



Cedar Creek to Milford 230 kV Transmission Line Rebuild



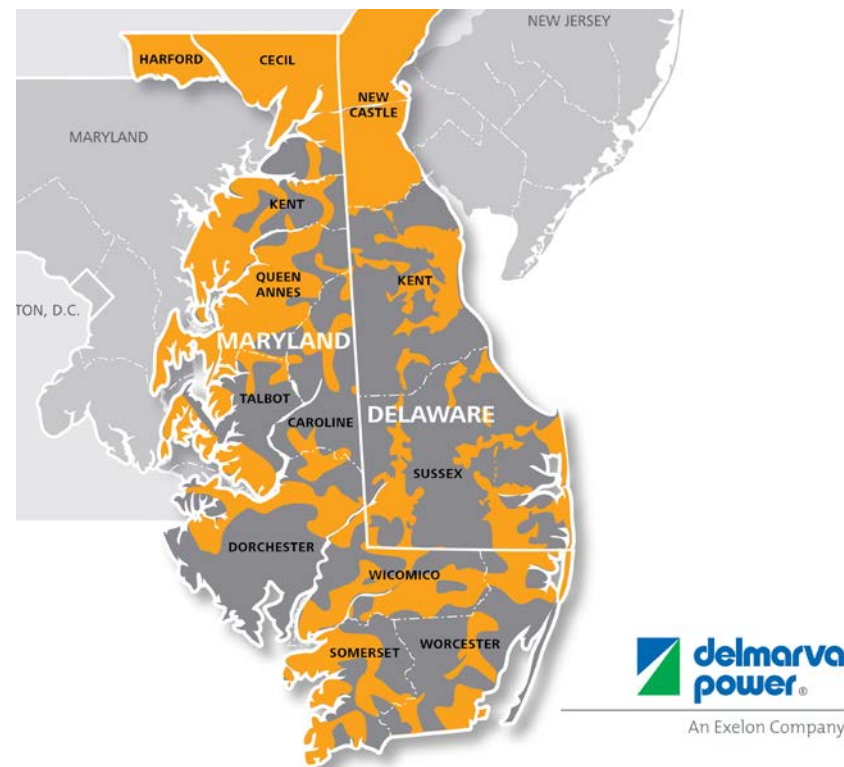
McCormick Taylor and Delmarva Power & Light Company

Presented by: Sean Francis and Annina Hazel

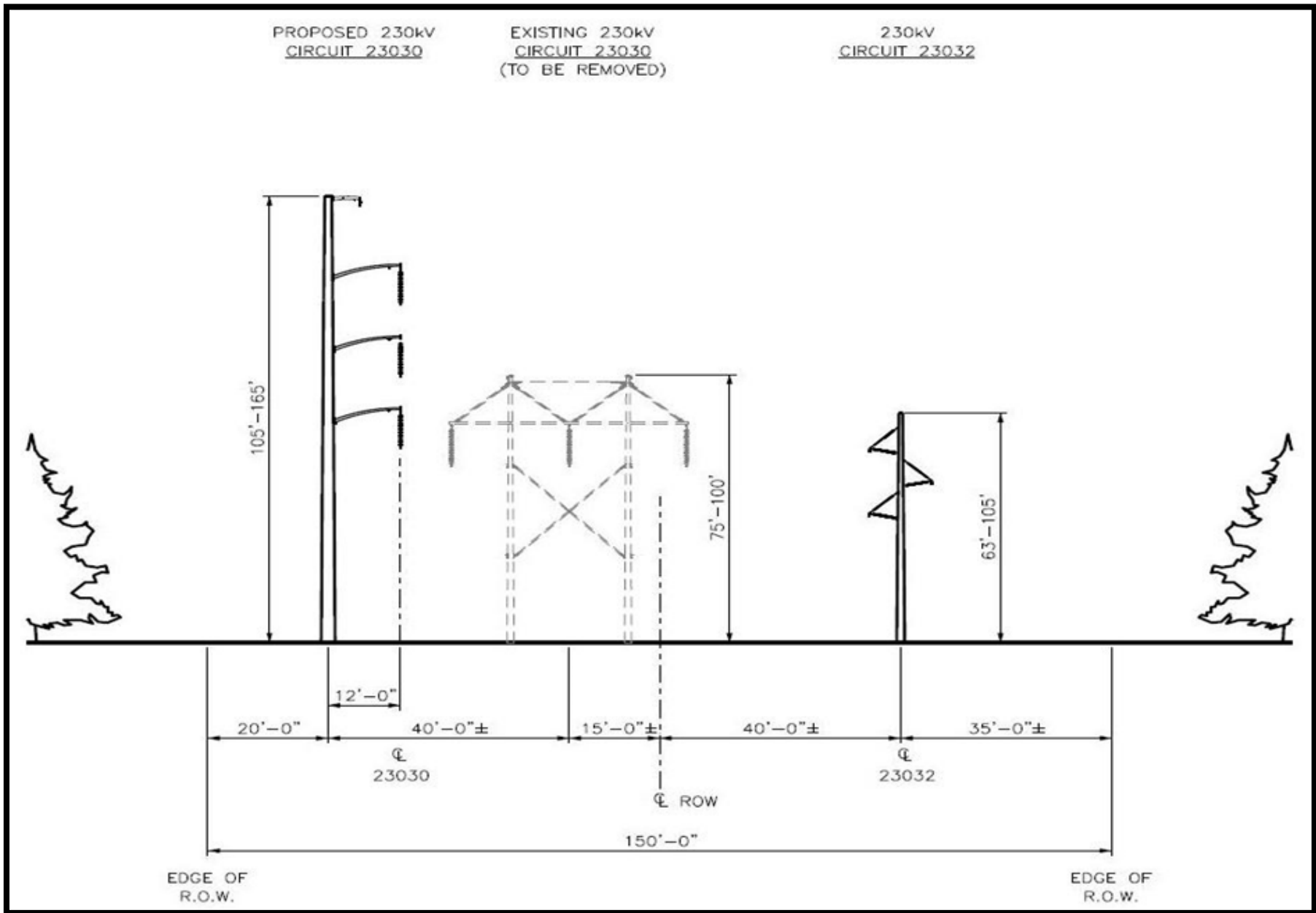
October 4, 2017

Project Overview

- DPL is constructing the second phase of a critical 58-mile, 230,000-volt transmission line
- \$71 million project
- Construction began in Spring, 2017
- Construction complete in May, 2018
- Required to meet reliability standards
 - North American Electric Reliability Corporation (NERC)
 - PJM Interconnection
- Existing wooden “H-Frame” transmission structures will be replaced with single-pole steel that can withstand winds up to 120 miles per hour



Project Overview



Project Overview



VIEWPOINT 11

Date	6/25/2014
Time	1:15 PM
Viewing Direction	Southwest



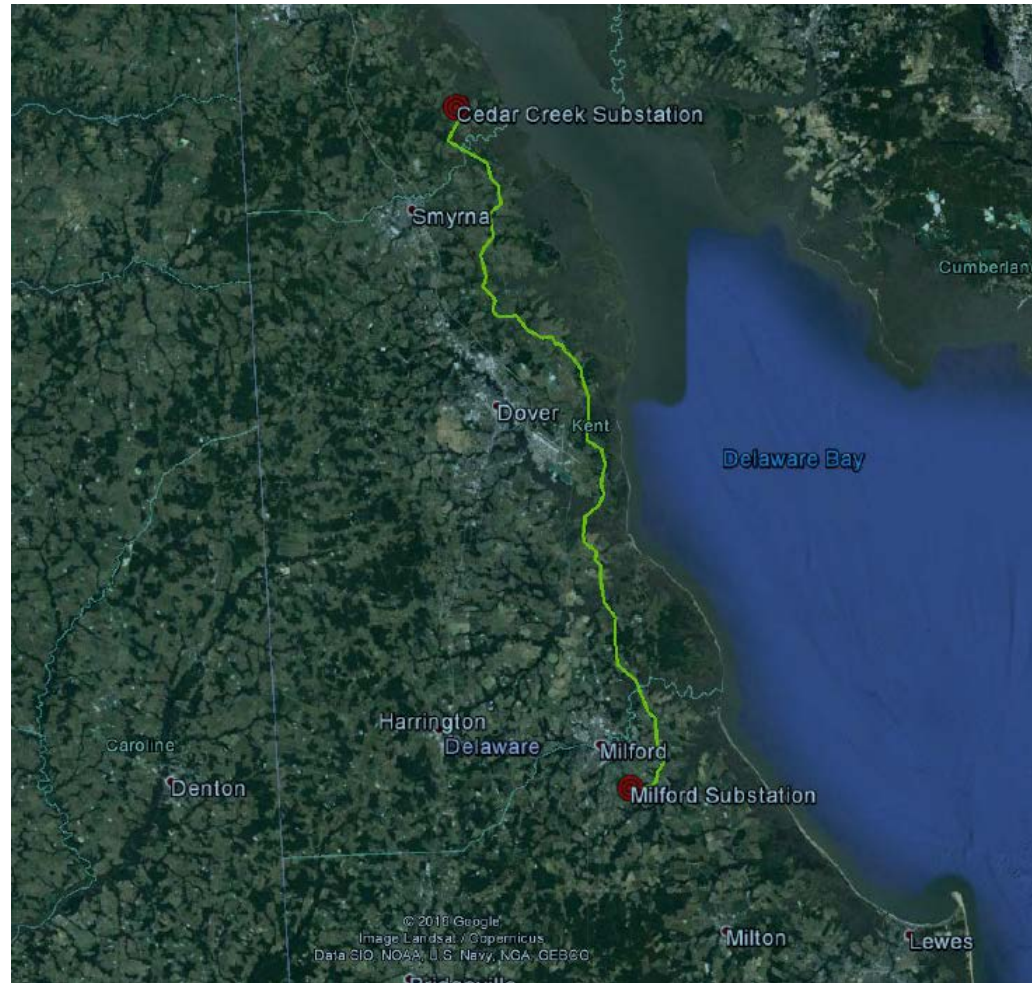
LEGEND	
	Viewpoint Location
	Existing Line
	Existing Line (To Be Removed)
	Proposed Line
	Right-Of-Way

Red Lion - Milford



Project Overview

- 43 Miles
- 3 Counties
- 384 Poles
- 8 Laydown Yards
- 11 Helicopter Construction Areas
- 35 Cultural Resource Locations
- 43 Raptor Nests (and counting!)
- 10 Major Watercourses Crossed
- 92 Tidal & Nontidal Wetlands Crossed
- 5 State Wildlife Areas (DFW)
- 7 State Natural Areas (DFW)



State Lands

- DNREC Permit required coordination with Program Managers
- Hunting Time-of-Year Restrictions: November



Impact Analysis

- Foundations
 - Caissons (6-ft diameter)
 - Drilled Piers (10-ft diameter)
- Permanent Impacts Vs. Temporary Impacts
- Tidal / Non-tidal wetlands

Total Impacts (AC.)			
Permanent		Temporary	
Tidal	Non-tidal	Tidal	Non-tidal
0.02	0.04	10.1	16.9

Permitting and Licensing

Kent Conservation
District

DNREC- Notice of
Intent (NOI)
under a NPDES
General Permit

Coastal Programs

Sussex
Conservation
District

DNREC - Wetlands
and Subaqueous
Lands Permit

State Historic
Preservation
Office (SHPO)
Concurrence

New Castle
County Dept. of
Land Use

USACE-
Nationwide 3
Permit

DNREC Wildlife
Species
Conservation &
Research Program

Cultural Resources

- Archaeological & Architectural Studies Conducted
- Artifacts recovered: 12,102
- Phase I - identified 35 archaeological sites
- Phase II - 33 sites identified for protection
- Enhanced Phase II - 2 sites identified for excavation



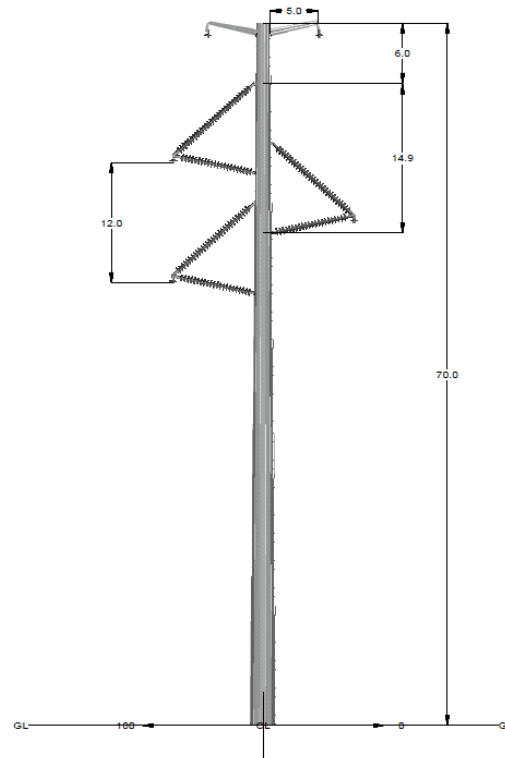
Cultural Resources

- 35 archaeological sites
 - Composite matting base pads installed at each pole location
 - Orange Construction Fencing (OCF) installation along the perimeter of the composite matting



Cultural Resources

- Redesign within the St Jones Neck Historic District
 - Tangent brace post construction to lower pole heights within the District
 - Originally 13 davit arm structures proposed
 - Redesigned to 24 tangent brace post structures to stay within viewshed of the tree line and the adjacent circuit.



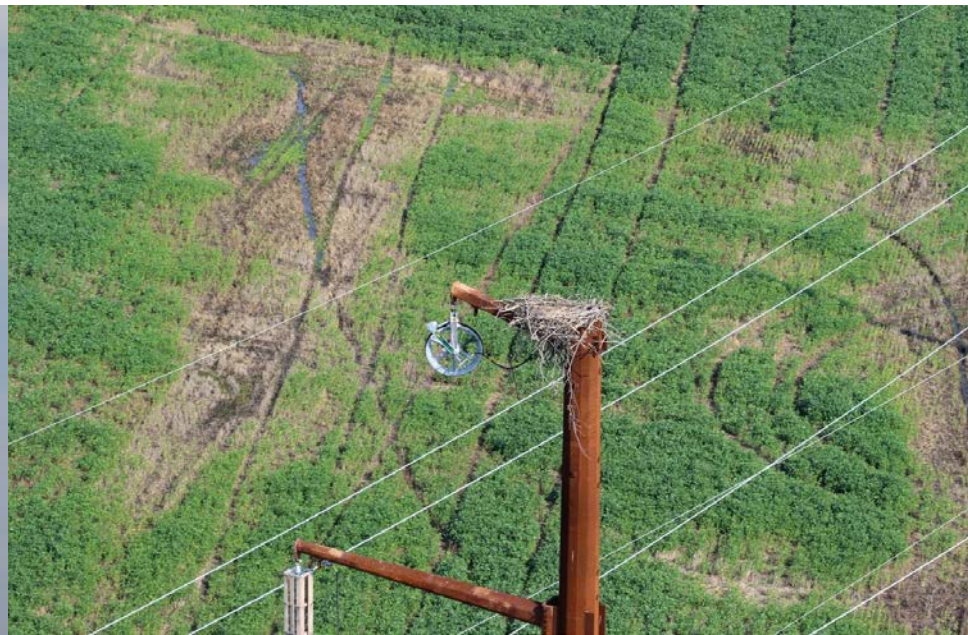
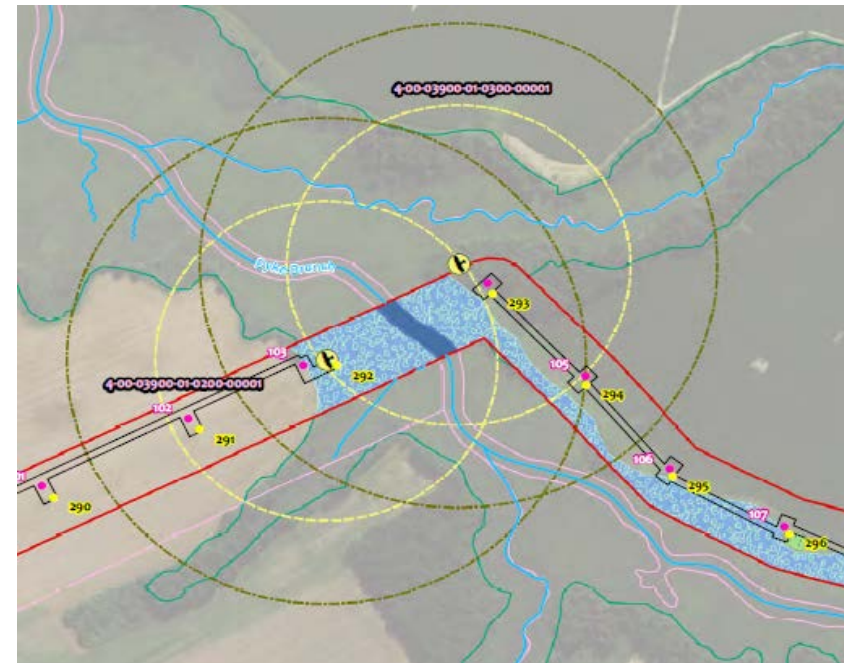
Raptor Nests

- 20 nests were observed during the August, 2017 survey.
 - 14 are located on existing structures within the ROW that are proposed to be removed.
 - 4 are located on new steel monopoles that were recently installed.
 - 2 are located in trees that are in close proximity to the ROW.



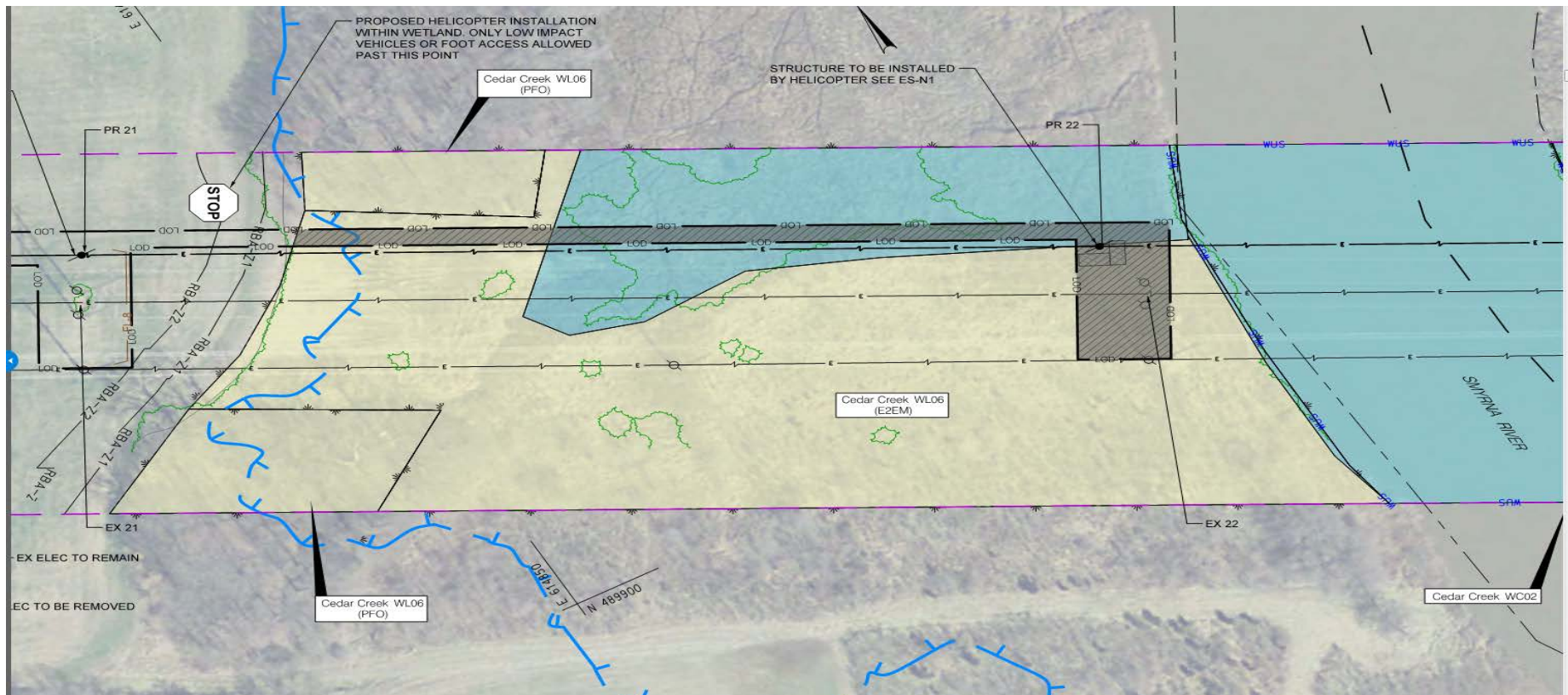
Raptor Nests

- In ROW
 - Defeated Excluders
 - Nesting on newly constructed structures
- Off ROW
 - Buffers associated with off-ROW eagle nests
 - Nesting on Phase I Red Lion to Cedar Creek Structures



Avoidance and Minimization

- Erosion and Sediment Control
 - 75 SCEs
 - 53 Temporary bank-to-bank bridges
 - 23 Miles of filter log
 - 71 acres of composite matting



Avoidance and Minimization

- Low Impact Vehicle and Aircrane Construction



Environmental Monitoring

- The Monitor's Role
 - Serve as eyes and ears of PHI
 - Document compliance and non-compliance
 - Facilitates communication
 - Proactive issue resolution
 - Recommends measures to stay in compliance



Environmental Monitoring

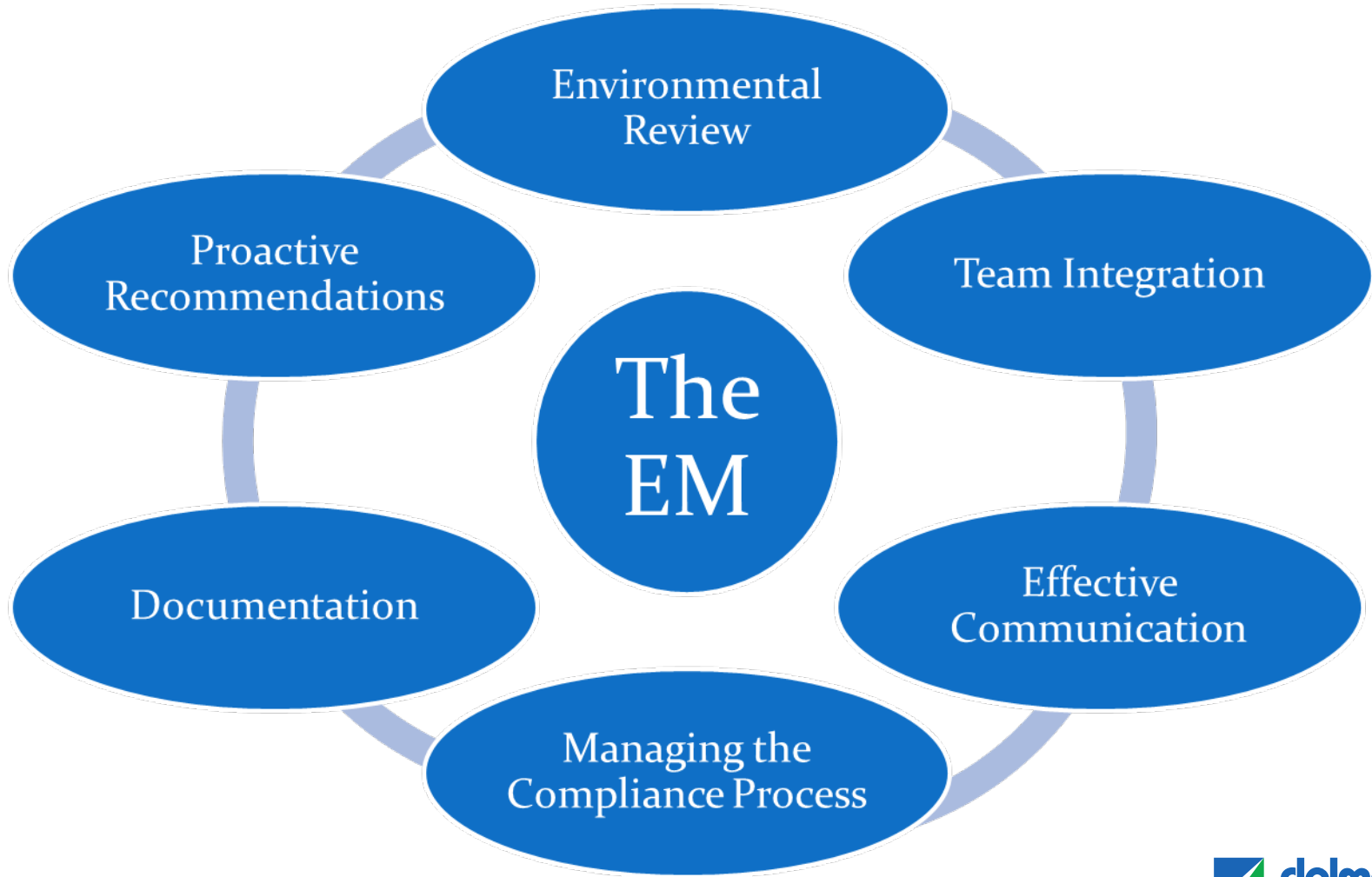
- The Monitor's Role (Cont.)

To help facilitate:

Communication	Access
Contractor Expectations	Agency Coordination and Involvement
Public Interaction	Opportunities to minimize impacts
Avoiding Violations	Permit modifications
Community Opposition	Closure Periods
Impact Tracking	Post Storm Inspections
Response Preparedness	Design Review
Water Quality	Team Integration

Environmental Monitoring

- Focus Areas



Environmental Monitoring

- Focus Areas (Cont.)
 - Permit Compliance
 - Regulated Resources
 - Erosion & Sediment Control
 - Minimization of Impacts
 - RTE species protection
 - Project Commitments
 - Wetland Flagging
 - Pre-Construction Photographs
 - Plan Modification Submittals- DNREC / County



Environmental Monitoring

- Documentation - ECAT
 - Inspection Reporting
 - Notifications
 - Issue Tracking/Resolution
 - Photo Documentation
 - Permit Condition Review

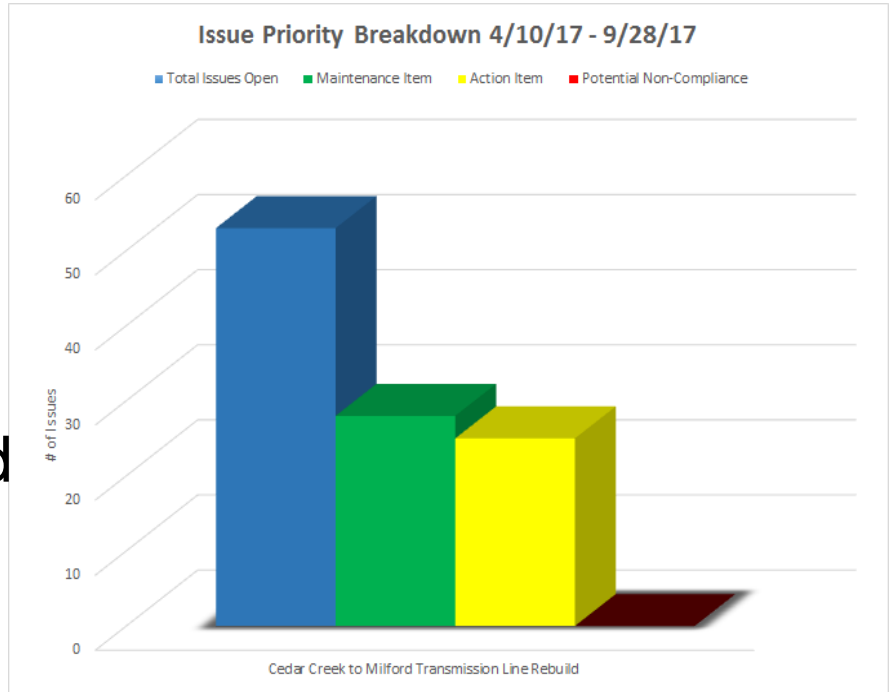
The screenshot displays the 'My ECAT Projects' web interface. On the left, a sidebar shows a search bar, a 'Stage' filter, and a project card for 'Northwest Su 3382072' with a 'Latest Status' of 'Compliance' and 'Territory' of 'PEPCO'. The main content area is titled 'View Compliance Review' and has three tabs: 'DETAILS', 'CONDITIONS REVIEW', and 'PHOTOS'. The 'DETAILS' tab is active, showing the following information:

Review Date	10-06-2016		Reviewer	Smith, Lauren	
Review Status	Compliance		Weather	Cloudy	
Temp (Low)	52	Temp (High)	71	Precipitation	0
Site Visitors	None				
Notes	Construction Activities:				
At the time of the review, the Contractor was not working. See attached Photos 1 - 4					
The Contractor had received approval to remove all of the erosion and sediment controls throughout the ROW.					
Safety Checklist - Attached					

A 'Close' button is located at the bottom right of the review window.

Environmental Monitoring

- 119 Total Compliance Reviews
- 2,100 Total Hours
- 1,574 Total Images Uploaded
- 53 Total Issues Open
- 49 Issues Closed (9/28)



Contact Us

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