The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended __X__
Eligibility Not Recommended __

Criteria: ___A ___B ___C ___D
Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Comments: ____________________________________________

Reviewer, OPS: Anne E. Bruder ____________________________ Date: 3 April 2001
Reviewer, NR Program: Peter E. Kurtze ____________________ Date: 3 April 2001
SHA Bridge No. M-85 Bridge name Talbot Avenue over CSXT Railroad

LOCATION:
Street/Road name and number [facility carried] Talbot Avenue
City/town Silver Spring Vicinity X
County Montgomery

This bridge projects over: Road Railway X Water Land

Ownership: State County Municipal Other CSXT Railroad

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

Name of district

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 X:
Rolled Girder X Rolled Girder Concrete Encased
Plate Girder X Plate Girder Concrete Encased

Metal Suspension

Metal Arch

Metal Cantilever

Concrete:
Concrete Arch Concrete Slab Concrete Beam Rigid Frame
Other Type Name

881
DESCRIPTION:
Setting: Urban X Small town _______ Rural ________

Describe Setting:

Bridge No. M-85 carries Talbot Avenue over CSXT Railroad in Montgomery County. The bridge spans from north to south, while the rail line runs east-west. The bridge is located in the vicinity of Silver Spring, and is surrounded by single family dwellings and a school property.

Describe Superstructure and Substructure:

Bridge No. M-85 is a 3-span, single-lane, combination metal plate and rolled girder bridge. The bridge was originally built in 1918, with a new deck added in 1986. The structure is 106 feet long with a clear roadway width of 14.5 feet from timber curb to curb and an out-to-out width of 18 feet. The superstructure consists of a through-plate girder in the center span, rolled girders in the end spans, timber floor beams, a wood plank deck and a timber railing. The rolled girders are 1.5 feet x 7 inches, while the through plate girder is 3 feet in height. The roadway is carried on the rolled girders of the end spans and through the plate girder of the center span. The structure has a wood railing supported by wood posts. A metal w-section guardrail has been added to the bridge. The substructure consists of two (2) concrete abutments and two (2) metal column bents. There are flared, concrete wing walls. The bridge is posted for 10 tons, and has a Montgomery County sufficiency rating of 20.7.

According to the 1993 inspection report, this structure was in fair to poor condition with cracking, corrosion and section loss. The top cover plates of the plate girders are heavily rusted and delaminated. The top flanges of the steel beams at the end spans are also rusted and delaminated with minor section loss and the bottom of the timber deck is moderately to heavily rotted. The substructure is in poor condition. The west batten plates of the top steel struts at the north and south bents are damaged and heavily corroded with 80 percent section loss. The north and south abutment slopes are severely eroded undermining the center section of both abutments.

Discuss Major Alterations:

The last major rehabilitation of the bridge was in 1986. At that time, the timber deck was replaced and some of the steel members in the column bents were replaced or reinforced.

HISTORY:

WHEN was the bridge built: 1918
This date is: Actual X Estimated
Source of date: Plaque Design plans County bridge files/inspection form X

WHY was the bridge built?

The bridge was a replacement of an earlier bridge which was functionally obsolete by 1918. The new bridge allowed for the construction of a third railroad track and increased the clear height above the railroad line by 2.5 feet.
WHO was the designer?

Unknown

WHO was the builder?

Although the bridge is associated with the CSXT Railroad and is currently owned by the railroad, there is no documentation to suggest who was the original builder.

WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

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 X

The bridge is eligible for the National Register of Historic Places under Criterion C, as a significant example of metal girder construction. Even though the structure has a low sufficiency rating, it has a high degree of integrity and retains such character-defining elements of the type as plate and rolled girders, abutments and column bents.

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

Metal girder bridges were most likely introduced and first popularized in Maryland by the state's major railroads of the nineteenth century including the Baltimore and Susquehanna, its successor the Northern Central, and the Baltimore and Ohio Railroad. Bridge engineering historians have documented the fact that James Milholland (or Mulholland) erected the earliest plate girder span in the United States on the Baltimore and Susquehanna Railroad in 1846 at Bolton Station, near present-day Mount Royal Station. The sides (web) and bottom flange of Milholland's 54-foot-long span were wholly of wrought iron and included a top flange reinforced with a 12x12-inch timber. Plates employed in the bridge were 6 feet deep and 38 inches wide, giving the entire bridge a total weight of some 14 tons. Milholland's pioneering plate girder cost $2,200 (Tyrrell 1911:195). By December 31, 1861, the Northern Central Railroad, which succeeded the Baltimore and Susquehanna, maintained an operating inventory in Maryland of 50 or more bridges described simply as "girder" spans, in addition to a number of Howe trusses. Most of these were probably iron girder bridges; the longest were the 117-foot double-span bridge over Jones Falls and the 106-foot double-span girder bridge at Pierce's Mill (Gunnarson 1990:179-180).

As in the nation, girder bridge technology in Maryland was quickly adapted to cope with the increasingly heavy traffic demands of the twentieth century caused by automobile and truck traffic. The 1899 Maryland Geological Survey report on highways noted that "there are comparatively few I-beam bridges, one of the cheapest and best forms for spans less than 25 or 30 feet" (Johnson 1899:206). Interestingly, the report also urged construction of a composite metal, brick, and concrete bridge, noting that "no method of construction is more durable than the combination of masonry and I-beams, between which are transverse arches of brick, the whole covered with concrete, over which
is laid the roadway" (Johnson 1899:206). Whether any such bridges (transitional structures between I-beams and reinforced concrete spans) were built is unknown.

Official state and county highway reports—issued between 1900 and the early 1920s through the Highway Division of the Maryland Geological Survey and its successor, the State Roads Commission—generally do not reference or describe girder construction. An analysis of the current statewide listing of county and municipal bridges (a listing maintained by the State Highway Administration) reveals that 48 county bridges, out of the total of 141 approximately dated to "1900" by county engineers, were listed as steel girder, steel stringer, or variants of such terms. (It should be noted that the "1900" date is often given when no exact date is pinpointed for a bridge that is clearly old). A grand total of 200 bridges (including "steel culverts"), out of 550 bridges dated on the county list between 1901 and 1930, were described as steel beam, steel girder, or steel stringer and girder varieties. The total suggests that among the various highway bridge types built in the early twentieth century metal girder bridges in Maryland between 1900 and 1930 were second in popularity only to reinforced concrete bridges. However, these numbers must be interpreted with caution, as they do not necessarily include all county and municipal bridges.

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?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

The bridge is a potentially significant example of a metal girder bridge, possessing a high degree of integrity.

Does the bridge retain integrity of important elements described in Context Addendum?

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including plate and rolled girders, abutments and column bents.

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

This bridge is a significant example of a plate and rolled girder bridge.

BIBLIOGRAPHY:

County inspection/bridge files X SHA inspection/bridge files

Other (list):

Gunnarson, Robert
Johnson, Arthur Newhall

Tyrrell, Henry G.
1911 History of Bridge Engineering. Published by author, Chicago.

SURVEYOR:

Date bridge recorded 2/25/97
Name of surveyor Caroline Hall/Tim Tamburrino
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1685 FAX number (410) 296-1670
The Talbot Avenue Bridge (M: 36-30) is located in Silver Spring, Maryland, on the south side of 4th Avenue/Grace Church Road and connects the North Woodside and Woodside neighborhoods south to Lyttonsville and Rosemary Hills via Talbot Avenue. The bridge is to the rear and northeast of Rosemary Hills Elementary. Talbot Avenue Bridge consists of single-lane, rolled and plate girder spans and adjacent abutments. Constructed in 1918, the bridge replaced an earlier bridge at the Talbot Avenue crossing and provides access over the CSX Rail tracks, formerly the Metropolitan Branch of the Baltimore & Ohio (B&O) Railroad. The bridge provided single-lane vehicle access not exceeding five tons until it closed to vehicular traffic in 2017.

Communities in Montgomery County flourished along the Metropolitan Branch of the B&O Railroad, which was completed in 1873 and linked Washington, DC, with the railroad’s main line in Point of Rocks, Maryland. The Talbot Avenue Bridge was constructed above the Metropolitan Branch of the B&O Railroad in 1918, replacing an earlier bridge. The bridge connected the communities of Lyttonsville to North Woodside and Woodside and provided residents with an additional crossing over the railroad. Over time, the bridge became representative of segregation and a time when residents of predominantly African-American Lyttonsville used the bridge to access the majority-white neighborhoods north of the railroad for goods and services. The Talbot Avenue Bridge was previously determined eligible for listing in the National Register of Historic Places (NRHP) under Criterion C as an example of a metal girder bridge as part of the Maryland Inventory of Historic Bridges using a Historic Bridge Inventory form following a survey completed in February 1997. The Maryland State Highway Administration submitted the form to the Maryland Historical Trust (MHT) in February 2001. MHT accepted the Historic Bridge Inventory determination on April 3, 2001. It is also a contributing element to the Metropolitan Branch of the B&O Railroad (M: 37-16). No re-evaluation of these determinations was requested by MHT or other consulting parties during Purple Line Section 106 consultation. However, as a result of the additional research completed for this intensive-level Maryland Inventory of Historic Properties documentation, the bridge is also eligible under Criterion A for its association with the surrounding neighborhoods and for providing a vital transportation link that allowed African-American residents access to goods and services in nearby commercial areas.
1. Name of Property
   (indicate preferred name)
   historic: Talbot Avenue Bridge
   other: Bridge No. M-85

2. Location
   street and number: Talbot Avenue over CSX Railroad
   city, town: Silver Spring
   county: Montgomery

3. Owner of Property
   (give names and mailing addresses of all owners)
   name: Montgomery County
   street and number: 101 Monroe Street
   city, town: Rockville
   telephone: 240-777-0311
   state: MD
   zip code: 20850

4. Location of Legal Description
   courthouse, registry of deeds, etc.: N/A
   liber: N/A
   folio: N/A
   city, town: Rockville
   tax map: JP11
   tax parcel: N/A
   tax ID number: N/A

5. Primary Location of Additional Data
   ——— Contributing Resource in National Register District
   ——— Contributing Resource in Local Historic District
   ——— X Determined Eligible for the National Register/Maryland Register
   ——— Determined Ineligible for the National Register/Maryland Register
   ——— Recorded by HABS/HAER
   ——— Historic Structure Report or Research Report at MHT
   ——— Other: __________________________

6. Classification
   Category:________
   ——— district
   ——— building(s)
   ——— structure
   ——— site
   ——— object
   Ownership:________
   ——— public
   ——— private
   ——— both
   Current Function:________
   ——— agriculture
   ——— commerce/trade
   ——— defense
   ——— domestic
   ——— education
   ——— funerary
   ——— government
   ——— health care
   ——— industry
   ——— landscape
   ——— recreation/culture
   ——— religion
   ——— social
   ——— transportation
   ——— work in progress
   ——— unknown
   ——— vacant/not in use
   ——— other: __________________________
   Resource Count:________
   ——— Contributing
   ——— Noncontributing
   ——— buildings
   ——— sites
   ——— structures
   ——— objects
   ——— Total
   Number of Contributing Resources previously listed in the Inventory:________
Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Summary

The Talbot Avenue Bridge (M: 36-30) is located in Silver Spring, Maryland, on the south side of 4th Avenue/Grace Church Road and connects the North Woodside and Woodside neighborhoods south to Lyttonsville and Rosemary Hills via Talbot Avenue. The bridge is to the rear and northeast of Rosemary Hills Elementary. Talbot Avenue Bridge consists of single-lane, rolled and plate girder spans and adjacent abutments. Constructed in 1918, the modest bridge replaced an earlier bridge at the Talbot Avenue crossing and provides access over the CSX Rail tracks, formerly the Metropolitan Branch of the Baltimore & Ohio (B&O) Railroad. The bridge, which measures 106 feet long and 18 feet wide, provided single-lane vehicle access not exceeding five tons until it closed to vehicular traffic in 2017. This documentation is being completed as part of mitigation for the Purple Line project. The Talbot Avenue Bridge was previously determined eligible under Criterion C as an example of a metal girder bridge. However, the intensive-level documentation completed here indicates that it is also locally significant as a railroad crossing that facilitated the movement of the African-American community’s residents to services, amenities, and employment in Silver Spring and Washington, DC. It is also a contributing element to the Metropolitan Branch of the B&O Railroad (M: 37-16).

Architectural Description

The Talbot Avenue Bridge is a fixed, single-lane, three-span, plate and rolled girder bridge. The bridge carries Talbot Avenue north toward 4th Avenue/Grace Church Road over the CSX Railroad. Although the current bridge dates to 1918, an elevated crossing existed at this location prior to that time. Widening of the railroad bed below necessitated construction of the existing bridge and also improved overhead clearance.

The bridge extends 106 feet across the CSX Railroad bed at a roadway width of 14.5 feet and an overall width of 18 feet. Both the bridge’s substructure and superstructure are largely constructed of riveted steel beams and plates. In the substructure, a vertical clearance of 22 feet is supported by two steel bents comprised of vertical supports with cross-bracing and lateral ties. The bents are secured in concrete footings and connect the center span to its flanking approach spans. Concrete abutments provide the end support for the superstructure.

The bridge’s three-span superstructure is supported by the steel bents and abutments. The longer, central span is a through girder with built-up plate girders that increase in height toward the bridge’s center, giving the central span a trapezoidal appearance when viewed from the side. Connected to the central span are approach spans consisting of rolled girders. Timber railroad ties form deck joists over

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1 The Talbot Avenue Bridge appears as Bridge No. 9A on a June 30, 1918, B&O Railroad right-of-way and track map.
2 Select descriptive information derived from the Maryland Inventory of Historic Bridges form for Talbot Avenue over CSXT Railroad, survey completed February 1997 and accepted by the Maryland Historical Trust in April 2001, and the Maryland Historical Trust State Historic Sites Inventory Form for Talbot Avenue Bridge dated August 15, 1995.
3 Available historical documentation discussing the Talbot Avenue Bridge presents conflicting information about the year of its construction. The most recent survey was completed in 1997 and accepted by the Maryland Historical Trust in 2001; it provides a 1918 construction date which corresponds to information in the Montgomery County Department of Transportation’s 2013 Bridge Inventory Summary. The original Maryland Historical Trust State Historic Sites Inventory Form completed in 1995 notes a Talbot Avenue Bridge construction date of 1916. Similar documentation completed for the Woodside Historic District in 1976 notes a bridge construction date of 1921. This latter source also states that the Talbot Avenue Bridge was fashioned from an old railroad turntable turned upside down. According to the source, the turntable was originally from Martinsburg, West Virginia, but larger train engines rendered the turntable obsolete. In turn, the turntable was repurposed to create a bridge. However, this has not been verified. Because the railroad’s bridge shop was located in Martinsburg, it is possible that the bridge components were sent from the Martinsburg shop, but may not have originated as a Martinsburg turntable.
which wood plank decking is diagonally laid. The existing decking dates to a 1986 bridge rehabilitation project. A basic wood hand railing lines the bridge, and a metal w-section guardrail lines the roadway inside of the timber railing.⁴

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⁴ Daniel Koski-Karell, “Talbot Avenue Bridge,” Maryland Historical Trust/State Historic Sites Inventory Form, August 15, 1995; Caroline Hall and Tim Tamburrino, “Talbot Avenue over CSXT Railroad,” Maryland Inventory of Historic Bridges/Historic Bridge Inventory/Maryland State Highway Administration/Maryland Historical Trust, April 3, 2001.
8. Significance

Inventory No. M: 36-30

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Evaluation for:

_____ National Register  X _____ Maryland Register  not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

Significance Summary

The Talbot Avenue Bridge was determined eligible for listing in the National Register of Historic Places (NRHP) as part of a Maryland Inventory of Historic Bridges/Historic Bridge Inventory form following a survey completed in February 1997. The form was submitted by the Maryland State Highway Administration to the Maryland Historical Trust in February 2001. The Maryland Historical Trust accepted the Historic Bridge Inventory determination on April 3, 2001. At that time, the bridge was determined to be eligible under Criterion C as a significant example of a girder bridge with a high degree of integrity and retention of original features. No re-evaluation of this eligibility determination was requested by the Maryland Historical Trust or other consulting parties during historic preservation consultation that occurred during Purple Line project planning. However, as a result of the additional research completed for this intensive-level Maryland Inventory of Historic Properties documentation, the bridge is also eligible under Criterion A for its association with the surrounding neighborhoods and for providing a vital transportation link that allowed African-American residents access to goods and services in nearby commercial areas. The bridge retains moderate to high levels of all aspects of integrity. The period of significance for the bridge is 1918, its generally accepted year of construction, until 1998, when CSX, a successor of the B&O Railroad, transferred the bridge’s ownership to Montgomery County and when other transportation routes within the community provided alternatives to citizens.

Historic Context

Introduction

The Metropolitan Branch of the B&O Railroad was completed in 1873 and linked Washington, DC, with the railroad’s main line in Point of Rocks, Maryland. Communities in Montgomery County flourished along the rail corridor, particularly those located closest to Washington, DC. The Talbot Avenue Bridge was constructed above the Metropolitan Branch of the B&O Railroad in 1918, replacing an earlier bridge that carried Talbot Avenue. Its rolled and plate girder design retains its character-defining features. The bridge connected the communities of Lyttonsville to North Woodside and Woodside and provided residents of surrounding neighborhoods an additional crossing over the railroad. Importantly, over time, the bridge became representative of segregation and a time when residents of predominantly African-American Lyttonsville used the bridge to access the majority-white neighborhoods north of the railroad for access to goods, services, transportation, and employment opportunities.

Silver Spring and Montgomery County

The Talbot Avenue Bridge is located in the Silver Spring vicinity of Maryland. Part of the Washington, DC, metropolitan area, Silver Spring is an unincorporated community located in Montgomery County, the most populous county in the state. Though the
community’s origins date to the mid-nineteenth century, Silver Spring, along with Montgomery County, did not begin to experience rapid population growth until after World War I. From that period to the present day, the area’s built environment has continually and dramatically expanded and is now dominated by dense suburban and urban development.

Silver Spring’s origins are traced to presidential adviser Francis Preston Blair who departed Kentucky at the request of Andrew Jackson to become editor of the Washington Globe. Though historical accounts vary, Silver Spring was discovered by Blair while horseback riding through the Montgomery County countryside with his daughter in 1840. One of their horses, Selim, bolted and was found near a small spring that had bits of mica reflecting from it, giving the water a silver, metallic appearance. Enchanted by the location, Blair purchased the spring and surrounding 250 acres. Today, Acorn Park in downtown Silver Spring memorializes the location of Blair’s spring. In 1842, Blair constructed his summer home “Silver Spring” on the site and began developing the land for agricultural purposes. By this time, farming was an established practice in Montgomery County, with origins more than eighty years prior to Blair’s arrival. Blair’s son Montgomery moved to Silver Spring a decade later and constructed his home “Falkland.” By the second half of the 1850s, Blair’s Silver Spring farm was valued at $15,000 and a portion of the property was used to raise dairy cows. In the years that followed, a small nearby community named Sligo near the Colesville Road and Georgia Avenue intersection grew to include a store, post office, and several homes. Blair family land holdings surrounded the burgeoning crossroads community.

In the 1870s, construction of the B&O Railroad’s Metropolitan Branch encouraged growth in Montgomery County, particularly areas along the line and near the nation’s capital. The branch extended from Washington, DC, to Point of Rocks, Maryland, where it connected to the B&O Railroad’s main line. Land speculators predicted that railroad access would make Montgomery County a popular summer destination for Washington, DC’s residents. In anticipation of the railroad’s 1873 completion, several lots were sold in the Rockville area, although development along the line was slow during its first decade of operation. The original Silver Spring station was not constructed until 1878 and provided a way for residents to take advantage of rail service without having to travel to Union Station in Washington, DC.

The 1880s saw a rapid increase in the number of summer homes and suburban subdivisions created along the B&O Railroad’s Metropolitan Branch. Speculators rushed to purchase land near the rail line in anticipation of future residential development. The rail line also allowed for easy transport of agricultural goods and produce to nearby urban markets, benefiting Montgomery County farmers. Takoma Park, established in 1883, became the first suburban commuter community in Montgomery County. Land development companies marketed the area as an idyllic suburban destination nestled within a bucolic landscape all within a short train ride of Washington, DC. Accessibility and affordability increased in 1897 when an electric streetcar line, the Washington, Woodside and Forest Glen Railway, began operating between Montgomery County and Washington. The Metropolitan Branch and the streetcar line led to steady growth in communities near Silver Spring. By 1899, these communities were also linked to Washington, DC, by toll roads and turnpikes. When a new post office opened that year, the communities combined with Silver Spring. Despite this growth, Silver Spring remained relatively small.

At the turn of the century, a number of changes occurred in predominantly rural Montgomery County. Progressive-era ideals, which caused widespread political reform throughout the United States, brought about a new approach to public highways and safety. In 1899, over 780 miles of unimproved dirt roads existed in Montgomery County and 45 miles of roads were paved using inferior techniques. Only eight miles of paved roads, including Colesville Road, existed in the entire county. Maryland’s General Assembly began to vigorously appropriate funds to its newly formed State Roads Commission in 1908. These funds were received at the county level and Montgomery County’s commissioners began improving roads throughout the county. Turnpikes operating in Montgomery
County were purchased by the State Roads Commission over the subsequent decade and paved, responding to increased automobile use.

Improved roads led to the development of clusters of suburban communities, which became more prevalent during the early 1900s, marking the beginning of Montgomery County’s transition from rural farmland to suburban center. The majority of this development occurred between the established communities of Bethesda and Silver Spring, close to Washington, DC. Residents ranged from full-time suburbanites who lived in more modest houses to wealthy citizens with large estates and summer homes. Developers and civic leaders built community buildings, societies, and clubs, providing residents with social activities and meeting spaces.

Montgomery County’s pre-World War I era represented a period when county officials were not equipped to meet the demands its growing suburban population presented. Initially, these new suburban denizens did not significantly impact the county’s ability to provide educational services to residents since most continued sending their children to schools in Washington, DC. This reprieved county officials from accommodating new students and funding school construction, which the county budget could not have supported at the time. With no planning statutes in place, builders and developers generally laid out neighborhoods and built homes to their own liking with little coordination with county officials. As the county’s population continued to grow, new wealthy residents increased the county’s tax base, but much of the new revenue was directed toward services they required including police, fire protection, roads, and sewer lines. This ad hoc system worked until 1914, when the district government forbade Montgomery County children from attending Washington, DC, schools. Montgomery County Public Schools acted quickly and raised funds by issuing bonds to construct school buildings. County commissioners raised taxes, outraging rural residents who did not feel responsible for funding the needs of the county’s new suburban communities.

World War I's conclusion in 1919 spurred a resurgence in suburban development. Civic associations, women’s clubs, and emerging community improvement organizations appealed for improved public services. County officials responded to the building boom and the public’s demands by using special taxing districts to localize the cost of new services without burdening rural residents. Adequate roads and additional schools were built while the Washington Suburban Sanitary District upgraded the area’s water and sewer infrastructure. For the first time, zoning regulations emerged and officials focused on long-range planning efforts. This service expansion resulted in a large county government and new job opportunities at the county level.

Silver Spring’s proximity to Washington, DC, served as a major draw and attracted potential buyers. The city quickly grew into one of the main residential communities for Washington, DC’s federal employees during the post-World War I period. A number of subdivisions were quickly developed. E. Brook Lee, great-grandson of Francis Preston Blair, laid out a subdivision on nineteen acres of land in 1921. Another large subdivision, Blair-Takoma, was developed in 1924, followed by the North Washington Realty Company’s Northgate, Colonial Village, Sligo, and Sligo Park Hills subdivisions, among others. In the 1920s, a bank and a newspaper, the Maryland News, established businesses in Silver Spring, while new sidewalks and streetlights were installed throughout the town. E. Brook Lee was largely responsible for many of these improvements.

The 1920s construction boom coincided with Montgomery County’s population growth, which reached nearly 50,000 by the end of the decade. Despite the surge of Silver Spring and Montgomery County’s residential growth during the 1920s, the area’s ability to maintain a level of affluence was due to developers adopting strict land covenants and regulations. Many restrictions stipulated that only single-family homes could be constructed in subdivisions. Others set minimum home values, ensuring that an entire subdivision would be built at a certain price point; some restricted the race of buyers.

As construction and growth continued, Silver Spring’s population rose rapidly, increasing by more than 70 percent during the 1930s. While the nation suffered from the Great Depression, Silver Spring and Montgomery County continued to grow. New Deal programs that benefited citizens across the United States had an immediate impact on Silver Spring and Montgomery County, bringing an influx
of federal workers who were supporting these programs and who needed housing to the Washington, DC, area. Amenities including the Maryland-National Capital Park and Planning Commission’s new parks and parkways and nearby country clubs attracted residents to Silver Spring. Between 1937 and 1938, the Federal Housing Administration-backed Falkland Apartments, a post office, and Montgomery County’s first shopping center were completed in Silver Spring. The Falkland Apartments represented one of only a small number of multi-family housing developments in the entire county at that time.7

In the decades following World War II, suburban Montgomery County experienced rapid growth. The County’s population doubled between 1946 and 1950. Housing demands resulted in construction projects in outlying areas away from established communities, leading to automobile-oriented development. County planners responded by focusing on expanding Silver Spring’s commercial center and providing ample parking. The Hecht Co., became an early tenant in Silver Spring’s retail center, opening in November 1947. Others followed over the subsequent years including J.C. Penney and Sears, Roebuck and Company. By the early 1950s, Silver Spring had grown to become one of the largest retail destinations between Baltimore and Richmond.8

Much of Montgomery County’s post-war development can be attributed to new residents employed by a growing federal government. Though many commuted into Washington, DC, in 1948, the Public Buildings Administration, which was replaced with the U.S. General Services Administration the following year, began making plans to relocate some federal agencies to the suburbs. By 1950, President Truman sought to construct sufficient office space to house up to 40,000 federal workers outside of Washington, DC. New suburban facilities housed the Atomic Energy Commission, White Oak Naval Surface Weapons Center, and National Bureau of Standards. To keep pace with growth, the number of multi-family housing units increased, as did the size of single-family dwellings; new planned communities combined residential and commercial development and included a variety of housing types.9

Transportation improvements played a large role in Montgomery County’s suburban development. In 1945, a new Silver Spring B&O Railroad station was constructed on the site of the earlier station building. The Baltimore-Washington Parkway opened 1954 and the Capital Beltway (Interstate 495) was completed in 1964. Washington Metropolitan Area Transit Authority’s expansion into southern Maryland provided another transportation option for Washington’s growing Montgomery County suburbs with the construction of the Metro’s Red Line; the Silver Spring station opened in 1978.

Montgomery County also responded to the nation’s civil rights movement. Local protests and boycotts led the County Council to form a Commission on Interracial Problems (later called the Commission on Human Relations) in 1960. One of the commission’s earliest tasks included studies of Montgomery County’s government hiring practices and discrimination in public accommodations, leading to a ban on the practice in 1962, two years earlier than the federal Civil Rights Act’s passage. Full-time staff was added to the Commission in 1967. Over subsequent years, the commission addressed race issues relating to housing, businesses, and police, and expanded to counter discrimination based on nationality, sex, religion, sexual orientation, and disability. Today, the Office of Human Rights and Commission on Human Rights continues county-wide anti-discrimination efforts.10

7 MacMaster and Hiebert, A Grateful Remembrance, 301.
The 1980s saw commercial growth in Silver Spring with several new office buildings constructed during the decade. New high rise apartment buildings followed in the 1990s. By 1990, Montgomery County’s population had reached over 700,000 and is estimated to have approached 1,000,000 by the mid-2010s.11

Lyttonsville

The Talbot Avenue Bridge connects Lyttonsville, a historically African-American neighborhood with a long and interesting history, with surrounding areas. In the 1700s, Montgomery County north of what would become Washington, DC, contained tobacco plantations worked by large slave populations. Washington, DC’s northern boundary stone was placed in 1792, partitioning sections of southern Montgomery County to be included in the new capital city. Samuel Lytton, a free black laborer working at Blair’s Silver Spring estate, purchased land nearby from farmer Leonard Johnson in 1853 for the price of “ninety-six dollars eighty-seven and a half cents current money.”12 Located east of Brookville Road, the tract eventually became a small community of free blacks prior to the Civil War. The settlement became known as Lyttonsville, in honor of Samuel Lytton.

The B&O Railroad’s Metropolitan and Georgetown Branches crossed Lyttonsville at the turn of the twentieth century, bringing growth to the area and providing rail transportation into Washington, DC.13 Enos C. Keys and Sons constructed a coal yard on Brookville Road and employed many of Lyttonsville’s residents. A Lyttonsville community school started at Pilgrim Church in 1896, and later grew into the two-room Linden School. The greater Lyttonsville community included the grade school, a church, beer hall, and baseball field where a community baseball team, the Linden Black Sox, played. Just beyond Lyttonsville, restrictive racial covenants prevented African Americans from purchasing land within certain suburban Washington, DC, neighborhoods. The nearby neighborhood of Woodside Park, for example, included covenants that prohibited landowners to “sell or lease the said land to any one of a race whose death rate is at a higher percentage than the white race.”14 Over fifty subdivisions enacted such covenants between 1900 and 1948.15 These practices, effectively racist in policy and procedure, disproportionally affected minority groups, which usually had inferior access to quality healthcare, from purchasing homes in these neighborhoods. As a result, Lyttonsville became a defined, and often ignored, African-American enclave in the Silver Spring area.

By 1930, approximately 300 people resided in Lyttonsville, clustered near the Brookville Road and Garfield Avenue intersection.16 Industrialization along Brookville Road continued into the twentieth century and included a garbage incinerator, radio stations and transmitters, and a vehicle maintenance yard. Large sections of Lyttonsville were rezoned for industrial uses, ultimately placing undesirable uses near or within the African-American residential area. Over time, these industrial developments shifted Lyttonsville’s population east and away from Brookville Road.

12 By 1850, Montgomery County’s free black population had reached over 1,000 persons. MacMaster and Hiebert, A Grateful Remembrance, 114.
During the mid-twentieth century, single-family homes were constructed in the Rosemary Hills, Rosemary Knolls, and Richland Place neighborhoods near Lyttonsville. Garden apartments added higher density housing to the community. The area became racially diverse and attracted residents with similar sentiments against segregation. Rosemary Hills Elementary School opened in 1956, offering an integrated learning experience for the community’s diverse student body. Still, into the 1960s, Lyttonsville’s streets remained unpaved and the community underserved by county services. Urban renewal projects spearheaded by local resident and respected community activist Gwendolyn Coffield improved Lyttonsville’s infrastructure over time, leading to paved roads, street lighting, and improved water and sewer systems. The Rosemary Hills/Lyttonsville Community center that opened in 2000 bears her name as a testament to the commitment to her community and the improvements that she brought to the area. Many residents displaced by these 1960s development projects moved into the Quaker-funded Friendly Gardens Apartments, a lower-income housing complex. Others resided in new modular residences constructed at the same time. In 1984-1985, area high school students involved with the Young Americans program and Montgomery County Students Construction Trades Foundation constructed several houses in Lyttonsville. Located on Young American Court and Kansas Avenue, the homes provided housing opportunities for middle-income earners supported by the program’s below-market interest rates. Collectively, these changes resulted in a loss of most of Lyttonsville’s original buildings as the community was slowly enveloped by rapid suburban development and incompatible industrial growth, resulting in the replacement of its earliest buildings.

Lyttonsville existed in racially segregated Montgomery County, across the B&O Railroad tracks from the majority white North Woodside and Woodside neighborhoods. Linking the communities was the Talbot Avenue Bridge, a single-lane vehicle bridge. Current Lyttonsville residents, including Gwendolyn Coffield’s sister, Charlotte, recall crossing the bridge to reach public transportation or taxis that would take them into Washington, DC. Others cleaned the homes of North Woodside’s white residents and used the bridge to access the neighborhood. Lyttonsville offered few amenities. The Talbot Avenue Bridge provided access to entertainment, restaurants, and shopping in parts of Washington, DC, where African Americans were welcome at a time when segregation was still pervasive and Jim Crow laws restricted African Americans.

Residents described the Talbot Avenue Bridge a “lifeline to all the amenities on the other side” and a “passage back to... their homes and families,” and many still view the bridge as a reminder of Silver Spring’s segregated past. The bridge became viewed as a vital link to the surrounding area for Lyttonsville’s African-American community for much of the twentieth century.

Woodside

Woodside is located northeast of Lyttonsville and Rosemary Hills, across the B&O Railroad tracks. Lyttonsville residents traversed the Talbot Avenue Bridge to reach Woodside and access goods and services in downtown Silver Spring. The neighborhood is one of the first planned suburban residential neighborhoods in the Silver Spring area, and was developed in the late-nineteenth century. The B&O Railroad’s Metropolitan Branch provided access to suburban Washington, DC, for the city’s growing workforce. Washington, DC’s population nearly doubled from 1860 to 1870, and as the population continued to grow, development pressure on suburban areas increased. Platted subdivisions popularity increased in the late-nineteenth century due to a large number of investment companies seeking to take advantage of undeveloped areas and potential suburban communities outside of major urban centers.

Developers in Silver Spring sought to attract Washingtonians to the suburbs by envisioning a bucolic countryside and “fine building sites, with abundant shade and excellent water.” Woodside’s subdivision plans were recorded on September 19, 1889, by

19 Charlotte Coffield, conversation with Stephanie Foell, May 24, 2016, Montgomery County, Maryland, Planning Offices.
Washington, DC, resident Benjamin F. Leighton on land formerly owned by Richard T. and Laura C. Wilson. The neighborhood was platted to encompass eleven blocks with fourteen to twenty building lots bounded by Grace Church Road, the B&O Railroad's Metropolitan Branch, Fenwick Road and the Brookeville and Washington Turnpike (now Georgia Avenue). Lots ranging from $225 to $600 apiece were sold and several homes were constructed by 1890. The subdivision included graded, tree-lined streets and sidewalks. In addition to the Metropolitan Branch, the Washington, Woodside and Forest Glen Railway (also called the Forest Glen Trolley) provided a stop at Woodside.

A contiguous addition to Woodside was made by Benjamin Leighton in 1890, located to the north of the original platted area. This expansion comprised seven blocks with six to twenty-two parcels each. In 1891, a portion of Leighton's original Woodside was subdivided again by William L. King and J. Henry Gulick to create sixteen lots.

The earliest homes constructed in the neighborhood feature architectural styles popular at the time: Queen Anne, Colonial and Tudor Revival, and Craftsman and Bungalow. Growth of Woodside continued over the subsequent decades, developing all available parcels by the 1940s. In the 1950s and 1960s, contemporary brick homes were constructed within Woodside, while more recently, modern homes referencing historic architectural styles have been built.22

North Woodside

North Woodside is an early-to-mid twentieth century subdivision adjacent to Woodside and located north and northeast of Lyttonsville and Rosemary Hills, across the B&O Railroad's Metropolitan Branch. The area is approximately bound by Second Avenue, Glen Ross Road, and Luzerne Avenue and its proximity to Silver Spring resulted in the neighborhood quickly becoming a desirable residential location. Although the neighborhood post-dates construction of the Talbot Avenue Bridge, the bridge allowed Lyttonsville residents a simpler route to North Woodside for employment opportunities and access to goods and services.

North Woodside's development began in 1925 when the earliest sections were subdivided and developed by Joseph Clagett and Julius Stadler, businessmen, investors, and real estate developers. The duo advertised heavily in Washington, DC, newspapers and constructed Colonial Revival and Craftsman-style dwellings. The men did not use stock plans or a consistent model, but did integrate unifying features to their designs. This provided a cohesive yet original look to each building in the North Woodside development. A later development phase beginning in 1937 was platted by Louis Schneider and featured brick, one-and-one-half story dwellings; two-story homes became common by 1940. The last section of North Woodside to develop was along Luzerne Avenue and Louis Avenue; these streets were platted in 1950 and 1962, respectively. Homes in this area are largely contemporary with similar floor plans and little ornamentation. Many of the homes in North Woodside have undergone extensive alterations over time, including changes to exterior materials and fenestration, rear and side additions, and decorative details.23

Baltimore & Ohio Railroad and the Metropolitan Branch

During the early nineteenth century, the United States experienced rapid transportation progress, seeing a rise in canal, turnpike, and railroad construction as the country's expansion continued west of the Appalachian Mountains. These new routes facilitated commerce and led East Coast businessmen to invest in risky transportation projects with potentially substantial investment returns. Desire to exploit the newly settled region's resources caused companies to compete with one another to become the first to construct

21 "Up the Metropolitan Road," The Evening Star, June 1, 1889.
22 Catherine Crawford, "Woodside Historic District," Maryland Historical Trust/State Historic Sites Inventory Form, June 1984.
routes to the Ohio and Mississippi Rivers. The Erie Canal’s opening in 1825 resulted in increased trade along the Hudson River and Lake Erie, drawing increased attention to the need for a westward trade route for other East Coast cities.

The Erie Canal’s immediate success caused officials in other East Coast cities to swiftly consider ways to capitalize on this potential for growth and increased commerce. On February 28, 1827, the B&O Railway Company was chartered with plans to construct a railroad from Baltimore to the Ohio River. Local Baltimore businessmen sponsored the venture, viewing railroad construction as a necessity to maintain Baltimore’s ability to compete economically with Philadelphia and New York. Rail travel had become widespread in the United Kingdom and investors hoped for a similar outcome in the United States since rail was generally viewed as a more efficient alternative to canal or turnpike construction.

The planned line first extended from Baltimore to Wheeling, West Virginia, located on the Ohio River, a distance of approximately 400 miles. Having little experience in railroad construction, the project encountered multiple delays largely stemming from disagreements between engineers and the B&O Railroad’s board of directors. Disputes largely surrounded engineering issues including track type, rail beds, bridges, grades, and curves. Maryland’s rolling piedmont terrain also posed challenges. Lack of prior large-scale United States railroads made these issues more apparent, though fiscal concerns and transport needs forced the B&O Railroad’s executives to hastily make decisions. Officials agreed upon an 82-mile initial segment that followed the Patapsco River near Relay, Maryland, to the Potomac River at Point of Rocks, Maryland. At Point of Rocks, the line would continue alongside the Potomac River to Harpers Ferry, Virginia (now West Virginia).

On the symbolic date of July 4, 1828, construction commenced on the line’s first thirteen miles. A large ceremony marked the event accompanied by a parade and 50,000 spectators. This short line originated in Baltimore and extended to Ellicott’s Mills, west of Baltimore. B&O Railroad began operating the line to Ellicott’s Mills on May 24, 1830, with the earliest rail cars pulled by horses.

By 1832, construction had proceeded as far as Point of Rocks, approximately 70 miles west of Baltimore. Construction was stopped due to conflict with the Chesapeake & Ohio (C&O) Canal design. The B&O Railroad had planned to construct its rail along the Potomac River’s narrow north shore, but lack of buildable land forced a court battle with the C&O Canal that resulted in a compromise on the two companies’ preferred rights-of-way. The C&O Canal would be responsible for constructing the rail bed in the narrowest areas, but the B&O Railroad was forced to pause construction beyond Harpers Ferry until the C&O Canal’s project reached Cumberland; the B&O Railroad was also required to abandon its proposed route on the Potomac River’s north bank.

The B&O Railroad reached Harpers Ferry in December 1834. At Harpers Ferry, the B&O Railroad connected to the Winchester and Potomac (W&P) Railroad via a bridge completed in 1837. Construction planning continued until 1838, when the W&P Railroad would not lease six miles of track for the B&O Railroad to continue its westward route. To proceed west, the B&O Railroad was forced to obtain a right-of-way from a federal armory located in Harpers Ferry. From there, construction moved at a quicker pace. The B&O Railroad reached Martinsburg, Virginia (now West Virginia), in May 1842 and achieved its goal of reaching Cumberland, Maryland, in November 1842. Coal quickly became the B&O Railroad’s most lucrative cargo, as it became the majority of the B&O Railroad’s freight by 1850. The B&O Railroad finally reached the Ohio River in December 1852.

New railroad technologies required the B&O Railroad to begin updating its track in the mid-nineteenth century. Heavier loads coupled with longer and faster trains necessitated track improvements, and B&O Railroad engineer Benjamin Latrobe, Jr., advocated for these changes. The Civil War, however, caused a pause in rail expansion, and war activities and battles severely damaged the existing lines and ancillary structures. Following the war, the B&O Railroad commenced a major upgrade campaign on its main line, now referred to as the Old Main Line, and its line west out of Harpers Ferry. Upgrades included solving bottleneck issues at Harpers Ferry by constructing a new bridge, track straightening, and double-tracking sections near Parrs Ridge and Point of Rocks in addition to construction of three new tunnels west of Point of Rocks. Harpers Ferry continued to experience issues until a new tunnel and track...
realignment project was completed in 1894. Over the course of the nineteenth century’s second half, the railroad continued to expand west, eventually reaching Cincinnati, St. Louis, and Chicago by 1874. Late-nineteenth century improvements coincided with construction of a B&O Railroad spur into Washington, DC, called the Metropolitan Branch, from 1866 through 1873. The B&O Railroad also expanded north to Philadelphia.

The Metropolitan Branch of the Baltimore & Ohio Railroad extended from Washington, DC, to Point of Rocks, Maryland, where it connected to the main line of the B&O Railroad. The line was conceived in 1853 when the Maryland General Assembly chartered the Metropolitan Railroad Company to provide rail service from Montgomery County to Washington, DC, eventually allowing for access to Georgetown’s port on the Potomac River. Although the company surveyed the route, financial constraints and the ensuing Civil War prevented construction. The war demonstrated the importance of having a rail line near the nation’s capital, both for strategic and future economic purposes. Following termination of the Metropolitan Railroad Company’s charter in 1865, the B&O Railroad amended the earlier surveyed route and shifted the proposed line through Silver Spring. The Metropolitan Branch opened on May 25, 1873, at a cost of $3 million and quickly became a major route for travelers and shipments along its 49-mile route to Washington, DC.

Suburban development slowly progressed along the Metropolitan Branch corridor. In the decade before the line’s completion, Montgomery County’s population increased by just over 2,000 residents. The following decade only saw an increase of approximately 4,000 people. Still, the Metropolitan Branch provided the impetus for establishing new communities along its route including Kensington, Washington Grove, Boys, and Dickerson. Agriculture-based business also improved. Farms located along the line easily shipped products into Washington, DC, and return trips transported furniture, building supplies, and equipment to the countryside. By the late 1880s, land speculators began purchasing large swaths of Montgomery County land for subdivision development. The Civil Service Reform Act in 1883 also grew the federal government, drawing workers who needed housing to the Washington, DC, area and creating demand along the Metropolitan Branch.

By the end of the nineteenth century, the B&O Railroad had laid over 5,000 miles of track. Railroad use at the turn of the century required greater improvements to the B&O Railroad’s rails. Leonor F. Loree, the B&O Railroad’s president at the time, oversaw the beginning of a system-wide upgrade that encompassed both the B&O Railroad’s Old Main Line and the Metropolitan Branch in 1901. Taking place over a twenty-year period, improvements included line reconstruction, double-tracking, new bridges, curve reduction, rail yards, and tunnels. Along the Metropolitan Branch, efficiency and speeds improved and access to rural areas in Montgomery County continued to stimulate agricultural enterprises as well as real estate development over the subsequent decades. A Metropolitan Branch spur to Georgetown was completed in 1910. Montgomery County quickly became a suburban countryside escape for Washington’s residents, particularly during the hot and humid summers. Eventually, commuters used the Metropolitan Branch for daily transportation into the city. The Metropolitan Branch was upgraded again in the 1920s and double-tracked in 1927.

The Great Depression and World War II caused drastic shifts in rail usage. From the late 1920s and through the 1930s, freight and passenger traffic declined, resulting in the abandonment of rail infrastructure such as towers, station offices, and switches. The rise of automobiles, now driving on improved roads, began to displace rail as the preferred transportation mode. Efforts to thwart the drop in rail ridership included luxury improvements such as passenger trains with reclining seats, air-conditioned cars, and faster routes; however, these enhancements proved ineffective. In 1936, the Metropolitan Branch added a stop at Silver Spring for through trains, allowing passengers to disembark in the suburbs rather than Union Station in Washington. The Silver Spring station also served as a hub for taxis, busses, and automobile parking.

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World War II reversed the B&O Railroad’s fortunes as the lines were used to quickly ship coal, supplies, and soldiers to the east coast as part of the war effort. The B&O Railroad carried on average approximately 1 million troops per day during the war as rail became the primary mode of transportation for the nation’s armed forces. Disruptions to shipping lanes and wartime gasoline and tire shortages increased reliance on rail during the war years. The railroad hub at Harpers Ferry, for example, saw the number of trains increase from six per day in the late-1930s to forty-two per day by the middle of the war. Silver Spring constructed a new station on the site of its original station in 1945.

Following World War II, rail’s decline as a preferred transportation mode continued once more. Sixteen trains ran along the Metropolitan Branch each day in 1947, but by 1955, only eleven trains made the trip. Greater automobile use coupled with truck shipments caused a steady decline in passenger and freight service. As a result, federal regulators began allowing railroad consolidation. By 1963, the B&O Railroad had reached new financial lows and merged with the Chesapeake and Ohio Railroad. The two companies acquired Western Maryland Railroad the following year, and by the 1970s became one freight rail company called the Chessie System while Amtrak assumed control of passenger rail service. By the early 1980s, Amtrak discontinued service to Silver Spring. Maryland Area Regional Commuter (MARC) train service began operating commuter rail service along the Metropolitan Branch in 1984 and the line is still used for that purpose. The Chessie System later merged with Seaboard Coast Line Industries and became CSX Transportation in 1987.

Bridge Technology

The Talbot Avenue Bridge includes a central plate girder span with rolled girder approach spans. These simple structures consist of girders fashioned from plates riveted together or as single, rolled beams supporting a timber or concrete deck. Technological and financial constraints in the mid-nineteenth century led to greater plate girder use in construction due to manufacturers’ abilities to cast smaller members later riveted together into single girders. Rolled girders or beams were not widely used until the twentieth century.

Built-up, plate girder bridges, assembled by riveting steel plates together to form a beam, were popular with railroads and allowed the lines to achieve maximum vertical clearance. At the time, metal beams and plates used for bridge construction consisted of wrought or cast iron. By the end of the nineteenth century, industrial developments allowed steel to become a cost-efficient and preferred structural material. Plate girder bridges were recognized as being suited for longer spans from 65 to 100 feet. Generally, plates were riveted in an assembly shop and taken by rail to the installation location. By 1905, the American Railway Engineering Association and similar engineering groups had developed standard plans and specifications for a number of girder bridge types.

Rolled girder bridges later became an alternative and economical solution, as did concrete bridge forms, although rolled beams were not typically used on bridges until the 1920s and 1930s. The beams were cast at rolling mills according to project requirements, allowing for beams to fit a variety of bridge lengths. Most bridge spans would consist of three or more parallel beams with decking laid on top. The earliest rolled bridges date to 1917 and contained I-beam spans with timber decking. Concrete decks quickly supplanted timber decks. Rolled girders were generally used for shorter spans of thirty feet or less.

In Maryland, the earliest metal girder bridges were constructed by the state's railroads. The first plate girder bridge was built by the Baltimore & Susquehanna Railroad in 1846. Weighing 14 tons with a 50-foot span, the bridge was pre-assembled and taken by rail to the site. Due to this efficiency, plate girder bridges quickly became the railroads’ preferred bridge type. In the early 1900s, the B&O Railroad undertook a large rebuilding campaign and refitted the railroad with plate girder bridges at many of its crossings, including plate girder center spans for trestles. For highway bridges, built-up, riveted plate girders were used by the late-nineteenth and early twentieth centuries. These bridges were fairly rare, however, due to expenses incurred creating plate girders and the availability of rolled girder and concrete bridge forms. Concrete decking was featured on steel bridges by 1921. Metal deck girder and through plate girder bridges became common bridge forms through the 1930s and were often implemented at railroad grade crossings. In Maryland, only reinforced concrete bridge construction outpaced metal girder bridges between 1900 and 1930.

Though the earliest plate girders were formed by riveting the beam sections together, by the 1950s most were welded. Weld flaws discovered in the 1970s changed the way girders were assembled, favoring splices and bolted attachments. Rising steel prices in the 1960s led to a decline in rolled beam use. Built-up plate girders are still commonly used in highway construction.28

**Talbot Avenue Bridge**

The Talbot Avenue Bridge is owned by Montgomery County and located in Silver Spring on the south side of 4th Avenue/Grace Church Road and connects the North Woodside and Woodside neighborhoods south to Lyttonsville and Rosemary Hills via Talbot Avenue. The roadway bridge was constructed in 1918 over the Metropolitan Branch of the B&O Railroad near the Georgetown Branch junction, replacing an earlier bridge that had become functionally and structurally obsolete at the location. A new bridge allowed for a wider railroad bed below and improved the clearance height by 2.5 feet. The Talbot Avenue Bridge’s construction coincided with a B&O Railroad system-wide upgrade that took place over a twenty-year period beginning in 1901, though no direct link between the existing bridge and the upgrade campaign was identified during research. The steel used to construct the bridge’s spans may have originated from Martinsburg, West Virginia, the location of the B&O Railroad’s Bridge and Machine Shop. Although local tradition indicates that the metal may have come from a turntable from the Martinsburg facility, this information could not be confirmed.29

A 1986 rehabilitation of the Talbot Avenue Bridge resulted in new wood decking and replacement or reinforcement of some of the substructure’s steel members. A 1993 inspection report rated the bridge in fair to poor condition with section loss, corrosion, and cracking. In 1997, it was noted that rust and delaminated sections were commonplace, bents were damaged and corroded, the decking suffered from rot, and abutments were eroding. Between 1998 and 2000, CSX, a subsequent owner after the B&O Railroad, transferred the ownership of the bridge to Montgomery County. Efforts to close the bridge for safety reasons failed, although in 2007, the bridge was temporarily closed for repairs and reopened in November 2008.30 In 2017, the bridge was permanently closed to vehicular traffic after failing a safety inspection.31

The bridge is slated for removal as part of the Purple Line Project. The Purple Line is a proposed 16.2-mile light rail line that will extend from Bethesda in Montgomery County to New Carrollton in Prince George’s County. A portion of the line will be constructed

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29 Email exchange among Guy Blanchard, Al McEvoy (B&O Railroad Historical Society Archives Coordinator), and Ben Sullivan (B&O Railroad Historical Society), June 22, 2017.


over the former rail bed of the B&O Railroad Georgetown Branch and alongside the existing CSX railroad tracks, formerly the B&O Railroad Metropolitan Branch. The existing railroad bed will be widened to accommodate Purple Line tracks. As a result, the Talbot Avenue Bridge will be removed because it will not be able to span the widened area. As of mid-2018, plans to include remnants of the bridge along portions of the proposed Purple Line alignment were being considered by project and county officials.
9. Major Bibliographical References


See Continuation Sheet

10. Geographical Data

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Verbal boundary description and justification

The historic property boundary is limited to the structure itself and includes its abutments, bents, girders, decking, and railings.

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The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust
Maryland Department of Planning
100 Community Place
Crownsville, MD 21032-2023
410-514-7600
Maryland Historical Trust
Maryland Inventory of Historic Properties Form

Name
Continuation Sheet

Number 8 Page 1

Major Bibliographical References, continued


Email exchange among Guy Blanchard, Al McEvoy (B&O Railroad Historical Society Archives Coordinator), and Ben Sullivan (B&O Railroad Historical Society). June 22, 2017.


Montgomery County Department of Transportation. 2013 Bridge Inventory Summary. October, 2014.


Moser, Jason D. “M 76 over B&O RR (Stoneybrook Drive Bridge).” Maryland Inventory of Historic Bridges/Historic Bridge Inventory/Maryland State Highway Administration/Maryland Historical Trust. State Highway Administration, Brooklandville, 1995.


"Up the Metropolitan Road." *The Evening Star*, June 1, 1889.

Photo Log

Talbot Avenue Bridge
M: 36-30
Silver Spring, Montgomery County

All photographs were created using HP 831A Ink Cartridge and HP Professional Satin Photo Paper.

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Talbot Avenue Bridge, view to the south

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Talbot Avenue Bridge, decking, view to the southwest

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Talbot Avenue Bridge, view to the southwest

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Talbot Avenue Bridge, northwest railing detail

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Talbot Avenue Bridge, southeast railing detail

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Talbot Avenue Bridge, view to the northeast

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View to the northwest from Talbot Avenue Bridge

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MD SHPO

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Talbot Avenue Bridge
Montgomery County, MD
S. Föll
10/2017
MD SHPO
Decking, view to the southwest
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Talbot Avenue Bridge
Montgomery County, MD

S. Foell
10/2017

MD SHPO

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Montgomery County, MD

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MD SHPO

View to the northwest from Talbot Avenue Bridge

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historic

and/or common  
Talbot Avenue Bridge

2. Location

street & number  
Talbot Avenue Intersection With 4th Avenue

__ not for publication

city, town  
Silver Spring

__ vicinity of  
congressional district 13

state  
Maryland

county  
Montgomery

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____ industrial  
____ military  
 X transportation  
 ____ other:

4. Owner of Property  
(give names and mailing addresses of all owners)

name  
Montgomery County Government

street & number  
101 Monroe Street

telephone no.:  

__ state and zip code  
Maryland 20850

5. Location of Legal Description

courthouse, registry of deeds, etc.  
Department of Assessments & Taxation  
Right of Way

street & number  
101 Monroe Street

folio

city, town  
Rockville  
__ state  
MD 20850

6. Representation in Existing Historical Surveys

title  
None

date  

 federal  
 state  
 county  
 local

pository for survey records

city, town  

state
Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

The Talbot Avenue Bridge is a single span through girder roadway bridge constructed in 1916. Its primary support system consists of steel I-beam plate girders that serve as stringers. The steel plate girders support the wooden deck of the Talbot Avenue crossing of the CSX Railroad tracks near the community of Woodside in Montgomery County. The length of the bridge is 135 feet.

The bridge's plate girders are supported by bents constructed of steel I-beams constructed of steel I-beams supported on concrete footings.

This bridge is along the alignment of the CSX Railroad in eastern Montgomery County, Maryland. The CSX alignment includes three set of railroad tracks at this location.

The Talbot Avenue Bridge was constructed during the second decade of the 20th century. It is representative of steel plate girder roadway bridges associated with the early 20th century transportation infrastructure of Maryland during the period between World War I and World War II. It reflects civil engineering design and building technologies associated with expansion of the transportation infrastructure during the post-World War I period of economic expansion.

This structure has two main components. The substructure consists of the steel bents that support the two ends of the bridge. The superstructure component includes two large steel plate girders, smaller supporting girders, and the wooden roadway deck. The steel plate girders span the opening between the vertical trestle supports.

This bridge appears to retain its original integrity. Except for normal maintenance, it does not appear to have been rebuilt or otherwise altered from its 1916 condition.

CONTRIBUTING RESOURCE COUNT: One.
The Talbot Avenue Bridge appears to merit further study to evaluate its eligibility for nomination to the National Register of Historic Places or Maryland Register of Historic Properties.

It is associated with the economic significance of land vehicle and railroad transportation in Montgomery County during the first half of the 20th century. This bridge exceeds the normal minimum age standard of fifty years or older for consideration of historical significance.

This bridge appears to largely retain its original integrity. It does not appear to have undergone remodeling that may have affected its potential historic character. It is representative of civil engineering design and technology during the first part of the 20th century.
10. Geographical Data

Acreage of nominated property 0.1 acre

Quadrangle name Kensington

Quadrangle scale 1:24,000

UTM References do NOT complete UTM references

Verbal boundary description and justification

The property consists of the structure of the Talbot Avenue Bridge over the CSX Railroad.

List all states and counties for properties overlapping state or county boundaries

<table>
<thead>
<tr>
<th>state code</th>
<th>county code</th>
</tr>
</thead>
</table>

11. Form Prepared By

name/title Daniel Koski-Karell, President

organization Karell Archeological Services

date 15 August 1995

street & number P.O. Box 342

telephone (202) 333-1492

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust

Shaw House

21 State Circle

Annapolis, Maryland 21401

(301) 269-2438
FRAMEWORK FOR IDENTIFYING COMPREHENSIVE PLAN DATA

HISTORIC CONTEXT:

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA

Geographic Organization: Piedmont.


Historic Period Theme: Transportation.

Resource Type:

Category: Structure.

Historic Environment: Suburban.

Historic Functions and Uses: Bridge for roadway crossing of a major railroad alignment.

Known Design Source: None.
RESOURCE SKETCH MAP

Talbot Avenue Bridge.
Vicinity of Silver Spring,
Montgomery County, MD.

CXS RR Tracks

4th Avenue

Talbot Ave. Bridge

NORTH

Scale in Feet

0 30
1. Mi: 36-30
2. Talbot Avenue over CSXT Railroad
4. Tim Tamburino
5. 3-97
6. MD SHPO
7. West Approach
8. Lot 5
1. m' 36-30
2. Talbot Avenue over CSXT Railroad
4. Tim Tamburrino
5. 3-97
6. MO SHPO
7. West elevation
8. 2 of 5
1. M: 36-30
2. Talbot Avenue over CSXT Railroad
3. Montgomery Co., MD
4. Tim Tam Bunting
5. 3-97
6. MD SHPO
7. West approach
8. 3 of 5
1. M: 36-30
2. Talbot Avenue over CSXT Railroad
3. Montgomery Co. MD
4. Tim Tamburrino
5. 3-97
6. MO SHPO
7. Deck
8. 4 of 5
1. M: 36-30
2. Talbot Avenue over CS&T Railroad
3. Montgomery Co, MD
4. Tim Tam Serrind
5. 3-97
6. MD SHPO
7. East elevation, detail of
8. 5 of 5
M: 36-30
TALBOT AVENUE BRIDGE
MONTGOMERY COUNTY, MD.
Luis Ortiz
August 1995
MARYLAND SHPO
View Looking Southeast, North West
Elevation of Bridge.

1 of 1