



August 15, 2024

Vulcan Construction Materials, LLC  
Attn: Salley Lewis  
201 Brown Road  
Piedmont, SC 29673  
lewiss@vmcmail.com

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Re: Approval of Application and Reclamation Plan for a Mine Operating Permit  
Issuance of an Individual Mine Operating Permit  
Mine Permit #I-002407 | Orangeburg Limestone Quarry | Orangeburg County

Dear Ms. Lewis:

The S.C. Department of Environmental Services (SCDES) has approved the application and reclamation plan for the Orangeburg Limestone Quarry as of the date of this letter. SCDES has received the reclamation bond submitted in the amount of \$1,230,700.00.

With the receipt of the reclamation bond and the approval of the application and reclamation plan, this letter serves as official notification that the Individual Mine Operating Permit for the Orangeburg Limestone Quarry is being issued as of the date of this letter. Enclosed are the permit document, reclamation plan, and mine and reclamation maps.

Should there be any questions or if we may be of further assistance, please do not hesitate to contact the project manager and regional inspector, Colby Myers, at 803-898-3079 or by e-mail at Colby.Myers@des.sc.gov.

Respectfully,

A handwritten signature in blue ink that reads "Jeremy E. Eddy".

Jeremy E. Eddy, P.G.

Manager, Mining & Reclamation Program

Cc: Marty Lindler, Colby Myers, Brett Caswell, Harold Young (Orangeburg County), Craig Kennedy, Sarah Harris (Vulcan)

Encl: Permit document, reclamation plan, and maps.





SC DEPARTMENT of  
**ENVIRONMENTAL  
SERVICES**

**INDIVIDUAL MINE  
OPERATING PERMIT**

**Orangeburg Limestone Quarry  
Vulcan Construction Materials, LLC**

Vulcan Construction Materials, LLC, a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-002407, to operate the Orangeburg Limestone Quarry in accordance with this Permit, the approved Reclamation Plan, the S.C. Mining Act (S.C. Code Sections 48-20-10 *et seq.*, 1976), and Regulations 89-10 *et seq.* The operator shall conduct this operation as represented in documents submitted to support the issuance of this permit.



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JEREMY E. EDDY, P.G.  
MANAGER - MINING AND RECLAMATION PROGRAM  
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

**PERMIT NUMBER:** I-002407  
**ORIGINALLY ISSUED:** August 23, 2024  
**MODIFIED:** N/A



**Part I: GENERAL INFORMATION**

In accordance with Section 48-20-60 of the South Carolina Mining Act, this Mine Operating Permit will remain valid unless it terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

The approved *Permit Application, Reclamation Plan*, and all supplemental information referenced herein, are an integral part of this permit. *Land Entry Agreements and Mine Maps* as identified in Part II and Part IV, respectively, are also a part of this permit.

**CONTACT INFORMATION:**

**Home Office Address:** Vulcan Construction Materials, LLC  
201 Brown Road  
Piedmont, SC 29673

**Local Office Address:** Vulcan Construction Materials, LLC  
Attn: Salley Lewis  
201 Brown Road  
Piedmont, SC 29673

**Address for Official Mail:** Same as Local Office Address

**Company personnel and title to be the contact for official business and correspondence [South Carolina Department of Environmental Services (SCDES) should be notified in writing immediately of any change in contact, address, telephone or e-mail]:**

Salley Lewis  
Environmental Specialist

Telephone: (864) 894-9203  
Email: lewiss@vmcmail.com

**LOCATION:** The mine is located on the Sandridge, SC U.S.G.S. 7.5' Topographic Map. The approximate geographic coordinates for the site are:

Latitude: 33.361475 Longitude: -80.293856

**DESCRIBE LOCATION:** The operation is located in Orangeburg County, approximately 2.9 miles southeast of Eutawville, S.C. Specifically, the site is located between the intersections of State Road S-38-136 (Addidas Road) with State Road S-38-1690 (Horizon Street) and Carribell Road.

**Part II: PERMITTED LAND**

This permit allows Vulcan Construction Materials, LLC, also referred to as the operator, to conduct mining operations within the permitted land as defined through the *Land Entry Agreement* submitted as part of the application. Permitted land as defined by Section 48-20-40(18) is "the affected land in addition to (a) lands identified for future mining to become affected land; (b) and undisturbed or buffer area that is or may become adjacent to the affected land." Therefore, this permit grants the operator the right to conduct active mining operations within the specified affected land, delineate land for future mine areas as future reserves, and to establish undisturbed buffer zones to mitigate any adverse effects to the surrounding environment.

**AFFECTED LAND:** 451.9 acres of land are to be affected by Vulcan Construction Materials, LLC under the current mine plan; 451.9 of the affected acres are currently bonded. The affected acres are derived from the operator's response in the *Application for a Mine Operating Permit* and are shown on the approved mine map(s).



**FUTURE RESERVES:** 79.7 acres are identified as future reserves and are specified on the mine site map. Prior to the initiation of activity in future reserves, the operator shall submit detailed mine and reclamation plans to SCDES for approval.

**BUFFER AREAS:** 161.6 acres are identified as buffer area, setbacks, or areas that will not be disturbed beyond the pre-mine natural state. These buffer areas are identified on the mine site map. Acres designated as buffer areas are not bonded under the reclamation bond. Any activity within the buffer areas (e.g. removal of timber) shall require **prior** notification and approval by SCDES.

**TOTAL PERMITTED AREA:** 693.2 acres as submitted on the *Land Entry Agreement(s)*.

**LAND ENTRY AGREEMENTS:** The operator is required to furnish and maintain up-to-date *Land Entry Agreements* on all lands covered under this permit. Any change in ownership on any portion of land covered by this permit, the operator is responsible for furnishing the appropriate and completed *Land Entry Agreements* (Forms MR-600 or MR-700) to SCDES within 30 days of the change of ownership.

Land Owner(s) as Listed on *Land Entry Agreement(s)*:

<b>TMS #</b>	<b>Land Owner(s)</b>
0363-00-02-003.000, 0363-00-02-004.000, 0363-00-02-005.000, 0363-00-02-011.000, 0363-00-02-013.000, 0363-00-02-017.000.	Vulcan Lands, Inc.

Total acres of the contiguous tract(s) of land for which the permit is granted:

OWNED 0.0                      LEASED 693.2                      TOTAL 693.2

**Part III: FINANCIAL ASSURANCE FOR RECLAMATION**

The financial assurance for reclamation is based upon the total affected acres. Pursuant to Section 48-20-70 and R.89-200, the financial assurance for this mining permit is set at \$1,230,700.00. The financial assurance shall remain in force and continuous throughout the life of the mining operation and shall only be released, partially or in full, back to the operator after the operator has completed reclamation in accordance with the approved *Reclamation Plan* and the minimum standards in R.89-330.

**Part IV: MINE OPERATIONS**

Vulcan Construction Materials, LLC is permitted to mine limestone at the Orangeburg Limestone Quarry. The maximum depth to the pit floor shall not exceed -10 feet mean sea level (to an approximate elevation of 110 feet below ground surface as measured from the lowest ground surface elevation). Mining will take place on tracts of land leased by the referenced operator. These tracts of land are identified in the submitted *Land Entry Agreements* (LEAs).

**MINE/PIT CHARACTERIZATION:**

The limestone will be excavated, processed, and stockpiled on site. Ground clearing will be accomplished by heavy equipment (e.g., backhoe, excavator, bulldozer). Removed overburden will be stockpiled in the overburden area or backfilled in previously mined out areas of the pits. The exposed limestone will be drilled, explosives loaded, and blasted to fragment stone into manageable sizes to facilitate loading in the dredge and crushing by the primary crusher. The dragline will excavate the fragmented limestone and place the material parallel to the working surface to drain excess moisture. Material will be crushed and processed by means of a mobile crusher.

PROCESSING PLANT LOCATED ON MINE SITE:

The processing plant will consist of a primary mobile crusher. The mobile crusher will not have a fixed location but will follow behind the dragline as excavation progresses through each phase. Crushed stone will be screened, sorted, and stockpiled around the pit and material will be directly loaded onto haul trucks via a front-end loader.

MINE DEWATERING:

Wet mining operations will be implemented within the permitted area. This area will be excavated in three (3), potentially four (4), phases as indicated in the approved mine maps. Overburden will be removed to expose the top of the limestone deposit. If necessary, dewatering may be utilized to lower groundwater levels in order to create a safe, dry foundation for the dragline and other machinery. However, the material will be mined wet and groundwater levels will be maintained at least two (2) feet above the top of limestone at the perimeter monitoring wells. Groundwater discharge will be pumped into the recharge trench or discharged in accordance with the NPDES permit and Regulation 89-140.

A 41-acre perimeter infiltration trench system will be constructed prior to and during the initiation of mining activities. The trench will be constructed as mining progresses through each phase, as indicated in the approved mine maps. The trench system will receive runoff and discharge water from the quarry to maintain groundwater elevations at least two (2) feet above the top of limestone at the perimeter monitoring wells, and to help reduce any potential discharges and stormwater runoff while mining operations are active.

If an operator receives a complaint concerning adverse impacts to neighboring wells, the operator is to notify SCDES's Manager of the Mining and Reclamation Section, Columbia, SC, within 48 hours. After investigation, if SCDES determines dewatering activities at the mine are affecting a drinking water well or water supply well, the operator shall be responsible for repairing, deepening, or re-drilling such wells. Until that permanent water supply is re-established, the operator shall supply the owner with a temporary water supply (e.g., bottled water for drinking, provisions for laundry).

Active pumping and discharge of water shall cease if the dewatering discharge causes flooding conditions to property downstream of the mine site.

See Part X: *Additional Terms and Conditions #4 - #6.*

BLASTING:

Blasting is permitted at this site. Blasting activities shall be conducted in accordance with R.89-150.

Pursuant to R.89-150A., the operator shall conduct a pre-blast survey on inhabited structures within one-half mile of any blasting, prior to the commencement of any blasting activities. The survey shall be completed by a third-party consultant and a copy of the report sent to SCDES, the operator, and the landowner. Upon review and approval, SCDES will then grant permission to begin blasting activities.

Pursuant to R.89-150J., the operator shall report any suspected incident of fly-rock outside of the permitted area resulting from blasting operations. Pursuant to R.89-150E., the operator shall report if the peak particle velocity exceeds one (1.0) inch per second at the immediate location of any dwelling not owned by the operator (or where a waiver of damage has been submitted to SCDES). These incidents shall be reported to SCDES within 24 hours of the blast, and a written report shall be submitted to SCDES within five (5) business days.

Pursuant to R.89-150H., the operator shall maintain a minimum distance of 250 feet from contiguous property boundaries when conducting blasting. Additionally, pursuant to R.89-150I., the operator shall maintain a minimum distance as shown on the approved mine map between the nearest point of blasting and any structures not owned by the operator (at the time of the completed application date of: September 25, 2023) or where a waiver of damage has been submitted to SCDES.

**NOISE MONITORING AND CONTROL:**

The operator shall use Best Management Practices (BMPs) to minimize noise from the mine site. These noise BMPs shall include, at a minimum, proper maintenance of mufflers on equipment (trucks, track-hoes, pumps, etc.) and consideration of special buffering measures if planning to operate equipment during nighttime hours.

**OTHER STATE OR FEDERAL PERMITS:**

The operator must obtain, maintain, and update, as appropriate, all necessary State and Federal permits in order to construct and operate the mine.

**Part V: MAPS**

The mine site maps were prepared by synTerra. These maps are further identified with the following map numbers and are part of the operating permit:

SM-2407-1V1 Existing Conditions Map	Dated: June 21, 2023
SM-2407-2V1 Mine Land Use Map	Dated: June 30, 2023
SM-2407-3V1 Pit Phases Map	Dated: July 27, 2023
SED-2407-1V1 Erosion & Sediment Control Map	Dated: July 11, 2023
SED-2407-2V1 Erosion & Sediment Control Details	Dated: July 11, 2023
SED-2407-3V1 Erosion & Sediment Control Details 2	Dated: July 11, 2023

The reclamation maps were prepared by synTerra. These maps are further identified with the following map numbers and are part of the operating permit.

RM-2407-1V1 Reclamation Map	Dated: July 12, 2023
RM-2407-2V1 Post-Development Drain Area Map	Dated: July 6, 2023

**Part VI: PROTECTION OF NATURAL RESOURCES**

**MINE SITE AND SURROUNDING AREA:**

Prior to mining activities, this site's land use type was agricultural and minimally modified for hunting purposes. The topography of this area is slightly variable (i.e., mostly flat), with surface elevation ranging from 85 - 90ft. MSL. The immediate area around this site is silvicultural, rural residential, and industrial mining.

**PUBLIC SAFETY:**

A gate shall be installed at the entrance to the mine site and kept locked during inactive periods. *Warning* and/or *Danger* signs shall be posted around the perimeter of the property. In the future, if determined to be necessary by SCDES, an appropriate fence shall be installed around the affected area.

Operator shall use BMPs to prevent accumulation of sediment/soil on public roads carried by trucks and other vehicles exiting the mine site; any accumulations shall be removed by the operator on a daily basis or more frequently if needed. To reduce the potential of track-out on public roads, the operator shall construct a crushed stone "mud mat" that extends the width of the haul road and stretches a minimum of one hundred (100) feet in length.

The operator shall establish a protected area or establish procedures to minimize fuel spillage or incidental spillage of other petroleum products during storage, refueling of equipment or in the performance of routine maintenance on equipment. Contaminated materials resulting from contact with petroleum products shall be removed from the site and disposed of properly to prevent contamination to ground and surface water resources.

To maintain stable mine walls, the unconsolidated overburden material shall be sloped to a stable configuration no steeper than 3H:1V during active mining.

PUBLICLY OWNED PARKS, FORESTS, OR RECREATION AREAS:

There are no publicly owned parks, forests, or recreation areas near this mine site.

WETLANDS AND SURFACE WATER AREAS:

Unnamed wetlands are located on-site. These wetlands flow into Sandy Run (approx. 2 miles S/SW of the mine site), Dean Swamp (approx. 5.5 miles S/SW of the mine site), and Four Hole Swamp (approx. 8 miles SW of the mine site). Wetlands on-site trend N-S on the western portion of permitted parcels.

The operator shall maintain a minimum 50ft. undisturbed buffer between all land disturbance activity and any USACE jurisdictional wetlands. This buffer shall be permanently flagged prior to the initiation of any mine activity. The flags shall be maintained throughout the active mine operation of the site. The operator is allowed to discharge accumulated stormwater—that meets NPDES permit limits—into wetlands through a regulated NPDES outfall.

The operator shall comply with the NPDES General Permit for Non-metallic Mineral Mining and Stormwater Pollution Prevention Plan developed for the mine.

SIGNIFICANT CULTURAL OR HISTORICAL SITES:

Per the *Cultural Resource Reconnaissance Survey of the Orangeburg Tract* performed by Brockington Associates, Inc. dated September 2021, and the concurrence letter provided by the State Historic Preservation Office (SHPO) dated August 3, 2021, six (6) archeological sites (38-OR0417-38OR0422) within the proposed mine site were identified. Of those six sites, two (2) were deemed as potentially eligible for listing in the National Register of Historic Places. See Part X: *Additional Terms and Conditions #2* of this Mine Operating Permit.

If archaeological materials are encountered prior to or during the construction of mine facilities or during mining, the S.C. Department of Archives and History and SCDES should be notified immediately. Archaeological materials consist of any items, fifty years or older, which were made or used by humans. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, oyster shell, worked wood, bone and stone, metal and glass objects, human skeletal remains, and concentrations of charcoal and stones below the ground surface. These materials may be present on the ground surface and/or under the surface of the ground.

WILDLIFE:

Common wildlife typical to this area can be found in and around this site; the Rafinesque big-eared bat, the northern long-eared bat, the tri-colored bat, the red-cockaded woodpecker, and the spotted turtle are threatened, endangered, or at-risk species believed to inhabit the general area.

See Part X: *Additional Terms and Conditions #7* for additional information related to the protection/relocation of these species.

VISUAL SCREEN:

To appropriately screen the operation from view, the operator shall maintain a minimum 50ft. undisturbed buffer between mining activity and all property lines. A vegetated earthen berm or brush barrier shall be constructed and maintained on the mine side of this undisturbed buffer if SCDES determines that the existing vegetative screening is not adequate.

ACID WATER GENERATION:

Acid water is not anticipated to be generated from the oxidation of existing minerals currently found on this site.

AIR QUALITY:

The mine operator will use appropriate measures (e.g. water truck, dust suppressants) to control fugitive dust created by moving equipment along haul roads. The operator, where feasible, shall establish vegetation in non-active mine areas barren of vegetation to stabilize the soil and reduce potential for wind erosion and dust emissions.

## **Part VII: STANDARD CONDITIONS OF MINE OPERATING PERMIT**

### SURVEY MONUMENTS:

In accordance to R.89-130, the operator shall install and maintain the two required permanent survey monuments, or control points, within the permitted area as shown on the mine site map. At the discretion of SCDES, the operator may be required to mark the area to be affected with flagging or other appropriate measures.

### RIGHT OF ENTRY:

Pursuant to Section 48-20-130 and R.89-240, the operator shall grant SCDES and/or duly appointed representatives access to the permitted area for inspection to determine whether the operator has complied with the reclamation plan, the requirements of this chapter, rules and regulations promulgated hereunder, and any terms and conditions of this permit.

### RECORDS RETENTION:

All records are to be maintained through additional terms and conditions of this permit or by regulations. Records shall be kept on site or at the office identified for receipt of official mail and open for inspection during normal business hours. The records shall be maintained for a minimum of three (3) years or as specified by SCDES. The operator shall furnish copies of the records upon request to SCDES.

### PERMIT MODIFICATIONS:

Pursuant to Section 48-20-80, the operator may modify the permit and/or *Reclamation Plan* upon approval by SCDES. Requests for permit and/or *Reclamation Plan* modifications may be made to SCDES on Form MR-1300. The operator shall submit any requested supporting data for consideration during SCDES's evaluation of the modification request. If a modification request is determined to be substantial by SCDES, the modification request will be public noticed pursuant to R.89-100 and a modification fee will be required as specified in R.89-340. If SCDES determines activities proposed under the *Reclamation Plan* and other terms and conditions of the permit are failing to achieve the purpose and requirements of the S.C. Mining Act and Regulations, SCDES shall notify the operator of its intentions to modify the permit and/or *Reclamation Plan* pursuant to Section 48-20-150.

### TRANSFER OF PERMIT:

Pursuant to Section 48-20-70, this permit may be transferred to another responsible party. The transfer of the permit must be conducted in accordance with R.89-230. The transferor of the permit will remain liable for all reclamation obligations until all required documents, plans, and the replacement reclamation bond have been submitted and approved by SCDES. The transfer will be considered complete when all parties have received notification by certified letters of the approval of the transfer by SCDES.

### DURATION OF MINE OPERATING PERMIT:

In accordance with Section 48-20-60, this Mine Operating Permit will remain valid unless this permit terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

Pursuant to R.89-80(B), the operator shall conduct reclamation simultaneously with mining whenever feasible. Reclamation shall be initiated at the earliest practicable time, but no later than 180 days following termination of mining of any segment of the mine, and shall be completed within two years after completion or termination of mining on any segment of the mine.

## **Part VIII: ENFORCEMENT ACTIONS**

Pursuant to Section 48-20-30 of the S.C. Mining Act, "SCDES has ultimate authority, subject to the appeal provisions of this chapter, over all mining, as defined in this chapter, and the provisions of the chapter regulating and controlling such activity." This allows SCDES to assist, cooperate with, or supersede other State agencies in taking enforcement action on violations of the State Regulations or violations of the S.C. Mining Act to ensure the purposes of this Act are enforced.

The operator shall comply at all times with all conditions of this mine operating permit. Non-compliance with this mining permit, statute, or regulations could lead to permit revocation and bond forfeiture pursuant to Sections 48-20-160 and 48-20-170 or other enforcement action allowed by law.

Compliance with the Mine Operating Permit requires the operator to conduct the mining operation as described in the approved *Application for a Mine Operating Permit*. Variance from the *Application for a Mine Operating Permit*, this permit, statute or regulation, without first receiving SCDES approval, shall be deemed non-compliance with the permit.

An operator or official representative of the mine operator who willfully violates the provisions of the S.C. Mining Act, rules and regulations, or willfully misrepresents any fact in any action taken pursuant to this chapter or willfully gives false information in any application or report required by this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not less than one hundred dollars nor more than one thousand dollars for each offense. Each day of continued violation after written notification shall be considered a separate offense.

The operator is responsible for all mining activity on the permitted mine site.

## **Part IX: REPORTS**

### ANNUAL RECLAMATION REPORTS:

The operator shall comply with Section 48-20-120 and Regulation 89-210 and submit an *Annual Reclamation Report* on Form MR-1100 as supplied by SCDES. The form for the report will be made available to the operator electronically. The operator should receive access to the report form from SCDES by July 1 of each year; however, the operator is ultimately responsible for obtaining the *Annual Reclamation Report* form and is not excused from penalty fees for failure to submit the report on time.

The Annual Operating Fee is a part of the *Annual Reclamation Report*. Failure to submit a complete *Annual Reclamation Report* and fee, in accordance with Section 48-20-120 and R.89-340, will result in a late penalty payment. The *Annual Reclamation Report* and Annual Operating Fee are required if there is any permitted land not fully reclaimed and released by SCDES by June 30 of *each* year.

### SPECIAL REPORTS:

SCDES may at any time request information, data, or explanations from the operator as to conditions relating to the permitted mine site. Such requests from SCDES shall be made in writing to the operator with an appropriate time frame stated for the submittal of the requested information to SCDES. The operator must produce the information requested within the timeframe specified by SCDES.

## Part X: ADDITIONAL TERMS AND CONDITIONS

1. Temporary or permanent placement of refuse and debris (e.g., concrete, brick, asphalt) from off-site locations is prohibited without approval by SCDES. Topsoil fill approved by SCDES may be brought in from off-site sources only for the purposes of mine land reclamation.
2. The operator shall maintain a 50-foot buffer around archaeological sites 38OR0420 and 38OR421, as shown on the approved mine map.
3. A revised mine map, reclamation map, and reclamation schedule must be submitted and approved by the Department prior to initiating any mining activity in Future Reserves.
4. Seven (7) groundwater monitoring wells around the perimeter of the site shall be installed as shown on the mine map. If, in the future, SCDES determines additional monitoring wells should be installed, the operator shall comply with the department's request.

The monitoring wells shall be installed by a certified well driller in accordance with R.61-71: *Well Standards and Regulations*. The surveyed elevation of the measuring point, relative to an established benchmark, must be submitted with the driller/geologist's log for each well. The driller/geologist's log must also include the elevation of the top of the limestone layer to use as a compliance point for groundwater elevation.

Groundwater monitoring wells shall be measured monthly. Groundwater elevations shall be normalized to mean sea level, and hydrographs plotted for each monitoring well. These data shall be submitted quarterly to the Division of Mining and Solid Waste Management by the 28<sup>th</sup> of the first month of the following quarter. The report should include a record of daily precipitation measurements, with monthly rainfall totals graphed to facilitate comparison to well hydrographs.

5. The operator shall maintain groundwater elevation at least two (2) feet above the top of the limestone layer at all of the perimeter compliance wells. If the groundwater elevation falls below two (2) feet above the top of the limestone layer, the operator shall notify the department within twenty-four (24) hours and cease dewatering activities at the site until the groundwater level rebounds back above the compliance point.
6. The operator shall notify the department prior to excavation in Phase 4. The operator must submit to the Department feasibility documentation to show that the operator can remain in compliance with AT&C #4 and #5 prior to the initiation of activity in this phase.
7. The following measures shall be taken to ensure there are no undue adverse effects to wildlife:

**Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*):** The operator may choose one of the following two options:

Option 1: The operator may assume the presence of maternity roosting trees within all isolated and non-isolated wetlands, buffer 1,000ft from all wetlands, and avoid tree clearing in these areas from May 1st to July 31st. Tree clearing may occur in uplands and isolated wetlands, designated as Affected Area, during the rest of the year.

Option 2: Prior to initiating tree clearing activities on this site, the operator may survey for maternity roosting trees within the site, buffer 1,000ft from the identified maternity roosting trees, and avoid tree clearing in these areas from May 1st to July 31st. Tree clearing may occur in uplands and isolated wetlands, designated as Affected Area, during the rest of the year. For the purpose of this term and condition, a maternity roosting tree is defined as a tree standing 59 to 82 feet tall with a large, hollow cavity, approximately 4 feet tall by 1 foot wide. The operator shall provide a survey map of the location of any identified roosting trees with associated 1,000ft buffer(s) to the Department upon completion of the survey.

**Tricolored Bat (*Perimyotis subflavus*):** As of the issuance of this permit, the tricolored bat is not a federal or state-protected species; however, it has been proposed to be added for federal listing. The operator shall consult with the U.S. Fish and Wildlife Service within thirty (30) days of the tricolored bat's federal listing (if/when approved) and shall comply with the USFWS's recommendations.

**Red-Cockaded Woodpecker (*Leuconotopicus borealis*):** If a red-cockaded woodpecker, or their cavity trees, are observed on the site, the operator shall immediately notify SCDES, the SCDNR's Red-cockaded Woodpecker Project (803-260-4132; [RCW@dnr.sc.gov](mailto:RCW@dnr.sc.gov)), and the USFWS. The operator shall consult with these agencies before proceeding any further towards that area.

**Spotted Turtle (*Clemmys guttata*):** The operator may initiate land disturbing activities (to include the clearing of vegetation) at any time during June 1<sup>st</sup> and January 14<sup>th</sup>. If the operator initiates land disturbing activities in an area between January 15<sup>th</sup> and May 31<sup>st</sup>, the operator shall install silt fencing between mining operations and the delineated wetlands shown on the mine map; the silt fencing barrier shall include 45-degree arms to direct spotted turtles away from the mining operations. When feasible, the operator shall install the silt fencing between November 15<sup>th</sup> and January 15<sup>th</sup>. However, if the operator is unable to install the silt fencing during this period, then the operator shall check the perimeter of the silt fencing twice daily for fourteen (14) days prior to the initiation of mining activities in that area. The silt fence shall be monitored weekly to ensure the integrity of the fence and for the presence of spotted turtles. If a spotted turtle is observed at any time, the operator shall notify the Department and consult with the State Herpetologist (843-527-8448).

The operator shall conduct a survey between February 15<sup>th</sup> and April 15<sup>th</sup> prior to the initiation of mining activities in isolated or non-jurisdictional wetlands at any time to determine the presence of spotted turtles. Survey results should be submitted to SCDNR and further coordination occur if spotted turtles are found to be present on-site.



# APPENDIX A

## MODIFICATIONS TO MINE PERMIT I-002407

NUMBER	DATE	<b>DESCRIPTION OF MODIFICATION</b> (PA= Permitted Acreage; AA= Affected, Bonded Acreage; FR= Reserves Acreage, B= Buffer Acreage)
I-002407	8/15/24	PA = 693.2ac., AA = 451.9ac., FR = 79.7ac., B = 161.6ac. Permit issued.



# **MR-500 Reclamation Plan for an Individual Mine Operating Permit**

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## **Environmental Protection**

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### **Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.**

The mine permit area is located in a rural area with land cover consisting of hardwood and managed pine forests for timber. On land neighboring the mine permit area, the land uses include agricultural, managed timberlands, rural residential. Of the 693 acres of permitted land, undisturbed buffers are used to provide additional protection to adjacent properties, creeks, and other sensitive areas.

### **Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.**

Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, cleanup of any spillage of petroleum products, removal of scrap material. Once mining is terminated, groundwater levels will rebound to approximate original levels. The mining process will not use chemicals in the mining or processing of crushed stone; consequently, there is no potential for chemical contamination to groundwater resources.

### **Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.**

The two archeological sites, 38OR420 & 38OR421, were determined to have potential for possible listing in the National Registration of Historic Places (NRHP). It was decided not to conduct the intensive survey to make a final determination on the listing but to avoid disturbing the two sites and adding a 50-foot buffer for protection.

### **Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.**

Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, cleanup of any spillage of petroleum products, removal of scrap material. Setbacks established buffers and soil stabilization of mine disturbed areas will protect any nearby streams and fisheries. Establishing 3:1 slopes around the pit and overburden storage areas will remove hazardous conditions for the public and indigenous animal populations.

### **Describe how applicant will comply with State air quality and water quality standards as established by the S.C. Department of Health and Environmental Control.**

This will be a wet mining operation. Groundwater will be lowered to establish a dry work bench and to desaturate the overburden. The limestone will be drilled, blasted, and extracted through the groundwater residing within the pit. This will significantly minimize dust from the pit area. The limestone when mined will have significant moisture content that will minimize dust generation from the crushing and screening in the portable crusher. Additionally, dust suppression water sprays will be used as necessary to control dust from the mobile plant. Water trucks will be used on haul road to control fugitive dust from mobile equipment and customer trucks.

To operate the mine and processing plant, the mine operator will obtain the Air Quality Construction Permit and ultimately the Air Quality Operating Permit. These permits set the quantity of air particulates that can be emitted to be protective of air quality standards.

During mining and until reclamation is complete and approved by DHEC, water quality will be protected by routing stormwater and process water into the pit to allow appropriate settling time to ensure compliance with NPDES water quality discharge limits.

With the termination of mining all mobile mine equipment and processing plant equipment will be removed from site. Once the process plant equipment is removed from site, the Air Quality Operating Permit can be terminated. Stone stockpiles, fines and barren soils, potential sources of dust after mining, will be either removed (stone stockpiles) or stabilized with vegetation to eliminate windblown dust.

## Reclamation of Affected Area

---

### State useful purpose(s) the affected land is being proposed for reclamation.

Grassland  
Lake or Pond

### Feasibility Documentation Attachment

NONE PROVIDED

#### Comment

The feasibility of reclaiming the quarry is not in question. The high-water table allows for easy reclamation of the pit to a lake. Once limited dewatering operations cease, the groundwater level will rebound to pre-mine levels. Reclaiming the terminal walls of the pit uses typical mining equipment to slope the overburden.

### Will the final maximum surface gradient (slope) in soil, sand, or other unconsolidated materials be steeper than 3 Horizontal : 1 Vertical (18 degrees or 33 percent)?

No

### How will the final slopes in unconsolidated material be accomplished?

All final slopes will be accomplished by grading.

**i** If the slope will be by backfilling, demonstrate that there is adequate material to accomplish the stated final gradient. If gradient is to be achieved by bringing in material from outside the permitted area, state the nature of the material and approximate quantities. If the gradient is to be achieved by grading, show that there is adequate area for grading to achieve gradient (i.e., adequate distance between the property line and edge of highwall).

### Final slopes calculations or other supporting information attachment(s)

NONE PROVIDED

#### Comment

All slopes will be constructed by grading. Backfilling to achieve 3:1 slope will not be necessary.

### Describe the plan for revegetation or other surface treatment of affected area(s). The revegetation plan shall include but not be limited to the following: (a) planned soil test; (b) site preparation and fertilization; (c) seed or plant selection; (d) rate of seeding or amount of planting per acre; (e) maintenance.

#### (a) Planned Soil Test

Soil analysis will be performed to determine the need for pH adjustment and nutrients. Different soils will be sampled separately. Soil samples will be taken in advance of planting. Soil samples will be submitted to the cooperative NRCS or Clemson extension services or commercial lab for analysis.

#### (b) Site Preparation & fertilization

Grading, shaping, and other earth moving will be completed to the extent necessary to permit seeding or planting. Tillage shall be the minimum needed to break compaction; incorporate fertilizers when incorporation of them is required; and provide enough loose soil to cover the seed when seed are to be drilled or covered by harrowing or cultipacking.

Soil amendments will be added as necessary to promote conditions suitable for plant growth (i.e., organic matter). Agricultural limestone will be uniformly spread and incorporated as soon as possible to allow for the pH adjustment. Incorporation also benefits relatively immobile nutrients such as phosphorus when needed. Type and rate of fertilization will be determined bases upon soil analysis.

#### (c) & (d) Seed or Plant Selection and Seeding Rates

Plants shall be selected based on species characteristics, site and soil conditions, the planned land use and maintenance of the area, the time of year the planting is made, and the needs and desires of the land user. Availability of seed will be one of the criteria for plant selection.

Coastal Plain

Spring Seeding Mix



Grass or legume Optimum  
Planting Date Seeding Rate  
(# per acre) Comments  
Browntop millet April- August 10 Serve as short term cover  
Bermudagrass (common)  
or  
Coastal Panicgrass March-June

March-May 4

20 broadcast, 12 drilled Hulled (chaff removed)

Pure Live Seed (PLS)  
Annual lespedeza (Kobe) Feb. - April 10 Use scarified seed and inoculate

Coastal Plain  
Fall Seeding Mix  
Grass or legume Optimum  
Planting Date Seeding Rate  
(# per acre) Comments  
Rye (Abruzzi) or Oats Sept-Nov. 10 Serve as short term cover  
Bermudagrass (common)  
or  
Switchgrass Aug-Oct

Oct-May 8

10 Unhulled (in chaff)  
Crimson clover (optional) Sept-Oct 10 Serve as short term cover, inoculate

(e) Maintenance

The revegetated site will be maintained through periodic inspections to detect areas with significant erosion, seed germination failure or significant plant die off. Additionally, site will be inspected after significant storm events to detect wash outs or gullies in planted areas. Damaged areas will be repaired where necessary by fixing erosion damage and reseeding as necessary.

**Does the possibility exist for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit has discharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or stockpiles (excludes fertilizer or lime for revegetation purposes)?**

No

**Describe the methods to control contaminants and permanently dispose any mine waste. This includes any soil, rock (overburden), mineral, scrap, tailings, fines, slimes, or other material directly connected with the mining, cleaning, and preparation of mineral substances mined. It also includes all waste material deposited on or in the permit area from any source.**

Any accumulated sediment removed from the overburden sediment ponds will be placed in the overburden storage area. The limestone product will not include a washed stone, so no tailings will be generated. Any other non-mining waste will be removed from the site and disposed of in a permitted solid waste facility.

**Describe the method of reclaiming settling and/or sediment ponds.**

The sediment ponds at the overburden storage area will remain. They will function as stormwater detention ponds to reduce the outflow velocity to minimize erosion and scouring.

**Describe the method of restoring or establishing stream channels, stream banks, and site drainage to a condition to minimize erosion, siltation, and other pollution.**

Not applicable - no streams will be diverted or relocated by mining.

**What are the maintenance plans to insure that the reclamation practices established on the affected land will not deteriorate before released by the Department?**

Areas that have undergone final reclamation practices will be maintained through periodic inspections and conducting any necessary repairs in a timely manner.

**For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify areas of potential danger (vertical walls, unstable slopes, unstable surface on clay slimes, etc.) and provide appropriate safety provisions.**

The following mine segments will be reclaimed to provide safety to persons and adjoining areas.

Highwalls -- The overburden will be sloped to a 3:1 gradient around the pit perimeter. With the sloped overburden and high-water table, no exposed vertical highwalls will remain.

Unstable Slopes -- All overburden storage areas (i.e., berms) will have an overall 3h:1v gradient and vegetated. Soils place to 3:1 gradient are stable and are not prone to landslides.

**What provisions will be taken to prevent noxious, odious, or foul pools of water from collecting and remaining on the mined area? For mines to be reclaimed as lakes or ponds, provide supporting information that a minimum water depth of four (4) feet on at least fifty percent (50%) of the pond surface area can be maintained.**

The final pit will be reclaimed as a lake and will meet the above referenced regulatory requirement for sufficient depth. Areas of the affected land not reclaimed to ponds will be properly graded to prevent unwanted pools of water from collecting and prevent foul water from forming.

**Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.**

Not able to determine what buildings or other structures will remain in post reclamation of the mine. Near the end of mining, Vulcan will identify which structures, if any, will remain in post reclamation.

**Attach a copy of a map of the area (referred to as the RECLAMATION MAP) that shows the reclamation practices and conservation practices to be implemented. The following should be shown (A through P - see below):**

[00587200-C08-RECLAMATION MAP-REV B.pdf - 09/20/2023 02:09 PM](#)

**Comment**

NONE PROVIDED

- A. The outline of the proposed final limits of the excavation during the number of years for which the permit is requested.
- B. The approximate final surface gradient(s) and contour(s) of the area to be reclaimed. This would include the sides and bottoms of mines reclaimed ponds and lakes.
- C. The outline of the tailings disposal area.
- D. The outline of disposal areas for spoil and refuse (exclusive of tailings ponds).
- E. The approximate location of the mean shore line of any impoundment or water body and inlet and/or outlet structures which will remain upon final reclamation.
- F. The approximate locations of access roads, haul roads, ramps or buildings which will remain upon final reclamation.
- G. The approximate locations of various vegetative treatments.
- H. The proposed locations of re-established streams, ditches or drainage channels to provide for site drainage.
- I. The proposed locations of diversions, terraces, silt fences, brush barriers or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation.
- J. Proposed locations of the measures to provide safety to persons and adjoining property.
- K. Segments of the mine that can be mined and reclaimed as an ongoing basis.
- L. The boundaries of the permitted area.
- M. The boundaries of the affected area for the anticipated life of the mine.
- N. The boundaries of the 100-year floodplain, where appropriate.
- O. Identify sections of mine where the final surface gradient will be achieved by grading and/or backfilling.

P. A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map.

THE REQUIRED RECLAMATION MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT. RECLAMATION MAP SHOULD BE THE SAME SCALE USED FOR THE SITE MAP.

**Schedule for Implementation of Conservation and Reclamation Practices**

**As stated in Section 48-20-90 of the S.C. Mining Act, reclamation activities, to the extent feasible, must be conducted simultaneously with mining operations. Identify which areas or segments of the mine are not feasible to reclaim simultaneously with mining. Provide reasons why reclamation can not proceed simultaneously with mining in these areas.**

The pit of a rock quarry cannot be mined and reclaimed in segments. Once the pit expands to a terminal wall the overburden can be sloped and revegetated.

Overburden storage area will be reclaimed in sections as soon as feasible.

**Schedule for Implementing Conservation and Reclamation Practices**

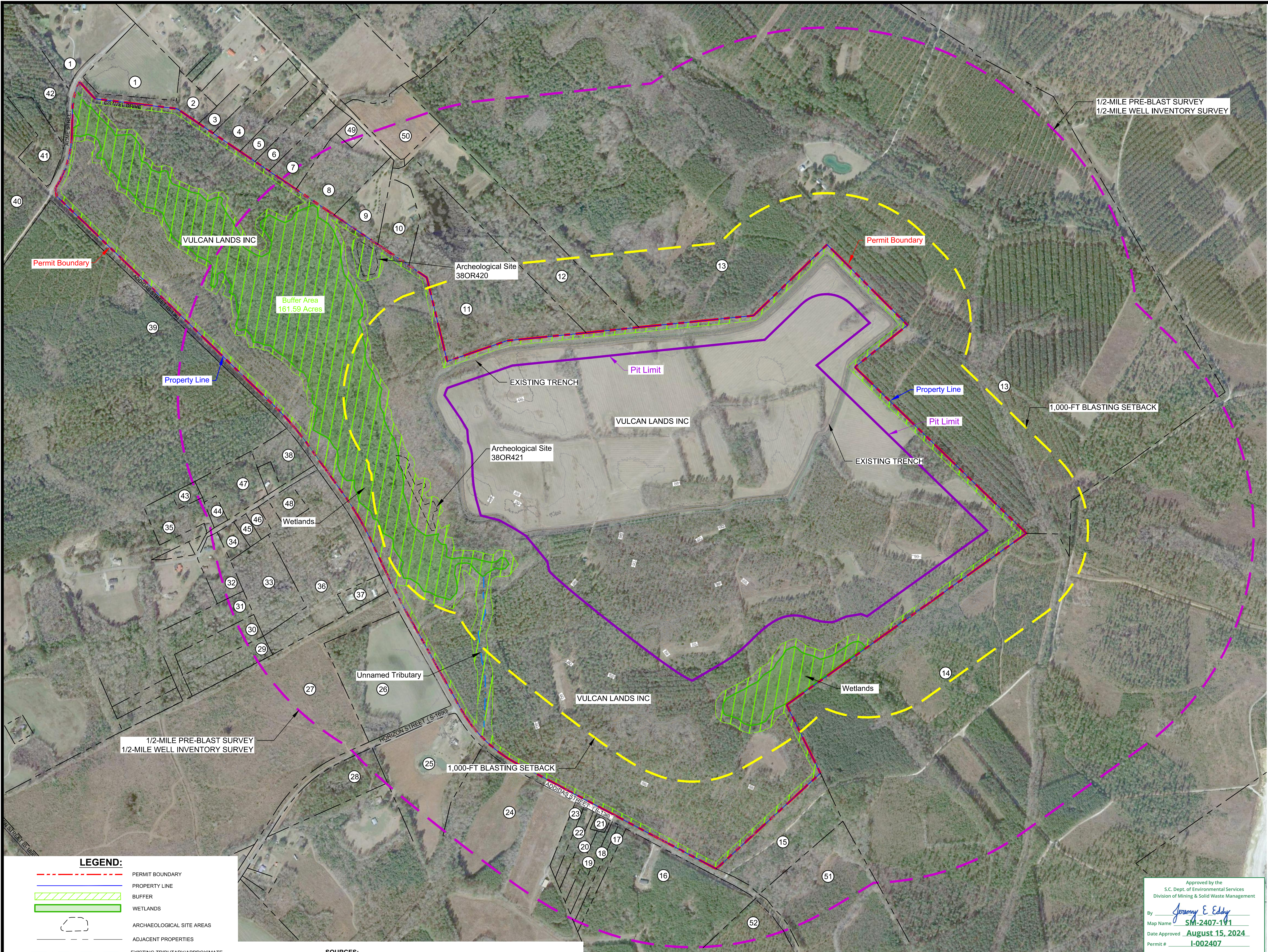
Conservation & Reclamation Practices	Segment # or Area	Planned Amount	Planned Year	*Applied Amount	*Applied Year	Notes
MARK 50' WETLAND BUFFER	ENTRANCE & OFFICE	5,600 LF	2024			NONE PROVIDED
MARK 50' WETLAND BUFFER	OVBN STORAGE & INFILTRATION CHANNEL	2,000 LF	2024			NONE PROVIDED
MARK BUFFERS FOR ARCHAEOLOGICAL SITES	38OR420 & 38OR421	2,000 LF	2024			NONE PROVIDED
MARK 50' PROPERTY LINE BUFFERS	ADJACENT TO OVBN STORAGE & ENTRANCE	6,600 LF	2024			NONE PROVIDED
MARK 50' PROPERTY LINE BUFFERS	NORTH OF PIT ALONG PHASE 1 INFILTRATION CHANNEL	2,000 LF	2024			NONE PROVIDED
Construction sediment control ponds 1 & 2	OVBN STORAGE	2	2025			NONE PROVIDED
SLOPE, GRADE, FERTILIZE AND VEGETATE	TERMINAL PIT WALL OVBN IN PHASE 1	TBD	TBD			WHEN AND WHERE FEASIBLE
SLOPE, GRADE, FERTILIZE AND VEGETATE	TERMINAL PIT WALL OVBN IN PHASE 2	TBD	TBD			WHEN AND WHERE FEASIBLE
SLOPE, GRADE, FERTILIZE AND VEGETATE	TERMINAL PIT WALL OVBN IN PHASE 3	TBD	TBD			WHEN AND WHERE FEASIBLE
SLOPE, GRADE, FERTILIZE AND VEGETATE	TERMINAL PIT WALL OVBN IN PHASE 4	TBD	TBD			WHEN AND WHERE FEASIBLE



Conservation & Reclamation Practices	Segment # or Area	Planned Amount	Planned Year	*Applied Amount	*Applied Year	Notes
SLOPE, GRADE, FERTILIZE AND VEGETATE	OVBN STORAGE	100 AC	TBD			WHERE AND WHEN FEASIBLE, CONDUCT RECLAMATION ACTIVITIES IN SECTIONS AS FINAL PLACEMENT OF VOERBURDEN ALLOWS
REMOVE EQUIPMENT & STOCKPILES	PERMIT AREA	TBD	END OF MINING			NONE PROVIDED
GRADE, FERTILIZE AND VEGETATE DISTURBED AREAS	PERMIT AREA	TBD	END OF MINING			NONE PROVIDED

**i** \*Applied fields to be completed by department





ORANGEBURG LIMESTONE QUARRY - PROPERTY OWNERS' INFORMATION				
MAP NUMBER	TAX PARCEL #	OWNER	OWNER ADDRESS	PROPERTY ADDRESS
1	0362-00-03-062.00	Travis E. Clarence	542 Acme Street Eutawville, SC 29048	542 Acme Street Eutawville, SC 29048
2	0362-00-03-097.00	Teresa Adkins	3402 Pinosa Lane North Charleston, SC 29420	539 Acme Street Eutawville, SC 29048
3	0362-00-03-131.00	Guillermo & Janet Chavez	186 Tunita Street Eutawville, SC 29048	186 Tunita Street Eutawville, SC 29048
4	0362-00-03-125.00	Carol J. & Brian E. Walters	176 Tunita Street Eutawville, SC 29048	176 Tunita Street Eutawville, SC 29048
5	0362-00-03-149.00	C & C Properties of Eutawville LLC	131 Waterfront Drive Eutawville, SC 29048	188 Tunita Street Eutawville, SC 29048
6	0362-00-03-126.00	Alan R. & Brenda L. Bloom	9779 Roseberry Street Ladson, SC 29456	204 Tunita Street Eutawville, SC 29048
7	0363-00-02-16.00	Greig & Lucelly Stinson	P.O. Box 410 Eutawville, SC 29048	Tunita Street Eutawville, SC 29048
8	0363-00-02-009.00	Greig A. & Lucelly Stinson	P.O. Box 410 Eutawville, SC 29048	248 Tunita Street Eutawville, SC 29048
9	0363-00-02-010.00	Greig A. & Lucelly Stinson	P.O. Box 410 Eutawville, SC 29048	248 Tunita Street Eutawville, SC 29048
10	0363-00-02-014.00	Steven B. Holladay	256 Tunita Street Eutawville, SC 29048	Tunita Street Eutawville, SC 29048
11	0363-00-02-012.00	Steven B. Holladay	256 Tunita Street Eutawville, SC 29048	256 Tunita Street Eutawville, SC 29048
12	0363-00-02-002.00	Greig A. & Lucelly Stinson	P.O. Box 410 Eutawville, SC 29048	Tunita Street Eutawville, SC 29048
13	0362-00-03-106.00	Martin Marietta Material Real Estate	P.O. Box 8040 Fort Wayne, IN 46888	Frankford Court Eutawville, SC 29048
14	0370-00-03-001.00	Martin Marietta Material Real Estate	P.O. Box 8040 Fort Wayne, IN 46888	273 Gardonsgate Rd. Eutawville, SC 29048
15	0363-00-02-007.00	Martin Marietta Material Real Estate	P.O. Box 8040 Fort Wayne, IN 46888	Addidas Street Eutawville, SC 29048
16	0363-00-03-022.00	Stephen D. Walker	1320 Addidas Street Eutawville, SC 29048	1320 Addidas Street Eutawville, SC 29048
17	0363-00-03-019.00	William Johnson, Jr. ETAL	340 Myrtle Ave Apt 88 Irvington, NJ 07111	Addidas Street Eutawville, SC 29048
18	0363-00-03-018.00	Rosalene Taste ETAL	120 Burnside Lane Ridgely, SC 29472	Addidas Street Eutawville, SC 29048
19	0363-00-03-017.00	Malchia N. Lee	153 Horizon Street Eutawville, SC 29048	Addidas Street Eutawville, SC 29048
20	0363-00-03-015.00	Kaysha S. & Monroe Fields, Jr.	29 Deer Ridge Court St. Matthews, SC 29135	Addidas Street Eutawville, SC 29048
21	0363-00-03-016.00	Cecil Knots	P.O. Box 243 North, SC 29112	1296 Addidas Street Eutawville, SC 29048
22	0363-00-03-014.00	Mary Mitchum ETAL	788 Zion Road Cross, SC 29436	Addidas Street Eutawville, SC 29048
23	0363-00-03-013.00	Dorothy Gadsdon ETAL	6032 Hackney Court North Charleston, SC 29406	Addidas Street Eutawville, SC 29048
24	0363-00-03-012.00	Michael Grosso, Jr. Addidas Rd. LLC	421 Barony Street Sls 6 Monks Corner, SC 29641	Addidas Street Eutawville, SC 29048
25	0363-00-03-020.00	Bavian L. & Mildred W. Scott	1605 Addidas Street Eutawville, SC 29048	1204 Addidas Street Eutawville, SC 29048
26	0363-00-01-047.00	Malchia N. Lee	8447 Schumacher Ave NW Concord, NC 28027	Addidas Street Eutawville, SC 29048
27	0363-00-01-045.00	Vulcan Lands Inc	1200 Urban Center Dr. Vestavia, AL 36242-2545	Horizon Street Eutawville, SC 29048
28	0363-00-03-007.00	Josephly Canty Shirley Lee	15349 Ballantyne County Club Dr. Charlotte, NC 28277-2722	Horizon Street Eutawville, SC 29048
29	0363-00-01-042.00	Patrick Fitzgerald Luttwant	1100 Boulevard St Orangeburg, SC 29115	Cambell Road Eutawville, SC 29048
30	0363-00-01-041.00	William P. & Kelli A. Wilson	1066 Addidas St. Eutawville, SC 29048	Cambell Road Eutawville, SC 29048
31	0363-00-01-040.00	Rosa Lee H. Cashus	167 Cambell Road Eutawville, SC 29048	Cambell Road Eutawville, SC 29048
32	0363-00-01-039.00	Azlee H. Yeadon	167 Cambell Road Eutawville, SC 29048	n/a
33	0363-00-01-053.00	William P. Wilson	144 Staffler Drive Summerville, SC 29486	Addidas Street Eutawville, SC 29048
34	0363-00-01-054.00	Michael A. Tucker	1222 Azoria Drive Summerville, SC 29486	Addidas Street Eutawville, SC 29048
35	0363-00-01-007.00	Mattie Mintz ETAL	154 Cambell Road Eutawville, SC 29048	Cambell Road Eutawville, SC 29048
36	0363-00-01-043.00	William P. Wilson	144 Staffler Drive Summerville, SC 29486	Addidas Street Eutawville, SC 29048
37	0363-00-01-044.00	William P. & Kelli A. Wilson	1066 Addidas Street Eutawville, SC 29048	1066 Addidas Street Eutawville, SC 29048
38	0363-00-01-002.00	Audrey L. Brunson; Regina P. Blondell	128 Pineridge Road Charleston, SC 29407	Cambell Road Eutawville, SC 29048
39	0363-00-01-050.00	Bill & Dena Cody	8784 E. Tree Tops Court Drive, FL 33328	Highway 136 Eutawville, SC 29048
40	0363-00-01-051.00	Wampee # 4	P.O. Box 1180 Monks Corner, SC 29486	Highway 136 Eutawville, SC 29048
41	0363-00-02-001.00	William M. & Heather R. Ward	783 Addidas Street Eutawville, SC 29048	783 Addidas Street Eutawville, SC 29048
42	0357-00-04-040.00	Congaree Carton Limited Partnership	1156 Bowman Rd Unit 200 Mount Pleasant, SC 29464	Highway 136 Eutawville, SC 29048
43	0363-00-01-006.00	Joshua Heirs Daily	154 Cambell Road Eutawville, SC 29048	Cambell Road Eutawville, SC 29048
44	0363-00-01-004.00	David & Mattie Mintz	162 Cambell Road Eutawville, SC 29048	154 Cambell Rd. Eutawville, SC 29048
45	0363-00-01-061.00	William P. Wilson	144 Staffler Drive Summerville, SC 29486	Addidas Street Eutawville, SC 29048
46	0363-00-01-060.00	Elizabeth & Michell Robert Wilson	131 Cambell Road Eutawville, SC 29048	Addidas Street Eutawville, SC 29048
47	0363-00-01-005.00	Josh Dailey	130 Cambell Road Eutawville, SC 29048	130 Cambell Rd. Eutawville, SC 29048
48	0363-00-01-066.00	Amy R. Evans	1641 18 Street Holly Hill, SC 29052-2512	Addidas Street Eutawville, SC 29048
49	0363-00-02-018.00	Thomas Carter	555 Doleland Way Cross, SC 29436-3636	Tunita Street Eutawville, SC 29048
50	0363-00-02-019.00	Krista D. Bowman	1032 Farmhouse Lane Manning, SC 29026	Acme St. Eutawville, SC 29048
51	0363-00-02-015.00	Martin Marietta Material Real Estate	P.O. Box 8040 Fort Wayne, IN 46888	Addidas Street Eutawville, SC 29048
52	0363-00-01-023.00	Environmental Banc & Exchange LLC	5000 Montrose Blvd. FL 6 Houston, TX 77006-6550	Addidas Street Eutawville, SC 29048

- LEGEND:**
- - - - - PERMIT BOUNDARY
  - — — — — PROPERTY LINE
  - ▨ ▨ ▨ ▨ ▨ BUFFER
  - ▭ ▭ ▭ ▭ ▭ WETLANDS
  - ARCHAEOLOGICAL SITE AREAS
  - - - - - ADJACENT PROPERTIES
  - - - - - EXISTING TRIBUTARY/APPROXIMATE CENTERLINE OF CREEK
  - - - - - EXISTING CONTOUR
  - - - - - 1/2-MILE PRE-BLAST SURVEY
  - - - - - 1/2-MILE WELL INVENTORY SURVEY
  - - - - - 1,000-FT BLASTING SETBACK
- 12 MAP NUMBER

- SOURCES:**
- PARCEL INFORMATION WAS OBTAINED FROM ORANGEBURG COUNTY GIS AT <https://gis2.orangeburgcounty.org/maps/> in June and September 2023.
  - AERIAL PHOTOGRAPH DATED 01-28-2023 WAS OBTAINED FROM GOOGLE PRO AT <https://earth.google.com/web/>.
  - BASE TOPOGRAPHY PROVIDED BY VULCAN MATERIALS COMPANY. DATE OF SURVEY: JUNE 26, 2021



E			
D			
C			
B	8/30/2023	FOR CLIENT REVIEW	JCC
A	6/23/2023	FOR CLIENT REVIEW	CCN
	DATE	REVISION	BY

**TOLERANCES—UNLESS NOTED**

FRACTIONAL: ± 1/16"  
 DECIMAL: ± 0.010"  
 ANGLE: ± 0.1°

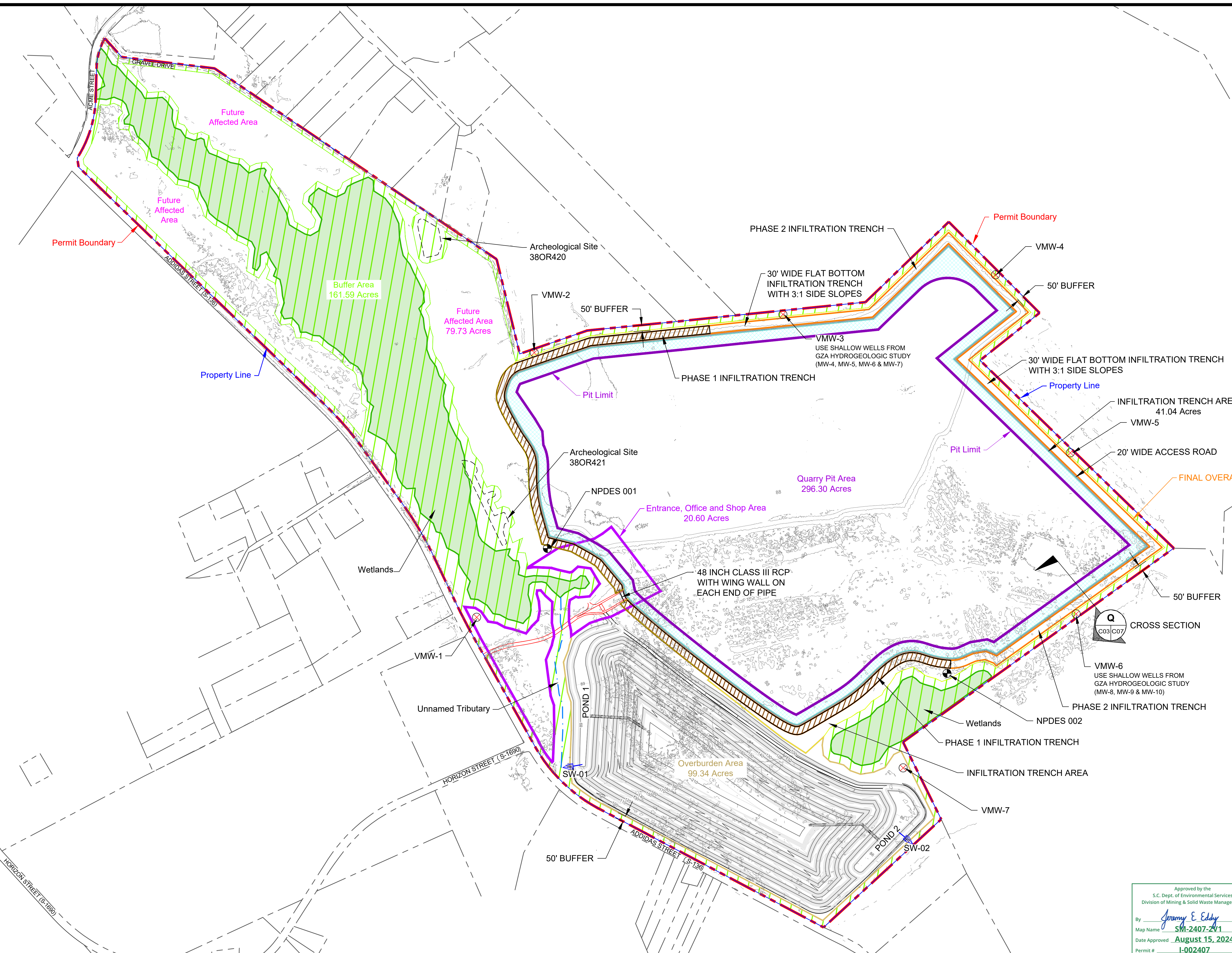
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**EXISTING CONDITIONS WITH BLASTING SETBACKS AND WELL INVENTORY AREAS PHASES MAP**

DRAWN		PLANT	
BY C. NEWELL	DATE 6/21/2023	BY B. GREEN	DATE 6/21/2023
PROJECT: ORANGEBURG LIMESTONE QUARRY		SCALE: 1" = 450'	
SHEET 2 OF 8		REV. B	





**LEGEND:**

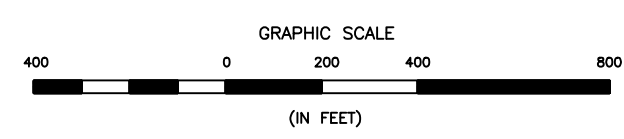
- OVERBURDEN AREA
- PERMIT BOUNDARY
- PROPERTY LINE
- ENTRANCE AND OFFICE AREA
- PIT LIMIT
- BUFFER
- WETLANDS
- STRIPPING LIMIT
- ARCHAEOLOGICAL SITE AREAS
- ADJACENT PROPERTIES
- STORMWATER OUTFALL
- NPDES OUTFALL
- INFILTRATION TRENCH AREA
- PHASE 1 INFILTRATION TRENCH
- FINAL OVERALL INFILTRATION TRENCH
- EXISTING TRIBUTARY/APPROXIMATE CENTERLINE OF CREEK
- EXISTING CONTOUR
- PROPOSED 20' WIDE ACCESS ROAD
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- VMW-5
- PROPOSED GROUNDWATER MONITORING WELL

ORANGEBURG BONDING AREA	
QUARRY PIT AREA (15,009 Linear Feet of Pit Limit) (area includes Stripping Limit)	296.30 (ACRES) (includes 3.92 ac. in Entrance, Office and Shop area)
INFILTRATION TRENCH AREA	41.04 (ACRES) (includes 1.44 ac. in Entrance, Office and Shop area)
ENTRANCE, OFFICE AND SHOP AREA	20.60 (ACRES)
OVERBURDEN AREA	99.34 (ACRES)
<b>TOTAL AFFECTED AREA</b>	<b>451.92 (ACRES)</b>
TOTAL BUFFER AREA	161.59 (ACRES)
FUTURE AFFECTED AREA	79.73 (ACRES)
<b>TOTAL PERMITTED AREA</b>	<b>693.24 (ACRES)</b>

- SOURCE:**
1. BASE TOPOGRAPHY PROVIDED BY VULCAN MATERIALS COMPANY. DATE OF SURVEY: JUNE 26, 2021
  2. WETLANDS DELINEATION, PROPERTY BOUNDARY LINES AND ARCHAEOLOGICAL BOUNDARY LINES AND DETAILS SUPPLIED BY VULCAN

Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management

By: *Jeremy E. Eddy*  
Map Name: SM-2407-2/1  
Date Approved: August 15, 2024  
Permit #: I-002407



DATE	REVISION	BY
1/23/2024	ELIMINATE OUTFALL	JAW
8/30/2023	FOR CLIENT REVIEW	JCC
6/30/2023	FOR CLIENT REVIEW	CCN
		BY

**TOLERANCES—UNLESS NOTED**

FRACTIONAL: ± 1/16"  
DECIMAL: ± 0.010"  
ANGLE: ± 0.1°

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**MINE LAND USE MAP WITH BONDING**


















DATE	BY	DATE	BY	SCALE	SHEET
6/30/2023	C. NEWELL	6/30/2023	B. GREEN	1" = 400'	3 OF 8

ORANGEBURG LIMESTONE QUARRY  
PRJ. NO. 00.5872.00  
FILE SERVER  
SHEET 3 OF 8  
REV. C

C:\Users\whitney\Desktop\Projects\Orangeburg\2024\1-Permit Mapping\00587200-BASE-REV B.dwg 1/23/2024 1:23 PM



**LEGEND:**

-  OVERBURDEN AREA
-  PERMIT BOUNDARY
-  PROPERTY LINE
-  BUFFER
-  WETLANDS
-  STRIPPING LIMIT
-  ARCHAEOLOGICAL SITE AREAS
-  ADJACENT PROPERTIES
-  INFILTRATION TRENCH AREA
-  PHASE 1 INFILTRATION TRENCH
-  FINAL OVERALL INFILTRATION TRENCH
-  EXISTING TRIBUTARY/APPROXIMATE CENTERLINE OF CREEK
-  PROPOSED 20' WIDE ACCESS ROAD
-  PHASE 1 PIT
-  PHASE 2 PIT
-  PHASE 3 PIT
-  PHASE 4 PIT

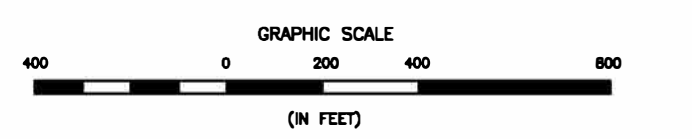
PHASE 4: MINING WILL ONLY PROCEED INTO PHASE 4 IF EXPERIENCE DEMONSTRATES OR MINING TECHNIQUES ARE ADJUSTED TO MAINTAIN GROUNDWATER LEVELS AT OR ABOVE 2 FEET ABOVE TOP OF LIMESTONE AT THE PROPERTY BOUNDARY. DEWATERING ELEVATION IS TO BE DETERMINED.

PHASE 3: YEARS 31 TO 45  
- DEWATERING TO ELEVATION 67 FEET

PHASE 2: YEARS 16 TO 30  
- DEWATERING TO ELEVATION 62 FEET

PHASE 1: YEARS 1 TO 15  
- DEWATERING TO ELEVATION 57 FEET

Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management  
By: Jeremy E. Eddy  
Map Name: SM-2407-3/1  
Date Approved: August 15, 2024  
Permit #: I-002407



E			
D			
C			
B	8/30/2023	FOR CLIENT REVIEW	JCC
A	7/27/2023	FOR CLIENT REVIEW	CCN
	DATE	REVISION	BY

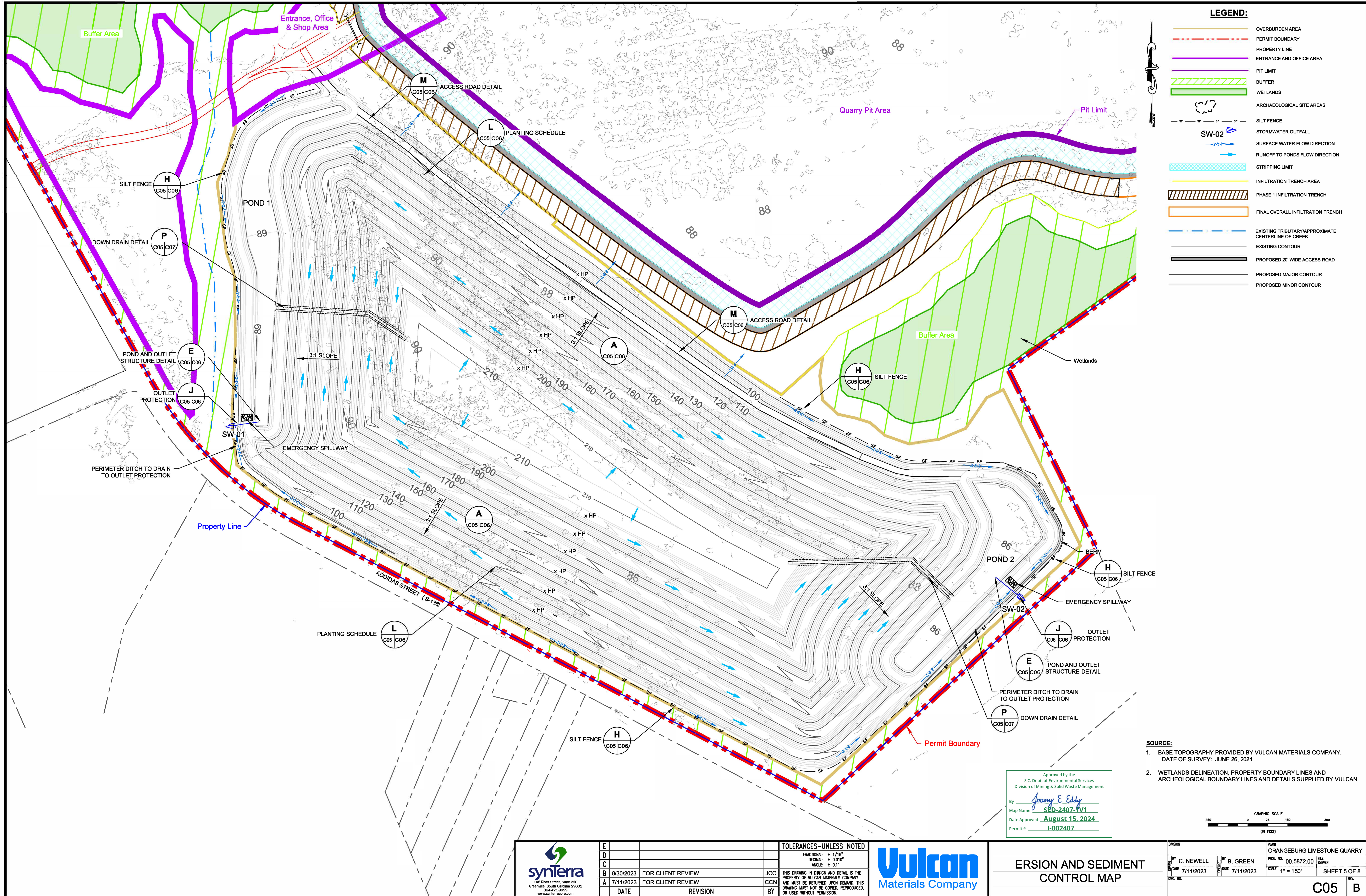
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 FRACTIONAL: ± 1/16"  
 DECIMAL: ± 0.010"  
 ANGLE: ± 0.1°  
 THIS DRAWING IN DIMENSION AND DETAIL IS THE PROPERTY OF VULCAN MATERIALS COMPANY AND MUST BE RETURNED UPON DEMAND. THIS DRAWING MUST NOT BE COPIED, REPRODUCED, OR USED WITHOUT PERMISSION.



**PIT PHASES MAP**

DRAWN BY: C. NEWELL		PLANT: ORANGEBURG LIMESTONE QUARRY	
DATE: 7/27/2023	DATE: 7/27/2023	PROJ. NO.: 00.5872.00	FILE NUMBER
SCALE: 1" = 400'	SHEET 4 OF 8	REV.	
C04		B	





**LEGEND:**

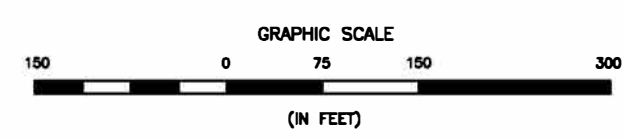
- OVERBURDEN AREA
- PERMIT BOUNDARY
- PROPERTY LINE
- ENTRANCE AND OFFICE AREA
- PIT LIMIT
- BUFFER
- WETLANDS
- ARCHAEOLOGICAL SITE AREAS
- SILT FENCE
- STORMWATER OUTFALL
- SURFACE WATER FLOW DIRECTION
- RUNOFF TO PONDS FLOW DIRECTION
- STRIPPING LIMIT
- INFILTRATION TRENCH AREA
- PHASE 1 INFILTRATION TRENCH
- FINAL OVERALL INFILTRATION TRENCH
- EXISTING TRIBUTARY/APPROXIMATE CENTERLINE OF CREEK
- EXISTING CONTOUR
- PROPOSED 20' WIDE ACCESS ROAD
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR

**SOURCE:**

1. BASE TOPOGRAPHY PROVIDED BY VULCAN MATERIALS COMPANY. DATE OF SURVEY: JUNE 26, 2021
2. WETLANDS DELINEATION, PROPERTY BOUNDARY LINES AND ARCHEOLOGICAL BOUNDARY LINES AND DETAILS SUPPLIED BY VULCAN

Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management

By Jeremy E. Eddy  
Map Name SED-2407-YV1  
Date Approved August 15, 2024  
Permit # I-002407



E D C B A			
	DATE	REVISION	BY
	TOLERANCES—UNLESS NOTED		
	FRACTIONAL: ± 1/16"		JCC
	DECIMAL: ± 0.010"		CCN
ANGLE: ± 0.1°		THIS DRAWING IN DIMENSION AND DETAIL IS THE PROPERTY OF VULCAN MATERIALS COMPANY AND MUST BE RETURNED UPON DEMAND. THIS DRAWING MUST NOT BE COPIED, REPRODUCED, OR USED WITHOUT PERMISSION.	

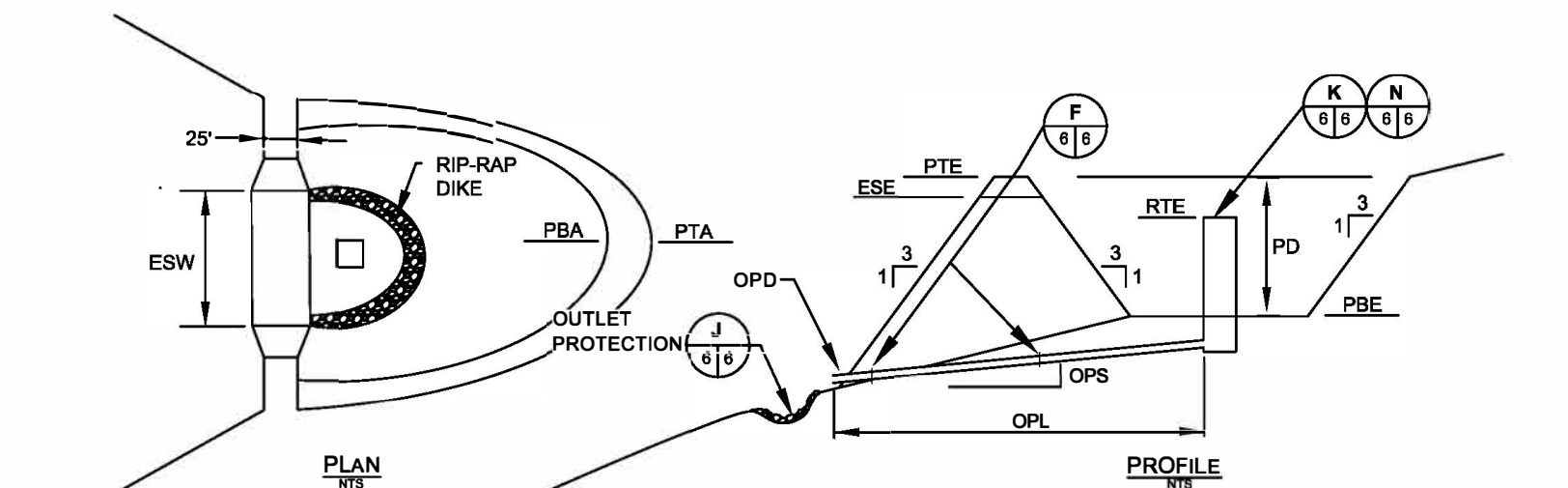
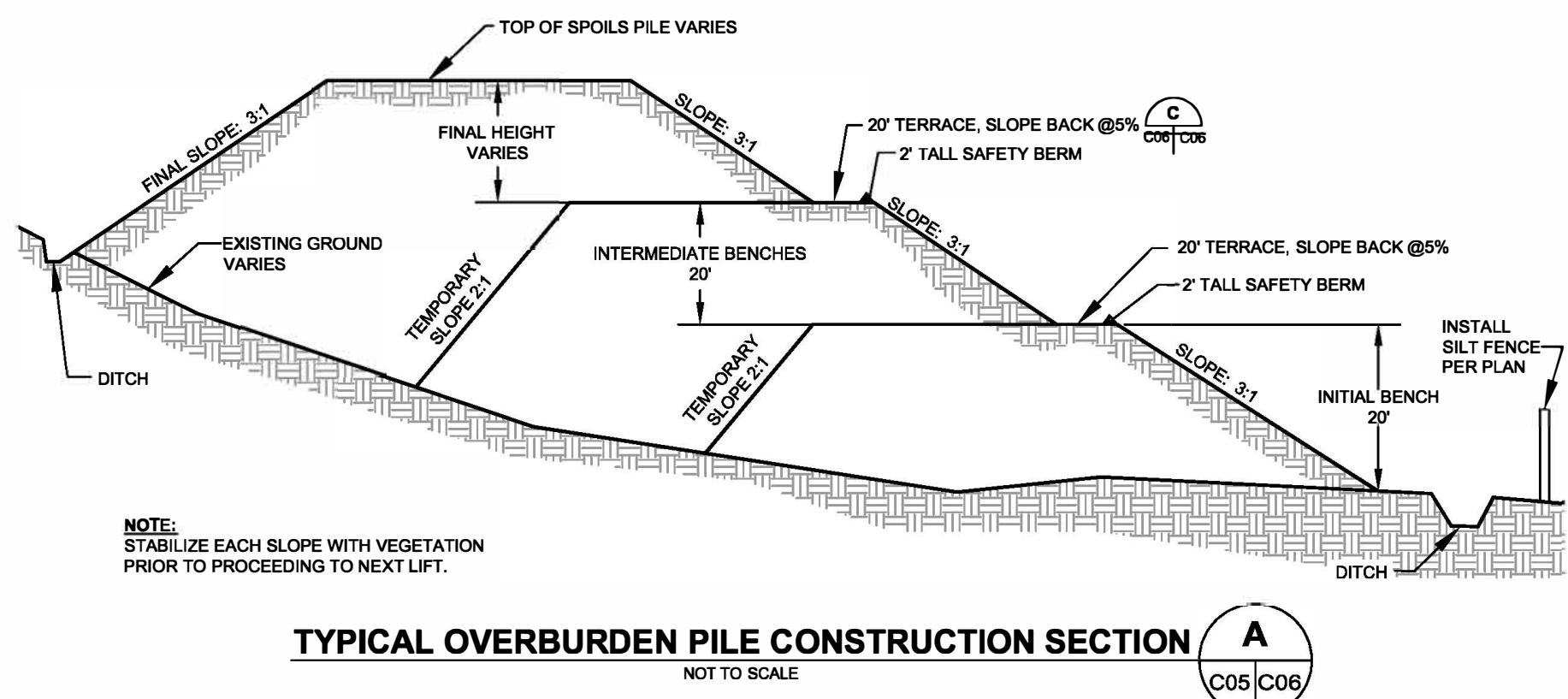


**ERSION AND SEDIMENT CONTROL MAP**

PROJECT ORANGEBURG LIMESTONE QUARRY	
DRAWN BY C. NEWELL	PLANNED BY B. GREEN
DATE 7/11/2023	DATE 7/11/2023
PROJECT NO. 00.5872.00	SHEET 5 OF 8
SCALE 1" = 150'	
C05	B

9/20/2023 8:55 AM P:\Vulcan Construction Materials\983920\_Orangeburg Quarry\00.5872.00 Mine Permit & NPDES Permit\CAD\00587200-BASE-REV B.dwg





**ABBREVIATIONS**

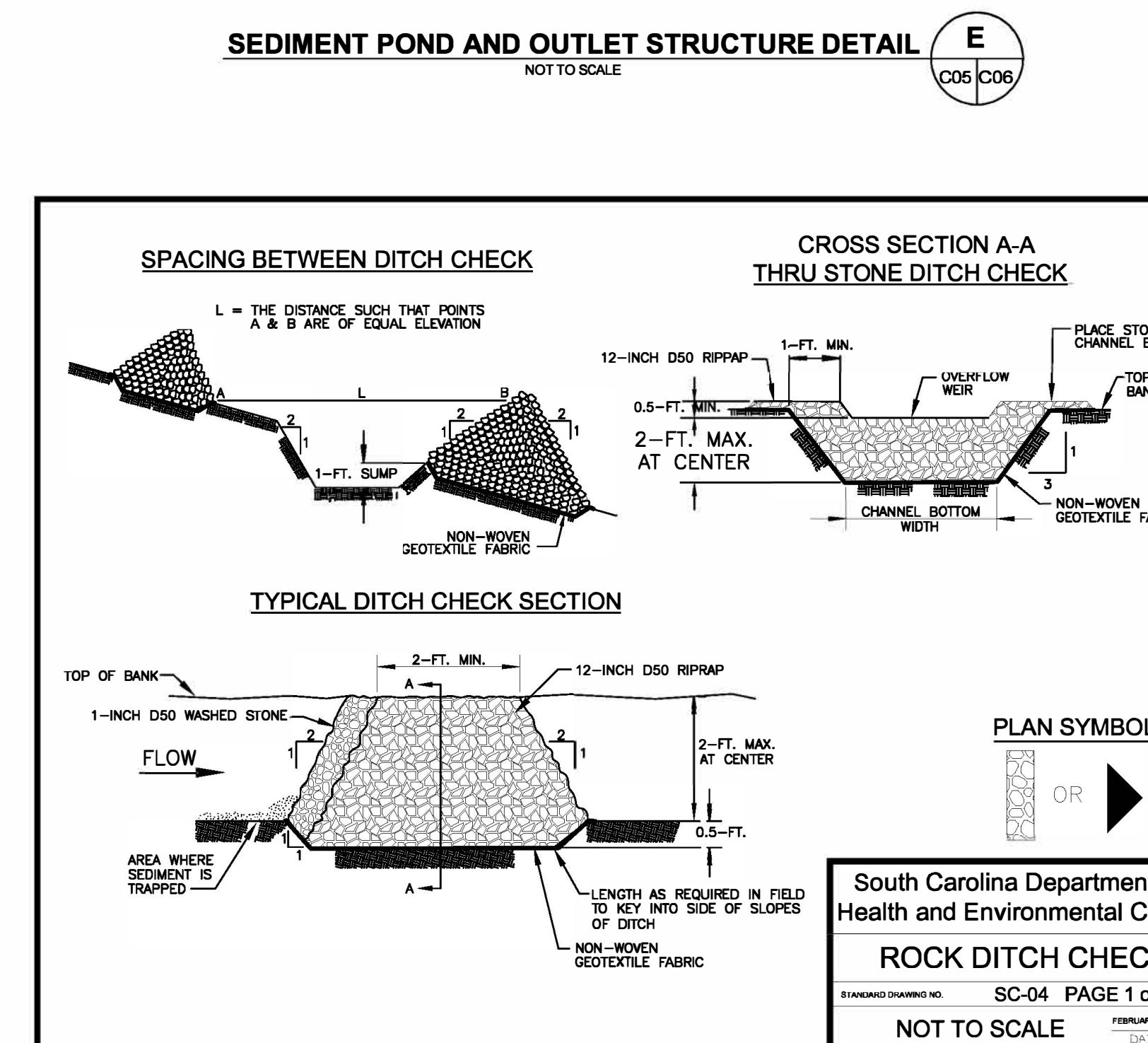
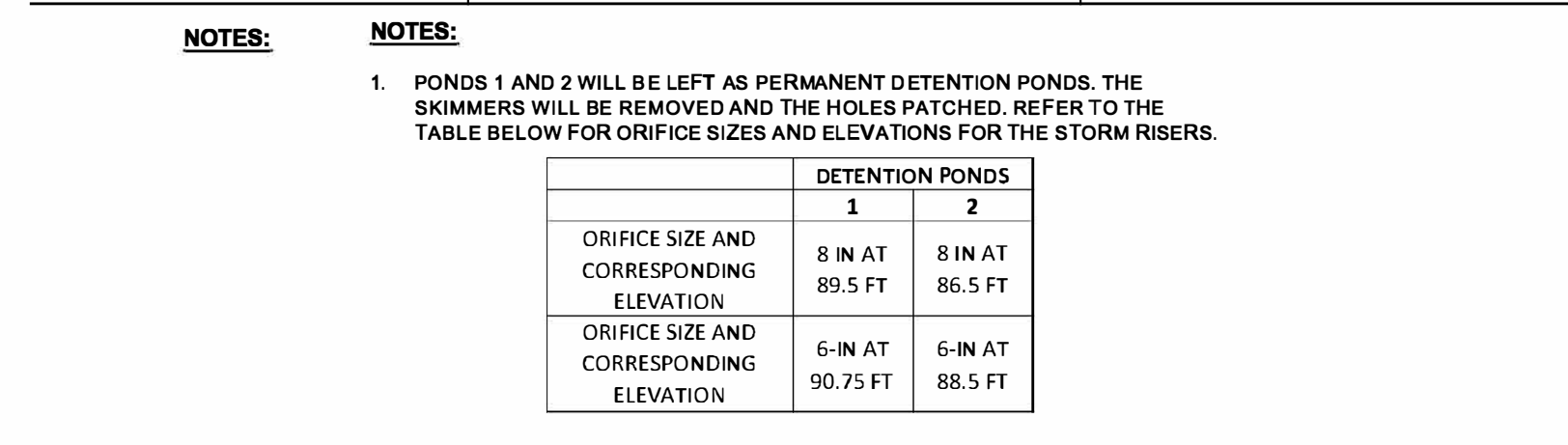
PTE POND TOP ELEVATION  
ESE EMERGENCY SPILLWAY ELEVATION  
RTE RISER TOP ELEVATION  
PD POND DEPTH  
PBE POND BOTTOM ELEVATION  
ESW EMERGENCY SPILLWAY WIDTH  
PBA POND BOTTOM AREA  
PTA POND TOP AREA  
OPL OUTLET PIPE LENGTH  
OPS OUTLET PIPE SLOPE  
OPD OUTLET PIPE DIAMETER

	POND 1	POND 2
PTE	96.0'	96.0'
ESE	95.0'	95.0'
RTE	93.5'	93.5'
PD	7'	10'
PBE	89.0'	86.0'
ESW	10'	10'
PBA	1,091 ac	0,793 ac
PTA	3,505 ac	3,209 ac
OPL	75'	100'
OPS	0.013	0.020
OPD	24"	24"

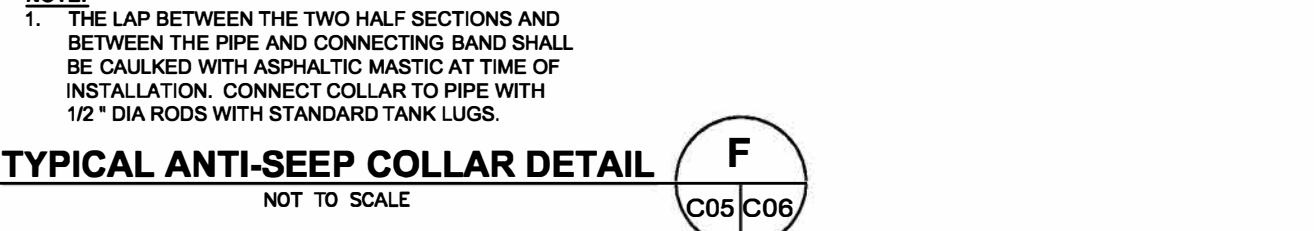
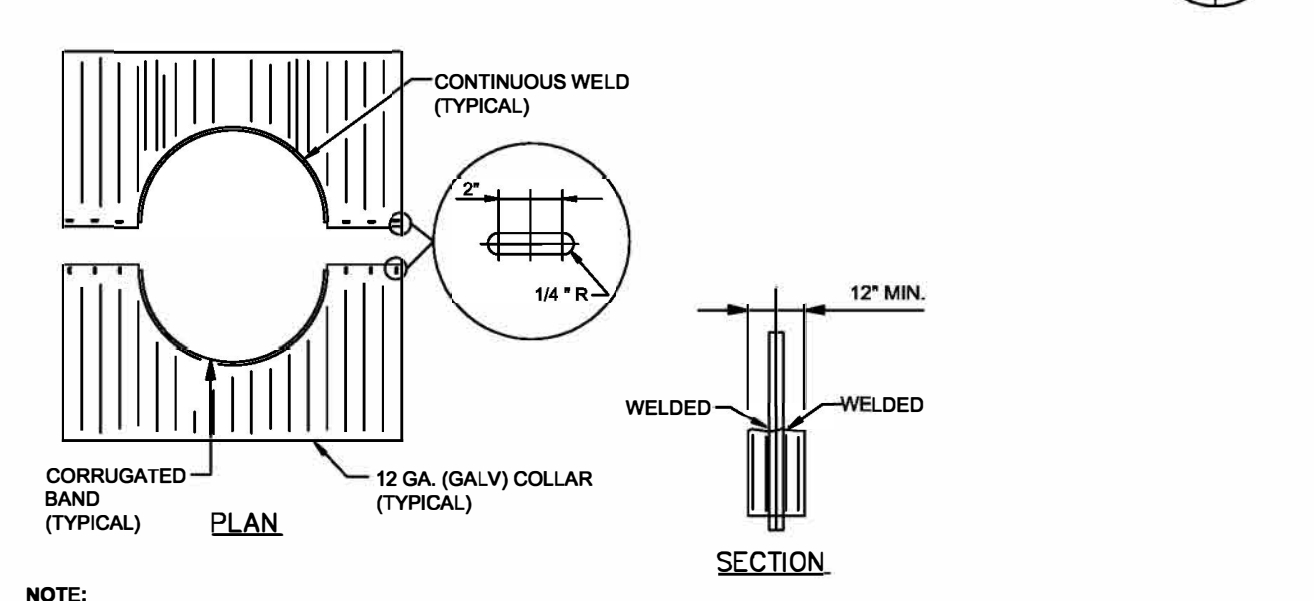
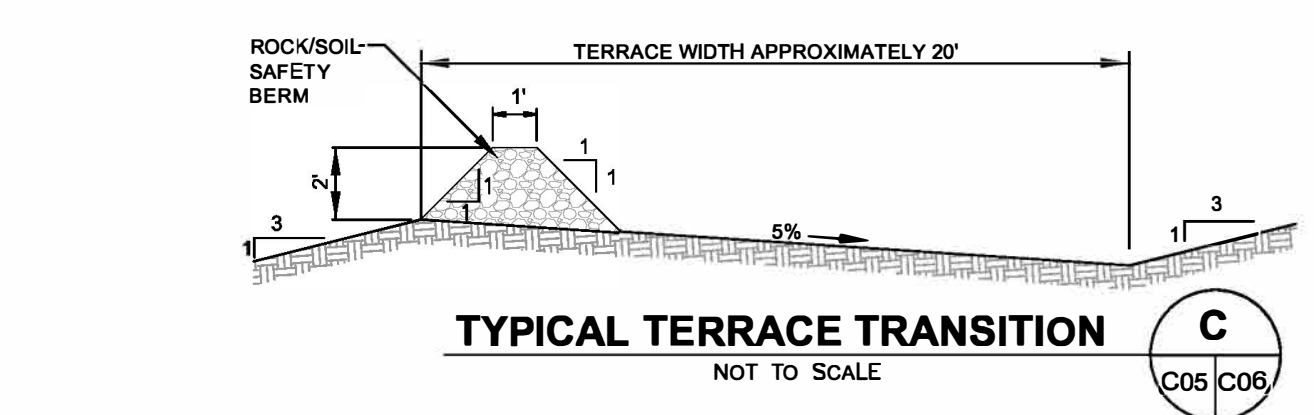
**NOTES:**

1. PONDS 1 AND 2 WILL BE LEFT AS PERMANENT DETENTION PONDS. THE SKIMMERS WILL BE REMOVED AND THE HOLES PATCHED. REFER TO THE TABLE BELOW FOR ORIFICE SIZES AND ELEVATIONS FOR THE STORM RISERS.

	1	2
ORIFICE SIZE AND CORRESPONDING ELEVATION	8 IN AT 89.5 FT	8 IN AT 86.5 FT
ORIFICE SIZE AND CORRESPONDING ELEVATION	6-IN AT 90.75 FT	6-IN AT 88.5 FT

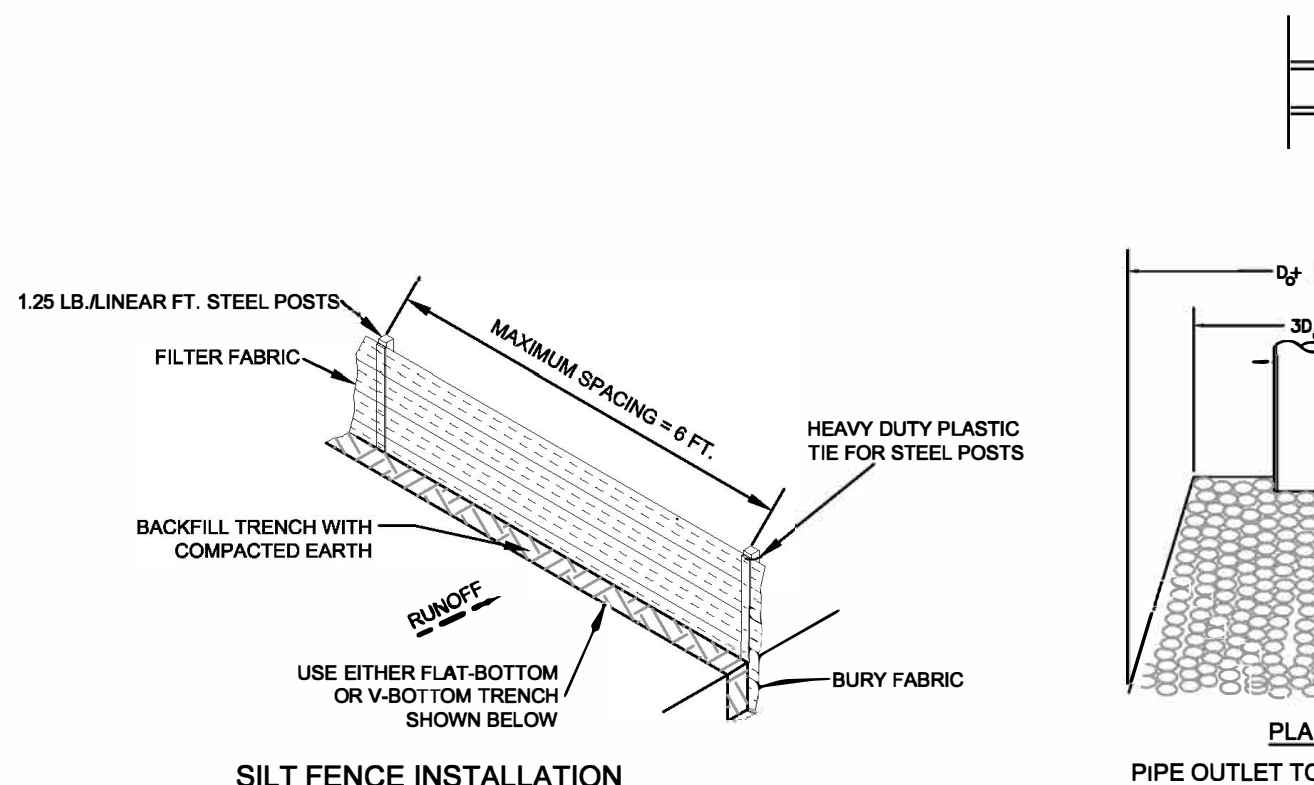


South Carolina Department of Health and Environmental Control  
ROCK DITCH CHECK  
SC-04 PAGE 1 of 2  
NOT TO SCALE



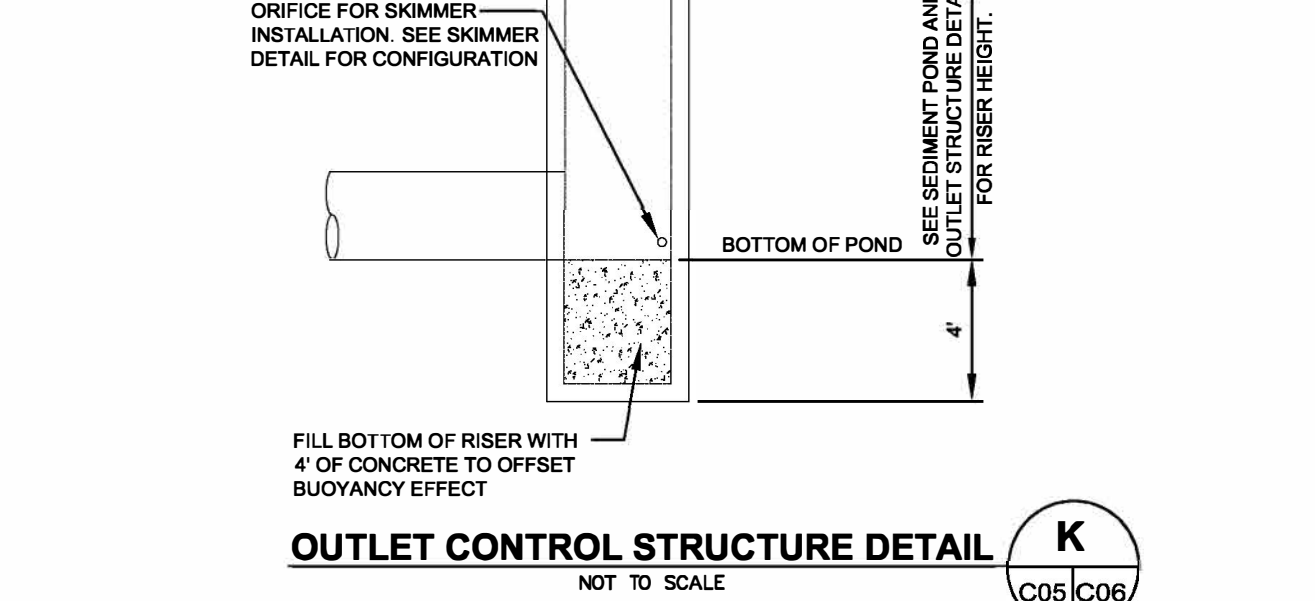
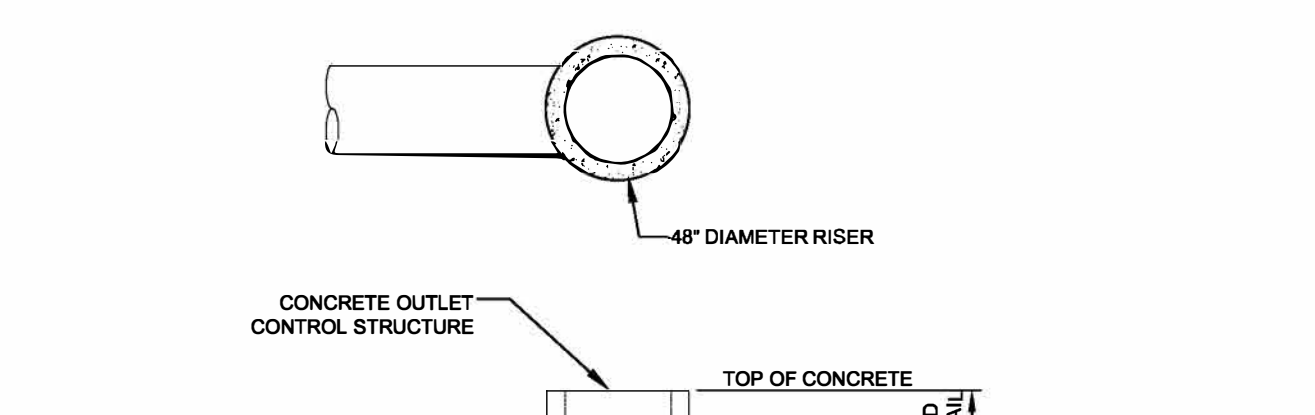
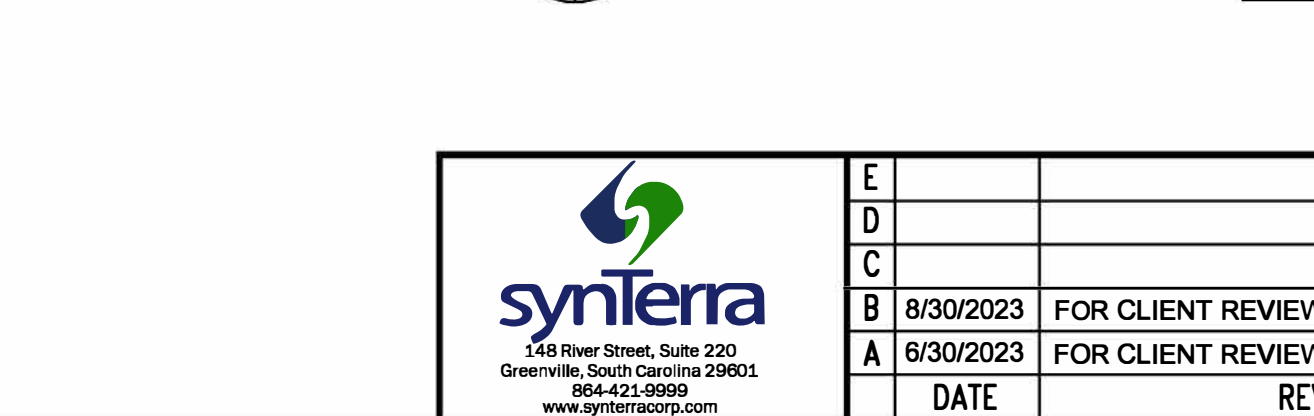
**Permanent Seeding - Upstate**

Species	Lbs/ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bahia Grass (Alone)	40												
Bahia Grass (Mix)	30												
Bermuda Grass (hulled) (Alone)	8-12												
Bermuda Grass (hulled) (Mix)	4-6												
Fescue, Tall (KY31) (Alone)	40												
Fescue, Tall (KY31) mix	20												
Series Lespedeza (Scarfield) (Alone or Mix) (inoculate with EL Inoculant)	40												
Ladino Clover (mix only)	2												
Inoculate with AB Inoculant	2												
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												
Crownvetch (Mix) (Inoculate with Type M Inoculant)	8-10												



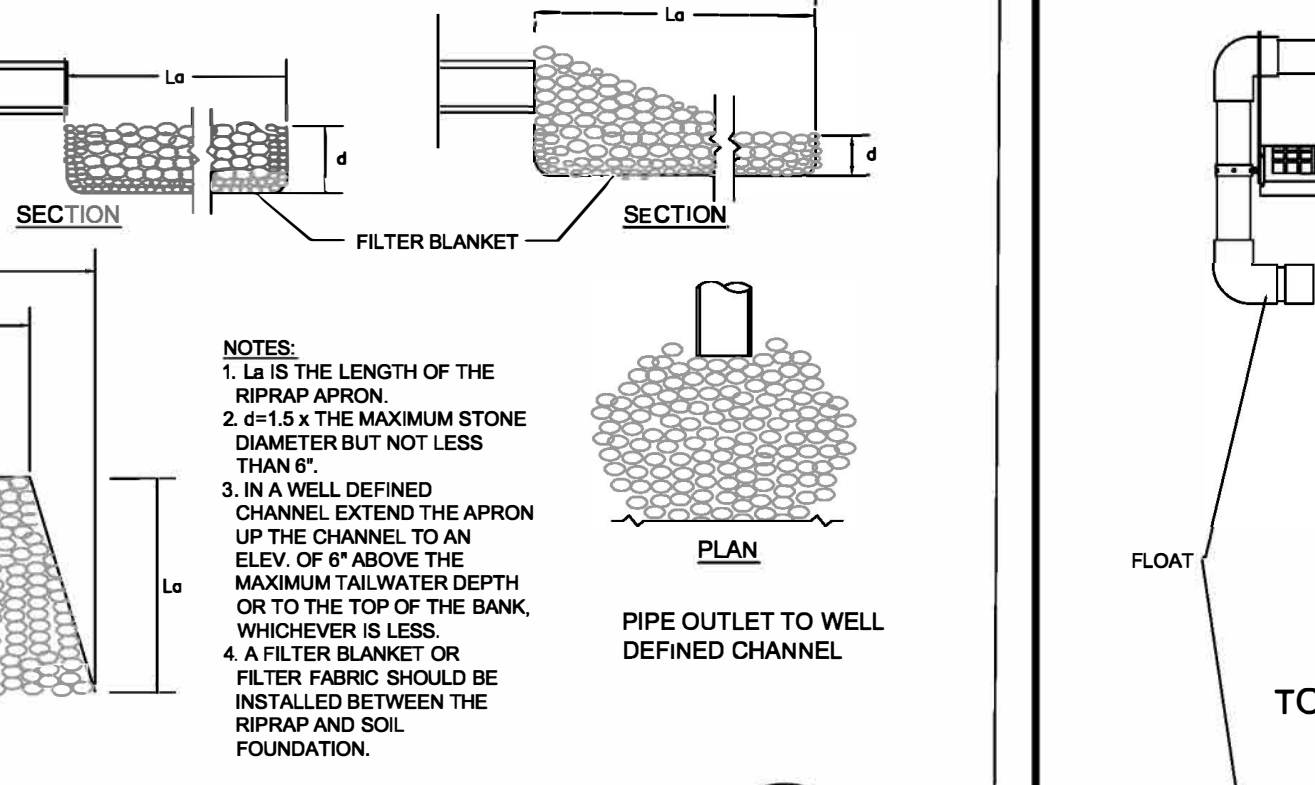
**RIP RAP OUTLET PROTECTION**

	POND 1	POND 2
D <sub>o</sub>	24 in.	24 in.
L <sub>a</sub>	14 ft.	16 ft.
d	1.13 ft. min.	1.13 ft. min.
SCDOT CLASS	A	A



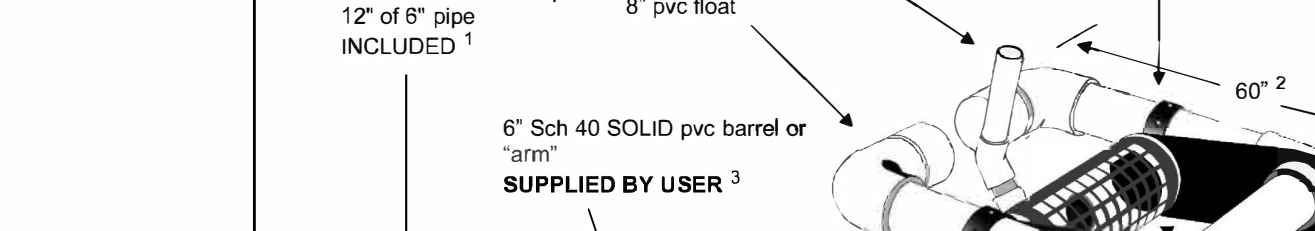
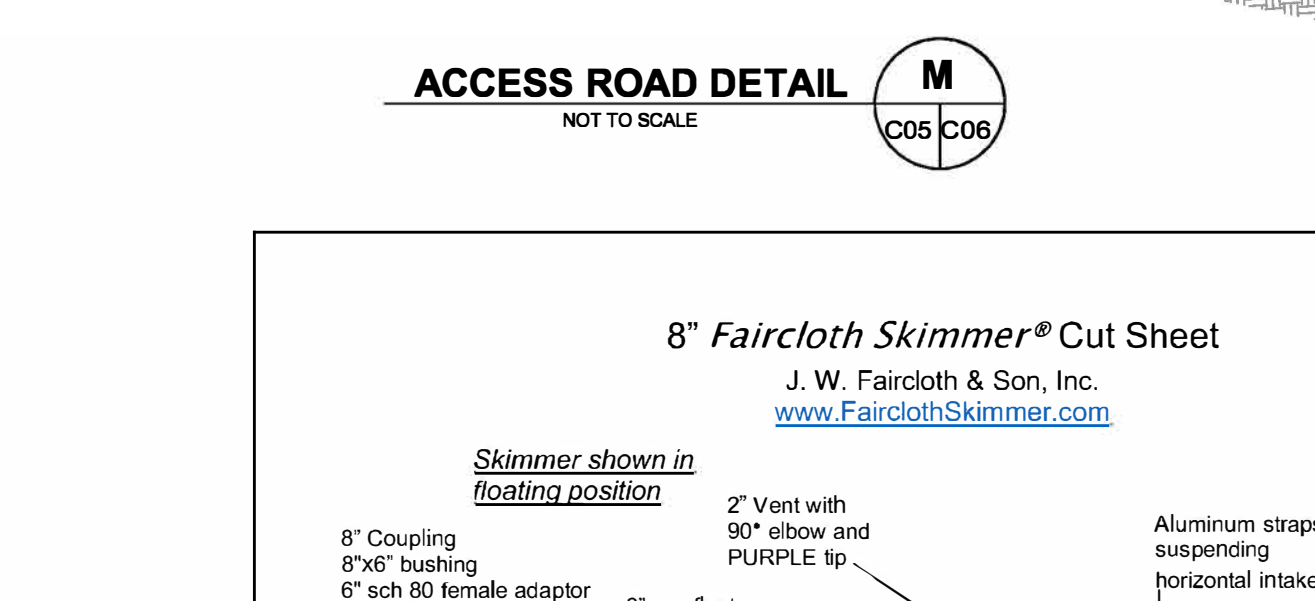
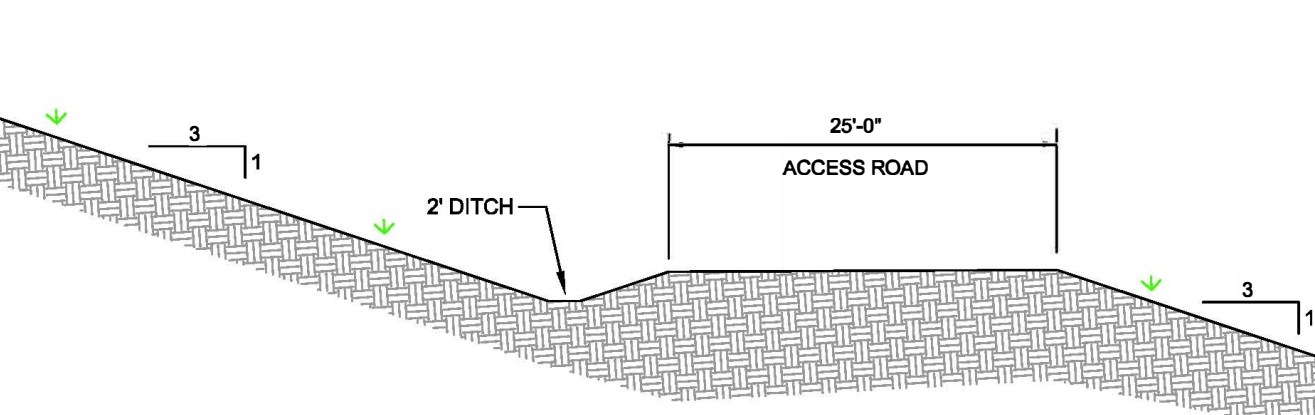
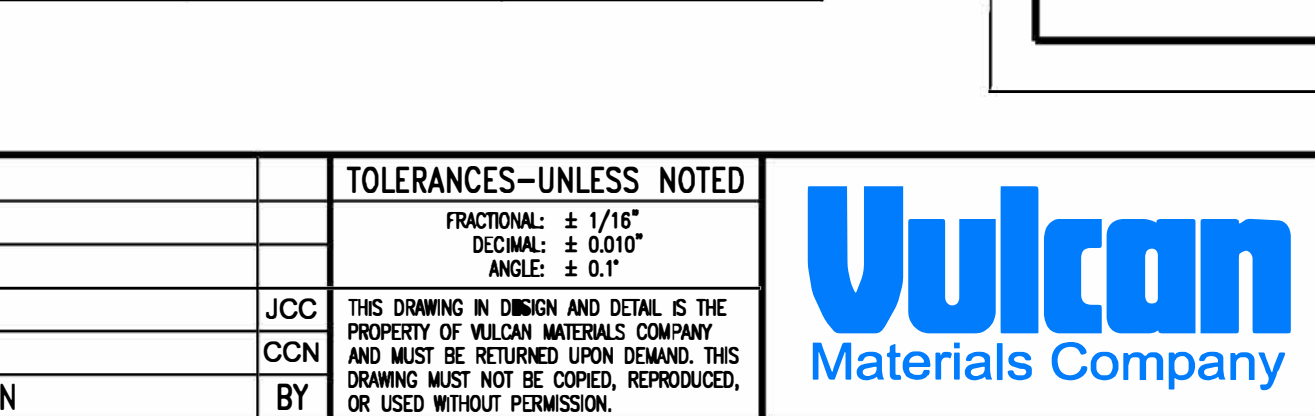
**Permanent Seeding - Upstate**

Species	Lbs/ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Fescue, Tall (KY31) (Alone)	40												
Fescue, Tall (KY31) mix	20												
Series Lespedeza (Scarfield) (Alone or Mix) (inoculate with EL Inoculant)	40												
Ladino Clover (mix only)	2												
Inoculate with AB Inoculant	2												
Weeping Lovegrass (Alone)	4												
Weeping Lovegrass (Mix)	2												
Crownvetch (Mix) (Inoculate with Type M Inoculant)	8-10												



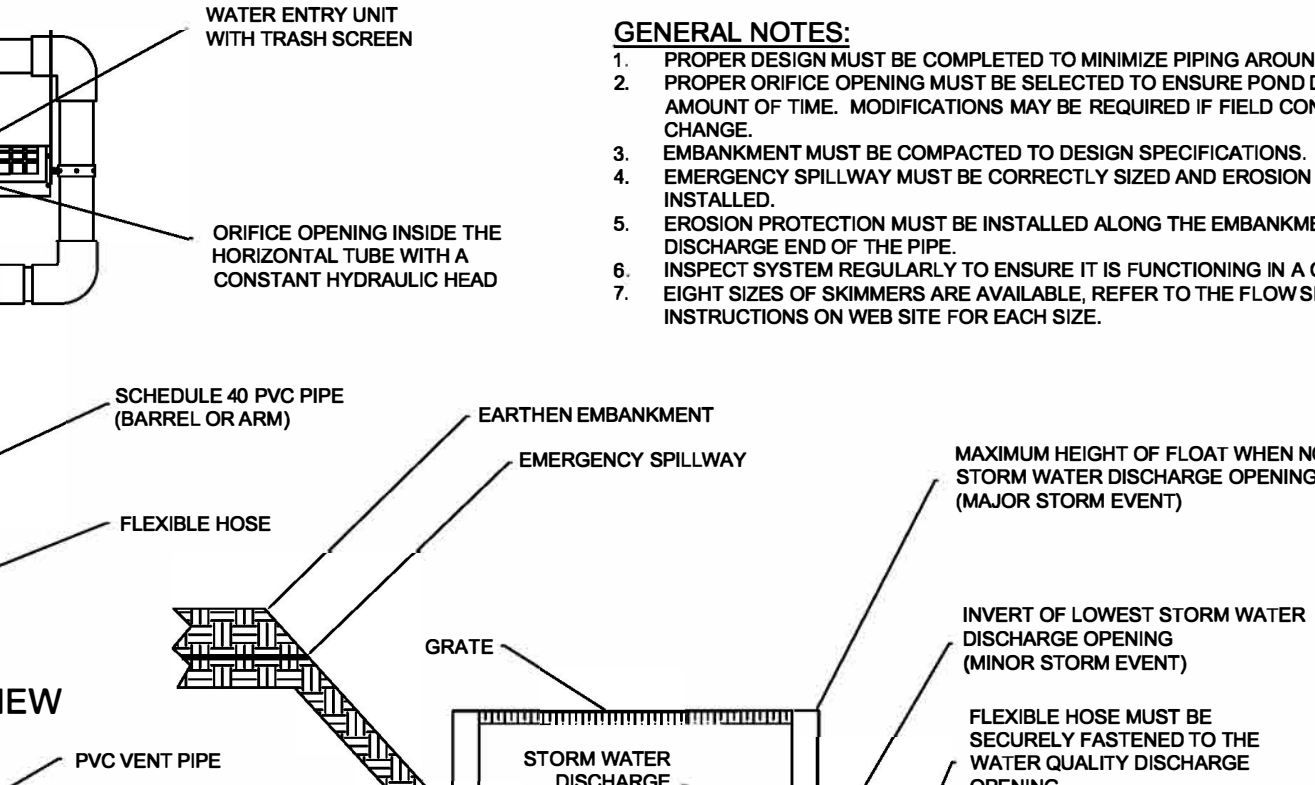
**RIP RAP OUTLET PROTECTION**

	POND 1	POND 2
D <sub>o</sub>	24 in.	24 in.
L <sub>a</sub>	14 ft.	16 ft.
d	1.13 ft. min.	1.13 ft. min.
SCDOT CLASS	A	A



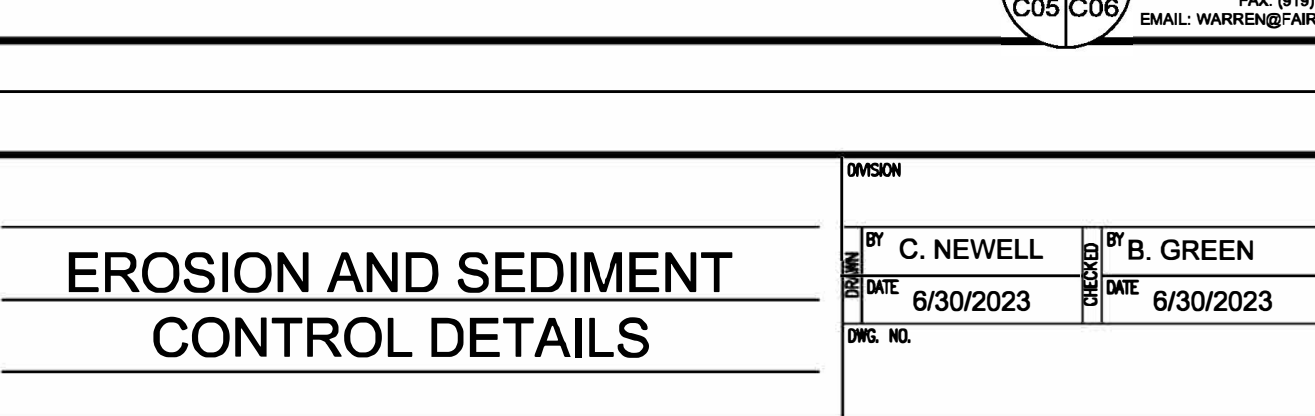
**Permanent Seeding - Upstate**

Species	Lbs/ac	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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Crownvetch (Mix) (Inoculate with Type M Inoculant)	8-10												



**RIP RAP OUTLET PROTECTION**

	POND 1	POND 2
D <sub>o</sub>	24 in.	24 in.
L <sub>a</sub>	14 ft.	16 ft.
d	1.13 ft. min.	1.13 ft. min.
SCDOT CLASS	A	A



FAIRCLOTH SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE N. Shows a top view and side view of a discharge system with a float, flexible hose, and outlet pipe. Includes labels for 'GENERAL NOTES', 'TOP VIEW', 'SIDE VIEW (NO SCALE)', and 'END VIEW'. A note states: 'NOTE: MAINTAIN DEPRESSION TO MINIMIZE CHANCE OF SKIMMER BECOMING STUCK.'

**8" Faircloth Skimmer® Cut Sheet**  
J. W. Faircloth & Son, Inc.  
[www.FairclothSkimmer.com](http://www.FairclothSkimmer.com)

- Hose can be attached to outlet using the threaded 6" nipple. Typical methods used: a) a metal structure with a steel stub out welded on the side at the bottom with a 6" threaded coupling or reducer(s); b) a concrete structure with a hole or orifice at the bottom - use a steel plate with a hole and coupling welded to it that will fit over the hole in the concrete and bolted to the structure with sealant.
- Dimensions are approximate, not intended as plans for construction.
- Barrel (solid, not foam core pipe) should be 1.4 times the depth of water with a minimum length of 8' so the inlet can be pulled to the side for maintenance. If more than 12' long, weight may have to be added to inlet to counter the increased buoyancy.
- Orifice/inlet tapers down from 8" maximum inlet to a 6" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The orifice/inlet can be reduced using the plate and cutter provided to control the outflow rate - see #6.
- Horizontal intake is 12" pipe between the straps with slots cut in the inlet and aluminum screen door (smaller than shown in illustration) for access to the inlet and orifice inside.
- Ships assembled. User glues inlet extension and barrel, installs vent, cuts orifice in plate and attaches to outlet pipe or structure. Includes float, flexible hose, rope, orifice plate and cutter. Does NOT include 6" Sch 40 SOLID pvc barrel or "arm" SUPPLIED BY USER.
- Capacity: 97.978 cubic feet per day maximum with 8" inlet and 6" head. Inlet can be reduced by installing a smaller orifice using the plate and cutter provided to adjust flow rate for the particular drawdown time required. Please use the sizing template at [www.fairclothskimmer.com](http://www.fairclothskimmer.com).
- Shipped in cardboard box on pallet. Shipping weight approximately 365 lbs, dimension 61"x44"x57".

8inchCut-5-1-19 © J. W. Faircloth & Son, Inc. 2019

**erosion and sediment CONTROL DETAILS**

DATE	BY	REVISION
8/30/2023	JCC	FOR CLIENT REVIEW
6/30/2023	CCN	FOR CLIENT REVIEW
		DATE
		REVISION

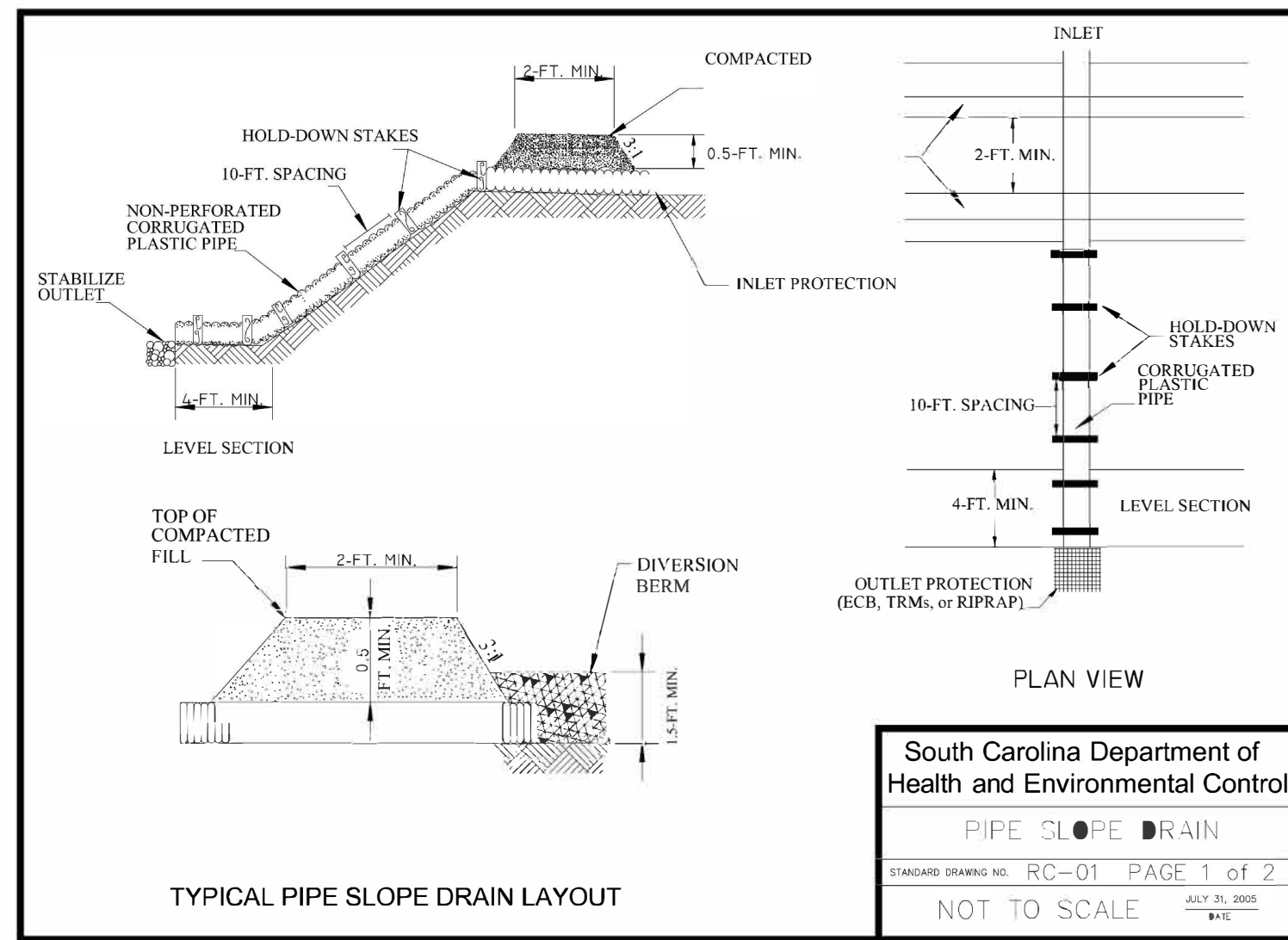
**TOLERANCES—UNLESS NOTED**  
FRACTIONAL: ± 1/16"  
DECIMAL: ± 0.010"  
ANGLE: ± 0.1°

**Vulcan Materials Company**

DATE	BY	REVISION
6/30/2023	JCC	FOR CLIENT REVIEW
6/30/2023	CCN	FOR CLIENT REVIEW
		DATE
		REVISION

**ORANGEBURG LIMESTONE QUARRY**  
PRJ. NO. 00.5872.00  
SCALE: N.T.S.  
SHEET 6 OF 8





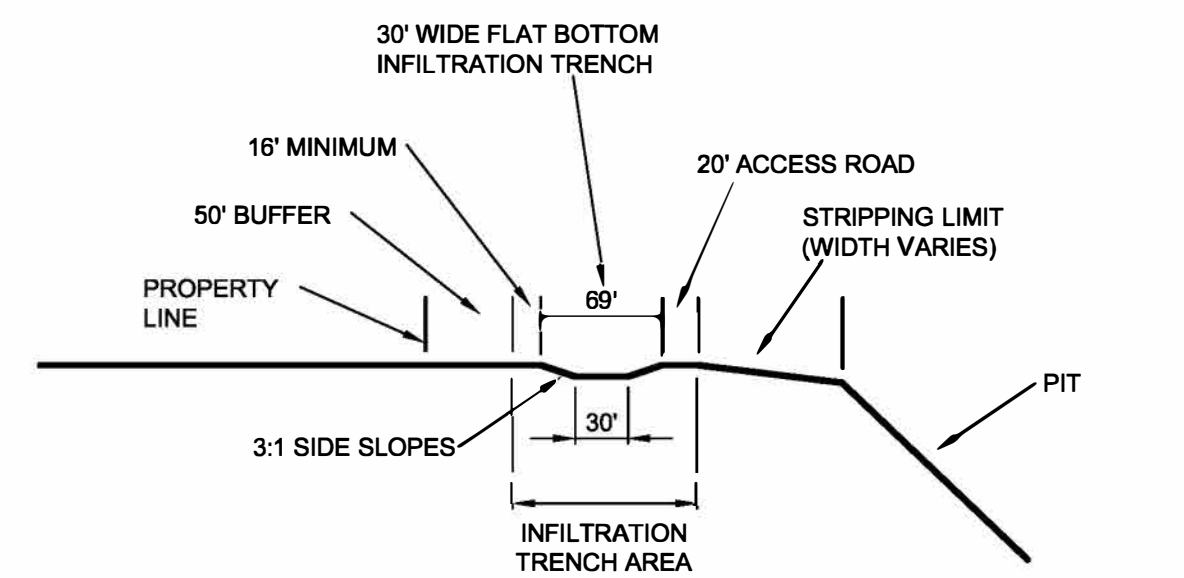
South Carolina Department of Health and Environmental Control

PIPE SLOPE DRAIN

STANDARD DRAWING NO. RC-01 PAGE 1 OF 2

NOT TO SCALE

DATE: JULY 31, 2005



**CROSS SECTION**

NOT TO SCALE

Q

C03 C07

**PIPE SLOPE DRAIN**

When and Where to Use It

Pipe slope drains are used when it is necessary for water to flow down a slope without causing erosion, especially before a slope has been stabilized or before permanent drainage structures are installed.

Installation

Typical pipe slope drains are made of non-perforated corrugated plastic pipe.

Slope drain sections should be securely fastened together, have gasket watertight fittings, and be securely anchored into the soil.

Diversion Berms or dikes should direct runoff to slope drains. The minimum depth of these berms or dikes should be 1.5-feet. The height of the berm around the pipe inlet should be a minimum of 1.5-feet high and at least 0.5-feet higher than the top of the pipe. The berm at the pipe inlet shall be compacted around the pipe. The area around the inlet shall be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization techniques.

The area below the outlet must be properly stabilized with ECBs, TRMs, riprap or other applicable stabilization technique.

If the pipe slope drain is conveying sediment-laden water, direct all flows into the sediment trapping facility.

Permanent slope drains should be buried beneath the soil surface a minimum 1.5-feet.

Inspection and Maintenance

Inspect pipe slope drain inlet and outlet points every seven (7) calendar days and within 24-hours after each rainfall event that produces 1/2-inch or more of precipitation.

The inlet should be free from undercutting, and no water should be going around the point of entry. If there are problems, the headwall should be reinforced with compacted earth or sandbags. The outlet point should be free of erosion and installed with appropriate outlet protection.

All temporary pipe slope drains should be removed within 30 days after final site stabilization is achieved or after the temporary BMP is no longer needed. Disturbed soil areas resulting from removal should be permanently stabilized.

South Carolina Department of Health and Environmental Control

PIPE SLOPE DRAIN

STANDARD DRAWING NO. RC-01 PAGE 2 OF 2

GENERAL NOTES

DATE: JULY 31, 2005

**PIPE SLOPE DOWN DRAIN DETAIL**

NOT TO SCALE

P

C05 C07

Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management

By Jeremy E. Eddy

Map Name SED-2407-SV1

Date Approved August 15, 2024

Permit # I-002407



E				
D				
C				
B	8/30/2023	FOR CLIENT REVIEW	JCC	
A	7/11/2023	FOR CLIENT REVIEW	CCN	
	DATE	REVISION	BY	

**TOLERANCES—UNLESS NOTED**

FRACTIONAL: ± 1/16"  
DECIMAL: ± 0.010"  
ANGLE: ± 0.1°

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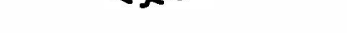










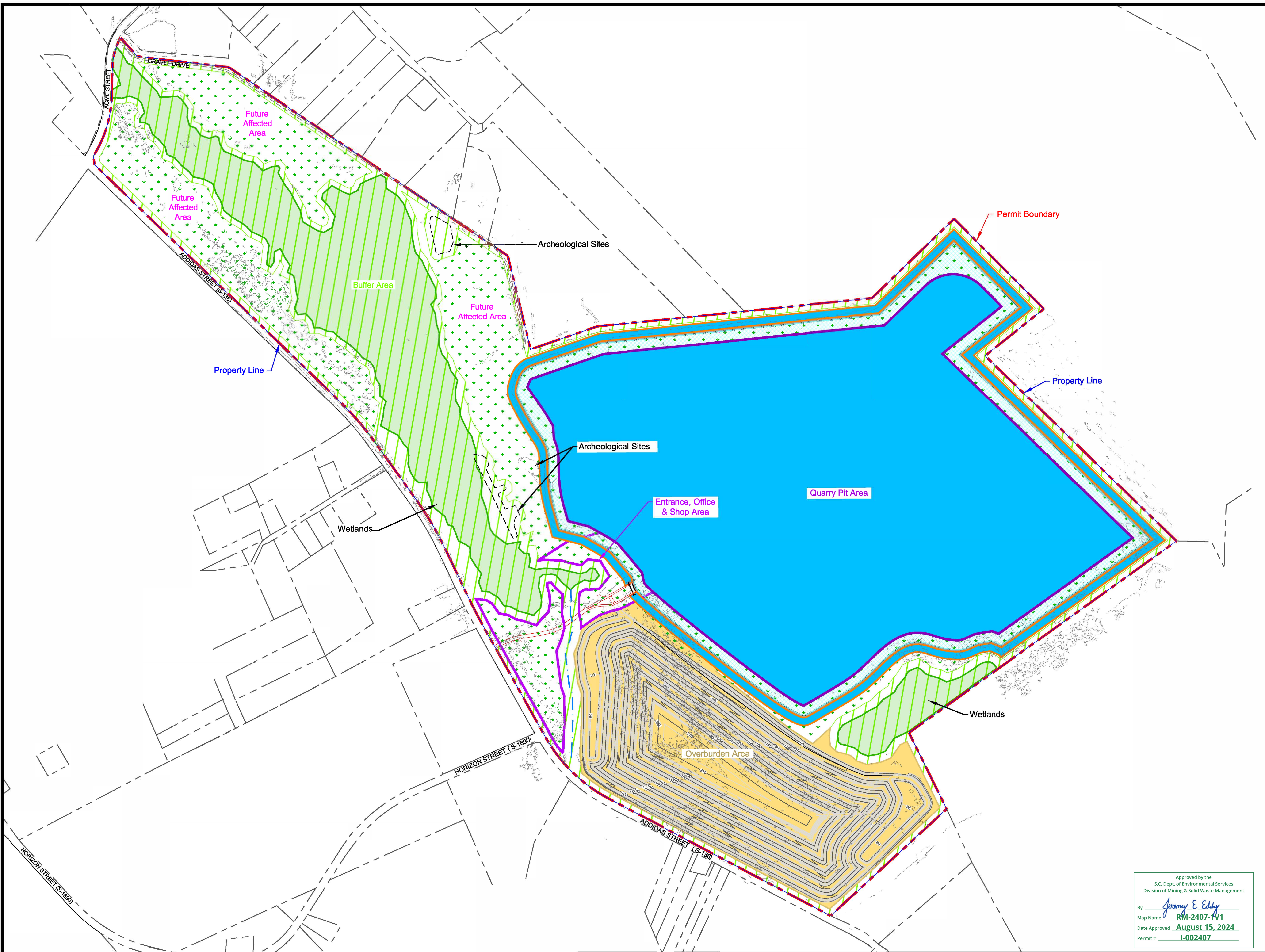
**EROSION AND SEDIMENT CONTROL DETAILS**

DRAWN BY C. NEWELL		CHECKED BY B. GREEN		PROJECT NO. 00.5872.00	FILE NUMBER
DATE 7/11/2023	DATE 7/11/2023	SCALE N.T.S.	SHEET 7 OF 8		
DWG. NO.			REV.		
			C07 B		



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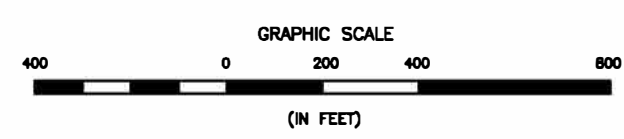
-  OVERBURDEN AREA
-  PERMIT BOUNDARY
-  PROPERTY LINE
-  ENTRANCE AND OFFICE AREA
-  PIT LIMIT
-  BUFFER
-  WETLANDS
-  ARCHAEOLOGICAL SITE AREAS
-  AREAS WHERE SURFACE GRADIENT OF NO STEEPER THAN 3H:1V WILL BE ACHIEVED BY GRADING AND WILL BE VEGETATED WITH GRASS.
-  FUTURE POND AREA
-  AREAS WILL BE VEGETATED WITH GRASS
-  EXISTING TRIBUTARY/APPROXIMATE CENTERLINE OF CREEK
-  FINAL OVERALL INFILTRATION TRENCH
-  EXISTING CONTOUR
-  PROPOSED 20' WIDE ACCESS ROAD
-  PROPOSED MAJOR CONTOUR
-  PROPOSED MINOR CONTOUR
-  STRIPPING LIMIT



- SOURCE:**
1. BASE TOPOGRAPHY PROVIDED BY VULCAN MATERIALS COMPANY. DATE OF SURVEY: JUNE 26, 2021
  2. WETLANDS DELINEATION, PROPERTY BOUNDARY LINES AND ARCHEOLOGICAL BOUNDARY LINES AND DETAILS SUPPLIED BY VULCAN

Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management

By Jeremy E. Eddy  
Map Name RM-2407-A/1  
Date Approved August 15, 2024  
Permit # I-002407



DATE	REVISION	BY
8/30/2023	FOR CLIENT REVIEW	JCC
7/12/2023	FOR CLIENT REVIEW	CCN

**TOLERANCES—UNLESS NOTED**

FRACTIONAL: ± 1/16"  
DECIMAL: ± 0.010"  
ANGLE: ± 0.1°

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**RECLAMATION MAP**

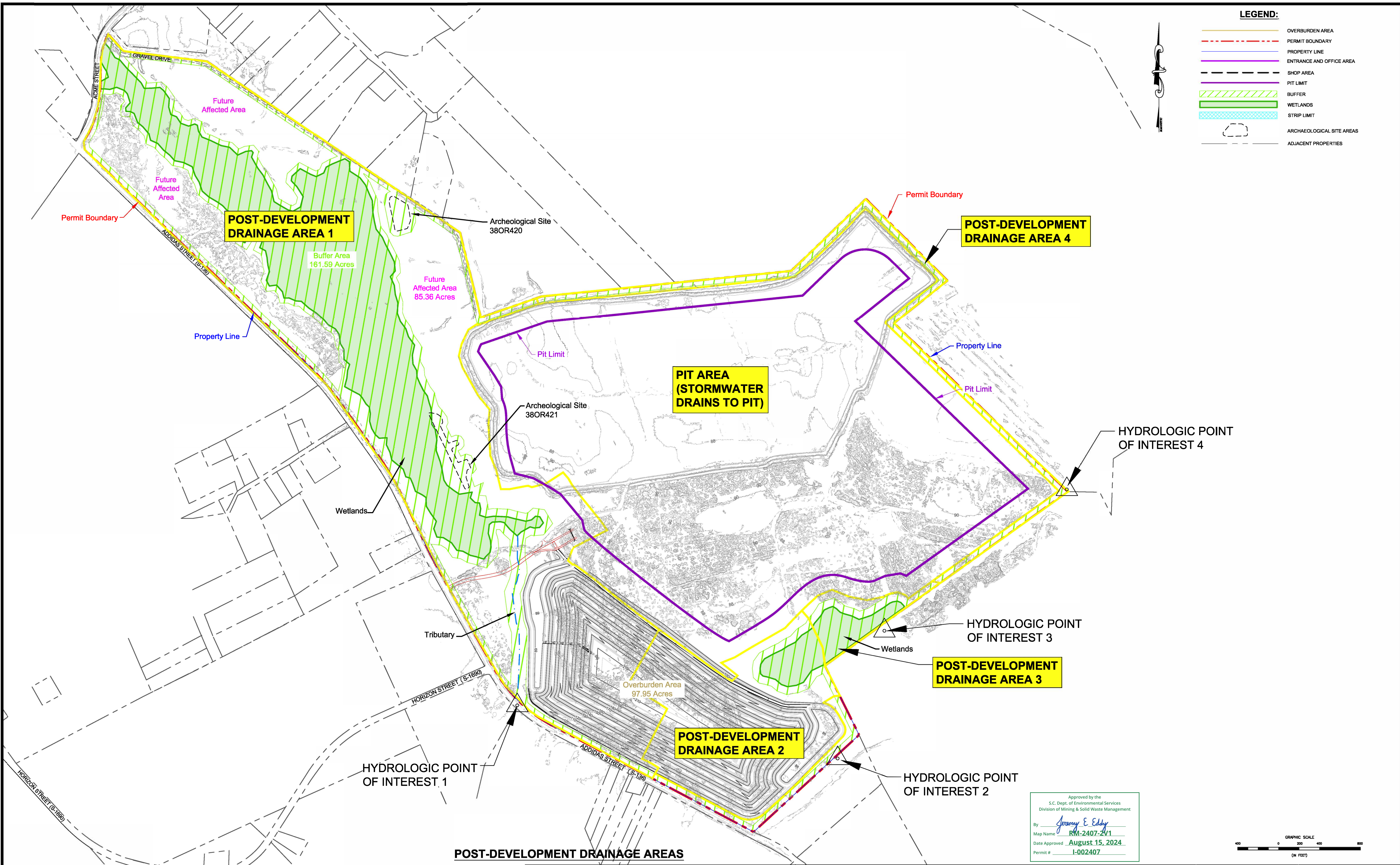
DATE	BY	DATE	BY	SCALE	SHEET
7/12/2023	C. N. BV E.L.	7/12/2023	B. GR. E.N.E.	1" = 400'	8 OF 8

PROJECT: ORANGEBURG LIMESTONE QUARRY  
PROJECT NO.: 005872 00  
SHEET: C08 B



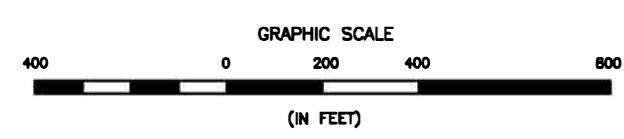
**LEGEND:**

- OVERBURDEN AREA
- PERMIT BOUNDARY
- PROPERTY LINE
- ENTRANCE AND OFFICE AREA
- SHOP AREA
- PIT LIMIT
- BUFFER
- WETLANDS
- STRIP LIMIT
- ARCHAEOLOGICAL SITE AREAS
- ADJACENT PROPERTIES



Approved by the  
S.C. Dept. of Environmental Services  
Division of Mining & Solid Waste Management

By: *Jeremy E. Eddy*  
Map Name: RM-2407-2/1  
Date Approved: August 15, 2024  
Permit #: I-002407



**POST-DEVELOPMENT DRAINAGE AREAS**



DATE	REVISION	BY
8/30/2023	FOR CLIENT REVIEW	JCC
7/6/2023	FOR CLIENT REVIEW	JCC
		JCC

**TOLERANCES—UNLESS NOTED**

FRACTIONAL: ± 1/16"  
DECIMAL: ± 0.010"  
ANGLE: ± 0.1°

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**POST-DEVELOPMENT DRAINAGE AREAS**

DATE	BY	DATE	BY	SCALE	SHEET
7/6/2023	J. COLEMAN	7/6/2023	L. LOTRAKUL	1" = 400'	SHEET 2 OF 2

P:\Vulcan Construction Materials\98320\_Orangeburg Quarry\00.5872.00 Mine Permit & NPDES Permit\CA000587200-BASE-REV B.dwg 9/20/2023 9:01 AM