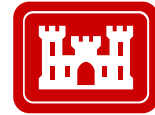




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Regulatory Program



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INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided
in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): August 30, 2019

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): NAP-2017-00093

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: New Jersey County/parish/borough: Cape May City: Middle Twp.

Center coordinates of site (lat/long in degree decimal format): Lat. 39.084184, Long. -74.812258.

Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: ☒ attached ☒ in report/map titled "PLAN OF SURVEY LOT 28, BLOCK 132.01 ..."; prepared by Gibson Associates; Sheets 1 and 2 of 2, DWG. No. 3237-2D; dated 12-29-11, last revised 08-20-19.

☐ Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1): .

D. REVIEW PERFORMED FOR SITE EVALUATION:

☐ Office (Desk) Determination Only. Date: .

☒ Office (Desk) and Field Determination. Office/Desk Dates: Field Date(s): 12-JUL-2019.

SECTION II: DATA SOURCES

Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: "PLAN OF SURVEY LOT 28, BLOCK 132.01 ..."; prepared by Gibson Associates; Sheets 1 and 2 of 2, DWG. No. 3237-2D; dated 12-29-11, last revised 08-20-19.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☒ Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: Original delineation report submitted under letter from Lomax Consulting Group dated 02-MAR-2017, with their data sheets dated 24-JAN-2011. This was in support of our previous Approved Jurisdictional Determination (AJD) dated 17-AUG-2018. A request for reconsideration of that AJD was received under a letter from Lomax Consulting Group dated 02-JUL-2019, with additional data sheets dated 21-MAY-2019.

☐ Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include information on revised data sheets/delineation report that this AJD form has relied upon: .

Revised Title/Date: .

☐ Data sheets prepared by the Corps. Title/Date: .

☐ Corps navigable waters study. Title/Date: .

☐ CorpsMap ORM map layers. Title/Date: .

☐ USGS Hydrologic Atlas. Title/Date: .

☐ USGS, NHD, or WBD data/maps. Title/Date: .

☒ USGS 8, 10 and/or 12 digit HUC maps. HUC number: 02040302.

☒ USGS maps. Scale & quad name and date: Stone Harbor, 1:24000.

☒ USDA NRCS Soil Survey. Citation: Cape May, Sheet 101.

☒ USFWS National Wetlands Inventory maps. Citation: U.S. FWS web site.

☐ State/Local wetland inventory maps. Citation: .

- ☐ FEMA/FIRM maps. Citation: .
- ☒ Photographs: ☒ Aerial. Citation: Google Earth, various dates. or ☒ Other. Citation: Under Lomax letter dated 02-JUL-2019.
- ☐ LiDAR data/maps. Citation: .
- ☒ Previous JDs. File no. and date of JD letter: Previous AJD NAP-2017-00093, issued by this office in a letter dated 17-AUG-2018. The current determination, which is the subject of this form, is the result of the applicant's request for reconsideration and revision of that determination.
- ☐ Applicable/supporting case law: .
- ☐ Applicable/supporting scientific literature: .
- ☒ Other information (please specify): The previous AJD dated 17-AUG-2018 was issued under the Rapanos/SWANCC procedures which were in place at the time it was processed. On 16-AUG-2018, a court decision required the Corps to use the "2015 Clean Water Rule" (CWR). However, we did not learn of this from our HQ until the AJD had been issued. As noted above, the applicant has requested reconsideration and revision of the previously issued AJD. In addition to making this determination under the 2015 CWR, the applicant has also provided data in support of their position that the previously delineated wetlands E, F and G do not meet all three criteria in order to be classified as a wetland.

SECTION III: SUMMARY OF FINDINGS

Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Water Droplet Screen from ORM for All Waters and Features, Regardless of Jurisdictional Status – Required

A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION:

- ☐ "navigable waters of the U.S." within RHA jurisdiction (as defined by 33 CFR part 329) in the review area.

• Complete Table 1 - Required

NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.

B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. **Check all that apply.**

- ☒ (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))
- Complete Table 1 - Required**
- ☐ This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.
- ☐ (a)(2): All interstate waters, including interstate wetlands.
- Complete Table 2 - Required**
- ☐ (a)(3): The territorial seas.
- Complete Table 3 - Required**
- ☐ (a)(4): All impoundments of waters otherwise identified as waters of the U.S. under 33 CFR part 328.3.
- Complete Table 4 - Required**
- ☐ (a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- Complete Table 5 - Required**
- ☒ (a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.
- Complete Table 6 - Required**
- ☒ Bordering/Contiguous.
Neighboring:
- ☐ (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.
- ☐ (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water.

- ☒ (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes.
- ☐ (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- ☐ (a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(8) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.

C. NON-WATERS OF THE U.S. FINDINGS:

Check all that apply.

- ☐ The review area is comprised entirely of dry land.
- ☐ Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(7) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- ☐ Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
- **Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis. - Required**
- ☐ Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
- ☐ Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):
- **Complete Table 10 - Required**
- ☐ (b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
- ☐ (b)(2): Prior converted cropland.
- ☐ (b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
- ☐ (b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.
- ☐ (b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1)-(a)(3).
- ☐ (b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease.
- ☐ (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
- ☐ (b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.¹
- ☐ (b)(4)(iv): Small ornamental waters created in dry land.¹
- ☐ (b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water.
- ☐ (b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways.¹

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.

- ☐ (b)(4)(vii): Puddles.¹
- ☐ (b)(5): Groundwater, including groundwater drained through subsurface drainage systems.¹
- ☐ (b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.¹
- ☐ (b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.
- ☒ Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of (a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).
 - **Complete Table 11 - Required.**

D. ADDITIONAL COMMENTS TO SUPPORT AJD: Burke Motor Group; 16.038-acre property identified as Block 132.01, Lot 28; 516 Stone Harbor Boulevard (northeast side of Stone Harbor Boulevard), between approximately 400 to 1,400 feet southeast of the Garden State Parkway. The property consists of developed area (car dealership with associated paved and gravel parking areas), wooded areas and tidal marsh. The tidal marsh (designated WA) on the northern and western sides of the property (and within the property limits) includes the tidal waters of Crooked Creek, which is part of a large tidal waters and wetland complex. Outside the tidally-influenced area, most of the undeveloped portion of the property is upland forest. Within this upland forest, there are several separate freshwater wetland areas as delineated by the applicant's consultant. These areas are man-excavated shallow depressions, which originated from attempts at borrow pits for the construction of Stone Harbor Boulevard (according to the consultant). Those borrow operations appear to have been terminated following several shallow excavations. None of the delineated non-tidal wetlands have any surface drainage connection to the tidal system. See Tables 1 and 6 for discussions of the tidal waters, tidal wetlands, and non-tidal wetlands, and the basis for federal jurisdiction over each of them..

Jurisdictional Waters of the U.S.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
NAP-2017-00093 CWR Crooked Creek	The waterbody is subject to Section 9 or 10 of the Rivers and Harbors Act	Crooked Creek is subject to the ebb and flow of the tide, with an indicated mean high water line (MHWL). The high tide line (HTL) is generally outside the channel, which flows through a tidal marsh. The HTL is at the interface between the tidal marsh and adjacent uplands at higher elevation. The property survey indicates the MHW line at 1.50', with the HTL at 2.92'. All elevations are NAVD 88. The survey indicates that 1.045 acres of this open, non-vegetated channel is present within the property boundaries.

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation
N/A	N/A

Table 3. (a)(3) Territorial Seas

(a)(3) Waters Name	Rationale to Support (a)(3) Designation
N/A	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A
N/A	N/A

Table 5. (a)(5)Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A

Table 6. (a)(6) Adjacent Waters

(a)(6) Waters Name	(a)(1)-(a)(5) Water Name to which this Water is Adjacent	Rationale for (a)(6) Designation and Additional Discussion. Identify the type of water and how the limits of jurisdiction were established (e.g., wetland, 87 Manual/Regional Supplement); explain how the 100-year floodplain and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
NAP-2017-00093 CWR Wetland A Tidal	Crooked Creek	Wetland A is tidal marsh, with 3.834 acres of the vegetated wetland present within the property according to the survey. Since wetland line WA is landward of the indicated high tide line (HTL), it represents the landward extent of Section 404 jurisdiction for the tidally-influenced areas (contiguous with tidal waters). The mean high water line (MHWL) is shown on the plan as the Section 10 jurisdictional limit. As such, based on the fact that the wetland is bordering/contiguous with the tidal waters of Crooked Creek (an (a)(1) waterbody), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – bordering/contiguous – with a wetland boundary), or waters type “A6BWB” in ORM.

NAP-2017-00093 CWR Wetland B Non-tidal	Crooked Creek	Wetland B is a 0.979-acre depressional wetland, roughly 80-120 feet wide and about 500 feet long. Much of it is dominated mainly by <u>Phragmites australis</u> , with some trees, shrubs and green briar (<u>Smilax</u>) around the outer (higher) portion. Some portions were ponded, mainly in the center lower portions (March 2017). At its closest point, it is about 130 feet from the HTL, and about 300 feet from the MHWL of Crooked Creek. There is a narrow (50-60 feet) break between this wetland and <u>Phragmites</u> -dominated wetlands that are contiguous with the tidally-influenced wetlands. The break between the two wetlands is very subtle, with probably a foot or less of elevation rise between the two. Based on its proximity to the tidal waters of an (a)(1) waterbody (i.e. less than 1,500 feet from the HTL), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – neighboring (iii) – with a wetland boundary, or waters type “A6N3HWP” in ORM.
NAP-2017-00093 CWR Wetland C Non-tidal	Crooked Creek	Wetland C is 0.268 acre in size. It is roughly 90-100 feet wide by about 150 feet long. It is about 45 feet from the HTL, and about 100 feet from the MHWL of Crooked Creek at its closest point. It is separated from the tidal marsh by about a 35-foot-wide upland break. It is dominated by trees (including red maple, <u>Acer rubrum</u>) and shrubs (including highbush blueberry, (<u>Vaccinium corymbosum</u>) with a scrubby, tangled understory including green briar (<u>Smilax</u>). Based on its proximity to the tidal waters of an (a)(1) waterbody (i.e. less than 1,500 feet from the HTL), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – neighboring (iii) – with a wetland boundary, or waters type “A6N3HWP” in ORM.
NAP-2017-00093 CWR Wetland D Non-tidal	Crooked Creek	Wetland D (0.022 acre) has some trees but not much shrubby understory. It is roughly 25 by 40 feet in size. It is about 30 feet from the HTL, and about 125 feet from the MHWL of Crooked Creek at its closest point. It is separated from the tidal marsh by about a 20-foot wide upland break. Based on its proximity to the tidal waters of an (a)(1) waterbody (i.e. less than 1,500 feet from the HTL), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – neighboring (iii) – with a wetland boundary, or waters type “A6N3HWP” in ORM.
NAP-2017-00093 CWR Wetland H Non-tidal	Crooked Creek	Wetland H (0.031 acre) is about 20-30 feet wide, and about 60 feet long. It abuts a retaining wall on the developed property. It has some trees, shrubs and green briar (<u>Smilax</u>), and a small area of standing water. It is about 485 feet from the HTL, and about 550 feet from the MHWL of Crooked Creek. There are about 500 feet of intervening uplands between this wetland and the tidal marsh system, including the developed portion of the property. Those uplands are up to 7-8 feet higher in elevation than the wetland (and up to 8-9 feet above the tidal marsh). Based on its proximity to the tidal waters of an (a)(1) waterbody (i.e. less than 1,500 feet from the HTL), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – neighboring (iii) – with a wetland boundary, or waters type “A6N3HWP” in ORM.
NAP-2017-00093 CWR Wetland I Non-tidal	Crooked Creek	Wetland I (0.072 acre) is roughly 60 by 70 feet in size. It is separated from Wetland B by a narrow (5-10 feet wide) berm. The lowest portions (in the center) were ponded, with some trees, shrubs, green briar (<u>Smilax</u>) and <u>Phragmites</u> around the outer portion. It is about 650 feet from the HTL, and about 725 feet from the MHWL of Crooked Creek. There are over 600 feet of intervening uplands between this wetland and the tidal marsh system. Those uplands are up to 4-5 feet higher in elevation than the wetland (and up to 5-6 feet above the tidal marsh). Based on its proximity to the tidal waters of an (a)(1)

		waterbody (i.e. less than 1,500 feet from the HTL), the wetland is regulated as Waters of the U.S pursuant to the 2015 CWR (i.e. (a)(6) adjacent waters – neighboring (iii) – with a wetland boundary, or waters type “A6N3HWB” in ORM.
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Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; discuss whether any similarly situated waters were present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE Name	(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water, etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Non-Jurisdictional Waters

Table 9. Non-Waters/No Significant Nexus

SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water.
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N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 10. Non-Waters/Excluded Waters and Features

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
N/A	N/A
N/A	N/A

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
Previously delineated (by the consultant) Wetlands E, F and G	The applicant requested reconsideration on previously delineated wetlands E, F and G. They provided additional soil documentation. Based on the information provided by the consultant and our observations on 17 July 2019, this office concurs with the agent's determination that the three previously delineated wetland areas in question (E, F and G) do not meet the criteria for a wetland under the 1987 Delineation Manual (Atlantic and Coastal Plain Supplement), and the NRCS Field Indicators of Hydric Soils.

Waters_Name	State	Cowardin Code	Hgm Code	Meas Type	Amount	Units
2017-93 CWR Crooked Creek	NJ	E1UB-ESTUARINE, SUBTIDAL UNCONSOLIDATED BOTTM		AREA	1.045	ACRES
2017-93 CWR Wetland A Tidal	NJ	E2EM-ESTUARINE, INTERTIDAL, EMERGENT	Estuarine Fringed	AREA	3.834	ACRES
2017-93 CWR Wetland B	NJ	PEM-PALUSTRINE, EMERGENT	Depressional	AREA	0.979	ACRES
2017-93 CWR Wetland C	NJ	PFO-PALUSTRINE, FORESTED	Depressional	AREA	0.268	ACRES
2017-93 CWR Wetland D	NJ	PFO-PALUSTRINE, FORESTED	Depressional	AREA	0.022	ACRES
2017-93 CWR Wetland H	NJ	PFO-PALUSTRINE, FORESTED	Depressional	AREA	0.031	ACRES
2017-93 CWR Wetland I	NJ	PFO-PALUSTRINE, FORESTED	Depressional	AREA	0.072	ACRES

Waters_Type	Latitude	Longitude	Local Wate Ohwm
A1	39.08544	-74.8114	Crooked Creek
A6BWB	39.08506	-74.8113	Crooked Creek
A6N3HWB	39.08395	-74.81	Crooked Creek
A6N3HWB	39.08487	-74.8106	Crooked Creek
A6N3HWB	39.08489	-74.8101	Crooked Creek
A6N3HWB	39.08366	-74.8112	Crooked Creek
A6N3HWB	39.08331	-74.8106	Crooked Creek

GENERAL NOTES:

- BEING A PORTION OF TAX LOT 28 IN TAX BLOCK 132.01 AS SHOWN ON THE MIDDLE TOWNSHIP TAX MAP SHEET No. 43 DATED APRIL, 2004, REVISED THROUGH NOVEMBER, 2007, CAPE MAY COUNTY, NEW JERSEY. ALSO BEING A PORTION OF THE SAME PREMISES AS DESCRIBED IN DEED DATED DECEMBER 29, 2011 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON DECEMBER 29, 2011 IN 3478, PAGE 649, SUBJECT TO THE PARAMOUNT RIGHTS OF THE STATE OF NEW JERSEY OVER LANDS NOW OR FORMERLY LOCATED BELOW THE MEAN HIGH WATER LINE OF CROOKED CREEK AND ALL LANDS CLAIMED BY THE N.J.D.E.P. BUREAU OF TIDELANDS MANAGEMENT, WHICHEVER IS LOCATED FURTHER UPLAND (SEE NOTE 8). EXEMPTING THEREOUT AND THEREFROM A PORTION ALONG STONE HARBOR BOULEVARD KNOWN AS PARCEL 4606 AS DESCRIBED IN DEED BOOK 3583, PAGE 646.
- THIS SURVEY IS MADE SUBJECT TO ANY RIGHTS, RESTRICTIONS, EASEMENTS, RIGHT OF WAY, EXCEPTIONS, OR COVENANTS THAT AN ACCURATE AND CURRENT TITLE REPORT MAY DISCLOSE.
- THIS SURVEY DOES NOT NECESSARILY LOCATE AND/OR DELINEATE ALL MAPPED OR UNMAPPED REGULATED ENVIRONMENTAL CONSTRAINTS THAT MAY BE WITHIN THE JURISDICTIONAL LIMITS OF FEDERAL, STATE, AND/OR LOCAL REGULATORY AGENCIES.
- THIS SURVEY IS BASED ON FIELD CONDITIONS AS OF NOVEMBER 20, 2017.
- REFERENCE MERIDIAN BASED ON MATCHING THE BEARING SYSTEM FROM DEED BOOK 1632, PAGE 538.
- THE TIDELANDS CLAIM LOCATION SHOWN ON THIS SITE WAS OBTAINED FROM THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF GEOGRAPHIC INFORMATION SYSTEMS DIGITIZED DATA FILES (CD ROM) WHICH REQUIRES THE FOLLOWING CREDIT/DISCLAIMER: "THIS (MAP/PUBLICATION/REPORT) WAS DEVELOPED USING GEOGRAPHIC INFORMATION SYSTEM DIGITAL DATA DEVELOPED UNDER THE AUSPICES OF BUREAU OF TIDELANDS MANAGEMENT, NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUT THIS SECONDARY PRODUCT HAS NOT BEEN VERIFIED BY NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND IS NOT STATE-AUTHORIZED".
- LOCATION OF UNDERGROUND UTILITIES HAVE NOT BEEN INVESTIGATED AS PART OF THIS SURVEY. IT SHALL BE THE RESPONSIBILITY OF ANY CONTRACTOR AND/OR INDIVIDUAL TO DETERMINE THE EXACT LOCATION OF ANY AND ALL SUBSURFACE UTILITIES PRIOR TO ANY EXCAVATION.
- THE MEAN HIGH WATER LINE SHOWN WAS LOCATED ONLY ON A PORTION OF THE SITE PER AGREEMENT WITH THE CLIENT. THE TIDELAND CLAIM LIMIT IS UTILIZED AS ESTABLISHING THE UPLAND LIMITS OF THE SITE AT THE LOCATIONS WHERE THE MEAN HIGH WATER LINE WAS NOT LOCATED OR WHERE THE MEAN HIGH WATER LINE IS LOCATED OUTSHORE OF THE MAPPED TIDELANDS CLAIM LINE AND IS SUBJECT TO CHANGE BASED ON A FIELD DELINEATED MEAN HIGH WATER LINE LOCATION ON THE REMAINING PORTION OF THE SITE OR N.J.D.E.P. BUREAU OF TIDELANDS VERIFICATION OF THE EXTENT OF THE CLAIM LIMIT.
- POINTS WA-1 TO WA-30, WB-1 TO WB-29, WC-1 TO WC-13, WD-1 TO WD-5, WH-1 TO WH-6 AND WI-1 TO WI-10 SHOWN INDICATE FLAGGED FRESHWATER WETLANDS LIMITS AS DELINEATED BY THE LOMAX CONSULTING GROUP AND LOCATED IN THE FIELD BY GIBSON ASSOCIATES, P.A. ON APRIL 21, 2011.
- LIMITS OF FRESHWATER WETLANDS SHOWN WERE VERIFIED BY THE N.J.D.E.P. REFER TO AMENDMENT TO FRESHWATER WETLANDS LETTER OF INTERPRETATION/LINE VERIFICATION ISSUED BY THE N.J.D.E.P. ON SEPTEMBER 29, 2011 (FILE No. 0506-09-0072.1-FWW 110001). LETTER OF INTERPRETATION EXTENDED TO SEPTEMBER 01, 2021 PER AUTHORIZATION FOR FRESHWATER WETLANDS LETTER OF INTERPRETATION-EXTENSION DATED JULY 08, 2016 (FILE No. 0506-09-0072.1 FWW160001).
- THE LOCATION OF THE MEAN HIGH WATER LINE SHOWN ON THIS PLAN IS BASED ON PUBLISHED TIDAL DATUM INFORMATION PROVIDED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (N.J.D.E.P.) TIDELANDS MANAGEMENT PROGRAM AND THE NEW JERSEY GEOLOGICAL SURVEY (N.J.G.S.). THE REFERENCE TIDE STATION IS No. 853-5581, STONE HARBOR, GREAT CHANNEL, NEW JERSEY.
- MEAN HIGH WATER LINE SHOWN WAS FIELD LOCATED BY GIBSON ASSOCIATES, P.A. ON APRIL 18, 2011 AND VERIFIED ON NOVEMBER 20, 2017 AND IS BASED ON ELEVATION 1.50 (N.A.V.D. 1988). MEAN HIGH WATER ELEVATION AT STATION 853-5581 WAS CONVERTED FROM MEAN LOWER LOW WATER DATUM TO N.A.V.D. 1988 TO DERIVE ELEVATION 1.50 (N.A.V.D. 1988) AS THE MEAN HIGH WATER ELEVATION.
- THE DEPT. OF THE ARMY HIGH TIDE LINE WAS FIELD LOCATED BY GIBSON ASSOCIATES, P.A. ON NOVEMBER 20, 2017 AND IS BASED ON ELEV 2.92 (N.A.V.D. 1988) WHICH IS THE ELEVATION OF THE PROJECTED HIGHEST TIDE OCCURRING DURING THE PERIOD OF OCTOBER 30, 2017 TO OCTOBER 30, 2018 PROJECTED TO OCCUR ON JULY 13, 2018 AT ELEV. 5.58 (MEAN LOWER LOW WATER DATUM) AND CONVERTED TO N.A.V.D. 1988 TO DERIVE ELEV. 2.92 (N.A.V.D. 1988) AS THE DEPT. OF THE ARMY HIGH TIDE LINE.
- SURVEY REFERENCES:
 - DEED DATED MARCH 26, 1986 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON MARCH 27, 1986 IN DEED BOOK 1632, PAGE 543.
 - DEED DATED MARCH 26, 1986 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON MARCH 27, 1986 IN DEED BOOK 1632, PAGE 538. (RE-RECORDED IN DEED BOOK 1635, PAGE 840).
 - ATLANTIC CITY ELECTRIC COMPANY EASEMENT DATED JUNE 13, 1996 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON AUGUST 19, 1996 IN DEED BOOK 1682, PAGE 140.
 - CAPE MAY COUNTY MUNICIPAL UTILITIES AUTHORITY SEWER RIGHT OF WAY/EASEMENT DATED OCTOBER 05, 1990 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON NOVEMBER 07, 1990 IN DEED BOOK 2096, PAGE 342.
 - DEED DATED DECEMBER 29, 2011 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON DECEMBER 29, 2011 IN DEED BOOK 3478, PAGE 649.
 - DECLARATION OF TAKING DATED APRIL 08, 2014 AND RECORDED IN THE CAPE MAY COUNTY CLERK'S OFFICE ON JUNE 12, 2014 IN DEED BOOK 3583, PAGE 646.
- THIS SURVEY IS NOT INTENDED TO BE USED FOR MORTGAGE OR CONVEYANCE PURPOSES.
- COORDINATE VALUES SHOWN BASED ON NEW JERSEY STATE PLANE COORDINATE SYSTEM (N.A.D. 1983).
- THIS PLAN IS PREPARED IN ACCORDANCE WITH THE OWNER'S ENVIRONMENTAL CONSULTANT, LOMAX CONSULTING GROUP'S MEETING WITH THE US ARMY CORPS OF ENGINEERS (USACE) OF JULY 17, 2019 WHERE IT WAS DETERMINED THAT PRIOR WETLANDS AREAS E, F AND G DID NOT MEET FEDERAL STANDARDS AS WETLANDS.

LEGEND:

	VINE FENCE		IRON PIN FOUND
	WOOD FENCE		SANITARY SEWER
	CHAIN LINK FENCE		OVERHEAD WIRE
	PROPERTY LINE		WATER
	CONCRETE		GAS
	X-CUT SET		POINT OF BEGINNING
	CM FOUND		POINT OF CURVATURE
	CM SET		POINT OF TANGENCY
	CM TO BE SET		EXISTING SPOT ELEVATION
	I.P. FOUND		OLD LOT NUMBERS
	I.P. TO BE SET		WETLANDS FLAG
	WOODS LINE		LIGHT POLE
	TREE		WETLANDS
	INLET		DEPT. OF THE ARMY HIGH TIDE LINE
	CONC. CURB		LATH SET
	DEPRESSED CONC. CURB		
	EDGE OF PAVEMENT		

COURSES ALONG STONE HARBOR BOULEVARD:

COURSE	BEARING	DISTANCE
(1)	S 44° 50' 00" E	21.90'
(2)*	RADIUS=4762.00'	69.12'
(3)	N 45° 10' 00" E	5.00'
(4)*	RADIUS=4767.00'	188.12'
(5)	S 37° 21' 59" E	181.52'
(6)*	RADIUS=4846.00'	11.78'

* CURVE	RADIUS	DELTA ANGLE	LENGTH	CHORD BEARING	CHORD LENGTH
(2)	4762.00'	00° 49' 54"	69.12'	S 44° 25' 03" E	69.12'
(4)	4767.00'	02° 15' 40"	188.12'	S 42° 52' 19" E	188.11'
(6)	4846.00'	00° 08' 21"	11.78'	S 41° 43' 15" E	11.78'

USACE WETLANDS PLAN (SEE NOTE 17)

PREPARED BY:



GIBSON ASSOCIATES, P.A.
CONSULTING ENGINEERS AND SURVEYORS
522 SEA ISLE BOULEVARD
OCEAN VIEW, NEW JERSEY 08230
(609) 624-1944

PLAN OF SURVEY
LOT 28, BLOCK 132.01
MIDDLE TOWNSHIP
CAPE MAY COUNTY, NEW JERSEY

MARK J. GIBSON
LICENSED PROFESSIONAL LAND SURVEYOR
N.J.P.L.S. LICENSE No. 32115

DATE	REVISIONS
08-20-19	REV. PER COMMENTS FROM LOMAX DATED 07-17-19 AND 08-19-19
07-12-18	ADDRESS ACCE COMMENTS DATED 06-18-18
12-05-17	UPDATE SURVEY
02-06-12	ADD DEPT. OF THE ARMY HIGH TIDE LINE UPDATE WETLANDS LINES PER N.J.D.E.P. L.O.I. FILE No. 0506-09-0072.1 FWW110001 DATED 09/29/11

DRAWN: JJS CHECKED: WPF/MJG DATE: 12-29-11 SCALE: 1" = 50' SHEET 1 OF 2 DWG. No. 3237-20

Approximate Location Of
Dept. Of The Army High Tide Line
Located In The Field By Gibson
Associates, P.A. On November 20, 2017
Based On Elev. 2.92 (N.A.V.D. 1988)

Approximate Location Of
Dept. Of The Army High Tide Line
Located In The Field By Gibson
Associates, P.A. On November 20, 2017
Based On Elev. 2.92 (N.A.V.D. 1988)

(Deed)
R=850.00'
L=1456.36'
A=98° 10' 07"
C=S 85° 44' 56" E
C=1284.65'

Block 132.01
Lot 28

Lot 25
Lands N/F Of
R & RD, LLC

PLAN OF SURVEY



SCALE 1" = 50'

P:\File 3237-20\REV. 12-29-11\DWG\3237-20\1914\DWG_3237-20\1914.DWG, 12/29/2019 2:34:16 PM, G:\DWG

COURSE	BEARING	DISTANCE
℞ TO WA-4	S 71° 48' 12" E	23.84'
WA-4 TO WA-5	S 85° 13' 15" E	30.31'
WA-5 TO WA-6	N 47° 22' 06" E	68.28'
WA-6 TO WA-7	N 48° 41' 21" E	56.89'
WA-7 TO WA-8	N 53° 42' 27" E	88.32'
WA-8 TO WA-9	N 66° 31' 11" E	52.54'
WA-9 TO WA-10	N 84° 33' 27" E	53.13'
WA-10 TO WA-11	S 84° 39' 54" E	47.92'
WA-11 TO WA-12	N 68° 48' 21" E	70.80'
WA-12 TO WA-13	N 64° 07' 15" E	78.72'
WA-13 TO WA-14	N 78° 43' 12" E	70.28'
WA-14 TO WA-15	S 53° 03' 12" E	56.97'
WA-15 TO WA-16	S 84° 21' 13" E	71.45'
WA-16 TO WA-17	N 86° 48' 40" E	89.31'
WA-17 TO WA-18	S 77° 32' 26" E	69.30'
WA-18 TO WA-19	S 75° 29' 47" E	71.83'
WA-19 TO WA-20	S 77° 04' 55" E	62.84'
WA-20 TO WA-21	S 69° 30' 07" E	66.75'
WA-21 TO WA-22	S 40° 46' 11" E	31.26'
WA-22 TO WA-23	S 11° 57' 15" E	38.11'
WA-23 TO WA-24	S 68° 58' 25" E	64.74'
WA-24 TO WA-25	S 52° 53' 48" E	43.36'
WA-25 TO WA-26	S 24° 36' 43" E	72.96'
WA-26 TO ℞	S 25° 31' 47" E	13.45'

COURSE	BEARING	DISTANCE
WB-1 TO WB-2	N 60° 54' 41" W	50.78'
WB-2 TO WB-3	S 40° 46' 51" W	72.07'
WB-3 TO WB-4	S 41° 31' 07" W	48.51'
WB-4 TO WB-5	N 27° 59' 43" W	47.22'
WB-5 TO WB-6	S 86° 33' 54" W	22.78'
WB-6 TO WB-7	S 32° 35' 14" W	58.93'
WB-7 TO WB-8	S 50° 22' 20" W	17.66'
WB-8 TO WB-9	N 77° 19' 02" W	24.39'
WB-9 TO WB-10	S 03° 59' 43" W	46.39'
WB-10 TO WB-11	S 38° 20' 48" E	35.80'
WB-11 TO WB-12	S 38° 22' 27" W	10.55'
WB-12 TO WB-13	N 44° 10' 54" W	34.42'
WB-13 TO WB-14	N 52° 14' 35" W	27.34'
WB-14 TO WB-15	S 48° 30' 28" W	57.11'
WB-15 TO WB-16	S 18° 40' 28" W	81.78'
WB-16 TO WB-17	S 42° 26' 09" W	50.56'
WB-17 TO WB-18	S 40° 32' 41" W	29.42'
WB-18 TO WB-19	S 36° 54' 33" E	34.78'
WB-19 TO WB-20	S 58° 46' 48" E	31.38'
WB-20 TO WB-21	S 71° 47' 41" E	16.90'
WB-21 TO WB-22	N 55° 27' 00" E	23.27'
WB-22 TO WB-23	N 41° 07' 21" E	73.73'
WB-23 TO WB-24	N 21° 54' 17" E	29.81'
WB-24 TO WB-25	N 37° 55' 54" E	77.58'
WB-25 TO WB-26	N 61° 20' 34" E	88.66'
WB-26 TO WB-27	N 48° 34' 29" E	61.11'
WB-27 TO Ȁ	N 49° 18' 59" E	47.49'
ALONG Ȁ	N 45° 10' 00" E	23.02'
Ȁ TO WB-29	N 43° 56' 19" E	40.22'
WB-29 TO WB-1	N 02° 05' 20" W	30.30'

COURSE	BEARING	DISTANCE
WC-1 TO WC-2	S 52° 23' 21" E	55.47'
WC-2 TO WC-3	N 67° 56' 17" E	47.14'
WC-3 TO WC-4	S 61° 05' 10" E	36.43'
WC-4 TO WC-5	N 37° 44' 57" E	40.51'
WC-5 TO WC-6	N 20° 39' 26" E	47.01'
WC-6 TO WC-7	N 28° 17' 26" W	25.73'
WC-7 TO WC-8	N 84° 40' 25" W	40.82'
WC-8 TO WC-9	S 85° 25' 44" W	28.61'
WC-9 TO WC-10	S 32° 21' 34" W	16.68'
WC-10 TO WC-11	S 53° 49' 30" W	23.69'
WC-11 TO WC-12	N 41° 28' 51" W	24.27'
WC-12 TO WC-13	S 59° 43' 48" W	34.11'
WC-13 TO WC-1	S 08° 36' 36" W	39.79'

COURSE	BEARING	DISTANCE
WD-1 TO WD-2	S 69° 20' 08" E	28.85'
WD-2 TO WD-3	N 41° 08' 14" E	16.95'
WD-3 TO WD-4	N 39° 58' 10" W	26.21'
WD-4 TO WD-5	S 88° 04' 50" W	27.58'
WD-5 TO WD-1	S 16° 02' 20" E	22.63'

COURSE	BEARING	DISTANCE
WH-1 TO WH-2	S 27° 10' 25" W	36.51'
WH-2 TO R _L	S 45° 17' 05" W	26.50'
ALONG R _L	S 44° 50' 00" E	16.24'
R _L TO WH-5	N 56° 23' 15" E	42.79'
WH-5 TO WH-6	N 30° 15' 21" E	11.08'
WH-6 TO WH-1	N 30° 16' 59" W	34.03'

COURSE	BEARING	DISTANCE
WI-1 TO WI-2	S 52° 29' 59" W	16.81'
WI-2 TO WI-3	S 17° 32' 50" E	22.99'
WI-3 TO $\underline{R_L}$	S 36° 17' 59" W	5.89'
ALONG $\underline{R_L}$	S 44° 50' 00" E	56.32'
$\underline{R_L}$ TO WI-8	N 59° 05' 12" E	13.66'
WI-8 TO WI-9	N 40° 01' 03" E	44.31'
WI-9 TO WI-10	N 70° 04' 26" W	38.40'
WI-10 TO WI-1	N 56° 06' 11" W	40.87'

[illegible]