ARE OVER 2 FEET IN DEPTH SHALL BE ENGINEERED. ENGINEERED FILLS SHALL BE CONSTRUCTED IN 6" LIFTS. EACH LIFT SHALL BE COMPACTED TO 95 % OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST
- 10. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE FLEVATIONS AND OR FINISH CONTOUR LINES SHOWN FINISH PAVEMENT GRADES AT TRANSITION EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE
- 11. CRUSHED ROCK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 02630 (BASE AGGREGATE) SCDOT STANDARD SPECIFICATIONS. COMPACT TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). A.C. PAVEMENT SHALL CONFORM TO SECTION 00745 (ASPHALT CONCRETE PAVEMENT) SCDOT STANDARD SPECIFICATIONS FOR STANDARD DUTY MIX. A.C. PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 91% OF MAXIMUM DENSITY AS DETERMINED BY THE RICE STANDARD
- 12. ALL EXISTING OR CONSTRUCTED MANHOLES, CLEANOUTS, MONUMENTS, GAS VALVES, WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA WHEREIN THEY LIE
- 13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS
- 14. ENGINEERED FILL MATERIAL SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE AND OTHER UNSUITABLE MATERIALS AND SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
- 15. IMPORTED SOILS FOR USE AS ENGINEERED FILL SHALL BE NON-EXCLUSIVE MATERIALS AND SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS.
- 16. AGGREGATE BASE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

	<u> </u>
SIEVE SIZE (PER ASTM D422)	PERCENT PASSING BY WEIGHT
1 INCH	100
3/4	90–100
No. 8	35–55
No. 200	0–8

- 17. ALL AREAS TO RECEIVE FILL, AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. STRIPPED SOILS SHALL NOT BE USED IN ENGINEERED FILL, BUT MAY BE USED IN LANDSCAPE AREAS.
- ENGINEERED FILL MATERIAL SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D698 (STANDARD PROCTOR)

ENGINEERED FILL MATERIAL	MINIMUM PERCENT COMPACTION	MOISTURE CONTENT (RANGE)					
NATIVE SOIL	90%	OPTIMUM TO OPTIMUM PLUS 3%					
ENGINEERED FILL UNDER STRUCTURES AND BEHIND RETAINING WALLS	95%	OPTIMUM TO OPTIMUM PLUS 3%					
ENGINEERED FILL UNDER PAVEMENTS	95%	OPTIMUM TO OPTIMUM PLUS 2%					
FILL IN LANDSCAPE AREAS	95%	2 TO 5% ABOVE OPTIMUM					
FILL IN LANDSCAPE AREAS 95% 2 TO 5% ABOVE OPTIMUM							

•	AGGREGATE BASE COURSE SHALL BE COMMAXIMUM DRY DENSITY AND OPTIMUM MO			
	ENGINEERED FILL MATERIAL	MINIMUM PERCENT COMPACTION	MOISTURE CONTENT (RANGE)	

100%

OPTIMUM PLUS OR MINUS 2%

- NOTE: MOISTURE CONTENT OF ENGINEERED FILL MATERIAL MAY REQUIRE ADJUSTMENT DURING
- CONSTRUCTION TO PREVENT SOIL PUMPING.

AGGREGATE BASE MATERIAL OR

BUILDING AND PAVEMENT AREAS

IMPORTED GRANULAR SOIL IN

- 18. ENGINEERED FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 6 INCHES THICK (LOOSE). 19. THE TOP 6 INCHES OF SOIL EXPOSED AT THE BOTTOM OF THE EXCAVATIONS SHALL BE COMPACTED, SCARIFIED AND COMPACTED AS ENGINEERED FILL PRIOR TO PLACEMENT OF ADDITIONAL FILL.
- 20. IF SOFT OR LOOSE SOIL IS PRESENT AT THE BASE OF EXCAVATIONS, IT SHALL BE EXCAVATED AND/OR COMPACTED AS ENGINEERED FILL OR AS RECOMMENDED BY THE GEOTECHNICAL FIELD REPRESENTATIVE. 21. IF SUBGRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL

HE SOLIDS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE

- ADJUSTED TO PREVENT PUMPING 22. EXPOSURE TO THE ENVIRONMENT MAY REDUCE THE STRENGTH OF SOILS IN PAVED AREAS. IF THIS OCCURS. THE SOFTENED SOILS SHALL BE REMOVED AND REWORKED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. IF RAINFALL IS EXPECTED AT A TIME WHEN BEARING SOILS IN FOOTING AREAS ARE
- EXPOSED, A 2 TO 4 INCH THICK LAYER OF LEAN CONCRETE MAY BE PLACED IN SUCH AREA. 23. THE SITE SHALL BE GRADED TO TRANSPORT SURFACE RUNOFF AWAY FROM THE PAVED AREAS. WATER SHALL NOT BE ALLOWED TO ACCUMULATE (POND) ON ANY AREA OF THE SITE, WITH THE EXCEPTION OF AREAS DESIGNATED FOR STORMWATER DETENTION.
- 24. BACKFILL AND FILL SHALL CONFORM TO THE GENERAL REQUIREMENTS FOR SOIL MATERIALS ABOVE AND SHALL BE CLASSIFIED AS GW, GP, GM, GC, SW, SP, SM, SC, ML, CL BY ASTM D2487 AND SHALL
- 24.1. SHALL BE CAPABLE OF BEING COMPACTED TO THE SPECIFIED DEGREE OF COMPACTION WHEN THE MOISTURE CONTENT IS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM PERCENT MOISTURE.
- 24.2. LIQUID LIMIT SHOULD NOT EXCEED 40 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
- 24.3. PLASTICITY INDEX SHOULD NOT BE GREATER THAN 30 PERCENT WHEN TESTED IN ACCORDANCE WITH
- 24.4. NO MORE THAN 75 PERCENT BY WEIGHT SHALL BE FINER THAN NO. 200 SIEVE WHEN TESTED IN ACCORDANCE WITH ASTM D1140.
- 25. UNSUITABLE SOIL SHALL BE ANY SOIL MATERIALS DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY AS NOT CONFORMING TO THE REQUIREMENTS DESCRIBED ABOVE FOR BACKFILL AND FILL. A MOISTURE CONTENT WHICH IS MORE THAN 3 PERCENTAGE POINTS FROM OPTIMUM SHALL NOT B CONSIDERED UNSUITABLE IF SUCH MATERIALS WOULD OTHERWISE BE SUITABLE IF THE MOISTURE CONTENT WERE ADJUSTED. ADJUSTMENTS TO THE SOIL MOISTURE CONTENT BY DRYING, MIXING, ADDING WATER, OR OTHER MEANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- 26. MEASUREMENT OF UNSUITABLE MATERIAL: THE VOLUME OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY THE OWNER'S GEOTECHNICAL ENGINEER. THE EXTENT OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY THE OWNER'S GEOTECHNICAL LABORATORY.
- 27. ALL PAINTED ARROWS AND OTHER SYMBOLS TO BE PER MUTCD AND SCDOT STANDARD
- 28. CONTRACTOR TO REFERENCE "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING ANALYSIS, JAMESTOWN SUBSTATION SITE SUB LANE, JAMESTOWN, SOUTH CAROLINA" DATED 9/21/2016 BY ECS CAROLINAS, LLP PREPARED FOR THOMAS BARNETTE OF CHARLESTON ELECTRIC COOPERATIVE,



4969 Centre Pointe Dr, Suite 200 North Charleston, SC 29418 843-740-7700

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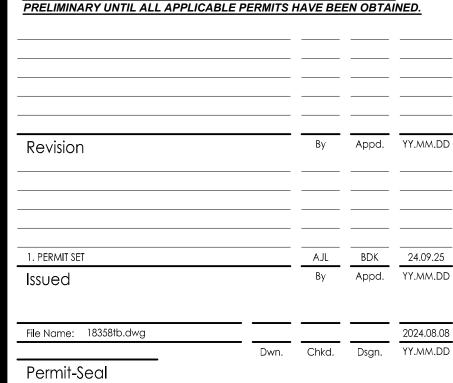
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Client/Project DOMINION ENERGY

SOUTH CAROLINA

STANTEC

CONSULTING

√ SERVICES, INC.

HAMLIN SUBSTATION EXPANSION

Charleston County, SC

Title

CONSTRUCTION NOTES

Project No. 215618358

Sheet

Drawing No.

AS NOTED

Revision

Scale

PROJECT OVERVIEW:

- PROJECT DESCRIPTION CONSTRUCTION OF ELECTRICAL SUBSTATION ALONG WITH SITE GRADING AND IMPROVEMENTS
- <u>CURRENT SITE USE</u> INDUSTRIAL WITH RESIDUAL UNDEVELOPED WOODS.
- PROPOSED SITE USE INDUSTRIAL ELECTRICAL SUBSTATION
- TOTAL SITE AREA
- NEAREST RECEIVING WATERBODY

STORMWATER MANAGEMENT & SEDIMENT CONTROL

EROSION PREVENTION BMPS AS THE EXISTING SITE IS CLEARED, GRUBBED AND GRADED TO THE PROPOSED CONTOURS SHOWN ON THE CONSTRUCTION SITE PLANS, EROSION PREVENTION BMPS SHALL BE PLACED THROUGHOUT THE CONSTRUCTION SITE TO AID IN THE PREVENTION OF SEDIMENT-LADEN STORMWATER RUNOFF. THESE BMPS SHALL BE FOCUSED IN AREAS WITH HIGH POTENTIAL OF EROSION, AREAS PRECEDING INFILTRATION PRACTICES, AND SHALL BE APPLIED TO ALL STEEP SLOPES. THAT IS SLOPES EQUAL TO OR GREATER THAN 3H:1V.

EXAMPLES OF EROSION PREVENTION BMPS ARE, BUT ARE NOT LIMITED TO, SURFACE ROUGHENING, TEMPORARY SEEDING, EROSION CONTROL BLANKETS, SODDING, RIPRAP, OUTLET PROTECTION, AND DUST CONTROL.

SEDIMENT CONTROL BMPS
SEDIMENT CONTROL BMPS ARE DESIGNED TO REMOVE SOME OF THE SEDIMENT ACCUMULATED WITHIN STORMWATER RUNOFF, TO THE BEST EXTENT PRACTICABLE. THESE BMPS HELP PREVENT SEDIMENT IMPACTS TO ADJACENT PROPERTIES AND WATER BODIES FROM STORMWATER DISCHARGES ORIGINATING FROM CONSTRUCTION SITES

CONTRACTORS MUST CONSULT THE ENGINEER OF RECORD BEFORE MAKING ANY SIGNIFICANT CHANGES TO THESE BMPS. EXAMPLES OF SEDIMENT CONTROL BMPS ARE, BUT ARE NOT LIMITED TO SILT FENCE, SEDIMENT TUBES, AND INLET PROTECTION.

STRUCTURAL CONTROL BMPS AND FLOODPLAIN PLACEMENT

THIS SITE-SPECIFIC SWPPP UTILIZES THE FOLLOWING STRUCTURAL CONTROL BMPS: STORM SEWER SYSTEMS. THESE PRACTICES HAVE BEEN DESIGNED TO EITHER DIVERT FLOWS FROM EXPOSED SOILS, TO RETAIN/DETAIN FLOWS, AND TO OTHERWISE LIMIT THE RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM DISTURBED AREAS OF THE CONSTRUCTION SITE.

THROUGHOUT THE LIFESPAN OF THE CONSTRUCTION PROJECT THESE BMPS WILL BE INSTALLED AND MAINTAINED. AS REQUIRED BY THE SWPPP AND THE CONSTRUCTION SITE PLANS, UNTIL FINAL STABILIZATION HAS BEEN ACHIEVED FOR THE AREAS DRAINING TO EACH BMP. UPON FINAL STABILIZATION, EACH STRUCTURAL CONTROL BMP MUST BE MODIFIED TO THE POST-CONSTRUCTION CONDITIONS SHOWN WITHIN THE APPROVED CONSTRUCTION SITE PLANS OR REMOVED, IF THE STRUCTURAL BMP WAS A TEMPORARY STRUCTURE.

ALL ACCESS AREAS INTO AND OUT OF THE LIMITS OF DISTURBANCE, AS SHOWN ON THE CONSTRUCTION SITE PLANS, ARE REQUIRED TO BE EQUIPPED WITH A CONSTRUCTION ENTRANCE. EACH CONSTRUCTION ENTRANCE MUST BE INSTALLED AS SHOWN IN THE DETAILS SECTION

IF A NEW ENTRANCE OR EXIT IS REQUIRED. THAT IS NOT SHOWN ON THE PLANS. INSTALL THE CONSTRUCTION ENTRANCE AS NOTED BY THE CONSTRUCTION ENTRANCE DETAIL, MARK THE LOCATION ON THE PLANS AND MAKE A RECORD OF THIS MINOR MODIFICATION IN THE SWPPP'S MODIFICATION LOG, WHICH IS LOCATED WITHIN ONE OF THE APPENDICES OF THE ON-SITE SWPPP

EACH STABILIZED CONSTRUCTION ENTRANCE SHOULD BE USED IN CONJUNCTION WITH STREET SWEEPING MEASURES IF IT BECOMES APPARENT THAT SEDIMENT IS STILL BEING TRACKED ONTO ADJACENT IMPERVIOUS AREAS. EVEN WITH THE USE OF THE CONSTRUCTION

DURING EXTREMELY DRY CONDITIONS, DROUGHT, AND/OR EXCESSIVE WINDS, THE CONSTRUCTION SITE SHOULD BE TREATED FOR DUST CONTROL TO PREVENT THE SUSPENSION OF FINE SEDIMENT PARTICLES INTO THE AIR, BEING CARRIED OFFSITE, AND DEPOSITED ON ADJACENT PROPERTIES OR SURFACE WATERS. THIS PRACTICE MAY NOT BE DIRECTLY CALLED OUT FOR ON THE CONSTRUCTION SITE PLANS. A WATER TANKER USED TO SPRAY THE SOIL DOWN MAY BE AN EFFECTIVE WAY TO PREVENT EXCESSIVE DUST AT A CONSTRUCTION

SITE-SPECIFIC WATER QUALITY BMPS (E.G., SILT-FENCING, INLET PROTECTION, AND SEDIMENT TUBES) MUST BE INSTALLED PRIOR TO THE MASS CLEARING, GRUBBING AND GRADING OF THE SITE, AND MUST BE KEPT IN FUNCTIONING ORDER THROUGHOUT THE LIFESPAN OF ALL CONSTRUCTION ACTIVITIES. EACH OF THESE BMPS MUST BE MAINTAINED AND INSPECTED UNTIL ALL AREAS DRAINING TO THESE BMPS HAVE REACHED FINAL STABILIZATION.

POST-CONSTRUCTION WATER QUALITY

ALL CONSTRUCTION SITES DISTURBING 5 ACRES OR MORE, INCLUDING CONSTRUCTION ACTIVITIES ASSOCIATED WITH LARGER COMMON PLANS DISTURBING 5 ACRES OR MORE (FOR SITES LOCATED WITHIN AN MS4 THIS MAY BE 1 ACRE OR MORE), MUST BE DESIGNED TO TREAT WATER QUALITY POST-CONSTRUCTION, THESE WATER QUALITY CONTROLS MUST BE INSTALLED AND STABILIZED PRIOR TO TERMINATING COVERAGE UNDER THE CGP. THESE CONTROLS WILL REQUIRE ROUTINE MAINTENANCE TO REMAIN FUNCTIONAL: THIS IS TO BE CONDUCTED. BY THE PRIMARY PERMITTEE OR THE ENTITY THAT ACCEPTS RESPONSIBILITY FOR THESE STRUCTURES ONCE CONSTRUCTION HAS BEEN

LIPON FINAL STABILIZATION FACH CONSTRUCTION SITE WILL HAVE TO MAKE THE TRANSITION FROM TEMPORARY RMPS TO PERMANENT BMPS. ALL POST-CONSTRUCTION (PERMANENT) WATER QUALITY AND WATER QUANTITY BMPS ARE IDENTIFIED IN THE FINAL PHASE OF THE EROSION AND SEDIMENT CONTROL LOCATED WITHIN THE CONSTRUCTION SITE PLANS.

BASED ON THE NATURE, CONDITIONS, AND/OR PROCEDURES ASSOCIATED WITH THIS CONSTRUCTION SITE, THE FOLLOWING ITEMS MUST BE FOLLOWED AND ADOPTED BY ALL THOSE CONDUCTING LAND DISTURBING ACTIVITIES AT THIS SITE:

- ALL CONSTRUCTION DEBRIS MUST BE STOCKPILED IN DESIGNATED AREAS. WHICH HAVE BEEN PROVIDED WITH THE PROPER BMPS TO PREVENT THE DISCHARGE OF POLLUTANTS THROUGH STORMWATER RUNOFF FORM BUILDING OR OTHER SIMILAR MATERIALS OFF-SITE
- OR INTO SURFACE WATERS. • ANY ADDITIONAL WASTE MATERIAL OR STOCKPILE MATERIAL (LE. SOIL AND MULCH) MUST ALSO BE STORED IN THE DESIGNATED AREAS
- AS SHOWN ON THE CONSTRUCTION SITE PLANS OR AS THE CONTRACTOR RESPONSIBLE FOR DAY-DAY ACTIVITIES AT THIS SITE. DEFMS APPROPRIATE. SILT FENCE OR AN APPROVED EQUAL SHALL SURROUND ALL STOCKPILED MATERIALS.
- INDUSTRIAL AND CONSTRUCTION. AT THIS SITE, AND BE INFORMED OF ALL CONTROLS AND MEASURES THE WILL BE IMPLEMENTED TO PREVENT THE DISCHARGE OF THESE POLLUTANTS IN STORMWATER RUNOFF.
- ANY ADDITIONAL NON-STORMWATER DISCHARGES, AS REFERENCED IN THE CGP, SHOULD BE ELIMINATED OR REDUCED TO THE MAXIMUM EXTENT FEASIBLE. ALL UNPREVENTABLE NON-STORMWATER DISCHARGES SHALL BE TREATED THROUGH THE APPROVED STORMWATER MANAGEMENT SYSTEM BEFORE RELEASE OFF-SITE. FOLLOWING IS A LIST OF ALLOWABLE NON-STORMWATER DISCHARGES:

• ALL PARTIES CONDUCTING WORK AT THIS CONSTRUCTION SITE MUST BE INFORMED OF AND MAKE NOTE OF POLLUTANT SOURCES, BOTH

- FIRE HYDRANT FI USHING WASH WATER WITHOUT DETERGENTS
- WATER USED FOR DUST CONTROL
- POTABLE WATER BUILDING WASH DOWN WATER WITHOUT DETERGENTS
- UNCONTAMINATED PAVEMENT WASH WATER UNCONTAMINATED CONDENSATION FROM MECHANICAL EQUIPMENT
- UNCONTAMINATED GROUND OR SPRING WATER
- WATER FROM FOUNDATION OF FOOTING DRAINS UNCONTAMINATED EXCAVATION DEWATERING LANDSCAPE IRRIGATION.

SEQUENCE OF CONSTRUCTION

SEE EROSION AND SEDIMENT CONTROL PHASE 1-3 SHEETS FOR SEQUENCE OF CONSTRUCTION

NOTE: INCLUDE INDIVIDUAL LOT DEVELOPMENT/ CONSTRUCTION IN THE SEQUENCE IF THE SITE WILL NOT BE MASS-GRADED

NOTE: MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND THE CONTROLS ARE REMOVED.

CERTIFICATION STATEMENT

OBICINIAL CHEET ABOUT

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM, FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC. 1976 AS AMENDED. PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF

NON-NUMERIC EFFLUENT LIMITS

DURING THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. ALL PARTIES PERFORMING WORK AT THIS CONSTRUCTION SITE WHOSE WORK MAY AFFECT THE IMPLEMENTATION OF THE SWPPP MUST BE INFORMED OF AND DIRECTED ON HOW TO COMPLY WITH THIS 2. SITE GRADING, INSTALL CURB AND GUTTER, PAVEMENT. NON-NUMERIC EFFLUENT LIMIT, WHICH REQUIRES THE MANAGEMENT OF STORMWATER RUNOFF WITHIN THE CONSTRUCTION SITE AND AT EACH OUTFALL. THE PURPOSE OF THIS REQUIREMENT IS TO CONTROL THE STORMWATER VOLUME AND VELOCITY AT THESE LOCATIONS TO 3. PERMANENT/FINAL STABILIZATION.

THE CONSTRUCTION SITE TO ACCOMPLISH THESE PARTICULAR STORMWATER MANAGEMENT PRACTICES. BELOW IS A LIST OF PRACTICES THAT MAY BE UTILIZED WITHIN THE DISTURBED AREA AND AT EACH OUTFALL AT CONSTRUCTION SITES TO CONTROL STORMWATER VOLUME AND VELOCITY:

• LIMITING THE AMOUNT OF DISTURBED AREA AND EXPOSED SOILS

- STAGING AND/OR PHASING OF THE CONSTRUCTION SEQUENCE; • DIVERTING OFF-SITE FLOW AROUND THE CONSTRUCTION SITE;
- CONTROLLING THE DRAINAGE PATTERNS WITHIN THE CONSTRUCTION SITE: • TEMPORARY STABILIZATION OF DISTURBED AREAS.

NON-NUMERIC EFFLUENT LIMIT.

• SURFACE ROUGHENING AND/OR OTHER SLOPE STABILIZATION PRACTICES; • LEVEL SPREADERS, RIPRAP PLUNGE POOLS AND/OR OTHER VELOCITY DISSIPATION BMPS LOCATED AT THE CONSTRUCTION SITE'S

• USE OF ROCK CHECKS, SEDIMENT TUBES, ETC. IN TEMPORARY DIVERSIONS SWALES AND DITCHES.

• USE OF EROSION CONTROL BLANKETS, TURF REINFORCEMENT MATS, AND OTHER NON-VEGETATIVE BMPS THAT CAN BE USED TO QUICKLY STABILIZE DISTURBED AREAS. THE SWPPP PREPARER/ENGINEER SHOULD APPROVE ANY MODIFICATIONS (ADDITIONAL BMPS OR CHANGES TO EXISTING BMPS) TO ENSURE THAT SOURCES OF POLLUTION ARE MANAGED TO PREVENT THEIR DISCHARGE FROM THE CONSTRUCTION SITE. ADDRESS THE MANAGEMENT OF STORMWATER VOLUME AND VELOCITY PRIOR TO IMPLEMENTATION, ALL APPROVED SWPPPS THAT WERE EXPECTED POLLUTION SOURCES DURING CONSTRUCTION HAVE BEEN IDENTIFIED IN TABLE BELOW.

THROUGHOUT CONSTRUCTION ACTIVITIES, THE AMOUNT OF SOIL EXPOSED DURING CONSTRUCTION SHOULD BE KEPT TO A MINIMUM. THIS MAY BE ACCOMPLISHED BY MINIMIZING THE AMOUNT THE DISTURBED AREA WITHIN THE PERMITTED LIMITS OF DISTURBANCE (SHOWN OF THE APPROVED CONSTRUCTION SITE PLANS) TO ONLY THAT WHICH IS NECESSARY TO COMPLETE THE PROPOSED WORK, FOR AREAS THAT HAVE ALREADY BEEN DISTURBED AND WHERE CONSTRUCTION ACTIVITIES WILL NOT BEGIN FOR A PERIOD OF 14 DAYS OR MORE, TEMPORARY STABILIZATION TECHNIQUES MUST BE IMPLEMENTED.

PRIOR TO IMPLEMENTATION OF ANY MAJOR GRADING ACTIVITIES, <u>TOPSOIL IS TO BE PRESERVED</u> BY PLACING IT IN AREAS DESIGNATED FOR STOCKPILING UNTIL FINAL GRADES ARE REACHED. EACH STOCKPILE MUST BE EQUIPPED WITH PROPER SEDIMENT AND EROSION CONTROLS O PRESERVE THE TOPSOIL AND PROTECT ADJACENT AREAS FROM IMPACTS. ONCE FINAL GRADES HAVE BEEN REACHED, THE PRESERVED OPSOIL SHOULD BE UTILIZED TO APPLY TO AREAS IDENTIFIED FOR STABILIZATION. TOPSOIL CONTAINS NUTRIENTS AND ORGANISMS THA AID IN THE GROWTH OF VEGETATION.

THE COMPACTION OF SOIL SHOULD ALSO BE MINIMIZED TO THE DEGREE PRACTICABLE DURING GRADING ACTIVITIES. THIS IS ESPECIALLY IMPORTANT DURING THE REPLACEMENT OF TOPSOIL TO AID IN A QUICK ESTABLISHMENT OF VEGETATIVE COVER, COMPACTION OF SOIL MAY ALSO REDUCE RAINFALL'S ABILITY TO INFILTRATE INTO THE SOIL INCREASING THE AMOUNT OF STORMWATER RUNOFF

HROUGHOUT CONSTRUCTION ACTIVITIES, SOIL STABILIZATION TECHNIQUES ARE TO BE INITIATED AS SOON AS PRACTICABLE WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE CONSTRUCTION SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. FOR AREAS WHERE INITIATING STABILIZATION MEASURES IS INFEASIBLE (F.G. WHERE SNOW COVER FROZEN GROUND, OR DROUGHT CONDITIONS PRECLUDE STABILIZATION). INITIATE VEGETATIVE OR NON-VEGETATIVE STABILIZATION MEASURES AS SOON AS PRACTICABLE

ALL DISTURBED STEEP SLOPES (30% GRADE, ~3H:1V, OR GREATER), AND STEEP SLOPES TO BE CREATED THROUGH GRADING ACTIVITIES MUST BE MANAGED IN A FASHION THAT LIMITS THE POTENTIAL OF EROSION ALONG THE SLOPES. ALL PARTIES WHOSE WORK IS/WAS RESPONSIBLE FOR THE CREATION/DISTURBANCE OF STEEP SLOPES MUST COMPLY WITH THE FOLLOWING ITEMS:

- MINIMIZE THE DISTURBANCE OF ALL STEEP SLOPES, WHEN POSSIBLE.
- DIVERT CONCENTRATED OR CHANNELIZED FLOWS OF STORMWATER AWAY FROM AND AROUND STEEP SLOPE DISTURBANCES. • USE SPECIALIZED BMP CONTROLS INCLUDING TEMPORARY AND PERMANENT SEEDING WITH SOIL BINDERS, EROSION CONTROL BLANKETS, SURFACE ROUGHENING, REDUCING CONTINUOUS SLOPE LENGTH WITH TERRACING OR DIVERSIONS, GRADIENT TERRACES, INTERCEPTOR DIKES AND SWALES. GRASS-LINED CHANNELS, PIPE SLOPE DRAINS, SUBSURFACE DRAINS, LEVEL SPREADERS, CHECK DAMS, SEEP BERMS, AND TRIANGULAR SILT DIKES TO MINIMIZE EROSION.
- INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE ON ANY DISTURBED STEEP SLOPE AREAS WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED. AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS. MEASURES WERE INITIATED.

STABILIZATION OF STEEP SLOPES SHOULD BE A PRIORITY AT THE CONSTRUCTION SITE.

APPROPRIATE CONTROLS. OTHERWISE THESE DISCHARGES ARE PROHIBITED

PERMITTEES, CONTRACTORS, AND ALL OTHER PARTIES RESPONSIBLE FOR CONDUCTING LAND-DISTURBING ACTIVITIES ARE REQUIRED TO INSTALL AND MAINTAIN ALL EROSION AND SEDIMENT BMPS THAT ARE IDENTIFIED ON THE APPROVED CONSTRUCTION SITE PLANS. THESE BMPS HAVE BEEN DESIGNED AND APPROVED TO ADDRESS SUCH FACTORS AS THE AMOUNT, FREQUENCY, INTENSITY AND DURATION OF PRECIPITATION, THE NATURE OF RESULTING STORMWATER RUNOFF, AND SOIL CHARACTERISTICS, INCLUDING THE RANGE OF SOILS PARTICLE SIZES EXPECTED TO BE PRESENT ON THE CONSTRUCTION SITE. PROPER INSTALLATION, INSPECTION, AND MAINTENANCE WILL ALLOW THESE BMPS TO OPERATE AT MAXIMUM EFFICIENCIES IN ORDER TO MINIMIZE SEDIMENT DISCHARGES TO THE MAXIMUM EXTENT

PERMITTEES, CONTRACTORS, AND ALL OTHER PARTIES RESPONSIBLE FOR CONDUCTING LAND-DISTURBING ACTIVITIES ARE REQUIRED TO INSTALL, IMPLEMENT, AND MAINTAIN EFFECTIVE POLLUTION PREVENTION MEASURES TO MINIMIZE THE DISCHARGE OF POLLUTANTS. AT A MINIMUM, THE FOLLOWING ITEMS MUST BE IMPLEMENTED: • MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING TRENCHES AND EXCAVATIONS BY MANAGING RUNOFF WITH THE

- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH VATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER OF THE PLAN'S LOCATION, ALONG WITH ANY UPDATE CONTACT INFORMATION, MUST BE POSTED NEAR THE MAIN ENTRANCE AT THE TREATMENT PRIOR TO DISCHARGE;
- IDSCAPE MATERIALS FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE TO PRECIPITATION AND TO STORMWATER: AND
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM SPILLS AND LEAKS AND IMPLEMENT CHEMICAL SPILL AND LEAK PREVENTION AND

- PERMITTEES, CONTRACTORS, AND ALL OTHER RESPONSIBLE PARTIES FOR CONDUCTING LAND-DISTURBING ACTIVITIES ARE PROHIBITED TO DISCHARGES, FROM THE CONSTRUCTION SITE, THE FOLLOWING ITEMS:
- ASTEWATER 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
- <u>FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;</u> AND <u>SOAPS OR SOLVENTS</u>

BUFFER ZONE MANAGEMENT

BUFFER ZONE NARRATIVE (COMPLIANCE OPTION A

PER SECTION 3.2.4.C OF THE CGP. A BUFFER ZONE HAS BEEN PROPOSED ALONG THE JURISDICTIONAL WETLANDS ONSITE. A BUFFER ZONE WIDTH OF 30-FT WILL BE MAINTAINED ALONG THE WETLANDS, AS DIRECTED BY COMPLIANCE OPTION A FROM THE CGP

THIS 30-FT BUFFER ZONE IS TO BE IDENTIFIED ON THE SITE BY FLAGGING, INSTALLATION OF TREE PROTECTION FENCE OR OTHER PRACTICES TO MAKE IT READILY IDENTIFIABLE PRIOR TO THE IMPLEMENTATION OF OTHER PERIMETER BMPS AND COMMENCEMENT OF CONSTRUCTION ACTIVITIES ALL PERIMETER BMPS AND SEDIMENT CONTROL BMPS. AS SHOWN ON THE EROSION CONTROL PLAN OF THE CONSTRUCTION SITE PLANS. ARE TO BE INSTALLED PRIOR TO THE DISCHARGE OF STORMWATER RUNOFF INTO THE BUFFER ZONE FROM DISTURBED AREAS.

INSPECTION AND MAINTENANCE OF THE BUFFER ZONE IS TO BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED, OR AS OTHERWISE APPROVED. ALL MAINTENANCE PROCEDURES AND INSPECTION REQUIREMENTS FOR THE PROVIDED BUFFER ZONES CAN BE FOUND ON THE EROSION CONTROL SHEETS

BUFFER ZONE NARRATIVE (COMPLIANCE OPTION B)

PER SECTION 3.2.4.C OF THE CGP. A BUFFER ZONE HAS BEEN PROPOSED ALONG THE JURISDICTIONAL WETLANDS ONSITE. A BUFFER ZONE WIDTH OF 15-FT WILL BE MAINTAINED ALONG THE WETLANDS. AS DIRECTED BY COMPLIANCE OPTION B FROM THE CGP

THIS 15-FT BUFFER ZONE IS TO BE IDENTIFIED ON THE SITE BY FLAGGING, INSTALLATION OF TREE PROTECTION FENCE OR OTHER PRACTICES TO MAKE IT READILY IDENTIFIABLE PRIOR TO THE IMPLEMENTATION OF OTHER PERIMETER BMPS AND COMMENCEMENT OF CONSTRUCTION ACTIVITIES. ALL PERIMETER BMPS AND SEDIMENT CONTROL BMPS. AS SHOWN ON EROSION CONTROL SHEETS OF THE Construction site plans, are to be installed prior to the discharge of stormwater runoff into the buffer zone from

INSPECTION AND MAINTENANCE OF THE BUFFER ZONE IS TO BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED, OR AS OTHERWISE APPROVED. ALL MAINTENANCE PROCEDURES AND INSPECTION REQUIREMENTS FOR THE PROVIDED BUFFER ZONES CAN BE FOUND ON THE EROSION CONTROL SHEETS.

ALL CONSTRUCTION SITES THAT CONTAIN OR ARE ADJACENT TO SURFACE WATERS MUST PROVIDE A VEGETATED BUFFER OF AT LEAST 30 LINEAR FEET, OR 45 LINEAR FEET WHEN THE SURFACE WATER IS CLASSIFIED AS A SENSITIVE WATERS (SECTION 3.2.4.C OF SOUTH CAROLINA'S CGP). THIS REQUIREMENT IS ONLY APPLICABLE DURING CONSTRUCTION. WORK MAY CONDUCTED WITHIN THE BUFFER AREA ONCE ALL DISTURBED AREAS DISCHARGING TOWARDS THE BUFFER ZONE HAVE HAD FINAL STABILIZATION MEASURES IMPLEMENTED. THIS WORK MUST HAVE BEEN INCLUDED WITHIN THE SWPPP AT THE TIME OF COVERAGE APPROVAL.

BUFFER ZONES REQUIREMENTS SHOULD BE EXPLAINED IN DETAIL DURING THE PRE-CONSTRUCTION CONFERENCE. THESE DETAILS SHOULD INCLUDE THE OUTLINING OF THE EXACT LOCATION OF WHERE THE BUFFER STARTS AND ENDS, THE SEDIMENT AND EROSION CONTROLS PRECLUDING THE BUFFER AND ALL OTHER GENERAL INFORMATION PERTINENT TO MAINTAINING THE BUFFER ZONE AREA DURING CONSTRUCTION.

ALL CONTRACTORS AND SUB-CONTRACTORS SHALL BE MADE AWARE OF THE BUFFER ZONES AND ESTABLISH A WORK PROCEDURE THAT PRESERVES AND PROTECTS THESE AREAS. THE BUFFER ZONES SHOULD BE FLAGGED PRIOR TO ANY PERIMETER CONTROL PLACEMENT AND. MOST IMPORTANTLY, BEFORE MASS CLEARING AND GRUBBING, THESE AREAS MUST ALSO BE INSPECTED DURING CONSTRUCTION FOR AREAS OF EXCESSIVE SEDIMENT IMPACTS, WHICH MAY NEED TO BE REMOVED IF SEDIMENT IMPACTS ARE EVIDENT WITHIN THE

1. IN THE EVENT THAT A PORTION OF A BUFFER IS ACCIDENTALLY DISTURBED, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE AREA AS SOON AS POSSIBLE AND CONSULT WITH THE CONSTRUCTION SITE'S INSPECTOR, PERMITTEE, AND/OR ENGINEER ON THE INSTALLATION OF ANY ADDITIONAL SEDIMENT CONTROL OR EROSION PREVENTION MEASURE TO PROTECT THE PORTION OF THE BUFFER STILL UNDISTURBED.

POST CONSTRUCTION MAINTENANCE NOTES FOR BMPS

- 1. MAINTAIN EXISTING POND, PERIMETER SILT FENCE AND INLET PROTECTION DEVICES.

- SPECIFICALLY, EACH RESPONSIBLE PARTY SHOULD BE MADE AWARE OF THE PRACTICES THAT HAVE BEEN OR SHOULD BE IMPLEMENTED AT 4. MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES MUST CONTINUE UNTIL THE SITE IS PERMANENTLY STABILIZED AND
 - . CONTACT DHEC FOR FINAL INSPECTION AND CLOSE-OUT OF PROJECT. AS-BUILT, VIDEO AND CLOSE-OUT APPLICATION TO BE
 - SUBMITTED FOR REVIEW AND APPROVAL. 6. REMOVAL OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS
 - FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER/OPERATOR HAVE THE SWPPP PREPARER OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).
 - 7. SUBMIT TO DHEC FOR NOT.

SITE FEATURES & SENSITIVE AREAS

THROUGHOUT CONSTRUCTION ACTIVITIES, EACH PERMITTEE, CONTRACTOR, AND PERSON RESPONSIBLE FOR CONDUCTING WORK WILL ISSUED COVERAGE UNDER THE CGP SHOULD INCLUDE AMPLE BMPS AND OTHER CONTROL MEASURES TO ADDRESS THIS SPECIFIC STORMWATER RUNOFF SUBJECTED TO THE IDENTIFIED POLLUTION SOURCES MUST BE TREATED BY THE APPROPRIATE BMPS AS DIRECTED

> IN THE EVENT THAT ANY ADDITIONAL SOURCES OF POLLUTION ARE IDENTIFIED DURING CONSTRUCTION, THE PERSON(S) WITH DAY-TO-DAY OPERATIONAL CONTROL AT THE SITE IS TO ADD THE NEW SOURCE(S) TO THE TABLE AND CONSULT WITH THE SWPPP PREPARER TO PROPERLY ADDRESS THIS SOURCE AND TO PREVENT THE DISCHARGE OF ITS POLLUTANT THROUGH STORMWATER RUNOFF.

Source	Material or Chemical	Location	Appropriate Control Measures
toose soil exposed/disturbe d during clearing and grading activities	Sediment	All areas within the Limits of Disturbance	As shown on plans. This in cludes Silt Fence, sediment tubes, sediment basins, and sediment traps.
Areas where construction equipment are cleaned	Heavy Metals & pH	Adjacent to each construction entrance	Concrete Washout Basin as shown on plans
Water encountered during trenching	Nutrients & Sediment	In and around any trenching activities.	Direct water into impoundments such as basins or traps to allow for sedimentation
Paving Operations	Sediment & Trash	All areas to be paved.	Inlet protection.
Material Delivery and Storage Areas	Nutrients, pH, Sediment, Heavy Metals, oils & grease	All areas used as storage areas	Sit fence and/or sediment dikes
Equipment fueling and maintenance areas	Metals, hydrocarbons, oils and greases	Areas surrounding fuel tanks	Provide secondary containments, locate in upland areas. Repair leaking and broken hoses.

- THE DETAILED SPOLIFICE OF THE PROCEDURES AND/OR CONTROLS BELOW IS ESTABLISHED TO PROTECT THE SURFACE WATERS ALONG THE WETLAND LINE AND THE DETENTION POND OUTFALLS. THESE PROCEDURES ARE AS FOLLOWS:
- 2. CAREFULLY PERFORM SELECTIVE CLEARING IN THE FIRST 20 FEET OF AREA UPSTREAM OF THE FIRST ROW OF SILTFENCE USING SMALL RUBBER TIRE EQUIPMENT AND MANUAL LABOR. • A VEGETATIVE AND/OR NON-VEGETATIVE COVER MUST BE ESTABLISHED WITHIN 3 WORKING DAYS FROM THE TIME THAT STABILIZATION 3. INSTALL THE FIRST BATCH OF RIPRAP FOR THE ENERGY DISSIPATION AT THE DOWNSTREAM END OF THE POND OUTFALL LOCATIONS.

INSTALL FIRST ROW OF SILTFENCE ALONG THE ENTIRE LENGTH OF THE PERIMETER OF THE DISTURBANCE ADJACENT TO THE TOP OF

- 4. INSPECT FOR ANY AREAS NATURALLY RECEIVING CONCENTRATED FLOWS FROM UPSTREAM AREAS AND PROVIDE ADDITIONAL BMP MEANS OF PROTECTION TO THE EXISTING WETLANDS AS NECESSARY. ANY POTENTIAL BREACH OF THE WETLAND BUFFER ZONE NOT INDICATED ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OR SWPPP PREPARER. 5. AFTER ESTABLISHING AND SECURING THE BMPS ALONG THE WETLANDS, THE CONTRACTOR MAY BEGIN WITH POND SHAPING WORK AND SITE GRADING WORK SHOWN ON THE CONSTRUCTION PLANS.
- BERMS, POND SLOPES, ANY TEMPORARY SWALES AND DITCHES AND FINISH GRADES WITH GRASSING AND OTHER APPROVED MEANS OF STABILIZATION. MAINTENANCE AND INSPECTIONS OF THE BMPS ALONG THE WETLAND BUFFER SHALL BE PERFORMED AT REGULAR INTERVALS OR FREQUENCY AND AS NECESSARY AFTER RAIN EVENTS. BMPS THAT FAILED ALONG THE WETLAND BUFFER DURING INSPECTIONS SHALL BE REPAIRED IMMEDIATELY WITHIN A 24-HOUR

6. AFTER ALL GRADING WORK ARE ACHIEVED BY APPROVED CONSTRUCTION MEANS, THE CONTRACTOR SHALL STABILIZE THE POND

COMPLIANCE REQUIREMENTS

CONSTRUCTION SITE.

THE OS-SWPPP SHOULD BE KEPT ONSITE FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STARII IZATION IS REACHED.

IF A LOCATION WITHIN THE CONSTRUCTION SITE IS UNAVAILABLE TO STORE THE OS-SWPPP WHEN NO PERSONNEL ARE PRESENT, NOTICE

CONTRACTORS AND/OR RUII DERS. WHO HAVE DAY-TO-DAY OPERATIONAL CONTROL OVER THE OS-SWPPP IMPLEMENTATION, MUST HAVE A COPY OF THIS SWPPP AVAILABLE AT A CENTRAL LOCATION WITHIN THE CONSTRUCTION SITE FOR THE USE BY ALL THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE OS-SWPPF ON-SITE SWPPPS MUST BE MADE AVAILABLE UPON REQUEST AND AT THE TIME OF A CONSTRUCTION SITE INSPECTION BY EPA; DHEC; A

TRIBAL ENTITY DELEGATED LINDER REGULATION 72-300: LOCAL GOVERNMENT OFFICIALS: AND THE OPERATOR OF A MUNICIPAL SEPARATE

PRE-CONSTRUCTION CONFERENCES

A PRECONSTRUCTION CONFERENCE SHALL BE HELD ON SITE BY THE SWPPP PREPARER AND MUST BE ATTENDED BY ALL PRIMARY PERMITTEES, SECONDARY PERMITTEES, CO-PERMITTEES, CONTRACTORS, SUBCONTRACTORS, BLANKET UTILITY PROVIDERS, OS-SWPPP

PREPARERS. SITE MANAGERS. AND SITE INSPECTORS/MONITORS ALL ATTENDEES MUST SIGN A REGISTRATION FORM FOR PROOF OF ATTENDANCE AND SWPPP RECORDS.

STORM SEWER SYSTEM (MS4) RECEIVING DISCHARGES FROM THE CONSTRUCTION SITE TO THE REQUESTOR.

CONSTRUCTION SITE INSPECTIONS ARE TO BE CONDUCTED ON A ROUTINE BASIS AND MUST INCLUDE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY, INCLUDING PERIMETER BMPS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION. EACH INSPECTION MUST LOOK FOR THE EVIDENCE OF, OR THE POTENTIAL FOR, INEFFICIENCIES WITHIN THE IMPLEMENTED OS-SWPPP, WHETHER THE INEFFICIENCIES ARE A DIRECT RESULT OF IMPROPER DESIGN, INSTALLATION OR MAINTENANCE, BY INSPECTING, AT A MINIMUM THE FOLLOWING

I. ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVITY AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION: II. ALL STORMWATER CONVEYANCE SYSTEMS FOR ANY EVIDENCE OF, OF THE POTENTIAL FOR, POLLUTANTS ENTERING THESE SYSTEMS; III.ALL BMPS IDENTIFIED IN THE OS-SWPPF

IV. ALL DISCHARGE LOCATIONS TO ASCERTAIN WHETHER THE IMPLEMENTED BMPS ARE EFFECTIVE IN PREVENTING THE DISCHARGE OF SEDIMENT FROM THE SITE. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS MUST BE INSPECTED TO THE EXTENT THAT SUCH INSPECTIONS ARE PRACTICABLE: AND V.LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF A LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. AN INSPECTION IS RECOMMENDED WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER. PERMITTEES SHALL EITHER MAINTAIN AN ON-SITE RAIN GAUGE OR USE DATA FROM A CERTIFIED WEATHER RECORD LOCATED WITHIN A

REASONABLE PROXIMITY OF THE CONSTRUCTION SITE, TO RECORD RAINFALL RECORDS FROM ANY SIGNIFICANT RAINFALL EVENT, 0.5

INCHES OR GREATER. THESE RECORDED RAINFALL AMOUNTS MUST BE MAINTAINED IN A RAIN LOG LOCATED IN THE OS_SWPPP. RAINFALL RECORDS FOR THE DAY OF AN INSPECTION AND ANY SIGNIFICANT RAINFALL EVENTS SINCE THE LAST INSPECTION MUST BE REPORTED ON EACH WEEKLY INSPECTION REPORT INSPECTIONS MUST BE CONDUCTED BY QUALIFIED PERSONNEL. "QUALIFIED PERSONEL" MEANS A PERSON KNOWLEDGEABLE IN THE PRINCIPLES AND PRACTICE OF EROSION AND SEDIMENT CONTROLS WHO POSSESSES THE SKILLS TO ASSESS CONDITIONS AT TH

CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY AND TO ASSESS THE EFFECTIVENESS OF ANY BMPS SELECTED TO CONTROL THE QUALITY OF STORMWATER DISCHARGES FROM THE CONSTRUCTION SITE. A.ALL BMPS AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE OS-SWPPP MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. IF THERE ARE BMPS THAT ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED WITHIN SEVEN (7) CALENDAR DAYS, BEFORE THE NEXT INSPECTION, OR AS REASONABLY POSSIBLE, AND BEFORE THE NEXT STORM EVENT WHENEVER

PRACTICABLE TO MAINTAIN THE CONTINUED EFFECTIVENESS OF STORMWATER CONTROLS. 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 OS-SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE. SEDIMEN FROM SEDIMENT TRAPS OR SEDIMENT BASINS MUST BE REMOVED AS INDICATED IN THE OS-SWPPP OR WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%. WHICHEVER OCCURS FIRST. SEDIMENT COLLECTED BY SILT FENCE. OR ANOTHER SEDIMENT CONTROL MEASURE, MUST BE REMOVED WHEN THE DEPOSITED SEDIMENT REACHES 1/3 OF THE HEIGHT OF THE ABOVE-GROUND PORTION OF

B. PERMANENT MAINTENANCE. PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE ROUTINELY MAINTAINED TO OPERATE PER DESIGN. THE DEPARTMENT REQUIRES INCLUSION OF A PERMANENT STORMWATER MANAGEMENT MAINTENANCE AGREEMENT AND A MAINTENANCE PLAN TO ENSURE PROPER OPERATION.

THESE BMPS, OR BEFORE IT REACHES A LOWER HEIGHT BASED ON THE MANUFACTURER'S SPECIFICATIONS.

C.SECONDARY PERMITTEE COMMON BMP MAINTENANCE REQUIREMENT. IT SHALL BE THE RESPONSIBILITY OF THE SECONDARY PERMITTEE TO EITHER MAINTAIN OR COORDINATE THE MAINTENANCE OF ANY COMMON STORMWATER BMPS, ACCEPTING STORMWATER DISCHARGES FROM ANY AREA ASSOCIATED WITH THEIR WORK, WITH THE PRIMARY PERMITTEE OR THE PARTY RESPONSIBLE FOR PERMANENT MAINTENANCE.

MAINTENANCE REQUIREMENTS (CONT.)

LOGS MAY INCLUDE, BUT ARE NOT LIMITED TO, A PRE-CONSTRUCTION CONFERENCE LOG, AND INSPECTION LOG, SWPPP MODIFICATIONS, A STABILIZATION LOG, A RAIN LOG, A CONTRACTOR LOG AND/OR ANY ADDITIONAL RECORD KEEPING AS DEEMED NECESSARY BY THE PERMITTEE, CONTRACTOR, DHEC, MS4 OR AN ENTITY DELEGATED UNDER REGULATION 72-300.

FINAL STABILIZATION WILL BE ACHIEVED WHEN ALL DISTURBED AREAS HAVE EITHER BEEN PAVED, HAD HOUSES BUILT UPON THEM, OR HAVE BEEN PERMANENTLY GRASSED OR SODDED. GRASS SHALL HAVE TAKEN ROOT AND SHALL HAVE GOOD COVERAGE OF 80% OR MORE. STORMWATER PONDS SHALL HAVE BEEN CLEANED AND DRUDGED OF ACCUMULATED SEDIMENT. ALL DITCHES SHALL HAVE GOOD GRASS COVERAGE AND HAVE BEGUN A REGULAR MAINTENANCE PROGRAM OF CUTTING TO REDUCE WEEDS AND CATTAILS IN THE DITCH BOTTOM. RIPRAP AREAS SHALL BE FREE OF ACCUMULATED SEDIMENT. ROCK CHECK DAMS AND LEVEL SPREADERS SHALL BE MAINTAINED AND REMAIN FREE OF ACCUMULATED SEDIMENTS. ONCE THIS IS ACHIEVED. THE OS-SWPPP ADMINISTRATOR SHALL REQUEST A FINAL INSPECTION AND NOTICE OF TERMINATION (NOT) OF THE LAND DISTURBANCE PERMIT. IF THE NOT IS APPROVED, THE CONTRACTOR MAY REMOVE THE TEMPORARY BMPS, I.E., THE SILT FENCE AND TEMPORARY CURB INLET FILTERS.

THE NOT MUST BE SUBMITTED WITHIN 30 DAYS OF ONE OF THE ABOVE CONDITIONS BEING MET. AUTHORIZATION TO DISCHARGE TERMINATES AT MIDNIGHT OF THE DAY THE NOT IS SIGNED. IF AN NOT HAS BEEN SUBMITTED AND THE CONSTRUCTION SITE DOES NOT MEET THE CRITERIA FOR TERMINATION. THEN THE CONSTRUCTION SITE REMAINS SUBJECT TO THE PROVISIONS OF THIS PERMIT FOR RESIDENTIAL SUBDIVISIONS, PRIMARY PERMITTEES DO NOT NEED TO TERMINATE PERMIT COVERAGE IN AREAS WHERE SECONDARY PERMITTEES HAVE RECEIVED PERMIT COVERAGE TO PERFORM WORK UNDER THE PERMIT. PRIMARY PERMITTEES CAN REQUEST TO TERMINATE COVERAGE WHEN SECONDARY PERMITTEES ARE AUTHORIZED TO CONDUCT CONSTRUCTION ACTIVITIES, INDEPENDENT OF THE PRIMARY PERMITTEE, FOR THE REMAINING DISTURBED AREAS ON THE CONSTRUCTION SITE AND FINAL STABILIZATION HAS BEEN

BEST MANAGEMENT PRACTICES (BMPs)

EROSION PREVENTION

ACHIEVED ON ALL OTHER AREAS OF THE CONSTRUCTION SITE

TEMPORARY SEEDING & DUST CONTROL

REQUIREMENT - TEMPORARY STABILIZATION IS REQUIRED WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY IS COMPLETE UNLESS CONSTRUCTION ACTIVITY IS GOING TO RESUME WITHIN 21 DAYS, COVER SEEDED AREAS WITH AN APPROPRIATE MUI CH. TO PROVIDE PROTECTION FROM THE WEATHER. WHEN THE TEMPORARY VEGETATION DOES NOT GROW QUICKLY OR THICK ENOUGH TO PREVENT EROSION, RE-SEED AS SOON AS POSSIBLE. KEEP SEEDED AREAS ADEQUATELY MOIST. IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE GERMINATION AND GROWTH OF SEEDLINGS, WATER SEEDED

AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF.

SEED SELECTION IS BASED ON GEOGRAPHICAL LOCATION, SOIL TYPE AND THE SEASON OF THE YEAR IN WHICH THE PLANTING IS TO BE DONE.

INSTALLATION 3.1. TILLAGE

3.1.1. IF THE AREA HAS BEEN RECENTLY PLOWED, NO TILLAGE IS REQUIRED OTHER THAN RAKING OR SURFACE ROUGHENING TO BREAK ANY CRUST THAT HAS FORMED LEAVING A TEXTURED SURFACE. DISK THE SOIL FOR OPTIMAL GERMINATION WHEN THE SOIL IS COMPACTED LESS THAN 6-INCHES. 3.2. LIME

LIME IS NOT REQUIRED FOR TEMPORARY SEEDING UNLESS A SOIL TEST SHOWS THAT THE SOIL PH IS BELOW 5.0. IT MAY BE DESIRABLE TO APPLY LIME DURING THE TEMPORARY SEEDING OPERATION TO BENEFIT THE LONG-TERM PERMANENT SEEDING. APPLY A MINIMUM OF 1.5 TONS OF LIME/ACRE (70 POUNDS PER 1000 SQUARE FEET) IF IT IS TO BE USED. 3.3. FERTILIZER APPLY A MINIMUM OF 500 POUNDS PER ACRE OF 10-10-10 FERTILIZER (11.5 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING

THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. LOOSEN THE SOIL SURFACE BEFORE BROADCASTING THE SEED, APPLY SEED EVENLY BY THE MOST CONVENIENT METHOD AVAILABLE FOR THE TYPE OF SEED USED AND THE LOCATION OF THE TEMPORARY SEEDING. TYPICAL APPLICATION METHODS INCLUDE BUT ARE NOT LIMITED TO CYCLONE SEEDERS, ROTARY SPREADERS, DROP SPREADERS, BROADCAST SPREADERS, HAND SPREADERS, CULTIPACKER SEEDER, AND HYDRO-SEEDERS, COVER APPLIED SEED BY RAKING OR DRAGGING A CHAIN, AND THEN LIGHTLY FIRM THE AREA WITH A ROLLER OR CULTIPACKER.

TEMPORARY SEEDING UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO

USE MULCH WITH TEMPORARY SEED APPLICATIONS TO RETAIN SOIL MOISTURE AND REDUCE EROSION DURING THE ESTABLISHMENT OF VEGETATION, TYPICAL MULCH APPLICATIONS INCLUDE STRAW, WOOD FIBER, HYDROMULCHES, BFM AND FGM, USE HYDROMULCHES WITH

THE MOST COMMONLY ACCEPTED MUI CHIUSED IN CONJUNCTION WITH TEMPORARY SEEDING IS SMALL GRAIN STRAW. THIS STRAW SHOULD BE DRY AND FREE FROM MOLD DAMAGE AND NOXIOUS WEEDS. THE STRAW MAY NEED TO BE ANCHORED WITH NETTING OR EMULSIONS TO PREVENT IT FROM BEING BLOWN OR WASHED AWAY. APPLY THE STRAW MULCH BY HAND OR MACHINE AT THE RATE 1.5-2 TONS PER ACRE (90 POUNDS PER 1000 SQUARE FEET). FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD.

SEEDED AREAS SHOULD BE KEPT ADEQUATELY MOIST, IRRIGATE THE SEEDED AREA IF NORMAL RAINFALL IS NOT ADEQUATE FOR THE

GERMINATION AND GROWTH OF SEEDLINGS. WATER SEEDED AREAS AT CONTROLLED RATES THAT ARE LESS THAN THE RATE AT WHICH THE SOIL CAN ABSORB WATER TO PREVENT RUNOFF. RUNOFF OF IRRIGATION WATER WASTES WATER AND CAN CAUSE EROSION. 3.7.1. RE-SEED AREAS WHERE SEEDING DOES NOT GROW QUICKLY, THICK ENOUGH, OR ADEQUATELY TO PREVENT EROSION. BASE SEED SELECTION SHOULD ON THE REQUIREMENTS OF LOCAL SPECIFICATIONS

INSPECTION AND MAINTENANCE 4.1. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF

COVER SEEDED WITH MULCH TO PROVIDE PROTECTION, FREQUENT INSPECTIONS ARE NECESSARY TO CHECK THAT CONDITIONS FOR GROWTH ARE GOOD. SUPPLY TEMPORARY SEEDING WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY IN ABNORMALLY HOT OR DRY WEATHER OR ON ADVERSE SITES. CONTROL WATER APPLICATION RATES TO PREVENT RUNOFF. BASE SEED SELECTION ON LOCAL SPECIFICATIONS.

4.4. RE-SEED AREAS WHERE THE PLANTS DO NOT GROW QUICK ENOUGH. THICK ENOUGH. OR ADEQUATELY ENOUGH TO PREVENT EROSION

SEDIMENT CONTROL

INLET PROTECTION

INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH STORM THAT PRODUCES 1/2-INCHES OR MORE OF RAIN, HANDLE ANY DAMAGE OR NEEDED REPAIRS IMMEDIATELY INSPECT AFTER INSTALLATION FOR GAPS THAT MAY PERMIT SEDIMENT TO ENTER THE STORM DRAINAGE SYSTEM. REMOVE ACCUMULATED SEDIMENT AND DEBRIS FROM THE SURFACE AND VICINITY OF INLET FILTERS AFTER EACH RAIN EVENT OR AS DIRECTED BY THE ENGINEER, INSPECTOR OR MANUFACTURER'S REPRESENTATIVE

REMOVE SEDIMENT WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE INLET FILTER IF A SLIMP IS LISED. REMOVE SEDIMENT WHEN IT FILLS APPROXIMATELY 1/3 THE DEPTH OF THE HOLE. MAINTAIN THE POOL AREA, ALWAYS PROVIDING ADEQUATE SEDIMENT STORAGE REMOVE MOVE AND/OR REPLACE AS REQUIRED TO ADAPT TO CHANGING CONSTRUCTION SITE CONDITIONS

REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT AND DISPOSE OF THEM PROPERLY. GRADE THE DISTURBED AREAS TO THE ELEVATION

REMOVE INLET FILTERS FROM THE SITE WHEN THE FUNCTIONAL LONGEVITY IS EXCEEDED AS DETERMINED BY THE ENGINEER, INSPECTOR OR MANUFACTURER'S REPRESENTATIVE DISPOSE OF INLET FILTERS NO LONGER IN USE AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY PRIOR TO FINAL STABILIZATION. BACKFILL AND REPAIR ALL TRENCHES, DEPRESSIONS, AND OTHER GROUND DISTURBANCES CAUSED BY THE

CONSTRUCTION ENTRANCE

1. DESIGN REQUIREMENTS (MAY BE MODIFIED AS NEEDED TO ACCOMMODATE SITE CONSTRAINTS) 1.1. MINIMUM THICKNESS = 6 INCHES

MINIMUM WIDTH = 24' MINIMUM LENGTH = 100' OR REQUIRED LENGTH FOR 10 TIRE REVOLUTIONS

MATERIAL SHALL BE STONE WITH D50 DIAMETER RANGING FROM 2-3 INCHES

OF THE INLET STRUCTURE CREST. STABILIZE ALL BARE AREAS IMMEDIATELY.

NON-WOVEN GEOTEXTILE FABRIC IS REQUIRED TO UNDERLIE THE STONE

2. INSPECTION AND MAINTENANCE 2.1. INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF PRECIPITATION, OR AFTER HEAVY USE CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY.

2.3. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. 2.4. WASH OR REPLACE THE STONE IN THE ENTRANCE WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF SITE BY VEHICLES. FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING.

ONLY USE FLUSHING WHEN THE WATER IS DISCHARGED TO A SEDIMENT TRAP OR BASIN. REPAIR ANY BROKEN PAVEMENT IMMEDIATELY DISPOSE OF SEDIMENT IN A SUITABLE AREA IN SUCH A MANNER THAT IT WILL NOT ERODE. 2.9. REMOVE AS SOON AS THEY ARE NO LONGER NEEDED TO PROVIDE ACCESS TO THE SITE. BRING THE DISTURBED AREA TO GRADE,

SILT FENCE

DESIGN REQUIREMENTS

80 PERCENT DESIGN REMOVAL EFFICIENCY GOAL FOR TSS MAXIMUM SLOPE LENGTH - 100-FEET

MAXIMUM SLOPE GRADIENT - 2H:1\ MINIMUM INSTALLED FENCE FABRIC HEIGHT – 18-INCHES

2.6. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.

AND STABILIZE IT USING APPROPRIATE PERMANENT STABILIZATION METHODS.

MAXIMUM INSTALLED FENCE FABRIC HEIGHT – 24-INCHES (EXCEPTION FOR TIDAL AREAS) MINIMUM POST BURY DEPTH – 18-INCHES

PRACTICES (BMPS) ARE NO LONGER NEEDED.

MAXIMUM POST SPACING - 6-FEET

2. INSPECTION AND MAINTENANCE 2.1 INSPECT EVERY 7 CALENDAR DAYS AND WITHIN 24-HOURS AFTER FACH 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. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE SECTION OF FENCE IMMEDIATELY.

2.3. REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. 2.5. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BEST MANAGEMENT

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STANTEC CONSULTING SERVICES, INC. No. C02310
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 No. C02310
 No. C02310

Client/Project

File Name: 18358tb.dwg

SOUTH CAROLINA

HAMLIN SUBSTATION EXPANSION

DOMINION ENERGY

Charleston County, SC

SWPPP NOTES

Project No. Scale

> AS NOTED Sheet

Drawing No.

215618358

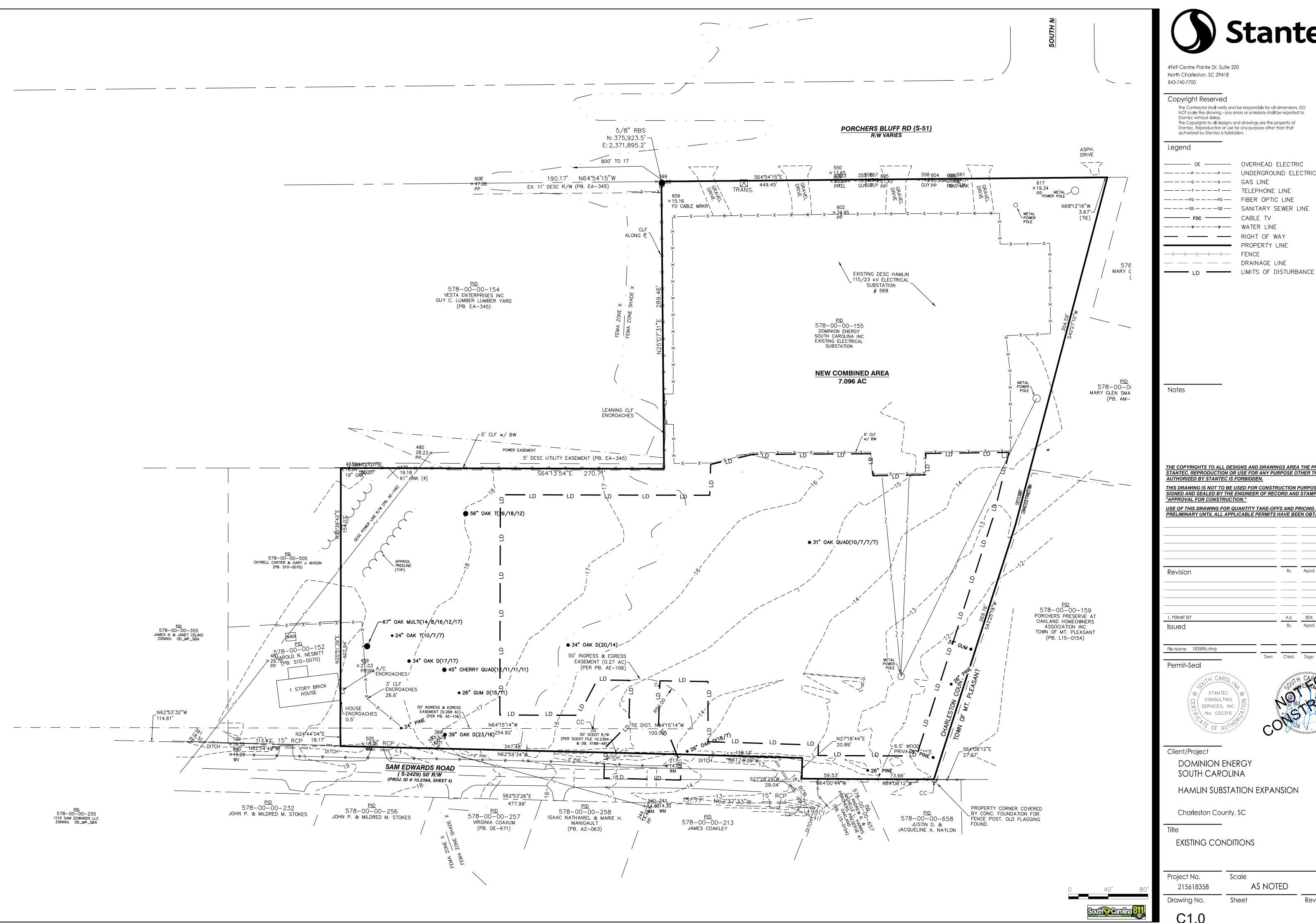
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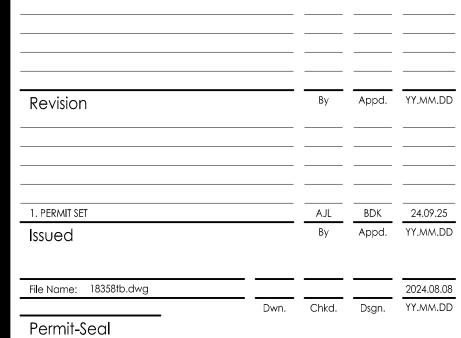
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OVERHEAD ELECTRIC — — — P — — P — UNDERGROUND ELECTRIC ————ss———ss—— SANITARY SEWER LINE FOC CABLE TV ——————— WATER LINE PROPERTY LINE

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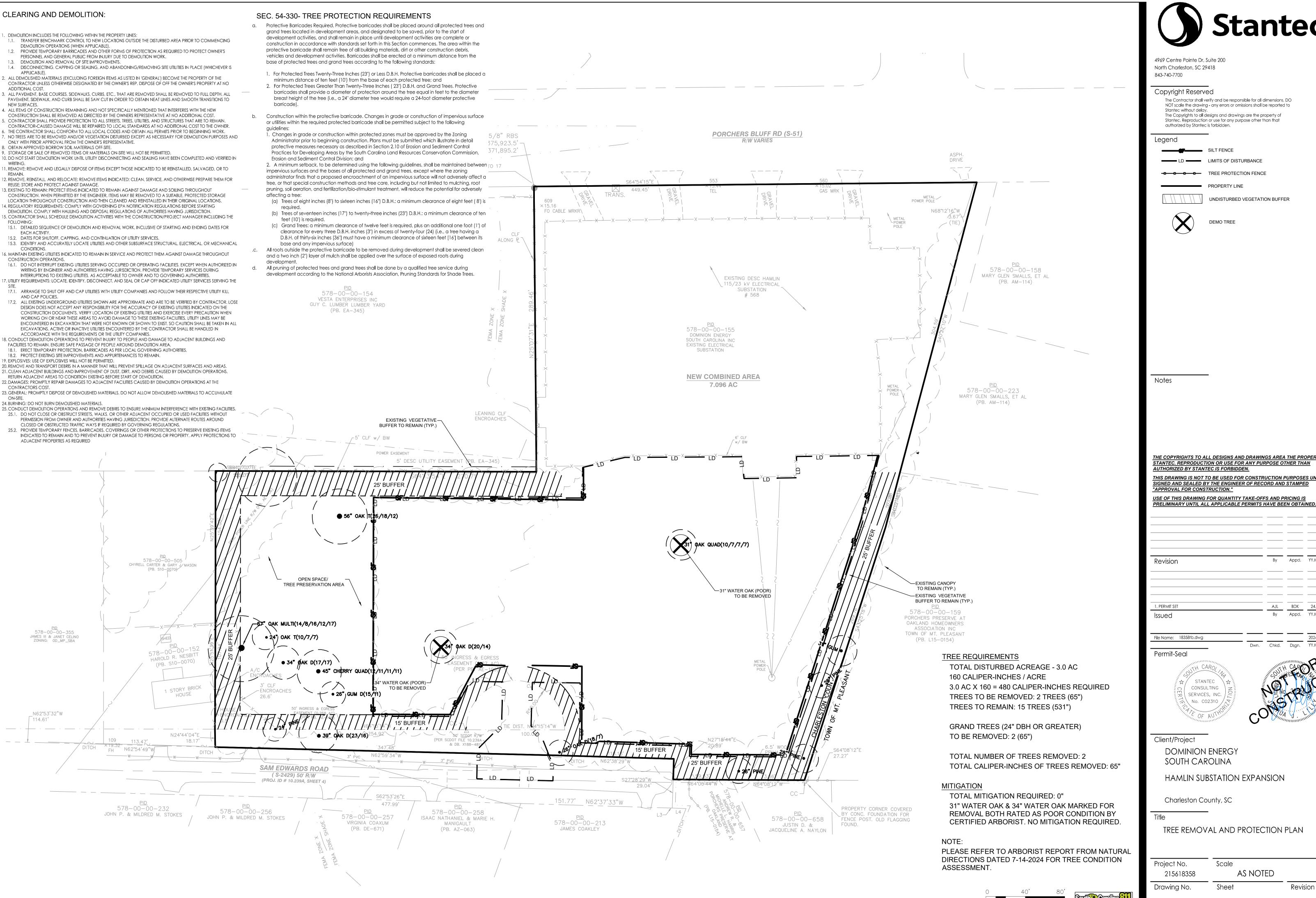
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Project No.	Scale	
215618358	as noted	
Drawing No.	Sheet	Revision



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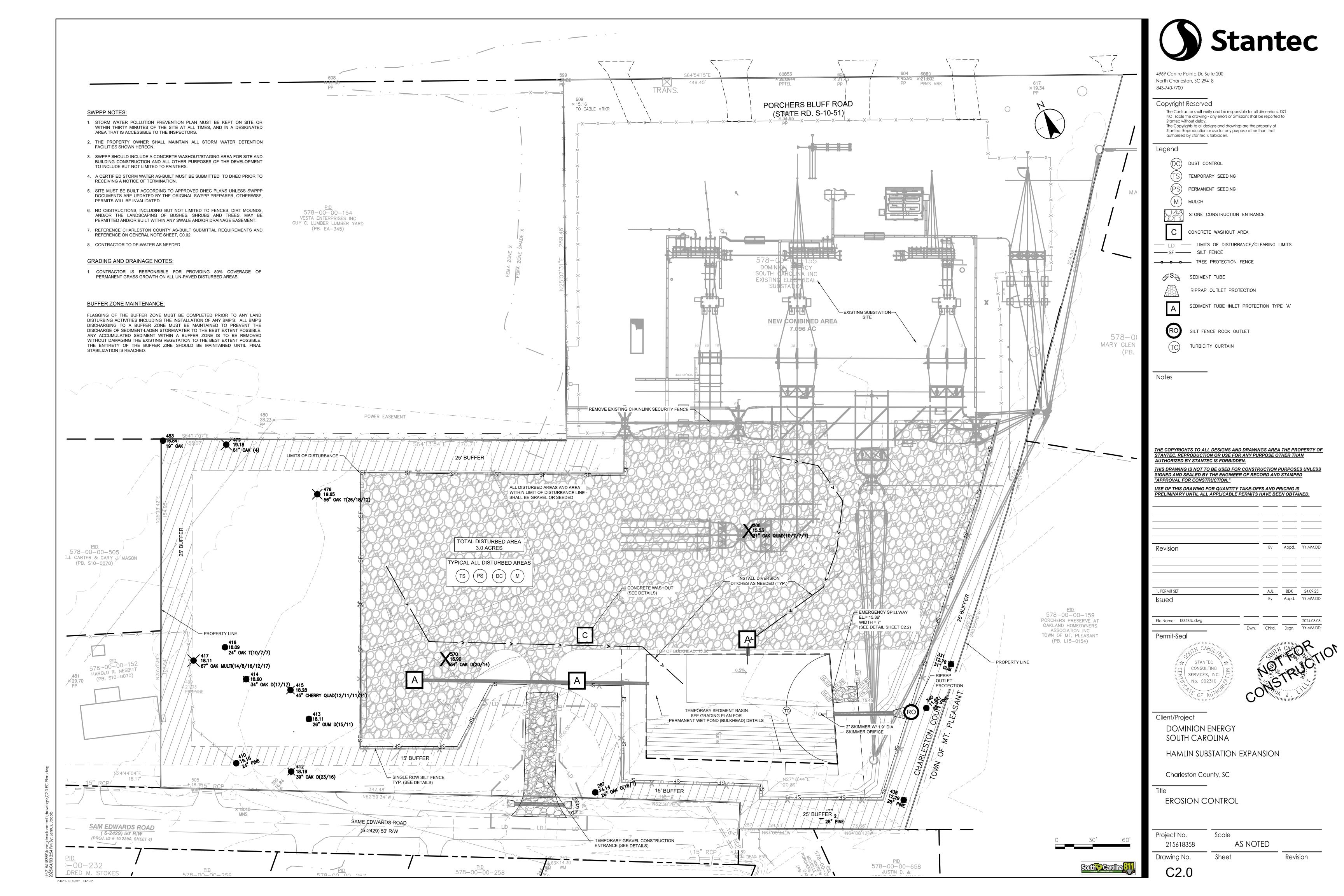
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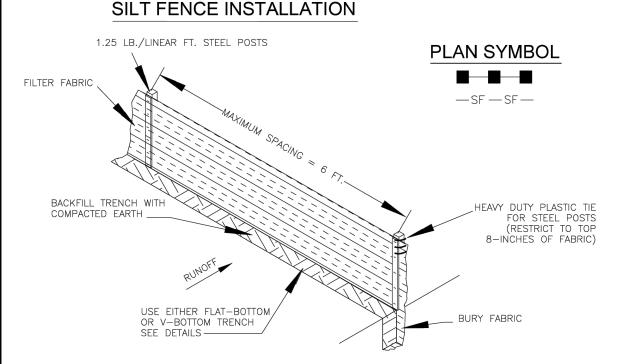
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HAMLIN SUBSTATION EXPANSION

TREE REMOVAL AND PROTECTION PLAN

AS NOTED Revision





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.
- 4. 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 - 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
- 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

6-INCH MI

SIZE

6 INCHES

24 FEET

100 FEET

D = 2-3 INCHES

AVERAGE STONE DIAMETER

OF 2 TO 3-INCHES

UNDERLYING NON-WOVEN GEOTEXTILE FABRIC ----

SPECIFICATION

ROCK PAD THICKNESS

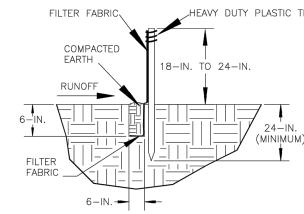
ROCK PAD WIDTH

ROCK PAD LENGTH

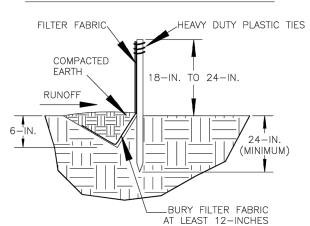
ROCK PAD STONE SIZE

WITH A 6-INCH MINIMUM DEPTH-

FLAT-BOTTOM TRENCH DETAIL HEAVY DUTY PLASTIC TIE



V-SHAPED TRENCH DETAIL



South Carolina Department of Health and Environmental Contro

SILT FENCE and A brawing no. SC-03 Page 1 of NOT TO SCALE

- EDGES SHALL BE TAPERED OUT

TRACKING OF MUD ON THE EDGES

PLAN SYMBOL

South Carolina Department of

Health and Environmental Control

CONSTRUCTION ENTRANC

andard drawing no. SC-06 PAGE 1 of

NOT TO SCALE FEBRUARY 2014

DATE

PLAN SYMBOL

South Carolina Department of

Health and Environmental Control

idard drawing no. SC-05 PAGE 1 of

SEDIMENT TUBES

NOT TO SCALE

Stakes

Placed

Minimum

Spacing

at 2'

TOWARDS ROAD TO PREVENT

- 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 Include a standard "T" section with a nominal face width of 1.38—inches and a nominal "T" length of 1.48—inches. - Weigh 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
- 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.

_T FENCE — FABRIC REQUIREMENTS

the barrier to avoid joints.

provide positive drainage.

accommodate site constraints.

- 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 - 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 installed at a minimum of 24—inches above the ground.

CONSTRUCTION ENTRANCE — GENERAL NOTES

Stabilized construction entrances should be used at all points

public road or any impervious surfaces, such as parking lots.

where traffic will egress/ingress a construction site onto a

Install a non-woven geotextile fabric prior to placing any

Install a culvert pipe across the entrance when needed to

4. The entrance shall consist of 2-inch to 3-inch D50 stone

100—feet long, and may be modified as necessary to

road to prevent tracking at the edge of the entrance.

a sediment trap or basin or other sediment trapping

8. Limestone may not be used for the stone pad.

Minimum dimensions of the entrance shall be 24-feet wide

The edges of the entrance shall be tapered out towards the

Divert all surface runoff and drainage from the stone pad to

placed at a minimum depth of 6—inches.

Filter Fabric shall be purchased in continuous rolls and cut to the length of

- SILT FENCE INSPECTION & MAINTENANCE 1. The key to functional silt fence is weekly inspections, routine maintenance, regular sediment removal
- 2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24—hours after each rainfall even that produces 1/2—inch or more of precipitation.
- 3. Attention to sediment accumulations along the silt fence is extremely Accumulated sediment should be continually monitored and removed when
- 4. Remove accumulated sediment when it reaches 1/3 the height of the silt
- 5. Removed sediment shall be placed in stockpile storage areas or spread across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. 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,
- 7. 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
- 8. Silt fence should be removed within 30 days after final stabilization is and once it is removed, the resulting disturbed area shall be permanently

South Carolina Department of Health and Environmental Control

SILT FENCE

andard drawing no. SC-O3 PAGE 2 of SENERAL NOTES FEBRUARY 2014

DATE

1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal. 2. Regular inspections of construction entrances shall be

- conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
- 3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.

CONSTR. ENTRANCE - INSPECTION & MAINTENANC

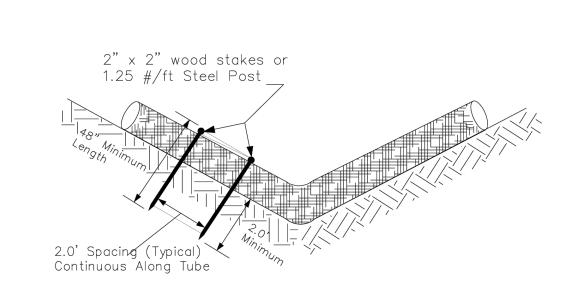
- 4. Reshape the stone pad as necessary for drainage and runoff
- 5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off—site by vehicles. Frequent washing will extend the useful life of stone pad.
- 6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
- 7. During maintenance activities, any broken pavement should be repaired immediately.
- 8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post-construction.

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CONSTRUCTION ENTRANCE

tandard drawing no. SC-06 PAGE 2 of GENERAL NOTES FEBRUARY 2014
DATE

SEDIMENT TUBE INSTALLATION



SEDIMENT TUBE SPACING

SLOPE	MAX. SEDIMENT TUBE SPACING	
LESS THAN 2%	150-FEET	
2%	100-FEET	
3%	75-FEET	
4%	50-FEET	
5%	40-FEET	
6%	30-FEET	
GREATER THAN 6%	25-FEET	
6%		

EDIMENT TUBES — GENERAL NOTES Sediment tubes may be installed along contours, in drainage conveyance channels, and around inlets to help prevent off—site discharge of sediment—laden stormwater runoff.

- Sediment tubes are elongated tubes of compacted geotextiles, curled excelsior wood, natural coconut fiber, or hardwood mulch. Straw, pine needle, and leaf mulch-filled
- sediment tubes are not permitted. The outer netting of the sediment tube should consist of seamless, high-density polyethylene photodegradable materials treated with ultraviolet stabilizers or a seamless, high-density
- polyethylene non-degradable material. Sediment tubes, when used as checks within channels, should range between 18-inches and 24-inches depending on channel dimensions. Diameters outside this range may be
- allowed where necessary when approved. Curled excelsior wood, or natural coconut products that are
- rolled up to create a sediment tube are not allowed. Sediment tubes should be staked using wooden stakes (2-inch X 2-inch) or steel posts (standard "U" or "T"
- Install all sediment tubes to ensure that no gaps exist between the soil and the bottom of the tube. Manufacturer's recommendations should always be consulted before

sections with a minimum weight of 1.25 pounds per foot) at

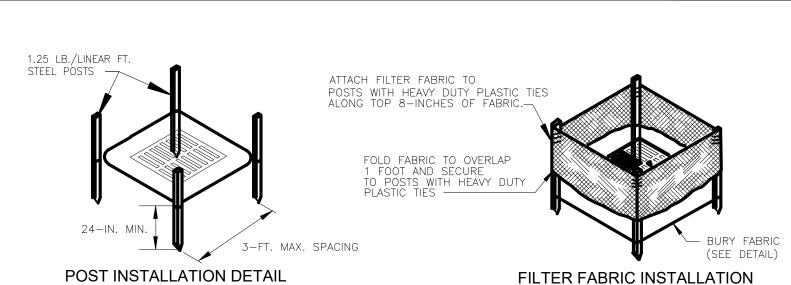
a minimum of 48—inches in length placed on 2—foot centers.

- The ends of adjacent sediment tubes should be overlapped 6-inches to prevent flow and sediment from passing through
- Sediment tubes should not be stacked on top of one another, unless recommended by manufacturer.
- . Each sediment tube should be installed in a trench with a depth equal to 1/5 the diameter of the sediment tube.
- . Sediment tubes should continue up the side slopes a of 1-foot above the design flow depth of the channel. 2. Install stakes at a diagonal facing incoming runoff.

- SEDIMENT TUBES INSPECTION & MAINTENANCE 1. The key to functional sediment tubes is weekly inspections, routine maintenance, and regular sediment removal.
- 2. Regular inspections of sediment tubes shall be conducted every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of
- 3. Attention to sediment accumulations in front of the sediment tube is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
- 4. Remove accumulated sediment when it reaches 1/3 the of the sediment tube.
- 5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
- 6. Large debris, trash, and leaves should be removed from in front of tubes when found.
- 7. If erosion causes the edges to fall to a height equal to or below the height of the sediment tube, repairs should be immediately to prevent runoff from bypassing tube.
- 8. Sediment tubes should be removed after the contributing drainage area has been completely stabilized. Permanent vegetation should replace areas from which sediment tubes have been removed.

South Carolina Department of Health and Environmental Contro

SEDIMENT TUBES indard drawing no. SC-05 PAGE 2 of 2 GENERAL NOTES FEBRUARY 2014
DATE



-18-IN. TO 24-IN. 48-IN. MIN. 8-IN. MIN. BURY & TRENCH MINIMUM

OF 12-INCHES OF FILTER FABRIC-FILTER FABRIC BURIAL DETAIL

TYPE A - FILTER FABRIC REQUIREMENTS

consists of the following requirements:

physical properties after installa

and/or filtering properties; and, Have a minimum width of 36-inches.

toed in when the trench is backfilled.

length of the barrier to avoid joints.

Weigh 1.25 pounds per foot (± 8%)

TYPE A - POST REQUIREMENTS

minimum, the following physical characteristics.

Composed of a high strength steel with a minimum yield strength of 50,000 psi.

height of 3 feet shall be maintained above the ground.

4. Post spacing shall be at a maximum of 3-feet on center.

Include a standard "T" section with a nominal face width of

1.38—inches and a nominal "T" length of 1.48—inches.

2. Posts shall be equipped with projections to aid in fastening of filter

3 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

I. Silt fence must be composed of woven geotextile filter fabric that

polyamides that are formed into a network such that the

filaments or yarns retain dimensional stability relative to each

Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or

Free of any treatment or coating which might adversely alter its

Free of any defects or flaws that significantly affect its physical

2. 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

3. 12-inches of the fabric should be placed within excavated trench and

4. Filter Fabric shall be purchased in continuous rolls and cut to the

5. Filter Fabric shall be installed at a minimum of 24-inches above the

I. Silt Fence posts must be 48—inch long steel posts that meet, at a

TYPE A - INSPECTION & MAINTENANCE 1. The key to functional inlet protection is weekly inspections, routine

DETAIL

PLAN SYMBOL

South Carolina Department of

Health and Environmental Contro

NOT TO SCALE

FILTER FABIC INLET PROTECTION

NDARD DRAWING NO. SC-07 PAGE 1 of 2

- 2. Regular inspections of inlet protection shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2—inch or more of precipitation.
- 3. Attention to sediment accumulations along the filter fabric is extremely important. Accumulated sediment should be continually monitored and removed when necessary. 4. Remove accumulated sediment when it reaches 1/3 the height of the

filter fabric. When a sump is installed in front of the fabric, sediment

- should be removed when it fills approximately 1/3 the depth of the 5. Removed sediment shall be placed in stockpile storage areas or
- spread thinly across disturbed area. Stabilize the removed sediment after it is relocated. 6. Check for areas where stormwater runoff has eroded a channel
- beneath the filter fabric, or where the fabric has sagged or collapsed due to runoff overtopping the inlet protection. 7. Check for tears within the filter fabric, areas where fabric has begun to decompose, and for any other circumstance that may render the inlet protection ineffective. Removed damaged fabric and reinstall new filter fabric immediately.
- 8. Inlet protection structures should be removed after all the disturbed areas are permanently stabilized. Remove all construction material and sediment, and dispose of them properly. Grade the disturbed area to the elevation of the drop inlet structure crest. Stabilize all bare greas

South Carolina Department of Health and Environmental Contro

FILTER FABIC INLET PROTECTION DARD DRAWING NO. SC-07 PAGE 2 of 2 GENERAL NOTES FEBRUARY 2014
DATE

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File Name: 18358tb.dwg

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Dwn. Chkd. Dsgn. YY.MM.DD

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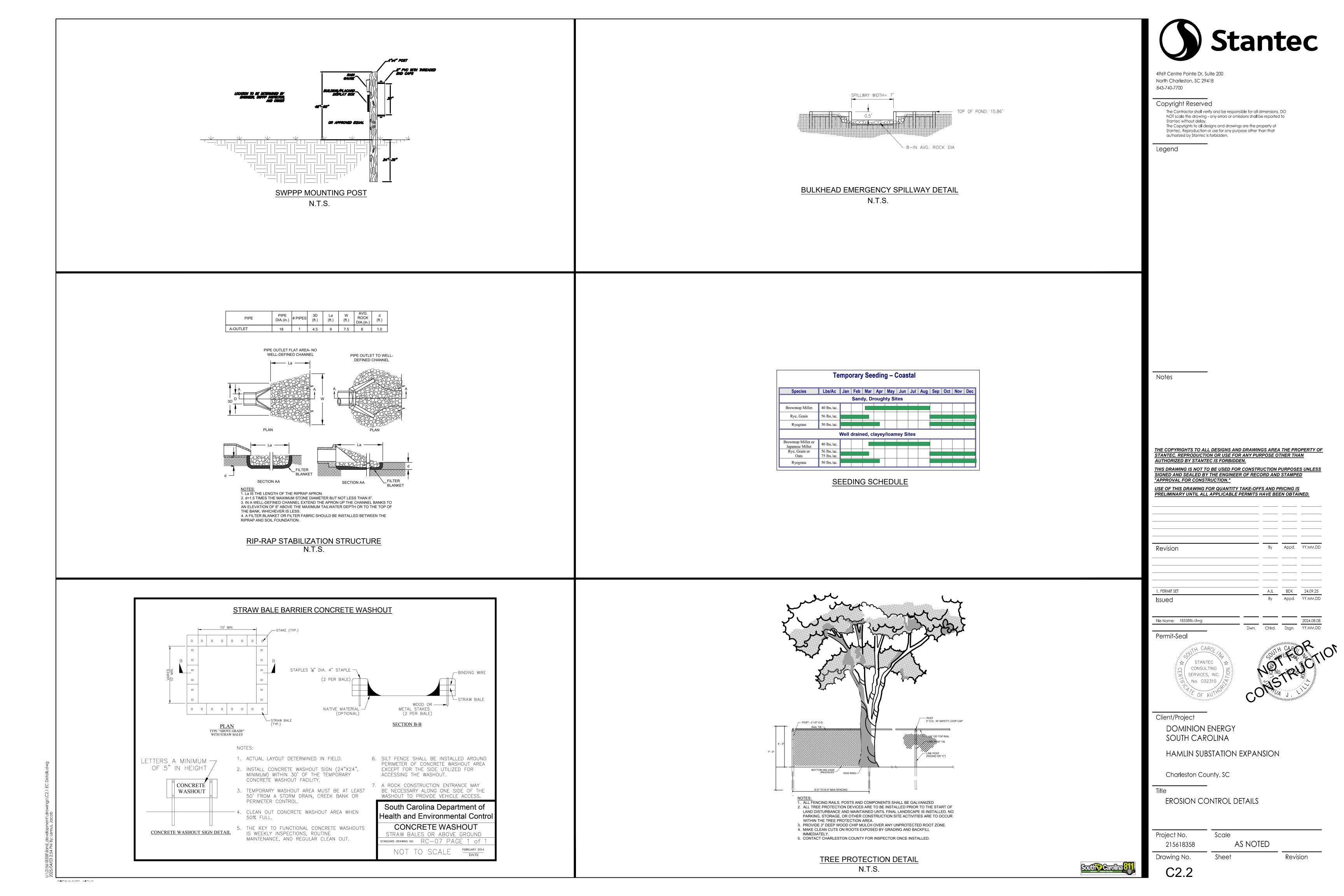
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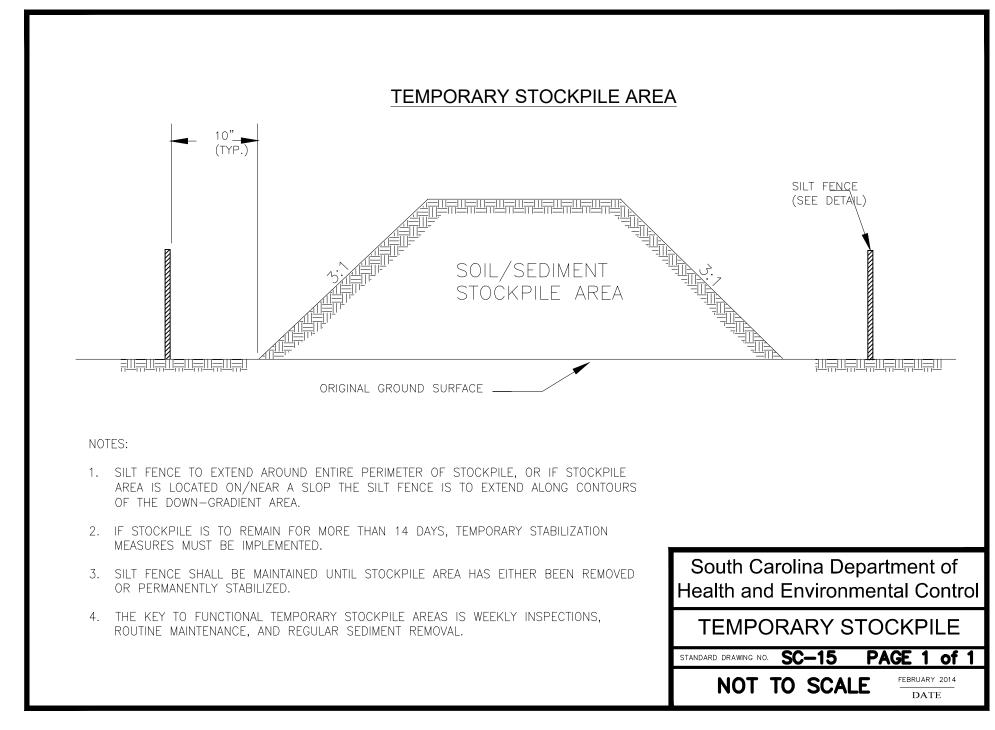
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EROSION CONTROL DETAILS

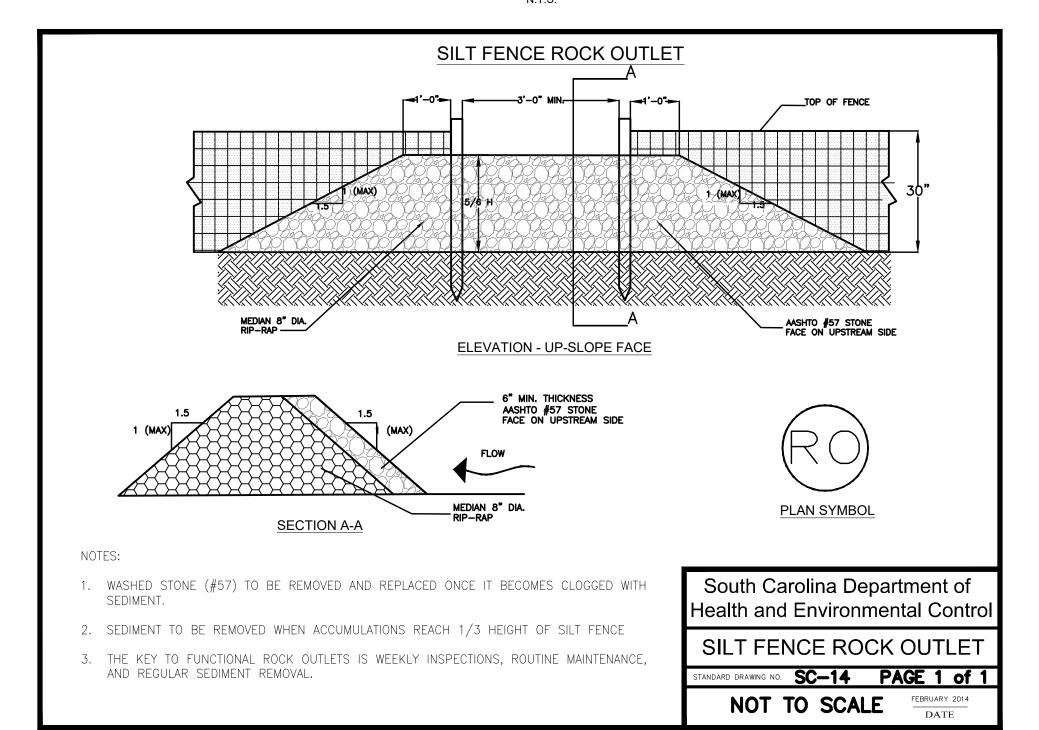
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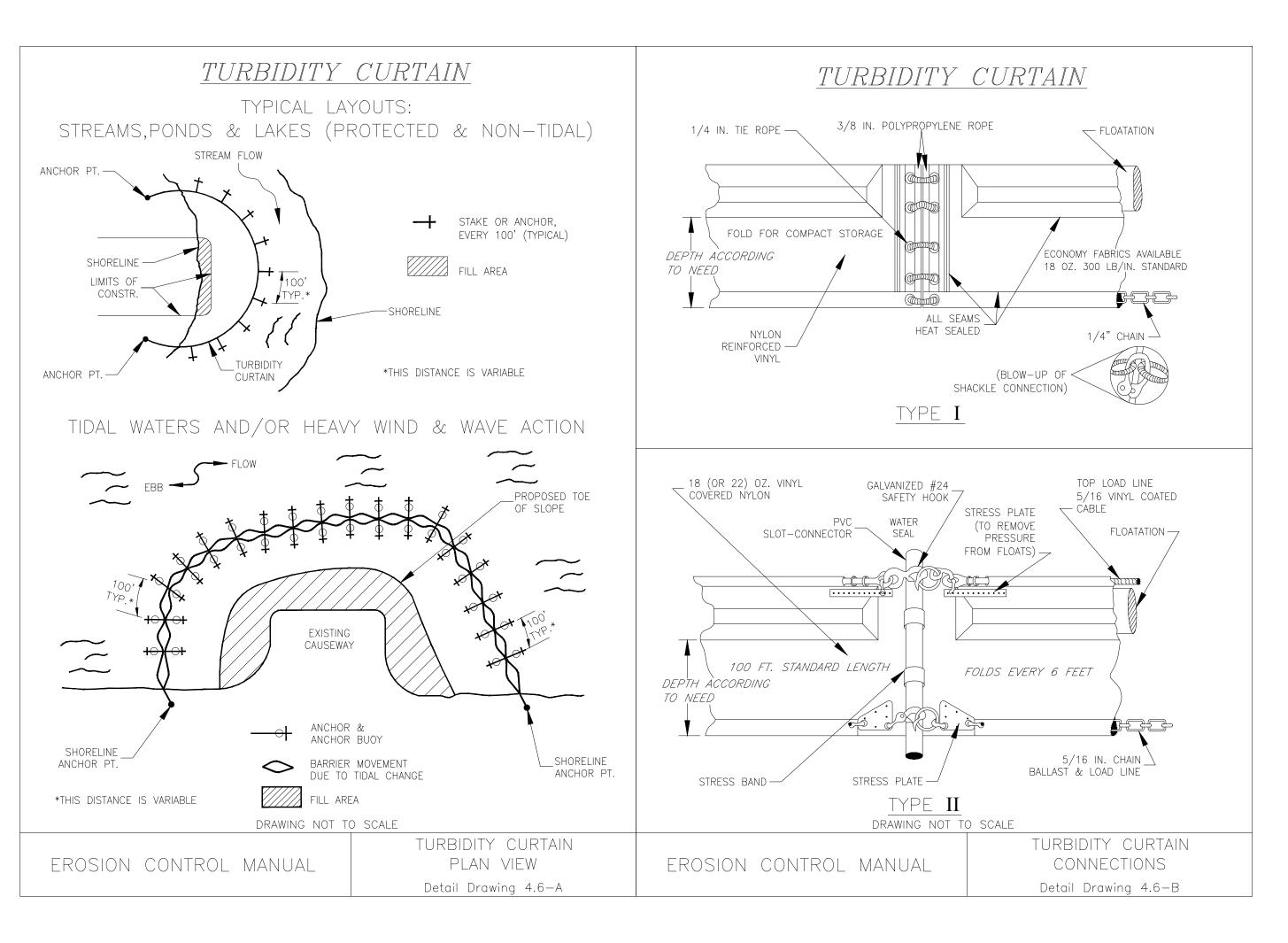
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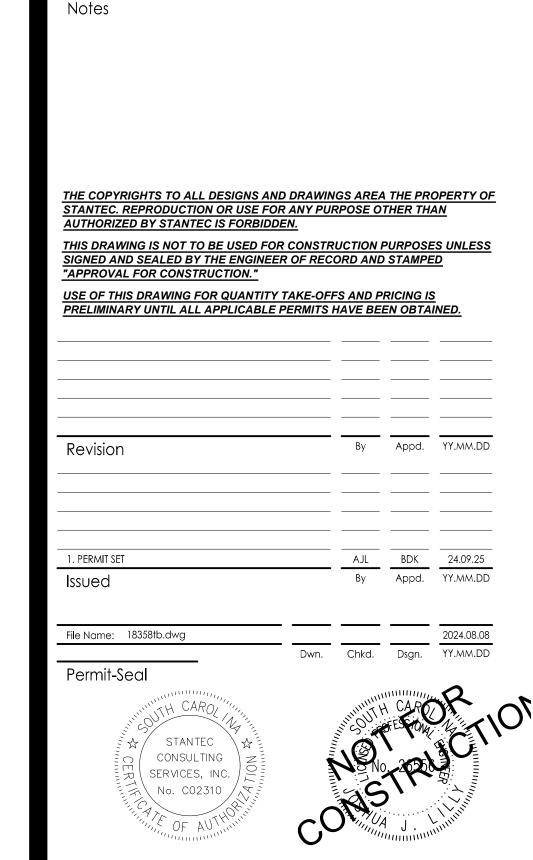


TEMPORARY STOCKPILE AREA





TURBIDITY CURTAIN DETAIL



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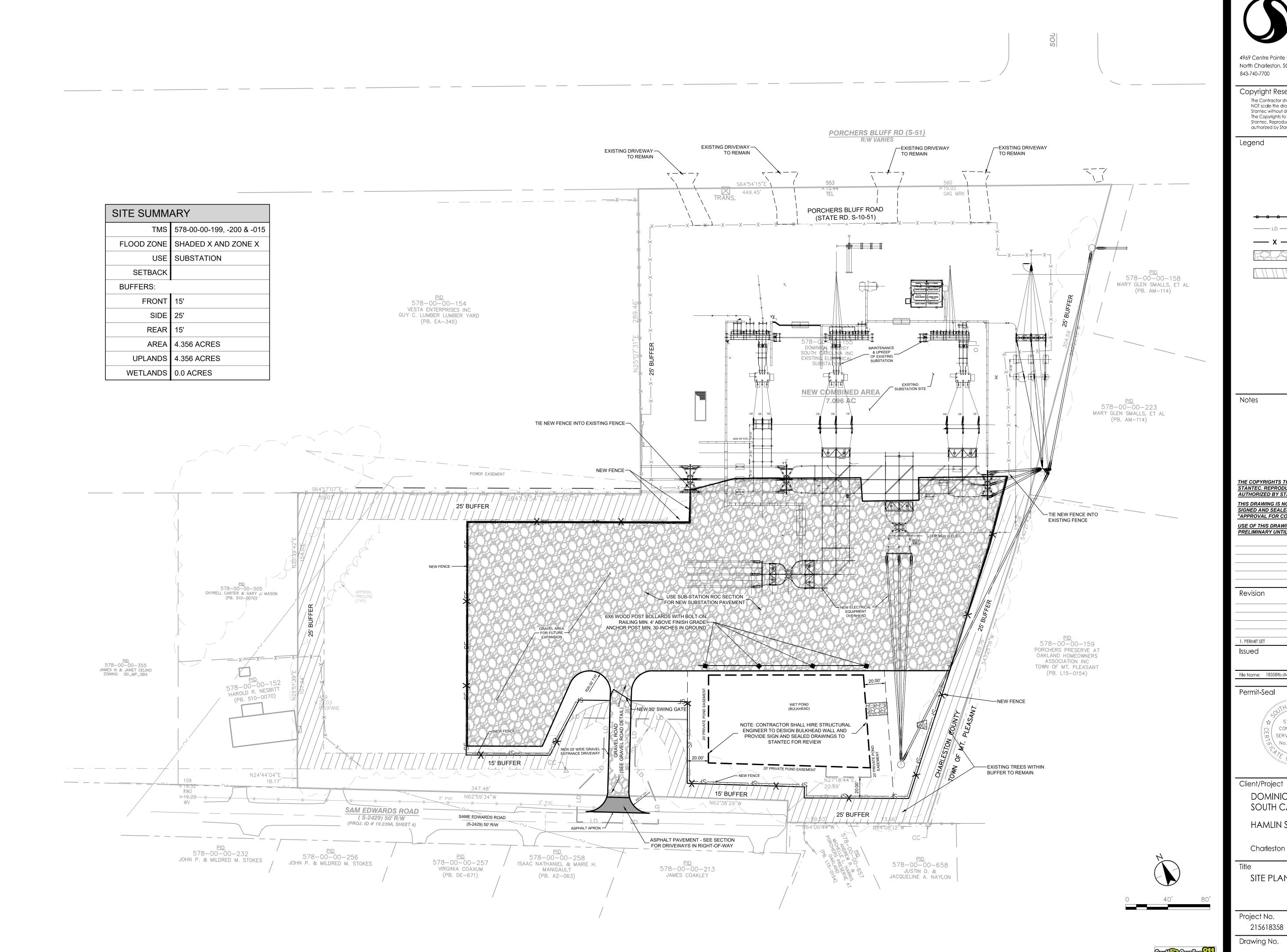
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EROSION CONTROL DETAILS

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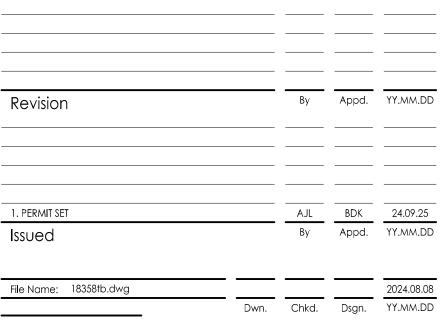
TREE PROTECTION FENCE ----- LD ----- LIMITS OF DISTURBANCE — X — CHAINLINK FENCE SUB-STATION ROC PAVEMENT

UNDISTURBED VEGETATION BUFFER

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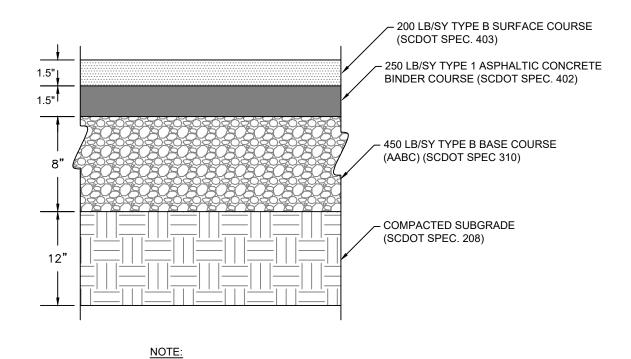
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SITE PLAN

Project No. Scale **AS NOTED** 215618358 Revision Sheet Drawing No.



SECTION TO BE PLACED WITHIN THE SCDOT RIGHT OF WAY. ALL SPECIFICATION REFERENCES TO BE PER THE LATEST REVISION AND SUPPLEMENTS OF SCDOT STANDARDS AND GUIDELINES.

TENSION ROD

ADJUSTMENT

ASPHALT PAVEMENT SECTION FOR DRIVEWAYS IN RIGHT-OF-WAY

N.T.S.

— 20' DOUBLE HUNG GATE —

1 5/8" O.D. TOP RAIL-CONTINUOUS

ROD ATTACHMENT-

3/8"D. TENSION ROD

- COMPACTED 789 OR 57 STONE 8" COMPACTED STONE /18" EARTH TYPE SUB BASE/ COMPACTED TO 100% MODIFIED PROCTOR METHOD DRY DENSITY

CONTRACTOR SHALL UTILIZE FIELD GEOTECHNICAL ENGINEER FOR PROOFROLLS AND EXCAVATION OF UNSUITABLE MATERIALS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER. ALL WORK MUST MEET SCDOT SPECIFICATIONS UNLESS PAVEMENT DESIGN HAS BEEN COMPUTED BY THE GEOTECHNICAL ENGINEER.

GRAVEL ROAD SECTION N.T.S.

3 STRANDS BARBED WIRE

BRACE-1 5/8" O.D.

STRETCHER BAR 1/4" X 3/4" X 6'-11"

GROUND ROD

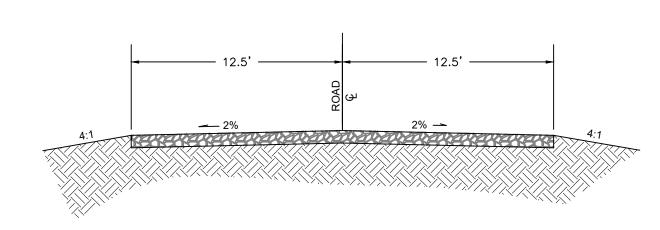
2 7/8" O.D. CORNER POST

- HOG RING FASTENER SPACE 24"

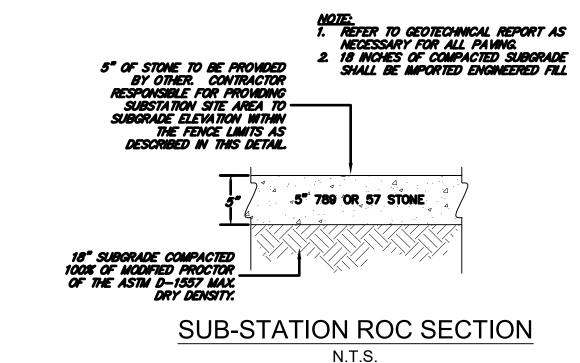
(GALVANIZED)

MULTIPLES

TOP RAIL-1 5/8" O.



TYPICAL GRAVEL ROAD SECTION N.T.S.



FENCE SPECIFICATIONS

THE FENCE SHALL CONSIST OF WOVEN STEEL FABRIC AND BARBED WIRE ON STEEL POSTS. IT SHALL BE A MINIMUM OF 8½' HIGH AND LAID OUT ACCORDING TO

A. <u>MATERIALS</u>

1. THE FABRIC SHALL BE A MINIMUM OF 7' HIGH. IT SHALL CONSIST OF A MINIMUM NO. 9 USWG STEEL WIRE WOVEN INTO A 2" SQUARE MESH, WITH SIDES OF MESH PATTERN APPROXIMATELY 45 TO A VERTICAL LINE.

THE FABRIC SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A392, CLASS II.

2. LINE, END, CORNER, PULL AND GATE POSTS SHALL BE STEEL AND OF SIZES LISTED ON THE ATTACHED TYPICAL FENCE CONSTRUCTION DRAWING AND CONFORM TO ASTM A53, GRADE B, FOR ROUND SHAPES. ROLL-FORMED SECTIONS SHALL MEET THE YIELD STRESS REQUIREMENTS OF ASTM A36 AS A

TUBULAR POSTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A120. ROLL-FORMED SECTIONS SHALL BE GALVANIZED IN ACCORDANCE WITH

ALL POSTS SHALL BE OF SUFFICIENT HEIGHT TO ACCOMMODATE A 7' FABRIC AND EXTENSION ARMS FOR BARBED WIRE, AND BE EMBEDDED 3' INTO A CONCRETE FOOTING.

3. THE TOP RAIL SHALL BE ROUND STEEL PIPE OR TUBING. RAILS SHALL BE 1-5/8" O.D. WITH A MINIMUM WALL THICKNESS OF .138". LENGTHS SHOULD BE A

4. BARBED WIRE SHALL CONSIST OF TWO STRANDS OF 12½ USWG STEEL WIRE WITH FOUR-POINT BARBS AT A MAXIMUM SPACING OF 5" APART.

5. THE EXTENSION ARMS SHALL EXTEND UPWARD AND OUTWARD FROM THE FENCE AT AN ANGLE OF 45. THERE SHALL BE PROVISIONS FOR THREE LINES OF BARBED WIRE, EQUALLY SPACE AT APPROXIMATELY 6". THE ARMS SHALL BE CONSTRUCTED OF PRESSED STEEL OR MALLEABLE IRON AND SHALL BE

EXTENSION ARMS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS B1.

6. THE FENCE FABRIC SHALL BE SECURED TO ALL TERMINAL POSTS, GATEPOSTS AND CORNER POSTS WITH STRETCHER BARS. THESE SHALL BE GALVANIZED

7. POST BRACES ARE REQUIRED AT EACH END GATE, CORNER, PULL AND END POST. IT SHALL CONSIST OF A STRUT OF EQUAL SIZE TO TOP RAIL AND AN ADJUSTABLE TENSION ROD. THE ROD SHALL BE A MINIMUM OF 3/8" IN DIAMETER.

BRACING MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.

THE STRUT SHALL BE SECURED TO THE ADJACENT LINE POST AT APPROXIMATELY MID-HEIGHT OF THE FABRIC. THE TENSION ROD IS ALSO SECURED ON THIS SAME HARDWARE ON THE LINE POST AND IS ANCHORED NEAR THE BASE OF THE GATE, CORNER, PULL OR END POST.

8. TENSION WIRE SHALL BE NOT LESS THAN NO. 7 USWG GALVANIZED STEEL WIRE.

9. GATE FRAMES SHALL BE CONSTRUCTED OF TUBULAR STEEL MEMBERS WELDED AT THE JOINTS. ADDITIONAL HORIZONTAL AND VERTICAL STRUTS MAY BE REQUIRED TO PROVIDE FOR A RIGID GATE PANEL ALLOWING NO VISIBLE SAG OR TWIST. GATE FRAMES SHALL BE MADE TO HAVE APPROXIMATELY 3" CLEARANCE ABOVE SUBSTATION GRADE. GATE FRAME AND BRACING MEMBERS SHALL BE MINIMUM 1-7/8" O.D. PIPE. STEEL TENSION RODS AND TURN

10. HINGES SHALL BE HEAVY DUTY AND ALLOW 180 SWING OF ALL GATE LEAVES. THE HINGES SHALL NOT TWIST OR TURN UNDER THE ACTION OF THE GATE

LATCHES, STOPS AND KEEPERS SHALL BE OF HEAVY-DUTY CONSTRUCTION OF GALVANIZED STEEL OR MALLEABLE IRON. LATCHES SHALL HAVE A HEAVY-DUTY DROP BAR. THE DROP BAR STOP SHALL BE MADE TO BE CAST IN CONCRETE AND ENGAGE THE DROP BAR. A KEEPER SHALL BE PROVIDED, WHICH WILL SECURE THE FREE END OF THE GATE PANELS IN THE OPEN POSITION. HARDWARE SHALL ALLOW FOR GATE OPERATIONS FROM EITHER

BANDS, WIRE TIES AND FASTENERS FOR SECURING FABRIC TO TOP RAILS, LINE POSTS, TERMINAL POSTS AND TENSION WIRES SHALL BE GALVANIZED STEEL AND OF ADEQUATE STRENGTH FOR THE PURPOSE INTENDED. ALUMINUM WIRE TIES OF ADEQUATE STRENGTH ARE ALSO ACCEPTABLE.

B. <u>ERECTION</u>

1. THE FABRIC SHALL BE PLACED ON THE OUTSIDE OF THE POSTS, STRETCHED TAUT, AND SECURED TO THE POSTS, TOP RAIL AND TENSION WIRE. THE FABRIC SHALL BE SECURED TO THE LINE POSTS WITH WIRE TIES OR METAL BANDS SPACED 14" MAXIMUM. THE TOP AND BOTTOM EDGES SHALL BE SECURED RESPECTIVELY TO THE TOP RAIL AND TENSION WIRE WITH WIRE TIES SPACED 24" MAXIMUM. THE FABRIC SHALL BE SECURED TO TERMINAL POSTS BY MEANS OF THE STRETCHER BAR, WHICH IS PASSED THROUGH THE END LOOPS OF THE FABRIC, AND IS SECURED TO THE TERMINAL POSTS BY METAL BANDS SPACED 14" MAXIMUM.

2. FABRIC FOR FENCING SHALL BE EITHER LEFT-HAND OR RIGHT-HAND WEAVE. ROLLS OF FABRIC SHALL BE JOINED BY WEAVING A SINGLE STRAND INTO THE

3. THE SPACING OF LINE POSTS, 10' MAXIMUM, SHALL, IN GENERAL, BE MEASURED PARALLEL TO THE GROUND. ALL POSTS SHALL BE PLACED IN A VERTICAL

4. ALL POSTS SHALL BE SET IN HOLES AND BACKFILLED WITH CONCRETE. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI WITHIN 28 DAYS. THE CONCRETE SHALL BE WELL WORKED, "RODDED", IN THE HOLE. THE TOP OF EACH FOOTING SHALL BE CROWNED TO SHED WATER.

5. THE MINIMUM DIAMETER OF HOLES FOR LINE POSTS SHALL BE 9" AND FOR TERMINAL POSTS, 12". THE MINIMUM DEPTH OF THE FOOTING HOLES SHALL BE

6. WARNING SIGNS TO BE PLACED ON THE EXTERIOR OF THE FENCE SHOULD READ: WARNING! "HIGH VOLTAGE INSIDE", "FOR YOUR SAFETY, KEEP OUT". THE SIGN SHOULD ALSO CONTAIN THE APPROPRIATE SAFETY SYMBOL TO INDICATE AN ELECTRICAL SHOCK HAZARD. THE SIGNS ARE TO BE PLACED ON THE SUBSTATION FENCE AS SHOWN ON THE FENCE PLAN DRAWING.

C. <u>SLATS</u>

1. CONTRACTOR TO INSTALL DARK GREEN PRIVACY FENCE SLATS

THE PLANS AND SPECIFICATIONS.

MINIMUM OF 16'. PROVISIONS FOR ADEQUATELY JOINING LENGTHS TOGETHER AND SECURING TO END OR CORNER POSTS SHALL BE COMPATIBLE FOR PHYSICAL SIZE OF THE TOP RAIL. THE TOP RAIL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A120.

CAPABLE OF SUPPORTING A DOWNWARD FORCE OF 300 POUNDS.

STEEL BARS, NOT LESS THAN 1/4" X 3/4", AND SHALL BE APPROXIMATELY 1" LESS THAN THE FABRIC HEIGHT.

BUCKLES MAY ALSO BE UTILIZED. ALL GATE FRAME MATERIAL SHALL BE HOT-DIP GALVANIZED.

AND SHALL PROVIDE EASE OF OPERATION.

SIDE. WITH PROVISIONS FOR SECURING WITH A PADLOCK.

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Legend

Notes

Revision

Issued

Revision

Chkd. Dsgn.

Appd. YY.MM.DD

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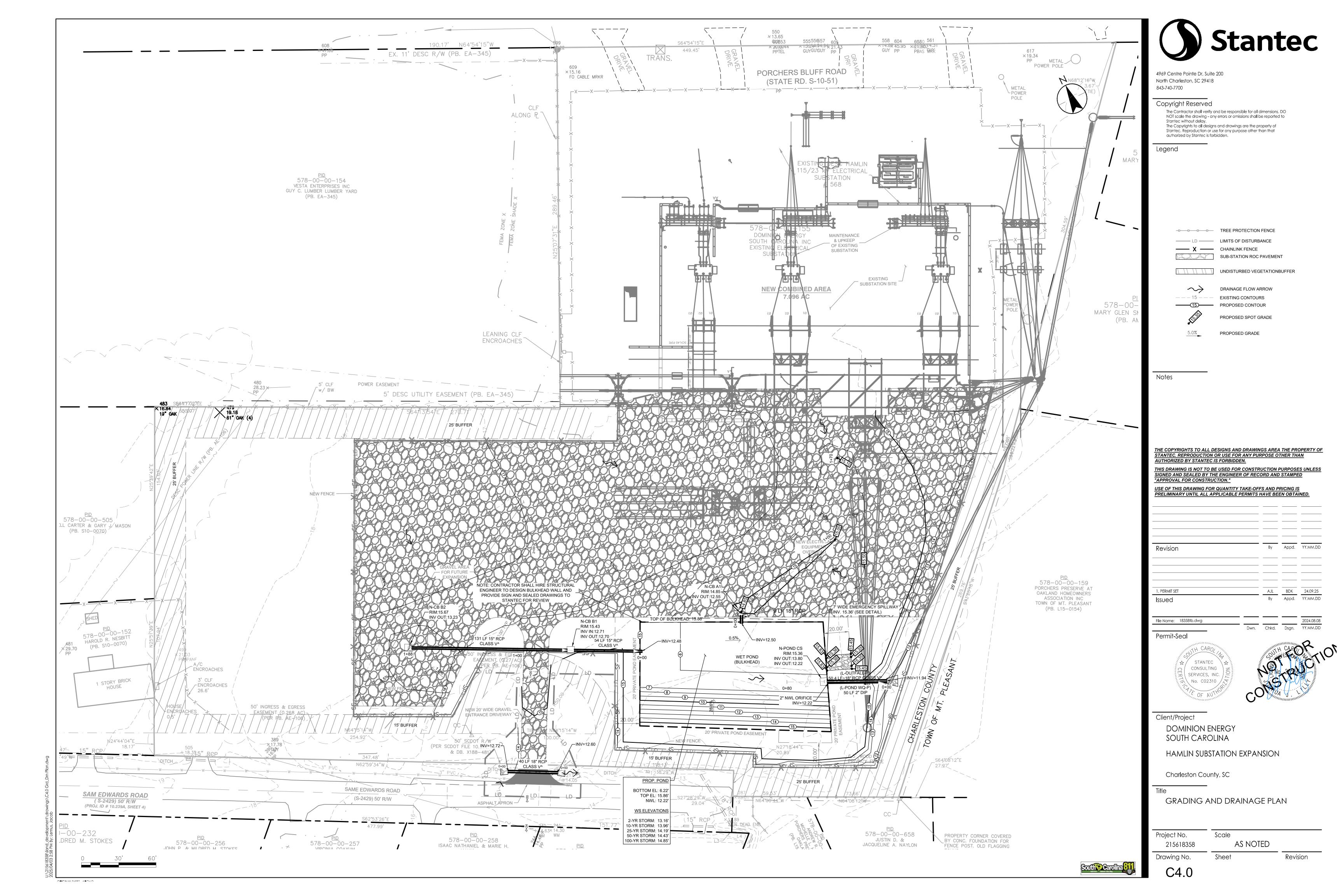
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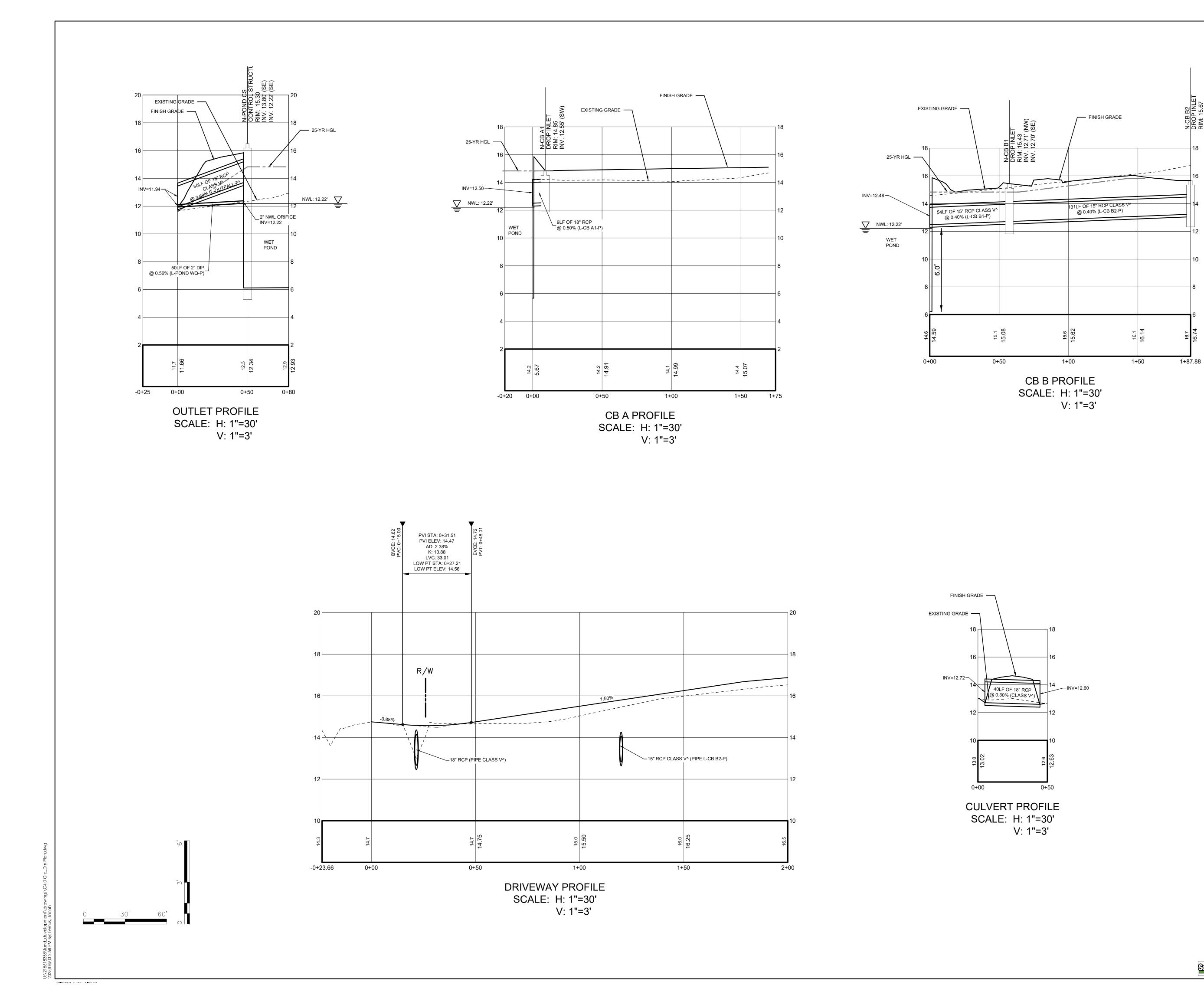
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Scale Project No. AS NOTED 215618358 Drawing No. Sheet

mpany. Inc. 3-2-10

4" O.D. GATE POST







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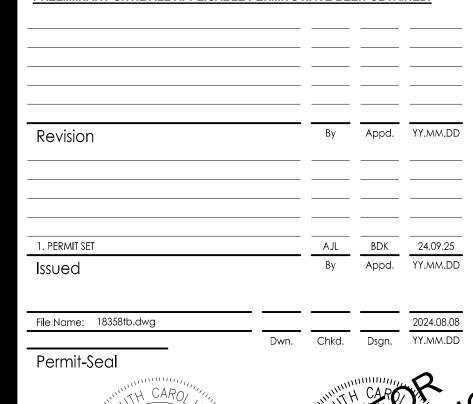
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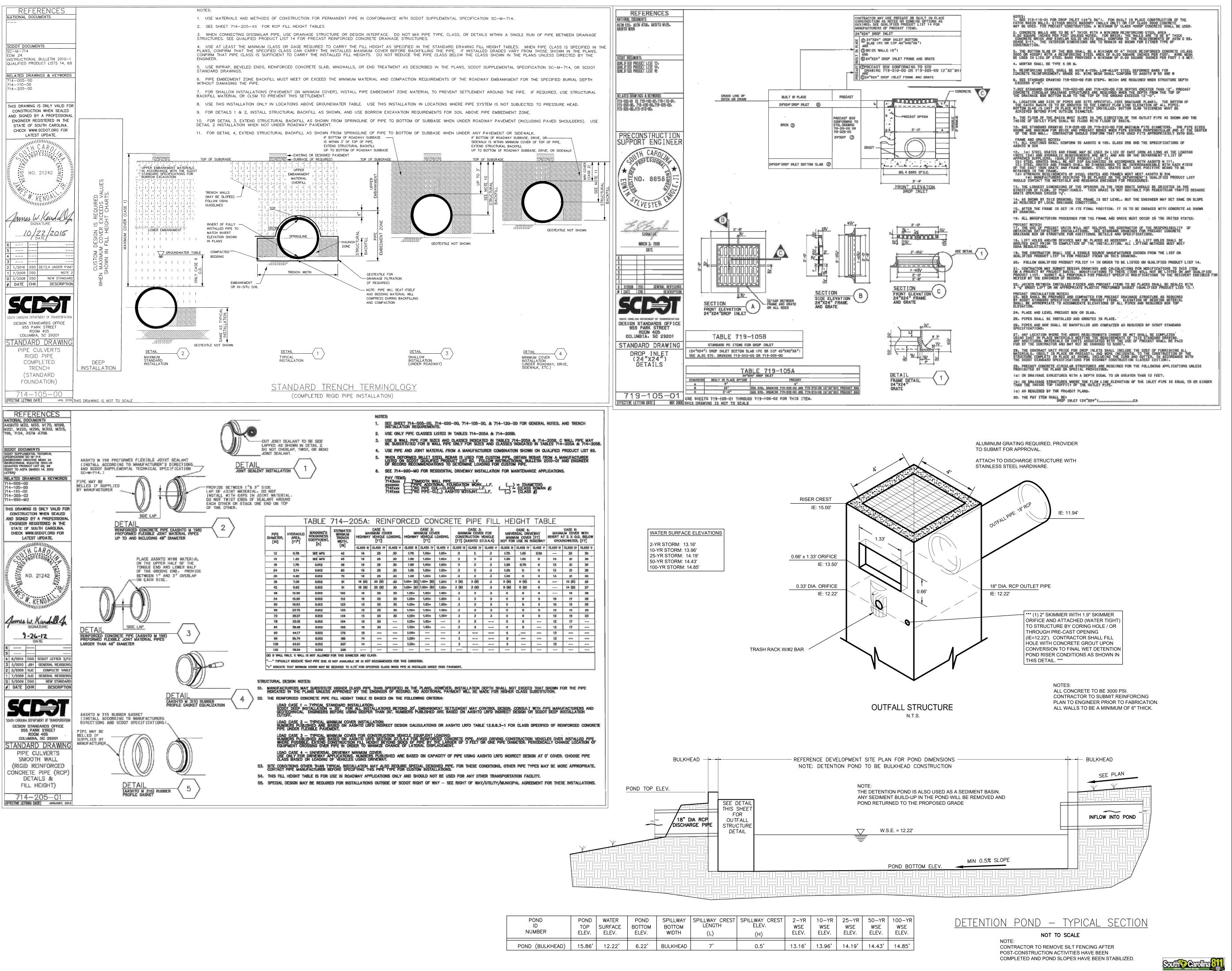
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STORM AND GRADING PROFILES

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215618358	AS NOTED	
Drawing No.	Sheet	Revision

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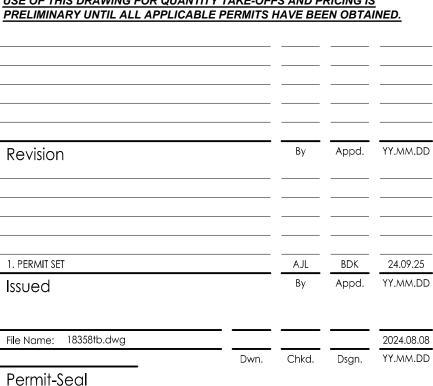
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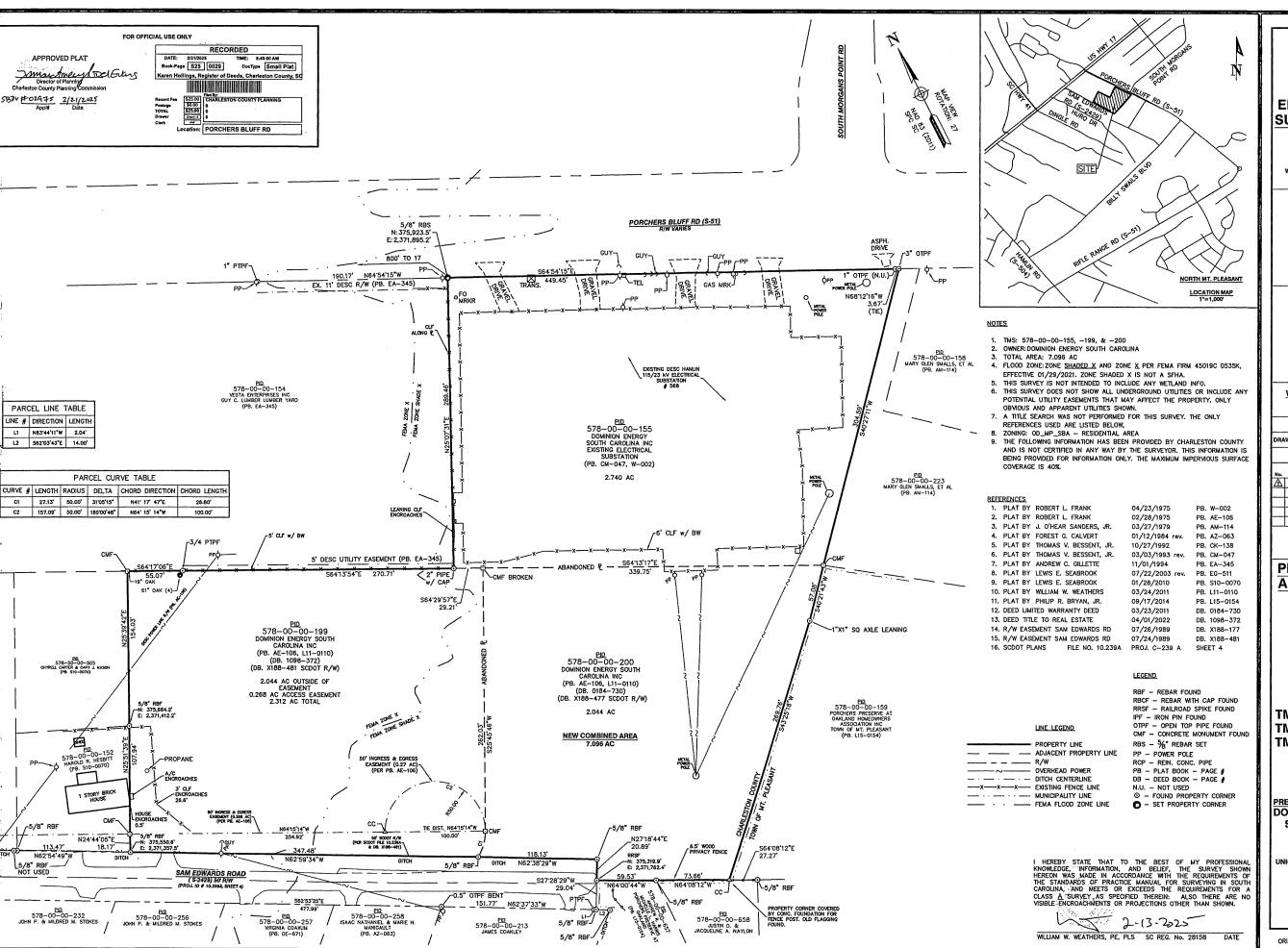
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WILLIAM W. WEATHERS FEBRUARY 13, 2025

RAWN BY: WWW APPROVED BY: WWW

DATUM
VERTICAL: NAVD 88
HORIZONTAL: NAD 83

PROPERTY LINE ABANDONMENT PLAT

FOR
DESC HAMLIN
ELECTRICAL
SUBSTATION
#568

COMBINING TMS 578-00-00-155 TMS 578-00-00-199 TMS 578-00-00-200

7.096 AC

PREPARED FOR & OWNED BY DOMINION ENERGY OF SOUTH CAROLINA

PORCHERS BLUFF RD
NORTH MT. PLEASANT
CORP.CHARLESTON COUNTY
SOUTH CAROLINA



ORIGINAL SHEET SIZE: 24" X 36"