



June 2020

**Storm Water Pollution Prevention
Plan**

**Neely Trucking & Excavating
Highway 49 Mine**

**Neely Trucking & Excavating Highway 49 Mine
Near the SE Corner of the Intersection of
Highway 49 & Maclean Road
Jackson, Hinds County, Mississippi**

Prepared For:

**Neely Trucking & Excavating Company, Inc.
652 Highway 469 North
Florence, Mississippi 39073**

Prepared By:

Franklin Environmental Group



***NEELY TRUCKING & EXCAVATING
HIGHWAY 49 MINE STORM WATER
POLLUTION PREVENTION PLAN
(SWPPP)***



Franklin Environmental Group

**NEELY TRUCKING & EXCAVATING COMPANY, INC.
NEELY TRUCKING & EXCAVATING HIGHWAY 49 MINE
Near SE Corner of Intersection of Highway 49 and Maclean Road**

JACKSON, HINDS COUNTY, MISSISSIPPI

**UNDER MISSISSIPPI'S
MINING STORM WATER GENERAL NPDES PERMIT**

COVERAGE NO. MSR 32_ _ _ _

SWPPP MANAGER: Mr. Chris Neely

TITLE: Manager

TELEPHONE #: (601) 845-2366

SWPPP COMMITTEE MEMBER:

Chris Neely – Neely Trucking & Excavating Company, Inc.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	SITE LOCATION AND DESCRIPTION	1
3.0	POLLUTION PREVENTION TEAM.....	1
4.0	POTENTIAL SOURCES OF STORM WATER POLLUTANTS.....	2
4.1	Narrative Description of Activities and Significant Materials	2
4.2	Significant Spills or Leaks.....	2
5.0	NON-STORM WATER DISCHARGE CERTIFICATION.....	2
6.0	STORM WATER MANAGEMENT CONTROLS	3
6.1	Sediment and Erosion Control	3
6.2	Preventative Maintenance	3
6.3	Good Housekeeping.....	4
6.3.1	Operation and Maintenance	4
6.3.2	Material Storage Practices	4
6.3.3	Material Inventory Procedures	4
6.4	Spill Plans and Response Procedures	5
6.5	Employee Training	5
6.6	Visual Site Inspections.....	6
7.0	NON-NUMERICAL LIMITATIONS, INSPECTIONS, RECORD KEEPING AND REPORTING	6
7.1	Storm Water Discharge Limitations.....	6
7.2	Record Keeping.....	6
7.3	Reporting	6
7.4	Annual SWPPP Update.....	7
8.0	CERTIFICATION OF SWPPP	7

FIGURES	Figure 1	Topographic Map and Site Plan
	Figure 2	Headwaters Wetlands Delineation
	Figure 3	Mining Maps

APPENDICES	Appendix A	List of Significant Spills or Leaks
	Appendix B	Regulatory Agencies
	Appendix C	Non-Storm Water Discharge Evaluation and Certification
	Appendix D	Monthly Inspection Form
	Appendix E	Employee Training
	Appendix F	Notice of Termination Form

ATTACHMENT	Attachment 1	Headwaters Delineation
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1.0 INTRODUCTION

The Clean Water Act (CWA), as amended (33 U.S.C. 1251 et seq.) and the rules and regulations promulgated under the authority of this Act require a permit for storm water discharges associated with certain industrial activities. These requirements are set forth in the National Pollutant Discharge Elimination System (NPDES) Mining General Storm Water Permit for the State of Mississippi, reissued February 16, 2018. Regulatory applicability is determined by the specific description of the covered industry, or activity, or by the Standard Industrial Classification (SIC) code which is 1442, Construction Sand and Gravel, for this activity. The Mississippi Department of Environmental Quality (MDEQ) NPDES Mining General Storm Water Permit authorizes discharges of storm water within the State of Mississippi from surface mining operations as defined in MDEQ Regulation WPC-1 Wastewater Regulations for NPDES Permits. Franklin Environmental Group, Inc. was retained by Neely Trucking & Excavating Company, Inc. (Neely Trucking) of Florence, Mississippi, to prepare this Storm Water Pollution Prevention Plan (SWPPP) for an approximate 30-acre site referred to as the Neely Trucking & Excavating Highway 49 Mine. The purpose of the SWPPP is to identify potential contaminants to storm water, describe best management practices (BMPs) and control measures, and maintain compliance with the terms and conditions of the Mining Storm Water General Permit - MSR32. This SWPPP was prepared in accordance with the MDEQ *Mississippi SWPPP Guidance Manual for Industrial Facilities* and the *SWPPP Guidance Manual for Construction Activities*. The SWPPP must identify potential pollutant sources, describe and ensure implementation of pollutant reduction practices, assure compliance with permit conditions and incorporate appropriate spill/leak responses and structural and non-structural best management practices (BMPs). Franklin Environmental Group teamed with Headwaters, Inc. to determine jurisdictional waters on the site. The delineation is included as an attachment. Headwaters, Inc. has submitted its delineation to the Corp of Engineers for approval.

2.0 SITE LOCATION AND DESCRIPTION

The Neely Trucking & Excavating Highway 49 Mine is located near the SE corner of the intersection of Highway 49 and Maclean Road, Jackson, Hinds County, Mississippi, latitude 32° 24' 31.27" North, longitude 90° 16' 52.91" West, being situated in the southwest quarter of the southeast quarter of Sections 34 & 35, Township 7 North, Range 1 West, Hinds County, Mississippi. The site encompasses approximately 30 acres and will be mined for borrow material to a depth of approximately 25 feet below surface grade. Access to the site will be provided through the existing Neely Trucking Mining permitted area located south (adjacent) to proposed mine. A topographic map showing a site plan and proposed drainage patterns is attached as Figure 1. An aerial photograph showing site location and major site features is attached as Figure 2. A 150' buffer will be maintained around the perennial stream onsite. A 100' buffer from public right-of-way will be maintained. A 50' buffer will be maintained around ephemeral streams.

3.0 POLLUTION PREVENTION TEAM

The Pollution Prevention Team (PPT) is responsible for oversight, implementation, maintenance, and any necessary revisions to the SWPPP. Members of the Neely Trucking & Excavating Highway 49 Mine PPT are:

- Mr. Chris Neely, PPT Leader.....(601) 845-2366

Specifically, team responsibilities include identifying pollutant sources and risk, choosing BMPs, and assessing the SWPPP effectiveness. The PPT leader (PPTL) will keep up-to-date on all site operations and ensure that changes are made to the SWPPP, as needed.

4.0 POTENTIAL SOURCES OF STORM WATER POLLUTANTS

4.1 Narrative Description of Activities and Significant Materials

Potential sources of storm water pollution during operation of the proposed surface mine are as follows:

- Exposed soil.

Incidental contaminants from heavy equipment and trucks, such as oil, grease, and fuel, may be present due to minor leaks, spills, or other causes. The maximum flow anticipated from this type of exposure is expected to be insignificant.

4.2 Significant Spills or Leaks

Significant spills or leaks are defined by federal regulations as a release within a 24-hour period of a hazardous substance or oil in an amount equal to, or in excess of, a reportable quantity listed in 40 CFR Part 117 and 40 CFR Part 302. To the knowledge of the landowner, no significant spills or leaks have occurred at the site to-date (see Appendix A).

Significant spills or leaks that could occur in the future will be reported to the proper authorities in accordance with applicable regulations and requirements. A list of regulatory agencies can be found in Appendix B. In such an event, documentation shall include the following information, as appropriate:

- Date of spill;
- Weather conditions;
- Duration of spill;
- Cause of spill;
- Environmental problems created by spill;
- Response procedures;
- Parties notified;
- Recommended revisions to the SWPPP and operating procedures; and
- Equipment needed to prevent recurrence.

5.0 NON-STORM WATER DISCHARGE CERTIFICATION

Federal law and the General Permit virtually prohibit all non-storm water discharges unless specifically permitted under an NPDES Permit. A Non-Storm Water Discharge Evaluation and Certification is included in Appendix C. Potential non-storm water discharges will be monitored during monthly site inspections, as well as the annual evaluation.

6.0 STORM WATER MANAGEMENT CONTROLS

General facility BMPs such as identifying a pollution prevention committee, sediment and erosion control, preventive maintenance, good housekeeping, spill prevention and response procedures, employee training, preventing non-storm water discharges, and routine site inspections were developed. The pollution potential, existing BMPs, and BMPs to be implemented for the identified exposed significant materials were assessed and will be developed based on risk identification, assessment, and material inventory of potential sources at the site. Descriptions of the BMPs are provided in the following sections. A 150' buffer will be maintained around the perennial stream onsite.

6.1 Sediment and Erosion Control

Berms will be located around the downslope side of each phase. These berms will be used as erosion control on disturbed areas to prevent sediment from reaching any intermittent receiving stream, lake, or storm water drainage ditch. Rip-rap rock check will be placed along the berms and discharge points to minimize sediment from exiting the site. Rock checks will be maintained by removing sediment from control when it has reached $\frac{1}{2}$ the height of the rock check. Erosion controls will be installed prior to commencement of mining. When a disturbed area not actively being mined will be left undisturbed for 30 days or more, the appropriate temporary or permanent vegetative practices shall be implemented within seven (7) calendar days. The seeding chart contained in the MDEQ Mississippi SWPPP Guidance Manual for Construction Activities will be used as guidance. A haul road construction entrance to adjacent Neely permitted mine will be utilized to minimize sediment tracking onto public roads. A monthly inspection form is attached in Appendix D. No sediment basins will be utilized onsite due to the size of total disturbed area at one time for the site. Silt fencing will be placed on the down stream side running along the earthen berm to prevent sediment from exiting the site. Silt fencing will be repaired or replaced when sediment has reached $\frac{1}{2}$ the height of the control.

6.1.1 Implementation Sequence

The project will be divided into six phases to minimize disturbance of soils. No individual phase exceeds 10 acres or more draining to a single point and no surface discharge is required. Install construction entrance, rip-rap rock checks, berms, and/or other MDEQ approved BMPs. 2/ Perform clearing and grubbing operations as needed. 3/ Mine areas as needed to reduce areas that will be left undisturbed for 30 more days. 4/ Grade areas for seeding and reclamation. 5/ Conduct final stabilization and reclamation. 5/Remove all temporary measures.

6.2 Preventive Maintenance

The preventive maintenance program at the Neely Trucking & Excavating Highway 49 Mine will involve the inspection and maintenance of storm water management devices and the inspection of potential pollutant sources to preclude breakdowns, or failures, which could result in discharges of polluted storm water. Maintenance of storm water management devices, performed as part of this program, and other routine maintenance programs include the following:

- Cleaning accumulated sediment from conveyance systems;
- Clearing of debris from drainage culverts; and
- Checking containment structures.

6.3 Good Housekeeping

Good housekeeping practices will be implemented and are intended to keep the facility clean and orderly, thus minimizing the potential for contribution to storm water run-off. Good housekeeping involves the following categories:

- No vehicle or equipment maintenance will be conducted onsite;
- No material storage onsite; and
- No material inventory is needed onsite.

6.3.1 Operation and Maintenance

The following general practices will be implemented into the Neely Trucking & Excavating Highway 49 Mine good housekeeping program and will remain in place for the duration of mining activities:

- Regularly pick up and dispose of garbage, debris or waste material found in, and around, the facility;
- Drip pans or buckets will be placed beneath hose connections during loading/unloading operations of motor fuels, as applicable;
- All equipment will be inspected once every month to ensure proper working conditions; and
- Inspections for leaks that could lead to discharges of chemicals, or for conditions where storm water contacts raw materials, waste materials or products will be performed monthly.

6.3.2 Material Storage Practices

Drums will not typically be used at the facility. Should drums be stored, the following proper storage techniques will be followed:

- Storage containers, and drums will be moved away from direct traffic routes to prevent spills;
- Containers will be stored on pallets, or similar devices, to prevent corrosion of the containers which can result when in contact with moisture on the ground; and
- The responsibility of hazardous material inventory will be assigned to a limited number of personnel who are trained to handle hazardous materials.

6.3.3 Material Inventory Procedures

The following inventory procedures will be followed:

- No chemical substances present in the work place will be identified;
- All containers will be labeled to show the name, type of substance, stock number, expiration date, health hazards, suggestions for handling, and first aid information; and
- All hazardous waste materials and recyclable materials which require special handling, storage, use, and special consideration will be clearly marked on the container.

6.4 Spill Plans and Response Procedures

Fuel storage is offsite.

Procedures for cleaning up spills, or releases, of potential pollutants are as follows:

- Personnel involved in the clean-up will take precautions to protect personal health and safety, as outlined in the MSDS for the spilled or released substance;
- All spills and releases of potential pollutants which could potentially contaminate storm water are to be completely contained upon discovery;
- The source material of the spill will be identified and halted immediately;
- The spilled material will be cleaned up immediately;
- The spilled or released material, all disposable equipment, and contaminated equipment will be disposed of in appropriate containers; and
- Non-disposable equipment shall be decontaminated or, disposed of, in accordance with 40 CFR Parts 260-265.

In the event of a hazardous material release, an employee will contact the PPTL. In the event of a small localized spill, an employee will immediately pour non-combustible sorbent material on the affected area. Arrangements will be made for proper disposal according to 40 CFR Parts 260-265.

The PPTL and PPT will be notified of any spills or releases. Spills, or releases, which are not fully contained, will be reported to the appropriate agency or agencies which are listed in Appendix B. Records of spills or releases will be documented in Appendix A.

6.5 Employee Training

Effective management of storm water pollution requires that all facility staff be familiar with those conditions that may cause pollution. Furthermore, day-to-day proper use of BMPs by all employees is essential for the success of the SWPPP. Mr. Chris Neely, the designated PPTL, will be responsible for implementation of the guidelines established in the SWPPP.

The PPTL is responsible for employee training at the Neely Trucking & Excavating Highway 49 Mine. Training objectives will consist of: (1) spill prevention and response, (2) good housekeeping practices, (3) material management practices, and (4) other general BMPs. Training will be conducted on an annual basis, and the information will be reviewed with new employees during their employee orientation. Regular feedback regarding the implementation and maintenance of the storm water management practices should be obtained from operations staff by the PPTL. In addition, the PPTL will annually evaluate the effectiveness of the training program and make improvements to promote employee awareness (see Appendix E).

6.6 Visual Site Inspections

Neely Trucking will continue to perform inspections of all erosion controls and other SWPPP requirements during permit coverage for the Neely Trucking & Excavating Highway 49 Mine. The inspections will be performed at least monthly and after 2-year, 24-hour storm event (approximately 4-inches on the MS/TN State Line); and as often as is necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained. The inspections will determine if additional or alternative control measures are required. Inspections will be recorded on the MDEQ "Annual Storm Water Site Inspection Report Form"

as presented in Appendix D. Non-functioning erosion controls will be repaired, replaced, or supplemented with functional controls within 24 hours of discovery, or as soon as field conditions allow.

7.0 NON-NUMERICAL LIMITATIONS, INSPECTIONS, RECORD KEEPING AND REPORTING

7.1 Storm Water Discharge Limitations

Storm water will be free from:

- Debris, oil scum, and other floating materials other than in trace amounts;
- Eroded soils and other materials that will settle to form objectionable deposits in receiving streams;
- Suspended solids, turbidity, and color at levels inconsistent with receiving streams; and
- Chemicals in concentrations that would cause violation of State water quality criteria in receiving streams.

7.2 Record Keeping

Records obtained during (1) monthly visual inspections and (2) the semi-annual site evaluation will be retained onsite for a minimum of three years after the date of the inspection. The PPTL will be responsible for implementing record keeping procedures.

7.3 Reporting

Inspection reports for SWPPP Evaluation will be will keep onsite or locally available.

In the event of anticipated, or unanticipated, noncompliance with the Storm Water General Permit requirements, the following procedures will be followed:

- Anticipated Noncompliance – The owner or operator will give at least ten days advance notice, if possible, before any planned noncompliance with the permit; and
- Unanticipated Noncompliance – The owner or operator will notify the MDEQ orally within 24 hours from the time that he, or she, becomes aware of unanticipated noncompliance. A written notice will be provided to the MDEQ within five working days of the time that he, or she, becomes aware of the circumstances. The written report must describe the cause, exact dates and times, steps taken or planned to reduce, eliminate, or prevent reoccurrence of the noncompliance and if the noncompliance has not ceased, the anticipated time for correction.

7.4 Annual SWPPP Update

Based upon the findings of the annual site evaluation, Neely Trucking will amend the SWPPP and SWPPP practices whenever there is change in design, construction, operation, or maintenance, which may potentially increase controlling storm water pollutants. Neely Trucking will submit the amended SWPPP to the MDEQ within 30 days following any amendments.

8.0 CERTIFICATION OF SWPPP

I certify under penalty of the law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person, or persons, who manages the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



President, FEG

June 30, 2020

Date

Certified Professional in Erosion and
Sediment Control - #6618
Certified Professional in Municipal
Storm Water Management - #0196



Franklin Environmental Group

ATTACHMENT

HEADWATERS, INC. STUDY



June 4, 2020

Ms. Patricia Neely
Neely Trucking
P.O. Box 1245
Florence, Mississippi 39073

**RE: Neely Trucking
Highway 49 North Property
Hinds County, Mississippi
Wetland Assessment**

Dear Ms. Neely:

Per your request, Headwaters, Inc. has completed a wetland and "other waters of the U.S." assessment on the above referenced property located in Hinds County, Mississippi. Headwaters conducted the initial site review and assessment of the subject property on May 29, 2020.

Our assessment was based upon the property boundaries as depicted on the property location maps and site plans provided to us by your office and verified by the field assessment of the property boundaries. The subject property consists of a parcel of land totaling approximately 53.60-acres located within an undeveloped portion of Hinds County located along the east side of Highway 49 North and along the south sides of Maclean Road and Phillips Drive. More specifically, the subject property is situated within Sections 34 & 35, Township 7 North, Range 1 West. The site can also be referenced by Global Positioning System (GPS) coordinates, N32.408752° - W90.278543°. Primary access to the property is granted by Highway 49 to the west, natural gas easement to the south, and Phillips Drive and Maclean Road to the north. Access is limited to foot travel only.

The initial phase of this assessment involved the assimilation of all available information related to the subject property that would help establish a historical perspective of the property and highlight the physical attributes of the property, the primary drainage patterns, and the physical location of any suspected wetland areas present within the limits of the property. An integral component of the initial phase included the review of the 2018 USDA National Agricultural Imagery Program (NAIP) and the U.S.G.S. *Pocahontas, Mississippi* Quadrangle Map (**Attachment I**).

Drainage across the preponderance of the subject property can be considered as moderate with natural drainage patterns found to be consistent with the available quadrangle maps. Drainage is conveyed generally to the north through natural

drainage features that cut across the property until eventually flowing into Bogue Chitto Creek to the west.

The initial review also included an assessment of the Hinds County, Mississippi Soil Survey, which revealed the subject property consists of Loring silt loam, 2 to 5 percent slopes moderately eroded (LoB2), Loring silt loam, 5 to 8 percent slopes, severely eroded (LoC3), Loring silt loam, 8 to 17 percent slopes, eroded (LoD2), Riedtown silt loam, 0 to 2 percent slopes, occasionally flooded (Re), and Siwell silt loam, 5 to 8 percent slopes, eroded (SeC2). Each of these soils is classified as 1 to 32 percent hydric except Loring (LoC3) and Loring (LoB2) which are classified as not hydric (0%) by the USDA NRCS.

Based upon our preliminary evaluation, the subject property has been historically utilized for timber production purposes, while the remaining portions of the property were occupied by utility easements. The surrounding areas have been historically utilized for commercial, industrial, and residential purposes. Presently, general land use of the surrounding areas can be described as undeveloped forestlands, mining operations, residential developments, and sporadic residential estates. The subject property was cleared in early 2014. The current habitat consists of a dense scrub-shrub stratum. A natural gas pipeline easement transects the southern portion of the site. The easement is well maintained and contains naturally vegetated swales. The swales exhibited signs of hydrology and hydric vegetation but lacked the hydric soil criteria to be deemed a wetland. The source of the hydrology was observed to be runoff from the property south of the subject property.

Once the initial map and historical review were complete, a field assessment was conducted to verify the primary habitat types present within the limits of the subject property, specifically jurisdictional waters, utilizing the 2010 Regional Supplement to the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual. Particularly, the regional supplement provides delineation guidance when considering soils and hydrology indicators of the Atlantic and Gulf Coastal Plain Region, in which the subject property is located. The field assessment revealed the presence of one (1) segment of an intermittent stream, three (3) ephemeral stream channels and scrub-shrub upland habitat within the subject property.

Given the natural topography and relatively moderate relief of the subject property, systematic transects were not employed in the field delineation methodology. Rather, wetland data points were established and documented utilizing GPS waypoints to verify potential jurisdictional wetlands and/or "other waters of the U.S." using an efficient approach based upon observations of vegetative and topographical features encountered in the field. The wetland delineation data points were spaced to ensure adequate coverage of each predominant habitat type present.

Based upon the site assessment completed, the following descriptions of the three (3) confirmed habitat types will be in general terms without specific chronology:

Intermittent Stream:

One (1) segment of an intermittent stream channel was observed transecting the northern portion of the subject property. This stream reach may be characterized by a relatively small channel approximately three (3) feet wide and two (2) feet deep. More specifically, this stream channel exhibits seasonal or intermittent flows throughout the year. This stream reach lacks significant vegetative components within the channel. The top banks of the channel were revealed to be upland in nature. The presence of the intermittent stream reach identified within the limits of the subject property would be considered as an "other waters of the United States."

Ephemeral Streams:

Additionally, the subject property contains three (3) ephemeral stream channels that can be described by shallow, defined stream banks with the overall lack of vegetative components within. The ephemeral stream channels predominantly provide storm water relief and convey storm water to the north through the subject property's natural topographic draw. Storm water runoff will be the primary source of water flow for the ephemeral stream channels with no apparent ground water recharge. The presence of the ephemeral stream channels within the subject property would be considered as "other waters of the U.S."

Upland (Non-Wetland) Habitat:

The remaining portions of the subject property are contained within a scrub-shrub upland (non-wetland) habitat type. Mature timber was observed along the perimeter of the subject property and small area on the eastern portion of the site. Additionally, the western and central portions of the site were recently cleared. Due to these upland habitats being present on higher elevations and hillslopes, the uplands were absent of any significant hydrology indicators or hydric characteristics. The primary vegetation observed within the upland habitats consist of loblolly pine (*Pinus taeda*), sweetgum (*Liquidambar styraciflua*), silk tree (*Albizia julibrissin*), Chinese tallow (*Triadica sebifera*), water oak (*Quercus nigra*), black cherry (*Prunus serotina*), water oak (*Quercus nigra*), cherry-bark oak (*Quercus pagoda*), winged elm (*Ulmus alata*), osage-orange (*Maclura pomifera*), American elm (*Ulmus americana*), winged sumac (*Rhus copallinum*), pecan (*Carya illinoensis*), green ash (*Fraxinus pennsylvanica*), honeylocust (*Gleditsia triacanthos*), eastern red cedar (*Juniperus virginiana*), beauty berry (*Callicarpa americana*), dog-fennel (*Eupatorium capillifolium*), *Solidago* spp., broomsedge (*Andropogon virginicus*), sawtooth blackberry (*Rubus argutus*), long-leaf wood-oats (*Chasmanthium sessiliflorum*), poverty rush (*Juncus tenuis*), peppervine (*Nekemias arborea*), trumpet creeper (*Campsis radicans*), Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron radicans*), and honeysuckle (*Lonicera japonica*), among others.

The soils sampled within the upland habitat types were observed to range from a 5/3 (brown) to a 6/3 (brown) and a 4/4 (dark yellowish brown) to a 5/4 (yellowish brown) on the 10YR page of the Munsell Soil Color Chart with limited to no soil mottling.

Based the field investigations, the following is a breakdown of the specific habitat types present within the limits of the subject property:

Intermittent Stream.....768.57 l.f. or 0.05 acres

Ephemeral Streams2,073.79 l.f. or 0.10 acres

Uplands (Non-Wetland) 53.45 acres

Total.....53.60 acres

Copies of the U.S.G.S. *Pocahontas, Mississippi* Quadrangle Maps and USDA NAIP 2018 color photograph covering the subject property are included as **Attachment I**. Copies of the U.S.G.S. *Pocahontas, Mississippi* Quadrangle Maps and USDA NAIP 2018 color photograph depicting the specific locations of the wetland habitats and “other waters of the U.S.” and wetland delineation points are included as **Attachment II**. Copies of the completed wetland determination data forms are included as **Attachment III**. Photographs of selected property features are also included as **Attachment IV** for your use and review.

Based upon our field assessment, it was revealed that the site does contain wetlands and “other waters of the U.S.” subject to regulations by the USACE. Prior to any site development activities that would adversely impact these areas, consultation with the USACE may be required. Please let us know if you have any questions regarding the necessary permit requirements for the development of this site.

As always, we appreciate the opportunity to be of assistance to you in this matter. If you have any questions or would like to discuss further, please do not hesitate to contact us.

Sincerely,



Joshua G. Brown
Project Manager

JCC\
Attachment

Attachment I

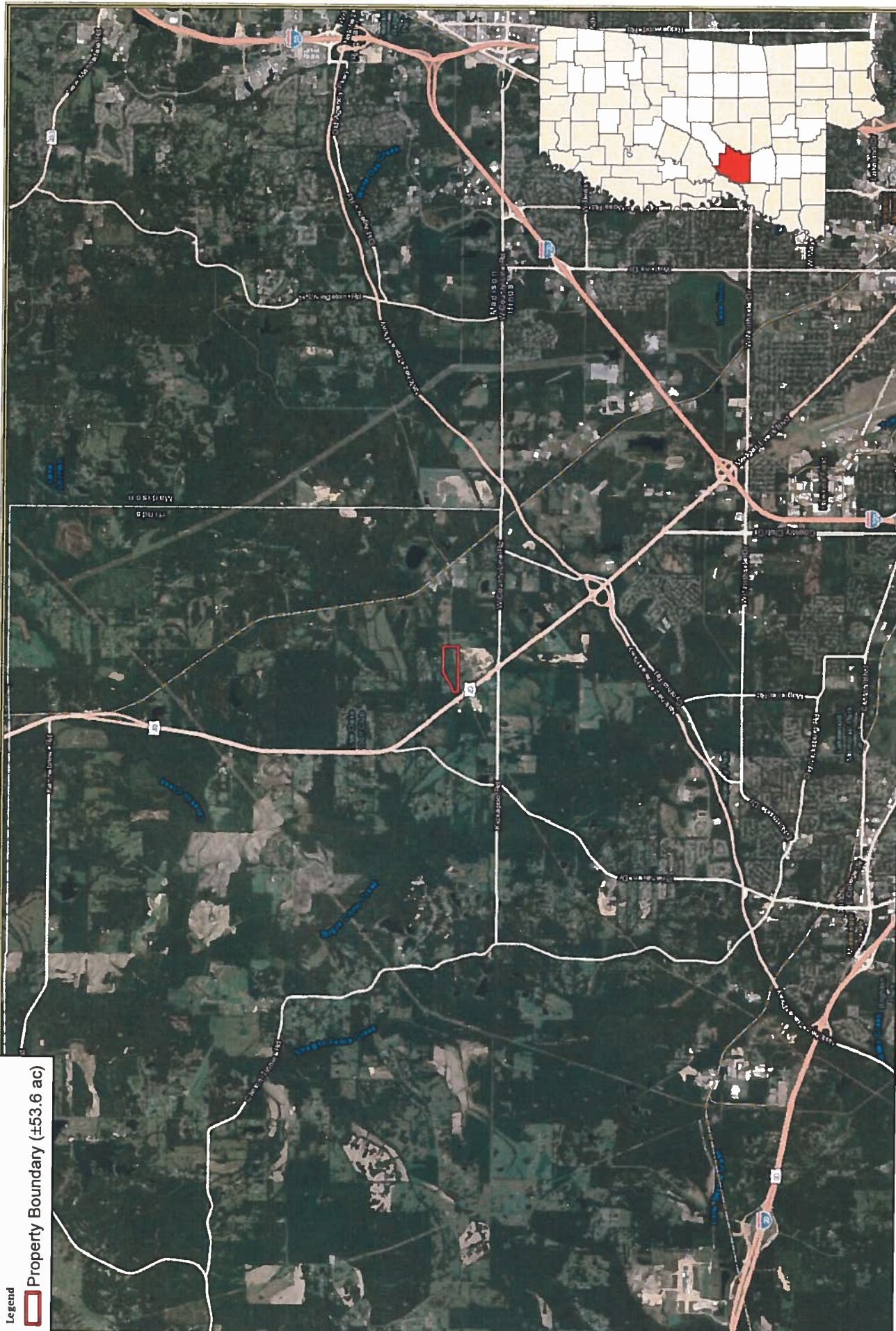
Hinds County, Mississippi – General Location Map

U.S.G.S. *Pocahontas*, Mississippi Quadrangle Map

USDA NAIP 2018 Aerial Photograph

Legend

 **Property Boundary (±53.6 ac)**



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 NATURAL RESOURCES CONSULTING
WWW.HEADWATERS-INC.COM

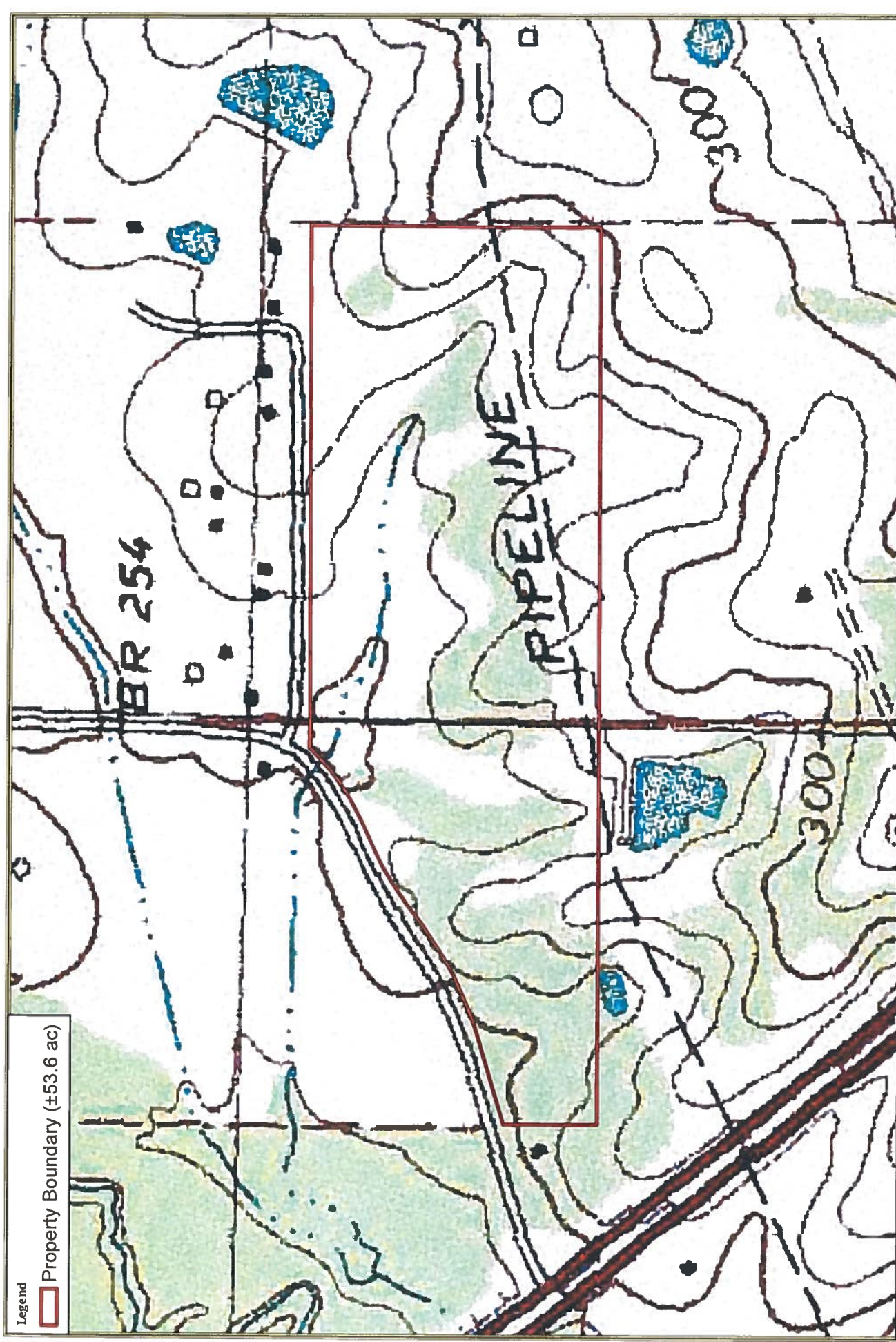
Date Created: 6/2/2020 Created by: JDL

Neely Trucking
Hwy 49 North Property
 Sec. 34 & 35, T7N, R1W
 Hinds County, Mississippi
[General Location Map](#)

Scale
 0 5,000 10,000 Feet
 1:100,000

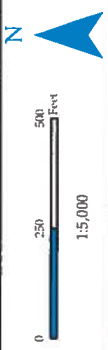
North Arrow
 N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
 ESRI World Imagery Basemap



Legend

 Property Boundary (±53.6 ac)



Neely Trucking
Hwy 49 North Property
Sec. 34 & 35, T7N, R1W
Hinds County, Mississippi
[Site Location Map](#)

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NATURAL RESOURCES CONSULTING
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NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
USCS Pochontas (MS) Quad Basemap

Date Created: 5/29/2020
Created by: JDL



Legend

 Property Boundary (±53.6 ac)



Date Created: 5/22/2020

Created by: JDL

Neely Trucking
Hwy 49 North Property
Sec. 34 & 35, T7N, R1W
Hinds County, Mississippi
[Site Location Map](#)

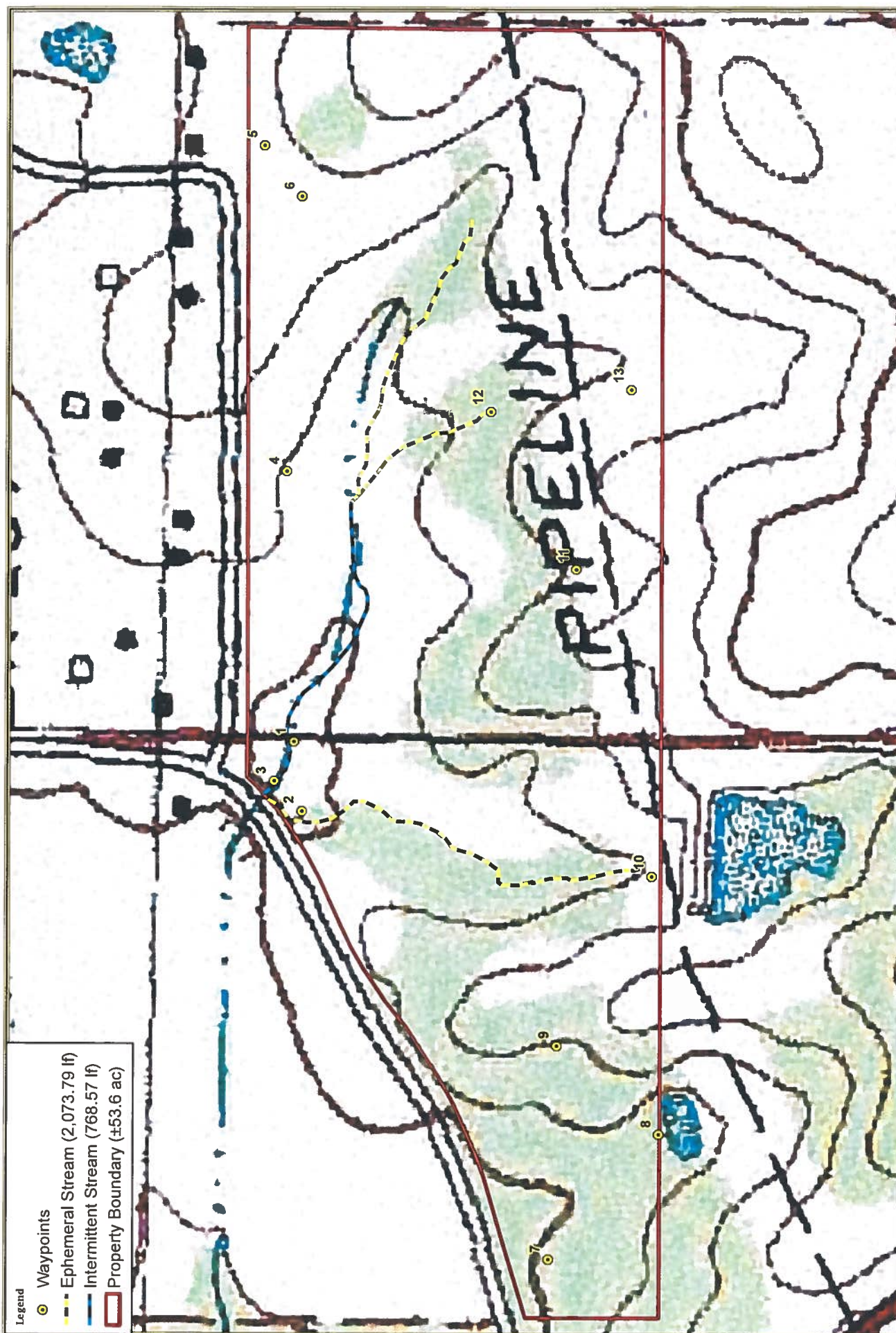


NAD 1983 StatePlane Mississippi West FIPS 2102 Feet

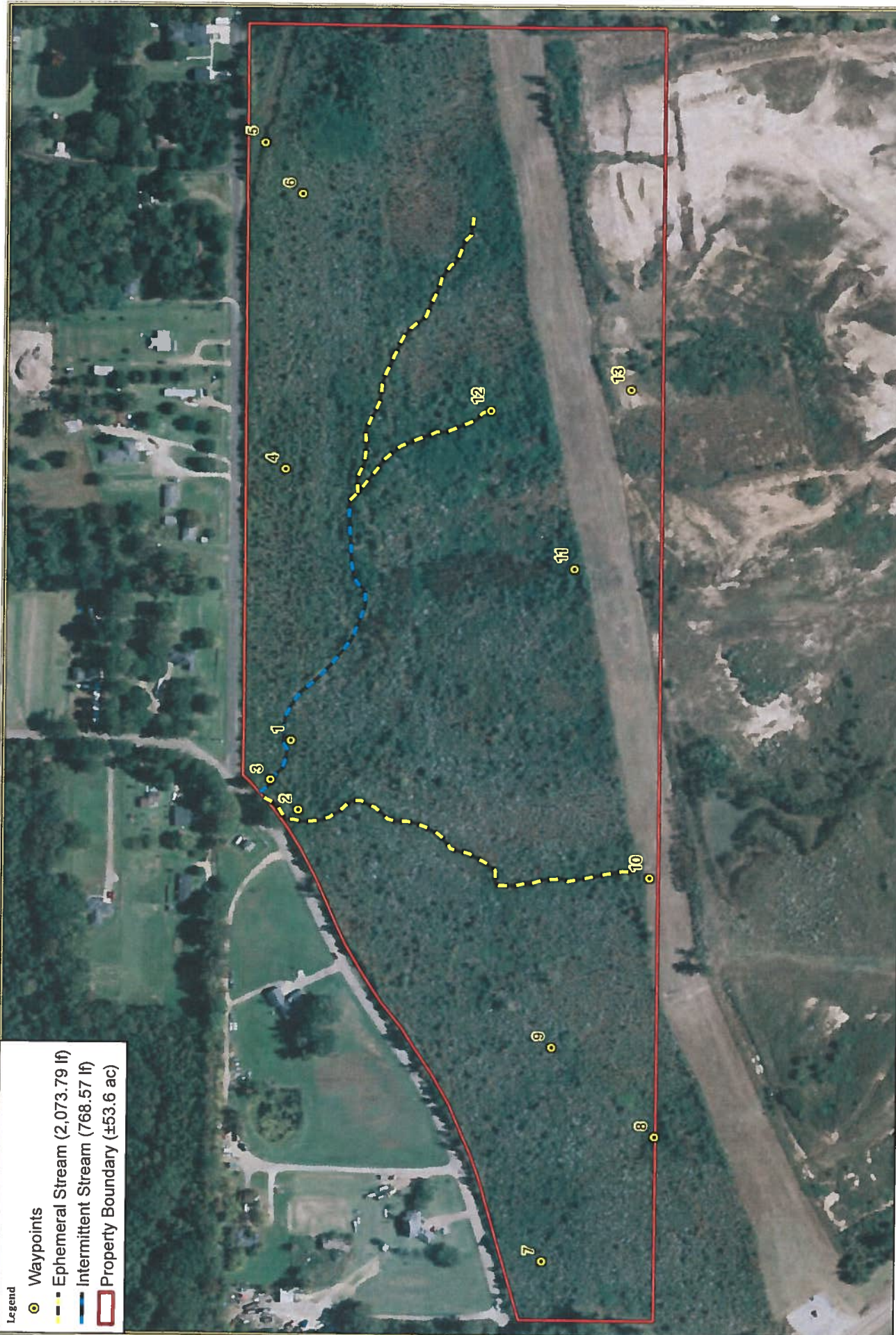
USDA NAIIP 2018 Imagery Basemap

Attachment II

U.S.G.S. *Pocahontas, Mississippi* Quadrangle Map and USDA NAIP 2018 Aerial
Photograph depicting Wetland Locations and Wetland Delineation Data Points



	Neely Trucking Hwy 49 North Property Sec. 34 & 35, T7N, R1W Hinds County, Mississippi GPS/Wetland Location Map	
		Date Created: 6/3/2020 Created by: JDL
NAD 1983 StatePlane Mississippi West FIPS 2302 Feet USCS Pocahontas (MS) Quad Basemap		



Legend

- Waypoints
- Ephemeral Stream (2,073.79 lf)
- Intermittent Stream (768.57 lf)
- Property Boundary (±53.6 ac)

Neely Trucking
Hwy 49 North Property
Sec. 34 & 35, T7N, R1W
Hinds County, Mississippi
[GPS/Wetland Location Map](#)

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Date Created: 6/3/2020 Created by: JDL

0 175 350 Feet
1:3,500

N

NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
USDA NAIP 2018 Imagery Basemap

Attachment III
Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 1
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.409752 Long: -90.278225 Datum: WGS84
 Soil Map Unit Name: Re - Riedtown silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Point taken on an intermittent channel. Upland topbanks	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 1

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. <i>Baccharis halimifolia</i>	10	N	FAC	
2. <i>Pinus taeda</i>	20	Y	FAC	
3. <i>Triadica sebifera</i>	10	N	FAC	
4. <i>Quercus nigra</i>	5	N	FAC	
5. <i>Liquidambar styraciflua</i>	20	Y	FAC	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
65 = Total Cover				
50% of total cover: <u>32.5</u>		20% of total cover: <u>13</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. <i>Rubus argutus</i>	25	Y	FAC	
2. <i>Solidago</i> spp.	15	Y	FAC	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
40 = Total Cover				
50% of total cover: <u>20</u>		20% of total cover: <u>8</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. <i>Toxicodendron radicans</i>	25	Y	FAC	
2. <i>Campsis radicans</i>	15	Y	FAC	
3. <i>Parthenocissus quinquefolia</i>	25	Y	FACU	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
65 = Total Cover				
50% of total cover: <u>32.5</u>		20% of total cover: <u>13</u>		

Remarks: (If observed, list morphological adaptations below).

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☐ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/4	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 2
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.409700 Long: -90.278738 Datum: WGS84
 Soil Map Unit Name: Re - Riedtown silt loam NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>Data point taken on the bank of an ephemeral stream channel. No water in the channel.</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 2

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. Liquidamabr styraciflua	5	Y	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)														
2. Quercus nigra	5	Y	FAC															
3. Albizia julibrissin	5	Y	NI															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
15 = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species _____</td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) <u>0</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>NaN</u>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = <u>0</u>	FACW species _____	x 2 = <u>0</u>	FAC species _____	x 3 = <u>0</u>	FACU species _____	x 4 = <u>0</u>	UPL species _____	x 5 = <u>0</u>	Column Totals: <u>0</u>	(A) <u>0</u> (B)
Total % Cover of:	Multiply by:																	
OBL species _____	x 1 = <u>0</u>																	
FACW species _____	x 2 = <u>0</u>																	
FAC species _____	x 3 = <u>0</u>																	
FACU species _____	x 4 = <u>0</u>																	
UPL species _____	x 5 = <u>0</u>																	
Column Totals: <u>0</u>	(A) <u>0</u> (B)																	
50% of total cover: <u>7.5</u> 20% of total cover: <u>3</u>																		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)																		
1. Sassafras albidum	10	N	FACU															
2. Ulmus americana	10	N	FAC															
3. Juniperus virginiana	10	N	FACU															
4. Liquidambar styraciflua	15	Y	FAC															
5. Quercus nigra	10	N	FAC															
6. Albizia julibrissin	10	N	NI															
7. Pinus taeda	15	Y	FAC	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)														
8. _____	_____	_____	_____															
80 = Total Cover																		
50% of total cover: <u>40</u> 20% of total cover: <u>16</u>																		
Herb Stratum (Plot size: <u>0.10 ac</u>)																		
1. Rubus argutus	25	Y	FAC															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
25 = Total Cover																		
50% of total cover: <u>12.5</u> 20% of total cover: <u>5</u>																		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)																		
1. Parthenocissus quinquefolia	15	Y	FACU															
2. Campsis radicans	15	Y	FAC															
3. Toxicodendron radicans	15	Y	FAC															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
45 = Total Cover																		
50% of total cover: <u>22.5</u> 20% of total cover: <u>9</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/4	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 4
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.409797 Long: -90.276216 Datum: WGS84
 Soil Map Unit Name: LoC3 - Loring silt loam, 5 to 8 percent slopes, severely eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 4

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. Albizia julibrissin	10	N	NI	
2. Pinus taeda	15	Y	FAC	
3. Ulmus alata	10	N	FACU	
4. Liquidambar styraciflua	20	Y	FAC	
5. Ligustrum sinense	10	N	FAC	
6. Triadica sebifera	10	N	FAC	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
75 _____ = Total Cover				
50% of total cover: <u>37.5</u>		20% of total cover: <u>15</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. Rubus argutus	15	Y	FAC	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
15 _____ = Total Cover				
50% of total cover: <u>7.5</u>		20% of total cover: <u>3</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. Toxicodendron radicans	15	Y	FAC	
2. Parthenocissus quinquefolia	5	Y	FACU	
3. Campsis radicans	5	Y	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
25 _____ = Total Cover				
50% of total cover: <u>12.5</u>		20% of total cover: <u>5</u>		
Remarks: (If observed, list morphological adaptations below).				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/3	85	10YR 4/6	15			silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
 (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 5
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.409940 Long: -90.273788 Datum: WGS84
 Soil Map Unit Name: LoB2 - Loring silt loam, 2 to 5 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Point taken on the edge of electrical distribution line.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 5

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>0</u>	= Total Cover		
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. Albizia julibrissin	5	N	NI	
2. Quercus nigra	5	N	FAC	
3. Ulmus americana	10	Y	FAC	
4. Liquidamabr stryaciflua	10	Y	FAC	
5. _____				
6. _____				
7. _____				
8. _____				
	<u>30</u>	= Total Cover		
	50% of total cover: <u>15</u>	20% of total cover: <u>6</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. Eupatorium capillifolium	5	N	FACU	
2. Solidago gigantea	10	N	FACW	
3. Rubus argutus	15	Y	FAC	
4. Andropogon virginicus	5	N	FAC	
5. Saccharum giganteum	5	N	FACW	
6. Juncus tenuis	25	Y	FAC	
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
	<u>65</u>	= Total Cover		
	50% of total cover: <u>32.5</u>	20% of total cover: <u>13</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
	<u>0</u>	= Total Cover		
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>		

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 5

[illegible]

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 6
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.409702 Long: -90.273819 Datum: WGS84
 Soil Map Unit Name: LoB2 - Loring silt loam, 2 to 5 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 6

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. Liquidambar styraciflua	20	Y	FAC	
2. Pinus taeda	25	Y	FAC	
3. Juniperus virginiana	5	N	FACU	
4. Ulmus alata	5	N	FACU	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
55 = Total Cover				
50% of total cover: <u>27.5</u>		20% of total cover: <u>11</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. Rubus argutus	15	Y	FAC	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
15 = Total Cover				
50% of total cover: <u>7.5</u>		20% of total cover: <u>3</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. Toxicodendron radicans	15	Y	FAC	
2. Parthenocissus quinquefolia	15	Y	FACU	
3. Campsis radicans	15	Y	FAC	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
45 = Total Cover				
50% of total cover: <u>22.5</u>		20% of total cover: <u>9</u>		
Remarks: (If observed, list morphological adaptations below).				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/3	85	7.5YR 4/6	15			silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 7
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.408150 Long: -90.282042 Datum: WGS84
 Soil Map Unit Name: LoD2 - Loring silt loam, 8 to 17 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks:	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 7

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. <i>Maclura pomifera</i>	15	Y	FACU	
2. <i>Pinus taeda</i>	15	Y	FAC	
3. <i>Liquidambar styraciflua</i>	15	Y	FAC	
4. <i>Prunus serotina</i>	10	N	FACU	
5. <i>Ligustrum sinense</i>	10	N	FAC	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
65 _____ = Total Cover				
50% of total cover: <u>32.5</u>		20% of total cover: <u>13</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. <i>Chasmanthium sessiliflorum</i>	25	Y	FAC	
2. <i>Asplenium platyneuron</i>	5	N	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
30 _____ = Total Cover				
50% of total cover: <u>15</u>		20% of total cover: <u>6</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Remarks: (If observed, list morphological adaptations below).				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>
--	------------------	--------------------

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/4	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 8
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.407454 Long: -90.281125 Datum: WGS84
 Soil Map Unit Name: LoD2 - Loring silt loam, 8 to 17 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Point taken in a low area where a couple of willows are visible. Area has recently been disturbed and cleared. A few scattered pines are left.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: We believe the saturation is a result of the collection of rain water from a recent rainfall event. The area is upland.		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 8

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species _____</td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) <u>0</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>NaN</u>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = <u>0</u>	FACW species _____	x 2 = <u>0</u>	FAC species _____	x 3 = <u>0</u>	FACU species _____	x 4 = <u>0</u>	UPL species _____	x 5 = <u>0</u>	Column Totals: <u>0</u>	(A) <u>0</u> (B)
Total % Cover of:	Multiply by:																	
OBL species _____	x 1 = <u>0</u>																	
FACW species _____	x 2 = <u>0</u>																	
FAC species _____	x 3 = <u>0</u>																	
FACU species _____	x 4 = <u>0</u>																	
UPL species _____	x 5 = <u>0</u>																	
Column Totals: <u>0</u>	(A) <u>0</u> (B)																	
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>																		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)																		
1. <u>Salix nigra</u>	<u>5</u>	<u>Y</u>	<u>OBL</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>																		
Herb Stratum (Plot size: <u>0.10 ac</u>)																		
1. <u>Rubus argutus</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>10</u> = Total Cover 50% of total cover: <u>5</u> 20% of total cover: <u>2</u>																		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)																		
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Hydrophytic Vegetation Present? Yes <u>X</u> No _____																		

Remarks: (If observed, list morphological adaptations below).

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/3	85	7.5YR 4/6	15			silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ^X _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 9
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.408099 Long: -90.280471 Datum: WGS84
 Soil Map Unit Name: LoD2 - Loring silt loam, 8 to 17 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Point taken on a slope. Area is recently cleared. Few pines remain.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 9

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>NaN</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.5</u> 20% of total cover: <u>1</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = <u>0</u></td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>0</u></td> <td>(A) <u>0</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>NaN</u>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = <u>0</u>	FACW species _____	x 2 = <u>0</u>	FAC species _____	x 3 = <u>0</u>	FACU species _____	x 4 = <u>0</u>	UPL species _____	x 5 = <u>0</u>	Column Totals: <u>0</u>	(A) <u>0</u> (B)
Total % Cover of:	Multiply by:																	
OBL species _____	x 1 = <u>0</u>																	
FACW species _____	x 2 = <u>0</u>																	
FAC species _____	x 3 = <u>0</u>																	
FACU species _____	x 4 = <u>0</u>																	
UPL species _____	x 5 = <u>0</u>																	
Column Totals: <u>0</u>	(A) <u>0</u> (B)																	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Herb Stratum (Plot size: <u>0.10 ac</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)																		
1. _____	_____	_____	_____															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>																		
Remarks: (If observed, list morphological adaptations below).																		

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>
--	-----------	-------------

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/4	100						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 10
 Investigator(s): Headwaters, Inc. Section, Township, Range: S34 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.407502 Long: -90.279223 Datum: WGS84
 Soil Map Unit Name: SeC2 - Siwell silt loam, 5 to 8 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Point taken at the head of an ephemeral channel. Upland topbanks.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 10

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. Liquidambar styraciflua	25	Y	FAC	
2. Triadica sebifera	20	Y	FAC	
3. Quercus nigra	15	Y	FAC	
4. Ulmus americana	15	Y	FAC	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
50% of total cover: <u>37.5</u>		20% of total cover: <u>15</u>		
<u>75</u> = Total Cover				
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. Rubus argutus	20	Y	FAC	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
50% of total cover: <u>10</u>		20% of total cover: <u>4</u>		
<u>20</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
<u>0</u> = Total Cover				
Remarks: (If observed, list morphological adaptations below).				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 5/3	95	7.5YR 4/6	5			silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 11
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.407984 Long: -90.276943 Datum: WGS84
 Soil Map Unit Name: LoD2 - Loring silt loam, 8 to 17 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: Point taken in a low area. Obvious signs of depostion from an adjacent property. Surface is saturated, but dry below 5 inches.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 11

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. <u>Salix nigra</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	
2. <u>Ligustrum sinense</u>	<u>25</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
4. <u>Gleditsia triacanthos</u>	<u>20</u>	<u>Y</u>	<u>FAC</u>	
5. <u>Carya illinoensis</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
6. <u>Ulmus americana</u>	<u>10</u>	<u>N</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
85 _____ = Total Cover				
50% of total cover: <u>42.5</u>		20% of total cover: <u>17</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. <u>Rubus argutus</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
10 _____ = Total Cover				
50% of total cover: <u>5</u>		20% of total cover: <u>2</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. <u>Parthenocissus quinquefolia</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
5 _____ = Total Cover				
50% of total cover: <u>2.5</u>		20% of total cover: <u>1</u>		
Remarks: (If observed, list morphological adaptations below).				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)
 Total Number of Dominant Species Across All Strata: _____ (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 11

[illegible]

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 12
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.408519 Long: -90.275774 Datum: WGS84
 Soil Map Unit Name: LoD2 - Loring silt loam, 8 to 17 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Similar to the last point. deposition visible and saturation in the upper three inches and dry below. Soils are a solid 5/3 as well. The vegetation is extremely dense. privet and elm dominate the strata.	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Marl Deposits (B15) (LRR U) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input checked="" type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

Sampling Point: 12

Atlantic and Gulf Coastal Plain Region – Version 2.0

SOIL

Sampling Point: 12

[illegible]

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Highway 49 Property City/County: Hinds County Sampling Date: 5/29/2020
 Applicant/Owner: Neely Trucking State: MS Sampling Point: 13
 Investigator(s): Headwaters, Inc. Section, Township, Range: S35 - T7N - R1W
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): MLRA 134 Lat: 32.407638 Long: -90.27561 Datum: WGS84
 Soil Map Unit Name: SeC2 - Siwell silt loam, 5 to 8 percent slopes, eroded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes _____ No _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
 Point taken on the berm of a dirt pit. The pit is part of the mining operation currently active south of our property. The area is upland with early successional plants (black willow) growing the pit. Soils are a 5/3 and 5/4 on the 10YR page.

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Marl Deposits (B15) (LRR U)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> FAC-Neutral Test (D5)
		<input type="checkbox"/> Sphagnum moss (D8) (LRR T, U)

Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>5"</u> Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____
--	---

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 This area is part of a dirt pit. The water is likely from the recent rainfall the site has experienced.

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: 13

Tree Stratum (Plot size: <u>0.10 ac</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Sapling/Shrub Stratum (Plot size: <u>0.10 ac</u>)				
1. <u>Salix nigra</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
15 _____ = Total Cover				
50% of total cover: <u>7.5</u>		20% of total cover: <u>3</u>		
Herb Stratum (Plot size: <u>0.10 ac</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		
Woody Vine Stratum (Plot size: <u>0.10 ac</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
0 _____ = Total Cover				
50% of total cover: <u>0</u>		20% of total cover: <u>0</u>		

Remarks: (If observed, list morphological adaptations below).

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

 Total Number of Dominant Species Across All Strata: _____ (B)

 Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = NaN

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10 YR 5/4						silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|--|--|
| <input type="checkbox"/> Histosol (A1)
<input type="checkbox"/> Histic Epipedon (A2)
<input type="checkbox"/> Black Histic (A3)
<input type="checkbox"/> Hydrogen Sulfide (A4)
<input type="checkbox"/> Stratified Layers (A5)
<input type="checkbox"/> Organic Bodies (A6) (LRR P, T, U)
<input type="checkbox"/> 5 cm Mucky Mineral (A7) (LRR P, T, U)
<input type="checkbox"/> Muck Presence (A8) (LRR U)
<input type="checkbox"/> 1 cm Muck (A9) (LRR P, T)
<input type="checkbox"/> Depleted Below Dark Surface (A11)
<input type="checkbox"/> Thick Dark Surface (A12)
<input type="checkbox"/> Coast Prairie Redox (A16) (MLRA 150A)
<input type="checkbox"/> Sandy Mucky Mineral (S1) (LRR O, S)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Dark Surface (S7) (LRR P, S, T, U) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR S, T, U)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR S, T, U)
<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR O)
<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Marl (F10) (LRR U)
<input type="checkbox"/> Depleted Ochric (F11) (MLRA 151)
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR O, P, T)
<input type="checkbox"/> Umbric Surface (F13) (LRR P, T, U)
<input type="checkbox"/> Delta Ochric (F17) (MLRA 151)
<input type="checkbox"/> Reduced Vertic (F18) (MLRA 150A, 150B)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149A)
<input type="checkbox"/> Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | <input type="checkbox"/> 1 cm Muck (A9) (LRR O)
<input type="checkbox"/> 2 cm Muck (A10) (LRR S)
<input type="checkbox"/> Reduced Vertic (F18) (outside MLRA 150A,B)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (LRR P, S, T)
<input type="checkbox"/> Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks) |
|--|--|--|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Attachment IV
Photographs of Selected Property Features

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #1

PHOTOGRAPH #1



View of the scrub-shrub habitat observed on the northern portion of the property.

DATA POINT #2

PHOTOGRAPH #2



View of an ephemeral stream channel on the northern portion of the property.



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www.headwaters-inc.com

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #3

PHOTOGRAPH #3



View of the intermittent stream channel flowing northwest off the site.

DATA POINT #4

PHOTOGRAPH #4



View of the 5/4 upland soils encountered on the northern portion of the site.

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #5

PHOTOGRAPH #5



View of the herbaceous upland observed on an electrical distribution line that transects the northeastern portion of the site.

DATA POINT #6

PHOTOGRAPH #6



View of the dense scrub-shrub upland habitat that occupies the majority of the site.

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #7

PHOTOGRAPH #7



View of a solid 10YR 5/3 upland soil observed at waypoint 7

DATA POINT #8

PHOTOGRAPH #8



View of an upland soil observed as a 10YR 5/3 soils with a 4/6 mottle. Most of the area has recently been cleared.

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #9

PHOTOGRAPH #9



View south of recently cleared area on the central and western portions of the property.

DATA POINT #10

PHOTOGRAPH #10



View of an ephemeral channel and scrub-shrub upland habitat at waypoint 10.



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DATA POINT #11

PHOTOGRAPH #11



View of the upland soils observed in a low area at waypoint 11.

DATA POINT #12

PHOTOGRAPH #12



View of the dense scrub-shrub habitat observed at waypoint 12

Highway 49 North Property

Hinds County, Mississippi

DATA POINT #13

PHOTOGRAPH #13



View of an existing surface mine dirt pit. Area was being used as a detention basin.

DATA POINT #14

PHOTOGRAPH #14



View of the typical scrub-shrub habitat observed at waypoint 14.



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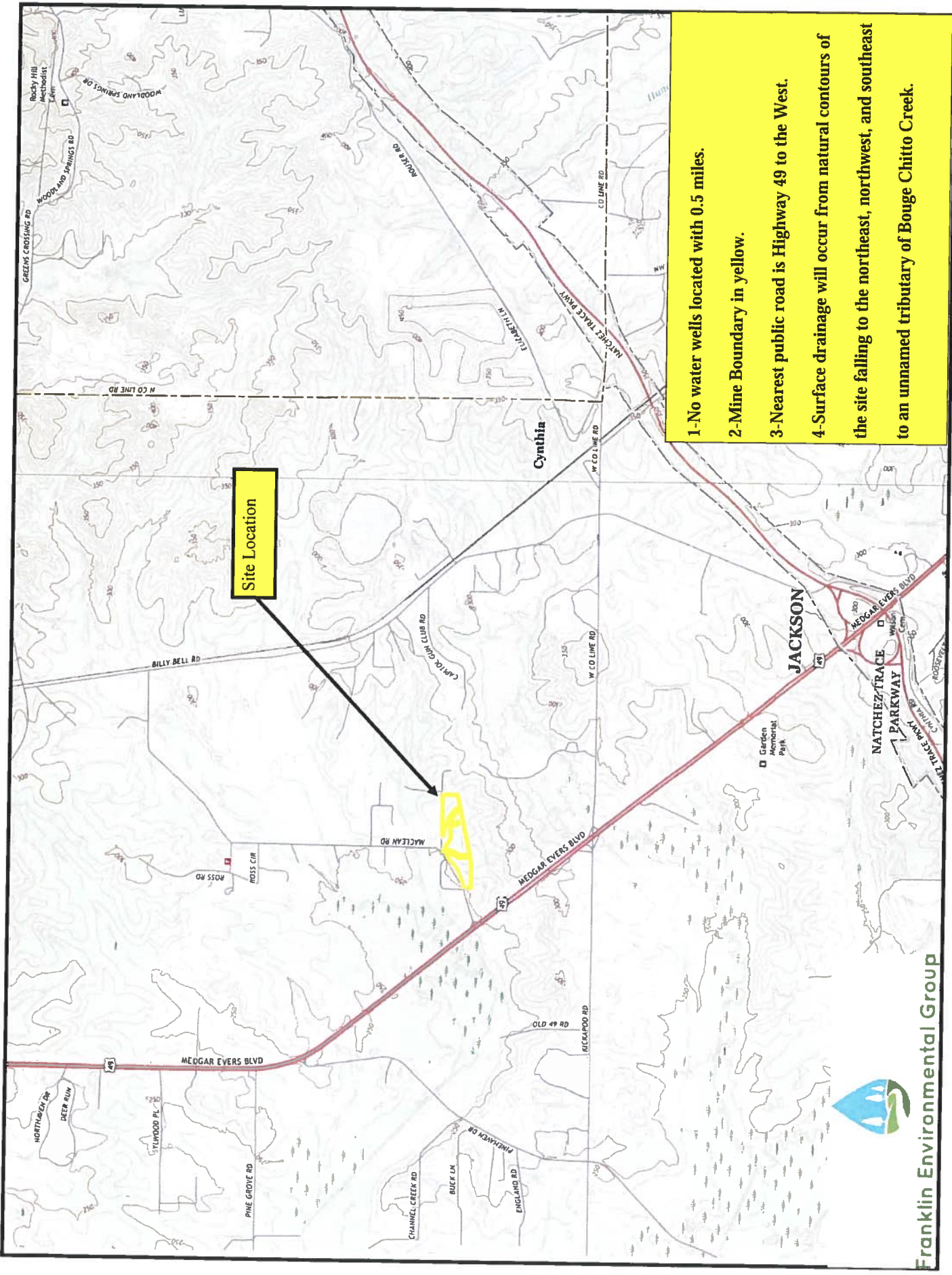
1-No water wells located with 0.5 miles.

2-Mine Boundary in yellow.

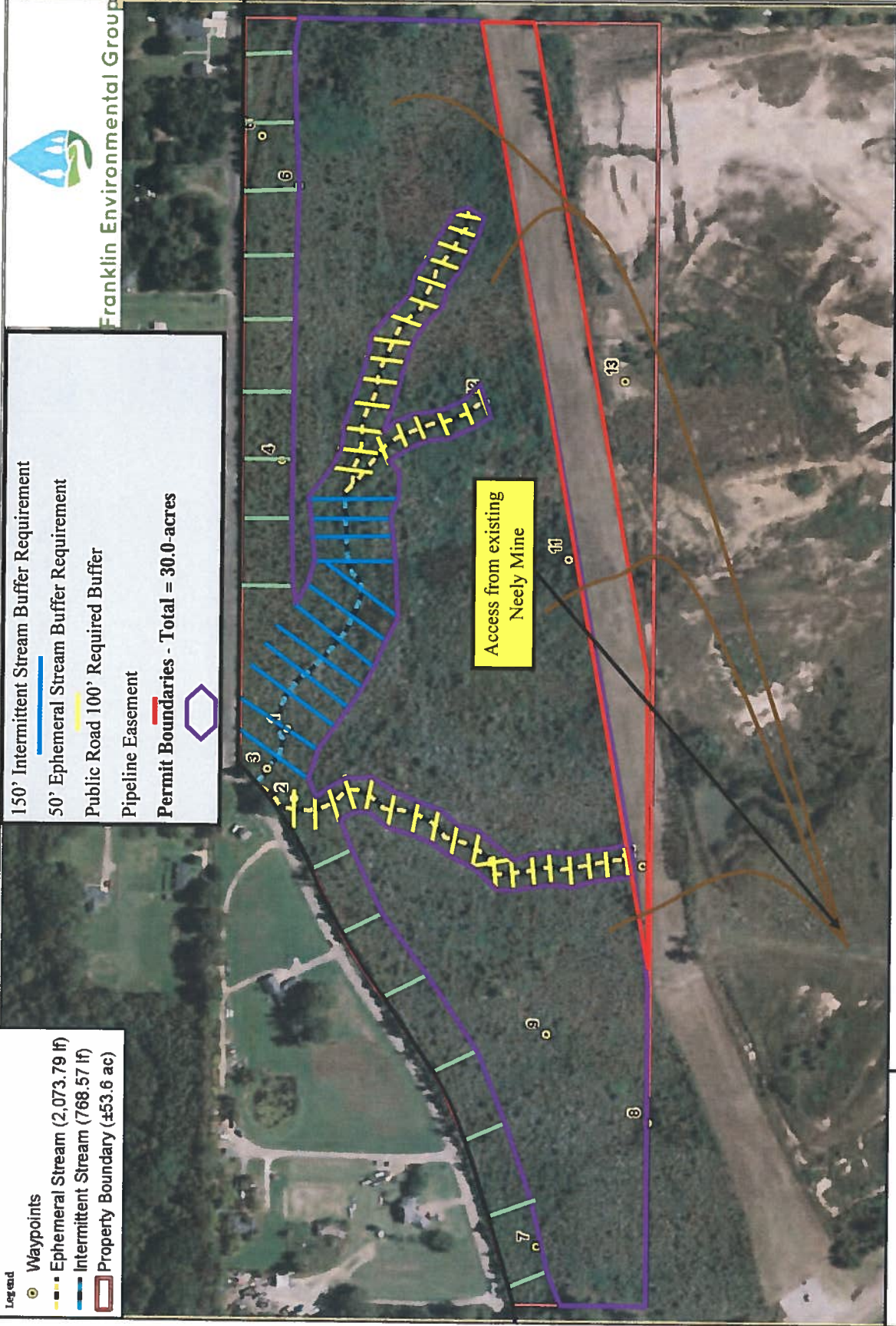
3-Nearest public road is Highway 49 to the West.

4-Surface drainage will occur from natural contours of the site falling to the northeast, northwest, and southeast to an unnamed tributary of Bouge Chitto Creek.

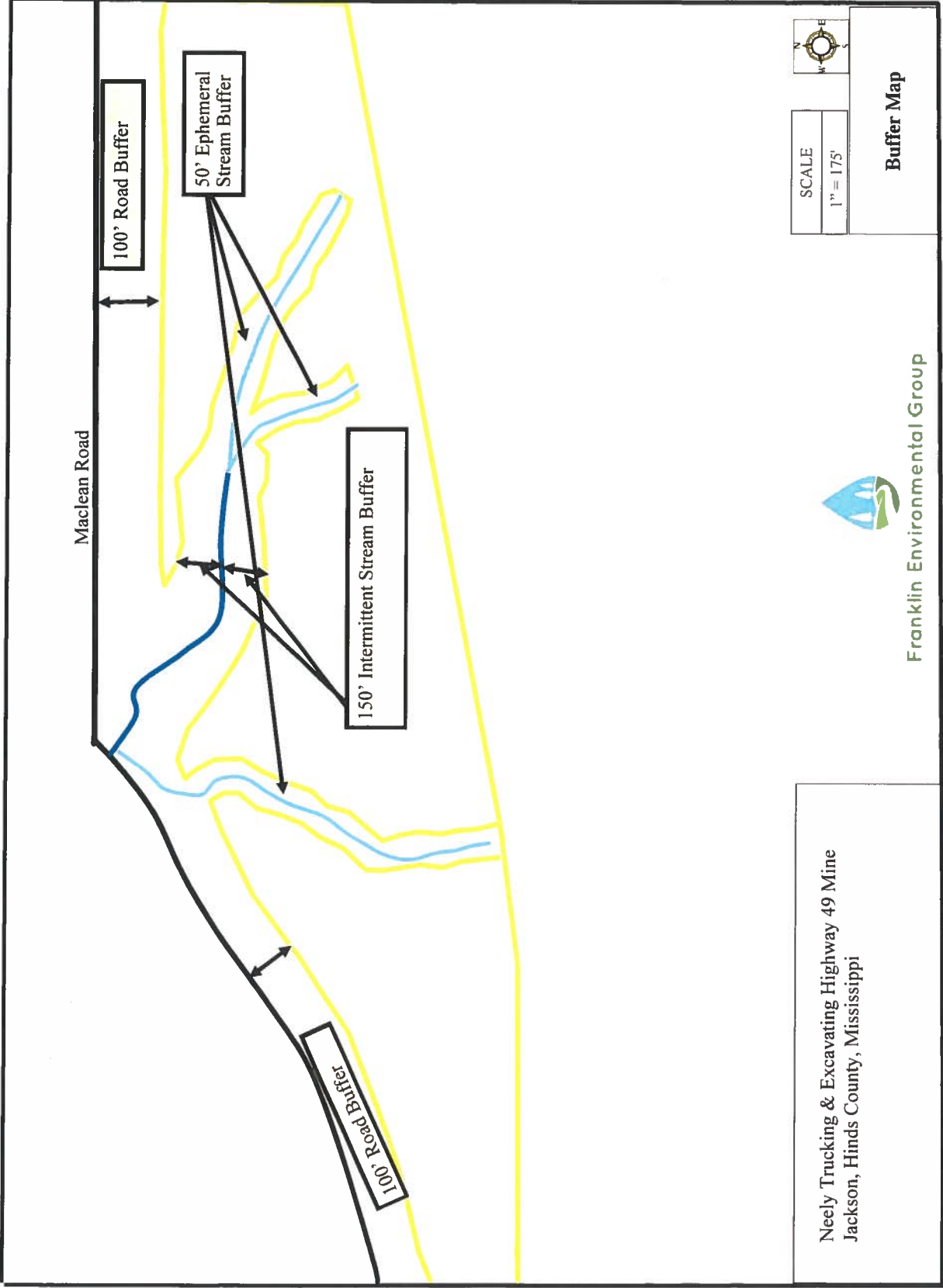
Site Location

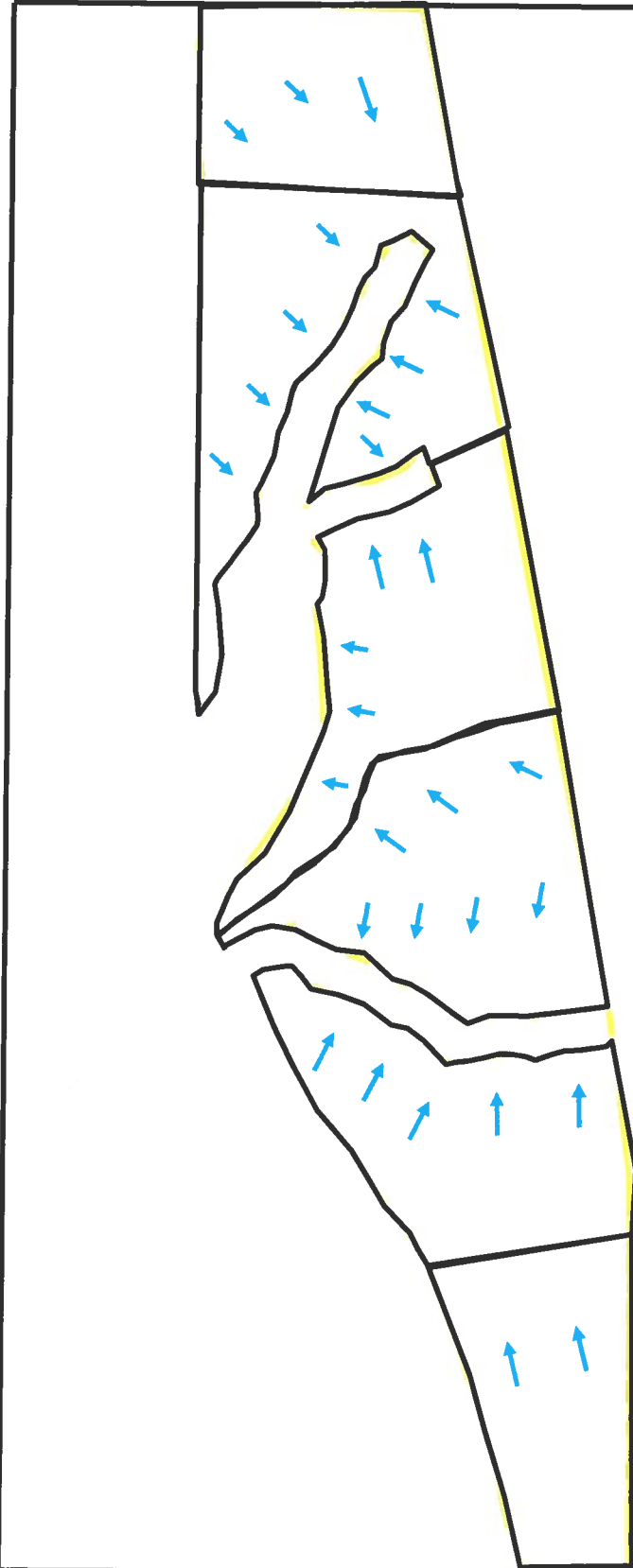


Franklin Environmental Group



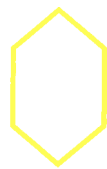
<p>HEADWATERS NATURAL RESOURCES CONSULTANTS WWW.HEADWATERS-INC.COM</p> <p>Date Created: 6/3/2020</p> <p>Created by: JDL</p>	<p>Aerial and stream data provided by Headwaters, Inc.</p> <p>Neely Trucking Hwy 49 North Property Sec. 34 & 35, T7N, R1W Hinds County, Mississippi GPS/Wetland Location Map</p>	<p>Franklin Environmental Group</p>
<p>NAD 1983 StatePlane Mississippi West FIPS 2002 Feet</p>		<p>USDA NAIP 2018 Imagery Base map</p>





SCALE
1" = 175'

Drainage Pattern Map



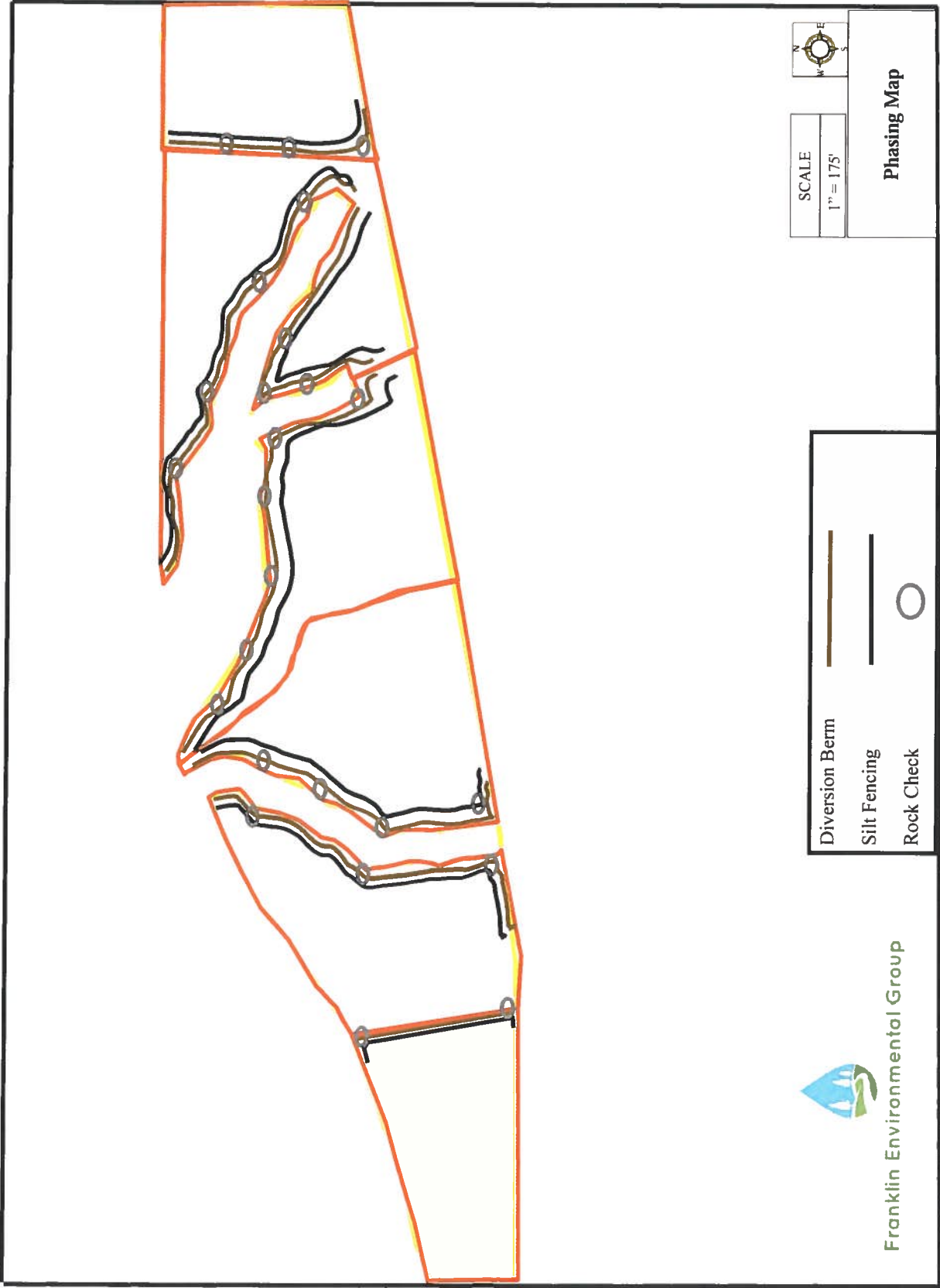
Mine Boundaries



Franklin Environmental Group



Franklin Environmental Group



SCALE
1" = 175'

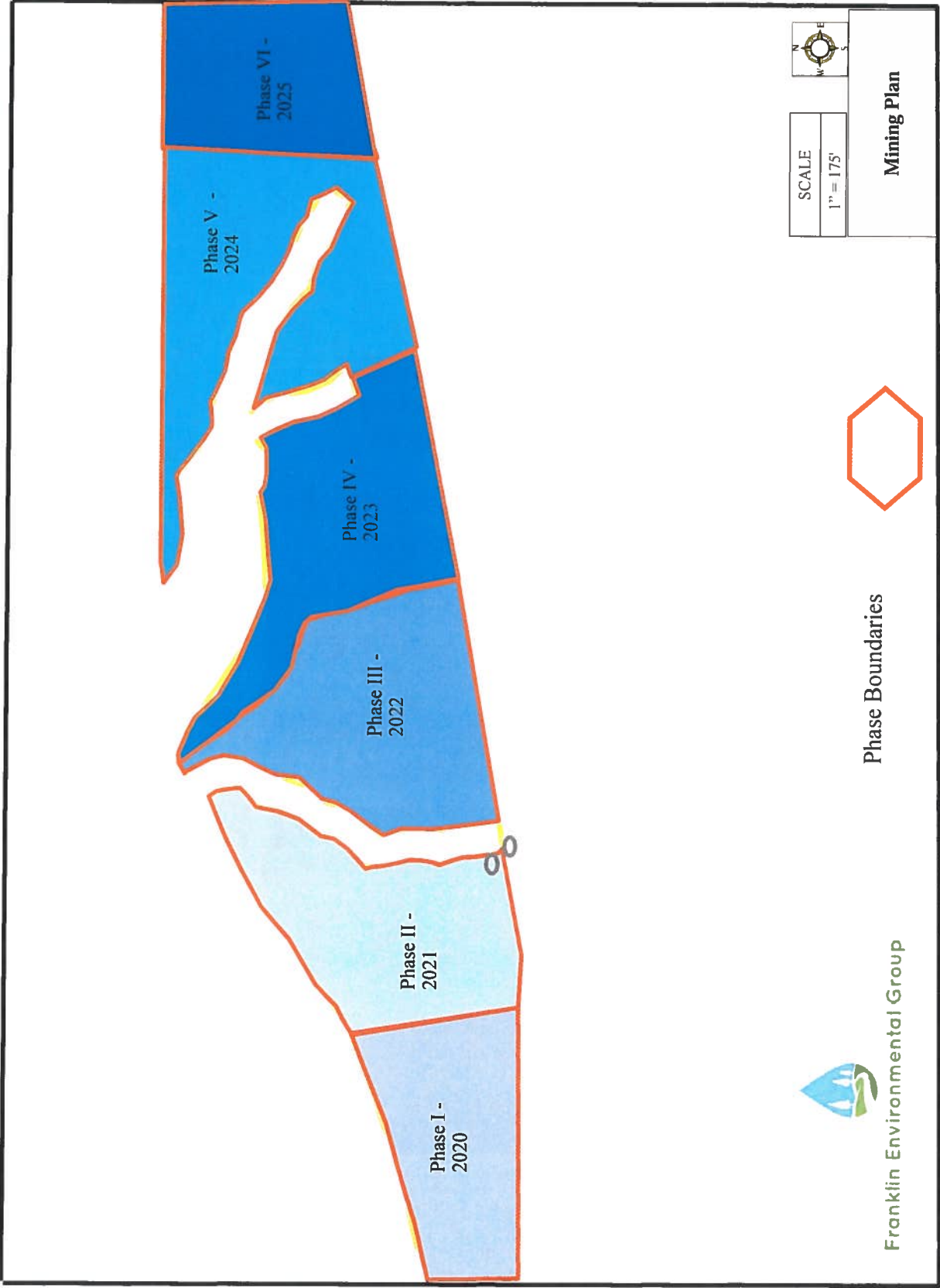


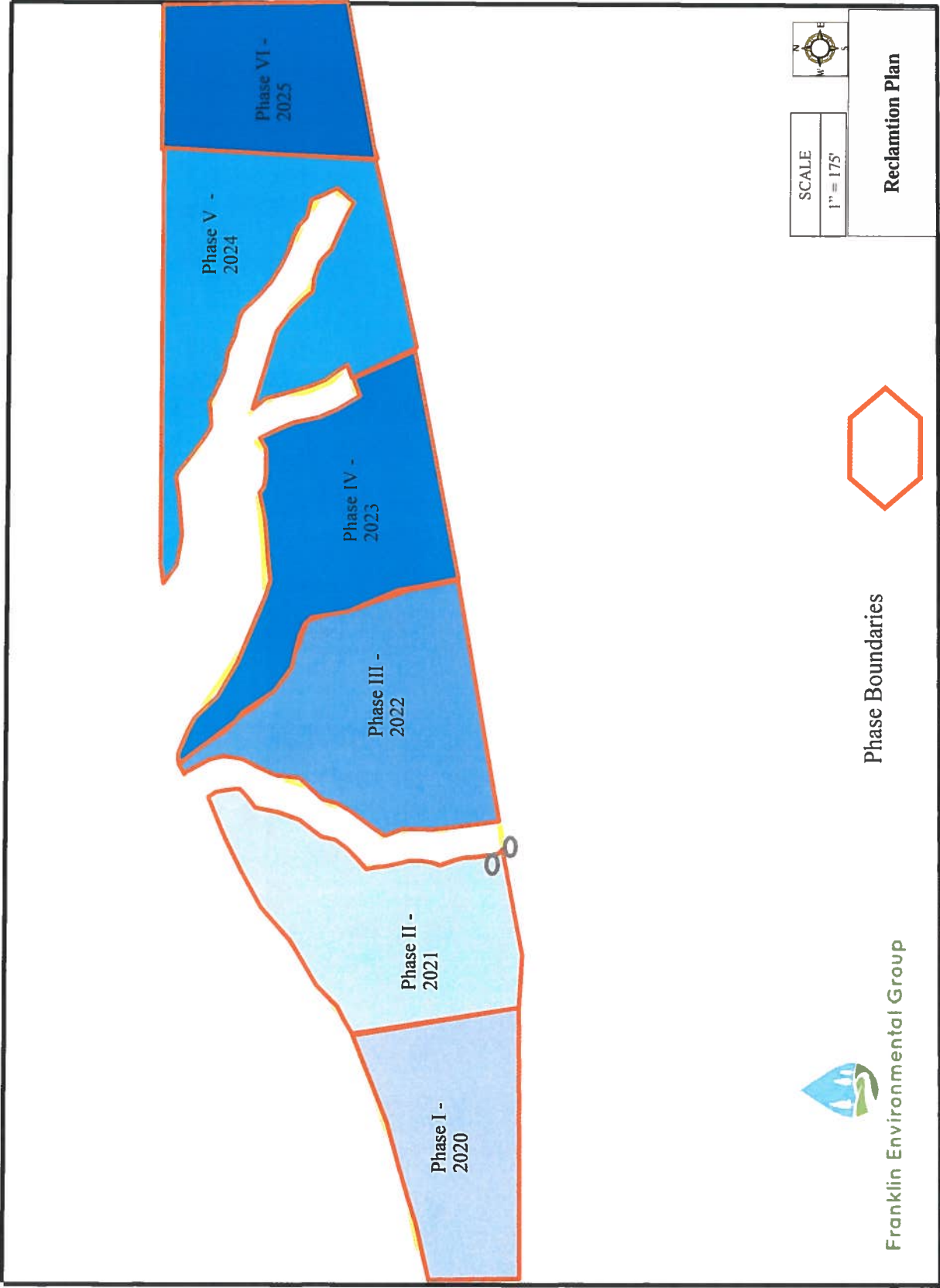
Phasing Map

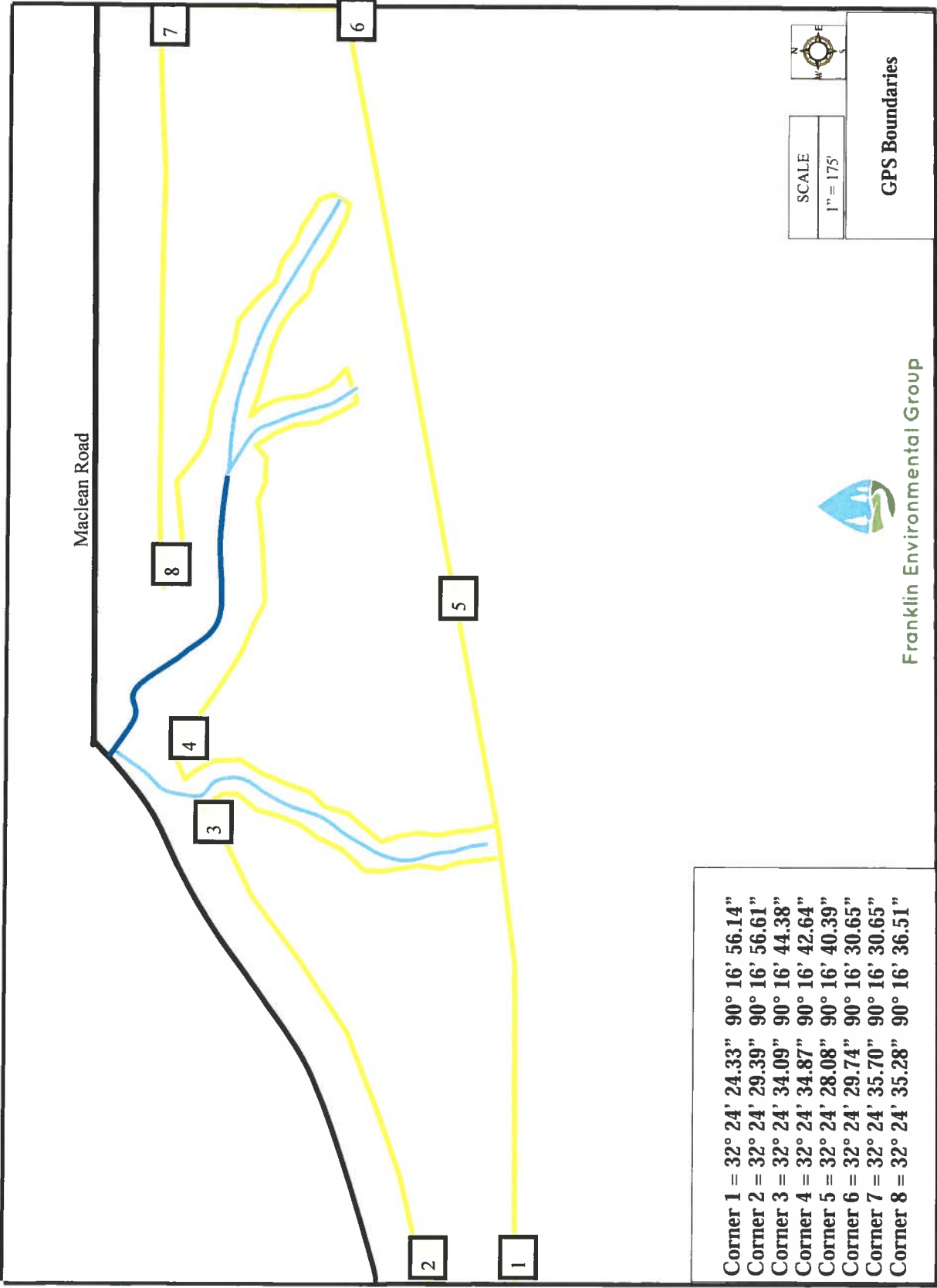
- Diversion Berm
- Silt Fencing
- Rock Check

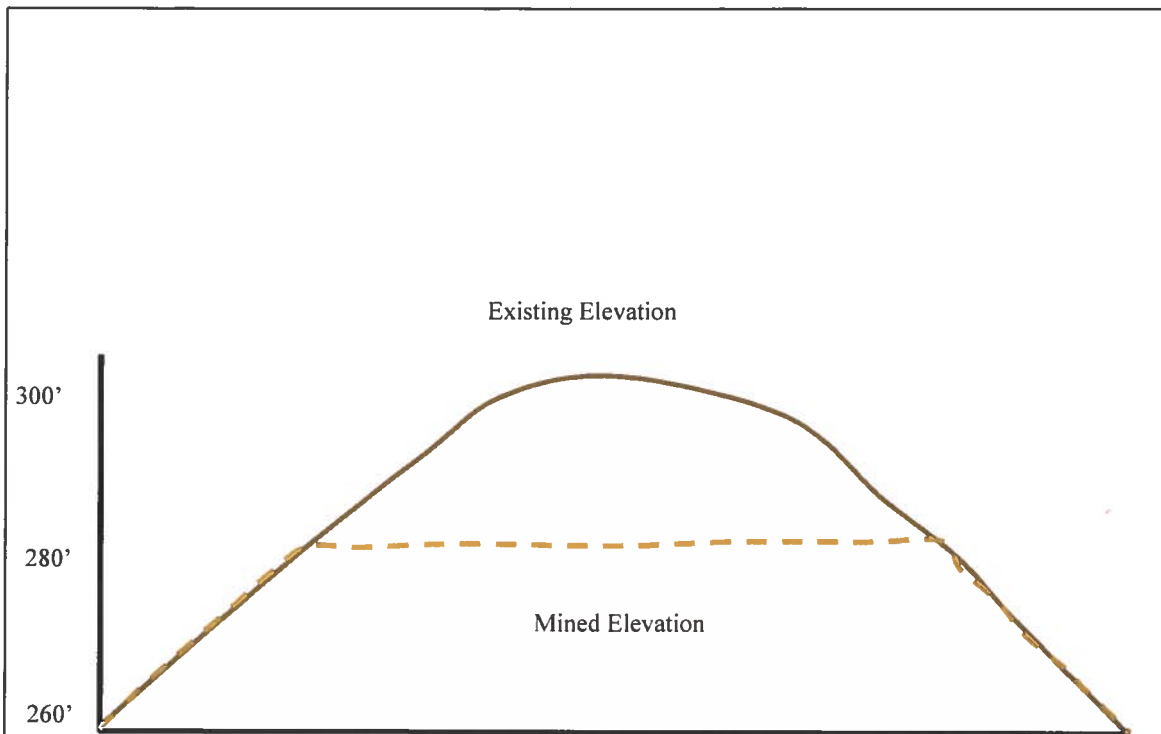


Franklin Environmental Group

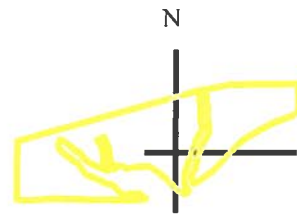






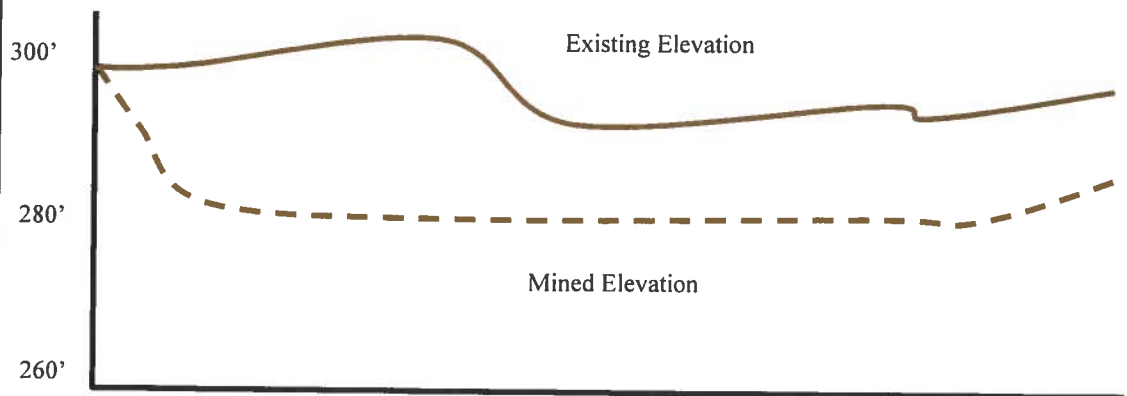




Looking from East to West
Profile Running South to North





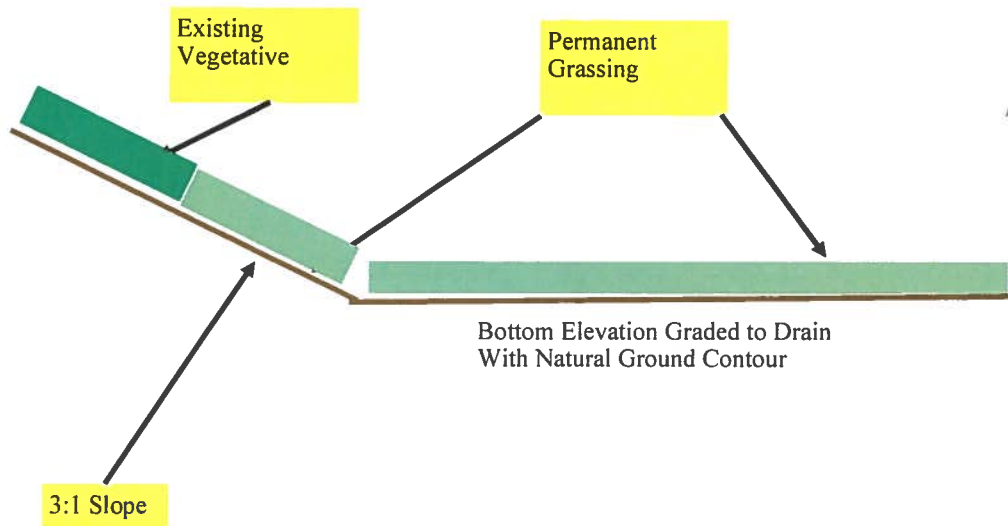
Pre and Post Mining Ground Surfaces Looking from East to West Profile Running South to North	 Franklin Environmental Group			
	Created By:	DFM	06/30/20	
	Checked By:	DFM	06/30/20	
			SCALE	1" = 500'



Looking from South to North
Profile Running East to West



Pre and Post Mining Ground Surfaces Looking from South to North Profile Running East to West	 Franklin Environmental Group			
	Created By:	DFM	06/30/20	
	Checked By:	DFM	06/30/20	
			SCALE 1" = 500'	



Post-Mining Reclamation



Franklin Environmental Group

Created By:

DFM

06/30/20

SCALE

Checked By:

DFM

06/30/20

1" = 500'



APPENDIX A

LIST OF SIGNIFICANT SPILLS AND LEAKS

APPENDIX A

Directions: Record below all significant leaks and spills of toxic or hazardous pollutants that have occurred at the facility since February 1, 2013. Update as needed for leaks and spills that occur. Attach additional sheets as needed

[illegible]

APPENDIX B
REGULATORY AGENCIES

REGULATORY AGENCIES

1. National Response Center
Open 24 hours per day, 365 days per year
Telephone (800) 424-8802
2. Emergency Response Staff
Mississippi Department of Environmental Quality
2380 Highway 80 West
Jackson, Mississippi 39289
Telephone (601) 354-9100 (24 hour)
3. Mississippi Emergency Management Agency
1410 Riverside Drive
Jackson, Mississippi 39202
Telephone (601) 352-9100 (24 hour)
4. Hinds County Emergency Management Agency
Mr. Ricky Moore
300 North State Street
Jackson, Mississippi 39201
Telephone (601) 960-1476

APPENDIX E
EMPLOYEE TRAINING

APPENDIX E
EMPLOYEE TRAINING

Instructions: Describe the employee training program for your facility below. The program should at a minimum, address spill prevention and response, good housekeeping, and material management practices. Provide a schedule for the training program and list the employees who attend training sessions.			
Training Topics	Brief Description of Scheduled Training Program/Materials (e.g. film, seminar, staff meetings)	Proposed Frequency of Training	Who will Attend?
Spill Prevention and Response	Staff Meetings	Annual	All full time employees
Good Housekeeping	Staff Meetings	Annual	All full time employees
Material Management Practices	Staff Meetings	Annual	All full time employees
Other Topics	Staff Meetings	Annual	All full time employees

APPENDIX F

NOTICE OF TERMINATION FORM

Request for Termination (RFT) of Coverage

Mining General NPDES Permit No. **MSR32** _____ County _____
(Fill in your Certificate of Coverage Number and County)



Use this form to request coverage termination only after mining activities have permanently stopped and permanent erosion and sediment controls are successfully established. Inspections must continue until the coverage recipient receives written notice of coverage termination by MDEQ.

Please check which of the following apply:

- ☐ Non-Exempt Mining Operation (copy of Permit Board Order, authorizing 90% or final release of mining performance bond attached)
- ☐ Exempt Mining Operation (as defined in MDEQ's Mississippi Surface Mining and Reclamation Rules and Regulations)

(Please Print or Type)

Facility Name: _____ Closure Date: _____

Physical Site Street Address (if not available, indicate nearest named road): _____

City: _____ County: _____

Landowner Company Name: _____

Landowner Company Contact Name and Position: _____

Street Address / P.O. Box: _____

City: _____ State: _____ Zip: _____

Tel. # (_____) _____

Operator Company Name (if different than owner): _____

Operator Contact Name and Position: _____

Street/ Address / P.O. Box: _____

City: _____ State: _____ Zip: _____

Tel. # (_____) _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. I understand that by submitting this Request for Termination and receiving written confirmation, I will no longer be authorized to discharge storm water associated with industrial activity under this general permit. Discharging pollutants in storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Request for Termination does not release an owner or operator from liability for any violations of this permit or the Clean Water Act.

Authorized Name (Print) _____

Telephone _____

Signature _____

Date Signed _____

¹This application shall be signed according to the General Permit, ACT 15, T-4 as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

After signing please mail to: Environmental Permits Division, Office of Pollution Control
P.O. Box 2261
Jackson, MS 39225

Revision: 2/16/2018

APPENDIX C

**NON-STORM WATER
DISCHARGE EVALUATION AND CERTIFICATION**

APPENDIX C
NON-STORM WATER DISCHARGE EVALUATION AND CERTIFICATION

Outfall No.	Date of Evaluation	Method Used to Evaluate Discharge	If Evaluation is Not Possible, Give Reason	Is Non-Storm Water Being Discharged? (Y/N)	List Likely Sources of Non-Storm Water Discharge	Person(s) Who Conducted the Test or Evaluation
		Visual Inspection			Diesel AST	
		Visual Inspection			Exposed Soil	
		Visual Inspection			Exposed Concrete	
		Visual Inspection			Exposed Asphalt	
CERTIFICATION						
I certify under the penalty of law that is, to the best of my knowledge and belief, true, accurate, and complete						
A. Name and Official Title (type or print)			B. Area Code and Telephone No.			
B. Signature			D. Date Signed			

APPENDIX D
MONTHLY INSPECTION FORM

COVERAGE NUMBER (MSR32 _____) INSPECTION YEAR _____
SITE INSPECTION REPORT AND CERTIFICATION FORM
MINING GENERAL PERMIT



Results of the inspection by ACT7 of this permit shall be recorded on this report form and in addition, copies of all completed forms shall be retained onsite or locally available. Inspections must be performed monthly and after a 2-year, 24-hour storm event (approx. 6-inches on Gulf Coast to 4-inches at MS/TN State Line). The coverage number must be listed at the top of all Site Inspection Report and Certification Forms.

COVERAGE RECIPIENT INFORMATION

COMPANY NAME: _____	MINE NAME: _____
MINE LOCATION: _____	GEOLOGY APPLICATION/PERMIT NO. _____
NEAREST PROJECT CITY: _____	COUNTY: _____
MAILING ADDRESS: _____	
MAILING CITY: _____	STATE: _____ ZIP: _____
CONTACT PERSON: _____	CONTACT PHONE NUMBER: _____

INSPECTION DOCUMENTATION

DATE (mm/dd/yy)	TIME (hh:mm AM/PM)	AFTER 2-YEAR, 24- HOUR STORM EVENT? (CHECK IF YES)	ANY DEFICIENCIES? (CHECK IF YES)	INSPECTOR(S)
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	

Deficiencies Noted During any Inspection (give date(s); attach additional sheets if necessary): _____

Corrective Action Taken or Planned (give date(s); attach additional sheets if necessary): _____

Based upon this inspection which I or personnel under my direct supervision conducted, I certify that all erosion and sediment controls have been implemented and maintained, except for those deficiencies noted above, in accordance with the Storm Water Pollution Prevention Plan filed with the Office of Pollution Control and sound engineering practices as required by the above referenced permit. I further certify that the MNOI and SWPPP information on file with MDEQ is up to date.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Authorized Signature

Date

Printed Name

Title