

**Draft Environmental Assessment for
Proposed Master Development Plans for
Recreational Development
Eagle Cove Marina, Holt Lake,
Tuscaloosa County, Alabama**

Prepared for:

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**DRAFT ENVIRONMENTAL ASSESSMENT FOR
PROPOSED MASTER PLAN FOR RECREATIONAL DEVELOPMENT
EAGLE COVE MARINA
HOLT LAKE
TUSCALOOSA COUNTY, ALABAMA**

1. INTRODUCTION

This Environmental Assessment (EA) was prepared utilizing a systematic, interdisciplinary approach integrating the natural and social sciences and the design arts with planning and decision-making. The proposed actions and its alternatives are evaluated in multiple contexts for short-term and long-term effects and for adverse and beneficial effects. This EA indicates the effects on the human environment that are well-known and do not involve unique or unknown risks. It is not anticipated that this is a precedent-setting action nor does it represent a decision in principle about future considerations.

If a Finding of No Significant Impact (FONSI) results from this study, this determination by the U.S. Army Corps of Engineers (USACE) will be advertised to the public via a Notice of Availability in accordance with Code of Federal Regulations (CFR) 1501.4(e)(1). This posting will provide a method by which any member of the public can request a copy of the FONSI.

a. Location

This EA addresses the proposed Eagle Cove Marina (ECM) in Tuscaloosa County, Alabama (Figures 1 and 2). ECM is located north of Petersen, Alabama, which is north of Alabama Highway 216 off of Recreation Area Road. The Property is situated in the northwest ¼ of the northeast ¼ of Section 1, Township 21 South, Range 9 West as shown on the 1974 Lake Nicol, Alabama 7½-minute U.S.G.S. topographic map (See Figure 2). Holt Lake forms the northern and eastern boundary of the proposed ECM. Recreation Road is the public road within the boundaries of the proposed ECM. The center of ECM is located at approximately N 33° 15' 01" Latitude and W 87° 25' 53" Longitude. The 60-acre parcel of property, located at 11912 Recreation Area Road, is owned by the USACE, but is currently leased by Mr. Dennis Sellers who is re-building a marina on this site. The Property has been utilized as a marina for over 30 years until April 2011 when the existing Eagle Cove Marina was destroyed by a tornado. Most marina facilities and substantial stands of timber were removed by the tornado, and currently the site is mostly barren with a few areas of remaining tornado debris.

b. Proposed Action

The action proposed is the approval of the Master Development Plan for ECM as a new marina and campground. This facility will replace the previous marina that was destroyed in the April 2011 tornado. The new marina will effectively use the same layout and infrastructure as the previous facility while also adding additional boat slips, parking, and other amenities. The Master Development Plan includes the following recreational facilities planned for future development: boat slips, docking structures, dry storage buildings, fueling facilities, a restaurant, a campground, and associated parking areas.

Because of the replacement nature of this project, previous shoreline allocation designations for USACE leased lands are still applicable and not proposed to be modified (Figure 4).

The water-dependent activities of boat ramps, boat slips, docking structures, dry storage, and the restaurant would not be possible at the proposed ECM without utilizing the natural resources of the USACE leased lands; thus, the proposed project would not be developed.

Implementation Plans, consistent with the Master Development Plan, will be submitted to the USACE for review and approval prior to the initiation of construction activities.

The development of the Master Plan reflects good stewardship principles and practices to protect and conserve natural and cultural resources. The proposed Master Plan has been prepared taking into consideration topography, soils, adjacent land uses, nearby recreation opportunities, vegetation, aesthetics, natural and cultural resources, lake level fluctuations, economics, and logical phases of development.

c. Purpose and Need for the Proposed Action:

The purpose of the proposed ECM facility is to replace and expand the recreational facilities that were destroyed by the April 27, 2011 tornado. The facility that was destroyed had been in operation for 27 years and many people relied on it for recreational opportunities. Its loss, along with the increasing popularity of Holt Lake and recreation along the Black Warrior River, creates a clear need for a replacement and improved recreation facility. Patrons of the former establishment are anxiously awaiting the construction of a new facility to expand recreation opportunities on the reservoir as noted in an editorial letter published in The Tuscaloosa News on August 2, 2013.

d. Authority

The construction of Holt Lake was authorized under the Flood Control Act of 1941 and 1944, for the primary purposes of flood control and hydroelectric power generation. Title 16 of the United States Code (USC) Section 406(d) approved December 22, 1944 authorizes the Secretary of the Army to lease lands at Water Resources Development projects if those leases are in the best interest of the general public. Title 16, USC states in part "The Chief of Engineers, under the supervision of the Secretary of the Army, is authorized to construct, maintain, and operate public park and recreational facilities at water resources development projects under control of the Department of the Army, to permit the construction of such facilities by local interest (particularly those to be operated and maintained by such interests) and to permit the maintenance and operation of such facilities by local interest." Preference shall be given to Federal, State, or local government agencies for the use of all or any portion of a project area for any public purpose, when the Secretary of the Army determines such action to be in the public interest, and for such periods of time upon such conditions as he may find advisable.

Federal actions (e.g. approval of Master Plans) require the preparation of National Environmental Policy Act of 1969 (NEPA) documentation in order to evaluate the potential impacts to health and the human environment of the proposed action.

2. AFFECTED ENVIRONMENT

a. General Environmental Setting:

The USACE Holt Lake includes approximately 3,300 acres of surface area on the Black Warrior River. Many recreational users visit Holt Lake each year, including boaters, swimmers, hikers, fishermen, campers, etc.

With approval of Mr. Sellers' request to add an additional 8 acres to the premises, the proposed ECM will reside on a 68-acre parcel leased from the USACE (Figure 4).

The Proposed ECM resides in the Warrior Coal Field geologic formation consisting of overlying soils mainly of the Montevallo-Nauvoo Complex. Elevations range from approximately 320 feet above mean sea level near the southern boundary of the property to 200 feet above MSL at the lake edge (Figure 2). The property generally lies on a large hill that slopes in all directions towards Holt Lake and/or its tributaries. Only the southern portion of this hill slopes away from the lake, but it gives way to a defined draw that drains eastward towards a slough of the lake as well. All streams of the proposed ECM flow to Holt Lake.

Much of the 68-acre parcel remains undeveloped woodland. The proposed facilities and the existing boat ramp are located along the western edge of a slough that traverses the eastern portion of the property (Appendix J). The April 2011 tornado destroyed numerous trees. Most of the forest on the property is mature, mixed hardwood-pine forest. This area is locally classified as being within the Oak-Pine forest classification for the State of Alabama (Figure 5). The dominant trees in the surrounding forest land are loblolly pines (*Pinus taeda*) and Virginia pines (*P. virginiana*). It also contains the shortleaf pines (*P. echinata*), yellow poplar (*Liriodendrum tulipifera*), and sweetgum (*Liquidambar styraciflua*).

b. Specific Resource Descriptions.

(1) Water Quality.

The project is located on Holt Lake within the Black Warrior River Basin. Holt Lake is an approximately 3,300 acre reservoir that is located from Holt Lock and Dam to Bankhead Lock and Dam. Neither Holt Lake nor any section of the Black Warrior River appear on the Alabama Department of Environmental Management (ADEM) 303(d) list of impaired waters in this area. This supports USACE's conclusion that Holt Lake and its nearby tributaries have good water quality that is adequate for all of their intended uses.

(2) Fishery Resources.

Holt Lake is primarily a recreational fishery. The primary recreational species targeted are bass (*Micropterus sp.*), crappie (*Pomoxis sp.*), various species of bluegill (*Lepomis sp.*), and catfish (*Ictalurus sp.*). The reservoir is best known for its largemouth bass (*Micropterus salmoides*) and spotted bass (*Micropterus punctulatus*) fishing, which can grow up to 18 and 15 inches in Holt Lake, respectively.

(3) Wildlife Resources.

The relatively remote and undeveloped woodland of the proposed ECM provides excellent wildlife habitat. High-quality, native habitat is found throughout the property.

Songbirds, waterfowl, reptiles, and amphibians are numerous in ECM and the adjacent Holt Lake. Wildlife species commonly found within the project area include whitetail deer (*Odocoileus virginianus*), gray squirrel (*Sciurus carolinensis*), turkey (*Meleagris gallopavo*), woodchuck (*Marmota monax*), cottontail rabbit (*Sylvilagus floridanus*), red fox (*Vulpes fulva*), and chipmunk (*Tamias striatus*).

(4) Wetlands/Vegetated Shallows.

A summary report prepared by TTL (Appendix C) found no wetland areas and one deepwater habitat (Holt Lake) as defined by Section 404 of the Clean Water Act (CWA) in the National Wetlands Inventory (NWI). However, due to the nature of soils on the site, other areas of wetlands may be present although not yet identified.

(5) Endangered Species.

A search of the computerized database maintained by the U.S. Fish and Wildlife Service (USFWS) resulted in a list of 43 protected animal species and 5 protected plant species known to occur in Tuscaloosa County. A total of 48 protected species, therefore, potentially occur in the study area. Twenty six of these surveyed species of concern are protected as either threatened or endangered under the Federal Endangered Species Act (ESA) of 1973:

- Red-cockaded woodpecker (*Picoides borealis*)
- Wood stork (*Mycteria americana*)
- Upland combshell (*Epioblasma metastriata*)
- Ovate clubshell (*Pleurobema perovatum*)
- Southern clubshell (*Pleurobema decisum*)
- Triangular Kidneyshell (*Ptychobranthus greenii*)
- Dark pigtoe (*Pleurobema furvum*)
- Alabama Heelsplitter (*Potamilus inflatus*)
- Alabama Moccasinshell (*Medionidus acutissimus*)
- Orangenacre Mucket (*Lampsilis perovalis*)
- Southern acornshell (*Epioblasma othcaloogensis*)
- Finelined pocketbook (*Lampsilis atilis*)
- Cahaba shiner (*Notropis cahabae*)
- Goldline darter (*Percina aurolineata*)
- Gentian pinkroot (*Spigelia gentianoides*)
- Georgia rockcress (*Arabis Georgiana*)
- Mohr's Barbara button (*Marshalla mohrii*)
- Tennessee yellow-eyed grass (*Xyris tennesseensis*)
- White fringeless orchid (*Piatanthera integrilabia*)
- Mitchell's satyr Butterfly (*Neonympha mitchellii mitchellii*)
- Indiana bat (*Myotis sodalis*)
- Gray bat (*Myotis grisescens*)
- Flattened musk turtle (*Sternotherus depressus*)
- Cylindrical Lioplax (*Lioplax cyclostomaformis*)
- Flat pebblesnail (*Lepyrium showalteri*)
- Round rocksnail (*Leptoxis ampla*)

Twenty Two other species are regulated under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA), including the Bald Eagle (*Haliaeetus leucocephalus*).

TTL, Inc. performed a survey for Threatened and Endangered (T&E) species within the proposed project site (Appendix B). No suitable habitat for any of the 26 above currently listed threatened or endangered species, or physical evidence of threatened or endangered species was observed within the survey area.

(6) Navigation.

The Black Warrior River is a Federally Approved Navigation Channel. The navigation channel is maintained at 9 feet deep and 200 feet wide from the confluence of the Tennessee-Tombigbee waterway in Demopolis to the head of navigation near the city of Birmingham. The waterway provides a link from the upper Black Warrior basin to the port of Mobile as well as connecting to other crucial inland waterways on the Ohio and Mississippi Rivers thru the Tennessee-Tombigbee Waterway. The proposed facilities will actually be located in a large slough of Holt Lake that traverses the eastern portion of the property.

(7) Recreation.

There are numerous recreation opportunities on the Black Warrior River. These include boating, fishing, and camping in the numerous campgrounds and recreational areas owned by the USACE. Holt Lake is a popular venue for fishing tournaments, and it hosts several every year. Before April 27, 2011, the Eagle Cove Marina had been in operation for 27 years. The marina consisted of 116 total boat slips, a convenience store, fueling dock, restroom/bathhouse, and a security trailer. It was a popular base camp for boaters and served as a focal point for outdoor recreation on Holt Lake. Unfortunately, the marina took a direct hit from the tornado, and the damage was beyond repair. Mr. Sellers wishes to rebuild, reopen, and expand the facility to bring back the recreational opportunities that have always been present at the site.

(8) Socioeconomic Resources.

The 68-acre parcel in which the proposed facility will reside is primarily undeveloped woodland. Properties adjacent/immediately surrounding the subject site are described in this section with respect to the four major compass directions (north, south, east, and west) from the Property.

- North – The Property is bordered to the north by the Black Warrior River which was impounded at mile 347.0 to form Holt Lake.
- South – Within this Property, most of the undeveloped land lies to the south of the Black Warrior River and is bordered along the south property line by an Alabama Power easement. Further to the south, lies scattered residential properties.
- East – An unnamed tributary or slough resides just to the east of the subject Property and borders almost the entire east side. A portion of the Property extends across the slough and fronts the Black Warrior River to the northeast. Further east, across this tributary, lies the Rock Quarry Landing Public Use Area which is used for the general public as picnic areas and campgrounds.

- West – Most of the property to the west is undeveloped and rural residential. Further west lies the Hideaway Harbor Marina bordering another unnamed tributary of the Black Warrior River.

The closest community to the site is Peterson, Alabama. Peterson is a small unincorporated community located just over a mile south of the site. The closest census-designated place (CDP) is Holt, Alabama, which is located about 3 miles west of the site, and has a population of 3,638 (2010 Census).

(9) Hazardous and Toxic Materials.

From historical evidence, two underground storage tanks (USTs) were located at the site several years in the past. However, these tanks were removed and the area tested for possible contaminants at that time. No contamination was found and there are no other USTs noted at this site. Based on interviews with Mr. Quinn Stewart (the previous property lease-holder and owner of ECM), no hazardous materials have ever been stored at the facility and no landfilling or dumping operations have occurred on the Property while under his management.

Debris clean-up from the April 2011 storm was almost complete before being halted due to a cease and desist order issued in 2013. TTL, Inc. was contracted to examine the debris piles and document the presence, or lack thereof, of hazardous materials within those debris piles (Appendix I). During their onsite observations it was evident that the debris was comprised mostly of dock and pier materials. The primary contents include aluminum and galvanized metal framing, styrofoam and plastic floats, wood decking, PVC pipe, logs and other woody debris. It is likely that this material was stockpiled following the April, 2011 storm and aerial imagery prior to the storm shows numerous piers and docks within Eagle Cove. Aerial imagery from the day following the storm shows widespread damage to the same over-water structures.

TTL professionals did not observe materials within the debris piles that would be considered environmentally hazardous or that would need to be disposed as hazardous materials. Although handling of the materials should be done with care using gloves and other protective clothing to avoid cuts or abrasions, there was no observable evidence that other protection would be necessary to prevent workers from environmental contaminant exposure. TTL considers these debris piles to be an issue of debris removal and disposal in a permitted construction debris landfill or recycling facility, rather than an environmental liability.

(10) Historic and Archeological Resources

TerraX, under contract with Longleaf Engineering, LLC, performed the Phase I cultural-resources survey for the proposed Eagle Cove Marina in Tuscaloosa County, Alabama in compliance with federal and state regulations (Appendix D). The Phase I survey was performed on January 24 to 27, 2013 by Jared Zink and Paul D. Jackson, who also served as Principal Investigator. As a result of the survey, three previously unrecorded archaeological sites (1TU1080, 1TU1081, and 1TU1082) were discovered. In addition, five potential rock shelters were examined. No prehistoric cultural material was noted in any of the shelters.

Upon review of TerraX's initial investigation, the USACE determined that additional investigation was needed at two of the rock shelter complexes (RS1 and RS2) found on the site. TerraX conducted a Phase II archaeological investigation at the two rock shelters in October and November of 2013 (Appendix E), and assignment of site trinomials were pending at the time of this review. The Phase II investigation found a cooking pit with bone and shell fragments along with potsherds in RS1, which radiocarbon dating placed at an age of 1220 to 1280 A.D. Rock falls have covered a significant amount of living space in the shelters, so additional findings would require the movement of large stones. The USACE concurs with TerraX's recommendation that rockshelters RS1 and RS2 are potentially eligible for nomination to the National Register of Historic Places.

(11) Aesthetics

The site is located on a small slough on the southern shore of Holt Lake. The site features naturally sloping hills and exposed rock cliff faces. Unfortunately, due to the April 2011 tornado, much of the site vegetation has been destroyed, and areas where damaged buildings once sat have been cleared and are bare except for grass that has been seeded to prevent erosion.

(12) Noise

The site is well removed from any nearby high traffic commercial or industrial facilities. Additionally, there are no busy streets or highways near the site so traffic noise from cars is non-existent. The greatest noise generator at the site is mobile source boat traffic on Holt Lake.

(13) Air Quality

As of January 30, 2015, Tuscaloosa County is not designated nonattainment for any pollutant by the Clean Air Act's National Ambient Air Quality Standards (NAAQS) (http://www.epa.gov/airquality/greenbook/anayo_al.html). Therefore the site is considered by the USACE as having good air quality.

(14) Floodplain

Holt Lake is a controlled waterbody, with only small fluctuations in water level that rarely exceed a few inches above normal pool. Additionally, the site is generally steep and sloping with a high average elevation compared to the lake. Because of these reasons, only a small part of the site area can be considered floodplain. This floodplain area is not vegetated and contains no floodplain habitats.

(15) Prime and Unique Farmland

A review of the U.S. Department of Agriculture Soil Surveys was conducted to identify Prime or Unique Farmland (<http://www.websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). None of the USACE leased land is identified as Prime or Unique farmland.

3. DESCRIPTION OF THE RECOMMENDED ACTION

The action proposed includes construction of a new marina facility to replace the existing facility that was destroyed in the April 2011 tornado. The proposed Master Plan

(Appendix J) includes the same recreational facilities that were present at the original site. Additionally, more boat slips and parking will be added along with a restaurant, campground facilities, and other associated amenities.

Currently, the site has been completely cleaned of the storm damage received in April 2011. Construction on the new facility is proposed to occur in three phases, which include:

Phase I

- 164 covered boat slips
- 37 recreation vehicle camping sites and associated dumping station and septic system sized to handle recreational vehicle traffic.
- A 600 sf office building
- 225 total crushed stone parking spaces
- Fueling station reusing existing tank
- Boat washing pad

Phase II

- Six boat/RV storage buildings
- A 4,000 sf restaurant and associated parking areas and septic system

Phase III

- Sailboat docking area
- Travel lift

Construction on Phase I of the project will begin as soon as possible and is anticipated to take 1-2 years to complete. Major activities that will occur during this phase include the construction of the steel floating boat slips, clearing for and construction of RV camping sites, construction of a small management office, and refurbishment of the fueling system. Almost all asphalt roads needed on site are already in place, and all additional roads and parking areas will be either gravel or asphalt.

Construction of Phase II should begin soon after completion of Phase I and take approximately 18 months to finish. Construction of the restaurant, septic system, and RV storage buildings are the only primary activities planned in this phase.

Phase III will be built approximately 1 year after Phase II and take about 1 year to complete. Construction activities for this phase will be the installation of a travel lift and a small amount of additional dock space for sailboats.

Prior to beginning construction activities, a Construction Best Management Practices Plan (CBMPP) is required for this facility, and it details Construction Best Management Practices (BMPs) that will be used throughout construction on the site to limit stormwater contact with potential pollutants associated with construction activities (Appendix H). BMPs that will be implemented during construction include:

- Silt fencing
- Hay bales
- Rock check dams
- Temporary/permanent vegetation
- Rip-rap slope protection
- Erosion control blankets

- Stone construction entrances
- Good site housekeeping
- Wetting of disturbed areas to limit dust generation (as necessary)

During regular operation of the marina, a Spill Prevention and Countermeasures Control Plan (SPCCP) will be employed to limit risk of discharges from fueling operations and onsite fuel storage. Construction BMPs practices will be implemented in any area of sediment loss that should occur as a result of regular operation and maintenance of the marina.

4. ENVIRONMENTAL IMPACTS OF THE RECOMMENDED PLAN

a. Biological and Physical Impacts:

(1) Water Quality

The run-off of sediment-laden storm water from land disturbance activities could have a short-term impact on water quality (elevated turbidity) in Holt Lake in the immediate area of the project. Sediment-laden runoff will be minimized by the use of BMPs to control construction-related erosion and sedimentation. Construction will be regulated under a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of storm water from construction sites. The CBMPP plan (Appendix H) developed as a requirement of this permit prescribes BMPs throughout the construction process that will minimize erosion and control sedimentation to keep sediment laden storm water from discharging pollutants into Holt Lake. The CBMPP requires regular inspections of the BMPs and monitoring of the turbidity of discharged storm water to assure that the project is meeting the requirements of the NPDES permit.

Some portions of the project site have relatively steep slopes and moderately erodible soils. To minimize the potential of soil erosion and sedimentation caused by land disturbance, the development has been located, to the maximum extent practicable, on those lands with the least slope. Only 19% of the 68-acre parcel will be improved for marina use. Minimal new access roads and parking areas will be created, as much of the previously paved surfaces are still intact and functional. Most of the new parking areas and access roads will be constructed with crushed stone in lieu of a completely impermeable surface (asphalt or concrete). Therefore, these new areas will result in a very small increase in storm water runoff from the site. The access roads and parking areas will be designed with bioswales instead of curb and gutter to allow storm water to flow from the parking areas/access roads and infiltrate into the soils of the adjacent vegetated areas. The associated parking areas may result in a slight increase in storm water flowing directly into Holt Lake. The storm water may carry pollutants from the parking area and boat ramp (e.g. gasoline, oils, antifreeze) but these pollutants should create minimal impacts in the proposed project area. To minimize this potential pollution source, the parking areas will be designed to slope away from the lake as much as possible to direct storm water flow onto vegetated bio-swales adjacent to the parking lot rather than flowing directly into Holt Lake. Vegetation areas downstream of parking lots provide opportunities for stormwater flow to be naturally treated by reducing toxins and

nutrients from the runoff. The overall adverse impacts to water quality from parking/road surfaces runoff are expected to be minimal.

The existing fueling station at the marina is constructed in accordance with state and federal guidelines. The two above ground replacement storage tanks will be placed within secondary containment structures and will undergo regular maintenance and inspection. An SPCC plan is in place for this structure to help reduce the risk of future impacts to the environment (Appendix G).

Septic tank field lines will be constructed in a location and manner consistent with federal EPA guidelines to eliminate or minimize the leaching of nutrients into the groundwater. The Tuscaloosa County Health Department will review the proposed project and ensure the proposed septic tank and field line system meets all applicable requirements.

(2) Fishery Resources

Construction activities at the site could have negligible impact on fishery resources due to increased recreation. The operational marina would likely lead to an increase in sport fishing activities on Holt Lake that could impact fishery populations. However, Holt Lake is large reservoir that already supports a healthy sport fishing community, and has shown no negative impacts from marina operation on the same site in the past. Fish populations in the immediate vicinity of the marina will likely change as the marina operates. While some species of fish may be driven away due to increase human activities, others will be attracted as marina structures create new underwater habitats. Therefore, it is the conclusion of USACE that the proposed facility will have minimal impact on fishery resources.

(3) Wildlife Resources

The proposed project will result in land disturbance and loss of natural habitat due to construction of the proposed recreational amenities. The primary biological impact will be loss of natural habitat. However, this impact would be minimal as a significant portion of the proposed project would occur on previously disturbed land, replacing facilities that were destroyed in the April 2011 tornado. Furthermore, the site is surrounded by undisturbed suitable habitats and displaced species could relocate to adjacent tracts. Some species in the area are well adapted to inhabiting developed areas and will likely continue to thrive after site improvements. Therefore, the USACE concludes the proposed marina would have no significant adverse impacts on wildlife resources.

(4) Wetlands/Vegetated Shallows

The National Wetlands Inventory (NWI) Report (Appendix C) indicated no probable areas of wetland concern across the subject site as defined in Section 404 of the Clean Water Act (CWA). However, it is possible that localized wetland areas are present at the site that will be discovered during construction activities. Prior to future design and construction activities, site assessments will be performed in areas of proposed development to delineate any potential wetland areas. Construction activities should be conducted in a manner that avoids or minimizes any wetlands found on site, and obtain a permit from USACE if impacts to wetlands cannot be avoided.

(5) Endangered Species

As previously stated in this assessment, a survey performed by TTL, Inc. (Appendix B) found no suitable habitat for currently listed threatened or endangered species or physical evidence of threatened or endangered species within the survey area. Additionally, the survey included a search for Bald Eagle which is known to nest at Holt Lake. However, no nesting sites were observed in the project area. Based on TTL's recommendation, the USACE has determined that the proposed action will have no effect on federally protected species.

(6) Navigation

The proposed marina will be similar to the previously existing marina, which was mostly located in a cove off of the lake and presented no impact to navigation along the Black Warrior River. Holt Lake in the area around the marina is very wide and easily navigable, so the planned docks and additional boat travel will not affect barge navigation. The marina will provide increased options for boaters who use the lake, and make it more easily accessible for fishermen and recreational boaters. A letter of permission under provisions of Section 10 of the Rivers and Harbors Act of 1899 was issued for the proposed marina by the USACE (Permit Number SAN-2012-01073-DEP, Appendix L), signifying the minimal impact of the marina on waterway navigation. Therefore, the USACE concludes the proposed marina will have no significant adverse impact on navigation along Holt Lake or the Black Warrior River.

(7) Recreation

This project is a replacement project of the previous ECM that had been in operation for 27 years prior to being destroyed by the April 2011 tornado. The development of the recreational amenities will restore the functionality of this site and new amenities (RV camping areas, additional boat docking, restaurant, etc.) will allow greater recreational opportunity for more visitors. No existing recreational opportunities are being affected by this proposed action. The development of the proposed ECM will have a positive impact on recreation on USACE land.

(8) Socioeconomic Impacts

The long-term impacts of recreation will be to enhance the socioeconomic environment of the local area. This project will help to address the recreational demand that was created when the previous facility was destroyed by the April 2011 tornado.

If the marina is not rebuilt, the previously held 4-5 part time employment positions would be permanently lost. The planned facility will initially create 3 full time positions which could increase to almost a dozen as phases of the project are completed, along with many other part time jobs. This does not include the 100s of personnel that would be working in the short-term during the actual construction process. Long-term jobs would include workers who provide general oversight of property, support personnel, restaurant workers, mechanics, and general laborers. There would also be outside support jobs that would be contracted to the marina such as fueling operators, suppliers for food; parts; equipment, mechanics, and other miscellaneous jobs. Furthermore, customers and users of the marina will patronize other local businesses, providing a boost to the local economy.

(9) Hazardous and Toxic Materials

There are currently no known hazardous or toxic materials on the USACE lands. An existing 2,000 gallon above ground storage tank resides on the project property. This tank will be replaced with two 3,000 gallon above ground storage tanks which will be used for fueling vessels at the site. One tank will hold unleaded gasoline and the other will contain diesel fuel. Each tank will be located within a concrete containment dike as specified in the Spill Prevention and Countermeasures Control Plan (SPCCP), (Appendix G). The proposed action may result in the discharge of small amounts of these materials during construction related activities, and ongoing operation of the marina will introduce the risk of small discharges of these materials through boat fueling operations. Following the SPCCP should mitigate this risk.

(10) Historic and Archeological Resources

Based on the Phase I and Phase II investigations by TerraX, two sites on the property were identified that are recommended to be potentially eligible for NRHP. The shelters are situated on a nearly vertical rock face that has limited access to the area and prevented development on the sites. The State of Alabama Historic Preservation Office (SHPO) and Indian Tribes agreed to an avoidance plan developed by McGiffert and Associates, LLC in October in 2014 (Appendix F). This plan called for revisions to the marina's master plan to allow minimum 25' perimeter buffers around the rock shelters that will be undeveloped and untouched, thus preserving the shelters and natural slopes around them. Drainage at the site will be routed away from the shelters and all construction plans will be submitted to USACE prior to construction to allow for stormwater management review. The shelters will be left undisturbed and be allowed to grow natural vegetation as to not attract attention. Marina personnel will observe the protective buffer and discourage access by curious individuals. As a result of these measures, the proposed development on the lease site presents no adverse effect to the historic properties.

(11) Aesthetics

Construction will have some short-term impacts on the aesthetics of this property. After construction, the completed facilities will only occupy 19% of the lease site, so minimal detrimental visual impacts would be realized.

(12) Noise

There will be minor noise associated with the project during construction due to construction equipment and personnel. Increased public use of the area will result in additional long-term noise impacts. These long-term impacts will almost exclusively be associated with boating activity and vehicles traveling in and out of the site. Mobile sources of noise pollution such as these are not atypical for a marina of this size. There is only one residential residence in the adjacent areas but it is located across the cove from the marina. This residence was built when the previous marina was in operation so localized impacts to outside receptors from the new facility should be negligible.

(13) Air Quality

Minimal short-term adverse impacts to air quality are anticipated during construction of the proposed project. These anticipated impacts are due to the exhaust from construction equipment and construction dust, which will be minimized using BMPs such as watering for dust control.

Long-term, the development of the proposed ECM will result in an increase in the number of cars and boats in the area. This will result in some negligible degradation of air quality due to air pollution generated by vehicular exhaust. However, no other air quality issues would be realized from the site.

(14) Floodplain Impacts

Due to the fact that Holt Lake is a man made, controlled reservoir, only small areas of floodplains exist at the site and no floodplain ecosystems are present. Impact to this area will be minimal, as no cut or fill activities are being conducted, and structures built in the area consist mostly of floating boat slips that will not impede the rise or fall of floodwaters. Accordingly, there will be no impact to floodplains as a result of this proposed project.

(15) Prime and Unique Farmland

This proposed project will have no impact on Prime or Unique Farmland, as none of the leased land is defined as such.

b. Cumulative Impacts

A cumulative effects analysis within an EA should consider the potential environmental consequences resulting from “the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 CFR 1508). The spatial boundary of such impacts will be chiefly limited to the cove the marina will be situated on, although other incremental impacts will affect the surrounding area, specifically Holt Lake and the Black Warrior River.

The site has been occupied by marina for more than 30 years, prior to which the site consisted of a rock quarry and access area. The previous marina was similar in design and construction to Eagle Cove Marina and the proposed marina reconstruction, so similar impacts from the construction and operation are expected. Construction impacts are predominantly runoff, noise, and additional vehicular traffic. However, these impacts will be temporary and only occur during the construction phase. During operation, impacts will include a minor increase in vehicular traffic, increased boating traffic, and noise. Increased impacts related to the slightly larger size of the proposed facility will be offset by improved environmental impact management practices used in both construction and operation of the facility. These practices include the use of improved BMP's during construction, implementation of bio-swales to minimize runoff, and protection of areas of the site that have historic value.

The owner has a specific plan for development of the site that utilizes most of the cove site's shoreline, so although minor alterations in the facility or its operations are possible and likely, significant expansions or changes to the proposed facility footprint are highly unlikely. Furthermore, all environmental impacts anticipated from the planned study should be temporary. In the event the facility should close and is removed from the site, no permanent impacts to the site would be expected and it would be possible for it to return to its natural state. Consequently, no significant increase in cumulative impacts is expected from the proposed facilities in the life cycle of the site.

5. ANY IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS WHICH WOULD BE INVOLVED SHOULD THE RECOMMENDED PLAN BE IMPLEMENTED

Development of the proposed site is not expected to create any impacts that prohibit the land from being reverted to its natural states. All constructions proposed on this site could be removed to restore the undeveloped state of the site. Due to the loss of wooded areas as results of the April 2011 tornado, forest could be reestablished to their current state in a short period of time. Furthermore, any natural habitats disrupted by the proposed action could be reestablished naturally and through remediation efforts. Any irreversible or irretrievable commitments of resources involved in the proposed action have been considered and are either unanticipated at this time, or have been considered and determined to present minor impacts.

6. ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED

Due to the nature of the proposed development, certain adverse environmental impacts detailed in this study are unavoidable. These include alteration of the natural aesthetics of the site, generation of noise from vehicular and maritime traffic, degradation of natural habitats in the area where the marina will be built, and risk of water quality degradation from sediment runoff and fueling operations. However, proper consideration has been given to mitigate these impacts, and any adverse environmental effects which cannot be avoided should the recommended project be implemented are expected to be minor individually and cumulatively.

7. THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The proposed project constitutes a short-term use of man's environment and is not anticipated to affect long-term productivity.

8. ALTERNATIVES TO THE RECOMMENDED ACTION

Two alternatives to the recommended plan were considered during this review.

1. No Action – This alternative consists of rejecting the recommended plan and not pursuing the reconstruction of the marina. Compared to the proposed action, this alternative would lessen several minor impacts on the environment, but would lead to the loss of potential major socioeconomic benefits to the surrounding region. An obvious need for the local community will be missed if the no action plan were implemented. The marina was in continuous operation for the previous 27 years before its closure due to the tornado. The lack of expansion at nearby marinas and absence of new marinas has failed to meet the continued and growing demand for the facilities that were lost by Eagle Cove Marina's closure. If the marina is not rebuilt, the previously held jobs will be permanently lost by local employees. No marina also means lost local economic revenue

- from recreational activities that draw persons from other areas. And finally, if the marina is not constructed, more private docks may be constructed along the waterway to provide storage facilities for vessels previously stored at this site, which could cumulatively have greater environmental impacts than the proposed action alone.
2. Alternative Construction Site – Alternate construction sites were considered as part of this review to determine their feasibility. However, because this is a reconstruction project, much infrastructure on the subject Property is already in-place including roads, parking lots, utilities, launches, and appropriate shoreline profiles. If an alternate location is selected, the aforementioned items would need to be constructed, dredging operations would most likely be warranted, and disturbance of other natural habitats would need to be implemented. This alternative would have similar, if not greater, impacts on the environment than the proposed action.

Based on these alternatives, it is our opinion the Proposed Action is warranted for this project.

9. COORDINATION

a. U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service agreed with findings from TTL that no federally protected species or critical habitat occur in the project area.

b. Federal Environmental Management Agency

FEMA was contacted on March 1, 2013 for comments on the proposed project. No response was received on the matter. Based on the wording of the inquiry, no response within 30 days of the receipt indicated concurrence with the project.

c. State Historic Preservation Officer (SHPO)

USACE coordinated the No Adverse Effects and Eligibility determinations with the AL SHPO and received concurrence on the determinations and proposed avoidance plan as presented in the EA.

10. FEDERALLY RECOGNIZED TRIBAL COORDINATION

a. The Chickasaw Nation

USACE coordinated the No Adverse Effects and Eligibility determinations with the Chickasaw and received concurrence on the determinations and proposed avoidance plan as presented in the EA.

b. Choctaw Nation of Oklahoma

USACE coordinated the No Adverse Effects and Eligibility determinations with the Choctaw Nation of OK and received concurrence on the determinations and proposed avoidance plan as presented in the EA.

11. REFERENCES

“A Phase I Cultural Resources Survey for the Eagle Cove Marina in Tuscaloosa, Alabama”, by TerraXplorations, Inc., February 2013.

“Custom Soil Resource Report for Tuscaloosa County, Alabama”, by United States Department of Agriculture (National Resources Conservation Service)

Deerman, Forman. Letter. *Tuscaloosa News* August 2013. Retrieved from <http://www.tuscaloosaneews.com/article/20130802/NEWS/130809975>

“Report of Survey for Threatened and Endangered Species, Eagle Cove Marina”, by TTL, Inc. February 27, 2013

US Army Corps of Engineers Holt Lake website (<http://www.sam.usace.army.mil/bwt/holt/>)

FIGURES



Project Area



VICINITY MAP

12-03-026 EAGLE COVE MARINA

PETERSON, ALABAMA



Longleaf Engineering, LLC
 CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
 Tuscaloosa, Alabama 35407
 Phone (205) 345-5646
 Fax (205) 345-5677

Date:	07/03/2012	Drawn By:	RTS
Scale:	None	Figure #:	1



TOPOGRAPHIC MAP

**12-03-026 EAGLE COVE
MARINA**

PETERSON, ALABAMA



Longleaf Engineering, LLC
CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
Tuscaloosa, Alabama 35407
Phone (205) 345-5846
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Date:

07/03/2012

Drawn By:

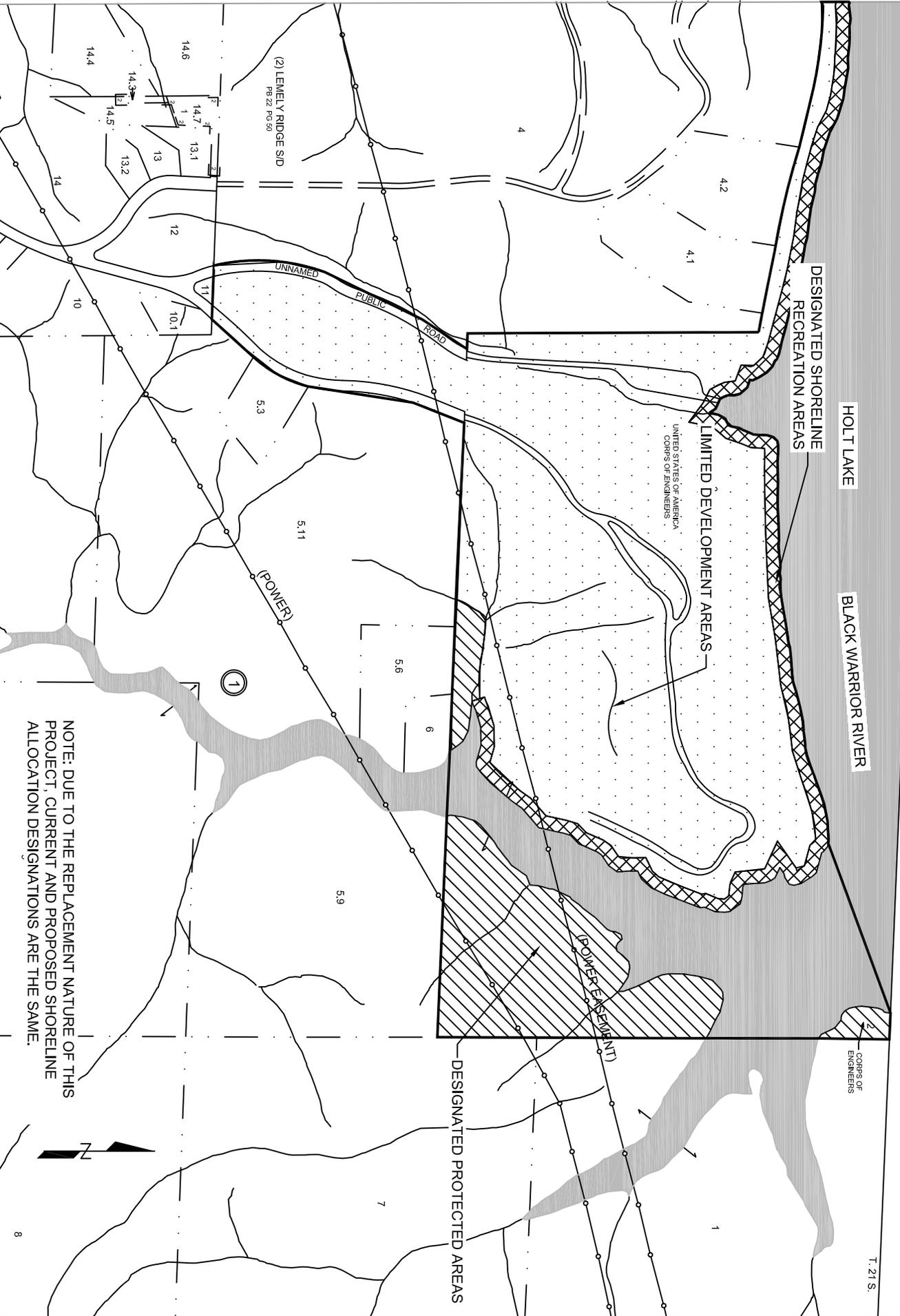
RTS

Scale:

1" = 2000'

Figure #:

2



HOLT LAKE

BLACK WARRIOR RIVER

DESIGNATED SHORELINE RECREATION AREAS

LIMITED DEVELOPMENT AREAS

UNITED STATES OF AMERICA
CORPS OF ENGINEERS

DESIGNATED PROTECTED AREAS

(2) LEMELY RIDGE SID
Pr. 22 P.C. 50

NOTE: DUE TO THE REPLACEMENT NATURE OF THIS PROJECT, CURRENT AND PROPOSED SHORELINE ALLOCATION DESIGNATIONS ARE THE SAME.

SHORELINE ALLOCATIONS

12-03-026 EAGLE COVE MARINA

PETERSON, ALABAMA



Longleaf Engineering, LLC

CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159

Tuscaloosa, Alabama 35407

Phone (205) 345-5646

Fax (205) 345-5677

T. 21 S.

CORPS OF ENGINEERS

Date:

04/16/2012

Drawn By:

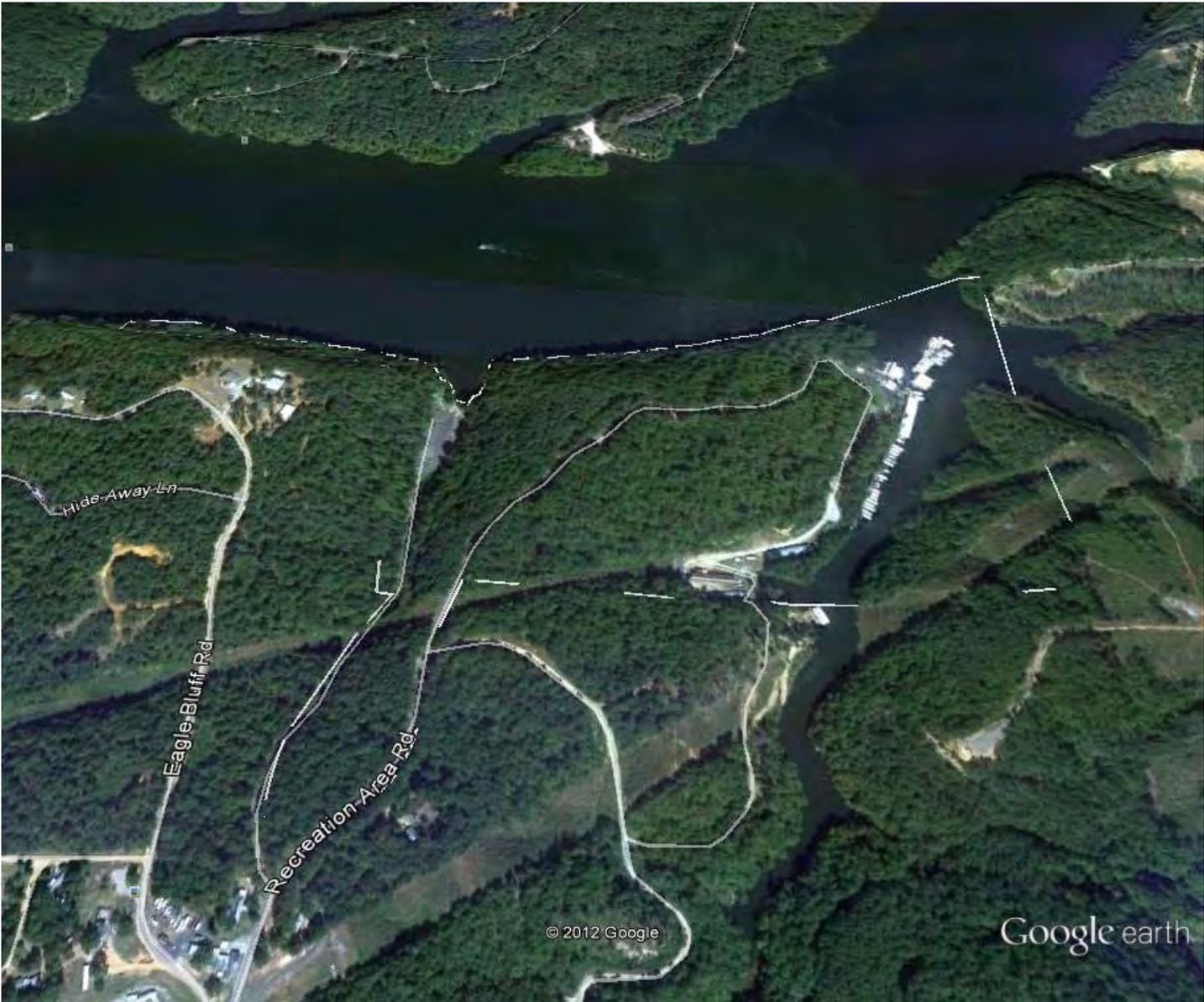
RTS

Scale:

1" = 500'

Figure #:

3

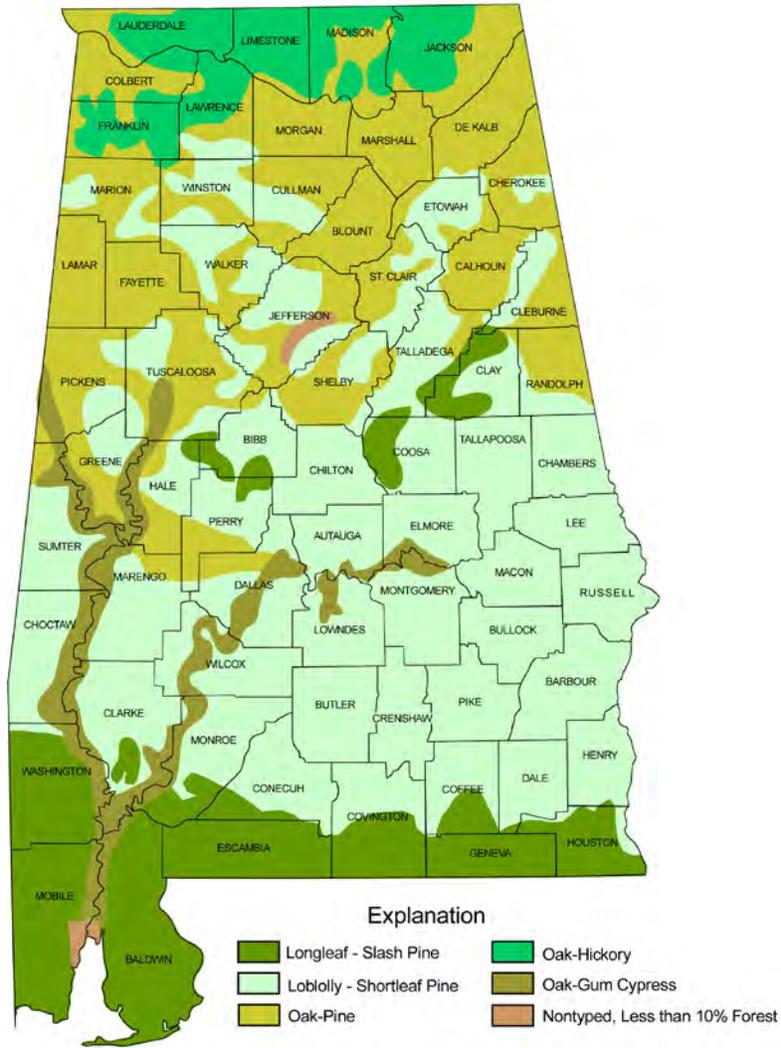


Google earth



FIGURE 4

Alabama Forest Types



Produced by the Dept. of Geography
The University of Alabama

Figure 5: Dominant forest types in Alabama

APPENDIX A
NRCS SOIL SURVEY REPORT



Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Tuscaloosa County, Alabama



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://soils.usda.gov/sqi/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nracs>) or your NRCS State Soil Scientist (http://soils.usda.gov/contact/state_offices/).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Soil Data Mart Web site or the NRCS Web Soil Survey. The Soil Data Mart is the data storage site for the official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

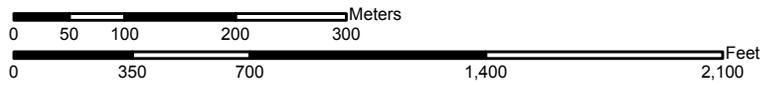
Custom Soil Resource Report Soil Map



87° 26' 14"



Map Scale: 1:7,040 if printed on A size (8.5" x 11") sheet.



87° 25' 17"

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

Special Line Features

-  Gully
-  Short Steep Slope
-  Other

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:7,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tuscaloosa County, Alabama
 Survey Area Data: Version 6, Aug 1, 2011

Date(s) aerial images were photographed: 6/29/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Tuscaloosa County, Alabama (AL125)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21	Montevallo-Nauvoo complex, 15 to 45 percent slopes	85.0	78.0%
25	Palmerdale very shaly loam, 6 to 45 percent slopes	0.2	0.2%
33	Smithdale fine sandy loam, 6 to 15 percent slopes	1.0	0.9%
W	Water	22.9	21.0%
Totals for Area of Interest		109.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that

Custom Soil Resource Report

have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Tuscaloosa County, Alabama

21—Montevallo-Nauvoo complex, 15 to 45 percent slopes

Map Unit Setting

Elevation: 490 to 2,160 feet

Mean annual precipitation: 40 to 56 inches

Mean annual air temperature: 52 to 75 degrees F

Frost-free period: 200 to 240 days

Map Unit Composition

Montevallo and similar soils: 45 percent

Nauvoo and similar soils: 40 percent

Minor components: 11 percent

Description of Montevallo

Setting

Landform: Ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy residuum weathered from shale

Properties and qualities

Slope: 15 to 45 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Very low (about 1.3 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7e

Hydrologic Soil Group: D

Typical profile

0 to 7 inches: Channery loam

7 to 12 inches: Very channery silt loam

12 to 80 inches: Weathered bedrock

Description of Nauvoo

Setting

Landform: Ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy residuum weathered from sandstone and shale

Properties and qualities

Slope: 15 to 45 percent

Custom Soil Resource Report

Depth to restrictive feature: 40 to 60 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.13 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.4 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7e
Hydrologic Soil Group: B

Typical profile

0 to 17 inches: Fine sandy loam
17 to 35 inches: Clay loam
35 to 41 inches: Sandy clay loam
41 to 80 inches: Weathered bedrock

Minor Components

Allen

Percent of map unit: 3 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Bibb

Percent of map unit: 2 percent
Landform: Drainageways
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Linear

Smithdale

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Pikeville

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Ruston

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

25—Palmerdale very shaly loam, 6 to 45 percent slopes

Map Unit Setting

Elevation: 1,390 to 2,160 feet

Mean annual precipitation: 40 to 56 inches

Mean annual air temperature: 52 to 75 degrees F

Frost-free period: 200 to 240 days

Map Unit Composition

Palmerdale and similar soils: 85 percent

Minor components: 11 percent

Description of Palmerdale

Setting

Landform: Ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Gravelly mine spoil or earthy fill derived from sandstone and shale

Properties and qualities

Slope: 6 to 45 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water capacity: Low (about 4.2 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Very channery loam

5 to 80 inches: Very channery sandy loam

Minor Components

Brilliant

Percent of map unit: 3 percent

Landform: Ridges

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Convex

Montevallo

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Pikeville

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Smithdale

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Nauvoo

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

33—Smithdale fine sandy loam, 6 to 15 percent slopes

Map Unit Setting

Elevation: 660 to 1,310 feet
Mean annual precipitation: 40 to 56 inches
Mean annual air temperature: 52 to 75 degrees F
Frost-free period: 200 to 240 days

Map Unit Composition

Smithdale and similar soils: 85 percent
Minor components: 11 percent

Description of Smithdale

Setting

Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy marine deposits derived from sedimentary rock

Properties and qualities

Slope: 6 to 15 percent

Custom Soil Resource Report

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.3 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 3e
Hydrologic Soil Group: A

Typical profile

0 to 5 inches: Fine sandy loam
5 to 42 inches: Loam
42 to 72 inches: Sandy loam

Minor Components

Bama

Percent of map unit: 3 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear

Luverne

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Flomaton

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Pikeville

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex

Ruston

Percent of map unit: 2 percent
Landform: Ridges
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear

W—Water

Map Unit Setting

Mean annual precipitation: 40 to 56 inches

Mean annual air temperature: 52 to 75 degrees F

Map Unit Composition

Water: 95 percent

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APPENDIX B
FISH AND WILDLIFE REPORT

REPORT OF SURVEY FOR THREATENED AND ENDANGERED SPECIES

EAGLE COVE MARINA
HOLT, TUSCALOOSA COUNTY, ALABAMA

Submitted to:

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Project No. 800213002

February 27, 2013



geotechnical · analytical · materials · environmental

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**Report of Survey for Threatened and Endangered Species
Eagle Cove Marina
Holt, Tuscaloosa County, Alabama
TTL Project No. 800213002**

1.0 PROJECT BACKGROUND

Longleaf Engineering, LLC previously submitted a draft Environmental Assessment (EA) for review by the U.S. Army Corps of Engineers (USACE), Mobile District for redevelopment of the Eagle Cove Marina along the Black Warrior River in Tuscaloosa County, Alabama. Following review, the USACE provided comments and recommended additional information be supplied, including a survey for threatened and endangered (T&E) species.

TTL, Inc. (TTL) was provided with two maps of the proposed project and the USACE's EA review comments. According to the provided Site Plan map, the site and area of investigation is approximately 78 acres. The site was formerly developed as a marina. Paved roads are present on the site. TTL understands the redevelopment of the subject tract will include docks, boat slips, a restaurant and other recreational areas associated with the Eagle Cove Marina.

TTL has performed a survey for T&E species within the proposed project site as defined by Longleaf Engineering in Tuscaloosa County, Alabama.

The subject tract of land is depicted on a portion of the Brookwood and Coaling, United States Geological Survey (USGS) 7.5' series topographic maps, Figure 1, and on Figure 2 a Google Earth aerial image dated July 2011 (both attached). The subject property is located at the terminus of Recreation Area Road approximately one mile north of the town of Peterson, Tuscaloosa County, Alabama. The subject tract is identified by the Tuscaloosa County GIS Internet Report as Parcel Number 3001010001003000. This Web-based report confirms that the parcel is 78 acres in size and owned by the United States of America, Army Corps of Engineers.

The area is within the path of an April 27, 2011, EF4 tornado and very significant destruction from that storm is evident today. The purpose of the T&E survey was to evaluate the potential for impact to federally protected species, or their habitat, associated with redevelopment of the subject site.

2.0 PHYSICAL SETTING OF SUBJECT SITE

The subject tract of land consists of rolling to steep hills with a relief change over the site of greater than 170 feet. The north boundary of the tract is the Black Warrior River. Approximately one mile downstream on the Black Warrior River is the Holt Lock and Dam. Wooded and single-family residential land occurs to the east and south of the Eagle Cove Marina site. Wooded, mostly undeveloped land exists to the west of the subject tract, and the next cove on the river, approximately 0.5 miles downstream, contains numerous vessels moored at a floating dock and pier system.

Damage from the aforementioned storm is evident as downed trees are present throughout the site. Trees and storm debris has been removed from some areas of the site and grading and establishment of vegetation appears ongoing.

3.0 SURVEY OF ENDANGERED SPECIES INCLUDING THEIR HABITAT

TTL has performed a survey for the presence of federally-listed threatened or endangered species or their supporting habitat within or adjacent to the subject tract of land. The survey was performed on January 24, 2013. On the date of the survey the weather was overcast and fifty to sixty degrees Fahrenheit. A desktop survey was performed prior to the field survey. The following table lists all T&E species for Tuscaloosa County, Alabama according to the US Fish and Wildlife Service website accessed January 15, 2013. This survey did not include a review of aquatic species.

Table 1- Federally Listed T&E Species, Tuscaloosa County, Alabama

Group	Name	Status
Birds	Bald eagle (<i>Haliaeetus leucocephalus</i>)	Recovery
Birds	Red-cockaded woodpecker (<i>Picoides borealis</i>)	Endangered
Birds	Wood stork (<i>Mycteria americana</i>)	Endangered
Clams	Alabama (=inflated) heelsplitter (<i>Potamilus inflatus</i>)	Threatened
Clams	Orangenacre mucket (<i>Lampsilis perovalis</i>)	Threatened
Clams	Upland combshell (<i>Epioblasma meta striata</i>)	Endangered
Clams	Finelined pocketbook (<i>Lampsilis altilis</i>)	Threatened
Clams	Ovate clubshelf (<i>Pieurobema perovatum</i>)	Endangered
Clams	Southern clubshell (<i>Pieurobema decisum</i>)	Endangered
Clams	Triangular Kidneysshelf (<i>Ptychobranthus greenii</i>)	Endangered
Clams	Alabama moccasinsshelf (<i>Medionidus acutissimus</i>)	Threatened
Clams	Dark pigtoe (<i>Pieurobema furvum</i>)	Endangered
Flowering Plants	Mohr's Barbara button (<i>Marshallia mohrii</i>)	Threatened
Flowering Plants	White fringeless orchid (<i>Piatanthera integrilabia</i>)	Candidate
Insects	Mitchell's satyr Butterfly (<i>Neonympha mitchellii mitchellii</i>)	Endangered
Mammals	Indiana bat (<i>Myotis sodalis</i>)	Endangered
Mammals	Gray bat (<i>Myotis grisescens</i>)	Endangered
Reptiles	Flattened musk turtle (<i>Sternotherus depressus</i>)	Threatened

3.1 Desktop Survey

Pre-survey planning performed by TTL included a review of aerial photographs, topographic maps, National Wetland Inventory maps, ecoregion maps, site plans, and habitat and life cycle information regarding the listed T&E species. Using this information the surveyors were able to better understand landscape features and potential for habitat occurrence. Individual characteristics (including habitat and life history) of each surveyed species is summarized below.

Bald Eagle (*Haliaeetus leucocephalus*)

The Bald Eagle (*Haliaeetus leucocephalus*) is one of North America's largest raptors with adult females reaching weights of 14 pounds and standing 42 inches tall. Adult males are slightly smaller. The bright white head and tail contrasted against dark body feathers are key characteristics used to

identify the bald eagle. However, these white feathers as well as the yellow color of the bill do not develop until the eagles reach sexual maturity at about five years of age. The eyes, legs, and talons are yellow. Immature bald eagles are often mistaken as golden eagles because they lack the white head and tail feathers.

Eagles feed opportunistically on fishes, injured waterfowl and seabirds, various mammals, reptiles, and carrion. The majority of their diet is comprised of fish. They hunt live prey, scavenge, and pirate food from other birds.

Bald eagles mate for life and share all nesting and brood-rearing responsibilities. Large nests are most often built in the crowns of tall trees, usually near water. Typically, breeding pairs will return to the same nests year after year, and repair or restore the nest by adding new material⁵.

Red-cockaded woodpecker (*Picoides borealis*)

The red-cockaded woodpecker (*Picoides borealis*) is about seven inches long with a wingspan of about 15 inches. It has black and white bars arranged on the feathers across its back. The most distinguishing features are the large white cheek patches that are surrounded by the black cap and nape. During the breeding season, males may have a small red streak on each side of its black cap, however this survey was not scheduled during a season that we would see this cockade in the field.

Red-cockaded woodpeckers can be found in mature pine forests. Longleaf forests are the preferred habitat, but other pine forests containing loblolly pine are also typical habitat. Red-cockaded woodpeckers prefer longleaf pines that average 80 to 120 years old and loblolly pines averaging 70 to 100 years old. Other woodpeckers make their cavities in dead trees where the wood is soft and/or rotted. The red-cockaded is the only woodpecker that commonly makes its cavities in living pine trees. Pines infected with red heart disease (which causes the inner wood to soften) are preferred for den excavation. Dense stands of hardwood or hardwood understory are avoided.

Wood stork (*Mycteria americana*)

Wood storks are large, long-legged wading birds, about 45 inches tall, with a wingspan of 60 to 65 inches. The plumage is white except for black primaries and secondaries and a short black tail. The head and neck are largely unfeathered and dark gray in color. The bill is black, thick at the base, and slightly decurved. Immature birds have dingy gray feathers on their head and a yellowish bill.

Storks are birds of freshwater and estuarine wetlands, primarily nesting in cypress or mangrove swamps. They feed in freshwater marshes, narrow tidal creeks, or flooded tidal pools. Particularly attractive feeding sites are depressions in marshes or swamps where fish become concentrated during periods of falling water levels.

A large, white, bald-headed wading bird of the southeastern swamps, the Wood stork is the only stork breeding in the United States. Its late winter breeding season is timed to the Florida dry season when its fish prey become concentrated in shrinking pools.

Storks migrate northward after breeding, with birds from the southeastern United States population moving as far north as North Carolina on the Atlantic coast and into Alabama and eastern Mississippi along the Gulf coast⁶.

Mohr's Barbara button (*Marshallia mohrii*)

Mohr's Barbara buttons is a perennial herb usually with branched stems obtaining a height of approximately ten to thirty inches. The lanceolate to obovate leaves are alternate, lance-oblong shaped, firm-textured, and are two to six inches in length and nearly one inch in width. Larger and more numerous leaves are near the base of the stem and may be up to twelve inches in length with the leaves gradually reducing upwards towards the top of the plant. Each leaf has three parallel veins. Terminal flower heads develop from mid-May to June forming a cluster of two to six (rarely one) button-like flowers approximately one inch in width. The flowers are subtended by numerous bracts, which are sharply pointed and composed only of tubular disk flowers. The disk flowers are purplish-violet to white each subtended by a single, persistent, sharply pointed scale-like chaff (bract). From July to August fruit are produced as a 5-angled, 10-ribbed achene approximately one-quarter inch in length exhibiting a hairy resin-dotted surface. The achene is topped by a pappus of five, narrowly triangular, sharply pointed scales approximately one-eighth inch in length. The achene is positioned among the sharply pointed chaff which persists on the flower head.

Mohr's Barbara buttons typically occurs in seasonally wet, sandy clay soils in prairie-like meadows along shale-bedded streams and utility and highway rights-of-way and in habitats with widely spaced trees known as "glades" when considerable bedrock is exposed, or "barrens" when thin soils predominate. The preferred soils are sandy clays, which are alkaline, high in organic matter, and seasonally wet. Most currently known populations occur on soils of the Conasauga-Firestone Association. Plants occur in full sun or partial shade in a grass-sedge community. The endangered

Alabama Leather Flower (*Clematis socialis*) and the green pitcher plant (*Sarracenia oreophila*), often occurs or co-exists with this specie⁹.

White fringeless orchid (*Piatanthera integrilabia*)

White fringeless orchid is a perennial herb that blooms from late July to early September. The inflorescence is showy, with large, ghost-white flowers with conspicuous long spurs, clustered in loose racemes. This plant is typically found in partially shaded, flat, boggy areas at the head of streams or seepage slopes. The species is often found in association with Sphagnum species and *Osmunda cinnamomea*, *Woodwardia areolata*, and *Thelypteris novaboracensis*, in acidic muck or sand. White fringeless orchid is native to the southeastern and south central United States and is rare throughout it's range⁷.

Mitchell's satyr Butterfly (*Neonympha mitchellii mitchellii*)

This butterfly has an approximate 1 ¾- inch wingspan with an overall rich brown color. A distinctive series of orange-ringed black circular eyespots with silvery centers are located on the lower surfaces of both pairs of wings. For this species, the focus for identification was placed on the location or presence of orange bands circling the eyespots.

The preferred plant communities for the Mithell's satyr are dominated by sedges, with upright (tussock) sedge (*Carex stricta*) reported by many to occur at every historic site. Deciduous shrubs and coniferous trees are also found in plant communities associated with the butterfly, and the butterfly is often reported as occurring at the interface between open stands of sedge meadows and woody vegetation. TTL personnel focused on identifying areas of wetlands containing *Carex* species. Adult butterflies mature during a two to three week period, usually in early to mid-July.

Indiana bat (*Myotis sodalis*)

In the southern areas of the Indiana bat's range (primarily Tennessee, Arkansas, and northern Alabama), which include the oak-hickory and oak-pine cover types, Indiana bats utilize shagbark hickory, white oak, red oak, pitch pine (*P. rigida*), shortleaf pine (*P. echinata*), loblolly pine (*P. taeda*), sweet birch (*Betula lenta*), and eastern hemlock (*Tsuga canadensis*).

Indiana bats begin to arrive at hibernacula (caves and mines in which they spend the winter) from their summer roosting sites in late August, with most returning in September. Most Indiana bats hibernate from October through April, but many at the northern extent of their range hibernate from

September to May. Occasionally, Indiana bats are found hibernating singly, but almost all are found hibernating in dense clusters.

Habitat requirements for the Indiana bat are not completely understood. Bottomland and floodplain forests were once thought to be the most important habitats during the summer, but subsequent study has shown that upland forest habitats may be equally important, especially in the southern portions of the species' range. Indiana bats are found in hardwood forest throughout most of their range and mixed hardwood-pine forests in the southeastern United States⁸.

Gray bat (*Myotis grisescens*)

Roost sites are nearly exclusively restricted to caves throughout the year, though only a few percent of available caves are suitable. Winter roosts are in deep vertical caves with domed halls. Large summer colonies utilize caves that trap warm air and provide restricted rooms or domed ceilings; maternity caves often have a stream flowing through them and are separate from the caves used in summer by males. This bat does not feed in areas along rivers or reservoirs where the forest has been cleared¹.

Subject Watershed

The Black Warrior River drains portions of seventeen counties and is divided into five main watersheds: the Sipsey Fork, Mulberry Fork, Locust Fork, the Upper Black Warrior, and the Lower Black Warrior. Together, these five United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Hydrologic Unit Code (HUC) Cataloging units are comprised of a total of 76 sub-watersheds. The Black Warrior watershed covers 6,276 square miles in Alabama and measures roughly 300 miles from top to bottom. The Black Warrior River contains 16,145.89 miles of mapped streams.

The Black Warrior River watershed is home to 127 freshwater fish species (four of which are federally listed as endangered), 36 species of mussels (five of which are federally listed as endangered), 15 turtle species (one of which is federally listed as threatened), an endangered snail, and numerous other aquatic animals.

More specifically, the subject site is located with the Upper Black Warrior watershed. The Upper Black Warrior Watershed (HUC 03160112) drains twelve sub-watersheds and is in the Fall Line Hills area. Tributaries located in the Fall Line Hills are generally low gradient, habitat poor, glide/pool

streams. Streams located in the Fall Line Hills flow year round due to the extensive sand and gravel aquifers in the region².

Ecoregion

Areas where ecological systems are generally similar are identified as ecoregions. Ecoregions are based on coincident patterns of natural factors such as geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. Ecoregions can provide a framework for assessing ecological conditions with respect to the natural environment setting. There are three distinct ecoregions within the Black Warrior River Basin: Southeastern Plains, Southwestern Appalachian, and Ridge and Valley.

The subject tract is in the Southwestern Appalachians ecoregion which extends from Kentucky to Alabama. These open low mountains contain a mosaic of forest and woodland with some cropland and pasture. The landscape is drained by streams of moderate gradient with cobble, gravel, and bedrock substrates. The surface elevation ranges from about 250 feet above sea level in the southwest to about 1,100 above sea level in the northeast. Oak, hickory, pine, and mixed forest of maple, tuliptree, and linden are the natural forest cover for this area. The region is primarily forested terrain of open hills with 200-400 feet of relief^{4,5}.

These reported ecoregion characteristics are generally true for the subject tract, however, the setting is at the southern-most area of the ecoregion and the maximum elevation of the subject site is approximately 370 to 380 feet.

Geologic Setting

The Pennsylvanian Pottsville Formation of the Black Warrior basin in Alabama comprises as much as 9,000 feet of shale, sandstone, and coal. The boundary between the informal units of the lower Pottsville and the upper Pottsville is the base of the Black Creek coal group, in the middle part of the section. Lower Pottsville strata include orthoquartzitic sandstone, shale, and coal interpreted as having been deposited in a barrier/back-barrier setting. Upper Pottsville strata consist of lithic arenite, shale, coal, and minor amounts of orthoquartzite, and are interpreted as representing a lateral gradation from lower delta plain to barrier bar³. Sandy-shale outcroppings of the Pottsville formation are visible upon the subject tract of land and shown in attached photographs.

Aerials

An October 20, 2012 aerial image provided by Google Earth shows the subject tract much as it appears today, with recently graded areas, most of the storm debris removed, and fallen trees (from the storm) visible within sparsely wooded areas.

The April 28, 2011 aerial image shows the subject tract damaged by the storm from the afternoon of the previous day. Damaged vessels, docks, piers and boat houses are visible, as well as damage to homes in the surrounding area. The area appears dramatically impacted by the storm, and many of the downed trees are oriented southwest to northeast.

Review of aerial imagery prior to April 28, 2011 reveals the site to appear wooded with some roads and infrastructure. Wooded areas appear to be a mixed pine and hardwood forest system.

Topography

TTL scientists reviewed the USGS 7.5' series topographic maps of the Brookwood and Coaling, quadrangles to understand the landscape condition and drainage pattern. The site is generally rolling and hilly and the elevation ranges from approximately 190 feet at the Black Warrior River (the river elevation changes with opening and closing of locks) to approximately 370 feet near the center of the site along the main access road. One perennial tributary to the Black Warrior flows northward on the west side of the Rock Quarry boat ramp access road, crosses under the road through a culvert, and flows south to another culvert under the boat ramp parking and drive areas. Approximately 650 feet of this stream is upon the subject tract of land. Small areas of floodplain wetlands are associated with this perennial, intermittent and ephemeral stream channel.

The confluence of a broad, unnamed tributary and the Black Warrior River is present along the eastern part of the site. Intermittent drainage features are present in the landscape within natural valleys of this cove. A boat ramp and boat docks are located within this cove area.

National Wetlands Inventory

U.S. Fish and Wildlife Service (USFWS), National Wetland Inventory (NWI) maps were reviewed as part of our desktop evaluation to aid in understanding landscape conditions and potential for suitable habitat for T&E species. The USFWS NWI does not identify wetlands upon the subject tract of land.

Soils

Natural Resources Conservation Service (NRCS), Soil Survey of Tuscaloosa County, Alabama maps the following soils upon the subject tract of land.

- Montevallo-Nauvoo complex, 15 to 45 percent slopes, Partially Hydric
- Smithdale fine sandy loam, 6 to 15 percent slopes, Not Hydric

3.2 Field Methods and T&E Survey

To be certain of navigating in the field and surveyors' position relative to the study area, the survey area boundary was entered into a Trimble Pro HX GPS system with sub-meter accuracy. The survey was conducted on foot. The primary approach was to focus on suitable habitat for listed species, and then to focus on physical evidence, or the presence of the listed specie. Transects were walked upon the tract and each drainage area was surveyed. Transition (edge) areas between habitat types were closely examined.

4.0 FINDINGS

Much of the land in the survey area or adjacent to it has been severely damaged by the April 27, 2011 tornado, and most mature trees have been blown over. Tree removal and land clearing continues on the survey tract. Several areas have been graded and seeded with a cover vegetation presumably to abate soil erosion through precipitation runoff.

Our terrestrial T&E species survey findings are ordered here as listed above in Table 1.

Bald eagle (*Haliaeetus leucocephalus*) - Although the subject tract does not contain nesting trees for the Bald Eagle, its proximity to a food source within the Black Warrior River could have provided historic fishing or hunting trees. Due to the significant loss of trees upon the site, and high human activity, it is unlikely that the Bald Eagle would occupy the site for nesting or foraging.

Red-cockaded woodpecker (*Picoides borealis*) - No mature longleaf pine tree stands or loblolly pines averaging 70 to 100 years old are present upon the subject tract or in the vicinity of the site. Red-cockaded woodpecker nesting, rearing, or foraging is not expected upon the Eagle Cove Marina property.

Wood stork (*Mycteria Americana*) - As the Wood stork breeds and nests in south Florida, the subject tract is not within the range that one would expect to see this species during much of the year (including winter). Upon migration northward, the Wood stork prefers swamps and cypress domes as far north as Alabama. Swamp habitat does not exist upon the subject tract and therefore it is highly unlikely that the Wood Stork would be found upon the subject property, except possibly an incidental occurrence while passing through to roosting or foraging habitat.

Mohr's Barbara button (*Marshallia mohrii*) - Wet prairie-like meadows, glades, barrens and shale-bedded streams are preferred habitats of this specie. Although there is short length of seasonally wet roadside ditch, and very small areas of floodplain wetlands along intermittent streams, habitat for this species is generally not present.

White fringeless orchid (*Piatanthera integrilabia*) - No areas exhibiting shaded, flat, boggy conditions at the head of streams or seepage slopes were observed. Additionally, Sphagnum species and *Osmunda cinnamomea*, *Woodwardia areolata*, association species, were not observed. Thus, it does not appear that habitat for this species is present upon the subject tract.

Mitchell's satyr butterfly (*Neonympha mitchellii mitchellii*) - Mitchell's satyr butterfly is very specific to tussocky sedge wetlands. This type of aquatic system is not found on the subject tract and therefore this specie is not expected to occur in the study area.

Indiana bat (*Myotis sodalis*) - Although literature suggests that both bottomland wetlands and upland hardwoods may be equally important to this specie, neither habitat type currently occurs on the subject tract. The survey area does not contain habitat for the Indiana bat.

Gray bat (*Myotis grisescens*) - The Gray bat uses caves for hibernacula, summer roosting, and rearing young. Cavernous, domed cave habitat is not present on the subject tract of land.

5.0 CONCLUSION

No suitable habitat for currently listed threatened or endangered species, or physical evidence of threatened or endangered species was observed within the survey area. It is our opinion that the proposed project is not likely to have a direct effect on federally listed T&E species.

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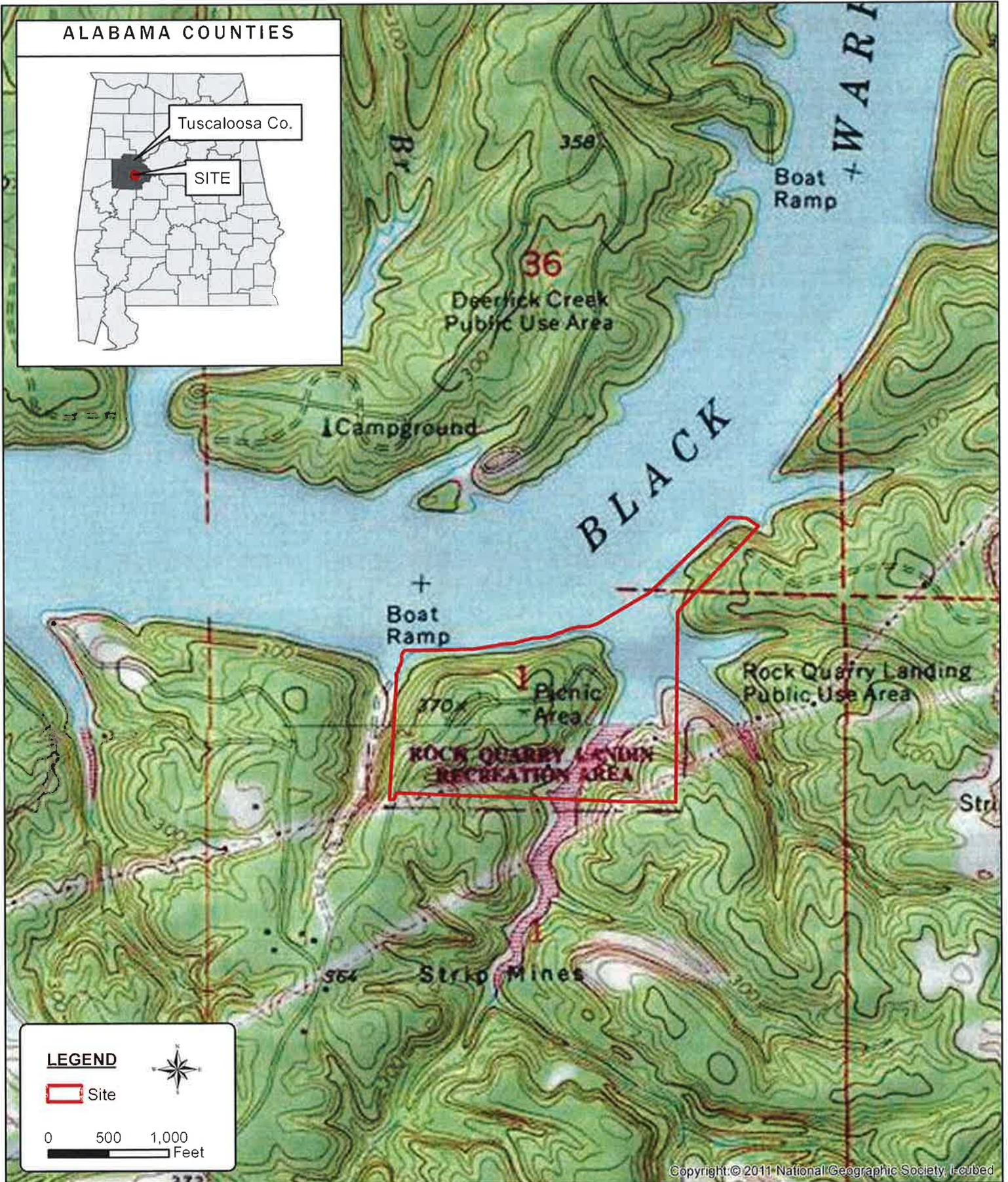
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FIGURES

ALABAMA COUNTIES



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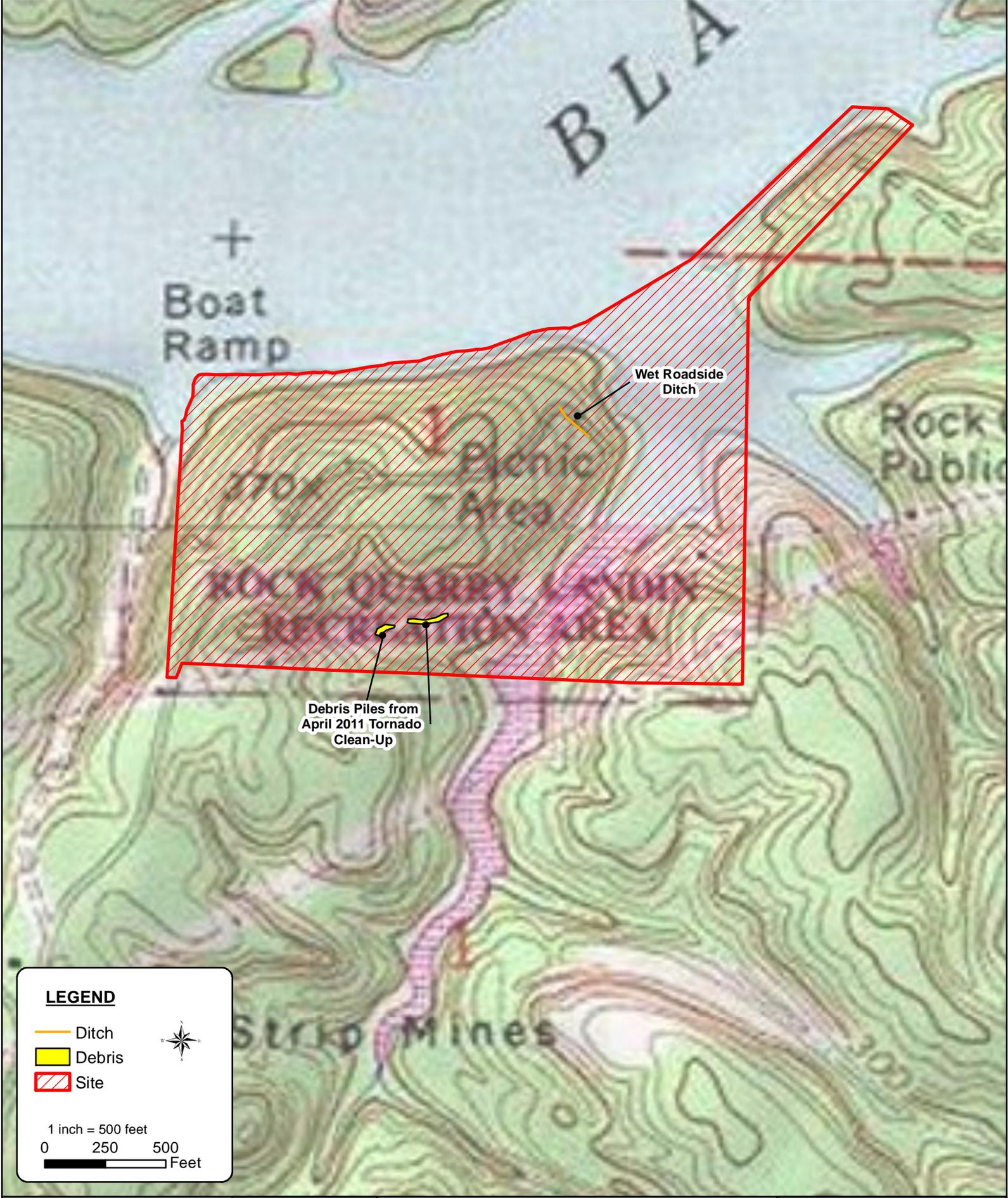
TTL PROJECT NO:
800213002

DRAWING DATE:
February 20, 2013

**Figure 1: Site Location
and Topographic Map**

BASEMAP: USGS 7.5' Topographic Map
of Lake Nicol and Cottondale, Tuscaloosa Co., Alabama

Eagle Cove Marina
Holt Lake
Tuscaloosa County, Alabama



LEGEND

-  Ditch
-  Debris
-  Site

1 inch = 500 feet
 0 250 500 Feet





LEGEND

-  Ditch
-  Debris
-  Site

0 250 500
Feet



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DRAWING DATE:
May 20, 2015

Figure 3: Threatened and Endangered Species Survey Aerial Map (Revised)

Basemap: February 2011 World Imagery (via ESRI.com)

Eagle Cove Marina
 Holt Lake
 Tuscaloosa County, Alabama

PHOTOGRAPHS

Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 1. View of gate at entry to subject tract.



Photograph 2. View to southwest from main entry road. Typical view of storm damage.



Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 3. View of Pottsville sandy-shale outcropping typical of subject site.



Photograph 4. Eastward view looking over southern tributary to Black Warrior River.



Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 5. Armored shoreline along south tributary at mouth entering Black Warrior River.



Photograph 6. Armored and graded shoreline on-site, on south side of Black Warrior River.



Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 7. View gravel road and graded areas at confluence of south tributary and Black Warrior River. Pottsville formation sandy-shale visible in background.



Photograph 8. Roadside ditch and culvert along main access road. Graded and grass-covered area to the left (east).



Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 9. Seep and small roadside swale wetland area.



Photograph 10. View Rock Quarry boat ramp and parking area.



geotechnical • analytical • materials • environmental

Site Photographs

Threatened & Endangered Species Survey – TTL Project No. 800213002
Eagle Cove Marina • Holt, Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 11. View of trail and shoreline to west of Rock Quarry boat ramp.



Photograph 12. Roadside stream to west side of road to Rock Quarry boat ramp.



APPENDIX C
NATIONAL WETLANDS INVENTORY REPORT



3516 Greensboro Avenue
Tuscaloosa, AL 35401
205.345.0816
www.ttlusa.com

March 28, 2013

Mr. Tom Sims
Longleaf Engineering, LLC
Post Office Box 72159
Tuscaloosa, Alabama 35407

**Re: National Wetland Inventory Summary Report
Proposed Master Plan for Recreational Development Eagle Cove Marina
Holt Lake, Tuscaloosa County, Alabama
TTL Project No. 800213002**

Dear Mr. Sims:

TTL, Inc. (TTL) was contracted by Longleaf Engineering (Client) to prepare a summary report of potential wetlands and waters of the U.S. in support of the Proposed Master Development Plan for Eagle Cove Marina (ECM). The summary report includes a literature review of the National Wetlands Inventory (NWI) and the Natural Resource Conservation Service (NRCS) soils database. The site is situated in the northwest $\frac{1}{4}$ of the northeast $\frac{1}{4}$ of Section 1, Township 21 South, Range 9 West as shown on the 1974 Lake Nicol and Cottondale, Alabama 7 $\frac{1}{2}$ -minute U.S.G.S. topographic map (Figure 1). Holt Lake, a reservoir on the Black Warrior River, forms the northern boundary of the proposed ECM. The center of ECM is located at approximately 33° 15' 01" Latitude and -87° 25' 53" Longitude. Included in this letter report is a brief description of the literature review and recommendations.

LITERATURE REVIEW

NWI

The U.S. Fish and Wildlife Service (USFWS) created and maintains the NWI database of information on the characteristics, extent, and status of the wetlands and deepwater habitats within the U.S. This information is useful for planning purposes to provide an overall understanding of the habitats that may be present in or around the site. The NWI classifies habitat types as marine, estuarine, riverine, lacustrine or palustrine with additional modifiers as appropriate to identify the water regime, water chemistry, soil or other characteristics based Classification of Wetlands and Deepwater Habitats of the U.S. (Cowardin, 1979).

TTL reviewed the NWI data for the site using the USFWS NWI Wetlands Mapper web-based tool to determine the potential for wetlands or deepwater habitat to exist on the site. The site contains one deepwater habitat classified as L1UBHh, described as Lacustrine, Limnetic, Permanently flooded, Diked/Impounded. This feature is known as Holt Lake. A map of potential wetland and deepwater habitats is provided in Figure 2.

NRCS

The NRCS maintains a database of soil types (map units) for most areas of the U.S. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit which represents a large area dominated by one or more major kinds of soil. Map units are further classified with a rating of hydric, partially hydric or non-hydric. Map units are useful for planning purposes to provide an overall understanding of the soils that occur in a general area. However, due to the natural variability of the landscape, direct observation of the soils profile is necessary to identify hydric soil indicators, which was beyond the scope of this task.

NRCS identified Montevallo-Nauvoo complex, 15 to 45 percent slopes as the predominant soil type on this site. This soil type is classified as partially hydric; therefore, there is a strong potential for the presence of hydric soil indicators to occur. The NRCS soil survey report is included in the attachments.

RECOMMENDATIONS

Streams, open waters, and wetlands are considered “water of the United States” and construction activities within waters of the U.S. are regulated by U.S. Army Corps of Engineers (USACE) under the Clean Water Act (33 U.S.C. 1344). TTL recommends a detailed wetland delineation be conducted within the areas of potential land disturbance during the planning stages of this project in order to ensure that no wetlands or waters of the U.S. would be affected by the proposed development.

Where possible, impacts to wetlands and waters should be avoided or minimized during the design phase. If impacts to jurisdictional wetlands and waters cannot be avoided, the appropriate permit should be obtained from the USACE, prior to construction activities.

TTL appreciates the opportunity to assist you with this project. If you have any questions or need additional information, please contact Louise Duffy at 251-424-4156 or lduffy@ttlusa.com.

Sincerely,

TTL, Inc.



Louise O. Duffy
Environmental Professional



Robert M. White
Principal Natural Resources Scientist

Attachments:

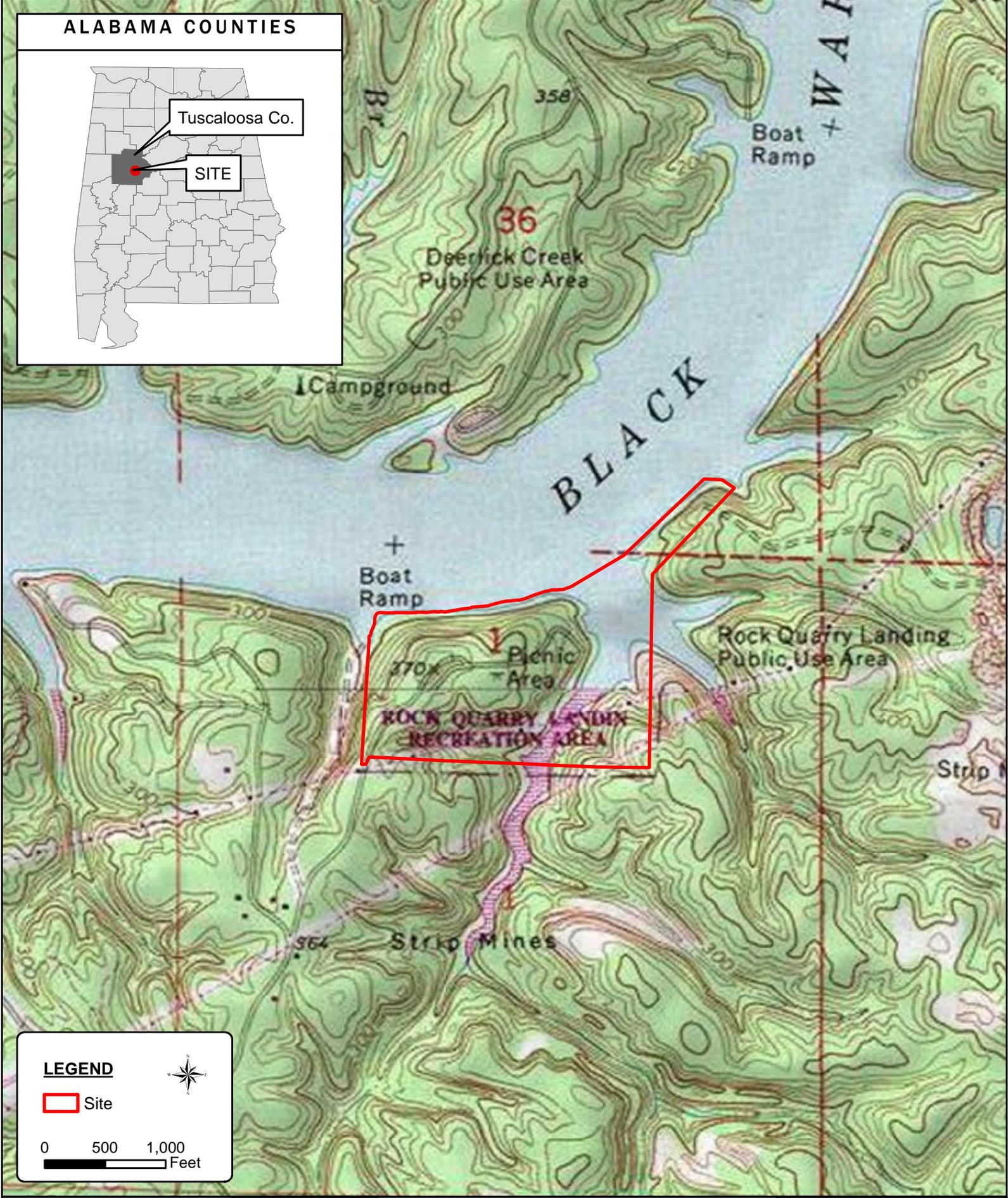
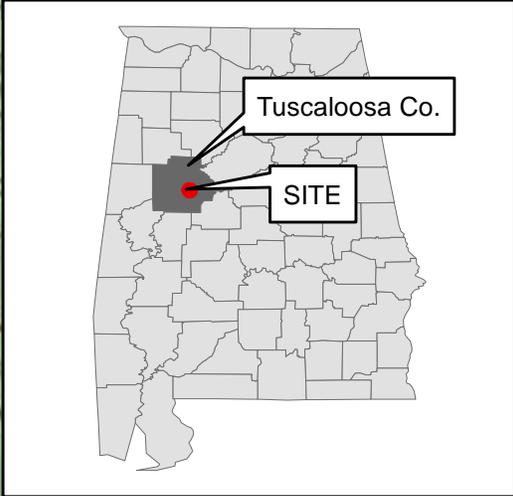
- Figure 1 – Site Location and Topographic Map
- Figure 2 – National Wetland Inventory (NWI) Map
- Natural Resources Conservation Service (NRCS) Hydric Rating by Map Unit

FIGURES

SITE LOCATION AND TOPOGRAPHIC MAP

NATIONAL WETLAND INVENTORY (NWI) MAP

ALABAMA COUNTIES



LEGEND

 Site



0 500 1,000
Feet

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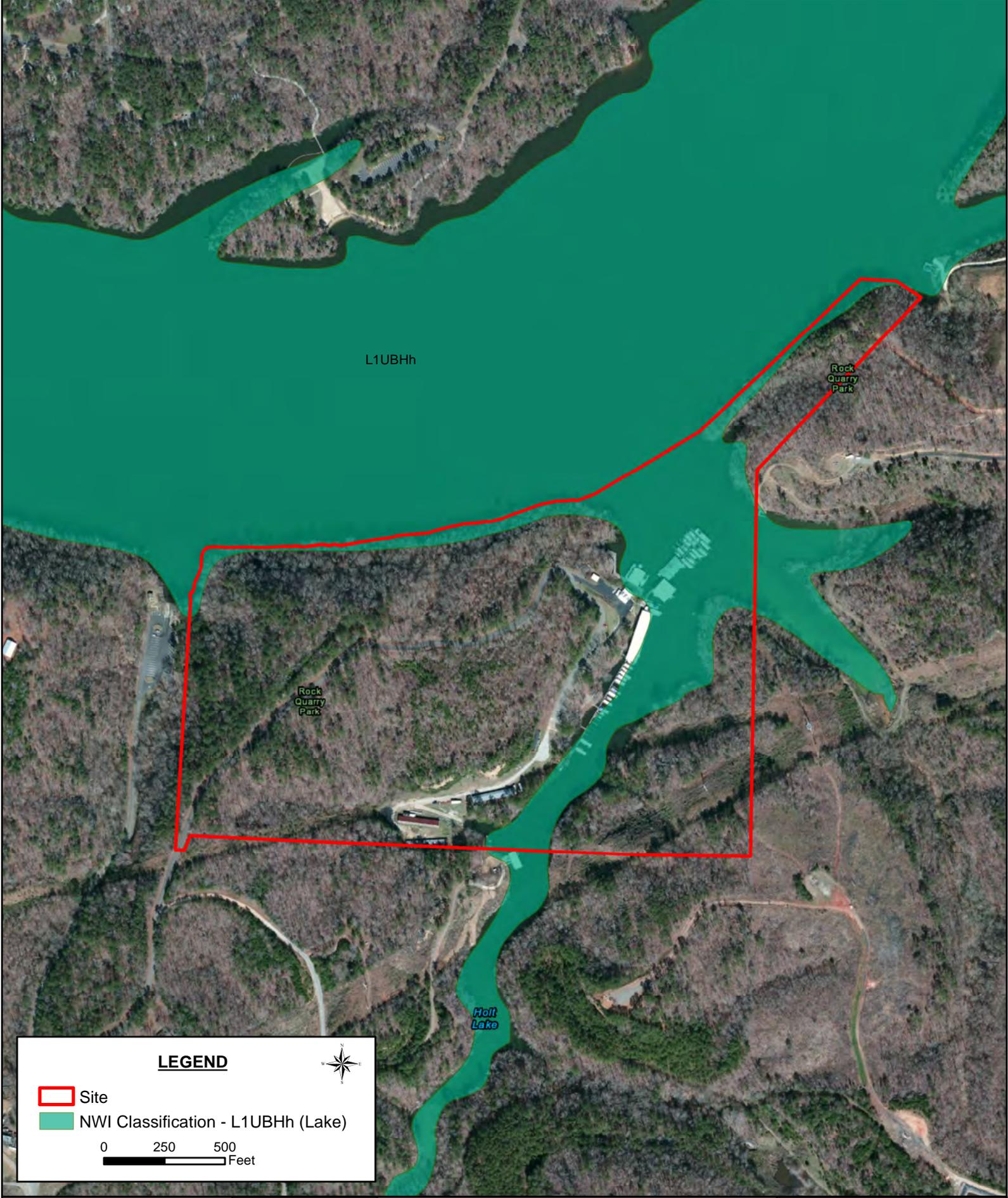
TTL PROJECT NO:
800213002

DRAWING DATE:
March 27, 2013

Figure 1: Site Location and Topographic Map

BASEMAP: USGS 7.5' Topographic Map of Lake Nicol and Cottondale, Tuscaloosa Co., Alabama (Published 1981, Photo revised 1984)

Eagle Cove Marina
Holt Lake
Tuscaloosa County, Alabama



LEGEND

 Site

 NWI Classification - L1UBHh (Lake)

0 250 500
 Feet



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March 27, 2013

**Figure 2: National Wetland
Inventory (NWI) Map**

BASEMAP: Bing Maps Hybrid (Feb 2011)

Eagle Cove Marina
 Holt Lake
 Tuscaloosa County, Alabama

ATTACHMENT

NATURAL RESOURCE CONSERVATION SERVICE (NRCS) HYDRIC RATING BY MAP UNIT REPORT

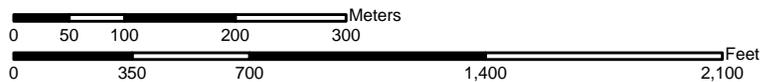
Hydric Rating by Map Unit—Tuscaloosa County, Alabama
(Eagle Cove Marina, Holt Lake)



87° 26' 14"



Map Scale: 1:7,040 if printed on A size (8.5" x 11") sheet.



Hydric Rating by Map Unit—Tuscaloosa County, Alabama
(Eagle Cove Marina, Holt Lake)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

 All Hydric
 Partially Hydric
 Not Hydric
 Unknown Hydric
 Not rated or not available

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

MAP INFORMATION

Map Scale: 1:7,040 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 16N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tuscaloosa County, Alabama
Survey Area Data: Version 6, Aug 1, 2011

Date(s) aerial images were photographed: 6/29/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Tuscaloosa County, Alabama (AL125)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
21	Montevallo-Nauvoo complex, 15 to 45 percent slopes	Partially Hydric	85.0	78.0%
25	Palmerdale very shaly loam, 6 to 45 percent slopes	Not Hydric	0.2	0.2%
33	Smithdale fine sandy loam, 6 to 15 percent slopes	Not Hydric	1.0	0.9%
W	Water	Not Hydric	22.9	21.0%
Totals for Area of Interest			109.0	100.0%

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "all hydric," "partially hydric," "not hydric," or "unknown hydric," depending on the rating of its respective components.

"All hydric" means that all components listed for a given map unit are rated as being hydric, while "not hydric" means that all components are rated as not hydric. "Partially hydric" means that at least one component of the map unit is rated as hydric, and at least one component is rated as not hydric. "Unknown hydric" indicates that at least one component is not rated so a definitive rating for the map unit cannot be made.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

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Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

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Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Absence/Presence

Tie-break Rule: Lower

APPENDIX D
PHASE I CULTURAL RESOURCES SURVEY

Phase I Cultural Resources Survey redacted from this version to protect sensitive sites.

The report is on file at USACE Mobile District.

APPENDIX E
PHASE II CULTURAL RESOURCES SURVEY

Phase II Cultural Resources Survey redacted from this version to protect sensitive sites.

The report is on file at USACE Mobile District.

APPENDIX F
ROCK SHELTER AVOIDANCE PLAN

EAGLE COVE MARINA, INC.

**AVOIDANCE PLAN FOR ROCK
SHELTER COMPLEXES RS1 & RS2**

U.S. ARMY CORPS OF ENGINEERS
LEASE NO. DACW01-1-95-0076

HOLT LAKE
TUSCALOOSA COUNTY, ALABAMA

OCTOBER 2014
(Revised May 2015)

PREPARED BY



EAGLE COVE MARINA

AVOIDANCE PLAN FOR ROCK SHELTER COMPLEXES RS1 & RS2

U.S. ARMY CORPS OF ENGINEERS LEASE NO. DACW01-1-95-0076
HOLT LAKE, TUSCALOOSA COUNTY, ALABAMA

BACKGROUND INFORMATION

In October and November, 2013 TerraXplorations, Inc. (TerraX) conducted Phase II archaeological testing of two rock shelter complexes located on approximately 60 acres of Federally owned land currently under U.S. Army Corps of Engineers Lease No. DACW01-1-95-0076 to Eagle Cove Marina, Inc. owned by Mr. Dennis Sellers (Lessee). The purpose of the testing was to determine if the complexes retained sufficient historical significance to be eligible for listing on the National Register of Historic Places (NRHP).

Rock falls blocked full access to the complexes and therefore limited the investigation, but, based on their findings, TerraX recommended that the complexes be considered potentially eligible for the NRHP. To protect the sites TerraX recommended that the development plan for the marina be modified to incorporate a buffer zone around each complex. The USACE Mobile District determined, in accordance with Section 106 of the National Historic Preservation Act, that the complexes are potentially eligible.

The State of Alabama Historic Preservation Office (SHPO) and the Indian Tribes have agreed to this plan of action. Therefore, this Avoidance Plan sets forth the protective measures to be implemented by the Lessee in both initial construction activities and the long term operation of the marina.

Historical Avoidance and Natural Preservation

The two existing rock shelters RS1 and RS2 are located on the side of an existing steep rocky hill side that changes approximately 50 feet in elevation. These near vertical slopes and rock shelter areas have been naturally protected from development and are very difficult to access by humans due to the extreme topography. The existing marina access road was previously a haul road for a rock quarry and later developed by the USACE as the main access road for the Rock Quarry Recreational Area over 40 years ago which was later leased to create the Marina. This main road is shown on the attached drawing Exhibit A and is located at the toe of the existing slope that contain the two rock shelters. Over the years and since the development of the Marina, the road has remained unchanged and the slope unaltered.

Redevelopment and Long Term Avoidance

The proposed rebuilding development of the Marina and newly revised Master Plan for the Marina lease property will continue to utilize the existing access road and leave the up-gradient slope in a natural state. The new Master plan does provide for a future development of a restaurant with an associated parking area and a recreational vehicle camping area northwest of the rock shelters and natural rock slope. The avoidance of the natural slope and rock shelters has been achieved as detailed below.

Attached is a revised drawing Exhibit A of the Master Plan that shows the location of the two rock shelter complexes RS1 and RS2. A proposed protected buffer zone has been shown surrounding each of the two rock shelters. These buffers have been identified on the master plan to ensure that a minimum 25 foot perimeter (50 foot total buffer) of undeveloped and untouched area will be maintained in every direction around the shelter. This buffer essentially will ensure

that the natural slope from toe to top will remain natural and no disturbance is proposed for this area.

The proposed restaurant parking area has been modified by moving it northwest to provide for the buffer plus an additional 5 feet. The recreational vehicle camping area access road has also been located northwest of the buffer area on top of the slope. No disturbance or construction work is proposed near the toe of the slope areas and the existing access road will continue to be utilized as it has over the last 40 plus years.

Drainage from the newly proposed camping and restaurant areas will be routed away from the proposed buffer areas to ensure that long-term protection of the rock shelters is achieved and no erosion occurs from channelized runoff. The construction of these proposed areas will occur in accordance with the USACE lease requirements and phased construction plans will be submitted prior to beginning construction that will provide for the review of the proposed stormwater runoff management.

As previously noted and evident over the years, the rock shelters are not easily accessible by humans in their current environment. We believe the best way to protect them from human use is to prevent drawing attention to them and allowing the slope to grow natural vegetation to hide them. Installing a fence along the near vertical slope in areas might prove impossible and only invite increased interest to access the rock shelters. With daily operations and marina personnel present we believe the areas will be best protected by generally observing the protected buffer area and preventing any attempted access by curious individuals.

Exhibit A redacted from this version to protect sensitive sites. The document is on file at
USACE Mobile District.

APPENDIX G
SPILL PREVENTION AND COUNTERMEASURES PLAN

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

**Eagle Cove Marina
Fueling Facility
Holt Lake
Tuscaloosa County, Alabama**

Prepared by:



Longleaf Engineering, LLC

Job Number 12-03-026

February 2013

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Introduction

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to describe measures implemented by Eagle Cove Marina (ECM) to prevent oil discharges from occurring, and to prepare Eagle Cove Marina to respond in a safe, effective, and timely manner to mitigate the impacts of a discharge.

This Plan has been prepared to meet the requirements of Title 40, *Code of Federal Regulations*, Part 112 (40 CFR 112).

In addition to fulfilling requirements of 40 CFR 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

Eagle Cove Marina personnel have determined that this facility does not pose a risk of substantial harm under 40 CFR 112, as recorded in the "Substantial Harm Determination" included in Appendix A of this Plan.

This Plan provides guidance on key actions that Eagle Cove Marina personnel must perform to comply with the SPCC rule:

- Complete and document monthly inspections as outlined in the Inspection, Tests, and Records section of this Plan (Section 3.7).
- Perform preventive maintenance of equipment, secondary containment systems, and discharge prevention systems described in this Plan as needed to keep them in proper operating conditions.
- Conduct and document annual employee training as outlined in the Personnel, Training, and Spill Prevention Procedures section of this Plan (Section 3.8).
- If either of the following occurs, submit the SPCC Plan to the EPA Region 4 Regional Administrator (RA), along with other information as detailed in Section 5.4 of this Plan:
 - The facility discharges more than 1,000 gallons of oil into or upon the navigable waters of the U.S. or adjoining shorelines in a single spill event; or
 - The facility discharges oil in a quantity greater than 42 gallons in each of two spill events within any 12-month period.

1.0 Plan Administration

1.1 Management Approval and Designated Person (40 CFR 112.7)

Eagle Cove Marina Management Approval for the Fueling Facility is located in Appendix B.

1.2 Professional Engineer Certification (40 CFR 112.3(d))

Professional Engineer Certification for this SPCC Plan is located in Appendix B.

1.3 Location of SPCC Plan (40 CFR 112.3(e))

In accordance with 40 CFR 112.3(e), a complete copy of this SPCC Plan is maintained in the Eagle Cove Marina office located on site.

1.4 Plan Review (40 CFR 112.3 and 112.5)

1.4.1 Changes in Facility Configuration

In accordance with 40 CFR 112.5(a), Eagle Cove Marina periodically reviews and evaluates this SPCC Plan for any change in the facility design, construction, operation, or maintenance that materially affects the facility's potential for an oil discharge, including, but not limited to:

- commissioning of containers;
- reconstruction, replacement, or installation of piping systems;
- construction or demolition that might alter secondary containment structures; or
- changes of product or service, revisions to standard operation, modification of testing/inspection procedures, and use of new or modified industry standards or maintenance procedures.

Amendments to the Plan made to address changes of this nature are referred to as technical amendments, and must be certified by a PE. Non-technical amendments can be done (and must be documented in this section) by the facility owner and/or operator. Non-technical amendments include the following:

- change in the name or contact information (i.e., telephone numbers) of individuals responsible for the implementation of this Plan; or
- change in the name or contact information of spill response or cleanup contractors.

Eagle Cove Marina must make the needed revisions to the SPCC Plan as soon as possible, but no later than six months after the change occurs. The Plan must be implemented as soon as possible following any technical amendment, but *no later than six months* from the date of the amendment. The Facility Manager is responsible for initiating and coordinating revisions to the SPCC Plan.

1.4.2 Scheduled Plan Reviews

In accordance with 40 CFR 112.5(b), Eagle Cove Marina reviews this SPCC Plan at least once every five years. Revisions to the Plan, if needed, are made within six months of the five-year review. A registered Professional Engineer certifies any technical amendment to the Plan, as described above, in accordance with 40 CFR 112.3(d). The next plan review is therefore scheduled to take place 5 years from the implantation of this plan (March 2018).

1.5 Facilities, Procedures, Methods, or Equipment Not Yet Fully Operational (40 CFR 112.7)

Secondary containment for the proposed two above ground fuel storage tanks (ASTs) will be completed by August 1, 2013. Security fencing and lighting will also be completed by this date.

1.6 Cross-Reference with SPCC Provisions (40 CFR 112.7)

This SPCC Plan does not follow the exact order presented in 40 CFR 112. Section headings identify, where appropriate, the relevant section(s) of applicable parts of 40 CFR 112. Additionally, a SPCC Cross-Reference Table is provided in Appendix C.

2.0 General Facility Information

Name:	Eagle Cove Marina Fueling Facility
Location:	Tuscaloosa County, Alabama
Type:	Marina with Fuel Storage
Owner/Operator:	Eagle Cove Marina 11912 Recreation Area Road Peterson, AL 35453
Primary contact:	Dennis Sellers Owner Cell (24 hours): (205) 507-7999

2.1 Facility Description (40 CFR 112.7(a)(3))

2.1.1 Location and Activities

Eagle Cove Marina is performing site preparation and construction work for the rebuilding of the marina facilities in Peterson, Alabama. This facility will replace the previous marina that was destroyed in the April 2011 tornado. The new marina will effectively use the same layout and infrastructure as the previous facility. Boat slips, docking structures, dry storage buildings, a restaurant, and associated parking areas will be developed as part of this plan.

An existing 2,000 gallon fuel storage tank will be replaced with two 3,000 gallon above ground fuel tanks (ASTs). Each of the tanks will be located within concrete containment areas. Piping from these tanks will be installed underground to the fueling pumps located in the designated docking areas.

The Topographic Location Maps and Facility Diagrams included in Appendix D of this Plan show the locations and layouts of the two tanks.

2.1.2 Oil Storage

Oil storage at the facility consists of two aboveground storage tanks and associated piping and fuel pumps. The capacities of oil containers present at the site are listed below and are also indicated on the facility diagram in Figure 2. All containers with a capacity of 55 gallons or more are included.

Table 2-1: Oil Containers

ID	Storage capacity	Content	Description
Fixed Storage			
1	3,000 gallons	Diesel Fuel	Aboveground horizontal tank
2	3,000 gallons	Unleaded Fuel	Aboveground horizontal tank

Total Oil Storage: 6,000 gallons

2.2 Evaluation of Discharge Potential

2.2.1 Distance to Navigable Waters and Adjoining Shorelines and Flow Paths

The diesel tank fueling facility and storage areas are located on relatively level terrain. Drainage generally flows to the northeast towards Holt Lake approximately 100 feet away. The ground surface area consists of mainly short grasses and paved areas. Drainage across this site will be relatively quick due to the sloping terrain towards the Lake. Spill trajectories are indicated on the facility diagram.

2.2.2 Discharge History

The Fueling Facility is a modification of a previous site. There have been no discharges associated with Eagle Cove Marina’s activities at this site.

3.0 Discharge Prevention - General SPCC Provisions

The following measures are implemented to prevent oil discharges during the handling, use, or transfer of oil products at the facility. Oil-handling employees have received training in the proper implementation of these measures.

3.1 Compliance with Applicable Requirements (40 CFR 112.7(a)(2))

This plan has been developed to comply with all applicable parts of 40 CFR 112.

3.2 Facility Layout Diagram (40 CFR 112.7(a)(3))

Figure 1 in Appendix D shows the general location of the facility on a topographic location map. Figure 2 in Appendix D presents a layout of the facility and the location of the ASTs. The diagram also shows the location of pertinent storm water drainage structures and the direction of surface water runoff. As required under 40 CFR 112.7(a)(3), the facility diagram indicates the location and content of ASTs, USTs, and transfer stations and permanent connecting piping.

3.3 Spill Reporting (40 CFR 112.7(a)(4))

The Discharge Documentation Form included in Appendix E will be completed upon immediate detection of a discharge and prior to reporting a spill to the proper notification contacts.

3.4 Potential Discharge Volumes and Direction of Flow (40 CFR 112.7(b))

Table 3-1 presents expected volume, discharge rate, general direction of flow in the event of equipment failure, and means of secondary containment for different parts of the facility where oil is stored, used, or handled.

Table 3-1: Potential Discharge Volumes and Direction of Flow

Potential Event	Maximum volume released (gallons)	Maximum discharge rate	Direction of Flow	Secondary Containment
Oil Containment Area				
Catastrophic failure of aboveground tanks (collapse or puncture below product level)	3,000	Gradual to instantaneous	Northeast towards Holt Lake	Concrete dike
Diesel Tank overflow	1 to 120	60 gal/min	Northeast towards Holt Lake	Concrete dike
Leaking hose/tank	600	1 gal/min	Northeast towards Holt Lake	Land-based spill response capability (temporary berm/spill kit)
Fuel Dispensing Activities				
Diesel tanks and diesel dispenser hose/connections leak	1 to 10	30 gal/minute	Northeast towards Holt Lake	Land-based spill response capability (proper fueling procedures/spill kit)

3.5 Containment and Diversionary Structures (40 CFR 112.7(c))

Methods of secondary containment at this facility include concrete dikes and land-based spill response (e.g., drain covers, sorbents, no spill devices, etc.) to prevent oil from reaching navigable waters and adjoining shorelines:

- For bulk storage containers (refer to Section 4.2.2 of this Plan):
 - **Fuel Tank.** The two 3,000 gallon fuel (diesel and unleaded) tanks are located within concrete dikes.
- At the dike area and fueling locations (refer to Section 3.11 of this Plan):
 - **Drip pans.** Where practical, drip pans will be utilized to contain small leaks from the piping/hose connections located outside of the containment dike.
 - **Spill response kits.** Small spills in the fueling area will be contained with absorbent booms and materials. Spill cleanup kits that include absorbent material, booms, and other portable barriers will be located near the fuel pumps. The spill kits are located within close proximity of the oil product storage and handling areas for rapid deployment should a spill or any other accidental discharge, such as a spill from tank vehicles entering or leaving the facility, occur at the fueling area.

3.6 Practicability of Secondary Containment (40 CFR 112.7(d))

Eagle Cove Marina management has determined that secondary containment is practicable at this facility.

3.7 Inspections, Tests, and Records (40 CFR 112.7(e))

As required by the SPCC rule, Eagle Cove Marina performs the inspections, tests, and evaluations listed in the following table. Table 3-2 summarizes the various types of inspections and tests performed at the facility. The inspections and tests are described later in this section, and in the respective sections that describe different parts of the facility (e.g., Section 4.2.6 for bulk storage containers).

Table 3-2: Inspection and Testing Program

Facility Component	Action	Frequency/Circumstances
Aboveground containers	Inspect outside of container for signs of deterioration and discharges.	Daily
	Test container integrity. Combine visual inspection with another testing technique (non-destructive shell testing).	Whenever material repairs are made.
Diked areas	Inspect for signs of deterioration, discharges, or accumulation of oil inside diked areas.	Daily
	Visually inspect accumulated water for presence of oil.	Prior to draining after rainfall events
All aboveground valves, piping, and appurtenances	Assess general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces.	Daily

3.7.1 Daily Inspection

An Eagle Cove Marina employee performs an informal walk-through of the oil containment area each day. The daily inspections cover the following key elements:

- Inspecting the containment dike for signs of leaks and/or cracking.
- Observing the exterior of aboveground storage tanks, pipes, and other equipment for signs of leaking/spillage.

All problems regarding tanks, piping, or containment must immediately be reported to the Owner. Visible oil leaks from tank walls, piping, or other components must be repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Pooled oil is removed immediately upon discovery.

3.7.2 Weekly Inspection

An Eagle Cove Marina employee performs a complete walk-through of the oil containment area each week. The checklist provided in Appendix M is used for daily inspections by Eagle Cove Marina personnel. The daily inspections cover the following key elements:

- Inspecting the containment dike for signs of leaks and/or cracking.
- Observing the exterior of aboveground storage tanks, pipes, and other equipment for signs of leaking, deterioration, leaks, corrosion, and thinning.
- Observing the tank fill and discharge pipes for signs of poor connection that could cause a discharge, and tank vent for obstructions and proper operation.
- Checking the inventory of discharge response equipment and restocking as needed.

All problems regarding tanks, piping, containment, or response equipment must immediately be reported to the Owner. Visible oil leaks from tank walls, piping, or other components must be repaired as soon as possible to prevent a larger spill or a discharge to navigable waters or adjoining shorelines. Pooled oil is removed immediately upon discovery.

Written weekly inspection records are signed by the Owner and maintained with this SPCC Plan.

3.7.3 Periodic Integrity Testing

In addition to the above daily inspections by Eagle Cove Marina personnel, tanks are periodically evaluated by an outside certified tank inspector following the American Petroleum Institute (API) standards set forth in API Standard, as described in Section 4.2.6 of this Plan.

3.8 Personnel, Training, and Discharge Prevention Procedures (40 CFR 112.7(f))

The Owner is the facility designee and is responsible for oil discharge prevention, control, and response preparedness activities at this facility. Eagle Cove Marina management has instructed oil-handling facility personnel in the operation and maintenance of oil pollution prevention equipment, discharge procedure protocols, applicable rules and regulations, general facility operations, and the content of this SPCC Plan. Any new facility personnel with oil-handling responsibilities are provided with this same training prior to being involved in any oil operation.

Records of the briefings and discharge prevention training are kept on the form shown in Appendix F.

3.9 Security (40 CFR 112.7(g))

The facility entrance is fenced and gated. The pumps for the diesel tanks are locked when not in use. Eagle Cove Marina personnel securely cap the loading/unloading connections of diesel tanks when not in service.

3.10 Tank Truck Loading/Unloading Rack Requirements (40 CFR 112.7(h))

The Fueling Facility does not utilize a tank truck loading/unloading rack as defined by 40 CFR 112 and subsequent EPA clarifications to the rule. Therefore, this section does not apply.

3.11 Loading/Unloading Procedures (40 CFR 112.7(h)(2) and (3))

Storage tank filling operations are performed by facility personnel trained in proper discharge prevention procedures. The truck driver or facility personnel remain with the vehicle at all times while fuel is being transferred. Transfer operations are performed according to the minimum procedures outlined as follows:

- Delivery personnel are to maintain visual contact with facility personnel responsible for tank filling operations to ensure that tanks are not overfilled.
- Care should be taken while dispensing fuel to ensure that product releases do not occur.

Fueling of vessels or other vehicles/equipment should be performed in accordance with the following minimum procedures:

- Install easy-to-read signs on the fuel dock that explain proper fueling procedures and list the spill reporting phone numbers. Be sure that an attendant is on hand to do the fueling.
- Prior to turning on the dispensing pumps, the dispensing nozzle should be placed securely in the container being filled.
- Have a dock box or locker on the fuel dock filled with spill absorption pads and containment booms. Provide a sign that briefly states spill reporting requirements and a phone number for reporting a spill.
- Use oil absorption pads, or fuel collars directly at the gas line to catch splash back and small drips during fueling. Hand each fuel customer an oil-only absorbent pad when you hand them the fuel nozzle. Ask them to place it around the deck fill to catch backsplash.
- Keep a No Spill vent collection device on hand for each customer to catch dribbles from the vent.
- Disable or remove fuel nozzle hands-free clips (and ensure that once removed, individuals do not improvise a hands-free method). This requires the person fueling to remain with the nozzle and should help prevent overfilling.
- When handling the nozzle always keep the tip up and hang it vertically when not in use to prevent fuel in the hose from draining out.
- Provide for proper disposal of oil absorption materials and rags.
- Regularly inspect the fueling system, and maintain, or replace fuel hoses, pumps, and tanks when necessary.
- Upon completion of fueling operations, the dispensing pump should be turned off and the line completely drained, if possible, prior to removing the dispensing nozzle from the fuel

tank or container. The nozzle is then removed from the tank or container and replaced on the dispensing pump so that any fuel that remains in the hose will not leak.

- Spills that occur during fueling operations should be cleaned up immediately. Catch basins should be used under the fill lines to contain petroleum products released during fuel dispensing operations.
- Prior to departing the fueling area, persons involved in the fueling operations should verify that the nozzle has been returned to the dispensing pump and the pump has been shut off.

3.12 Brittle Fracture Evaluation (40 CFR 112.7(i))

All tanks utilized at the Fueling Facility are shop-built tanks; therefore this section does not apply.

3.13 Conformance with State and Local Applicable Requirements (40 CFR 112.7(j))

All bulk storage tanks at this facility are registered with the applicable state and local authorities.

4.0 Discharge Prevention – SPCC Provisions for Onshore Facilities (Excluding Production Facilities)

4.1 Facility Drainage (40 CFR 112.8(b))

The contents of the secondary containment dikes are inspected by facility personnel prior to draining to ensure that only oil-free water is drained from the containment structures. A drainage valve is provided in each of the containment dikes. This valve must remain closed at all times until visual inspection of accumulated water can ascertain discharge is free of oil contamination. If an oil sheen or contamination is noted in any accumulated water, this water should be pumped to an appropriate tank for proper disposal and/or treatment. Drainage events are recorded on the Dike Drainage Logs included in Appendix G of this SPCC Plan.

Any potential discharge from the ASTs will be restrained by secondary containment structures. Discharges occurring during loading/unloading operations or occurring outside of the containment area will be restrained manually by facility personnel.

4.2 Bulk Storage Containers (40 CFR 112.8(c))

Table 4-1 summarizes the construction, volume, and content of bulk storage containers at the Fueling Facility.

Table 4-1: List of Oil Containers

Tank	Location	Type, Construction	Capacity (gallons)	Content	Discharge Prevention & Containment
1	Containment Dike	AST horizontal, Steel	3,000	Diesel	Single-walled Tank/ Concrete Dike
2	Containment Dike	AST horizontal, Steel	3,000	Unleaded	Single-walled Tank/ Concrete Dike

4.2.1 Construction (40 CFR 112.8 (c)(1))

All oil tanks used at this facility are constructed of steel, in accordance with industry specifications. The design and construction of all bulk storage containers are compatible with the characteristics of the oil product they contain, as well as with temperature and pressure conditions.

4.2.2 Secondary Containment (40 CFR 112.8(c)(2))

A concrete containment dike is provided around each of the 3,000 gallon fuel tanks. The dike has 8" concrete walls and a 4" concrete bottom. A discharge pipe and valve is available for drainage of accumulated water that is not contaminated. The dike is visually inspected during the daily facility inspection to detect any cracking, signs of heaving or settlement, or other structural damage that could affect the ability of the dike to contain oil. Any damage will be promptly corrected to prevent migration of oil into the ground and/or out of the dike.

4.2.3 Drainage of Diked Areas (40 CFR 112.8(c)(3))

The diked areas are drained under the direct supervision of facility personnel. Drainage of stormwater from the dikes will be conducted through the use of the discharge pipe and valve. The accumulated water is observed for signs of oil prior to draining. If present, all oil/visible sheen will be removed through the use of oil-absorbent padding and/or booms, prior to discharge. Contaminated pads/booms will be disposed in accordance with procedures outlined in Section 5.3 of this report. Larger oil contamination may be pumped to storage containers for further off-site treatment and/or disposal. Dike drainage events are recorded on the form included in Appendix G.

4.2.4 Corrosion Protection (40 CFR 112.8(c)(4))

There are no underground storage tanks located on this property. There is some underground piping conveying fuel from the storage tanks (ASTs) to the fuel pump dispensers. This piping is coated and cathodically protected to prevent corrosion and leakage into the ground. Pressure testing is performed on the piping every two years following the requirements of 40 CFR part 280. The cathodic protection system is tested annually to verify its efficacy.

Cathodic protection is provided in accordance with 40 CFR part 280 and meets the requirements of 40 CFR part 112.

Records of pressure tests are kept for at least three years.

4.2.5 Partially Buried and Bunkered Storage Tanks (40 CFR 112.8(c)(5))

This section is not applicable since there are no partially buried or bunkered storage tanks at this facility.

4.2.6 Inspections and Tests (40 CFR 112.8(c)(6))

Daily visual inspections of ASTs and the containment dike are performed by facility personnel according to the procedures described in this SPCC Plan. Leaks from tank seams, valves, hoses, gaskets, rivets, and bolts will be promptly corrected.

In addition to these daily visual inspections, additional inspections and tests will be conducted on the facility's petroleum ASTs. The scope and schedule of inspections, certified inspections, and tests performed on the ASTs will be conducted in accordance with Steel Tank Institute (STI) Standard for the Inspection of Aboveground Storage Tanks, SP001-06.

Tank inspections will be conducted by Eagle Cove Marina personnel for all ASTs at the facility on a monthly basis. The Monthly AST Inspection Checklist, located in Appendix I, will be utilized to document the monthly inspections for the fixed ASTs.

In addition to the monthly AST inspections a more thorough annual inspection of the fixed ASTs will be conducted by Eagle Cove Marina personnel. The Annual AST Inspection Checklist, located in Appendix K, will be utilized to document the annual inspections. The first annual inspection will be conducted by August 1, 2014.

In conjunction with periodic AST inspections, formal external inspections will be required for both tanks. These inspections will be conducted by a STI/API certified tank inspector at 20-year intervals. Timelines for the required formal external inspections will be determined from the construction date, last repair date, or change of service date listed on the STI SP001 AST Record (see Appendix L).

Only tanks larger than 5,000 gallons or tanks in direct contact with the ground are subject to certified inspection; therefore, scheduled formal external inspections are not required

for the tanks. In the event that the integrity of a tank is compromised additional testing and inspections will be conducted in accordance with STI standards. A STI SP001 AST Record will be provided for any tank undergoing repair or alteration.

4.2.7 Heating Coils (40 CFR 112.8(c)(7))

This section does not apply as there are no heating coils being utilized by tanks at the facility.

4.2.8 Overfill Prevention Systems (40 CFR 112.8(c)(8))

The diesel ASTs at the fueling facility are equipped with high level alarms. Additionally, a minimum of two Eagle Cove Marina employees will be present during the filling operations at all times. One employee will monitor the product level in the tank being filled. The second employee will remain in direct communication with the truck/filling operator. Both employees will remain in verbal and visual contact during the entire filling operation. Venting capacity is suitable for the fill and withdrawal rates.

4.2.9 Effluent Treatment Facilities (40 CFR 112.8(c)(9))

This section is not applicable since there are no effluent treatment facilities being utilized at this facility.

4.2.10 Visible Discharges (40 CFR 112.8(c)(10))

Visible discharges from any container or appurtenance – including seams, gaskets, piping, pumps, valves, rivets, and bolts – are to be quickly corrected upon discovery. Oil is to be promptly removed from the spill containment dike and disposed of according to the waste disposal method described in Part 5 of this Plan.

4.2.11 Mobile and Portable Containers (40 CFR 112.8(c)(11))

No mobile or portable devices will be used at this site therefore this section is not applicable.

4.3 Transfer Operations, Pumping, and In-Plant Processes (40 CFR 112.8(d))

Transfer operations at this facility include:

- The filling of vessels using the fuel dispenser.
- The filling of ASTs in the oil containment area.

5.0 Discharge Response

This section describes the response and cleanup procedures in the event of an oil discharge. The uncontrolled discharge of oil to groundwater, surface water, or soil is prohibited by state and possibly federal laws. Immediate action must be taken to control, contain, and recover discharged product.

In general, the following steps are taken:

- Eliminate potential spark sources;
- If possible and safe to do so, identify and shut down source of the discharge to stop the flow;

- Contain the discharge with sorbents, berms, fences, trenches, sandbags, or other material;
- Contact the Owner or his/her alternate;
- Contact regulatory authorities and the response organization (as necessary); and
- Collect and dispose of recovered products according to regulation.

For the purpose of establishing appropriate response procedures, this SPCC Plan classifies discharges as either “minor” or “major,” depending on the volume and characteristics of the material released. A list of Emergency Contacts is provided in Table 5-1. The list is also posted at prominent locations throughout the facility.

5.1 Response to a Minor Discharge

A “minor” discharge is defined as one that poses no significant harm (or threat) to human health and safety or to the environment. Minor discharges are generally those where:

- The quantity of product discharged is small (e.g., may involve less than 25 gallons of oil);
- Discharged material is easily stopped and controlled at the time of the discharge;
- Discharge is localized near the source;
- Discharged material is not likely to reach water;
- There is little risk to human health or safety; and
- There is little risk of fire or explosion.

Minor discharges can usually be cleaned up by Eagle Cove Marina personnel. The following guidelines apply:

- Immediately notify the Owner.
- Under the direction of the Owner, contain the discharge with discharge response materials and equipment. Place discharge debris in properly labeled waste containers.
- The Owner will record the spill on the Discharge Documentation Form in Appendix E.

5.2 Response to a Major Discharge

A “major” discharge is defined as one that cannot be safely controlled or cleaned up by facility personnel, such as when:

- The discharge is large enough to spread beyond the immediate discharge area;
- The discharged material enters water;
- The discharge requires special equipment or training to clean up;
- The discharged material poses a hazard to human health or safety; or
- There is a danger of fire or explosion.

In the event of a major discharge, the following guidelines apply:

- All workers must immediately evacuate a safe distance from the discharge site and notify the Owner.
- The Owner (or senior on-site person) must call the spill response and cleanup contractors listed in the Emergency Contacts list in Table 5-1.
- The Owner (or senior on-site person) must immediately contact the Alabama Department of Environmental Management (888-786-0661) and the National Response Center (888-424-8802).
- The Owner (or senior on-site person) must record the call on the Discharge Documentation Form in Appendix E and attach a copy to this SPCC Plan.

If the Owner is not available at the time of the discharge, then the next highest person in seniority assumes responsibility for coordinating response activities.

If spilled oil escapes secondary containment, and results in a sheen on the nearest stream, creek or river, then notification by telephone must be made to the U.S. National Response Center (NRC), and the ADEM. If the notification occurs after working hours, and the ADEM cannot be reached, then the Alabama Emergency Management Agency (AEMA) will be contacted. The Department of Public Safety must also be notified.

Table 5-1: Emergency Contacts

Agency	Toll-Free Number	Regular Number
U.S. National Response Center	(800) 424-8802	
Alabama Emergency Management Agency	(800) 843-0699	
Alabama Department of Public Safety		(205) 553-5531
United States EPA – Region IV	(800) 241-1754	
Alabama Department of Environmental Management	(800) 843-0699	(205) 942-6168
SWS First Response – Emergency Spill Response	(800) 852-8878	
SWS First Response – Spill Response		(205) 833-3407

5.3 Waste Disposal

Wastes resulting from a minor discharge response and/or a dike drainage event will be containerized in impervious bags, drums, or buckets. The Owner will have the waste characterized for proper disposal and ensure that it is removed from the facility by a licensed waste hauler within one week of generation.

Wastes resulting from a major discharge response will be removed and disposed of by a cleanup contractor.

5.4 Discharge Notification

Any size discharge (i.e., one that creates a sheen, emulsion, or sludge) that affects or threatens to affect navigable waters or adjoining shorelines must be reported immediately to the National Response Center (1-800-424-8802). The Center is staffed 24 hours a day.

The Discharge Documentation Form, included in Appendix E, will facilitate reporting. The person reporting the discharge must provide the following information:

- Name of the person reporting the spill
- Company: Eagle Cove Marina – Fueling Facility
- Mailing Address: 11912 Recreation Area Road, Peterson, AL 35453
- Telephone Number: (205) 507-7999
- Exact description and location of the spill
- Date and time of the spill
- Description of the material(s) spilled
- Estimated quantity of material(s) spilled
- Source of spill (e.g., tank)
- Cause of spill (e.g., tank rupture, tank overflow)
- Nearest receiving stream: Holt Lake (Black Warrior River)
- Danger or threat posed by the release or discharge

- Number and types of injuries (if any)
- Media affected or threatened by the discharge (i.e., water, land, air)
- Weather conditions at the incident location
- Any other information that may help emergency personnel respond to the incident

Contact information for reporting a discharge to the appropriate authorities is listed in Table 5-1. In addition to the above reporting, 40 CFR 112.4 requires that information be submitted to the United States Environmental Protection Agency (EPA) Regional Administrator whenever the facility discharges (as defined in 40 CFR 112.1(b)) more than 1,000 gallons of oil in a single event, or discharges (as defined in 40 CFR 112.1(b)) more than 42 gallons of oil in each of two discharge incidents within a 12-month period. The following information must be submitted to the EPA Regional Administrator within 60 days:

- Name of the facility;
- Name of the owner/operator;
- Location of the facility;
- Maximum storage or handling capacity and normal daily throughput;
- Corrective action and countermeasures taken, including a description of equipment repairs and replacements;
- Description of facility, including maps, flow diagrams, and topographical maps;
- Cause of the discharge(s) to navigable waters and adjoining shorelines, including a failure analysis of the system and subsystem in which the failure occurred;
- Additional preventive measures taken or contemplated to minimize possibility of recurrence; and
- Other pertinent information requested by the Regional Administrator.

A standard report for submitting the information to the EPA Regional Administrator is included in Appendix H of this Plan.

5.5 Cleanup Contractors and Equipment Suppliers

Contact information for a specialized spill response and cleanup contractor is provided in Table 5-1. These contractors have the necessary equipment to respond to a discharge of oil that affects Holt Lake, including floating booms and oil skimmers. Spill kits are located at the oil containment area and on the service truck. Spill kit inventory is verified on a daily basis.

Appendix A

Substantial Harm Determination

Facility Name: Eagle Cove Marina Fueling Facility
Eagle Cove Marina
Facility Location: Tuscaloosa County, Alabama

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
Yes No
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?
Yes No
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?
Yes No
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in 40 CFR part 112 Appendix C, Attachment C-III or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?
Yes No
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes No

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Dennis Sellers
Name (print or type)

Owner
Title

Signature

Date

Appendix B

Certifications

Management Approval

Eagle Cove Marina is committed to preventing discharges of oil to navigable waters and the environment, and to maintaining the highest standards for spill prevention control and countermeasures through the implementation and regular review and amendment to the Plan. This SPCC Plan has the full approval of Eagle Cove Marina management. Eagle Cove Marina has committed the necessary resources to implement the measures described in this Plan.

The Owner is the Designated Person Accountable for Oil Spill Prevention at the facility and has the authority to commit the necessary resources to implement this Plan.

Facility Name: Eagle Cove Marina Fueling Facility

Authorized Management Representative:

Dennis Sellers

Name (print or type)

Owner

Title

Signature

Date

Professional Engineer Certification

The undersigned Registered Professional Engineer is familiar with the requirements of Part 112 of Title 40 of the *Code of Federal Regulations* (40 CFR 112) and has visited and examined the facility, or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and the requirements of 40 CFR 112; and that procedures for required inspections and testing have been established; and that this Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR 112. This Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this Plan.

Facility Name: Eagle Cove Marina Fueling Facility

Professional Engineer: Riley T. Sims

License Number: 25779 State: Alabama

Date of Plan Certification: February 21, 2013

Signature:



Appendix C

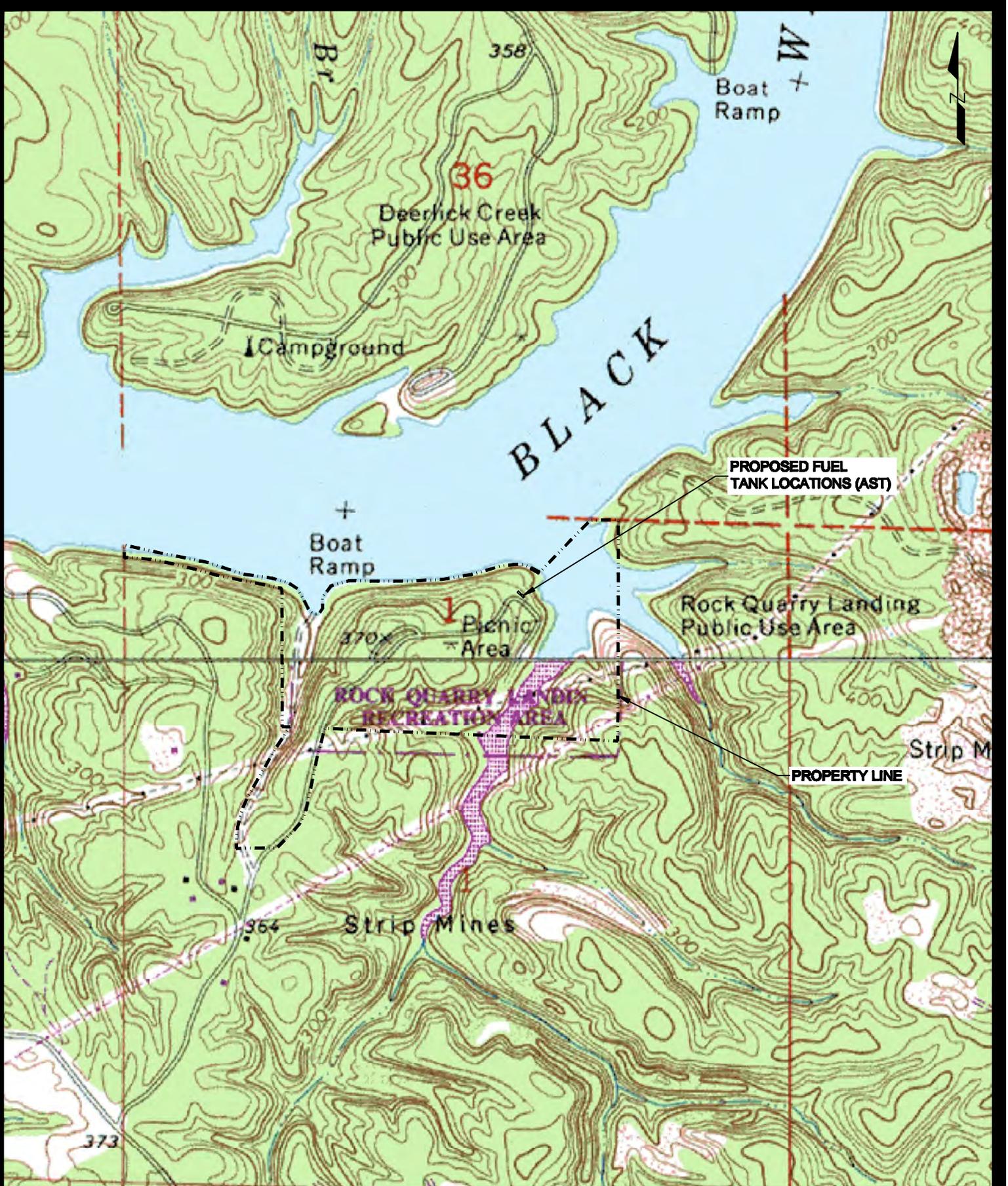
SPCC Cross-Reference Table

Provision	Plan Section
112.3(d)	Professional Engineer Certification
112.3(e)	Location of SPCC Plan
112.5	Plan Review
112.7	Management Approval
112.7	Cross-Reference with SPCC Rule
112.7(a)(3)	Part 2: General Facility Information Appendix A: Site Plan and Facility Diagram
112.7(a)(4)	5.4 Discharge Notification
112.7(a)(5)	Part 5: Discharge Response
112.7(b)	3.4 Potential Discharge Volumes and Direction of Flow
112.7(c)	3.5 Containment and Diversionary Structures
112.7(d)	3.6 Practicability of Secondary Containment
112.7(e)	3.7 Inspections, Tests, and Records
112.7(f)	3.8 Personnel, Training and Discharge Prevention Procedures
112.7(g)	3.9 Security
112.7(h)	3.10 Tank Truck Loading/Unloading
112.7(i)	3.11 Brittle Fracture Evaluation
112.7(j)	3.12 Conformance with Applicable State and Local Requirements
112.8(b)	4.1 Facility Drainage
112.8(c)(1)	4.2.1 Construction
112.8(c)(2)	4.2.2 Secondary Containment
112.8(c)(3)	4.2.3 Drainage of Diked Areas
112.8(c)(4)	4.2.4 Corrosion Protection
112.8(c)(5)	4.2.5 Partially Buried and Bunkered Storage Tanks
112.8(c)(6)	4.2.6 Inspection Appendix B - Facility Inspection Checklists
112.8(c)(7)	4.2.7 Heating Coils
112.8(c)(8)	4.2.8 Overfill Prevention System
112.8(c)(9)	4.2.9 Effluent Treatment Facilities
112.8(c)(10)	4.2.10 Visible Discharges
112.8(c)(11)	4.2.11 Mobile and Portable Containers
112.8(d)	4.3 Transfer Operations, Pumping and In-Plant Processes
112.20(e)	Certification of Substantial Harm Determination

* Only selected excerpts of relevant rule text are provided. For a complete list of SPCC requirements, refer to the full text of 40 CFR 112.

Appendix D

Figures



TOPOGRAPHIC MAP

12-03-026 EAGLE COVE
MARINA

PETERSON, ALABAMA



Longleaf Engineering, LLC
CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
Tuscaloosa, Alabama 35407
Phone (205) 345-5846
Fax (205) 345-5877

Date:

02/03/2013

Scale:

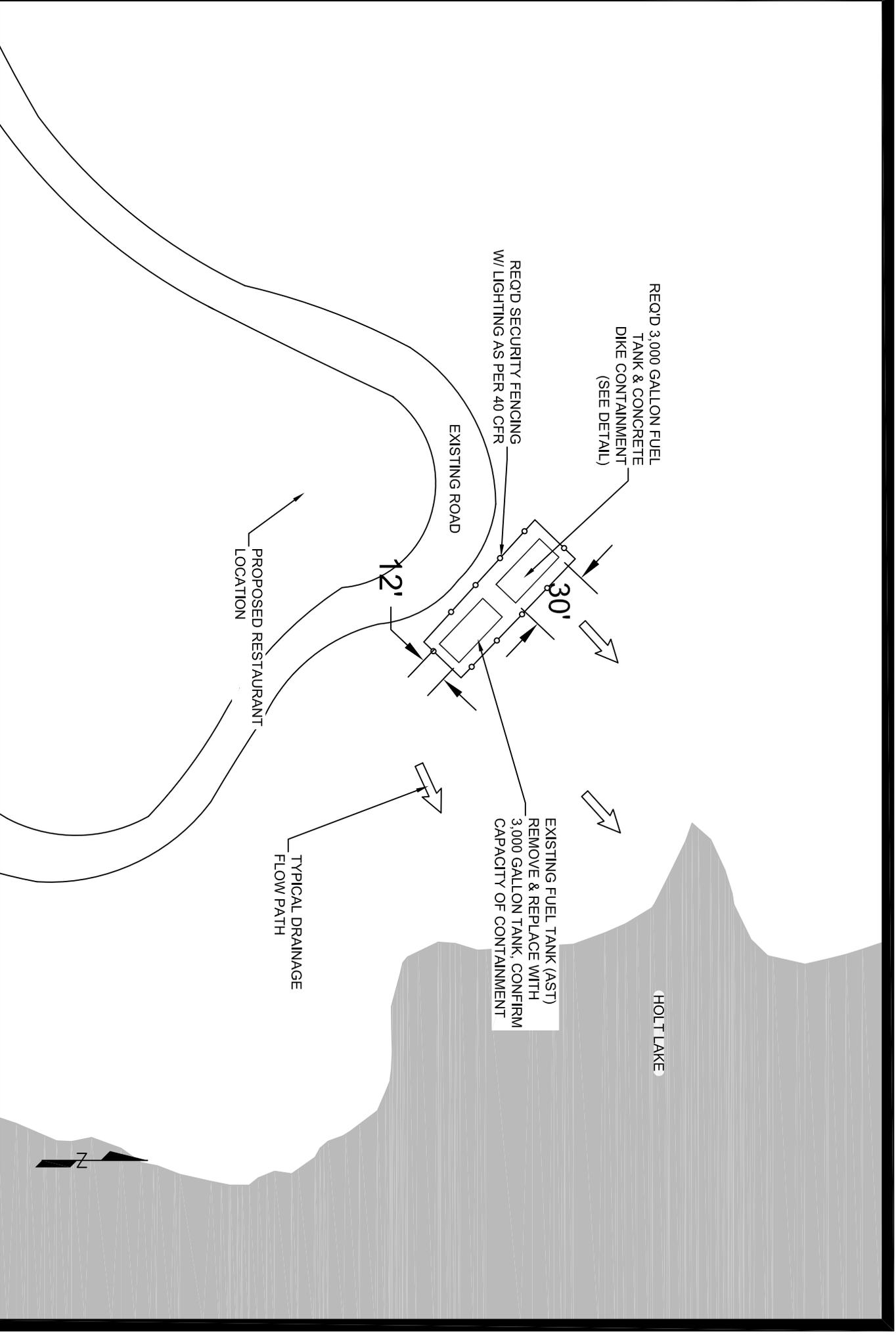
1" = 1000'

Drawn By:

RTS

Figure #:

1



SITE PLAN

12-03-026 EAGLE COVE MARINA
PETERSON, ALABAMA



Longleaf Engineering, LLC
CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
Tuscaloosa, Alabama 35407
Phone (205) 345-5646
Fax (205) 345-5677

Date:
02/03/2013

Scale:
1" = 60'

Drawn By:
RTS

Figure #:
2

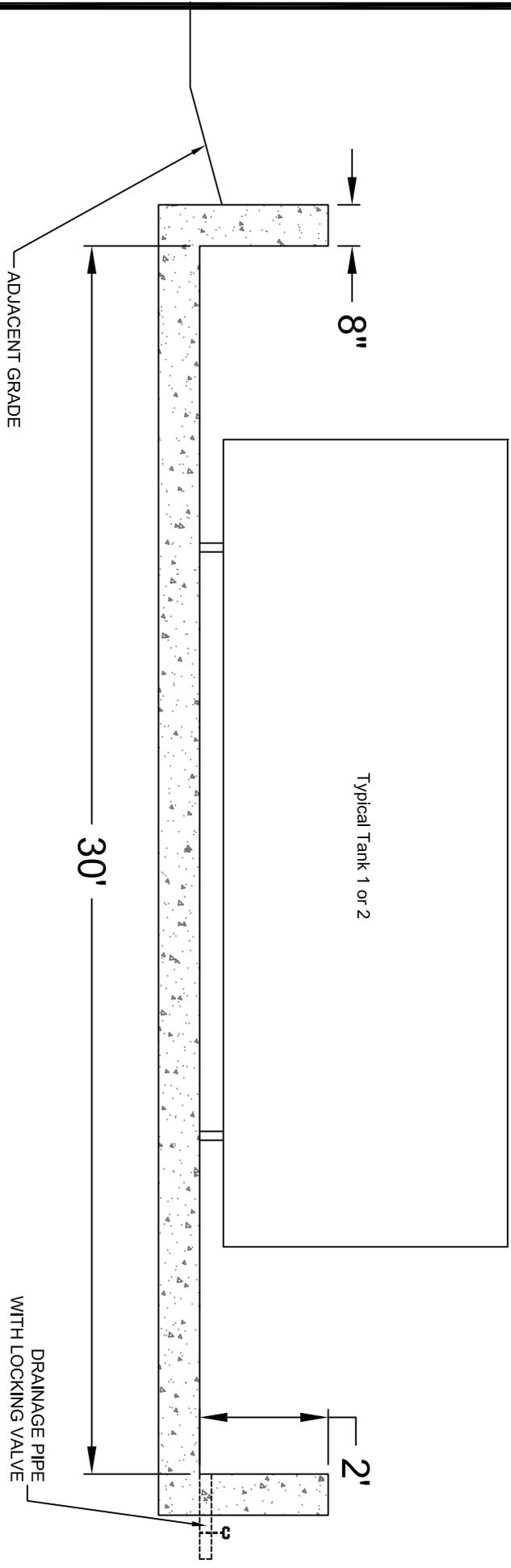
Tank Inventory

Tank 1 3,000 gallons Diesel
 Tank 2 3,000 gallons Fuel

Secondary Containment Calcs.

Existing Concrete Dike:
 30' x 12' x 2' (avg. depth) = 720 cu. feet.
 or 5,385 gallons
 25-yr, 24-hr Storm Event = 8.0 inches
 Largest container - 3,000 gallons - Tank 1 & 2
 Req'd Freeboard = 240 cu. feet or 1,796 gallons
 5,385 - 3,000 = 2,385 gallons > 1,796 gallons
 Therefore containment exceeds required
 secondary containment criteria.

FUELING TANKS



CONCRETE CONTAINMENT DIKE DETAIL
 (NOT TO SCALE)

DIKE DETAILS

12-03-026 EAGLE COVE MARINA
 PETERSON, ALABAMA



Longleaf Engineering, LLC
 CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
 Tuscaloosa, Alabama 35407
 Phone (205) 345-5646
 Fax (205) 345-5677

Date:
 02/03/2013

Drawn By:
 RTS

Scale:
 NONE

Figure #:
 3

APPENDIX E
Discharge Documentation Form

Discharge Documentation Form

Part A: Discharge Information		
General information when reporting a spill to outside authorities:		
Name:	Eagle Cove Marina Fueling Facility	
Location:	11912 Recreation Area Road, Peterson, Alabama	
Owner/Operator:	Eagle Cove Marina 11912 Recreation Area Road Peterson, AL 35453	
Primary Contact:	Dennis Sellers Cell (24 hrs): (205) 507-7999	
Type of oil:	Discharge Date and Time:	
Quantity released:	Discovery Date and Time:	
Quantity released to a waterbody:	Discharge Duration:	
Location/Source:		
Actions taken to stop, remove, and mitigate impacts of the discharge:		
Notification person:	Telephone contact: Business: 24-hr:	
Nature of discharges, environmental/health effects, and damages:		
Injuries, fatalities or evacuation required?		
Part B: Notification Checklist		
	Date and time	Name of person receiving call
Discharge in any amount		
Dennis Sellers, Owner (205) 507-7999		
Discharge in any amount and affecting (or threatening to affect) a waterbody		
Alabama Department of Environmental Management (800) 424-9300		
U.S. National Response Center (800) 424-8802		
Alabama Emergency Management Agency (800) 843-0699		
U.S. Environmental Protection Agency (404) 562-8700		
SWS First Response (Emergency Hotline) (800) 852-8878		
Dennis Sellers, Owner (205) 507-7999		

APPENDIX F
Record of Annual Discharge Prevention
Briefings and Training

APPENDIX G
Record of Containment Dike Drainage

APPENDIX H
Agency Notification Standard Report

Agency Notification Standard Report

Information contained in this report, and any supporting documentation, must be submitted to the EPA Region 4 Regional Administrator within 60 days of the qualifying discharge incident.

Facility:	<i>Eagle Cove Marina Fueling Facility</i>
Owner/operator:	<i>Eagle Cove Marina 11912 Recreation Area Road Peterson, AL 35453</i>
Name of person filing report:	
Location:	<i>11912 Recreation Area Road Peterson, Alabama</i>
Maximum storage capacity:	<i>6,000 gallons</i>
Nature of qualifying incident(s):	
<ul style="list-style-type: none"> ○ Discharge to navigable waters or adjoining shorelines exceeding 1,000 gallons ○ Second discharge exceeding 42 gallons within a 12-month period. 	
Description of facility (attach maps, flow diagrams, and topographical maps):	
<p><i>Eagle Cove Marina is performing site preparation and construction work for the rebuilding of the marina facilities in Peterson, Alabama. This facility will replace the previous marina that was destroyed in the April 2011 tornado. The new marina will effectively use the same layout and infrastructure as the previous facility. Boat slips, docking structures, dry storage buildings, a restaurant, and associated parking areas will be developed as part of this plan.</i></p> <p><i>An existing 2,000 gallon fuel storage tank will be replaced with two 3,000 gallon above ground fuel tanks (ASTs). Each of the tanks will be located within concrete containment areas. Piping from these tanks will be installed underground to the fueling pumps located in the designated docking areas.</i></p> <p><i>All drainage is east and north towards Holt Lake. The fueling facility is approximately 100 feet away from the Lake.</i></p> <p><i>Petroleum products are stored in the oil containment area.</i></p>	
(continued)	

Agency Notification Standard Report (cont'd)

Cause of the discharge(s), including a failure analysis of the system and subsystems in which the failure occurred:

Corrective actions and countermeasures taken, including a description of equipment repairs and replacements:

Additional preventive measures taken or contemplated to minimize possibility of recurrence:

Other pertinent information:

APPENDIX I
Facility Inspections

Weekly Facility Inspection Checklists

Weekly Facility Inspection Checklist

This inspection record must be completed each week. If any response requires further elaboration, provide comments in Description & Comments space provided.

	Y*	N	Description, Tank, & Comments
Diesel Tanks/Used Oil Tank/Oil Storage Trailer			
<i>Tank surfaces show signs of leakage</i>			
<i>Tanks are damaged, rusted or deteriorated</i>			
<i>Fuel/water in interstitial space of double-walled tanks</i>			
<i>Vents are obstructed</i>			
<i>Valve seals or gaskets are leaking</i>			
<i>Joints or other appurtenances are leaking</i>			
<i>Hoses/nozzles are deteriorating or damaged</i>			
Fuel Service Truck			
<i>Tank surfaces show signs of leakage</i>			
<i>Tanks are damaged, rusted or deteriorated</i>			
<i>Hoses/nozzles are deteriorating or damaged</i>			
<i>Joints, valves, and other appurtenances are leaking</i>			
<i>Staining observed under or around fuel service truck</i>			
Oil Containment Dike			
<i>Secondary containment floor is oil stained</i>			
<i>Dike floor is cracked or separating</i>			
<i>Dike walls are cracked or are separating</i>			
<i>Dike is in need of draining</i>			
<i>Dike is not retaining water (following large rainfall)</i>			
Security			
<i>Lighting is non-functional</i>			
<i>Pumps and valves are not locked (and not in use)</i>			
Response equipment			
<i>Response equipment inventory is incomplete</i>			

*Any item that receives "yes" as an answer must be described and addressed immediately. Further description and comments, if necessary, must be provided on a separate sheet of paper and attached to this sheet.

Additional Remarks:

Date:

Inspector:

Signature: _____

Monthly AST Inspection Checklist

Monthly AST Inspection Checklist

General Inspection Information

Inspection Date: _____	Retain Until Date: _____ (36 months from inspection date)
Prior Inspection Date: _____	Inspector Name: _____
Tanks Inspected (ID #'s): Eagle Cove Marina Tank #1 and Tank #2	

Inspection Guidance

- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Upon discovery of water in the primary tank, secondary containment area, interstice, or spill container, remove promptly or take other corrective action. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- **In the event of severe weather (snow, ice, wind storms) or maintenance (such as painting) that could affect the operation of critical components (normal and emergency vents, valves), an inspection of these components is required immediately following the event.**

Item	Status	Comments
1.0 Tank Containment		
1.1 Water in primary tank, secondary containment, interstice, or spill container?	___ Yes* ___ No	
1.2 Debris or fire hazard in containment?	___ Yes* ___ No	
1.3 Drain valves operable and in a closed position?	___ Yes ___ No	
1.4 Containment egress pathways clear and gates/doors operable?	___ Yes ___ No	

2.0 Leak Detection		
2.1 Visible signs of leakage around the tank, concrete pad, containment, ringwall or ground?	___ Yes* ___ No	
3.0 Tank Attachments and Appurtances		
3.1 Ladder and platform structure with no sign of severe corrosion or damage?	___ Yes ___ No*	
3.2 Tank Liquid level gauge readable and in good condition?	___ Yes ___ No*	
3.3 Check all tank openings are properly sealed	___ Yes ___ No*	
4.0 Other Conditions		
4.1 Are there other conditions that should be addressed for continued safe operation or that may affect the site SPCC plan?	___ Yes* ___ No	

Additional Comments:

Inspector Signature: _____

Annual AST Inspection Checklist

Annual AST Inspection Checklist

General Inspection Information

Inspection Date: _____

Retain Until Date: _____ (36 months from inspection date)

Prior Inspection Date: _____

Inspector Name: _____

Tanks Inspected (ID #'s): Eagle Cove Marina Tank #1 and Tank #2

Inspection Guidance

- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a certified inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Inspect the AST shell and associated piping, valves, and pumps including inspection of the coating for Paint Failure.
- Inspect:
 1. Earthen containment structures including examination for holes, washout, and cracking in addition to liner degradation and tank settling.
 2. Concrete containment structures and tank foundations/supports including examination for holes, washout, settling, paint failure, in addition to examination for corrosion and leakage.
 3. Steel containment structures and tank foundations/supports including examination for washout, settling, cracking, and for paint failure, in addition to examination for corrosion and leakage.
- Inspection of cathodic protection system, if applicable, includes the wire connections for galvanic systems and visual inspection of the operational components (power switch, meters, and alarms) of impressed current systems.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a certified inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

Item	Status	Comments
1.0 Tank Containment		
1.1 Containment structure in satisfactory condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
1.2 Drainage pipes/valves fit for continued service	<input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No*	
2.0 Tank Foundation and Supports		
2.1 Evidence of tank settlement or foundation washout?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
2.2 Cracking or spalling of concrete pad or ring wall?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
2.3 Tank supports in satisfactory condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
2.4 Water able to drain away from tank?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
2.5 Grounding strap secured and in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
3.0 Cathodic Protection		
3.1 CP system functional?	<input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A	
3.2 Rectifier Reading:	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
4.0 Tank External Coating		
4.1 Evidence of paint failure?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
5.0 Tank Shells/Heads		
5.1 Noticeable shell/head distortions, buckling, denting or bulging?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
5.2 Evidence of shell/head corrosion or cracking?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
6.0 Tank Manways, Piping and Equipment within Secondary Containment		
6.1 Flanged connection bolts tight and fully engaged with no sign of wear or corrosion?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
7.0 Tank Roof		
7.1 Standing water on roof?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
7.2 Evidence of coating cracking, crazing, peeling, blistering?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
7.3 Holes in roof?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	

Item	Status	Comments
8.0 Venting		
8.1 Vents free of obstructions?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
8.2 Emergency vent operable? Lift as required?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
9.0 Insulated Tanks		
9.1 Insulation missing?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
9.2 Are there noticeable areas of moisture on the insulation?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
9.3 Mold on insulation?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
9.4 Insulation exhibiting damage?	<input type="checkbox"/> Yes* <input type="checkbox"/> No	
9.5 Is the insulation sufficiently protected from water intrusion?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
10.0 Level and Overfill Prevention Instrumentation of Shop-Fabricated Tanks		
10.1 Has the tank liquid level sensing device been tested to ensure proper operation?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
10.2 Does the tank liquid level sensing device operate as required?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	
10.3 Are overfill prevention devices in proper working condition?	<input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No*	
11.0 Electrical Equipment		
11.1 Are tank grounding lines in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> N/A <input type="checkbox"/> No*	
11.2 Is electrical wiring for control boxes/lights in good condition?	<input type="checkbox"/> Yes <input type="checkbox"/> No*	

Additional Comments:

Inspector Signature: _____

STI SP001 AST Records

APPENDIX H
CONSTRUCTION BEST MANAGEMENT
PRACTICES PLAN

Construction Best Management Practices Plan

for:

Eagle Cove Marina
11912 Recreation Area Road
Peterson, AL 35453

Operator:

Eagle Cove Marina
Responsible Official: Dennis Sellers
11912 Recreation Area Road
Peterson, AL 35453
Phone: (205) 507-7999
Fax: NA

CBMPP Contact(s) / QCP:

Longleaf Engineering, LLC
Riley T. Sims
P.O. Box 72159
Tuscaloosa, AL 35407
Phone: (205) 345-5646
Fax: (205) 345-5677

CBMPP Preparation Date:

February 10, 2013

Estimated Project Dates:

Project Start Date: May 1, 2013
Project Completion Date: December 31, 2014

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Appendix A	Erosion Control Plan
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Appendix F	Corrective Action Log (or in Part 5.3)
Appendix G	CBMPP Amendment Log (or in Part 6.2)
Appendix H	Grading and Stabilization Activities Log (or in Part 6.1)
Appendix I	Rainfall Data Log
Appendix J	Product Dispensing Operations (None) Spill Clean-up & Containment (NA) Disposal of Petroleum Products (NA)

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Eagle Cove Marina

Project Street/Location: Located at 11912 Recreation Area Road

City: Peterson State: AL ZIP Code: 35453

County or Similar Subdivision: Tuscaloosa

Latitude/Longitude of the Project Site (front gate). [Use **one** of three possible formats, and specify method]

Latitude:

Longitude:

1. 33° 14' 44" N (degrees, minutes, seconds)

1. 87° 26' 10" W (degrees, minutes, seconds)

2. ° ' " N (degrees, minutes, decimal)

2. ° ' " W (degrees, minutes, decimal)

3. ° N (decimal)

3. ° W (decimal)

Method for determining latitude/longitude:

USGS topographic map (specify scale): 1:24,000 EPA Web site GPS

Other (please specify): _____

1.2 Contact Information/Responsible Parties

Operator:

Eagle Cove Marina
Dennis Sellers
11912 Recreation Area Road
Peterson, AL 35453
Phone: (205) 507-7999
Fax: NA

Project Manager(s) or Site Supervisor(s):

Eagle Cove Marina
Dennis Sellers
11912 Recreation Area Road
Peterson, AL 35453
Phone: (205) 507-7999
Fax: NA

CBMPP Contact(s) / QCP:

Longleaf Engineering, LLC
Riley T. Sims
P.O. Box 72159
Tuscaloosa, AL 35407
Phone: (205) 345-5646
Fax: (205) 345-5677

QCI or Qualified Person(s):

Longleaf Engineering, LLC
Riley T. Sims
P.O. Box 72159
Tuscaloosa, AL 35407
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This CBMPP was Prepared by:

Longleaf Engineering, LLC
Riley T. Sims
P.O. Box 72159
Tuscaloosa, AL 35407
Phone: (205) 345-5646
Fax: (205) 345-5677

Emergency 24-Hour Contact:

Dennis Sellers
Phone: (205) 507-7999

According to ADEM regulations, the General NPDES permit requires a Construction Best Management Practices Plan (CBMPP) be implemented and maintained by the construction site for the duration of the permit. The purpose of the CBMPP is to identify measures that will minimize stormwater contact with potential pollutants associated with construction activities at the Eagle Cove Marina. The implementation of the measures outlined in this plan will reduce the likelihood of exposing stormwater to potential pollutants.

1.3 Nature and Sequence of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:
The Eagle Cove Marina is preparing to reconstruct the marina that was destroyed in the 2011 tornado. As part of the reconstruction, additional boat slips, a restaurant, and other miscellaneous items will be added to the previous amenities at the site.

Proposed Activity(ies) to be Conducted:

- Residential Commercial Industrial Road Construction Linear Utility
 Other (please specify): _____

If Non-Coal, Non-Metallic Mining, Recovery, or Construction Material Management Site:

- Dirt-Chert Sand-Gravel Shale-Clay Crushed-Dimension Stone
 Other (please specify): _____
 Other (please specify): _____
 Other (please specify): _____

Primary SIC Code: _____

Primary NAICS Code: _____

Brief Description of Construction, Non-coal Mining, or Materials Management Activity:

Activities to include clearing, excavating, grading, road construction, and other

Estimated Project Start Date: 05/01/2013

Estimated Project Completion Date: 12/31/2014

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s): Montevallo-Nauvoo Complex, 15 to 45 percent slopes

Information Source(s): Soil Survey of Tuscaloosa County, Alabama

Slopes (describe current slopes and note any changes due to grading or fill activities):

The site has significant relief and elevation changes throughout.

Drainage Patterns describe or provide map(s) of current drainage patterns and note any changes due to grading or fill activities):

All drainage is towards the Black Warrior River and the Eagle Cove slough. Some internal drainage flows to intermediate draws or drainage channels that end up in one of the two above noted locations.

Vegetation:

Current vegetation consists of trees/forest (some felled by tornado) and underbrush in the natural areas. The developed areas have trees and grasses.

Other:

1.5 Pre- and Post- Construction Site Estimates

The following are estimates of the construction site.

Total project area:	<u>68 acres</u>
Construction site area to be disturbed:	<u>5 acres</u>
Percentage impervious area before construction:	<u>5 %</u>
Percentage impervious area after construction:	<u>6 %</u>

1.6 Receiving Waters

Description of receiving waters:

Receiving water is the Black Warrior River (Holt Lake) classified as Fish and Wildlife

Description of storm sewer systems: Sporadic storm piping conveys water underneath roadways but otherwise natural drainage occurs throughout.

Description of impaired waters or waters subject to TMDLs: NA

Other:

1.7 Site Features and Sensitive Areas to be Protected

Describe measures to protect these features:

No sensitive areas are located within project area.

1.8 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

Disturbed areas throughout site.

Potential pollutants and known sources, other than sediment, to stormwater runoff:

Spills from equipment operating at the site (mobile sources).

Trade Name Material	Potential Known Stormwater Pollutants	Storage Location
	Power Steering Fluid	Vehicle/Equipment Reservoir
	Windshield Wiper Fluid	Vehicle/Equipment Reservoir
	Ethylene Glycol	Vehicle/Equipment Reservoir
	Transmission Fluid	Vehicle/Equipment Reservoir
	Hydraulic Fluid	Vehicle/Equipment Reservoir; Service Truck
	Engine Oil	Vehicle/Equipment Reservoir; Service Truck
	Grease	Vehicle/Equipment Reservoir; Service Truck
	Unleaded Gasoline	Vehicle/Equipment Reservoir
	Diesel Fuel	Vehicle/Equipment Reservoir; Service Truck

1.9 Endangered Species

Are there any known endangered or threatened species and critical habitats on or near the project area?

Yes No

If yes, ADEM strongly recommends that the site operator work closely with the appropriate field office of the U.S. Fish and Wildlife Service www.fws.gov/daphne [Daphne, AL (251) 441-5181] and the Alabama Department of Conservation and Natural Resources Wildlife & Freshwater Fisheries [(334) 242-3465].

1.10 Historic Preservation

Are there any known historic sites on or near the construction site?

Yes No

If yes, ADEM strongly recommends that the site operator work closely with the Alabama Historical Commission's Historic Preservation office [(334) 230-2667].

1.11 Applicable Federal, State or Local Programs

There are no other applicable federal, state, or local soil and erosion control and stormwater management requirements that apply to this site.

1.12 Maps

See attached site maps in Appendix.

Appendix A: Figure 1 – Erosion Control Plan

Appendix B: Figure 2 – Site Topo Quad Map

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

All personnel of Eagle Cove Marina and any subcontractor thereof involved in clearing, excavating, grading, or other land disturbance activities shall adhere to the CBMPP to prevent/maintain discharge of pollutants in stormwater runoff to provide for protection of water quality. Prior to and during all construction activities, it is each contractor's responsibility to ensure that the BMPs are properly implemented and maintained (i.e. repair, replace, add to, improve, implement more effective practice) in the area of their construction activity. BMPs must be implemented in accordance with the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas, Latest Edition, or current industry standards.

The practices outlined in this CBMPP plan will be implemented immediately. Eagle Cove Marina will direct implementation of the CBMPP and the suitable Best Management Practices (BMPs) which make up the CBMPP. Dennis Sellers is the Site Contact and has the responsibility for the day-to-day implementation of this CBMPP or he may delegate the responsibility to various employees. Day-to-day activities will include informal inspections, training, record keeping, etc. If field changes are directed by the QCP to correct problems during construction, this CBMPP will be modified to reflect those changes.

The owner shall engage the services of a QCP to design the BMPs utilized across the site. These BMPs should be evaluated by the QCP at least every 6 months and as needed for improperly operating BMPs. The CBMPP should be updated/certified as the site changes to maintain compliance with ADEM standards.

This CBMPP identifies the erosion and sediment control BMPs to be implemented according to 10 categories of BMP activity, each of which is described in the remainder of this section.

2.1 Minimize Disturbed Area

The areas to be disturbed are illustrated in the erosion control plan (ECP) located in Appendix A. Where shown on the plans or as directed by the QCP, BMPs will be implemented to protect the undisturbed areas and natural features. Undisturbed areas are located in the interior of the site consisting mostly of forest or wooded natural areas.

Such practices shall include the delineation of disturbed areas with visible flagging or signs in order to protect those areas that are to remain undisturbed and protection of natural features with perimeter control and sediment barrier type BMPs (see section 2.7). See Figure 3 in Appendix A for design specifications and details.

BMP Description: Delineation of Disturbed Area	
Installation Schedule:	Phase I
Maintenance and Inspection:	Daily Inspection; perform maintenance as required.
Responsible Staff:	Dennis Sellers or Site Supervisor

BMP Description: Silt fencing for protection of Natural Features	
Installation Schedule:	Phases I - V
Maintenance and Inspection:	Daily inspection; perform maintenance as required
Responsible Staff:	Dennis Sellers or Site Supervisor

2.2 Phase Construction Activity

Construction sequencing such as phase grading and stabilization shall be implemented to minimize the overall amount of disturbed soil that will be subject to potential erosion at one time.

Grading and land clearing activities should be conducted during months that are suitable for seeding and establishment of vegetation. Grading and land clearing operations will also be scheduled so that one area can be stabilized before another is disturbed.

The following construction sequence shall be implemented:

- **BMP Phase I**
 - Description of Phase: Operations to include preconstruction planning, delineation of disturbed areas, and site preparation (including BMP installation)
 - Duration of phase:
3 weeks
 - BMPs associated with this phase:
Silt fencing, hay bales, site housekeeping
 - Stabilization methods for this phase: Existing vegetation and BMPs noted above. Continue to maintain.

- **BMP Phase II**
 - Description of Phase: Operations to include clearing, grubbing, excavating, grading, and stockpiling
 - Duration of phase:
2 months.
 - BMPs associated with this phase:
Silt fencing, Rock Check Dam, hay bales, temporary and permanent vegetation, erosion blankets, rip rap protection, site housekeeping
 - Stabilization methods for this phase: Temporary vegetation and erosion control blankets shall be used in the disturbed areas. Wetting of soils may also be required depending on site conditions. Site conditions that dictate wetting of the soils include times when windy conditions may cause airborne dust in disturbed areas.

- BMP Phase III
 - Description of Phase: Operations to include infrastructure installation (sewers, water mains, utilities, etc.)
 - Duration of phase: 2 months.
 - BMPs associated with this phase: Silt fencing, temporary and permanent vegetation, rip rap protection, site housekeeping
 - Stabilization methods for this phase: Temporary vegetation and erosion control blankets shall be used in the disturbed areas.

- BMP Phase IV
 - Description of Phase: Operations to include final site grading, base and paving of streets/parking lots, construction of boat docks, etc.
 - Duration of phase: 6 months
 - BMPs associated with this phase: Silt fencing, temporary and permanent vegetation, rip rap protection, site housekeeping
 - Stabilization methods for this phase: Temporary vegetation and erosion control blankets shall be used in the disturbed areas.

- BMP Phase V
 - Description of Phase: Operations to include building construction & removal of temporary BMPs
 - Duration of phase: 6 months
 - BMPs associated with this phase: Silt fencing, permanent vegetation, site housekeeping
 - Stabilization methods for this phase: Permanent vegetation

2.3 Control Stormwater Flowing onto and through the Project

Where shown on the plans or as directed by the QCP, structural practices shall be used to divert flows from exposed soils, retain or detain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall include Rip Rap Dams and Hay Bale Dams for velocity dissipation. See erosion control plan drawings in Appendix A for design specifications and details.

Erosion, sediment control, and stormwater management structures will be designed and constructed so the natural land features are utilized to reduce erosion and sediment concentrations in stormwater runoff and to reduce stormwater runoff velocities. The stormwater management structures will be constructed to follow the natural topography.

Constructed drainage ditches or outlets should be vegetated with a close-growing sod to help prevent erosion where runoff water concentrates. This practice is effective in reducing channel or gully erosion and reducing runoff velocity in order to trap and filter sediment.

Maintenance of Rip Rap Dams & Hay Bale Dams shall include:

1. Inspect dams and rip rap after each storm event.
2. Remove by hand and properly dispose of sediment collected within rock once it reaches ½ of the height of the dam or, as in the case of rip rap protection, the sediment is subject to wash downstream in future rain events.
3. If large equipment is needed to remove sediment, rock will need to be replaced immediately for continued protection.

BMP Description: Rip Rap Dams

Installation Schedule:	Phases I - II
Maintenance and Inspection:	Inspections monthly and after ¾" or greater rain events; perform maintenance as needed (e.g. removing accumulated silt, replacing rock, etc.)
Responsible Staff:	Eagle Cove Construction personnel

BMP Description: Rip Rap Protection

Installation Schedule:	Phase II - III
Maintenance and Inspection:	Inspections monthly and after each rain event; perform maintenance as needed (e.g. removing accumulated silt, replacing rock, etc.)
Responsible Staff:	Eagle Cove Construction personnel

2.4 Stabilize Soils

Where shown on the plans or as directed by the QCP, controls shall be implemented to stabilize exposed soils where construction activities have temporarily ceased or where problem areas exist. Controls shall include interim seeding with native vegetation and mulching, establishment of permanent vegetation, and dust suppression.

Final stabilization (permanent seeding) of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site.

As soon as practically feasible after an area is disturbed, temporary vegetation of that area will be established. Temporary vegetation must be established on areas not undergoing active construction when periods of inactivity exceed 13 days. Temporary vegetation will be established on disturbed areas during periods of inactivity until permanent vegetation can be established or until permanent structures are placed. Placement of vegetation reduces the impact of rainfall onto the soil by preventing or reducing the dislodgement and subsequent transport of sediment by sheet flow and channelized flow. When it is determined that an area is completed to a point that vegetation can be allowed to grow relatively undisturbed by construction activities, permanent vegetation will be established in that area. Hay or mulch will be placed to protect seeded areas from wind and water erosion. In addition, this practice assists in moisture retention to promote seed germination and it adds organic content to the soil.

Permanent and temporary vegetation shall be established by utilizing ALDOT's state seed mix applicable to the time of year it is being applied (see Notes in Appendix for ALDOT specifications). All seeded areas shall be protected by mulch. Mulch shall be wheat straw and shall be applied at a rate of 2.5 to 3 tons per acre and achieve at least 75% total coverage of the mulching area. In windy conditions, the mulch shall be crimped in place. For slopes steeper than 2:1 a tackifier shall be used to secure the mulch. In all other areas, the mulch shall be crimped in after placement.

Maintenance of temporary vegetation shall include:

1. Inspect seedings weekly until a stand is established and thereafter at least monthly for stand survival and vigor.
2. Inspect site for erosion. Erosion areas should be addressed appropriately with filling and/or smoothing, and reapplication of lime, fertilizer, seed, and mulch.
3. If vegetation fails to grow, test soil to determine if pH problem or nutrient deficiency exists. Follow soil test recommendations to establish planting.
4. Temporary plantings may be mowed to compliment the use of the site and the species planted.

Maintenance of permanent vegetation shall include:

1. A permanent stand of vegetation cannot be determined to be fully established until cover has been maintained for 1 year from planting. Inspect seedings monthly for stand survival and vigor.
2. Inspect site for erosion. Erosion areas should be addressed appropriately with filling and/or smoothing, and reapplication of lime, fertilizer, seed, and mulch.
3. If vegetation fails to grow, test soil to determine if pH problem or nutrient deficiency exists. Follow soil test recommendations to establish planting. Satisfactory

establishment may require refertilizing the stand in the second growing season. Follow soil test recommendations to establish and maintain the planting.

4. Mow vegetation on structural practices such as embankments and grass-lined channels to prevent woody plants from invading. Other areas should be mowed to compliment the use of the site and the species planted.

When the site is subject to losing sediment by wind due to dry conditions, disturbed areas shall be wetted. Wetting the soils reduces the amount of loose uncompacted soil present on the ground surface, therefore reducing the amount of sediment in the stormwater runoff.

BMP Description: Temporary Vegetation (seeding and mulching)

Permanent **Temporary**

Installation Schedule:	Phases II - IV
Maintenance and Inspection:	Inspect weekly; water (in dry conditions) until establishment
Responsible Staff:	Eagle Cove Construction personnel

BMP Description: Permanent Vegetation (seeding and mulching)

Permanent **Temporary**

Installation Schedule:	Phase II - V
Maintenance and Inspection:	Inspect monthly; water initially to establish
Responsible Staff:	Eagle Cove Construction personnel

2.5 Stabilize Slopes

Where shown on the plans or as directed by the QCP, controls shall be implemented for the protection of all slopes. Controls shall include erosion control blankets, and permanent vegetation. Erosion control blankets shall be used on all slopes 2.5:1 or steeper in grade. See erosion control plan drawings in Appendix A for design specifications and details.

BMP Description: *Erosion Control Blankets (ECB-1.D)*

Installation Schedule:	Phase II
Maintenance and Inspection:	Inspect weekly and after each rain event; repair/replace as necessary until vegetation is established
Responsible Staff:	Eagle Cove Construction personnel

BMP Description: *Permanent Vegetation (seeding & mulching)*

Installation Schedule:	Phase II
Maintenance and Inspection:	Inspect weekly and after each rain event; over-seed as necessary until vegetation is established
Responsible Staff:	Eagle Cove Construction personnel

2.6 Protect Storm Drain Inlets

Where shown on the plans or as directed by the QCP, structural controls shall be implemented to protect all inlets receiving stormwater from the site during the entire project. Hay Bale protection shall be used at this site. See the erosion control plan drawings in Appendix A for design specifications and details.

Maintenance of inlet protection shall include:

1. Inspect barriers after each rain and make repairs as needed.
2. Remove sediment promptly following storms to provide adequate storage volume for subsequent events and to prevent sediment breakthrough.
3. When contributing area has been properly stabilized, remove barriers and any collected sediment.

BMP Description: Hay Bale Protection

Installation Schedule:	Phases III - V
Maintenance and Inspection:	Daily inspection; perform maintenance as needed.
Responsible Staff:	Eagle Cove Construction personnel

2.7 Establish Perimeter Controls and Sediment Barriers

Where shown on the plans or as directed by the QCP, structural practices shall be implemented to filter and trap sediment before it leaves the construction site. Structural practices will include silt fences, hay bale dams and rip rap Dams. See the erosion control plan drawings in Appendix A for design specifications and details.

Silt fences will be in place before clearing activities are initiated. Silt fence fabric can be installed immediately below or in parallel series down the disturbed area. The silt fence will be embedded six inches into the ground to prevent undercutting and should be attached to metal fencing such as hog wire. This structure reduces runoff velocity and filters larger sediment particles. Frequent maintenance is critical for this BMP to be effective. Maintenance shall include:

1. Daily inspections should occur to make sure the integrity of the fence has not been compromised. Posts should not be leaning, all silt fences should be securely fastened, and the fabric should not be undermined.
2. Periodic removal of accumulated silt should occur at the base of the fence. Silt should be removed when it has accumulated to 25% of the height of the fence or when the accumulation is causing undue stress on the posts and wire.

BMP Description: Type A Silt Fencing (perimeter and as required)	
Installation Schedule:	Phase I
Maintenance and Inspection:	Inspect daily; repair/replace as necessary
Responsible Staff:	Eagle Cove Construction personnel
BMP Description: Type A Silt fencing (within site during building construction)	
Installation Schedule:	Phases II-V
Maintenance and Inspection:	Inspect daily; repair/replace as necessary
Responsible Staff:	Builders/Eagle Cove Construction personnel
BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.8 Retain Sediment On-Site

See erosion control plan drawings in Appendix A for design specifications and details.

BMP Description: See BMPs identified in Section 2.3

Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:

Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.9 Establish Stabilized Construction Exits

Where shown on the plans or as directed by the QCP, practices to minimize off-site vehicle tracking of sediments and discharges to stormwater shall be implemented. Such practices shall include stone pads.

Should tracking occur, accumulated sediment shall be removed manually by hand or by a mechanical sweeper. Sediment will be redistributed onsite.

BMP Description: Stone Pad

Installation Schedule:	Phase I
Maintenance and Inspection:	Inspect Daily; replace stone as pad loses usefulness
Responsible Staff:	Eagle Cove Construction personnel

BMP Description:

Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

2.10 Additional BMPs

None

SECTION 3: GOOD HOUSEKEEPING (GROUNDS KEEPING) BMPS

In order to minimize stormwater contact with potential pollutants at the Eagle Cove Marina, the following BMPs shall be implemented at the site. This section of the CBMPP identifies the good housekeeping BMPs to be implemented according to seven categories of BMP activity, each of which is described in the remainder of this section.

3.1 *Material Handling and Waste Management*

Materials Handling and waste management BMPs shall be implemented at all times to prevent the discharge of solid materials and/or waste to receiving waters. Such practices shall include, but not be limited to, the following:

1. Regularly scheduled disposal of garbage and waste materials within the construction area;
2. Regularly scheduled disposal of sanitary wastes from portable toilets. Portable toilets shall be located on level terrain and outside current construction areas. They should also not be located within or adjacent to stormwater features;
3. Proper storage of all tools, equipment, and parts in the construction area after use;
4. Covered storage of all materials stored in construction areas that have the potential to contaminate stormwater.

All construction debris from clearing operations to include brush, trees, stumps, branches, etc. shall be burned on site. A burn permit will be required by the local authorities. Any other debris that cannot be burned will be hauled to the appropriate C&D landfill. Sanitary sewer wastes will be disposed of by subcontractor personnel specializing in such work.

BMP Description: Garbage / waste disposal

Installation Schedule:	Phases II - V
Maintenance and Inspection:	Daily Inspection
Responsible Staff:	All construction personnel

BMP Description: Sanitary waste disposal

Installation Schedule:	Phases II - V
Maintenance and Inspection:	Daily Inspection
Responsible Staff:	All construction personnel

3.2 Establish Proper Building Material Staging Areas

No materials will be stored on site.

BMP Description: NA	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

3.3 Designate Washout Areas

No concrete washout areas will be used on site.

3.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

The SPCC plan shall be followed for this site. See Appendix J in case of leaking equipment.

3.5 Control Equipment/Vehicle Washing

No equipment/vehicle washing activities will occur onsite.

3.6 Spill Prevention, Control and Management

A Spill Prevention Control and Countermeasure Plan (SPCC) is required for this site and will be available onsite for review.

3.7 Any Additional BMPs

Additional good housekeeping BMPs will be required as directed by the QCP, and this CBMPP will be updated accordingly.

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

3.8 Non-Stormwater Discharge Management

Non-stormwater discharges from this site may result from water used for dust suppression, uncontaminated water line flushing, uncontaminated ground water or spring water, uncontaminated excavation dewatering, and landscape irrigation. However, any discharge that might result from these activities will traverse various structural BMPs identified in Section 2 of this CBMPP and have minimal impact on water quality. Therefore, no additional BMPs will be required by this section.

BMP Description: NA	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

SECTION 4: SELECTING POST-CONSTRUCTION BMPs

After construction is complete all areas shall receive permanent vegetation, planting areas, or be paved. Silt fence shall remain in place until full cover is achieved.

SECTION 5: INSPECTIONS

5.1 Inspections

- 1. Inspection Personnel:** Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:

Riley T. Sims, P.E., AL No. 25779, QCP
Jay Donahue under direction of QCP

- 2. Inspection Schedule and Procedures:**

Formal inspections of all BMPs are to be performed by a Qualified Credential Inspector (QCI), Qualified Credential Professional (QCP), or personnel under the QCP's direct supervision on a monthly basis and within 24 hours (to be completed within 72 hours) of a rainfall event exceeding 0.75 inch within a 24-hour period. In addition, formal inspections are to be performed by the QCP, or personnel under the QCP's direct supervision, on a semi-annual basis. During the inspection, the inspector will review the condition of the various erosion control devices making sure everything is appropriate and that no failures have occurred. The inspector will document the inspection on the ADEM Inspection Report Form (see Appendix D). The Inspection Report will be submitted to Eagle Cove Marina. Reports will identify noted deficiencies and time frames for making necessary corrections; corrective measures shall be implemented as soon as possible, not to exceed five (5) days of the inspection.

In addition to the formal inspections, informal visual observations will be conducted daily by personnel routinely working in and around active construction areas whenever construction activities are ongoing. These informal observations include visual observation of the BMPs, temporary ASTs, and equipment. A Daily Observation Checklist is provided in the Appendix D as guidance for inspectors. Any problem/deficiency observed during the informal observations will be reported to the operator, QCP, QCI, or Eagle Cove Marina and expeditiously corrected. If significant deficiencies are noted during informal observations, a formal inspection will be conducted and recorded on the ADEM Inspection Report Form. Any corrective measures will be documented on the ADEM Inspection Report. QCP inspections are required as necessary to evaluate poorly functioning or damaged controls and corrections.

Appendix D: Inspection Reports
ADEM Inspection Report Form
Daily Observation Checklist

5.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):

None provided.

5.3 Corrective Action Log

Any repair, replacement, or maintenance of BMPs undertaken as a result of formal or informal (daily) inspections should be documented in the Corrective Action Log. Actions related to the findings of formal inspections should reference the specific inspection report.

Appendix F: Corrective Action Log

Poorly functioning erosion controls, non-compliant discharges, or any other deficiencies across the site should be corrected as soon as possible, but not to exceed 5 days of the inspection unless unsafe weather conditions prohibit the work.

In the event of a breach of a sediment/detention pond, temporary containment measures shall be taken within 24 hours of the inspection. Permanent corrective measures shall be taken within 5 days of the inspection. If permanent measures cannot be implemented within the timeframes, ADEM shall be notified. The operator shall promptly take all reasonable steps to remove, to the maximum extent practical, pollutants deposited offsite or in any waterbody or stormwater conveyance structure.

SECTION 6: RECORDKEEPING AND TRAINING

6.1 Recordkeeping

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

The following list of records should be kept onsite as part of the CBMPP:

- Appendix C: Signed and certified NOI form or permit application form
Letter from ADEM acknowledging receipt of complete NOI/application
- Appendix D: ADEM Inspection Reports & records of all data used to create the reports

- Appendix H: Grading/Construction and Stabilization Activities Log
- Appendix I: Rainfall Data Log
- All monitoring information as noted in Part IV J of the General Permit

6.2 Log of Changes to the CBMPP

All changes and updates to the CBMPP should be noted in the CBMPP Amendment Log:

Appendix G: CBMPP Amendment Log

Such changes or updates may include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, and revisions to site maps.

6.3 Training

Individual(s) Responsible for Training:

Dennis Sellers of Eagle Cove Marina

Describe Training Conducted:

- General stormwater and BMP awareness training for staff and subcontractors:

- Detailed training for staff and subcontractors with specific stormwater responsibilities:

Training is an effective BMP to prevent stormwater problems at the site. An employee training program will be instituted at the site. The employee training program instructs each employee and/or subcontractor of specific stormwater responsibilities (e.g. installing, inspecting, and maintaining BMPs). Each employee and/or subcontractor is made aware of how his or her day-to-day activities might affect the environment, including the possibility of stormwater contamination.

SECTION 7: FINAL STABILIZATION

Final stabilization of this site will consist of the establishment of permanent vegetation and pavement areas. Upon completion of final stabilization for the entire site, the request to remove the subject site from permit coverage may be initiated.

BMP Description: Permanent vegetative cover	
Installation Schedule:	Phase V
Maintenance and Inspection:	Monthly monitoring and after significant rainfall events until permit is closed
Responsible Staff:	Eagle Cove Construction personnel

BMP Description:	
Installation Schedule:	
Maintenance and Inspection:	
Responsible Staff:	

SECTION 8: CERTIFICATION AND NOTIFICATION

I certify under penalty of law that a comprehensive Construction Best Management practices Plan (CBMPP) for the prevention and minimization of all sources of pollution in stormwater and authorized related processed wastewater runoff has been prepared under my supervision for this site/activity, and associated regulated areas/activities. The CBMPP meets the requirements of this permit and if properly implemented and maintained by the operator, discharges of pollutants in stormwater runoff can reasonably be expected to be effectively minimized to the maximum extent practicable according to the requirements of ADEM Administrative Code Chapter 335-6-6-.23 and this Permit. The CBMPP describes the erosion and sediment control measures that must be fully implemented and regularly maintained as needed at the permitted site in accordance with sound sediment and erosion control practices to ensure the protection of water quality.

Name: Riley T. Sims Title: Consulting Engineer
QCP Designation/Description: P.E. Registration/Certification: AL PE 25779
Address: PO Box 72159 Phone Number: (205) 345-5646
Tuscaloosa, AL 35407

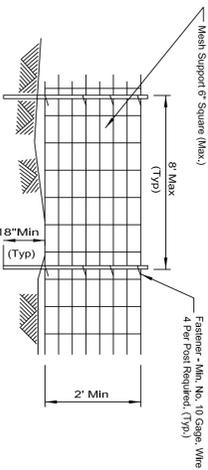
Signature:  Date: February 10, 2013

CBMPP APPENDICES

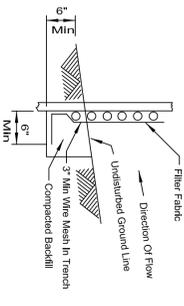
Appendix A	Erosion Control Plan
Appendix B	Topo Map
Appendix C	NOI and Acknowledgement Letter from ADEM
Appendix D	Inspection Reports Daily Observation Checklist ADEM Inspection Report Form
Appendix E	Stormwater Calculations
Appendix F	Corrective Action Log (or in Part 5.3)
Appendix G	CBMPP Amendment Log (or in Part 6.2)
Appendix H	Grading and Stabilization Activities Log (or in Part 6.1)
Appendix I	Rainfall Data Log
Appendix J	Product Dispensing Operations (None) Spill Clean-up & Containment (NA) Disposal of Petroleum Products (NA)

Appendix A – Erosion Control Plan

SILT FENCE WITH WIRE SUPPORT PLAN

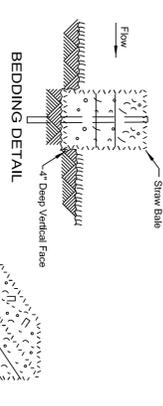


FABRIC ANCHOR DETAIL



- NOTES:**
1. Width of mesh support shall be min. gage no. 12.
 2. Temporary sediment fence shall be installed prior to any grading work in the area removed in conjunction with the final grading and site stabilization.
 3. Filter fabric shall meet all the requirements set forth by the ALDOT Standard Specifications.
 4. Frame posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 Sq. In.

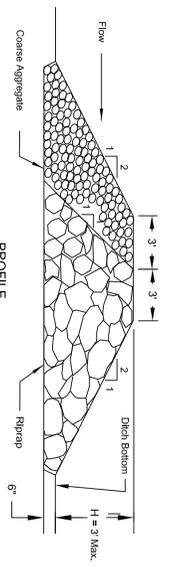
STRAW BALE BARRIER PLAN



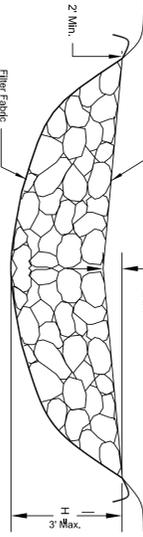
ANCHORING DETAIL

- NOTES:**
1. Bales shall be placed at the top of slope or on the contour and in a row with ends slightly abutting the adjacent bales.
 2. Each bale shall be embedded in the soil a minimum of 4" and placed so that the top of the bale is flush with the ground surface.
 3. Bales shall be securely anchored in place by either two stakes or rebar driven through the bale. The first stake in each bale shall be driven toward the previously laid bale at an angle to force the bales together. Stakes shall be driven through the bale at an angle to force the bales together. Stakes shall be driven through the bale at an angle to force the bales together. Stakes shall be driven through the bale at an angle to force the bales together. Stakes shall be driven through the bale at an angle to force the bales together.
 4. Inspectors shall be frequent and repair replacement shall be made promptly as needed.
 5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

ROCK FILTER DAM - RIPRAP

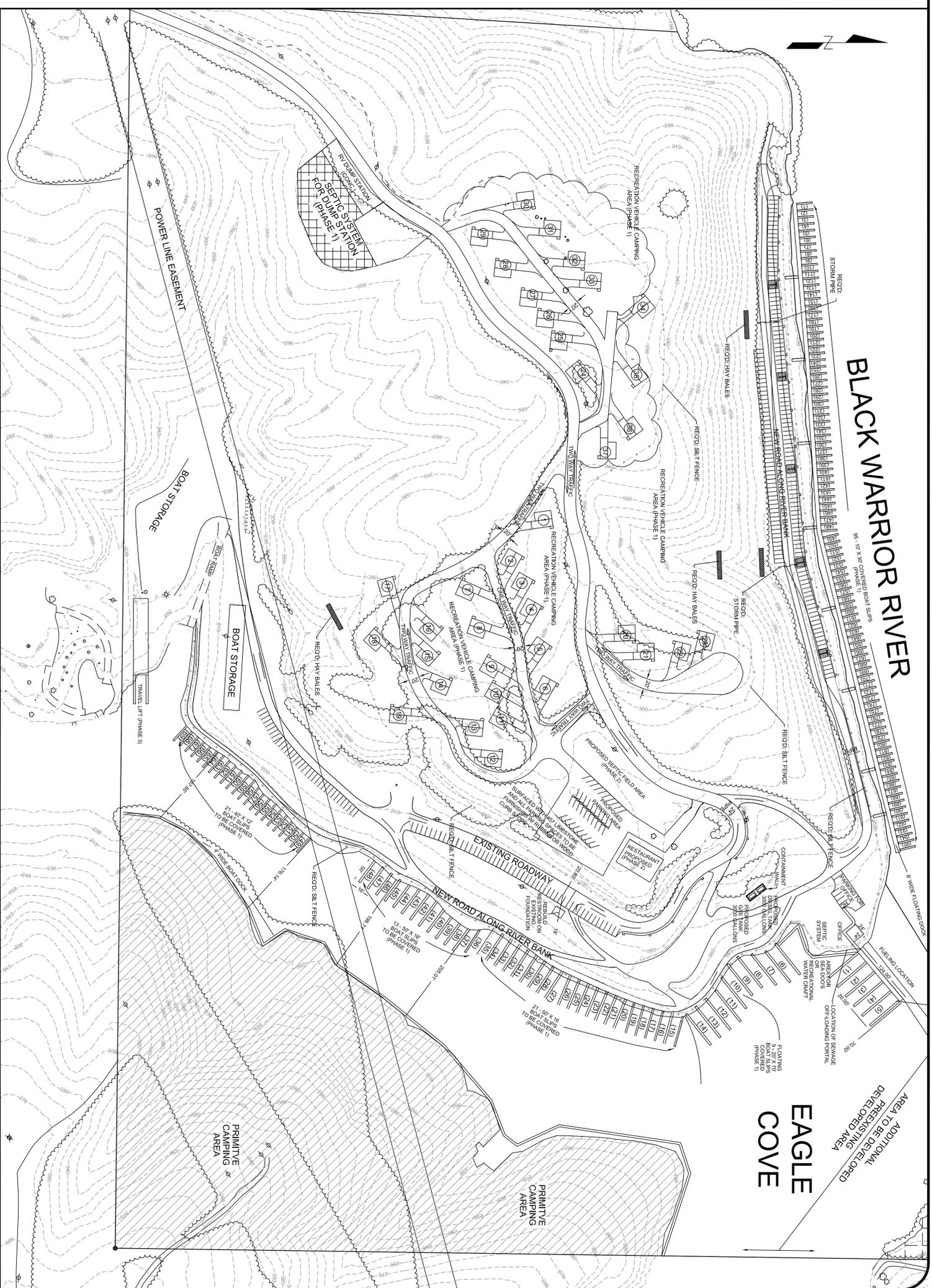


CROSS SECTION CENTERLINE LOOKING DOWNSTREAM

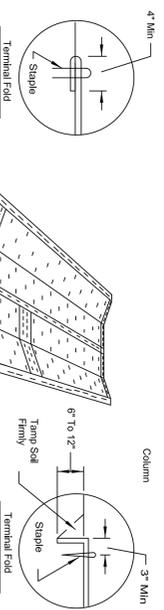


- NOTES:**
1. Filter fabric shall meet all the requirements set forth by the ALDOT Standard Specifications and shall be placed over the cleared area prior to the placing of rock.
 2. Coarse aggregate shall meet all the requirements set forth by the ALDOT Standard Specifications.
 3. Riprap shall be placed on a 6-inch minimum depth of coarse aggregate.
 4. Maximum drainage area to each dam is 10 acres.

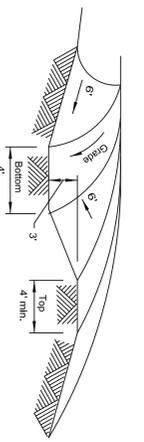
BLACK WARRIOR RIVER



EROSION BLANKET PLAN



TEMPORARY DIVERSION DITCH



- NOTES:**
1. All trees stumps, brush and debris shall be removed from the site.
 2. All obstructions that will interfere with construction or operation shall be removed.
 3. All ditches or gullies to be proposed shall be filled in prior to construction.
 4. When required topsoil shall be salvaged and spread uniformly over disturbed areas.
 5. The diversion will be constructed to the specified flags, grades, width and depth.
 6. All temporary and permanent vegetation must be installed in accordance with ALDOT's Standard Specifications. This includes choice seed type, seeding rate, fertilizer and lime application rate, and mulching.
 7. All stockpiled topsoil/muck will be spread on-site and stabilized with permanent/temporary vegetation.
 8. Repair of existing fills and gullies shall begin immediately.
 9. An informal inspection will be conducted at the site by the developer after all rainfall events, regardless of rainfall amount to monitor BMP installation and the formation of fills and gullies. BMPs will be repaired immediately. Rills and gullies will be flagged and repaired within three days of discovery.

EAGLE COVE

ADDITIONAL AREA TO BE DEVELOPED PRESERVING DEVELOPED AREA

EROSION CONTROL PLAN
EAGLE COVE MARINA
PETERSON, ALABAMA

Date: February 3, 2013

Longleaf Engineering, LLC
CIVIL • GEOTECHNICAL • ENVIRONMENTAL
PO Box 72159 • Tuscaloosa, Alabama 35407 • Phone (205) 345-5646 • Fax (205) 345-5677



GRAPHIC SCALE
0 100
(IN FEET)
1 inch = 100 feet

Sheet #: 1 of 1

1 of 1

Appendix B – Topo Map



TOPOGRAPHIC MAP
12-03-026 EAGLE COVE MARINA
PETERSON, ALABAMA



Longleaf Engineering, LLC
 CIVIL • GEOTECHNICAL • ENVIRONMENTAL

PO Box 72159
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Date:
02/03/2013
 Scale:
1" = 2000'

Drawn By:
RTS
 Figure #:
1

Appendix C – NOI and Acknowledgement Letter from ADEM

Appendix D – Inspection Reports

Appendix D

Daily Observation Checklist Eagle Cove Marina

The following checklist is a list recommended guidelines to be used for conducting daily observations in active construction areas following construction activities.

- Were any erosion problems identified within the construction area?
- Are any BMPs within the construction area in need of maintenance?
- Were any problems (i.e. bank erosion, high turbidity) identified at any of the retention ponds or permitted outfalls?
- Is the discharge at the outfall(s) affecting the clarity of the receiving tributary?
- Are there any visual signs of leaks around equipment, etc. within the construction area?
- Were any product spills or other problems observed at any time throughout the day?
- Was all released product, if any, cleaned up and properly disposed?
- Was any stained soil observed around any tanks or equipment within the construction area?
- Was all stained soil, if any, properly disposed?

If the answer is “yes” to any of the above questions, the following measures should be taken to correct the problem.

- The operator, the QCI, the QCP, or Owner should be notified in regards to the erosion/retention pond/outfall problems.
- In the event of a significant release within a construction area, the Owner should be notified immediately.
- A formal inspection should be requested if significant deficiencies are noted.

Appendix E – Site Stormwater Calculations

APPENDIX J

No fueling operations will occur on this site.

Spill Cleanup and Containment

In the event of a spill, Dennis Sellers should be notified immediately and the following steps should be taken:

- A. Attempt to determine the source, volume and extent of the spill.
- B. Determine the safest and quickest way to stop the spill (i.e. close defective valve, pump product out of leaking tank, etc.).
- C. Contain the spill as close to the source as possible. Sandbags, earthen dams or absorbent booms may be used to contain the spill.
- D. After the flow of the product has been restricted, the product should be removed.
 1. In the event of a small spill, absorbent booms, oil dry or other suitable materials may be used to recover the product. After the product has been removed, any contaminated soils should be excavated and placed in a suitable container for characterization and disposition.
 2. In the event of a large spill as much of the spilled material as possible should be transferred back into the tank or another structurally sound container. Any contaminated soils should be excavated and placed in a suitable container for characterization and disposition. Other remediation options may apply, based on the extent and nature of the spill.

Spilled chemical and/or petroleum products should be cleaned up immediately or immediately upon discovery. Unusable liquid products collected as a result of a spill, including used absorbent materials, contaminated soils and containers of recovered petroleum products, should be characterized in accordance with ADEM Administrative Code R. 335-14-2 and disposed in accordance with ADEM Administrative Code R. 335-14 (if hazardous) or ADEM Administrative Code R. 335-13-4-.26 (if non-hazardous). If possible, spill residue will be placed in an appropriate container and recycled.

In the event of a spill resulting in a release of material off the Eagle Cove Marina property, Dennis Sellers should be notified immediately. In the event that the amount of the release is greater than or equal to the substance's reportable quantity (RQ) limit, Dennis Sellers

shall contact the NRC (National Response Center) and ADEM or, if after hours, the Department of Public Safety at the following addresses and phone numbers:

National Response Center
Telephone: (800) 424-8802

Alabama Department of Environmental Management
(ADEM)
Water Division
1400 Coliseum Boulevard
Montgomery, Al 36110
Telephone: (334) 271-7700

Department of Public Safety
Telephone: (205) 553-5531

Dennis Sellers must notify authorities within 24-hours of discovery of the release. The following information should be reported by telephone to ADEM and the NRC:

1. Name of person reporting spill
2. Company/Owner: Eagle Cove Marina
(c/o Dennis Sellers)
3. Mailing address: 11912 Recreation Area Road
Peterson, AL 35453
4. Telephone number: (205) 507-7999
5. Exact description of location of spill
6. Description of the material(s) spilled
7. Estimated quantity of material(s) spilled
8. Source of spill (e.g. tank)
9. Cause of spill (e.g. tank failure, tank overflow)
10. Nearest receiving stream: Holt Lake (Black Warrior River)

A description addressing measures taken in response to the release should be submitted to ADEM within 15 days after the incident.

Disposal of Petroleum Products

- A. All spent petroleum products generated as a result of on-site construction vehicle and equipment maintenance are to be removed in a timely manner.
- B. Contaminated soil generated by cleanup of a spill of petroleum products will be characterized as previously described in the Spill Cleanup and Containment section. Decisions regarding the management of the soil will be based on the characterization of the soil.

Notes:

APPENDIX I
HAZARDOUS MATERIALS INVESTIGATION



3516 Greensboro Avenue
Tuscaloosa, AL 35401
205.345.0816
www.ttlusa.com

February 27, 2013

Transmitted via email (tsims@longleafengineering.com) and U.S.P.S.

Mr. Tom Sims, P.E.
Longleaf Engineering, LLC
Post Office Box 72159
Tuscaloosa, Alabama 35407

Subject: Letter Report of Debris Pile Observations
Eagle Cove Marina at Holt Lake
Holt, Tuscaloosa County, Alabama
TTL Project No. 800213002

Dear Mr. Sims:

TTL, Inc. (TTL) is pleased to submit this letter report of our observations concerning the content of two debris piles on the Eagle Cove Marina tract located on the Black Warrior River in Holt, Tuscaloosa County, Alabama. It is our understanding that our work is to provide support for the Draft Environmental Assessment (EA) for the Proposed Master Development Plan for Recreational Development. This letter contains a summary of our on-site observations.

Longleaf Engineering, LLC previously submitted a draft Environmental Assessment (EA) for review by the U.S. Army Corps of Engineers (USACE), Mobile District for redevelopment of the Eagle Cove Marina along the Black Warrior River in Tuscaloosa County, Alabama. Following review, the USACE provided comments and recommended additional information be supplied.

TTL was contracted to perform environmental consulting services and two maps of the proposed project area were provided. According to the Site Plan map dated June 2012, the site and area of investigation is approximately 78 acres. The site was formerly developed as a marina. Paved roads are present on the site. TTL understands the redevelopment of the subject tract will include docks, boat slips, a restaurant and other recreational areas associated with the Eagle Cove Marina.

The subject tract of land is depicted on a portion of the Brookwood and Coaling, United States Geological Survey (USGS) 7.5' series topographic maps, Figure 1, and Figure 2, and on a 2011 aerial image, Figure 3 (attached). The subject property is located at the terminus of Recreation Area Road approximately one mile north of the town of Peterson, Tuscaloosa County, Alabama. The subject tract is identified by the Tuscaloosa County GIS Internet Report as Parcel Number 3001010001003000. This Web-based report confirms that the parcel is 78 acres in size and owned by the United States of America, Army Corps of Engineers.

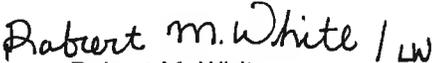
The area is within the path of an April 27, 2011, EF4 tornado and very significant destruction from that storm is evident today. The purpose of this evaluation is to examine two piles of debris that resulted from cleanup following that storm. The location of these debris piles is north of the existing concrete boat ramp within Eagle Cove. The areas are depicted on Figures 2 and 3. The debris piles are approximately twenty to thirty feet in width (north to south) and from fifty to seventy feet in length (west to east). TTL personnel observed the contents of the debris during a site visit on January 24, 2013.

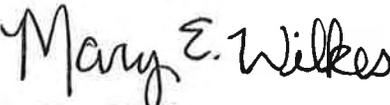
During our onsite observations it was evident that the debris was comprised mostly of dock and pier materials. The primary contents include aluminum and galvanized metal framing, Styrofoam and plastic floats, wood decking, PVC pipe, logs and other woody debris. It is likely that this material was stockpiled following the April, 2011 storm and aerial imagery prior to the storm shows numerous piers and docks within Eagle Cove. Aerial imagery from the day following the storm shows widespread damage to the same over-water structures.

TTL professionals did not observe materials within the debris piles that would be considered environmentally hazardous or that would need to be disposed as hazardous materials. Although handling of the materials should be done with care using gloves and other protective clothing to avoid cuts or abrasions, there was no observable evidence that other protection would be necessary to prevent workers from environmental contaminant exposure. TTL considers these debris piles to be an issue of debris removal and disposal in a permitted construction debris landfill or recycling facility, rather than an environmental liability. Photographs of the debris pile materials are attached.

We appreciate the opportunity to provide these services and look forward to working with you in the future. If you have any questions concerning the enclosed report, please do not hesitate to contact us at (205) 345-0816.

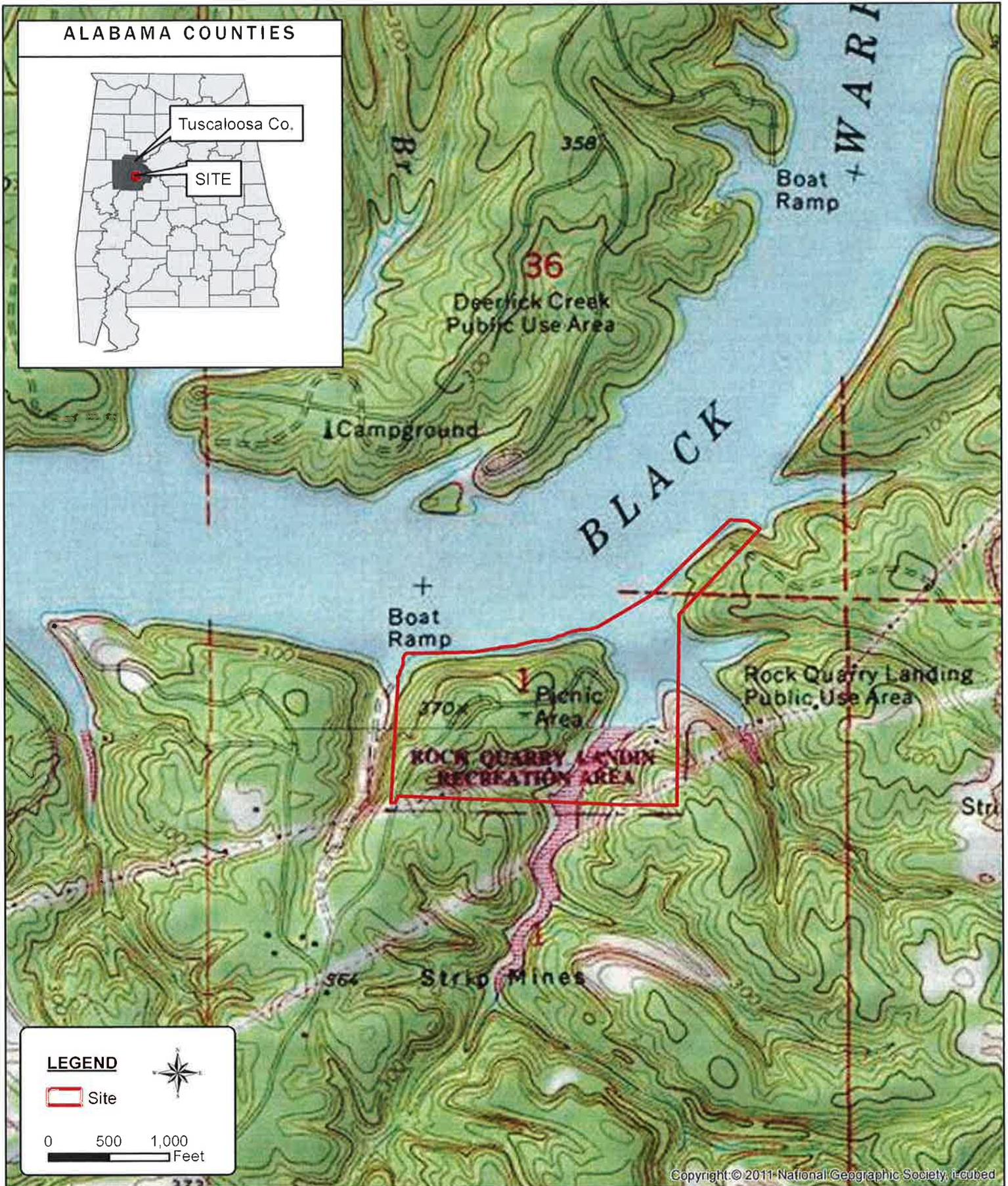
Sincerely,
TTL, Inc.


Robert M. White
Principal Natural Resources Scientist


Mary E. Wilkes
Staff Professional

Attachments: *Figures 1-3*
Selected Site Photographs

ALABAMA COUNTIES



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TTL

20210 Highway 59 North
Summerdale, Alabama 36580
251.989.2177 // www.TTLUSA.com

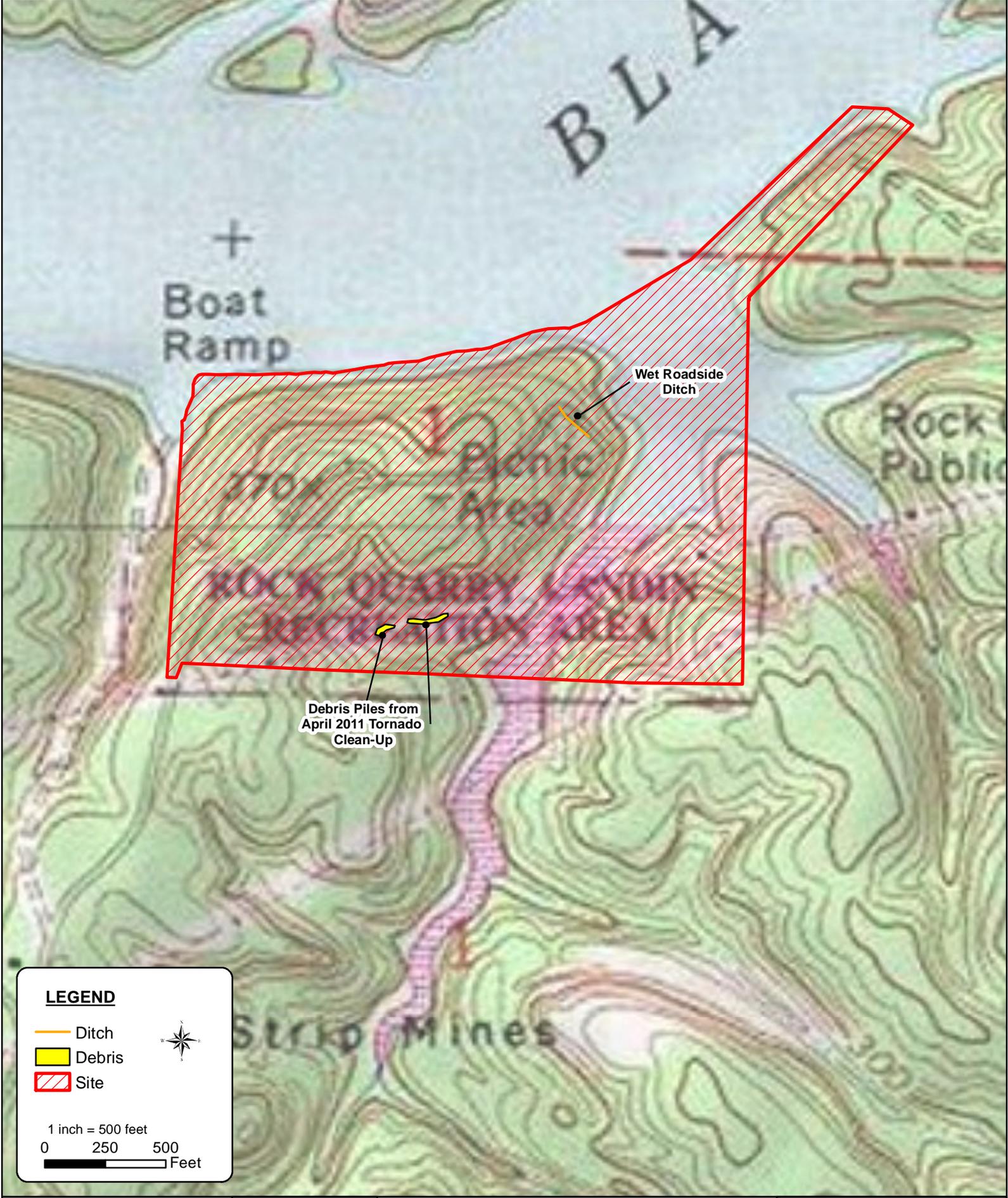
TTL PROJECT NO:
800213002

DRAWING DATE:
February 20, 2013

**Figure 1: Site Location
and Topographic Map**

BASEMAP: USGS 7.5' Topographic Map
of Lake Nicol and Cottondale, Tuscaloosa Co., Alabama

Eagle Cove Marina
Holt Lake
Tuscaloosa County, Alabama



LEGEND

-  Ditch
-  Debris
-  Site

1 inch = 500 feet
 0 250 500 Feet





LEGEND

— Ditch

■ Debris

▨ Site

0 250 500
Feet

TTL

20210 Highway 59 North
 Summerdale, Alabama 36580
 251.989.2177 // www.TTLUSA.com

TTL PROJECT NO:
800213002

DRAWING DATE:
May 20, 2015

**Figure 3: Debris Pile Evaluation
Aerial Map (Revised)**

Basemap: February 2011 World Imagery (via ESRI.com)

Eagle Cove Marina
 Holt Lake
 Tuscaloosa County, Alabama

Site Photographs

TTL Project No. 800213002
Threatened & Endangered Species Survey
Eagle Cove Marina Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 1. View of debris pile materials including floats and galvanized metal framing.



Photograph 2. View of debris pile materials including Styrofoam floats and wood.

TTL

geotechnical • analytical • materials • environmental

Site Photographs

TTL Project No. 800213002
Threatened & Endangered Species Survey
Eagle Cove Marina Tuscaloosa County, Alabama
Photos taken January 24, 2013



Photograph 3. View of debris pile materials including wood decking, PVC and woody debris.



Photograph 4. View of debris pile materials.

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APPENDIX J
PROPOSED MASTER PLAN

APPENDIX K
COPIES OF COORDINATION CORRESPONDENCE



3516 Greensboro Avenue
Tuscaloosa, AL 35401
205.345.0816
www.ttlusa.com

RECEIVED
MAR - 7 2013

March 5, 2013

Mr. Bill Pearson, Field Supervisor
Daphne Ecological Services Field Office
1208-B Main Street
Daphne, AL 36526

RE: Eagle Cove Marina
Holt, Tuscaloosa County, Alabama
TTL Project No. 800213002

Post-it® Fax Note	7671	Date	3-12-13	# of pages	▶
To	Mary E Wilkes	From	USFWS		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	205-343-0646	Fax #			

Dear Mr. Pearson:

2013-TA-0263

TTL is assisting Long Leaf Engineering, LLC with an evaluation of the environmental impact posed by the Eagle Cove Marina tract located on the Black Warrior River in Holt, Tuscaloosa County, Alabama. It is our understanding that our work is to provide support for the Draft Environmental Assessment (EA) for the Proposed Master Development Plan for Recreational Development. According to information maintained by the US Fish and Wildlife Service (USFWS) Alabama Ecological Services Field Station website, 18 federally listed species can be found in Tuscaloosa County, Alabama. The enclosed report contains a summary of our desktop T&E species and habitat evaluation, as well as our on-site observations and feature location by sub-meter GPS.

We respectfully request comment from your office within 30 days of receipt of this letter regarding the potential impact of the proposed project on threatened and endangered species in Tuscaloosa County. Should you have any questions, please do not hesitate to call either of the undersigned at (205) 345-0816.

Sincerely,

TTL, Inc.

Mary E. Wilkes

Mary E. Wilkes
Staff Professional

Robert M. White /w

Robert M. White
Principal Natural Resources Scientist



U.S. Fish and Wildlife Service
1208-B - Daphne, Alabama 36526
Phone: 251-441-5181 Fax: 251-441-6222

Enclosure:

Report of Survey for Threat

Based upon our records and the information provided in your letter, we agree with your findings that no federally listed species/critical habitat occur in the project area. If project design changes are made, please submit new plans for review.



Longleaf Engineering, LLC

CIVIL • GEOTECHNICAL • ENVIRONMENTAL

March 1, 2013

Mr. William Straw
Regional Environmental Officer
Federal Emergency Management Agency
3003 Chamblee Tucker Rd
Atlanta, GA 30341

*RE: Draft Environmental Assessment for
Proposed Master Plan for Recreational Development Eagle Cove Marina
Holt Lake, Tuscaloosa County, Alabama*

Dear Mr. Straw:

On behalf of Hideaway Harbor, Longleaf Engineering, LLC, (Longleaf) is conducting agency coordination as required by the National Environmental Policy Act (NEPA) in support of the Proposed Master Development Plan for Eagle Cove Marina (ECM). This facility will replace the marina that was destroyed in the April 2011 tornado. The proposed action will utilize existing infrastructure and includes the following facilities: boat slips, docking structures, dry storage buildings, a restaurant, and associated parking areas (Appendix A).

The site is situated in the northwest $\frac{1}{4}$ of the northeast $\frac{1}{4}$ of Section 1, Township 21 South, Range 9 West as shown on the 1974 Lake Nicol and Cottdale, Alabama 7 $\frac{1}{2}$ -minute U.S.G.S. topographic map (Appendix A). Holt Lake, a reservoir on the Black Warrior River, forms the northern boundary of the proposed ECM. The center of ECM is located at approximately 33° 15' 01" Latitude and -87° 25' 53" Longitude.

Longleaf respectfully requests your comments regarding this project. If you have any questions or need additional information, please contact Tom Sims by phone at 251-554-4540 or by email at tsims@longleafengineering.com. If you have no questions or comments at this time, please confirm by email. If a response is not received within 30 days of receipt of this letter, Longleaf will assume the Federal Emergency Management Agency concurs and the project will progress as scheduled.

Sincerely,
Longleaf Engineering, LLC

Tom Sims, P.E.

Cc: Mr. Dennis Sellers, Hideaway Harbor

Enclosures: Attachments - Proposed Eagle Cove Marina Master Plan, Site Location and Topographic Map

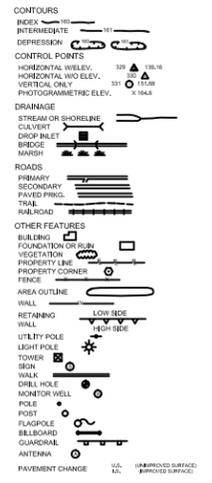
ATTACHMENTS

PROPOSED EAGLE COVE MARINA MASTER PLAN

SITE LOCATION AND TOPOGRAPHIC MAP

HOLT LOCK AND DAM
.85 MILES DOWNSTREAM

MAP SYMBOLS



ROBERT S. McPHERSON P.L.S.

EAGLE COVE MARINA

FILE: EAGLE COVE 04-12.dwg

SRMC JOB NO. 08712m

PHOTOGRAPHED: APRIL 30, 2012

COMPILED: MAY, 2012

SOUTHERN RESOURCES
MAPPING CORPORATION

2808-4 McFARLAND BOULEVARD

NORTHPORT, ALABAMA 36476

PHONE: (205) 333-9900

FAX: (205) 333-9915

Email: srmc@srmcmaps.com

Web Site: srmcmaps.com

N 33° 14' 31.41", W 67° 35' 11.85"



DEERLICK CREEK
PUBLIC USE AREA

NOTES:

1. THE FINAL NUMBER OF RV SPACES WILL BE DETERMINED BY THE CAPACITY AVAILABLE OF THE DUMP STATION DESIGN. THE DUMP STATION WILL HAVE AN ALABAMA DEPARTMENT OF PUBLIC HEALTH APPROVED SEPTIC SYSTEM, THE DESIGN OF WHICH WILL BE DICTATED BY SOIL CONDITIONS AND SIZING.
2. ALL DESIGN CRITERIA FOR ALL SEPTIC SYSTEMS WILL BE IN ACCORDANCE WITH THE ALABAMA DEPARTMENT OF HEALTH REGULATIONS.
3. ALL STORM WATER DRAINAGE WILL BE IN COMPLIANCE WITH ADEM REGULATIONS.
4. ALL BUILDING CONSTRUCTION (ELECTRICAL AND PLUMBING) WILL BE IN COMPLIANCE WITH THE CITY OF TUSCALOOSA BUILDING CODES AND DEVELOPMENT PERMIT REGULATIONS
5. REQUIRED STORM WATER PIPES TO BE SIZED ACCORDING TO CALCULATED RUN-OFF OR MINIMUM SIZED REQUIREMENTS.

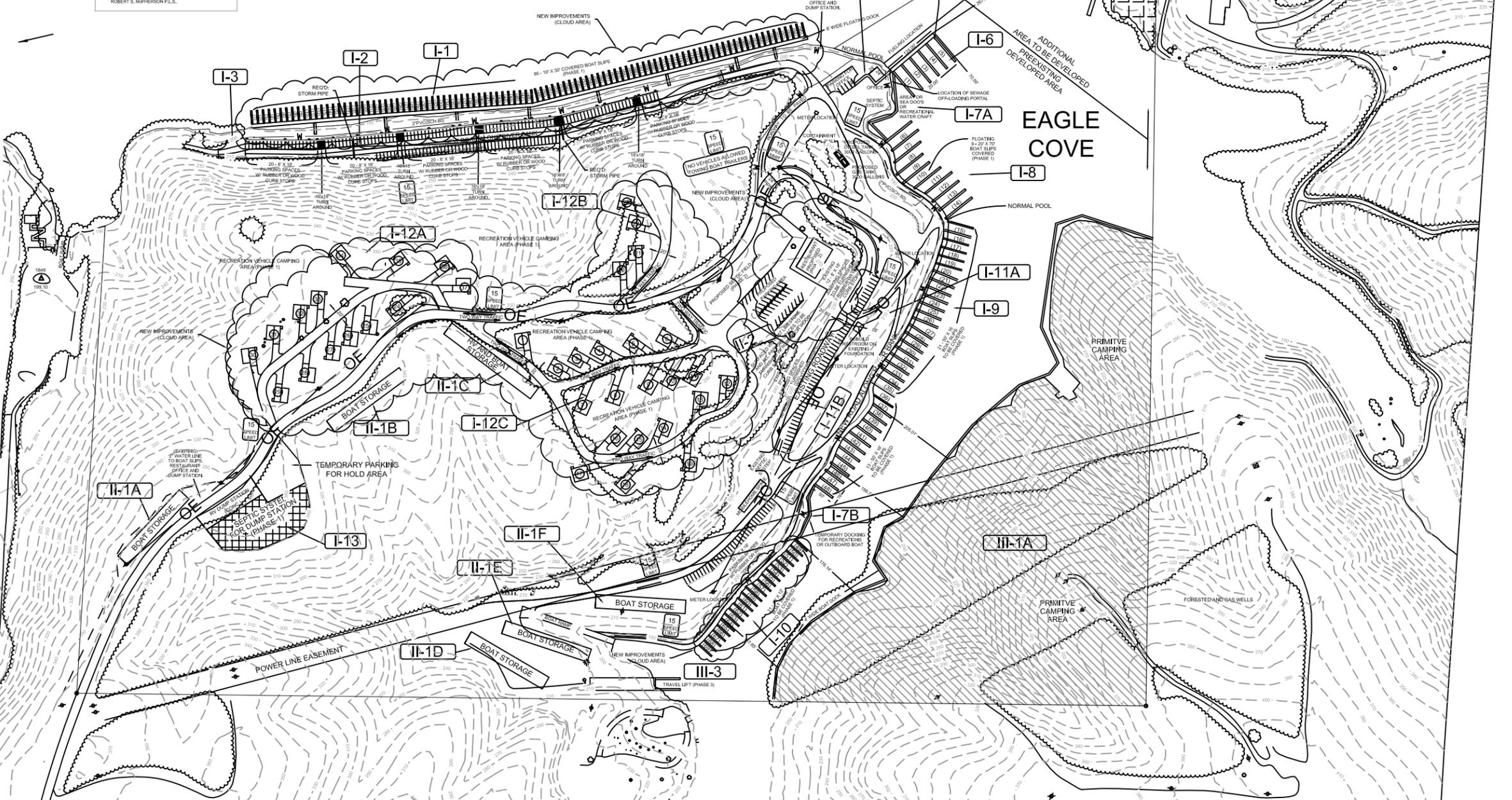
PROPOSED BOAT SLIPS		
NUMBER	TYPE	SIZE
14	COVERED	20'x70'
34	COVERED	16'x52'
21	COVERED	12'x40'
95	COVERED	10'x30'
164	TOTAL	

PROPOSED PARKING		
TOTAL	TYPE	SIZE
156	PARKING SPACES	8'x15'
5	TURN AROUNDS	16'x16'

PRE-EXISTING BOAT SLIPS		
NUMBER	TYPE	SIZE
36	COVERED	16'x30'
15	COVERED	20'x50'
51	TOTAL	

BLACK WARRIOR RIVER

BANKHEAD LOCK AND DAM
17.50 MILES UPSTREAM



ACCOUNT: Call by prepaid customer 4
DATE: Jan 18, 2012
DESIGNED BY: ROBERT S. McPHERSON
DRAWN BY: ROBERT S. McPHERSON
CHECKED BY: ROBERT S. McPHERSON

PROJECT MANAGER: ROBERT S. McPHERSON
ENGINEER: TOM SIMS
REG. NO.: 25779
DRAWN BY: ROBERT S. McPHERSON
REG. NO.: 18228

ROBERT S. McPHERSON P.L.S.
4810 WASSIE DRIVE, TUSCALOOSA, AL 35404

EAGLE COVE MARINA
RV PARK AND DOCKS

DRAWING

SHEET 1

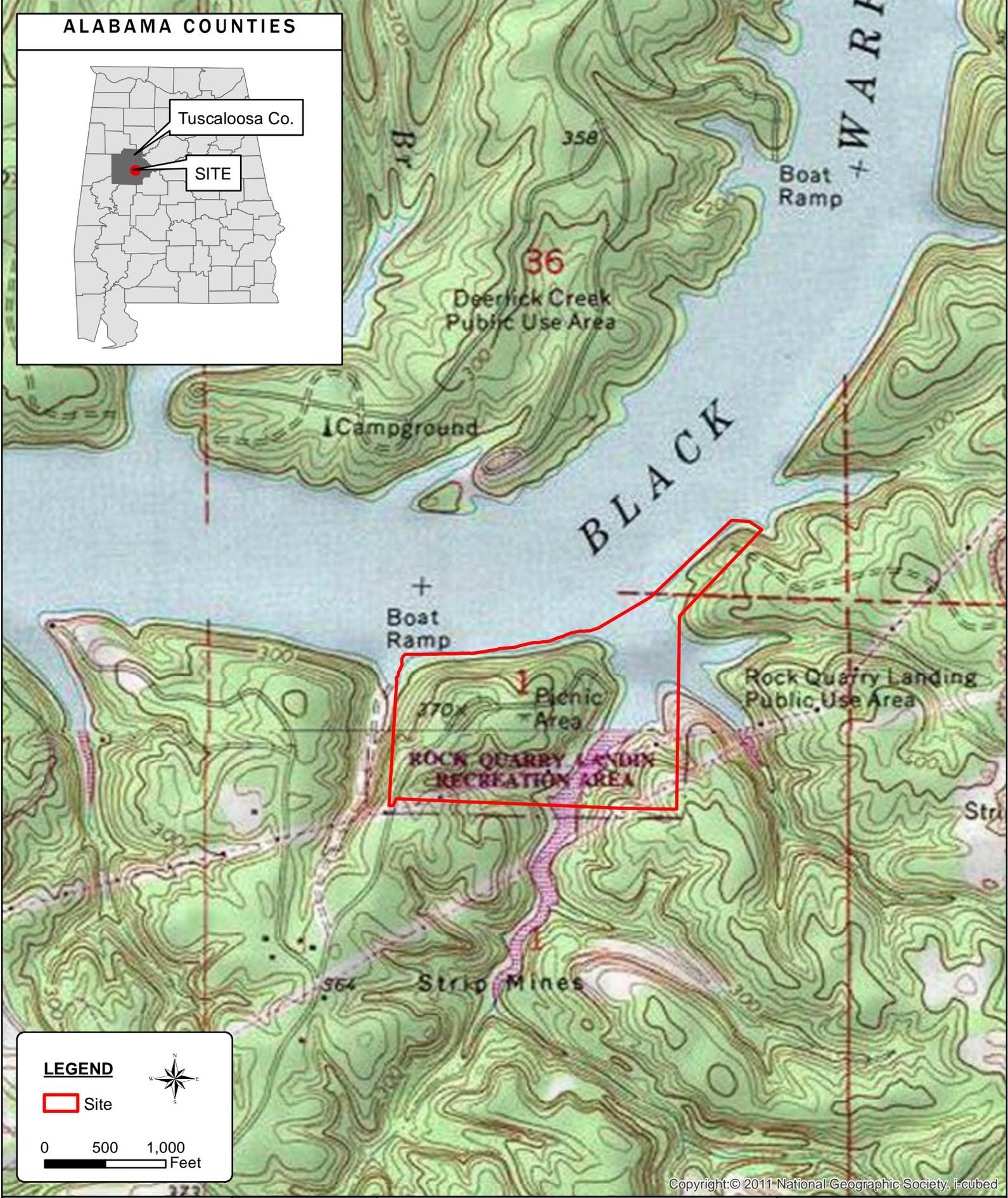
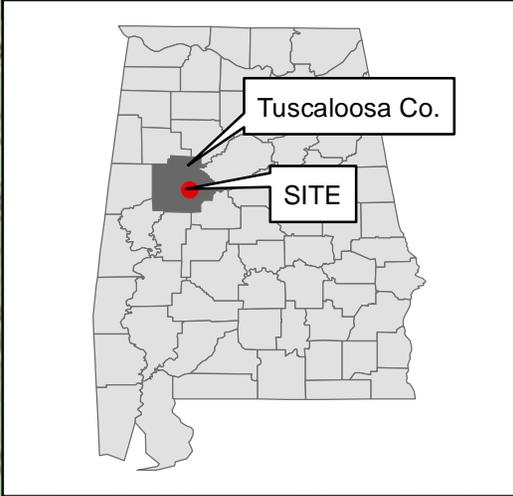
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Robert S. McPHERSON
Professional Engineer
Professional License No. 18228



EXHIBIT 'A'

ALABAMA COUNTIES



LEGEND

 Site




0 500 1,000 Feet

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20210 Highway 59 North
Summerdale, Alabama 36580
251.989.2177 // www.TTLUSA.com

TTL PROJECT NO:
800213002

DRAWING DATE:
February 20, 2013

Figure 1: Site Location and Topographic Map

BASEMAP: USGS 7.5' Topographic Map of Lake Nicol and Cottondale, Tuscaloosa Co., Alabama

Eagle Cove Marina
Holt Lake
Tuscaloosa County, Alabama



STATE OF ALABAMA
ALABAMA HISTORICAL COMMISSION
468 SOUTH PERRY STREET
MONTGOMERY, ALABAMA 36130-0900

FRANK W. WHITE
EXECUTIVE DIRECTOR

TEL: 334-242-3184
FAX: 334-240-3477

March 22, 2013

Paul D. Jackson
TerraXplorations
3523 18th Avenue NE
Tuscaloosa, Alabama 35406

Re: AHC 13-0518
Cultural Resource Assessment
Eagle Cove Marina
Tuscaloosa County, Alabama

Dear Mr. Jackson:

Upon review of the cultural resource assessment submitted by your office, we have determined that project activities will have no adverse effect on cultural resources eligible for or listed on the National Register of Historic Places. Therefore, we concur with the proposed project activities. However, should artifacts or archaeological features be encountered during project activities, work shall cease and our office shall be consulted immediately.

We appreciate your efforts on this project. Should you have any questions, please contact Greg Rhinehart at (334) 230-2662 or by e-mail at greg.rhinehart@preserveala.org. Please have the AHC tracking number referenced above available and include it with any correspondence.

Truly yours,

Elizabeth Ann Brown
Deputy State Historic Preservation Officer

EAB/RJG/GCR/gcr

From: [Stacie D. MacCollister](#)
To: [Fedoroff, Michael P SAM](#)
Subject: [EXTERNAL] Two Rockshelters in Eagle Cove, Tuscaloosa County, Alabama
Date: Monday, December 01, 2014 11:57:06 AM

December 1, 2014

Mr. Michael P. Fedoroff
District Archaeologist
Mobile District
Corps of Engineers
Post Office Box 2288
Mobile, AL 36628-0001
michael.p.fedoroff@usace.army.mil

Dear Mr. Fedoroff:

Thank you for sending us the information concerning the two rockshelters in Eagle Cove, Tuscaloosa County, Alabama. This information was reviewed by the Chickasaw Nation Division of Historic Preservation and we find the concept of “potentially eligible” to be vague. We hope that your office may be able to make a clear determination of eligibility for these sites in the near future.

After reviewing your information, the Chickasaw Nation is in agreement with the assessment and has no objections to the proposed undertaking. We are presently unaware of any specific historic properties, including those of traditional, religious and cultural significance in the project area. In the event your agency becomes aware of the need to enforce other statutes we request to be notified under NEPA, NAGPRA, AIRFA, ARPA, NHPA and Professional Standards.

If you have any questions, please contact Dr. Timothy G. Baugh, tribal historic preservation officer, at (580) 272-1106, timothy.baugh@chickasaw.net.

Sincerely,

Lisa John, Secretary
Department of Culture & Humanities

From: [Lindsey Bilyeu](#)
To: [Fedoroff, Michael P SAM](#)
Subject: [EXTERNAL] RE: Phase II Investigation of Two Rock shelters in Eagle Cove, Tuscaloosa Co., AL
Date: Wednesday, December 10, 2014 11:09:09 AM

Mr. Fedoroff,

The Choctaw Nation of Oklahoma thanks the USACE, Mobile District, for the correspondence regarding the above referenced project. Tuscaloosa Co., AL lies in the Choctaw Nation of Oklahoma's area of historic interest. The Choctaw Nation Historic Preservation Department concurs that the rock shelters are potentially eligible and that they should be avoided. If for any reason the sites cannot be avoided, the Choctaw Nation Historic Preservation Department requests to be notified and included in the consultation. Also, as the project lies in an area of historic interest to the Tribe, we ask that work be stopped and our office be contacted immediately in the event that Native American cultural objects or human remains are encountered. If you have any questions, please contact me at lbilyeu@choctawnation.com or at 580-340-0571.

Thank you,

Lindsey Bilyeu
NHPA Senior Section 106 Reviewer
Historic Preservation Department
Choctaw Nation of Oklahoma
P.O. Box 1210
Durant, OK 74701
lbilyeu@choctawnation.com

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

APPENDIX L
USACE SECTION 10 PERMIT



REPLY TO
ATTENTION OF:

**DEPARTMENT OF THE ARMY
MOBILE DISTRICT, CORPS OF ENGINEERS
BIRMINGHAM FIELD OFFICE
218 SUMMIT PARKWAY, SUITE 222
HOMEWOOD, ALABAMA 35209**

October 2, 2012

Inland Section North
Regulatory Division

SUBJECT: Letter of Permission, Department of the Army Permit Number SAM-2012-01073-DEP, Dennis Sellers, Eagle Cove Marina Floating Docks.

Eagle Cove Marina
Attention: Mr. Dennis Sellers
12420 Hideaway Lane
Cottdale, Alabama 35453

Dear Mr. Sellers:

Reference is made to your request for a Department of the Army permit to construct and maintain 164 covered floating docks and one fueling dock. The project is located in Section 01, Township 21 South, Range 9 West in Cottdale, Tuscaloosa County, Alabama (Lat 33°15'4.30"N/Long 87°25'42.34"W).

Upon the recommendation of the Chief of Engineers and under the provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), you are hereby authorized by the Secretary of the Army to perform this work in accordance with your submitted data and plans, the enclosed General Conditions, and the following Special Conditions:

- a. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- b. Special Conditions: Prior to construction of the marina floating docks the Mobile District must approve the proposed lease area marina master plan.**

The District Commander shall be notified in writing of the commencement and completion of the work. The enclosed forms should be used for that purpose. If the activity authorized herein is not completed on or before October 1, 2017, this permit, if not previously revoked or specifically extended, shall automatically expire.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

STEVEN J. ROEMHILDT, P.E.
Colonel, Corps of Engineers
District Commander

BY: _____
Cindy House-Pearson
Chief, Inland Section North
Birmingham Field Office
Regulatory Division

Enclosures

*Pickard/Kay
CH/RS Inland CH-P 10/2/12
file:*