

Critical Area Commission

STAFF REPORT

July 6, 2022

APPLICANT:	Maryland Department Natural Resources
JURISDICTION:	St. Mary's County
PROPOSAL:	Point Lookout State Park Water and Sewer System Rehabilitation
COMMISSION ACTION:	Vote
STAFF RECOMMENDATION:	Approval
STAFF:	Annie Sekerak
APPLICABLE LAW/ REGULATIONS:	COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Lands

DISCUSSION

The Maryland Department of Natural Resources (DNR) is proposing improvements to the water and sewer network for the north and south systems within Point Lookout State Park located on the southern tip of St. Mary's County. The proposed work involves the replacement and relocation of linear utilities including water mains, gravity sewer mains, and sewer force mains; and tertiary improvements to existing infrastructure including wastewater pump stations, a hydropneumatics tank, maintenance building, and sewer manholes. The campground at Point Lookout State Park is currently closed to the public as a result of the existing deteriorating infrastructure and recurrent main breaks. Work is proposed to commence this summer and is anticipated to be completed in the Fall 2023.

Given the entire limit of disturbance (LOD) is located within the Critical Area Buffer and given the overall scope of the proposed improvements, this project exceeds the parameters of the Memorandum of Understanding (MOU) between DNR and the Critical Area Commission. Therefore, review and approval by the Critical Area Commission is required. A site plan is attached to this staff report.

Project Impacts and Mitigation

The total LOD for the project is 14.65 acres, the majority of which is temporary disturbance and/or within existing structures. No new lot coverage is proposed. For the most part, underground linear utilities will be replaced in kind; however, select segments will be relocated adjacent to existing roadways for easier maintenance and access as well as to reduce potential

impacts to environmentally sensitive areas in the future.

Impacts to Buffer and other Habitat Protection Areas and Tree Clearing

The entire LOD is located within the Buffer, which has been expanded for nontidal wetlands. In addition, Forest Interior Dwelling Bird Species (FIDS) habitat has been identified onsite. Per COMAR 27.02.05.03.E(2), a State agency may locate a utility within a Habitat Protection Area provided no practicable alternative exists and the utility is designed and maintained so as to provide maximum protection from erosion; avoid or minimize negative impacts to plant and wildlife habitat; and maintain hydrologic processes and water quality.

A total of 7,739 square feet of permanent canopy removal is proposed and 32,574 square feet of understory clearing, in which the canopy will be maintained or allowed to naturally regenerate, is proposed. Canopy and understory clearing is required in order to access existing water and sewer lines. Utility access will be maintained after in-kind replacement and applicable utility lines will be relocated adjacent to existing roadways in order to minimize negative impacts to habitat and water quality during future maintenance and repair. Given onsite constraints and to maintain utility access, mitigation will be fulfilled offsite with the planting of 40,382 square feet of ¾-inch caliper native trees at Newtowne Neck State Park in St. Mary's County. The proposed mitigation planting is adjacent to existing FIDS habitat and will increase the width of contiguous forest along Breton Bay.

Stormwater Management

Due to the nature of the project, Maryland Department of the Environment (MDE) stormwater management and Critical Area 10% pollutant reduction are not required.

Tidal and Nontidal Wetlands

The proposed improvements will result in the conversion of 1,946 square feet of forested wetlands to emergent wetlands as well as temporary impacts to 7,005 square feet of forested wetlands and 72,179 square feet of the 25-foot nontidal wetland buffer. No impacts to tidal wetlands are proposed.

Permits and Review by Other Agencies

Maryland Department of the Environment (MDE)

A Letter of Authorization for impacts to nontidal wetlands and their buffers was received by MDE on May 25, 2022.

Maryland Department of Natural Resources (DNR)

The Department's Wildlife and Heritage Service (WHS) identified time of year restrictions (TOYR) for a Great Blue Heron colony located onsite. Heronry buffers have been delineated on the site plans and TOYR for construction work will be observed. WHS also identified FIDS habitat onsite, as discussed above.

Maryland Historical Trust (MHT)

Per comments dated October 25, 2021 and March 4, 2022, MHT determined this project will have no adverse effects on historic properties.

Climate Resiliency

The entirety of Point Lookout State Park, located at the junction of the Potomac River and the Chesapeake Bay, is vulnerable to sea level rise and storm surges. Based on desktop analysis, much of the Park is within the 0 to 2-foot sea level rise inundation zone. The majority of the Park is within the 100-year floodplain and is susceptible to storm surges from a Category 1 hurricane. In addition, wetland adaptation areas have been identified within the Park.

The Park's facilities and campgrounds already exist, and the purpose of the project is to replace failing water and wastewater utilities that service the existing park areas. Where possible, the existing utilities are being replaced in their current location. Where same trench replacement is not feasible or practical, the utilities are being relocated out of wetland and forested areas to be adjacent to existing roadways. No new structures are being built, instead the utilities are being relocated, as applicable, to allow the existing facilities to continue to be used while minimizing maintenance and repair in the future. Proposed improvements include raising the height of targeted sewer manholes in locations prone to flooding and equipping some of the existing pump stations with flood-proofing measures to account for impacts from extreme weather and flooding events.

Impacts to mapped wetland adaptation areas are unavoidable due to the location of existing infrastructure and the nature of the proposed project (i.e., repairing utilities servicing existing facilities). The work is underground and will not create new structures above ground that could prevent the natural migration of wetlands in the future.

The Park's marshland ecosystem supports a diversity of native and migratory wildlife species. Lake Conoy and Point Lookout Creek comprise a brackish 300-acre tributary of the Potomac River, surrounded by 240 acres of marshland and extensive areas of submerged aquatic vegetation and native marsh grasses. Marsh, shrub-scrub, and forest areas provide habitat for a variety of upland mammals and birds. The park is mostly forested, which stabilizes the soils and provides important riparian buffer benefits, such as nutrient removal, habitat, and carbon sequestration. Restoration of the habitat in and around Lake Conoy is a major goal of the recently published Point Lookout Strategic Management Plan, specifically Goal #4: "Improve underwater habitat and water quality in Lake Conoy through restoration of oyster beds, re-establishing submerged aquatic vegetation and restoring native marsh vegetation." In addition, Park staff has initiated a dune grass planting effort all along the beach areas in order to reduce erosion and "soften" the edges between the beach and the existing grassed picnic areas.

In accordance with COMAR 27.02.05.03.C, DNR Maryland Park Service is making every effort to minimize any new impacts to wetland migration areas and keep development at Point Lookout

State Park within the areas that are already developed. All ground disturbance will be temporary, replacing in kind or, where that is not possible, adjacent to an existing road. By pursuing the Strategic Management Plan goal described above and keeping disturbance within already developed areas, protection of the natural features onsite, including wetland adaptation areas, will be maximized.

Public Notice

In accordance with the provisions of COMAR 27.03.01.03, signage was posted at the project site and notice of the project was posted in the *Southern Maryland* newspaper on June 10, 2022. As of the writing of this staff report, no public comments in opposition to this project have been received. Any additional comments received will be noted at the Commission meeting.

STAFF RECOMMENDATION

Staff recommends approval of the project as proposed.

MARYLAND ENVIRONMENTAL SERVICE

Scotland, Maryland

POINT LOOKOUT STATE PARK SEWAGE

COLLECTION AND WATER DISTRIBUTION

SYSTEM REHABILITATION

ENVIRONMENTAL FEATURES PLAN

NOTES:

THE FOLLOWING ARE SHOWN IN THE MAPS:

- LIVING RESOURCES/HABITAT PROTECTION AREAS
 - SENSITIVE SPECIES PROJECT REVIEW AREAS
 - WATERFOWL AREAS
 - FOREST INTERIOR DWELLING
- FLOODPLAIN LAYER (UNLESS OTHERWISE NOTED, ALL THE MAPPED AREA IS VULNERABLE TO 100 YEAR FLOODPLAIN)
- SEA LEVEL RISE VULNERABILITY
- STORM SURGE (UNLESS OTHERWISE NOTED, ALL THE MAPPED AREA IS VULNERABLE TO CATEGORY I)

TOTAL IMPACT AREA (LOD): 641,733 SF

TOTAL NET CHANGE IN LOT COVERAGE: 0 SF

PERMANENT CANOPY REMOVAL: 7,739 SF
UNDER-STORY IMPACT: 32,574 SF (CANOPY ALLOWED TO NATURALLY REGENERATE)
TOTAL FOREST IMPACT: 40,313 SF

BUFFER IMPACTS: YES

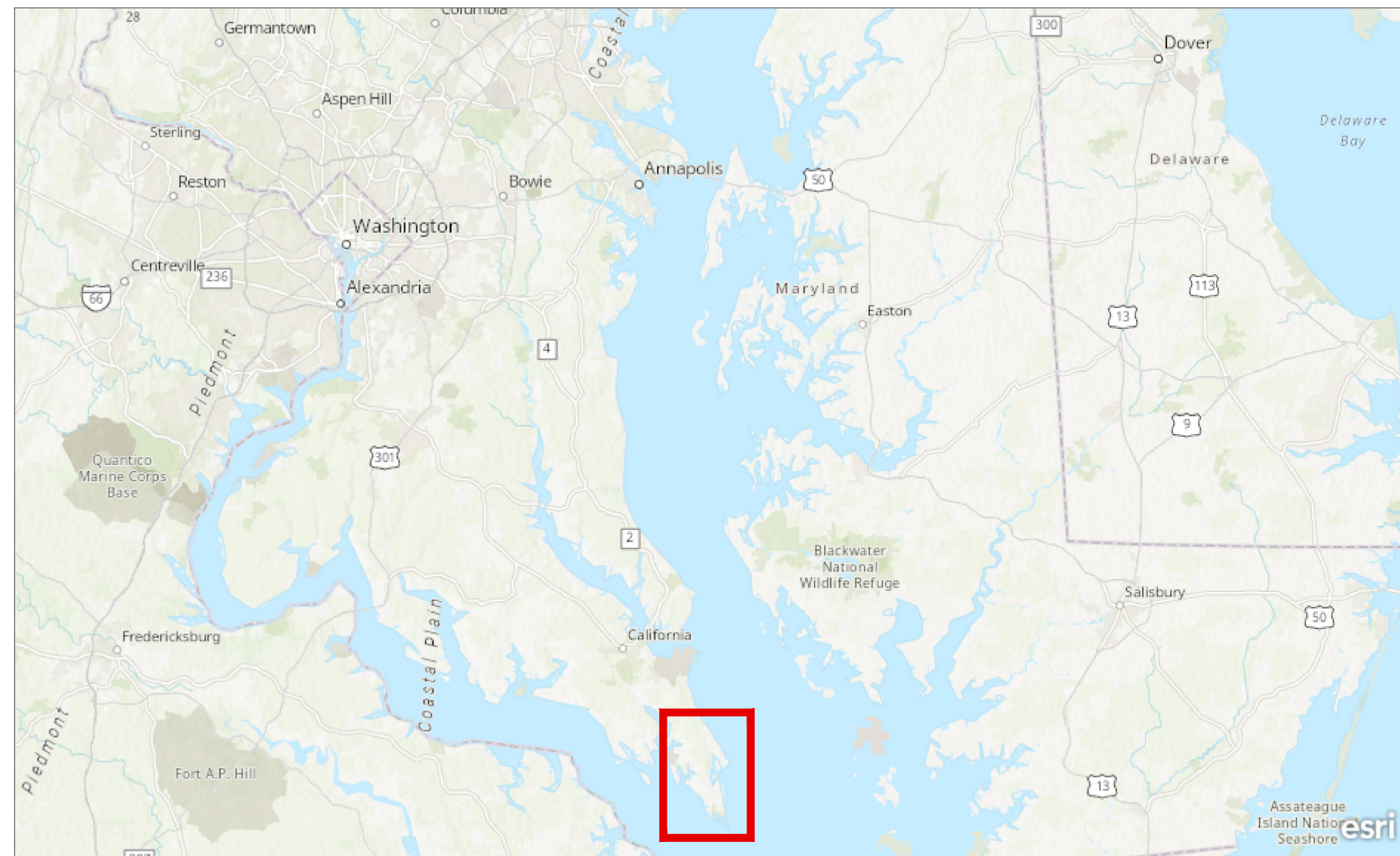
HABITAT PROTECTION AREA IMPACTS: YES

WETLAND IMPACTS: YES

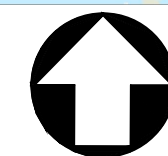
NOTES:

THE FOLLOWING ARE NOT FOUND IN THE VICINITY OF THE PROJECT AREA:

- LIVING RESOURCES/HABITAT PROTECTION AREAS
 - NATURAL HERITAGE AREAS
- SHORELINE CHANGES/EROSION
 - HIGH EROSION TRANSECTS
 - MEDIUM EROSION TRANSECTS

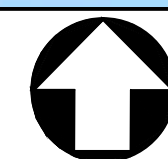


VICINITY MAP



LOCATION MAP

SCALE: 1" = 1 MILE



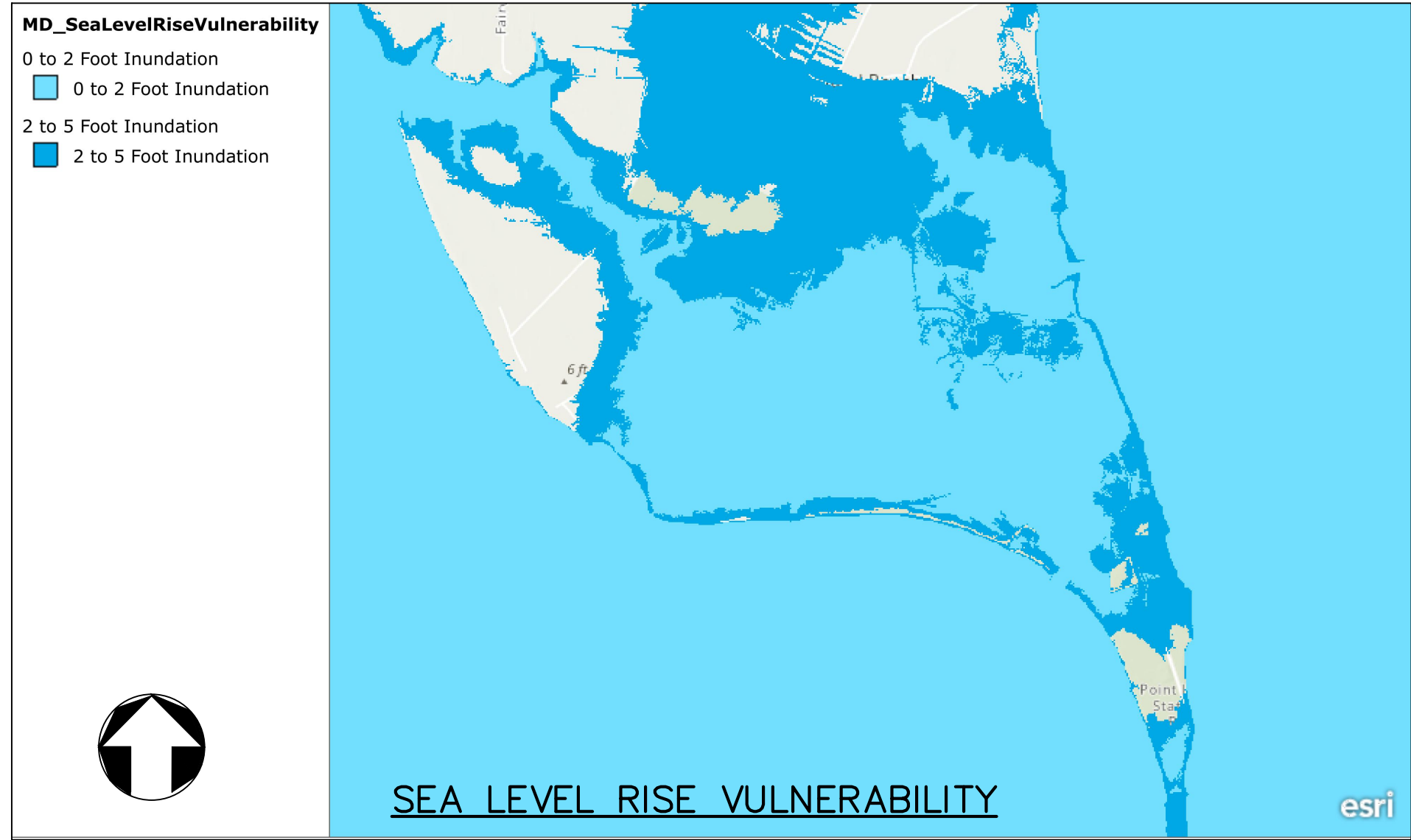
Impact Number	Impact Area Sq. Ft.	Volume of Fill Cu. Ft.	Wetland Number	Total Wetland Area Acres	Water Replacement or New	Water Utility Length through Impact Area Ft.	Sewer/FM Utility Length Replacement or New Ft.	Sewer/FM Utility Length through Impact Area Ft.	Buffer Impact Sq. Ft.	Impact Type	Jurisdictional Activity	Impact Description
C03-1-1	50	225	1	47.89			Replacement	19		Maintenance	5) 1,2,3	Open trench replacement of sewer service connections in existing utility ROW.
C03-1-2	511	480	1	47.89			Replacement	40		Maintenance	5) 1,2,3	Open trench replacement of sewer service connections in existing utility ROW.
C03-1-3	408	600	1	47.89	Replacement		Replacement	32		Maintenance	5) 1,2,3	Open trench replacement of water and sewer service connections in existing utility ROW.
C03-1-4	176	204	1	47.89			Replacement	17		Maintenance	5) 1,2,3	Open trench replacement of sewer service connections in existing utility ROW.
C04-1-1	76	0	1	47.89						Maintenance	3) Woody/Wetland grubbing	No trenching. Removal of trees and shrubs for service connection replacement in existing utility ROW. All grades restored to original elevation.
C04-1-2	2717	3192	1	47.89	Replacement	134	Replacement	132		Maintenance	5) 1,2,3	Open trench replacement of water and sewer utilities in existing utility ROW. All grades restored to original elevation.
C05-1-1	3480	4224	1	47.89	Replacement	175	Replacement	177		Maintenance	5) 1,2,3	Open trench replacement of water and sewer utilities in existing utility ROW. All grades restored to original elevation.
C06-1-1	389	444	1	47.89	Replacement	37				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C06-1-2	625	672	1	47.89			Replacement	56		Maintenance	5) 1,2,3	Open trench replacement of sewer utilities in existing utility ROW. All grades restored to original elevation.
C06-4-1	2554	3260	4	47.89	New	255				Temporary	5) 1,2,3	Open trench new water main through wooded wetland. All grades restored to original elevation. Tree canopy to remain closed.
C06-4-2	3372	4336	4	47.89	Replacement	185	Replacement	183		Maintenance	4) 1,2	Open trench replacement of water and sewer service connections in existing utility ROW.
C07-1-1	40	36	1	47.89			Replacement	3		Maintenance	4) 1,2	Open trench replacement of sewer utilities in existing utility ROW. All grades restored to original elevation.
C07-1-2	7	0	1	47.89						Maintenance	3) Woody/Wetland grubbing	No trenching. Removal of trees and shrubs for utility replacement in existing utility ROW.
C09-1-1	1948	2232	1	47.89			New	186		Permanent	5) 1,2,3	Open trench new force main through wooded wetland. All grades restored to original elevation. Permanent impact because woody vegetation will be grubbed and tree canopy will not remain closed.
C09-1-2	579	684	1	47.89	Replacement	57				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C09-1-3	615	732	1	47.89	Replacement	61				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C09-1-4	1964	2232	1	47.89	Replacement	186				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-8-1	4202	5652	8	1,2	New	216	New	205		Temporary	5) 1,2,3	Open trench new water main through wooded wetland. All grades restored to original elevation. Tree canopy shown in drawings is not representative of site. See photos.
C10-8-2	23	0	8	1,2	Replacement					Maintenance	3) Woody/Wetland grubbing	No trenching. Removal of trees and shrubs for utility replacement in existing utility ROW.
C10-8-3	1869	2280	8	1,2	Replacement	190				Maintenance	5) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-8-4	1562	1920	8	1,2	Replacement	160				Maintenance	4) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-8-5	1132	1396	8	1,2	Replacement	108				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C11-23-1	846	852	23	0.04		108	Replacement	71		Maintenance	5) 1,2,3	Open trench replacement of sewer utilities in existing utility ROW. All grades restored to original elevation.
C11-2-1	236	120	7	2.01			Replacement	10		Maintenance	5) 1,2,3	Open trench replacement of force main utilities in existing utility ROW. All grades restored to original elevation.
C11-6-1	1680	2016	9	1.26	Replacement	168				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C11-5-2	631	780	9	1.26	Replacement	85				Maintenance	5) 1,2,3	Open trench replacement of water service connections in existing utility ROW.
C11-6-3	273	408	9	1.26	Replacement	17	Replacement	17		Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-8-1	324	346	9	1.26	Replacement	29				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-9-2	414	482	9	1.26	Replacement	41				Maintenance	4) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C10-9-3	67	96	9	1.26	Replacement	6				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C14-11-1	230	0	11	2.33						Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C15-12-1	11	0	12	8.65						Temporary Indirect		No trenching. LOC in wetland.
C15-12-2	22	0	12	8.65						Temporary Indirect		No trenching. LOC in wetland.
C16-12-2	216	828	12	8.65			New	69		Temporary Direct	4) 1,2	No trenching. LOC in wetland.
C19-15-1	1946	2136	15	13.69	Replacement	178				Maintenance	4) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C19-15-2	1687	3120	15	13.69	Replacement	200				Maintenance	5) 1,2,3	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C19-15-3	119	724	15	13.69	Replacement	602				Maintenance	4) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C20-15-1	2136	2256	15	13.69			Replacement	188		Maintenance	4) 1,2	Open trench replacement of sewer and force main utilities in existing utility ROW. All grades restored to original elevation.
C21-14-1	502	1044	14	3.18	Replacement	45	Replacement	42		Maintenance	5) 1,2,3	Open trench replacement of water and force main utilities in existing utility ROW. All grades restored to original elevation.
C21-14-2	258	492	14	3.18	Replacement	28	Replacement	13		Maintenance	4) 1,2	Open trench replacement of water and force main utilities in existing utility ROW. All grades restored to original elevation.
C21-14-3	3186	4212	14	3.18	Replacement	174	Replacement	177		Maintenance	5) 1,2,3	Open trench replacement of water and force main utilities in existing utility ROW. All grades restored to original elevation.
C21-15-1	322	372	15	13.69			Replacement	31		Maintenance	5) 1,2,3	Open trench replacement of force main utilities in existing utility ROW. All grades restored to original elevation.
C21-15-2	1430	1650	15	13.69			Replacement	138		Maintenance	4) 1,2	Open trench replacement of force main utilities in existing utility ROW. All grades restored to original elevation.
C21-15-3	3771	2376	15	13.69			Replacement	198		Maintenance	4) 1,2	Open trench replacement of force main utilities in existing utility ROW. All grades restored to original elevation.
C21-15-4	576	664	15	13.69	Replacement	36	Replacement	36		Maintenance	4) 1,2	Open trench replacement of water and force main utilities in existing utility ROW. All grades restored to original elevation.
C21-15-5	67	1588	15	13.69	Replacement	114				Maintenance	4) 1,2	Open trench replacement of water utility in existing utility ROW. All grades restored to original elevation.
C21-15-6	553	612	15	13.69			Replacement	51		Maintenance	4) 1,2	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.
C22-15-2	532	564	15	13.69			Replacement	47		Maintenance	5) 1,2,3	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.
C22-15-3	858	882	15	13.69			Replacement	71		Maintenance	4) 1,2	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.
C22-15-4	961	1008	15	13.69			Replacement	84		Maintenance	5) 1,2,3	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.
C22-15-5	1029	696	15	13.69			Replacement	58		Maintenance	4) 1,2	Open trench replacement of force main utility in existing utility ROW. All grades restored to original elevation.
C22-15-6	2139	1596	15	13.69			Replacement	133		Maintenance	5) 1,2,3	Open trench replacement of force main utility in existing utility ROW. All grades restored to original elevation.
C22-15-7	324	240	15	13.69			Replacement	20		Maintenance	5) 1,2,3	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.
C22-22-1	309	396	22	7.47			Replacement	33		Maintenance	4) 1,2	Open trench replacement of force main utility in existing utility ROW. All grades restored to original elevation.
C22-22-2	161	676	22	7.47			Replacement	48		Maintenance	5) 1,2,3	Open trench replacement of force main utility in existing utility ROW. All grades restored to original elevation.
C22-22-3	631	1020	22	7.47			Replacement	85		Maintenance	4) 1,2	Open trench replacement of force main utility in existing utility ROW. All grades restored to original elevation.
C22-22-4	1613	1932	22	7.47			Replacement	161		Maintenance	4) 1,2	Open trench replacement of sewer utility in existing utility ROW. All grades restored to original elevation.

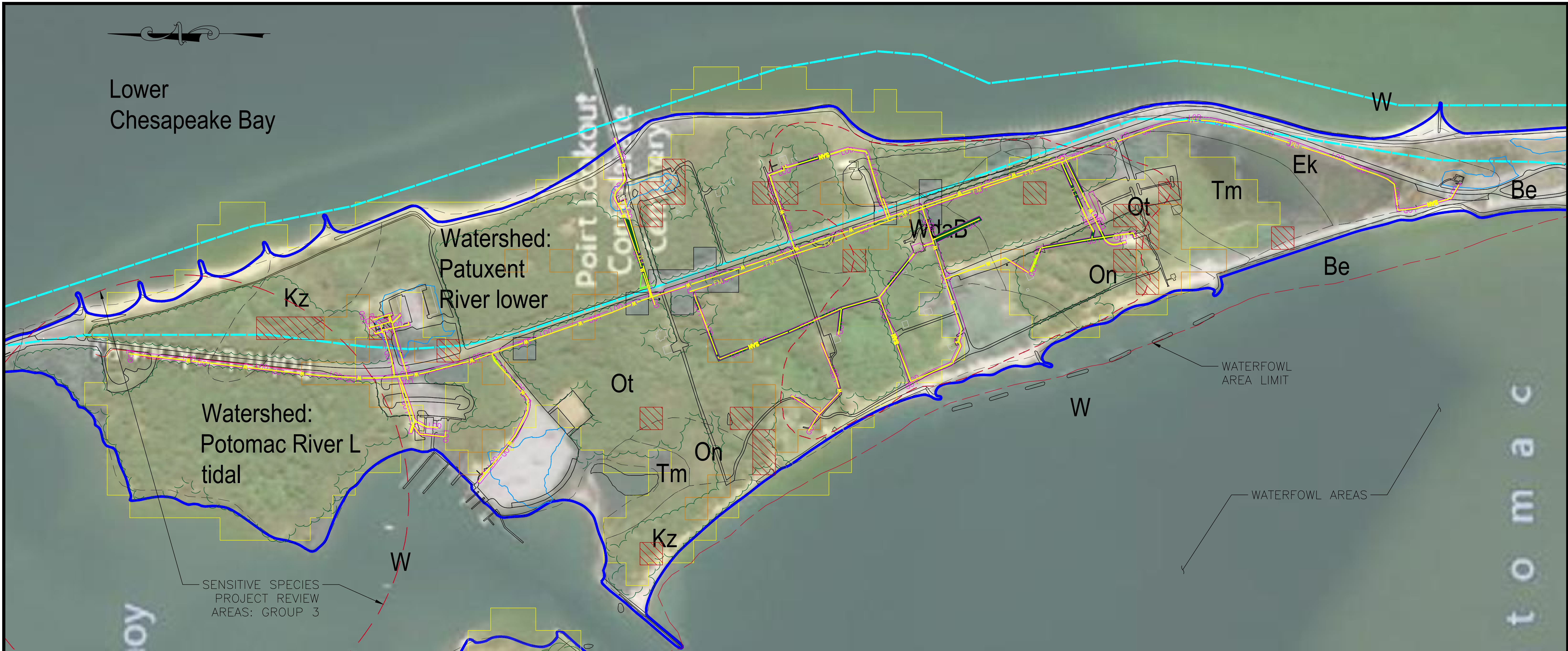
Impact Breakdown Summary Table	Quantity	Units	Jurisdictional Activities	Total Impacts per Type	Quantity	Units
Total Impact Area	18027	Sq. Ft.	1) Excavation	Excavation	1846	Sq. Ft.
Total Wetland Area	18027	Sq. Ft.	2) Fill	Fill	6756	Sq. Ft.
Wetland 1 Impacts	17301	Sq. Ft.	3) Woody/Wetland grubbing	Woody/Wetland grubbing	49188	Sq. Ft.
Wetland 4 Impacts	5926	Sq. Ft.	4) 1,2	Impacts	3313	Sq. Ft.
Wetland 7 Impacts	239	Sq. Ft.	5) 1,2,3	Total New Utility Impacts	8913	Sq. Ft.
Wetland 8 Impacts	8677	Sq. Ft.				
Wetland 9 Impacts	3264	Sq. Ft.				
Wetland 11 Impacts	233	Sq. Ft.				
Wetland 12 Impacts	249	Sq. Ft.				
Wetland 14 Impacts	2946	Sq. Ft.				
Wetland 15 Impacts	18047	Sq. Ft.				
Wetland 22 Impacts	2714	Sq. Ft.				
Wetland 23 Impacts	846	Sq. Ft.				
New Water Pipe Through Wetlands	471	Ft.				
New Sewer Pipe Through Wetlands	460	Ft.				
Replacement Water Pipe	3331	Ft.				
Replacement Sewer Pipe	2281	Ft.				



- LOD LIMIT OF DISTRUBANCE
- FM PROPOSED UTILITIES
- CRITICAL AREA LIMIT
- WATERSHED DIVIDE
- SHORELINE
- Ek SOIL TYPE
- FOREST INTERIOR DWELLING SPECIES
- UNDERSTORY FOREST IMPACT
- WETLAND ADAPTATION AREAS:MEDIUM PRIORITY
- WETLAND ADAPTATION AREAS: HIGH PRIORITY
- HERON COLONY
- HERON COLONY BUFFER
- FOREST EDGE
- 500-YR FLOODPLAIN

NOTE: THE ENTIRE PROJECT SITE IS LOCATED WITHIN THE CRITICAL AREA.

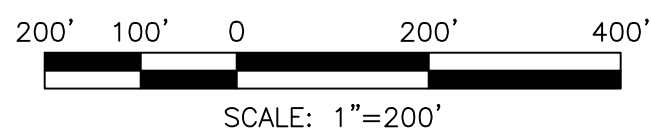




ENVIRONMENTAL FEATURES PLAN - SOUTH

SCALE: 1"=200'

- LOD LIMIT OF DISTURBANCE
- FM-W-SAN PROPOSED UTILITIES
- CRITICAL AREA LIMIT
- WATERSHED DIVIDE
- SHORELINE
- Ek SOIL TYPE
- FOREST INTERIOR DWELLING SPECIES
- UNDERSTORY FOREST IMPACT
- WETLAND ADAPTATION AREAS:MEDIUM PRIORITY
- WETLAND ADAPTATION AREAS: HIGH PRIORITY
- HERON COLONY
- HERON COLONY BUFFER
- FOREST EDGE
- 500-YR FLOODPLAIN



M M
MOTT
MACDONALD

225 International Circle Suite 202
Hunt Valley, MD 21030
Phone: 866-363-1471



CARROLL ENGINEERING, INC.
215 SCHILLING CIRCLE
SUITE 102
HUNT VALLEY, MD 21031
410-785-7423 PHONE 410-771-1313 FAX

DESIGNED EAN
DETAILED EAN
CHECKED CMS
APPROVED JAC
DATE 3-9-2022



MARYLAND ENVIRONMENTAL SERVICE
259 NAJOLAS RD
MILLERSVILLE MD 21108
410-729-8200 FAX: 410-729-8220

MARYLAND ENVIRONMENTAL SERVICE
WATER AND WASTEWATER

ROY C. McGRATH
DIRECTOR/CEO
C. JASON GILLESPIE
MANAGING DIRECTOR,
ENVIRONMENTAL SERVICES
ELLEN FRKETIC
CHIEF OF ENGINEERING
EZGI KURDOGLU
PROJECT MANAGER

NO.	DATE	DATE	BY	CK

POINT LOOKOUT STATE PARK SEWAGE
COLLECTION AND WATER DISTRIBUTION SYSTEM
REHABILITATION

ENVIRONMENTAL FEATURES
PLAN-SOUTH

SCALE: AS NOTED

MES PROJECT ID NO.
1-20-2-04-3
MM PROJECT NO.
SHEET
3 OF 3
DRAWING NO.
EFP-3