



US Army Corps  
of Engineers®  
Little Rock District

# JOINT PUBLIC NOTICE

*CORPS OF ENGINEERS – STATE OF MISSOURI*

**Application Number: SWL-2023-00336**

**Date: April 16, 2024**

**Comments Due: May 13, 2024**

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TO WHOM IT MAY CONCERN: **Comments are invited on the work described below. Please see the Public Involvement section for details on submitting comments.**

Point of Contact. If additional information is desired, please contact the regulator, Rocky Presley, telephone number: (501) 340-1390, mailing address: Little Rock District Corps of Engineers, Regulatory Division, PO Box 867, Little Rock, Arkansas 72203-0867, email address: [Rocky.L.Presley@usace.army.mil](mailto:Rocky.L.Presley@usace.army.mil)

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that

**Emerald Isle Properties, LLC  
P.O. Box 14248  
Springfield, Missouri 65814**

has requested authorization for the placement of dredged and fill material in waters of the United States associated with various sediment control activities in Ozark Eagle Lake. The project includes construction of an upstream forebay and sediment collection basin, dredging the lake, and installation of a dredged material disposal impoundment. The proposed project is located in West Fork Bull Creek, in the NW 1/4 of section 21, T. 26 N., R. 20 W., Ozark, Christian County, Missouri.

The project purpose is to control and limit the sediment volume flowing into the lake and to restore the lake's depth. The proposed forebay structure would also dissipate energy during high-flow events to improve the balance of degradation and aggradation within the stream.

The construction of the forebay and sediment basin would involve excavation of 10,000 cubic yards of stream bed material and installation of a series of three rock dikes that would allow flows through the structures while capturing sediment and debris. These structures would extend a total of approximately 620 linear feet within the unaltered stream channel upstream of the lake and within the lake inlet area, which now has a buildup of accumulated gravel and sediment. The base and side slopes of the forebay and sediment basin would be covered with rock.

The project includes dredging 20,000 cubic yards of sediment from the lake using mostly hydraulic dredging. Large excavating equipment would also be used for sediment/gravel removal in shallow areas at the upper end of the lake and for the forebay construction. The dredged material would be pumped from the lake via floating pipe to a material disposal impoundment to be constructed in uplands adjacent to the West Fork Bull Creek on the south side of the lake. The dredged material would be dewatered by gravity through the impoundment. As the water level increases, excess water will be pumped out of the impoundment through a rock filter and into a temporary channel to the creek.

The Ozark Eagle Lake is an 11.1-acre lake formed by an earthen dam and concrete spillway with a control gate to manage lake levels. The lake is over 30 years old and has accumulated sediment over that span causing a reduction in lake depths over portions of the lake. The West Fork Bull Creek is a perennial stream at the project location and receives spring-fed flows and runoff from a drainage area of approximately 5,000 acres north of the lake.

The applicant proposes to mitigate for project impacts due to construction of the forebay and sediment basin through the purchase of stream credits from an approved mitigation bank which has a service area containing the project site.

The location and general plan for the proposed work are shown on the enclosed sheets.

Water Quality Certification. The Clean Water Act (CWA) Section 401 Certification Rule (Certification Rule, 40 Code of Federal Regulations (CFR) Part 121), effective November 27, 2023, requires certification for any license or permit that authorizes an activity that may result in a discharge. The scope of a CWA Section 401 certification is limited to assuring that a discharge from a Federally licensed or permitted activity will comply with water quality requirements. This public notice is issued jointly with the Missouri Department of Natural Resources, Water Protection Program. The Department of Natural Resources will use the comments to this notice in deciding whether to grant Section 401 water quality certification. Commenters are requested to furnish a copy of their comments to the Missouri Department of Natural Resources by email at [wpsc401cert@dnr.mo.gov](mailto:wpsc401cert@dnr.mo.gov) or by mail at P.O. Box 176, Jefferson City, Missouri 65102. In accordance with Certification Rule Part 121.6, the Corps and Missouri Department of Natural Resources, Water Protection Program have determined the reasonable period of time for the certifying agency to act upon the certification request is 60 days. In accordance with Certification Rule Part 121.12, the Corps will notify the U.S. Environmental Protection Agency Administrator when it has received the subject certification. The Administrator is responsible for determining if the discharge may affect water quality in a neighboring jurisdiction. The DA permit may not be issued pending the conclusion of the Administrator's determination of effects on neighboring jurisdictions.

Cultural Resources. A Corps staff archeologist will evaluate the proposal for compliance with Section 106 of the National Historic Preservation Act, including identification and evaluation of cultural resources potentially impacted by the proposal's implementation in waters of the United States. The District Engineer invites responses to this public notice from Native American Nations or tribal governments; Federal, State, and local agencies; historical and archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area.

Endangered Species. Our preliminary determination is that the proposed activity will not affect listed Endangered Species or their critical habitat. A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies and constitutes a request to those agencies for information on whether any listed or proposed-to-be-listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Floodplain. We are providing copies of this notice to appropriate floodplain officials in accordance with 44 Code of Federal Regulations (CFR) Part 60 (Floodplain Management

Regulations Criteria for Land Management and Use) and Executive Order 11988 on Floodplain Management.

Section 404(b)(1) Guidelines. The evaluation of activities to be authorized under this permit, which involves the discharge of dredged or fill material will include application of guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. These guidelines are contained in 40 Code of Federal CFR 230.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before **May 13, 2024**. Substantive comments, both favorable and unfavorable, will be accepted and made a part of the record and will receive full consideration in determining whether this work would be in the public interest. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request in writing within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

**NOTE:** The mailing list for this Public Notice is arranged by state and county(s) where the project is located and includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosures

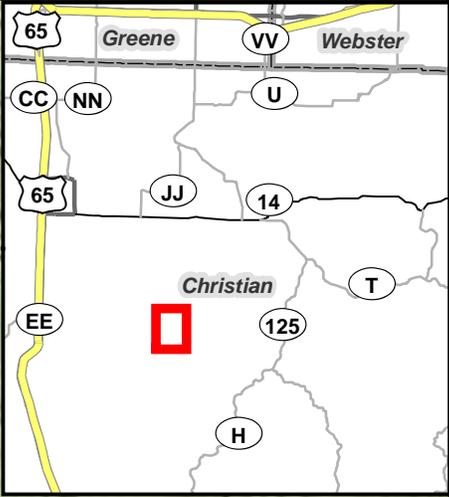
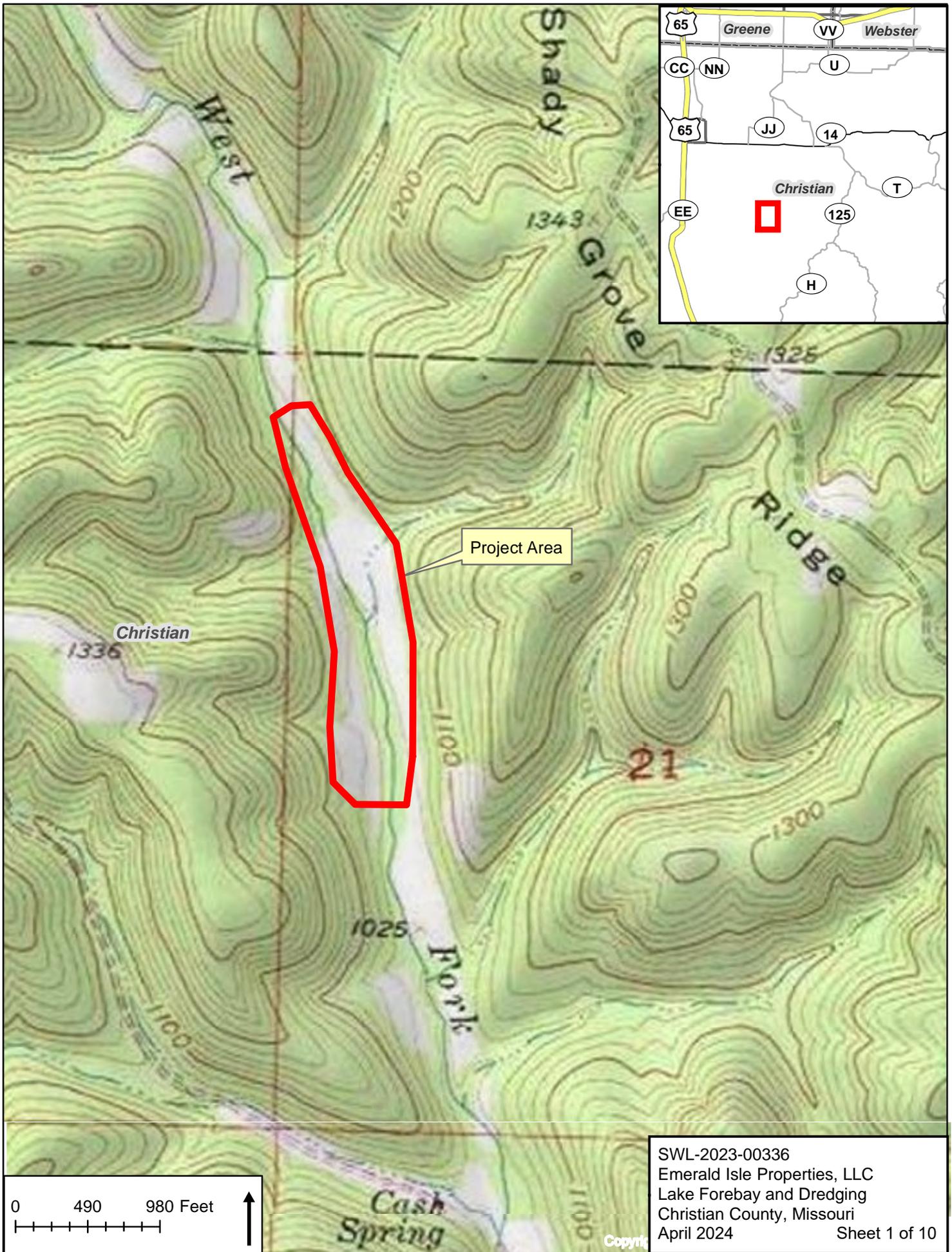
Approximate Coordinates of Project Center

Latitude: **36.941058**

Longitude: **-93.140261**

UTM Zone: **15N** North: **4088342**

East: **487510**



Project Area

Christian

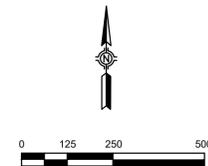
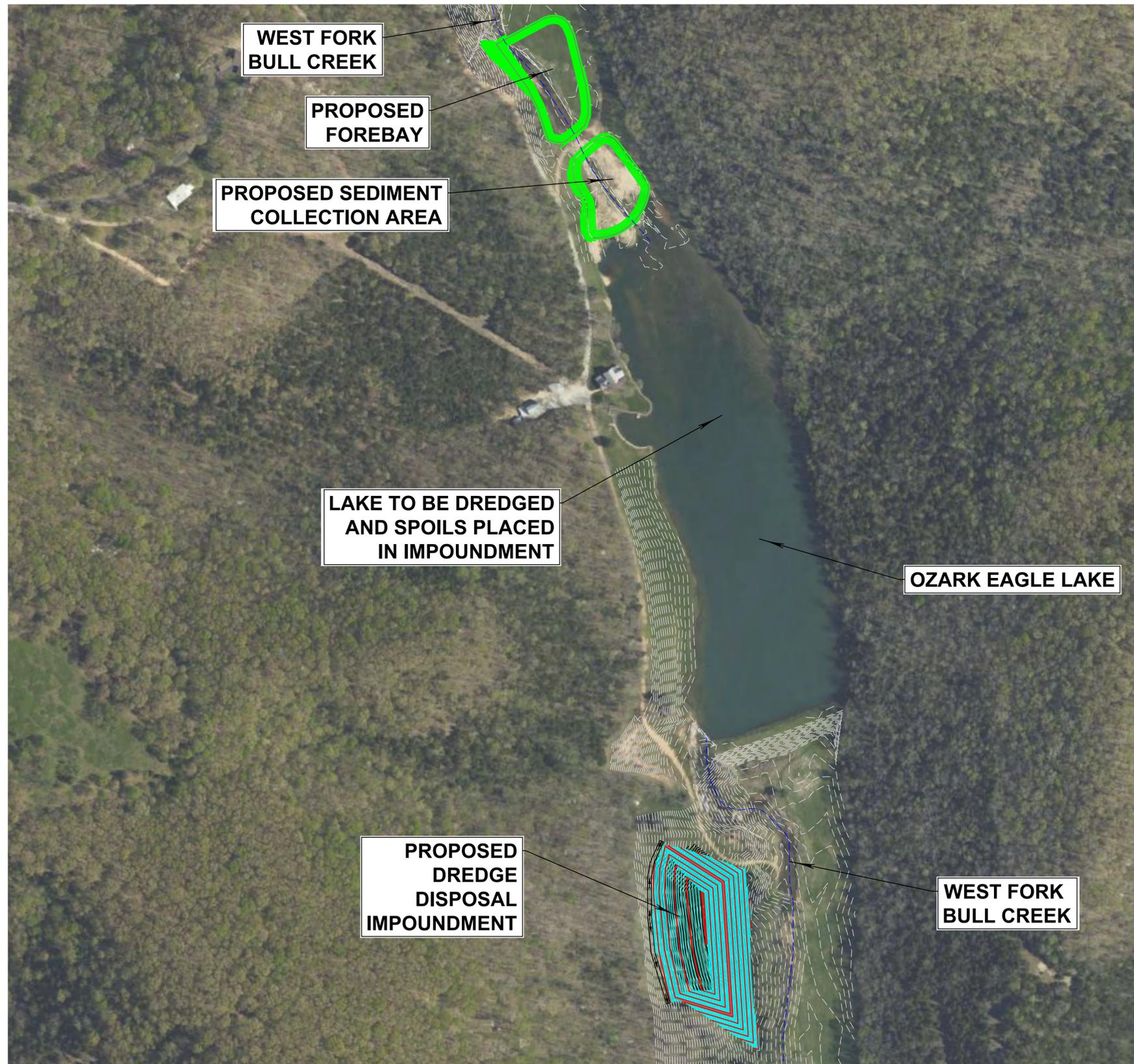
21

0 490 980 Feet



SWL-2023-00336  
Emerald Isle Properties, LLC  
Lake Forebay and Dredging  
Christian County, Missouri  
April 2024  
Sheet 1 of 10

Copyright



**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 2 of 10**

**GENERAL NOTES**

1. ENGINEERING SURVEY BY A & M ENGINEERING CONTROL WAS SET ON 7-26-2022 AND SURVEY WAS CONDUCTED ON 8-18-2022 AND 2-21-2023.
2. VERTICAL DATUM, NAVD 88. HORIZONTAL DATUM NAD83 MISSOURI STATE PLAN CENTRAL ZONE.
3. ALL UNITS IN FEET.
4. BACKGROUND IMAGE BY MICROSOFT MAXAR CNES DISTRIBUTION AIRBUS DS.

**REVISIONS**

NO.	DESCRIPTION	BY	CHECKED	DATE	NO.	DESCRIPTION	BY	CHECKED	DATE



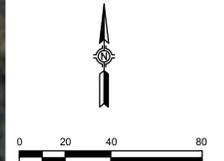
**A & M Engineering and Environmental Services, Inc.**  
 Consulting - Design - Construction - Remediation

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DATE: 9/29/2023	DATE: 9/29/2023	DATE:	DATE: 9/29/2023	DATE: 9/29/2023				

**OVERALL SITE PLAN**  
**DREDGE DISPOSAL IMPOUNDMENT DESIGN**  
**SOLITUDE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

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 FILE: NEW DESIGN.dwg
 DATE: Nov 20, 2023 - 7:47AM



**LEGEND**

- EXISTING GROUND CONTOURS
- PROPOSED FOREBAY CONTOURS
- EXISTING FLOWLINE
- EXISTING ROAD
- RIPRAP AREAS
- A CROSS-SECTION LOCATION

**QUANTITIES**

ITEM #	DESCRIPTION	QUANTITY	UNITS
1	SURVEY	1.00	LUMP SUM
2	CLEARING AND GRUBBING	2.00	ACRES
3	EXCAVATION CUT	9,966.00	CUBIC YARDS
4	8 OZ/SY NON-WOVEN GEOTEXTILE	3,525.00	SQUARE YARDS
5	AASHTO R5 RIPRAP 18"-24"	1,433.00	CUBIC YARDS
6	4"-8" ROCK (MODOT SECTION 609.60.2.2)	1,275.00	CUBIC YARDS
7	AASHTO #57 WASHED STONE	162.00	CUBIC YARDS

**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 3 of 10**

**GENERAL NOTES**

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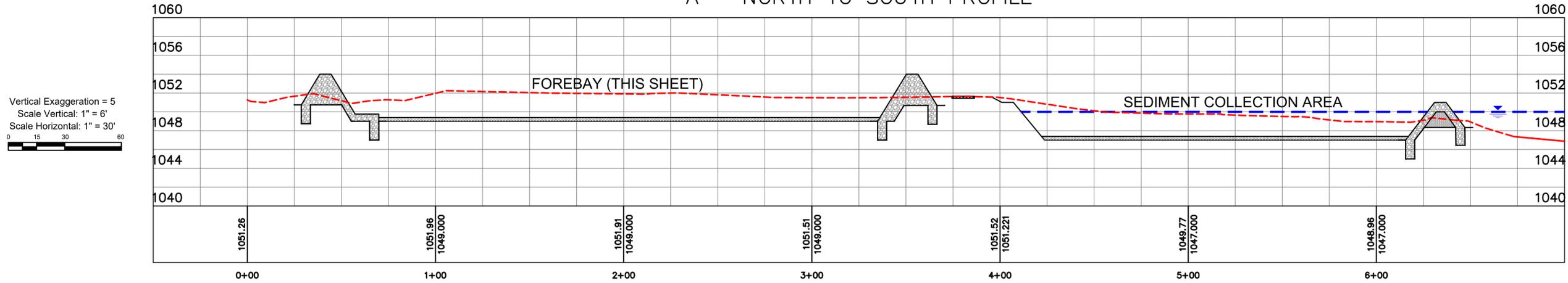
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**SITE PLAN**  
**LAKE FOREBAY DESIGN**  
**SOLIDUTE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

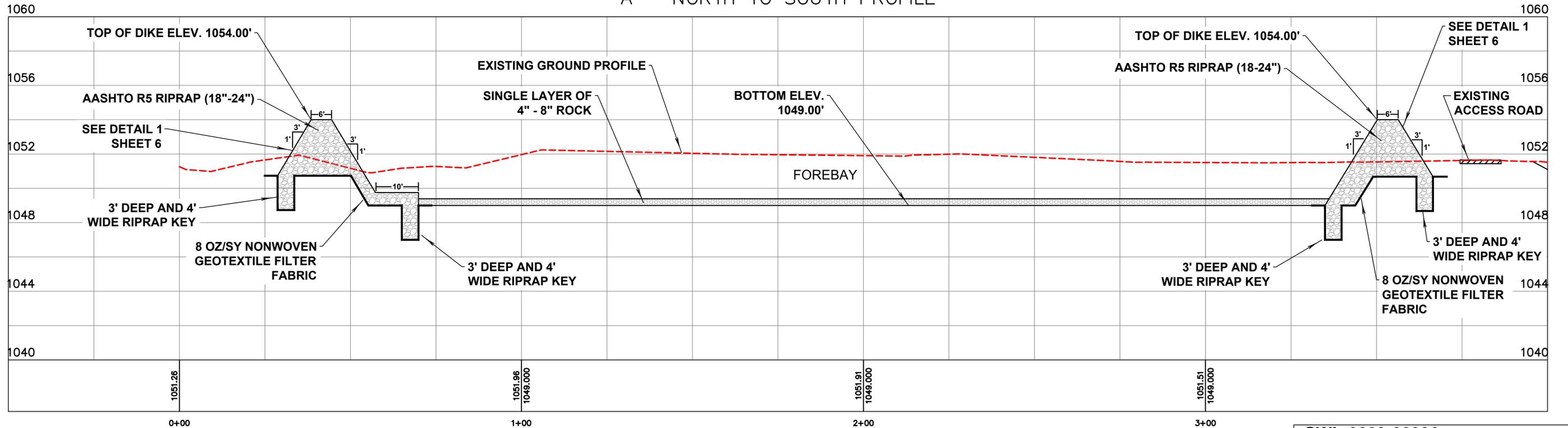
A – NORTH TO SOUTH PROFILE



Vertical Exaggeration = 5  
 Scale Vertical: 1" = 6'  
 Scale Horizontal: 1" = 30'

Vertical Exaggeration = 5  
 Scale Vertical: 1" = 3'  
 Scale Horizontal: 1" = 15'

FOREBAY - STATION 0+00 - 4+00  
 A – NORTH TO SOUTH PROFILE



**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 4 of 10**

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REVISIONS

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**A & M Engineering and Environmental Services, Inc.**  
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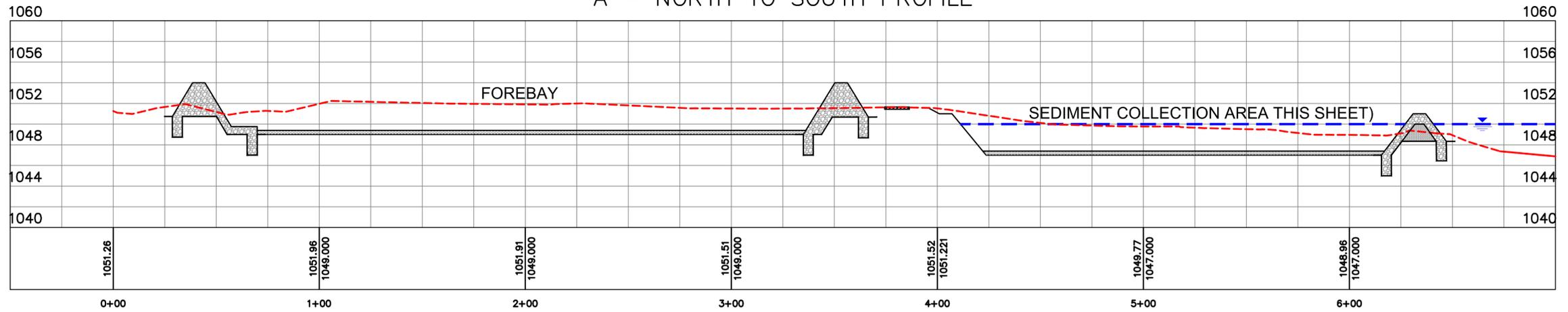
**CROSS-SECTIONS (1)**  
**LAKE FOREBAY DESIGN**  
**SOLIDUTE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

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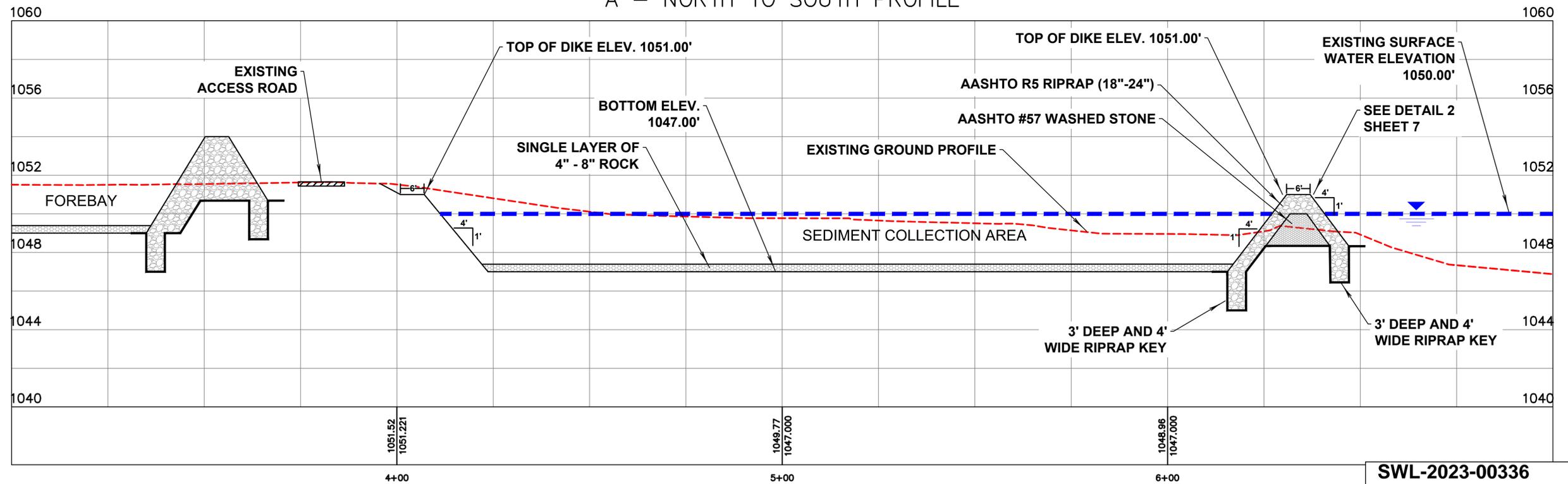
A – NORTH TO SOUTH PROFILE

Vertical Exaggeration = 5  
 Scale Vertical: 1" = 6'  
 Scale Horizontal: 1" = 30'



Vertical Exaggeration = 5  
 Scale Vertical: 1" = 3'  
 Scale Horizontal: 1" = 15'

SEDIMENT COLLECTION AREA - STATION 4+00 - 6+50  
 A – NORTH TO SOUTH PROFILE



**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 5 of 10**

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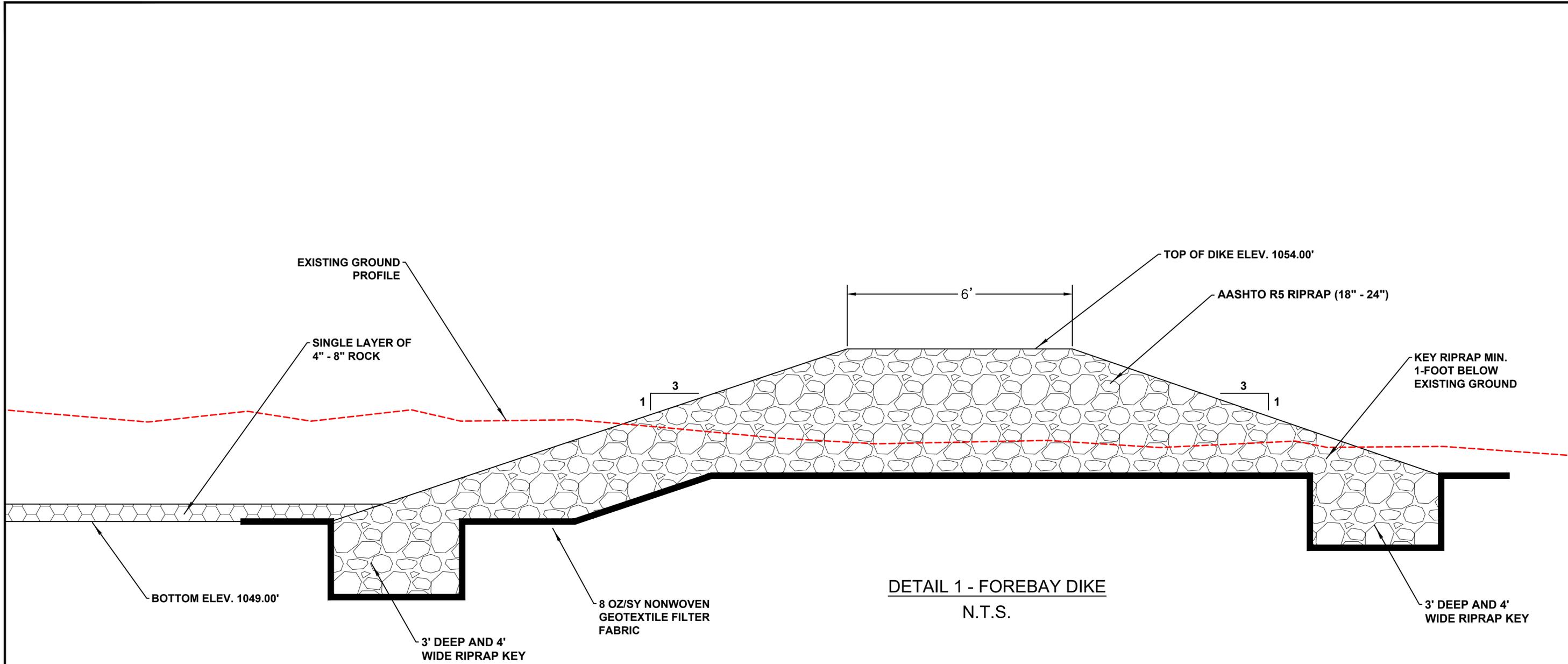


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**CROSS-SECTIONS (2)**  
**LAKE FOREBAY DESIGN**  
**SOLITUDE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

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DETAIL 1 - FOREBAY DIKE  
N.T.S.

**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 6 of 10**

GENERAL NOTES

REVISIONS

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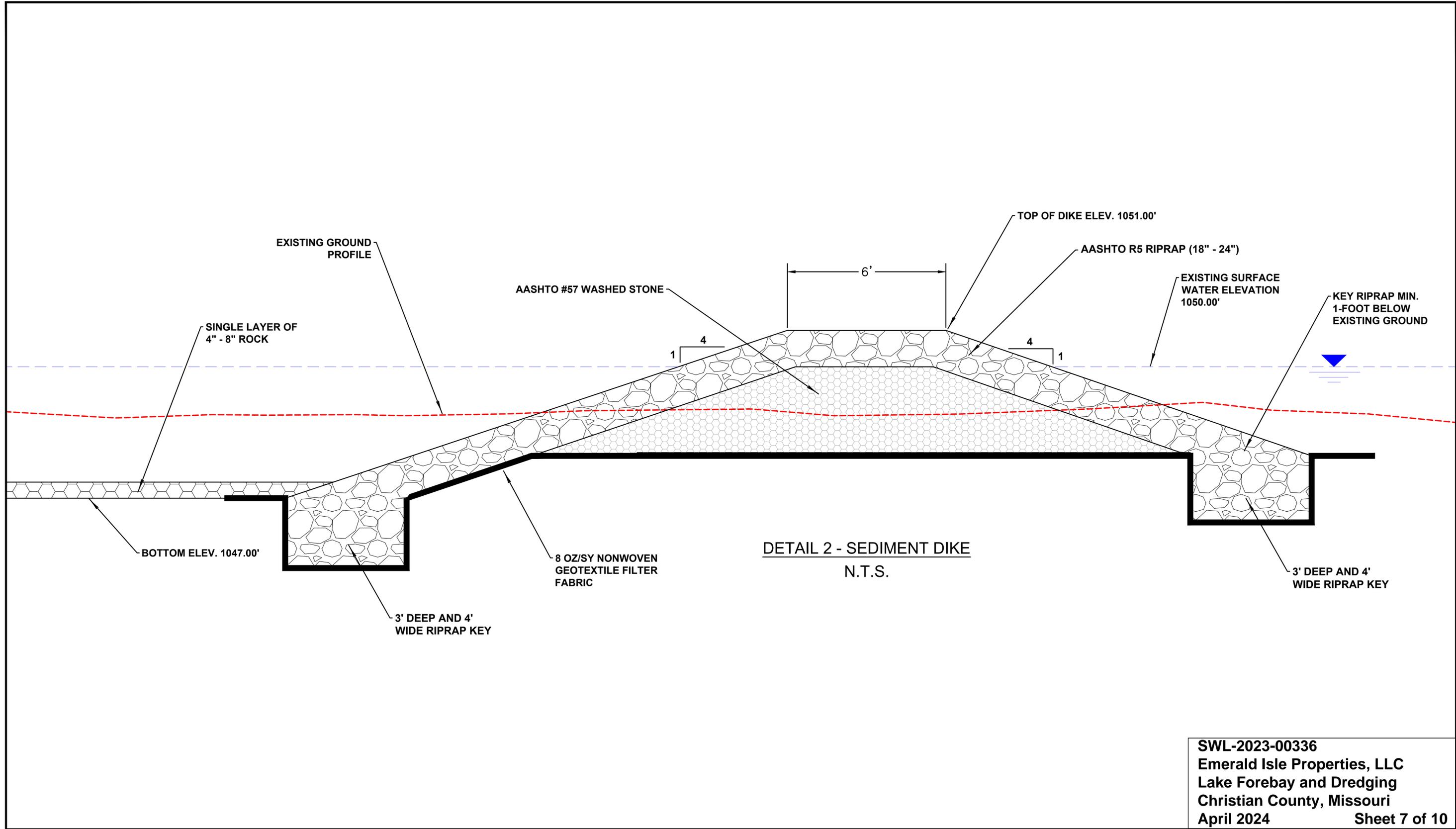


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**FOREBAY DIKE DETAILS**  
**LAKE FOREBAY DESIGN**  
**SOLITUDE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

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**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 7 of 10**

GENERAL NOTES	

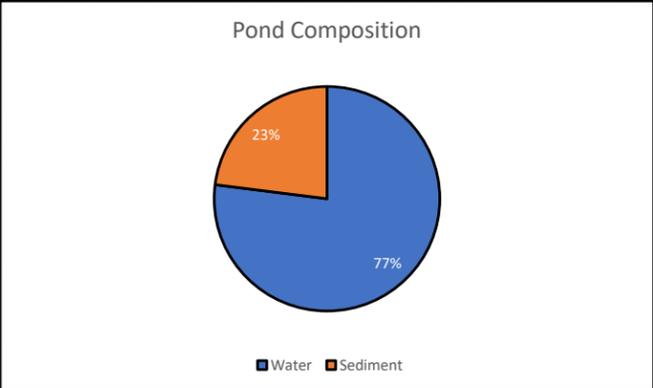
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**A & M Engineering and Environmental Services, Inc.**

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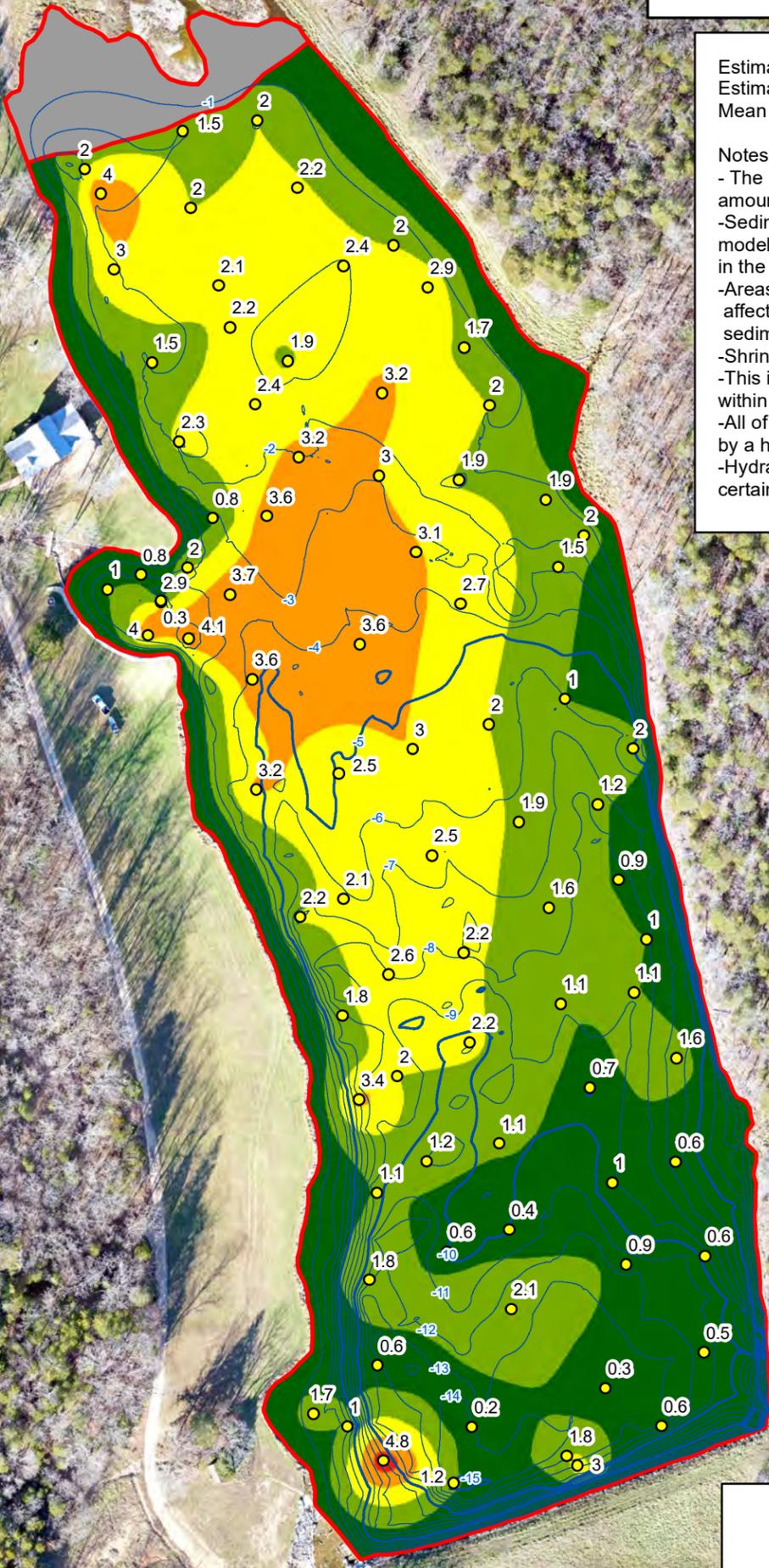
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DATE: 6/1/2023	DATE: 6/1/2023	DATE:	DATE: 6/1/2023	DATE: 6/1/2023				

<b>SEDIMENT DIKE DETAILS</b> <b>LAKE FOREBAY DESIGN</b> <b>SOLITUDE LAKE MANAGEMENT</b> <b>880 CASH SPRING ROAD</b> <b>OZARK, MISSOURI 65721</b>	
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Estimated Soft Sediment Volume: 28,131 yards<sup>3</sup>  
 Estimated Not-Navigable Area Sediment: 840 yards<sup>3</sup>  
 Mean Soft Sediment Thickness: 1.6 ft

- Notes:
- The purpose of this map is to provide an estimated amount of soft sediment
  - Sediment volume calculations based on computer model generated from measurements collected in the field
  - Areas of rock and impermeable surfaces may affect the estimated total volume of removable sediment.
  - Shrinkage not included in calculations
  - This is an estimate of the amount of soft sediment within its designated area
  - All of this material may not be able to be removed by a hydraulic dredge
  - Hydraulic dredges come in various sizes and need certain depths of water to and area to function properly

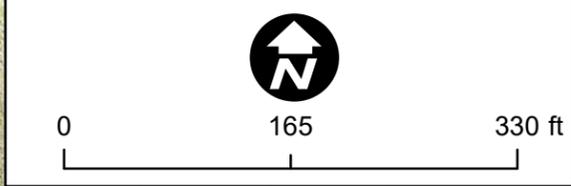


**Water Depth (ft)**

- Minor
- Major
- Not-Navigable
- Sediment Thickness Samples (ft)

**Sediment Thickness (ft)**

- 0 to 1
- 1 to 2
- 2 to 3
- 3 to 4
- 4 to 5



**Pond Information:**

- Area: 11.1 Acres
- Max Depth: -15.2 ft
- Mean Depth: -5.4 ft
- Volume: 19,242,514 gal / 59.1 ac-ft

**Mapping Information:**

- Data Collection Performed: 12-2-21
- GPS: Mapping Grade (sub-foot accuracy)
- Points Collected: 66,000
- Water Level: Adjusted to Full Pool



# Ozark Eagle

**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 8 of 10**

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DATE: Nov/20, 2023 - 7:44AM



**LEGEND**

- EXISTING GROUND CONTOURS
- PROPOSED MAJOR IMPOUNDMENT CONTOUR 5' INTERVAL
- PROPOSED MINOR IMPOUNDMENT CONTOUR 1' INTERVAL
- CROSS-SECTION LOCATION

**DREDGE DISPOSAL IMPOUNDMENT VOLUME CALCULATIONS**

6' WIDTH TOP OF DIKE AT ELEV. 1065.00'  
25' HIGH DIKE  
2.5:1 OUTSIDE SLOPE  
2.5:1 INSIDE SLOPE  
CLAY CORE FOR DIKE IMPOUNDMENT APPROX. 9-10,000 CY

IMPOUNDMENT CUT: 9,249.32 CY  
IMPOUNDMENT FILL: 18,756.54 CY  
NET FILL: 9,507.22 CY

IMPOUNDMENT AIR SPACE VOLUME TO INVERT 1.0' BELOW TOP OF DIKE ELEV 1064.00': 20,227.54 CY

**FOREBAY/SEDIMENT COLLECTION AREA AND LAKE DREDGE SPOIL MATERIAL VOLUME CALCULATIONS**

FOREBAY AREA CUT: 5,300 CY  
SEDIMENT COLLECTION AREA CUT: 4,7000 CY  
TOTAL CUT: 10,0000 CY

NET FILL FROM CONSTRUCTION OF DREDGE DISPOSAL IMPOUNDMENT: 9,507.22 CY

NET VOLUME BALANCE: 492.78 CY CUT

DREDGING TO A DEPTH OF 6' SPOILS VOL: 17,567 CY  
DREDGING TO A DEPTH OF 8' SPOILS VOL: 20,611 CY

**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
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**April 2024** **Sheet 9 of 10**

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REVISIONS				
NO.	DESCRIPTION	BY	CHECKED	DATE

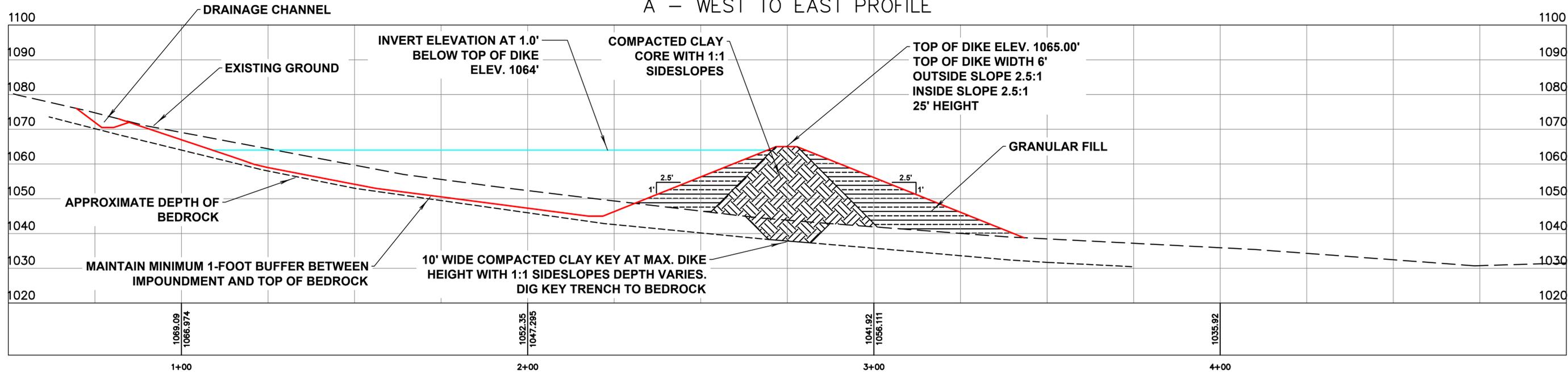
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DRAWN: ALB	CHECKED BY: TE	MATERIALS BY:	ENGINEER: ALB
DATE: 9/29/2023	DATE: 9/29/2023	DATE:	DATE: 9/29/2023

**SITE PLAN - DREDGE DISPOSAL IMPOUNDMENT DESIGN**  
**SOLITUDE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

APPROVED BY: TE	SCALE: GRAPHIC	PROJECT NUMBER: 2511-0002	DRAWING NUMBER: SHEET NO. 3	REV: .
DATE: 9/29/2023				

A – WEST TO EAST PROFILE



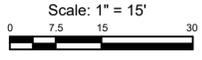
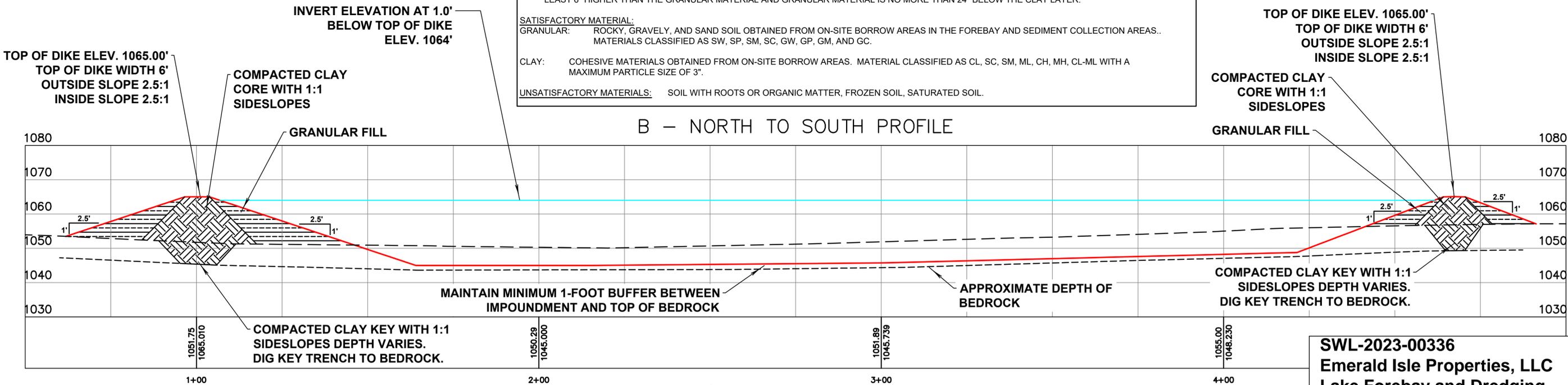
**DREDGE DISPOSAL IMPOUNDMENT CONSTRUCTION NOTES:**

- INSTALL THE CLAY CORE IN 6" COMPACTED LIFTS. COMPACT CLAY MATERIAL TO A MINIMUM OF 95% OPTIMUM DENSITY AND 0 TO +3% OPTIMUM MOISTURE BASED OF THE STANDARD PROCTOR.
- INSTALL THE GRANULAR MATERIAL IN 12" LIFTS. COMPACT GRANULAR FILL WITH MULTIPLE PASSES OF A DOZER.
- BUILD UP THE ENTIRE CLAY AND GRANULAR CROSS-SECTION TOGETHER. PLACE CLAY AND GRANULAR MATERIAL SUCH THAT THE TOP OF CLAY IS AT LEAST 6" HIGHER THAN THE GRANULAR MATERIAL AND GRANULAR MATERIAL IS NO MORE THAN 24" BELOW THE CLAY LAYER.

**SATISFACTORY MATERIAL:**  
 GRANULAR: ROCKY, GRAVELY, AND SAND SOIL OBTAINED FROM ON-SITE BORROW AREAS IN THE FOREBAY AND SEDIMENT COLLECTION AREAS. MATERIALS CLASSIFIED AS SW, SP, SM, SC, GW, GP, GM, AND GC.  
 CLAY: COHESIVE MATERIALS OBTAINED FROM ON-SITE BORROW AREAS. MATERIAL CLASSIFIED AS CL, SC, SM, ML, CH, MH, CL-ML WITH A MAXIMUM PARTICLE SIZE OF 3".

**UNSATISFACTORY MATERIALS:** SOIL WITH ROOTS OR ORGANIC MATTER, FROZEN SOIL, SATURATED SOIL.

B – NORTH TO SOUTH PROFILE



**SWL-2023-00336**  
**Emerald Isle Properties, LLC**  
**Lake Forebay and Dredging**  
**Christian County, Missouri**  
**April 2024** **Sheet 10 of 10**

GENERAL NOTES

- ENGINEERING SURVEY BY A & M ENGINEERING CONTROL WAS SET ON 7-26-2022 AND SURVEY WAS CONDUCTED ON 8-18-2022 AND 2-21-2023.
- VERTICAL DATUM, NAVD 88. HORIZONTAL DATUM NAD83 MISSOURI STATE PLAN CENTRAL ZONE.
- ALL UNITS IN FEET.

REVISIONS

NO.	DESCRIPTION	BY	CHECKED	DATE	NO.	DESCRIPTION	BY	CHECKED	DATE

**A & M Engineering and Environmental Services, Inc.**  
 Consulting - Design - Construction - Remediation

**CROSS-SECTIONS**  
**DREDGE DISPOSAL IMPOUNDMENT**  
**SOLITUDE LAKE MANAGEMENT**  
**880 CASH SPRING ROAD**  
**OZARK, MISSOURI 65721**

DRAWN: ALB	CHECKED BY: TE	MATERIALS BY:	ENGINEER: ALB	APPROVED BY: TE	SCALE: GRAPHIC	PROJECT NUMBER: 2511-0002	DRAWING NUMBER: SHEET NO. 4	REV:
DATE: 9/29/2023	DATE: 9/29/2023	DATE:	DATE: 9/29/2023	DATE: 9/29/2023				

PATH: C:\Users\alberta\Documents\A and M Engineering\01 Projects\SOLITUDE Lake Management\2511-0001\_Ozark Eagle Lake Forebay Design (MO)\DWGS\FILE: IMPOUNDMENT AT 1065 - 25' TALL 6' WIDE DIKE 2.5 SLOPES.dwg  
 DATE: Nov 10, 2023 - 10:02AM