

POTOMAC YARD METRORAIL STATION PROJECT

Potomac Yard Metrorail
Implementation Work Group
February 4th, 2019



AGENDA

Environmental Permitting Update

- Project History
- Supplemental Field Work
- Project Footprint
- Compensatory Mitigation
- Preparing the revised Joint Permit Application
- Next Steps

COMMUNITY COMMENTS

- Station Location
- Tidal Wetland Limits
- Wetland Impacts
- Restoration Plan
- Regulatory Approval Process
 - Agencies
 - Permits

PROJECT TEAM

Stantec

Loretta Cummings PhD

MS and PhD Environmental Science /Public Policy - GMU

BS Biology/Chemistry - Shepherd College

30+ years experience with 404/401 permitting, NEPA, aquatic biology at USFWS, VDOT, Stantec

Chuck Roadley

BS Biology - Virginia Tech, MBA - VCU

30+ years experience: Virginia Institute of Marine Science (VIMS), Virginia Marine Resources Commission (VMRC), Williamsburg Environmental Group/Stantec, Member James City County Wetlands Board

Sean Wender - Ecologist - MS/BS Biology - 20+ years experience

Jason Mann - Ecologist - BS Forestry - 16+ years experience

Waterway Surveys & Engineering

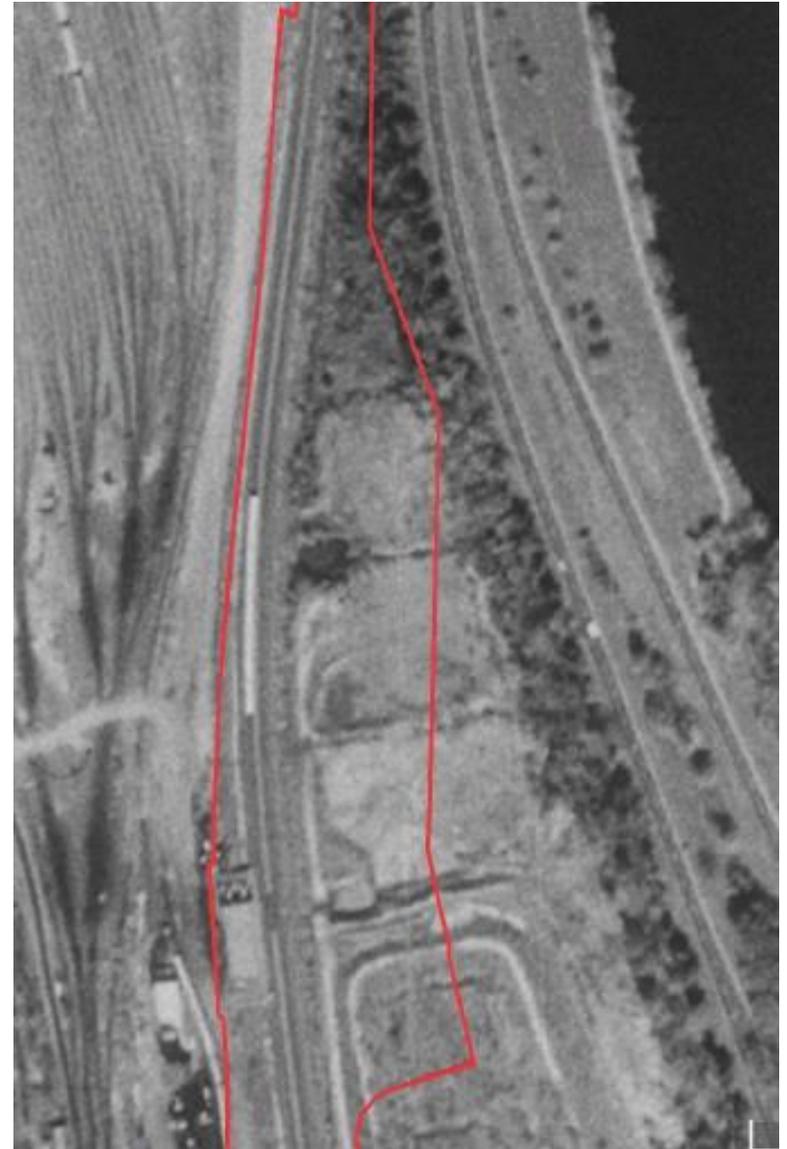
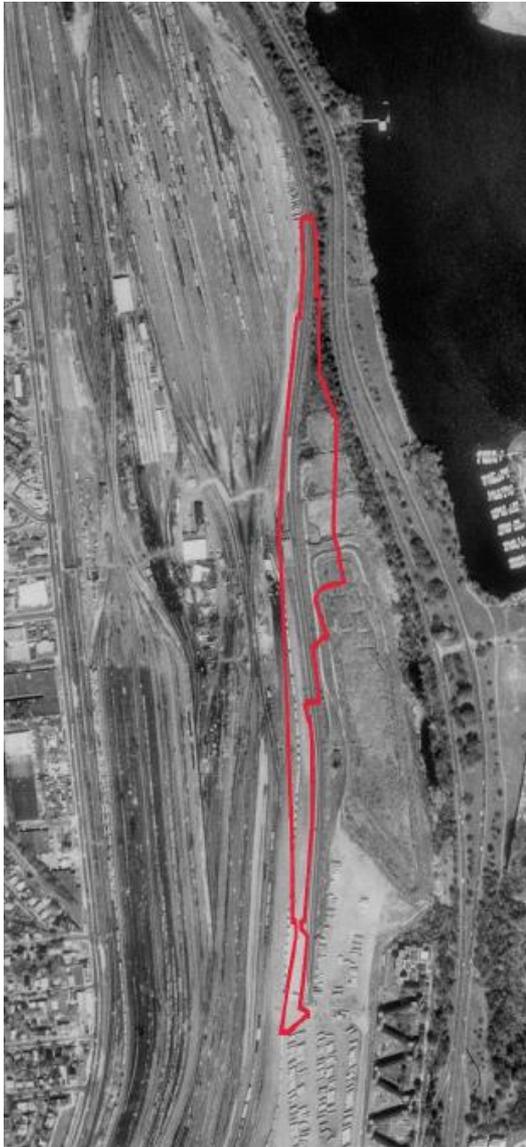
39 years performing hydrographic surveys for streams, lakes, rivers and coastlines.

PROJECT HISTORY

PYMS Design-Build Project Evolution

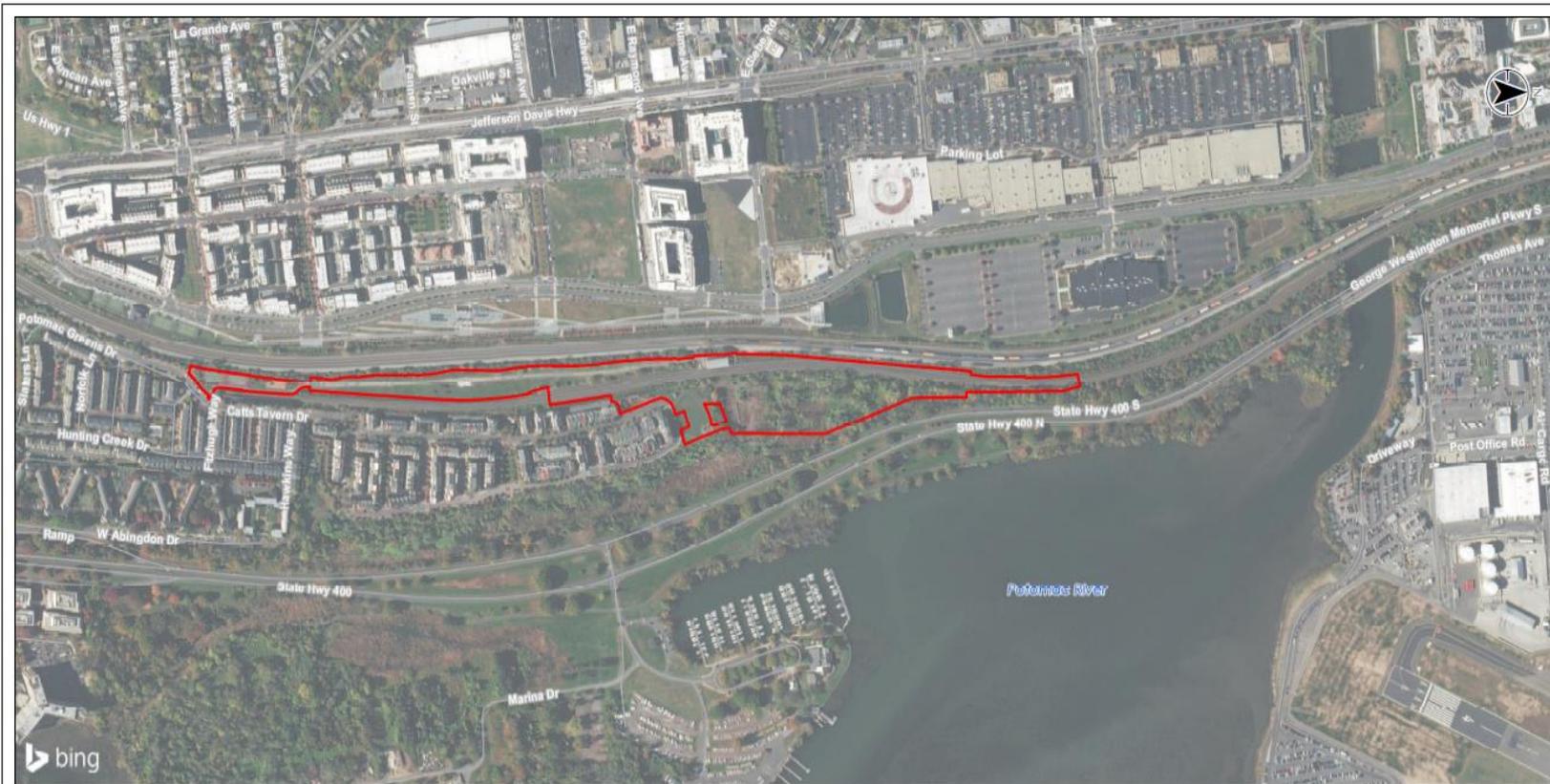
- 2011 - Environmental Impact Statement (NEPA) process began
 - Wetland delineation, values assessment, impact limits, alternatives analysis, purpose & need determined during NEPA
- June 2, 2016 - Final Environmental Impact Statement Issued
- Federal Transit Authority ROD October 31, 2016
- National Park Service ROD November 11, 2016
- October 3, 2017 - Joint Permit Application submitted
 - JPA developed exclusively on EIS data
- September 10, 2018 - Potomac Yard Contractors selected
 - Contractor selection allows for JPA refinement
- September 12, 2018 - VDEQ Draft Permit Issued
 - Responses gathered in public comments to be addressed in now-revised JPA

AERIAL PHOTOGRAPHS



1988 – Google Imagery

PROJECT AREA



Project Limits



Project Location
 City of Alexandria, Virginia
 Client/Project
 City of Alexandria, VA
 COA Potomac Yard Metro

Figure No.
1
 Title
Project Location Map

- Notes**
1. Coordinate System: NAD 1983 StatePlane Virginia North FIPS 4501 Feet
 2. Project limits provided by WMATA
 3. Roads provided by ESRI
 4. Orthomograpy © Bing Maps
 5. Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation

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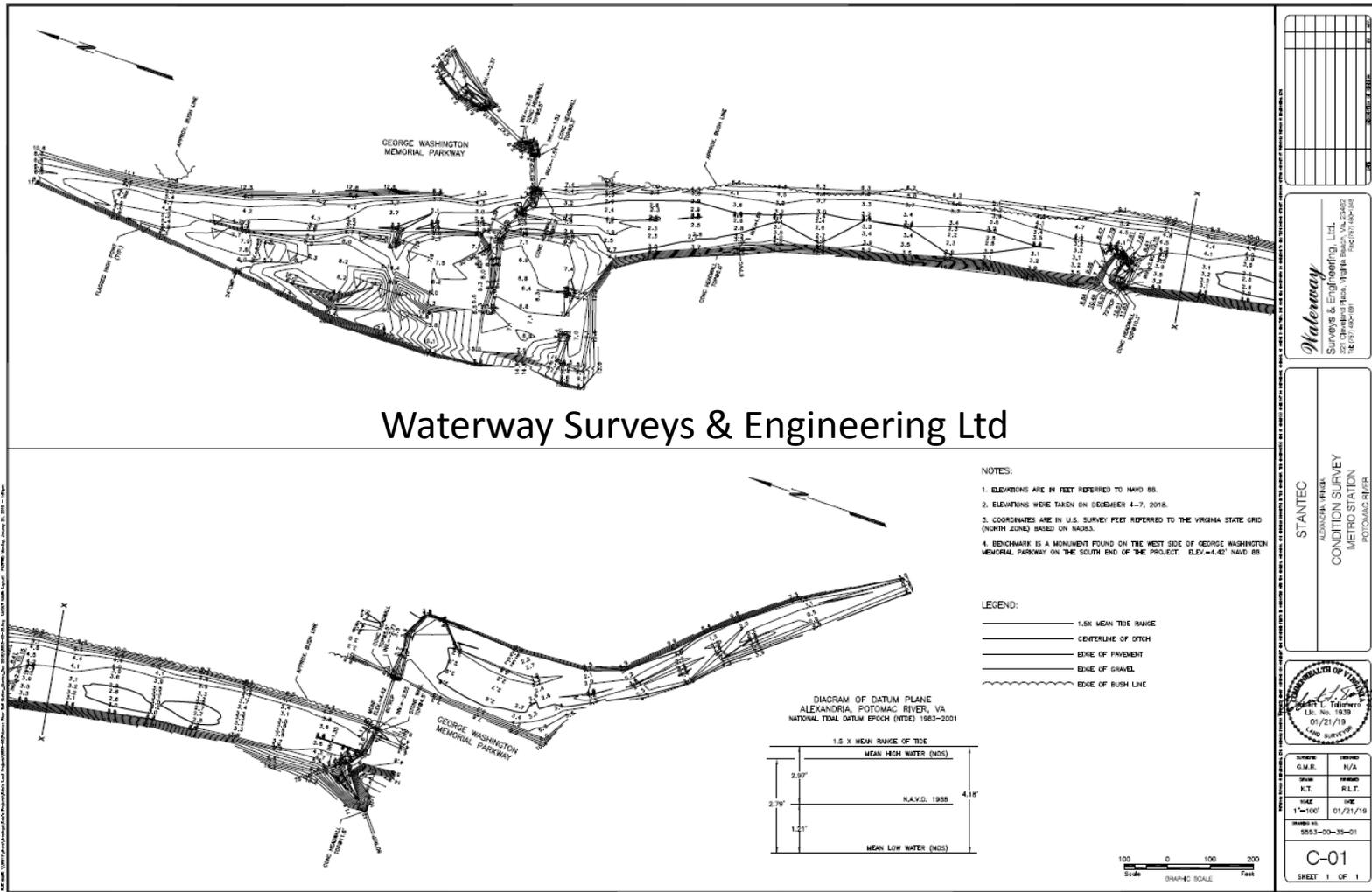


SUPPLEMENTAL FIELD WORK FALL 2018

- Tidal wetland survey
- Non-tidal wetland data points
- Habitat Evaluation
- Wetland Functional Assessment

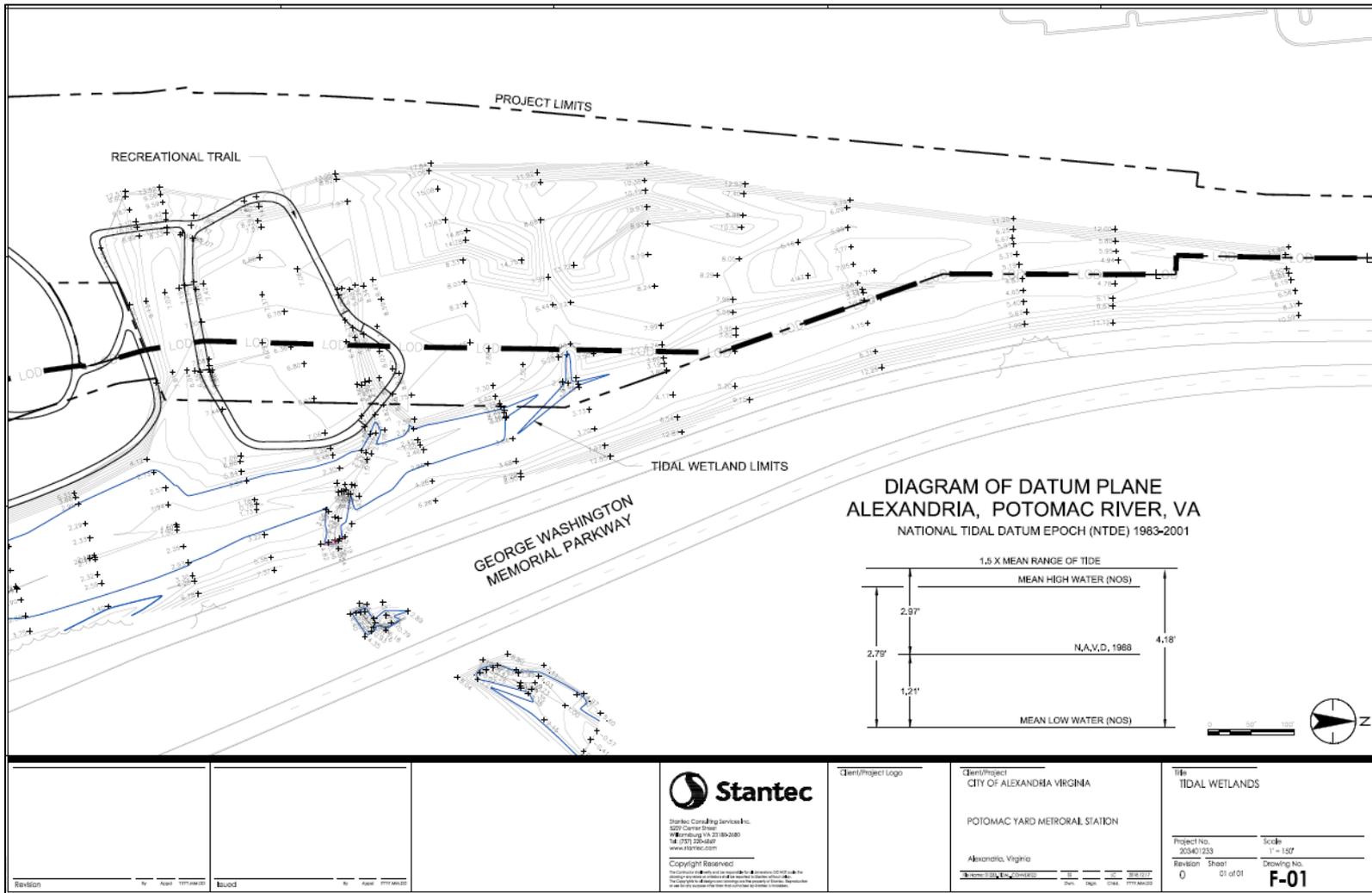


FIELD WORK - TIDAL LIMITS SURVEY



Waterway Surveys & Engineering Ltd

FIELD WORK - TIDAL LIMITS SURVEY



FIELD WORK - WETLAND DATA COLLECTION



- Soils
- Vegetation
- Hydrology



FIELD WORK - WETLAND FUNCTIONS AND VALUES

Functions

- Groundwater recharge/Discharge
- Flow Alteration
- Fish and Shellfish Habitat
- Sediment/Toxicant Retention
- Nutrient Removal
- Sediment Stabilization
- Wildlife Habitat

Values

- Recreation
- Education
- Uniqueness
- Aesthetics
- Threatened and Endangered Species



FIELD WORK - HABITAT ASSESSMENT

- Both Palustrine Emergent (PEM) and Palustrine Forested (PFO) wetland types are onsite
- Emergent Tidal (E2EM), Tidal Open Water (E1UB) and Tidal Stream Channel (R1SB) are present downstream of the project
- Invasive species are dominant in the areas of proposed impacts
- Highly disturbed with spoil piles and previous grading

PROJECT FOOTPRINT



Potomac Greens

SEE SHEET 2

LEGEND:

- APPROXIMATE FORESTED WETLAND (PFO) LIMITS
- APPROXIMATE EMERGENT WETLAND (PEM) LIMITS
- APPROXIMATE TIDAL WETLAND LIMITS
- PROPOSED PERMANENT EMERGENT WETLAND (PEM) IMPACTS
- PROPOSED TEMPORARY PERMANENT FORESTED WETLAND (PFO) IMPACTS
- PROPOSED TEMPORARY EMERGENT WETLAND (PEM) IMPACTS
- PROPOSED PERMANENT FORESTED WETLAND (PFO) IMPACTS
- PROJECT LIMITS - REMBED LOD
- ORIGINAL LOD

SITE DATA:

PROJECT AREA	16.86 ACRES ±
FORESTED WETLANDS (PFO)	2.27 ACRES ±
EMERGENT WETLANDS (PEM)	2.16 ACRES ±

JURISDICTIONAL AREA IMPACTS:

PERMANENT IMPACTS	
FORESTED WETLANDS (PFO)	0.92 ACRES ±
EMERGENT WETLANDS (PEM)	0.64 ACRES ±
TEMPORARY IMPACTS	
FORESTED WETLANDS (PFO)	1.10 ACRES ±
EMERGENT WETLANDS (PEM)	0.91 ACRES ±

NOTES:

1. COORDINATE SYSTEM WMATA 2009
2. SURVEY TOPOGRAPHY PROVIDED BY SURVEYS & ENGINEERING, LTD.
3. THE LIMITS OF WETLANDS AND OTHER WATERS OF THE U.S. SHOWN ON THIS MAP WERE PROVIDED BY WMATA.

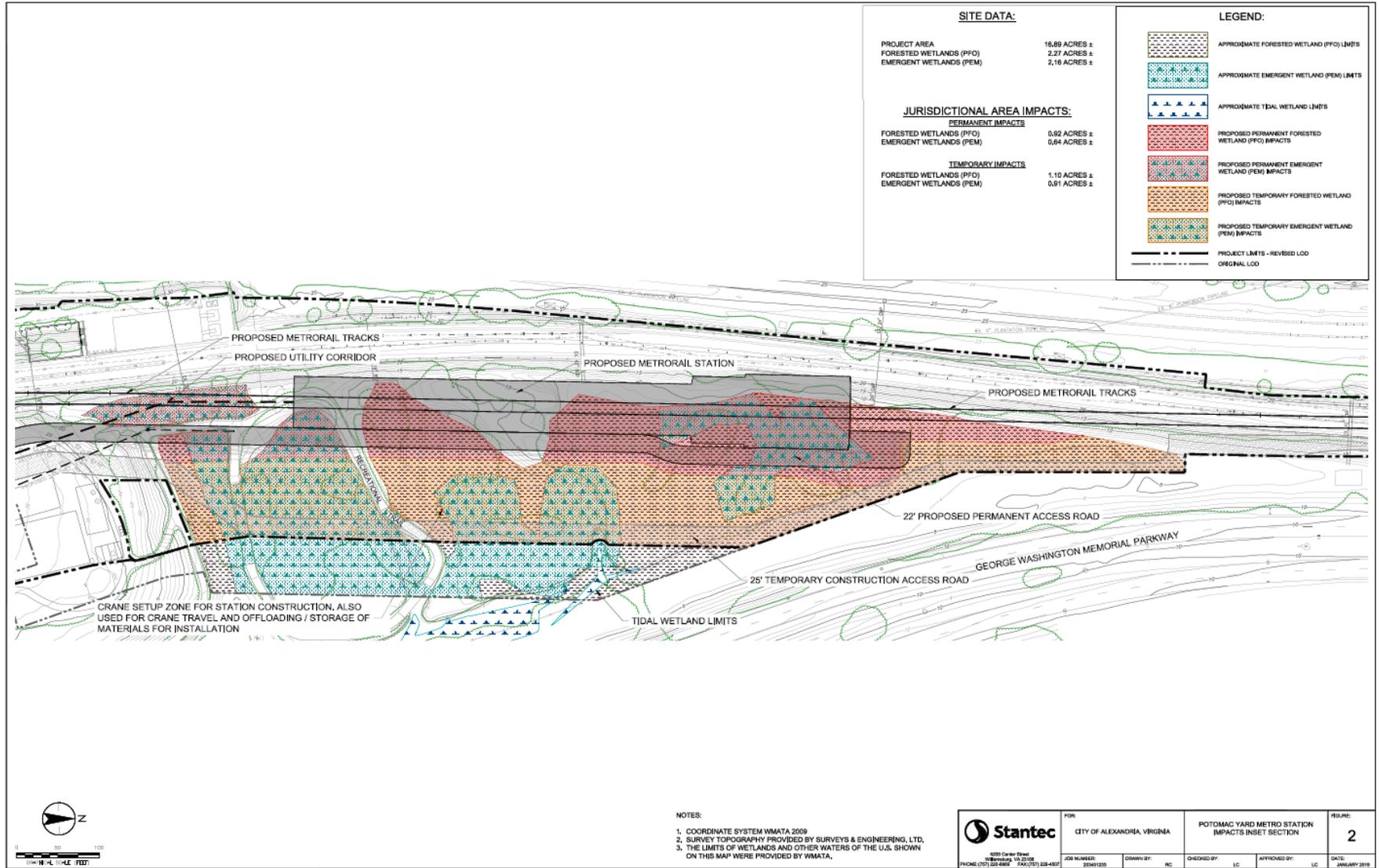


SCALE: 1" = 40' FEET

	FOR:	CITY OF ALEXANDRIA, VIRGINIA	PROJECT:	POTOMAC YARD METRO STATION IMPACTS MAP	REVISION:	1	
	JOB NUMBER:	2018/0123	DRAWN BY:	IC	CHECKED BY:	LC	
<small>205 Center Street Alexandria, VA 22304 PHONE (703) 224-9900 FAX (703) 224-9100</small>				APPROVED BY:	LC	DATE:	JANUARY 2019



PROJECT FOOTPRINT



PROJECT FOOTPRINT - WETLAND IMPACT REDUCTION

October 2017 JPA

- Permanent = 1.65
 - PFO = 1.01
 - PEM = 0.64
- Temporary = 2.97
 - PFO = 1.38
 - PEM = 1.59

Current

- Permanent = 1.56
 - PFO = 0.92
 - PEM = 0.64
- Temporary = 2.01
 - PFO = 1.01
 - PEM = 0.91

REDUCTION
0.09 acre permanent
0.96 acre temporary

COMPENSATORY MITIGATION

Wetland Type	Amount	Ratio	Required
PFO	0.92	2:1	1.84
PEM	0.64	1:1	0.64
			2.48 CREDITS REQUIRED

The City must ensure “No Net Loss” of wetlands acreage and functions by providing compensatory mitigation.

Credits will be purchased from the approved mitigation bank prior to construction in jurisdictional areas.

○ RESTORATION PLAN

- Approximately 2 acres of wetlands temporarily impacted must be restored to the same or better condition
- Forested area (1.01 acre) will be planted at a rate of 400 stems per acre
- Emergent area (0.91 acre) will be seeded with a wetland mix
- Monitoring is required by DEQ during and after construction
- Monitoring wells will be installed to verify hydrology
- An invasive control plan will be included.
- Field studies and reporting will occur for 5-7 years or until the site meets the success criteria required by the agencies

PREPARING REVISED APPLICATION

- Site visit with the agencies to walk the property
- Worked with PYC to minimize the proposed permanent and temporary impacts
- PYC is preparing a wetland restoration plan for the temporary impact areas per DEQ guidance documents
- Incorporate new ecology and tidal survey information
- Documenting Alternatives Analysis



NEXT STEPS

- Submit Revised Application in early February
 - US Army Corps of Engineers
 - Virginia Department of Environmental Quality
 - Virginia Marine Resources Commission
- Will be posted on City website
- Corps & DEQ will take public comments
- City will request DEQ hold a public hearing
- VMRC to review tidal wetland survey



Discussion