Delaware Department of Natural Resources and **Environmental Control** Delaware Coastal Management Program



Initial Review:	
Updated On:	
Complete:	

## Coastal Zone Management Act **Federal Consistency Form**

Official Use Only

This document provides the Delaware Coastal Management Program (DCMP) with a Federal Consistency Determination or Certification for activities regulated under the Coastal Zone Management Act of 1972, as amended. and NOAA's Federal Consistency Regulations, 15 C.F.R. Part 930. Federal agencies and other applicants for federal consistency are not required to use this form; it is provided to applicants to facilitate the submission of a Consistency Determination or Consistency Certification. In addition, federal agencies and applicants are only required to provide the information required by NOAA's Federal Consistency Regulations.

Project/Activity Name:	PAESE/KIMBROU	JGH DREDGIN	G/DOCKING				
I. Federal Agency or Non-Federal Applicant Contact Information:							
Contact Name/Title: Evely	n Maurmeyer,	CER, Inc.	(applicant	's agent	.)		
Federal Agency Contractor Na	me (if applicable):	n/a	Market 1				
Federal Agency: IP a (either the federal agency propassistance to a non-federal app	pplication sub osing an action <u>or</u> the fe plicant)	omitted to I ederal agency issu	JS Army Cor ing a federal licen	ps of Er se/permitor	ngineers Tnancial		
Mailing Address: PO Bo	x 674			- 5			
City: Lewes	State: DE	Zip Code: 199	58				
E-mail: maurmeye@udel	.edu	Telephone #: (	302) 645-9	610			
II. Federal Consistency Ca	tegory:		4				
Federal Activity or Develo (15 C.F.R. Part 930, Subp	pment Project eart C)	Federal L (15 C.F.R	icense or Permit A 2. Part 930, Subpa	Activity	*1		
Outer Continental Shelf Add (15 C.F.R. Part 930, Subp		Federal L	icense or Permit A	Activity which	occurs		
Federal Financial Assistant (15 C.F.R. Part 930, Subp	nce part F)	wholly in a activities i	another state (inte dentified in DCMF	erstate consis o's Policy doo	tency cument)		
III. Detailed Project Descrip	otion (attach additional	sheets if necessar	y):				
See attached shee	ts						
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Detailed Analys	sis of Consistency s Management	with DCMP En	nforceable Policie	s (attach additiona	al sheets if necess	sary):
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cy 5.3: Coastal V	Vaters Managemer	nt (includes wells,	, water supply, and stor	mwater management.	Attach additional she	ets if nece
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Policy 5.13: State Owned Coastal Recreation and Conservation		
Policy 5.14: Public Trust Doctrine		
Policy 5.15: Energy Facilities		
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Policy 5.16: Public Investment		
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Policy 5.17: Recreation and Tourism		
Policy 5 40, Notice 1 D. C.		
Policy 5.18: National Defense and Aerospace Facilities		
Policy 5.19: Transportation Facilities		

Policy 5.20: Air Quality Managem	ent					
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Policy 5.21: Water Supply Manage	ement					
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Policy 5.22: Waste Disposal Mana	gement					
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Policy 5.24: Pollution Prevention			-			
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Policy 5.25: Coastal Management	Coordination					
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VI. JPP and RAS Review (Check	all that apply):					
Has the project been reviewed		nt Permit Proce	ssing ar	nd/or Reg	gulatory Advisory S	ervice meeting?
☐ JPP	RAS			None		
*If yes, provide the date of the r	neeting(s):					

attach details)

VII. S	II. Statement of Certification/Determination and Signature (Check one and sign below):							
FEDERAL AGENCY CONSISTENCY DETERMINATION. Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity is consistent to the maximum extent practicable with the enforceable policies of the Delaware Coastal Management Program.								
OR								
FEDERAL AGENCY NEGATIVE DETERMINATION. Based upon the information, data, and analysis included herein, the federal agency, or its contracted agent, listed in (I) above, finds that this proposed activity will not have any reasonably foreseeable effects on Delaware's coastal uses or resources (Negative Determination) and is therefore consistent with the enforceable policies of the Delaware Coastal Management Program.								
OF	₹							
and age enf	NON-FEDERAL APPLICANT'S CONSISTENCY CERTIFICATION. Based upon the information, data, and analysis included herein, the non-federal applicant for a federal license or permit, or state or local government agency applying for federal funding, listed in (I) above, finds that this proposed activity complies with the enforceable policies of the Delaware Coastal Management Program and will be conducted in a manner consistent with such program.							
Sign	nature: WYMM	111-14	allines					
Printed N	Name: Evelyn M	. Maurme	yer, CER,	Inc.	Date:	1/8/2021		
Federal A	ctivity or Development P. Part 930, Subpart C)	umed if the s	n or consistent tate's response	is not received	I within the allov	additional 15 days or		
	icense or Permit							
	. Part 930, Subpart D)			Six months, with a status letter at three months. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.63)				
	ntinental Shelf Activity Part 930, Subpart E)			Six months, with a status letter at three months. If three month status letter not issued, then concurrence presumed. The six month review period can be stayed by mutual agreement. (15 C.F.R. § 930.78)				
	inancial Assistance to Sta . Part 930, Subpart F)	ate or Local (	Governments	State	Clearinghouse sch	nedule		
OFFICIAL USE ONLY:								
Reviewed	Ву:	-	Fed Con ID:		Date Received	d:		
Public noti	ice dates:	to		Comments Re	ceived: NC	YES [attach comments]		
Decision type:				_ Decision Date:				

#### III. Detailed Project Description:

#### **Applicants**

Michael Paese and Blake Kimbrough 330 Pilottown Road Lewes, DE 19958

### Site Location and Description

The proposed project site is Tax Map Parcel #3-35-4.19-95.03, adjacent to the Lewes and Rehoboth Canal across from the applicants' home at 330 Pilottown Road, Lewes, Sussex County, Delaware. See Figures 1, 2, and 3 for location maps and directions to site; and Figure 4 for site location on U.S.G.S. topographic map, Lewes, Delaware quadrangle. The site is depicted on State of Delaware DNREC Wetland Map #065, 1988 photobase (Figure 5), and is mapped O (uplands or non-tidal wetlands less than 400 acres); T (Tidal mudflats, in some cases vegetated/sand bars); and W (Water). See Figures 6a and 6b for aerial photographs, and Figure 7 for ground-level photograph of site.

#### **Proposed Project:**

The applicants propose the following activities:

- New Hydraulic Dredging. 1,350± c.y. of new hydraulic dredging to a depth of -3' MLW. The area to be dredged is 140' alongshore x 70' cross-shore (9,800 sq. ft./0.22 acre). See Figure 8 for bathymetric survey (conducted by Plitko Engineering); and Figure 9 for plan view and cross-sections of proposed dredging area.
- Dredged Material Disposal. Dredged material (predominantly mud) will be transported across the waterway via hydraulic pipeline to an existing upland confined disposal facility on the opposite (north) side of the Lewes and Rehoboth Canal. The pipeline will cross 65' of vegetated tidal wetlands dominated by Spartina alterniflora. See Figures 2, 3, and 4 for location; Figure 5 on State of Delaware DNREC Wetland Map #066; Figure 6b for aerial photograph; Figures 12, 13, and 14 for ground-level photographs; and Figure 15 for schematic diagrams.

• **Docking Facilities**. Upon completion of dredging activities, new docking facilities, consisting of a 10' x 3' walkway; 26' x 4' fixed pier; a 6' x 30' fixed dock with 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock will be constructed.

## IV. General Analysis of Coastal Effects.

Dredging and disposal are anticipated to take place in January-February 2022, in compliance with time-of-year restrictions to reduce impacts to fish spawning. Dredged material will be transported via hydraulic pipeline to an existing upland confined upland disposal area. Dredged material will be transported from the dredging site via hydraulic pipeline to an existing upland confined upland disposal area. The disposal pipeline will cross approximately 65' of wetlands dominated by smooth cordgrass (Spartina alterniflora) to access the existing upland disposal area. The 12" diameter pipeline will be placed directly on marsh surface, temporarily impacting approximately 65 sq. ft. of wetlands during after which the pipeline will be removed. However, since the project will take place during the winter dormant season, impacts on vegetation are anticipated to be minimal, with full recovery expected by the following growing season, as was the case for previous dredging/disposal events. No impacts anticipated on adjacent coastal environments once dredging and disposal are completed. Upon completion of dredging, the docking facilities will be constructed. The dimensions of the walkway, piers, and fixed and floating docks are in compliance with DNREC WSLS Guidelines. Materials (salttreated wood; poly-encapsulated floats; aluminum gangway; aluminum/steel lift) are non-toxic and safe for use in marine/estuarine environments.

## V. Detailed Analysis of Consistence with DCMP Enforceable Policies

Policy 5.1: Wetlands Management. There are no DNREC-regulated wetlands (M, marsh) mapped on site (see Figure 5). However, there is a narrow fringe of *Spartina alterniflora* wetlands along the waterway (see photograph, Figure 7). Dredging will avoid the vegetated wetland fringe along the shoreline at the dredging site. The discharge pipeline will cross approximately 65' of wetlands dominated by smooth cordgrass (*Spartina alterniflora*) to access the existing upland disposal area. The 12" diameter pipeline will be placed directly on marsh surface, temporarily impacting approximately 65 sq. ft. of wetlands during disposal (early 2022), after which the pipeline will be removed. However, since the project will take place during the winter dormant season, impacts on vegetation are anticipated to be minimal, with full recovery expected by the following growing season, as was the case for previous dredging/disposal events. No impacts anticipated on adjacent coastal environments once the project is completed. The proposed 10' x 3' access walkway from uplands to the proposed fixed pier will be elevated above the wetland surface to minimize shading effects.

- **Policy 5.2: Beach Management.** The project site is not within the area of DNREC-regulated beaches.
- Policy 5.3: Coastal Waters Management. The proposed project will assure continued availability of the waterway (Lewes and Rehoboth Canal) for public recreational purposes. The project will maintain beneficial uses of the waterway for the public (including secondary contact recreation such as boating and fishing). Moreover, the project will not result in pollution which may threaten the safety and health of the public. The waterway is not designated for use as a public water supply. Approved materials will be utilized for construction of the docking facilities (salt-treated wood pilings, galvanized hardware; poly-encapsulated floats; aluminum gangway; aluminum/steel list); no creosote-treated timber or other harmful materials will be utilized. It is not anticipated that the proposed project will degrade the waterway.
- Policy 5.4: Subaqueous Land and Coastal Strip Development. The proposed project does not involve industrial nor manufacturing facilities. There is no deposition of material (filling) nor extraction of materials (dredging) associated with the proposed project in subaqueous lands. The coastal strip will continue to be protected for public use for recreation, fishing, and crabbing; the proposed project will not impact these activities. No additional supporting facilities will be required for the project.
- **Policy 5.5: Public Lands Management.** The applicant has submitted a permit application to the Wetlands and Subaqueous Lands Section, DNREC, for which a Subaqueous Lands Permit/Lease will be issued.
- **Policy 5.6: Natural Lands Management.** The project site does not lie within a State Natural Heritage site nor within a Delaware National Estuarine Research Reserve.
- Policy 5.7: Flood Hazard Areas Management. The proposed project is not anticipated to contribute to increased flood hazards.
- Policy 5.8: Port of Wilmington. The project site is not located in the Port of Wilmington.
- Policy 5.9: Woodlands and Agricultural Lands Management. The project site is located within the City of Lewes, in a residential community, not in woodlands nor agricultural lands.
- Policy 5.10: Historic and Cultural Areas Management. There are no known archaeological, historical, nor cultural resources at the project site. US Army Corps of Engineers Public Notice for a nearby property at 2 (CENAP-OP-R-2017-738-85, applicant/ permittee) stated that no registered properties or properties listed as eligible for inclusion in the National Register of Historic Places are located within the permitted area of work. It is anticipated that the same conclusion will be reached during review of this application.

- Policy 5.11: Living Resources. The proposed project is not anticipated to adversely affect living resources. US Army Corps of Engineers Public Notice for a nearby property at (CENAP-OP-R-2017-738-85, applicant/ permittee) identified several managed species of fish as occurring in the vicinity of the project. The Corps' analysis of effects of dredging states that "the proposed work...would occur is a small area of waters within (the)... L&R Canal subject to regular boating activity and substantial wake energy. For these reasons the proposed work area is an unlikely spawning or nursery area for the managed species. Consequently, concentrations of sessile life stages (eggs and larva) of the listed species are not expected to be within the area under review... The pelagic adults and juveniles of the listed species are highly mobile and capable of avoiding such impacts as may be associated with the work." It is anticipated that the same conclusion will be reached during review of this application.
  - Policy 5.12: Mineral Resource Management. No mineral extraction proposed.
- Policy 5.13: State-Owned Coastal Recreation and Conservation. The site is not State-owned. However, public recreational opportunities in the Lewes and Rehoboth Canal will be maintained.
- Policy 5.14: Public Trust Doctrine. The public's right to navigation will not be impeded by the proposed project.
  - Policy 5.15: Energy Facilities. The proposed project does not involve energy facilities.
- Policy 5.16: Public Investment. The project is entirely private; no public investment involved.
- Policy 5.17: Recreation and Tourism. The proposed docking facilities will improve recreational boating opportunities for the applicants, their family and friends, and allow increased participation in water-based recreational activities (boating, fishing, crabbing, etc.).
- Policy 5.18: National Defense and Aerospace Facilities. The proposed activity does not involve national defense not aerospace facilities.
- Policy 5.19: Transportation Facilities. The proposed project does not involve commercial transportation facilities.
- Policy 5.20: Air Quality Management. Air pollution resulting from the proposed project will be minimal. There may be minor, temporary, localized effects during dredging from equipment used.

- Policy 5.21: Water Supply Management. The site is not located in a water supply area.
- Policy 5.22: Waste Disposal Management. No waste disposal is associated with the proposed project.
- **Policy 5.23: Development.** The proposed project is not associated with new community development.
- **Policy 5.24: Pollution Prevention.** There will be no pollution associated with the proposed project.
- Policy 5.25: Coastal Management Coordination. Coordination among State and Federal agencies will take place in review of the proposed project. The public will have the opportunity to comment of the project in response to Public Notices issued by the US Army Corps of Engineers; DNREC Wetlands and Subaqueous Lands Section; and Delaware Coastal Management Program.

#### U.S. Army Corps of Engineers (USACE) APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT 33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved -OMB No. 0710-0003 Expires: 01-08-2018

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

#### PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1140b) and may be accessed at the following website: <a href="http://dpcid.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx">http://dpcid.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx</a>					
	(ITEMS 1 THRU 4 TO BE	FILLED BY THE	CORPS)		
1. APPLICATION NO.	2.º FIELD OFFICE CODE		3. DATE RECEIVED	4. DATE APP	LICATION COMPLETE
	(ITEMS BELOW TO BE	FILLED BY APP	LICANT)		
5. APPLICANT'S NAME Michael First- Middle- & Blake Company- E-mail Address-	8 AUTHORIZED AGENT'S NAME AND TITLE (agent is not required) First - Evelyn Middle - M. Last - Maurmeyer Company - CER, Inc. E-mail Address - maurmeye@udel.edu				
6. APPLICANT'S ADDRESS:		9 AGENTS A	DDRESS:		
Address 330 Pilottown Road City Lewes State DE	i Zip-19958 <sub>Country-</sub> USA	Address- PO I	Box 674 State - D	E Zip - 19	9958 Country -USA
7. APPLICANT'S PHONE NOs. WAREA COD	10. AGENTS PHONE NOs. WAREA CODE				
a. Residence b. Business	c. Fax	a. Residence	b. Busines (302) 645	2.2.1	c. Fax (302) 645-4332
11. Thereby authorize, Evelyn Mauri supplemental information in support of this Turkbul Pelde £	BIAKE FORMS	my agent in the p	7-/2-2 DATE	eation and to furr	sish, upon request
	AME, LOCATION, AND DESCRI	TION OF PROJ	ECT OR ACTIVITY	-4	. Itt sine
12. PROJECT NAME OR TITLE (see instruction PAESE/KIMBROUGH DREDGE)	ons) ING/DOCKING FACII	LITY	*		
13. NAME OF WATERBODY, IF KNOWN (if a Lewes and Rehoboth Ca	pplicable) anal	14. PROJECTS Tax Ma Address 330	Pilottown	applicable) -35-4.19 Road	-95.03,
15. LOCATION OF PROJECT  Latitude: •N 38 . 779084 ° N Longitude:	ude: •w-75.143312°	City - Lewes	s	tale-DE	Zip- 19958
16. OTHER LOCATION DESCRIPTIONS, IF K	NOWN (see instructions)				
State Tax Parcel ID #3-35-4.19-95	.03 Municipality Th	ne City o	of Lewes		
Section Township - ENG FORM 4345, MAY 2018	DDD No. 11	Range -			
LITO I WILLIAM TOTO, INPLI ZUIO	PREVIOUS ED	ITIONS ARE OB	SOLETE.		Page 1 of 2

17. DIRECTIONS TO THE SITE	*
See Figures 1, 2, and 3 for maps and dire	ctions.
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18. Nature of Activity (Description of project, include all features)	540
Applicants propose 1,350 c.y. hydraulic disposal at existing upland confined disposal	artina alterniflora wetlands  pon completion. Once dredging is  ruct a docking facility consisting  pier; 6' x 30' floating dock with  ay, and a 6' x 50' floating dock.
19. Project Purpose (Describe the reason or purpose of the project, see instruction	ıs)
Purpose of dredging is to obtain navig facility is to provide mooring facilit	able depths. Purpose of docking
	· · ·
(a)	
USE BLOCKS 20-23 IF DREDGED AND/OR	FILL MATERIAL IS TO BE DISCHARGED
20. Reason(s) for Discharge	•
Dredging of 1,350 c.y. of sediment to	a depth of -3' MLW.
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21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic	Yards:
Type mud Type	Туре
Amount in Cubic Yards Amount in Cubic Yards	Amount in Cubic Yards
1,350 c.y.	~ )
22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)  Acres No wetlands/waters to be filled.	
or	9
Linear Feet	
23. Description of Avoidance, Minimization, and Compensation (see instructions)	,
See attached sheet.	
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ENG FORM 4345, MAY 2018

Page 2 of 3

. Is Any Portion of the W	ork Already Complete?	Yes X No IF YES, DE	SCRIBE THE COMPLET		
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. Addresses of Adjoining	g Property Owners, Lessees	s, Etc., Whose Property Adjo	oins the Waterbody (if more	than can be entered here, please attac	ii a supplication in the
See attache	ed sheet.				
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6. List of Other Certifica	tes or Approvals/Denials red	eived from other Federal, S	State, or Local Agencies for	or Work Described in This App	olication.
AGENCY	TYPE APPROVAL*	IDENTIFICATION	DATE APPLIED	· DATE APPROVED	DATE DENIED
		NUMBER	July, 2021	a andino	
DE WSLS	Subaq. Lease , WQC	Not yet available	UUTY, 2021	pending	
DE DCMP	CZM Consistency	11		11	35
ICACE D. h. Di-4	RE License	1)	- 11	II.	
ISACE Balt. Dist.	KE License			-	
Mould include but is not	restricted to zoning, buildin	g and flood plain permits			
7 Application is hereby	made for permit or permits	to authorize the work descri	bed in this application. 1	certify that this information in t	his application is
omplete and accurate. I	further certify that I possess	the authority to undertake	the work described herein	n or am acting as the duly auth	norized agent of the
pplicant.			Trollers MI	Milalum/	V/2/20
OLOUET ID	F OF ADDITIONAL	DATE	WYMM VIII	M/ MW/	DATE
	E OF APPLICANT	DATE	the proposed activity	(applicant) or it may be sig	ned by a duly
	statement in block 11 ha			applicant of it may be sign	nou by a daily
RIISC Section 100	1 provides that: Whoever	. in any manner within th	ne jurisdiction of any de	partment or agency of the	United States
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nowingly and willfully	falsifies, conceals, or co-	vers up any trick, scheme	e, or disguises a mater	ial fact or makes any false	, fictitious or frauc

#### BLOCK 23.

**Avoidance.** Avoidance of impacts ("no action" alternative) is not feasible, as existing MLW depths are too shallow for proposed docking facilities (see Figure 8 for bathymetric survey conducted by Plitko Engineering). The edge of the Corps' buffer zone is approximately at the -1' contour, making it virtually impossible to construct and utilize docking facilities without encroaching into the buffer.

**Minimization.** Dredging area (140' x 70'); volume 1,350 c.y.) and depth (-3' MLW) have been minimized to the greatest extent feasible to accommodate the size and draft of the vessels to be moored at the proposed docking facilities. The extent of dredging will tie in to the existing -3' contour of the Lewes and Rehoboth Canal (see Figures 8 and 9). The 3' depth will also insure that the proposed floating dock does not rest on the substrate during low tide.

Hydraulic dredging (rather than barge-mounted mechanical dredging) will minimize turbidity in adjacent waters. The project will involve temporary placement of a 12±" diameter discharge pipeline across 65 linear feet of intertidal emergent *Spartina alterniflora* wetlands to access an existing upland contained disposal site. The distance of wetlands to be crossed has been minimized (shortest distance from the waterway to the upland disposal site; see Figures 5 and 6b). Placement will take place during the winter dormant season (January-February 2022), thereby minimizing impacts on vegetation. Dredged material will be hydraulically pumped directly into an existing upland confined disposal facility, avoiding impacts in adjacent waters and wetlands.

Compensation. The discharge pipeline will be removed upon completion of the project. Since the project will take place during winter dormant season, impacts on vegetation are anticipated to be minimal, with full recovery expected by following growing season, as was the case for previous dredging/disposal events utilizing this pipeline crossing site. Therefore, no compensation is proposed.

#### BLOCK 25.

Address of adjoining property owners, lessees, etc. whose property adjoins the waterbody.

Project Site: Tax Map Parcel #3-35-4.19-95.03 (see Figure 3)

Tax Map Parcel #

Name, address of owner

O1 DA 10200



## COASTAL & ESTUARINE RESEARCH, INC.

Marine Studies Complex PO. Box 674 Lewes, Delaware 19958 302-645-9610

July, 2021

# PROJECT DESCRIPTION: PROPOSED NEW HYDRAULIC DREDGING AND CONSTRUCTION OF DOCKING FACILITIES

## **Applicants**

Michael Paese and Blake Kimbrough 330 Pilottown Road Lewes, DE 19958

## Site Location and Description

The proposed project site is Tax Map Parcel #3-35-4.19-95.03, adjacent to the Lewes and Rehoboth Canal across from the applicants' home at 330 Pilottown Road, Lewes, Sussex County, Delaware. See Figures 1, 2, and 3 for location maps and directions to site; and Figure 4 for site location on U.S.G.S. topographic map, Lewes, Delaware quadrangle. The site is depicted on State of Delaware DNREC Wetland Map #065, 1988 photobase (Figure 5), and is mapped O (uplands or non-tidal wetlands less than 400 acres); T (Tidal mudflats, in some cases vegetated/sand bars); and W (Water). See Figures 6a and 6b for aerial photographs, and Figure 7 for ground-level photograph of site.

### **Project Description**

The applicants propose the following activities:

• New Hydraulic Dredging. 1,350± c.y. of new hydraulic dredging to a depth of -3' MLW. The area to be dredged is 140' alongshore x 70' cross-shore (9,800 sq. ft./0.22 acre). See Figure 8 for bathymetric survey (conducted by Plitko Engineering); and Figure 9 for plan view and cross-sections of proposed dredging area.

- **Dredged Material Disposal.** Dredged material (predominantly mud) will be transported across the waterway via hydraulic pipeline to an existing upland confined disposal facility on the opposite (north) side of the Lewes and Rehoboth Canal. The pipeline will cross 65' of vegetated tidal wetlands dominated by *Spartina alterniflora*. See Figures 2, 3, and 4 for location; Figure 5 on State of Delaware DNREC Wetland Map #066; Figure 6b for aerial photograph; Figures 12, 13, and 14 for ground-level photographs; and Figure 15 for schematic diagrams.
- **Docking Facilities**. Upon completion of dredging activities, new docking facilities, consisting of a 10' x 3' walkway; 26' x 4' fixed pier; a 6' x 30' fixed dock with 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock will be constructed.

#### Project Purpose

Purpose of dredging is to provide navigable depths. At the present time, there is a 50°± wide muddy, unvegetated intertidal flat channelward of the marsh edge (see survey, Figure 8); and the Corps of Engineers buffer zone is located at approximately the -1° contour, approximately 60° from the (marsh) shoreline. Thus, site conditions make it impossible for docking facilities to be constructed unless dredging is conducted. The applicants have minimized dredging to the minimum necessary, -3° at MLW, to provide navigable depths; allow the boatlift to function properly; and to insure that the floating dock does not rest on the substrate at low tide.

Purpose of the docking facilities is to provide mooring facilities for the applicants' boat (a 29' Hinckley Runabout). Two additional slips will be available for lease (a common practice along the Lewes and Rehoboth Canal).

## I. PROJECT DESCRIPTION:

- A. General Site Location: Accurately locate the project site with respect to State, county, or other subdivision, and in relation to streams and rivers.
  - Project site is located in State of Delaware, Sussex County, adjacent to the Lewes and Rehoboth Canal.
- B. <u>Specific Site Locations:</u> Completely locate the project site with respect to cove, creek, property owner, plot number, etc.

Project site is Tax Map Parcel #3-35-4.19-95.03 (located across from applicants' home at 330 Pilottown Road), Lewes, DE 19958 (Michael Paese and Blake Kimbrough, owners).

C. <u>Description of Proposed Action:</u> Carefully describe the action proposed, including the method of construction, equipment, and materials to be used. Details in your description are important. Attach additional sheets if necessary.

See attached sheet.

- D. Purpose of Proposed Action: Define the purpose of the proposed structure or work. For example, the purpose of bulkheading may be to stabilize an eroding bank; whereas, the purpose for a pier may be for the mooring of a private boat, for access to a public or private facility, for a marina, or for another purpose.

  Purpose of dredging is to obtain navigable depths.

  Purpose of docking facilities is to moor 3 boats.
- E. Submit color photographs of the site, with explanations of the views shown (prints only). Photographs help us to better understand your project. The more photographs you provide, the easier it is to understand and process your application.

See Figure 6a for aerial photograph, and Figure 7 for ground-level photograph.

## C. <u>Description of Proposed Action.</u>

The applicants propose the following activities:

- New Hydraulic Dredging. 1,350± c.y. of new hydraulic dredging to a depth of -3' MLW. The area to be dredged is 140' alongshore x 70' cross-shore (9,800 sq. ft./0.22 acre). See Figure 8 for bathymetric survey (conducted by Plitko Engineering); and Figure 9 for plan view and cross-sections of proposed dredging area.
- **Dredged Material Disposal.** Dredged material (predominantly mud) will be transported across the waterway via hydraulic pipeline to an existing upland confined disposal facility on the opposite (north) side of the Lewes and Rehoboth Canal. The pipeline will cross 65' of vegetated tidal wetlands dominated by *Spartina alterniflora*. See Figures 2, 3, and 4 for location; Figure 5 on State of Delaware DNREC Wetland Map #066; Figure 6b for aerial photograph; Figures 12, 13, and 14 for ground-level photographs; and Figure 15 for schematic diagrams.

Dredging and disposal will be conducted in January-February 2022 (in compliance with time-of-year restrictions to reduce impacts to fish spawning) by Ray Nornes Dredging.

• **Docking Facilities**. Upon completion of dredging activities, new docking facilities, consisting of a 10' x 3' walkway; 26' x 4' fixed pier; a 6' x 30' fixed dock with 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock will be constructed. Work will be constructed from the water, using barge-mounted equipment. Pilings (approximately 26 support pilings; no free-standing pilings) will be 12" diameter salt-treated wood, and will be installed using a vibratory hammer.

Construction of docking facilities will begin in March, 2022 upon completion of dredging. It is anticipated that the work will be completed in 1-2 weeks after commencement.

PART II – ENVIRON		AL IM	PACT CHECKLIST
ENVIRONMENTAL IMPACT	YES	NO	QUALIFYING REMARKS
A. Physical			
1. Topography	X		Will increase depths
2. Geological Elements and Leaching		x.	Minimal impacts anticipated
3. Air		x	No impacts anticipated
4. Transportation	х		Will improve boating access
5. Handling of Hazardous Materials		x	None involved
6. Spoil Disposal	x		Material to be placed at upland site (existing spoil si
7. Sewage and Solid Wastes		x	No impacts
8. Water Resources			
a. Water Quality	×		possible minor, localized turbidity during dredging
b. Hydrography, Circulation, Littoral Drift.	x		Possible minor, localized impacts
c. Ground Water		x	No impacts anticipated
B. Biological			
1. Vegetation			and the state of t
a. Terrestrial		x	No impacts
b. Aquatic		x	No impacts (none present)
2. Fish and Wildlife			
a. Mammals		x	No impacts anticipated
b. Birds		x	u .
c. Amphibians		x	"
d. Reptiles		K	II .
e. Fish	×	TE	Possible minor impacts during dredging
f. Shellfish		k	No impacts (area closed to shellfish harvesting
g. Invertebrates	X		Possible minor impacts
3. Rare or Endangered Species		X	None known on site

ENVIRONMENTAL IMPACT	YES	NO	QUALIFYING REMARKS
C. Cultural			
1. Land Use		X	No impacts
2. Population Density and Trends		x.	No impacts anticipated
3. Regional Development		x	II .
4. Historic Places		x	None known on site
5. Archaeological Sites		x	11
6. Aesthetics . `		X	No impacts anticipated
7. Utilities		x	11
8. Transportation Systems	х	. 🗆	Will improve boating access
9. Recreation	x		Will improve recreational boating
10. Public Health		x	No impacts
D. Other Factors			
1. Secondary Effects		x	None anticipated
2. Controversiality		x	, ""
3. Is significant dredging involved?	x		1,350 c.y.
4. Is significant filling involved?		X	No filling involved

## Considerations of a Dredging Proposal:

A. Describe characteristics and locations of the proposed dredged material disposal site. Provide photographs.

Proposed disposal site is existing upland confined disposal facility. See attached sheet for details.

- B. Is there a comprehensive plan for disposal sites that takes into account the accumulative effect over time and the decreasing amount of suitable sites for disposal?

  Site is over 100 acres in size, large enough to accommodate disposal needs for several decades.
- C. Describe the present land use of the disposal site.

  Land use is dredged material disposal facility.
- D. Describe characteristics of the material to be disposed, including:
  - 1. Physical source of material (i.e. sand, silt, clay, etc.) Give percentages of the various fractions if available.

- Material is predominantly mud (silt + clay)

2. Chemical composition of material: Many areas, especially marinas, highly industrialized areas, etc., have sediments with high concentrations of pollutants (chemicals, organic material, etc.). These materials may be re-suspended or reintroduced into the water and result in serious environmental damage. If your proposed dredging is in an area such as described above, a chemical analysis of the material to be dredged should be provided.

The site does not have a history of commercial nor industrial use; no hazardous materials are likely present.

3. Dewatering properties of the material to be disposed.

See Attachment 1 for water content of similar sediments. Material anticipated to dewater withing weeks to months.

- 4. Compactability of material and settling rates of material to be disposed.

  Material anticipated to compact by 50-80% based on water content.
- Dredging and disposal schedule to insure that operations do not degrade water quality during times of anadromous fish migration.
   Dredging/disposal to be conducted January-February 2022, to minimize impacts on fish migration.
- E. When the project involves land disposal, discuss the following:
  - 1. Method of disposal to be utilized, i.e., pipeline discharge, barge, hopper (underway or stationary).

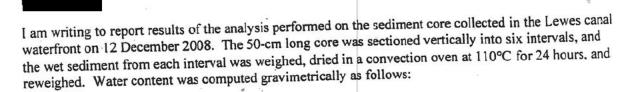
Pipeliné discharge will be used.

2. Describe method of dredged material containment (i.e. embankment, behind bulkhead, etc.)

Dredged material will be contained by earthen berms (see Figure 13).







Water content 
$$(W_f) = \frac{M_i - M_d}{M_i} \cdot 100\%$$

where  $M_t$  is the total wet weight of the sediment (water plus solids) and  $M_d$  is the dry weight of the solids alone. Porosity was computed from water content:

Porosity 
$$(\phi) = \left(\frac{W_f(\rho_s)}{W_f(\rho_s) + (1 - W_f)\rho_w}\right) \cdot 100\%$$

where  $\rho_s$  is the density of the mineral grains (2650 kg/m<sup>3</sup>) and  $\rho_w$  is the density of the porewater (1025 kg/m<sup>3</sup>). Dry bulk density of the samples was computed from porosity as follows:

Dry-bulk density 
$$(B_d) = (1 - \phi / 100) \cdot \rho_s$$

The results are tabulated below.

		1.00()	$B_d (kg/m^3)$
Core interval	$W_f(\%)$	φ(%)	312.1
0-5cm	73.9	88.2 85.8	377.4
5-10cm	69.4	85.7	379.3
10-20cm	69.3	87.0	343.9
20-30cm	71.7 70.9	86.6	354.7
30-40cm	69.1	85.6	381.9
40-50cm	70.7	86.5	358.2
means	/0./		

In short, the mean water content of the core material was 70.7% and 86.5% by weight and volume, respectively. Based on my experience these values are representative for estuarine muds in general. Please contact me should you have any questions about the analysis or resulting data.

Best Regards,

Christopher K. Sommerfield

Associate Professor

3. What type of leachates will be produced from the spoil material and what is planned for protection of the groundwater?

Disposal site is existing dredged material disposal facility, no additional protection required.

4. Methods to insure that spoil water does not adversely affect water quality, both during construction and after completion of the project.

Dredging method will cause minimal impacts to water quality. Confined disposal site with controlled outflow (weir)

5. Provisions for monitoring during discharge: water quality, sediment transport, and precautions to prevent "short-circuiting" dumping.

Contractor will not "short-circuit" dumping (pipe will be

properly placed in disposal area).

F. Consider and discuss the following for water disposal: Not applicable.

- 1. Describe methods to be used for water disposal, including volumes and site selection.
- 2. Describe the existing water characteristics at the site, including chemical analysis for water quality.
- G. Discuss the frequency and amount of maintenance dredging which will be required; discuss the resulting impacts.

See attached sheet.

- H. Alternatives. See attached sheet.
  - 1. Discuss all alternatives to the project, including the "no action" alternative.
  - 2. Discuss alternative types and methods of dredging and disposal, such as pipeline discharge, barging, or hopper method.
  - 3. Discuss alternatives to dredging.
  - 4. Discuss alternative areas of sites for spoil disposal.
  - 5. Discuss impact of port docking patterns upon the demand for dredging. Can alternative patterns reduce the amount of dredging required to support port operations?
  - 6. Support alternative means of construction that would prevent or minimize water quality degradation using EPA standards for guidance.
  - 7. State in detail impacts resulting in alternative locations for the proposed project.

## Considerations of a Dredging Proposal

G. It is anticipated that maintenance dredging will be required every 5 years or so, based on shoaling rates in similar areas of the Lewes and Rehoboth Canal. The -3' MLW depth necessary for navigation; operation of the boat lift and floating dock will minimize the volume of future dredging required. It should also be noted that the site is located along the open waterway, and not in an enclosed basin; therefore, tidal currents are anticipated to reduce shoaling.

#### H. Alternatives.

- 1. Avoidance of impacts ("no action" alternative) is not feasible, as existing MLW depths are too shallow for proposed docking facilities (see Figure 8 for bathymetric survey conducted by Plitko Engineering). The edge of the Corps' buffer zone is approximately at the -1' contour, making it virtually impossible to construct and utilize docking facilities without encroaching into the buffer.
- 2. The proposed dredging method is hydraulic dredging with pipeline discharge directly to an existing upland confined disposal facility. Mechanical dredging using a barge-mounted excavator, then off-loading into trucks for transport to the disposal site would likely result in greater turbidity during dredging, and the possibility of spillage of muddy spoil material in residential neighborhoods during transport.
- No alternatives to dredging are feasible.
- 4. There are other possible disposal sites, but none is as close to the dredging site, nor as convenient for hydraulic discharge as the proposed site.
- 5. The applicants' contractor has designed the proposed docking facility after considering various alternative docking patterns. The shore-parallel orientation of the fixed and floating docks maximizes docking space while minimizing channelward encroachment of the structure. The major constraint at this site is the distance to the Corps' buffer zone (much closer to the south bank than the north bank of the Canal), which is located near the -1' depth contour, approximately 50-55' from the water's edge. The area to be dredged has been minimized to the greatest extent feasible, to tie in to the existing -3' contour (minimum depth necessary for navigable depth; operation of the boat lift; and to insure that the proposed floating dock does not rest on the substrate at low tide.).
- 6. The proposed method (hydraulic dredging with pipeline discharge directly into the confined disposal site; with material contained by earthen berms and outflow through a spillway (weir) minimizes water quality impacts to the greatest extent feasible.
- No alternative locations feasible.



## DEPARTMENT OF THE ARMY PHILADELPHIA DISTRICT, CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

#### PUBLIC NOTICE

The Philadelphia District of the Corps of Engineers requests that applicants for Department of the Army permits for work in waters of the United States provide in their permit application the following information:

- a. street address, lot and block number, latitude and longitude of the proposed project site;
- b. names and addresses of adjoining property owners, lessees, etc. to the proposed project site;
- c. mailing addresses of post office, city and county governments, and local newspapers in the vicinity of the proposed project site.

The more the applicant provides, the easier it is to understand and process an application. The above information is necessary in order to initiate processing of the permit application. Failure to provide the information will result in the withdrawal of the permit application without prejudice.

Frank J. Cianfrani

Chief, Regulatory Branch

## INFORMATION FOR PUBLIC NOTICE

## **Applicants**

Michael Paese and Blake Kimbrough 330 Pilottown Road Lewes, DE 19958

## a. Site Location:

Tax Map Parcel #3-35-4.19-95.03 Across from 330 Pilottown Road at New Road Lewes, Sussex County, Delaware 19958

Latitude: 38.779084° North. Longitude: -75.143312° West

## b. Adjacent Property Owners

Tax Map Parcel #

Name, address of owner

c.	Mailing Add	dresses

- 1. 2.
- 3.
- 4.



## DEPARTMENT OF THE ARMY

PHILADELPHIA DISTRICT CORPS OF ENGINEERS WANAMAKER BUILDING, 100 PENN SQUARE EAST PHILADELPHIA, PENNSYLVANIA 19107-3390

OCT 0 2 2018

CENAP-OP-R-Coastal Zone Management (Delaware)

## Public Notice

SUBJECT: "Consistency Certification" with Approved State Coastal Zone Management Programs

Federal regulations require that applicants for Department of the Army permits to perform work in waters of the United States, which fall under the jurisdiction of a State with a Coastal Zone Management (CZM) Program approved by the Secretary of Commerce, must provide a signed consistency certification statement to the Corps of Engineers with their application for a Department of the Army permit.

On August 21, 1979, a CZM Program was approved for the State of Delaware by the U.S. Department of Commerce. Therefore, all applications for Department of the Army permits for work in Delaware's designated Coastal Zone, which is the entire state of Delaware, MUST CONTAIN A SIGNED CONSISTENCY CERTIFICATION stating that: "The proposed activity complies with and will be conducted in a manner that is consistent with the approved State Coastal Zone Management (CZM) Program."

Furthermore, concurrent with the application for a Department of the Army permit, the applicant MUST ALSO PROVIDE A SIGNED CONSISTENCY CERTIFICATION STATEMENT DIRECTLY TO THE Delaware Coastal Management Program (DCMP) for their review and concurrence. This certification must be accompanied by the following information:

- A copy of the Federal application for the Department of the Army permit.
- A detailed description of the proposed activity and its associated facilities which is adequate to assess the activity's probably coastal zone effects.
   Including but not limited to, maps, diagrams, technical data, etc.
- A brief assessment of the probable coastal zone effects of the proposal and their relation to the relevant policies of the DCMP. A DCMP Policy Document may be obtained by contacting the DCMP at (302) 739-9283.
- A brief set of findings, derived from the above assessment, indicating that the proposed activity and the effects are all consistent with the provisions of the DCMP.

## The above information should be sent to:

Delaware Coastal Management Program
Delaware Department of Natural Resources and Environmental Control
100 W. Water Street, Suite 7B
Dover, Delaware 19904
(302) 739-9283 (V)
(302) 739-2048 (F)

Edward E. Bonner

Chief, Regulatory Branch



## COASTAL & ESTUARINE RESEARCH, INC.

Marine Studies Complex P.O. Box 674 Lewes, Delaware 19958 302-645-9610

## DELAWARE COASTAL MANAGEMENT PROGRAM CONSISTENCY CERTIFICATION

The proposed activity, 1,350 c.y. of hydraulic dredging to a depth of -3' MLW, with disposal via hydraulic pipeline at an existing upland confined disposal site across the waterway; and construction of new docking facilities consisting of a 10' x 3' walkway; a 26' x 4' fixed pier; a 6' x 30' fixed dock with a 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock adjacent to the Lewes and Rehoboth Canal at Tax Map Parcel #3-35-4.19-95.03, across from 330 Pilottown Road, Lewes, Sussex County, Delaware 19958 (Michael Paese and Blake Kimbrough, applicants) complies with and will be conducted in a manner that is consistent with the approved Delaware Coastal Management Program (DCMP).

Evelyn M. Maurmeyer, CER, Inc.

Agent for applicant

IN: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough

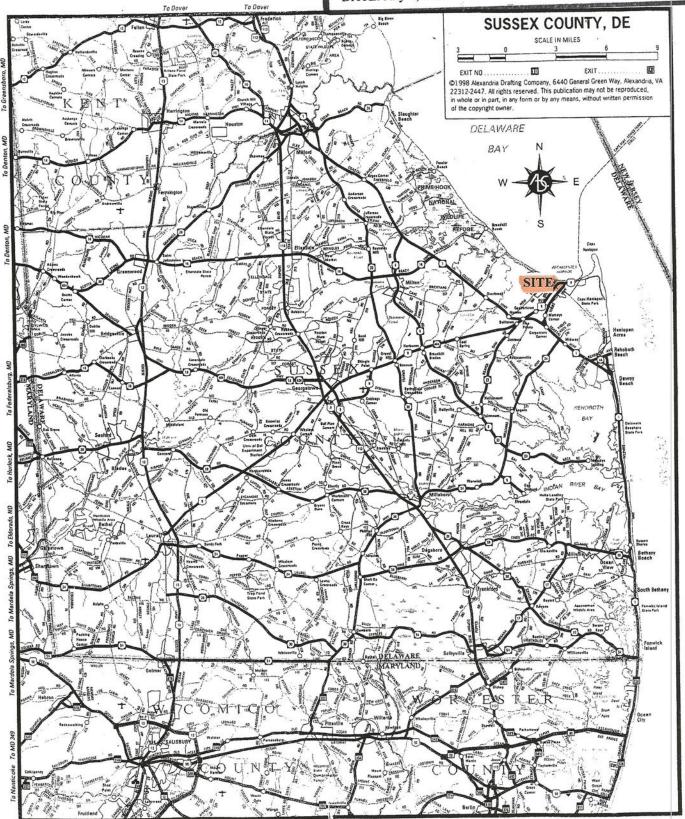


Figure 1. Map of Sussex County, Delaware, showing site location, Lewes. Scale as shown.

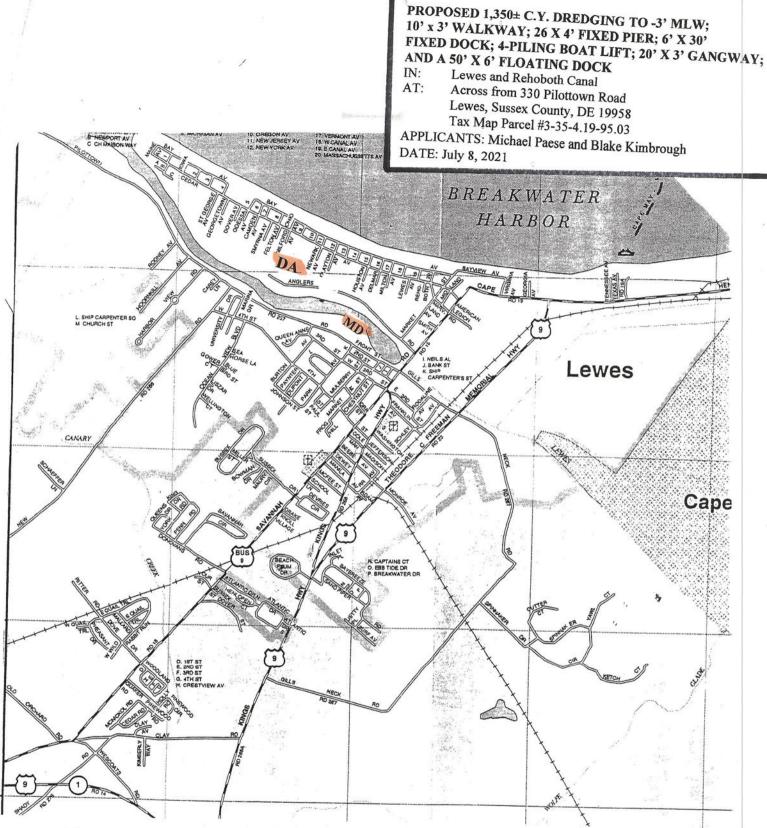


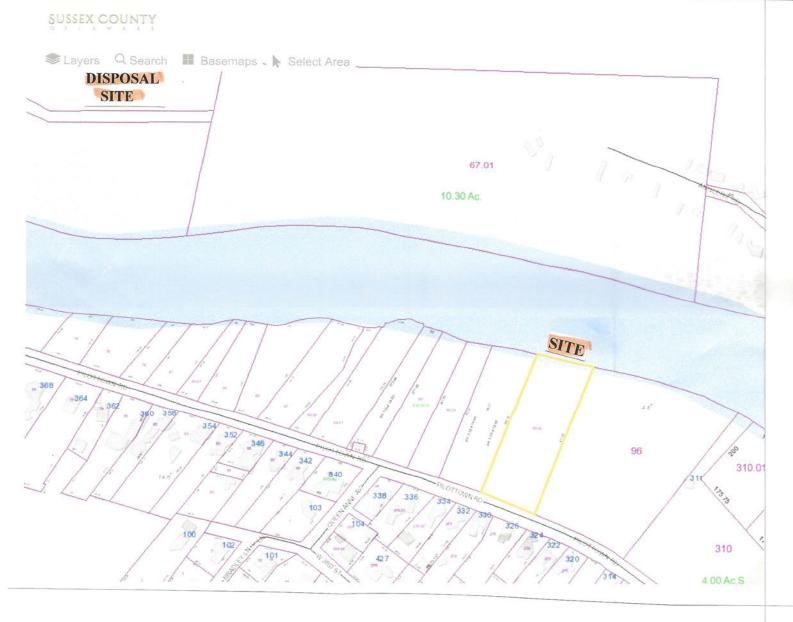
Figure 2. Map of Lewes, Sussex County, Delaware, showing site location, Lewes and Rehoboth Canal off of **330 Pilottown Road**. Directions (from Dover, Delaware): SR 1 southbound toward Lewes; left (at Five Points intersection) onto Business 9 (Savannah Road) to Lewes; left (at traffic signal) onto Front Street (becomes Pilottown Road); site is on right, Lewes and Rehoboth Canal off of house at 330 Pilottown Road (on left). Dredged material disposal area (**DA**) is an existing upland confined disposal site on the north side of the waterway. Directions to disposal site: Eastbound on Pilottown Road; left at traffic light onto Savannah Road; cross Lewes and Rehoboth Canal drawbridge; left onto Cedar Street; left onto Newark Avenue to end. Disposal site is across wooded berm at end of street. Also see Figure 3.

IN: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough



Project location, Tax Map Parcel #3-35-4.19-95.03 (Lewes and Rehoboth Canal Figure 3. off of 330 Pilottown Road, Lewes, Sussex County, Delaware). Disposal site is across the waterway, Tax Map Parcel #3-35-4.19-67.00).

IN: Lewes and Rehoboth Canal AT:

Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough

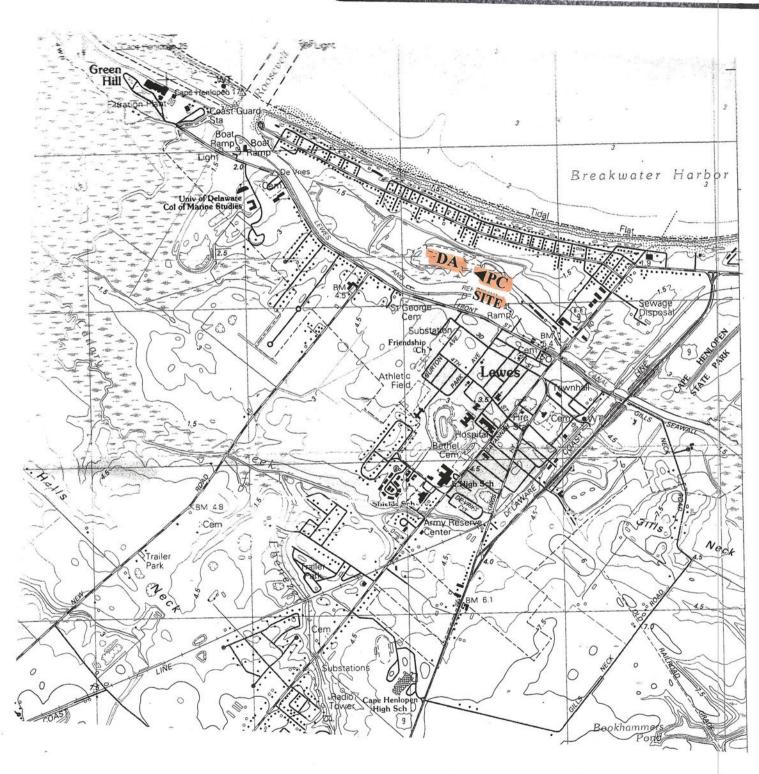


Figure 4. USGS topographic map, Lewes, Delaware quadrangle showing project site; pipeline crossing (PC); and disposal area (DA), all adjacent to Lewes and Rehoboth Canal. Scale: 1" = 2,000'.

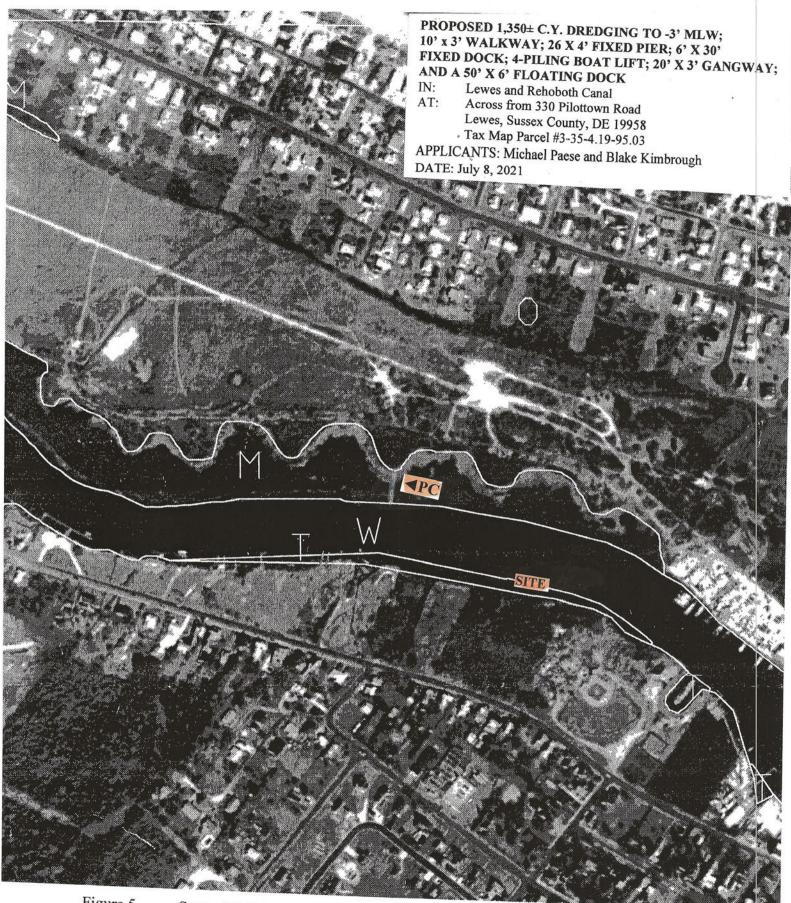


Figure 5. State of Delaware DNREC Wetland Map #066 (1988 photobase) showing project site (pier/docking facilities), mapped T (tidal mudflats, in some cases vegetated/sand bars); and W (water), adjacent to O (other, upland or non-tidal wetlands less than 400 acres). Dredging site is mapped W (water); pipeline crossing (PC) is mapped M (marsh); and disposal area (DA) is mapped O (other, acres). Scale: 1" = 300'.

DA

IN: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road Lewes, Sussex County, DE 19958

Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough



Figure 6a. Aerial photograph of site, Tax Map Parcel #3-35-4.19-95.03, Lewes and Rehoboth Canal off of 330, Pilottown Road, Lewes, Sussex County, Delaware. Note wide tidal flat off of marsh edge. Applicants propose to dredge 1,350± c.y. (140' alongshore x 70' cross-shore) to a depth of -3' MLW; and to construct install docking facilities, to consist of a 26' x 4' fixed pier; a 6' x 30' fixed dock with 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock. A 10' x 3' elevated walkway will provide access from uplands across vegetated wetlands to the pier. The channelward end of the structure (outer pilings of boat lift) will be in line with neighboring structures to the west (left).

IN: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough



Imagery ©2021 CNES / Airbus, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2021 100 ft

Figure 6b. Aerial photograph of project **site** (dredging/docking facilities); pipeline crossing (**PC**); and (existing, upland confined) disposal area (**DA**). Note presence of pipeline from previous dredging activities.

IN: Lewes and Rehoboth Canal

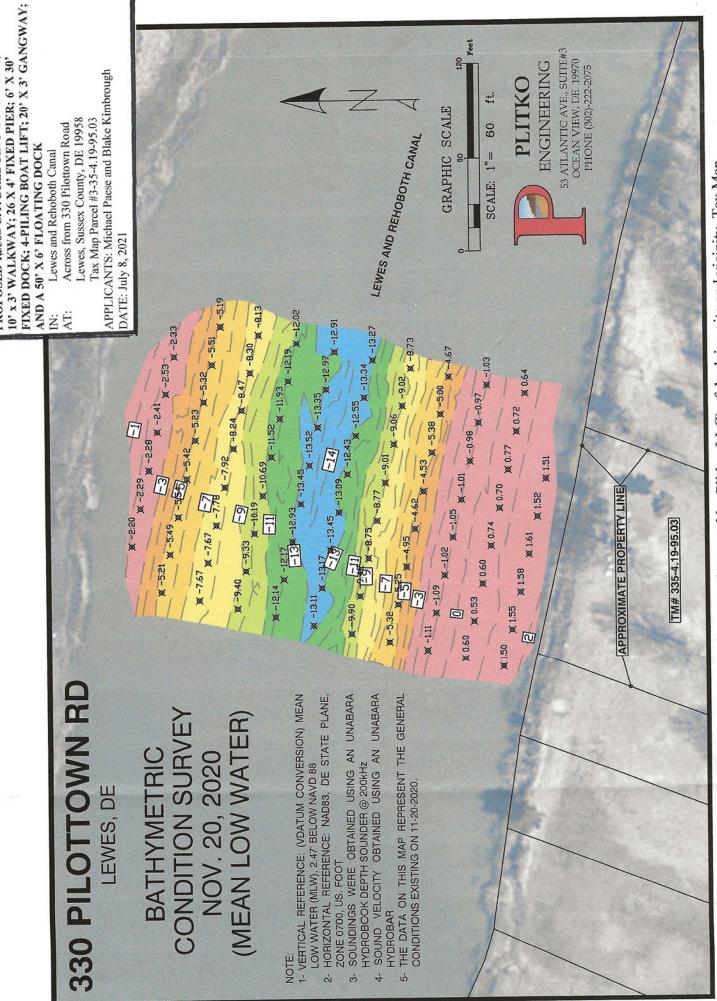
AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough



Figure 7. Ground-level photograph of dredging site, Tax Map Parcel #3-35-4.19-95.03, adjacent to the Lewes and Rehoboth Canal at 330 Pilottown Road, Lewes, Sussex County, Delaware. Applicants propose to conduct 1,350± c.y. of dredging to a depth of -3' MLW; and to install docking facilities (26' x 4' fixed pier; a 6' x 30' fixed dock with 4-piling boat lift; a 20' x 3' gangway; and a 6' x 50' floating dock). A 10' x 3' elevated walkway over vegetated wetlands (not mapped nor regulated as marsh by DNREC; see Figure 5) will provide access from uplands to the pier.



PROPOSED 1,350± C.Y. DREDGING TO -3' MLW;

Figure 8.

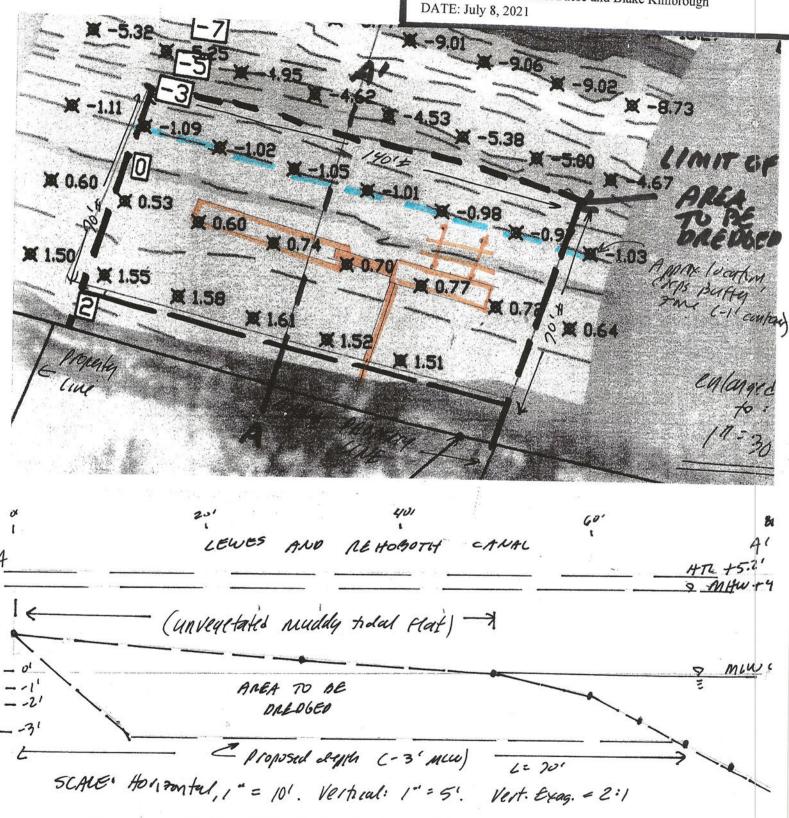
huffer zone superimposed. See Figure 9 for plan view of area to be dredged and cross-sections. Bathymetric survey (prepared by Plitko, LLC) of dredging site and vicinity, Tax Map Pilottown Road, Lewes, Sussex County, Delaware. Approximate location of Corps Parcel #3-35-4.19-95.05, adjacent to the Lewes and Rehoboth Canal off of 330

IN: Lewes and Rehoboth Canal AT:

Across from 330 Pilottown Road Lewes, Sussex County, DE 19958

Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough



Portion of Plitko Engineering bathymetric survey showing plan view of dredging site, Figure 9. 140' alongshore x 70' cross-shore (to a depth of -3' MLW); and cross-section showing existing and proposed depths.

FIXED DOCK; 4-PILING BOAT LIFT; 20' X 3' GANGWAY; PROPOSED 1,350± C.Y. DREDGING TO -3' MLW; 10° x 3° WALKWAY; 26 X 4° FIXED PIER; 6° X 30° APPLICANTS: Michael Paese and Blake Kimbrough PRECISION MARINE CONSTRUCTION INC. 10.00 Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03 Across from 330 Pilottown Road Scale: 1" =20' Date: 06-01-2021 AND A 50' X 6' FLOATING DOCK 202 Woodbridge Hills Rehoboth Beach, DE 19971 Lewes and Rehoboth Canal 7 6.00 DATE: July 8, 2021 Fixed Dock 10' X3' 30.00 (prepared by Precision Marine Construction, Inc.). ä Boat 4.00 The Lewes and Rehoboth Canal Plan view of proposed docking facilities Gangway **=**20.00'**=** 26.00' 20' 7 31 148.68' M. Hr. HC Edge of Marsh \* Floating Dock 50.00 0 x 20 Figure 10. Proposed Docking Facility 6.00 FM 335-8.07-272.00 Lewes, DE 19958 Michael M Paese 330 Pilottown Rd. 10.00

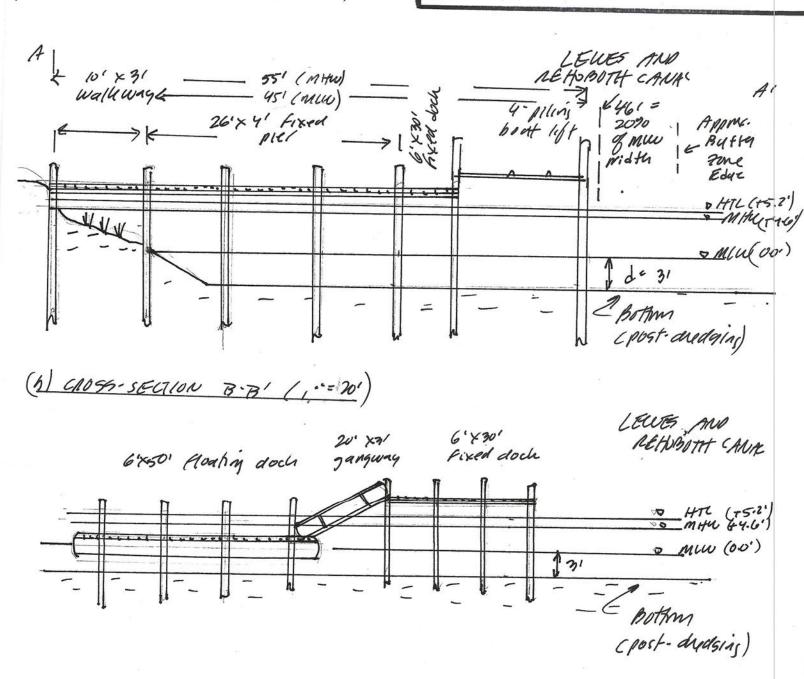
N: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough

DATE: July 8, 2021



(a) CROSS-SECTION A-A1" (1°=10')

Figure 11. Cross-sections of proposed docking facilities. Sketches for permit application purposes only.



Photograph of existing upland confined dredged material disposal site, located at end of Anglers Road (also accessible at end of Newark Avenue), Lewes, Sussex County, Delaware. Figure 12.



Photograph of earthen berm at existing upland confined disposal site. Figure 13.

10' x 3' WALKWAY; 26 X 4' FIXED PIER; 6' X 3 0' FIXED DOCK; 4-PILING BOAT LIFT; 20' X 3' GANGWAY; PROPOSED 1,350± C.Y. DREDGING TO -3' ML. ~~ AND A 50' X 6' FLOATING DOCK

Lewes and Rehoboth Canal A.:.

Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958

APPLICANTS: Michael Paese and Blake Kimbrough Tax Map Parcel #3-35-4.19-95.03

DATE: July 8, 2021

Photograph of spillway (weir) Figure 14.

at existing upland comfined disposal site.

IN: Lewes and Rehoboth Canal

AT: Across from 330 Pilottown Road

Lewes, Sussex County, DE 19958 Tax Map Parcel #3-35-4.19-95.03

APPLICANTS: Michael Paese and Blake Kimbrough

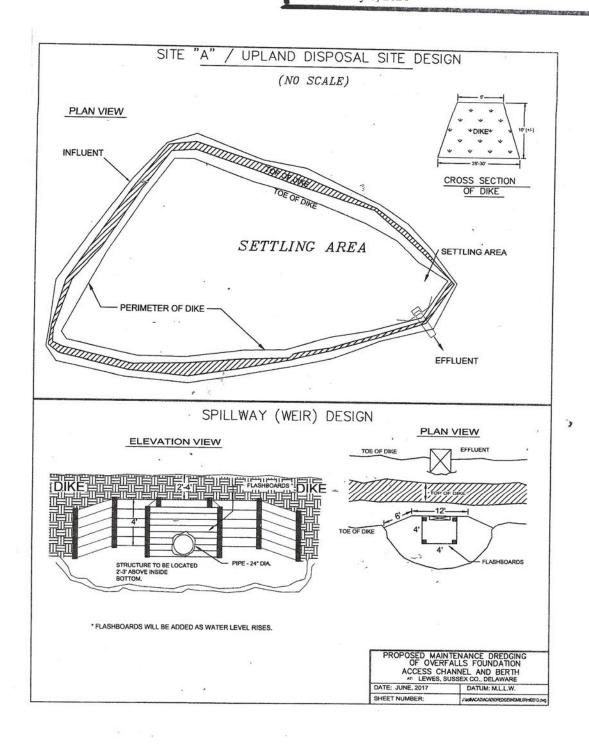


Figure 15. Schematic diagrams of disposal site (provided by Chuck Williams, DNREC, now retired).