

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
1835 Assembly Street, RM 865 B1
Columbia, South Carolina 29201

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: P/N SAC-2019-01066

February 5, 2020

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1341), 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 South Carolina Department of Health and Environmental Control by

Mr. Brian Couture
Duke Energy Carolinas LLC
526 South Church Street
Charlotte, North Carolina 28202

for a permit to construct new recreational access facilities in

Lake Wateree

at approximately 604 Island Road, south of the intersection of Island Road and Rockbridge Road (SC-20-291) in Ridgeway, Fairfield County, South Carolina (Latitude: 34.3885 °, Longitude: - 80.7946 °), Liberty Hill 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.

The proposed work consists of constructing a roadway, walkways, picnic shelters, restrooms, parking areas, a boat ramp, a swim beach, two fishing piers, and shoreline stabilization. In detail the work consists of constructing a roadway and trails to access the site consisting of

placing 772 cubic yards of fill in 0.22 acre below the full pool elevation of which 0.02 acre is wetland as well as an additional 0.02 acre of temporary impacts to wetland during construction. Selective shoreline stabilization is proposed in areas that are eroding includes installing rip-rap up to 3,707 cubic yards along 2,134 linear feet (0.85 acre) of shoreline. Two T-shaped timber fishing piers with riprap fish attractor features are proposed to be installed with each consisting of 20 timber piles. Each pier would have a walkway of approximately 85 feet by 8 feet with a fishing platform of 29 feet and 6 inches by 9 feet and 4 inches. Each pier is proposed to include 11 cubic yards (0.01 acre) of rip-rap placed at the base of the support structures. Additionally, abutments are proposed to stabilize both piers by placing 30 cubic yards (0.01 acre) at the northern pier and 42 cubic yards (0.01 acre) at the southern pier. The proposed swim beach area would require placing 746 cubic yards (0.23 acre) of clean sand in an area of approximately 244 feet by 50 feet. The swim beach will be demarcated by breakwaters of natural stone on the north and south to assist in preventing beach erosion. Construction of the breakwaters would result in the placement of a total of 43 cubic yards (0.01 acre) and 32 cubic yards (0.01 acre) of rip-rap in the two areas of approximately 8 feet by 50 feet. A series of eight steel pile buoys will be erected between the natural stone breakwaters to establish an enclosed swim area bound by a floating barrier. A boat ramp would be pre-cast on high ground and subsequently installed into the lake. The ramp includes a floating dock in the center. The boat ramp would result in the placement of 92 cubic yards (0.08 acre) of concrete measuring 114 feet by 16 feet, with the floating dock resulting in approximately 0.03 acre of impacts measuring 104 feet by 8 feet. A paved approach to the boat ramp is proposed to impact 0.06 acres below the full pool elevation of which 0.02 acre is wetland. In total the project would impact approximately 1.43 acres below the full pool elevation, of which 0.04 acre is permanent wetland impacts and 0.03 is temporary wetland impacts. The applicant has not proposed to mitigate for impacts to wetlands and/or waters of the United States. The project purpose is to construct a new recreational facility.

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

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. 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.

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 1.4 acres of freshwater habitat well 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.

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project area, examined all information provided by the applicant, and the District Engineer has determined, based on the most recently available information that the project will have no effect on any Federally endangered, threatened, or proposed species and will not result in the destruction or adverse modification of designated or proposed critical habitat. 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.

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)(l)(1)), and has initially determined that no historic properties are present; 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 any 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.

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.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the 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. 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.

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. **Please submit comments in writing, identifying the project of interest by public notice number, to the following address:**

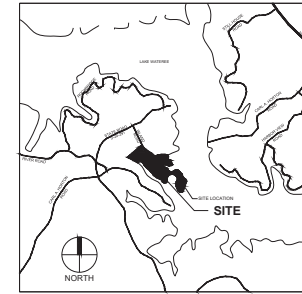
**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
1835 Assembly Street, RM 865 B1
Columbia, South Carolina 29201**

If there are any questions concerning this public notice, please contact Jarrett B. Cellini, Project Manager, at (803) 253-3916, or by email at Jarrett.B.Cellini@usace.army.mil.

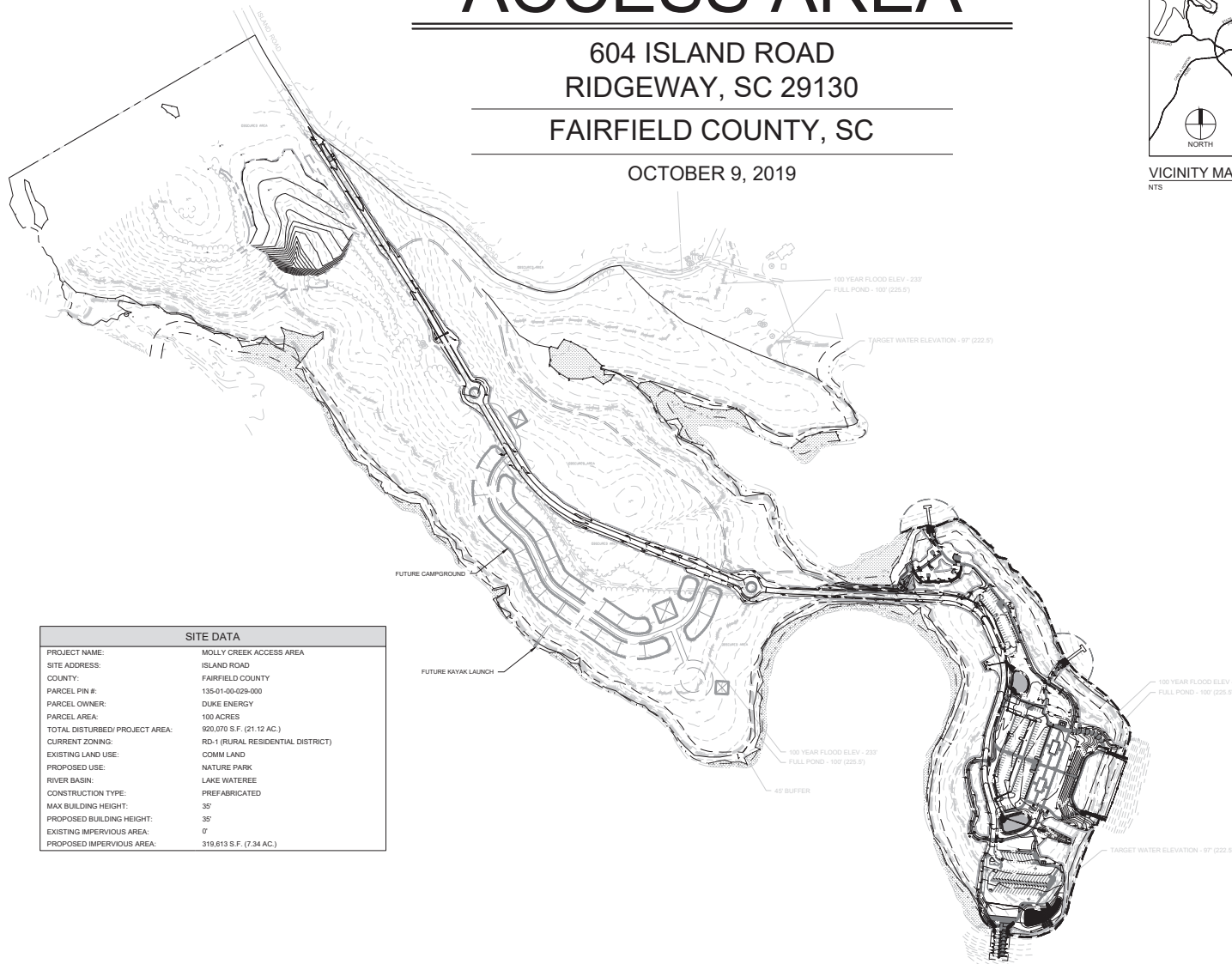
MOLLY CREEK ACCESS AREA

604 ISLAND ROAD
RIDGWAY, SC 29130
FAIRFIELD COUNTY, SC

OCTOBER 9, 2019



VICINITY MAP
NTS



SITE DATA	
PROJECT NAME:	MOLLY CREEK ACCESS AREA
SITE ADDRESS:	ISLAND ROAD
COUNTY:	FAIRFIELD COUNTY
PARCEL PIN #:	135-01-00-029-000
PARCEL OWNER:	DUKE ENERGY
PARCEL AREA:	100 ACRES
TOTAL DISTURBED/PROJECT AREA:	920,070 S.F. (21.12 AC.)
CURRENT ZONING:	RD-1 (RURAL RESIDENTIAL DISTRICT)
EXISTING LAND USE:	COMM LAND
PROPOSED USE:	NATURE PARK
RIVER BASIN:	LAKE WATEREE
CONSTRUCTION TYPE:	PREFABRICATED
MAX BUILDING HEIGHT:	35'
PROPOSED BUILDING HEIGHT:	35'
EXISTING IMPERVIOUS AREA:	0'
PROPOSED IMPERVIOUS AREA:	319,613 S.F. (7.34 AC.)



Client:



DUKE ENERGY
538 SOUTH CHURCH STREET
CHARLOTTE, NC 28202
PHONE: 704.382.9257
FAX: 704.382.4671

Project:

MOLLY CREEK PARK

Key map:

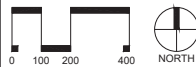
Seal:



Issued for:

CONSTRUCTION DOCUMENTS

No.	Date	Description



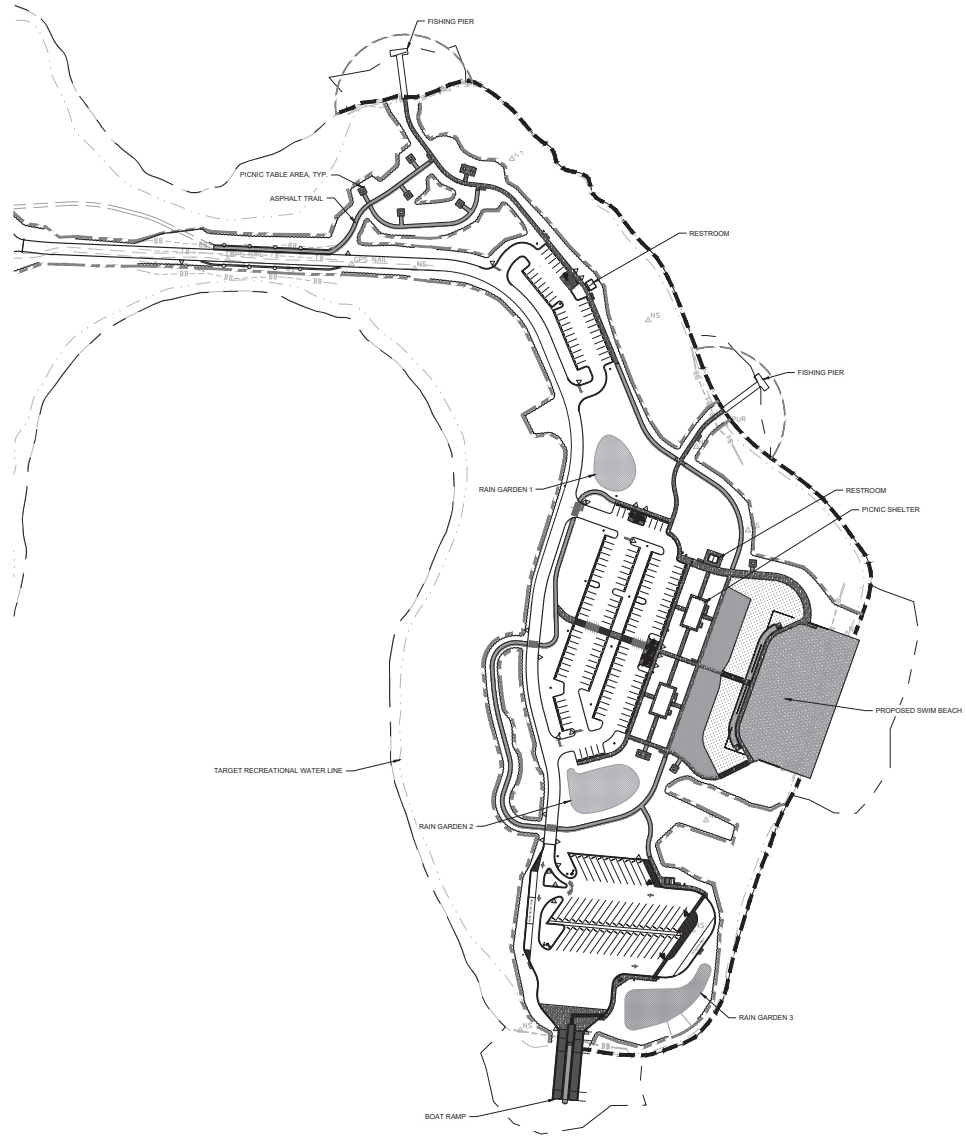
SCALE: 1"=200'

Title:

COVER SHEET

Project number: C19004 Sheet:
Date: 09.09.2019
Drawn by: RGB
Approved by: JO

W1



SITE LEGEND:

- PROPOSED BUILDING
- PROPOSED CONCRETE SIDEWALK
- PROPOSED BRICK SIDEWALK
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED CONCRETE PAVERS
- PROPOSED GRAVEL
- PROPOSED CURB & GUTTER
- PROPOSED STOP BAR
- PROPOSED CROSSWALK
- PROPOSED 6' WIDE STANDARD CROSSWALK
- PROPOSED 10' WIDE HIGH VISIBILITY CROSSWALK
- PROPOSED SIGN
- PROPOSED ADA PARKING SPACE
- PROPOSED KEYSTONE WALL
- PROPOSED CIP WALL
- PROPOSED WHEEL STOP
- PROPOSED GRAVEL TRAIL
- PROPOSED ASPHALT TRAIL
- PROPOSED TREELINE
- PROPOSED FENCE
- PROPOSED VEHICLE GATE (X' WIDE)
- PROPOSED LIGHT
- PROPOSED TRANSFORMER
- PROPOSED CONDENSER
- PROPOSED BIKE RACK
- PROPOSED BENCH
- PROPOSED BOLLARD
- PROPOSED PEDESTRIAN STEEL PLATE
- PROPOSED ADA APARTMENT UNIT
- LIMITS OF DISTURBANCE
- LARGE HARDWOOD FIELD LOCATED WITH GPS BY LANDSCAPE ARCHITECT

PAVEMENT MARKING LEGEND:

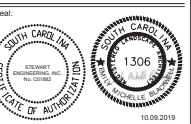
- PROPOSED HEAVY DUTY ASPHALT PAVING
- ACCESSIBLE ROUTE
- ACCESSIBLE CROSSWALK
- NO PARKING SIGN (FIRE LANE) PLACED AT BEGINNING AND END OF FIRE LANE EVERY 100'



Client:
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 DUKE ENERGY
 338 SOUTH CHURCH STREET
 CHARLOTTE, NC 28202
 PHONE: 704.382.9257
 FAX: 704.382.4671

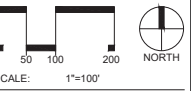
Project:
MOLLY CREEK PARK

Key map:



Issued for:
CONSTRUCTION DOCUMENTS

No.	Date	Description



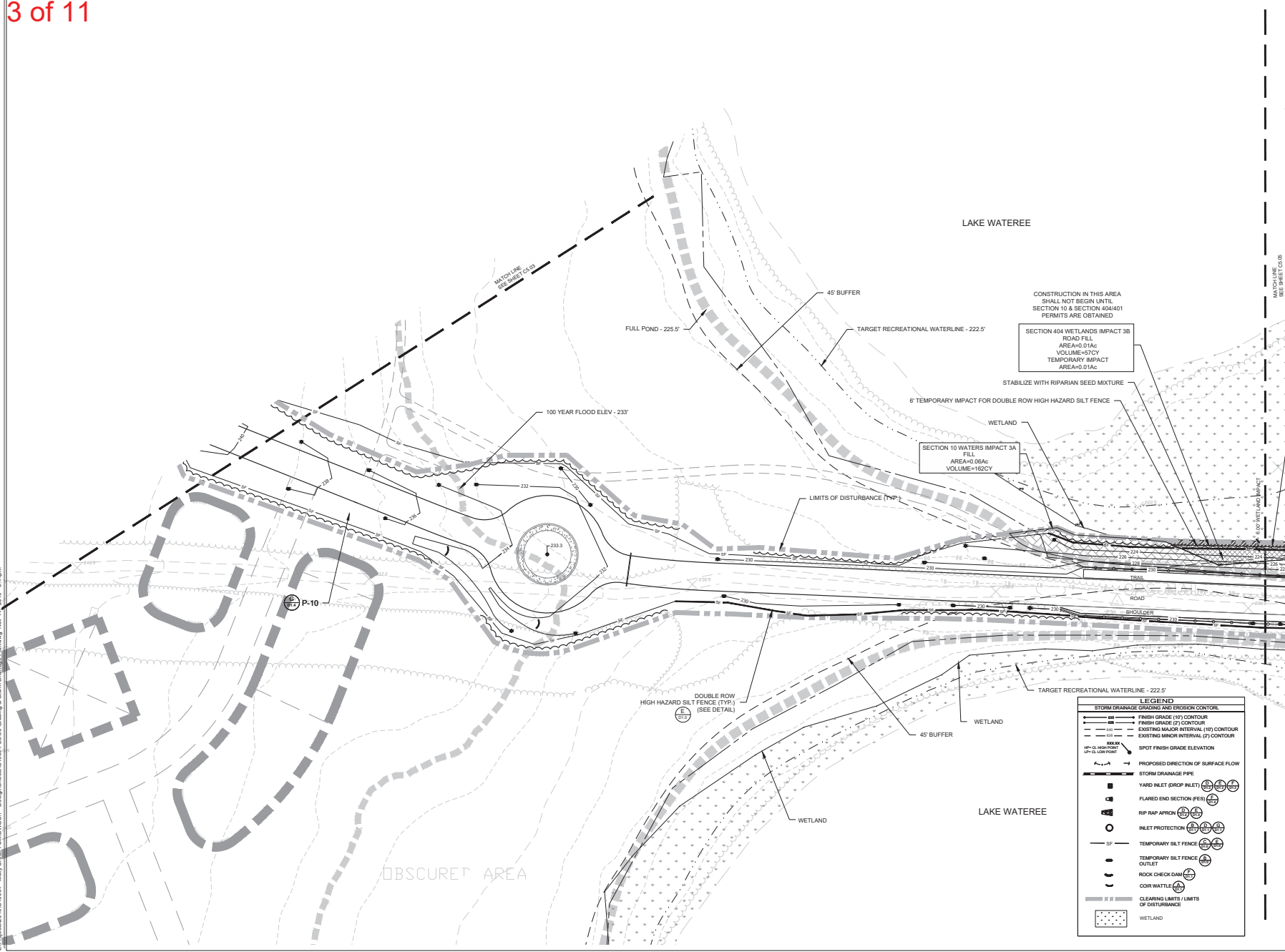
Title:
MOLLY CREEK ACCESS AREA, OVERALL PROPOSED AMENITIES

Project number: C19004 Sheet:
 Date: 09.09.2019
 Drawn by: RGB
 Approved by: EB

W2

L:\Projects\2019\C19004 - Molly Creek Park\DWG\SS1 - Design\Sheets\C19004-C2-00-Site Plan.dwg Nov 14, 2019 - 3:40pm

L:\Projects\2019\01066 - Molly Creek Park\DWG\01 - Design\Sheets\01066-05-00-Grading & Storm Drainage\Plan\dwg No. 14 - 2019 - 3-14-19m



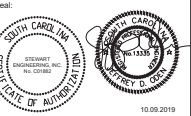
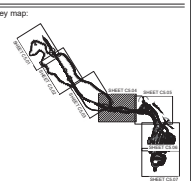
Client:

DUKE ENERGY.

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538 SOUTH CHURCH STREET
CHARLOTTE, NC 28202
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Project:

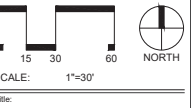
MOLLY CREEK PARK



Issued for:

CONSTRUCTION DOCUMENTS

No.	Date	Description



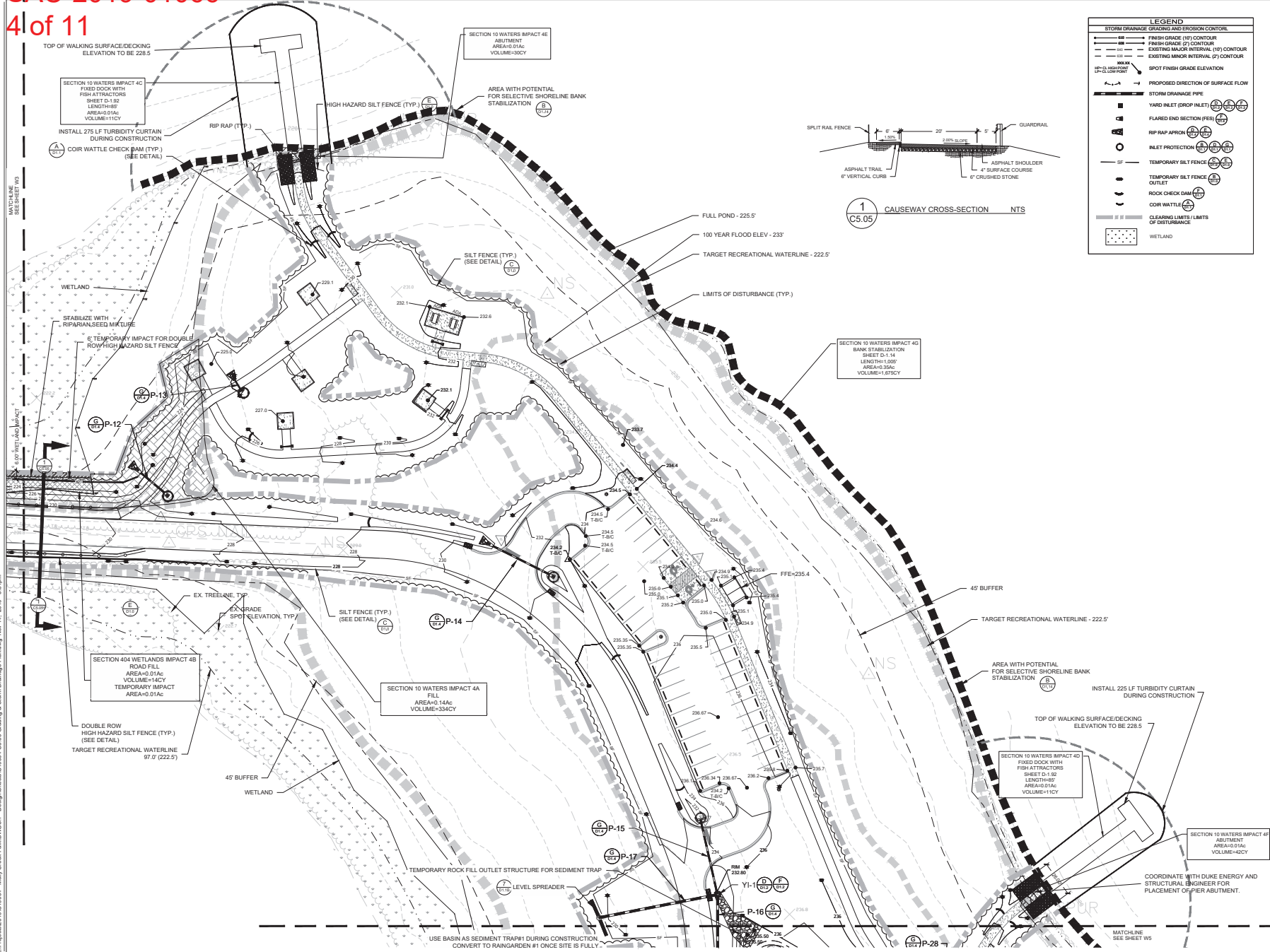
Title:

ENLARGED GRADING AND STORM DRAINAGE PLAN

Project number: C19004 Sheet:
Date: 09.09.2019
Drawn by: RB
Approved by: JO **W3**

LEGEND

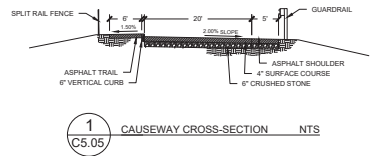
	STORM DRAINAGE GRADING AND EROSION CONTOUR
	FINISH GRADE (1) CONTOUR
	FINISH GRADE (2) CONTOUR
	EXISTING MAJOR INTERNAL (1) CONTOUR
	EXISTING MINOR INTERNAL (2) CONTOUR
	SPOT FINISH GRADE ELEVATION
	PROPOSED DIRECTION OF SURFACE FLOW
	STORM DRAINAGE PIPE
	YARD INLET (DROP INLET)
	FLARED END SECTION (FES)
	RIP RAP APRON
	INLET PROTECTION
	TEMPORARY SILT FENCE
	TEMPORARY SILT FENCE OUTLET
	ROCK CHECK DAM
	COIR WATTLE
	CLEARING LIMITS / LIMITS OF DISTURBANCE
	WETLAND



LEGEND

STORM DRAINAGE GRADING AND EROSION CONTROL

- FINISH GRADE (1%) CONTOUR
- FINISH GRADE (2%) CONTOUR
- EXISTING MAJOR INTERNAL (1%) CONTOUR
- EXISTING MINOR INTERNAL (2%) CONTOUR
- SPOT FINISH GRADE ELEVATION
- PROPOSED DIRECTION OF SURFACE FLOW
- STORM DRAINAGE PIPE
- YARD INLET (GROUP INLET)
- FLARED END SECTION (FEES)
- RIP RAP APPROX.
- INLET PROTECTION
- TEMPORARY SILT FENCE
- TEMPORARY SILT FENCE OUTLET
- ROCK CHECK DAM
- COIR WATTLE
- CLEARING LIMITS / LIMITS OF DISTURBANCE
- WETLAND

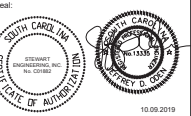
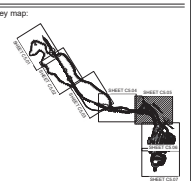


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538 SOUTH CHURCH STREET
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FAX: 704.382.4671

Project:

MOLLY CREEK PARK



Issued for:

CONSTRUCTION DOCUMENTS

No.	Date	Description

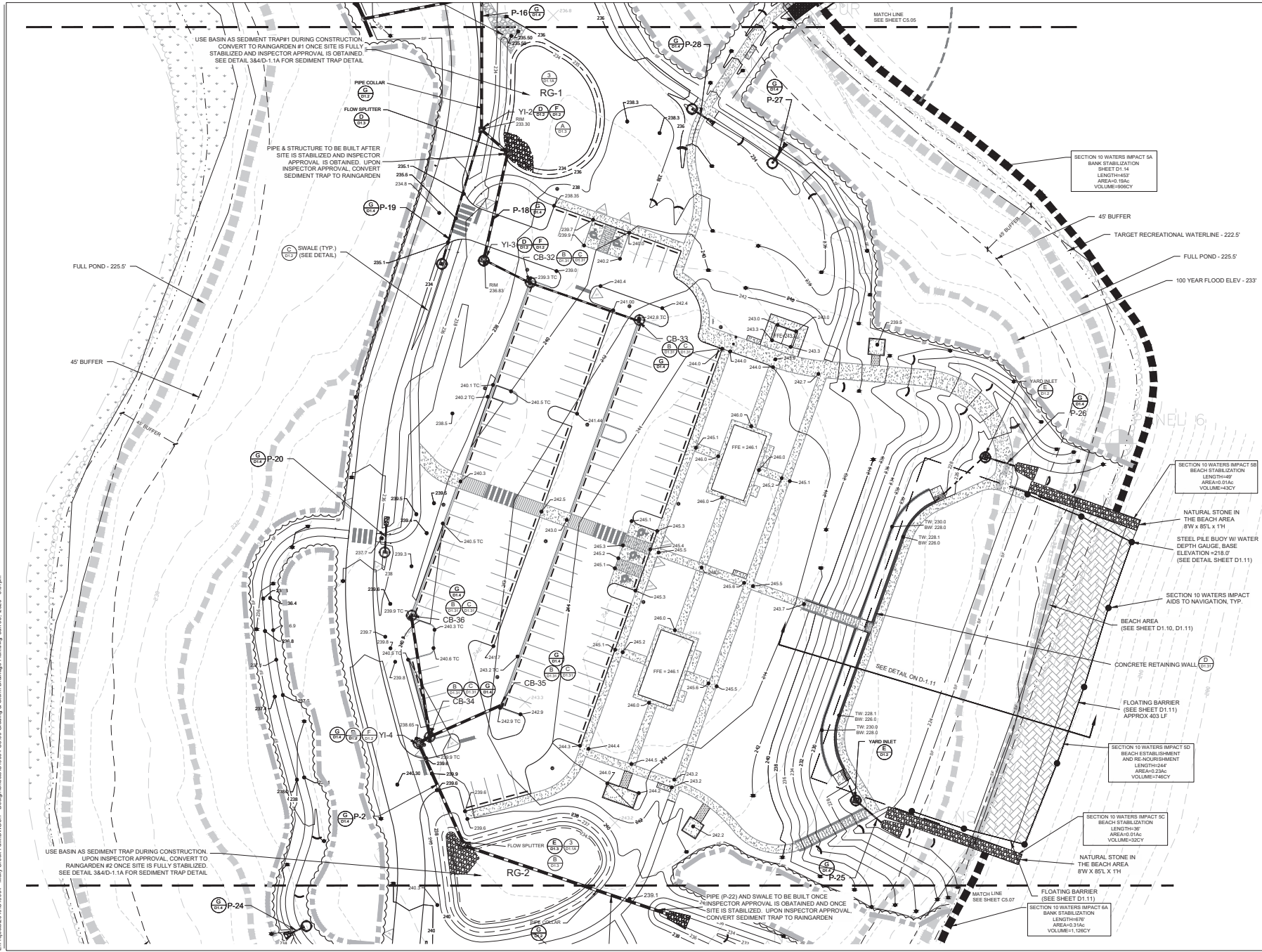
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0 15 30 60 NORTH

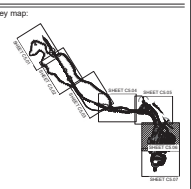
ENLARGED GRADING AND STORM DRAINAGE PLAN

Project number: C19004 Sheet: **W4**
 Date: 09.09.2019
 Drawn by: RB
 Approved by: JO

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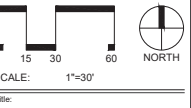


Project:
MOLLY CREEK PARK



Issued for:
CONSTRUCTION DOCUMENTS

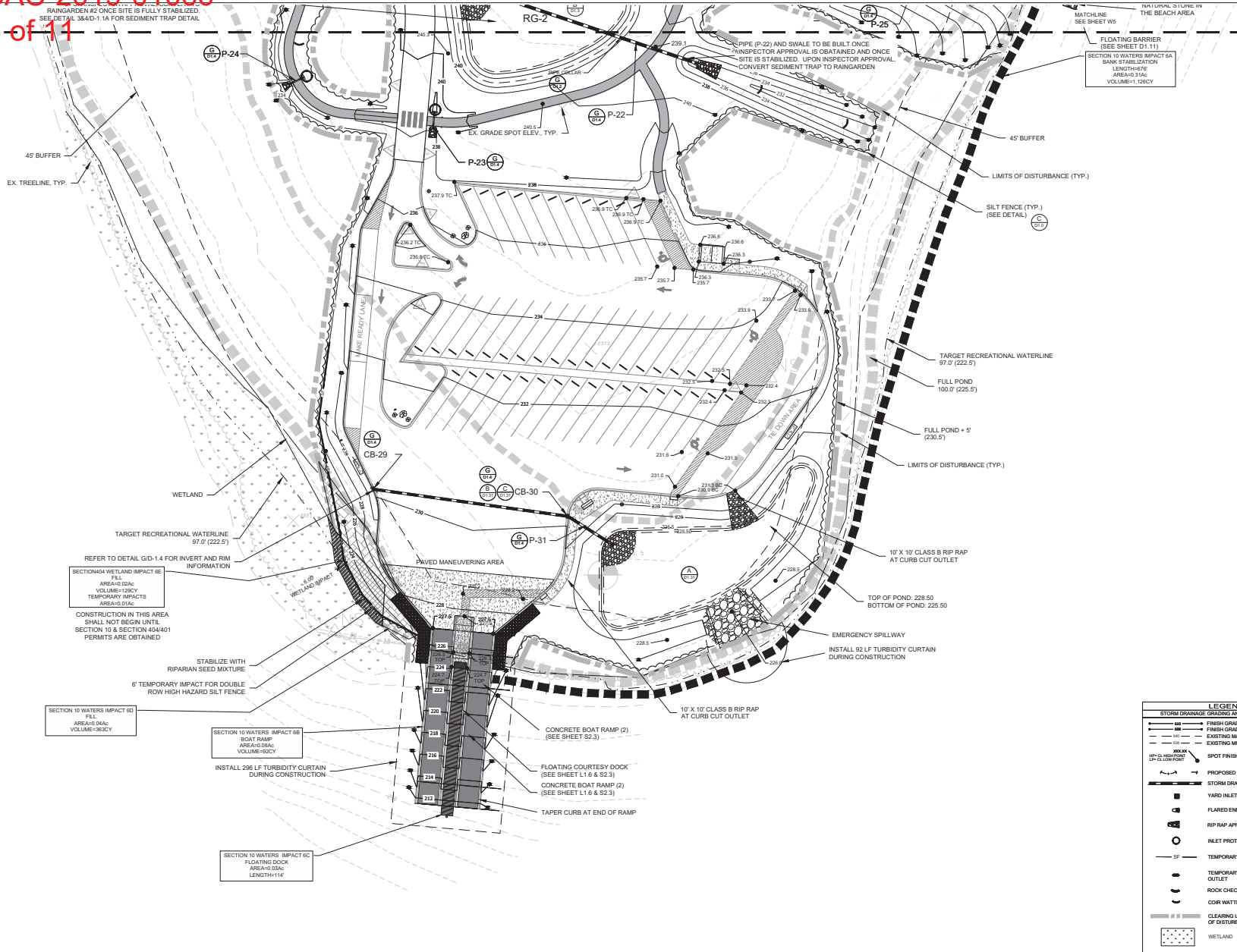
No.	Date	Description



Title:
ENLARGED GRADING AND STORM DRAINAGE PLAN

L:\Projects\2019\19004 - Molly Creek Park\DWG\01 - Design\Sheets\C19004-C5-00-Grading & Storm Drainage Plan.dwg Jan 08, 2020 - 6:01 pm

RAIN GARDEN #2 ONCE SITE IS FULLY STABILIZED.
SEE DETAIL 364-D-1.1A FOR SEDIMENT TRAP DETAIL.



SECTION 10A WETLAND IMPACT 6E
FILL
AREA=0.03AC
VOLUME=126CY
TEMPORARY IMPACTS
AREA=0.01AC

SECTION 10 WATERS IMPACT 6D
FILL
AREA=0.04AC
VOLUME=36CY

SECTION 10 WATERS IMPACT 6B
BOAT RAMP
AREA=0.03AC
VOLUME=92CY

SECTION 10 WATERS IMPACT 6C
FLOATING DOCK
AREA=0.03AC
LENGTH=114'

LEGEND

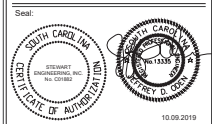
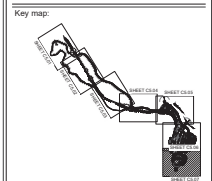
STORM DRAINAGE GRADING AND EROSION CONTROL

- FINISH GRADE (F) CONTOUR
- FINISH GRADE (CY) CONTOUR
- - - EXISTING MAJOR INTERVAL (M) CONTOUR
- - - EXISTING MINOR INTERVAL (C) CONTOUR
- SPOT FINISH GRADE ELEVATION
- PROPOSED DIRECTION OF SURFACE FLOW
- STORM DRAINAGE PIPE
- YARD INLET (DROP INLET)
- FLARED END SECTION (FEB)
- RIP RAP APRON
- INLET PROTECTION
- TEMPORARY SILT FENCE
- TEMPORARY SILT FENCE OUTLET
- ROCK CHECK DAM
- CORR WATTLE
- CLEARING LIMITS OF DISTURBANCE
- WETLAND



Client:
DUKE ENERGY
DUKE ENERGY
338 SOUTH CHURCH STREET
CHARLOTTE, NC 28202
PHONE: 704.382.9257
FAX: 704.382.4671

Project:
MOLLY CREEK PARK



Issued for:
CONSTRUCTION DOCUMENTS

No. Date Description

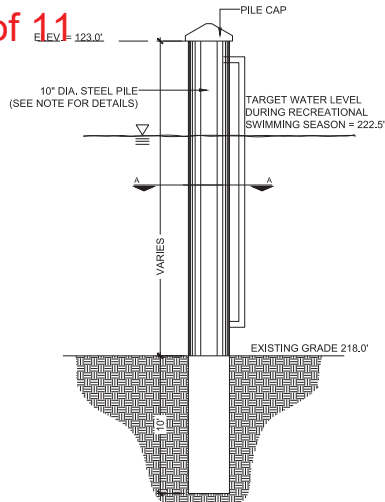
0 15 30 60 NORTH

SCALE: 1"=30'

Title:

ENLARGED GRADING AND STORM DRAINAGE PLAN

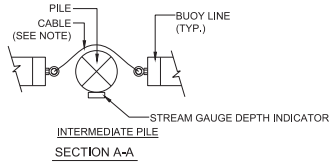
Project number: C19004 Sheet:
Date: 09.09.2019
Drawn by: RB
Approved by: JO **W6**



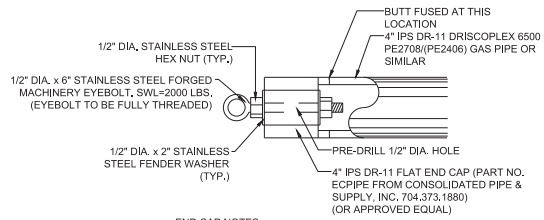
STEEL PILE NOTE:
PILES SHALL BE 8" DIAMETER SCH 40 STEEL PILE. STANDARDS: 0.80 CCA, AWP/A C3. DRIVE PILES TO MINIMUM 5 TON CAPACITY AND 10' EMBEDMENT BELOW EXISTING GRADE.

STEEL PILE BUOY ANCHOR

CABLE NOTE:
CABLE SHALL BE 1/4" DIA. 7x19" STAINLESS STEEL VINYL COATED CABLE. SECURE CABLE TO THE EYE BOLT AT THE END OF EACH BUOY LINE USING (1) 1/4" STAINLESS THIMBLE AND (2) 1/4" STAINLESS STEEL WIRE ROPE CLIPS. PROVIDE PLASTIC CAPS ON THE ENDS OF WIRE ROPE CLIP BOLT. INSTALL WIRE ROPE CLIP 2" FROM THE THIMBLE AND AT THE END OF THE WIRE ROPE SO THAT THE END OF THE WIRE ROPE IS NOT EXPOSED.

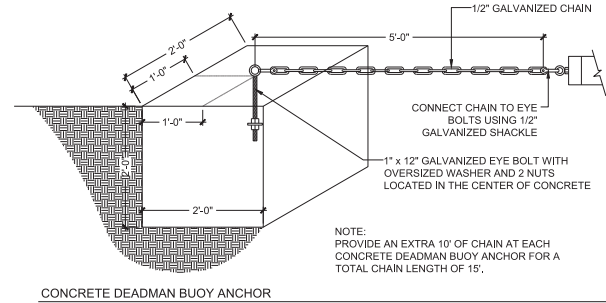


SECTION A-A



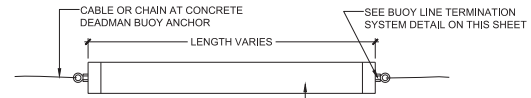
END CAP NOTES:
1.) THE END CAP SHALL BE WATER TIGHT. CAULK SHALL BE APPLIED IN THE PRE-DRILLED HOLE BEFORE THE EYEBOLT IS INSERTED.
2.) HEX NUTS ARE TO BE ADEQUATELY TORQUED AND SECURED IN PLACE USING PERMANENT STRENGTH THREADLOCKER OR APPROVED EQUAL.
3.) SUBSTITUTIONS TO THE HARDWARE SHOWN FOR THE BUOY LINE TERMINATION SYSTEM ARE TO BE SUBMITTED TO DUKE ENERGY FOR APPROVAL PRIOR TO THEIR USE.

BUOY LINE TERMINATION SYSTEM



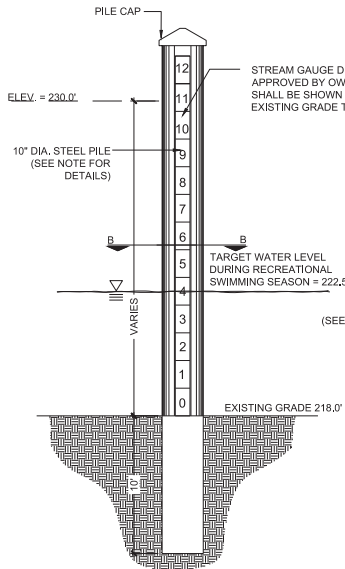
CONCRETE DEADMAN BUOY ANCHOR

NOTE:
PROVIDE AN EXTRA 10' OF CHAIN AT EACH CONCRETE DEADMAN BUOY ANCHOR FOR A TOTAL CHAIN LENGTH OF 15'.



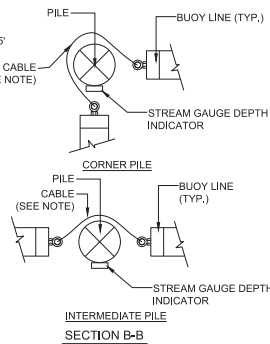
NOTE:
CONTRACTOR SHALL UTILIZE STRAIGHT NON-ROLLED SECTIONS OF GAS PIPE FUSED TOGETHER TO CREATE THE BUOY LINE.

BUOY LINE SECTION

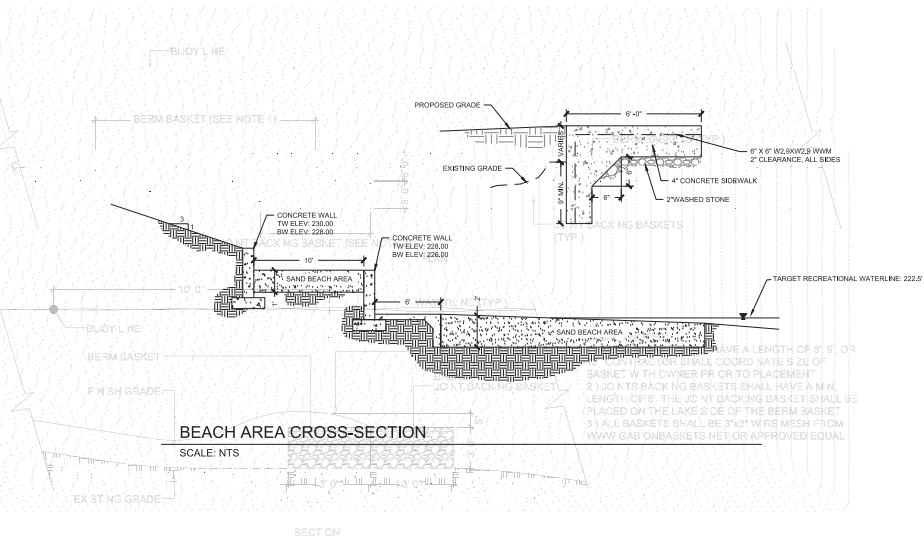


WATER DEPTH GAUGE

CABLE NOTE:
CABLE SHALL BE 1/4" DIA. 7x19" STAINLESS STEEL VINYL COATED CABLE. SECURE CABLE TO THE EYE BOLT AT THE END OF EACH BUOY LINE USING (1) 1/4" STAINLESS THIMBLE AND (2) 1/4" STAINLESS STEEL WIRE ROPE CLIPS. PROVIDE PLASTIC CAPS ON THE ENDS OF WIRE ROPE CLIP BOLT. INSTALL WIRE ROPE CLIP 2" FROM THE THIMBLE AND AT THE END OF THE WIRE ROPE SO THAT THE END OF THE WIRE ROPE IS NOT EXPOSED.



SECTION B-B



BEACH AREA CROSS-SECTION

SCALE: NTS

1) BACKING BASKETS SHALL HAVE A LENGTH OF 5'; 9" OR CONTRACTOR SHALL COORDINATE SIZE OF BASKET WITH OWNER PER CR-10 PLACEMENT
2) 3.00 INCHES BACKING BASKETS SHALL HAVE A MIN LENGTH OF 6"; THE JOINT BACKING BASKET SHALL BE PLACED ON THE LAKE SIDE OF THE BERM BASKET.
3) ALL BASKETS SHALL BE 5'X2' WIRE MESH FROM WWW.GABONBASKETS.NET OR APPROVED EQUAL

SWIM BEACH COMPONENT DETAILS

SCALE: NTS



Client:



DUKE ENERGY
525 SOUTH CHURCH STREET
CHARLOTTE, NC 28202
PHONE: 704.382.9297
FAX: 704.382.4871

Project:

MOLLY CREEK PARK

Key map:



Issued for:

CONSTRUCTION DOCUMENTS

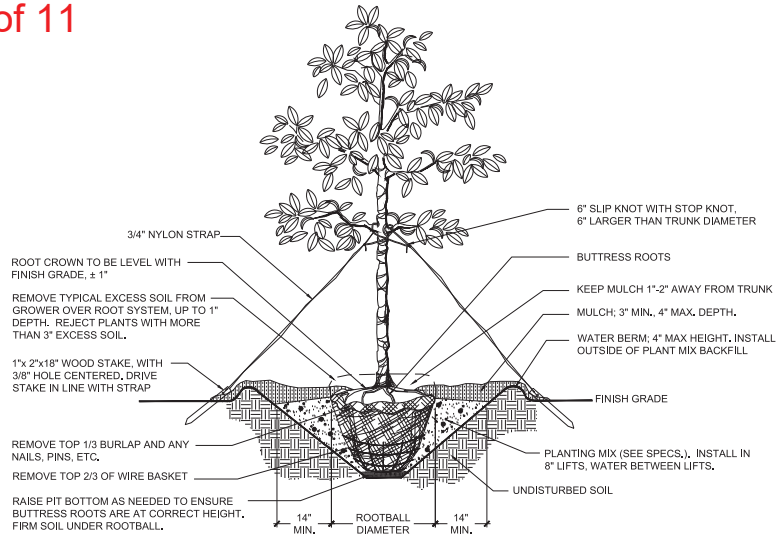
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Title:

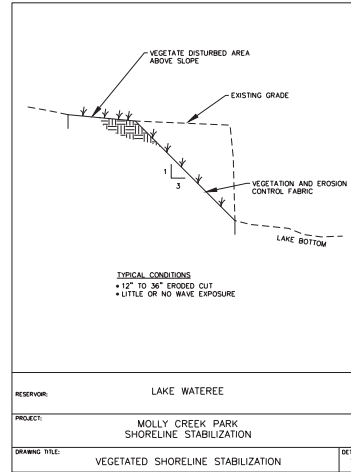
SWIM BEACH COMPONENT DETAILS

Project number: C19004 Sheet:
Date: 09.09.2019
Drawn by: RB
Approved by: EMB

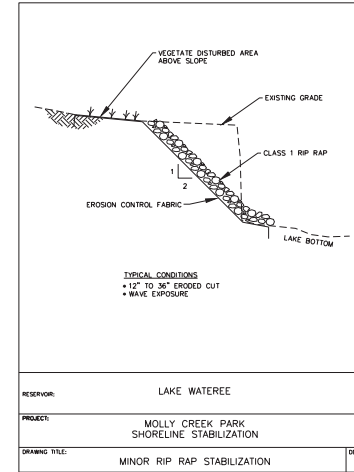
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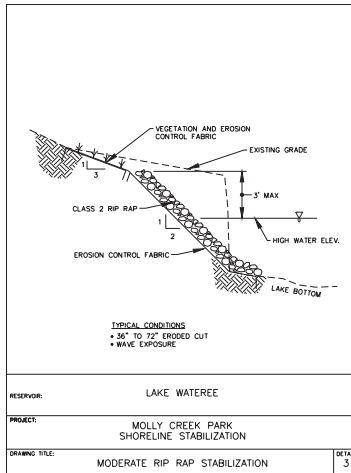
A SHADE TREE INSTALLATION DETAIL
NOT TO SCALE



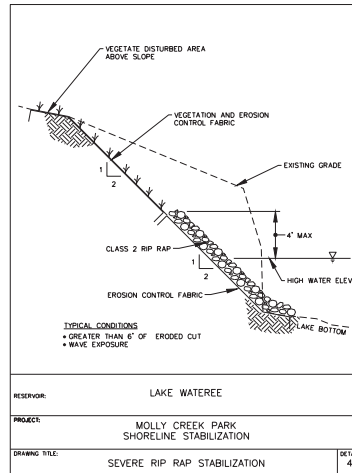
RESERVOIR: LAKE WATEREE
PROJECT: MOLLY CREEK PARK SHORELINE STABILIZATION
DRAWING TITLE: VEGETATED SHORELINE STABILIZATION DETAIL 1



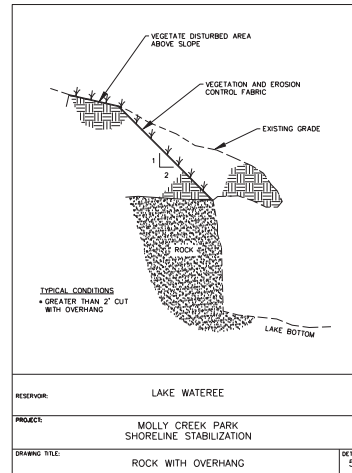
RESERVOIR: LAKE WATEREE
PROJECT: MOLLY CREEK PARK SHORELINE STABILIZATION
DRAWING TITLE: MINOR RIP RAP STABILIZATION DETAIL 2



RESERVOIR: LAKE WATEREE
PROJECT: MOLLY CREEK PARK SHORELINE STABILIZATION
DRAWING TITLE: MODERATE RIP RAP STABILIZATION DETAIL 3



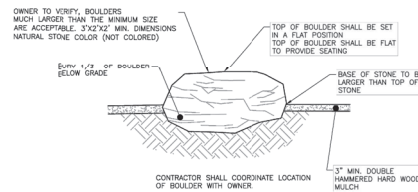
RESERVOIR: LAKE WATEREE
PROJECT: MOLLY CREEK PARK SHORELINE STABILIZATION
DRAWING TITLE: SEVERE RIP RAP STABILIZATION DETAIL 4



RESERVOIR: LAKE WATEREE
PROJECT: MOLLY CREEK PARK SHORELINE STABILIZATION
DRAWING TITLE: ROCK WITH OVERHANG DETAIL 5

SHORELINE STABILIZATION NOTES:
1. DETAILS 1 THRU 5 ARE APPLICABLE TO THE AREA INDICATED AS "SHORELINE STABILIZATION AREA" ON THE PLANS. SHORELINE WITHIN THE AREA INDICATED MAY REQUIRE STABILIZATION BASED ON EXISTING CONDITIONS. THE APPLICABLE DETAIL TO BE APPLIED IS BASED ON EXISTING CONDITION OF THE SHORELINE PRIOR TO CONSTRUCTION AND SHALL BE COORDINATED IN DETAIL WITH DUKE ENERGY BEFORE CONSTRUCTION COMMENCES.
2. MAXIMUM SHORELINE TO BE STABILIZED AS PART OF A SINGLE PROJECT IS 500 LINEAR FEET.

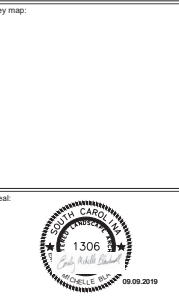
B BANK STABILIZATION
NOT TO SCALE



C BOULDER DETAIL
NOT TO SCALE



Client:
Project:
MOLLY CREEK PARK



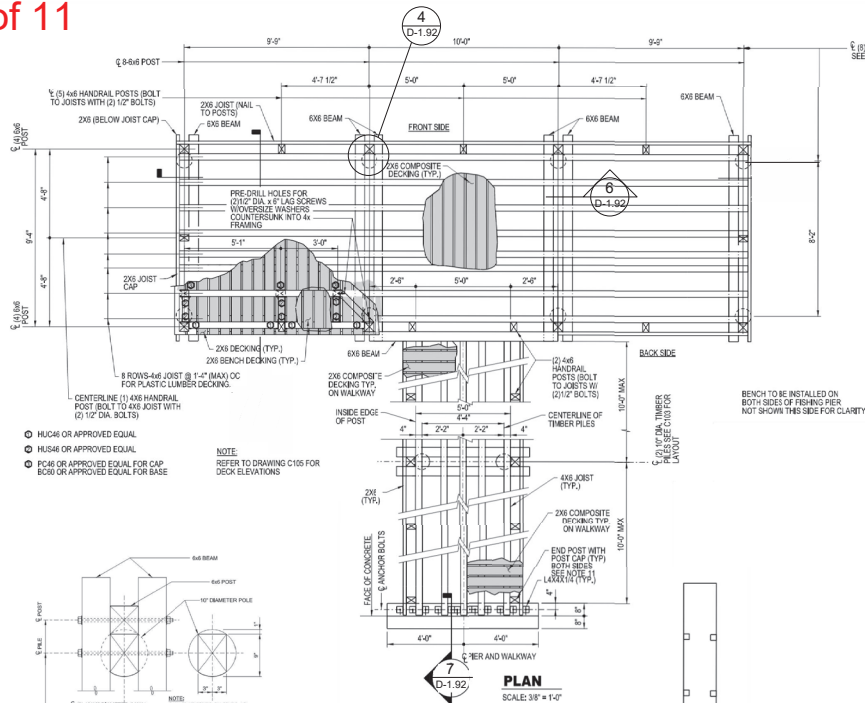
Issued for:
CONSTRUCTION DOCUMENTS

No.	Date	Description

Title:
STABILIZATION DETAILS

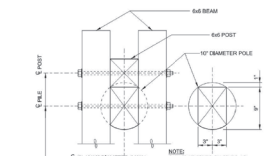
Project number: C19004 Sheet
Date: 09.09.2019
Drawn by: TMI
Approved by: EMB
D-1.14

L:\Projects\2019\01066 - Molly Creek Park\DWG\Sheet 1 - Design\Sheet\01066-C01-03-Share Details.dwg, Sep 09, 2019 - 5:03pm

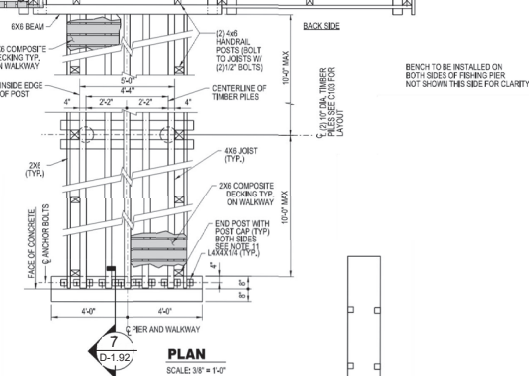


- HUCA OR APPROVED EQUAL
- HUS46 OR APPROVED EQUAL
- P046 OR APPROVED EQUAL FOR CAP
- B230 OR APPROVED EQUAL FOR BASE

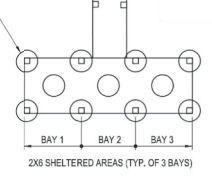
NOTE: REFER TO DRAWING C105 FOR DECK ELEVATIONS



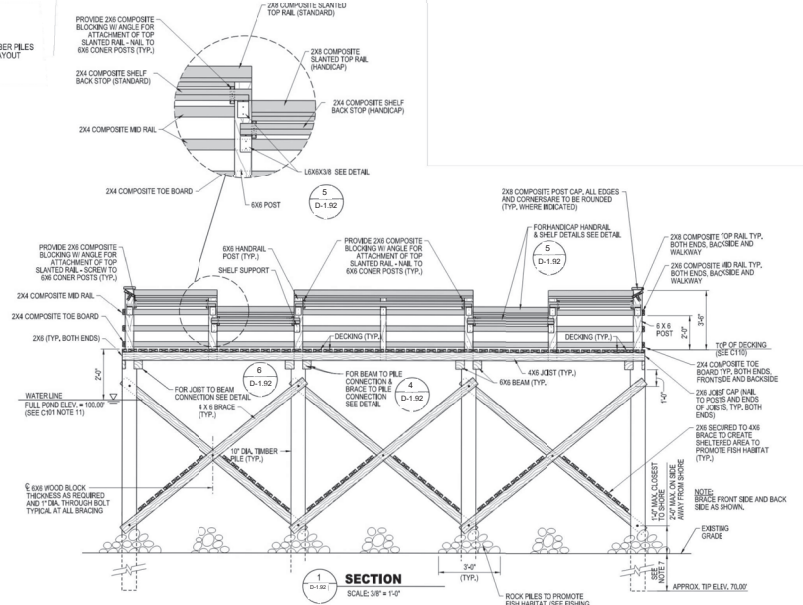
TYPICAL BEAM TO PILE CONNECTION AND BRACE TO PILE CONNECTION
SCALE: 3/8" = 1'-0"



PLAN SCALE: 3/8" = 1'-0"

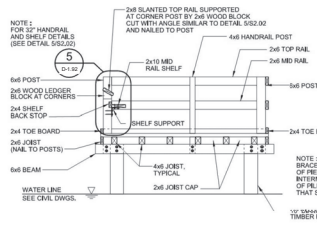


FISHING HABITAT PLAN
NO SCALE

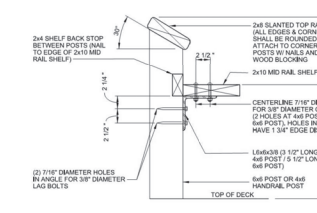


SECTION SCALE: 3/8" = 1'-0"

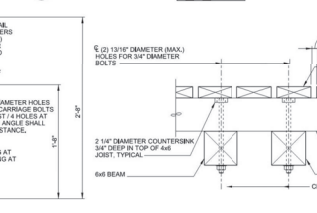
- NOTES:
- LUMBER SHALL BE AS FOLLOWS:
 - 1. ALL 4x AND LUMBER SHALL BE NO. 1 GRADE, STANDARD DRESSED (S4S) AND PRESSURE TREATED TO 0.6 PCF NET RETENTION FOR GROUND CONTACT USE.
 - 2. ALL OTHER LUMBER SHALL BE NO. 2 GRADE, STANDARD DRESSED (S4S) AND PRESSURE TREATED TO 0.25 PCF NET RETENTION FOR ABOVE GROUND USE EXCEPT AS NOTED IN I.C.
 - HANDRAIL, TOP RAIL, NOT SLANTED RAIL, MID RAIL, MID RAIL SHELF (INCLUDING BACK STOP, Toe BOARD, & DECKING) SHALL BE AMERICAN COMPOSITE TIMBERS IN LIEU OF PRESSURE TREATED LUMBER.
 - PRESSURE TREATED LUMBER SHALL BE TREATED WITH WATERBORNE PRESERVATIVE.
 - ALL CUT ENDS OF TREATED LUMBER SHALL BE TREATED WITH COPPER NAPHTHANATE SOLUTION (2% METAL).
 - MID RAIL SHELF SUPPORT ANGLES & ANGLES TO ANCHOR JOISTS TO ADJUTMENT SHALL BE 45° HOT DIPPED GALVANIZED.
 - FASTENERS SHALL BE AS FOLLOWS:
 - 1. NAILS AND SPIKES SHALL BE HOT DIP GALVANIZED.
 - 2. THREADED FASTENERS SHALL BE HOT DIP GALVANIZED.
 - 3. FASTENERS COMPOSITE DECKING TO JOISTS W/ GALVANIZED OR STAINLESS STEEL WOOD SCREWS.
 - INSTALL FASTENERS ACCORDING TO DECKING MANUFACTURERS INSTRUCTIONS.
 - THREADED FASTENERS SHALL NOT BE TIGHTENED DIRECTLY AGAINST WOOD SURFACES, BUT USED ONLY IN CONJUNCTION WITH STANDARD Ogee OR FLAT WASHERS.
 - PILES SHALL BE ROUND 10" DIA. SOUTHERN YELLOW PINE TIMBER PILES CHOSEN FOR BUTT DAMPER, GRADE ASTM D 25.4 TREATED FOR FRESHWATER USE STANDARDS, 8 SOCA, AWPA C3, DRIVE PILES TO MINIMUM 5 TON CAPACITY AND 15' EMBEDMENT BELOW GRADE. SEE SPECIFICATIONS SECTION 0459 - TIMBER PILES FOR ADDITIONAL INFORMATION.
 - FOR JOIST TO BEAM CONNECTION AT WALKWAY ATTACHMENT - USE SIMPSON STRONG-TIE JOIST HANGER WITH ZMAX HOT DIPPED GALVANIZED COATING, MODEL "L46" TYPICAL FOR 4x6 JOISTS, AND MODEL "L28" TYPICAL FOR 2x6 JOISTS OR APPROX EQUAL.
 - CONCRETE WORK SHALL BE IN ACCORDANCE WITH AC3081, LATEST ED. UNLESS OTHERWISE NOTED.
 - CONCRETE SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. ALL UNFORMED REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, LATEST REV., GRADE 60.
 - UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" - AC308.
 - PROVIDE BRACING AS SHOWN IN SECTION 0252 02 BETWEEN ALL ROWS OF PILES IN BOTH DIRECTIONS.
 - SPACING BETWEEN NAILS BE 4" MAXIMUM.



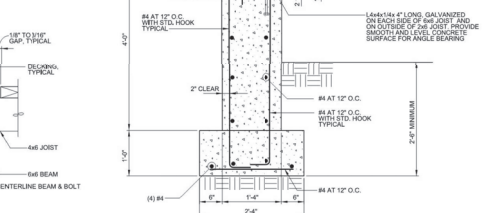
SECTION 3 SCALE: 3/8" = 1'-0"



TYPICAL 32" HANDRAIL AND SHELF DETAIL
SCALE: 1/2" = 1'-0"



TYPICAL JOIST TO BEAM CONNECTION
SCALE: 1/2" = 1'-0"



SECTION 7 SCALE: 1" = 1'-0"

PIER BENCH DETAIL
NOT TO SCALE



MOLLY CREEK PARK

Client: **DUKE ENERGY**



CONSTRUCTION DOCUMENTS

No.	Date	Description

PIER DETAILS

Project number: C19004 Sheet
Date: 09.09.2019
Drawn by: RD
Approved by: JB