

Notes

- THIS SURVEY PLAN HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTION 20-300B-1 THROUGH 20-300B-20 AND THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT DEPARTMENT OF CONSTRUCTION ON SEPTEMBER 28, 1986.
- THIS SURVEY CONFORMS TO THE STANDARDS AND THE ACCURACY OF THE CLASS: A-2 HORIZONTAL & T-2 TOPOGRAPHIC ACCURACY MAP #2.
- BEARINGS AS SHOWN ARE BASED UPON REFERENCE MAP #2.
- ELEVATIONS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM 1988.
- CONTOUR INTERVAL = 1'

- BOUNDARY LINES OF ADJOINING PROPERTIES ARE SHOWN FOR GENERAL INFORMATIONAL PURPOSES ONLY AND ARE NOT TO BE CONSTRUED AS BEING ACCURATELY LOCATED OR DEPICTED.
- PROPERTY SURVEY LAND OF JUDITH A. ABOOD 60 AVERILL PLACE BRANFORD, CONNECTICUT PREPARED BY LMF LAND SURVEYING DATED OCTOBER, 1991 SCALE 1"=30'
- EASEMENT MAP ACQUIRED TO BE ACQUIRED BY THE TOWN OF BRANFORD ACROSS THE LAND OF DAVID R. JENKINS & MARY R. BARNETT AVERILL PLACE (END OF) BRANFORD, CONNECTICUT PREPARED BY LMF LAND SURVEYING DATED MARCH, 2006 SCALE 1"=20'

Reference Maps

- PROPERTY SURVEY LAND OF JUDITH A. ABOOD 60 AVERILL PLACE BRANFORD, CONNECTICUT PREPARED BY LMF LAND SURVEYING DATED OCTOBER, 1991 SCALE 1"=30'
- EASEMENT MAP ACQUIRED TO BE ACQUIRED BY THE TOWN OF BRANFORD ACROSS THE LAND OF DAVID R. JENKINS & MARY R. BARNETT AVERILL PLACE (END OF) BRANFORD, CONNECTICUT PREPARED BY LMF LAND SURVEYING DATED MARCH, 2006 SCALE 1"=20'

HTL = 4.5'
CJL = 4.3'
MHW = 2.7'
MLW = -3.2'

APPROXIMATE
LOW LOW WATER
ELEV. = -3.2'

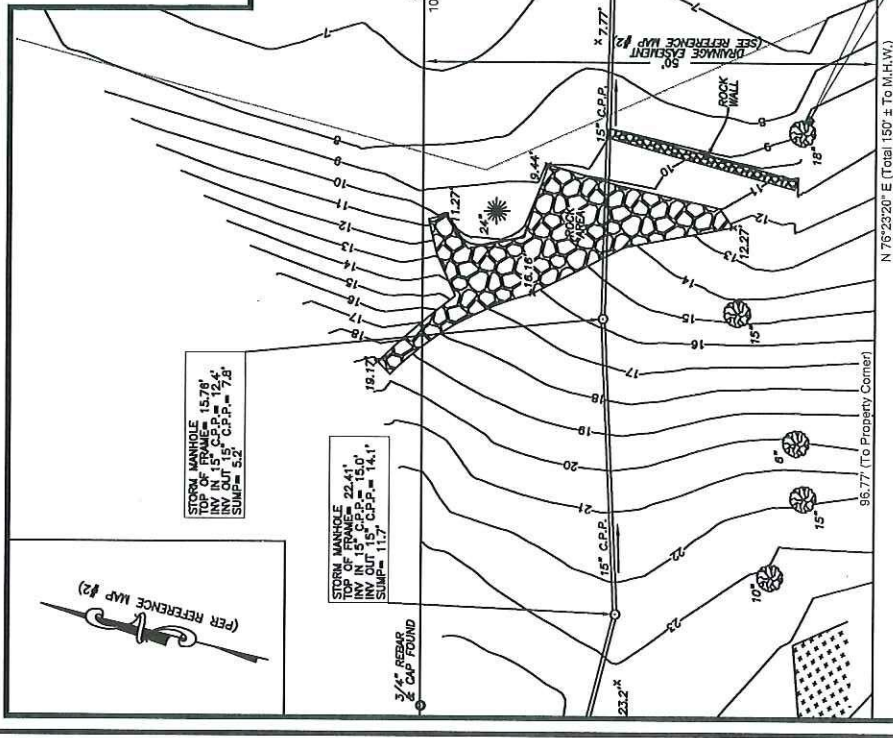
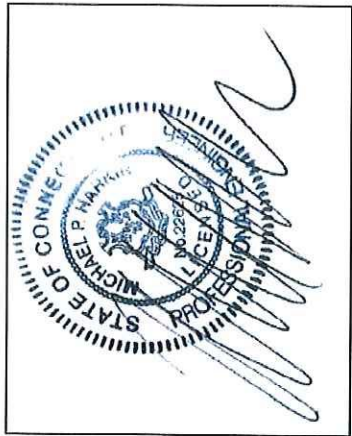
**TIDAL WETLANDS FLAGGED BY
NEW ENGLAND ENVIRONMENTAL SERVICES**

DATUM = NAVD 88

GRAPHIC SCALE: 1"=20'



EXISTING CONDITIONS SURVEY	Job No. 13-21
PREPARED FOR TOWN OF BRANFORD	Scale: 1"=20'
AVERILL PLACE DRAINAGE EASEMENT	Date: 9/7/17
BRANFORD, CONNECTICUT	Designed: M.P.H.
HARKIN ENGINEERING, LLC	Drawn: M.P.H.
78 WOLF HOLLOW LAKE KILLINGWORTH, CT. (860) 663-4248	Sheet: 1 OF 5



Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
•	PROPERTY CORNER	—	TRELINE
◊	P / REBAR	—	FENCE LINE
◻	MON / MORTSTONE	—	OVERHEAD WIRES
◊	BENCH MARK	—	WATER LINE
◊	UTILITY POLE W/ LIGHT	—	PROPERTY LINE
—	UTILITY POLE W/ LIGHT	—	PROPERTY LINE OTHER
—	GUY WIRE	—	FEAR ZONE LINE
—	GAS VALVE	—	SPOT ELEVATION
—	WATER VALVE	—	PLANTED AREA
—	FIRE HYDRANT	—	GRAVEL AREA
—	CATCH BASIN	—	EXISTING BUILDING
—	MANHOLE	—	NW OR FORMERLY
—	SKIN	—	ELEVATION
—	YARD LIGHT	—	TYPICAL
—	WOOD POST	—	REINFORCED CONCRETE PIPE
—	DECIDUOUS TREE	—	CORRUGATED PLASTIC PIPE
—	CONIFEROUS TREE	—	EDGE OF PAVEMENT
—	SRUB	—	EDGE OF GRAVEL
—	STUMP	—	BITUMINOUS CONCRETE UP CURB
—	HEDE	—	WITH
—	STONEWALL	—	FINISHED FLOOR
—	EDGE OF MARSH	—	TOP OF SLATE
—	INDEX CONTOUR	—	TOP OF WALL
—	INTERMEDIATE CONTOUR	—	TOP OF BORDER
—	COASTAL SUBDUCTION LINE		

SECTOR MARKER 15.78'
TOP OF MANHOLE 22.41'
INV. IN 15" C.P.P. = 15.0'
INV. OUT 15" C.P.P. = 12.4'
INV. OUT 15" C.P.P. = 7.8'
SUM = 3.2'

SECTOR MARKER 22.41'
TOP OF MANHOLE 15.0'
INV. IN 15" C.P.P. = 15.0'
INV. OUT 15" C.P.P. = 14.1'
SUM = 11.7'

SECTOR MARKER 15.78'
TOP OF MANHOLE 22.41'
INV. IN 15" C.P.P. = 15.0'
INV. OUT 15" C.P.P. = 12.4'
INV. OUT 15" C.P.P. = 7.8'
SUM = 3.2'

SUITABLE BACKFILL MATERIAL (30±CY - 230 S.F.) TO BE INSTALLED WITH STAKED GEOGRID SOIL REINFORCEMENT AT 2' LIFTS. ALL FILL MATERIAL TO BE APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.

LAYER OF ARMOUR ROCK (15±CY - 115 S.F.) SET AGAINST A 6" THICK CONC. PARGE COAT. ROCK TO BE APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.

LOAM (6" MIN.) AND SEED ALL DISTURBED AREAS AS SOON AS PRACTICAL. INSTALL STAKED EROSION CONTROL BLANKETS OVER NEWLY GRADED / SEEDD AREAS.

ALL BACKFILL MATERIAL / ARMOUR ROCK TO BE APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALL.

REMOVE AND LEGALLY DISPOSE OF EXIST. RIP RAP (TYP.). NO BURY HOLES PERMITTED AT THE SITE.

PROP. FLARED END (INV.=5.00) RE-USE EXIST. FLARED END IF POSSIBLE. GRADE ADJACENT AREA AS SHOWN (TYP.).

EXIST. TREES TO REMAIN (TYP.).

32 LF., 15" H.D.P.P. STORM PIPE SLOPE =1.10%

PROP. STORM SEWER MANHOLE AND LOCKING COVER. 2' DEEP SUMP. RIM = 8.75 INV. (IN)=5.59. INV. (OUT)=5.35

PROP. 16" COIR LOG / LIVING WALL ACROSS ALL AREAS OF CONST.

N 76°23'20" E
(Total 114'± To M.H.W.)
104.00' (To Survey Tie Line)

Easement Line Runs Along Mean High Water A Distance of 70'±

INVERT OF 15" C.P.P. FLARED END= 5.59'

8.75
5.47
5.95'

Zone AE (EL 9)
Zone X

ROCK WALL

COASTAL JURISDICTION LINE ELEV= 4.3

HIGH TIDE LINE ELEV= 4.5

33.41' (To Survey Tie Line)

PROPERTY LINE

BENCH MARK
MAG NAIL IN 18" TREE
ELEV= 9.94'
DATUM= NAVD 88

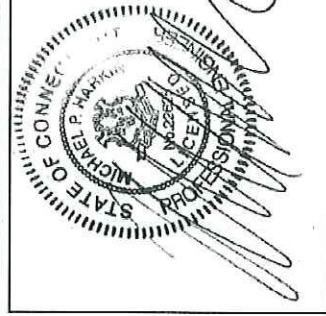
HTL = 4.5'
CJL = 4.3'
MHW = 2.7'
MLW = -3.2'

DATUM= NAVD 88

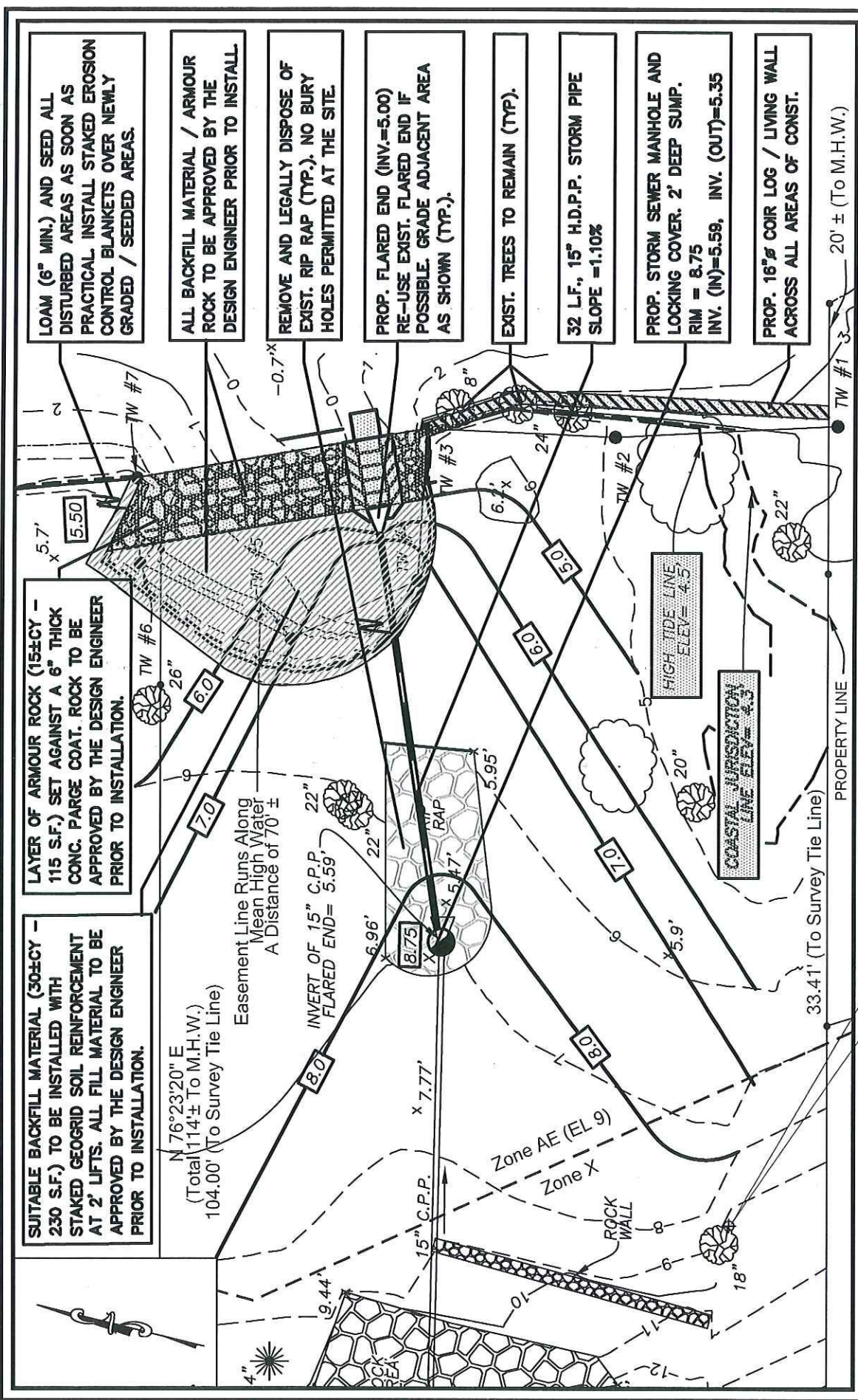
SITE CONTRACTOR TO VERIFY ALL QUANTITIES.

TIDAL WETLANDS FLAGGED BY NEW ENGLAND ENVIRONMENTAL SERVICES

GRAPHIC SCALE: 1"=10'
0' 5' 10' 20'



PROPOSED IMPROVEMENTS		Job No. 13-21
PREPARED FOR TOWN OF BRANFORD		Scale: 1"=10'
AVERILL PLACE DRAINAGE EASEMENT BRANFORD, CONNECTICUT		Date: 9/7/17
HARKIN ENGINEERING, LLC 78 WOLF HOLLOW LANE KILLINGWORTH, CT. (860) 663-4248		Designed: M.P.H.
		Drawn: M.P.H.
		Sheet: 2 OF 5



PROPOSED COIR LOGS PLACED IN FIVE (5) LAYERS. COIR LOGS TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS. (STAKES, ANGLE, TIE-BACKS, ETC). COIR LOGS TO BE 12" DIAMETER, 10' LONG.

TOP SOIL, SEED AND HAY ALL DISTURBED AREAS BEHIND THE COIR LOGS AS SOON AS SOON AS PRACTICAL

SECTION "A"
34'±

SECTION "B"
21'±

SECTION OF LIVING WALL "WITHOUT" PARGE COAT

SECTION OF WALL WITH PARGE COAT

HTL=4.5
CJL=4.3
MHW=2.7

HTL=5.00
HTL=4.5
EL=4.00
CJL=4.3
MHW=2.7

MLW=-3.2

MLW=-3.2

PROPOSED NATIVE WETLAND PLANTING (TYP.) PLANTINGS SHALL BE INSTALLED ON EACH COIR LOG LAYER (5 LAYERS TOTAL) AND WITHIN THE BANK FOR ADDITIONAL STABILIZATION. SOIL SCIENTIST TO DETERMINE TYPE, QUANTITY & LOCATION.

SUITABLE BACKFILL MATERIAL (APPROVED BY THE DESIGN ENGINEER) TO BE PLACED BEHIND THE COIR LOGS WHERE REQUIRED (TYP.).

PROPOSED CONC. TRAPEZOIDAL CHANNEL FOR STORM WATER DRAINAGE DISCHARGE. 4' WIDE, 1' DEEP WITH 2' WIDE BOTTOM. BOT. OF CHANNEL = 4.00 PLACE 3'X3' STONE SPLASH PAD AT BOTTOM FOR ANTI-SCOUR.

SITE CONTRACTOR TO VERIFY ALL QUANTITIES.

TIDAL WETLANDS FLAGGED BY NEW ENGLAND ENVIRONMENTAL SERVICES

HTL = 4.5'
CJL = 4.3'
MHW = 2.7'
MLW = -3.2'

DATUM= NAVD 88



REVISED:
9/27/17 - CTDEEP
4/18/18 - ARMY CORPS

LIVING WALL

X-SECTION - WATER VIEW

Job No. 13-21

Scale: N.T.S.

Date: 9/7/17

Designed: M.P.H.

Drawn: M.P.H.

Sheet: 3 OF 5

PREPARED FOR
TOWN OF BRANFORD

AVERILL PLACE DRAINAGE EASEMENT
BRANFORD, CONNECTICUT

HARKIN ENGINEERING, LLC
78 WOLF HOLLOW LANE KILLINGWORTH, CT. (860) 653-4248

SUITABLE BACKFILL MATERIAL (APPROVED BY THE DESIGN ENGINEER) TO BE PLACED BEHIND THE COIR LOGS WHERE REQUIRED (TYP.).

6" LOAM (MIN.), SEED & HAY ALL DISTURBED AREAS AS SOON AS PRACTICAL (TYP.).

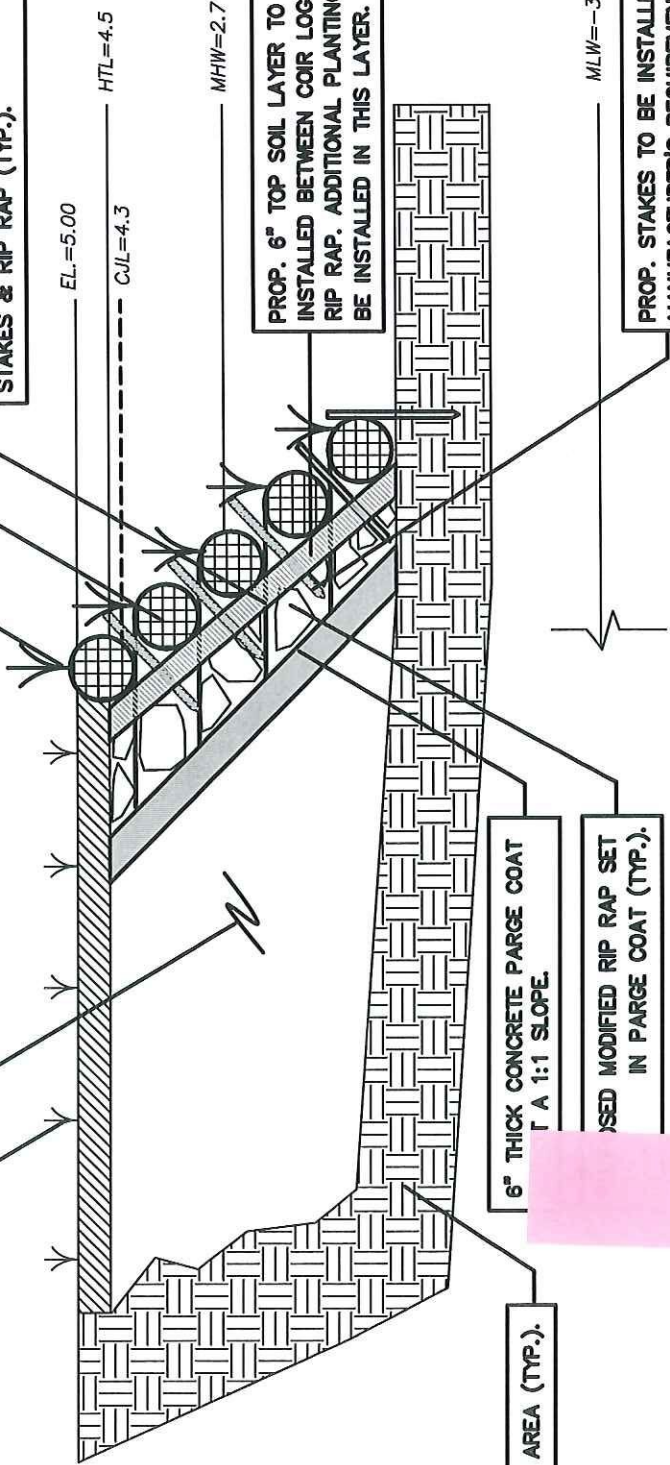
PROP. WETLANDS PLANTINGS (TYP.). SOIL SCIENTIST TO DETERMINE TYPE AND QUANTITY IN-ORDER TO CREATE LIVING WALL.

PROP. 12" DIA, 10 LONG COIR LOGS TO BE SET IN FIVE (5) LAYERS HIGH. LAYERS TO BE SET AT A 1:1 SLOPE.

PROP. TIE BACKS PER MANUFACTURER'S REQUIREMENTS. SECURE/ANCHOR WITH STAKES & RIP RAP (TYP.).

PROP. 6" TOP SOIL LAYER TO BE INSTALLED BETWEEN COIR LOGS & RIP RAP. ADDITIONAL PLANTINGS TO BE INSTALLED IN THIS LAYER.

PROP. STAKES TO BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.



6" THICK CONCRETE PARGE COAT AT A 1:1 SLOPE.

USED MODIFIED RIP RAP SET IN PARGE COAT (TYP.).

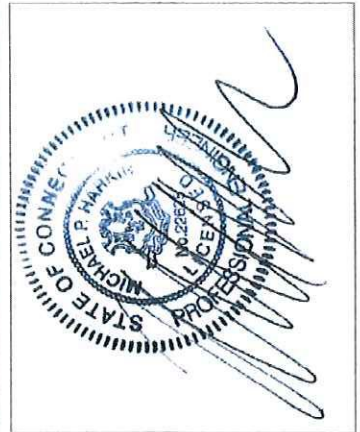
EXIST. UNDISTURBED AREA (TYP.).

HTL = 4.5'
CJL = 4.3'
MHW = 2.7'
MLW = -3.2'

DATUM= NAVD 86

SITE CONTRACTOR TO VERIFY ALL QUANTITIES.

TIDAL WETLANDS FLAGGED BY NEW ENGLAND ENVIRONMENTAL SERVICES



REVISED: 9/27/17 - CTDEEP 4/18/18 - ARMY CORPS

LIVING WALL

X-SECTION: SECTION "B" (PARGE COAT)
PREPARED FOR TOWN OF BRANFORD
AYERILL PLACE DRAINAGE EASEMENT BRANFORD, CONNECTICUT
HARKIN ENGINEERING, LLC
78 WOLF HOLLOW LANE KILLINGWORTH, CT. (860) 663-4248
Job No. 13-21
Scale: N.T.S.
Date: 9/7/17
Designed: M.P.H.
Drawn: M.P.H.
Sheet: 4 OF 5

SUITABLE BACKFILL MATERIAL
(APPROVED BY THE DESIGN ENGINEER)
TO BE PLACED BEHIND THE COIR
LOGS WHERE REQUIRED (TYP.).

6" LOAM (MIN.), SEED & HAY ALL
DISTURBED AREAS AS SOON AS
PRACTICAL (TYP.).

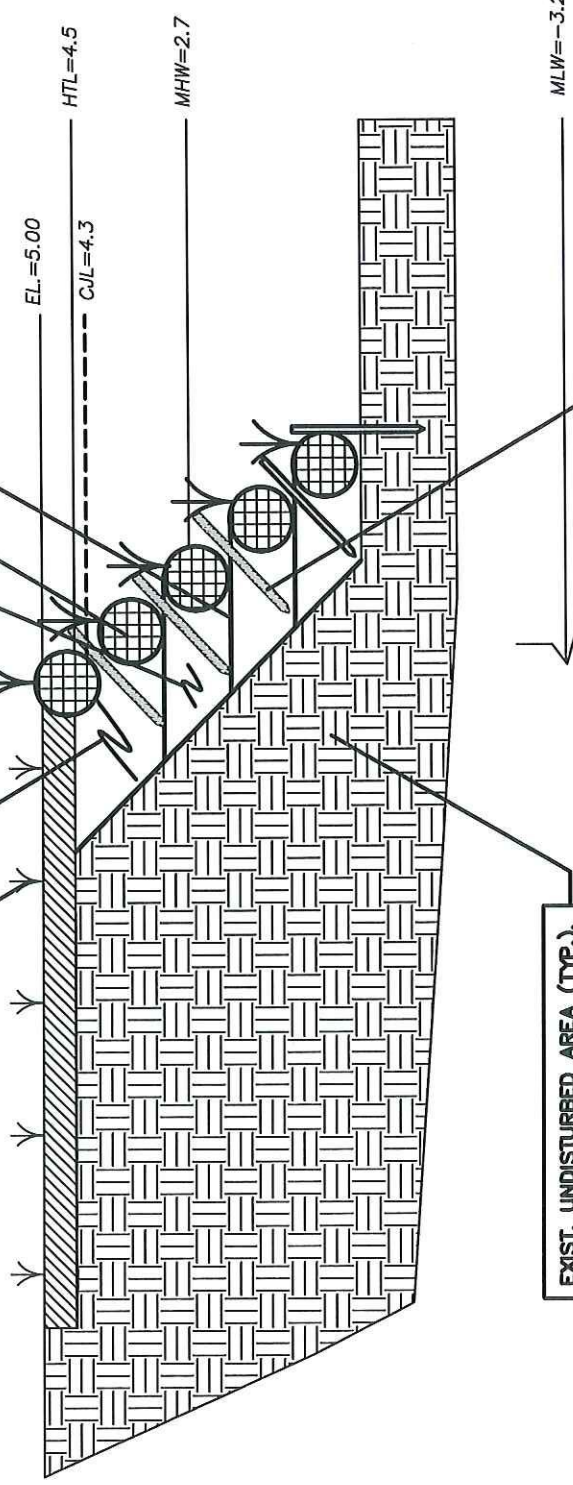
EXIST. UNDISTURBED AREA (TYP.).

PROP. STAKES TO BE INSTALLED PER
MANUFACTURER'S REQUIREMENTS.

PROP. WETLANDS PLANTINGS (TYP.),
SOIL SCIENTIST TO DETERMINE TYPE AND
QUANTITY IN-ORDER TO CREATE LIVING WALL

PROP. 12" DIA, 10 LONG COIR LOGS TO BE
SET IN FIVE (5) LAYERS HIGH. LAYERS TO
BE SET AT A 1:1 SLOPE.

PROP. TIE BACKS PER MANUFACTURER'S
REQUIREMENTS. SECURE/ANCHOR WITH
STAKES & RIP RAP (TYP.).



EL.=5.00

CJL=4.3

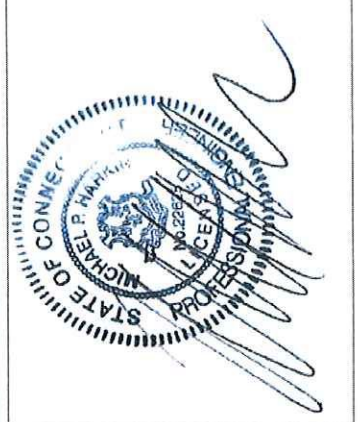
HTL=4.5

MHW=2.7

MLW=-3.2

SITE CONTRACTOR TO VERIFY ALL
QUANTITIES.

TIDAL WETLANDS FLAGGED BY
NEW ENGLAND ENVIRONMENTAL SERVICES



HTL = 4.5'
CJL = 4.3'
MHW = 2.7'
MLW = -3.2'

DATUM= NAVD 88

REVISED:
9/27/17 - CTDEEP
4/18/18 - ARMY CORPS

LIVING WALL
X-SECTION: SECTION "A"

Job No. 13-21

Scale: N.T.S.

Date: 9/7/17

Designed: M.P.H.

Drawn: M.P.H.

Sheet: 5 OF 5

PREPARED FOR
TOWN OF BRANFORD

AVERILL PLACE DRAINAGE EASEMENT
BRANFORD, CONNECTICUT

HARKIN ENGINEERING, LLC
78 WOLF HOLLOW LANE
KILLINGWORTH, CT. (860) 663-4248