VILLAGE OF BALD HEAD ISLAND, N.C.

CAMA MAJOR PERMIT APPLICATION FOR A

TERMINAL GROIN PROJECT

SUBMITTED TO:
N.C. DIVISION OF COASTAL MANAGEMENT
WILMINGTON DISTRICT
127 CARDINAL DR. EXT.
WILMINGTON, N.C. 28405-3545

APPLICANT:
VILLAGE OF BALD HEAD ISLAND, N.C.

SUBMITTED BY:
OLSEN ASSOCIATES, INC.
JACKSONVILLE, FL
C-1468
NOT FOR PURPOSES OF CONSTRUCTION

LOCATION OF GROIN TERMINATION MAY VARY
DEPENDING UPON BEACH CONDITIONS AT TIME
OF CONSTRUCTION

BEACH FILL NOT SHOWN

ELEV = +6'

SLOPE

ELEV = +4.5'

NOTES: 1) NOT FOR PURPOSES OF CONSTRUCTION
2) FINAL DESIGN ELEVATIONS MAY VARY
3) THE STRUCTURE STEM MAY HAVE MULTIPLE
   SLOPES AND ELEVATIONS
4) LENGTH IS COMPUTED ALONG GROIN CENTERLINE
5) GROIN LENGTH IS NOT SHORE NORMAL
6) THE STRUCTURE MAY BE CONSTRUCTED IN TWO PHASES
7) A TEMPORARY TRESTLE MAY BE INSTALLED DURING THE
   PERIOD OF CONSTRUCTION
8) TOTAL STRUCTURE LENGTH: 1900 FT

DATUM - NGVD1929
NOTES:
1) LIMIT OF GROIN FILLET IS MAXIMUM. ACTUAL LIMITS WILL VARY.
2) EASTWARD LIMIT OF FILLET IS DEPENDENT UPON BERM WIDTH.
3) FILLET SAND BERM ELEV AT +8 NGVD (TYP)
4) FILLET VOLUME EST'D AT .5MCY.
5) PHASE II LENGTH - 1900 FT. MOL

VILLAGE OF BALD HEAD ISLAND
TERMINAL GROIN PROJECT
PHASE II GROIN FILLET
(MAXIMUM SEAWARD EXTENT)
NOTES:
1) PHASE I LENGTH - 1300 FT, MOL.
2) PHASE II LENGTH (TOTAL) - 1900 FT
3) PHASE I DESIGN ELEVATIONS REMAIN UNCHANGED.
NOTES:
1. SEPT. '09 SURVEY FOR REFERENCE ONLY
2. MAY '13 SURVEY - POST DISPOSAL
SOUTH BEACH

LIMIT OF PROJECT EASEMENT
DISTANCE VARIES

EXISTING DUNE (VARIES)
LIMIT OF WORK

SLOPE
+8.5'
20H:1V

LIMIT OF PROJECT EASEMENT
EDGE OF BERM

BEACH FILL

EXISTING BEACH PROFILE (TYP)

NOTE:
1) FILL DENSITY TO VARY SPATIALLY DEPENDING ON CONDITION OF BEACH AT TIME OF CONSTRUCTION,
2) GROIN FILLET FILL DENSITY VARIES AND MAY EXCEED 300 CY/FT

TYPICAL SECTION

ATLANTIC OCEAN

AVERAGE BEACH FILL DENSITY APPROX. 100cy/ft

MHW (2.5' NGVD)
ASSUMED FILL TEMPLATE SLOPE DURING CONSTRUCTION

-12TO-15FT NGVD (TYP)
SLOPE INTERCEPT OF FILL TOE

WEST BEACH

LOCAL TIDAL DATUMS (FT)
MHHW +2.8
MHW +2.5
NAVD +1.1
NGVD(29) 0.0
MLW -1.8
MLLW -2.0

NOTE:
1) POINT FILL DENSITY MAY BE TYPICAL OF EITHER S. BEACH OR W. BEACH

TYPICAL SECTION

CAPE FEAR RIVER
CHANNEL GORGE

NAVD 29

DATUM: NGVD 29

NOT FOR PURPOSES OF CONSTRUCTION

09/30/2013

DREW BY:

DATE APPROVED REVISION

SHEET 11 of 21
NOTES:

1) PROJECT BASELINE UTILIZED FOR BEACH MONITORING AND FEDERAL BEACH DISPOSAL PROJECT CONSTRUCTION BY WILMINGTON DISTRICT, USACOE

2) ACTUAL LIMITS OF FILL PLACEMENT BY VILLAGE FOR MITIGATION OR FILLET MAINTENANCE SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF S.B. 110.

3) STA 44+00 IS TYPICAL WESTERN LIMIT OF FEDERAL S. BEACH DISPOSAL.

BALD HEAD ISLAND

PROJECT BASELINE (STA 00+00)

NOT FOR PURPOSES OF CONSTRUCTION

VILLAGE OF BALD HEAD ISLAND TERMINAL GROIN PROJECT PROJECT BASELINE AND LIMITS OF FILL
TYPICAL TRESTLE INSTALLATION - OPTIONAL

NOTE:
1) TRESTLE SHALL BE CONSTRUCTED ALONGSIDE ROCK GROIN.
2) TRESTLE LENGTH TO BE DETERMINED BY BEACH CONDITIONS AT TIME OF CONSTRUCTION.
3) TRESTLE MAY NOT ENTER CULTURAL RESOURCE BUFFER AREA (SEE SHEET 3).
4) ALL TRESTLE MATERIAL TO BE REMOVED FROM SITE.
NOTES:
1) FILL PAD SAND TO BE SOURCED FROM DISPOSAL BERM (ABOVE MHWL).
2) FILL PAD TO ALLOW CONTRACTOR EQUIPMENT ACCESS FOR ROCK PLACEMENT SEAWARD OF THE MLWL (OPTIONAL)