

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
1835 Assembly Street, Room 865B-1
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-2021-00520

July 9, 2021

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. Brandon Crutchfield
Bear Creek Partner, LLC
2381 Dutch Fork Road
Chapin, South Carolina 29036

for a permit to remove and replace an existing marina in

Lake Murray

at Putnam's Landing marina, south of Putnam Drive, in Crenshaw Cove, on Lake Murray, Lexington County, South Carolina (Latitude: 34.0523 °, Longitude: -81.2035 °), Quad Sheet- Irmo.

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 would consist of the redevelopment of an existing marina in Lake Murray, including removal of existing multi-slip dock structures, dredging, placement of fill material for shoreline stabilization, and construction of new multi-slip dock structures, bringing

total number of docks from 43 (existing) to 120 (proposed). In detail, the proposed project would include:

Structure removal. Removal of existing structures including four floating docks with a total of 43 slips (a 32 slip dock, a 4 slip dock, a 5 slip fueling dock, and a 2 slip loading dock), one fixed pier/boardwalk/loading dock, and approximately 1,340 linear feet (lf) of failing wooden bulkhead and/or rip-rap shoreline stabilization. Note that the existing boat ramp with floating dock is proposed to remain in place.

Dredging. Dredging of approximately 450 cubic yards (cy) in a 0.3 acre area of Lake Murray including a portion of the existing earthen peninsula and surrounding the earthen peninsula to create the new dry dock storage launch and proper channel depth for safe navigation to and from a proposed dry dock launch. According to the applicant, the dredged material would be spread on site as part of the grading operations unless deemed unsuitable after testing. If unsuitable, the material would be taken to an appropriate landfill facility.

Placement of fill material. Placement of approximately 890cy clean fill material (590cy concrete, 100cy riprap, 200cy earthen) will be placed in approximately 0.4 acre of Lake Murray for the construction of the new dry dock launch, abutments, and concrete bulkhead (approximately 1,340lf). A temporary sheet pile dam may be necessary to dewater 0.05 acre of Lake Murray for the construction of the new dry dock launch.

Construction of new structures. Construction of a new fixed wooden pier walkway with metal gangway leading to a new 120 covered slip dock tree (docks "A," "C," "D"). The docks would be secured in place with wood pilings, and a new uncovered fueling/pump-out/handicap dock (dock "B"), with metal gangway would be attached to a new concrete abutment/walkway and secured in place with wood pilings. In total the proposed dock tree would extend approximately 202' waterward from the 360' full pool elevation and would parallel the shoreline and the applicant's property line, spanning approximately 638' of shoreline. Attending structures such as dry dock storage buildings, office buildings, roads, parking lots, and water quality ponds, would be constructed in the uplands above the 360' full pool elevation.

The applicant has not proposed compensatory mitigation. Per the applicant, the purpose of the proposed project is for lake access/recreation and erosion control in this area.

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 0.7 acre 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.

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)(f)(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.

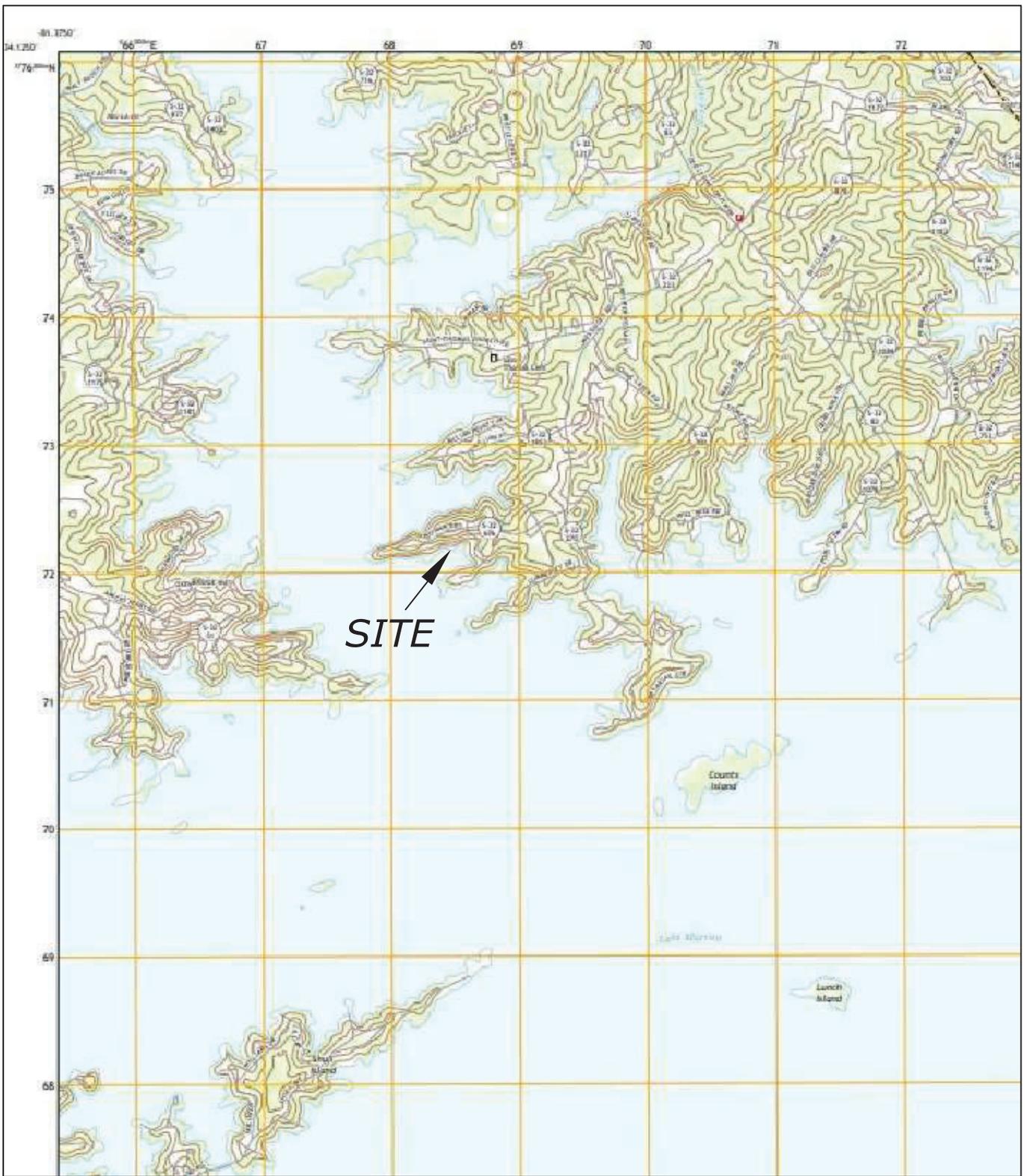
The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act 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.

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, Room 865B-1
Columbia, South Carolina 29201**

If there are any questions concerning this public notice, please contact Jonathan Swartz, Project Manager, at (803) 260-5536, toll free at 1-866-329-8187, or by email at Jonathan.M.Swartz@usace.army.mil.



LOCATION MAP

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

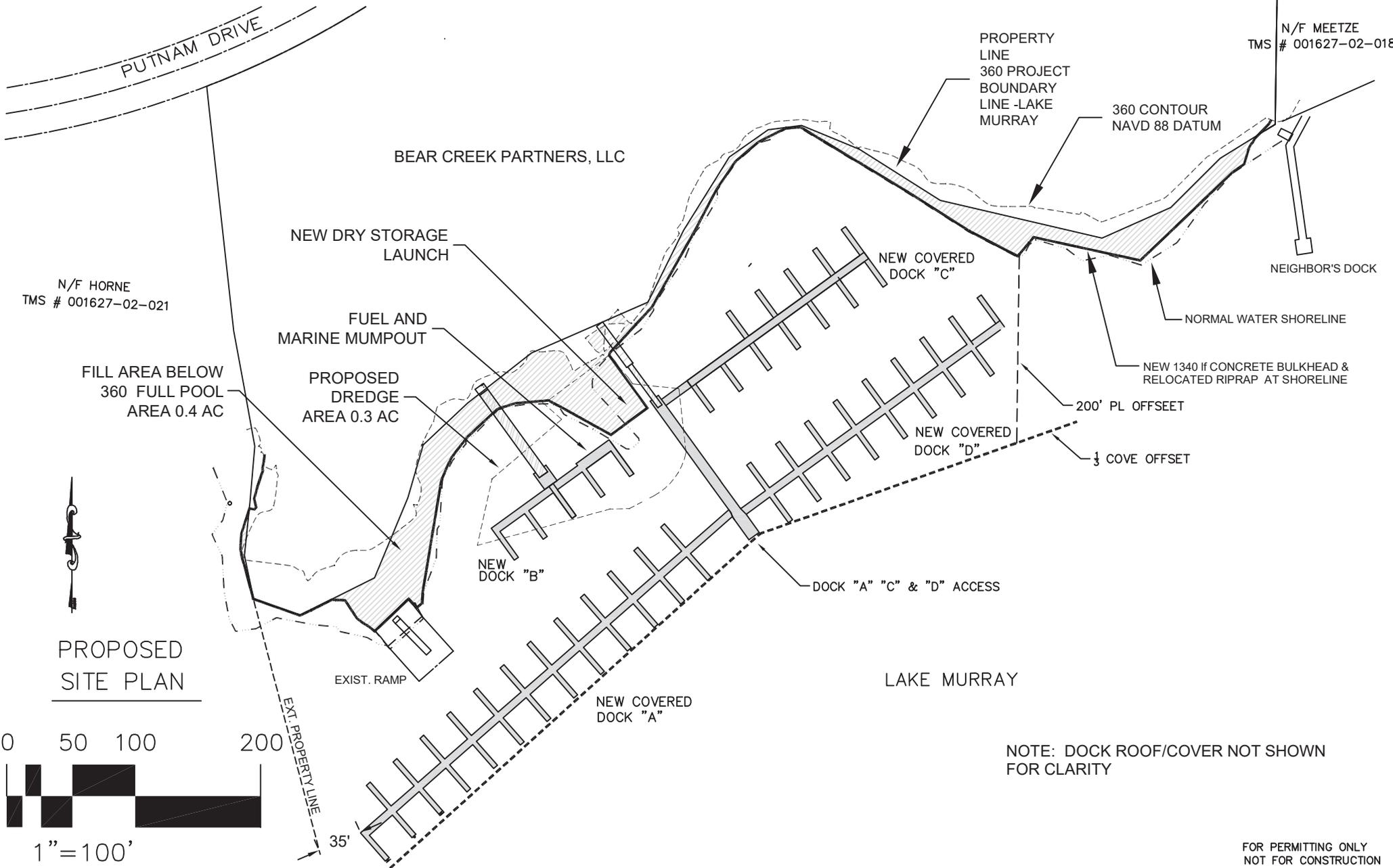
LAKE MURRAY EAST QUAD

APPLICANT:
BEAR CREEK PARTNERS, LLC
ACTIVITY:
Replace Marina & Bulkhead,
Dredge
P/N#

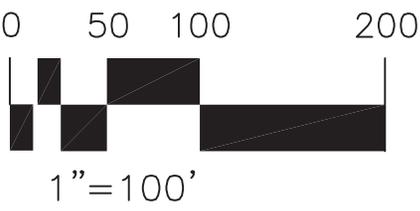
LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

SAC-2021-00520

SHEET 1 OF 12



PROPOSED
SITE PLAN



NOTE: DOCK ROOF/COVER NOT SHOWN FOR CLARITY

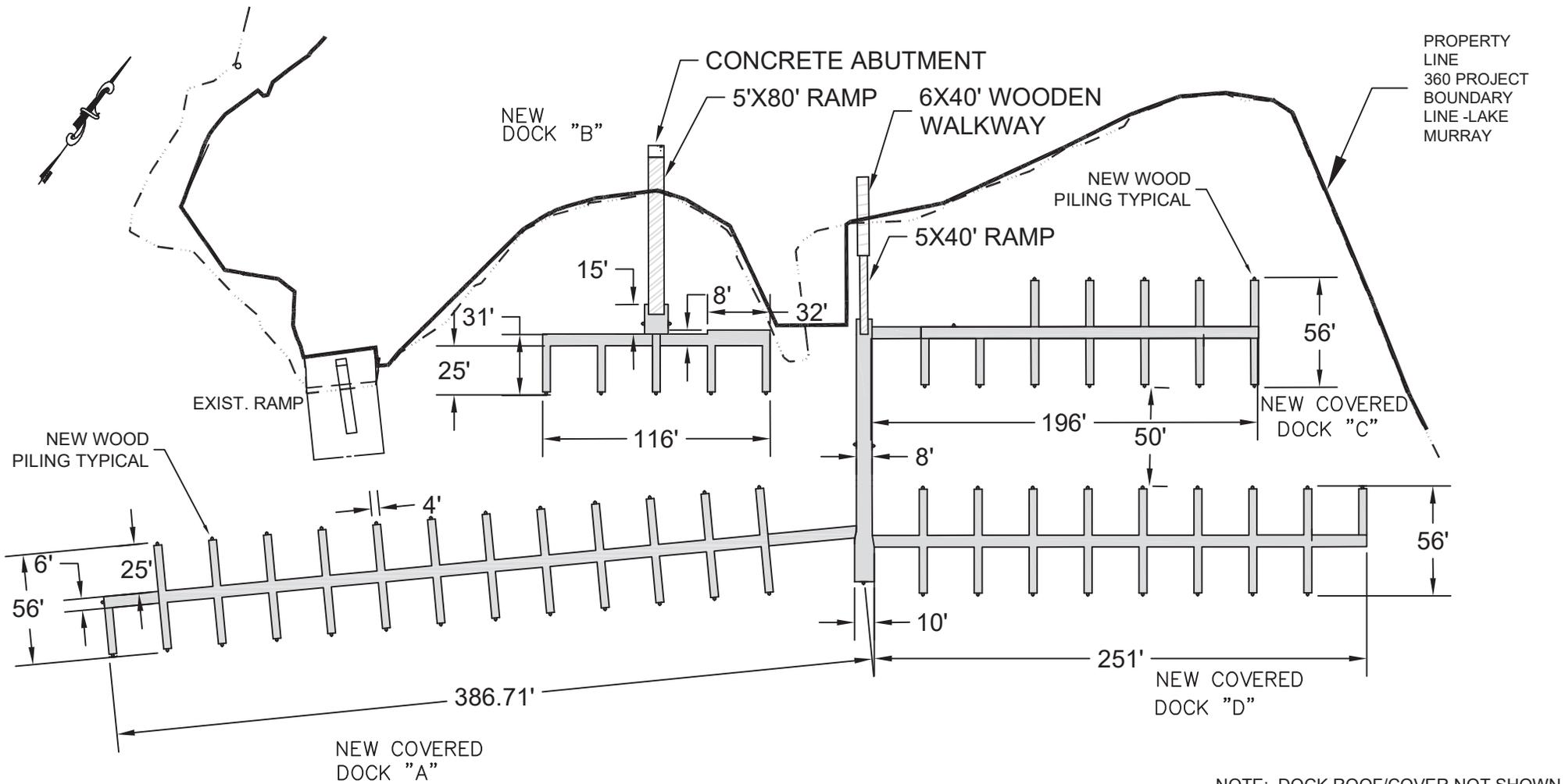
FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

APPLICANT: **BEAR CREEK PARTNERS, LLC**
 ACTIVITY: Replace Marina & Bulkhead,
 Dredge
 P/N#

LOCATION:
 Lake Murray
 Chapin, SC
 COUNTY: Lexington
 DATE: 5/7/2020

ADDED 360 NAVD 88 CONTOUR AND SHADED FILL AREA 6/21/21

SAC-2021-00520



NOTE: DOCK ROOF/COVER NOT SHOWN FOR CLARITY

LAKE MURRAY

**NEW DOCK
DIMENSION PLAN**

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

REV 6/14/21 TO SHOW PILINGS

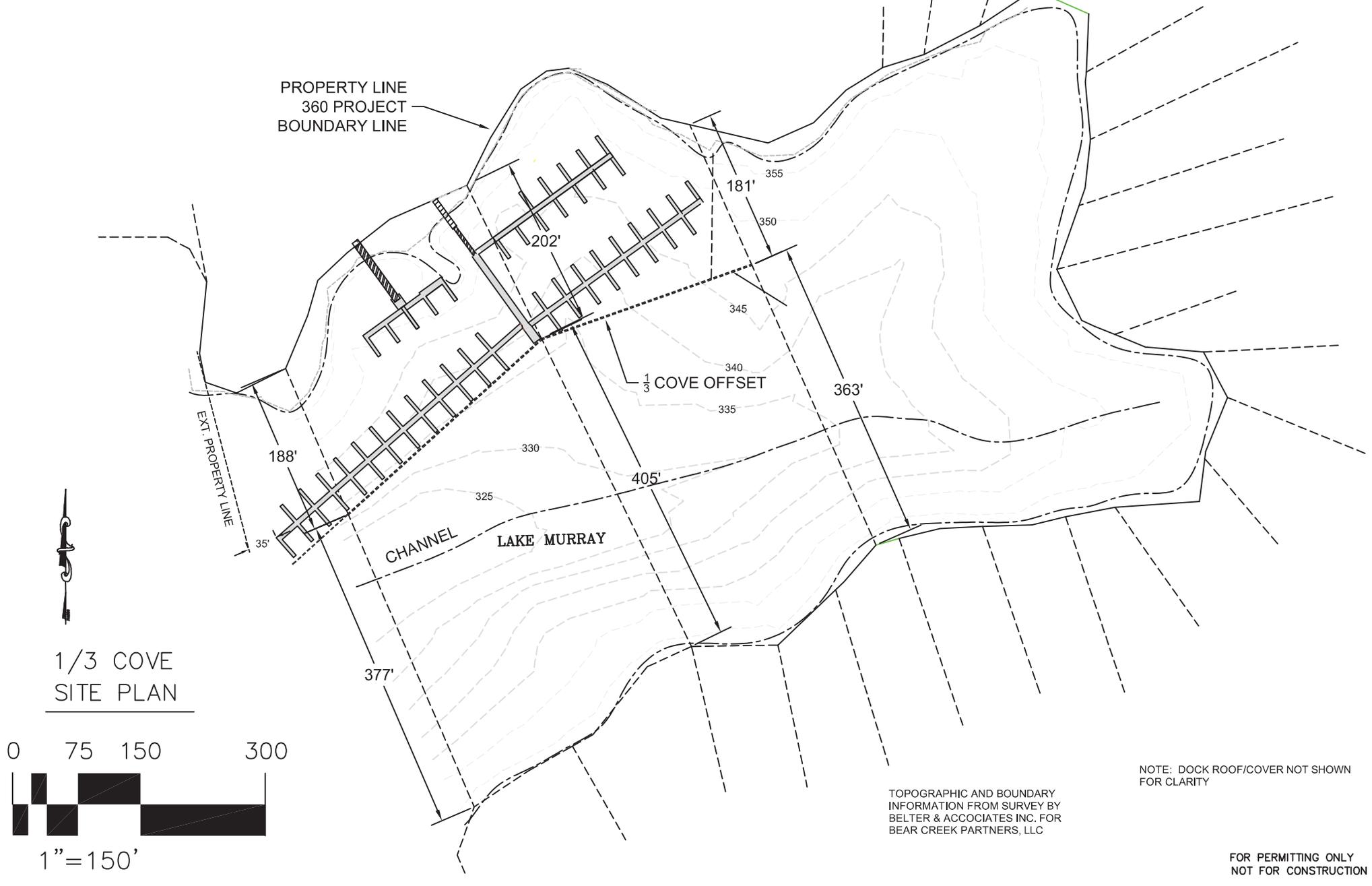
APPLICANT: **BEAR CREEK PARTNERS, LLC**

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

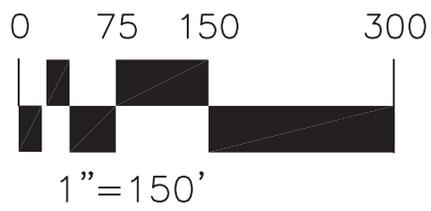
SAC-2021-00520

ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#



1/3 COVE
SITE PLAN



NOTE: DOCK ROOF/COVER NOT SHOWN FOR CLARITY

TOPOGRAPHIC AND BOUNDARY INFORMATION FROM SURVEY BY BELTER & ASSOCIATES INC. FOR BEAR CREEK PARTNERS, LLC

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

APPLICANT: **BEAR CREEK PARTNERS, LLC**

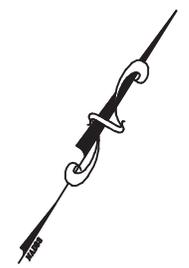
ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

SAC-2021-00520

NEW CONCRETE BULKHEAD
SEE SECTIONS



360 EXIST.
CONTOUR

PROPOSED
CONTOUR

352

350

350

EXIST. CONTOUR

DOCK "C"

DOCK "B"

348

350

348

LIMITS OF DREDGING

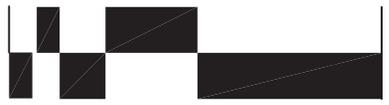
EXISTING FILLED PENINSULA

TEMPORARY STEEL SHEET PILE
AREA TO DEWATER = 0.05 AC

NEW DRY STORAGE LAUNCH

DRY STACK LAUNCH
& DREDGE SITE PLAN

0 20 40 80



1"=40'

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

REV 6/14/21 TO SHOW PILINGS
REV 6/25/21 TO SHOW TEMP. SHEET PILE

APPLICANT: **BEAR CREEK PARTNERS, LLC**

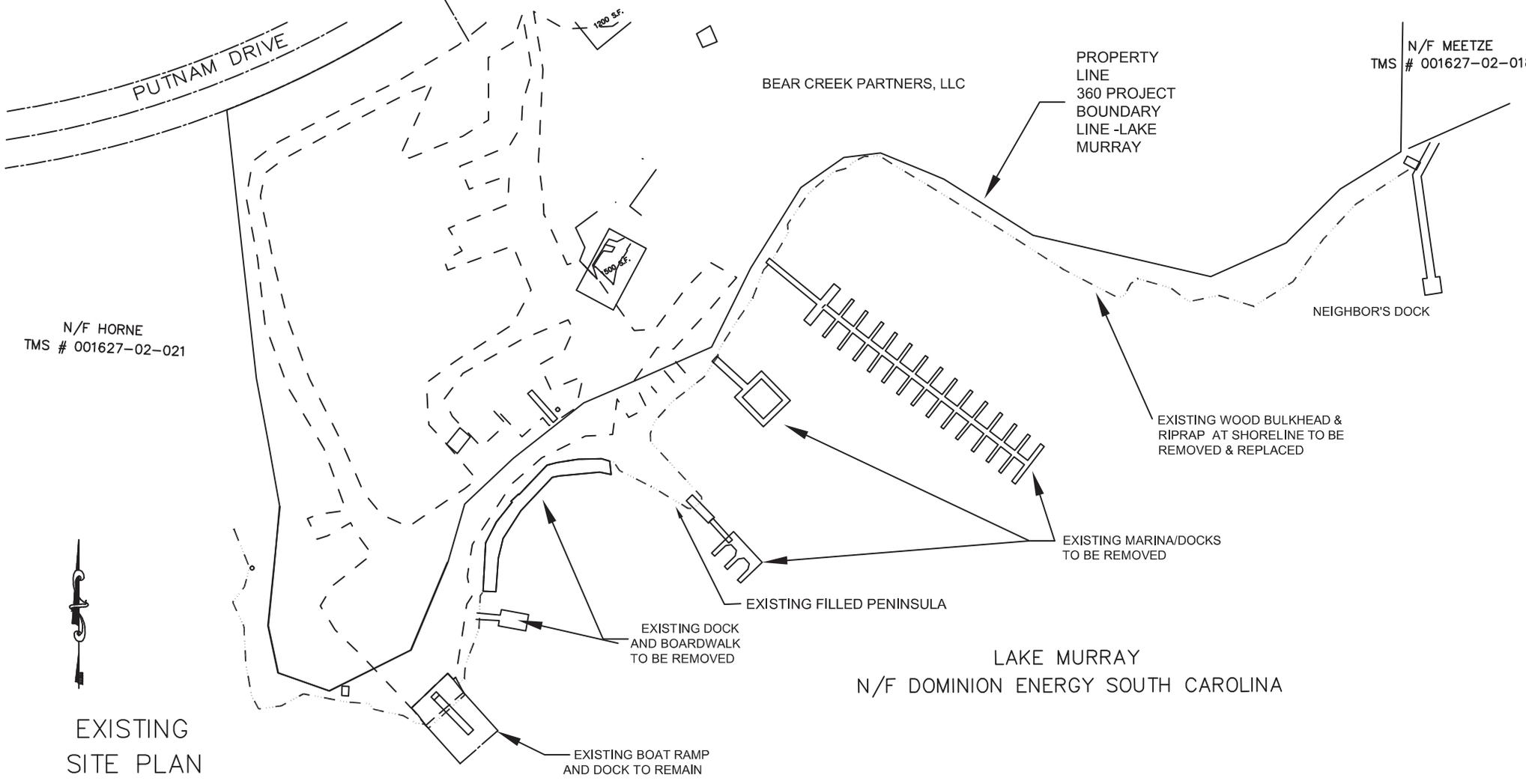
ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

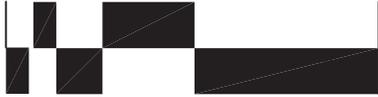
SAC-2021-00520

SHEET 6 of 12



EXISTING
SITE PLAN

0 50 100 200



1" = 100'

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

APPLICANT: **BEAR CREEK PARTNERS, LLC**

ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

SAC-2021-00520

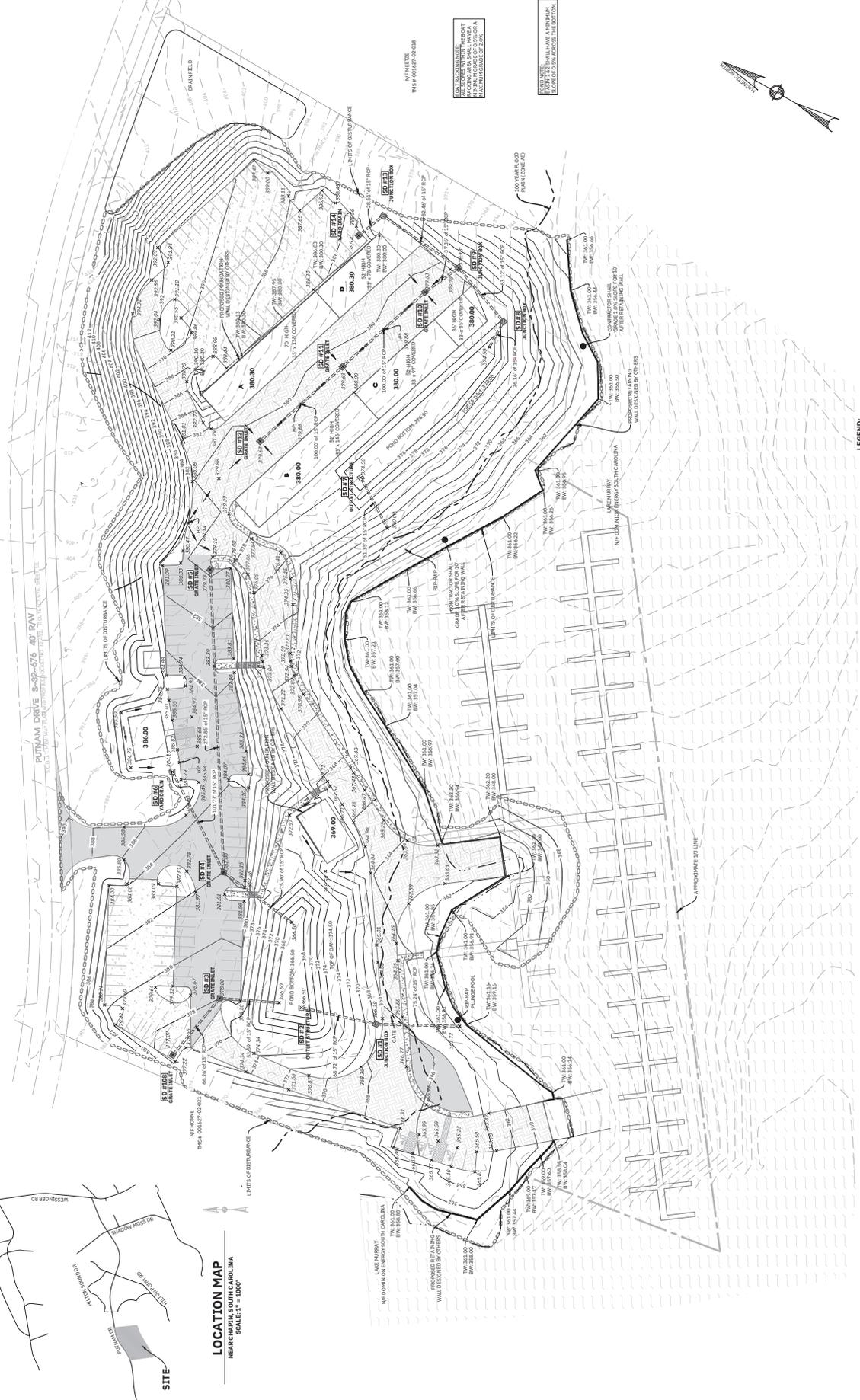


CIVIL ENGINEERING of COLUMBIA

3704 FERNANDEZ ROAD COLUMBIA, SC 29220
 (TEL) (803) 796-2820 FAX (803) 796-2825



MARINE 360
 CHAPIN, SC 29036
 20177

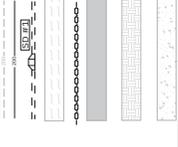


PUTNAM'S LANDING

LEXINGTON COUNTY, SOUTH CAROLINA

SCALE: 1" = 40'

- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED DISTURBANCE
 - LAKE MURRAY
 - LIMITS OF DISTURBANCE
 - PROPOSED STANDARD ASPHALT PAVEMENT
 - PROPOSED HEAVY ASPHALT PAVEMENT
 - PROPOSED GRAVEL LOT



THE ENGINEER AND SURVEYOR IS:
CIVIL ENGINEERING OF COLUMBIA
 3704 FERNANDEZ ROAD
 COLUMBIA, SC 29220
 (TEL) (803) 796-2820
 FAX (803) 796-2825
 EMAIL: INFO@CIVILCOLUMBIA.COM

THE OWNER IS:
MARINE 360
 3704 FERNANDEZ ROAD
 COLUMBIA, SC 29220
 (TEL) (803) 796-2820
 FAX (803) 796-2825
 EMAIL: INFO@MARINE360.COM

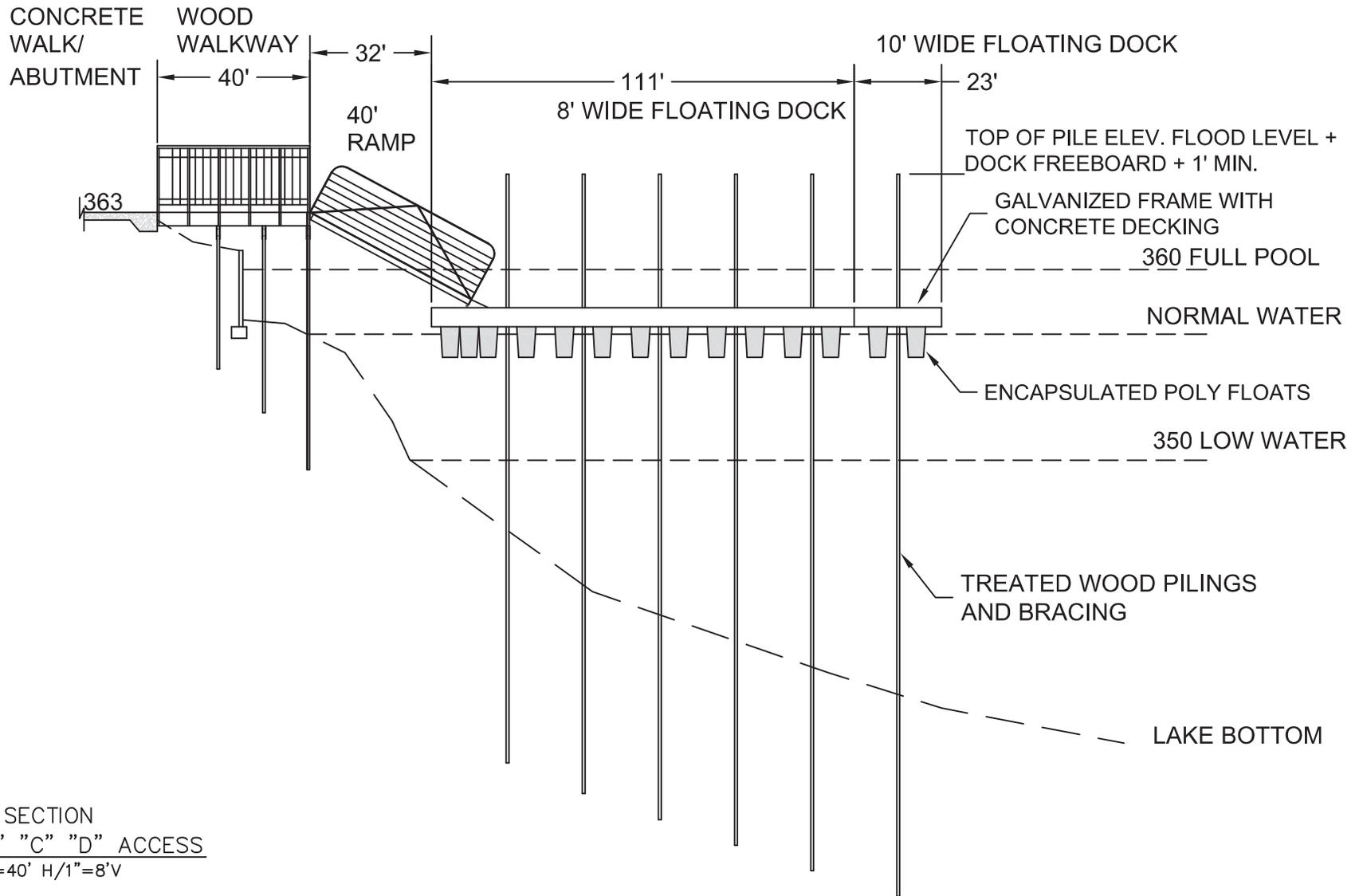
LEXINGTON COUNTY PUBLIC WORKS
 1000 W. MAIN STREET
 COLUMBIA, SC 29201
 (TEL) (803) 893-8900
 FAX (803) 893-8901
 EMAIL: INFO@LEXCOUNTYSC.COM

NOTICE TO THE CONTRACTOR:
 THIS PLAN IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

811 CONSTRUCTION:
 AT LEAST 2 WEEKS IN ADVANCE OF THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 TO LOCATE ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.



SAC-2021-00520



SECTION
DOCK "A" "C" "D" ACCESS
1"=40' H/1"=8'V

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

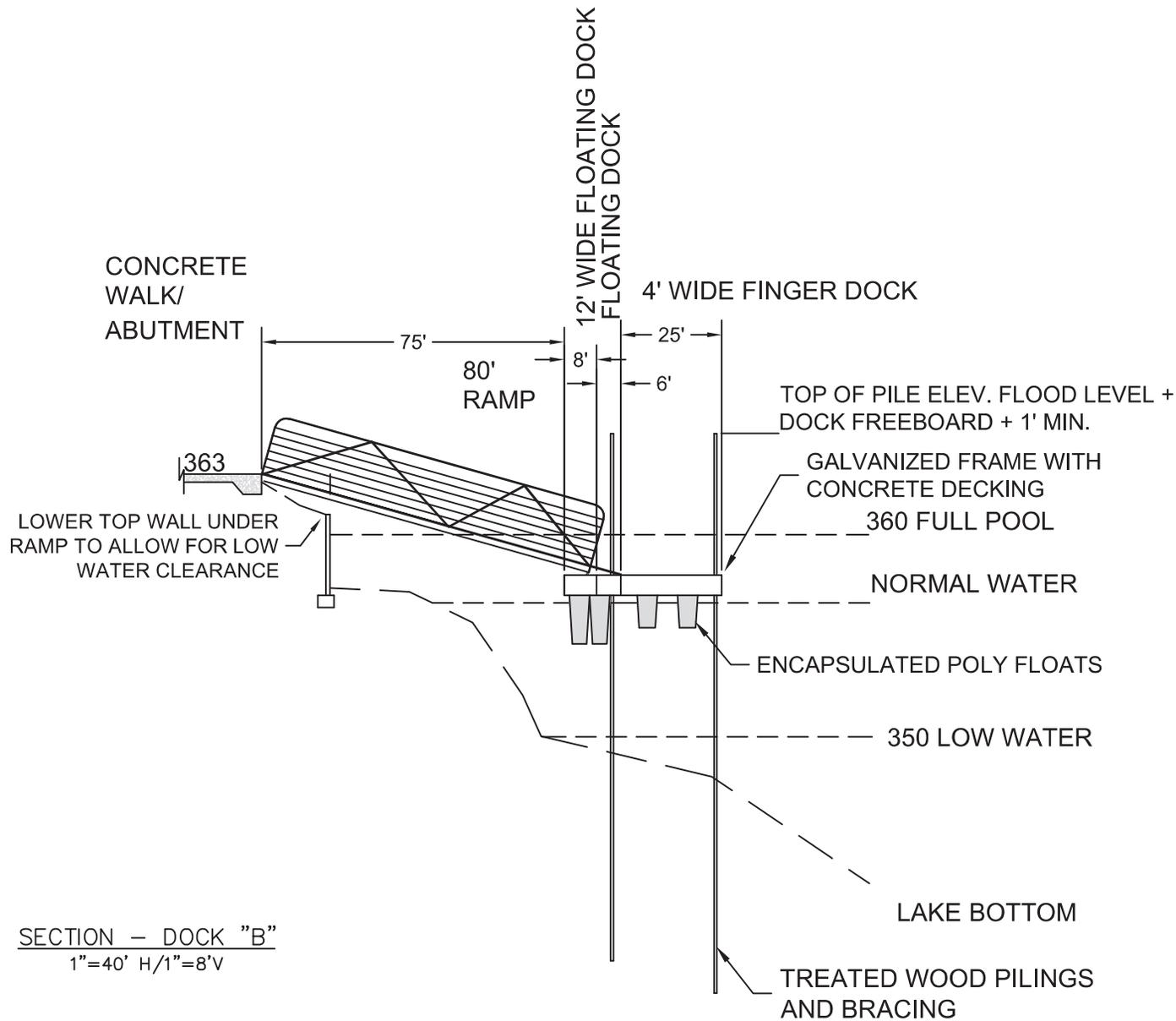
APPLICANT: **BEAR CREEK PARTNERS, LLC**

ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

SAC-2021-00520



FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

APPLICANT: **BEAR CREEK PARTNERS, LLC**

ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#

LOCATION:

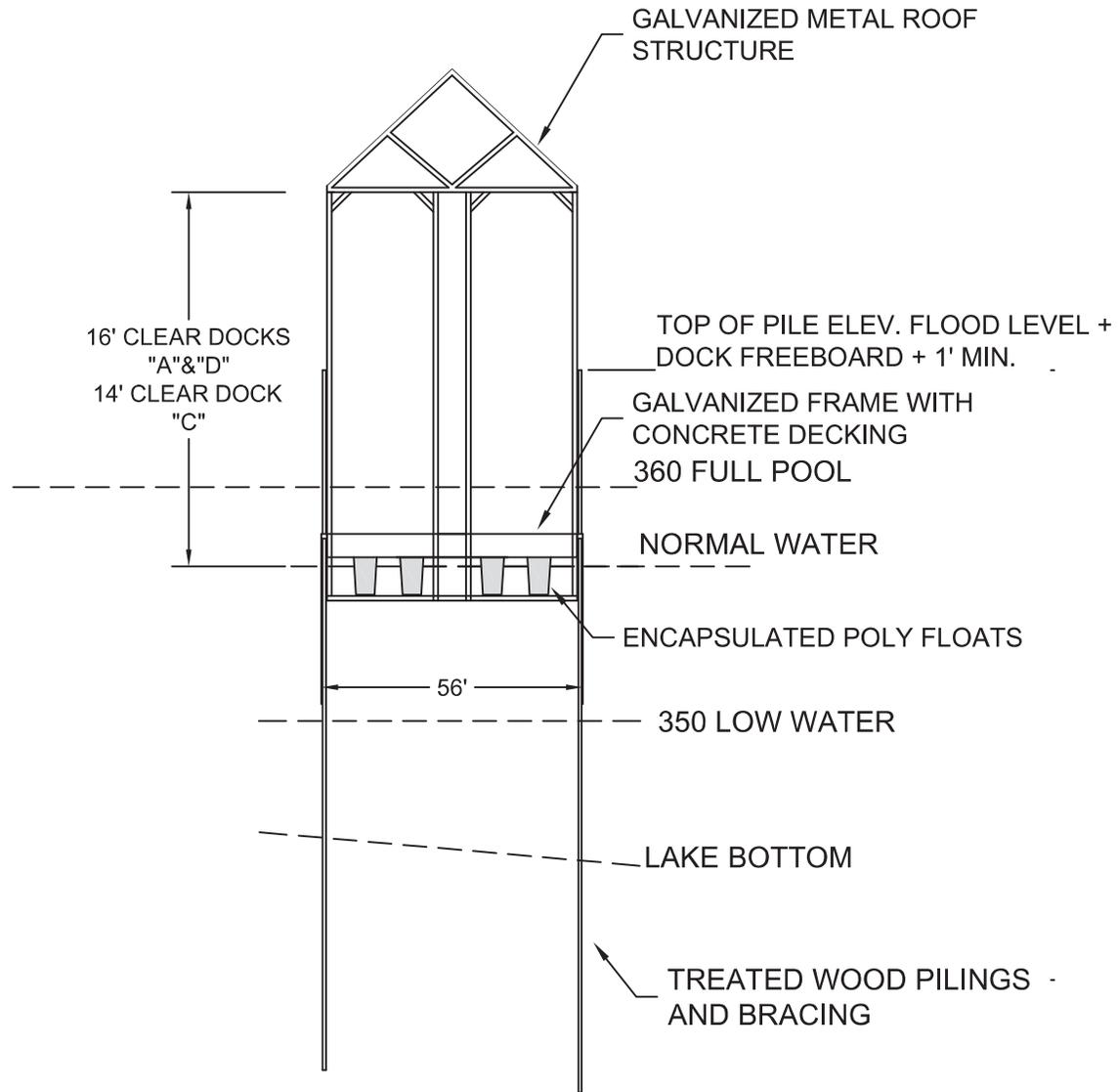
Lake Murray

Chapin, SC

COUNTY: Lexington

DATE: 5/7/2020

SAC-2021-00520



SECTION - DOCKS "A" "C" "D"
 1"=40' H/1"=8'V

FOR PERMITTING ONLY
 NOT FOR CONSTRUCTION

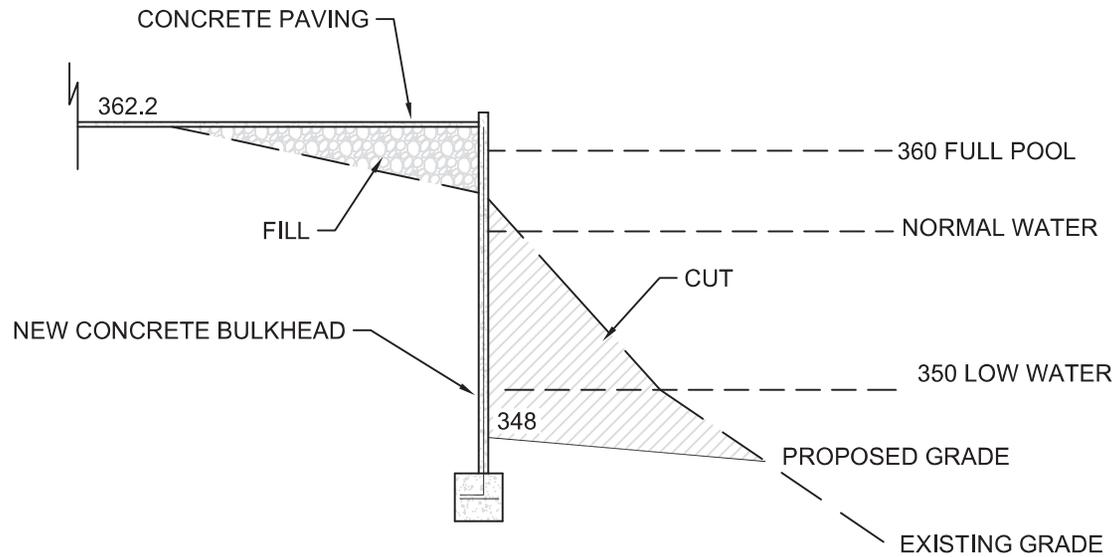
APPLICANT: **BEAR CREEK PARTNERS, LLC**

ACTIVITY: Replace Marina & Bulkhead,
 Dredge

P/N#

LOCATION:
 Lake Murray
 Chapin, SC
 COUNTY: Lexington
 DATE: 5/7/2020

SAC-2021-00520



DRY STORAGE LAUNCH
BULKHEAD SECTION

1"=40' H/1"=8'V

FOR PERMITTING ONLY
NOT FOR CONSTRUCTION

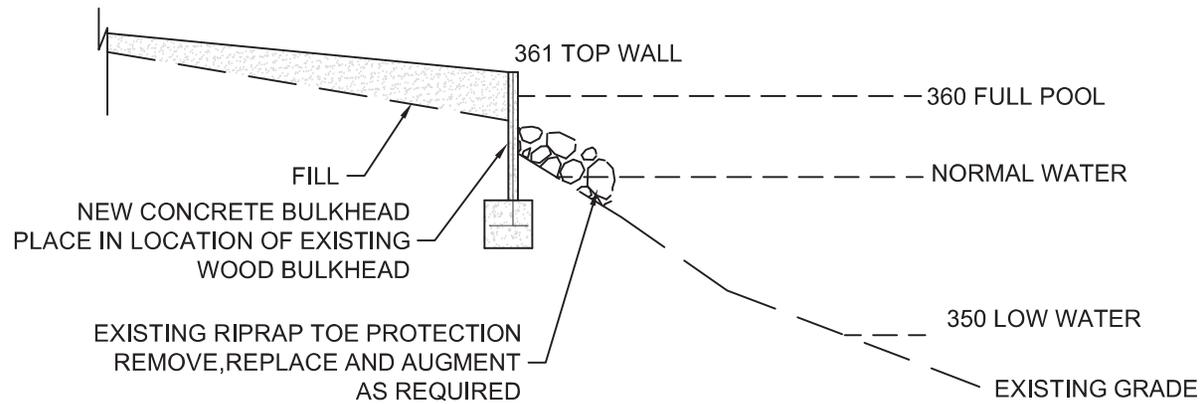
APPLICANT: **BEAR CREEK PARTNERS, LLC**

LOCATION:
Lake Murray
Chapin, SC
COUNTY: Lexington
DATE: 5/7/2020

SAC-2021-00520

ACTIVITY: Replace Marina & Bulkhead,
Dredge

P/N#



SHORELINE
BULKHEAD SECTION
 1"=40' H/1"=8'V

FOR PERMITTING ONLY
 NOT FOR CONSTRUCTION

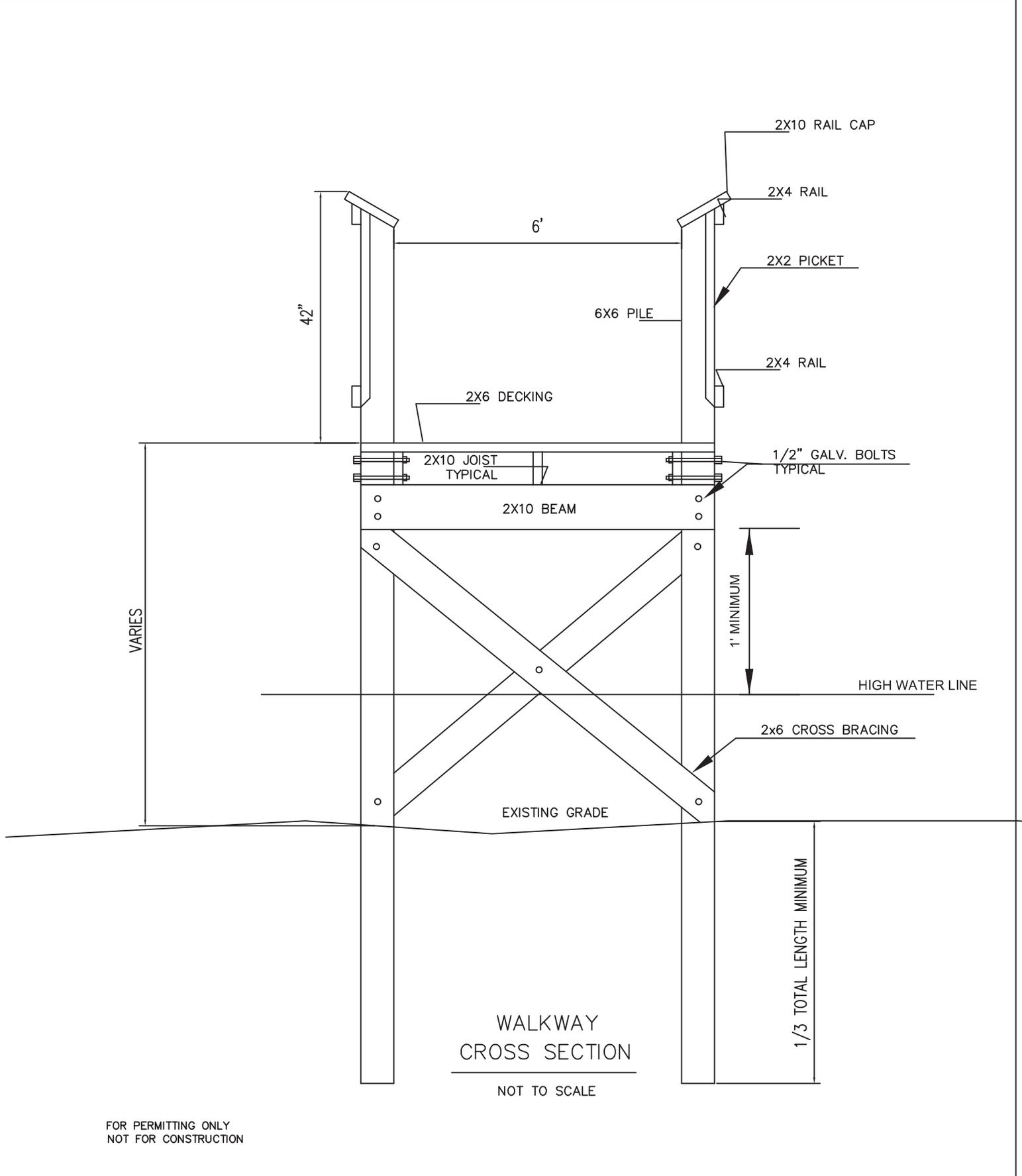
APPLICANT: **BEAR CREEK PARTNERS, LLC**

ACTIVITY: Replace Marina & Bulkhead,
 Dredge

P/N#

LOCATION:
 Lake Murray
 Chapin, SC
 COUNTY: Lexington
 DATE: 5/7/2020

SAC-2021-00520



APPLICANT:
BEAR CREEK PARTNERS, LLC

ACTIVITY:
Replace Marina & Bulkhead,
Dredge

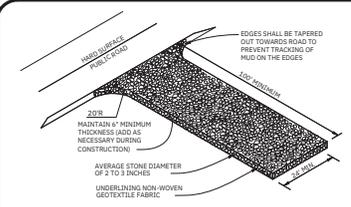
P/N#

LOCATION:
Lake Murray
Chapin, SC

COUNTY: Lexington

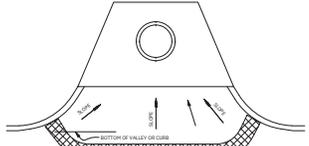
DATE: 5/7/2020

SAC-2021-00520



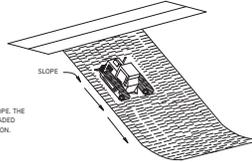
- NOTES:**
1. INSTALL A CURVEY PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.
 2. WHENEVER POSSIBLE COVER ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP, BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.

GRAVEL CONSTRUCTION EXIT
N.T.S.

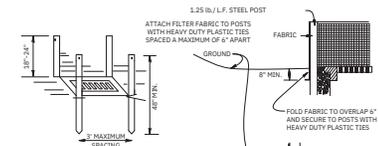


- GENERAL NOTES:**
1. USE SLOPEGUARD 3 WEIGHTED FIBER ROLL AS MANUFACTURED BY KOSTER OR ENGINEER'S AND SOME APPROVED EQUAL.
 2. PLACE AROUND ALL STREET CATCH BASIN DURING CONSTRUCTION WHEN CURB HAS BEEN INSTALLED. MAINTAIN FIBER ROLL AFTER ASHES HAS BEEN INSTALLED UNTIL AN ADEQUATE STAND OF GRASS OR DISTURBED AREAS HAS BEEN ESTABLISHED.

PAVEMENT CATCH BASIN INLET PROTECTION
N.T.S.

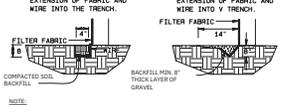
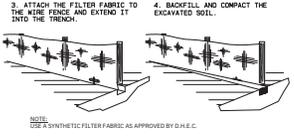
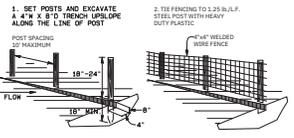


FINAL GRADING / SEEDBED PREPARATION
N.T.S.



- NOTE:** THE CLEANOUT DEPTH OF THE SEDIMENT IS AT 33% OF THE FENCE HEIGHT.
- AFTER INSTALLATION OF BOX WITH COVER & PRIOR TO PAVEMENT BEING INSTALLED, PLACE A FILTER FABRIC WITH ITS STAPLES (OR STAPLE FABRIC) TO PREVENT SEDIMENT FROM ENTERING CATCH BASIN.**

FILTER FABRIC CATCH BASIN INLET PROTECTION
N.T.S.



TEMPORARY SILT FENCE
N.T.S.

GRASSING SEED MIX AND APPLICATION NOTES:

FOR AREAS IN THE SANDHILLS AND SOUTHERN PIEDMONT OF SOUTH CAROLINA

FROM MAY 1 THROUGH AUGUST 31:
USE THE FOLLOWING PER ONE THOUSAND (1000) SQUARE FEET:
ONE (1) POUND BROWN TOP MILLET
TWO (2) POUNDS HULLED BERMIUDA
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

ONE (1) POUND BROWN TOP MILLET
ONE (1) POUND HULLED BERMIUDA
TWO (2) POUNDS BAHIA GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

FROM SEPTEMBER 1 - APRIL 30:
USE THE FOLLOWING PER ONE THOUSAND (1000) SQUARE FEET:
TWO (2) POUNDS ANNUAL RYE GRASS
ONE HALF (1/2) POUND HULLED BERMIUDA
ONE AND ONE HALF (1 1/2) POUNDS UNHULLED BERMIUDA
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

TWO (2) POUNDS ANNUAL RYE GRASS
ONE HALF (1/2) POUND HULLED BERMIUDA
ONE (1) POUND UNHULLED BERMIUDA
TWO (2) POUNDS BAHIA GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

FOR ALL OTHER AREAS OUTSIDE OF THE SANDHILLS AND SOUTHERN PIEDMONT OF SOUTH CAROLINA

FROM MAY 1 THROUGH AUGUST 31:
USE THE FOLLOWING PER ONE THOUSAND (1000) SQUARE FEET:
ONE (1) POUND BROWN TOP MILLET
TWO (2) POUNDS HULLED BERMIUDA
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

FROM SEPTEMBER 1 THRU MAY 1:
USE THE FOLLOWING PER ONE THOUSAND (1000) SQUARE FEET:
TWO (2) POUNDS ANNUAL RYE GRASS
ONE HALF (1/2) POUND HULLED BERMIUDA
ONE AND ONE HALF (1 1/2) POUNDS UNHULLED BERMIUDA
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

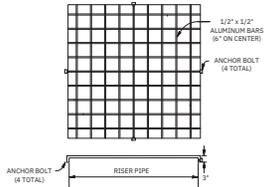
ONE (1) POUND BROWN TOP MILLET
ONE (1) POUND HULLED BERMIUDA
FOUR (4) TO SIX (6) OUNCES CENTIPEDE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

TWO (2) POUNDS ANNUAL RYE GRASS
ONE HALF (1/2) POUND HULLED BERMIUDA
ONE AND ONE HALF (1 1/2) POUNDS UNHULLED BERMIUDA
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

ONE (1) POUND BROWN TOP MILLET
ONE (1) POUND HULLED BERMIUDA
FOUR (4) TO SIX (6) OUNCES CENTIPEDE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

TWO (2) POUNDS ANNUAL RYE GRASS
ONE HALF (1/2) POUND HULLED BERMIUDA
ONE (1) POUND UNHULLED BERMIUDA
FOUR (4) TO SIX (6) OUNCES CENTIPEDE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

WATER QUALITY BUFFER SIGN DETAIL



TRASH RACK DETAIL
N.T.S.

FOR DEEP SANDY SOILS
USE THE FOLLOWING PER ONE THOUSAND (1000) SQUARE FEET:
TWO (2) POUNDS BROWN TOP MILLET
FOUR (4) TO SIX (6) OUNCES CENTIPEDE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER

ONE (1) POUND ANNUAL RYE GRASS
THREE (3) POUNDS FESCUE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

ONE (1) POUND UNHULLED BERMIUDA
TWO (2) POUNDS PINE OR GRASS RYE GRASS
FOUR (4) TO SIX (6) OUNCES CENTIPEDE GRASS
TWENTY FIVE (25) POUNDS 10-10-10 FERTILIZER
SEVENTY FIVE (75) POUNDS LIMESTONE

BHHA GRASS IS A FOOD PRODUCTION CONTROL PREFERRED WEEDP. AREAS. BAHIA GRASS IS HARD TO MOW, BUT IT DOES NOT REQUIRE THE CARE THAT OTHER GRASSES REQUIRE. AROUND OFFICE BUILDINGS AND WITHIN SUBDIVISIONS, USE FOUR (4) TO SIX (6) OUNCES OF CENTIPEDE GRASS IN LIEU OF BAHIA GRASS OR IN COMBINATION WITH BERMIUDA GRASS.

FOR SANDY SOILS WITH CLAY SUBSOIL, DO NOT PLANT

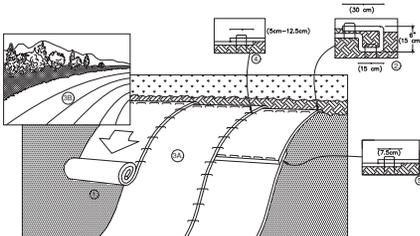
IF HYDROSEED, USE THIRTEEN (13) POUNDS PER ONE THOUSAND (1000) SQUARE FEET OF LOW SALT FORMULA OF 19-19-19 INSTEAD OF 10-10-10 TO GIVE LONG TERM FERTILIZATION BENEFITS.

PERMANENT STORMWATER MAINTENANCE PLAN:

1. DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORMWATER RETENTION/DETENTION AREAS) WHEN SEDIMENT BUILDS UP TO SEDIMENT STAKE CLEANOUT ELEVATION, AND ALL SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED BY A SCHEIC CERTIFIED, LICENSED SEDIMENT CONTROL INSPECTOR AT INTERVALS REQUIRED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM ADOPTED BY SCHEIC JANUARY 1, 2013. THE CONTRACTOR SHALL COORDINATE THE INSPECTION AND REPORTING WITH THE OWNER AND ENGINEER OF RECORD.
2. POST CONSTRUCTION: VEGETATION IN AND AROUND THE STORMWATER DETENTION AREA'S/STRUCTURES SHALL BE CUT A MINIMUM OF THREE TIMES A YEAR. ANY TREES WITHIN THIS AREA SHALL BE REMOVED.
3. ANY TRASH IN OR AROUND THE STORMWATER DETENTION AREA SHALL BE REMOVED.
4. IF ANY DAMAGE HAS OCCURRED TO THE DRAINAGE PIPES, OUTFALL STRUCTURE OR EMERGENCY SPILLWAY, THE DAMAGE SHALL BE REPAIRED.
5. IF REQUIRED, THE BOTTOM OF THE POND SHALL BE REGRADED TO PROVIDE PROPER DRAINAGE TOWARDS THE OUTLET DISCHARGE POINT.
6. CURBS, GRATE INLETS, STORM DRAINAGE STRUCTURES AND PIPES CONNECTED TO THE STORM DRAINAGE STRUCTURES SHALL BE INSPECTED AT LEAST ONCE PER YEAR. ANY DEBRIS OR DEFICIENCIES FOUND SHALL BE REMOVED OR REPAIRED. AFTER SIGNIFICANT WEATHER EVENTS, A GENERAL INSPECTION SHALL BE PERFORMED AND ANY DEFICIENCIES REMEDIATED.

BMP PLAN:

1. DURING CONSTRUCTION, BMP'S SHALL BE INSPECTED ONCE PER WEEK TO ENSURE PROPER FUNCTIONALITY THROUGHOUT.
2. SEDIMENT BUILDUP ON SILT FENCE SHALL BE REMOVED ONCE IT REACHES 1/3 OF THE HEIGHT OF FENCE.
3. INLET PROTECTION SHALL MAINTAIN PROPER FUNCTIONALITY THROUGHOUT CONSTRUCTION AND SHALL BE IMMEDIATELY REPLACED IF FOUND TO BE DYSFUNCTIONAL.
4. RIP-RAP SHALL BE CLEANED OF ANY SEDIMENT BUILD-UP AS NECESSARY.
5. GRAVEL CONSTRUCTION EXIT SHALL BE CLEANED OF ANY SEDIMENT BUILDUP AS NECESSARY.
6. ROADS SHALL BE SWEEPED WEEKLY OR IF ANY SIGNIFICANT SEDIMENT BUILDUP OCCURS.



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 4" (10 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND TOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP'S.
3. ROLL THE RECP'S (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLOURED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP'S TYPE.
5. CONSECUTIVE RECP'S SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP'S WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

EROSION CONTROL MATTING INSTALLATION DETAIL
NOT TO SCALE

SAC-2021-00520

PUTNAMS LANDING
LEXINGTON COUNTY, SOUTH CAROLINA

SCALE	N/A	DATE	MAR/12/2021
DRAWN	BFD	DESIGNED	SHIN
DRAWING NUMBER	10 OF 12	CHECKED BY:	
POLLUTION PREVENTION DETAILS (1 OF 2)		APPROVED FOR	DATE
		CHIEF, E.C. DIVISION	20177
JOB NUMBER		20177	
CIVIL ENGINEERING of COLUMBIA		3740A TERRAMORADO ROAD, COLUMBIA, SC 29210	
		TEL: (803) 739-2668 FAX: (803) 739-2666	
REVISION		NO. DATE DESCRIPTION	
CIVIL ENGINEERING OF COLUMBIA, INC. 401 COLLEGE AVENUE, COLUMBIA, SC 29202			

