

Pleasure House Point Wetlands Restoration Project

City Council Briefing

LJ Hansen, P.E. | November 26, 2024



CITY OF
**VIRGINIA
BEACH**



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VIRGINIA BEACH FLOOD PROTECTION PROGRAM



Agenda

- Project Site
- History
- Project Scope
- Similar Project
- Schedule
- City Commitment
- Funding
- Next Steps



Restoration Site

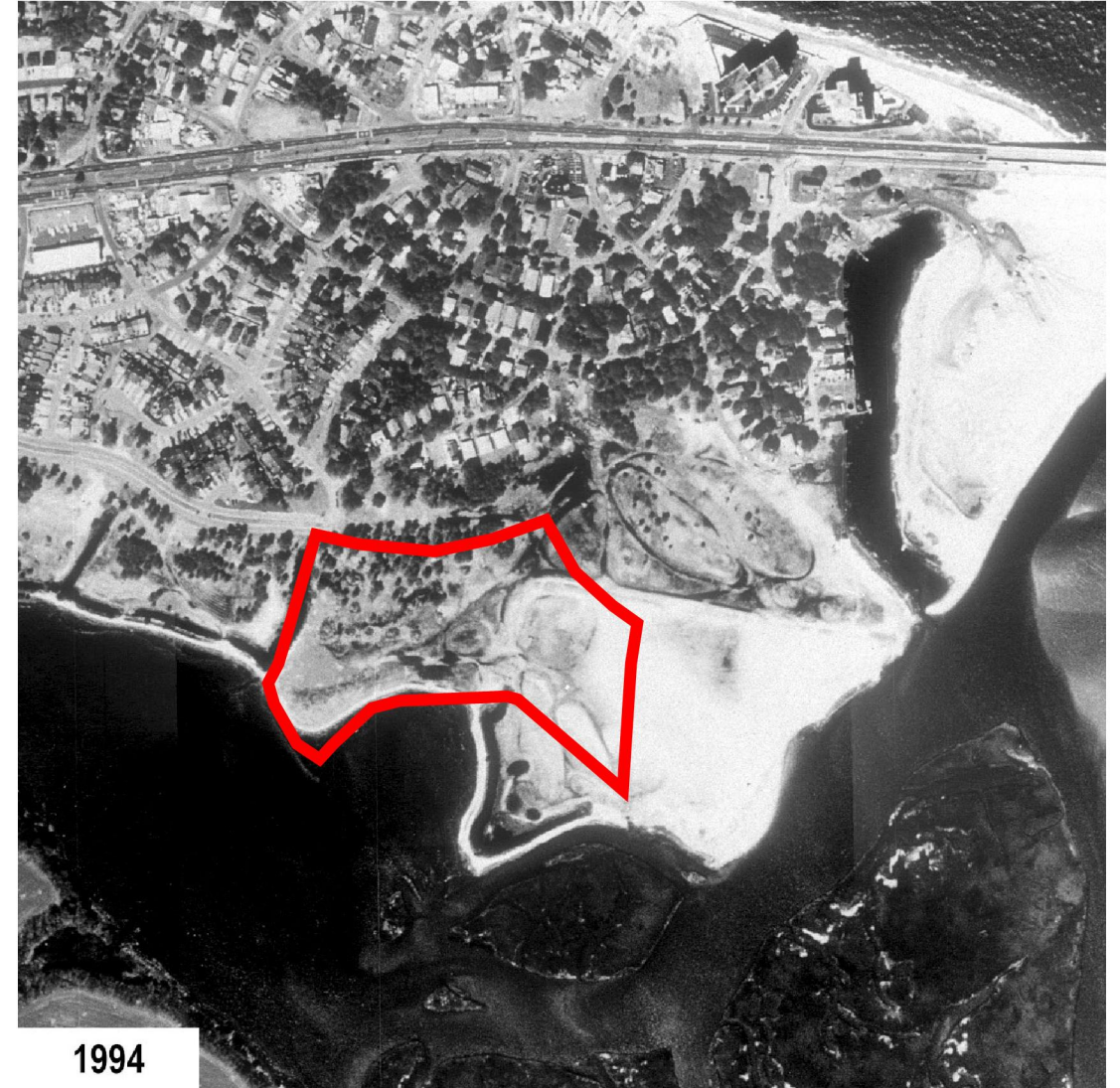
- Undeveloped area (~12.3 acres)
- West of Lesner Bridge



Site History

- In 1954 Princess Anne County, Virginia Beach Erosion Commission and the U.S Army Corps of Engineers designated the area as a “spoil site” for use in dredging the Lynnhaven Inlet.
- Prior to the 1970’s the area existed in a natural condition as a partially wooded inlet over-wash area with a broad expanse of wetlands.
- Between 1971 and 1972 it is reported that over one million cubic yards (+1M CY) of dredge material was placed over the wetlands (behind a perimeter dike constructed along the shorelines of Crab Creek and Pleasure House Creek).
- Pleasure House Point was acquired and preserved in July 2012 as a collaborative effort between the Trust for Public Land, the City of Virginia Beach, and the Chesapeake Bay Foundation.
- The property was under the threat of development for many years.

Existing Site – 1958 to 1994



Existing Site – 2002 to 2011



Existing Site - 2024



2024



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Plan History

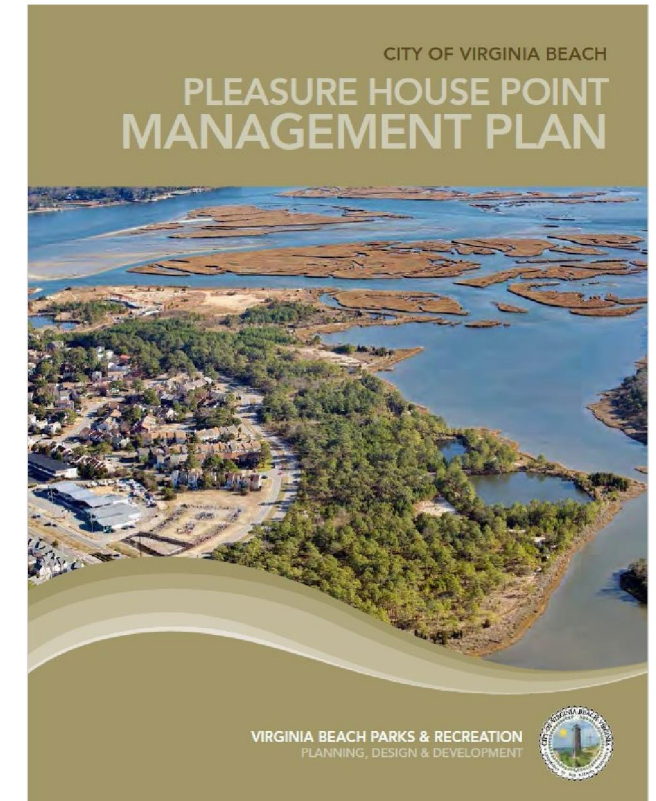
- **2013-2017:** Development of the Pleasure House Point Management Plan
 - Plan developed in coordination with the community
 - Included several public meetings
- **2017 - 2018:**
 - Mitigation Banking Instrument developed (City & Agencies)
 - Design Plans developed through 90%
- **Feb 2018:** Received USACE Permit - Project not executed at that time

Master Plan (2013-2014)



FINAL MASTER PLAN
PLEASURE HOUSE POINT
 CITY OF VIRGINIA BEACH
 WPL LANDSCAPE ARCHITECTS LAND SURVEYORS CIVIL ENGINEERS

February 5, 2014
 212-4216
 50 0 100 FT 200



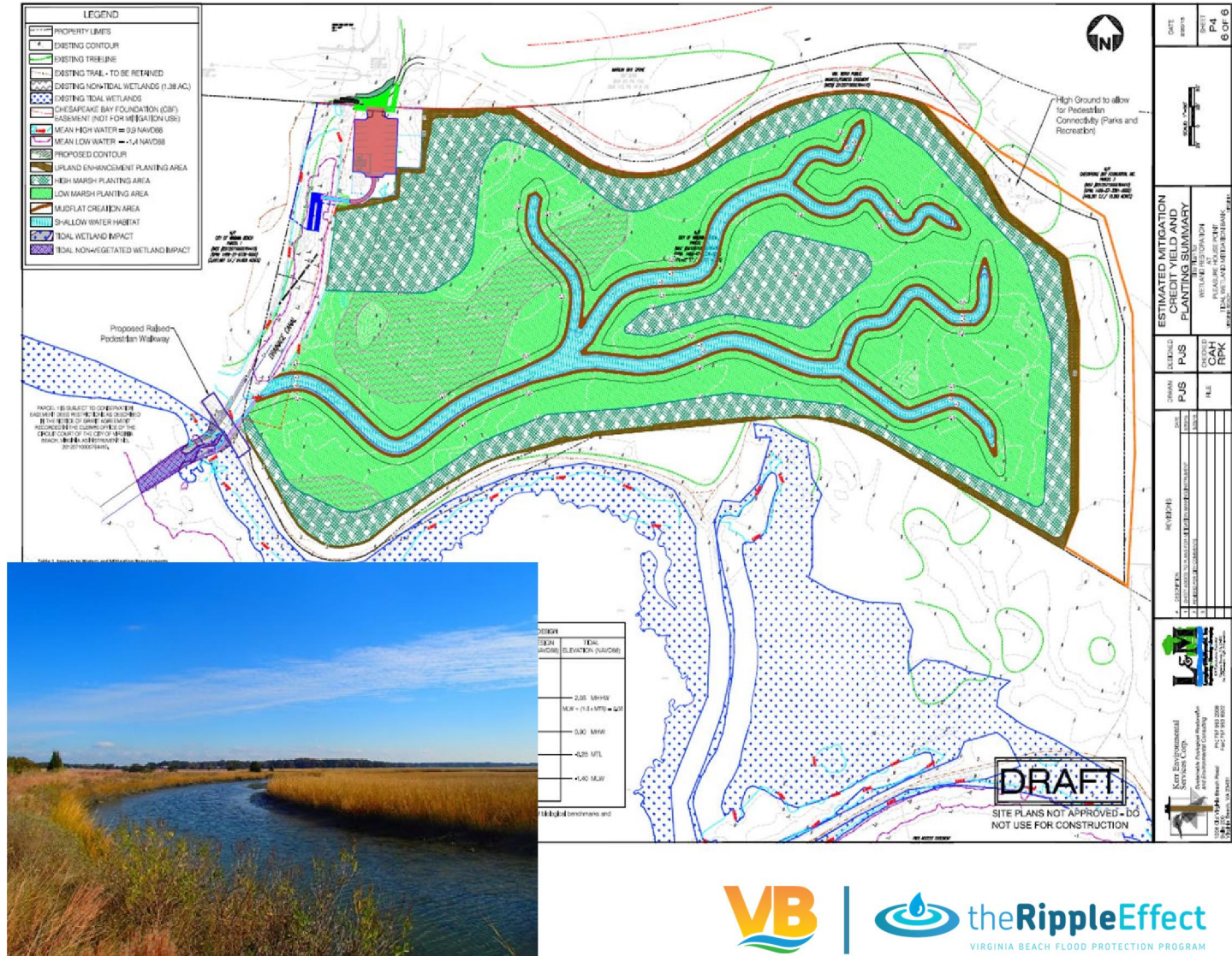
Conservation Easement



Restoration Project Scope

Master Plan: Establishment of Wetlands and “Banking” Operation

- Public Works will establish tidal wetlands and vegetation as part of a “Bank”
- Credits will be used for City Projects
 - Flood Protection Projects
 - Dredging Projects
 - Water Quality Improvement Projects
 - Roadway Projects
 - Other Public Infrastructure



Goals and Objectives

- The objective of the Pleasure House Mitigation Bank is to **Restore/Create:**
 - 6.22 acres of tidal vegetated wetlands
 - 1.78 acres of non-vegetated tidal wetlands
- The additional goal of the Bank is to provide economically efficient off-site compensation for impacts to tidal wetlands that cannot be practicably avoided for the City of Virginia Beach projects.

(Source: MBI, Page 2)

Purpose and Need

- **Currently, there are no tidal wetland credits available in the City, public or private.**
- **The Windsor Woods “Mega-Bundle” Design-Build project needs 2.7 acres of Tidal Wetland credits.**
- **Tidal Wetland Credits Required:**
 - **Windsor Woods Pumpstation = 0.4 Acres**
 - **North London Bridge Creek and South London Bridge Creek = 2.3 Acres**

(Source: MBI, Page 2)

Similar Project

Welcome to Paradise Creek Nature Park

This park was created by the non-profit Elizabeth River Project, with the City of Portsmouth, Virginia Port Authority and many partners, to introduce you to the wonders of a river once presumed dead – coming back to life.

Here on Paradise Creek, a finger of the Elizabeth, environmental restoration has been underway since 2001.

Explore 40 acres of restored forest and wetlands, surrounded by business partners also doing their part. You'll see first-hand the many ways you, too, can help bring back the health of your home river.

Learn more at elizabethriver.org.

LEGEND	
	Fred W. Beazley River Academy
	Kayak Launch
	Wetland Learning Lab
	Restroom
	Pet Waste Station
	Art/Sculpture
	River Star Business
	Towne Bank River Playground



A public park of
PORTSMOUTH
757-393-8481

ELIZABETH RIVER
PROJECT

Similar Project

- **Paradise Creek Nature Park –**
1141 Victory Blvd.
Portsmouth, VA



Paradise Creek Nature Park



Paradise Creek Nature Park continued...



Schedule

Current Schedule

- **Complete Design Plans:** November 2024 – February 2025
- **Construction:** February 2025 – October 2025
 - **Site Clearing:** February – March 2025
 - **Earthwork and Landscaping:** March – August 2025
 - **Planting:** June – October 2025
- **Completion:** October 2025
- **First Year Monitoring:** October 2025 – October 2026
- **Tenth Year Monitoring:** October 2035 – October 2036
- **Long Term Maintenance Responsibilities Begin:** Oct 2036

Release of Credits

- The tidal wetland credits will be released based on the following:
 - Total Tidal Wetland credits created - 8.00 acres
 - 15% (1.2 acres) available after issuing NTP for construction
 - 25% (2.0 acres) available after project is complete
 - 50% (4.0 acres) available after year one monitoring
 - 90% (7.2 acres) available after year two monitoring
 - 100% (8.0 acres) available after 10 years of monitoring

City Commitment



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City Responsibilities and Duration

- The Pleasure House Point Natural Area will be managed as a **Natural Area Preserve** by the City of Virginia Beach Department of Parks and Recreation.
- The site must be managed consistent with conservation goals used to rank and fund the project as listed below:
 - Maintain habitat values
 - Maintain Coastal Maritime Forests
 - Maintain water quality
 - Maintain educational and recreational values not detrimental to other aspects



- Maintenance and Monitoring (10-Years)
- Catastrophic Event Restoration (10-Years)
- Long-term Maintenance (Perpetual, as-needed)
- Land Use Restrictions (Perpetual)
- Reporting to the State and Federal Agencies
 - Credits Used, Periodic Inspections, Annual Maintenance

City's Commitment





- Total Project Costs: \$12.1M
- Includes \$135K Long Term Monitoring & Management
 - Habitat Maintenance and Restoration
 - Legal Fees (if needed)
 - Facilities Maintenance
 - Yearly Monitoring & Reporting to State and Federal Agencies

City's Financial Commitment



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Funding

	Total Budgetary Cost Estimate	ATD	BTC
Pleasure House Point Mitigation (CIP 100304)	\$12,086,638	\$426,492	\$11,660,143

Transfers proposed from:

Beach Replenishment II (CIP 100038) – Requested to be made whole in FY26 Budget **\$2,593,508**

Rudee Inlet Weir Replacement (CIP 100617) – Requested to be made whole in FY26 Budget **\$4,066,635**

Princess Anne Plaza North London Bridge Creek Pump Station (CIP 100517) **\$5,000,000**

Transfer to:

Pleasure House Point Mitigation (CIP 100304) **\$11,660,143**

- The project will be funded by the Coastal CIP and the Flood Protection Program CIP.



Next Steps

Presentation to BAC – December 19th

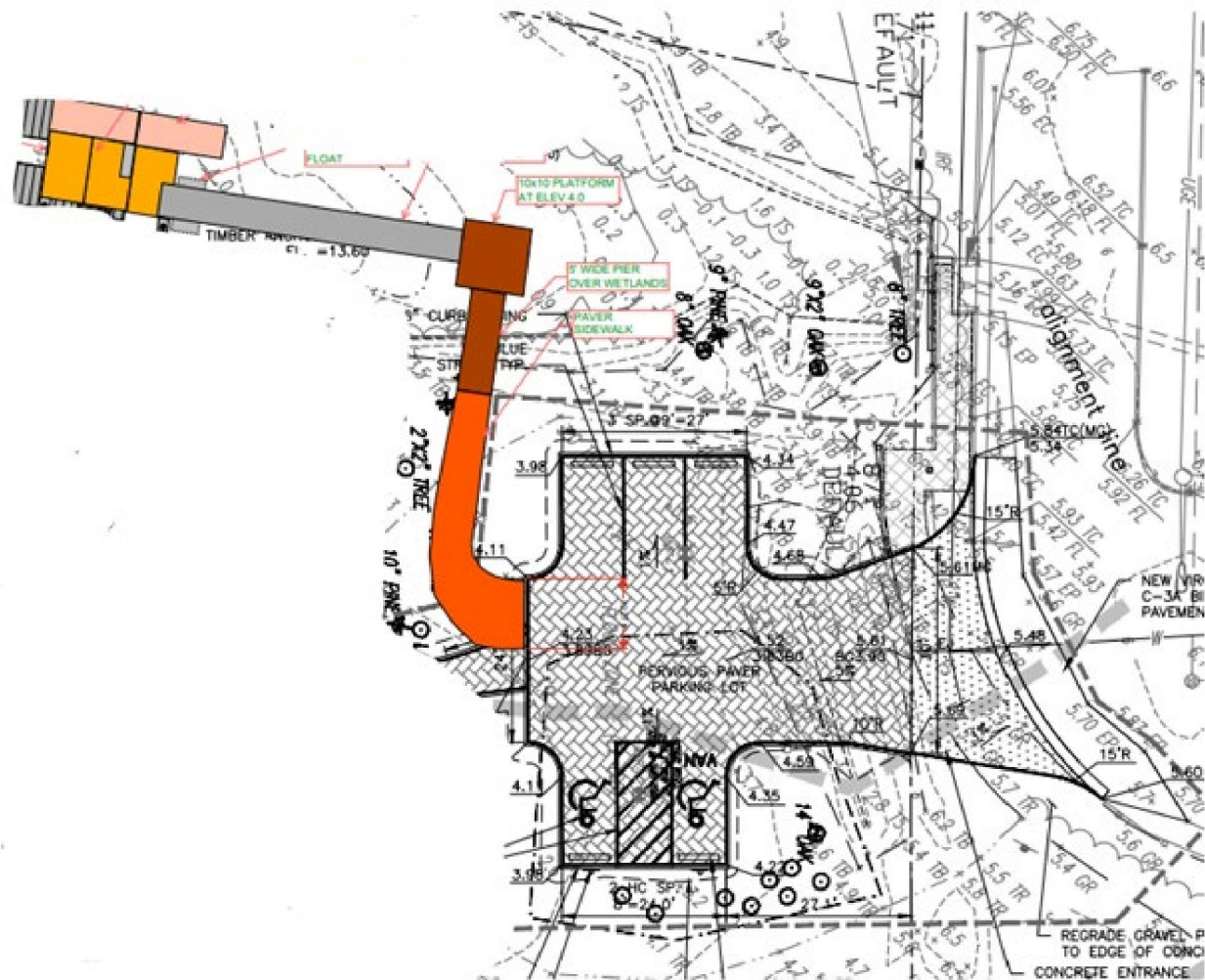
Ordinance to transfer funds – January 7th

Mobilization & Construction Begin – February 2025

Questions?





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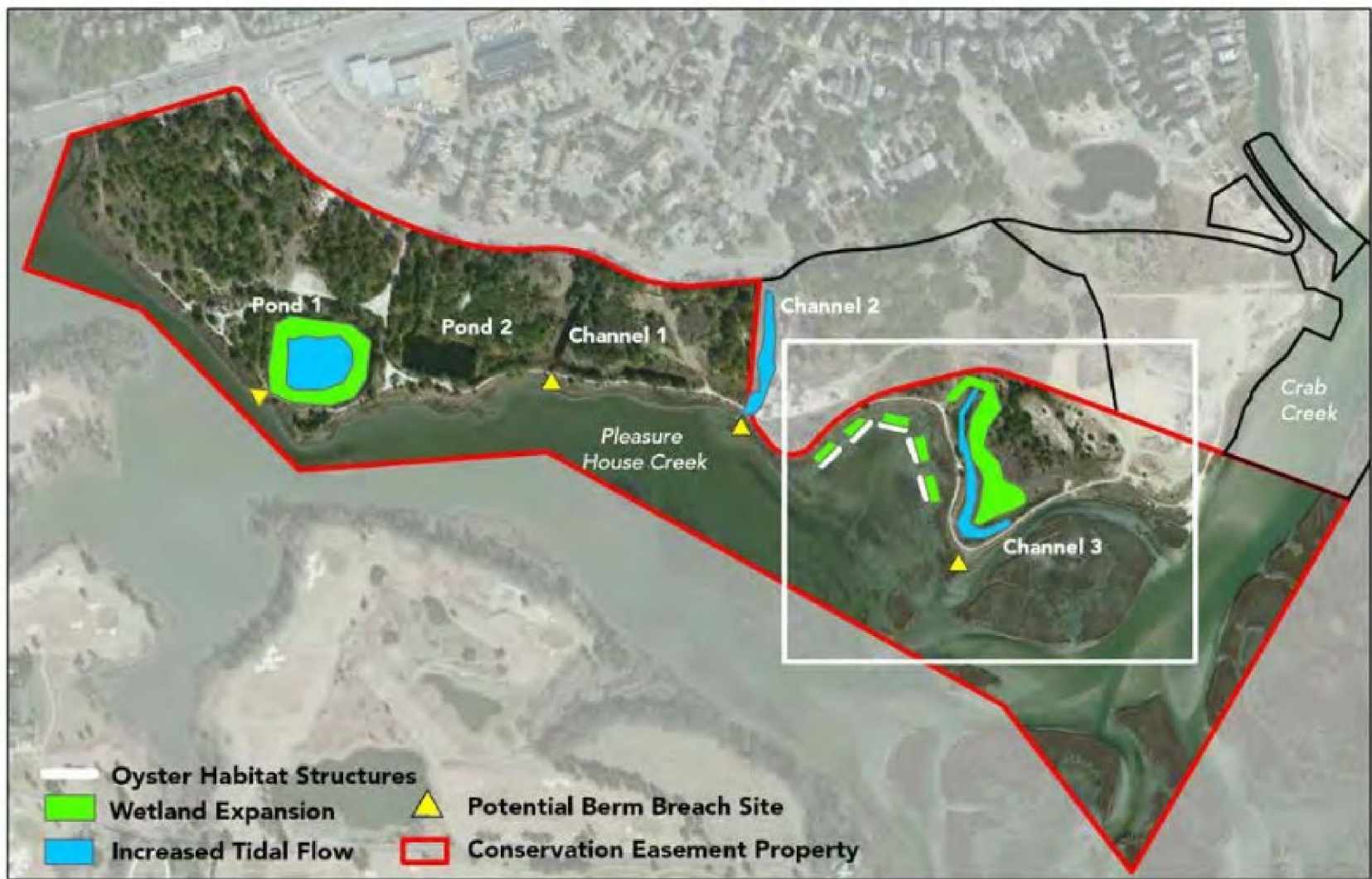
DRAFT

SITE PLANS NOT APPROVED - DO NOT USE FOR CONSTRUCTION

LEGEND	
	PROPERTY LIMITS
	EXISTING CONTOUR
	EXISTING TREELINE
	EXISTING TRAIL - TO BE RETAINED
	EXISTING NON-TIDAL WETLANDS
	EXISTING DRAINAGE EASEMENT
	MEAN HIGH WATER - 0.9 NAVD88
	MEAN LOW WATER - 1.4 NAVD88
	PROPOSED CONTOUR
	EDGE OF MITIGATION BOUNDARY NEAR KAYAK LAUNCH
	EXISTING PERVIOUS PAVERS

 Ken Environmental Services Corp. Sustainable Practices Worldwide and Environmental Consulting P.O. Box 1000 1000 14th Street, Suite 100 Virginia Beach, VA 23451 Phone: 757-943-2328 Fax: 757-943-8522		 L&M Landscape Architecture Mechanical Engineering and Surveying 1000 14th Street, Suite 100 Virginia Beach, VA 23451 Phone: 757-943-2328 Fax: 757-943-8522		<table><tr><th colspan="3">REVISIONS</th></tr><tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th></tr><tr><td>1</td><td>INITIAL DESIGN</td><td>12/13/14</td></tr><tr><td>2</td><td>REVISIONS</td><td>12/13/14</td></tr><tr><td>3</td><td>REVISIONS</td><td>12/13/14</td></tr><tr><td>4</td><td>REVISIONS</td><td>12/13/14</td></tr><tr><td>5</td><td>REVISIONS</td><td>12/13/14</td></tr></table>		REVISIONS			NO.	DESCRIPTION	DATE	1	INITIAL DESIGN	12/13/14	2	REVISIONS	12/13/14	3	REVISIONS	12/13/14	4	REVISIONS	12/13/14	5	REVISIONS	12/13/14	<table><tr><td colspan="2">DRAWN</td><td colspan="2">CHECKED</td></tr><tr><td colspan="2">MC</td><td colspan="2">ABG</td></tr><tr><td colspan="2">FILE</td><td colspan="2">TBL</td></tr></table>		DRAWN		CHECKED		MC		ABG		FILE		TBL		TYPICAL DETAILS		DATE 12/13/14		SHEET P3 5 OF 6	
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Potential Wetland Restoration & Enhancement Areas



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Kayak Launch Included

- Handicap accessible kayak launch
- Ties into Pleasure House Creek



