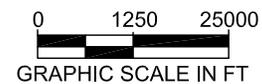
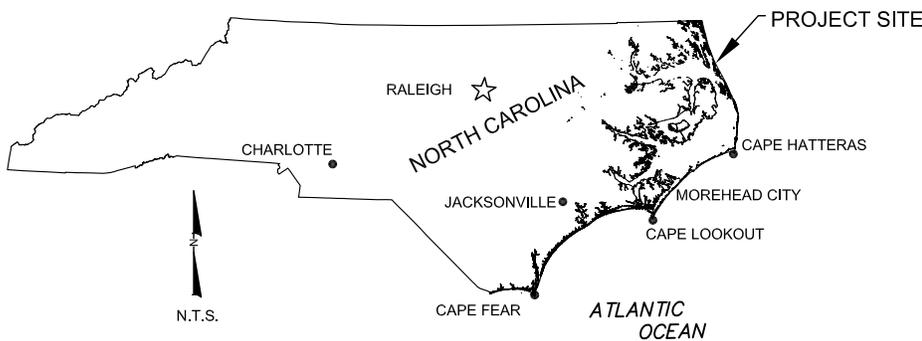
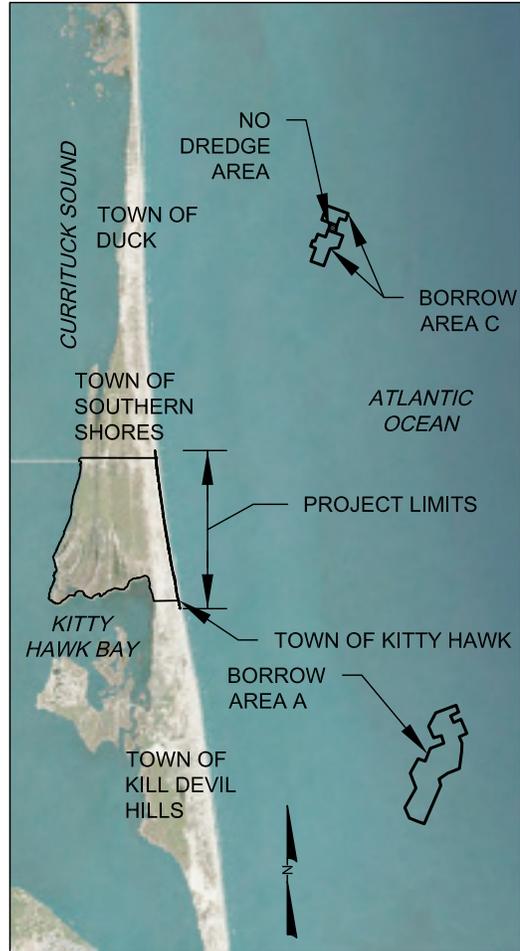


KITTY HAWK SHORELINE PROTECTION PROJECT

DARE COUNTY, NORTH CAROLINA

INDEX TO SHEETS

1	COVER SHEET
2	PROJECT OVERVIEW
3-15	BEACH FILL PLAN VIEWS
16-25	BEACH FILL PROFILES
26	BORROW AREA A PLAN VIEW
27-28	BORROW AREA A CROSS-SECTIONS
29	BORROW AREA C PLAN VIEW
30-31	BORROW AREA C CROSS-SECTIONS



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
COVER SHEET

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.
 4038 MASONSBORO LOOP RD.
 WILMINGTON, NC 28409
 PH: (910) 791-9494
 FAX: (910) 791-4129

DATE:
 5/1/15

BY:
 GK

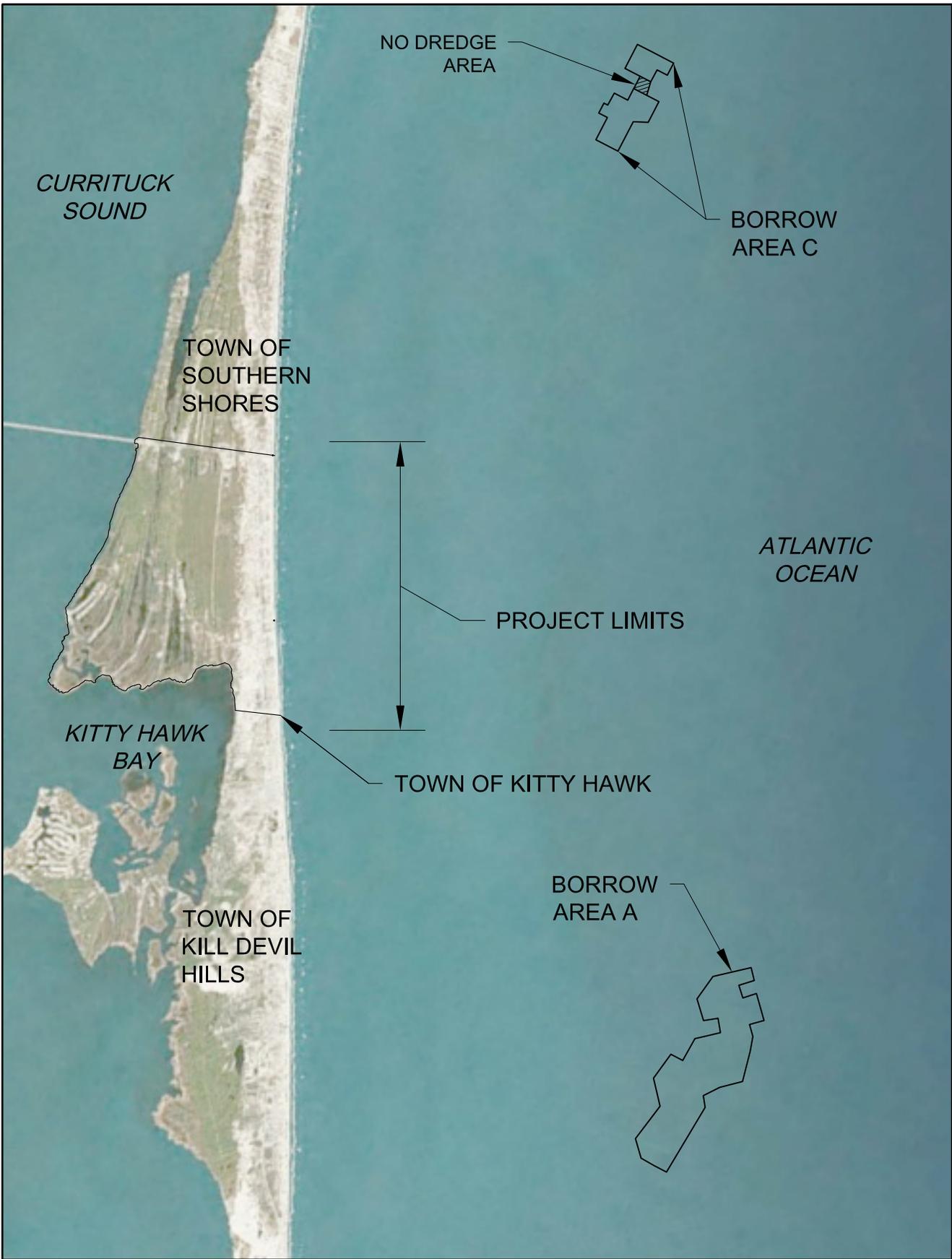
COMM NO.:
 151386

SHEET:
 1 of 31

REVISIONS		
DATE	BY	DESCRIPTION

NOT FOR CONSTRUCTION
 FOR REGULATORY REVIEW ONLY

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 10:24am - howard.nejb



**KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
PROJECT OVERVIEW**

TITLE:

**COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.**

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409
PH: (910) 791-9494
FAX: (910) 791-4129

DATE:
5/1/15

BY:
GK

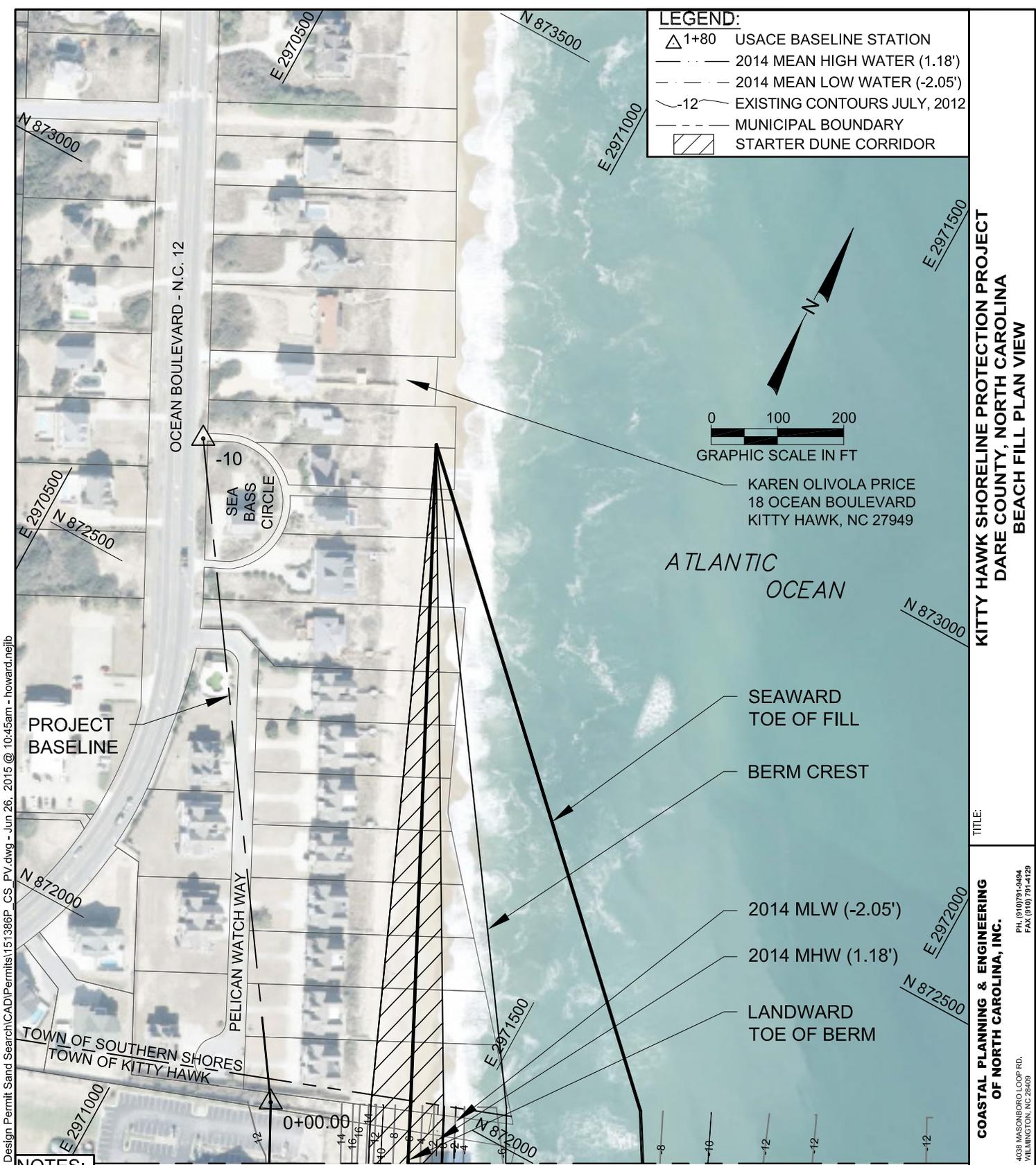
COMM NO.:
151386

SHEET:
2 of 31

**NOT FOR CONSTRUCTION
FOR REGULATORY REVIEW ONLY**



REVISIONS		
DATE	BY	DESCRIPTION



LEGEND:

- △ 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- - - 2014 MEAN LOW WATER (-2.05')
- ~ -12 EXISTING CONTOURS JULY, 2012
- - - MUNICIPAL BOUNDARY
- ▨ STARTER DUNE CORRIDOR

KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW



KAREN OLIVOLA PRICE
 18 OCEAN BOULEVARD
 KITTY HAWK, NC 27949

ATLANTIC OCEAN

SEAWARD TOE OF FILL

BERM CREST

2014 MLW (-2.05')

2014 MHW (1.18')

LANDWARD TOE OF BERM

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
5. STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
6. SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 4

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
 FAX: (910) 791-4129
 4038 MASONBORO LOOP RD.
 WILMINGTON, NC 28409

DATE:

5/1/15

BY:

GK

COMM NO.:

151386

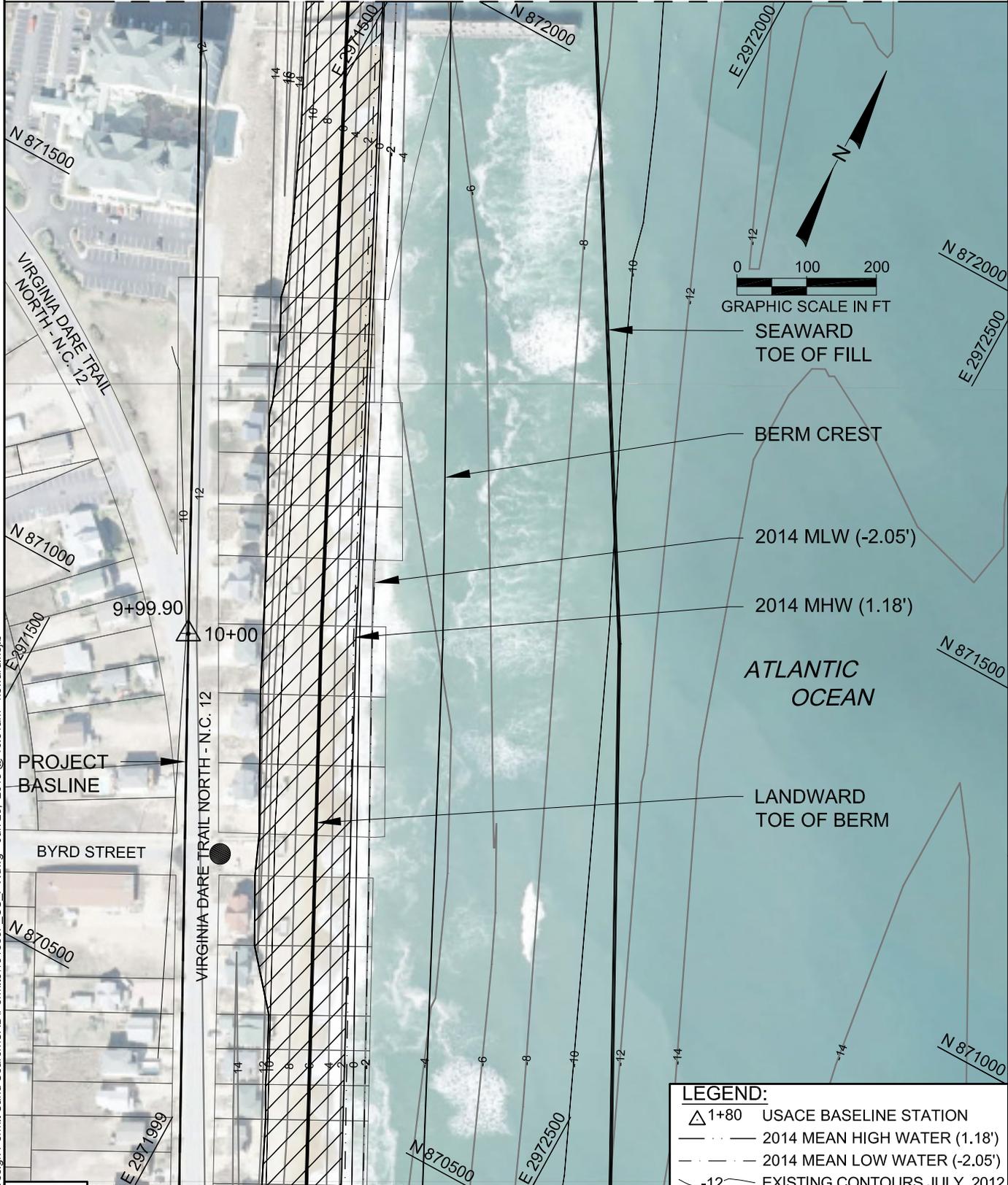
SHEET:

3 of 31

REVISIONS		
DATE	BY	DESCRIPTION

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 10:45am - howard.nejib

MATCH LINE SHEET 3



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE:

5/1/15

BY:

GK

COMM NO.:

151386

SHEET:

4 of 31

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 5

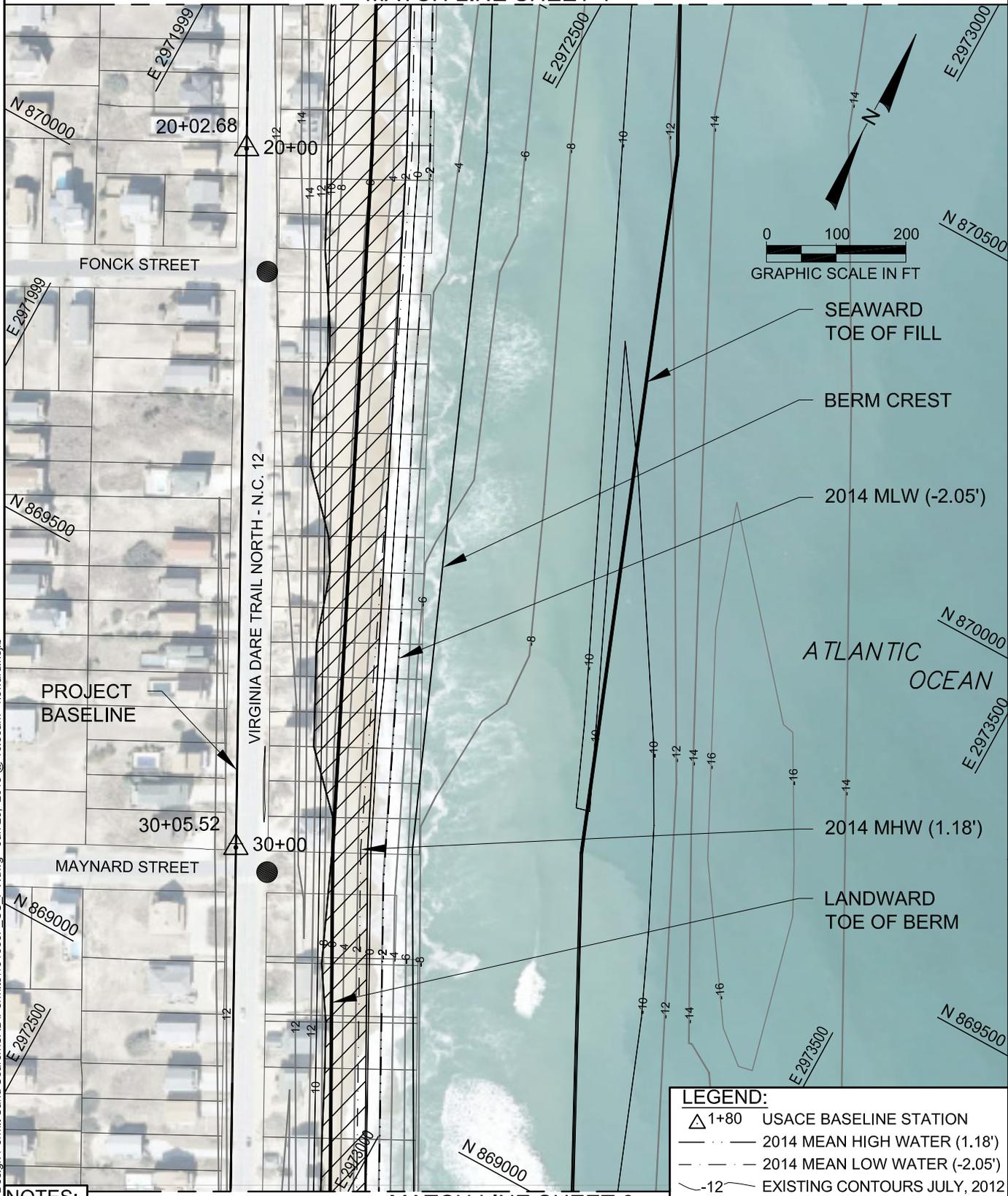
LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS

DATE	BY	DESCRIPTION

MATCH LINE SHEET 4



KITTY HAWK SHORELINE PROTECTION PROJECT
 DARE COUNTY, NORTH CAROLINA
 BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
 OF NORTH CAROLINA, INC.

PH: (910) 791-9494
 FAX: (910) 791-4129
 4038 MASONBORO LOOP RD.
 WILMINGTON, NC 28409

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
5. STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
6. SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 6

LEGEND:

- △ 1+80 USACE BASELINE STATION
- — — 2014 MEAN HIGH WATER (1.18')
- - - 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- [Hatched Box] STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS		
DATE	BY	DESCRIPTION

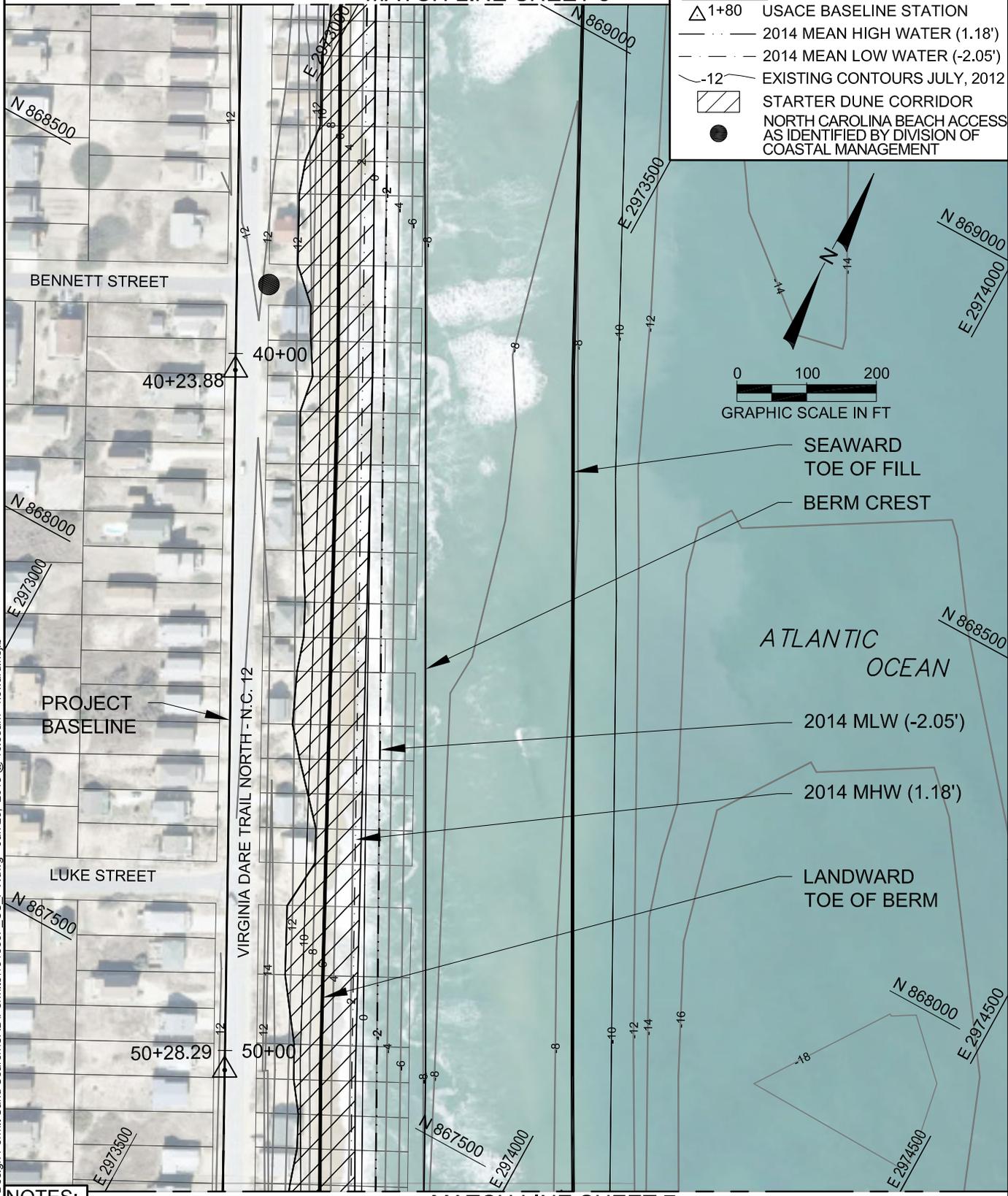
DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	5 of 31

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 10:53am - howard.nejib

MATCH LINE SHEET 5

LEGEND:

- △ 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- -12 EXISTING CONTOURS JULY, 2012
- ▨ STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.
4038 MASONBORO LOOP RD.
 WILMINGTON, NC 28409

PH: (910) 791-9494
 FAX: (910) 791-4129

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
5. STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
6. SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

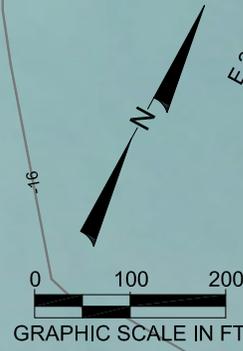
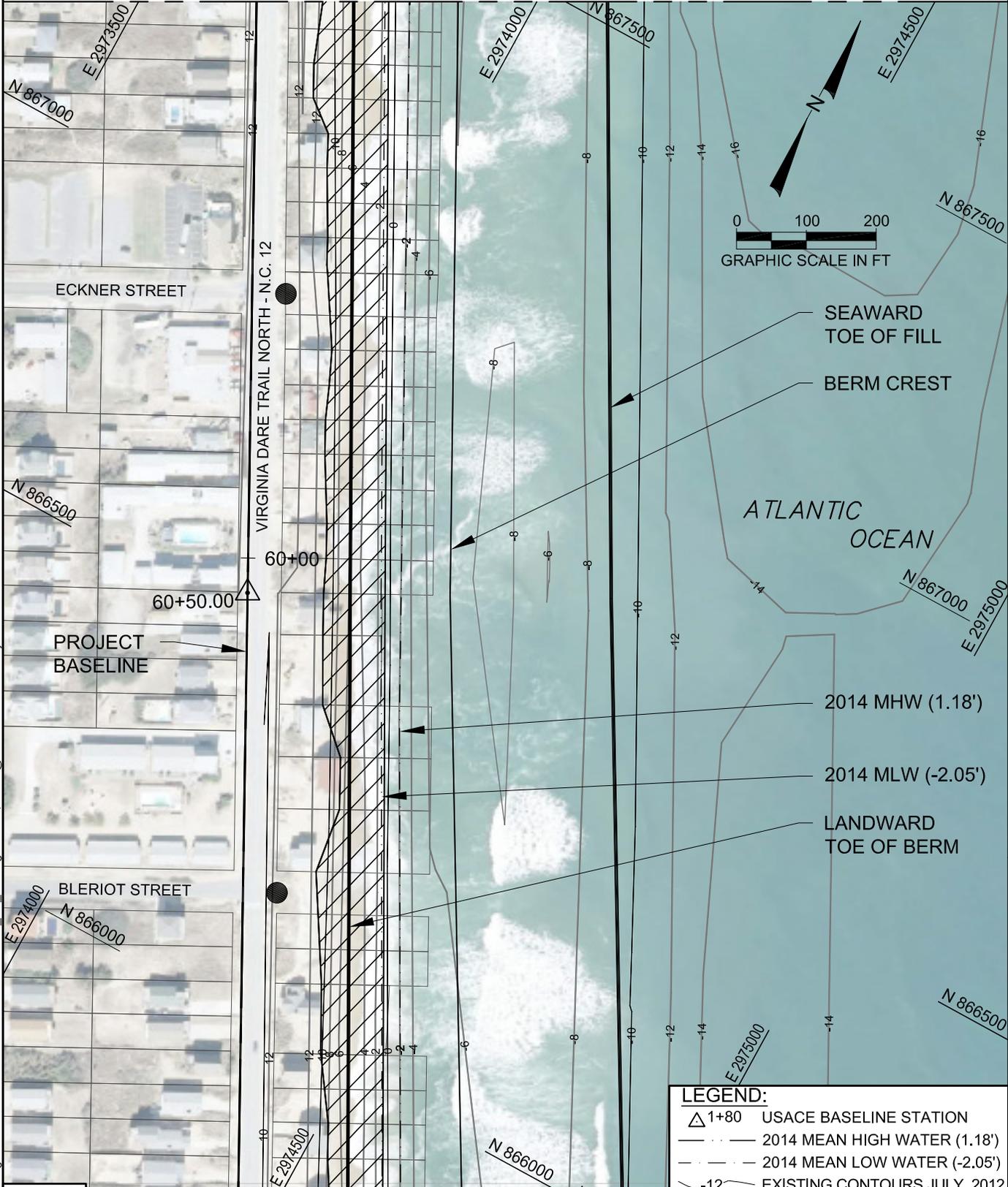
MATCH LINE SHEET 7

DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	6 of 31

REVISIONS		
DATE	BY	DESCRIPTION

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 10:55am - howard.nejib

MATCH LINE SHEET 6



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409
PH: (910) 791-9494
FAX: (910) 791-4129

NOTES:

MATCH LINE SHEET 8

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

LEGEND:

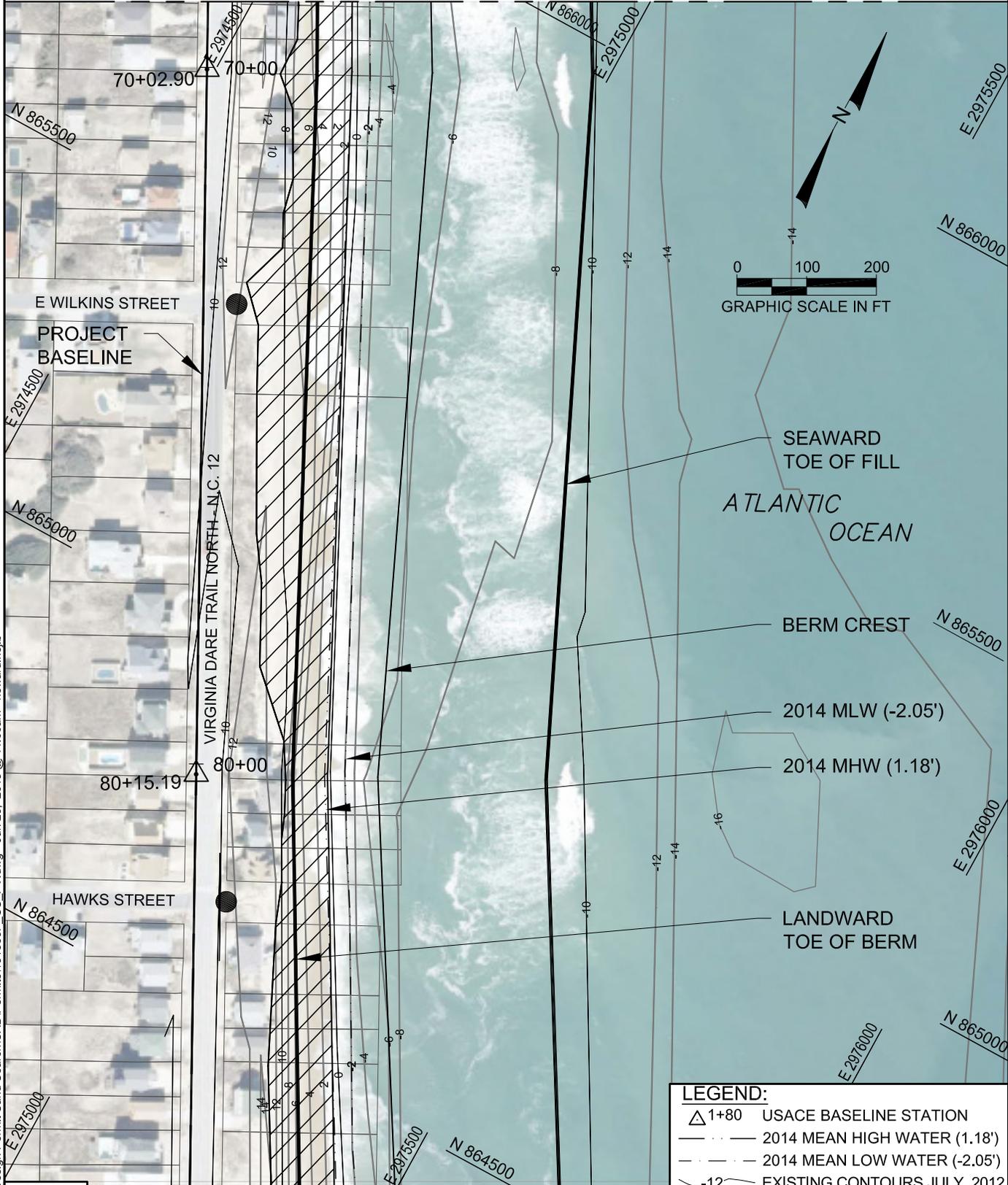
- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS		
DATE	BY	DESCRIPTION

DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	7 of 31

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 10:57am - howard.nejib

MATCH LINE SHEET 7



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129
4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE:

5/1/15

BY:

GK

COMM NO.:

151386

SHEET:

8 of 31

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 9

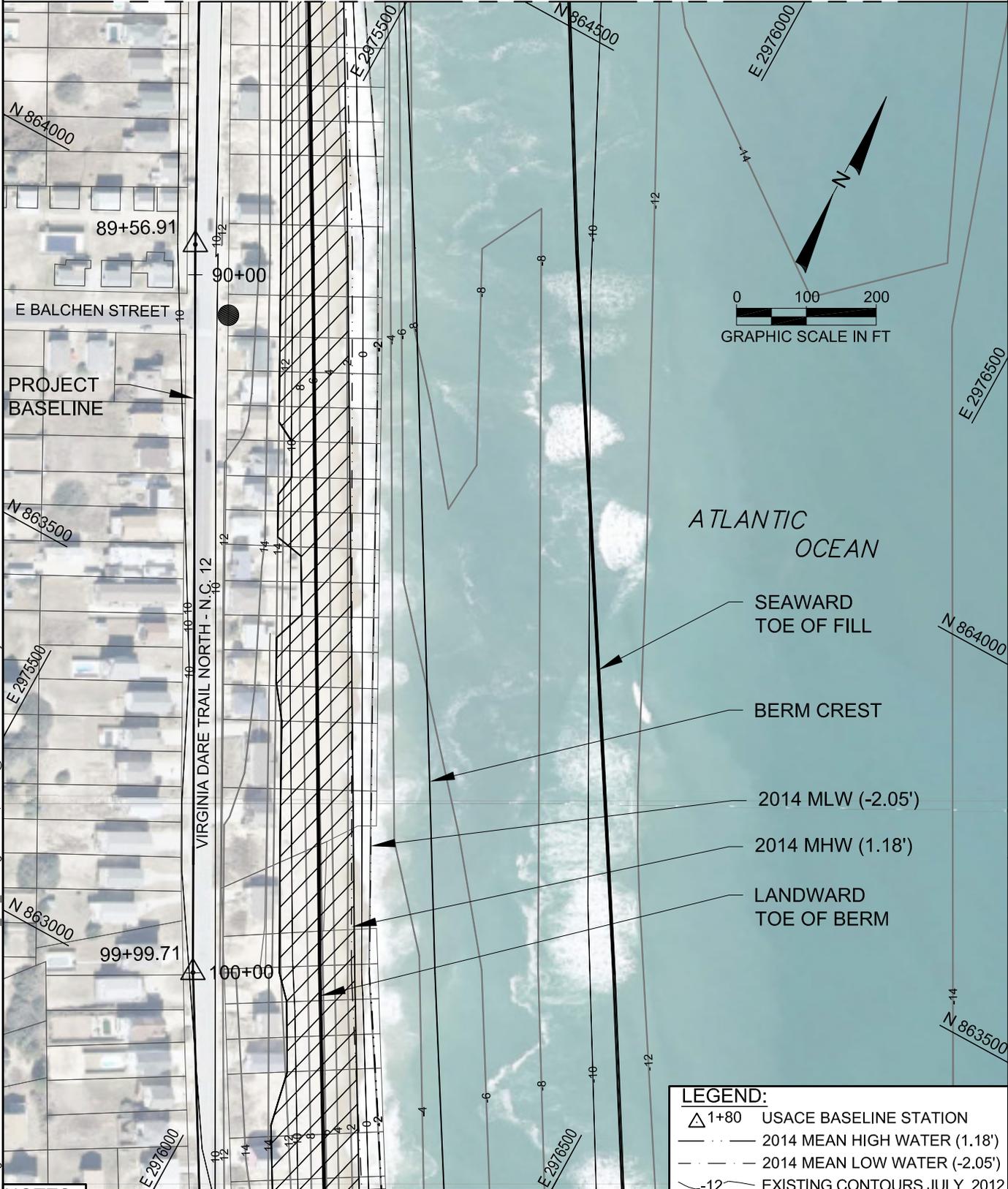
LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS

DATE	BY	DESCRIPTION

MATCH LINE SHEET 8



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129
4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE:

5/1/15

BY:

GK

COMM NO.:

151386

SHEET:

9 of 31

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
5. STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
6. SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 10

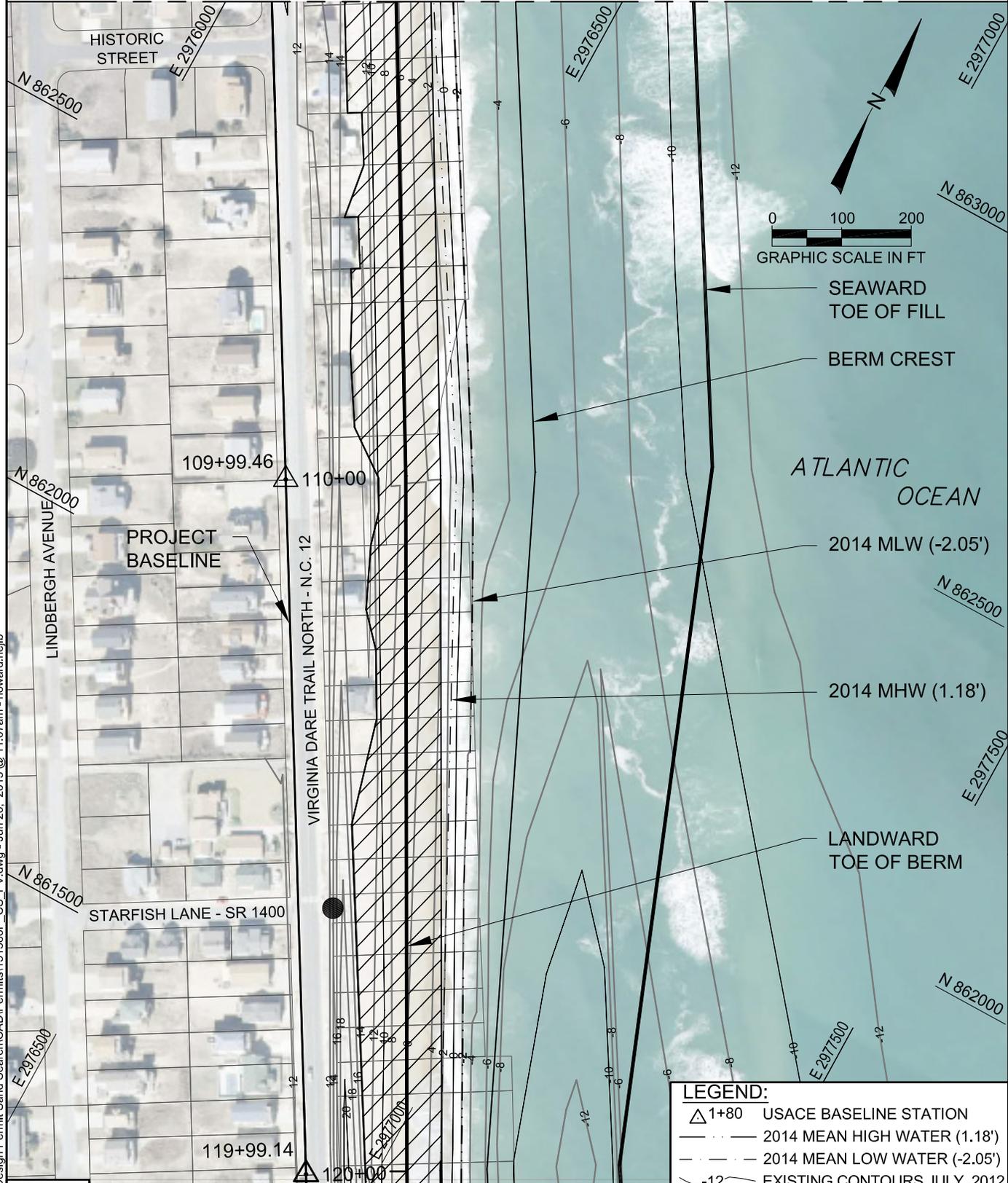
LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS

DATE	BY	DESCRIPTION

MATCH LINE SHEET 9



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE: 5/1/15

BY: GK

COMM NO.: 151386

SHEET: 10 of 31

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 11

LEGEND:

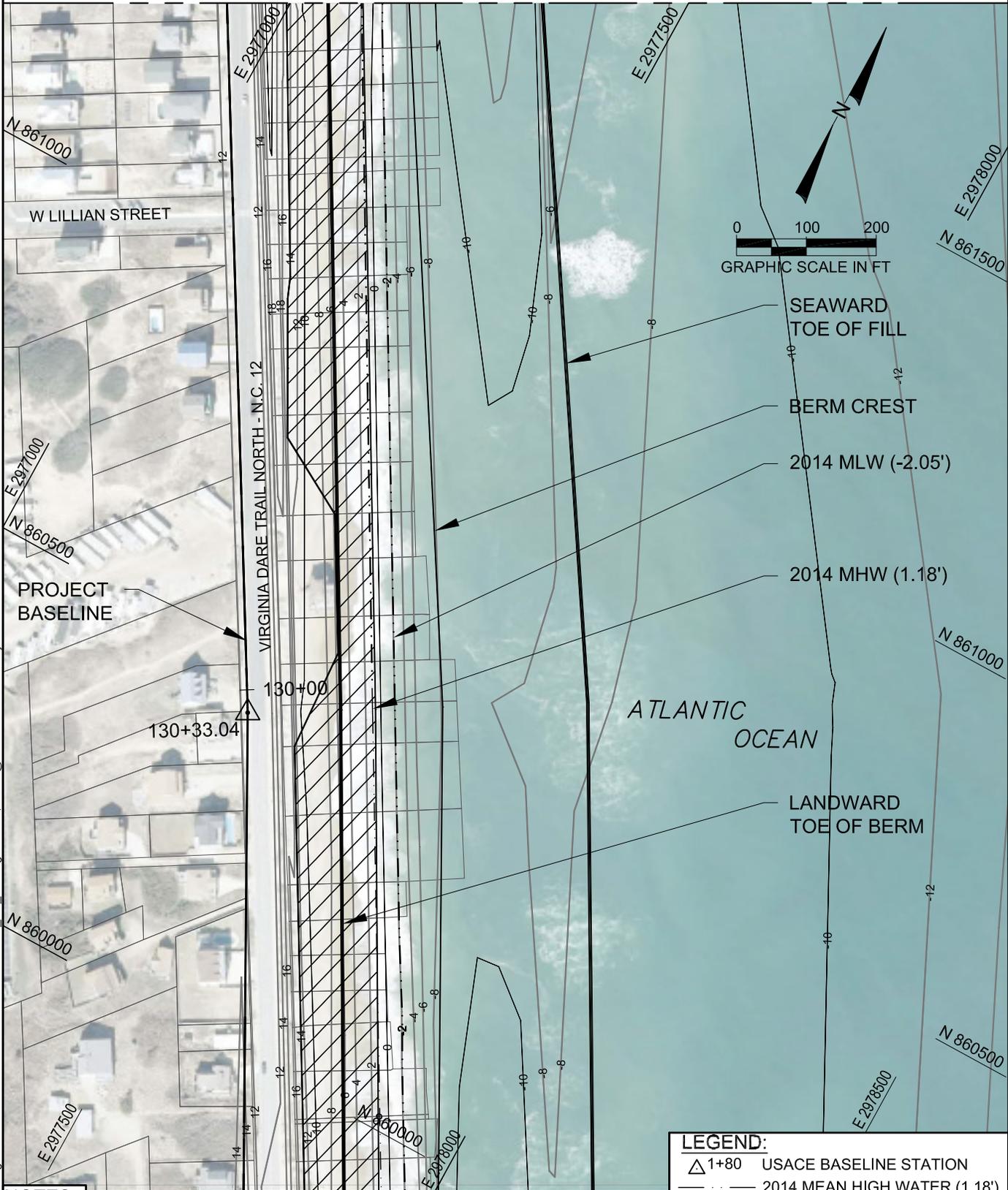
- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS

DATE	BY	DESCRIPTION

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 11:07am - howard.nejib

MATCH LINE SHEET 10



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE: 5/1/15
BY: GK
COMM NO.: 151386
SHEET: 11 of 31

NOTES:

MATCH LINE SHEET 12

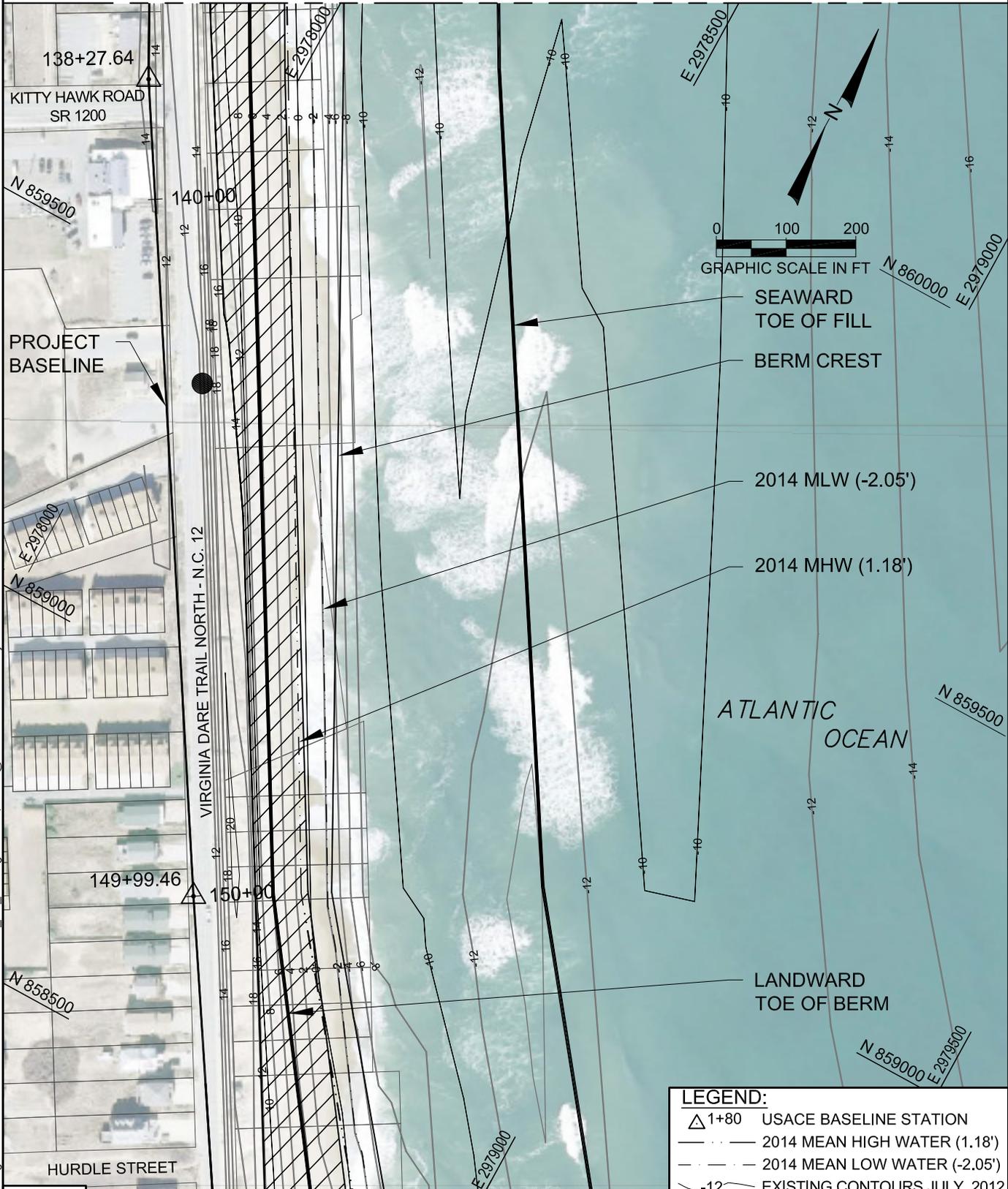
- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR

REVISIONS		
DATE	BY	DESCRIPTION

MATCH LINE SHEET 11



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129
4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE: 5/1/15
BY: GK
COMM NO.: 151386
SHEET: 12 of 31

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 13

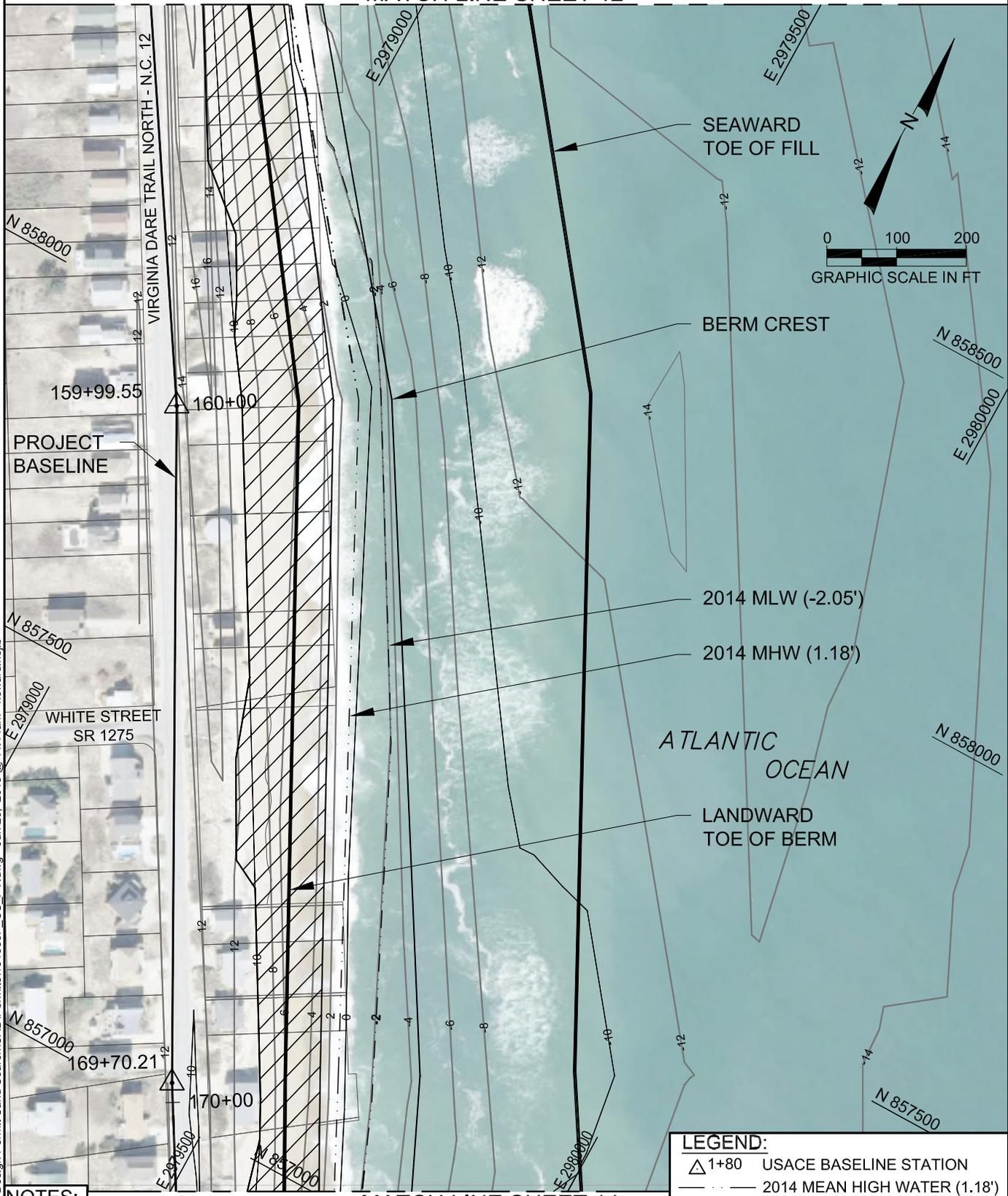
LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12 EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS

DATE	BY	DESCRIPTION

MATCH LINE SHEET 12



KITTY HAWK SHORELINE PROTECTION PROJECT
 DARE COUNTY, NORTH CAROLINA
 BEACH FILL PLAN VIEW

TITLE:

**COASTAL PLANNING & ENGINEERING
 OF NORTH CAROLINA, INC.**
 4038 MASONBORO LOOP RD.
 WILMINGTON, NC 28409
 PH: (910) 791-9494
 FAX: (910) 791-4129

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

MATCH LINE SHEET 14

LEGEND:

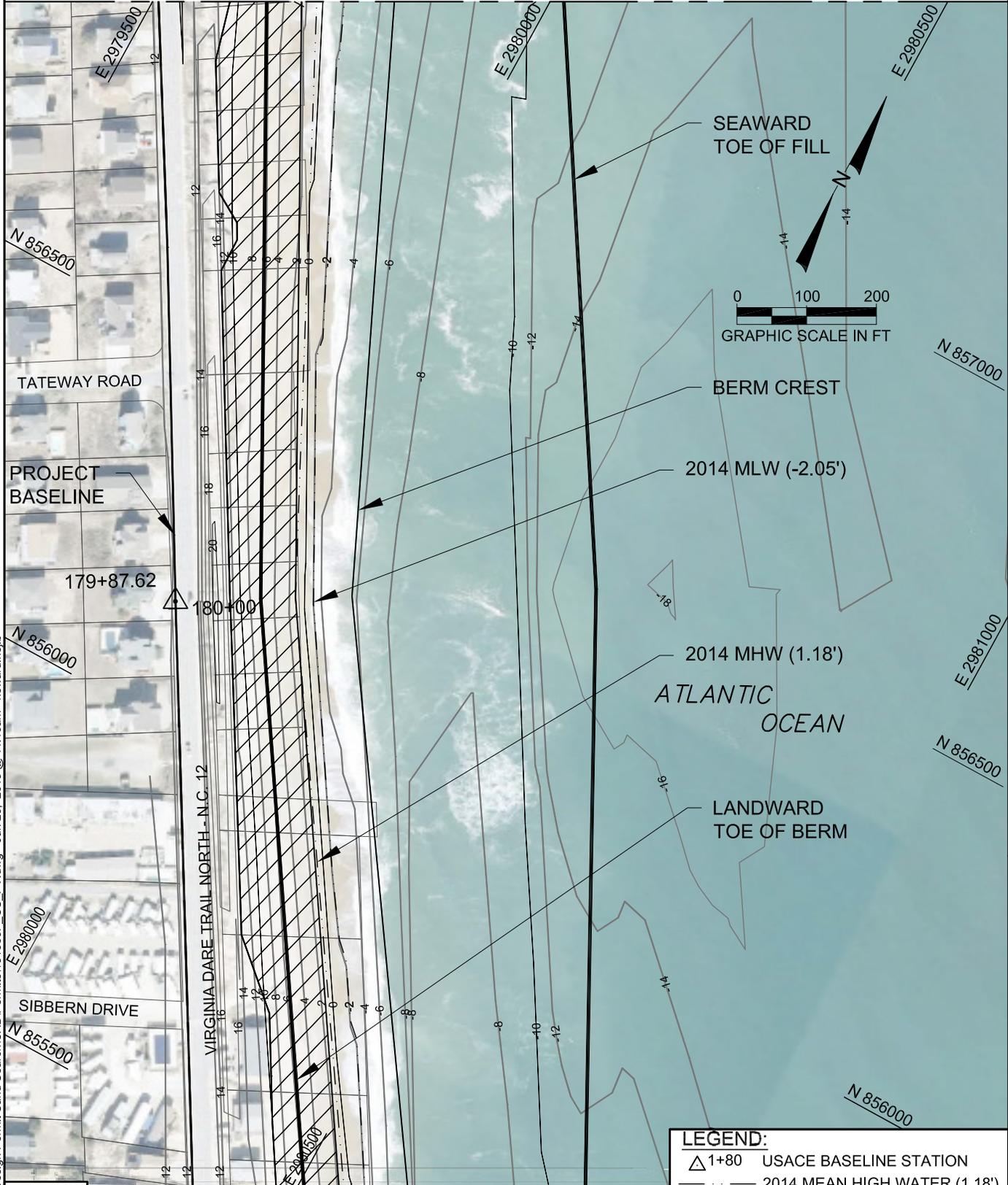
- △ 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- - - 2014 MEAN LOW WATER (-2.05')
- 12' EXISTING CONTOURS JULY, 2012
- ▨ STARTER DUNE CORRIDOR

REVISIONS		
DATE	BY	DESCRIPTION

DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	13 of 31

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 11:14am - howard.nejib

MATCH LINE SHEET 13



KITTY HAWK SHORELINE PROTECTION PROJECT
 DARE COUNTY, NORTH CAROLINA
 BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
 OF NORTH CAROLINA, INC.

PH: (910) 791-9494
 FAX: (910) 791-4129

4038 MASONBORO LOOP RD.
 WILMINGTON, NC 28409

DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	14 of 31

NOTES:

- DATE OF AERIAL PHOTOGRAPHY: 2012.
- COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
- ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
- CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
- STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
- SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

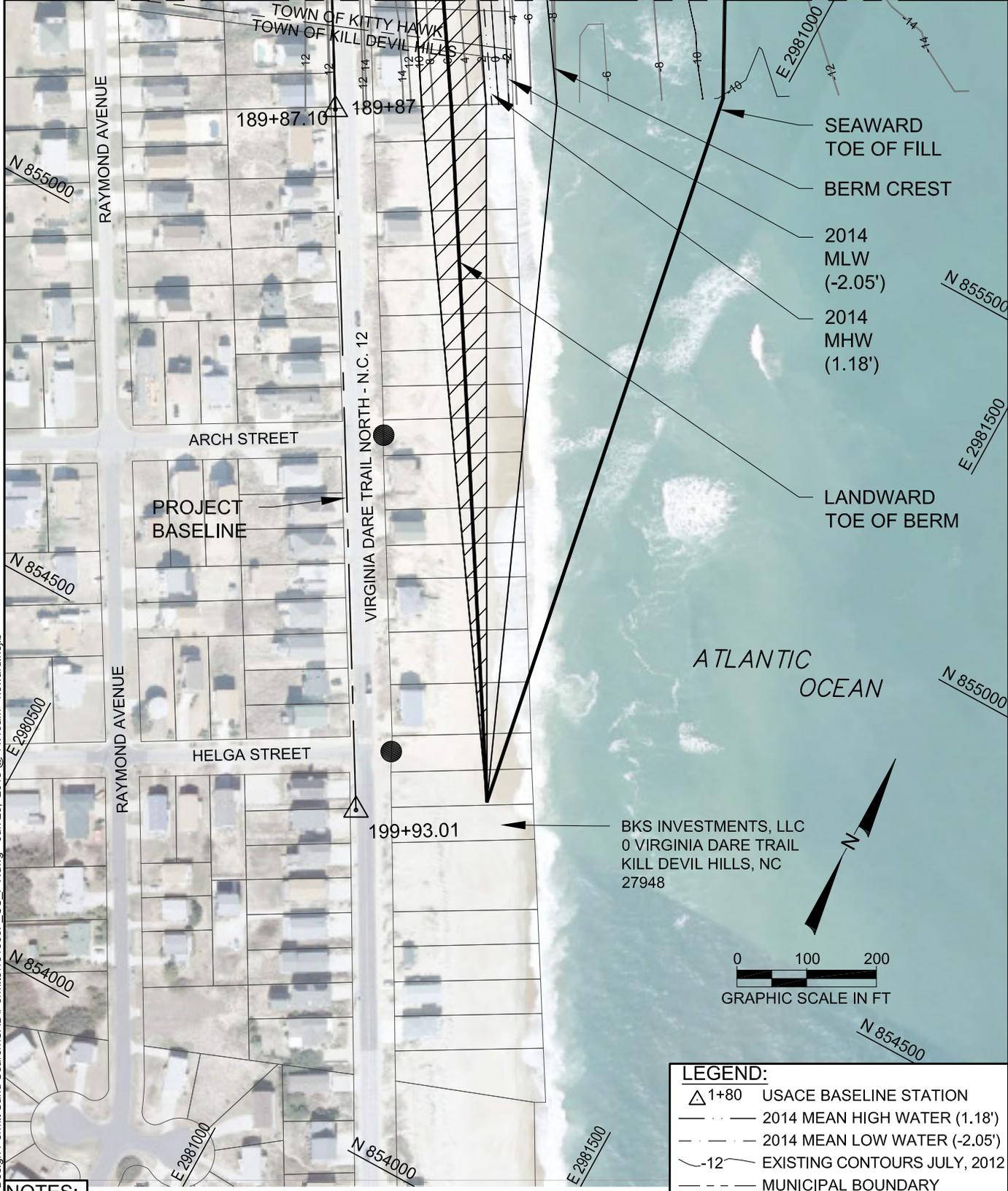
MATCH LINE SHEET 15

LEGEND:

- 1+80 USACE BASELINE STATION
- 2014 MEAN HIGH WATER (1.18')
- 2014 MEAN LOW WATER (-2.05')
- 12' EXISTING CONTOURS JULY, 2012
- STARTER DUNE CORRIDOR

REVISIONS		
DATE	BY	DESCRIPTION

MATCH LINE SHEET 14



KITTY HAWK SHORELINE PROTECTION PROJECT
DARE COUNTY, NORTH CAROLINA
BEACH FILL PLAN VIEW

TITLE:

COASTAL PLANNING & ENGINEERING
OF NORTH CAROLINA, INC.

PH: (910) 791-9494
FAX: (910) 791-4129

4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409

DATE:	5/1/15
BY:	GK
COMM NO.:	151386
SHEET:	15 of 31

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. CONTOURS SHOWN REPRESENTS SURVEY DATA COLLECTED BY CPE-NC APRIL, 2014.
5. STARTER DUNE CORRIDOR = AREA IN WHICH STARTED DUNE WILL BE CONSTRUCTED ON AS NEEDED BASIS (SEE CROSS SECTION 169+70 FOR EXAMPLE).
6. SAND FENCING MAY BE INSTALLED ALONG THE STARTER DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.

LEGEND:

- △ 1+80 USACE BASELINE STATION
- · — 2014 MEAN HIGH WATER (1.18')
- · — 2014 MEAN LOW WATER (-2.05')
- 12- EXISTING CONTOURS JULY, 2012
- - - MUNICIPAL BOUNDARY
- ▨ STARTER DUNE CORRIDOR
- NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

REVISIONS		
DATE	BY	DESCRIPTION

P:\North Carolina\Kitty Hawk\151386 - Design Permit Sand Search\CAD\Permits\151386P_CS_PV.dwg - Jun 26, 2015 @ 11:19am - howard.nejib