Isiah Leggett, County Executive

*KEEPING MONTGOMERY MOVING*

Arthur Holmes, Jr., Director, MCDOT

# MCDOT NEWS

News from the Montgomery County Department of Transportation, Division of Highway Services

# Greenhills Farm Permanent Patching Project

## Project to Begin Soon; Work to Include Full-Depth Patching

### PURPOSE

This newsletter is to inform you of the upcoming full-depth permanent patching project in the Greenhills Farm community. This pavement system preservation project employs long term strategies to preserve and enhance the physical and operating conditions of the roadway system as it exists and assures a system serviceable for many years. This project falls under the County's Full-Depth Permanent Patching Program.

### INTRODUCTION

The Montgomery County Department of Transportation's (MCDOT) Division of Highway Services (DHS) maintains over 5,108 lane miles of streets and highways in the county's transportation system. As part of our pavement system preservation efforts, MCDOT initiated a new Pavement Management System in 2008. MCDOT recently completed a second countywide pavement condition survey of all county roads, identifying and rating the condition of each. Our pavement management system has enabled the development of countywide roadway pavement repair schedules based on a formula based objective rating system coupled with budgetary parameters. Part of Montgomery County's Pavement Management System includes structural permanent patching, which is a cost effective interim solution to maintain roadway structural integrity based on current funding allocations.

### SCOPE OF PROJECT

Overall, the pavement conditions in Greenhills Farm were generally rated as fair, with some areas described as needing more attention. This rating meets the criteria for roadway preservation using Hot Mix Asphalt (HMA) full-depth permanent patching.

### PROJECT WORK PLAN

You may have noticed paint markings that outline areas for pavement replacement, such as those shown in the picture below. The markings enable us to estimate the quantity of asphalt needed for full depth patching and provide the locations of the distressed pavement. Crews will excavate the distressed pavement with either a roadway milling machine or Gradall (see pictures for examples).

Typical paint markings

**Full Depth Patching**

Areas of pavement distress are excavated and replaced with hot mix asphalt. This method is used in isolated areas where pavement failures extend through the road base. Full depth patching restores the pavement's structural integrity and capacity to support vehicle loads. Further, patching will prevent water from infiltrating through the pavement and into the underlying road base, exacerbating the degree and extent of pavement deterioration. Failing pavement conditions are dynamic in nature and will worsen, nearly exponentially, under conditions such as harsh winters and wet summers. Patching with HMA will yield a service life of between 15 - 20 years.

There are two phases to full-depth patching:

First, the pavement is excavated and HMA base material is installed in 2 layers and compacted with a steel-wheeled roller. The patch is left approximately one-and-one-half (1 ½) inches below the existing road surface to allow room for a layer of smooth surface HMA to be applied at a later time (within a few days).

Second, the surface HMA is placed either by machine or by hand, depending on the size of the patch, into the one-and-one-half (1 ½) inch depression left by the base asphalt work. The asphalt is then compacted using a steel-wheeled roller. The final surface of the patch will match the level of the existing roadway and provide for a smooth ride.

### SCHEDULE

This project is expected to begin in September 2014, and should be completed within five to ten days, weather permitting. Work hours will be between 7 am and 5 pm, Monday through Friday.

### IMPACTS

Continuous traffic will be maintained at all times utilizing lane closures and/or alternating one-way traffic patterns. However, minor traffic delays may be experienced as our flaggers manually direct traffic safely through the construction zone. Minor traffic delays may also be experienced as we move our equipment around from one patch to another.

Street patching may necessitate temporary lane closures and parking restrictions. Signs will be posted identifying such restrictions. Access to residences will be available at all times; however, minor delays may be experienced as workers restrict traffic from freshly placed hot mix asphalt.

Generally speaking this work is best characterized as noisy and disruptive. However, MCDOT staff will take all necessary steps to mitigate any inconveniences this work may cause.

Quality control for the entire project will be managed by County inspection staff to ensure that the project meets contract specifications.

***Thank you for your cooperation as we work to improve the county infrastructure for residents and roadway users.***

Typical milling operation

Gradall Excavating

Loading

Compacting the sub-grade

New asphalt is placed and compacted

**MONTGOMERY COUNTY, MARYLAND**
**DEPARTMENT OF TRANSPORTATION**
**DIVISION OF HIGHWAY SERVICES**
**100 EDISON PARK DRIVE, 4TH FLOOR, GAITHERSBURG, MD 20878**
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**MCDOT NEWS No. 2014.93**

# NOTICE OF THE GREENHILLS FARM PERMANENT PATCHING PROJECT IN GAITHERSBURG

## SAFETY NOTICE

Please drive gently and safely through the work site and kindly remember that while repair work is underway, personnel and construction vehicles will be moving around the site. Some materials may be stored in the area. Please use caution when walking or driving through the construction zone. Children may be attracted to the noise and machinery, so we ask that you please keep all children under close supervision at all times, even after the work is completed for the day. Also, please follow the direction of flaggers and temporary signs and traffic control devices. We appreciate your patience and cooperation while we make these much needed improvements to the infrastructure.

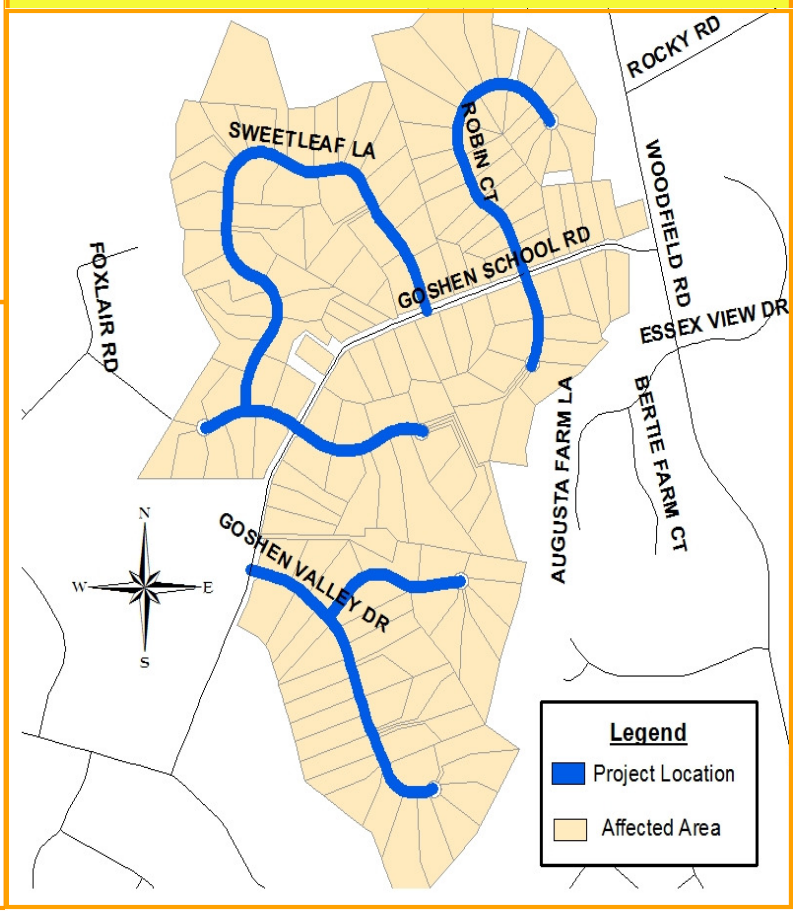
## IMPORTANT MCDOT CONTACTS

| | | |
|---|---|---|
| **Project Manager:** | Nicholas Boone | 240-777-7648 |
| **Program Manager:** | Donald Noble | 240-777-7601 |

Should your questions be of a more general nature, please contact the MC311 Call Center by dialing 3-1-1 or 240-777-0311

**DHS Email:** mcdot.highway@montgomerycountymd.gov

**DHS Website:** www.montgomerycountymd.gov/dot-highway/

On the Highway Services Map, click on the **Damascus** Service Area, where you will find additional roadway maintenance projects scheduled in your area.

## Permanent Patching Project Limits