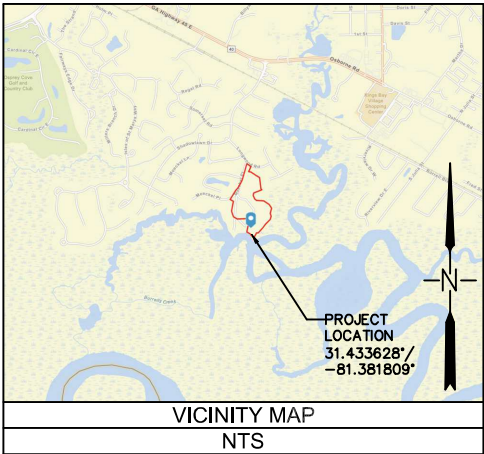


SHADOWLAWN LIVING SHORELINE CMPA APPLICATION



PREPARED FOR:
SHADOWLAWN, LLC
101 DAVID PORTER CT.
ST. MARYS, GA 31558

LABARBA ENVIRONMENTAL SERVICES
139 ALTAMA CONN. #161
BRUNSWICK, GA 31525

ORIGINAL ISSUE DATE: 5/17/26

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NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

- MEAN LOW WATER
- MEAN HIGH WATER
- HIGH TIDE LINE
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

COVER

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA
PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

1

SHEET:

NOTES:
1. PROPERTY BOUNDARY AND CMPA JURISDICTION LINE SURVEYED BY JACKSON SURVEYING.



NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

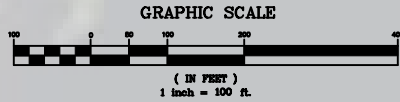
- MEAN LOW WATER
- MEAN HIGH WATER
- HIGH TIDE LINE/CMPA LINE
- 25' MARSH BUFFER
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

SUBJECT PROPERTY

PROJECT AREA

ERODING SHORELINE

BORRELL
CREEK



PROJECT LOCATION

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA
PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

2

SHEET:

NOTES:
1. NO EXISTING SHORELINE ARMORING.
2. APPROXIMATE 4-5 BLUFF FROM UPLAND AREA TO RIVER WITH NO EXISTING MARSH VEGETATION.

NOT RELEASED
FOR
CONSTRUCTION

- LEGEND
- These standard symbols will be found in the drawing.
- MEAN LOW WATER
 - MARSH VEG LINE
 - HIGH TIDE LINE/CMPA LINE
 - 25' MARSH BUFFER
 - OYSTERS
 - RIP RAP
 - FLEXAMAT
 - MARSH VEG PLANTING
 - TRANS. VEG PLANTING
 - UPLAND VEG PLANTING

EXISTING CONDITIONS

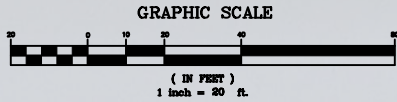
LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA

PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

3

SHEET:



- NOTES:
- 1. MINIMAL LOCAL GRADING WILL BE COMPLETED TO OBTAIN A #3:1 SLOPE
 - 2. NO FOREIGN FILL WILL BE INTRODUCED TO THE SITE
 - 3. ANY EXISTING MARSH VEGETATION WILL BE SAVED AND REPLANTED INTO LIVING SHORELINE (#2,800 SF)
 - 4. MINOR GRADING AREA
5,875 SF
1,650 SF ON UPLAND
4,225 SF IN CMPA JURISDICTION

EQUIPMENT OPERATED FROM UPLAND

LIVING SHORELINE AREA
GRADED TO 3:1 SLOPE

25' MARSH BUFFER

NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

- MEAN LOW WATER
- MARSH VEG LINE
- HIGH TIDE LINE/CMPA LINE
- 25' MARSH BUFFER
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

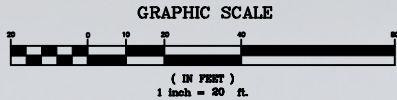
GRADING

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA
PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

4

SHEET:



- NOTES:
- 1. FLEXAMAT WILL BE INSTALLED PER MANUFACTURER GUIDELINES.
 - 2. FLEXAMAT AREA
5,767 SF
1,650 SF ON UPLAND
4,117 SF IN CMPA JURISDICTION
*100% WITHIN GRADED FOOTPRINT

EQUIPMENT OPERATED FROM UPLAND

LIVING SHORELINE AREA
GRADED TO 3:1 SLOPE

25' MARSH BUFFER

TOE TRENCHED TO PREVENT SCOUR

FLEXAMAT TO END ADJACENT TO
EXISTING DOCK WALKWAY



NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will
be found in the drawing.

- MEAN LOW WATER
- MARSH VEG LINE
- HIGH TIDE LINE/CMPA LINE
- 25' MARSH BUFFER
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

FLEXAMAT

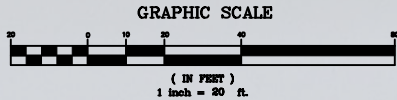
LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA

PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

5

SHEET:



NOTES:

1. RIP RAP WILL CONSIST OF TYPE 3 GRANITE STONE.
2. RIP RAP
4' WIDE X 250' LONG X 2' THICK
TOTAL AREA: 1,000 SF
UPLAND IMPACT: 48 SF (3.55 CY)
MARSHLAND IMPACT: 952 SF (70.52 CY)
*100% WITHIN GRADED FOOTPRINT

EQUIPMENT OPERATED FROM UPLAND

RIP RAP BORDER
4' WIDE X 250' LONG

RIP RAP PLACED OVER
TRENCHED FLEXAMAT TOE

25' MARSH BUFFER

RIP RAP EXTENDS UNDER DOCK
WALKWAY TO PREVENT SCOURING AT THE EDGES



NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will
be found in the drawing.

- MEAN LOW WATER
- MARSH VEG LINE
- HIGH TIDE LINE/CMPPA LINE
- 25' MARSH BUFFER
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

RIP RAP TOE & EDGE PROTECTION

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA

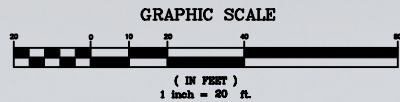
PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026

SCALE: NTS

6

SHEET:



NOTES:

1. TOTAL PLANTED AREA: 8,630 SF
5,683 SF ON UPLAND
*INCLUDES PERMANENT IMPACT AREAS AS WELL AS THE TEMPORARY WORK AREA.

2,947 SF IN CMPA JURISDICTION
*INCLUDES ALL SECTIONS IMPACTED IN MARSH EXCEPT FOR THE RIP RAP AREAS.
2. PLANTS IN JURISDICTION WILL CONSIST OF:
SPARTINA ALTERNIFLORA
BORRICHIA FRUTESCENS
BACCHARIS HALIMIFOLIA
BACCHARIS ANGUSTIFOLIA
IVA FRUTESCENS
3. UPLAND WILL BE REPLANTED WITH ANY PLANTS OR TREES THAT ARE DISTURBED DURING CONSTRUCTION. ALL REPLACEMENT PLANTS WILL BE NATIVE.



NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

- MEAN LOW WATER
- MARSH VEG LINE
- HIGH TIDE LINE/CMPA LINE
- 25' MARSH BUFFER
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

VEGETATION PLAN

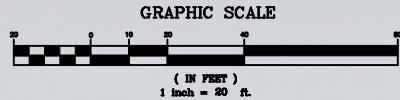
LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA

PREPARED FOR:
SHADOWLAWN, LLC

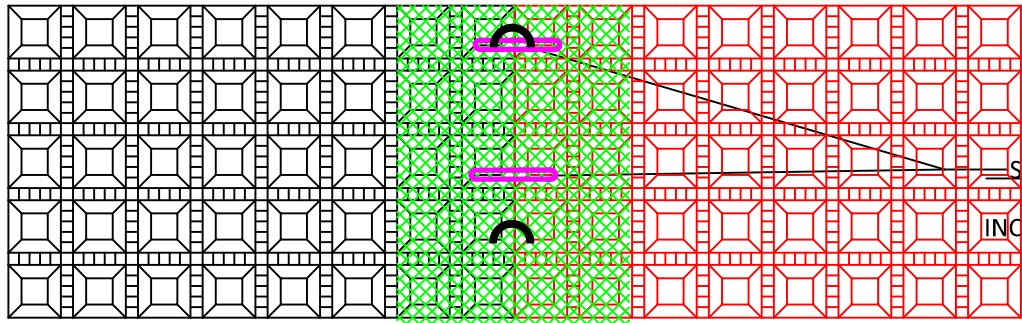
DATE: 5/17/2026
SCALE: NTS

7

SHEET:

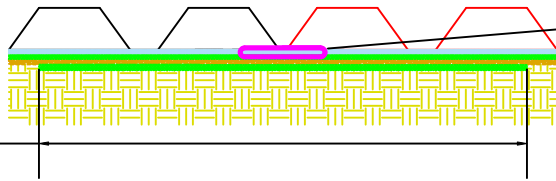


ABUTMENT METHOD FOR SHORELINE WIDTH LESS THAN 16'



SECURE ABUTMENT SEAM WITH 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS OR 18" U-ANCHORS IN 2' INCREMENTS THE LENGTH OF THE SEAM.

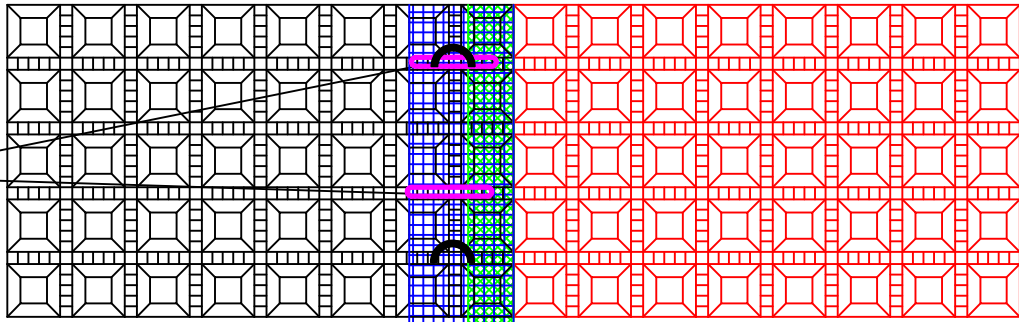
30" RECYCLEX TRM SPACED EVENLY BETWEEN EACH MAT AT THE SEAM



SECURE ABUTMENT SEAM WITH 20" STAINLESS STEEL ZIP TIES IN 1' INCREMENTS THE LENGTH OF THE SEAM.

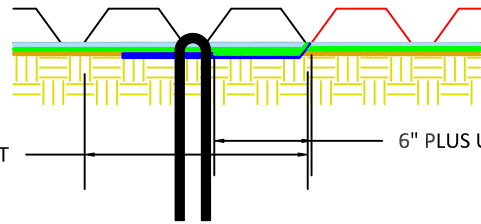
RECYCLEX TRM SPACED EVENLY BETWEEN EACH MAT AT THE SEAM

ABUTMENT METHOD FOR SHORELINE WIDTH GREATER THAN 16'



12" GEOGRID EXTENSION FOR ABUTMENT

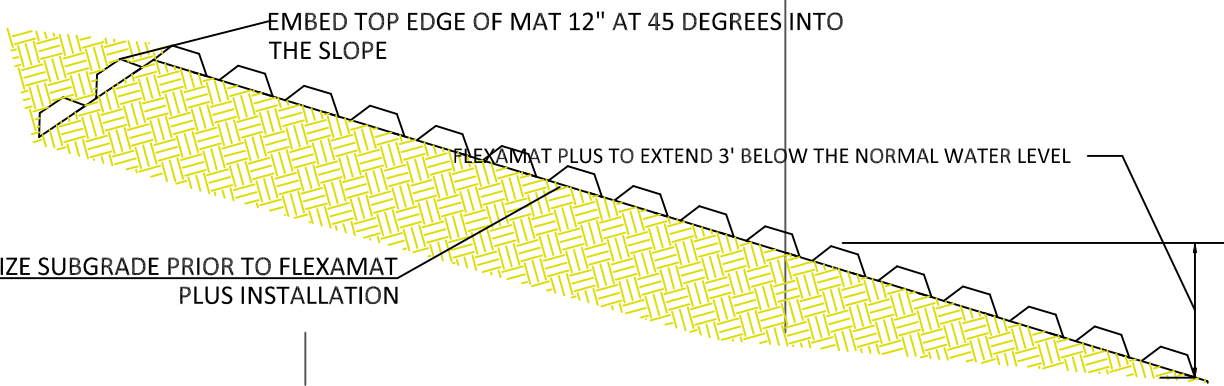
6" PLUS UNDERLAYMENT FOR ABUTMENT



12" GEOGRID EXTENSION FOR ABUTMENT

6" PLUS UNDERLAYMENT FOR ABUTMENT

PROFILE VIEW OF SLOPE AND ANCHOR TRENCH

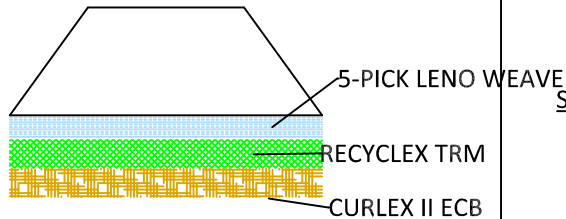


EMBED TOP EDGE OF MAT 12" AT 45 DEGREES INTO THE SLOPE

FLEXAMAT PLUS TO EXTEND 3' BELOW THE NORMAL WATER LEVEL

SEED AND FERTILIZE SUBGRADE PRIOR TO FLEXAMAT PLUS INSTALLATION

FLEXAMAT PLUS UNDERLAYMENT



5-PICK LENO WEAVE

RECYCLEX TRM

CURLEX II ECB

FLEXAMAT PLUS - SHORELINE ARMORING

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURES REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT PLUS INSTALLATION, SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. .
4. INSTALL FLEXAMAT PLUS ROLLS, MATS SHALL BE CONTINUOUS FOR ENTIRE LENGTH OF SLOPE.
 - 4.1. MATTING SHALL EXTEND 3' BELOW ORDINARY WATER LEVEL.
5. AT MAT ABUTMENT SEAMS, INSTALL RECYCLEX TRM SEAMS EVENLY UNDER EACH MAT.
6. SECURE ABUTMENT SEAMS IN 2' INCREMENTS USING STAINLESS STEEL ZIP TIES OR #3 REBAR - 18" U-ANCHORS. ZIP TIES SHALL ENCOMPASS 3 CORDS OF GRID OF EACH ABUTTING MAT OR GEOGRID EXTENSION. U-ANCHORS SHALL ENCOMPASS 2 CORDS OF GEOGRID OF EACH ABUTTING MAT OR GEOGRID EXTENSIONS.
7. AT THE BEGINNING AND END OF THE SHORELINE PROTECTION, EMBED THE MAT 18" PAST THE ANTICIPATED SCOUR POINT. FILL AND COMPACT TERMINATION TRENCH WITH COHESIVE SOIL.
8. RECESS TOP TWO BLOCKS OF MAT INTO THE SLOPE.

MOTZ ENTERPRISES, INC.

Flexamat
(513)772-6689
Info@Flexamat.com
Flexamat.com



REV - 2

NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

- MEAN LOW WATER
- MEAN HIGH WATER
- HIGH TIDE LINE
- OYSTERS
- RIP RAP
- FLEXAMAT
- MARSH VEG PLANTING
- TRANS. VEG PLANTING
- UPLAND VEG PLANTING

MATERIALS

LABARBA ENVIRONMENTAL SERVICES

BRUNSWICK, GA

PREPARED FOR:
SHADOWLAWN, LLC

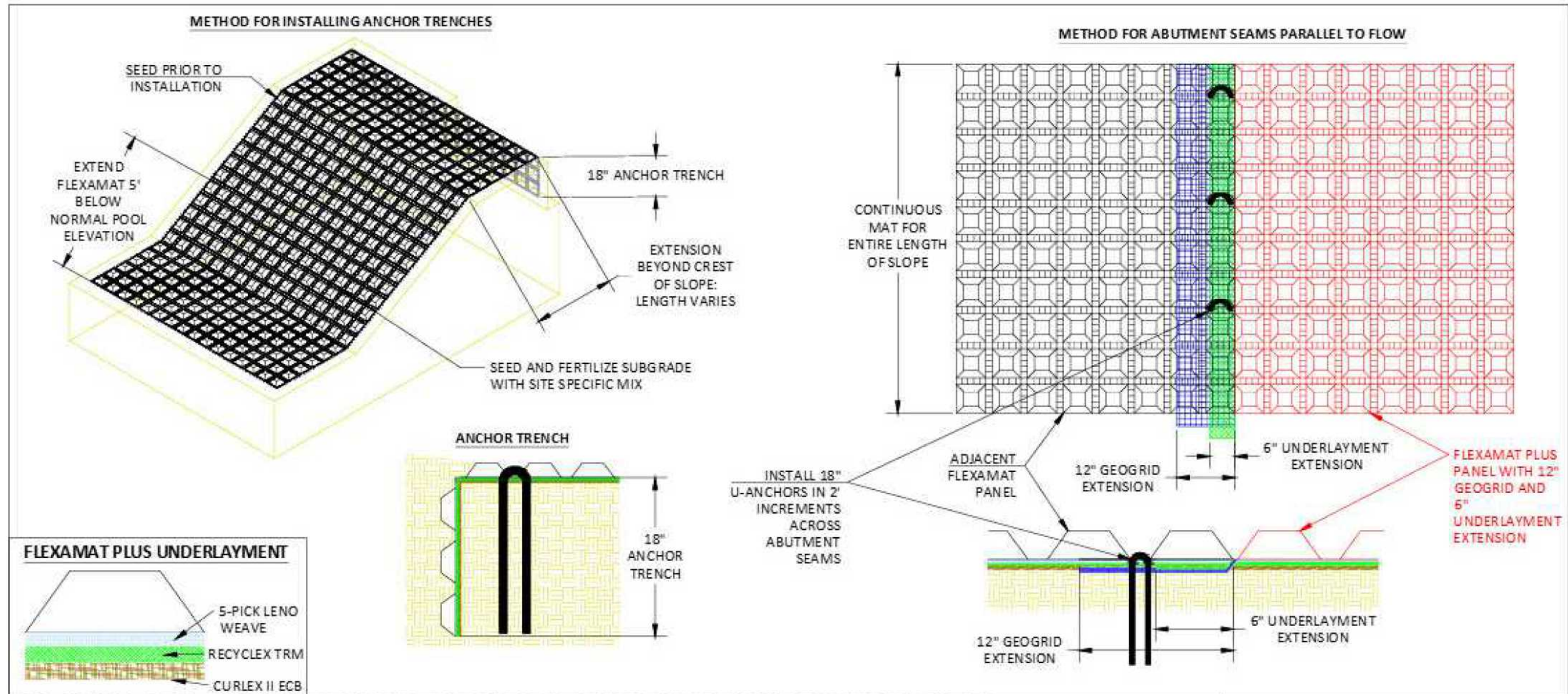
DATE: 5/17/2026

SCALE: NTS

8

SHEET:

LEGEND	
These standard symbols will be found in the drawing.	
	MEAN LOW WATER
	MEAN HIGH WATER
	HIGH TIDE LINE
	OYSTERS
	RIP RAP
	FLEXAMAT
	MARSH VEG PLANTING
	TRANS. VEG PLANTING
	UPLAND VEG PLANTING



FLEXAMAT PLUS - WAVE IMPACT SHORELINE ARMORING

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OF DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT PLUS INSTALLATION, SEED AND FERTILIZE THE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT ROLLS THAT ARE 15.5' WIDE AND INCLUDE A 12" GEOGRID AND 6" PLUS UNDERLAYMENT EXTENSION FOR OVERLAPPING MATS. THE TOP EDGE OF MAT SHALL BE RECESSED 18" INTO THE SLOPE. INSTALL SUBSEQUENT MATS OVER THE 12" GEOGRID AND 6" PLUS EXTENSION OF THE DOWNSTREAM MAT INSTALLED ADJACENT MAT. MATS SHALL BE CONTINUOUS FOR ENTIRE LENGTH OF SLOPE.
5. SECURE OVERLAP SEAMS IN 2' INCREMENTS USING 18" U-ANCHORS. U-ANCHORS SHALL EXTEND AROUND 2 CORDS OF GEOGRID ON EACH MAT.
6. AT THE BEGINNING AND END OF THE SHORELINE/LEVEE PROTECTION, EMBED THE MAT 18" PAST THE ANTICIPATED SCOUR POINT. FILL AND COMPACT TERMINATION TRENCH WITH COHESIVE SOIL.
7. EXTEND FLEXAMAT 5' BELOW ORDINARY POOL ELEVATION.

Zulu Marine
7505 Waters Ave
Savannah Ga



MATERIALS

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA

PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
SCALE: NTS

EXISTING CONDITIONS



PROPOSED CONDITIONS (RENDERING)

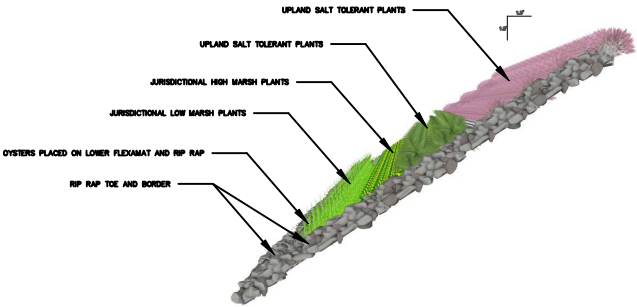
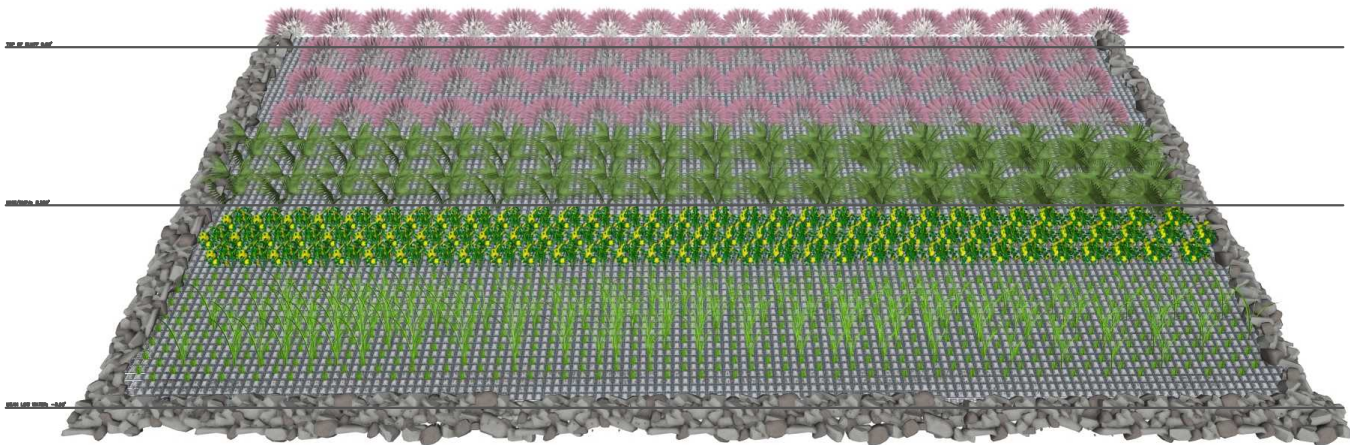


NOT RELEASED
FOR
CONSTRUCTION

LEGEND

These standard symbols will be found in the drawing.

- MEAN LOW WATER
- MEAN HIGH WATER
- HIGH TIDE LINE
- OYSTERS
- RIP RAP
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- UPLAND VEG PLANTING



RENDERING

LABARBA ENVIRONMENTAL SERVICES
BRUNSWICK, GA
PREPARED FOR:
SHADOWLAWN, LLC

DATE: 5/17/2026
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SHEET: