



WSSC

Where Water Matters

**BROAD CREEK AUGMENTATION PROJECT
Conveyance System North Contract**

Community Meeting

March 4, 2015

Introduction



Austin Freeman, PMP
Project Manager

John Beitler, PE
Project Manager



Dennis Funk, P.E.
Gannett Fleming

Presentation Overview

- Project Background
- Status
- Conveyance System - North Contract
- Questions and Discussion

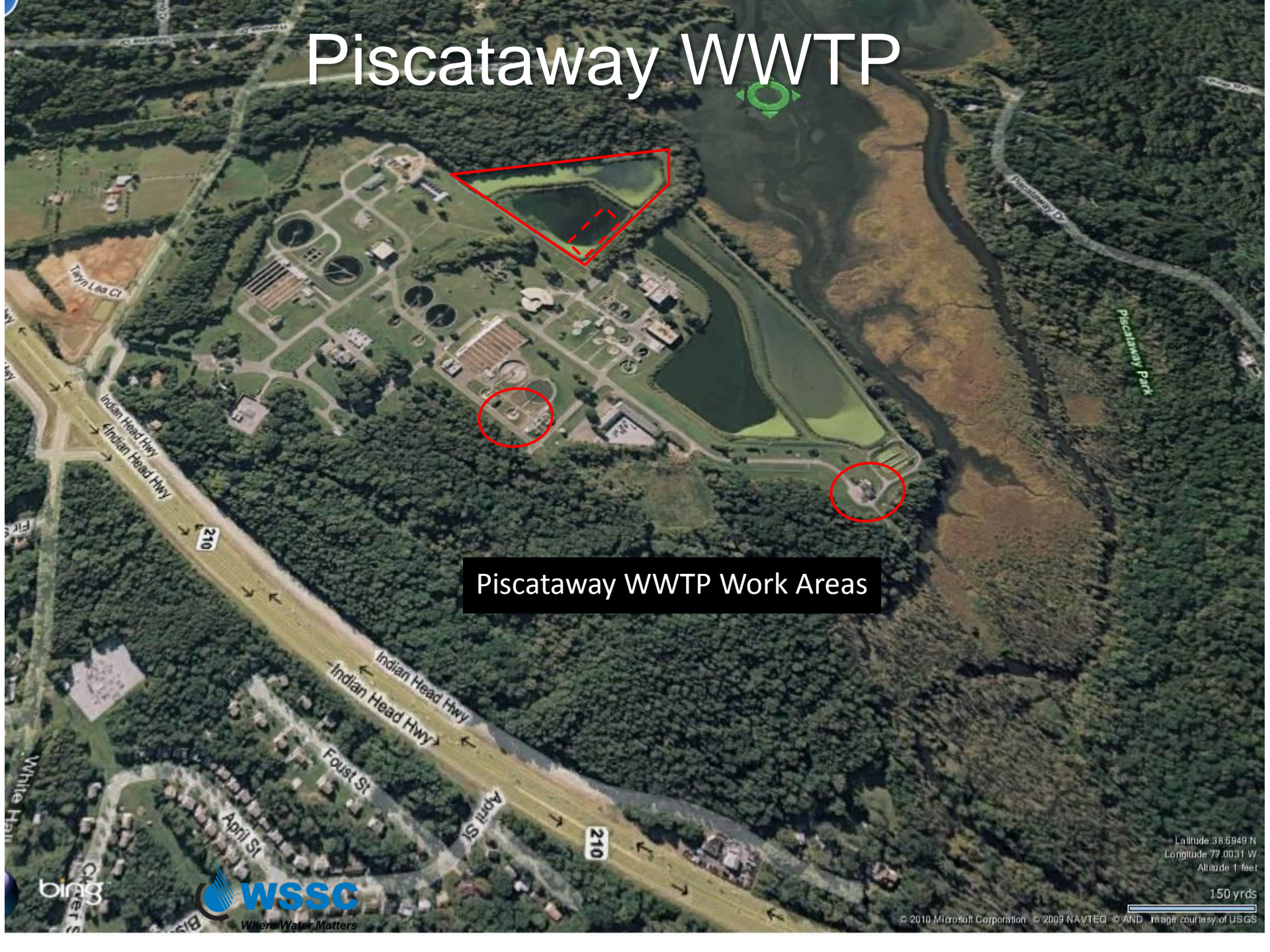
Project Overview - Existing System



Project Background

- **Consent Order - December 2005**
- **Facility Plan Study – to address overflows**
- **Consent Decree – 55 MGD capacity**
- **Broad Creek WWPS Augmentation Design – Hatch Mott MacDonald / Gannett Fleming JV**

Piscataway WWTP



Piscataway WWTP Work Areas

Latitude 38.6949 N
Longitude 77.0031 W
Altitude 1 feet

150 yds

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Broad Creek Pump Station Site



North Pipeline Contract

- Design Notice to Proceed September 2009
- Design Studies Complete April 2010
- Final Design Complete June 2012
- Final Permitting February 2014
- Bids Received February 2015
- Notice to Proceed (estimate) May 2015
- Construction Duration 2 years

Conveyance System Alignment



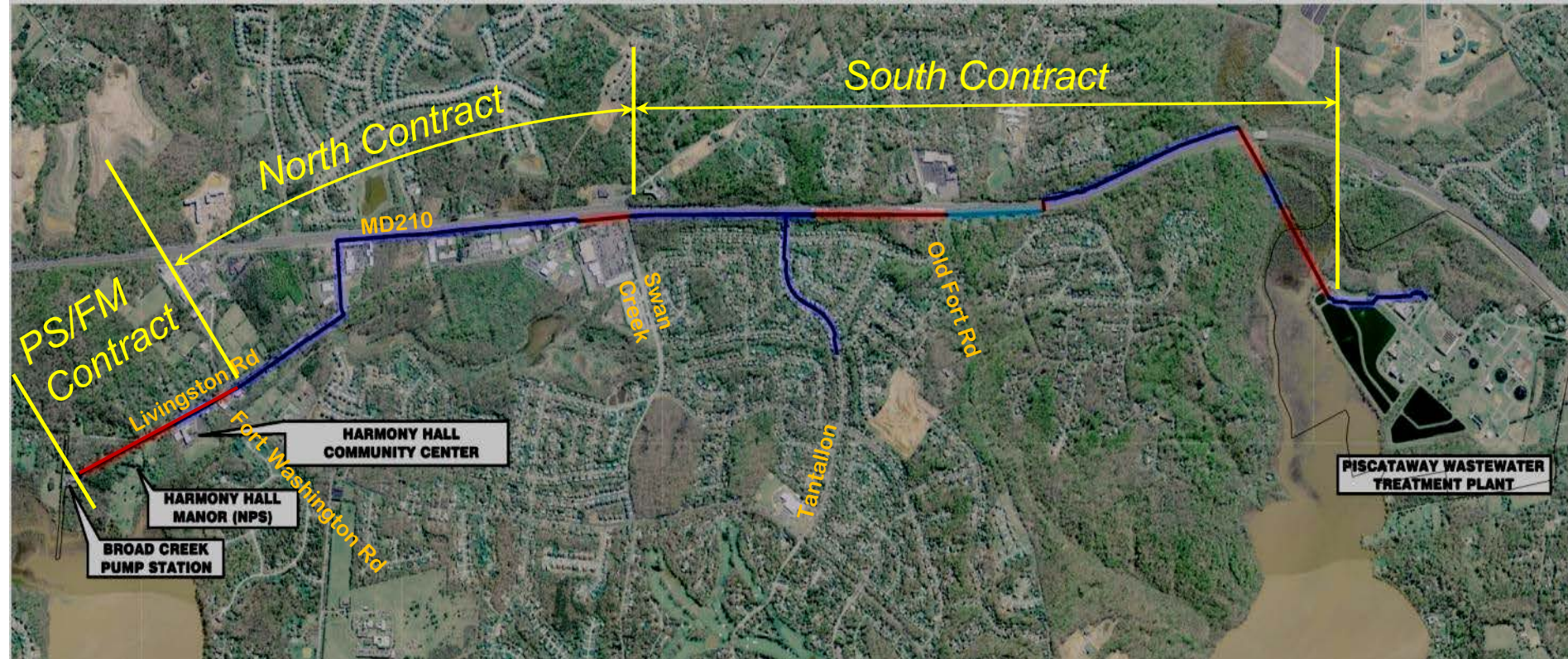
Pipeline Lengths

48" Force Main	15,045 feet
60" Gravity Sewer	1,460 feet
42" Pressure Sewer	6,050 feet
24" Force Main	2,737 feet

Tunnel Lengths

Tunnel 1&2	2,722 feet
Tunnel 3	773 feet
Tunnel 4N/4S	1,952 feet
Tunnel 6&7	2,112 feet
Tunnel 9	547 feet

Conveyance System Contracts



PS & Force Main

48" Force Main 2,889 feet
 Tunnel 1&2 2,722 feet

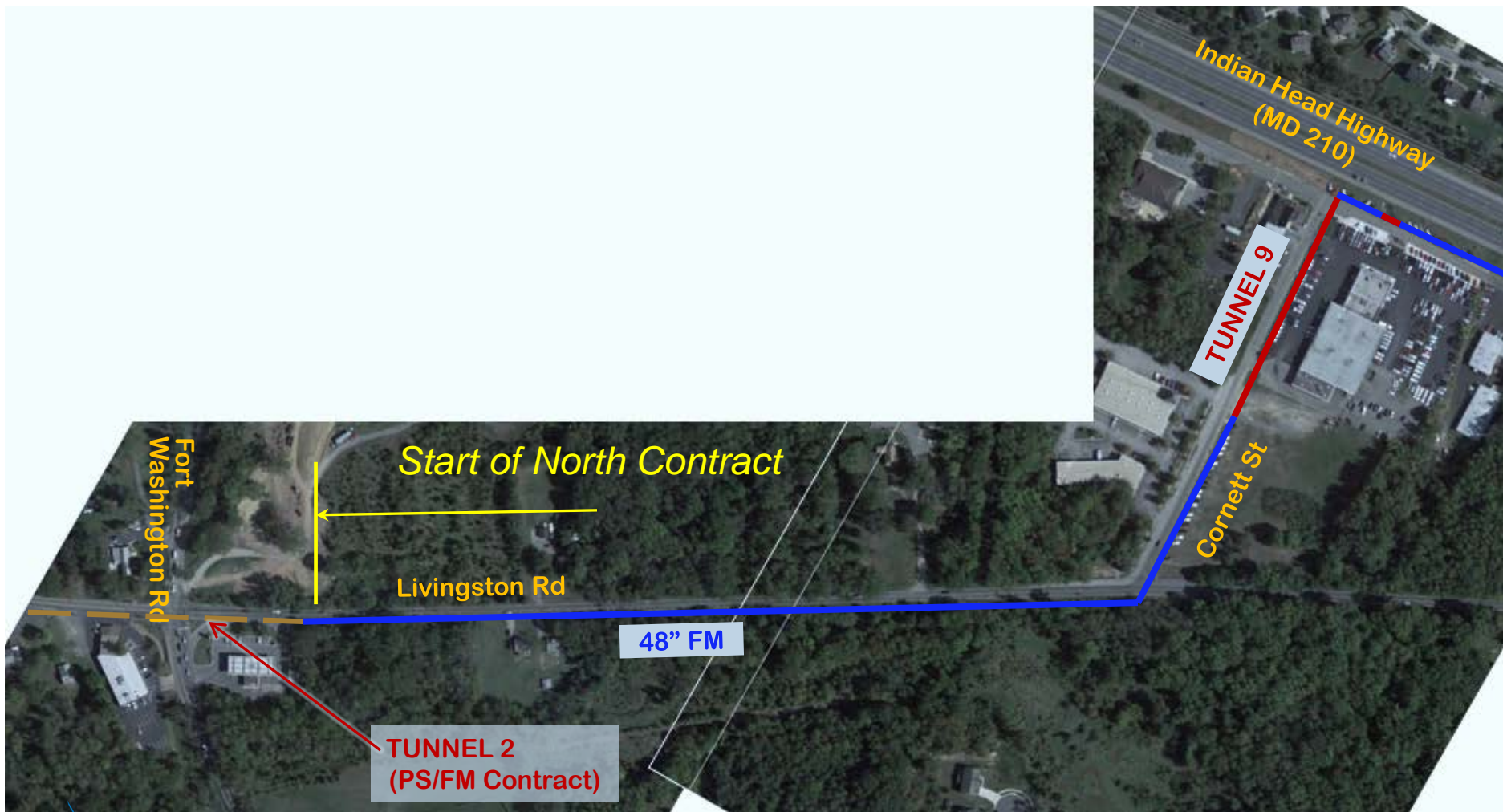
North Contract

48" Force Main 7,367 feet
 Tunnel 3 773 feet
 Tunnel 9 547 feet

South Contract

48" Force Main 4,788 feet
 60" Gravity Sewer 1,460 feet
 42" Pressure Sewer 6,050 feet
 24" Force Main 2,737 feet

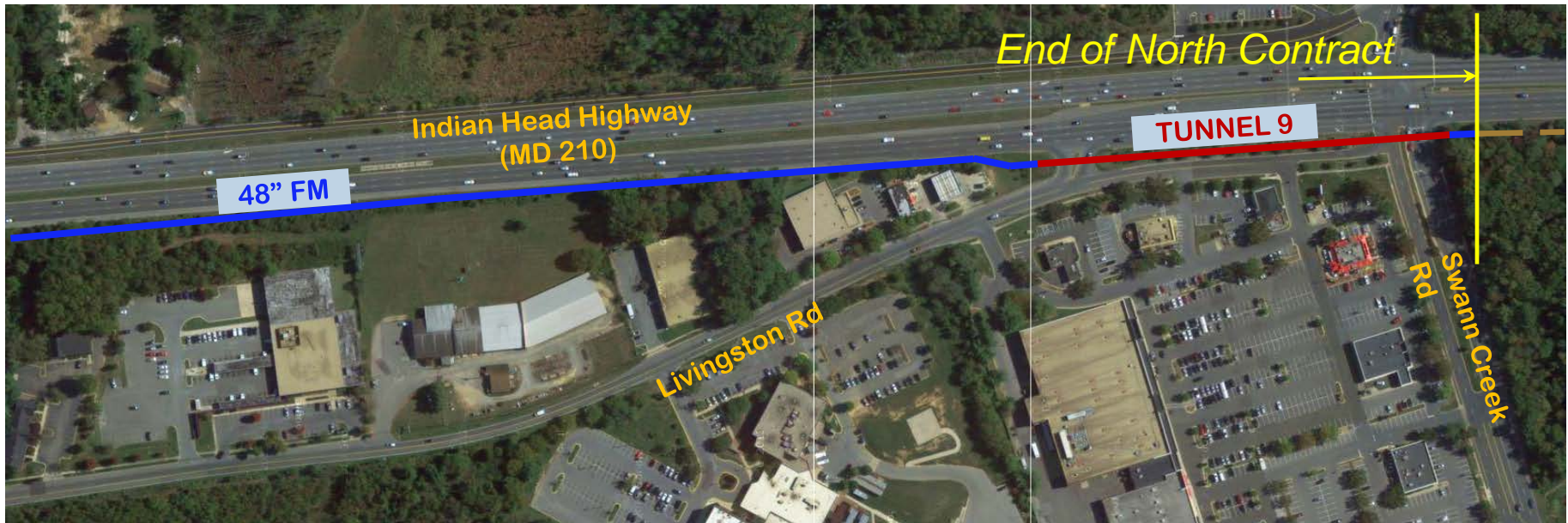
North Contract Alignment



North Contract Alignment



North Contract Alignment



Pipeline Construction Impacts - Traffic

Route 210

- Lane closures permitted during off-peak hours
- 9 am to 3 pm under normal operations
- Traffic barriers to protect work areas
- Construction Access locations move with phases

Livingston Road

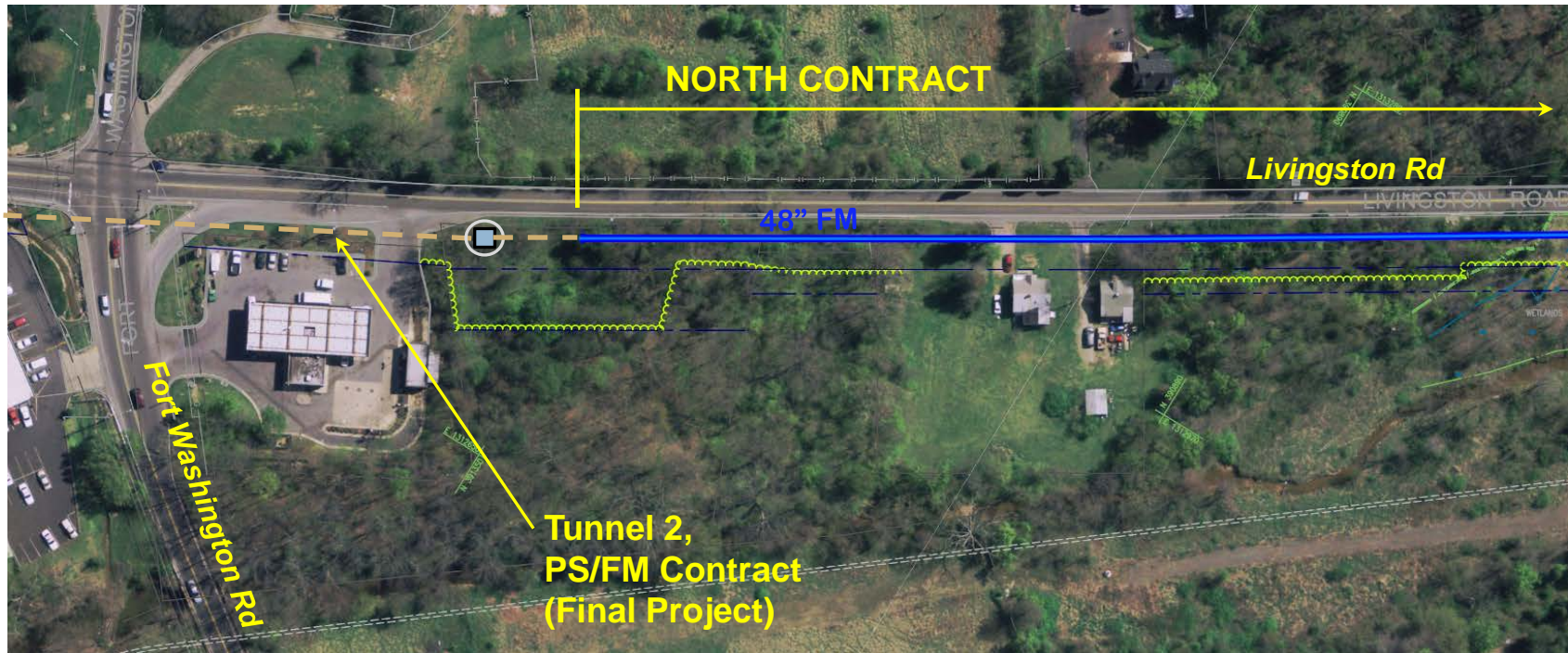
- Flagging operations for lane closures
- 9:00 am to 3:30 pm
- Construction Access locations move with phases

Pipeline Construction Impacts

Construction Activities

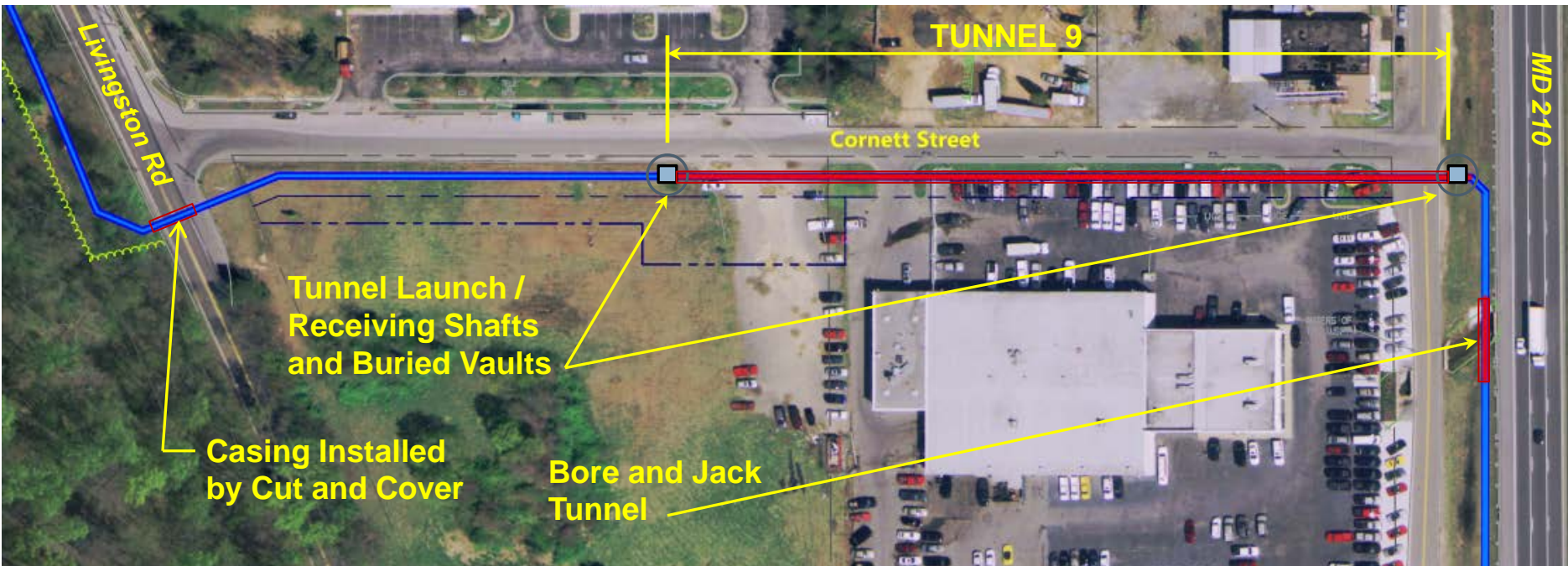
- Clearing
- Pipeline Construction
- Tunneling
 - Cornett Street
 - Livingston Road/Swann Creek
- Buried Vaults at Tunnel Shafts

North Contract – Livingston Road



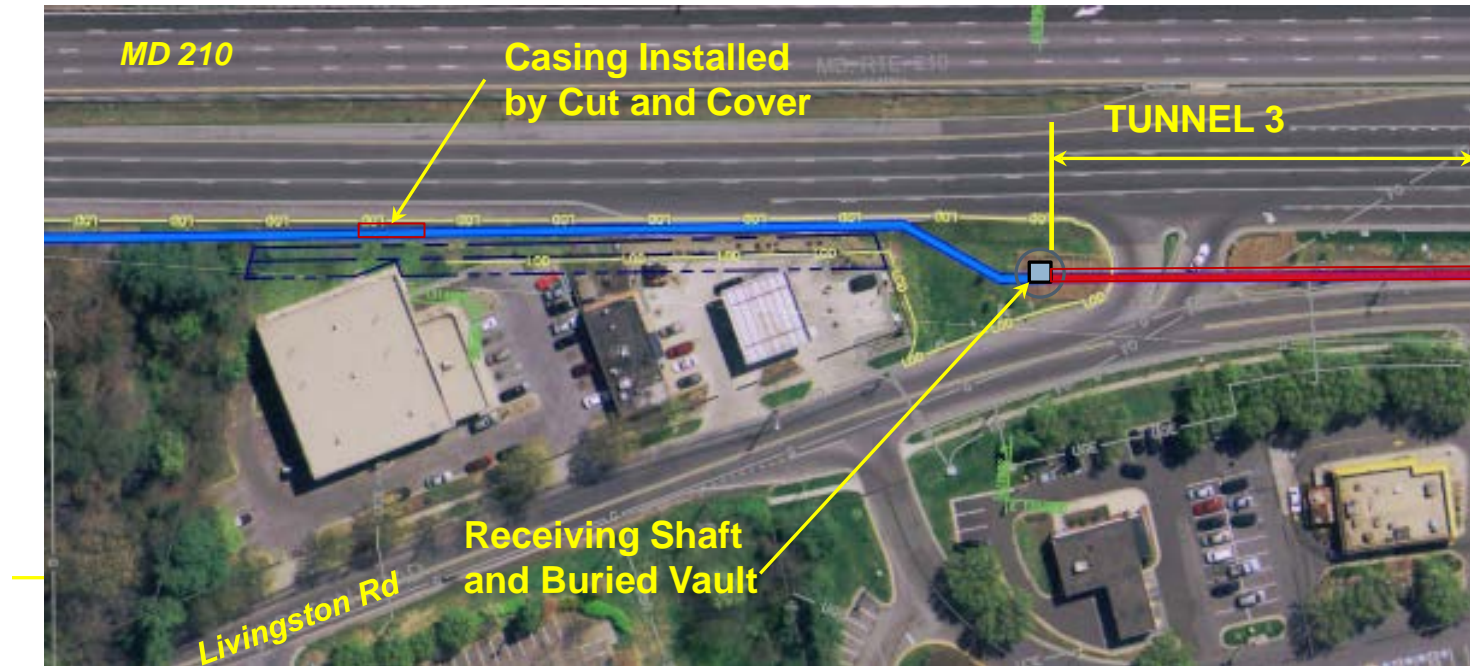
- Traffic impact on Livingston Rd
- Clearing for work area

North Contract – Construction Impacts Cornett Street



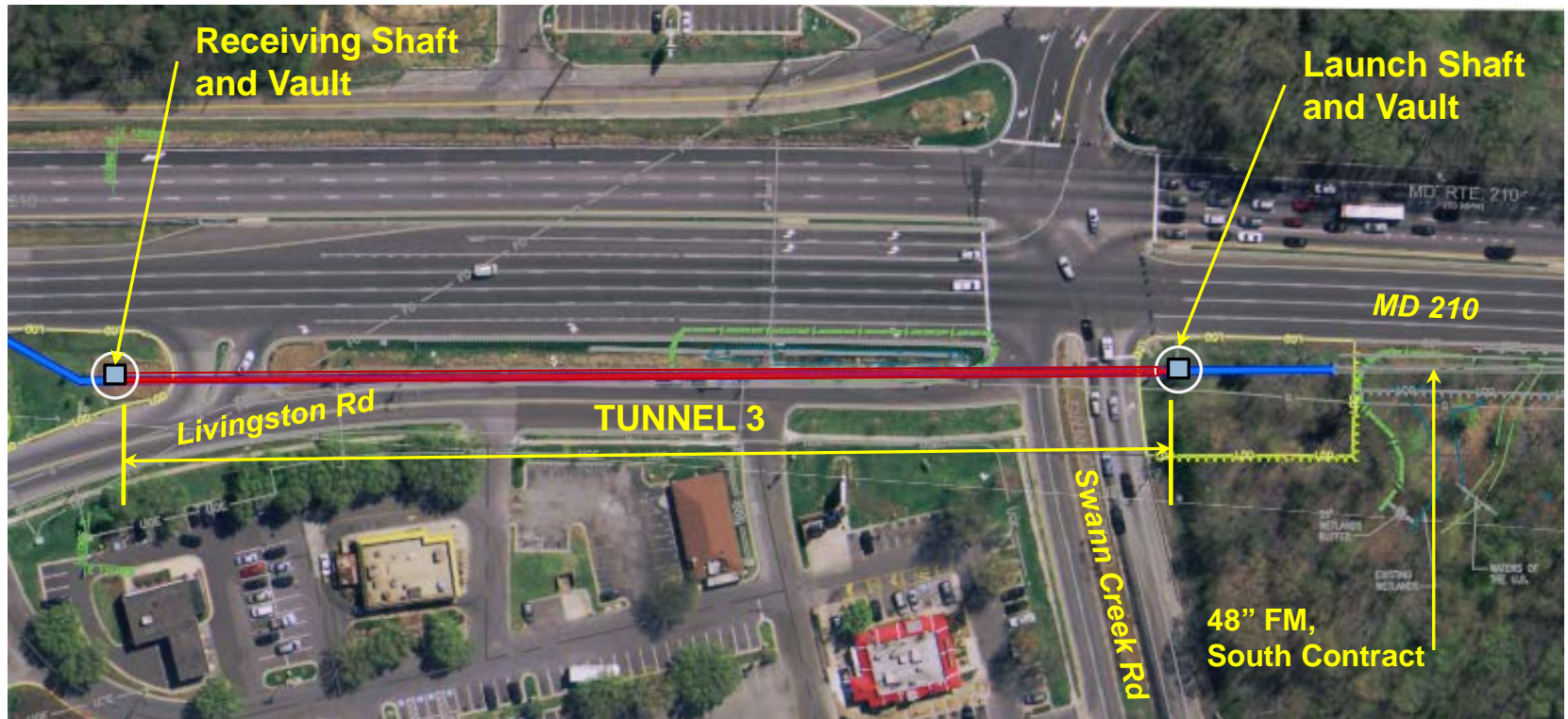
- Tunnel Equipment setup at Launch Shaft
- Receiving Shaft will impact roadway on Frontage Road₁₇

North Contract – Construction Impacts Livingston Rd / MD 210



- Tunnel Receiving Shaft Construction
- Access from Livingston Road

North Contract – Construction Impacts Swann Creek Road



- Tunnel Equipment setup at Launch Shaft
- Clearing under South Contract / Restoration under North Contract

North Contract – Traffic Impacts

MD 210

Lane Closures for
Construction Ingress/Egress

MD 210

- Lane Closures during off-peak hours
 - 9 am to 3 pm
- Construction traffic entering and exiting
- Work is behind concrete barrier

Project Status – Bid/Construction

Piscataway WWTP Headworks and Storage Improvements

- Under Construction – Estimated Completion Date: May 2016

South Conveyance System

- Bid Awarded August 2014 – Estimated Completion: May 2017

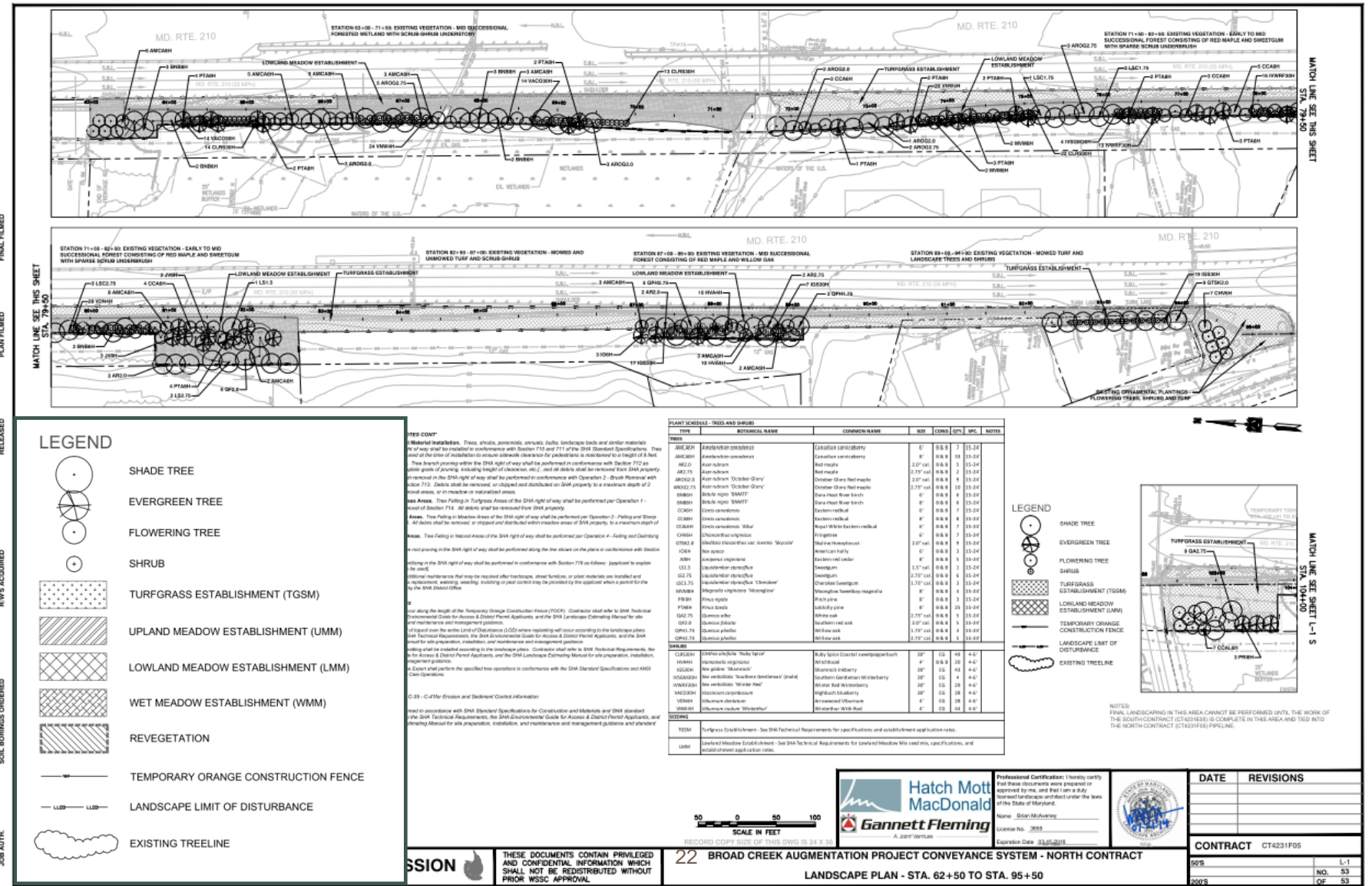
North Conveyance System

- Bids Received February 2015 – Estimated Completion: May 2017

Broad Creek Pump Station and Tunnel

- Working with National Park Service for Access Agreement. Bid Estimated in mid-2015.

Landscaping – Post Construction



SOIL BORINGS ORDERED
 SOIL BORINGS ORDERED
 RELEASED
 PLAN FILMED
 FINAL FILMED
 JOB AUTH.

MATCH LINE SEE THIS SHEET STA. 79+50
 MATCH LINE SEE THIS SHEET STA. 79+50
 MATCH LINE SEE THIS SHEET STA. 104+00
 MATCH LINE SEE THIS SHEET STA. 104+00

LEGEND

- SHADE TREE
- EVERGREEN TREE
- FLOWERING TREE
- SHRUB
- TURFGASS ESTABLISHMENT (TGSM)
- UPLAND MEADOW ESTABLISHMENT (UMM)
- LOWLAND MEADOW ESTABLISHMENT (LMM)
- WET MEADOW ESTABLISHMENT (WMM)
- REVEGETATION
- TEMPORARY ORANGE CONSTRUCTION FENCE
- LANDSCAPE LIMIT OF DISTURBANCE
- EXISTING TREELINE

LEGEND

- SHADE TREE
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- TURFGASS ESTABLISHMENT (TGSM)
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- WET MEADOW ESTABLISHMENT (WMM)
- TEMPORARY ORANGE CONSTRUCTION FENCE
- LANDSCAPE LIMIT OF DISTURBANCE
- EXISTING TREELINE

PLANT SCHEDULE - TREES AND SHRUBS

SYMBOL	TYPE	SCIENTIFIC NAME	COMMON NAME	MIN.	CONDS.	QTY.	SPEC.	NOTES
ARC20H	SHRUB	ARUNICATA	Red maple	2.0'	0.8	1	15.24	
ARC21H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC22H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC23H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC24H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC25H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC26H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC27H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC28H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC29H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC30H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC31H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC32H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC33H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC34H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC35H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC36H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC37H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC38H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC39H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC40H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC41H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC42H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC43H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC44H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC45H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC46H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC47H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC48H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC49H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC50H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC51H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC52H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC53H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC54H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC55H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC56H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC57H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC62H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC67H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC68H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC69H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC70H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC71H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC76H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC79H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC80H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC81H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC82H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC83H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC93H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
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ARC97H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC98H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC99H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	
ARC100H	SHRUB	AMERICANA	Striped maple	2.0'	0.8	1	15.24	



DATE	REVISIONS

Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed landscape architect under the laws of the State of Maryland.

Name: Sean McAvoy
License No. 3689
Expiration Date: 3/31/2018

CONTRACT CT4231F05

9/26

2008

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Comments and Questions?

www.wsscwater.com/broadcreek

Contact Information:

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Austin.Freeman@wsscwater.com

301-206-8328

*Thank you for attending
tonight's meeting*

