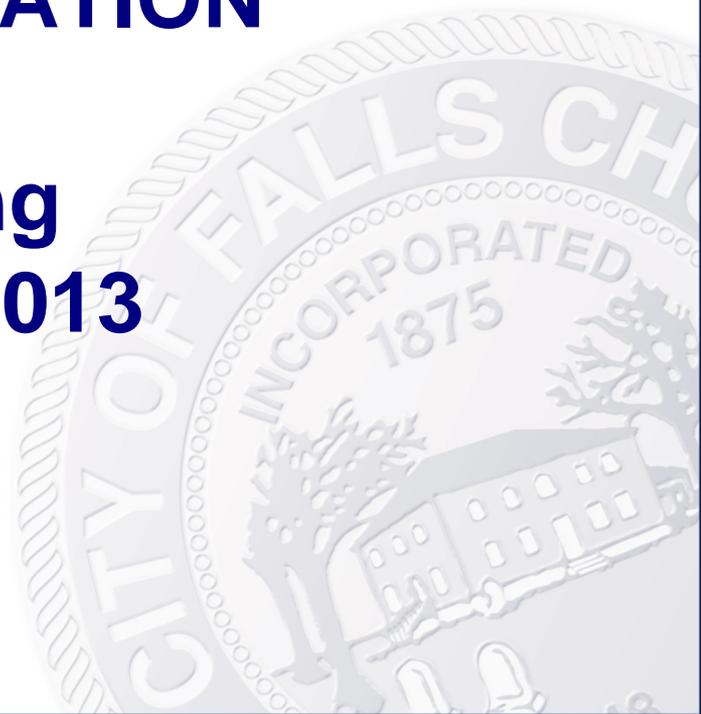




**COE BRANCH
PEARSON BRANCH
STREAM RESTORATION**

**Public Meeting
December 17, 2013**





Background

- State and Tribal Assistance Grant (STAG)
- 55% / 45% Federal / local match
- Approximately \$1.8M for design and construction



Benefits

- Improve drainage in the park and on nearby residences
- Improve water quality (eroding stream bank, DO, temperature)
- Create a natural-looking stream channel corridor that will be the centerpiece of the park.
- Credits toward Chesapeake Bay TMDL

Coe Branch Existing Conditions



Existing Conditions



Existing Conditions



Existing Conditions

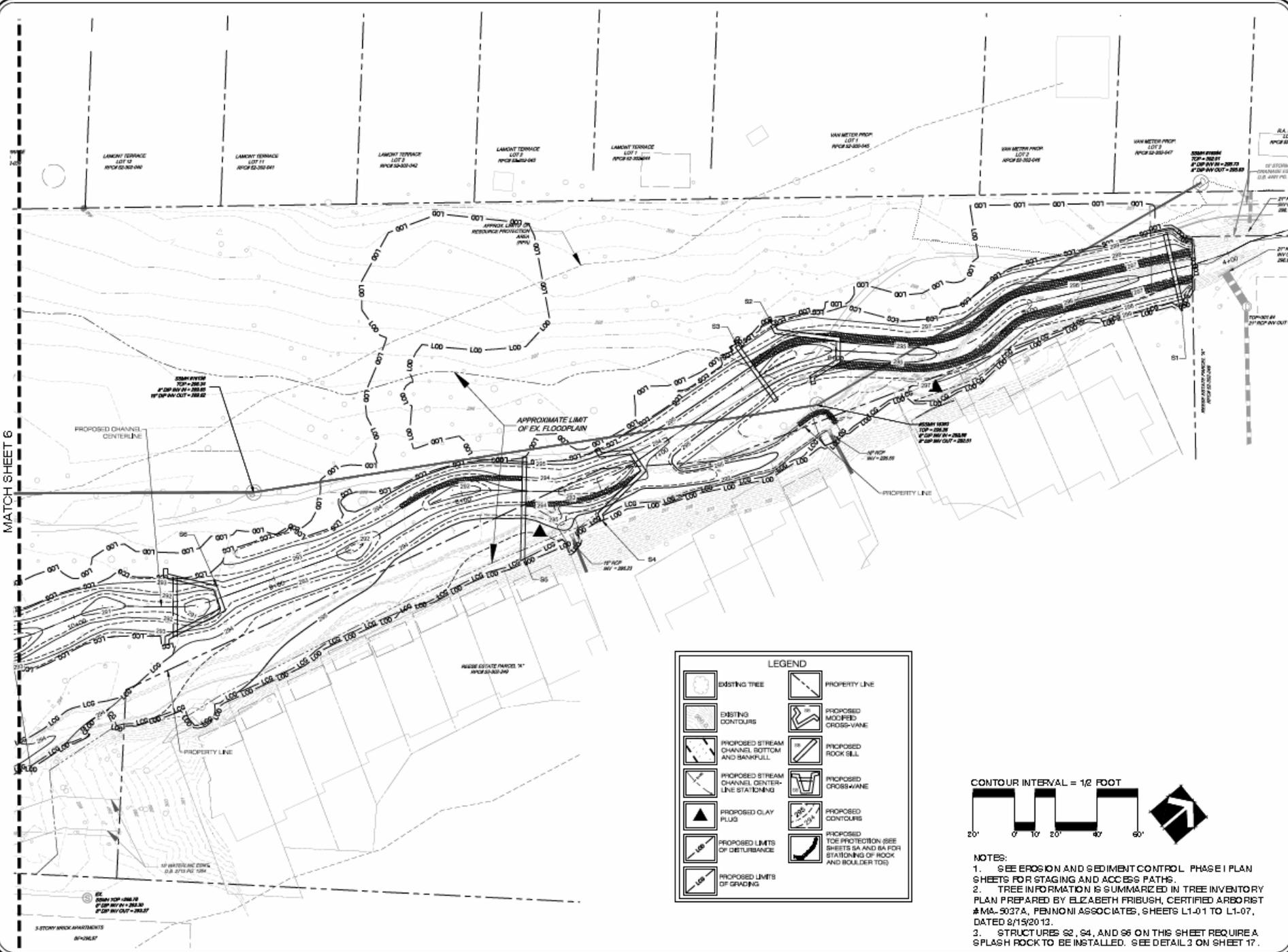


Existing Conditions



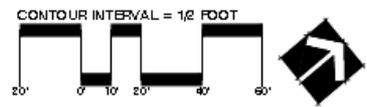
COMMON NAME	SCIENTIFIC NAME	INVASIVE LEVEL	COVERAGE
GARLIC MUSTARD	<i>Alliaria petiolata</i>	Highly	Occasional
PORCELAIN BERRY	<i>Ampelopsis brevipedunculata</i>	Highly	Occasional
ORIENTAL BITTERSWEET	<i>Celastrus orbiculata</i>	Highly	Moderate
BUSH HONEYSUCKLE	<i>Lonicera morrowii</i>	Highly	Moderate
JAPANESE STILIT GRASS	<i>Microstegium vimineum</i>	Highly	Light
ROSE	<i>Rosa multiflora</i>	Highly	Heavy
WINEBERRY	<i>Rubus phoenicolasius</i>	Highly	Light
MIMMOSA	<i>Albizia julibrissin</i>	Moderately	Occasional
WINTERCREEPER	<i>Euonymus fortunei</i>	Moderately	Heavy
GILL-OVER-THE-GROUND	<i>Glechoma hederacea</i>	Moderately	Light
ENGLISH IVY	<i>Hedera helix</i>	Moderately	Heavy
BAMBOO	<i>Phyllostachys aurea</i>	Moderately	Moderate
TRUMPET CREEPER	<i>Campsis radicans</i>	Occasionally	Light
RED MORNING-GLORY	<i>Ipomoea coccinea</i>	Occasionally	Occasional

MATCH SHEET 6



LEGEND

	EXISTING TREE		PROPERTY LINE
	EXISTING CONTOURS		PROPOSED MODIFIED CROSS-VANE
	PROPOSED STREAM CHANNEL BOTTOM AND BANKFULL		PROPOSED ROCK SILL
	PROPOSED STREAM CHANNEL CENTER-LINE STATIONING		PROPOSED CROSSWANE
	PROPOSED CLAY PLUG		PROPOSED CONTOURS
	PROPOSED LIMITS OF DISTURBANCE		PROPOSED TOE PROTECTION (SEE SHEETS 5A AND 5A FOR STATIONING OF ROCK AND BOULDER TOE)
	PROPOSED LIMITS OF GRADING		



- NOTES:**
1. SEE EROSION AND SEDIMENT CONTROL PHASE I PLAN SHEETS FOR STAGING AND ACCESS PATHS.
 2. TREE INFORMATION IS SUMMARIZED IN TREE INVENTORY PLAN PREPARED BY ELIZABETH FRIBUSH, CERTIFIED ARBORIST #MA-5037A, PENNOMI ASSOCIATES, SHEETS L1-01 TO L1-07, DATED 8/15/2013.
 3. STRUCTURES 52, 54, AND 56 ON THIS SHEET REQUIRE A SPLASH ROCK TO BE INSTALLED. SEE DETAIL 3 ON SHEET 17.

3-STORY BRICK APARTMENTS
5/19/2017

Tree Removal / Replacement

- Approximately 400 removals (2" in diameter and larger)
- Of this total, ~20 are trees >24" DBH, ~65 are 12-24 DBH, and ~120 are 6-12 DBH. The remainder are generally all trees smaller than 6" diameter.
- 1350 native canopy and understory trees and shrubs will be planted



Pearson Branch



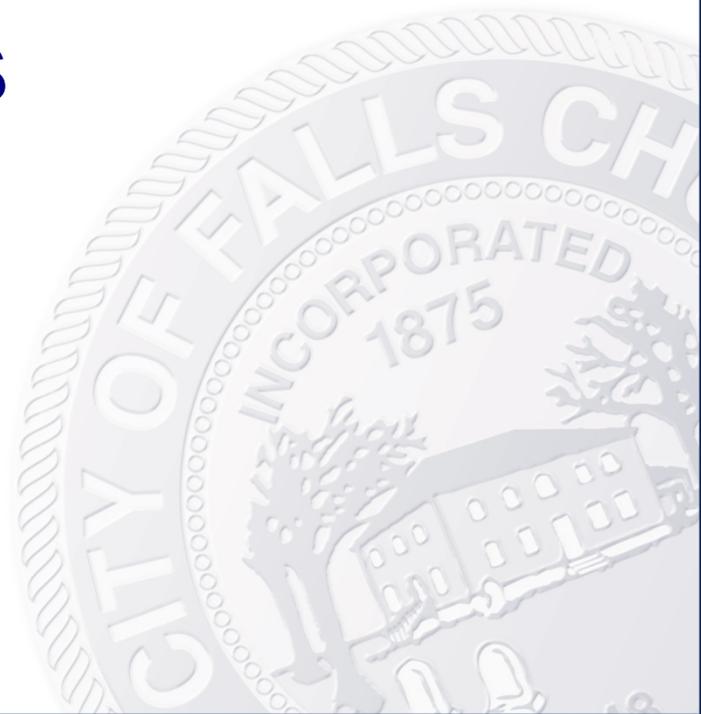
Existing Conditions



Tree Removal / Replacement

- Approximately 50 removals (2" in diameter and larger)
- 390 native canopy and understory trees and shrubs will be planted
- Revegetation in compliance with Chesapeake Bay Preservation Overlay District – create a forested condition

Stream Restoration Examples



Rock Toe Protection



Step Pools



Cross Vanes



Constructed Riffles



Buffer Replanting



Buffer Replanting



Live Stake Plantings



Example Projects



Looking Downstream to Jefferson Ave – Pre Restoration



Looking Downstream to Jefferson Ave – Post Restoration

Example Projects



Looking Upstream to VDOT BMP
- Post Restoration



Looking Upstream to VDOT BMP
- Post Restoration – 6 months

Example Projects



Looking Downstream from Jefferson Outfall
- Post Restoration
2 months



Looking Downstream from Jefferson Outfall
- Post Restoration
6 months

Example Projects



Looking Upstream at Jefferson Outfall - Pre Restoration



Looking Upstream at Jefferson Outfall - Post Restoration
6 months

Example Projects



Looking Downstream from
Richneck Rd
– Pre Restoration



Looking Downstream from
Richneck Rd
- 6 months



Feb 2009

December 19, 2013

28



Apr 2011



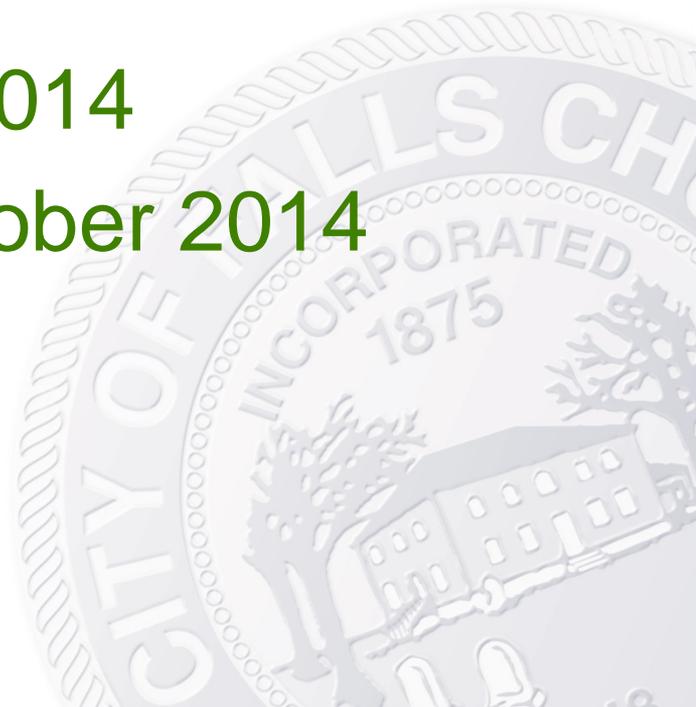
May 2011

December 19, 2013

30

Timeline

- Finalize design and bid specifications
February 2014
- Begin construction May 2014
- Expected completion October 2014



Questions?

