

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, SC 29403-5107
and
THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Water Quality Certification and Wetlands Section
2600 Bull Street
Columbia, South Carolina 29201

REGULATORY DIVISION
Refer to: SAC-2022-01552

January 23, 2023

Pursuant to Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), the South Carolina Coastal Zone Management Act (48-39-10 et.seq.), and the S.C. Construction in Navigable Waters Permit Program (R. 19-450, et. seq., 1976 S.C. Code of Laws, as amended), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

Mr. Brian Appel
Moon River Capital
100 Bull Street Suite 200
Savannah, Georgia 31401
c/o
Mr. Alton Brown, Jr.
Resource & Land Consultants
41 Park of Commerce Way, Suite 101
Savannah, Georgia 31405
abrown@rlandc.com

for a permit to discharge fill material into wetlands associated with the

NEW RIVER/GREAT SWAMP

located on a 2,230.8-acre tract adjacent to and northwest of Highway 46 and adjacent to and east of Striker Road in Hardeeville, Jasper County, South Carolina (Latitude: 32.25883 °, Longitude: -81.01530 °), Hardeeville Quad.

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

15 Days from the Date of this Notice,

and **SCDHEC** will receive written statements regarding the proposed work until

30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

NOTE: This public notice and associated plans are available on the Corps' website at: <http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

Applicant's Stated Purpose

According to the applicant, the purpose of the proposed project is to construct a mixed-use development within upland areas.

Project Description

The proposed work consists of the discharge of fill material into 17.55 acres of freshwater wetlands for the construction of a mixed use residential and commercial development. In detail, the proposed work consists of the discharge or fill material into 17.55 acres of freshwater wetlands for road and utility crossings associated with the construction of the development. The proposed development plan includes the construction of a mixed-use community consisting of primarily single-family residential development with a small area of multifamily residential and commercial development. Of the total 2,230.8-acre tract, 1,050 acres will be developed for the roads, stormwater management areas and general development areas (mixed-use and single family residential).

Avoidance and Minimization

The applicant has stated that the proposed project will avoid and/or minimize impacts to the aquatic environment by designing the site plan specifically to avoid wetlands during construction of commercial development, single family residential development, multifamily residential development and stormwater management facility installation. The only impacts to aquatic resources required for the project are

associated with installation of road crossings for vehicular access and installation of utilities.

Proposed Compensatory Mitigation

The proposed project requires 218.8 wetland credits to off-set the impacts to 17.55 acres of freshwater wetlands. The applicant is proposing on-site wetland and upland buffer preservation and mitigation credit purchase. The proposed mitigation plan includes the preservation of 1,135.65 acres of wetlands, of which includes 71.45 acres of slope and depressional wetlands and 425.2 acres of New River Swamp. In addition, the applicant is proposing 105.8 acres of upland buffer preservation adjacent to the preserved wetland areas.

The applicant is proposing to receive the 25% reduction (54.7 credits) in the required wetland mitigation credits as a result of the on-site wetland and upland buffer preservation therefore reducing the number of required wetland mitigation credits to 164.1. In addition, to receiving the 25% credit reduction, the applicant is also proposing that the on-site wetland and upland buffer preservation would generate 137.1 wetland credits. The remaining 81.7 credits would be purchased from a Corps approved mitigation bank.

The applicant also notes that based on completion of the Proposed Wetland Mitigation Table, that the preservation of 1,135.65 acres of wetlands and 105.6 acres of upland buffers generate 1,664.14 proposed mitigation credits.

With regard to the proposed on-site wetland preservation, the applicant provided the following information supporting their proposal:

As outlined in the mitigation rule, “(h) Preservation. (1) Preservation may be used to provide compensatory mitigation for activities authorized by DA permits when all the following criteria are met: (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed; (ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available; (iii) Preservation is determined by the district engineer to be appropriate and practicable; (iv) The resources are under threat of destruction or adverse modifications; and (v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust)”.

The following provides a brief justification for the proposed preservation for each of the five criteria listed above.

(i) The resources to be preserved provide important physical, chemical, or biological

functions for the watershed. The proposed preservation areas include depressional wetland areas, slope wetlands, riverine wetlands and uplands directly connected to the new river and New River Swamp.

Floodplain forests are among the highest in primary productivity of any ecosystem in the southeastern U.S. Major functional categories associated with forested riverine floodplain wetlands include hydrology, water quality, fisheries and wildlife, ecosystem processes, and cultural/recreational/economic. Specific functions include flood storage, velocity reduction, groundwater discharge modification, sediment retention, erosion control, nutrient retention and transformation, habitat for finfish, habitat for shellfish, habitat for waterfowl, habitat for a wide variety of mammals, maintenance of natural biotic diversity on a watershed and site-specific level, food chain support, stream flow mediation, and water quality transformation and filtering.

In addition to the preservation of high priority and highly productive habitats, the proposed mitigation area provides important physical, chemical, and biological functions for the New River watershed. The following outlines several watershed benefits for each of the functional categories.

a. Physical Functions: The project site provides many important physical functions including flood control, shore line protection, and river corridor protection.

Flood Control: Wetlands provide natural buffers that capture stormwater, temporarily store stormwater and slowly release stormwater over a period of time. This site is located adjacent to New River and contains many natural sloughs, depressions and micro-topography which provide various levels of flood control. Overall, the wetland preservation areas provide floodplain storage and flood relief for the New River.

Shoreline Protection: The existing vegetative structure associated with this property minimizes the erosive nature of storm flow events within this section of river. Overstory and understory vegetative root structure holds soil in place greatly reducing bank erosion and prohibiting soil erosion within the site. This natural erosion control and prevention is beneficial to the entire watershed.

Vegetation Protection: The proposed project will result in the protection of valuable hardwood and freshwater herbaceous wetland habitat.

b. Chemical Functions: The mitigation site provides outstanding pollution treatment and biogeochemical cycling.

This large freshwater wetland and floodplain system acts as a sponge where water is filtered through the substrate and wetland plants, removing nutrients such as phosphorous, nitrogen, and other toxins. The wetland area allows natural cycling of

various nutrients within the biota, soils, water, and air.

The site provides valuable water filtration for this area of the New River. Wetlands improve water quality by acting as sediment sinks or basins. Existing vegetation and reduction in water velocity allows sediments to drop out and settle on the bottom of the wetland. Many nutrients from human sources that are dissolved in water (i.e. fertilizers, fecal matter, etc.) are absorbed by plant roots and microorganisms in the soil.

The site provides habitat important for carbon cycling by storing carbon within plant biomass instead of releasing it to the atmosphere as carbon dioxide.

The quality of water entering or leaving the floodplain and exported downstream can be affected by the nutrient content of surface water or ground water from the watershed. Forested riverine wetlands effectively reduce levels of nutrients from adjacent tributaries. The important relationship between the stream and the floodplain has been well documented. Any future impacts that occur within this site would inevitably impact downstream areas of the watershed. Thus, the site clearly provides important chemical functions for the New River Watershed.

c. Biological Functions: Forested riparian floodplains provide habitat for various life stages and activities of numerous species of fish, birds, mammals, and invertebrates. It is generally known that palustrine wetlands of riparian floodplains provide cover, spawning, and nursery habitat for numerous fish species. It has been shown that 20 fish species use forested floodplains for feeding, spawning, and rearing young. Crayfish form a large percentage of the aquatic animal biomass on floodplains and are an important food source for large predator fishes.

In addition, nutrient supplies from the watershed deposited during stream flooding provide resources necessary to sustain high rates of productivity. Wetland trees and herbaceous vegetation are the floodplains primary producers and the source of much of the detritus on the floodplain and in the associated stream.

Obviously, riverine wetlands and floodplain wetlands are not isolated or enclosed systems and these areas provide important physical, chemical, and biological functions for the New River Watershed.

(ii) The resources to be preserved contribute significantly to the ecological sustainability of the watershed. The preservation area contributes to the New River Watershed in many ways and several key functions of this site contribute to the sustainability of the watershed.

First, the physical, chemical, and biological attributes discussed above all provide functions critical to the overall sustainability of the watershed.

Second, because of the close connection between the hydrologic regime of a river and organisms living in its floodplain, alterations in river hydrology can greatly affect processes within riparian ecosystems. The proposed project and preservation areas are critical to the sustainability of natural species composition of the New River Swamp.

Third, many rivers within the southeast have been extensively altered since colonial periods. Changes in hydrologic regime may also lead to greater susceptibility of the floodplain ecosystem to exotic invasive species. Recruitment and growth of this highly shade and flood tolerant species may be accelerated by changes in floodplain hydrology which adversely affect native species. The proposed preservation of natural habitat and prohibition of timber harvesting through the protection of the site reduces opportunity for expansion of non-native invasive species.

In summary, the project provides protection of natural functions, floodplain, and cypress/tupelo wetland and oak habitat all of which are important to the sustainability of the watershed. Just as alterations within riverine and floodplain wetlands have functional impacts to the overall watershed, preservation of the forested wetlands within the property will aid in the protection, maintenance, and sustainability of the New River watershed.

(iii) Preservation is determined by the district engineer to be appropriate and practicable. Because protection of wetland habitats has been incorporated into most mitigation plans associated with other federal actions and bank projects approved by the IRT and because the applicant is legally capable of preserving the wetlands with establishment of a restrictive covenant and granting of a conservation easement, the proposed wetland preservation plan for this mitigation project is appropriate and practicable.

(iv) The resources are under threat of destruction or adverse modifications. While numerous potential threats could be documented, the two major threats are associated with timber harvesting and flood plain connectivity.

The mitigation site contains large areas currently and historically dominated by cypress and a variety of other mature desirable hardwood species. Protection of these wetland areas will prohibit future logging and timber harvesting activities.

Beyond threats to vegetative community, it is well documented that fragmentation of forested habitat can alter the functions of a floodplain. River floodplain connectivity can affect distributions of fish and the invertebrates on which they feed, both concentrating in the river-floodplain ecotone. Should river-floodplain connectivity be inhibited or altered, invertebrates that use the floodplain often decrease and become less available

to predatory fish. Invertebrates also provide other ecosystem services such as contributing to litter breakdown, which may also be impaired by reduced connectivity. The proposed preservation of the site will prohibit any unnatural alteration or fragmentation of the floodplain.

(v) The preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust). Upon approval of the compensatory mitigation, the mitigation site will be permanently protected by recording a restrictive covenant. A draft restrictive covenant will be prepared by a qualified real estate attorney using the Charleston District Restrictive Covenant Model of September 2010. A draft copy of the restrictive covenants and draft mitigation area boundary survey will be provided to Office of Counsel (OC) for review. Upon approval by OC, the boundary survey and the declaration of restrictive covenants will be recorded in the record deeds office in Jasper County and a recorded copy shall be provided to OC showing the book and page numbers of its recorded location.

The mitigation site will be posted with appropriate signs and marked clearly. Signs will meet the following criteria: painted metal, printed plastic, or other durable construction; placed at intervals not to exceed 300'; affixed at approximately 5' above ground elevation; contain the phrase "Conservation Area Do Not Disturb" or similar; text shall be of sufficient font, size and color to be easily legible at 25'; signs shall face away from the protected property.

As discussed above, the site contributes significantly to the ecological sustainability of the watershed, the preservation is appropriate and practicable; the resources are under threat of destruction or adverse modifications by continued timber management; and the preserved site will be permanently protected through establishment of a declaration of restrictive covenants and/or a conservation easement.

The mitigation credit calculations for the proposed preservation indicate the wetland and upland buffer preservation generates more than 5 times the mitigation credits required for the project. Considering the mitigation credit value and based on the ecological value and total acreage of both wetland and upland buffer preservation, the applicant is proposing to satisfy 137.1 wetland credits via wetland and upland buffer preservation. As noted above, the preservation area totals 1,135.65 acres of wetland preservation 105.5 acres of upland buffer preservation varying in width from a minimum of 25 feet to 50 feet.

South Carolina Department of Health and Environmental Control

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the certifying authority, South Carolina Department of Health and Environmental Control, in accordance with provisions of Section 401 of the Clean Water Act (CWA). The CWA Section 401 Certification Rule (Certification Rule, 40 CFR 121), effective September 11, 2020, requires certification, or waiver, 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. The applicant is responsible for requesting certification and providing required information to the certifying authority. In accordance with Certification Rule part 121.12, the Corps will notify the U.S. Environmental Protection Agency Administrator when it has received a Department of the Army (DA) permit application and the related 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.

The work shown on this application must also be certified as consistent with applicable provisions of the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact 17.55 acres of freshwater wetlands inland of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Endangered Species

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project and based on the location of the project and available information, the following species may be present in the County(s) where the work will occur: Frosted flatwoods salamander, American wood stork, Eastern black rail, piping plover, red-cockaded woodpecker, Rufa red knot, Atlantic sturgeon, shortnose sturgeon, finback whale, humpback whale, Northern long-eared bat, North Atlantic right whale, sei whale, sperm whale, West Indian manatee, American chaffseed, green sea turtle, Kemp's Ridley sea turtle, leatherback sea turtle, and loggerhead sea turtle.

Based on all information provided by the applicant and the most recently available information, the District Engineer has determined the following:

The project will have no effect on the frosted flatwoods salamander, Eastern black rail, piping plover, red-cockaded woodpecker, Rufa red knot, Atlantic sturgeon, shortnose sturgeon, finback whale, humpback whale, North Atlantic right whale, sei whale, sperm whale, West Indian manatee, American chaffseed, green sea turtle, Kemp's Ridley sea turtle, leatherback sea turtle, and loggerhead sea turtle and will not result in the destruction or adverse modification of designated or proposed critical habitat.

The project is not likely to adversely affect the American wood stork or the Northern long eared bat, or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity.

Cultural Resources

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(1)), and has initially determined that there are historic properties present, but they will not be affected; therefore, there will be no effect on

historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

Corps' Evaluation

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 and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. 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 project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project 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, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

Solicitation of Public Comment

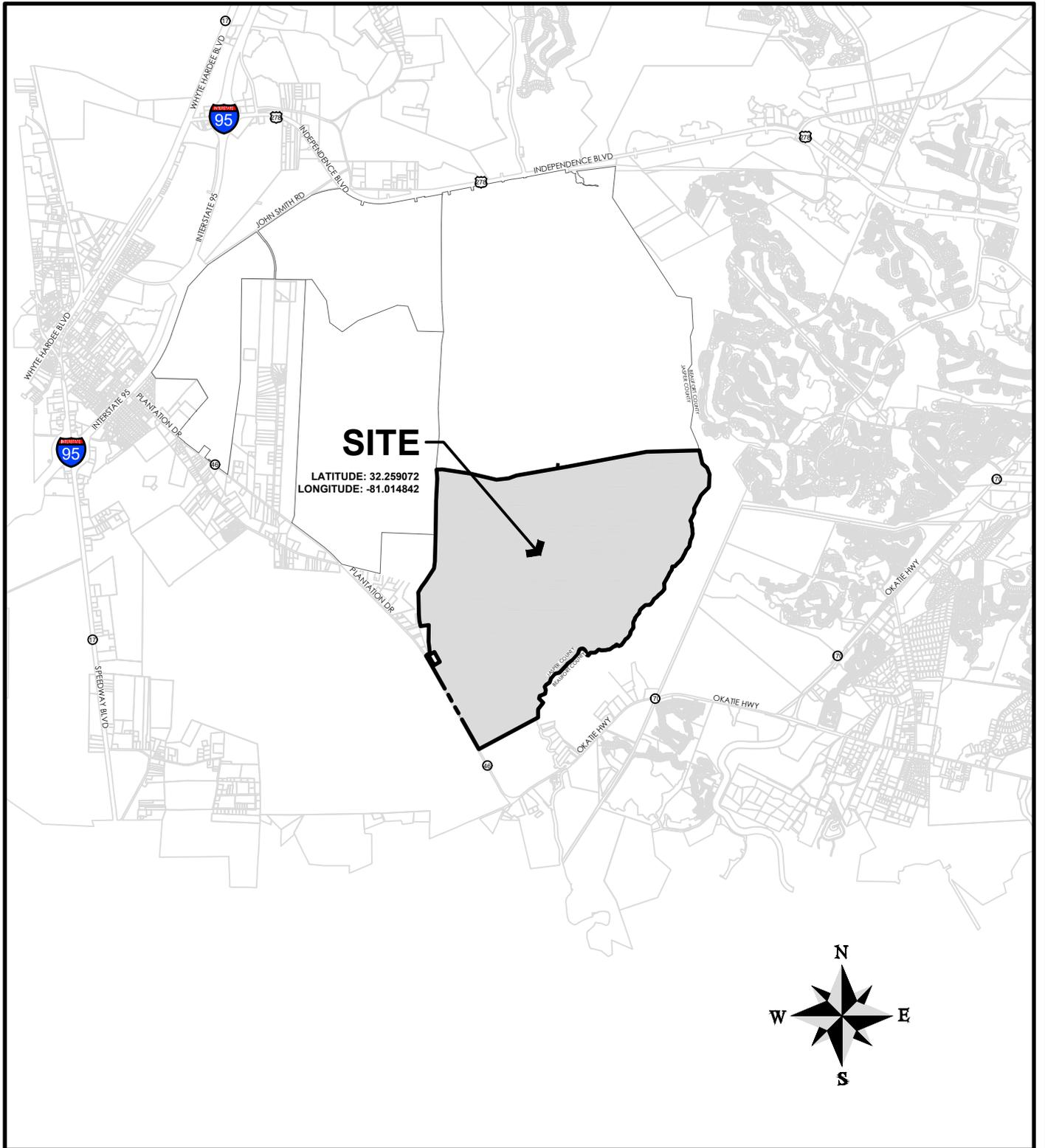
The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. 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 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 a public hearing shall state, with particularity, the reasons for holding a public hearing.

Please submit comments in writing, identifying the project of interest by public notice/file number (SAC-2022-01552), to Tracy.D.Sanders@usace.army.mil or the following address:

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, SC 29403-5107**

If there are any questions concerning this public notice, please contact Tracy D. Sanders, Project Manager, at (843) 329-8190, toll free at 1-866-329-8187, or by email at Tracy.D.Sanders@usace.army.mil.



KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT
LOCATION MAP

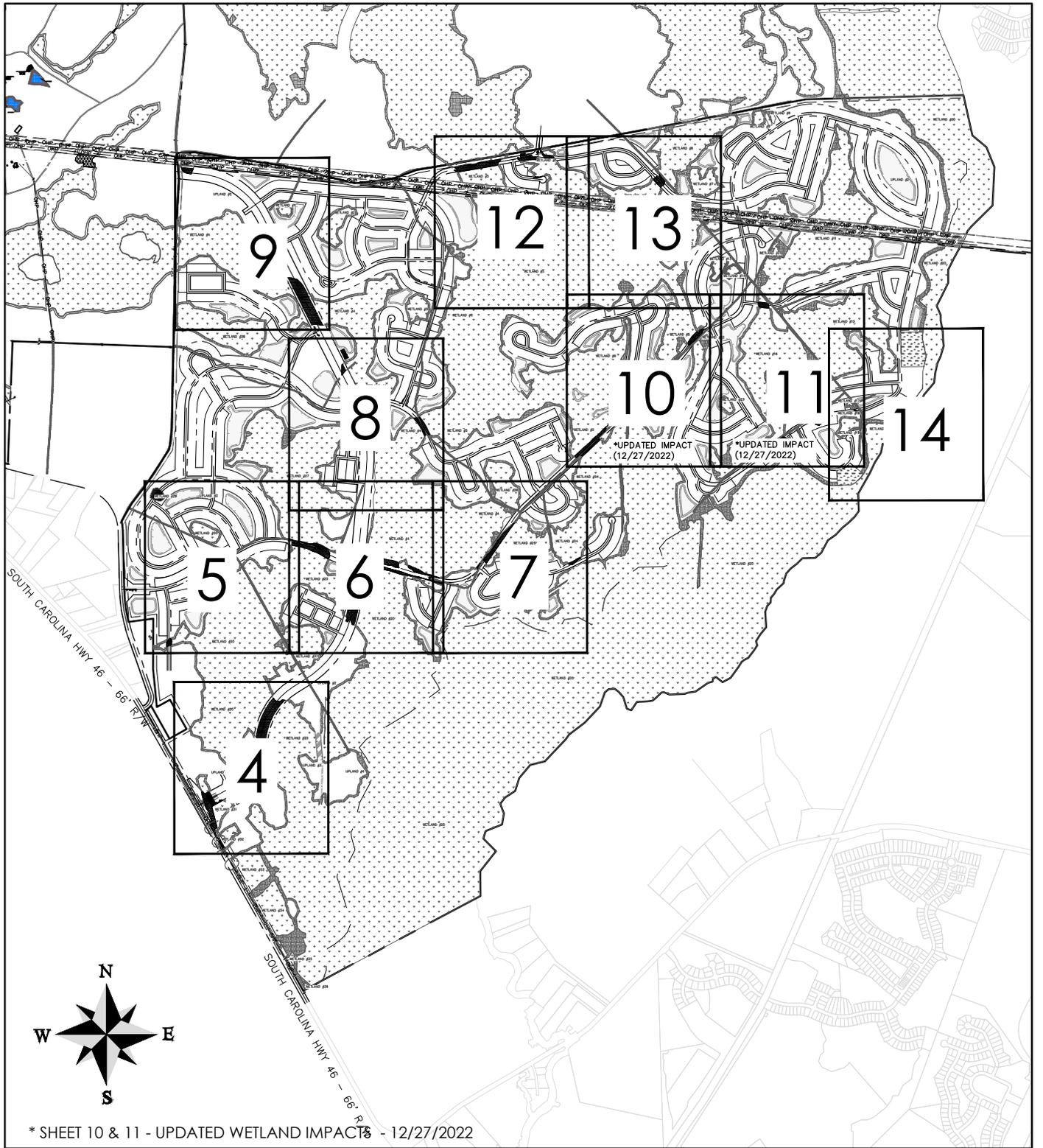
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
DATE: 01/19/23 DRAWN BY: TTH SHEET: 1 OF 22
JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: 1" = 6000'



50 Park of Commerce Way
Savannah, GA 31405 • 912.234.5300

www.thomasandhutton.com



* SHEET 10 & 11 - UPDATED WETLAND IMPACTS - 12/27/2022

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT
SHEET INDEX

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA	DATE: 01/19/23	DRAWN BY: TTH	SHEET: 2 OF 22
JOB NUMBER: J-28779.0004	REVIEWED BY: FIT	SCALE: 1" = 2000'	



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LEGEND

PROJECT SITE

	TOTAL PROJECT ACREAGE.....	2,230.8 AC
	TOTAL UPLAND AREA.....	1,039.2 AC
	TOTAL JURISDICTIONAL WETLAND.....	1,172.4 AC
	TOTAL POWER/GAS EASEMENT/CITY PARK ACCESS WETLAND ²	19.2 AC
	TOTAL WETLAND BUFFER.....	105.8 AC
TOTAL WETLAND PRESERVATION.....		1,135.65 AC

JURISDICTIONAL WETLAND IMPACTS

	TOTAL ROAD CROSSING WETLAND MPACT.....	17.55 AC
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² NOTE: POWER AND GAS EASEMENTS ON THESE WETLANDS (PRESERVATIONS OR IMPACTS) ARE NOT IN THE SCOPE OF THIS PERMIT
 * SHEET 10 & 11 - UPDATED WETLAND IMPACTS - 12/27/2022

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT
LEGEND

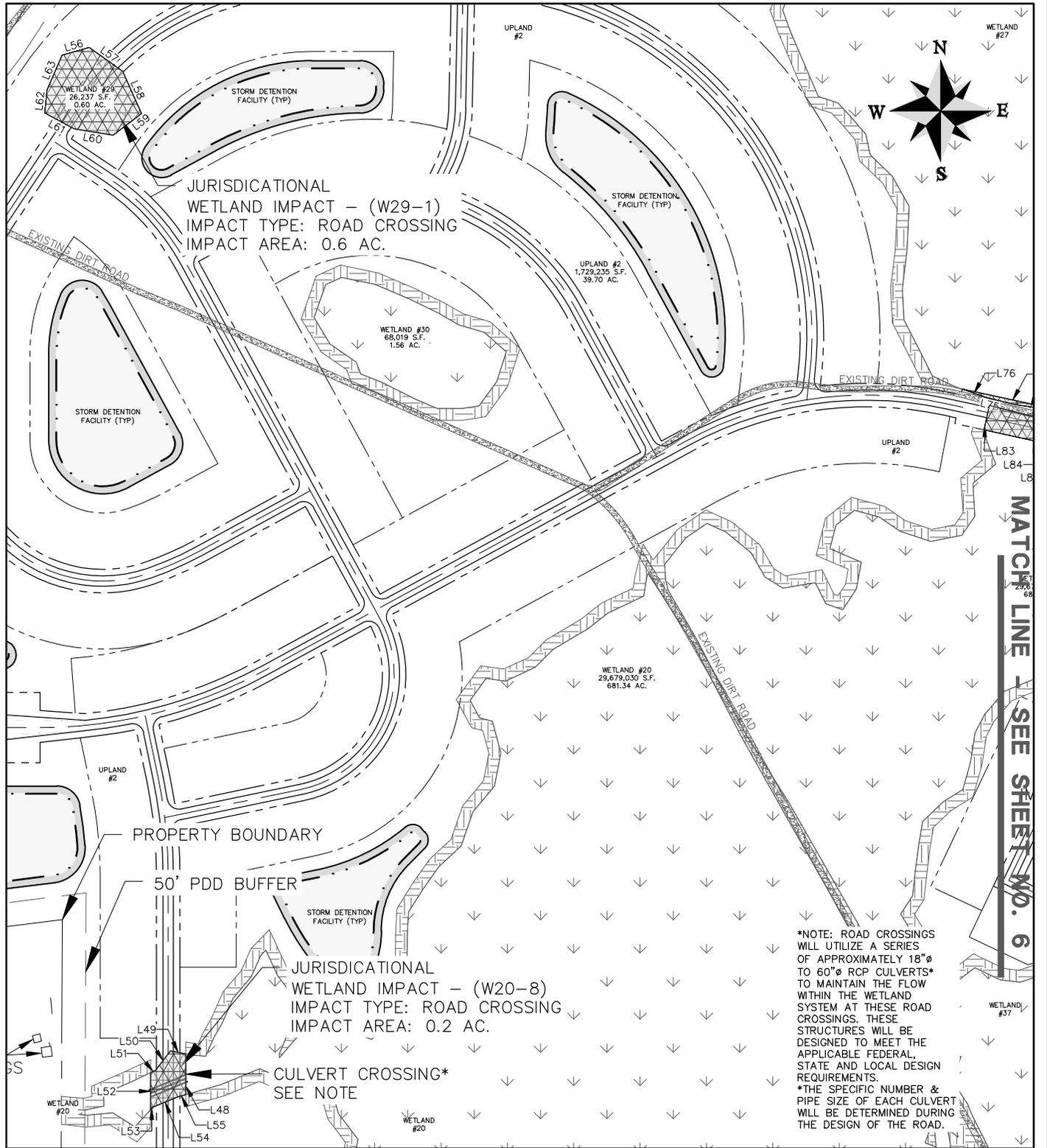
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA		
DATE: 01/19/23	DRAWN BY: TTH	SHEET: 3 OF 22
JOB NUMBER: J-28779.0004	REVIEWED BY: FIT	SCALE: N.T.S.



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NOTE: ROAD CROSSINGS WILL UTILIZE A SERIES OF APPROXIMATELY 18"Ø TO 60"Ø RCP CULVERTS TO MAINTAIN THE FLOW WITHIN THE WETLAND SYSTEM AT THESE ROAD CROSSINGS. THESE STRUCTURES WILL BE DESIGNED TO MEET THE APPLICABLE FEDERAL, STATE AND LOCAL DESIGN REQUIREMENTS.
*THE SPECIFIC NUMBER & PIPE SIZE OF EACH CULVERT WILL BE DETERMINED DURING THE DESIGN OF THE ROAD.

KARRH TRACT - 404 WETLAND PERMIT

WETLAND IMPACT MAP IMPACT PLAN

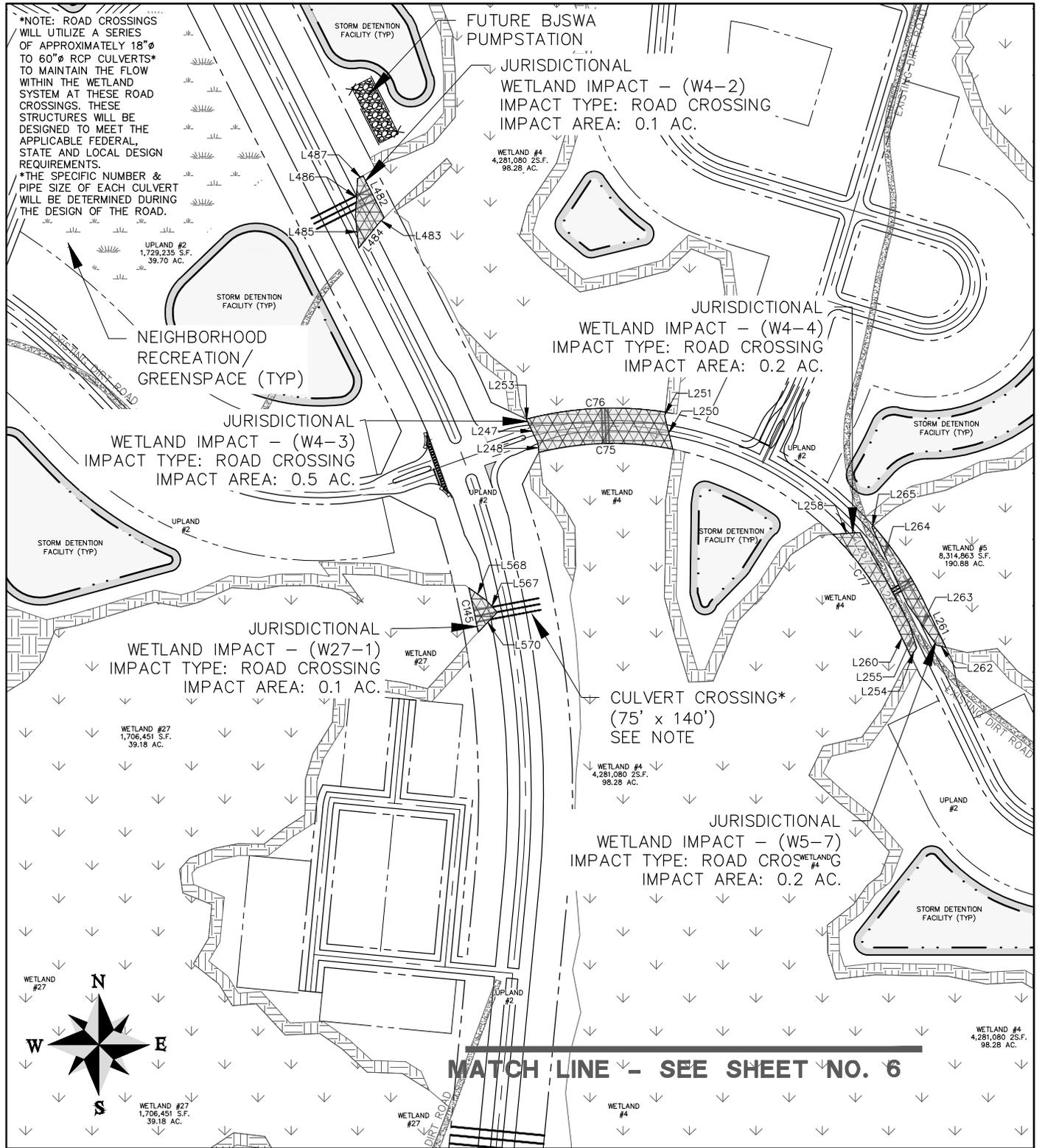
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 5 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: 1" = 300'



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KARRH TRACT - 404 WETLAND PERMIT

WETLAND IMPACT MAP
 IMPACT PLAN

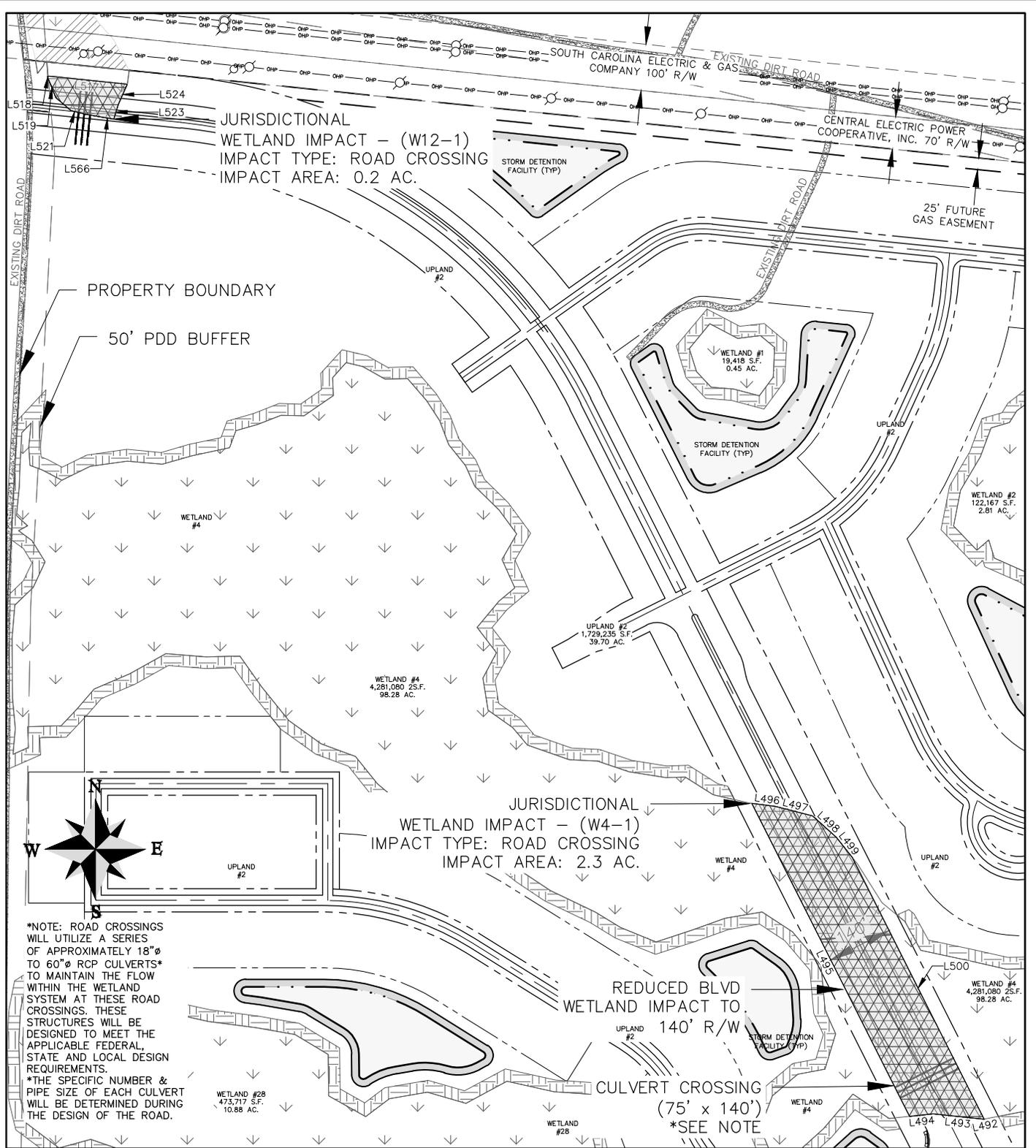
CLIENT:
 TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 8 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: 1" = 300'



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KARRH TRACT - 404 WETLAND PERMIT

WETLAND IMPACT MAP IMPACT PLAN

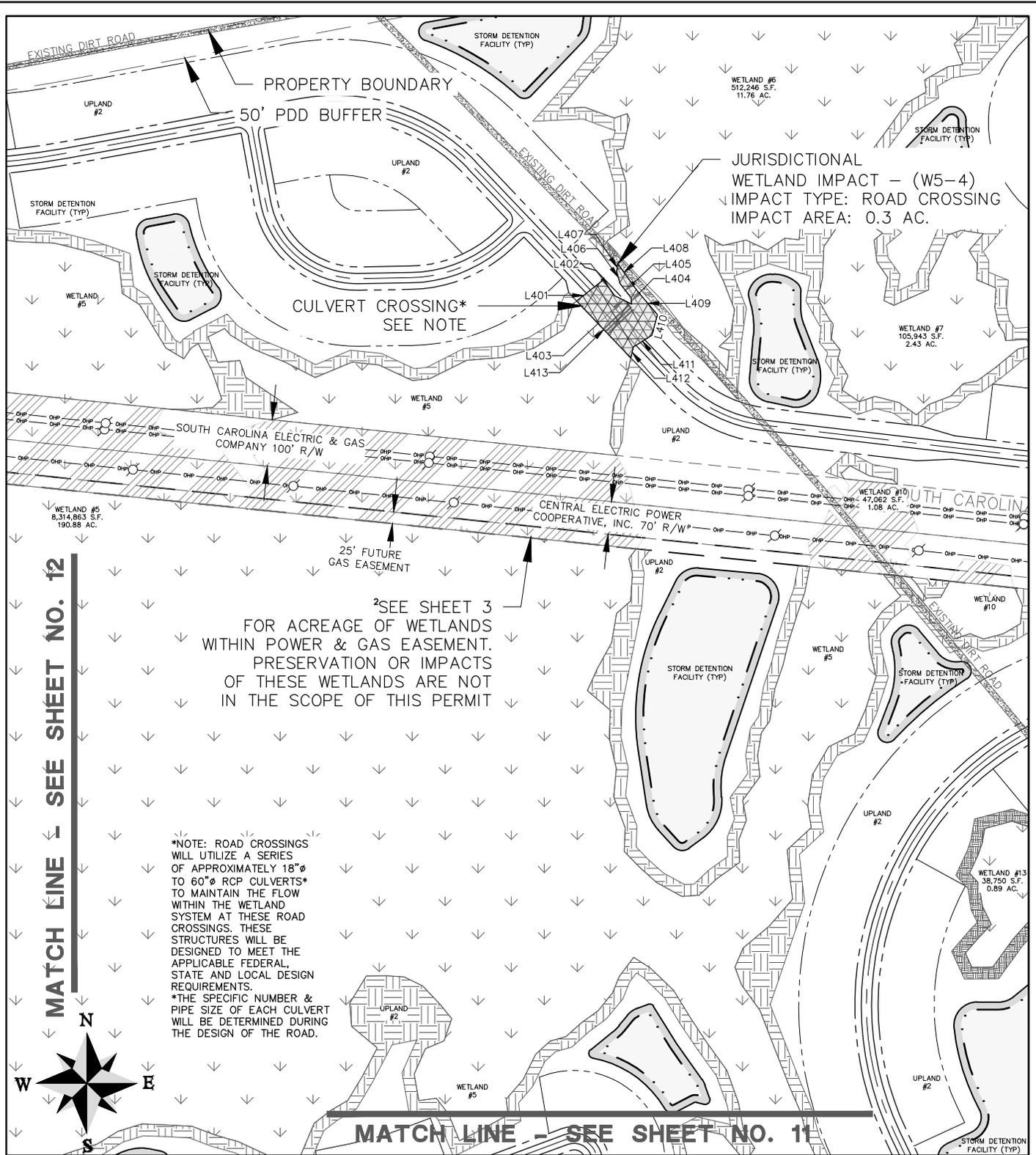
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 9 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: 1" = 300'



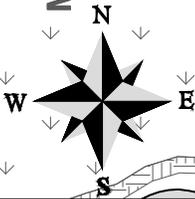
50 Park of Commerce Way
 Savannah, GA 31405 • 912.234.5300

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MATCH LINE - SEE SHEET NO. 12

MATCH LINE - SEE SHEET NO. 11



KARRH TRACT - 404 WETLAND PERMIT

WETLAND IMPACT MAP
 IMPACT PLAN

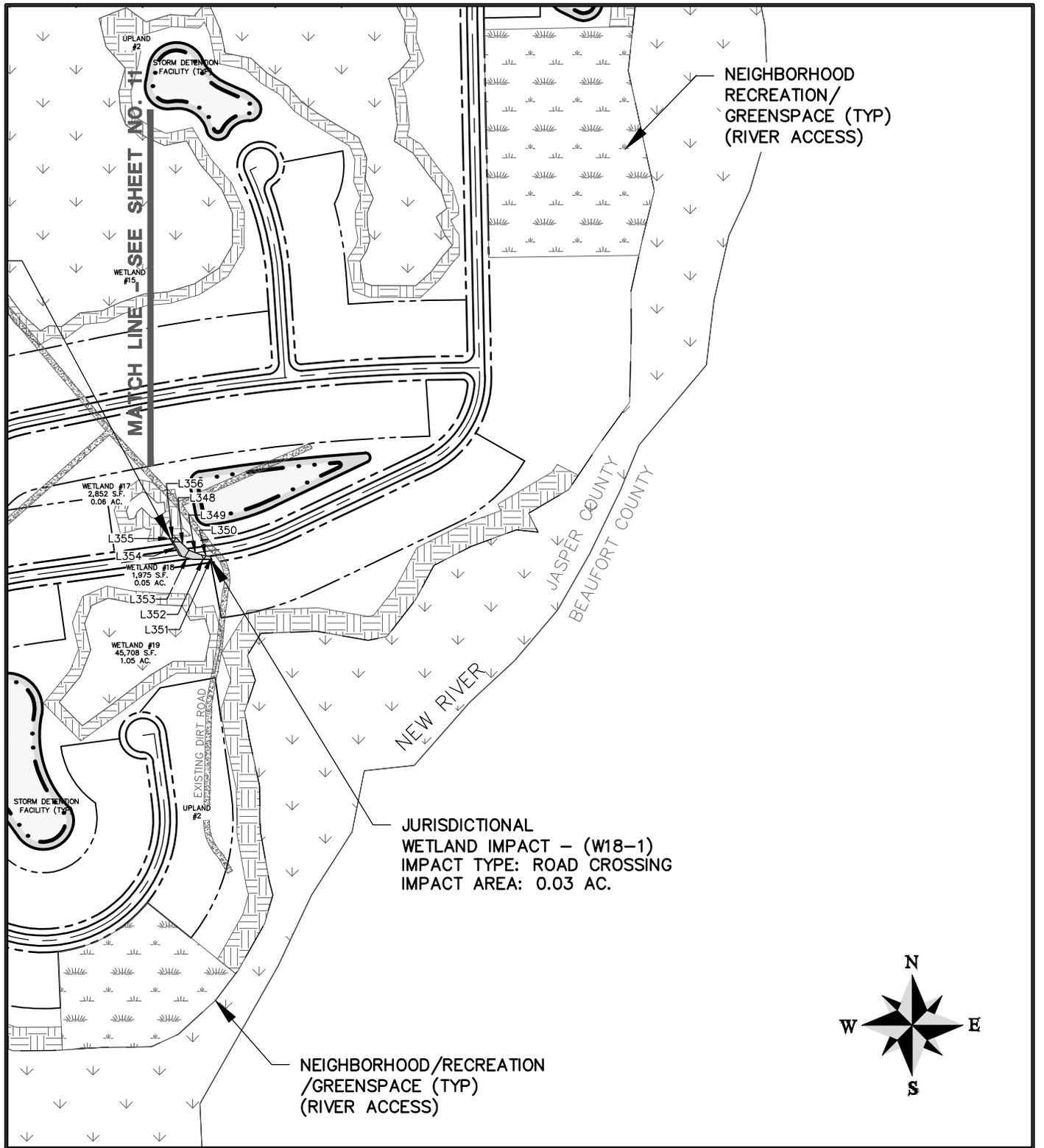
CLIENT:
 TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 13 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: 1" = 300'

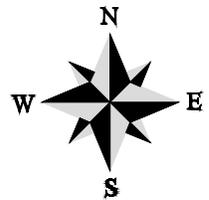


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JURISDICTIONAL
WETLAND IMPACT - (W18-1)
IMPACT TYPE: ROAD CROSSING
IMPACT AREA: 0.03 AC.



KARRH TRACT - 404 WETLAND PERMIT

WETLAND IMPACT MAP
IMPACT PLAN

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA

DATE: 01/19/23

DRAWN BY: TTH

SHEET: 14 OF 22

JOB NUMBER: J-28779.0004

REVIEWED BY: FIT

SCALE: 1" = 300'



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IMPACT - W31-1

LINE TABLE		
LINE	BEARING	DISTANCE
L6	N 9°56'19" E	37.28'
L7	N 22°44'34" W	34.06'
L8	N 16°14'58" W	31.95'
L9	N 13°51'45" W	59.43'
L10	N 35°36'52" W	67.50'
L11	N 15°30'03" W	77.14'
L12	N 19°27'15" W	92.14'
L13	N 8°38'17" W	85.67'
L14	S 43°38'26" E	74.22'
L15	N 60°59'05" E	73.71'
L16	S 19°36'26" E	5.00'
L17	S 27°17'20" E	88.73'
L18	S 28°28'02" E	72.64'
L19	S 78°42'21" E	52.07'
L20	N 19°08'56" E	43.10'
L21	N 81°15'20" E	33.97'
L22	S 59°36'09" E	19.79'
L23	S 60°59'05" W	183.27'
L24	S 14°23'23" E	310.05'
L25	S 60°59'05" W	45.00'
L26	S 29°20'34" E	42.60'
L27	S 22°48'29" W	4.77'
L28	S 8°22'07" W	34.72'
L29	N 29°20'34" W	149.64'
L30	N 9°56'19" E	39.49'

IMPACT - W29-1

LINE TABLE		
LINE	BEARING	DISTANCE
L56	N 73°59'35" E	59.40'
L57	S 54°45'02" E	87.99'
L58	S 23°46'55" E	98.58'
L59	S 52°36'27" W	75.97'
L60	N 80°25'42" W	83.45'
L61	N 62°04'21" W	71.70'
L62	N 5°50'01" E	49.70'
L63	N 23°35'06" E	80.57'

IMPACT - W20-7

LINE TABLE		
LINE	BEARING	DISTANCE
L590	N 80°49'31" W	37.77'
L591	S 53°20'59" W	39.92'
L592	N 87°46'59" W	45.17'
L593	N 56°54'25" W	41.93'
L594	N 31°09'46" W	26.52'
L595	S 49°24'21" E	70.39'
L596	S 39°40'34" E	95.50'
L597	S 18°25'39" E	23.35'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C169	970.00'	96.07'	96.03'	N 08°18'15" E	5°40'28"
C170	930.00'	647.80'	634.79'	N 25°25'19" E	39°54'37"
C176	1070.00'	616.40'	607.91'	S 23°45'14" W	33°00'23"

IMPACT - W20-8

LINE TABLE		
LINE	BEARING	DISTANCE
L48	N 0°00'00" E	86.76'
L49	N 79°03'15" W	33.25'
L50	S 36°58'52" W	51.56'
L51	S 64°52'58" W	12.52'
L52	S 0°00'00" E	78.90'
L53	N 42°22'32" E	7.98'
L54	N 67°30'53" E	55.47'
L55	N 74°08'28" E	19.09'

IMPACT - W32-1

LINE TABLE		
LINE	BEARING	DISTANCE
L31	N 29°20'34" W	171.05'
L32	S 12°14'11" W	11.74'
L33	S 54°34'24" W	17.31'
L34	S 29°20'34" E	157.99'
L35	N 66°14'17" E	25.12'

IMPACT - W20-1

LINE TABLE		
LINE	BEARING	DISTANCE
L75	N 75°58'24" W	64.96'
L77	S 59°41'17" E	130.22'
L78	N 35°59'58" E	32.55'
L79	N 3°49'44" E	61.70'
L80	N 39°27'51" W	41.05'
L81	N 75°14'58" W	251.81'
L82	N 75°37'16" W	273.51'
L83	S 11°58'50" W	53.22'
L84	S 77°49'18" E	221.21'
L85	S 64°45'57" E	104.42'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C22	440.00'	108.29'	108.02'	S 66°44'19" E	14°06'05"

IMPACT - W27-2

LINE TABLE		
LINE	BEARING	DISTANCE
L65	S 77°49'18" E	297.77'
L66	S 89°00'34" E	106.14'
L68	S 59°41'17" E	70.18'
L69	N 76°58'23" W	77.22'
L70	N 79°00'55" W	58.71'
L71	N 68°13'36" W	102.96'
L72	N 81°27'39" W	80.92'
L73	N 71°01'39" W	95.58'
L74	N 81°43'25" W	66.20'
L75	N 75°58'24" W	64.96'
L76	N 70°59'12" W	53.02'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C21	560.00'	131.01'	130.71'	S 66°23'25" E	13°24'16"

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT LINE & CURVE TABLE

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 15 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S



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IMPACT - W20-2

LINE TABLE		
LINE	BEARING	DISTANCE
L109	S 73°50'42" E	8.35'
L110	S 78°58'40" E	78.78'
L111	S 71°33'36" E	77.03'
L112	S 74°28'39" E	71.55'
L113	S 76°48'01" E	92.97'
L114	S 79°34'10" E	109.56'
L115	S 30°52'43" W	11.99'
L116	S 87°48'05" W	29.91'
L117	N 85°49'30" W	21.34'
L119	N 85°49'30" W	28.63'
L120	S 6°20'42" W	1.76'
L121	N 67°45'22" W	94.90'
L122	N 72°43'22" W	117.57'
L123	N 84°06'07" W	106.65'
L124	N 71°13'37" W	15.98'
L125	N 73°38'33" W	24.72'
L126	N 73°38'33" W	33.87'
L127	N 76°03'00" W	88.57'
L128	S 6°14'03" W	11.00'
L129	N 72°43'22" W	182.37'
L131	N 84°33'58" W	63.06'
L132	S 50°26'02" W	82.25'
L133	N 28°03'46" E	52.09'
L134	N 1°24'06" W	42.50'
L135	N 68°54'09" W	102.50'
L136	N 72°28'56" W	21.44'
L137	S 41°58'18" W	66.66'
L138	S 4°27'39" W	98.28'
L139	S 88°23'00" W	23.25'
L140	N 0°31'57" W	24.10'
L141	N 4°24'24" E	58.08'
L142	N 20°45'26" E	31.09'
L143	S 86°10'05" W	18.41'
L144	N 46°53'23" W	16.38'
L145	N 15°53'27" W	32.58'
L146	S 39°00'13" W	31.46'
L147	N 41°41'50" W	11.38'
L148	N 40°50'05" W	15.06'
L149	N 77°00'44" W	49.81'
L150	N 41°50'14" W	15.97'
L151	N 39°09'12" E	24.92'
L152	N 44°32'48" E	26.25'
L153	S 70°33'19" E	56.20'
L154	N 13°33'59" W	37.93'
L155	S 76°16'14" E	32.79'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C61	925.00'	191.20'	190.86'	N 78°38'40" W	11°50'36"

LINE TABLE		
LINE	BEARING	DISTANCE
L156	S 13°23'59" W	38.13'
L157	S 33°04'24" E	56.90'
L158	S 46°20'02" W	8.03'
L159	S 31°30'53" E	11.00'
L160	N 38°50'53" E	53.86'
L161	N 40°13'30" E	25.83'
L162	N 34°00'55" E	14.10'
L163	S 82°52'47" E	17.54'
L164	S 52°19'30" W	11.34'
L165	S 58°11'50" E	56.60'
L166	S 79°01'00" E	83.23'
L167	S 77°22'51" E	107.11'
L168	S 67°58'13" E	34.87'
L169	S 71°28'33" E	69.24'
L170	S 74°28'51" E	99.88'
L171	S 75°00'49" E	102.09'
L172	S 70°19'13" E	113.18'
L173	S 73°50'42" E	71.09'

IMPACT - W4-5

LINE TABLE		
LINE	BEARING	DISTANCE
L174	S 15°01'43" W	38.40'
L175	S 16°58'40" E	36.69'
L176	N 80°50'16" W	63.18'
L177	N 61°55'35" W	57.22'
L178	S 87°44'13" W	38.77'
L179	N 74°57'56" W	78.41'
L180	N 76°53'49" W	55.96'
L181	N 72°48'33" W	71.37'
L182	N 73°53'35" W	59.92'
L183	N 43°24'52" W	33.12'
L184	S 89°09'21" W	55.51'
L185	N 47°10'24" W	20.82'
L186	N 51°01'45" E	11.95'
L187	S 79°11'58" E	49.56'
L188	S 67°10'52" E	13.68'
L189	N 13°56'02" W	113.71'
L190	N 9°19'35" E	31.62'
L191	S 39°33'58" E	179.51'
L192	S 84°33'58" E	63.06'
L194	S 72°43'22" E	60.16'

IMPACT - W20-3

LINE TABLE		
LINE	BEARING	DISTANCE
L571	S 28°36'23" W	40.50'
L572	S 39°04'08" W	30.18'
L573	N 25°52'25" E	96.31'
L574	N 5°26'02" E	58.78'
L575	N 3°12'47" W	83.64'
L576	S 74°33'07" W	47.02'
L577	N 27°08'58" W	63.21'
L578	N 30°19'18" W	43.01'
L579	N 19°05'24" E	52.74'
L580	N 76°45'57" W	37.11'
L581	S 5°26'02" W	269.16'
L582	S 36°21'54" E	25.19'
L583	S 25°26'25" W	49.46'
L584	S 74°35'04" E	33.95'
L585	N 30°53'47" E	121.70'
L586	S 41°44'57" E	10.25'
L587	S 29°15'48" W	70.84'
L588	S 18°33'17" E	76.72'
L589	S 70°16'28" E	26.04'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C150	1570.00'	41.26'	41.26'	N 06°11'13" E	1°30'21"
C159	1430.00'	239.92'	239.64'	S 10°14'25" W	9°36'46"
C168	1570.00'	282.09'	281.71'	N 13°06'20" E	10°17'41"

IMPACT - W4-6

LINE TABLE		
LINE	BEARING	DISTANCE
L195	S 72°43'22" E	113.34'
L196	S 58°14'43" E	150.00'
L197	S 72°43'22" E	224.88'
L198	S 88°59'06" W	5.10'
L199	N 77°58'49" W	78.77'
L200	N 74°32'02" W	105.96'
L201	N 77°18'20" W	93.56'
L202	N 73°56'34" W	87.10'
L203	N 43°22'20" W	43.03'
L204	N 61°59'51" W	57.08'
L205	N 19°26'26" W	34.04'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C62	1075.00'	222.21'	221.81'	S 78°38'40" E	11°50'36"

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT
LINE & CURVE TABLE

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 16 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S



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IMPACT - W4-7

LINE TABLE		
LINE	BEARING	DISTANCE
L206	S 63°22'05" E	17.09'
L207	N 24°51'22" E	83.33'
L208	N 30°22'05" E	11.00'
L209	S 34°50'25" W	54.31'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C63	462.50'	41.21'	41.20'	S 37°05'04" W	5°06'20"

IMPACT - W24-1

LINE TABLE		
LINE	BEARING	DISTANCE
L418	S 27°30'15" E	9.18'
L419	S 79°41'45" E	53.90'
L420	N 52°54'19" E	64.59'
L421	N 45°11'44" E	37.29'
L422	N 58°09'26" E	53.59'
L423	N 8°26'57" E	14.41'
L424	S 63°48'13" W	203.83'

IMPACT - W20-6

LINE TABLE		
LINE	BEARING	DISTANCE
L425	N 43°56'11" E	9.95'
L426	N 86°59'22" E	8.59'
L427	S 63°48'13" W	17.26'

IMPACT - W25-1

LINE TABLE		
LINE	BEARING	DISTANCE
L211	N 34°50'25" E	695.63'
L212	S 54°00'06" W	23.54'
L213	S 38°26'15" W	46.37'
L214	S 52°06'24" W	38.11'
L215	S 43°57'22" W	45.69'
L216	S 54°45'24" W	48.85'
L217	S 35°27'36" W	58.71'
L218	S 35°02'22" W	44.52'
L219	S 52°10'41" W	40.50'
L220	S 17°04'25" W	31.96'
L221	S 37°21'13" W	66.90'
L222	S 32°07'01" W	75.79'
L223	S 36°51'10" W	56.67'
L224	S 72°27'14" W	19.34'
L225	S 22°28'01" W	29.40'
L226	S 48°29'03" W	34.45'
L227	S 29°30'14" W	38.13'
L228	S 46°18'24" E	55.44'
L229	S 18°22'49" E	6.95'

IMPACT - W4-2

LINE TABLE		
LINE	BEARING	DISTANCE
L482	S 26°44'29" E	100.31'
L483	S 44°50'11" W	17.36'
L484	S 38°57'57" W	66.81'
L485	N 5°55'14" W	69.04'
L486	N 3°37'38" E	78.79'
L487	N 59°53'04" E	13.02'

IMPACT - W4-3

LINE TABLE		
LINE	BEARING	DISTANCE
L247	S 25°12'50" E	56.41'
L248	S 7°02'18" E	20.23'
L250	N 13°55'27" W	72.04'
L251	N 6°13'50" E	9.08'
L253	N 64°32'47" W	0.68'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C75	662.50'	287.63'	285.38'	N 88°39'01" E	24°52'31"
C76	737.50'	297.23'	295.22'	S 87°06'55" W	23°05'28"

IMPACT - W4-4

LINE TABLE		
LINE	BEARING	DISTANCE
L254	N 32°31'11" E	21.58'
L255	N 16°50'56" W	53.58'
L256	N 27°52'19" W	139.57'
L257	N 29°20'26" W	81.31'
L258	S 86°09'31" W	57.59'
L260	S 25°43'10" E	87.47'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C77	662.50'	223.09'	222.04'	S 35°21'59" E	19°17'39"

IMPACT - W26-1

LINE TABLE		
LINE	BEARING	DISTANCE
L230	S 7°59'00" E	7.27'
L231	N 86°09'23" W	7.14'

CURVE TABLE					
CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C64	1037.50'	9.09'	9.09'	N 42°19'45" E	0°30'07"

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT LINE & CURVE TABLE

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 17 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S



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IMPACT - W5-7

LINE TABLE		
LINE	BEARING	DISTANCE
L261	S 25°43'10" E	102.51'
L262	N 76°27'21" W	20.43'
L263	N 35°19'00" W	106.77'
L264	N 24°45'52" W	181.99'
L265	N 50°57'21" E	3.47'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C78	737.50'	200.94'	200.32'	S 33°31'29" E	15°36'40"

IMPACT - W27-1

LINE TABLE		
LINE	BEARING	DISTANCE
L567	N 42°51'13" W	33.68'
L568	N 54°12'20" W	46.13'
L570	N 43°39'47" E	58.99'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C145	1930.00'	96.37'	96.36'	S 11°43'53" E	2°51'39"

IMPACT - W4-1

LINE TABLE		
LINE	BEARING	DISTANCE
L492	S 79°10'39" W	0.38'
L493	N 83°53'54" W	109.98'
L494	S 83°44'09" W	50.42'
L495	N 26°44'29" W	753.33'
L496	S 82°31'19" E	50.76'
L497	S 75°41'57" E	82.80'
L498	S 47°46'51" E	68.84'
L499	S 38°16'45" E	54.30'
L500	S 26°44'29" E	630.34'

IMPACT - W24-2

LINE TABLE		
LINE	BEARING	DISTANCE
L312	N 13°51'46" E	17.47'
L313	N 90°00'00" W	19.71'
L314	N 46°28'42" E	359.88'
L315	S 35°51'23" E	12.94'
L316	S 40°58'17" E	13.41'
L317	S 46°59'45" W	357.99'

***UPDATED
IMPACT - W5-6**

LINE TABLE		
LINE	BEARING	DISTANCE
L318	N 46°59'45" E	619.57'
L319	S 18°06'44" W	58.95'
L320	S 46°22'35" W	174.21'
L321	S 48°04'21" W	96.11'
L322	S 42°29'21" W	80.70'
L323	S 50°10'10" W	49.73'
L324	S 47°47'51" W	78.71'
L325	S 45°49'24" W	82.57'
L326	N 52°35'16" W	27.61'
L327	N 60°12'16" W	5.76'
L328	N 46°59'45" E	141.40'
L329	N 46°59'45" E	76.85'
L330	N 47°26'01" E	128.77'
L598	S 36°56'20" W	32.96'
L599	S 46°42'41" W	101.96'
L600	S 37°53'44" W	62.02'
L601	S 53°25'27" W	152.33'

IMPACT - W12-1

LINE TABLE		
LINE	BEARING	DISTANCE
L517	N 84°06'22" W	171.62'
L518	S 4°12'02" E	3.70'
L519	S 21°37'40" E	45.83'
L521	S 75°44'04" E	35.00'
L523	N 16°59'00" E	32.29'
L524	N 23°28'43" E	48.30'
L566	S 80°14'46" E	59.10'

IMPACT - W5-1

LINE TABLE		
LINE	BEARING	DISTANCE
L365	S 80°12'07" W	576.84'
L366	N 64°07'25" W	59.80'
L367	N 74°55'07" E	51.26'
L368	N 59°08'42" W	54.34'
L369	N 80°12'07" E	676.66'
L370	S 30°44'13" W	19.64'
L371	S 44°19'44" W	43.47'
L372	S 21°48'56" W	31.43'
L373	S 33°21'51" E	8.54'

IMPACT - W18-1

LINE TABLE		
LINE	BEARING	DISTANCE
L348	S 45°51'46" E	39.02'
L349	S 69°30'09" E	28.05'
L350	S 80°38'24" E	18.58'
L351	S 29°45'44" E	7.62'
L352	S 89°43'15" W	38.75'
L353	N 74°41'36" W	30.77'
L354	N 29°05'52" W	40.43'
L355	N 71°24'43" W	3.98'
L356	N 82°15'07" E	15.60'

IMPACT - W38-1

LINE TABLE		
LINE	BEARING	DISTANCE
L602	N 66°19'50" E	64.81'
L603	N 51°10'37" E	40.79'
L604	S 2°00'58" E	56.97'
L605	S 4°19'44" E	47.55'
L606	S 11°10'32" W	59.90'
L607	S 53°40'54" W	59.79'
L608	N 78°08'32" W	49.34'
L609	N 22°10'24" W	105.16'
L610	N 52°18'58" E	64.47'

KARRH TRACT - 404 WETLAND PERMIT

**KARRH TRACT
LINE & CURVE TABLE**

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 18 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S



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IMPACT - W5-5

LINE TABLE		
LINE	BEARING	DISTANCE
L331	S 77°08'29" E	2.79'
L332	N 31°06'21" E	5.32'
L333	S 55°23'57" E	23.68'
L334	S 8°31'59" E	6.25'
L335	S 84°04'10" W	17.15'
L336	S 11°38'48" W	44.46'
L337	S 46°24'32" W	67.66'
L338	S 41°42'54" W	68.35'
L339	S 49°44'06" W	125.42'
L340	N 33°55'21" W	27.82'
L341	N 37°58'09" W	4.89'

IMPACT - W16-1

LINE TABLE		
LINE	BEARING	DISTANCE
L357	N 83°28'55" W	131.36'
L358	S 4°41'39" W	23.68'
L359	S 7°21'33" E	49.74'
L360	S 4°33'30" E	3.10'
L361	S 83°28'55" E	151.94'
L362	N 19°59'05" W	4.53'
L363	N 9°35'40" W	50.34'
L364	N 31°48'48" W	28.79'

IMPACT - W5-2

LINE TABLE		
LINE	BEARING	DISTANCE
L530	N 25°46'27" W	62.09'
L531	N 25°46'27" W	4.77'
L532	N 6°05'12" E	15.46'
L534	N 84°06'28" W	22.33'
L535	N 42°17'51" W	75.00'
L536	N 5°53'32" E	17.86'
L537	S 73°56'40" W	9.25'
L538	S 18°58'01" E	47.90'
L539	S 33°57'20" E	59.02'
L540	S 8°47'48" E	5.25'
L541	S 8°47'48" E	39.66'
L542	S 85°40'15" W	30.30'
L543	N 63°52'36" W	67.21'
L544	N 63°52'36" W	10.35'
L545	N 76°44'45" W	65.85'
L546	N 41°48'55" W	40.52'
L547	S 71°45'37" W	45.32'
L548	N 80°39'15" W	51.22'
L549	N 23°19'11" E	32.38'
L550	S 81°52'20" W	40.84'
L551	S 73°20'37" W	31.31'
L552	S 3°07'02" W	26.42'
L553	S 12°26'24" E	34.98'
L554	N 69°53'52" W	46.48'
L555	S 3°08'19" W	26.25'
L556	S 56°45'32" E	41.03'
L557	S 80°22'43" E	29.54'
L558	N 80°12'07" E	74.10'
L560	S 84°06'28" E	135.84'

*ADDITIONAL IMPACT
IMPACT - W5-4

LINE TABLE		
LINE	BEARING	DISTANCE
L401	N 51°37'13" E	72.71'
L402	S 35°41'37" E	41.95'
L403	S 63°52'46" E	40.63'
L404	N 6°28'26" W	13.91'
L405	N 37°42'04" W	38.80'
L406	N 14°51'31" W	26.12'
L407	N 6°42'05" E	16.81'
L408	S 35°42'36" E	73.45'
L409	S 40°17'26" E	64.93'
L410	S 15°23'45" W	45.60'
L411	S 57°50'52" W	46.47'
L412	S 12°50'07" W	24.40'
L413	N 43°31'50" W	168.30'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C86	1962.50'	65.50'	65.50'	N 32°50'13" E	1°54'45"
C87	437.50'	167.42'	166.40'	N 42°50'37" E	21°55'33"
C90	437.50'	70.09'	70.02'	N 59°16'45" E	9°10'47"

IMPACT - W5-3

LINE TABLE		
LINE	BEARING	DISTANCE
L388	S 84°06'34" E	46.65'
L390	S 55°38'20" W	11.21'
L391	S 72°42'18" W	66.42'
L392	N 85°41'13" W	48.85'
L393	N 16°24'02" E	21.17'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C115	162.50'	67.58'	67.09'	N 83°58'38" E	23°49'35"
C116	292.50'	2.28'	2.28'	S 86°02'19" E	0°26'50"

IMPACT - W20-5

LINE TABLE		
LINE	BEARING	DISTANCE
L342	N 20°08'27" W	5.67'
L343	N 72°31'13" W	56.23'
L344	S 57°23'33" W	71.48'
L345	S 38°02'02" E	39.60'
L346	S 89°05'11" E	35.34'
L347	N 49°23'56" E	73.85'

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD	CHD BEARING	DELTA
C141	1462.50'	105.39'	105.36'	N 86°10'20" W	4°07'43"
C142	462.50'	126.65'	126.26'	N 88°02'49" E	15°41'24"
C143	1537.50'	140.54'	140.49'	S 86°43'36" E	5°14'15"

KARRH TRACT - 404 WETLAND PERMIT

KARRH TRACT LINE & CURVE TABLE

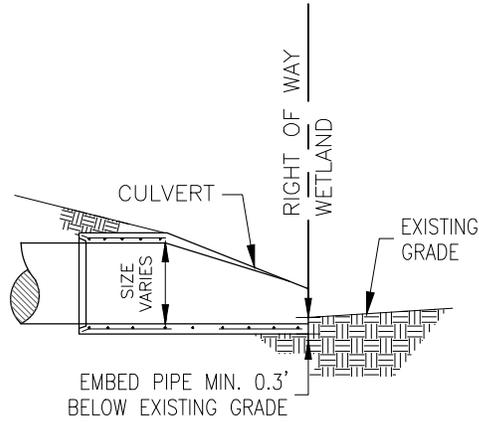
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 19 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S



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CULVERT CROSSING DETAIL
NOT TO SCALE

NOTE:

- CULVERT NUMBER, SIZE AND INVERT TO BE DETERMINED DURING DESIGN PHASE.
- CULVERT SIZE(S) TO RANGE BETWEEN 18" (MIN.) AND 60" (MAX.), NOT INCLUDING BOX CULVERTS TO MAINTAIN THE FLOW WITHIN THE WETLAND SYSTEM.
- PIPE INVERTS TO BE EMBEDDED 0.3' (MIN.) BELOW EXISTING GRADE.
- THESE STRUCTURES WILL BE DESIGNED TO MEET THE APPLICABLE FEDERAL, STATE AND LOCAL DESIGN REQUIREMENTS.

KARRH TRACT - 404 WETLAND PERMIT

DETAIL SECTION

CULVERT CROSS SECTION

CLIENT:

TWO BRIDGE BLUFF, LLC

LOCATION: HARDEEVILLE, SOUTH CAROLINA

DATE: 01/19/23

DRAWN BY: TTH

SHEET: 20 OF 22

JOB NUMBER: J-28779.0004

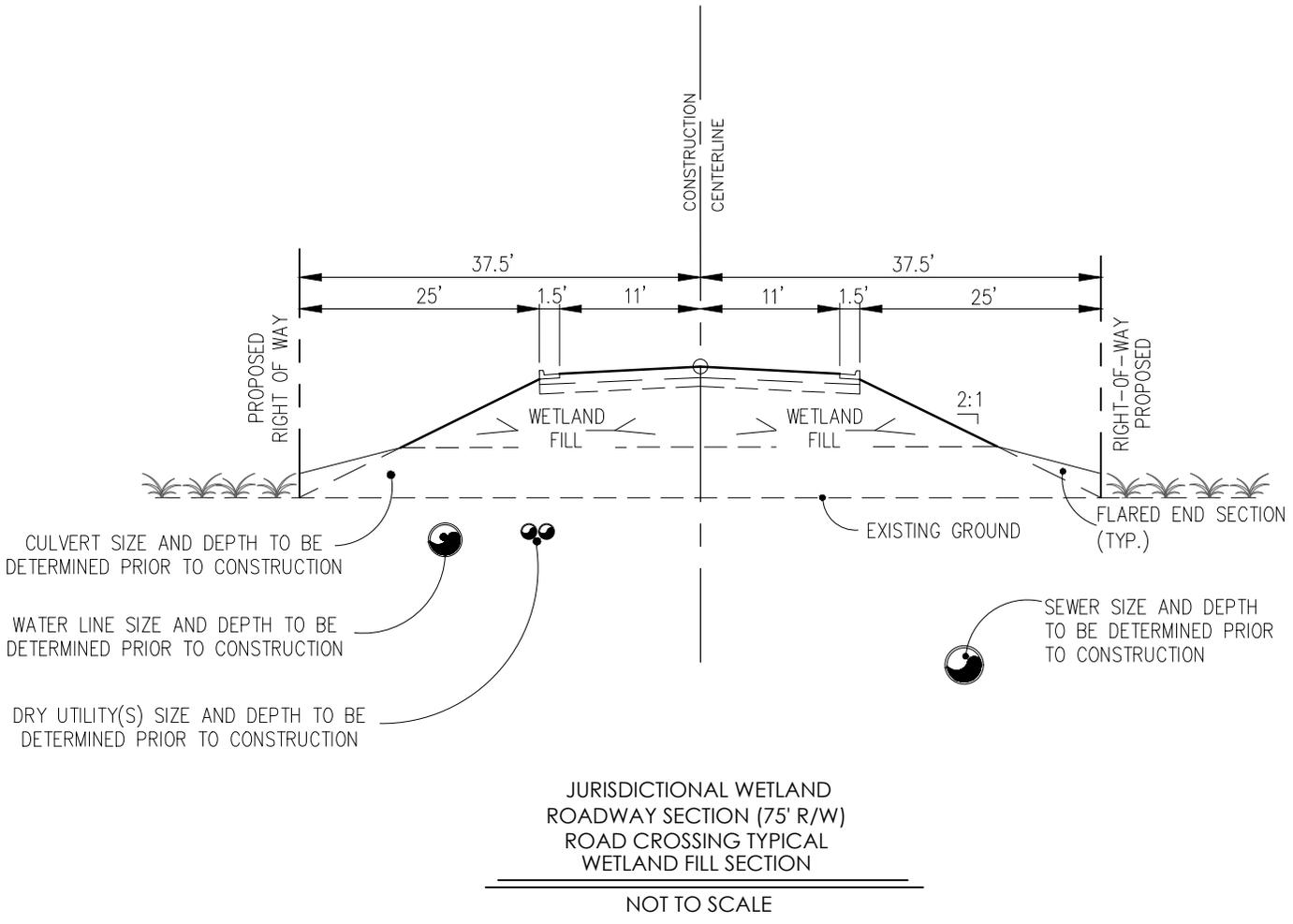
REVIEWED BY: FIT

SCALE: N.T.S.



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KARRH TRACT - 404 WETLAND PERMIT

DETAIL SECTION
75' RIGHT-OF-WAY WETLAND CROSSING

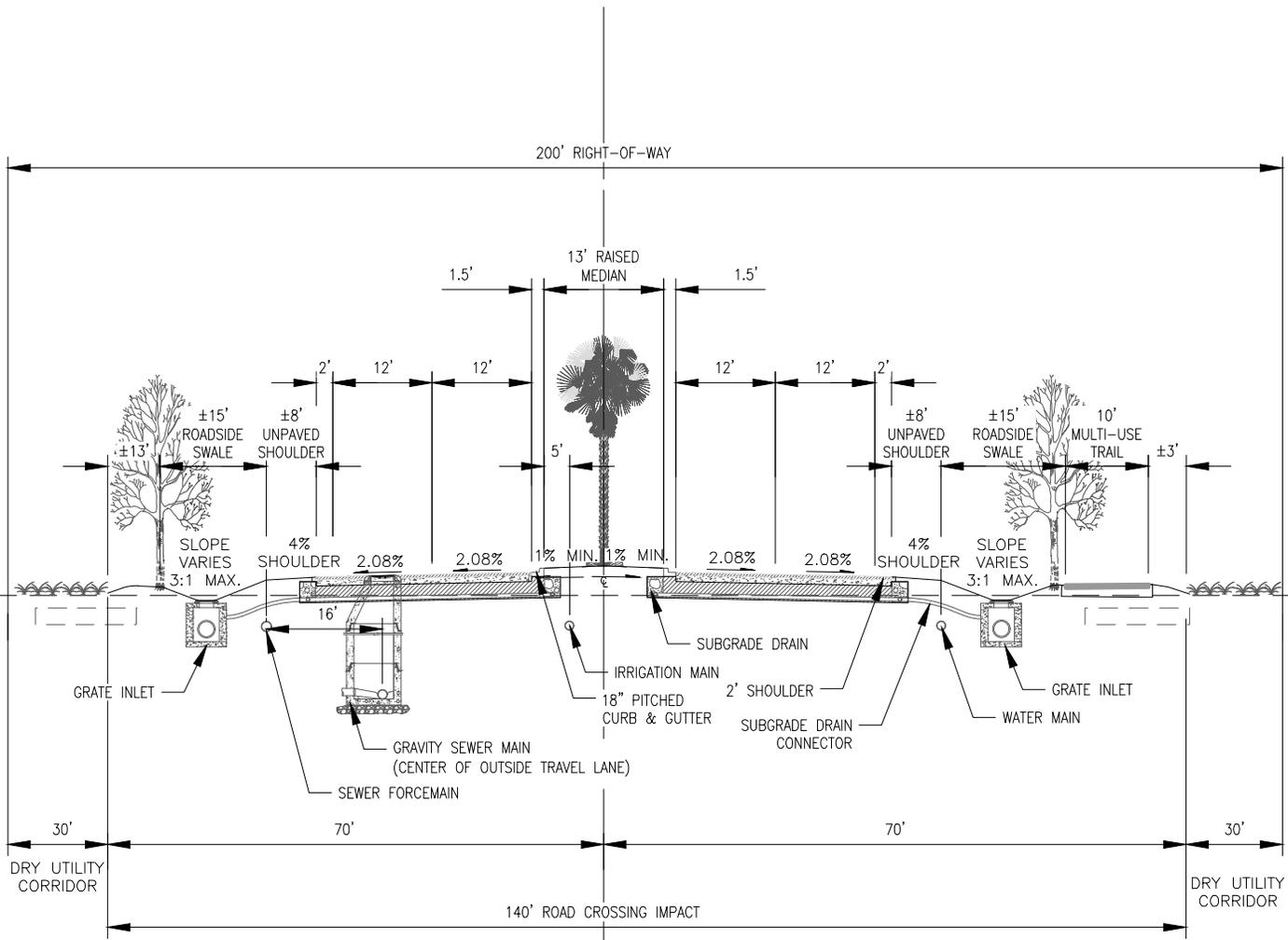
CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
DATE: 01/19/23 DRAWN BY: TTH SHEET: 21 OF 22
JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S.



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TYPICAL ROAD SECTION
 4 LANE BOULEVARD
 THROUGH WETLAND CROSSING
 200' RIGHT OF WAY

KARRH TRACT - 404 WETLAND PERMIT

DETAIL SECTION
 200' RIGHT-OF-WAY WETLAND CROSSING

CLIENT:
TWO BRIDGE BLUFF, LLC

LOCATION: HARDEVILLE, SOUTH CAROLINA
 DATE: 01/19/23 DRAWN BY: TTH SHEET: 22 OF 22
 JOB NUMBER: J-28779.0004 REVIEWED BY: FIT SCALE: N.T.S.



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