DOE-PR-0261

MARYLAND HISTORICAL TRUST
SHORT FORM FOR INELIGIBLE PROPERTIES

PG: 62-34

Property Name: 16012X0

Address: Powder Mill Road (MD 212) Mile Point 10.38

City: Beltsville Zip Code: 20705 County: Prince Georges

USGS Quadrangle(s): Beltsville

Tax Map Parcel Number(s): 138 Tax Map Number: 19

Project: US1/MD201: Cherrywood Lane to N. of Contee Road Agency: SHA

Agency Prepared By: EHT Traceries, Inc.

Preparer's Name: Saleh Van Erem Date Prepared: 1/8/2008

Preparer's Eligibility Recommendation: X Eligibility not recommended

Complete if the property is a non-contributing resource to a NR district/property:

Name of the District/Property:

Inventory Number: Eligible: yes Listed: yes

Description of Property and Justification: *(Please attach map and photo)*

The concrete box culvert identified as structure number 16012X0 by the State Highway Administration runs under Powder Mill Road (MD 212), at mile point 10.38 in Beltsville, Prince George's County, Maryland. The roadway is 40 feet in width at this point. This structure, constructed circa 1950, is located west of the intersection of Powder Mill Road and Edmonston Road (MD 201), and can easily be seen from the road. The concrete box culvert features two wing walls set at a 45 degree angle from the roadway. The vertical span of the culvert is beginning to show signs of deterioration including stress cracks. The culvert travels 66 feet carrying a branch of Indian Creek. The immediate area is undeveloped; however, there is heavy traffic due to the intersection of the two busy thoroughfares near where the structure is located.

Structure number 16012X0 is located at mile point 10.38 along Powder Mill Road (MD 212), which runs east to west and crosses U.S. Route 1. The development and history of the area around U.S. Route 1, which travels north from Beltsville to Laurel in Prince George's County, Maryland, has been strongly influenced by its use as a major transportation corridor. Today, Route 1, also known as Baltimore Avenue (formerly Washington and Baltimore Turnpike, established 1812), is bounded by commercial properties, many of which are automobile-oriented businesses dating from the early to mid-twentieth century. Nearby thoroughfares such as Old Baltimore Pike, Edmonston Road, and Maryland Avenue have a mix of commercial and industrial sites. The edges of minor roads such as Old Muirkirk and Cochran Roads are predominately developed by freestanding single-family dwellings dating from the first part of the twentieth century. It was not until after World War II that intensive development came to the area along Route 1. With increased federal employment, rise in personal automobile ownership, and construction of Interstate 95, development along Route 1 and surrounding area continued through the 1960s.(1)

An important element in the development of U.S. Route 1 and the surrounding area is the construction of small structures that are part of an extensive transportation network that permit people to travel with ease.(2) These structures measure less than 20 feet, and are used to span waterways or divert water away from the road surface. In the first half of the twentieth century, the Geological Society and its successor, the State Roads Commission, promoted the concept of all-weather roads and the standardization of

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ____ **Eligibility not recommended** X

MHT Comments:

Chris DeCarlo / 8/28/08

Reviewer, Office of Preservation Services **Date**

N/A

Reviewer, National Register Program **Date**

2009 01746

structural plans and roadway design. The first standard plans were developed in 1912 and encouraged reinforced concrete construction techniques.(3) During the early- to mid-twentieth-century, old roads and structures were widened and upgraded, and many new roads, bridges, and culverts were constructed. Between 1935 and 1945, the State Roads Commission sometimes used stone to face concrete structures either to simulate early-nineteenth-century stone bridges or to enhance modern structures in a visually sensitive location. (4) After World War II, there was a rapid growth in the construction of small road structures due to the rapid deterioration of the roadways because of the lack of maintenance during the war. (5)

The concrete box culvert at mile point 10.38 along Powder Mill Road (MD 212) was constructed during the early- and mid-twentieth-century development of the Beltsville/Laurel area. However, this structure is not individually associated with the events and trends that have made a significant contribution to the broad patterns of our history, thus disqualifying it for eligibility under Criterion A. The property is not associated with any person or group of persons of outstanding importance to the community, state, or nation. Therefore, structure number 16012X0 is not eligible under Criterion B. Although this concrete box culvert is an example of early- or mid-twentieth-century-engineering, it is a common form in Prince George's County. This example is not significant as it does not represent the work of a master or possess high artistic value. Further, the poor condition of the structure has affected its integrity of design and materials. It is thus disqualified for eligibility under Criterion C. The concrete box culvert at mile point 10.38 along Powder Mill Road (MD 212) was not evaluated under Criterion D. Therefore, it has been recommended that structure number 16012X0 is not eligible for listing in the National Register of Historic Places under Criteria A, B, and C.

1) Susan G. Pearl, "History of Route 1 Corridor, 1740-1990," in Historic Contexts in Prince George's County: Short Papers on Settlement Patterns, Transportation and Cultural History (Upper Marlboro, MD: Maryland-National Capital Park and Planning Commission, 1991), 30.

2) Parsons Brinckerhoff Quade & Douglas, Inc., "Small Structures on Maryland's Roadways: Historic Context Report," (Baltimore, MD: Maryland State Highway Administration, 1997), 2-1.

3) Parsons Brinckerhoff Quade & Douglas, Inc., "Small Structures on Maryland's Roadways: Historic Context Report," (Baltimore, MD: Maryland State Highway Administration, 1997), 1-2.

4) Parsons Brinckerhoff Quade & Douglas, Inc., "Small Structures on Maryland's Roadways: Historic Context Report," (Baltimore, MD: Maryland State Highway Administration, 1997), 3-11.

5) Parsons Brinckerhoff Quade & Douglas, Inc., "Small Structures on Maryland's Roadways: Historic Context Report," (Baltimore, MD: Maryland State Highway Administration, 1997), 2-15.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ **Eligibility not recommended** _____

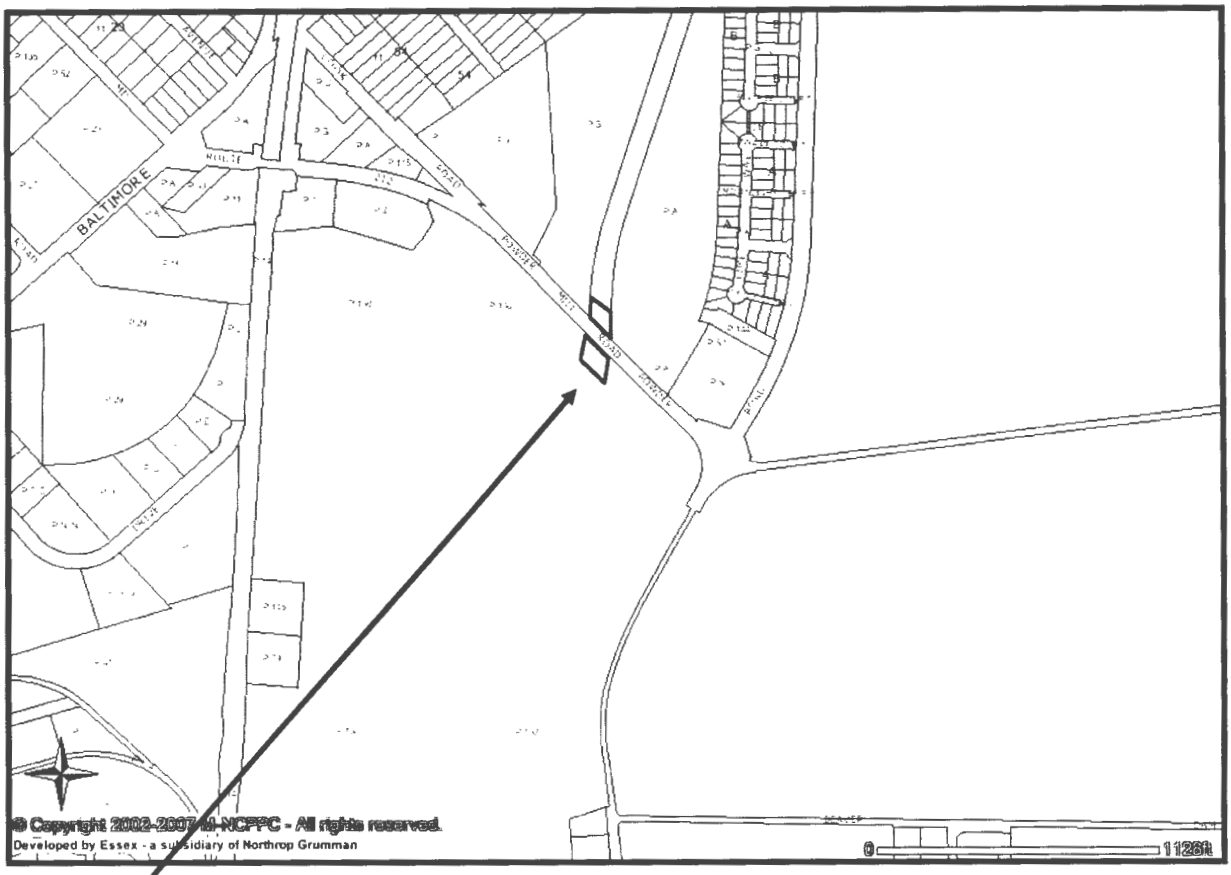
MHT Comments:

_____ _____

Reviewer, Office of Preservation Services **Date**

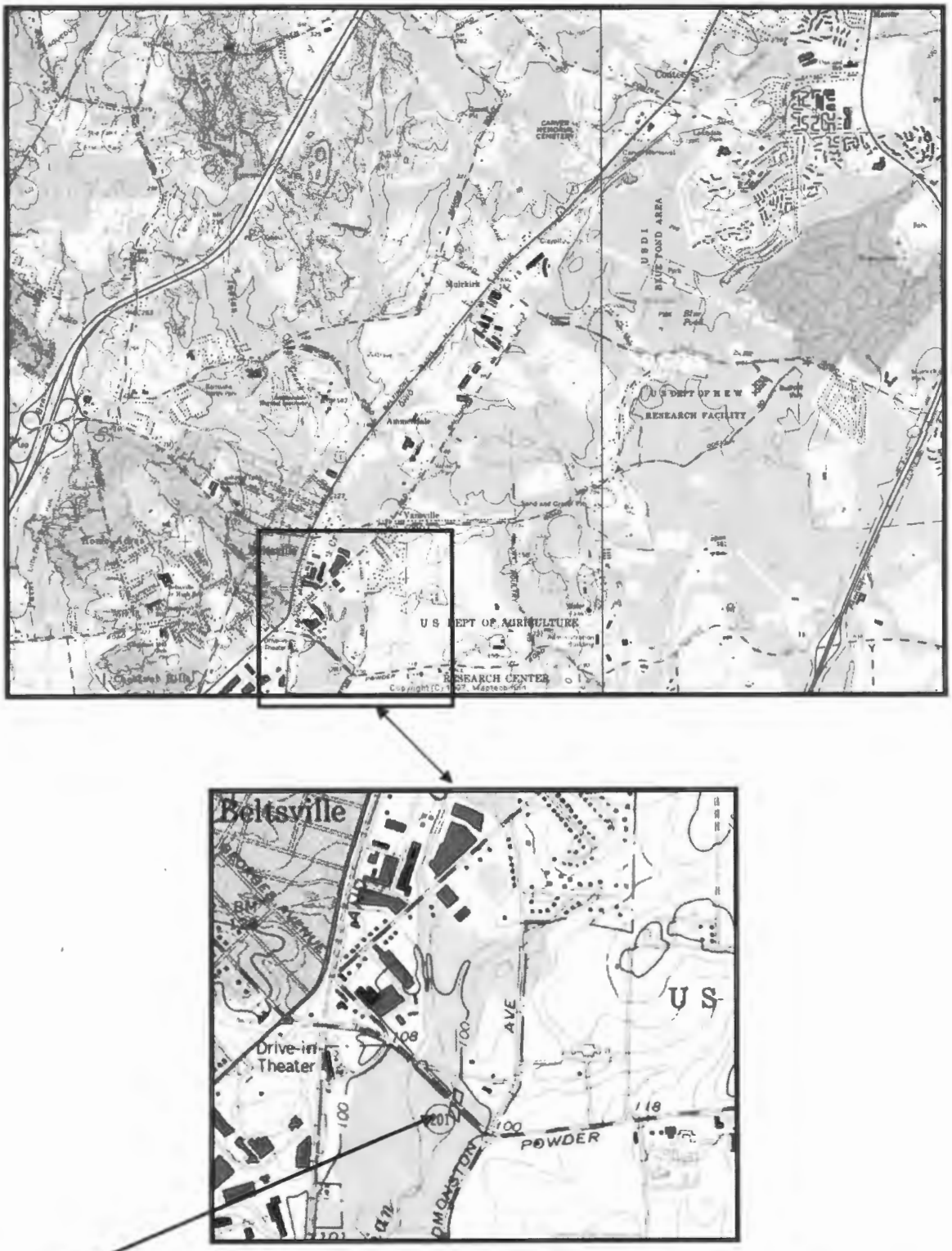
_____ _____

Reviewer, National Register Program **Date**



Structure #16012X0
Beltsville, Prince George's County, MD
Tax Parcel Map 19, Parcel 138
Prepared by EHT Traceries, Inc., 2008

N



Structure #16012X0
Beltsville, Prince George's County, MD
Beltsville Quad, USGS Topographic Map, 1964, Revised 1979
Prepared by EHT Traceries, Inc., 2008

N

Structure #16012X0
Beltsville, Prince George's County, MD
Top – Box Culvert looking southwest
Bottom – Box Culvert looking northeast
Photographed by EHT Traceries, Inc., 2008

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. PG:62-34

SHA Bridge No. _____ **Bridge name** Powder Mill Road over branch of Indian Creek

LOCATION:
Street/Road name and number [facility carried] Powder Mill Road (MD 212)

City/town Beltsville **Vicinity** X

County Prince George's

This bridge projects over: Road____ **Railway**_____ **Water** X **Land** ____

Ownership: State _____ **County** _____ **Municipal** _____ **Other** _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes X **No** _____
National Register-listed district ____ **National Register-determined-eligible district** X
Locally-designated district _____ **Other** _____

Name of district Beltsville Agricultural Research Center

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ **Truss -Covered** ___ **Trestle** ___ **Timber-And-Concrete** ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge ____:
Swing _____ **Bascule Single Leaf** __ **Bascule Multiple Leaf** _____
Vertical Lift _____ **Retractile**_____ **Pontoon** _____

Metal Girder_____:
Rolled Girder _____ **Rolled Girder Concrete Encased** _____
Plate Girder _____ **Plate Girder Concrete Encased** _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete X:
Concrete Arch_____ **Concrete Slab** X **Concrete Beam** ____ **Rigid Frame** _____
Other _____ **Type Name** _____

DESCRIPTION:
Setting: Urban _____ **Small town** _____ **Rural** X

Describe Setting:

The Powder Mill Road small-structure carries Powder Mill Road over a branch of Indian Creek in Prince George's County. Powder Mill Road runs east-west and the branch of Indian Creek flows north-south. The small-structure is located in the vicinity of Beltsville, and is surrounded by trees and a wooded area.

Describe Superstructure and Substructure:

The Powder Mill Road small-structure is a 1-span, 2-lane, concrete slab small-structure. The structure is 5.1 meters (16.75 feet) long and has a clear roadway width of 11.5 meters (37.7 feet); there are no sidewalks. The concrete slab has a bituminous wearing surface. The structure and the roadway approaches have metal guardrails. The substructure consists of two concrete abutments. There are four flared concrete wing walls.

Discuss Major Alterations:

Riprap has been added along the southwest wingwall.

HISTORY:

WHEN was the bridge built: circa 1940
This date is: Actual _____ **Estimated** _____
Source of date: Plaque _____ **Design plans** ___ **County bridge files/inspection form**
Other (specify)

WHY was the bridge built?

The small structure was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

Unknown

Was this bridge built as part of an organized bridge-building campaign?

Unknown

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

The small structure does not have National Register significance. It is located within the National Register-eligible Beltsville Agriculture Research Center (PG:62-14), but it neither adds nor detracts from the historic district.

Was the bridge constructed in response to significant events in Maryland or local history?

The historical context for Maryland's small structures parallels that of the state's bridges. Two specific periods are significant in the specific historical context of small structures. The first half of the nineteenth century, generally between 1800 and 1850, relates to the extensive road-building activity in the state during the nineteenth century, in particular the building of the National Road and the numerous turnpikes or toll roads. The later period of significance is generally between 1900 and 1947. It may actually be further divided into two periods. The first is the period between 1900 and 1911, when concrete was promoted as a "permanent" construction material for small structures and reinforced concrete was introduced (around 1903). The second era extends from 1912 to 1947, during which time the state issued and promoted extensively the use of Standard Plans for small structures.

By 1912, the newly-formed State Roads Commission joined a growing number of state highway departments in developing standardized plans for their bridges and small structures. Maryland's Standard Plans included designs for concrete culverts and concrete box, slab and girder structures. The small structure designs were for spans in increments of 2 feet from 6 feet to 18 feet in length. The 6-foot to 16-foot spans were slab structures while the 18-foot length was a girder-type structure. The 1912 Standard Plan specified both reinforced and plain concrete and provided ratios for mixing the concrete. A plain parapet rail was shown on the plans.

Revised Standard Plans came out in 1919 and had a separate plan sheet for the slab and girder designs. Again, the 18-foot length was a girder. These Standard Plans included an incised parapet rail in which the number of incised panels increased with the length of the structure. No designs for box bridges or culverts were shown in the 1919 plans.

In 1924, the State Standard Plans included designs for slab bridges from 6 feet to 20 feet in increments of 2 feet. Girders were no longer included for the Standard Plans for small structures. Like the 1919 plans, the designs included an incised parapet rail with the number of panels increasing with the size of the span. The 1924 plans also included a standard design for slab abutments that featured horizontal scoring in the concrete abutments and wingwalls.

In 1928, the State Roads Commission developed an open rail balustrade called the "standard open handrail." In 1930, standard small structure plans utilized the open balustrade for the 6-foot to 18-foot slab structures. The plans included an isometric view of a slab structure with the standard open handrail and abutments with horizontal scoring. The 1933 Standard Plans for small concrete structures specified concrete slab design for structures from 6 feet to 18 feet in length, horizontally incised abutments and wingwalls and the open balustrade design that was introduced in the Standard Plans of 1928.

The concrete slab structure, along with some girder structures and box culverts, was widely used on state highways throughout Maryland (and most assuredly on roadways of cities and counties) up through World War II. State Roads Commission reports of the pre-World War II era repeatedly mention the use of slab construction for small structures.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

This small structure is located within the Beltsville Agricultural Research Center Historic District (PG:62-14), which has been determined eligible for the National Register of Historic Places by the Maryland Historical Trust. The small structure is an undistinguished example of its type and therefore, does not contribute to the significance of the historic district.

Is the bridge a significant example of its type?

Small structures are generally not eligible for the National Register because there are many extant examples and because they are essentially non-descript and very hard to date.

Does the bridge retain integrity of important elements?

The CDE's for concrete slab small structures are identified as the slab, the parapet or railing, the abutments and wingwalls. The small structure does not have any parapets or rails.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

This small structure is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this small structure is required to evaluate its significance.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended XX

Comments: ALTHOUGH ON AN HISTORIC ROAD, STRUCTURE IS IN POOR CONDITION AND IS NOT A SIGNIFICANT ELEMENT OF THE ROAD.

Reviewer, OPS: _____ Date: 1/29/99

Reviewer, NR Program: _____ Date: 2/2/99

PG:62-34

BIBLIOGRAPHY:

County inspection/bridge files _____ **SHA inspection/bridge files** _____
Other (list):

Parsons Brinckerhoff Quade & Douglas, Inc. Small Structures on Maryland's Roadways: Historic Context Report. Maryland State Highway Administration, June 1997.

SURVEYOR:

Date bridge recorded May 1998
Name of surveyor Susan L. Taylor
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1685 **FAX number** (410) 296-1670

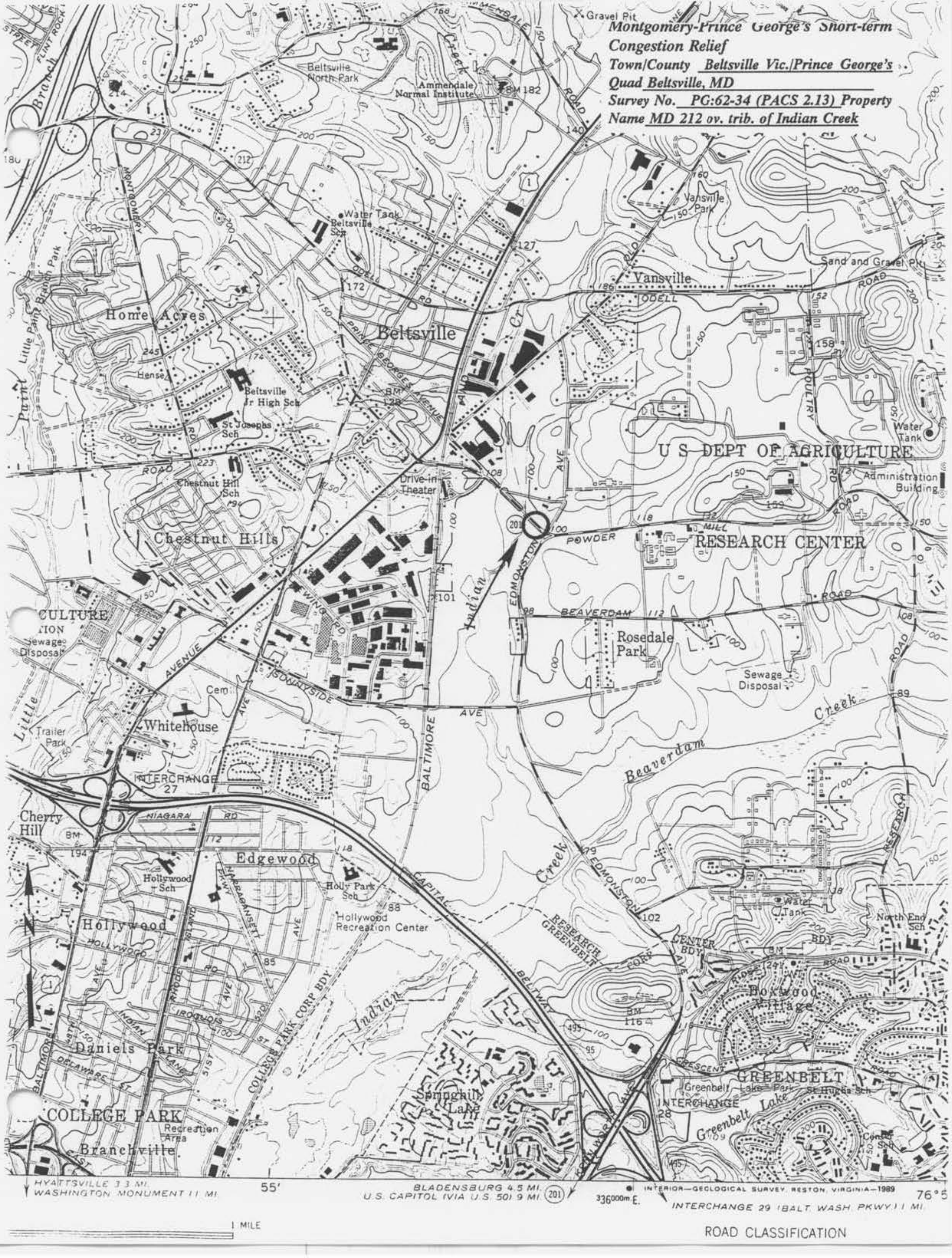
Montgomery-Prince George's Short-term Congestion Relief

Town/County *Beltsville Vic./Prince George's*

Quad Beltsville, MD

Survey No. *PG:62-34 (PACS 2.13) Property*

Name MD 212 ov. trib. of Indian Creek


Gravel Pit
Beltsville North Park
Ammendale Normal Institute
BM 182
Vansville Park
Water Tank
Beltsville Sch
Sand and Gravel Pit
Vansville
ODELL
ROAD
Home Acres
Beltsville
PRINCE GEORGES AVENUE
Little Paint Branch Park
Hense
Beltsville Jr High Sch
St Josephs Sch
U S DEPT OF AGRICULTURE
Administration Building
Water Tank
Chestnut Hill Sch
Drive-in Theater
Chestnut Hills
POWDER MILL
RESEARCH CENTER
EDMONSTON
Indian Cr
BEAVERDAM
Rosedale Park
Sewage Disposal
SUNNYSIDE AVE
Cem
Whitehouse
Trailer Park
BALTIMORE
Beaverdam Creek
INTERCHANGE 27
NIAGARA RD
Cherry Hill
Edgewood
Hollywood Sch
Holly Park Sch
Hollywood Recreation Center
Hollywood
RESEARCH GREENBELT
CENTER BDY
CAPITAL BELTWAY
COLLEGE PARK CORP BDY
Indian
Daniels Park
IROQUOIS
DELAWARE
Boxwood Village
North End Sch
Springhill Lake
GREENBELT
Greenbelt Lake Park
St Hughs Sch
INTERCHANGE 28
Greenbelt Lake
COLLEGE PARK
Recreation Area
Branchville
HYATTSVILLE 3.3 MI.
WASHINGTON MONUMENT 11 MI.
55'
BLADENSBURG 4.5 MI.
U.S. CAPITOL (VIA U.S. 50) 9 MI.
INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1989
336000m E.
INTERCHANGE 29 (BALT. WASH. PKWY) 1 MI.
76°5
1 MILE
ROAD CLASSIFICATION

1 PG-ED-34

2 Powder Mill Rd Culvert (Indian Creek)

3 Prince Georges Co, Md

4 Susan Taylor

5 5/98

6 MD 214 PG

7 West approach

8 1 of 4

1 PE:62-34

2 Calvert Rd Site, [illegible] Powder Mill Creek

3 Prince Georges Co., Md

4 Susan Taylor

5 5/98

6 Md SHPO

7 E approach

8 2 of 4


SALE
301 459-4400

1 PG-62-34

2 Powder Mill RD & Lot 4 (Indian Creek)

3 Prince Georges Co. Md

4 Susan Saylor

5 5/76

6 MD SHPO

7 N elevation

8 3 of 4

1 PG:62-34

2 Powder Mill Rd Culvert (Indian Creek)

3 Prince George Co. Md

4 Susan Jaylin

5 5/98

6 MD SHPO

7 S elevation

8 4 of 4