

SITE ANALYSIS

The Site Analysis graphically depicts existing natural and manmade conditions (Insert A). The analysis shows the assets and constraints of the property necessary to plan appropriate site development. The Site Analysis shows the existing contours, slopes, streams, drainage swales, wetlands, wetland / stream buffers, wooded areas, soils, ridge lines, structures, access routes, scenic views, and utilities.

Currently, access to the Dairy Farm is from Annapolis Road (Maryland Route 175) with egress located on Dairy Farm Road (Figure 2a). Access to the main body of Hammond's Connection is from the Village via a gravel farm lane that parallels Dairy Farm Road (Figure 2b). The farm lane is narrow and may require improvements as well as widening to accommodate the public. To minimize traffic destined for Hammond's Connection from traveling through the Village, an entrance would be provided from Dairy Farm Road. Possible locations could be the existing egress from the Village or a new curb opening opposite Old Dairy Farm Road. The proposed alignment of the South Shore Hike / Bike Trail follows the old WB & A Railroad bed that parallels Maple Road north of the Dairy Farm. The South Shore Trail will connect Annapolis and Odenton with a spur trail into Hammond's Connection.

The houses, outbuildings, and all but one of the barns are located at the Village (Figure 2c). A public restroom and picnic pavilion are located at the Village and used during special events and festivals. The 4-H Dairy Club is housed at the Village. The Village is serviced by well water and septic system. Overhead electric lines come on site from Annapolis Road.

Approximately 140 acres of Hammond's Connection lies on the west side of the Dairy Farm, bounded on the north by Dairy Farm Road and on the west by Towser's Branch. Fences to the south separate Hammond's Connection from the farm fields. A gravel lane provides access to the site and separates Hammond's Connection from the active farm operations. A ridge line parallels Dairy Farm Road and then heads south following the gravel lane. The remains of the Hammond Manor House and family cemetery located on this ridge are the only structures on Hammond's Connection (Figure 3a and 3b). The dominant site characteristics of Hammond's Connection are steep slopes and Towser's Branch. A gravel pit used to repair the farm lanes is located in Hammond's Connection.



Figure 2a.
The existing egress on
Dairy Farm Road



Figure 2b.
The existing gravel lane to
Hammond's Connection



Figure 2c.
The Village



Figure 3a. Remains of Hammond Manor



Figure 3b. The Hammond Cemetery

The area contains historic artifacts, representing the Native American and colonial history of the site, requiring further archeological investigations and specific considerations to prevent damage to these important cultural resources during park development. The Manor House dates to the 1700s and was listed in 1974 on the National Register of Historic Places. Unfortunately, the home burned to the ground in 1980. The Hammond Cemetery is surrounded by a stone wall and sits north of the home site wall. At least 18 marked and unmarked graves of the distinguished Hammond family are buried in the cemetery. The homestead site and the ridge near Dairy Farm Road are the high points of Hammond's Connection and provide the best vistas of the Village to the north and of Towser's Branch down the slope to the west.

From the ridge line described above, a series of relatively flat terraces is separated from one another by slopes of 10 percent to over 15 percent stepping down to Towser's Branch (Figure 4a and 4b). Wooded areas cover some of the steepest slopes. Drainage swales carry surface water from the ridge line to Towser's Branch. Towser's Branch drains from north to south into the Little Patuxent River. A public sewer line parallels the stream within a 30-foot right-of-way on the east and a BGE powerline right-of-way follows along the west side of Towser's Branch. The wetlands along the stream are primarily forested.



Figure 4a. Looking south along the ridge



Figure 4b. Looking west from the ridge

A small portion of the farm drains into Jabez Branch, which flows into the Severn River. The State of Maryland has designated Jabez Branch as a Use III stream as it has the water quality and habitat to support a naturally reproducing trout population. As the only trout stream in the Coastal Plain it is a watershed of high concern.

Individual trees and small patches of forests are found on the northwest side of Dairy Farm Road, along Towser's Branch, on the steep slopes, and in hedge rows. The species occurring on the site include tulip poplar, beech, hickory, chestnut oak, white oak, pin oak, southern red oak, ash, mulberry, box elder, red maple, river birch, pear, sweetgum, sycamore, tree of heaven, and white pine.

For additional information on the health of the stream and management recommendations, refer to the August 2001 report prepared for the U.S. Naval Academy and the Washington Navy Yard, called "*Integrated Natural Resources Management Plan*" U.S. Naval Academy / Annapolis Area Complex prepared by the Chesapeake Bay Field Office, U.S. Fish and Wildlife Service.

According to the soil survey produced by the United States Department of Agriculture Natural Resources Conservation Service, five general soil complexes are identified on the Dairy Farm: Downer Phalanx, Mattapex-Butlertown, Matapeake Silt Loam, Sassafras and Croom soils, and Zekiah and Issue soils. The majority of soils in Hammond's Connection is in the Downer Phalanx Complex (DxB, DxC, and DxD) and found on slopes from 2 to 5 percent to over 15 percent. The Downer soils are sandy fluviomarine sediments and Phalanx soils are composed of sand eolian deposits. The soils are well drained and not prone to ponding or flooding. The available water capacity is low to very low for both soils. The Phalanx soils could have some rock 12 to 30 inches below grade.

Mattapex-Butlertown Complex soils (MxB and MxC) are found along the ridge line and accounts for most of the soils that are in agricultural production at the Dairy Farm. This Complex is on slopes from 2 percent to 10 percent and consists of silty eolian deposits and / or fluviomarine sediments. The soils are characterized as moderately well drained with moderately slow permeability; the top of the seasonal high water table is at 27 to 36 inches; the available water capacity is moderate to high; and the soils do not flood or pond.

One small triangle of Matapeake Silt Loam (MmA) in the northeastern corner of Hammond's Connection consists of silty eolian deposits and / or fluviomarine sediments on slopes of less than 2 percent, is well drained, has a high water capacity, and does not pond or flood.

A large band of Sassafras and Croom soils (SME) snakes through the middle of Hammond's Connection. SME soils are on slopes of 15 percent to 25 percent. Sassafras soils consist of fluviomarine sediments and the Croom soils contain

gravelly fluviomarine deposits. These soils are well drained, have a low to moderate water capacity, are not prone to flooding or ponding, and the water table is deeper than six feet. These soils are moderately erodible.

Towser's Branch contains Zekiah and Issue soils (ZBA). The parent material is loamy alluvium. These soils are found in floodplains, poorly drained, and frequently flooded. The soils have a depth to the water table of 0 to 20 inches and a high water capacity. Zekiah soils are hydric soils, while Issue soils are not.

The 36 acres north of Dairy Farm Road are also part of Hammond's Connection but are not contiguous to the larger tract. Residential properties abut this area on the north. Approximately 24 acres contiguous with Odenton Natural Area are wooded with wetlands running through the center and have grades ranging from below 5 percent to over 15 percent. The remaining eight acres are relatively flat. A curb opening exists onto Dairy Farm Road opposite the egress road from the Village. The four acres located between Old Dairy Farm and Dairy Farm roads have been allowed to naturally revegetate. The soils are primarily in the Mattapex-Butlertown Complex with some Downer Phalanx Complex soils within the wooded area.

The site has been in agricultural use for approximately 300 years. The topsoil may be depleted and require soil amendments for the proposed vegetable and display gardens. The University of Maryland Cooperative Extension Service recommended further soil analysis prior to crop production and garden creation.