



October 8, 2020

Sent Certified Mail

Mr. Chris Bauer
Sandridge Road Holdings, LLC
1015 East Westinghouse Blvd
Charlotte, NC 28273

RE: Approval of Application and Reclamation Plan for a Mine Operating Permit
Issuance of Mine Operating Permit I-002279
Sandridge Road Holdings, LLC, Pineland Mine
Dorchester County, South Carolina

Dear Mr. Bauer:

The S.C. Department of Health and Environmental Control (DHEC) has approved the application and reclamation plan for the Pineland Mine as of September 17, 2020. DHEC has approved the reclamation bond submitted in the amount of \$80,000.00.

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

Coverage was issued for GP1-002280 Pineland Mine and GP1-002281 Pineland Farm Mine Under General Mine Operating Permit. The areas covered under GP1-002280 and GP1-002281 have been incorporated into I-002279. With issuance of the individual mine operating permit, GP1-002280 and GP1-002281 are hereby canceled. The associated reclamation bonds will be returned by the bond manager, Lillian McFadden. If you have any questions concerning the bond, Ms. McFadden may be reached at 803-898-0486 or via email at mcfaddln@dhec.sc.gov.

A guide to board review outlining the procedure for requesting a final review is enclosed. Should there be any questions or if we may be of further assistance, please do not hesitate to contact the project manager, Mason Brandes, at 803-898-1369 or by e-mail at brandemd@dhec.sc.gov. Jonathan Summa is the regional mine inspector for Dorchester County. Mr. Summa can be contacted at 843-953-0150 or via email at summajt@dhec.sc.gov.

Sincerely,

Juli E. Blalock, Assistant Bureau Chief
Bureau of Land and Waste Management

Cc: Joe Koon, Mason Brandes, Juli Blalock – BLWM; Lillian McFadden - EC
Jonathan Summa – Regional Inspector
Brett Caswell – BOW
Dorchester County, Kiera Reinersten - kreinertsen@dorchestercountysc.gov
MSHA, Jefferey Phillips - phillips.jeffrey@dol.gov
Chris Bauer - cbauer@bluemaxtrucking.com
Ryan Wenzel - rwenzel@sabinc.net



S.C. Department of Health and
Environmental Control

MINE OPERATING PERMIT

PART I:

Pineland Mine Sandridge Road Holdings, LLC

Sandridge Road Holdings, LLC, a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-002279, to operate the Pineland Mine in accordance with 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.

JOE KOON, MANAGER
MINING AND RECLAMATION SECTION
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

PERMIT NUMBER: I-002279
ORIGINALLY ISSUED: October 8, 2020
MODIFIED: N/A

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.

I-002279

Sandridge Road Holdings, LLC

Home Office Address: Sandridge Road Holdings, LLC
1015 East Westinghouse BLVD
Charlotte, NC 28273

Local Office Address: Sandridge Road Holdings, LLC
255 Farmington Road
Summerville, SC 29483

Address for Official Mail: Same as Home Office Address

Company personnel and title to be the contact for official business and correspondence [South Carolina Department of Health and Environmental Control (DHEC) should be notified in writing immediately of any change in contact, address, telephone or fax numbers]:

Chris Bauer
Member/Manager

Telephone: 980-225-9944
Email: cbauer@bluemaxtrucking.com

LOCATION: The mine is located on the Harleyville and Maple Cane Swamp, SC U.S.G.S. 7.5' Topographic Maps. The approximate geographic coordinates for the site are:

Latitude: 33.130345 N

Longitude: -80.413336 W

DESCRIBE LOCATION: The operation is located in Dorchester County, approximately 6.0 mile(s) East-northeast of Ridgeville, S.C. Specifically, the site is located 1 miles west of the intersection of Sandridge Road and Hwy 78.

Part II: MINE OPERATIONS

Sandridge Road Holdings, LLC, also referred to as the operator, is permitted to mine sand/clay at the Pineland Mine. The maximum depth to the pit floor will be 30 feet below ground surface (to an elevation of 65 feet mean sea level) measured from the lowest ground surface elevation. Mining will take place on tracts of land owned by the referenced operator. These tracts of land are identified in the submitted *Land Entry Agreements* (LEAs).

MINE/PIT CHARACTERIZATION:

The Sand will be excavated and stockpiled on site. Ground clearing will be accomplished by excavator, backhoe and bulldozer. Excavation, stockpiling, and the loading of material will be done by excavator and backhoe. Dump trucks will be used to haul material off-site. Grading for reclamation will be done with a bulldozer. Adequate amounts of topsoil shall be stockpiled for reclamation of the affected area. Excess topsoil not needed for reclamation may be sold.

PROCESSING PLANT LOCATED ON MINE SITE:

Processing plants are not permitted at this mine site. Screens set to remove roots or other organic matter from the topsoil are not considered to be processing and are allowed on this site.

MINE DEWATERING:

The water table at the mine site is relatively shallow and lowering of the water table via dewatering is necessary to facilitate mining. Additionally, where feasible, stormwater runoff shall be diverted into the pit, collected into the sump, and discharged in the same manner as groundwater. Any accumulation of groundwater and stormwater shall be pumped into a sediment basin prior to discharge. Water discharged from the mine to a receiving stream must be discharged through an outfall regulated by an NPDES permit.

If an operator receives a complaint concerning adverse impacts to neighboring wells, the operator is to notify DHEC's Manager of the Mining and Reclamation Section, Columbia, SC, within 24 hours. After investigation, if DHEC 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.

BLASTING:

Blasting Operations are not permitted at this mine site.

SIGNIFICANT CULTURAL OR HISTORICAL SITES:

A *Cultural Resources Survey of the Pineland Mine* Tract dated May 1, 2020 was conducted by Brockington Associates. The survey identified five isolated artifact finds (Isolates 1 through 5) and one previously surveyed architectural resource (Resource 219 0072). The isolated finds and the previously surveyed archeological resource were recommended not eligible for inclusion in the National Register of Historic Places (NRHP). The State Historic Preservation Office (SHPO) concurs with these recommendations. The isolated finds and the previously surveyed archeological resource do not require additional buffer as they are not eligible for inclusion in the NRHP.

VISUAL SCREEN:

To appropriately screen the operation from view, the operator shall maintain a minimum 100ft. undisturbed buffer between mining activity and all property lines. A vegetated earthen berm shall be constructed and maintained as shown on the approved mine map.

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, trackhoes, 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.

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 DHEC within 30 days of the change of ownership.

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

Sandridge Land Holdings:

TMS #: 084-00-00-042, 084-00-00-003:

084-00-00-006 and 084-00-00-082 are included in the LEA but have since been combined with 084-00-00-042 and 084-00-00-003, respectively.

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

OWNED 314.71 LEASED 0 TOTAL 314.71

Part III: PERMITTED LAND

This permit allows 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: 62.3 acres of land are to be affected by Sandridge Road Holdings, LLC under the current mine plan; 40.0 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: 129.8 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 DHEC for approval.

BUFFER AREAS: 122.61 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 DHEC.

TOTAL PERMITTED AREA: 314.71 acres as submitted on the *Land Entry Agreement(s)*.

Part IV: MAPS

The mine site maps were prepared by Sabine and Waters, Inc. These maps are further identified with the following SCDHEC map numbers and are part of the operating permit:

SM-2279-1V1	Overall Site Map	Dated: July 29, 2020
SM-2279-2V1	Segment 1 Site Map	Dated: August 3, 2020
SM-2279-3V1	Segment 2 Site Map	Dated: August 3, 2020
SM-2279-4V1	Segment 3 Site Map	Dated: August 3, 2020
SM-2279-5V1	Segment 4 Site Map	Dated: August 3, 2020
SM-2279-6V1	Segment 5 Site Map	Dated: August 3, 2020

The reclamation maps were prepared by Sabine and Waters, Inc. These maps are further identified with the following SCDHEC map numbers and are part of the operating permit.

RM-2279-1V1	Segment 1 Reclamation Map	Dated: August 3, 2020
RM-2279-2V1	Segment 2 Reclamation Map	Dated: August 3, 2020
RM-2279-3V1	Segment 3 Reclamation Map	Dated: August 3, 2020
RM-2279-4V1	Segment 4 Reclamation Map	Dated: August 3, 2020
RM-2279-5V1	Segment 5 Reclamation Map	Dated: August 3, 2020

Part V: RECLAMATION BOND

The Reclamation Bond is based upon 40.0 affected acres. Pursuant to Section 48-20-70 and R.89-200, the reclamation bond for this mining permit is set at \$80,000.00. The reclamation bond 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 VI: PROTECTION OF NATURAL RESOURCES

1. Describe the area of and around the mine site. Specify topography, surface water systems, wildlife habitats, residential houses, commercial properties, recreational areas, and/or public roads.

Prior to mining activities, this site's land use type was undeveloped, rural residential; the immediate area around this site is rural residential. The topography of this area is slightly variable (i.e., mostly flat), with surface elevation ranging from 90 - 95 ft. MSL. Four Holes swamp is approximately 1.4 miles south of the site. Common wildlife typical to this area can be found in and around this site; there are no threatened or endangered species believed to inhabit this area. Houses, an undeveloped parcel, and a separate sand mine are adjacent to the site.

2. Methods used to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building, or public road.

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.

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 trackout on public roads, the operator shall construct crushed stone "mud mats" that extend the width of the haul road and stretches a minimum of one hundred (100) feet in length into the site from the entrances to the site.

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.

3. Methods used to prevent an adverse effect on the purposes of a publicly owned park, forest, or recreation area.

Any parks, forest, or recreation areas are located at a safe distance and buffered appropriately to avoid any adverse effects from mining operations

4. Measures taken to insure against substantial deposits of sediment in stream beds or lakes.

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

5. Measures taken to insure against landslides or unstable mine walls.

To minimize the potential for landslides or unstable mine walls, the operator shall grade side slopes as excavation progresses, and maintain slopes no steeper than a 3H:1V gradient. The operator is responsible for maintaining stable mine walls and appropriate setbacks to prevent significant slumping that may encroach into non-permitted lands.

6. Measures taken to insure against acid water generation at the mine site that may result in pollution on adjacent property.

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

7. Measures taken to minimize or eliminate fugitive dust emissions from the permitted area.

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

1) 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 DHEC, the operator may be required to mark the area to be affected with flagging or other appropriate measures.

2) RIGHT OF ENTRY: Pursuant to Section 48-20-130 and R.89-240, the operator shall grant DHEC 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.

3) 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 DHEC. The operator shall furnish copies of the records upon request to DHEC.

4) PERMIT MODIFICATIONS: Pursuant to Section 48-20-80, the operator may modify the permit and/or *Reclamation Plan* upon approval by DHEC. Requests for permit and/or *Reclamation Plan* modifications may be made to DHEC on Form MR-1300. The operator shall submit any requested supporting data for consideration during DHEC's evaluation of the modification request. If a modification request is determined to be substantial by DHEC, 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 DHEC 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, DHEC shall notify the operator of its intentions to modify the permit and/or *Reclamation Plan* pursuant to Section 48-20-150.

5) 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 DHEC. The transfer will be considered complete when all parties have received notification by certified letters of the approval of the transfer by DHEC.

6) 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 proposed 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, "DHEC 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 DHEC 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.

COMPLIANCE: 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 DHEC 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

1) 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 DHEC. The form for the report will be sent by regular mail to the operator to the mailing address shown on the previous year's *Annual Reclamation Report*. The operator should receive the report form from DHEC 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 DHEC by June 30 of each year.

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

Part X: ADDITIONAL TERMS AND CONDITIONS

1. 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 DHEC 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.
2. Temporary or permanent placement of refuse and debris (e.g., concrete, brick, asphalt) from off-site locations is prohibited without approval by DHEC. Topsoil fill approved by DHEC may be brought in from off-site sources only for the purposes of mine land reclamation.
3. In the future, if determined to be necessary by DHEC, an appropriate fence will be installed around the affected area.
4. 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.
5. A revised mine map, reclamation map, and reclamation schedule must be submitted and approved by DHEC prior to initiating any mining activity in Future Reserves.
6. The operator shall maintain working hours of 6am to 5pm on weekdays and 7am to 3pm on weekends.
7. The operator shall comply with the approved Coastal Zone Consistency Determination issued under the SC Coastal Zone Management Program by SCDHEC's Office of Ocean and Coastal Resource Management (OCRM). See Appendix B.

APPENDIX A

MODIFICATIONS TO MINE PERMIT I-002279

NUMBER	DATE	DESCRIPTION OF MODIFICATION (PA= Permitted Acreage; AA= Affected, Bonded Acreage; FR= Reserves Acreage, B= Buffer Acreage)
	10/8/20	Permit issued; PA = 314.71ac., AA = 62.3ac., FR = 129.8ac., B = 122.61ac. 40.0 acres are currently bonded. GP1-002280 and GP1-002281 cancelled and covered under I-002279.

APPENDIX B


Coastal Zone Consistency Determination
SC Department of Health and Environmental Control
Office of Ocean and Coastal Resource Management

HNY-52Q7-N9M8S, I-002279 July 1, 2020



Coastal Zone Consistency Determination

To: Mason Brandes, BLWM Mining and Reclamation Section

From: Christopher M Stout, OCRM Coastal Zone Consistency Section 

Applicant: Chris Bauer, Sandridge Road Holdings LLC

Project Name: SANDRIDGE ROAD HOLDINGS/PINELAND MINE

Finding: Conditionally Consistent with the SC Coastal Zone Management Program

Site Location: SANDRIDGE RD, DORCHESTER, Dorchester County, South Carolina (TMS#: 0840000082, 0840000003, 0840000006, & 0840000042)

Reference #: HNY-52Q7-N9M8S, I-002279

Date: July 1, 2020

The staff of the Office of Ocean and Coastal Resource Management (OCRM) reviewed the above referenced Coastal Zone Consistency project request to mine sand and clay. The proposed mining operation will include 192.1 acres of a 318 acres tract. The initial mining operation will take place on 62.3 acres with 129.8 acres labeled as future reserves. Excavation will occur to a maximum depth of 30'. The site will be allowed to be reclaimed as ponds and grasslands. There are wetlands on-site, but no impacts are proposed. A settlement pond will be utilized to prevent any deposits from being released into the neighboring streams and wetlands.

We hereby certify that the above referenced project is **Conditionally Consistent** with the **Guidelines for Evaluation of All Projects** as well as the Coastal Industries (*Mining*), Wildlife and Fisheries Management, and Stormwater Management (*Runoff* and *Mines and Landfills*) policies contained in the S.C. Coastal Zone Management Program provided the following conditions are included in the permits and adhered to by the applicant.

1. In the event that any historic or cultural resources and/or archaeological materials are found during the course of work, the applicant must notify the State Historic Preservation Office and the South Carolina Institute of Archaeology and Anthropology. Historic or cultural resources consist of those sites listed in the National Register of Historic Places and those sites that are eligible for the National Register. Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone

projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials.

2. All construction BMPs must be installed, inspected and maintained to hold sediment onsite and to protect any adjacent or downstream wetlands and waters through the life of the project. Upon completion of construction activities, all disturbed (includes undeveloped) areas, including those impacted for access, must be immediately stabilized.
3. The project must be fully consistent with local zoning and comprehensive plans prior to work being conducted.
4. The applicant is not authorized to impact any wetlands. In the event any impacts to wetlands occur, the US Army Corps of Engineers and DHEC-OCRM must be notified and all work must cease to minimize additional impacts until the applicant receives authorization.
5. The pumping of groundwater from sediment basins must be done with floating intakes only. Pumping of the basin must cease whenever the water levels come to within 2 feet of the pond bottom.
6. Stormwater discharge shall be routed through vegetated upland buffer areas, silt curtains, and/or other erosion and sediment control methods to prevent any direct discharge to onsite wetlands and waters.

This determination shall serve as the SCDHEC OCRM Coastal Zone Consistency Determination for the work described above. However, this determination **does not** serve as a Department permitting decision and **does not** alleviate the applicant's responsibility to obtain any applicable State or Federal permit(s) for the work. Local government authorizations **may also** be required.



**Mining
Form
MR-500**

**S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF LAND AND WASTE MANAGEMENT
DIVISION OF MINING AND SOLID WASTE PERMITTING
2600 Bull Street, Columbia, SC 29201
Telephone Number: (803) 896-4261 Fax Number: (803) 896-4001**

**RECLAMATION PLAN
DHEC FORM 500 DATE VERSION ADOPTED 7/1/94**

As required in Section 48-20-90 of the South Carolina Mining Act, "An operator shall submit with his application for an operating permit a proposed reclamation plan. The reclamation plan for an operating permit only must be furnished to the local soil and water conservation district in which the mining operation is to be conducted. The plan must include as a minimum each of the elements specified in the definition of 'reclamation plan' in Section 48-20-40 and information required by the department. The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on a segment of the permitted land. The plan must provide that reclamation activities must be completed within two years after completion or termination of mining on each segment of the area for which an operation permit is requested unless a longer period specifically is permitted by the department."

I. APPLICANT INFORMATION

1. Name of Company: Sandridge Road Holdings LLC
2. Name of Proposed Mine: Pineland Mine County: Dorchester
3. Home Office Address: 1015 East Westinghouse Blvd 980-225-9944
(Street and P.O. Box) (Telephone No.)
Charlotte NC 28273
(City) (State) (Zip Code) (Fax No.)
4. Local Office Address: 255 Farmington Road 980-225-9944
(Street and P.O. Box) (Telephone No.)
Summerville SC 29483
(City) (State) (Zip Code) (Fax No.)
5. Name of company personnel and their title to be the contact for official business and correspondence: Chris Bauer, Member/Manager
6. Location of Mine: S-18-247 Sandridge Road Dorchester SC
State or County Hwy No. Nearest Town or City

II. ENVIRONMENTAL PROTECTION

1. Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.
Roads adjacent to the mine area will be used for ingress and egress and are private roads. Due to the size and nature of the surrounding property being largely managed for recreational uses and forestry, the wildlife on the property has habitat not affected by the mining activity. Sedimentation ponds and following best management practices will protect adjacent woodlands and cropland nearby. Also, most of the nearby cropland is owned by the applicant and is included in the individual mine permit.
2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.
No significant adverse affects on adjacent surface water are anticipated. Ground and storm water will collect within the mine excavation area and be pumped into adjacent wetlands after settling. Water resources will be held in mine area until water levels require pumping into an adjacent outfall ditch which would flow through wetlands associated with Halfway Gut Creek and eventually Four Holes Swamp.
3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.
Archsite and SHPO do not show any significant cultural or historic sites within the proposed mine area. Should any cultural resources be discovered during mining activities, all mining shall cease until further investigation is complete.

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

It is anticipated that no conditions that could be hazardous to animal or fish life will develop as a result of the mining activity. Current and recent mine sites in along Sandridge Road host several species of fish and wildlife. It is expected that this site, as other sites have, will provide foraging habitat for bald eagles, waterfowl, amphibians, and reptiles.

5. 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.

Airborne dust is the only air quality control problem that may be associated with the proposed site. To alleviate this potential problem access roads will be watered down during dry periods to settle sand and dirt. These conditions will be monitored and treated as needed.

III. RECLAMATION OF AFFECTED AREA

6. State useful purpose(s) the affected land is being proposed for reclamation. More than one purpose may be checked, but information should be submitted to support the feasibility for each proposed purpose.

- | | |
|---|--|
| a. Lake or pond <input checked="" type="checkbox"/> | f. Grassland <input checked="" type="checkbox"/> |
| b. Agriculture <input type="checkbox"/> | g. Recreation <input type="checkbox"/> |
| c. Woodlands <input type="checkbox"/> | h. Wetlands <input type="checkbox"/> |
| d. Residential <input type="checkbox"/> | i. Park <input type="checkbox"/> |
| e. Commercial <input type="checkbox"/> | j. Other <input type="checkbox"/> |

7. State the final maximum surface gradient(s) (slope) in soil, sand, or other unconsolidated materials on reclaimed land. Surface gradients steeper than 3H:1V (18 degrees or 33 percent) may be required to submit geotechnical data and studies to demonstrate that the steeper slopes will remain stable following final reclamation.

3H:1V

8. How will the final slopes in unconsolidated material be accomplished? 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). Operator should show calculations or other appropriate information to demonstrate that there is adequate materials in backfilling and grading to meet the requirements for final slope.

Final grading will be accomplished using the on-site overburden along pond edges. The overburden location will be located adjacent to the mine.

9. 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) This proposed site is located in proximity to other past mine/pond sites. This site is very similar to other sites in elevation, soil type and sand deposits.

No formal testing is planned because we anticipate a soil pH of approximately 7 as occurred on other sites.

(b) Site preparation will consist mainly of grading and dragging along the pond edge. No additional fertilization is planned due to expected pH and lime content of the soil.

(c) Other reclaimed mine sites in the area have re-vegetated naturally. Local indigenous plant species provide an excellent ground cover with reclamation time-tables. Sparse growth areas will be planted with acceptable reclamation species such as rye grass and brown top millet

(d) Abruzzi rye grass= 1.1 lbs/ft², brown top milled 10 lbs/acre(e) No specific maintenance expected

(e). No specific maintenance expected

10. Provide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants from being harmful to the environment. A closure plan is not necessary for all mines, but is required where the possibility exists 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).

N/A

11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, slimes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.

There will be no contaminants, waste soil, rock, minerals, scrap or slime produced that will necessitate disposal.

12. Method of reclaiming settling and/or sediment ponds.

The sediment pond will be reclaimed at the completion of mining operations following the same parameters listed in this document for the mine.

13. Describe method of restoration or establishment of stream channels, stream banks and site drainage to a condition minimizing erosion, siltation and other pollution.

Water will be pumped from the sedimentation pond into the adjacent wetland. Rip-rap will be placed at the outfall pipe and a forebay will be constructed as well. Silt fencing layers will be established between the sediment pond and wetland in order to prevent erosion and sediment deposit associated with the flow. Rip rap and forebay will slow the velocity of water during precipitation events and pumping.

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

Natural vegetation will be used as primary ground cover with additional planting in sparse growth areas. With this planting/reclamation scheme it is unlikely that there will be any deterioration before release.

15. 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. These provisions can include but are not limited to setbacks, fencing,

There are a few directly adjacent residential properties that will be buffered. A berm will be constructed to screen the mine from adjacent properties. If required, a fence could be constructed between the mine site and the adjacent property. The proposed site is bounded by forested tracts on other sides. The only public exposure to the site is along Sandridge Road where the trucks will be entering and leaving the property. Public access to the site will be restricted by a buffer and screening where needed as well as a locked gate.

16. 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 applicant proposed to mine to the maximum allowable depth of 30'. Deposition depth within the proposed mine site will be greater than or equal to eight feet. During the mining activity, stormwater and groundwater will setting within the mine pit and be pumped out through erosion control measures into wetlands associated with Halfway Gut Creek and eventually Four Holes Swamp. Nearby properties with similar soils do not have any water quality issues or odor issues. If water quality issues arise, additional testing of upstream waters will take place and lime could be added to buffer low pH.

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

Existing roads will remain, however no structures associated with the mineral extraction will remain.

18. Attach two (2) copies 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. 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.

IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

19. 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. Reclamation activities will be conducted simultaneously with mining operations.

20. Section 48-20-40(16)(1) of the S.C. Mining Act requires a time schedule, including the anticipated years for completion of reclamation by segments. This time schedule should meet the requirements of Section 48-20-90 of the Mining Act.

SCHEDULE FOR IMPLEMENTING CONSERVATION AND RECLAMATION PRACTICES

Conservation & Reclamation Practices	Segment # or Area	Planned		*Applied		Notes
		Amount	Year	Amount	Month/Year	
Establish Mine areas and flag buffer area	PA					See Note 2, maintain LOM
Install survey control markers and clear mine area if necessary	PA					See Note 1, maintain LOM
Post Warning signs	PA					Maintain LOM
Install stormwater BMPs; maintain sediment basin	AA					See Note 3, maintain LOM
Maintain haul roads, gate	AA					Maintain LOM
Excavate rim ditch/ dewater	by segment					constructed as needed when segments are opened
Clear/ stockpile topsoil	1	5	2019			See Note 4
Remove/ stockpile overburden	1	0.2	2019			See Note 5
Excavate/ grade outer slopes	1	0.4	2019-2022			See Note 6
Clear/ stockpile topsoil	2	5	2020			See Note 4
Remove/ stockpile overburden	2	5	2020			See Note 5
Topsoil, fertilize, seed final slopes	1	0.4	2020-2023			See Note 7
Excavate/ grade outer slopes	2	0.4	2020-2023			See Note 6
Inspect, repair, maintain	1	5	2019-release			See Note 8
Clear/ stockpile topsoil	3	22.3	2021			See Note 4
Remove/ stockpile overburden	3	0.2	2021			See Note 5
Topsoil, fertilize, seed final slopes	2	0.4	2020-2023			See Note 7
Excavate/ grade outer slopes	3	1.4	2020 - 2025			See Note 6
Inspect, repair, maintain	2	5	2023-release			See Note 8
Clear/ stockpile topsoil	4	27	2025			See Note 4
Remove/ stockpile overburden	4	0.2	2025			See Note 5
Topsoil, fertilize, seed final slopes	3	1.4	2020 - 2025			See Note 7
Excavate/ grade outer slopes	4	1.2	2025-2030			See Note 6
Inspect, repair, maintain	3	22.3	2020 - 2025			See Note 8

respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. Contested case guidance will be included within the letter.

NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

9. If the RFR is to be considered by the RFR Committee, the Clerk will notify the Presiding Member of the RFR Committee and the Chairman that further review is requested by the Board. RFR Committee meetings are open to the public and will be public noticed at least 24 hours in advance.
10. Following RFR Committee or Board consideration of the RFR, if it is determined no Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Conference. Contested case guidance will be included within the letter.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.
2. The Clerk will request Department staff provide the Administrative Record.
3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publically noticed and should:
 - include the place, date and time of the Conference;
 - state the presentation times allowed in the Conference;
 - state evidence may be presented at the Conference;
 - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
 - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.
4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. Final Review Conference and Decision

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
 - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
 - Type of decision (permit, enforcement, etc.) and description of the program.
 - Parties
 - Description of facility/site
 - Applicable statutes and regulations
 - Decision and materials relied upon in the administrative record to support the staff decision.
 - Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] *NOTE: The burden of proof is on the Requestor(s)*
 - Rebuttal by Department staff [15 minutes]
 - Rebuttal by Requestor(s) [10 minutes]

Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.
2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the Conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the Conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at the conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court or in matters pertaining to decisions under the South Carolina Mining Act, to request a hearing before the South Carolina Mining Council.. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.

South Carolina Board of Health and Environmental Control

Guide to Board Review

Pursuant to S.C. Code Ann. § 44-1-60

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of \$100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation or settlement discussions during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference. In matters pertaining to decisions under the South Carolina Mining Act, appeals should be made to the South Carolina Mining Council.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars (\$100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
 - The grounds for amending, modifying, or rescinding the staff decision;
 - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
 - the relief requested;
 - a copy of the decision for which review is requested; and
 - mailing address, email address, if applicable, and phone number(s) at which the requestor can be contacted.
3. RFRs should be filed in person or by mail at the following address:
South Carolina Board of Health and Environmental Control
Attention: Clerk of the Board
2600 Bull Street
Columbia, South Carolina 29201
Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).
4. The filing fee may be paid by cash, check or credit card and must be received by the 15th day.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor. All personal and financial identifying information will be redacted from the RFR and accompanying documentation before the RFR is released to the Board, Department staff or the public.
7. If an RFR pertains to an emergency order, the Clerk will, upon receipt, immediately provide a copy of the RFR to all Board members. The Chairman, or in his or her absence, the Vice-Chairman shall based on the circumstances, decide whether to refer the RFR to the RFR Committee for expedited review or to decline in writing to schedule a Final Review Conference. If the Chairman or Vice-Chairman determines review by the RFR Committee is appropriate, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response and RFR Committee review will be provided on an expedited schedule defined by the Chairman or Vice-Chairman.
8. The Clerk will email the RFR to staff and Office of General Counsel and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within a twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will

Clear/ stockpile topsoil	5	27	2025		See Note 4
Remove/ stockpile overburden	5	0.2	2025		See Note 5
Topsoil, fertilize, seed final slopes	4	1.4	2020 - 2025		See Note 7
Excavate/ grade outer slopes	5	1.2	2025-2030		See Note 6
Inspect, repair, maintain	4	22.3	2020 - 2025		See Note 8
Topsoil, fertilize, seed final slopes	5	1.4	2025 - 2030		See Note 7
Inspect, repair, maintain	5	22.3	2025 - 2030		See Note 8

Notes:

- Two permanent survey markers within the permitted area shall be located at least 100 feet apart as required in R.89-130.
- Markers should be located prior to the start of mining. Permanently flag buffers associated with wetlands.
- Best Management Practices shall be installed and maintained as necessary to ensure stormwater is retained on site. Sediment basin shall be cleaned of sediment as necessary to ensure basin is functioning properly.
- Enough topsoil for reclamation must be stockpiled at the site.
- Minimize the amount of disturbed acreage to reduce the potential for offsite sediment and erosion control concerns.
- Slopes shall be graded as excavations progress.
- Reclamation of mined out areas should be initiated within 180 days of termination of mining in those areas or earlier if grading/ soil preparation/ seeding is feasible.
- Reclamation/ vegetation shall be inspected on a regular basis and corrective measures taken to prevent erosion of final slopes until the area is released by the Department as meeting reclamation standards
- Reclamation schedule must be revised, submitted to DHEC and approved prior to initiating activity in future reserves**

AA – Affected Area BMPs – Best Management Practices LOM – Life of Mine PA – Permitted Area PL – Property Line ST – Sediment Traps
 SW – Stormwater TS – Topsoil WL - Wetlands

* Completed by the Department

YOU ARE NOTIFIED THAT:

- 1) You, the operator, must file an application to modify the reclamation plan in the event actual reclamation varies from the set forth hereinabove; and
- 2) If at any time it appears to the Department that the activities under the reclamation plan are failing to achieve the purposes and requirements of the S.C. Mining Act, the Department may modify the RECLAMATION PLAN in accordance to Section 48-20-150.

Chris Bauer, Member/Manager

Signature of Applicant/Operator or his Authorized Representative

Chris Bauer, Member/Manager

Printed Name of Applicant/Operator or his Authorized Representative

Member/Manager

Title

8/27/2019

Date

Department Use Only

Permit No.: 2279 Date Application Approved: 10/8/20 Date Bond Rec'd: 9/3/2020

Bond Amount: \$80,000.00 (Blanket or Single Bond: _____ Permit Issuance Date: 10/8/2020

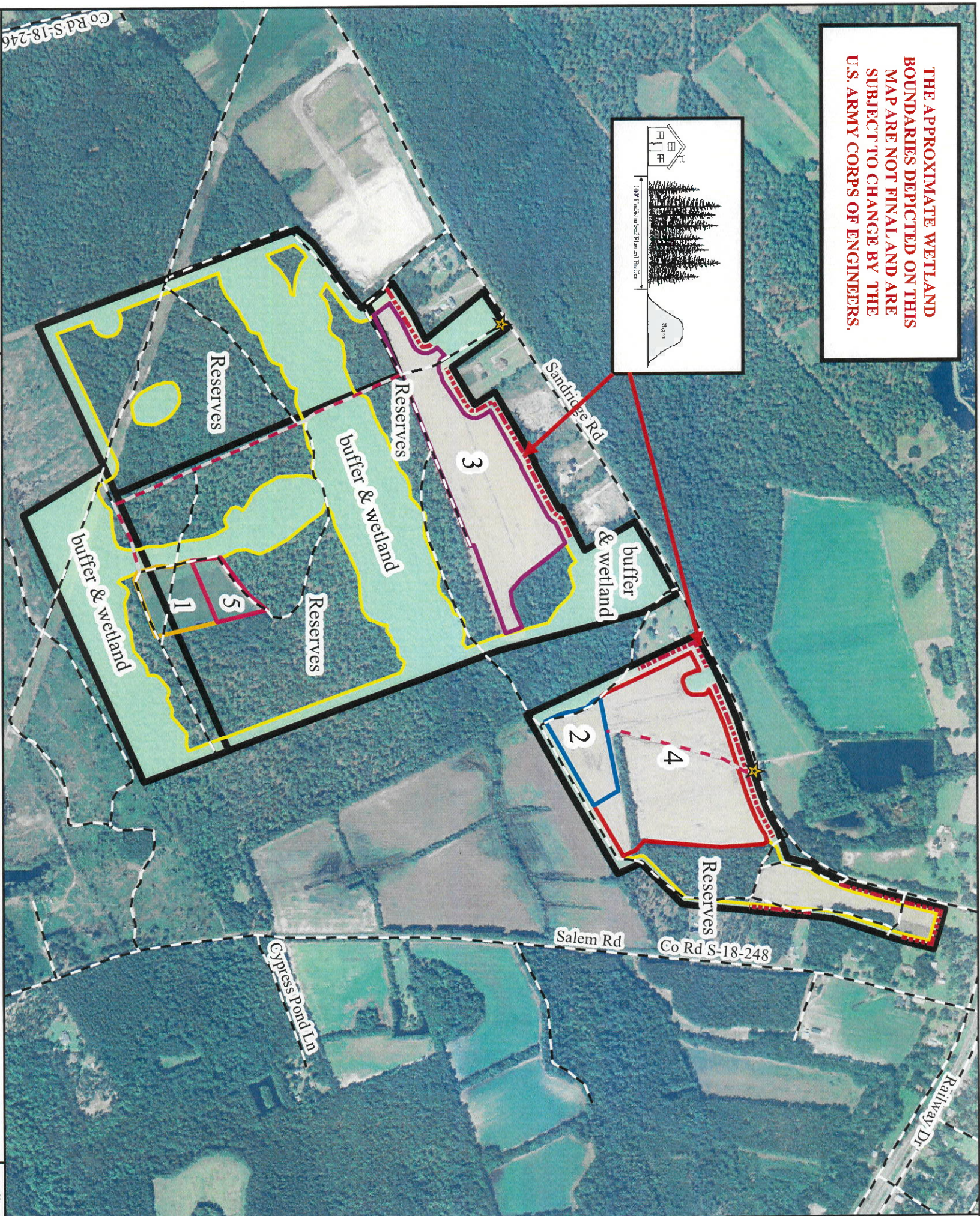
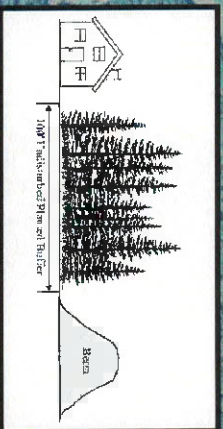
ACTION TAKEN ON THIS RECLAMATION PLAN

____ Approved _____ Denied Approved with Additional Terms and Conditions

By: *Joe Kov*
DIVISION DIRECTOR

Date: 10/8/2020

THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.



**MINE SEGMENTS AND FUTURE RESERVES MAP
PINELAND MINE
DORCHESTER COUNTY, SC**



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCELS.
MAP 2017 TRUE COLOR AERIAL

Created By: Stephen Bennett
Date: 7/30/2019
Company: Sabine & Waters, Inc.
Environmental Land Management Consultants
P.O. Box 1072, Summerville, SC 29484
843.871.5383 (phone) 843.871.2050 (fax)
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Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

**MINE SEGMENTS
AND
FUTURE RESERVES MAP**

**APPLICANT:
SANDRIDGE
HOLDINGS, LLC**

**OWNER:
SANDRIDGE
HOLDINGS, LLC**

**PREPARED BY:
Stephen Bennett
SABINE & WATERS, INC.
July 30, 2019**

PERMIT ACRES	314.71 acres
AFFECTED ACRES	62.3 acres
Segment 1 (CP1-002280)	5.0
Segment 2 (CP1-002281)	5.0
Segment 3	22.3
Segment 4	27.0
Segment 5	3.0
FUTURE RESERVES	129.8 acres
BUFFER AREA (buffers, wetlands)	122.61 acres

- LEGEND**
- 100FT PLANTED BUFFER & BERM
 - HAUL ROADS
 - ROADS
 - ACCESS POINTS

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT

REVISION DATE APPROVED: 7/29/2020
BY: Joe Kern
TITLE: SA-2234-18
10/8/2020
T-062234

THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.

MINE MAP

**APPLICANT:
SANDRIDGE ROAD
HOLDINGS, LLC**

**OWNER:
SANDRIDGE ROAD
HOLDINGS, LLC**

PREPARED BY:
Stephen Bennett
SABINE & WATERS, INC.
September 17, 2019

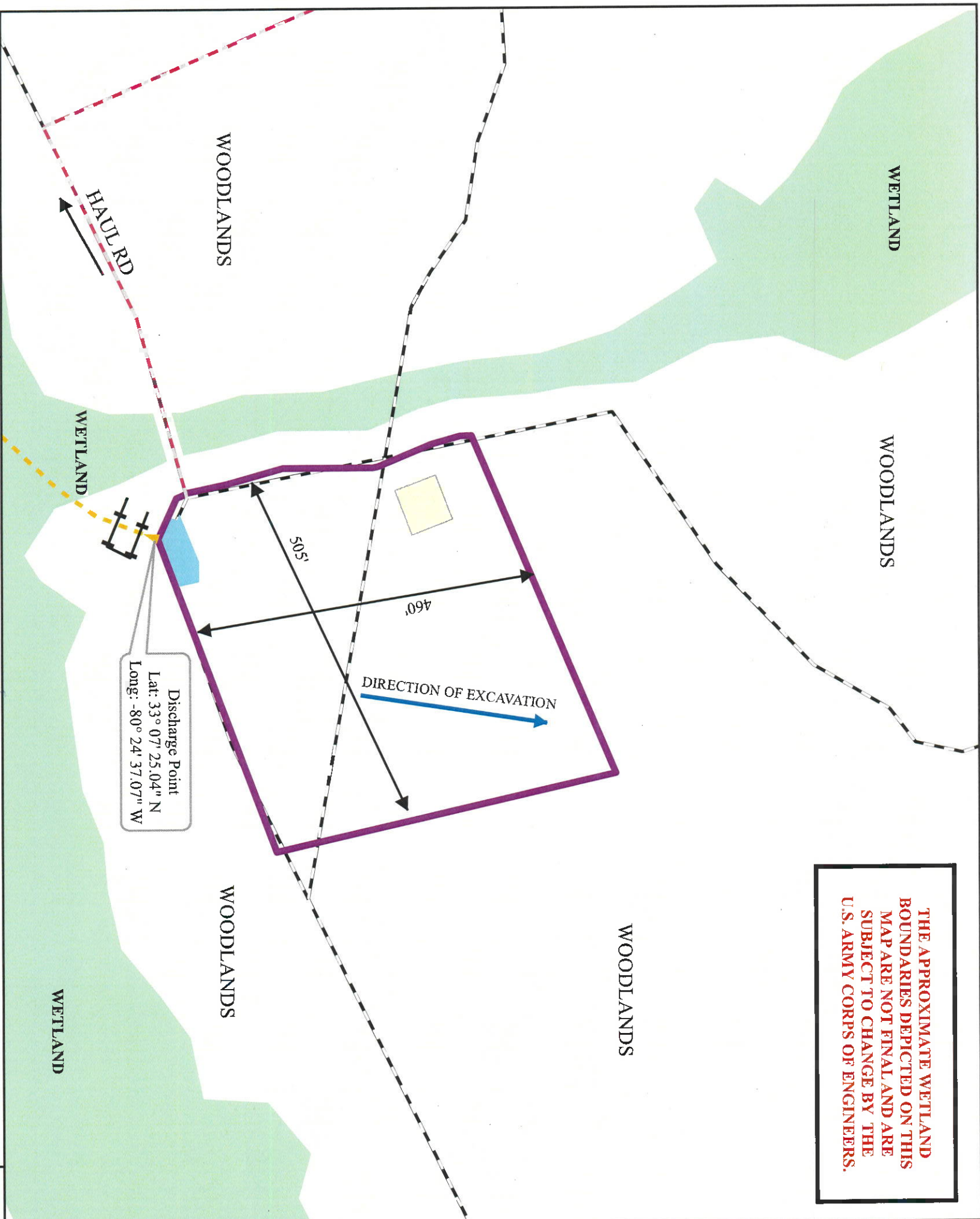
APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT

BY: *Joe Kern*
TITLE: *SP-2270-DVI*
DATE APPROVED: *10/9/2020*
PERMIT NO.: *I-0022709*

LEGEND

- PROPERTY BOUNDARY: 253.41 AC
- PIT FOOTPRINT: 5.0 AC
- WETLANDS: 68 AC
- OVERBURDEN/ STOCKPILE: 0.2 AC
- PIT DEWATER AREA: 0.2 AC
- RIP RAP SILT FENCE
- DISCHARGE
- HAUL ROAD
- ROADS

REVISED: 8/3/2020



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
Date Created: September 17, 2019
Copyright: Sabine & Waters, Inc.
Esri, Parcel Data and Management Consultants
P.O. Box 1072 Summerville, SC 29484
843.871.5383 (phone) 843.871.2050 (fax)
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Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

**MINE MAP
PINELAND INDIVIDUAL MINE SEGMENT 1 (GP1-002280)
DORCHESTER COUNTY, SC**



RECLAMATION MAP

APPLICANT:
SANDRIDGE ROAD
HOLDINGS, LLC






OWNER:
SANDRIDGE ROAD
HOLDINGS, LLC

PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 September 17, 2019

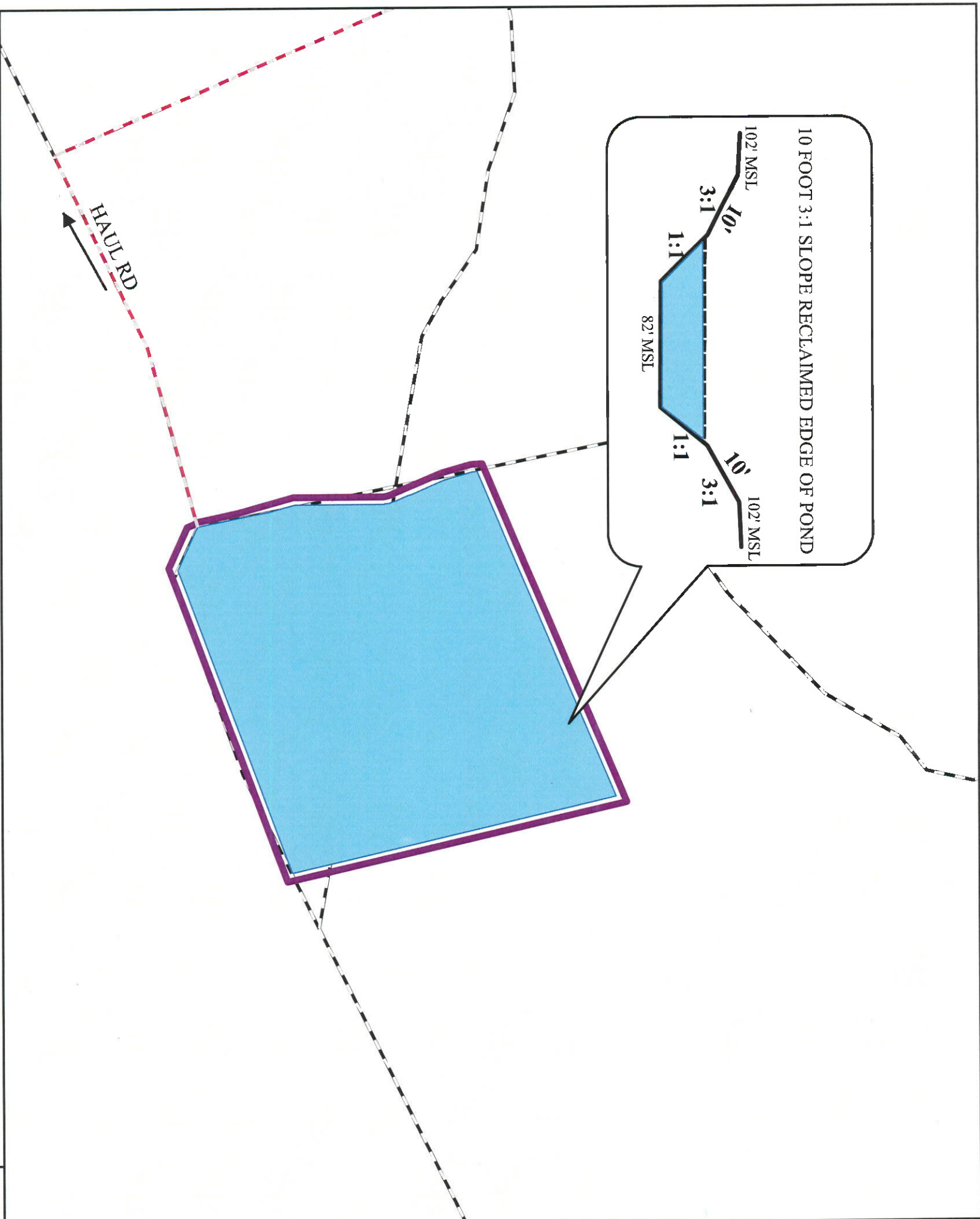
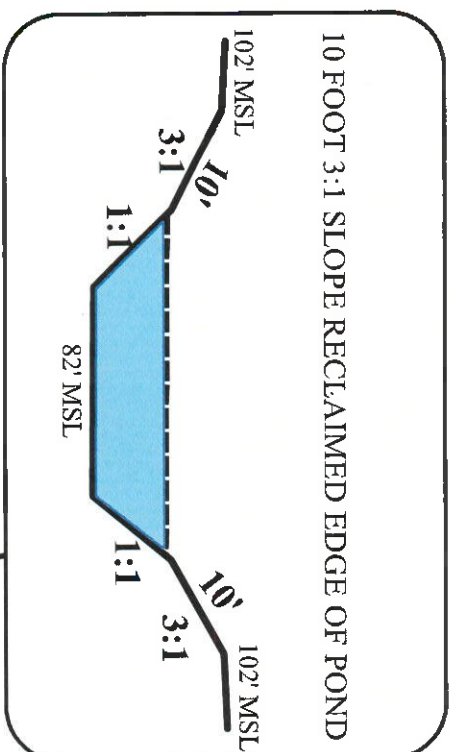
APPROVED BY
 SOUTH CAROLINA DEPARTMENT OF HEALTH
 AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT

BY: *Joe Vent*
 TITLE: GP-2279-111
 DATE APPROVED: 10/8/2020
 PERMIT NO.: I-002279

LEGEND

-  PROPERTY BOUNDARY: 253.14 AC
-  PIT FOOTPRINT: 5.0 AC
-  WATER: 4.6 AC
-  HAUL ROAD
-  ROADS

REVISED: 8/3/2020



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
 Date Created: September 17, 2019
 Copyright 2019 Sabine & Waters, Inc.
 P.O. Box 1072 Summerville, SC 29484
 843.871.5383 (phone) 843.871.2050 (fax)
 R:\cnsdnt\sandrdrge_land_holdings\mining\pineland_ip\segment1_reclamation.mxd

Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

RECLAMATION MAP
PINELAND INDIVIDUAL MINE SEGMENT 1 (GP1-002280)
DORCHESTER COUNTY, SC

0 200 400
 Feet

THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.

MINE MAP
APPLICANT:
SANDRIDGE ROAD
HOLDINGS, LLC
OWNER:
SANDRIDGE ROAD
HOLDINGS, LLC

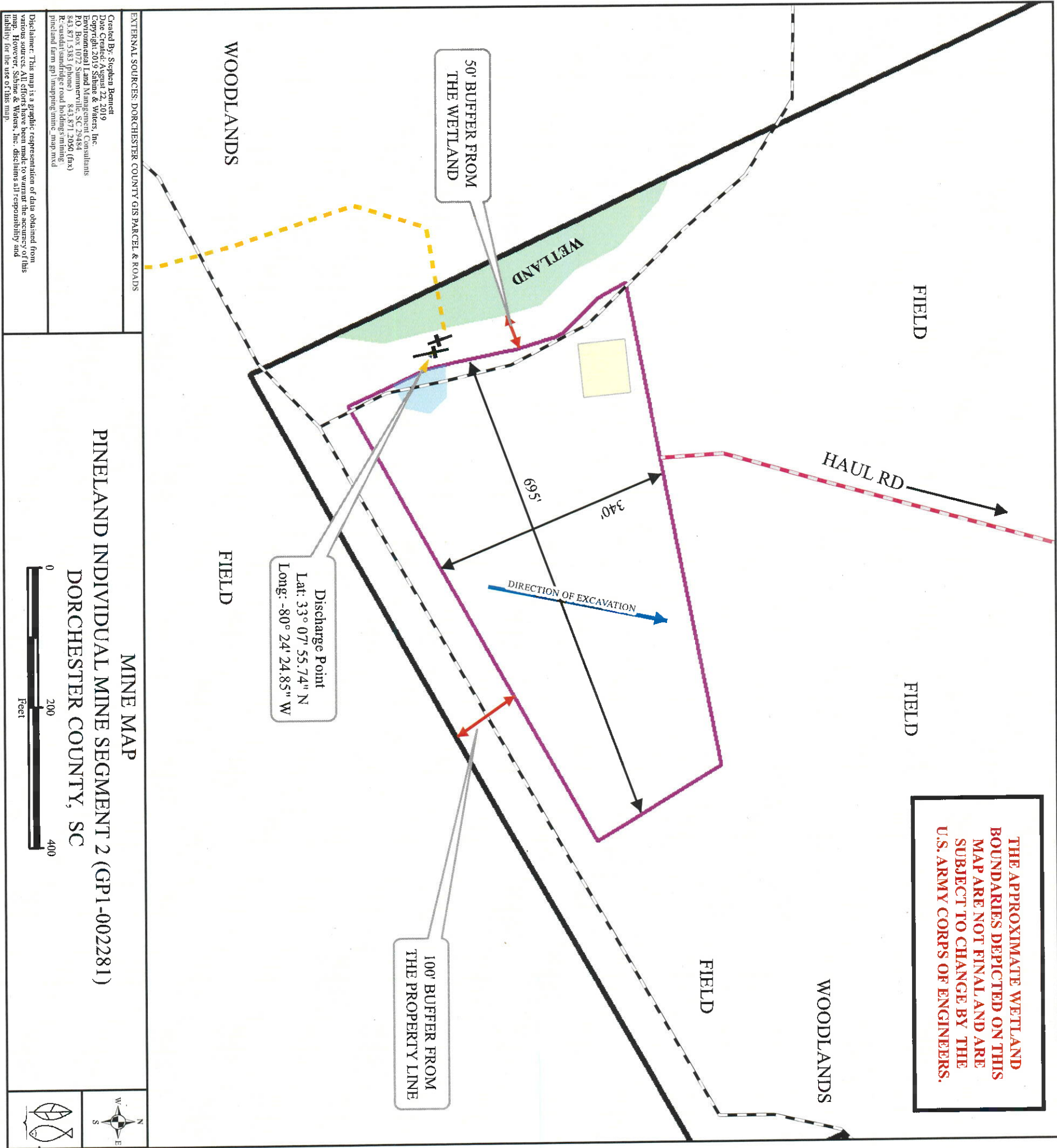
PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 August 22, 2019

APPROVED BY
 SOUTH CAROLINA DEPARTMENT OF HEALTH
 AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT
 BY *Joe Kern*
 TITLE *SM-2274-3V1*
 DATE APPROVED *10/6/2019*
 PERMIT NO. *I-2274*

LEGEND

- ▣ PROPERTY BOUNDARY: 61.30 AC
- ▣ PIT FOOTPRINT: 5.0 AC
- ▣ OVERBURDEN/ STOCKPILE: 0.2 AC
- ▣ SETTLING POND: 0.2 AC
- RIP RAP SILT FENCE
- DISCHARGE
- ▣ WETLAND
- HAUL ROAD
- ROADS

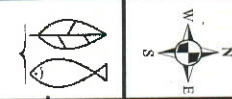
REVISED: 8/3/2020



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
 Date Created: August 22, 2019
 Copyright: 2019 Sabine & Waters, Inc.
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 P.O. Box 1072, Summerville, SC 29484
 843.871.5383 (phone) 843.871.2050 (fax)
 R:\cadd\sandridge road holdings\mine\pineland farm gp\mapping\mine_map.mxd

MINE MAP
PINELAND INDIVIDUAL MINE SEGMENT 2 (GP1-002281)
DORCHESTER COUNTY, SC



Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

RECLAMATION MAP

**APPLICANT:
SANDRIDGE ROAD
HOLDINGS, LLC**

**OWNER:
SANDRIDGE ROAD
HOLDINGS, LLC**

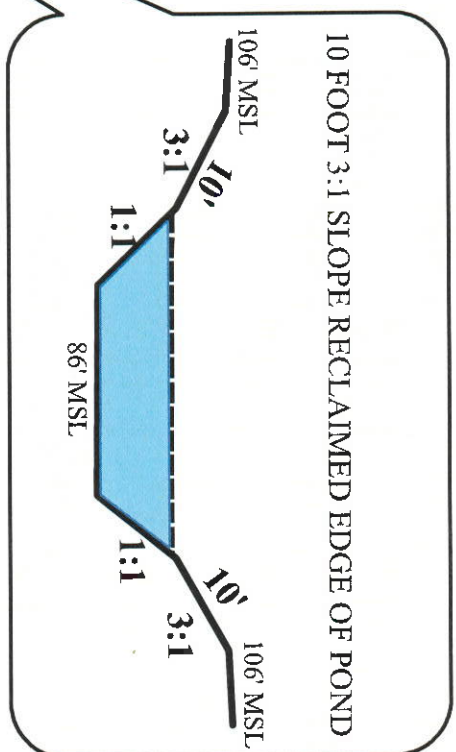
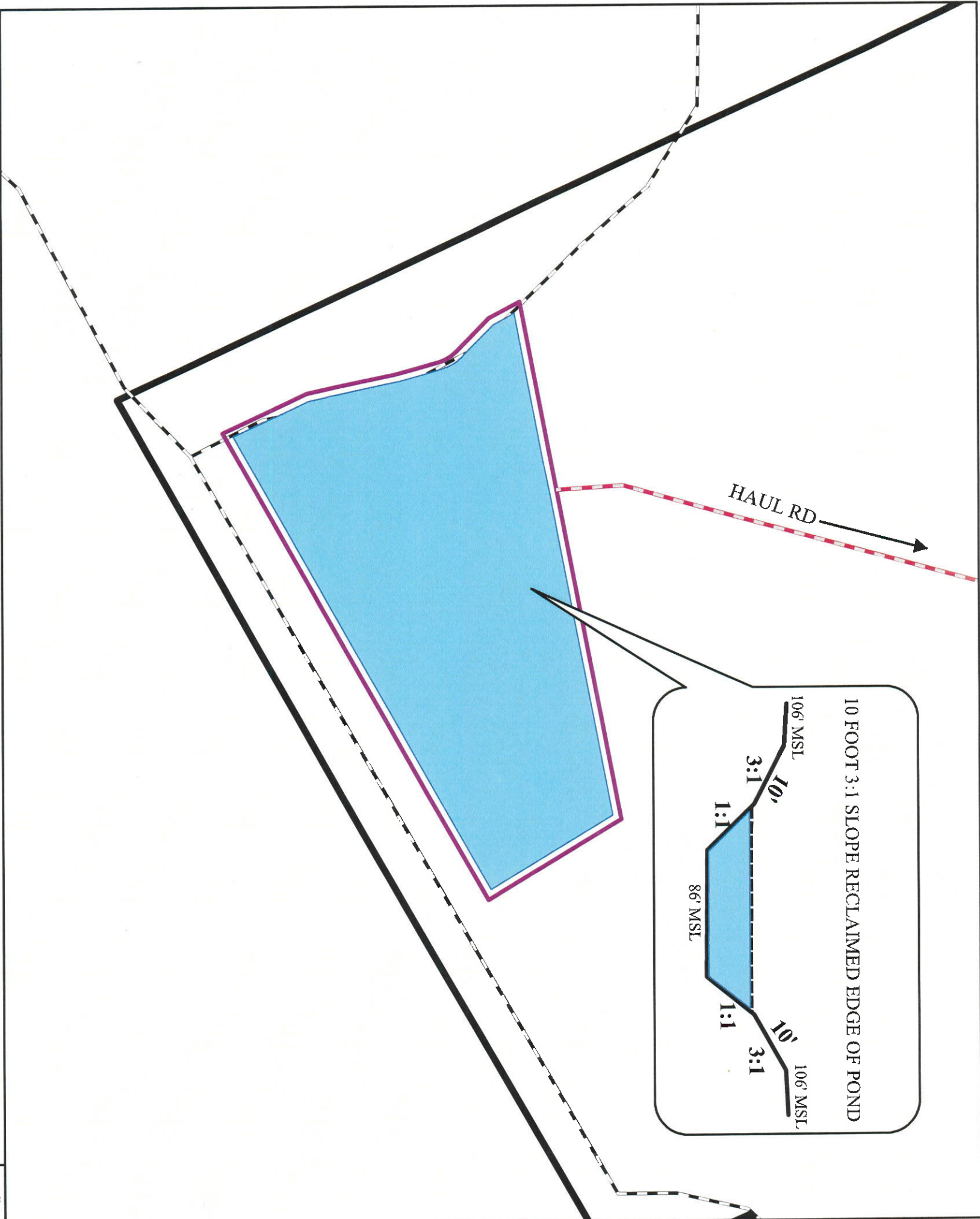
PREPARED BY:
Stephen Bennett
SABINE & WATERS, INC.
August 22, 2019

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY *[Signature]*
TITLE DM-2274-2VI
DATE APPROVED 10/11/2020
PERMIT NO. S-2274

LEGEND

- PROPERTY BOUNDARY: 61.30 AC
- PIT FOOTPRINT: 5.0 AC
- WATER: 4.6 AC
- HAUL ROAD
- ROADS

REVISED: 8/3/2020

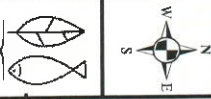


EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

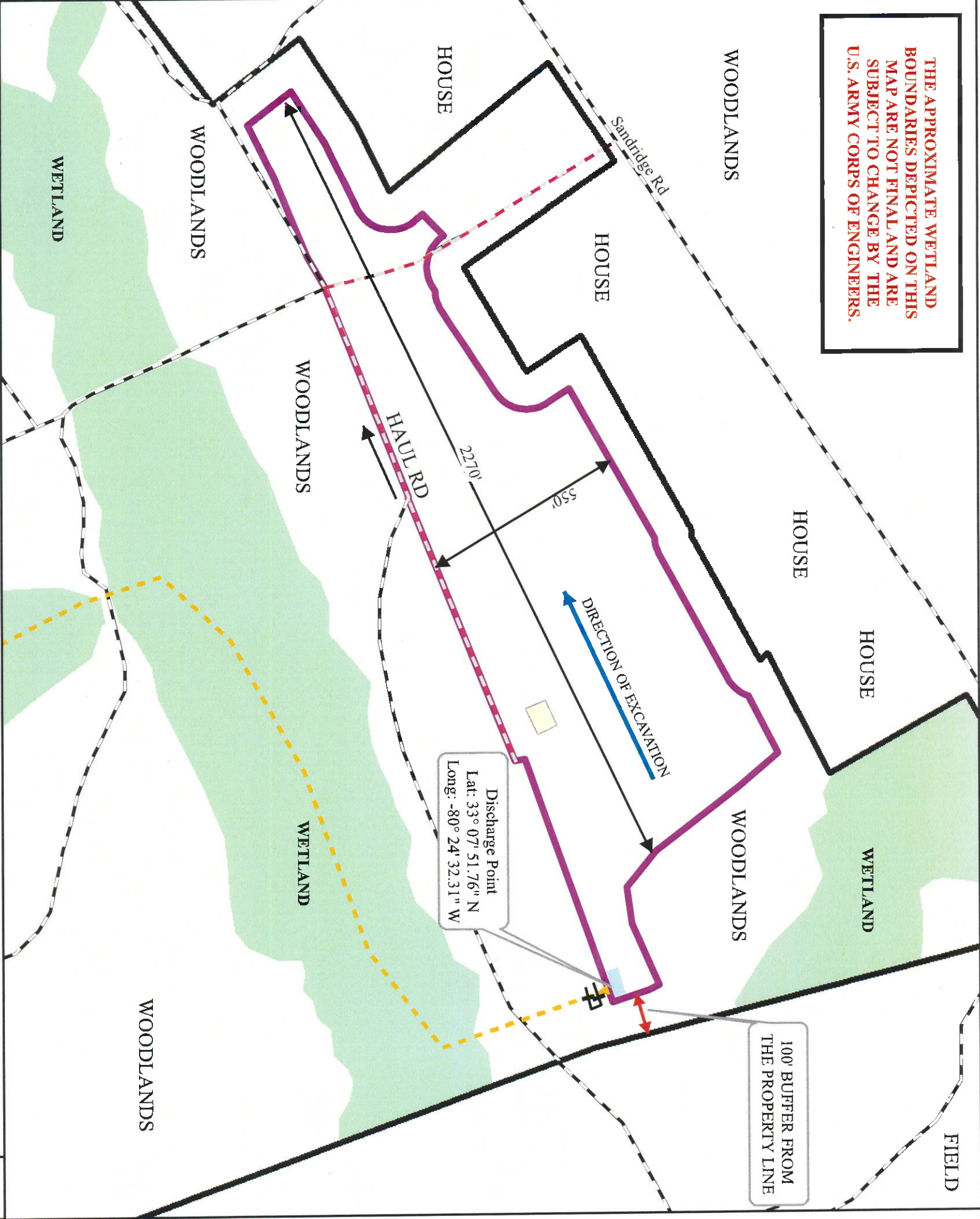
Created By: Stephen Bennett
Date Created: August 22, 2019
Copyright: Sabine & Waters, Inc.
Project: Pineland Land Management Consultants
PO Box 1072, Summerville, SC 29484
843.871.5383 (phone) 843.871.2050 (fax)
R:\cadd\landridge road holdings\mimg\pineland farm gp1\mapping\reclamation_map.mxd

Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

RECLAMATION MAP
PINELAND INDIVIDUAL MINE SEGMENT 2 (GP1-002281)
DORCHESTER COUNTY, SC



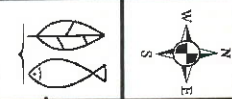
THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

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 Date Created: September 17, 2019
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 P.O. Box 1072 Summerville, SC 29484
 843.871.5383 (phone) 843.871.2050 (fax)
 R:\cadd\rsandridge road holdings\mining\mapping\psegment 3\mine map.mxd

MINE MAP
PINELAND INDIVIDUAL MINE SEGMENT 3
DORCHESTER COUNTY, SC



REVISIED: 8/3/2020

MINE MAP
APPLICANT:
SANDRIDGE ROAD HOLDINGS, LLC
OWNER:
SANDRIDGE ROAD HOLDINGS, LLC

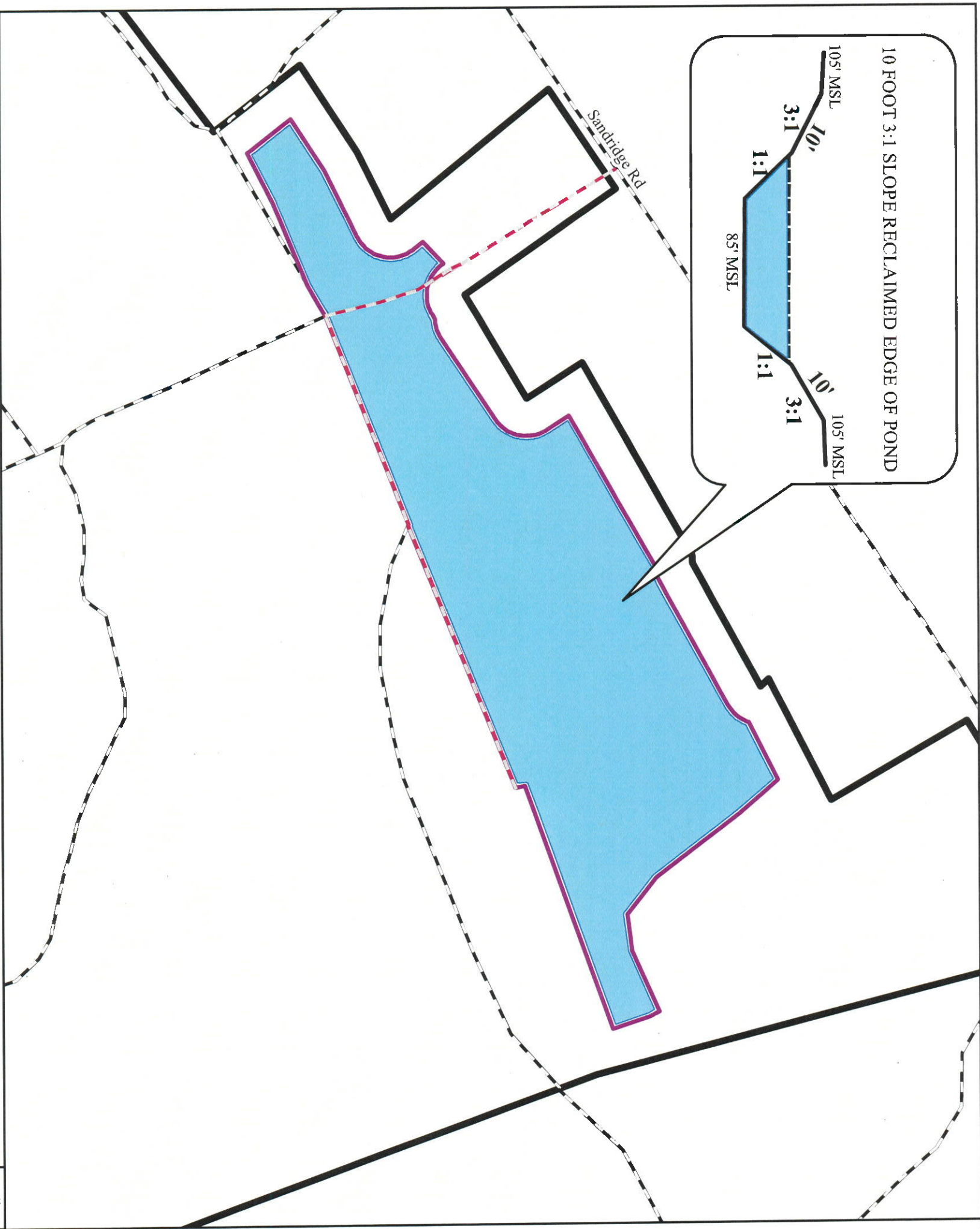
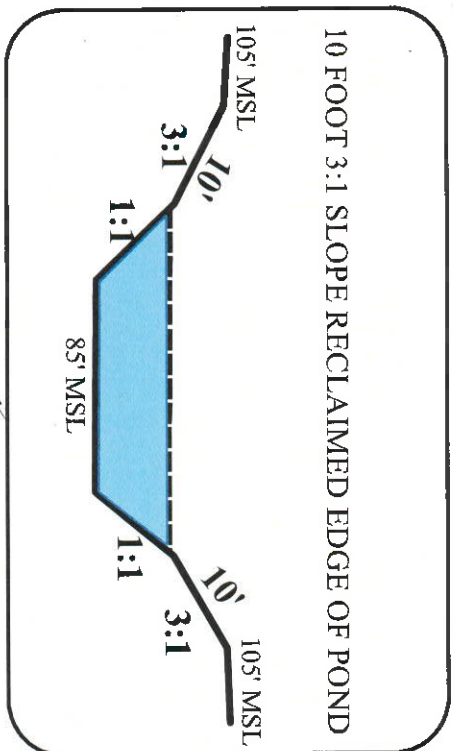
PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 September 17, 2019

APPROVED BY
 SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT
 BY: *Joe Perry*
 TITLE: *SM-2221-471*
 DATE APPROVED: *11/8/2020*
 PERMIT NO.: *I-22411*

LEGEND

- PROPERTY BOUNDARY: 253.41 AC
- PFT FOOTPRINT: 22.3 AC
- WETLANDS: 68 AC
- OVERBURDEN/ STOCKPILE: 0.2 AC
- PIT DEWATER AREA: 0.2 AC
- RIP RAP SILT FENCE
- DISCHARGE
- HAUL ROAD
- ROADS

Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to warrant the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.



RECLAMATION MAP

APPLICANT:
SANDRIDGE ROAD HOLDINGS, LLC

OWNER:
SANDRIDGE ROAD HOLDINGS, LLC

PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 September 17, 2019

APPROVED BY
 SOUTH CAROLINA DEPARTMENT OF HEALTH
 AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT
 BY: *Joe Pen*
 TITLE: *DM-2229-3VI*
 DATE APPROVED: *11/8/2029*
 PERMIT NO.: *2-2229*

LEGEND

- ▣ PROPERTY BOUNDARY: 253.41 AC
- ▣ PIT FOOTPRINT: 22.3 AC
- ▣ WATER: 20.9 AC
- HAUL ROAD
- ROADS

REVISED: 8/3/2020

RECLAMATION MAP

PINELAND INDIVIDUAL MINE SEGMENT 3
DORCHESTER COUNTY, SC



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
 Date Created: September 17, 2019
 Copyright 2019 Sabine & Waters, Inc.
 E-mail: stephen@sabineandwaters.com
 P.O. Box 1072 Summerville, SC 29484
 843.871.5183 (phone) 843.871.2050 (fax)
 R:\csdata\sandrige road holdings\mining
 mapping\segment_3\reclamation.mxd

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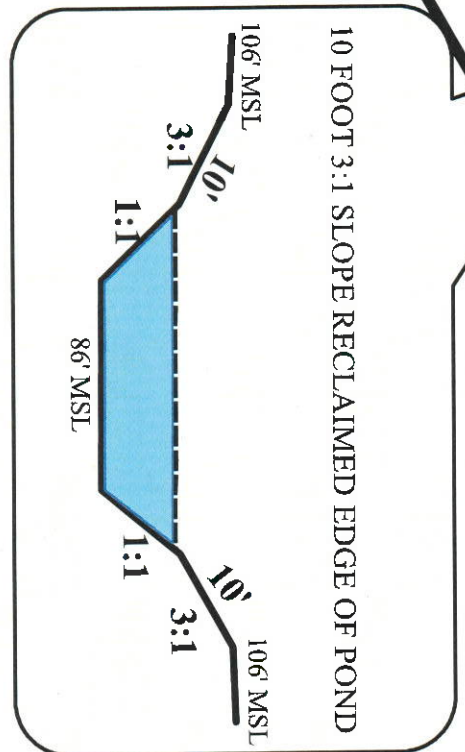
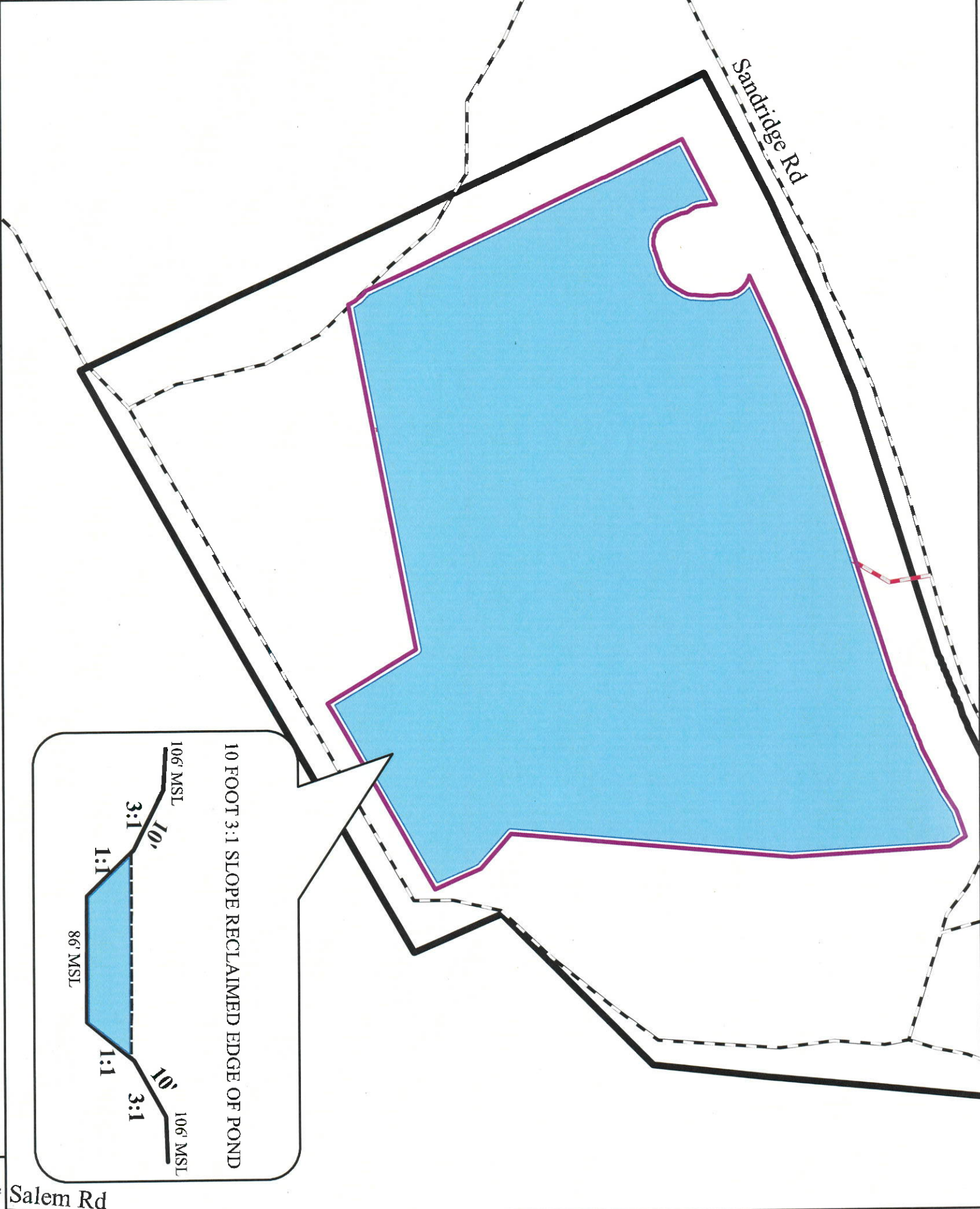
RECLAMATION MAP

APPLICANT:
SANDRIDGE ROAD HOLDINGS, LLC

OWNER:
SANDRIDGE ROAD HOLDINGS, LLC

PREPARED BY:
Stephen Bennett
SABINE & WATERS, INC.
September 17, 2019

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY Steph Bennett
TITLE RM 7240-4VI
DATE APPROVED 10/01/2020
PERMIT NO. I-2249

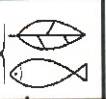
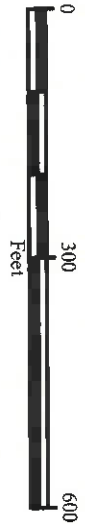


EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
Date Created: September 17, 2019
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P.O. Box 1072, Summerville, SC 29484
843.871.5383 (phone) 843.871.2050 (fax)
R:\cnsd\rsandrdrge road holdings\swm\swm\mapping\segment 2\reclamation.mxd

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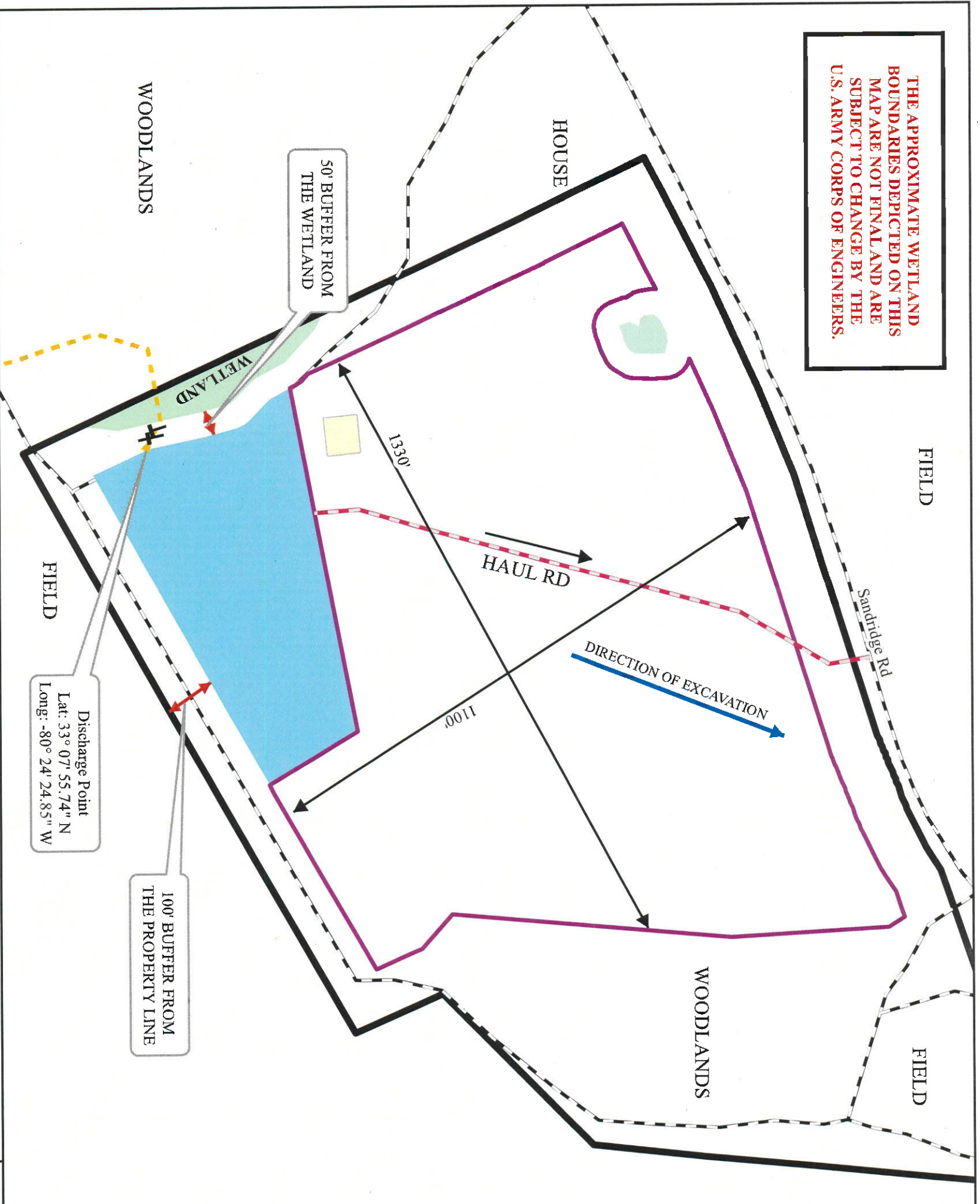
RECLAMATION MAP
PINELAND INDIVIDUAL MINE SEGMENT 4
DORCHESTER COUNTY, SC



- LEGEND**
- PROPERTY BOUNDARY: 61.30 AC
 - PIT FOOTPRINT: 27.0 AC
 - WATER: 25.8 AC
 - HAUL ROAD
 - ROADS

REVISED: 8/3/2020

THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
 Date: September 17, 2019
 Company: Sabine & Waters, Inc.
 Environmental Land Management Consultants
 P.O. Box 1072 Summerville, SC 29484
 843.871.5383 (phone) 843.871.2050 (fax)
 R:\cust\tsandrige road holdings\summing.mxd

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MINE MAP
PINELAND INDIVIDUAL MINE SEGMENT 4
DORCHESTER COUNTY, SC

Scale: 0 to 600 Feet

Discharge Point
 Lat: 33° 07' 55.74" N
 Long: -80° 24' 24.85" W

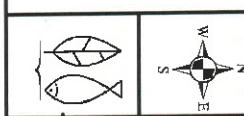
MINE MAP
APPLICANT:
SANDRIDGE ROAD HOLDINGS, LLC
OWNER:
SANDRIDGE ROAD HOLDINGS, LLC

PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 September 17, 2019

APPROVED BY:
 SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT
 BY: *Joe Pover*
 TITLE: *SP-22FA-SV1*
 DATE APPROVED: *10/8/2020*
 PERMIT NO.: *I-002249*

LEGEND

- PROPERTY BOUNDARY: 61.30 AC
- PIT FOOTPRINT: 27.0 AC
- SEGMENT 2 MINE
- OVERBURDEN/STOCKPILE: 0.2 AC
- RIP RAP SILT FENCE
- DISCHARGE
- WETLANDS
- HAUL ROAD
- ROADS



REVISED: 8/3/2020

THE APPROXIMATE WETLAND BOUNDARIES DEPICTED ON THIS MAP ARE NOT FINAL AND ARE SUBJECT TO CHANGE BY THE U.S. ARMY CORPS OF ENGINEERS.

MINE MAP

**APPLICANT:
SANDRIDGE ROAD
HOLDINGS, LLC**

**OWNER:
SANDRIDGE ROAD
HOLDINGS, LLC**

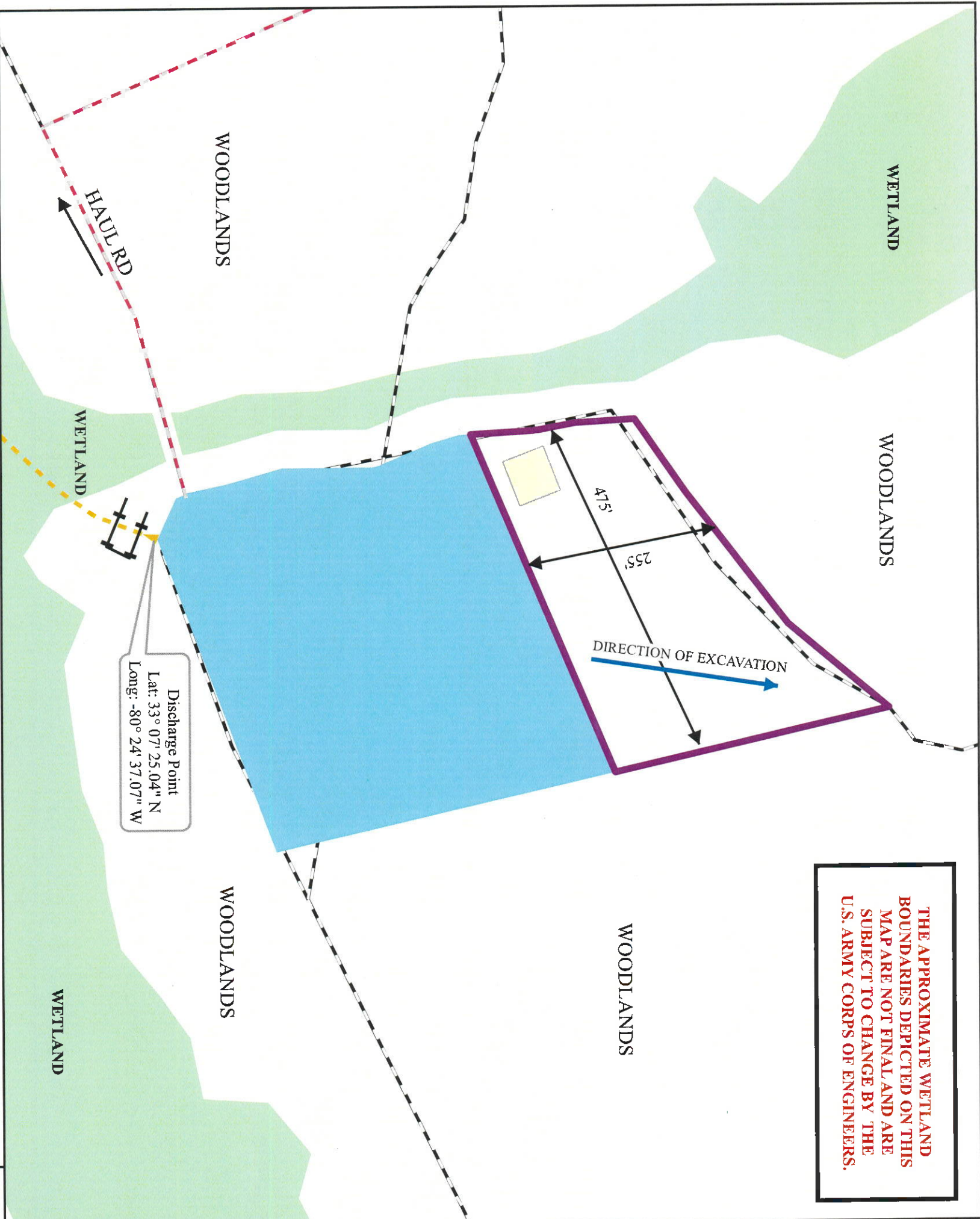
PREPARED BY:
Stephen Bennett
SABINE & WATERS, INC.
September 17, 2019

APPROVED BY
SOUTH CAROLINA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL CONTROL
DIVISION OF MINING AND SOLID WASTE MGT
BY *Joe Lee*
TITLE *SM-2279-6VI*
DATE APPROVED *11/8/2020*
PERMIT NO. *I-002279*

LEGEND

- PROPERTY BOUNDARY: 253.41 AC
- PIT FOOTPRINT: 3.0 AC
- PINELAND GP1 MINE: 5.0 AC
- WETLANDS: 68 AC
- OVERBURDEN/ STOCKPILE: 0.2 AC
- RIP RAP SILT FENCE
- DISCHARGE
- HAUL ROAD
- ROADS

REVISED: 8/3/2020



EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCELS & ROADS

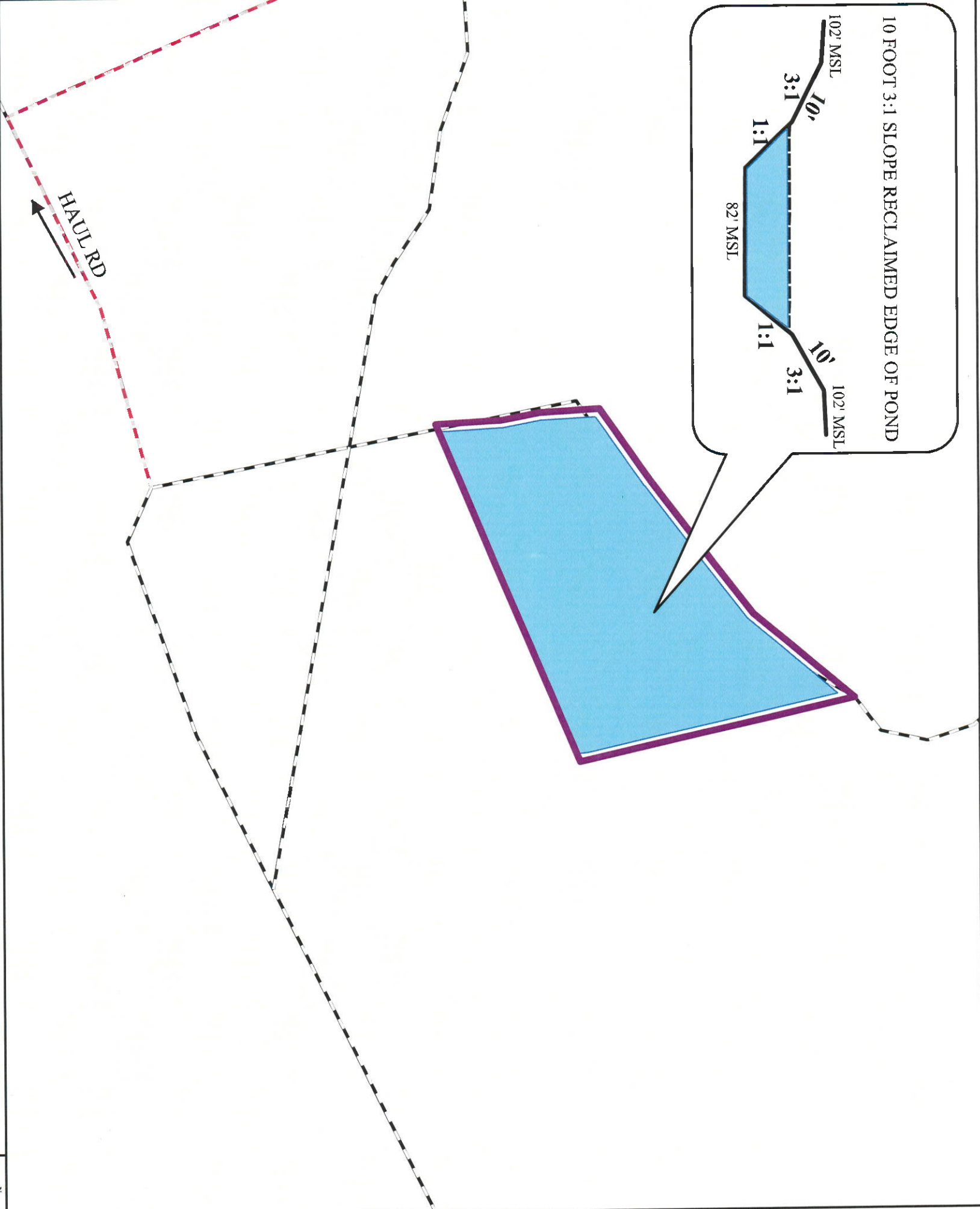
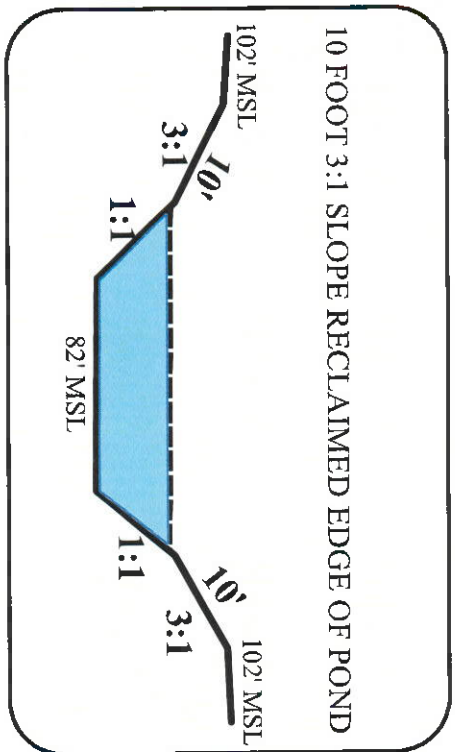
Created By: Stephen Bennett
Date Created: September 17, 2019
Copyright 2019 Sabine & Waters, Inc.
PO Box 10727, South Myrtle Beach, SC 29584
843.871.5383 (phone) 843.871.2050 (fax)
R:\cadd\rsandrdrge road holdings\mining\mapping\segment 5\mine map.mxd

MINE MAP
PINELAND INDIVIDUAL MINE SEGMENT 5
DORCHESTER COUNTY, SC

Scale: 0 to 400 Feet

Discharge Point
Lat: 33° 07' 25.04" N
Long: -80° 24' 37.07" W

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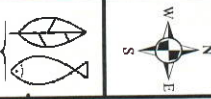
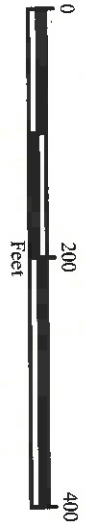


EXTERNAL SOURCES: DORCHESTER COUNTY GIS PARCEL & ROADS

Created By: Stephen Bennett
 Date Created: September 17, 2019
 Copyright 2019 Sabine & Waters, Inc.
 Environmental Consultants
 P.O. Box 1072, Summerville, SC 29484
 843.871.5183 (phone) 843.871.2050 (fax)
 R: eastside@sandriddle.com
 mapping: segment_5reclamation.mxd

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RECLAMATION MAP
 PINELAND INDIVIDUAL MINE SEGMENT 5
 DORCHESTER COUNTY, SC



RECLAMATION
 MAP

APPLICANT:
 SANDRIDGE ROAD
 HOLDINGS, LLC

OWNER:
 SANDRIDGE ROAD
 HOLDINGS, LLC

PREPARED BY:
 Stephen Bennett
 SABINE & WATERS, INC.
 September 17, 2019

APPROVED BY
 SOUTH CAROLINA DEPARTMENT OF HEALTH
 AND ENVIRONMENTAL CONTROL
 DIVISION OF MINING AND SOLID WASTE MGT

BY: *Joe Law*
 TITLE: PH-2279-51
 DATE APPROVED: 9/18/2020
 PERMIT NO.: 1-002279

LEGEND

- PROPERTY BOUNDARY: 253.41 AC
- PLOT FOOTPRINT: 3.0 AC
- WATER: 2.7 AC
- HAUL ROAD
- ROADS

REVISED: 8/3/2020