

The logo features the letters 'SHWA' in a bold, dark blue, sans-serif font. A stylized graphic of a highway with three lanes (orange, white, orange) curves from the bottom left towards the center, passing behind the 'H' and 'W'.

State Highway  
Administration

Maryland Department of Transportation

# **MD 175 from Rockenbach/Ridge Road to Disney Road/26<sup>th</sup> Street**

Geometric improvements including widening, turn lanes,  
grade adjustments, drainage and utility upgrades

2012 - 2014

# This Presentation Covers...



- Project purpose and limits
- Contract information
- Work description
- Challenges/issues
- Disney Road water supply project (Anne Arundel County)
- Schedules

\* This presentation will repeat in about 9 minutes \*

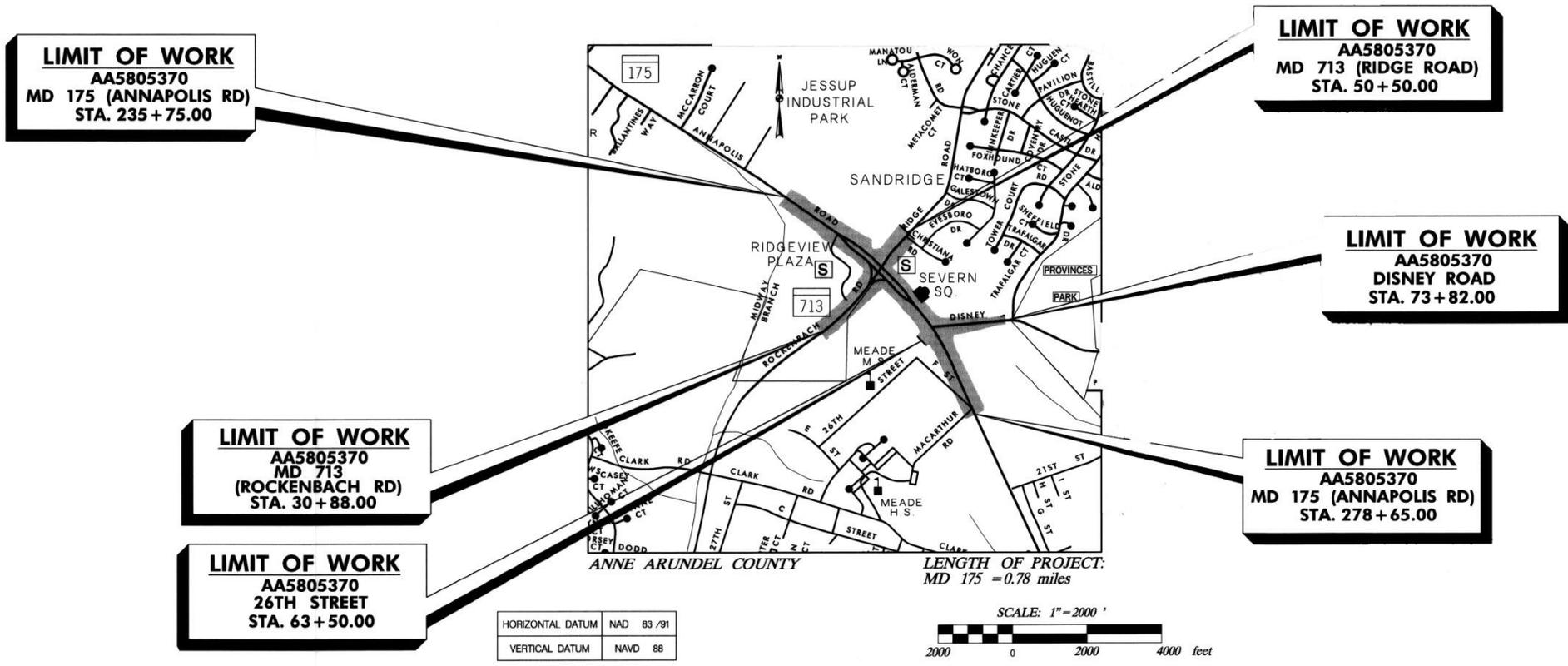
# Project Purpose



- Fort George G. Meade is expected to add 5,700 jobs due directly to BRAC, over 4,000 jobs due to ongoing NSA and other Army and DoD growth, and over 10,000 jobs from Enhanced Use Lease (EUL) related growth.
- This project is intended to improve traffic flow and accommodate transportation needs in and around Fort Meade.
- Design considerations included existing development and development likely to be constructed by 2015.

# Project Limits

- West of Rockenbach Road/Ridge Road (MD 713) to east of Disney Road/26<sup>th</sup> Street
- This project will tie into the Parkside improvements



# Contract Information



- Advertised for bid December 2010
- Contract awarded February 2011 to Concrete General of Gaithersburg
- \$8.9 million contract award

# Traffic Information



<i>DESIGN DESIGNATION</i>						
ROADWAY	MD 175 (ANNAPOLIS ROAD)		MD 713 (ROCKENBACH ROAD / RIDGE ROAD)		DISNEY ROAD / 26TH STREET	
CONTROLS / YEARS	2008	2015	2007	2015	2007	2015
AVERAGE DAILY TRAFFIC (A.D.T.)	31,500	53,900	13,150	26,900	5,450	9,800
DESIGN HOURLY VOLUME (D.H.V.)	9%	10%	N/A	3,705	N/A	1,040
DIRECTIONAL DISTRIBUTION	56/44	52/48	55/45 (SBNB)	55/45 (SBNB)	55/45 (SBNB)	55/45 (SBNB)
% TRUCKS – A.D.T.	5%	5%	3%	3%	–	–
% TRUCKS – D.H.V.	4%	4%	N/A	2%	N/A	–
DESIGN SPEED M. P. H.	45 MPH	45 MPH	45 MPH	45 MPH	30 MPH /20 MPH	30 MPH /20 MPH
FUNCTIONAL CLASSIFICATION	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	MINOR ARTERIAL	LOCAL ROAD	LOCAL ROAD
CONTROL OF ACCESS	NONE	NONE	NONE	NONE	NONE	NONE
INTENSITY OF DEVELOPMENT	URBAN	URBAN	URBAN	URBAN	URBAN	URBAN
TERRAIN	ROLLING	ROLLING	ROLLING	ROLLING	ROLLING	ROLLING
ANTICIPATED POSTED SPEED	40 MPH	40 MPH	45 MPH	45 MPH	30 MPH /20 MPH	30 MPH /20 MPH

# Work Description

## General construction



- Widen MD 175 to accommodate an extra through lane
- Construct a hiker/biker trail throughout the project area in the eastbound direction
- Grading and drainage including construction of ditches, installation of pipes and drainage structures, and stormwater management facilities
- Replace/upgrade utilities including water, sewer, gas

# Work Description

## MD 175 at Rockenbach/Ridge



- Construct an additional left turn lane to and from MD 175 in each direction.
- Construct a dedicated right turn movement from MD 175 onto both northbound and southbound MD 713.
- Construct a 6' wide concrete median to separate traffic

# Work Description

## MD 175 at Disney/26<sup>th</sup>



- Construct an additional left turn lane onto Disney Road from eastbound MD 175.
- Construct a dedicated right turn movement from MD 175 onto Disney Road and 26th Street.
- Construct a 6' wide concrete median to separate traffic.

# “What’s Taking So Long... ?”

# Three Big Challenges

1. Multi-agency coordination
  - Different rules, requirements, restrictions
2. Infrastructure/Utility Conflicts
3. Subgrade Compaction
  - Weather sensitive
  - Can't pave without compaction

# Challenges/Issues

## Tri-agency coordination



- SHA, Anne Arundel County & Ft. Meade
- Unique challenges for highway construction
  - State roadway
  - County water/sewer lines
  - U.S. Army property
  - Convergence of two separate projects on Disney Road

# Challenges/Issues

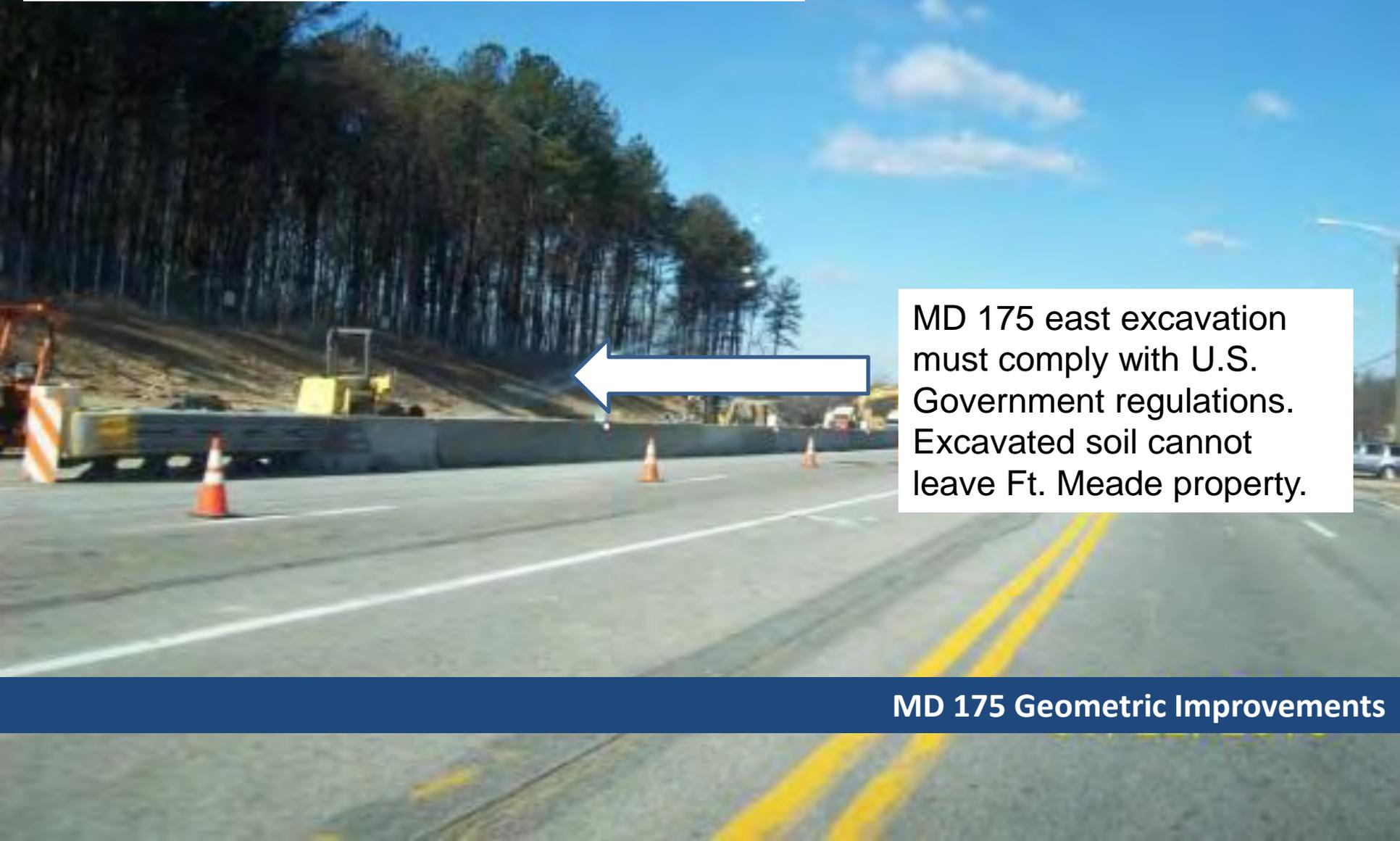
## MD 175 eastbound excavation



- Widening required excavation of several thousand cubic yards of material (dirt) from Ft. Meade property
- U.S. Government requires all material remain onsite
- Additional time needed to locate suitable disposal site

# Challenges/Issues

MD 175 eastbound excavation



MD 175 east excavation must comply with U.S. Government regulations. Excavated soil cannot leave Ft. Meade property.

MD 175 Geometric Improvements

# Challenges/Issues

## Utility work



- 26-inch high pressure gas main
- Stormwater management/roadway drainage
  - Grade and slope sensitive
- Water and sewer (Anne Arundel County)
  - New lines in conjunction with road work
  - More efficient to replace during road construction
- Electric, phone, cable & fiber optic relocations

# Challenges/Issues

## Utility “conflicts” in general



- Utility conflicts occur when two or more utilities need to occupy the same space
  - Old/abandoned utilities might not be recorded
  - Precise location can differ from plans
- Resolution depends on utilities involved
  - Difficult conflicts might require redesign
  - Can take months to resolve a single conflict

# Challenges/Issues

## Utility conflicts at Disney Road



Proposed facilities for this project conflict with:

- Communication lines (Verizon, MCI)
- Power lines
- Existing water line

# Challenges/Issues

Utility conflicts at MD 175/Disney Road



Multiple conflicts here (underground) involving several utilities companies, SHA, Ft. Meade and Anne Arundel County.

# Challenges/Issues

## Subgrade/base



- Subgrade along MD 175 east did not initially compact to specification
- Paving and lane shift delayed
- Similar issue on Disney Road
- Moisture related

# Challenges/Issues

Subgrade/Base, MD 175 east

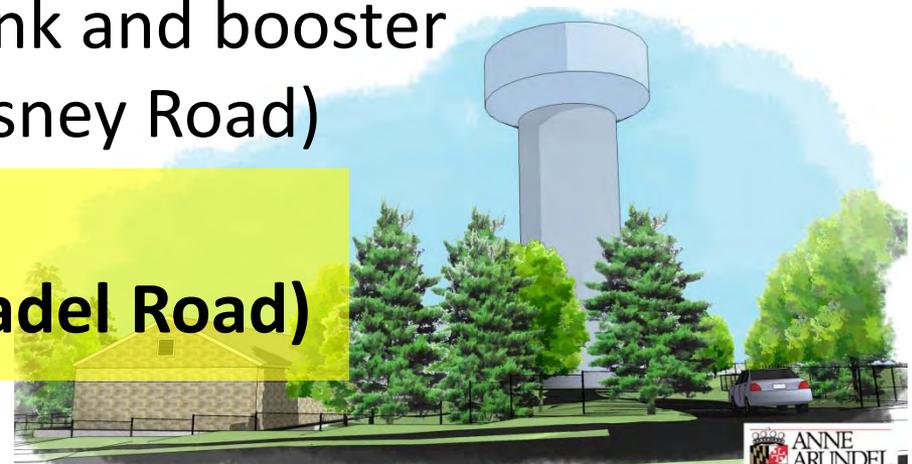


Base material for new lane did not compact initially. This delayed paving and a planned lane shift for the next construction phase. Paving cannot take place until compaction and temperatures are sufficient.

# Water Distribution Projects



- Anne Arundel County project
- Not related to MD 175 road project
- Elevated water storage tank and booster pumping station (1615 Disney Road)
- **Transmission main  
(1615 Disney Road to Citadel Road)**



Disney Road Water Storage Tank &  
Booster Pump Station



## Disney Road



# Water Transmission Main

- Runs along Disney Road from 1615 Disney Road to Citadel Road
- Ties into MD 175 water line
- Complete milling/paving in spring 2013

**Disney Road**

# Schedules/Timelines



- Disney Road:
  - Anne Arundel County is patching and will mill/resurface spring 2013 from 1615 Disney Road to Citadel Road
  - SHA will patch as needed south of Citadel Road; final surface toward end of project
- MD 175
  - Base paving of new lane and traffic shift scheduled for spring 2013
  - Project completion estimated at early 2014

# Other Area Projects



- MD 713 at Watts/Ridge Forest – new signal
  - Signal activation spring 2013
- MD 175 at Reece Road
  - Construction start 2014
- MD 175 at Mapes/Charter Oaks
  - Construction start 2014
- MD 175 comprehensive corridor study
  - See the “Projects & Studies” page of [www.roads.maryland.gov](http://www.roads.maryland.gov)

# For more information contact:

Bob Rager

Maryland State Highway Administration

410-841-1020

[rrager@sha.state.md.us](mailto:rrager@sha.state.md.us)