

38173 DUPONT BOULEVARD P.O. BOX 169 SELBYVILLE, DE 19975 PHONE: 302-436-9637

PHONE: 302-436-963 FAX: 302-436-9639

September 15, 2022

ERI Project No. 0849#0792

Mr. Matthew Jones, Program Manager
Delaware Department of Natural Resources and Environmental Control
Division of Water Resources
Wetlands and Subaqueous Lands Section
89 Kings Highway
Dover, Delaware 19901

RE: Marina / Subaqueous Lands Permit & Lease for Minor Marina

Estates at Bridgewater Community Marina

Tax Map Parcel 134-21.00-6.00

Baltimore Hundred, Sussex County, Delaware

Waterway: Dirickson Creek Applicant: SB Old Landing, LLC.

Dear Mr. Jones,

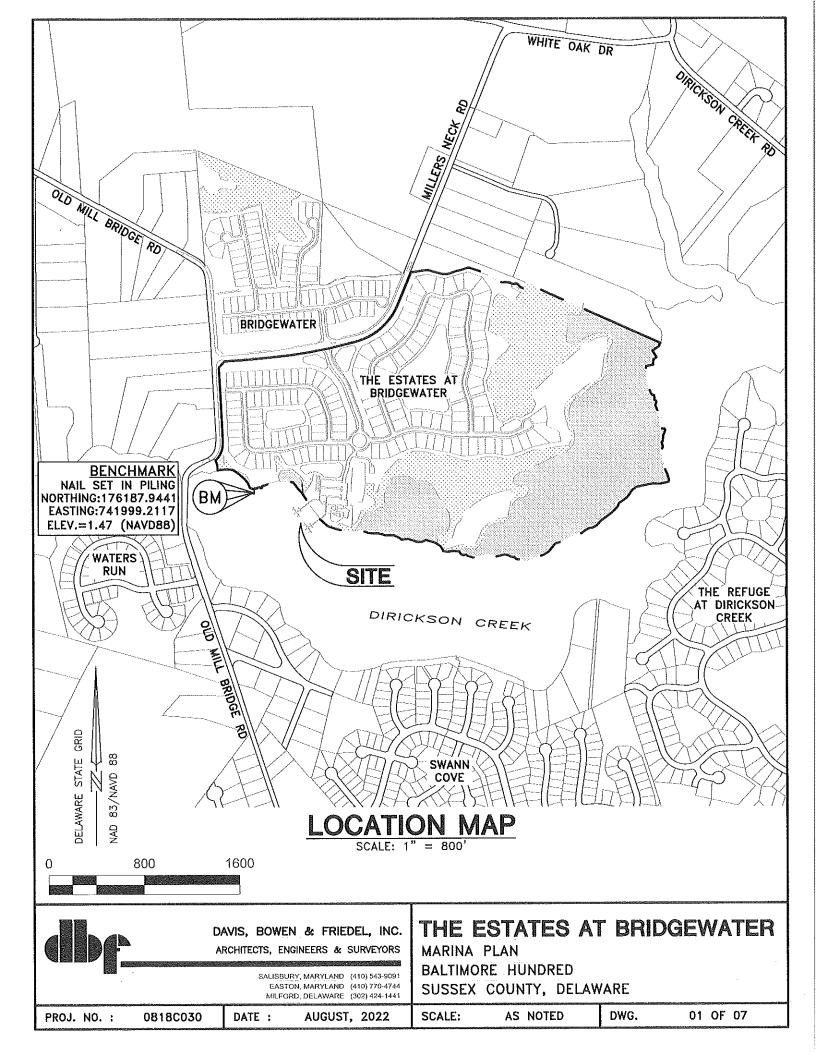
Environmental Resources, Inc. (ERI) is writing you on behalf of the applicant, SB Old Landing, LLC. regarding a proposed 24 slip marina and kayak launch dock to be located on the northern shore of Dirickson Creek. The project site is located on Tax Map Parcel 134-21.00-6.00, Baltimore Hundred, Sussex County, Delaware. The proposed marina will provide recreational water access for the future residents of the Estates at Bridgewater residential community. This is a 156 lot single family home subdivision which has obtained land use approvals from Sussex County.

Upon your review of these materials, please let me know if you or your staff need any additional information in support of this request. On behalf of SB Old Landing, LLC., thank you in advance for your time and attention to this request.

Sincerely,

ENVIRONMENTAL RESOURCES, INC.

Edward M. Launay, Principal



PROPOSED MARINA FACILITY OVER PU & FEDERALLY REGULATED SECTI	-
DESCRIPTION	AREA (SF)
PROPOSED LEASE AREA WITHIN PUBLIC STATE-OWNED SUBAQUEOUS LANDS OF DIRICKSON CREEK CHANNELWARD OF MEAN LOW WATER	4,036
MARINA ACCESS PIER BRIDGED OVER FEDERALLY REGULATED SECTION 404 WETLANDS	54

GENERAL NOTES:

- 1. ELEVATION BASED ON NAVD 88 DATUM = 0.00'. BENCHMARK LOCATED ON NORTHWEST CORNER PILE OF EXISTING DOCK PLATFORM. NAIL SET IN SOUTHWEST PILE AT ELEVATION 1.47'.
- 2. EXISTING DOCK AND PLATFORM TO BE REMOVED WHEN PROPOSED MARINA BECOMES OPERATIONAL.
- 3. RANGE OF LOCAL TIDES:

 MEAN HIGH HIGH WATER (SPRING TIDE) ELEV. = +0.8'

 MEAN HIGH WATER ELEV. = +0.5'

 MEAN LOW WATER ELEV. = -0.2'
- 4. TOTAL NUMBER OF SLIPS = 24
- 5. PROPOSED PIER AND DOCK ELEV. = 3.20'
- FIRE PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH DELAWARE STATE FIRE MARSHAL OFFICE REQUIREMENTS.



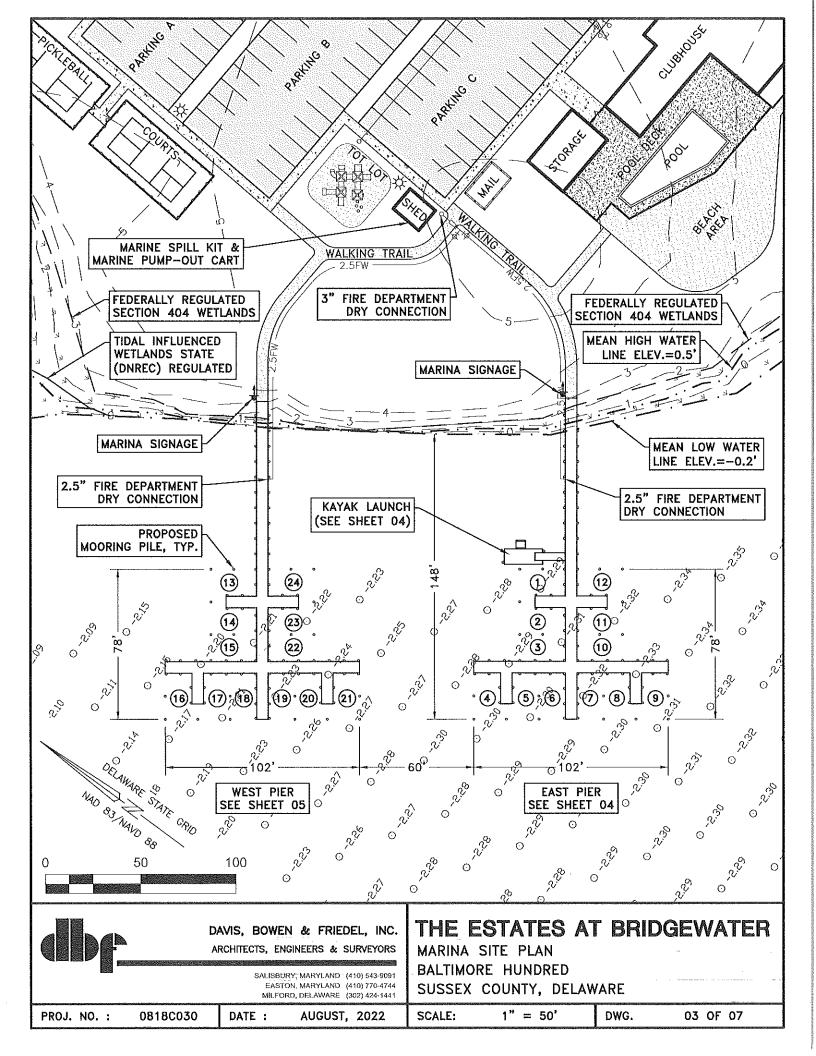
DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

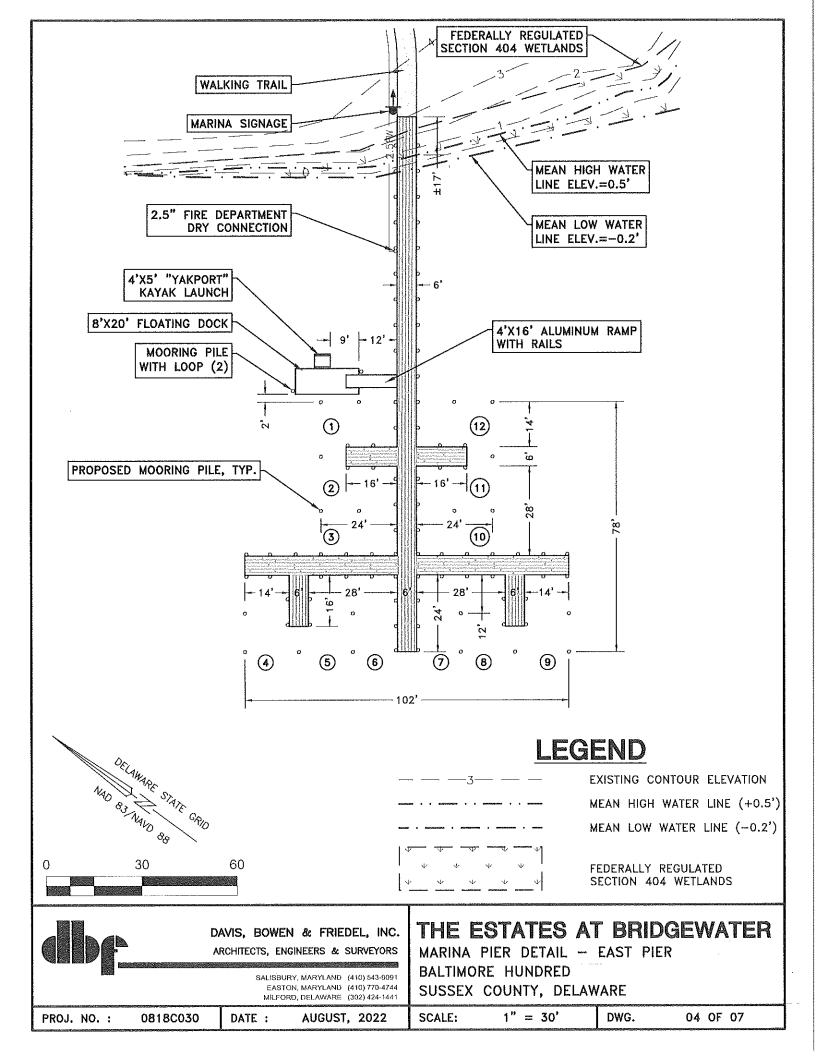
SALISBURY, MARYLAND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

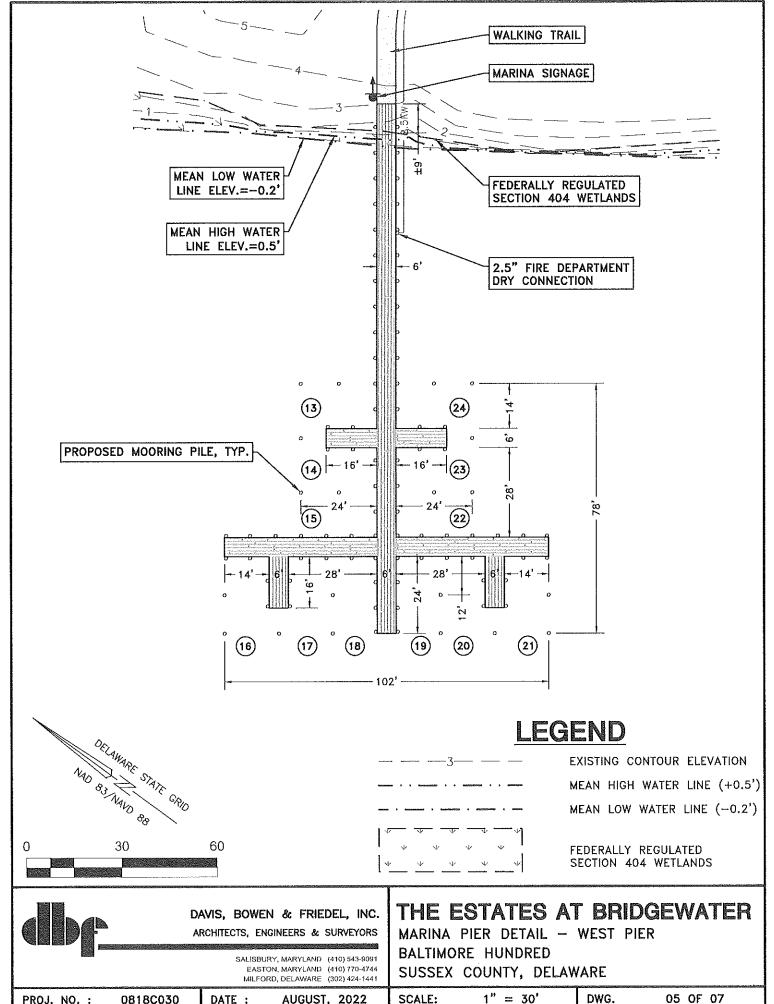
THE ESTATES AT BRIDGEWATER

MARINA PLAN
BALTIMORE HUNDRED
SUSSEX COUNTY, DELAWARE

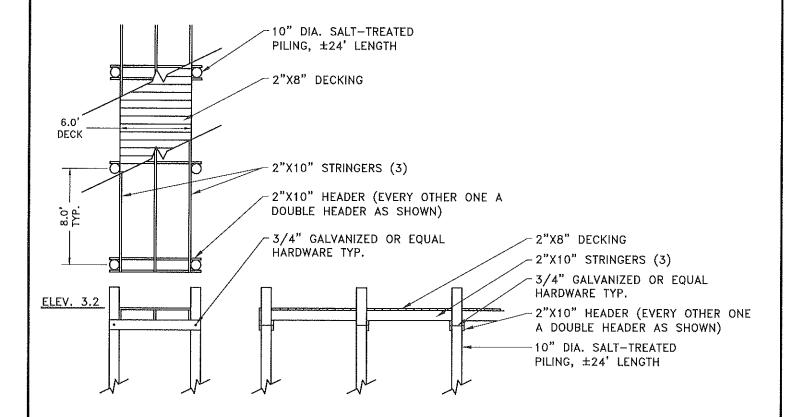
PROJ. NO. : 0818C030 DATE : AUGUST, 2022 SCALE: NTS DWG. 02 0F 07







1" = 30'0818C030 DATE: AUGUST, 2022 SCALE: DWG. PROJ. NO.:



TYPICAL PIER CONSTRUCTION

NOT TO SCALE



DAVIS, BOWEN & FRIEDEL, INC. ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYLAND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

THE ESTATES AT BRIDGEWATER

MARINA PLAN CONSTRUCTION DETAIL BALTIMORE HUNDRED SUSSEX COUNTY, DELAWARE

PROJ. NO.: 0818C030

DATE :

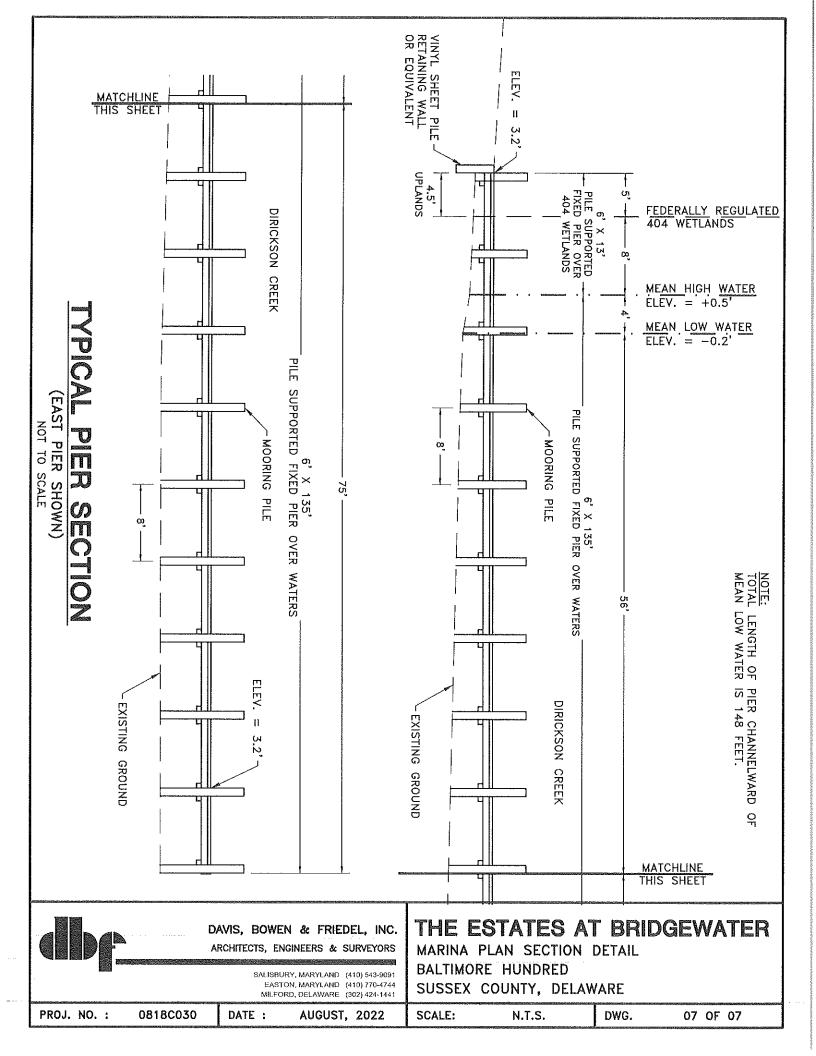
AUGUST, 2022

SCALE:

N.T.S.

DWG.

06 OF 07



WETLANDS AND SUBAQUEOUS LANDS SECTION PERMIT APPLICATION FORM

For Subaqueous Lands, Wetlands, Marina and 401 Water Quality Certification Projects

State of Delaware Department of Natural Resources and Environmental Control Division of Water

Wetlands and Subaqueous Lands Section



APPLICATION FOR APPROVAL OF SUBAQUEOUS LANDS, WETLANDS, MARINA AND WATER QUALITY CERTIFICATION PROJECTS

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

Application Instructions:

- 1. Complete each section of this basic application and appropriate appendices as thoroughly and accurately as possible. Incomplete or inaccurate applications will be returned.
- 2. All applications must be accompanied by a scaled plan view and cross-section view plans that show the location and design details for the proposed project. Full construction plans must be submitted for major projects.
- 3. All applications must have an original signature page and proof of ownership or permitted land use agreement.
- 4. Submit an original and two (2) additional copies of the application (total of 3) with the appropriate application fee and public notice fee* (prepared in separate checks) to:

Department of Natural Resources and Environmental Control Wetlands and Subaqueous Lands Section 89 Kings Highway Dover, Delaware 19901

*Application and public notice fees are non-refundable regardless of the Permit decision or application status.

5. No construction may begin at the project site before written approval has been received from this office.

Helpful Information:

1.	Tax Parcel Information:	New Castle County Kent County Sussex County	(302) 395-5400 (302) 736-2010 (302) 855-7878
2.	Recorder of Deeds:	New Castle County Kent County	(302) 571-7550 (302) 744-2314
		Sussex County	(302) 855-7785

- 3. A separate application and/or approval may be required through the Army Corps of Engineers. Applicants are strongly encouraged to contact the Corps for a determination of their permitting requirements. For more information, contact the Philadelphia District Regulator of the Day at (215) 656-6728 or visit their website at: http://www.nap.usace.army.mil/Missions/Regulatory.aspx.
- 4. For questions about this application or the Wetlands and Subaqueous Lands Section, contact us at (302) 739-9943 or visit our website at: http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx. Office hours are Monday through Friday 8:00 AM to 4:30 PM, except on State Holidays.

APPLICANT'S REVIEW BEFORE MAILING

DID TOO								
X	Yes	BASIC APPLICATION						
X	_Yes	SIGNATURE PAGE (Page 3)						
X	Yes	APPLICABLE APPENDICES						
X	_ Yes	SCALED PLAN VIEW						
X	_ Yes	SCALED CROSS-SECTION OR ELEVATION VIEW PLANS						
X	_ Yes	VICINITY MAP						
X	Yes	COPY OF THE PROPERTY DEED & SURVEY						
X	_ Yes	THREE (3) COMPLETE COPIES OF THE APPLICATION PACKET						
X	_ Yes	APPROPRIATE APPLICATION FEE & PUBLIC NOTICE FEE (Separate checks made payable to the State of Delaware)						

Submit 3 complete copies of the application packet to:

DID YOU COMPLETE THE FOLLOWING?

Department of Natural Resources and Environmental Control Wetlands and Subaqueous Lands Section 89 Kings Highway Dover, Delaware 19901

Before signing and mailing your application packet, please read the following:

The Department requests that the contractor or party who will perform the construction of your proposed project, if other than the applicant, sign the application signature page along with the applicant in the spaces provided. When the application is signed by the contractor as well as the applicant, the Department will issue the Permit to both parties. For Leases, the contractor will receive a separate construction authorization that will make them subject to all of the terms and conditions of the Lease relating to the construction

Section 1: Applicant Identification

1.	Mailing Address: 20184 Phillips	SB Old Mill Bridge, LLC. s Street ach, DE 19971	Tr	#: 302-226-19 een@schellbr			
2.	Consultant's Name: Edward M. Mailing Address: 38173 DuPon Selbyville, De	Launay nt Blvd elaware 19975	Company Name: Environmental Resources, I. Telephone #: (302) 436-9637 Fax #: (302) 436-9639				
3.	Contractor's Name: unknown Mailing Address:		Company N Telephone # Fax #:	elaunay@erico lame: #:			
	ction 2: Project Description						
5. Cc	Check those that apply: New Project/addition to existing project Project Purpose (attach additional shopstruct a 24 slip marina facility for floating dock with a "Yakport" cand	eets as necessary): Bridgewater Estates con	sisting of two	individual piers			
6.	Check each Appendix that is enclose	d with this application:					
/	A. Boat Docking Facilities	G. Bulkheads		N. Preliminary	Marina Chec	bliet	
<u> </u>	B. Boat Ramps	H. Fill		O. Marinas	Maina Chec	Klist	
	C. Road Crossings	I. Rip-Rap Sills and Re	vetments	P. Stormwater	Management		
T	D. Channel Modifications/Dams	J. Vegetative Stabilizati		Q. Ponds and I		3	
	E. Utility Crossings	K. Jetties, Groins, Brea		R. Maintenand			
	F. Intake or Outfall Structures	M. Activities in State W	Vetlands	S. New Dredg	ging		
7. Mil	etion 3: Project Location Project Site Address: southeast collers Neck Road and Old Mill Brilltimore Hundred, Selbyville, Del	orner of Site of Site of Address	wner name (if	N.C. □ Kent Y different from ap or:	oplicant):		
Tui	Driving Directions: From the interson left onto Old Mill Bridge Road. Pottach a vicinity map identifying road nations.	Proceed 1.1 miles to Mille	rs Neck Road				
9.	Tax Parcel ID Number: 134-21.00)-6.00 Subd	ivision Name: _	Estates at Bri	dgewater		
WS	SLS Use Only: Permit #s:						
Tyl	pe SP 🗆 SL 🗆 SU	J □ WE □ WQ	LA 🗆	SA □	$MP \square$	$WA \square$	
	rps Permit: SPGP 18 □ 20 □ Natio	onwide Permit #:	In	ndividual Perm	it #		
	ceived Date:	Project Scientist:					
	e Received? Yes \(\Bar{\cup} \) No \(\Bar{\cup} \) Amt: S blic Notice #: Public	\$ Receipt Notice Dates: ON	pt #:	FF			
1 14	Jile Profilee III.	Tiotice Dites: Off	0				

SECTION 2, ITEM 5 - PROJECT DESCRIPTION

Bridgewater Estates is a 156 lot single family home residential community which has received zoning and preliminary site plan approvals from Sussex County. The Bridgewater Estates property totals 145.3 acres. The community is located within an unincorporated area of Selbyville, in the Baltimore Hundred of Sussex County, Delaware. Approximately two thirds of the site consists of tidal salt marshes and non-tidal forested wetlands, which will be left undisturbed. A portion of the remaining area of approximately 48 acres (uplands) is where the residential development will be located. Water will be supplied to the site by Artesian Water Co. and sanitary sewer is service is provided by Sussex County. The proposed project is located approximately 4,350 feet north of the intersection of State Route (SR) 54 Lighthouse Road and Old Mill Bridge Road. The project site lies along the southerly shore of Dirickson Creek east of Old Mill Bridge Road. The entirety of the project is located within Sussex Co. Tax Map: 134-21.00, Parcel: 6.00. The project location is geographically identified by Latitude: 38.482710° N, Longitude: -75.114892° W.

The existing property has a waterfront area formerly developed with two mobile homes, several sheds and a 4' x 30' pier and 12' x 12' dock platform. The structure has a current Subaqueous Land Lease (SL 129/05). SB Old Mill Bridge, LLC plans to remove this structure when the proposed marina facility becomes operational. The applicant's development plan for the Bridgewater Estates Community Marina proposes to locate a community clubhouse and parking 0.2 miles east of the existing pier location. Development of this area will include two twelve slip marina piers and a floating kayak launch dock. The two piers will be separated by a 60 foot wide aisle for navigation of vessels. The redevelopment for the waterfront area is described as follows.

All proposed activities noted here are illustrated on the 8.5-inch by 11-inch permit drawings prepared by Davis, Bowen & Friedel, sheets 1 through 7 dated August 2022. The permit drawings are enclosed as **Exhibit 1**. Within this defined area of waterfront access, no state regulated wetlands will be impacted by the proposed marina project. A total of 54 square feet of federally regulated wetlands will be bridged by the two mooring piers.

Parking for the marina will be shared with the community clubhouse. A total of 108 parking spaces will be provided. A spill kit and portable marine pumpout cart will be kept in a small marina storage building which is at the sidewalk access point between the parking lot and marina. Restrooms will be conveniently located in the community clubhouse and a trash dumpster will be located in the parking lot area. A fire department connection for the fire protection system proposed for the marina piers will also be at that location. Connection will be made with a nearby hydrant which the system needs to be used. In accordance with Delaware State Fire Marshall guidance, each dock will

have a fire department connection on it's access pier. Marina signage will rules and emergency contact numbers will be located along the sidewalk area next to each pier. The proposed marina location is capable of meeting all the service requirements outlined in DNREC's Marina Regulations.

The Estates at Bridgewater Community Marina will provide mooring slips for 24 vessels. Two piers are proposed, each with 12 slips. The piers will extend from uplands 148 feet channelward of the mean low mean low water line of Dirickson Creek. The docking area of each pier will be separated by a 60 foot wide navigation aisle. Each docking area is contained within a 102 foot wide by 78 foot long rectangular area.

All of the proposed piers, docks and finger piers will be 6 feet wide in order to allow for possible boat lifts after operations begin. Slip size will be 24 feet long by 14 feet wide. The two docking areas have main pier configuration in a cross pattern. Each docking area will have four 16' x 6' finger piers between each pair of slips. There will be 20 free standing mooring piers between the slips at each docking area (40 total). In order to access an area of adequate water depth, each docking area is located approximately 74 feet offshore. Each pier will have a fire department connection on the main access pier placed approximately 30 feet offshore.

The eastern marina pier will be fitted with a floating dock to be used for launching canoes and kayaks. It will consist of an 8' x 20' dock which will be accessed from the main pier by a 4' x 16' aluminum ramp with railings. A 4' wide by 5' foot long "Yakport" launch assist apparatus will be attached to the side of the floating dock.

The combination of the two marina piers and the floating kayak launch dock facility will occupy a total of 4,036 square feet of public subaqueous lands. The proposed docks and piers will be of typical marine construction. All lumber will be salt treated, and all hardware will be galvanized or stainless steel. Pilings will be 10 inch diameter spaced typically 8 feet on center. Stringers and headers will be 2" x 10" and decking will be 2" x 8". Slip pair will be serviced by water and utility pedestals with down directed low level lighting.

Section 3: Project Location (Continued)

10. Name of	waterbody	at Project Locatio	n: Dirickson Cr	eek waterbody is	s a tributary to:	Little As	ssawoman Bay
11. Is the wa	terbody:	✓ Tidal □ N	Von-tidal Wa	erbody width at me	an low or ordin	ary high w	vater <u>758 to 858</u>
12. Is the pro	oject:	✓ On public sul ☐ In State-regu	baqueous lands? lated wetlands?	☐ On private suba☐ In Federally-re			
*If the projec	t is on priva	te subaqueous lan	nds, provide the na	me of the subaqueo	us lands owner		
(Written perm	nission from	the private subac	queous lands owne	r must be included	with this applic	ation)	
13. Present Z	Zoning:	☐ Agricultural	Residential	☐ Commercial	☐ Industrial	□ Othe	er
Section 4: M	iscellaneou	3					
		nd complete mai onal sheets as nec	essary):	the immediately ac	ljoining proper	ty owners	on all sides of the
			list the names and sheets as necessar		AND AND THE OWN PROTECTION OF PARTY.	operty ow	vners within a 1,000
15. Provide the None	he names of		rmy Corps of Engir	eers representatives	whom you have	discussed	the project with:
B. Has th	e project be		monthly Joint Peri	rformed on the prop nit Processing Meet		□ Yes	Y No V No
			he project site in s lease number(s):	ubaqueous lands?	√Ye	s 🗆 No	
*If n	io, were stru	ctures and/or fill	in place prior to 19	969?	□ Yes □ No		
17. Have you □ No	ı applied foı □ Pend			the Army Corps of lied Date:	Engineers?		
Type of Pern	nit: SPGP	- 20		Federal Permit or	ID #:		
18. Have you √No	ı applied foı □ Pend		ner Sections within ed		Pei	mit or ID i	#:
Type of perm	nit (circle all	that apply): S	Septic Well	NPDES Storm	Water		
Other:							

Adjacent Property Owners

Waters Run Property Owners Association, Inc. P.O. Box 1761 Millsboro, DE 19966

Rockswitch Properties, LLC. 12300 Rock Switch Street Milton, DE 19968

Christene Hargrove 36648 Old Mill Bridge Road Selbyville, DE 19975

Stephen & Deborah Finley 4378 Viridian Terrace Monrovia, MD 21770

Ethan J. Kleinstuber 1 West Indian Street Fenwick Island, DE 19944

Jay & Cynthia McAboy 36366 Derrickson Drive Selbyville, DE 19975

Virginia & Richard Moreland 36381 Rodney Lane Selbyville, DE 19975

Billy Jean Tuckmantel 70 North Seagull Road Selbyville, DE 19975

John O. Valliant Jr. TTEE 36463 Rodney Lane Selbyville, DE 19975

David A Lehman 36435 Rodney Lane Selbyville, DE 19975 George L. & June W. Grise Trustees 36423 Derrickson Drive Selbyville, DE 19975

Mark C. & Melissa R. Kopec 36415 Derrickson Drive Selbyville, DE 19975

Jeffrey E. Wilgus 36403 Derrickson Drive Selbyville, DE 19975

Christopher P. & Kristen E. Woodward 364 Weikart Rd. Gettysburg, PA 17325

Michael J. & Layne B. Snedaker 36379 Derrickson Drive Selbyville, DE 19975

Jane M. Long 36371 Derrickson Drive Selbyville, DE 19975

David Hartig 36361 Derrickson Drive Selbyville, DE 19975

Jeffrey W. & Paula C. Mumford Trustee 36347 Derrickson Drive Selbyville, DE 19975

Date

Section 5: Signature Page
19. Agent Authorization:
If you choose to complete this section, all future correspondence to the Department may be signed by the duly authorized agent. In addition, the agent will become the primary point of contact for all correspondence from the Department.
I do not wish to authorize an agent to act on my behalf $\ \Box$
I wish to authorize an agent as indicated below 🗸
I, <u>Tim Green, SB Old Mill Bridge, LLC.</u> , hereby designate and authorize <u>Edward M. Launay, ERI</u> (Name of Applicant) to act on my behalf in the processing of this application and to furnish any additional information requested by the Department.
Authorized Agent's Name: Edward M, Launay Mailing Address: Environmental Resources, Inc. 38173 DuPont Blvd. Selbyville, Delaware 19975 Telephone #: (302) 436-9637 Fax #: (302) 436-9639 E-mail: elaunay@ericonsultants.com
20. Agent's Signature:
I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge. I further understational that the Department may request information in addition to that set forth herein if deemed necessary to appropriately complete this application. Agent's signature 21. Applicant's Signature:
I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application. I grant permission to authorized Department representatives to enter upon the premises for inspection purposes during working hours.
Applicant's Signature Date
Mr. Tim Green, SB Old Mill Bridge, LLC. Print Name
22. Contractor's Signature:
I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge, and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

Last Revised on: March 28, 2017

Contractor's Name

Print Name

BOAT DOCKING FACILITIES

Any boat docking facility for more than four (4) vessels is considered a marina facility (see definitions and explanations section) and requires the applicant to complete Appendices N and O, and make application to the U. S. Army Corps of Engineers for approval.

Please make sure answers to all of the questions in this appendix correspond with information on the application drawings.

1. Briefly describe the project. (Attach additional sheets as necessary.)
24 slip community marina. See Basic Application, Section 2, item 5.

2. Please provide numbers and dimensions as follows:

Number of Dimensions (Channelward		hannelward of	Dimensions (Channelward of			New,	repair	
Support	MHW or OHW)		MLW- n	n/a	for	non-tidal	or mai	ntain
Pilings			water)					
	Width	Length	Width _		Len	gth		
	ft.	ft.	ft.		ft.			
40	6	152	6		148		NEW	
16	6	16	6		16		NEW	
24	6	96	6		96		NEW	
2	8	20	8		20		NEW	
0	4	5	4	•	5		NEW	
0	4	16	4		16		NEW	
Number								
20								
	Pilings 40 16 24 2 0 0 Number	Pilings Width ft. 40 6 16 6 24 6 20 8 0 4 0 4 Number	Pilings Width ft. Length ft. 40 6 152 16 6 16 24 6 96 2 8 20 0 4 5 0 4 16 Number Number	Pilings water) Width ft. Length ft. Width ft. 40 6 152 6 16 6 16 6 24 6 96 6 2 8 20 8 0 4 5 4 0 4 16 4 Number Number Number Number	Pilings Width ft. Length ft. Width ft. 40 6 152 6 16 6 16 6 24 6 96 6 2 8 20 8 0 4 5 4 0 4 16 4 Number Number Incompany of the property of the proper	Pilings water) Width ft. Length ft. Width ft. Length ft. 40 6 152 6 148 16 6 16 6 16 24 6 96 6 96 2 8 20 8 20 0 4 5 4 5 0 4 16 4 16 Number Number	Pilings water) Width ft. Length ft. Width ft. Length ft. 40 6 152 6 148 16 6 16 6 16 24 6 96 6 96 2 8 20 8 20 0 4 5 4 5 0 4 16 4 16 Number Number	Pilings water) Width ft. Length ft. Width ft. Length ft. Length ft. Midth ft. Length ft. Midth f

Mc	- '	How many moorings will be installed? What will be used for the anchor(s)? Anchor/Mooring Block Weight Anchor Line Scope (Length or Ratio) Water Depth at Mooring Location
3.	Approximat	ely how wide is the waterway at this project site? $\frac{758 \text{ to } 858}{2000}$ ft. (measured from MLW to MLW)
4.	What will be	the mean low water depth at the most channelward end of the mooring facility? 2.3 ft.
5.	aluminum, 1	of material(s) will be used for construction of the mooring facility (e.g. salt treated wood iberglass floats, etc.) Use of creosote-treated wood is prohibited. Ited timbers & piles fastened with galvanized hardware.
6.	Circle any o	f the following items that are proposed over subaqueous lands: g Stations/Benches/Ladders Water Lines/ Latellite Electric Lines/ Handrails/Other (Describe)
	If any of the	items are circled above, include their dimensions and location on the application drawings.

Append	N xib				Page 2
		ect require the use of acres and the intend		Yes 🖊 No If yes, ap	oproximate the amount
15. What	is the tide range a What is the sou	nt the marina site? N rce of this information	lormal tide <u>0.7</u> Neap ^{on?} on site observation	o tide <u>0.4</u> on and previous project in	n area
16. What i		e MLW depth at the rce of this informati	marina site? 2.3 Ft.		
17. If the s	Number of unit Length of shore Acreage of upla	ential development, s platted <u>142</u> line owned <u>1.1 mil</u> nd property <u>48</u> mber of on-site park	<u>es</u> _		
		cars	trailers	cars with trailers	oversize vehicles
	Proposed	108	0	0	0
	Existing	0	0	0	0
pump-	out, water, etc. E	lectric and water was based facilities are i	vill be provided by by ncluded in the propose	proper? Be specific, e.g. f pedestals with low level l ed marina or marina altera ith pool and restroom	lighting.
	e marina project	be available to the g	eneral public? If so, on ity for residents only.		
develo 22. Has a r	pment impacts? Project	Yes No t is approved by Su n completed for the	If no, please describe	ate to accommodate the the the upgrades required: equate utility capacity. No	project and associated

23. If no market study has been completed, please describe briefly the intended market, particularly the types and sizes of boats anticipated to use the facility.

The 24 slip marina will be fully occupied given the demand of 156 single family homes. Boat size will be small craft and pontoon type vessels expected to be less than 24 feet long.

Αţ	ppendix A			i e e	Page 2	
_						
/.	What will be the distance from or man-made channel? <u>+50</u>		ward end of the do	cking facility to	the edge of any natural	
8.	Describe the vessels that will plans and drawings.	be berthed at the	docking facility. Pl	ease draw prop	osed vessel locations on	
	Make/model	length	width	draft		
	Make/model	length	width	draft		
	Make/model	length	width	draft	_	
	Make/model	length	width	draft	_	
9.	Please provide a copy of the comotorized vessel listed above.	urrent state registr	ation or Coast Gua	rd Certificate of	Documentation for each	
10.	 Give the number and type of each Marine Sanitation Device (e.g. MSD III, Portable toilet) that will be used on vessels to be docked at the facility. Unknown 					
11.	Is there currently a residence of	on the property?	✓ Yes No			
12.	Do you plan to reach the boat explain your proposed mean authorizing access if you intend	ns of access and	provide document			

13. Will any portion of the structure be located in privately owned underwater land (such as a pond or lagoon)

Will any portion of the structure or any vessel be placed within 10 feet of your neighbor's property line?

If yes, a letter of no objection from the adjacent property owner must be included with this application.

If yes, written permission of the underwater land owner must be provided with this application.

14. What is the width of the waterfront property frontage adjacent to subaqueous lands? 5,800 ft.

_____ Yes _____ No

BOAT DOCKING FACILITIES

Any boat docking facility for more than four (4) vessels is considered a marina facility (see definitions and explanations section) and requires the applicant to complete Appendices N and O, and make application to the U. S. Army Corps of Engineers for approval.

Please make sure answers to all of the questions in this appendix correspond with information on the application drawings.

Briefly describe the project. (Attach additional sheets as necessary.)
 24 slip community marina. See Basic Application, Section 2, item 5.

2. Please provide numbers and dimensions as follows:

2. Please provide	e numbers and d	imensions as to	llows:	.,		
Structure Type	Number of	Dimensions (C	hannelward of	Dimensions (C	channelward of	New, repair
	Support	MHW or OHW	·)	MLW- n/a	for non-tidal	or maintain
	Pilings			water)		
Dock, Pier, Lift,		Width	Length	Width	Length	
gangway		ft.	ft.	ft.	ft.	
PIER	40	6	150	6	148	NEW
(6) FINGER PIERS	16	6	16	6	16	NEW
DOCK	24	6	96	6	96	NEW
Freestanding	Number					
Pilings		The statement of the st				

VI	oring Buoy: How many moorings will be installed? What will be used for the anchor(s)? Anchor/Mooring Block Weight Anchor Line Scope (Length or Ratio) Water Depth at Mooring Location
3.	Approximately how wide is the waterway at this project site? 758 to 858 ft. (measured from MLW to MLW)
1.	What will be the mean low water depth at the most channelward end of the mooring facility? 2.3 ft.
ō.	What type of material(s) will be used for construction of the mooring facility (e.g. salt treated wood aluminum, fiberglass floats, etc.) Use of creosote-treated wood is prohibited. salt treated timbers & piles fastened with galvanized hardware.
ŝ.	Circle any of the following items that are proposed over subaqueous lands: Fish Cleaning Stations/Benches/Ladders Water Lines/Latellite Electric Lines/Handrails/Other (Describe)
	If any of the items are circled above, include their dimensions and location on the application drawings.

Аβ	pendix A				Page 2	
7.	What will be the distance from the most channelward end of the docking facility to the edge of any natural or man-made channel? ± 50 ft.					
8.	Describe the vessels that will plans and drawings.	be berthed at the	docking facility. P	lease draw proposed	d vessel locations on	
	Make/model	length	width	draft		
	Make/model Make/model	length	width	draft		
	Make/model	length	width	draft		
	Make/model	length	width	draft		
	 Please provide a copy of the current state registration or Coast Guard Certificate of Documentation for each motorized vessel listed above. Give the number and type of each Marine Sanitation Device (e.g. MSD III, Portable toilet) that will be used on vessels to be docked at the facility. Unknown Is there currently a residence on the property? Yes No 					
12.	 Do you plan to reach the boat docking facility from your own upland property? Ves No If "No", explain your proposed means of access and provide documentation of easement or documentation authorizing access if you intend to cross someone else's property. 					
13.	3. Will any portion of the structure be located in privately owned underwater land (such as a pond or lagoon) owned by someone other than the applicant?Yes					

14. What is the width of the waterfront property frontage adjacent to subaqueous lands? 5,800 ft.

Will any portion of the structure or any vessel be placed within 10 feet of your neighbor's property line?

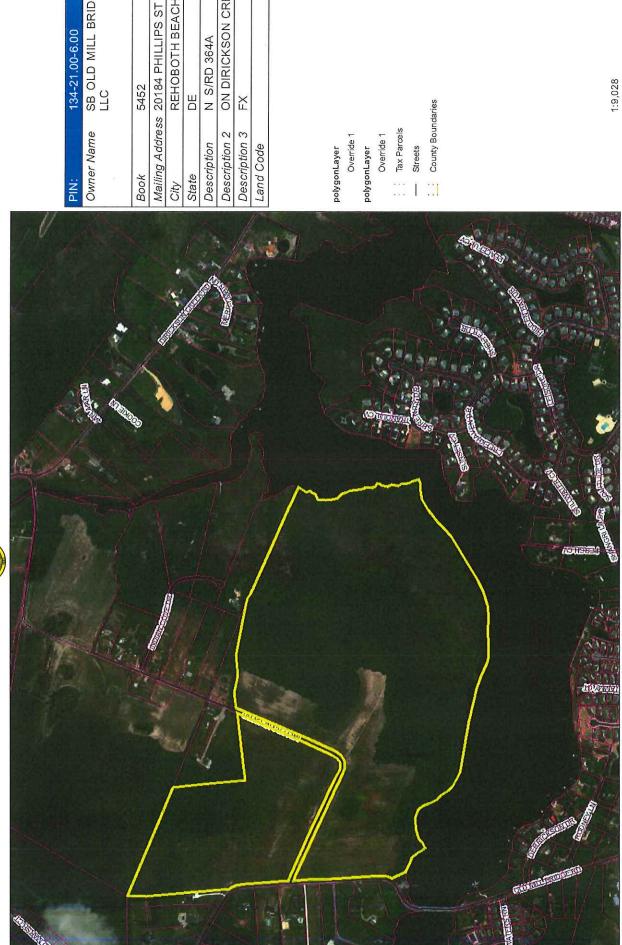
Yes V No

If yes, a letter of no objection from the adjacent property owner must be included with this application.

PRELIMINARY MARINA SCREENING CHECKLIST

(To be submitted at least one week prior to the pre-application meeting)

*	Provide the following information and/or answer the following with regard to the proposed marina project:
1.	Applicant's (Property Owners) Name Address: SB Old Mill Bridge, LLC. 20184 Phillips Street Rehoboth Beach, DE 19971 Attn: Tim Green Telephone Number Home (): 302-226-1994
Pro	ject Name: Estates at Bridgewater Community Marina
2.	Provide an aerial photograph of the site, if available.
3.	What are the existing land uses on the site? Site is composed of agricultural fields, forest and tidal wetlands. The site currently has two mobile homes. Site is approved by Sussex County for 156 single family homes.
4.	What are the existing land uses on adjacent properties within 1000 feet of the proposed marina or marina alteration, including the opposite shore? Agricultural lands, individual single family homes and small residential communities. The Waters Run Community operates a minor marina.
5.	Name and distance of nearest municipality. Fenwick Island, 3.5 miles west
6.	Is the proposed project an open water or enclosed basin marina? Open water Enclosed basin
7.	Is the marina on a creek, river, or open bay? Name of the water body? Dirickson Creek
8.	Indicate the number of wet slips. Proposed 24 Existing
9.	Indicate the number of dry stack spaces. Proposed <u>0</u> Existing
10.	Will the proposed marina or marina alteration require dredging? Yes No
	If yes, approximate the amount in cubic yardscubic yards
11.	If the project requires dredging, do you own or have access to an upland site for dredged material disposal?Yes No If yes, where is it located?
12.	If not, how do you propose to dispose of your dredged material?
13.	How many years of maintenance dredge spoil capacity does the spoil site possess? Years



ON DIRICKSON CREEK FX

REHOBOTH BEACH

5452

DE N S/RD 364A

SB OLD MILL BRIDGE LLC



MARINAS

Marina applicants must complete this appendix and any other appendices that may apply to the proposed project (see "List of Appendices").

Please be sure that answers to all of the questions in this appendix correspond to information on the application drawings.

1.	Name of marina: Estates at Bridgewater Community Marina
2.	Complete mailing address for marina: SB Old Mill Bridge, LLC. 20184 Phillips Street Rehoboth Beach, DE 19971 Attn: Tim Green
	Telephone Number: 302-226-1994
3.	Name and complete address for Harbormaster, if applicable: Attn: Tim Green SB Old Mill Bridge, LLC. 20184 Phillips Street Rehoboth Beach, DE 19971
4.	Check appropriate box: ☑ New Marina ☐ Alteration to Existing Marina
5.	Number of Slips: Complete Appendix A for details of docking facilities.
	 a. Wet Slips Dry Storage Spaces b. Existing c. Proposed or Additional 24 If this is an alteration to an existing marina, please be advised that the questions that follow pertain only to the altered portion(s) of the facility.
6.	Shellfish Resources: Is any part of the marina located within or adjacent to a classified shellfish growing area? This information can be obtained from the Division of Watershed Stewardship, Watershed Assessment Section (302-739-9939) YesNo If yes, how is the area currently classified? Approved Area Conditionally Restricted Area Conditionally Approved Area Restricted Area
7.	Submerged Aquatic Vegetation (SAV): Are any SAV beds located within the marina basin or adjacent areas? Yes No

Ρ	а	g	e	2

8.	Critical Habitats: Is the marina located within or adjacent to an area classified as a critical habitat by the Department's Division of Parks and Recreation? Critical habitat areas are those that are included in the Natural Areas Inventory, or that provide habitat for species included in the State Endangered Species Act (7 Del. C., Chapter 6). To obtain the locations of these areas, contact the Division of Parks and Recreation at (302) 739-5285 Yes No					
9.	. Dredging and Dredged material Disposal: Complete Appendices R and/or S. Not Applicable					
10.	. Shoreline Protection Structures: Complete appropriate Appendices.					
If t	Not Applicable . Water Supply: Describe the existing or proposed water supply facilities for the project. Public water system. Identify: Artesian Water Company, Inc. Private well. If existing, include the DNREC Well Permit Number: there are plans to construct a new well, a permit must be obtained from the Department's Water Supply ction prior to well construction.					
12.	. Wastewater Facilities:					
	 a. How many restroom facilities are planned for the marina? 1 If none, please explain: b. How will the wastewater from the facility be handled? ✓ Public sewer, identify: Sussex County On-site septic system Other, describe: c. Identify the permit numbers for any treatment, storage or disposal permits that have been obtained for the proposed wastewater facilities, including name and permit number for any waste transporters who will be transporting wastewater or septage. 					
	d. If permits for the wastewater facilities have not yet been obtained, have permit applications been submitted? Yes No If Yes, show the date and to whom the application was mailed. If no, describe all proposed plans for wastewater handling. Attach additional sheets as necessary.					
13	. Parking:					
Do Lo go Th	we many parking spaces will be provided? 108 westhe proposed parking plan conform to: cal planning codes or requirements; (Contact the County Planning Department and/or local municipal vernment offices for this information). e 0.5 spaces/slip rebuttable presumption from the Marina Regulations YesNo no, please explain:					

14. Stormwater Management: Describe in detail the plans to detain the first one-half inch of stormwater runoff from the disturbed portion of the site and release it over a 24 hour period. Attach additional sheets and drawings as necessary.

Stormwater will be collected from clubhouse area and managed in accordance with Sussex Conservation District approvals.

15. Solid Waste Management:

How many trash receptacles/ recycling bins will be provided at the marina? 2 If trash receptacles will not be provided, what measures will be taken to ensure that solid wastes are properly disposed of?

16. Boat Maintenance Areas and Activities:

a. Describe in detail how boat maintenance by-products, debris, residues, spills and run-off from maintenance areas will be controlled in accordance with the Marina Regulations. Attach separate sheets if necessary.

Maintenance is not proposed at the facility per Operations & Maintenance Plan.

b. Will special containers for waste oils and other maintenance wastes be provided? _____ Yes ______ No Explain:

Maintenance is not proposed at the facility per Operations & Maintenance Plan.

c. Describe in detail how materials used in maintenance and repair operations will be handled and stored. Materials of concern include, but are not limited to, paints, solvents, oils, greases, preservatives, pesticides, epoxies and corrosive cleaners. Indicate whether local fire codes or national Fire Protection Association (NFPA) standards have been used in developing the proposed handling and storage. Attach separate sheets if necessary.

Maintenance is not proposed at the facility per Operations & Maintenance Plan.

17. Fuel Storage and Delivery Facilities/Spill Contingency Plan:

a. Describe in detail all procedures for storage, handling and dispensing of fuel. Indicate whether local five codes or National Fire Protection Association (NFPA) standards have been used in developing proposed procedures. A permit from the Department's Underground Storage Tank Branch may also be required. Attach separate sheets as necessary.

No fueling is proposed for community marina.

b. Describe in detail procedures that will be used to contain and clean any fuel spills that occur as a result of marina operations. Notification procedures should also be described. Attach separate sheets if necessary.

On site spill kit will be provided with guidance provided by marina Operation & Maintenance Plan.

Append	dix O		Page 4
18. Fire Pr wheth	Protection Systems: Describe the fire protection system her local fire codes or National Fire Protection Asso sing and designing the systems. Attach additional sheet ide fire department connections on each marina pier pe	ciation (NFPA) standards have b	een used in
		r Delaware State Fire Marshall red	quirements.
19. Life Sa	afety Equipment:		
	For alterations to existing marinas: Does the altera structures? Yes No If yes, complete 20 How many floatation devices will be provided around located? None	B. If no, skip to question 21.	
20. Fish W	Vaste:		
If yes, how	cleaning stations be provided? Yes No w many? (Be sure to show their location on the e marina provide a live bait concession? Yes ✓		
21. Piers a	and Docks: Complete Appendix A.		
22. Drawi i	ing Requirements: At a minimum, all marina applicant	s must submit at least the followir	ng drawings:
b.	Elevation or Section View Vicinity Map Plan View		
	eneral Information for All Drawings: For all major stru om the nearest property line, survey marker or perman		and distance
	herever possible, identify the materials used in constructions of the volume and type of materials to be moved, and		volved, show
a.	Elevation or Section View		
items musX MeX Cor Cor Inta Boa Cha Oth	ation or section view includes the following, as applicant be included. Item high and low water lines; construction details for all water-based structures (e.g. proposed and other stake and outfall structures out Ramps cannel or basin modifications (proposed dredging areas ther	iers docks, pilings); horeline protection structures;	Pre-checked
b.	. Vicinity Map		

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c. Plan View

The plan view should be prepared on 8 1/2" x 11" paper, and in a standard blue print size and format, and contain the locations of the following features, as applicable (Check all those which apply to the project and include these items on the plan view drawing):

	Property boundaries
$\sqrt{}$	_ Shoreline
$\sqrt{}$	_ Mean high and low water lines
$\sqrt{}$	_ Direction of river flow/ebb and flow of tide
	Proposed channel
	Navigation Aids
$\sqrt{}$	Piers, docks, pilings, bulkheads, moorings, anchorages, jetties, groins, breakwaters and other water-
based	structures
	Slips (Wet)
	_ Slips (Dry)
	Boat ramp(s)
	Buildings, other structures (identify each)
	Boat storage areas/facilities
	Boat maintenance area(s)
	Extent of roof coverage (e.g. over maintenance areas, boat storage areas, etc.)
$\sqrt{}$	Roadways (identify surface, e.g. asphalt, gravel dirt, etc.)
$\sqrt{}$	Parking areas (identify surface, e.g. asphalt, gravel, dirt, grass, etc.)
	Maintenance materials storage areas(s)
	Public telephone(s)
$\overline{}$	Public restroom(s)
	Fish cleaning station(s)
	Life safety equipment station(s)
	Fuel dispensing pump(s) underground storage tank
	Septic tank
	Sewer connection/wastewater collection system
	Water supply well
$\sqrt{}$	Portable fire extinguisher(s), fire hydrant(s)
	Spill containment equipment storage areas(s)
	Trash receptacle(s) waste oil - other waste receptacles
	Stormwater management facilities
	Compensation area for wetlands
	Other

Document# 2021000026986 BK: 5452 PG: 76

Recorder of Deeds, Scott Dailey On 4/23/2021 at 11:11:46 AM Sussex County, DE

Consideration: \$7,000,000.00 County/Town: \$105,000.00 State: \$175,000.00 Total: \$280,000.00

Doc Surcharge Paid Town: SUSSEX COUNTY

TAX MAP #: 134-21.00-6.00 PREPARED BY & RETURN TO: Tunnell & Raysor, P.A. 770 Kings Highway Lewes, DE 19958 File No. HD25556/JCK

THIS DEED, made this April 19, 2021,

- BETWEEN -

<u>OLD MILL BRIDGE FARM, INC</u>, of 30562 Olde Fruitland Road, Salisbury, MD 21804, party of the first part,

- AND -

SB OLD MILL BRIDGE LLC, of 20184 Phillips Street, Rehoboth Beach, DE 19971, party of the second part.

WITNESSETH: That the said party of the first part, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the party of the second part, and its heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

TRACT I: All that certain tract, piece or parcel of land assigned as dower to Ann M. Williams, widow of Lemuel S. Williams, deceased, situate in Baltimore Hundred, Sussex County, and State of Delaware, adjoining lands of the heirs of James Q. Williams and lying on the Creek, containing forty-four (44) acres more or less with a dwelling house thereon, being the reversionary interest therein, with the appurtenances thereunto belonging, in or anywise appertaining; and also all the state, right, title, interest, property claim and any land whatsoever of the said Lemuel S. Williams, in his lifetime and at the time of his death, of, in and to the said lands and tenements before described; said lands having been conveyed to Jehu D. Bennett by Deed of Arthur Williams, dated the 9th of

TUNNELL
RAYSOR, P.A.
Georgetown, Delaware

April 1896, and recorded in the Office of the Recorder of Deeds, at Georgetown, Sussex County, Delaware, in Vol. 246, page 422.

TRACT II: All that certain tract, piece, parcel or tract of land which was assigned to Ann M. Williams by an order of the Orphans' Court as here portion of the estate of her husband, Lemuel S. Williams, as dower which dower, was conveyed to S. D. Bennett by Deed dated May 2, 1896, lying on the West side of the Creek, adjoining lands of A. E. Williams and others, said land to contain forty-four (44) acres, more or less, together with the improvements thereon; said lands having been conveyed to Samuel D. Bennett, by deed of Ann M. Williams, dated May 2, 1896, and duly recorded in the Office for the Recording of Deeds at Georgetown in Vol. 246, page 420.

TRACT III: All that certain piece or parcel of land which was awarded to Arthur E. Williams by the Commissioners appointed by the Orphans' Court of Sussex County as his part of the lands of his father, Lemuel S. Williams, deceased, lying and being situate in Baltimore Hundred, Sussex County, Delaware, on the West side of the Creek, adjoining lands of Joseph Harrison, Thomas R. Williams, and others, said to contain ninety-two acres (92) of land, more or less, together with all improvements thereon.

TRACT IV: All that certain interest, claim or demand whatsoever of the farm land the heirs of Lemuel S. Williams, deceased, heired from their father said heirs being Ida J. McCabe, Otis J. F. Williams, Ara P. Bunting; Orna E. Williams, and Ada E. Williams; said farm land lying on the West side of Williams Creek, adjoining lands of I. H. Hudson, Henry H. Watson and others said to contain thirty-five (35) acres of land, more or less.

TRACT V: All those certain tracts, pieces or parcels of land lying and being situate in Baltimore Hundred, Sussex County, Delaware, being bounded and described as follows to wit: Tract No. 1, being the tract of land formerly known as the Home tract of Thomas R. Williams and being composed of two parts one of which contains twenty (20) acres, more or less, and was conveyed to Thomas R. Williams by deed of Lemuel S. Williams and is recorded in

the Office for the recording of Deeds in and for Sussex County in Deed Record 121, page 467, as by reference thereto will more fully appear and the third party of Tract No. 1 was assigned to Thomas R. Williams by the Orphans' court of the State of Delaware in and for Sussex County as by reference to Orphans' Court Record No. 42, page 123 reference to Orphans' Court will more fully appear, same being the division of the lands of Lemuel S. Williams in said Orphans' Court, the second part contains twenty-five (25) acres and twenty-eight (28) perches, be the same more or less, together with the improvements thereon; said lands having been conveyed to Samuel D. Bennett, by deed of Otis J. F. Williams, dated the 4th day of February, 1911, and recorded in the Office of Recorder of Deeds at Georgetown in Sussex County, Delaware, in Vol. 226, page 262.



Witness

Witness

Witness

SUBJECT to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds in and for Frankford, Sussex County, Delaware.

IN WITNESS WHEREOF, the said Old Mill Bridge Farm, Inc has caused its name to be hereunto set, and its common and corporate seal to be hereunto affixed, duly attested, the day and year first above written.

OLD MILL BRIDGE FARM, INC

Bv:

Michael C. Burleson

Trustee Wanda W. Burleson Irrevocable Trust

Bw

Gray B. Warrington

Trustee Shirley J. Warrington

Irrevocable Trust

Steren (SEAL)

James E. Strugis

Substitute Trustee Donna L. Sturgis

Revocable Trust

TUNNELL

RAYSOR, P.A.

Georgetown, Delaware

STATE OF DELAWARE, COUNTY OF SUSSEX: to-wit

BE IT REMEMBERED, that on this 19th day of April, A.D. 2021, personally appeared before me, the Subscriber, a Notary Public in and for the State and County aforesaid, Michael C. Burleson, Trustee Wanda W. Burleson irrevocable trust, President of Old Mill Bridge Farm, Inc, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his/her act and deed and the act and deed of said corporation; that the signature of the Michael C. Burleson is in his/her own proper handwriting and the seal affixed is the common and corporate seal of said corporation; and that his/her act of signing, sealing, acknowledging and delivering said Indenture was first duly authorized by a resolution of the Board of Directors of said corporation.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

Notary Public

ATTORNEY AT LAW WITH

POWER TO ACT AS NOTARY PUBLIC PER 29 DEL. C SEC 4323 (A)3

STATE OF DELAWARE, COUNTY OF SUSSEX: to-wit

BE IT REMEMBERED, that on this 19th day of April, A.D. 2021, personally appeared before me, the Subscriber, a Notary Public in and for the State and County aforesaid, Gray B. Warrington, Trustee Shirley J. Warrington Irrevocable Trust, Vice President of Old Mill Bridge Farm, Inc, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his/her act and deed and the act and deed of said corporation; that the signature of the Gray B. Warrington is in his/her own proper handwriting and the seal affixed is the common and corporate seal of said corporation; and that his/her act of signing, sealing, acknowledging and delivering said Indenture was first duly authorized by a resolution of the Board of Directors of said corporation.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

Notary Public

My Commission Expires:

JAMIE C. KING
ATTORNEY AT LAW WITH
POWER TO ACT AS NOTARY PUBLIC
PER 29 DEL. C SEC 4323 (A)3

TUNNELL RAYSOR, P.A. Georgelown, Delaware STATE OF DELAWARE, COUNTY OF SUSSEX: to-wit

BE IT REMEMBERED, that on this 19th day of April, A.D. 2021, personally appeared before me, the Subscriber, a Notary Public in and for the State and County aforesaid, James E. Sturgis, Substitute Trustee Donna L. Sturgis Revocable Trust, Secretary/Treasurer of Old Mill Bridge Farm, Inc, party to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his/her act and deed and the act and deed of said corporation; that the signature of the James E. Sturgis is in his/her own proper handwriting and the seal affixed is the common and corporate seal of said corporation; and that his/her act of signing, sealing, acknowledging and delivering said Indenture was first duly authorized by a resolution of the Board of Directors of said corporation.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

Notary Public

My Commission Expires:

JAMIE C. KING
ATTORNEY AT LAW WITH
POWER TO ACT AS NOTARY PUBLIC
PER 29 DEL. C SEC 4323 (A)3

TUNNELL.

RAYSOR; P.A.

Georgetown, Delaware

SITING AND DESIGN STUDY FOR BRIDGEWATER ESTATES COMMUNITY MARINA

Tax Map No.: 134-21.00, Parcel: 6.00

Baltimore Hundred, Sussex County, Delaware

September 4, 2022

Prepared for:

SB Old Mill Bridge, LLC

Mr. Timothy Green 20184 Phillips Street Rehoboth Beach, DE 19975

Prepared By:



ENVIRONMENTAL RESOURCES, INC.

38173 DuPont Blvd. P.O. Box 169 Selbyville, DE 19975 Phone: 302-436-9637

ERI Project No.: 849#0792

SITING AND DESIGN STUDY FOR BRIDGEWATER ESTATES COMMUNITY MARINA

SUSSEX COUNTY, DELAWARE

Table of Contents:

Project Desc	cription1
Environmen	tal Setting2
Siting and D	esign Study Conclusions4
	List of Exhibits:
Exhibit 1:	Permit Drawings, "Bridgewater Estates Community Marina", prepared by Davis, Bowen & Friedel, Sheets 1 through 2, dated: August 2022
Exhibit 2:	Historic Water Quality Conditions – DEMAC Water Quality Portal -Dirickson Creek at Old Mill Bridge Road – Station 310031 -Swan Cove Picr – Station LA06
Exhibit 3:	ERI Water Quality Collection Data July through August 2022
Exhibit 4:	Agency Coordination Communication, USFWS
	List of Figures:
	Elst of Figures.
Figure 1:	Site Location Map & 8 ½ x 11 Marina Plans

PROJECT DESCRIPTION

Bridgewater Estates is a 156 lot single family home residential community which has received zoning and preliminary site plan approvals from Sussex County. The Bridgewater Estates property totals 145.3 acres. The community is located within an unincorporated area of Selbyville, in the Baltimore Hundred of Sussex County, Delaware. Approximately two thirds of the site consists of tidal salt marshes and non-tidal forested wetlands, which will be left undisturbed. A portion of the remaining area of approximately 48 acres (uplands) is where the residential development will be located. Water will be supplied to the site by Artesian Water Co. and sanitary sewer is service is provided by Sussex County. The proposed project is located approximately 4,350 feet north of the intersection of State Route (SR) 54 Lighthouse Road and Old Mill Bridge Road. The project site lies along the southerly shore of Dirickson Creek east of Old Mill Bridge Road. The entirety of the project is located within Sussex Co. Tax Map: 134-21.00, Parcel: 6.00. The project location is geographically identified by Latitude: 38.482710° N, Longitude: -75.114892° W.

The existing property has a waterfront area formerly developed with two mobile homes, several sheds and a 4' x 30' pier and 12' x 12' dock platform. The structure has a current Subaqueous Land Lease (SL 129/05). SB Old Mill Bridge, LLC plans to remove this structure when the proposed marina facility becomes operational. The applicant's development plan for the Bridgewater Estates Community Marina proposes to locate a community clubhouse and parking 0.2 miles east of the existing pier location. Development of this area will include two twelve slip marina piers and a floating kayak launch dock. The two piers will be separated by a 60 foot wide aisle for navigation of vessels. The redevelopment for the waterfront area is described as follows. A figure illustrating the location of the clubhouse and proposed marina piers is shown on Figure 1.

All proposed activities noted here are illustrated on the 8.5-inch by 11-inch permit drawings prepared by Davis, Bowen & Friedel, sheets 1 through 2 dated August 2022. The permit drawings are enclosed as **Exhibit 1**. Within this defined area of waterfront access, no state regulated wetlands will be impacted by the proposed marina project. A total of 54 square feet of federally regulated wetlands will be bridged by the two mooring piers.

Parking for the marina will be shared with the community clubhouse. A total of 108 parking spaces will be provided. A spill kit and portable marine pumpout cart will be kept in a small marina storage building which is at the sidewalk access point between the parking lot and marina. Restrooms will be conveniently located in the community clubhouse and a trash dumpster will be located in the parking lot area. A fire department connection for the fire protection system proposed for the marina piers will also be at that location. Connection will be made with a nearby hydrant which the system needs to be used. Per Delaware State Fire Marshall guidance, each dock will have a fire department connection on it's access pier. Marina signage will rules and emergency contact numbers will be located along the sidewalk area next to each pier. The proposed marina location is capable of meeting all the service requirements outlined in DNREC's Marina Regulations.

September 4, 2022 ERI Project Number: 849#0792

PROPOSED 24 SLIP MARINA

The Estates at Bridgewater Community Marina will provide mooring slips for 24 vessels. Two piers are proposed, each with 12 slips. The piers will extend from uplands 148 feet channelward of the mean low mean low water line of Dirickson Creek. The docking area of each pier will be separated by a 60 foot wide navigation aisle. Each docking area is contained within a 102 foot wide by 78 foot long rectangular area.

All of the proposed piers, docks and finger piers will be 6 feet wide in order to allow for possible boat lifts after operations begin. Slip size will be 24 feet long by 14 feet wide. The two docking areas have main pier configuration in a cross pattern. Each docking area will have four 16' x 6' finger piers between each pair of slips. There will be 20 free standing mooring piers between the slips at each docking area (40 total). In order to access an area of adequate water depth, each docking area is located approximately 74 feet offshore. Each pier will have a fire department connection on the main access pier placed approximately 30 feet offshore.

The eastern marina pier will be fitted with a floating dock to be used for launching canoes and kayaks. It will consist of an 8' x 20' dock which will be accessed from the main pier by a 4' x 16' aluminum ramp with railings. A 4' wide by 5' foot long "Yakport" launch assist apparatus will be attached to the side of the floating dock.

The combination of the two marina piers and the floating kayak launch dock facility will occupy a total of 4,036 square feet of public subaqueous lands. The proposed docks and piers will be of typical marine construction. All lumber will be salt treated, and all hardware will be galvanized or stainless steel. Pilings will be 10 inch diameter spaced typically 8 feet on center. Stringers and headers will be 2" x 10" and decking will be 2" x 8". Slip pair will be serviced by water and utility pedestals with down directed low level lighting.

ENVIRONMENTAL SETTING

The Bridgewater Estates Community Marina will extend into waters of Dirickson Creek. Dirrickson Creek is a tributary of Little Assawoman Bay. The Little Assawoman Bay has a surface area of approximately 600 hectares. It is tidally connected at its southern boundary by the Fenwick Ditch to the much larger Assawoman Bay, located in the State of Maryland. To the north, it is tidally connected to the Indian River Bay through a long, linear man-made navigation canal, the Assawoman Canal.

Regionally there are two (2) major drainage areas entering the Little Assawoman Bay as tributaries, a major wetland area bordering it and a smaller area of nonpoint source runoff. These two major drainage areas are associated with Dirickson Creek (with a drainage area of about 550 hectares to the south) and Miller Creek (with a drainage area of about 40 hectares to the north). An additional major nonpoint source area affecting water quality in the Little Assawoman Bay is the Assawoman Wildlife Management Area. The smaller area of nonpoint source runoff is in the southeast corner of the bay near the southern inlet and has about 25 hectares of developed area (Fenwick Island) extending along the interior beach to the west of Delaware State Route (SR) 1, Coastal Highway.

Plans for the Estates at Bridgewater Community Marina are based upon the North American Vertical Datum of 1988 (NAVD 88). The range of local tides in relation to this datum is as follows:

Elevation	0.3 feet	Spring Tide
Elevation	+ 0.5 feet	Mean High water
Elevation	0.0 feet	NAVD 88
Elevation	- 0.2 feet	Mean Low Water

A detailed bathymetric survey for water depths at Bridgewater Estates Community Marina was conducted by Mr. Robert Plitko, a Delaware registered professional engineer. Water depth at the existing pier are approximately elevation -2.3 feet NAVD 88. A 12 slip community marina owned and operated by the Waters Run Homeowners Association occurs on the opposite shoreline of Dirickson Creek west of the proposed marina. To the south of this facility there are a row of single family home lots opposite the marina site with a total of 11 private docks.

The width of Dirickson Creek in the vicinity of the proposed marina pier varies between 758 to 858 feet between mean low water. The marina is located in a cove like setting. There is no marked navigational channel in the area, but navigation mostly occurs in the center portion of the creek in the direction of the Old Mill Landing Road highway bridge. The usual area of navigation is therefore well away from the marina site. Other than the small existing dock currently on the Estates at Bridgewater property and a small community dock and ramp next to Old Mill Bridge Landing Road, there are no nearby docks on the north shoreline of Dirickson Creek.

A summary of historic water quality data representative of conditions at the proposed marina site were obtained from the Delawate Environmental Monitoring and Analysis Center (DEMAC) Water Quality Portal and provided in **Exhibit 2** of this study. The nearby applicable study point is Dirickson Creek at Old Mill Bridge Road, Sussex County Road 381, miles away. Conditions at the marina site are well represented by this location. Additional nearby data is available from a station located on a pier in Swann Keys.

Dissolved oxygen (DO) concentrations in Delaware's shallow inland bays and the area of the marina pier have dissolved oxygen levels that naturally cycle over 24 hours. During the day, plants and algae release oxygen into the water through photosynthesis. At night, plants, algae, and animals continue to respire and draw oxygen out of the water. Nutrient pollution can make these cycles extreme by fueling algal blooms. When the excessive algae respire at night, they can cause oxygen to drop below healthy levels. A healthy standard for DO levels in the inland bays is generally considered to be a DO of 4.0 mg/l.

In the Center for the Inland Bays (CIB) "2016 State of the Inland Bays Report", The CIB found that early morning DO levels fell below 4.0 mg/l only between 0 to 10 percent of summer mornings in the subject portion of the Little Assawoman Bay. This represents some of the best conditions in the inland bays as shown by the DEMAC data, summertime conditions. Old Mill Bridge Road station, summertime conditions ranged from 2.7 to 11.43 mg/l of DO. Average dissolved oxygen levels ranged from 5.85 mg/l to 6.88 mg/l. This exceeds the water quality standards for inland bay tidal waters. Other water chemistry results are also provided for these stations, none of which are limiting for this facility.

September 4, 2022 ERI Project Number: 849#0792

Exhibit 3 provides waters quality data collected by ERI at the marina pier location. DO levels slightly exceeded the reported DEMAC July and August average. Readings fell within the range of 7.0 to 8.0 mg/l.

Bacteria Report (total enterococcus) found colonics per 100 ml averaging between 92.4 and 377. The marine water standard of 100 ml was exceeded about fifty percent of the time.

As previously mentioned, the location of the proposed marina pier is unique among alternative locations in that community water access can be provided with no impacts to state regulated wetlands. The proposed marina will not adversely impact shellfish resources or harvesting. The marina pier lies within waters closed for shellfish harvesting under DNREC shellfishing regulations. Furthermore, in a 1991 Report "PRELIMINARY HARD CLAM AND MACROBENTHIC ALGAE SURVEY", authored by Mr. Jeffrey Tinsman (DNREC) found that no live mollusks were collected at 13 separate Little Assawoman Bay sampling locations. Mr. Tinsman also concluded that the lack of hard clam populations is due to the fact that the salinity of the Little Assawoman Bay drops below 20 parts per thousand (ppt) for extended periods of time, the minimum salinity needed to sustain hard clam populations. Salinity is lower than that level at the proposed marina location as documented by the data collected by ERI.

During sounding survey work, and site assessment of the marina location, ERI determined that submerged aquatic vegetation is not present at the marina pier site. Included in Exhibit 4 is correspondence from the U.S. Fish and Wildlife Service. Based upon these correspondences, the marina will not impact any federally listed threatened or endangered species or their critical habitats.

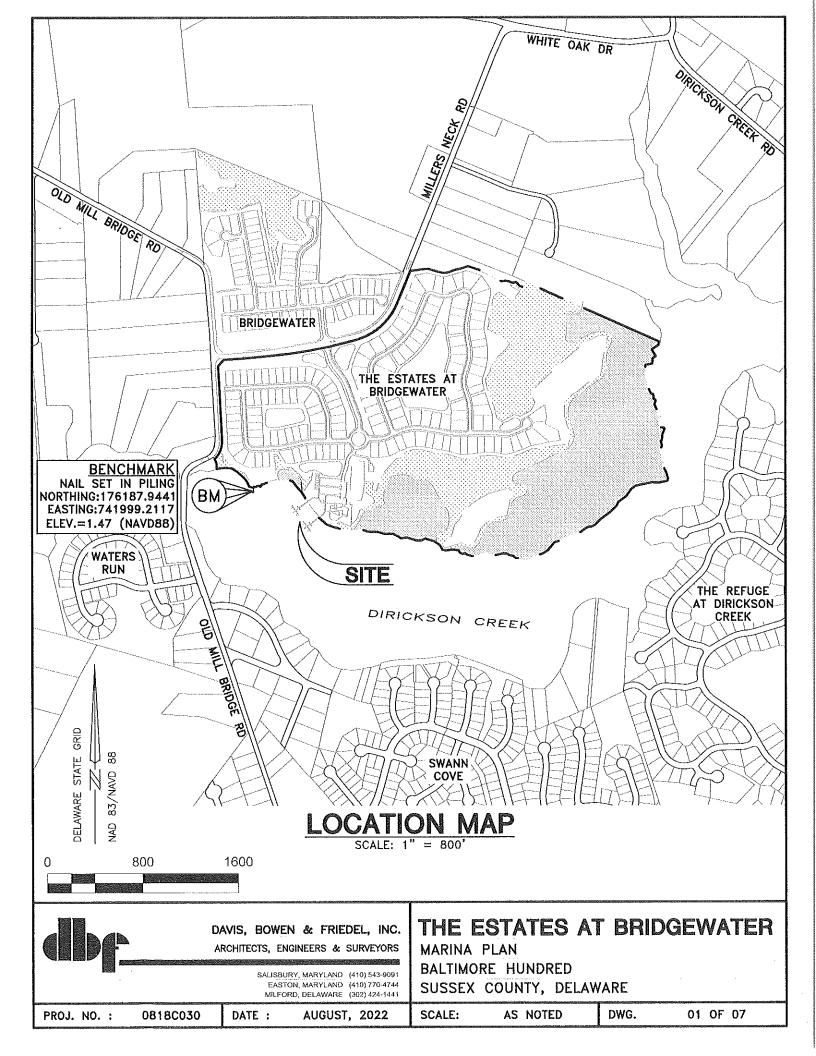
SITING AND DESIGN STUDY CONCLUSIONS

The design of The Estates at Bridgewater Community Marina meets all regulatory requirements and design standards of DNREC's Marina and Subaqueous Lands Regulations. It is a minor marina facility not exceeding 25 slips. The proposed location is favored since the waters of Dirickson Creek can be accessed from uplands without any impact to state regulated wetlands. Project impacts are thereby minimized. Adequate water depths exist without the need for dredging even on a long term basis. The project does not adversely impact boat navigation or any navigable channel(s). No nearby piers exist in close proximity; therefore, the facility has no impacts on neighboring properties. The marina site was approved by Sussex County as part of the land use approvals issued for the Estates at Bridgewater Residential Community.

No shellfish resources or submerged aquatic vegetation exists at the marina site. The marina site lies within waters prohibited for shellfishing. Water quality conditions at the marina facility are favorable and the marina will be result in no violation of state water quality standards. The marina will operate under an approved Operation and Maintenance Plan (O&M Plan). On-site restrooms and a marina pump out station are to be provided. The site is serviced by public water and sanitary sewer. Fish cleaning at the facility is prohibited by the O&M Plan. Lastly, endangered species or their critical habitats will not be impacted. Based on this summary of conclusions, the proposed marina facility is not adverse to public interest.

Exhibit 1

Permit Drawings
"Bridgewater Estates Community Marina"
prepared by Davis, Bowen & Friedel
Sheets 1 through 2, dated: August 2022



PROPOSED MARINA FACILITY OVER PU & FEDERALLY REGULATED SECTI	-
DESCRIPTION	AREA (SF)
PROPOSED LEASE AREA WITHIN PUBLIC STATE-OWNED SUBAQUEOUS LANDS OF DIRICKSON CREEK CHANNELWARD OF MEAN LOW WATER	4,036
MARINA ACCESS PIER BRIDGED OVER FEDERALLY REGULATED SECTION 404 WETLANDS	54

GENERAL NOTES:

- ELEVATION BASED ON NAVD 88 DATUM = 0.00'. BENCHMARK LOCATED ON NORTHWEST CORNER PILE OF EXISTING DOCK PLATFORM. NAIL SET IN SOUTHWEST PILE AT ELEVATION 1.47'.
- EXISTING DOCK AND PLATFORM TO BE REMOVED WHEN PROPOSED MARINA BECOMES OPERATIONAL.
- 3. RANGE OF LOCAL TIDES:

 MEAN HIGH HIGH WATER (SPRING TIDE) ELEV. = +0.8'

 MEAN HIGH WATER ELEV. = +0.5'

 MEAN LOW WATER ELEV. = -0.2'
- 4. TOTAL NUMBER OF SLIPS = 24
- 5. PROPOSED PIER AND DOCK ELEV. = 3.20'
- FIRE PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH DELAWARE STATE FIRE MARSHAL OFFICE REQUIREMENTS.



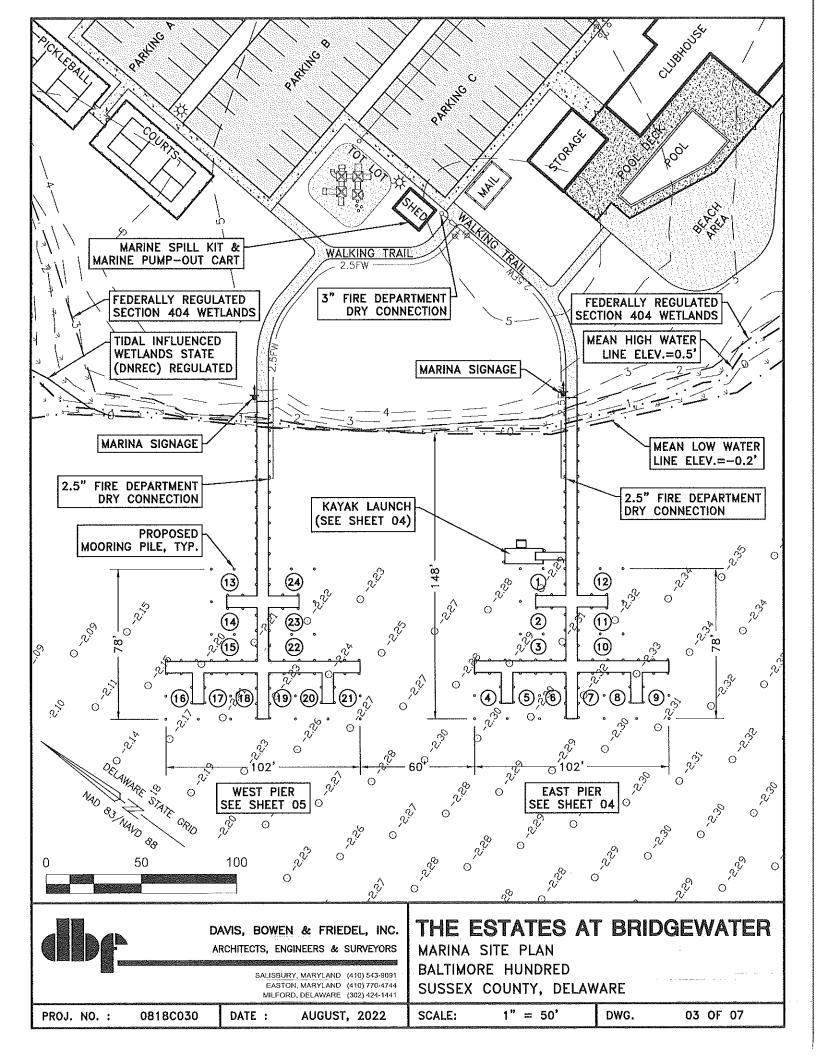
DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

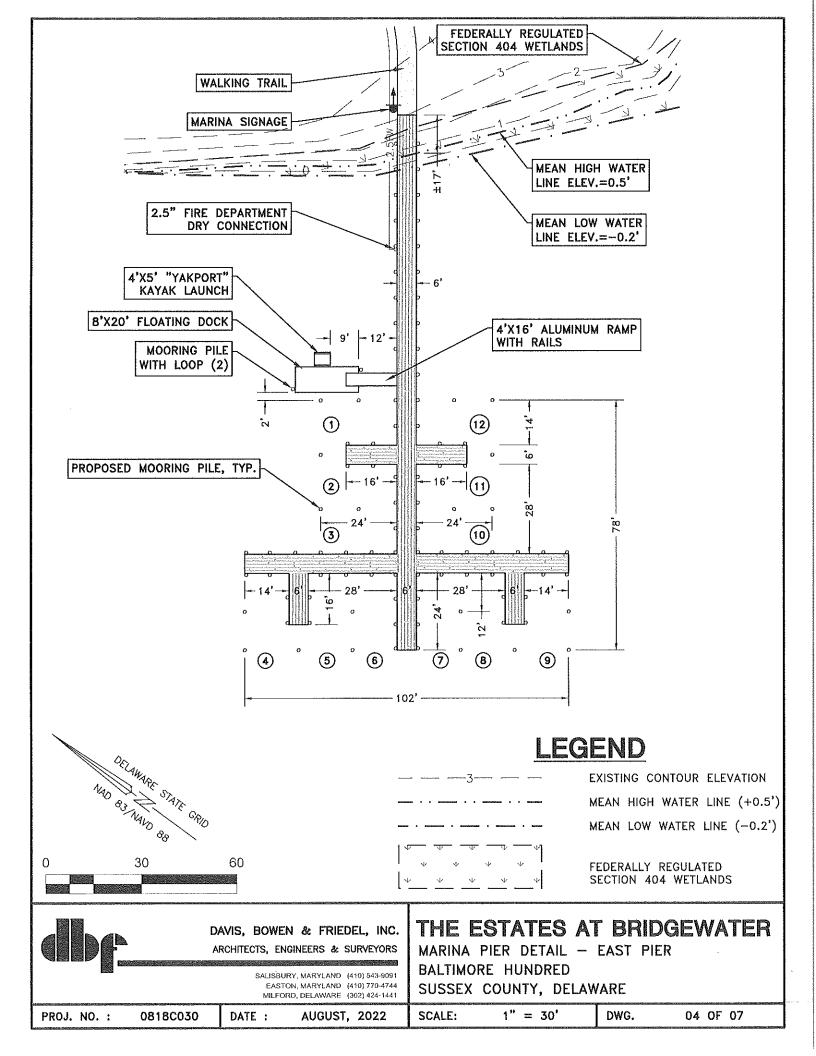
SALISBURY, MARYLAND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

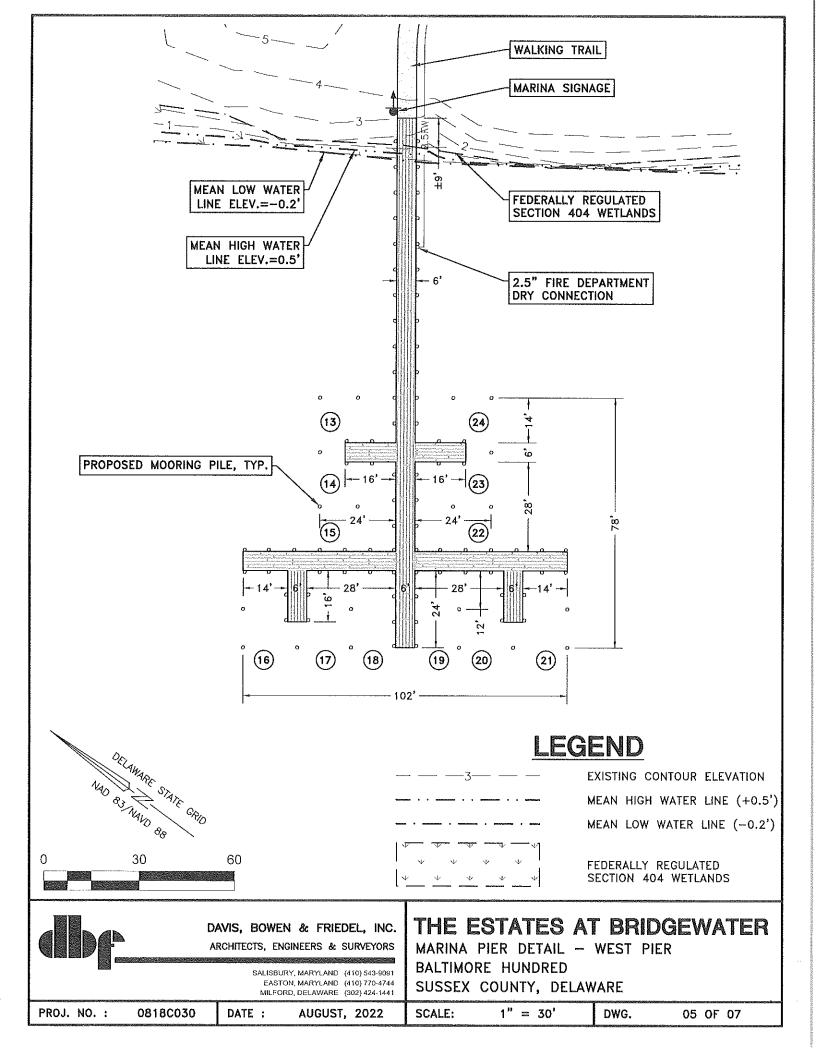
THE ESTATES AT BRIDGEWATER

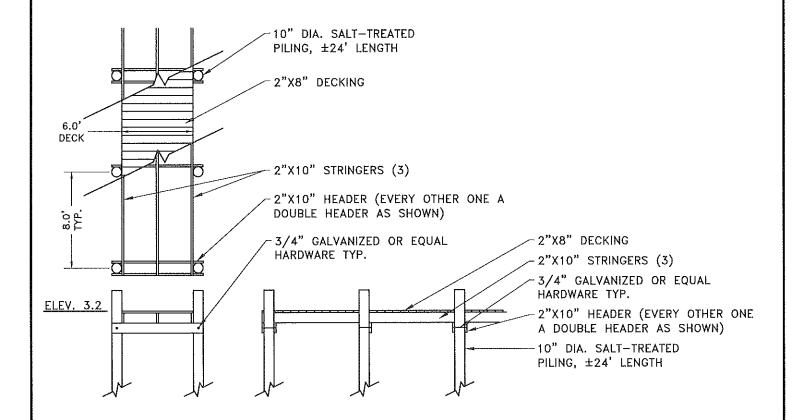
MARINA PLAN
BALTIMORE HUNDRED
SUSSEX COUNTY, DELAWARE

PROJ. NO.: 0818C030 DATE: AUGUST, 2022 SCALE: NTS DWG. 02 0F 07









TYPICAL PIER CONSTRUCTION NOT TO SCALE



DAVIS, BOWEN & FRIEDEL, INC. ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYLAND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

THE ESTATES AT BRIDGEWATER

MARINA PLAN CONSTRUCTION DETAIL BALTIMORE HUNDRED SUSSEX COUNTY, DELAWARE

PROJ. NO.: 0818C030

O DATE :

AUGUST, 2022

SCALE:

N.T.S.

DWG.

06 OF 07

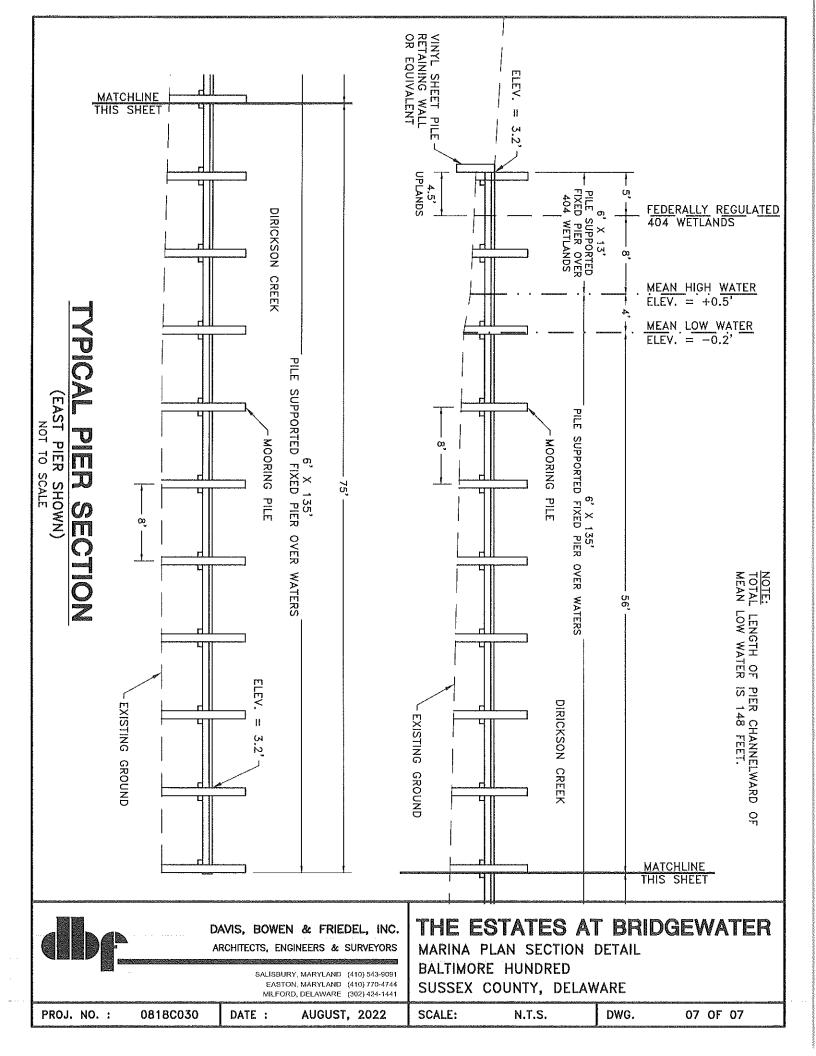


Exhibit 2

Historic Water Quality Conditions – DEMAC Water Quality Portal

-Dirickson Creek at Old Mill Bridge Road – Station 310031 -Swan Cove Pier – Station LA06

Delaware Water Quality Portal

Historical Data for 310031



Station Name: Dirickson Creek @ Old Mill Bridge

Rd. (Rd. 381)

Period of Record: Mar 06,

2000 - May 24, 2022

Classification: Salt Water

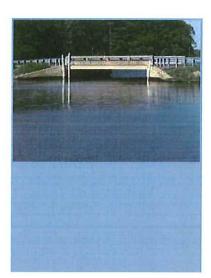
Basin: Inland Bays 🗗

Watershed: Little

Assawoman 🗗

Download Historical

Station Data (.csv)



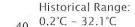
Water Temperature

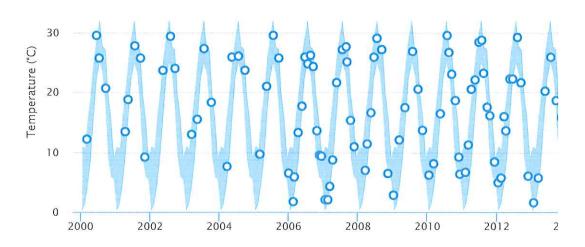
Temperature, like salinity, undergoes wide variations seasonally, although it is much less variable and much more predictable than any other water quality parameter displayed here. This can be seen by looking at the historical range for the long-term stations for any given month. This relative stability is due to the heat retaining properties of water, which make it much more resistant to temperature changes than our atmosphere.

Water Temperature

Observations







Hide Historical Data Range

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min	0.2	1.7	4.2	8.7	15.5	22.2	24.8	23.1	17.5	9.1	5.9	5.3
Avg	5.8	5.3	10.4	13.9	21	26.8	28.5	26.7	22.3	17.8	7.2	6.1
Max	10.9	10.6	15.9	20.4	25.8	29.5	32.1	27.6	27.1	19.7	15.7	9.3

pH

pH, in simple terms, is a chemical measure of whether or not something is an acid or a base. It is measured on a log scale of 0 to 14, with each unit representing a tenfold change. A pH of 7.0 is considered neutral and a range of 5.5 to 8.5 is usually tolerated by most aquatic organisms. Lower pHs are sometimes seen in fresher waters due to acid precipitation or even naturally-occurring organic acids, which can be found in areas with extensive marshes. High pHs can occur during algae blooms due to chemical reactions associated with photosynthesis.

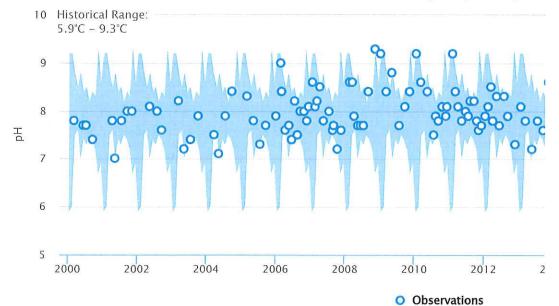
Moderate to higher salinities usually "buffer" in the 7 to 8 range, so most of the more extreme values are generally found in low salinity waters.

Water Temperature

DNREC Surface Water Quality Monitoring Program







Hide Historical Data Range

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min	5.9	6	7.5	7.6	7	7.4	7.3	7.5	7.4	7.2	6.7	6.9
Avg	7.6	6.6	8	8	7.7	7.9	8	7.9	7.9	8	8.6	8.2
Max	9.2	9.2	8.8	8.5	8.8	8.4	8.5	8.2	8.4	8.3	9.3	8.6

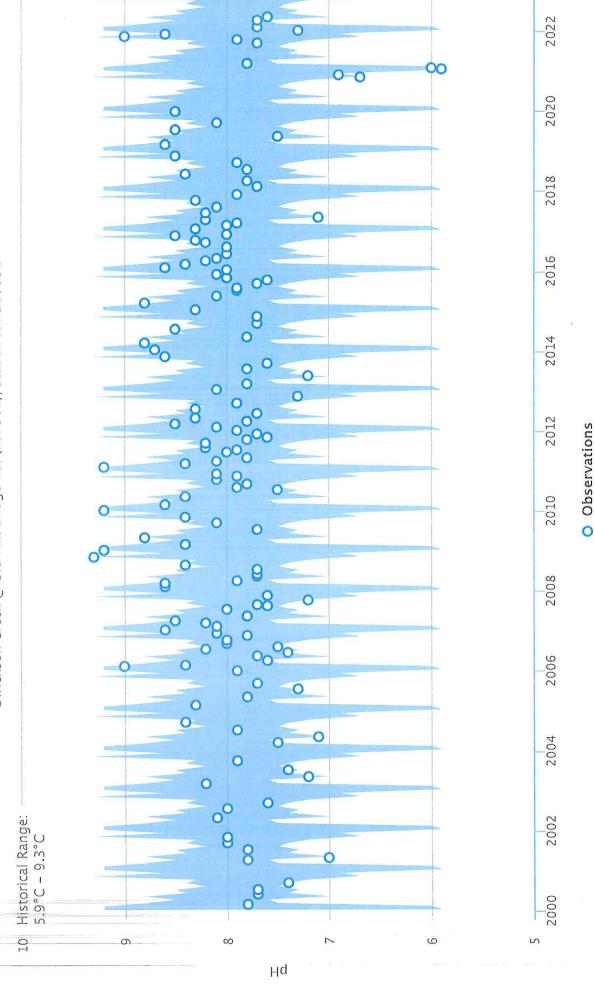
Dissolved Oxygen (DO)

The amount of oxygen dissolved in surface waters is one of the most important measures of habitat and water quality. This is because without oxygen, all of the living resources familiar to us perish. Dissolved oxygen (DO) is measured as a concentration (mg/l ~ milligrams per liter). When DO concentration drops below 5.0 or 5.5 mg/l, many sensitive organisms such as fish, become stressed, especially if exposed to these low DO conditions for a long period of time. On the other hand, bottom-dwelling organisms such as worms are usually more tolerant, and some species can survive at levels down to 1 mg/l in some cases.

The concentration of DO is affected by several factors. Temperature affects the concentration since warmer water cannot dissolve as much oxygen as colder water. In addition to temperature, the amount of algae in the water can also impact DO levels. Supersaturation (over 100% DO saturation) can occur when there is a large algal bloom. During the daylight, when the algae are photosynthesizing, they can produce oxygen so rapidly that it is not able to escape into the atmosphere, thus leading to short-term saturation levels of greater than 100%. In most cases, the DO graphs from the continuous monitoring stations show daily variations, with peaks

Hd

Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Station ID: 310031

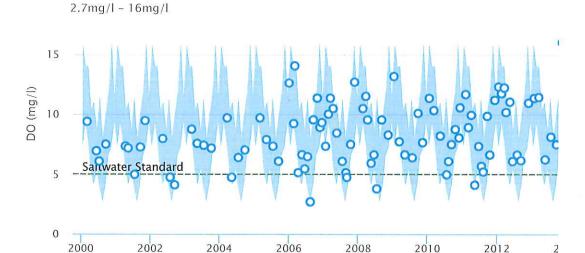


in late afternoon and minimums at dawn. These peaks are due to the production of oxygen by algae (measured by chlorophyll) during the daytime and the consumption of oxygen at night by algae and other organisms in the water and bottom sediments. These daily swings can be quite large when there are algae blooms fueled by nutrient pollution, and they often result in fish kills when oxygen levels drop to around 1 mg/l or less.

Dissolved Oxygen (DO)

X Present Above Quantification Limit

Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Stati



Hide Historical Data Range

Observations

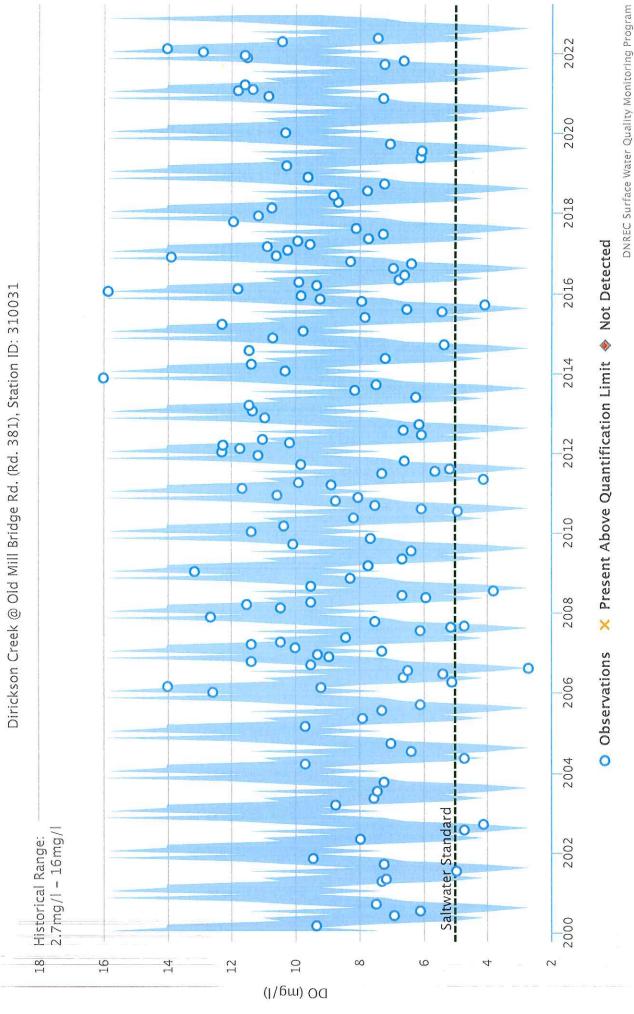
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Min	7.3	9.2	7.71	5.01	3.78	4.13	3.81	2.7	4.09	6.58	7.24
Avg	10.88	11.27	11.1	8.53	6.97	6.57	6.25	5.85	6.88	7.53	11.98
Max	15.85	12.01	14	10.46	11.02	8.81	11.43	8.08	10.07	11.93	16

Total Nitrogen (N)

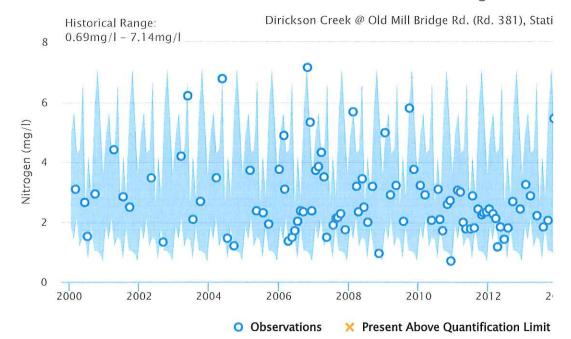
Historical Range:

Nitrogen is a nutrient and is essential element for both plants and animals. However, presence of excessive amounts of nitrogen in surface waters causes undesirable conditions leading to nutrient overenrichment. Symptoms of nutrient overenrichment include excessive algal blooms, large daily swings in dissolved oxygen levels, loss of Submerged Aquatic Vegetation (SAV), and fish kills.

Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Station ID: 310031 Dissolved Oxygen (DO)







Hide Historical Data Range

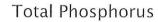
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min	1.85	1.4	2.11	1.17	1.29	1.41	0.76	1.81	1.05	1.03	0.94	0.69
Avg	2.94	3.39	2.66	2.12	2.55	2.12	2.04	2.38	1.7	1.85	1.7	1.71
Max	4.98	5.67	4.31	4.42	6.76	2.64	4.23	2.85	5.78	7.14	5.46	3.6

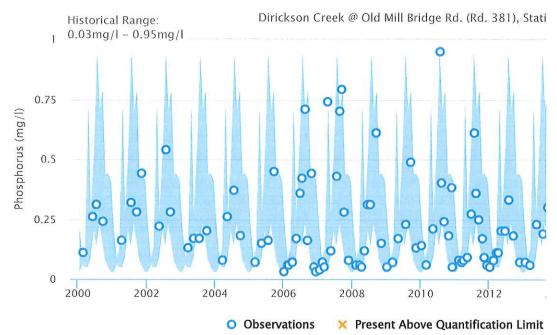
Total Phosphorus (P)

Phosphorus is a nutrient and is an essential element for both plants and animals. However, presence of excessive amounts of phosphorus in surface waters causes undesirable conditions leading to nutrient overenrichment. Symptoms of nutrient overenrichment include excessive algal blooms, large daily swings in dissolved oxygen levels, loss of Submerged Aquatic Vegetation (SAV), and fish kills.

O 🗙 Present Above Quantification Limit 🚸 Not Detected O O Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Station ID: 310031 Total Nitrogen O Observations Historical Range: 0.69mg/l - 7.14mg/l O / ∞ S $^{\circ}$ Nitrogen (mg/l)

DNREC Surface Water Quality Monitoring Program



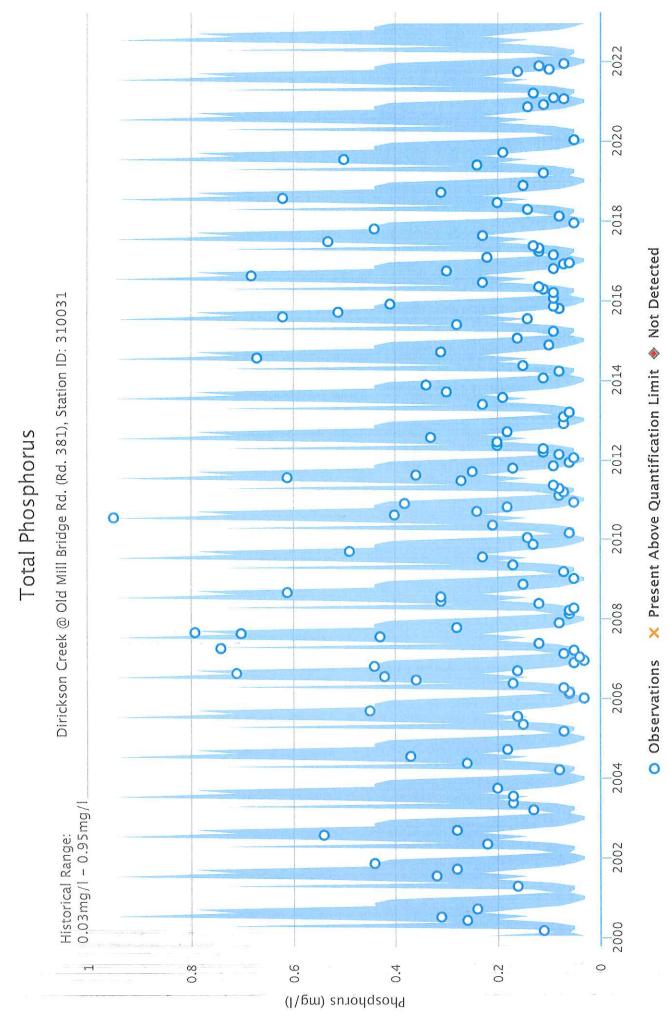


Hide Historical Data Range

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min	0.03	0.06	0.05	0.05	0.09	0.2	0.14	0.23	0.16	0.08	0.05	0.03
Avg	0.13	0.09	0.11	0.18	0.2	0.3	0.41	0.58	0.24	0.12	0.11	0.07
Max	0.22	0.09	0.13	0.74	0.28	0.53	0.95	0.71	0.79	0.44	0.44	0.41

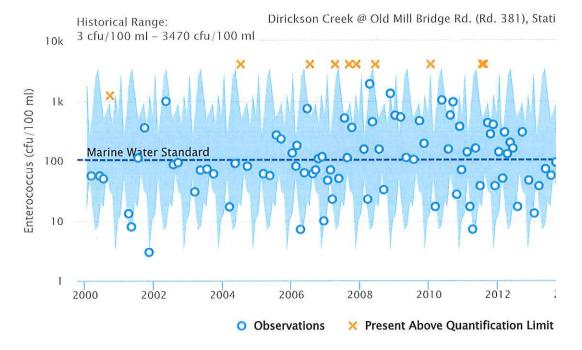
Enterococcus (Ent)

Enterococcus bacteria are indicator bacteria associated with warm blooded animals. Their presence in surface waters in excessive amount increases the risk of gastrointestinal illness for people who conduct swimming and other water contact activities in marine and fresh waters.



DNREC Surface Water Quality Monitoring Program

Enterococcus

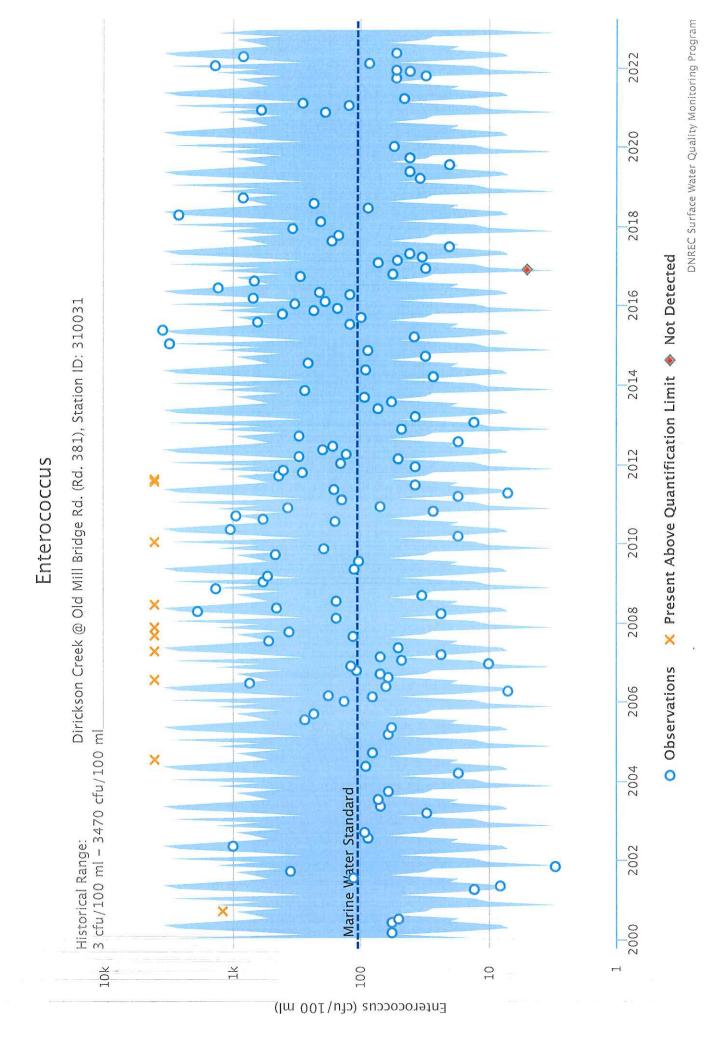


Hide Historical Data Range

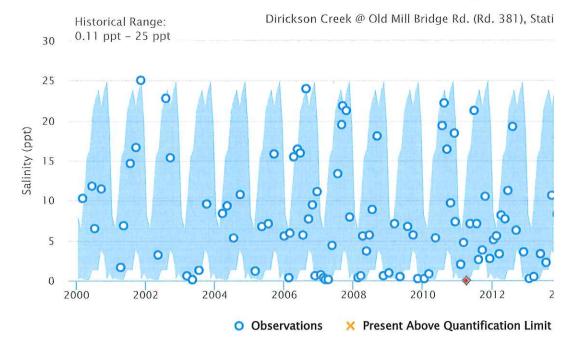
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	De
Min	13	50	17	7	8	20	17	60	31	27	3	10
Avg	88.5	220	46	81.4	122.9	128	70.6	376.6	94.2	46.2	57.2	56.
Max	3110	279	690	2610	3470	1300	520	677	933	409	1330	59

Salinity (Sal)

The concentration of salt, or salinity, is a function of the mixing of freshwater with ocean waters, which has higher salinity. In any given location, salinity can vary greatly depending upon river flow: being low during high flows and high during low flows and droughts. Most of the living resources are adapted to these swings in salinity, but extreme floods or droughts can lead to stressful conditions. Extended periods of high salinity can also force fish that prefer lower salinities, such as yellow perch, out of the river mainstems and up into headwater creeks.







Hide Historical Data Range

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Min	0.18	0.33	0.17	0.11	0.11	1.24	1.29	1.27	3.77	3.23	0.19
Avg	5.2	1.24	1.45	6.39	5.96	10.56	12.9	11.58	15.92	14.98	17.04
Max	8.16	6.55	10.3	15.43	16.47	21.25	22.75	23.97	21.88	23.92	25

Total Suspended Solids (TSS)

Total Suspended Solids are solid materials that are suspended in the water. Solid materials include inorganic and organic material such as silt, municipal and industrial wastes, and algae. High concentrations of suspended solids can degrade water quality by absorbing light, which causes the water to become warmer and reduces its ability to hold oxygen necessary for aquatic life. The combination of warmer water, less light and less oxygen makes it impossible for some forms of life to exist.

Suspended solids affect aquatic life in other ways. They can clog fish gills, reduce growth rates, decrease resistance to disease, and prevent egg and larval development. Particles that settle out can smother fish eggs and those of aquatic insects, as well as suffocate newly-hatched larvae. The material that settles also fills the spaces between rocks and makes these microhabitats unsuitable for various aquatic insects, such as mayfly, stonefly, and caddisfly larva.

Suspended solids can result from erosion from urban runoff and agricultural land, industrial wastes, bank erosion, bottom feeders (such as carp), algae growth or wastewater discharges. Protection of the land in our watersheds from erosion by use of conservation practices and giving urban runoff time to settle out before

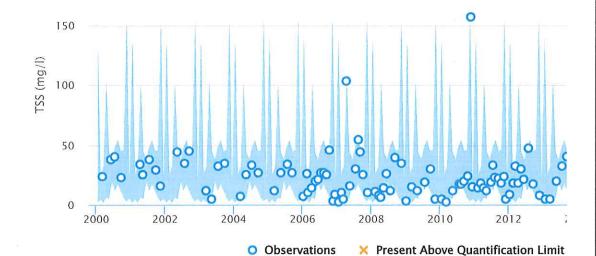
O O 🗙 Present Above Quantification Limit 🚸 Not Detected Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Station ID: 310031 Salinity O Observations Historical Range: 0.11 ppt - 25 ppt Salinity (ppt)

DNREC Surface Water Quality Monitoring Program

reaching our surface waters help with reducing suspended solids in our State's waterways.

Total Suspended Solids





Hide Historical Data Range

Q	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Min	2	5.9	2	6	5	19	12	17	11.8	6	3	5
Avg	64.3	8.8	16.6	34.5	19.8	25.8	28.6	27.8	25.9	11.3	22.1	14.6
Max	142	26	32	103	44	38	48.6	54	45	46	157	21.6

Chlorophyll A

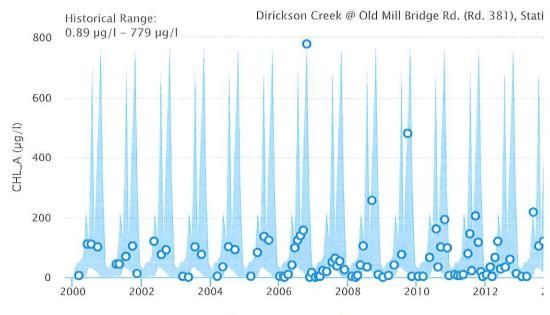
Chlorophyll is a color pigment found in plants, algae and phytoplankton. This molecule is used in photosynthesis, as a photoreceptor. There are 6 different chlorophylls that have been identified. The different forms (A, B, C, D, E and F) each reflect slightly different ranges of green wavelengths. Chlorophyll A is the primary molecule responsible for photosynthesis. Chlorophyll is measured in micrograms per liter $(\mu g/l)$.

Dirickson Creek @ Old Mill Bridge Rd. (Rd. 381), Station ID: 310031 Total Suspended Solids Historical Range: 2 mg/l - 157 mg/l S) (I/Bm) SST

DNREC Surface Water Quality Monitoring Program

O Observations X Present Above Quantification Limit * Not Detected

Chlorophyll A



Observations

× Present Above Quantification Limit

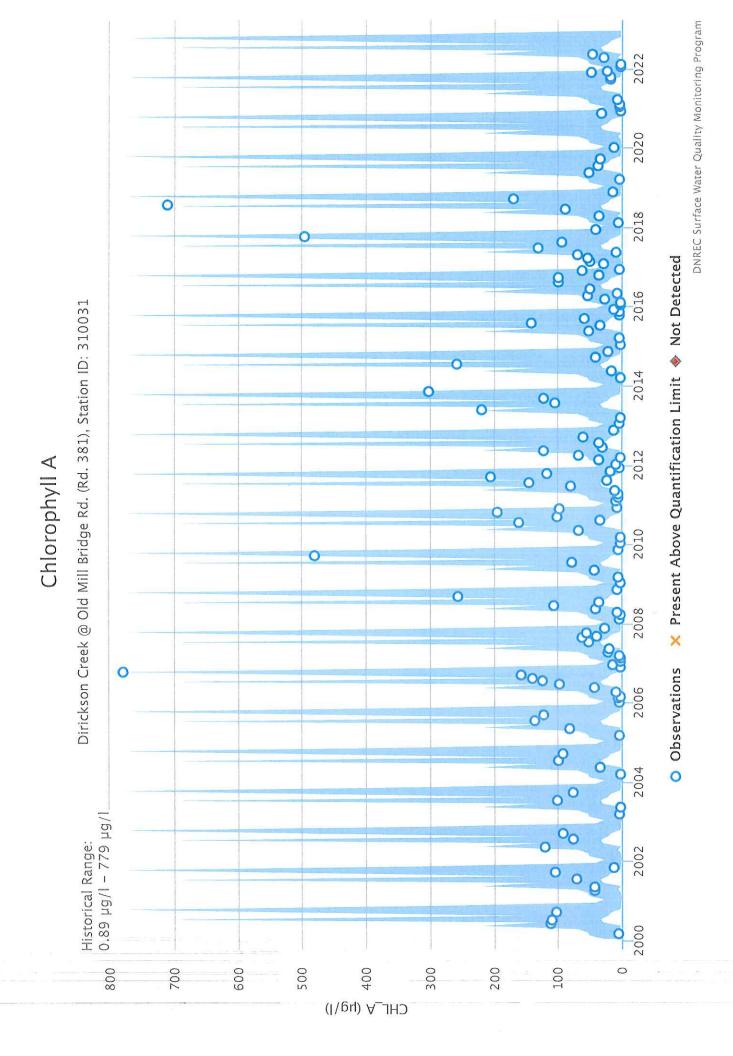
Hide Historical Data Range

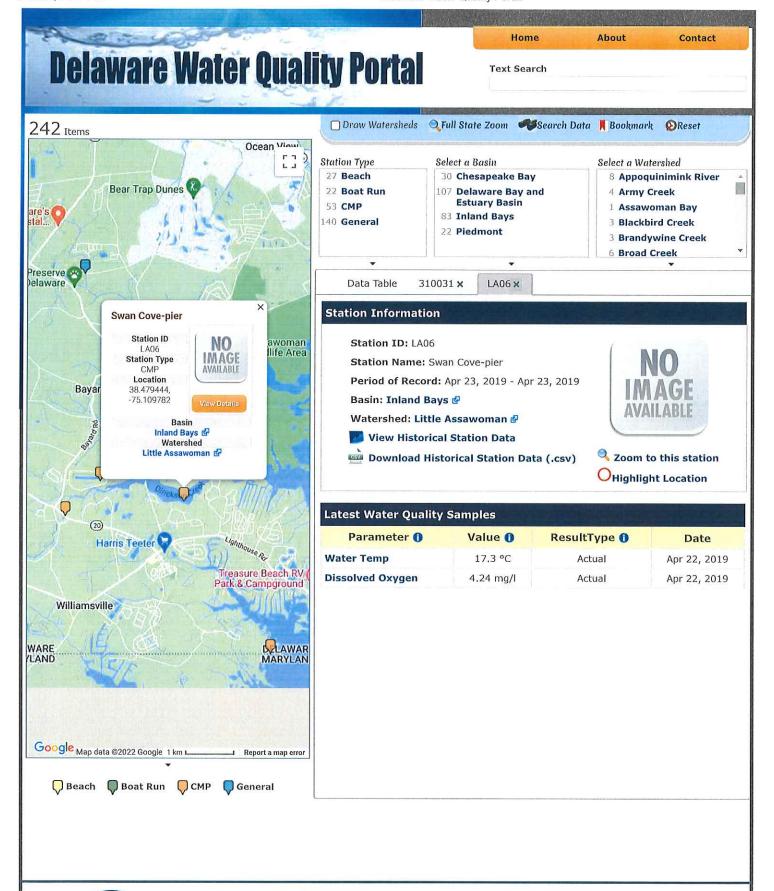
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Min	1.33	1.37	1.24	6.03	1.1	29.6	33.3	22.3	16.9	2.89	0.89
Avg	14.57	5.5	6.76	34.37	53.29	86.36	107.47	89.27	67.9	52.11	51.7
Max	27.5	50	52.7	68.3	218	130	711	141	480	779	302



This site was developed by the Center for Environmental Monitoring & Analysis in coordination with the DNREC Watershed Assessment and Mangement Section. Additional support provided by the US EPA through the Center for Inland Bays and the Citizens Monitoring Program. All data for this site were obtained from the National Water Quality Monitoring Council's National Water Quality Portal (www.waterqualitydata.us).









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Exhibit 3

ERI Water Quality Collection Data July through August 2022

WATER QUALITY SAMPLING OF DIRICKSON CREEK **ESTATES AT BRIDGEWATER COMMUNITY MARINA**

j	CONDITIONS	TEMPERATURE	SALINITY	DISSOLVED
	TO THE PARTY OF TH	ບໍ	ppt	OXYGEN mg/I
	cloudy, calm, mid tide	28.3	14.4	7.52
	partly sunny, breezy, low tide	27.4	13.7	12.95
	sunny, calm, mid tide	30.0	15.6	7.45
	partly cloudy, breezy, high tide	30.0	16.0	7.33
	sunny, calm breeze, mid tide	31.1	16.1	7.35
	cloudy, calm, high tide	27.5	15.1	7.82
	partly cloudy, calm, mid tide	28.0	23.0	7.58
				Manager and the second
				And the second s
				And the state of t
1				

Exhibit 4

Agency Coordination Communication USFWS



38173 DUPONT BOULEVARD P.O. BOX 169 SELBYVILLE, DE 19975 PHONE: 302-436-9637

FAX: 302-436-9639

December 18, 2019

ERI Project 849#0792

Mr. Zachary Crouch, P.E. Davis, Bowen & Friedel, Inc. 23 North Walnut Street Milford, DE 19963

RE: Presence / Absence of Federally Listed Threatened & Endangered Species Old Mill Bridge Landing (North & South Parcels) Old Mill Bridge Farms, Inc.

Dear Mr. Crouch,

Environmental Resources, Inc. (ERI) has conducted a variety of environmental studies for both the north and south section of the proposed Old Mill Bridge Landing Residential Community which borders both sides of Miller Neck Road. The 186 acre site includes approximately 66 acres of agricultural field, 45 acres of forested uplands, 30 acres of forested wetlands, 1.5 acres of ponds and drainage channels and 43.5 acres of state regulated wetlands consisting primarily of salt marshes.

As part of our field effort we reviewed the entire project area for the presence of any federally listed threatened or endangered species or their critical habitats as listed by the Endangered Species Act of 1973. ERI determined no species or habitats of concern occur on this property.

ERI conducted further consultation on this matter with the U.S. Fish & Wildlife Service (USFWS). Attached is the USFWS letter dated December 18, 2019 which further confirms that no federally listed threatened or endangered species or their critical habitats are found on this property.

Upon your review of these findings, I am available at your convenience should you have any questions.

Sincerely,

ENVIRONMENTAL RESOURCES, INC.

Edward M. Launay, Principal

Protessional Wetland Scientist No. 875, Society of Wetland Scientists



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 Phone: (410) 573-4599 Fax: (410) 266-9127

http://www.fws.gov/chesapeakebay/

http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html



December 18, 2019

In Reply Refer To:

Consultation Code: 05E2CB00-2020-SLI-0340

Event Code: 05E2CB00-2020-E-00886

Project Name: Old Mill Landing Residential Community

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office 177 Admiral Cochrane Drive Annapolis, MD 21401-7307 (410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2020-SLI-0340

Event Code:

05E2CB00-2020-E-00886

Project Name:

Old Mill Landing Residential Community

Project Type:

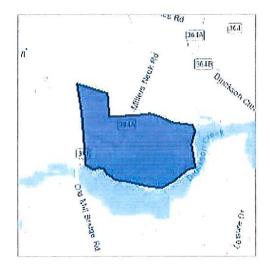
DEVELOPMENT

Project Description: Develop a residential community on uplands as permitted by Sussex

County Code.

Project Location:

Approximate location of the project can be viewed in Google Maps: https:// www.google.com/maps/place/38.48655840666044N75.11145610009828W



Counties: Sussex, DE

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an
office of the National Oceanic and Atmospheric Administration within the Department of
Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

ESTUARINE AND MARINE DEEPWATER

* E1UBL

ESTUARINE AND MARINE WETLAND

- **E2EM1P**
- E2EM1Pd

FRESHWATER FORESTED/SHRUB WETLAND

- PFO1/4A
- PFO1/4B
- " PFO1A
- PFO1C
- PFO1E
- PFO4/1A

FRESHWATER POND

PUBHx

RIVERINE

- " R2UBH
- **R2UBHx**

ESTATES AT BRIDGEWATER COMMUNITY MARINA OPERATION & MAINTENANCE PLAN

September 15, 2022

Prepared for:

SB Old Mill Bridge, LLC.

c/o Mr. Tim Green, Harbormaster 20184 Phillips Street Rehoboth Beach, Delaware 19971 302-436-9639

Prepared by:

ENVIRONMENTAL RESOURCES, INC.

38173 DuPont Boulevard P. O. Box 169 Selbyville, DE 19975

302-436-9637

ERI Project No. 0849#0792

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INTRODUCTION

SB Old Mill, LLC. is seeking DNREC approvals to construct and operate a 24 slip community marina and kayak launch dock. The marina will be used by the residents of The Estates at Bridgewater Residential Community. The community consists of 156 single family homes and a clubhouse. The marina facility will consist of two 148 foot long piers, each berthing 12 vessels. Electric and water service will be provided to each slip by shared utility pedestals. The eastern pier is equipped with a floating kayak launch dock. The docking area at each pier is a 102 foot wide by 78 foot long rectangular area. Restrooms, parking, and other services are located at the adjacent community clubhouse building. A marina shed housing a marina spill kit and portable pump out cart is provided near the corner of the parking lot opposite the marina on the west side of the clubhouse. Marina tenants will be provided with keyed access to the marina shed. Signage at the marina piers provides marina rules and emergency contact numbers.

In order to comply with requirements and special permit conditions of authorizations obtained from DNREC, this Operation and Maintenance Plan (O&M Plan) has been developed. The O&M Plan serves to describe the facility, define how the facility will be operated utilizing best management practices, and provide rules and procedures for users of the facility. The goal of the O&M Plan is to protect the water quality of Dirickson Creek and surrounding inland bay waters and to ensure that the marina is operated in a safe manner.

The owner/operator of the marina facility is required to:

- 1. Update and submit the O&M Plan to DNREC for re-approval every three years from the date DNREC approves the facility as fit for operation or upon transfer of ownership of the facility;
- 2. Insure that the facility is operated and maintained as specified by the DNREC-approved O&M Plan and in a manner which protects the health, safety and welfare of marina employees, tenants and members of the general public;
- 3. Insure that the facility is operated in compliance with Conditions of DNREC permits and leases;
- 4. Insure that marina tenants comply with the O&M Plan;
- 5. Provide copies of the O&M Plan to all marina tenants; and
- 6. Take appropriate action to deal with marina tenants who violate the O&M Plan.

GENERAL MARINA INFORMATION

A) Facility Name and Address

Estates at Bridgewater Community Marina Old Mill Bridge Road & Millers Neck Road Parcel 6, Tax Map 134-21.00 Selbyville, Sussex County, Delaware

B) Name of Owner/Operator

SB Old Mill Bridge, LLC. c/o Mr. Tim Green 20184 Phillips Street Rehoboth Beach, DE 19971 Phone: 302-436-9639

C) Personnel Contact Information

Harbormaster/Estates at Bridgewater Community Marina c/o Mr. Tim Green, Harbormaster 20184 Phillips Street Rehoboth Beach, DE 19971 Phone: 302-436-9639

D) Emergency Numbers

Responsible Personnel:

	
Mr. Tim Green, Estates at Bridgewater Community Marina Harbormaster	302-542-8349
Emergency Response Numbers:	
Police/Fire/Ambulance	911
U.S. Coast Guard Search & Rescue	302-227-2121
DNREC Emergency Response Team/Marina Police	800-662-8802
In the event of a fuel, oil or sewage spill or fire, reporting contact numbers are:	
Estates at Bridgewater Community Marina Harbormaster	302-542-8349
Police/Medical/Fire Emergency	911
Local fire company	302-732-6151
State Police (Non-emergency)	302-855-2980
U.S. Coast Guard	302-227-2121

DNREC Emergency Response Team/Marina Police	800-662-8802	
DNREC Inland Bays Pollution Reporting Hotline	800-523-3336	
Sussex County Operations Center (severe weather)	302-855-7804	

PART I: MARINA OVERVIEW

A) Plans

The Estates at Bridgewater Community Marina Plan as prepared by Davis, Bowen & Friedel, Inc., showing unit/slip numbering is included in *Exhibit A* of the O&M Plan.

B) Location and Water Depths

Location

38.482710°N

75.114892°W

Local Range of Tides

Elevation +0.5' mean high water

Elevation 0.0' local mean tide (NAVD 88 DATUM)

Elevation -0.2' mean low water

Elevation of community pier +/- 3.2'

Design depth of marina Elevation +/- 2.3'

C) Slip Capacity & Marina Configuration

24 recreational wet slip berths 24' X 14' (12 slips each pier)

Two 6'wide community piers 148 feet long

A 8'x 20' canoe/kayak floating launch dock is located on the west side of the easterly community pier. A marina shed located near the clubhouse will house a portable marine pump out unit and emergency spill kit. Marina tenants will be provided keyed access for the marina shed. Marina signage with rules and emergency contact numbers is located at each marina pier.

D) MSD Types & Numbers

Unknown at this time, records to be kept by operator based upon future marina tenant records

E) Fueling Location, Rules and Procedures

The marina does not contain fueling facilities.

Marina tenants are advised that fueling by commercial distributors is not permitted without permission and direct supervision by the Harbormaster who oversees safety precautions.

When fuel is carried on board, it should only be done so in an approved container or in a portable tank as provided for outboard engines, and should be safely stowed outside of engine or living compartments.

Fueling should not be done at night except under well-lighted conditions.

The quantity of fuel to taken aboard into fuel tanks should be determined beforehand in order to avoid overfilling.

Tanks should never be completely filled. A minimum of 10% of tank space should be allowed for fuel expansion.

After fueling, any spillage should be wiped up. Place contaminated material in a sealed plastic bag, then dispose of on shore in the marina trash receptacle.

F) Sanitation Location

A portable sewage pumpout station for vessels is located in the marina shed located next to the community parking area on the west side of the clubhouse. Marina tenants shall use the shore side bathroom facilities at the clubhouse.

Tenants are advised by this O&M Plan that the discharge, by any means, of untreated or inadequately treated vessel sewage into or upon the waters of any marina, boat docking facility or tidal water of the State is prohibited by Delaware law. Violation is punishable by a minimum \$1,000 fine and up to a \$25,000 fine per violation.

G) Seasonal Wet Storage Reduction Plan

The Estates at Bridgewater Community Marina will not moor live-aboard vessels or vessels which are expected to require year-round mooring. Removal of vessels for winter storage will be encouraged by December 1. Spring launching will be encouraged after April 1. Special provisions for maintaining vessels within the marina for sporting or other similar purpose will be on a case-by-case basis with the permission of the Harbormaster. Any vessels moored at the marina which are not properly maintained and inspected by their owner or which, in the sole discretion of the owner or Harbormaster, present a threat to the health or safety of the public or the environment may be removed by the owner at the cost of the tenant. Reasonable notice depending on circumstances shall be given to the tenant prior to removal of the vessel.

PART II: PUMPOUT COMPLIANCE

A) The location of the portable on-site sewage pumpout station located is the marina shed located next to the parking area west of the clubhouse. Notice of the location is also provided by providing this O&M Plan to all residents. Notice of Delaware pumpout regulations will be posted on marina signage along with notice of penalties for noncompliance. Notice is also provided in this O&M Plan.

Pumpout Operations

Pumpout Procedures:

- 1. Remove cap from the waste fitting on the boat;
- 2. Attach a suitable adapter to the dock fitting and hand tighten;
- 3. Place coupler over the adapter and lock;
- 4. Open valve;
- 5. Start pump;
- 6. If using a suction nuzzle, insert it into the deck fitting (do not twist). Hold in place until pumpout is complete;
- 7. Observe pumpout through sight glass;
- 8. If rinse is desired, flush with fresh water (If potable water source is used for rinse, be certain that a back flow prevention devise is installed on the water service line.);
- 9. Pump out rinse water. Close the valve and return hose and adapter;
- 10. Stop the pump.

Maintenance Procedures: Major maintenance procedures and winter storage are the responsibility of the marina operator. However, the following minimum maintenance will be required in all cases by individual users of pump station facilities:

- 1. Hoses should be flushed daily by pumping clean water through the system and emptying it into the disposal system. Never discharge flush water onto the ground or into the water;
- 2. Disinfect the suction connection by dipping in bleach or spraying with a disinfectant after each use.
- 3. Contact Harbormaster to arrange for cleaning and disposal of portable pumpout station holding tank as needed.
- B) The number and types of MSD's aboard vessels at the Estates at Bridgewater Community Marina is unknown at this time. Records will be kept by the operator based upon future tenant agreements.
- C) Since the Estates at Bridgewater Community Marina provides its own facilities, no pumpout agreements with other existing marinas have been made.

D) State of Delaware Pumpout Law

The State of Delaware laws pertaining to marina operations provide pumpout facilities and laws prohibiting the discharge of untreated or inadequately treated vessel sewage.

State Law on Vessel Sewage Discharge

7 Delaware Code Chapter 60 § 6035 Vessel sewage discharge

- (a) Marina owners/operators for marinas that are located in whole or in part on tidal waters of the State, and that provide dockage for vessels with a portable toilet(s) or Type III marine sanitation devise(s) (MSD), shall provide convenient access, as determined by the Department, in an approved, fully operable and well maintained pumpout facility(ies) and/or dump station(s) for the removal of sewage from said vessels to a Department approved sewage disposal system.
- (b) (1) Owners/operators may agree to pool resources for a single pumpout dump station with Departmental approval based on criteria of number and class of vessels, marina locations, cost per pumpout use, and ultimate method of sewage treatment and disposal (i.e., septic system or waste water treatment facility).
 - (2) The owner/operator of any boat docking facility that is located in whole or in part on tidal waters of the State, and that provides dockage for a live-aboard vessel(s) with a Type III marine sanitation device(s), shall install and maintain at all times, in a fully operable condition, an approved dedicated pumpout facility at each live-aboard vessel slip for the purpose of removing sewage from the live-aboard vessel on a continuous or automatic, intermittent basis to a Department approved sewage disposal system.
 - (3) Any discharge, by any means, of untreated or inadequately treated vessel sewage into or upon the waters of any marina, boat docking facility or tidal water of the State is prohibited.
 - (4) All vessels while on waters of the State shall comply with 33 U.S.C. § 1322, as amended February 4, 1987.
 - (5) The Secretary shall have authority to adopt reasonable rules and regulations to implement this section.

PART III: STORMWATER MANAGEMENT PRACTICES/PLAN

The Estates at Bridgewater Community Marina strives to meet the needs of its recreational boating community while protecting the aquatic resources upon which they depend. A stormwater management plan for the community for the treatment of stormwater prior to discharge into Dirickson Creek has been approved by the USDA Sussex Conservation District. The Estates at Bridgewater community directs stormwater from paved street areas and impervious surfaces into stormwater management basins which provide for treatment and partial infiltration of stormwater.

The Estates at Bridgewater Community Marina does not contain any areas for major vessel maintenance or repairs, nor may these activities occur on the property. Such activities include bottom or hull painting, repairs, scraping or engine overhauls. Only minor maintenance such as washing, polishing and limited inboard painting is permitted to occur while vessels are moored. Any request for an exception to these prohibitions with just cause must be approved by the Harbormaster prior to conducting work. Appropriate measures for protecting water quality must be implemented prior to and during such work as directed by the Harbormaster.

PART IV: MATERIALS & WASTE MANAGEMENT

Materials—A fueling facility is not located at the marina.

All cleaning agents, solvents, paints, and pesticides utilized at the facility by the marina tenant or his employees shall be safely stored in their original container and stored at private locations apart from the marina facility. Quantities of such materials shall be kept at a minimum. Privately-owned materials aboard vessels shall be kept at a minimum. Materials shall be kept secure in a covered area in original containers at all times.

Proper disposal of waste oil, oil absorbent sponges and similar materials are the responsibility of the tenants. Waste oil can be recycled at the nearest Delaware Solid Waste Authority recycling collection center.

Fish Waste–Estates at Bridgewater Community Marina does not contain an approved fish cleaning or fish waste recycling facility. Therefore, fish cleaning and disposal of fish wastes within the waters of the marina or Dirickson Creek is prohibited. Residents and fishermen are encouraged to dispose of fish waste in accordance with DNREC's Fish Waste Management Police as found at Part VI, C.

Other types of refuse shall be placed within private trash receptacles of residents. It shall be the responsibility of each resident to provide an appropriate trash removal schedule.

Sanitary Wastes—Marina tenants and guests shall use the shore side bathroom facilities at their homes whenever possible while docked at the marina. No discharge of untreated or inadequately treated sewage is permitted within the marina or waters of the State under penalty of law. Sanitary waste from vessels shall be discharged into the portable marina pumpout station or dump station.

Bilge Water–Marina tenants are encouraged to use oil absorbent "sponges" in bilges at all times. Bilge water should not be pumped overboard in the marina but should be discharged at sea when possible. All vessels with automatic bilge pumps are requested to use absorbent sponges. Used sponges should be properly disposed of in the private trash receptacles of each resident.

PART V: EMERGENCY OPERATIONS

A) Responsible Personnel:

Estates at Bridgewater Community Marina Harbormaster	302-542-8349
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Emergency Response Numbers:

Police/Fire/Ambulance	911
U.S. Coast Guard Search & Rescue	302-227-2121
DNREC Emergency Response Team/Marina Police	800-662-8802

In the event of a fuel, oil or sewage spill or fire, reporting contact numbers are:

Estates at Bridgewater Community Marina Harbormaster	302-542-8349
Police/Medical/Fire Emergency	911
Local fire company	302-732-6151
State Police (Non-emergency)	302-855-2980
U.S. Coast Guard	302-227-2121
DNREC Emergency Response Team/Marina Police	800-662-8802
DNREC Inland Bays Pollution Reporting Hotline	800-523-3336
Sussex County Operations Center (severe weather)	302-855-7804

B) Fuel/Oil Spill Prevention & Containment Practices

<u>Spills</u>

Any marina patron who observes a spill should report it immediately to the Estates at Bridgewater Marina Harbormaster DNREC and Coast Guard. Any marina tenant who causes or contributes to a spill of fuel, oil or other toxic substance should take immediate steps to:

- 1. Find and stop the cause of the spill.
- 2. Contain the spill if possible.
- 3. Report the spill to Estates at Bridgewater Marina Harbormaster, DNREC and the U.S. Coast Guard.

A spill containment kit and containment boom is stored at the marina shed. Marina tenants are provided with key access to this storage area.

- 4. In the event the spill cannot be quickly and readily contained, request immediate assistance from DNREC and the U.S. Coast Guard.
- 5. Properly dispose of all contaminated containment and clean-up materials.

C) Sewage Spill Prevention & Containment Practices

Marina occupants shall be trained as needed by the Harbormaster in the use of the marina's sewage pumpout system. Use of the pumpout system will be available during the normal operation during the boating season. Pumpout of sewage shall be done under the supervision of the Harbormaster whenever possible. Marina occupants will follow the pumpout procedures prescribed in Section IIA of the O&M Plan. The Harbormaster shall be responsible for scheduling service of the portable pumpout unit as needed by a DNREC-approved waste hauler.

D) Fire

It shall be the responsibility of all marina occupants with motorized vessels to maintain adequate onboard U.S. Coast Guard-approved fire extinguisher protection.

Any marina occupant who observes a fire which is not immediately contained with on-site equipment shall contact 911, and the Harbormaster.

E) Hurricane/Severe Weather

Marina occupants shall keep advised of pending severe weather conditions. Information on emergency situations can be obtained from the Sussex County Operations Center, 302-855-7804. In the case of impending severe weather, the following measures are the responsibility of each tenant.

Removal of the boat from the water and storage away from the water and out of harm's way if at all possible;

If the boat cannot be removed from the water, all portable fuel tanks, CNG or propane tanks from grills or stoves, porta-pot tees and other loose gear should be removed from the vessel, and the vessel must be properly secured using extra lines and fenders if warranted.

PART VI: MARINA RULES & REGULATIONS AND GENERAL GUIDANCE

A) Marina Rules & Regulations for Boaters

- 1. Any vessel entering the waters of Estates at Bridgewater Community Marina or moored at the marina as a tenant or transient vessel along with the operator and owner of said vessels shall be subject to these rules, the DNREC-approved O&M Plan for the facility, DNREC marina and boating regulations, and U.S. Coast Guard regulations.
- 2. No person shall dock or anchor a vessel within the waters of the marina or launch a vessel from the marina complex unless the owner/operator of the vessel has secured a share, or purchased a berth area as required for usage. The Estates at Bridgewater Marina is for the exclusive use of Estates of Bridgewater residents and their guests. A copy of this O&M Plan shall be provided to each homeowner within the marina.
- 3. Docking or launching of vessels will be only as directed and permitted by the slipholder or Harbormaster.
- 4. No major repair work shall take place aboard any vessel except for unusual cause and as permitted by the Harbormaster or owner.
- 5. The marina does not contain any refueling facilities. Tenants refueling vessels shall do so only as specified by the marina O&M Plan, Part I,E.
- 6. No refuse, trash, oil or effluents shall be thrown or pumped overboard within the waters of the marina, channel approaches or other water of the State.
- 7. Disorderly conduct by a boat owner, his crew or guests is not permitted.
- 8. Safety precautions must be observed and compiled with in all marina areas.
 - a. Swimming or diving is prohibited from all piers, docks, bulkheads and vessels within the marina waters.
 - b. Running or horseplay is prohibited on all piers, docks and bulkheads.
 - c. Use of barbecue grills or other type of portable open flame devices is prohibited in docks or vessels moored within the marina.
- 9. Fish cleaning is prohibited within the marina complex.

- 10. It is prohibited to throw or dump in the waters or on the grounds of the marina any fish remains, parts or pieces thereof. Recycling of fish waste shall be in accordance with State policies provided in the O&M Plan.
 - 11. No person shall go aboard any vessel docked within the marina without the expressed permission of the owner or master of such vessel.
 - 12. The marina and its surroundings are a "no wake" zone. Operate your vessels cautiously at all times.
 - 13. Marina tenants are responsible for maintaining the knowledge of and complying with emergency procedures for fuel spills, oil spills, fires, hurricane and severe weather as detailed in the O&M Plan.
 - 14. Marina tenants and patrons shall comply with the following marina policies and operation procedures.
 - 15. Operate your vessel and conduct yourself in accordance with Estates at Bridgewater Community Marina Clean Marina Boating Tips.
- B) Estates at Bridgewater Community Marina, Clean Marina Boating Tips For use around the Marina and while on the water anywhere.

Contain Trash

- Do not let trash get thrown or blown overboard
- If trash blows overboard, retrieve it—consider it "crew-overboard" practice
- · Pack food in reusable containers
- Buy products without plastic or excessive packaging—plastic is deadly to fish and birds
- Do not toss cigarette butts overboard—they are made of plastic (cellulose acetate)

Recycle

- Recycle cans, glass, paper, plastic, newspaper, antifreeze, oil and batteries
- Recycling facilities are located throughout the area
- · Bring used monofilament fishing line to recycling bins

Fuel Cautiously

- · Estates at Bridgewater Community Marina does not contain a refueling facility. Use proper containers and fuel carefully if carrying fuel onboard your vessel
- · Shut down engines during fueling
- · Do not smoke during refueling
- · Ventilate all spaces and check for gasoline vapors before starting engines
- · Do not use soaps or dispersants on spills
- Remember, fuel expands as it warms up. If you fill your tank, fill it only 90 95 percent full to prevent expansion and spillage
- · Use the oil absorbent pads to capture back splash and vent line overflow during fueling
- Add a fuel conditioner to your tank if you use your engine infrequently

Control Oil in the Bilge

- Keep your engine well tuned-no leaking seals, gaskets or hoses
- · Place oil absorbent material or a bio-remediating bilge boom in the bilge
- · Place an oil absorbent pad under the engine
- · Replace oil absorbent materials regularly
- · Check fuel lines for damage-replace with alcohol resistant hoses
- Secure fuel hoses to prevent chafing and leaks
- Never discharge bilge water with a sheen—it is illegal

Waste Oil

- Dispose of waste oil at recycling facility
- Do not discharge waste oil into storm drains, the Marina lagoons, or waters of the State of Delaware

Properly Dispose of Oil Absorbent Materials

- · If the pad is saturated with gas, allow it to air dry. Reuse
- · If the pad is saturated with diesel or oil, double bag it in plastic—one bag sealed inside another. Dispose in your regular trash
- Bio-remediating bilge booms should not be sealed in plastic bags—the microbes need oxygen to function. Discard in regular trash or marina dumpster

Clean Gently

- Be environmentally-aware
- Wash your boat frequently with a sponge and plain water
- Use detergents sparingly
- · Use phosphate-free, biodegradable and non-toxic cleaners
- · Wax your boat—a good coat of wax prevents surface dirt from becoming ingrained
- Clean wood with a mild soap powder and a nylon brush—not harsh chemical cleaners
- · Conserve water–put a spray nozzle on your hose

Maintain Your Vessel Wisely

Major boat maintenance and repair are not permitted at the Estates at Bridgewater Community Marina

Sewage Pumpout & Management

- · Never discharge any sewage into the waters of the Estates at Bridgewater Community Marina
- · Never discharge raw or inadequately treated sewage in Delaware waters within three miles of shore
- Use restrooms on shore
- · Under way, use approved Marine Sanitation Devises (MSD's)
- Establish regular maintenance schedule for your MSD based on manufacturer's recommendations
- · Pump out and rinse holding tanks regularly
- Use pumpout station or dump station located at the boat ramp/Harbormaster's Office

- Use enzyme based products to control odor and reduce solids in holding tanks
- · Avoid holding tank products that contain quaternary ammonium compounds (QAC) and formaldehyde

Dispose of Fish Waste Properly

- · Fishing, crabbing and netting fish are not permitted on the Marina docks
- Do not clean fish within the marina basin
- Do not discharge fish waste at the marina
- Follow DNREC's Fish Waste Management policy

Protect Sensitive Habitat

- · Proceed slowly in shallow areas
- · Do not disturb wildlife
- Avoid contact with submerged aquatic vegetation (SAV)
- · Watch your wake-it can lead to shoreline erosion and disturb wildlife

Be a Responsible Boater

- · Contact the Harbormaster in the event of any emergency
- · Have a hurricane/storm plan
- Learn about products and practices which are environmentally safe
- · Share the information with other boaters
- · Help guests understand that, on your boat, no trash is thrown overboard
- Obey laws governing speeding, littering and discharge
- Encourage other boating facilities to provide trash cans, recycling bins and pumpout stations
- · Support marinas that are environmentally responsible
- Note the location of fire extinguishers at your home and the Marina

Be a Good Neighbor

- · Be a responsible boater
- Conserve water and electricity
- Make sure your boat is secure to the dock at all times
- Keep your pets on a leash no longer than 6 feet and under control at all times
- · Clean up after your pets
- · Supervise children at all times
- · Do not affix anything to the docks without the homeowners association approval
- Do not affix anything to the power posts, including electric cords and/or garden hoses
- Use carts to transport items to and from your boat instead of dragging items along the surface of the docks
- · Be aware of the location of safety ladders and life ring stations
- Throw a Personal Flotation Device to a person who has fallen overboard rather than attempt to swim to the person

Enjoy!

C) State of Delaware Fish Waste Policy FISH WASTE MANAGEMENT POLICY (No. 90-01)

Purpose

The purpose of this policy is to encourage the recycling of fish wastes back into the natural ecosystem in a manner that will not degrade water quality or cause other adverse environmental impacts. Any fish wastes which are recycled back into the ecosystem in accordance with the guidelines established below shall not be considered to be a discharge requiring a permit from the Department.

Background

Because of the potential for fish wastes which are improperly managed to cause dissolved oxygen depressions and other adverse environmental effects, as well as odors and nuisances, the Department of Natural Resources and Environmental Control has developed a policy regarding their management.

Application

The policy will be implemented in both fresh and tidal waters and will apply to:

- All private individuals who harvest fish or shellfish for recreational purposes, or for private use or consumption;
- Commercial fishermen;
- Head and charter boat owners and operators;
- Bait Concessions

Authority

The Department's Marina Regulations state that fish wastes must be disposed of in accordance with 7 Delaware Code, Chapter 60. Fish wastes (carcasses, entrails, scales, etc.) are included in the definition of "solid waste" and are a "pollutant" as defined in Chapter 60. In accordance with 56003, a permit is required to discharge these wastes into any surface or ground water. However, the purpose of this policy, as stated above, is to allow fish wastes to be recycled back into the ecosystem without a permit from the Department as long as the guidelines established below are adhered to. Those who do not follow established guidelines will be subject to fines and penalties as provided in 7 Del. C. §6005 and/or §6013.

Guidelines

In order to implement this policy in a manner consistent with the purpose stated above, the following guidelines are hereby established:

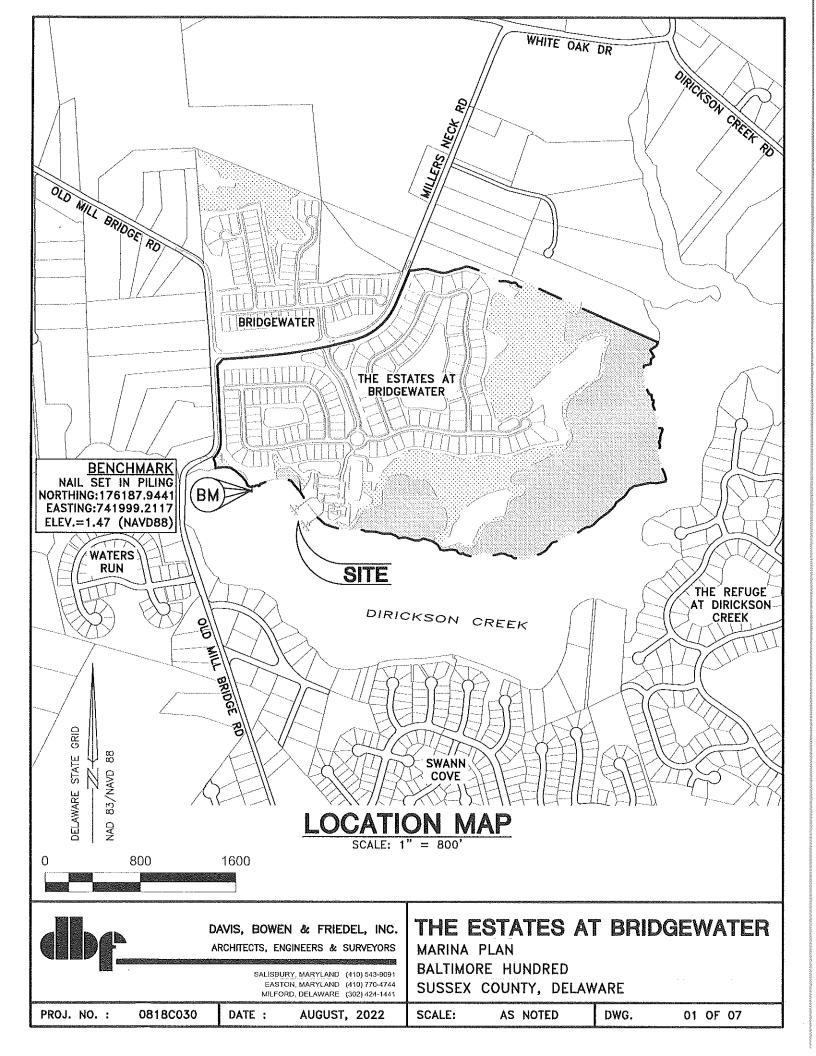
- In order to prevent violations of the Delaware Surface Water Quality Standards, fish wastes should not be discharged into surface waters in any dead end lagoons or other poorly flushed locations. A dead end lagoon shall mean an enclosed embayment with only one opening. A recommended best management practice is to discharge on outgoing tides.
- 2. Fish wastes should be recycled back into the ecosystem from which the organisms were originally harvested.

- 3. Collected fish wastes should be handled in such a manner so as not to introduce other contaminants into the waste prior to recycling back into the ecosystem
- 4. Fish should be cleaned and uncontaminated fish wastes disposed of at sea whenever practicable.
- 5. Fish waste recycling within marina basins shall only be allowed if in accordance with an Operations and Maintenance Plan which has been approved by the Department. Marinas shall not provide fish cleaning stations unless the activity has been included in the Operations and Maintenance Plan. Marinas which are not approved for fish waste recycling shall post signs warning fishermen that it is unlawful to dispose of fish wastes into the water at that location. The Department will consider the flushing characteristics of the marina basin when determining whether or not to approve fish recycling at that location.
- 6. Fish wastes should not be recycled into surface waters in such a way that they will wash up onto any shoreline, or cause odors or other nuisances.
- 7. Oyster shells may be discharged into the waters of the State in accordance with Shellfish Management Programs, 7 Del. Code Chapter 19-12.

O&MPlan.439-1

EXHIBIT A

MARINA PLANS & SLIP NUMBERING



PROPOSED MARINA FACILITY OVER PUBLIC SUBAQUEOUS LAND & FEDERALLY REGULATED SECTION 404 WETLANDS	
DESCRIPTION	AREA (SF)
PROPOSED LEASE AREA WITHIN PUBLIC STATE—OWNED SUBAQUEOUS LANDS OF DIRICKSON CREEK CHANNELWARD OF MEAN LOW WATER	4,036
MARINA ACCESS PIER BRIDGED OVER FEDERALLY REGULATED SECTION 404 WETLANDS	54

GENERAL NOTES:

- ELEVATION BASED ON NAVD 88 DATUM = 0.00'. BENCHMARK LOCATED ON NORTHWEST CORNER PILE OF EXISTING DOCK PLATFORM. NAIL SET IN SOUTHWEST PILE AT ELEVATION 1.47'.
- EXISTING DOCK AND PLATFORM TO BE REMOVED WHEN PROPOSED MARINA BECOMES OPERATIONAL.
- 3. RANGE OF LOCAL TIDES:

 MEAN HIGH HIGH WATER (SPRING TIDE) ELEV. = +0.8'

 MEAN HIGH WATER ELEV. = +0.5'

 MEAN LOW WATER ELEV. = -0.2'
- 4. TOTAL NUMBER OF SLIPS = 24
- 5. PROPOSED PIER AND DOCK ELEV. = 3.20'
- FIRE PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH DELAWARE STATE FIRE MARSHAL OFFICE REQUIREMENTS.



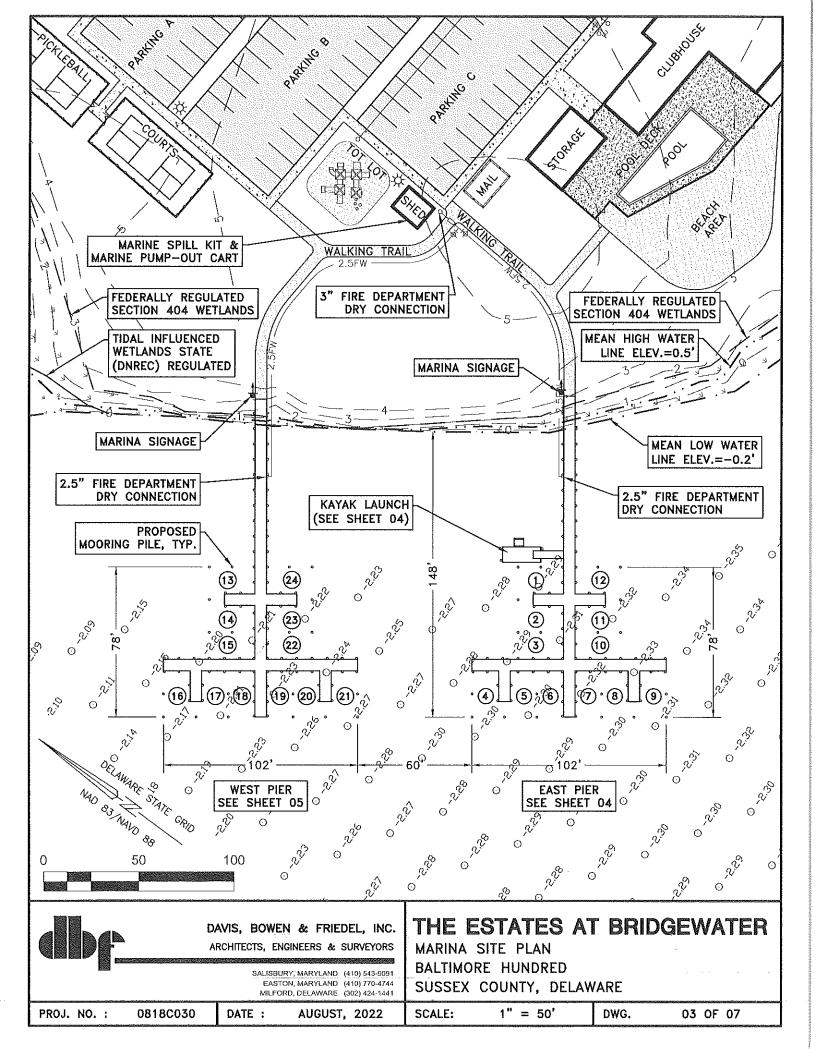
DAVIS, BOWEN & FRIEDEL, INC.
ARCHITECTS, ENGINEERS & SURVEYORS

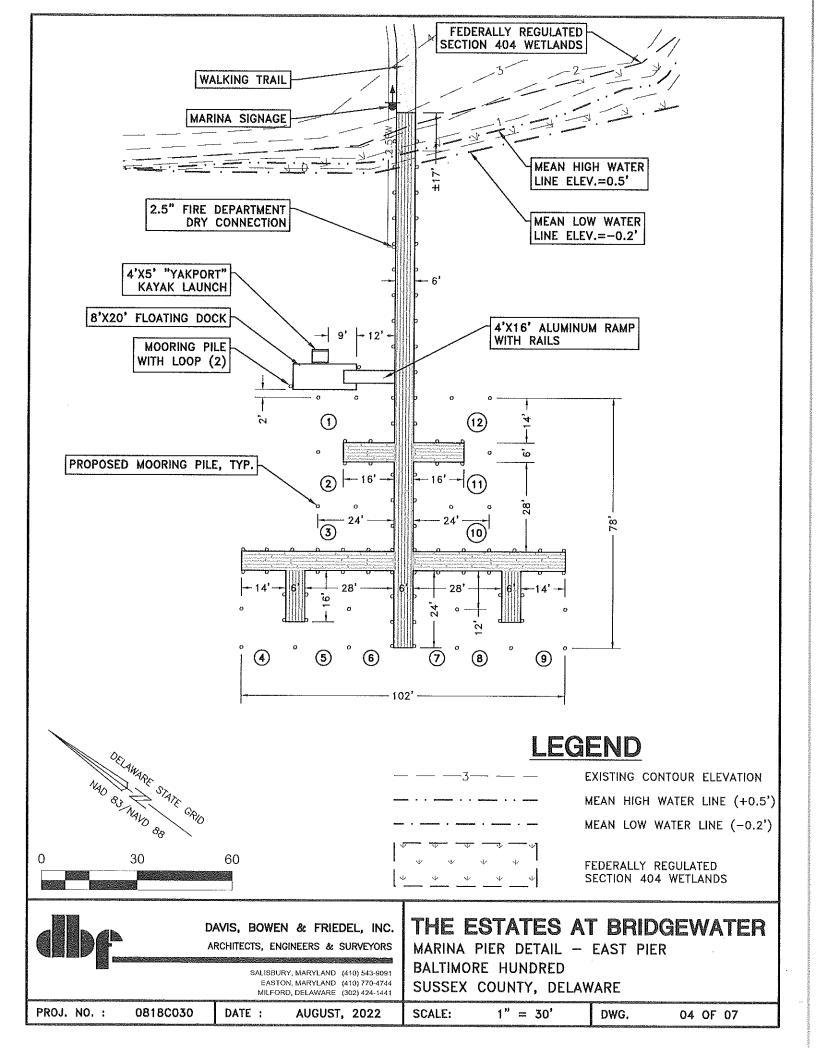
SALISBURY, MARYLAND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

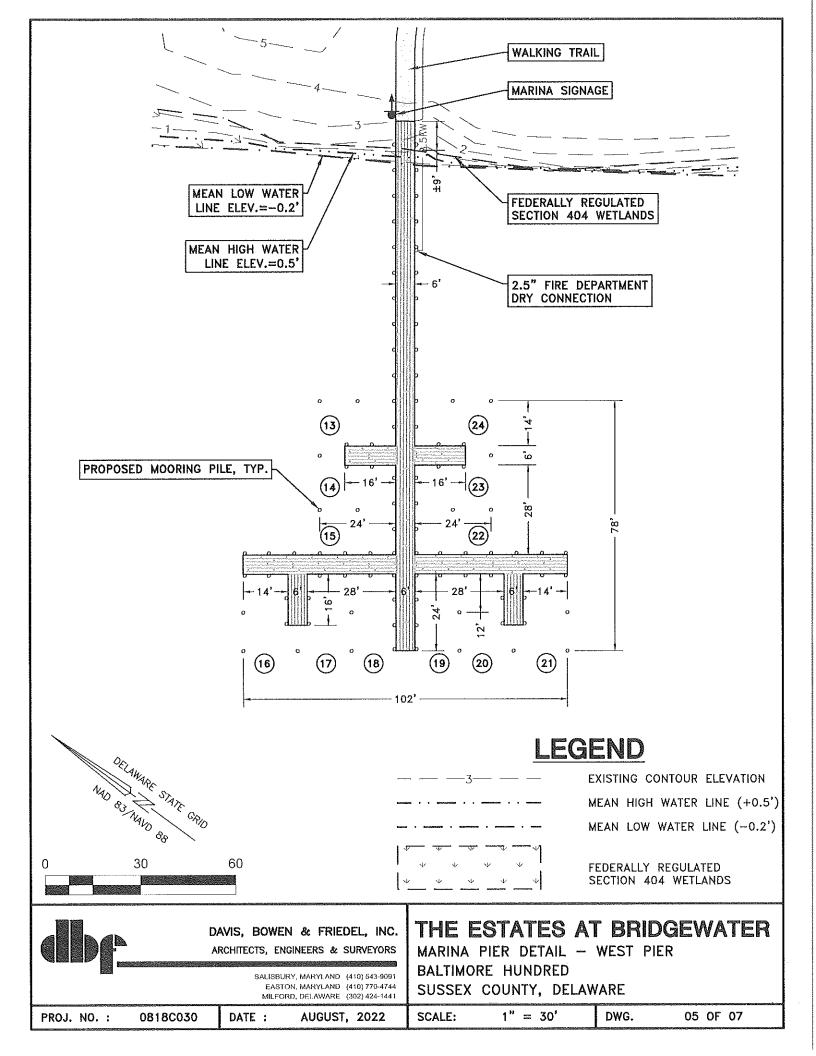
THE ESTATES AT BRIDGEWATER

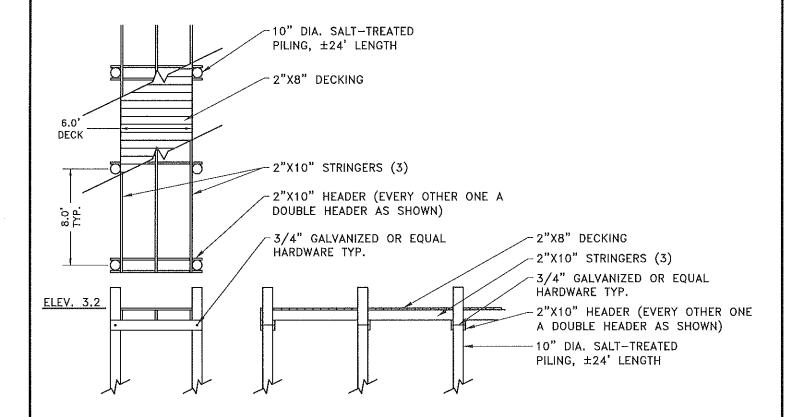
MARINA PLAN
BALTIMORE HUNDRED
SUSSEX COUNTY, DELAWARE

PROJ. NO. : 0818C030 DATE : AUGUST, 2022 SCALE: NTS DWG. 02 0F 07









TYPICAL PIER CONSTRUCTION

NOT TO SCALE



DAVIS, BOWEN & FRIEDEL, INC. ARCHITECTS, ENGINEERS & SURVEYORS

SALISBURY, MARYI.AND (410) 543-9091 EASTON, MARYLAND (410) 770-4744 MILFORD, DELAWARE (302) 424-1441

THE ESTATES AT BRIDGEWATER

MARINA PLAN CONSTRUCTION DETAIL BALTIMORE HUNDRED SUSSEX COUNTY, DELAWARE

PROJ. NO.: 0818C030

030

DATE: AUGUST, 2022

SCALE:

N.T.S.

DWG.

06 OF 07

