



HOWARD COUNTY OFFICE OF TRANSPORTATION  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

# **BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE**

JANUARY 2015



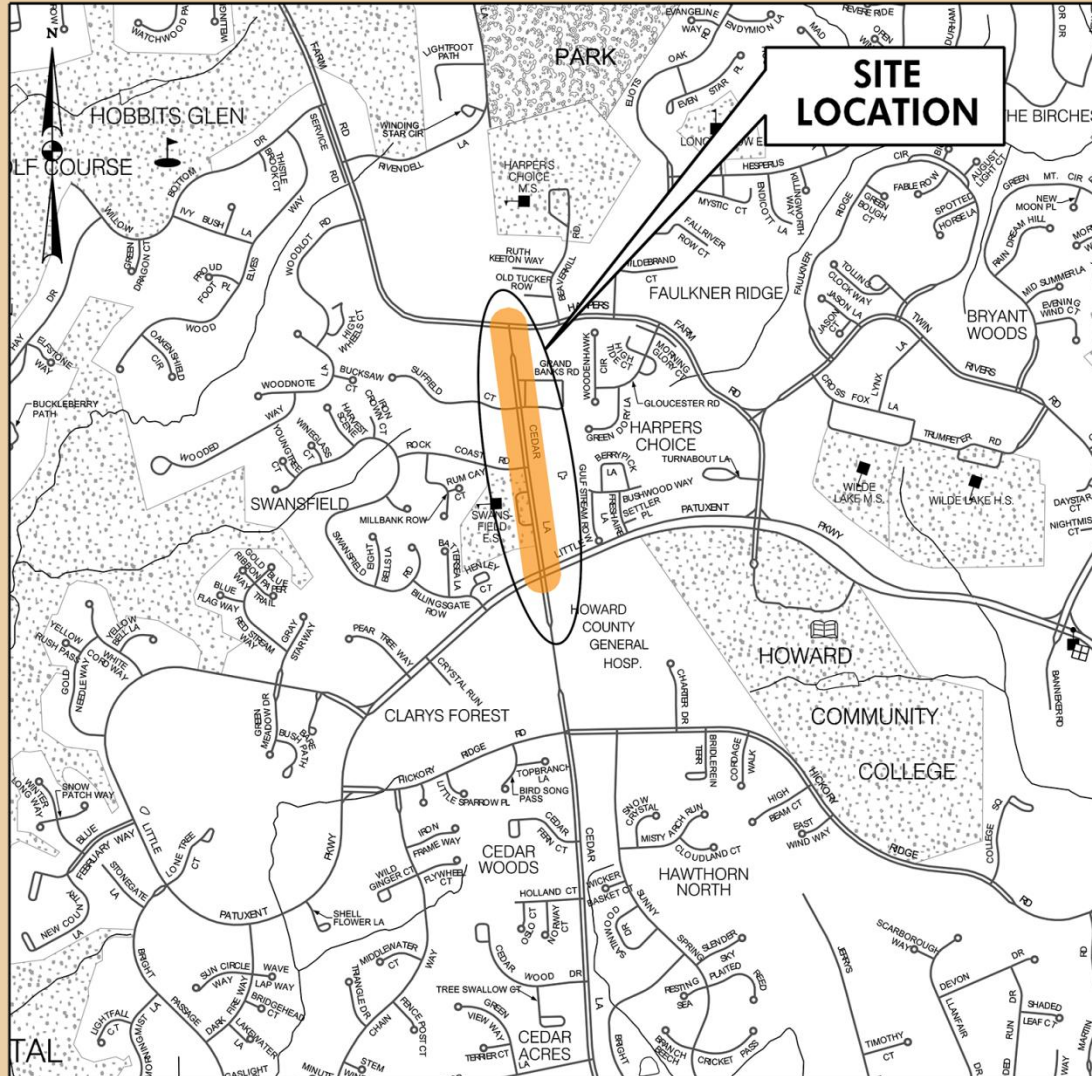
4 NORTH PARK DRIVE, SUITE 300  
HUNT VALLEY, MARYLAND 21030  
WWW.URS.COM • 410-785-7220



# BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE

## Site Location

Little Patuxent Parkway  
to  
Harpers Farm Road





# Introduction

- Data Collection
  - Howard County GIS
  - Field visits / observations
  - Utilities based on markings provided by Miss Utility
  - Right-of-way mosaic based on Howard County property information



# Preliminary Design Criteria

- Pedestrian and bicycle improvements were developed using:
  - The Howard County Design Manual: Volume III
  - The American Association of State Highway and Transportation Officials (AASHTO): A Policy on Geometric Design of Highways and Streets (2011)
  - The AASHTO Guide for the Development of Bicycle Facilities (2012)
- All improvements are in compliance with the Americans with Disabilities Act (ADA, 2010)

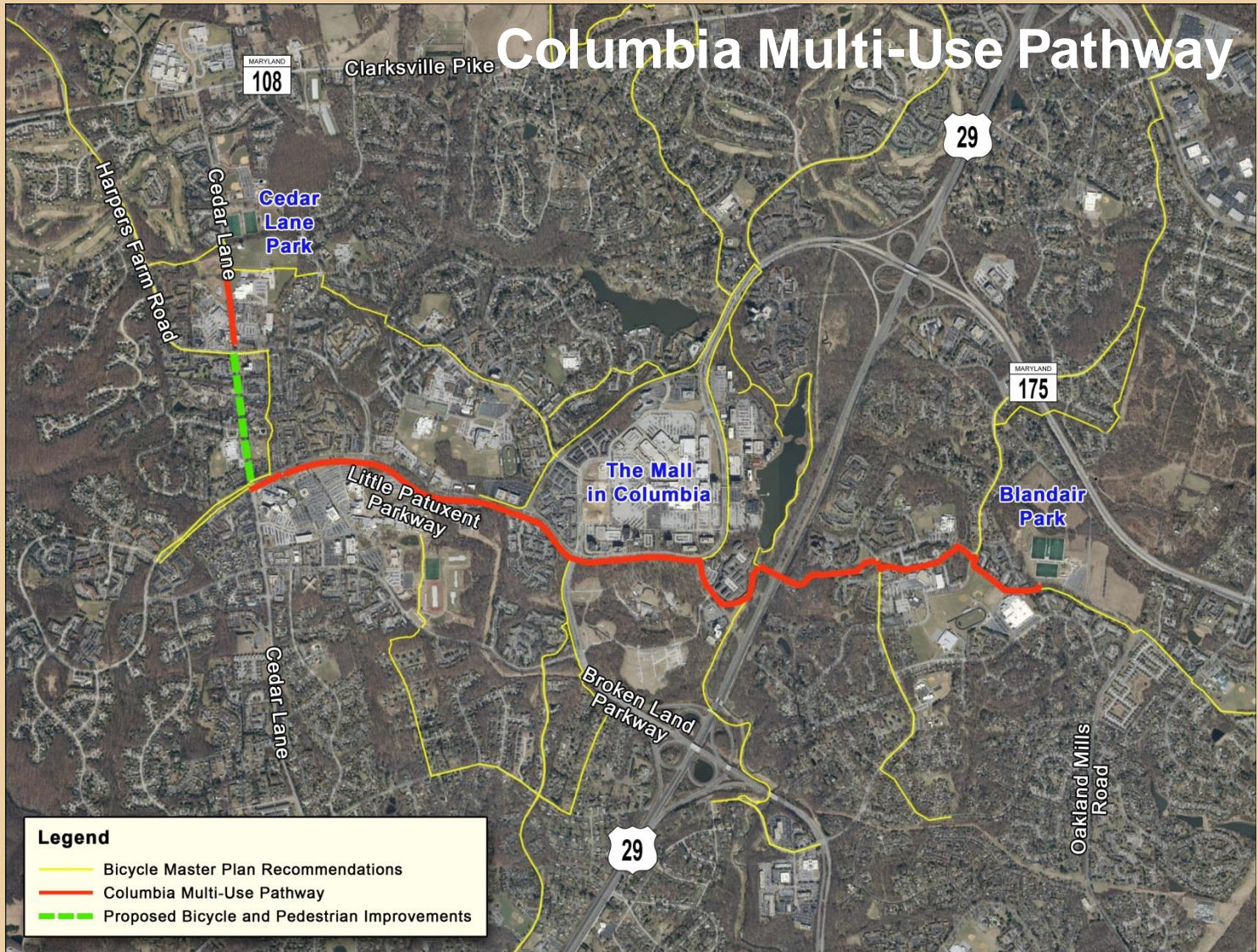


# **Project Development**

- Concept Development
- Environmental Concept Plan
- Preliminary Stormwater Management Report
- 30% Concept Design Plans



# BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE





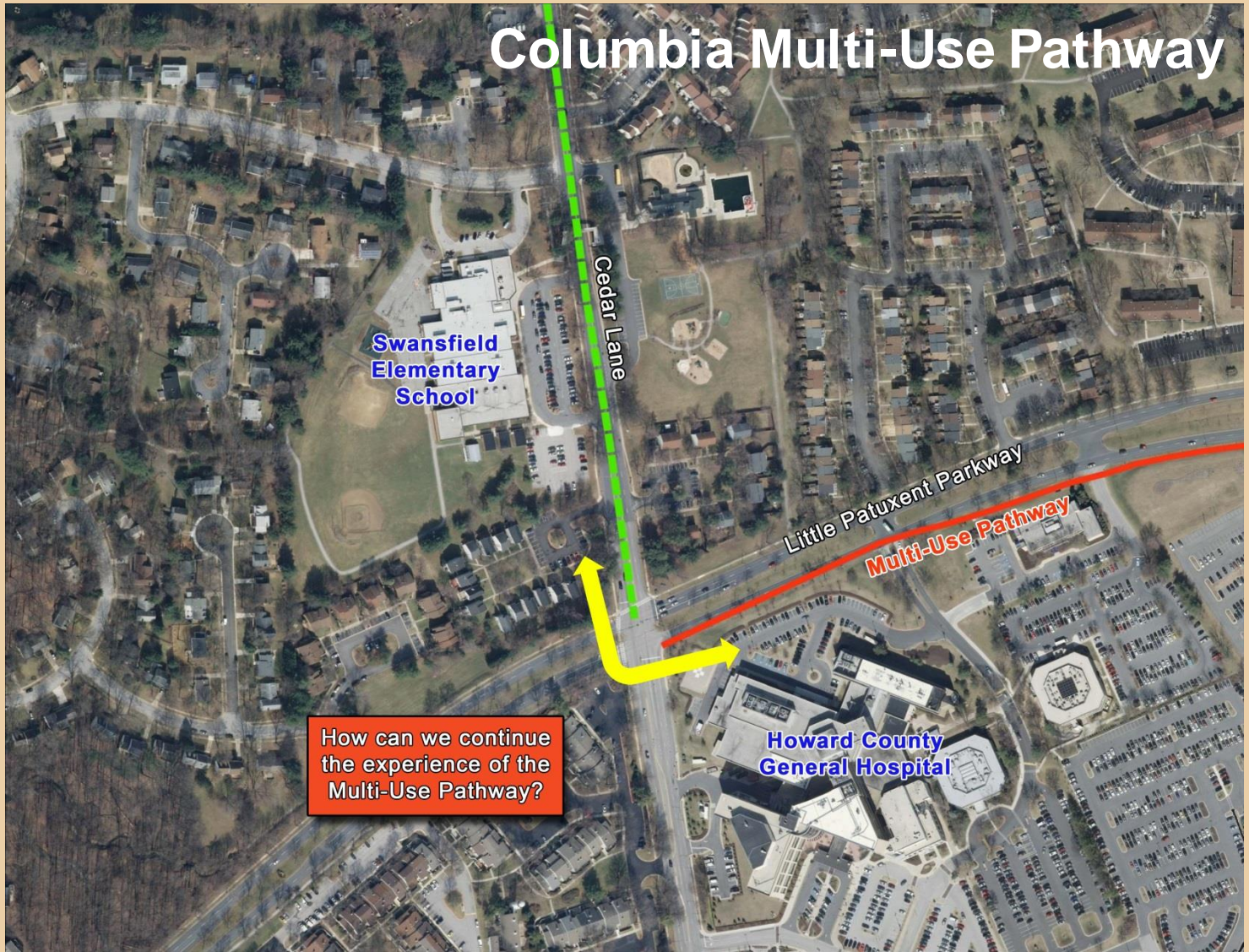
# **Columbia Multi-Use Pathway**

## **Existing Segment**





# BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE





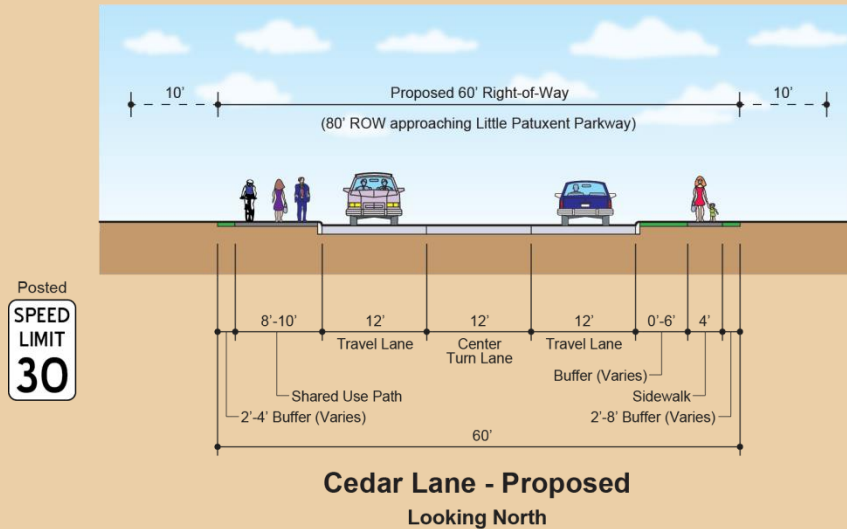
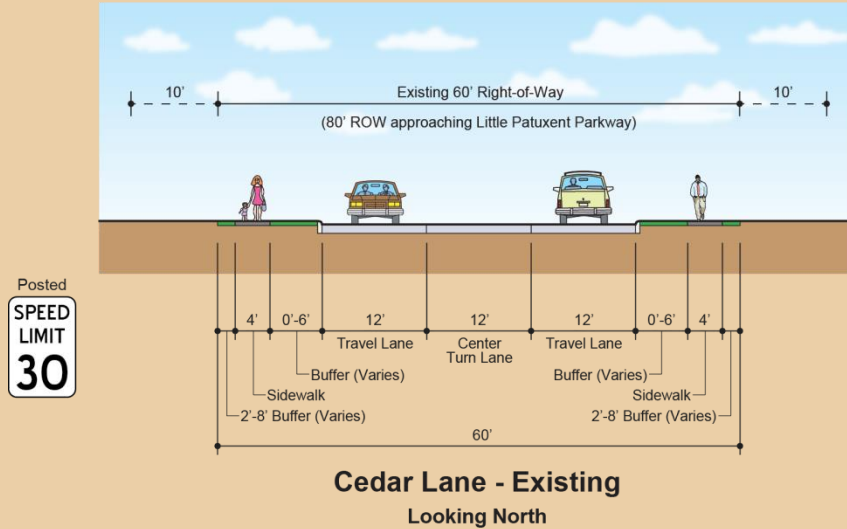


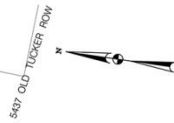
# **30% Concept Design Plans**



# BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE

## Typical Section





**LEGEND**

EXISTING 4' SIDEWALK/TRAIL	ADA - COMPLIANT RAMP
PROPOSED PATH/SIDEWALK	TREE IDENTIFIED IN FIELD
	POTENTIAL TREE IMPACT

DES: JC					
DRN: LY					
CHK: RD					
DATE: 12/2014	BY: NO.	REVISION	DATE	SCALE MAP NO.	BLOCK NO.

**CEDAR LANE IMPROVEMENTS**

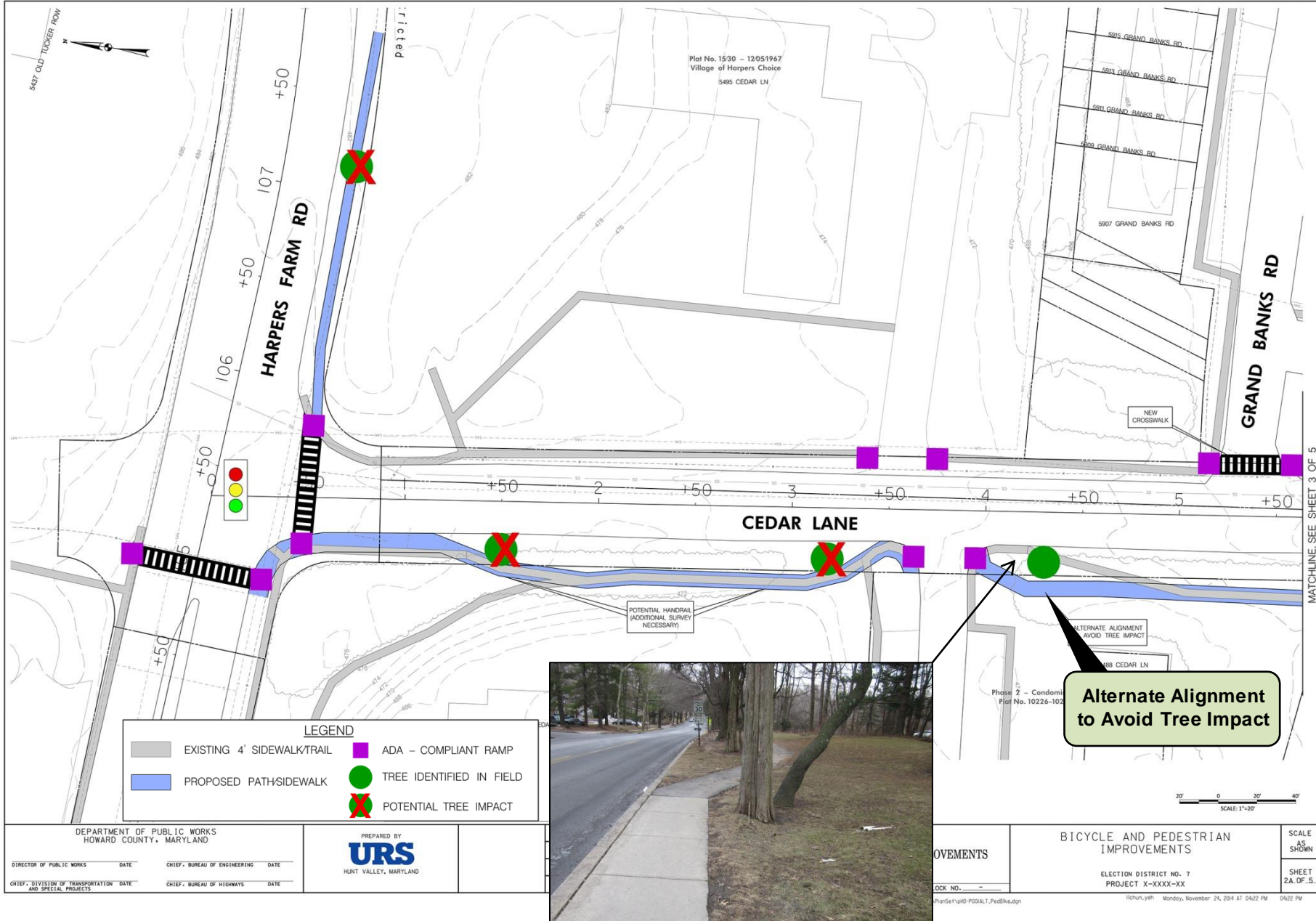
**BICYCLE AND PEDESTRIAN IMPROVEMENTS**

ELECTION DISTRICT NO. 7  
PROJECT X-XXX-XX

SCALE AS SHOWN  
SHEET 2 OF 5



MATCHLINE: SEE SHEET 3 OF 5



MATCHLINE, SEE SHEET 3 OF 5

MOVEMENTS

BOOK NO. - -

10/24/04 Monday, November 24, 2004 AT 04:22 PM 04:22 PM



MATCHLINE SEE SHEET 2 OF 5

MATCHLINE SEE SHEET 4 OF 5



SUFFIELD COURT  
Deed 107764  
through John Vannore Jr  
Howard County  
showing plat nos. 1851-1855

**LEGEND**

- EXISTING 4' SIDEWALK/TRAIL
- ADA - COMPLIANT RAMP
- PROPOSED PATH/SIDEWALK
- TREE IDENTIFIED IN FIELD
- POTENTIAL TREE IMPACT

DES: JC			
DRN: LY			
CHK: RD			
DATE: 12/2014	BY NO.	REVISION	DATE

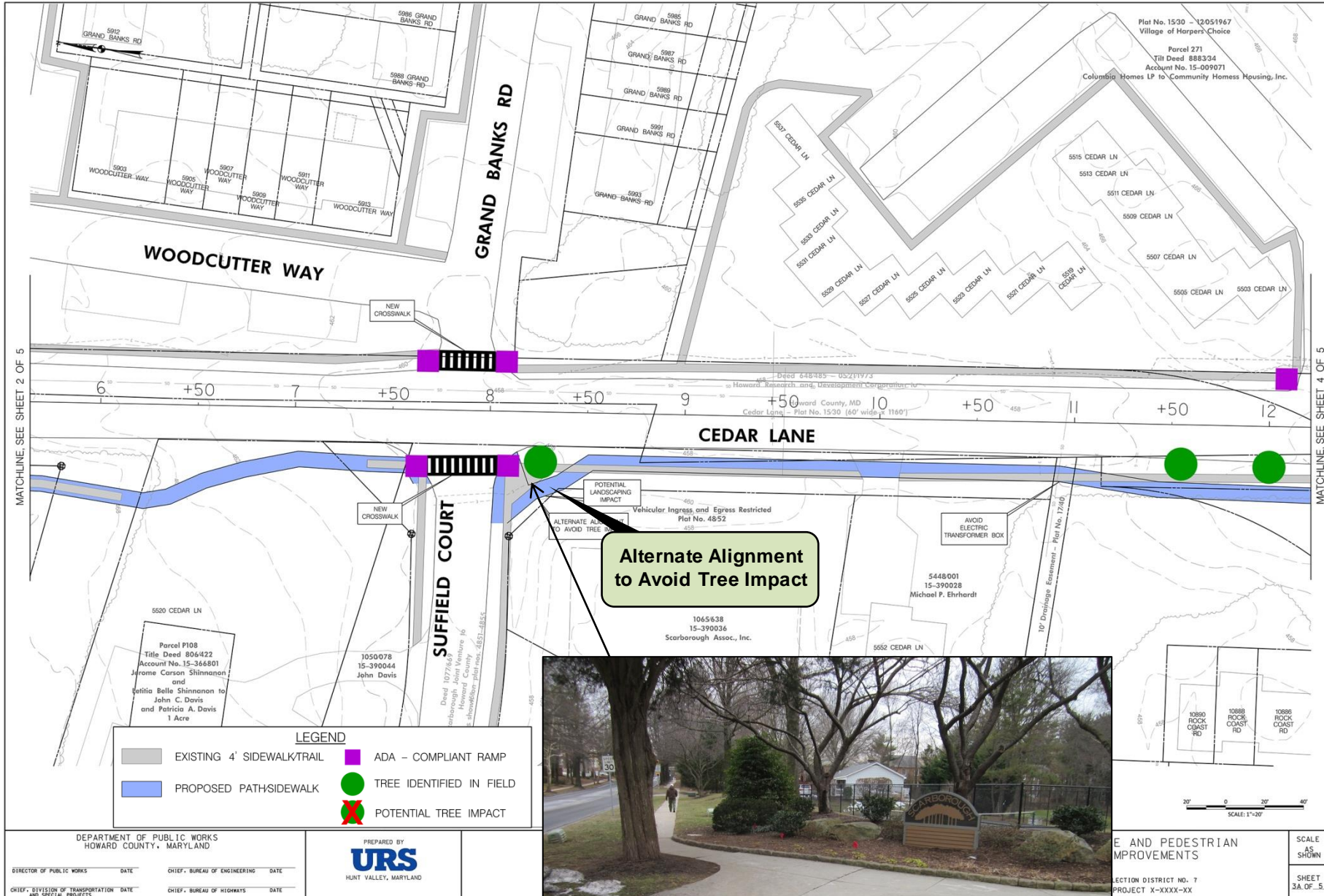
**CEDAR LANE IMPROVEMENTS**

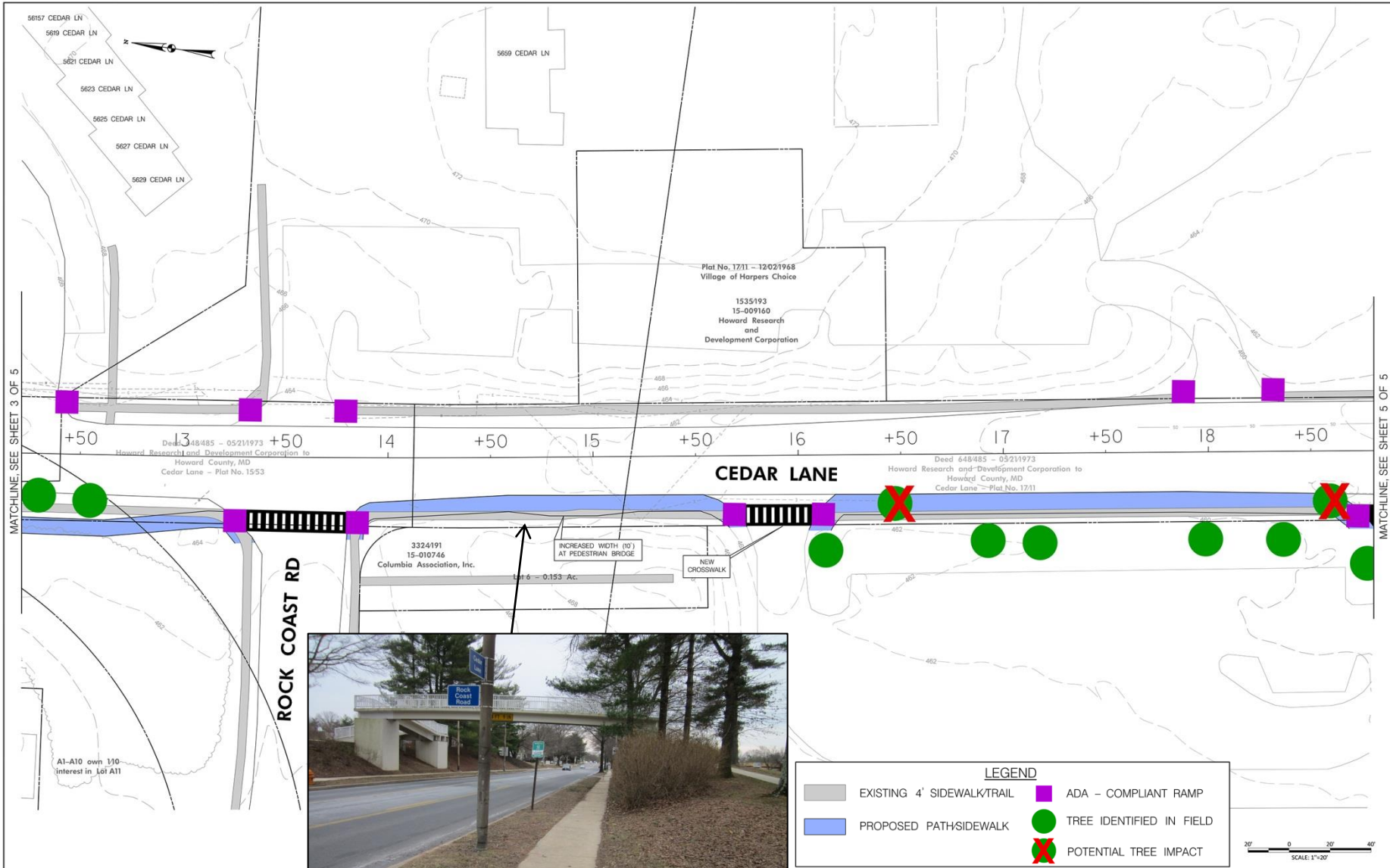
SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

**BICYCLE AND PEDESTRIAN IMPROVEMENTS**

ELECTION DISTRICT NO. 7  
PROJECT X-XXX-XX

SCALE AS SHOWN  
SHEET 3 OF 5





DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND			
DIRECTOR OF PUBLIC WORKS	DATE	CHIEF, BUREAU OF ENGINEERING	DATE
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS	DATE	CHIEF, BUREAU OF HIGHWAYS	DATE

<b>CEDAR LANE IMPROVEMENTS</b>		<b>BICYCLE AND PEDESTRIAN IMPROVEMENTS</b>		SCALE AS SHOWN
DATE	SCALE	MAP NO.	BLOCK NO.	ELECTION DISTRICT NO. 7 PROJECT X-XXXX-XX
<small>U:\Projects\HW\Co\320835121\CAD\Project\150103_PedBike.dwg</small> <small>llchun_yeh Monday, November 24, 2014 AT 04:46 PM 04:46 PM</small>				SHEET 4 OF 5

# 30% Concept Design Plans



**LEGEND**

- EXISTING 4' SIDEWALK/TRAIL
- PROPOSED PATH/SIDEWALK
- ADA - COMPLIANT RAMP
- TREE IDENTIFIED IN FIELD
- POTENTIAL TREE IMPACT



DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS \_\_\_\_\_ DATE \_\_\_\_\_ CHIEF, BUREAU OF ENGINEERING \_\_\_\_\_

CHIEF, DIVISION OF TRANSPORTATION DATE \_\_\_\_\_ CHIEF, BUREAU OF HIGHWAYS \_\_\_\_\_

**CEDAR LANE IMPROVEMENTS**

**BICYCLE AND PEDESTRIAN IMPROVEMENTS**

ELECTION DISTRICT NO. 7  
PROJECT X-XXXX-XX

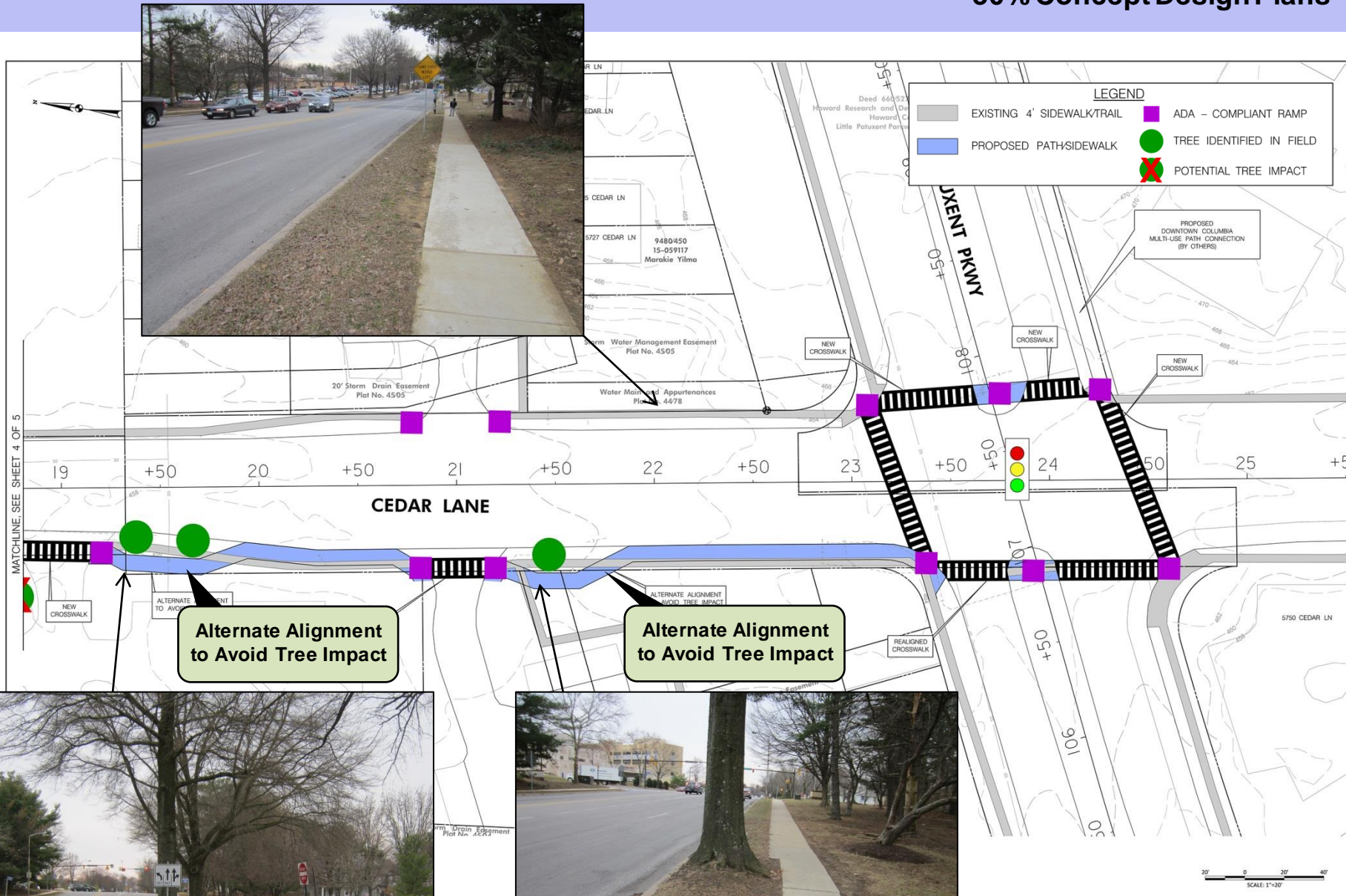
SCALE MAP NO. \_\_\_\_\_ BLOCK NO. \_\_\_\_\_

DATE \_\_\_\_\_

SCALE AS SHOWN  
SHEET 5 OF 5



# 30% Concept Design Plans



IMPROVEMENTS	BICYCLE AND PEDESTRIAN IMPROVEMENTS	SCALE AS SHOWN
	ELECTION DISTRICT NO. 7 PROJECT X-XXXX-XX	SHEET SA-OF-5
DATE NO. --	1504un_vph Monday, November 24, 2014 AT 04:25 PM	04:25 PM



# Next Steps

- Address community input
- Final Design (date TBD)
- Construction (date TBD)
  - Planning level construction cost estimate for future installed improvements: \$0.9 - \$1.1 million
    - No traffic or pedestrian signal modifications included
    - No additional utility relocation or lighting included
    - No right-of-way included



## BICYCLE AND PEDESTRIAN IMPROVEMENTS ALONG CEDAR LANE





# **Potential Tree Impact Mitigation**

- Air Spade
  - A handheld soil excavation tool connected to a large air-compressor
  - The high pressure stream of air is funneled through a small nozzle breaking dense soils apart into small particles
  - By using air to excavate soil, delicate and critical roots, underground pipes, and hard surfaces are not damaged



# Potential Tree Impact Mitigation

