REHABILITATION OF
BROAD BRANCH ROAD, NW
WASHINGTON, DC

October 2013

SECTION 106 CULTURAL RESOURCES AND EFFECTS REPORT

d.
District Department of Transportation

U.S. Department of Transportation
Federal Highway Administration

DRAFT

REHABILITATION OF BROAD BRANCH ROAD, NW WASHINGTON, DC

SECTION 106 CULTURAL RESOURCES AND EFFECTS REPORT

In Cooperation with
U.S. Department of the Interior
National Park Service
Rock Creek Park

Washington, D.C.
District Department of Transportation

OCTOBER 2013

PUBLIC VERSION

ES EXECUTIVE SUMMARY

The District Department of Transportation (DDOT) and the Federal Highway Administration (FHWA), in conjunction with the National Park Service (NPS) are proposing to rehabilitate a 1.5-mile segment of Broad Branch Road, NW between Beach Drive and Linnean Avenue on the west edge of Rock Creek Park. FHWA has oversight responsibility for the Federal-aid program and is participating in the funding of the project. The existing two-lane Broad Branch Road occurs within DDOT right-of-way and is maintained by DDOT. South of 27th Street, NW, the eastern edge of the roadway borders Rock Creek Park, an administrative unit of the NPS.

The purpose of the proposed action is to rehabilitate Broad Branch Road to satisfy operational, safety, and multi-modal tranportation needs in a manner keeping with the setting of the project area. The project needs are a culmination of infrastructure deficiencies, including deteriorating pavement, inadequate storm water management systems, and aging and inadequate structures; safety concerns due to substandard roadway geometrics and the lack of separate facilities for pedestrians and bicycles; gaps in system linkage for pedestrians and bicyclists to community and residential areas adjacent to Broad Branch Road including NPS facilities including Rock Creek Park and Soapstone Valley trail systems; and legislation: the District of Columbia's Priority Sidewalk Assurance Act of 2010. Context sensitive solutions will take into account the adjoining land uses including residential, foreign diplomatic properties, institutional developments, community resources, and wooded areas, including Rock Creek Park. Improvements to the corridor will consider all modes of transportation including motorized vehicles, bicycles and pedestrians.

Cultural resources identified within the project area of potential effects (APE) include one unnamed Civil War battery (51NW169) associated with the Civil War Fort Sites and Fort Circle Park System Historic District; archaeological potential for historic features associated with the Rock Creek Park Historic District (RCPHD) along Broad Branch such as stone retaining walls or a stone dam near the Soapstone Creek culvert; contributing and non-contributing architectural elements associated wtih the RCPHD; a stone pedestrian bridge; roadway and water control features associated with District of Columbia (DC) infrastructure; residences; and educational and health facilities. Although the boundary of site 51NW169 extends into the APE, no features associated with the Civil War battery location occur within DDOT right-of-way. Archaeological deposits related to the unnamed Civil War battery are not likely to occur beneath Broad Branch Road as the road was constructed in 1839 prior to construction of any Civil War defenses.

Architectural features associated with the RCPHD include: Grant Road Bridge; Broad Branch Road Bridge; Ridge Road Bridge; Grant Road; Ridge (Glover) Road; a historic trail on the east side of Broad Branch Run (part of the Western Ridge Trail network); Soapstone Creek culvert; storm water outfalls with stone headwalls; stone retaining walls; and stone boundary markers.

Architectural features associated with DC Roadway and Infrastructure include Broad Branch Road, 27th Street, the 27th Street Bridge, roadway guard rails, and water control resources such as storm sewer outfalls and inlets, retaining walls, culverts, stone channels, and circular features.

Twenty-five of thirty-five residential structures along Broad Branch Road are older than 50 years. At the request of the District of Columbia State Historic Preservation Office (DC SHPO) based on their examination of the project area, the gatehouse for La Villa Firenze, the estate currently serving as the residence of the Italian Ambassador to the United States, was evaluated for eligibility for listing in the National Register of Historic Places (NRHP) and determined eligible. Based on the DC SHPO assessment, the other houses are not likely to be individually eligible nor are they likely to comprise an historic district that would be eligible for the NRHP.

Educational and health facilities in the Broad Branch Road project area include the Carnegie Institution's Broad Branch Campus containing the Department of Terrestrial Magnetism and Geophysical Laboratory; the Ingleside Manor at the Presbyterian Home, and the Hillwood Estate, Museum and Gardens.

Two historic trails in which segments are considered contributing elements fo the Historic Trails Cultural Landscape are present along the southern end of the project area near the intersection of Broad Branch Road and Beach Drive. Visual intrusions to the viewshed of this cultural landscape of RCPHD would be minimized with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls during outfall replacement. Temporary visual and audible intrusions to the two trails associatedwith the Rock Creek Park cultural landscape will likely occur during the period of construction for any of the alternatives for reconstruction of Broad Branch Road. Long-term visual intrusions are not expected to occur because the roadway will be rehabilitated in its existing corridor. Long-term audible intrusions are not anticipated because reconstruction of Broad Branch Road is not a capacity-building project; no increased noise from additional vehicular traffic is expected to occur.

The No Action Alternative and Options A, B, and C would result in no effects to archaeological sites, historic structures/architectural resources and cultural landscapes.

Alternatives 2, 3, and 4 would not affect historic archaeological resources.

Alternatives 2, 3, and 4 will result in adverse effects to contributing elements to the RCPHD: the demolition of Soapstone Creek culvert, segments of historic stone retaining walls, and storm water outfall headwalls. In addition, Alternatives 2, 3, and 4 will result in adverse effects to the NRHP-eligible La Villa Firenze from demolition of the original stone retaining walls at the gatehouse driveway entrance. In addition, Alternatives 2, 3, and 4 would result in short-term visual and audible effects to historic structures during construction.

Alternatives 2, 3, and 4 would result in no adverse effects to cultural landscapes with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls

during outfall replacement. In addition, Alternatives 2, 3, and 4 would result in short-term visual and audible effects to cultural landscapes during construction.

Because the Broad Branch Road rehabilitation project will have an adverse effect on NRHP-listed or eligible resources, a Memorandum of Agreement (MOA) will be prepared to resolve and mitigate the adverse effects in accordance with Section 106 of the National Historic Preservation Act.

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1 PROJECT BACKGROUND

The District Department of Transportation (DDOT) and the Federal Highway Administration (FHWA), in conjunction with the National Park Service (NPS) are proposing to rehabilitate a 1.5-mile segment of Broad Branch Road Road, NW between Beach Drive, NW and Linnean Avenue, NW on the west edge of Rock Creek Park (**Figure 1-1**). FHWA has oversight responsibility for the Federal-aid program and is participating in the funding of the project. The existing two-lane Broad Branch Road occurs within DDOT right-of-way and is maintained by DDOT. South of 27th Street, NW, the eastern edge of the roadway borders Rock Creek Park, an administrative unit of the NPS.

The purpose of the proposed action is to rehabilitate Broad Branch Road to satisfy operational, safety, and and multi-modal tranportation needs in a manner keeping with the setting of the project area.

The needs for improvements to Broad Branch Road relate primarily to infrastructure deficiencies, including deteriorating pavement, and inadequate storm water management systems with aging and inadequate structures; the safety of motorists, pedestrians, and bicyclists due to substandard roadway geometrics and the lack of separate facilities for pedestrians and bicycles; gaps in system linkages for pedestrians and bicylcists to community and residential areas adjacent to Broad Branch Road including NPS Rock Creek Park and Soapstone Valley trail systems; and legislation: the District of Columbia's Priority Sidewalk Assurance Act of 2010.

Context sensitive solutions will take into account the adjoining land uses including residential, foreign diplomatic properties, institutional developments, community resources, and wooded areas, including Rock Creek Park. Improvements to the corridor will consider all modes of transportation including motorized vehicles, bicycles and pedestrians.

1.1 PROJECT DESCRIPTION

Broad Branch Road is a two-lane roadway located in northwest Washington, D.C. The portion of Broad Branch Road in the current project area extends from Linnean Avenue to just north Beach Drive, a distance of approximately 1.5 miles. For much of its length, the roadway parallels the channel of Broad Branch. The approximately 170-acre Broad Branch watershed is a highly urbanized sub-watershed of Rock Creek. Rock Creek Park (owned by NPS) is located immediately east of Broad Branch Road south of 27th Street, which creates a wooded, rural-like setting for much of the project corridor (Figure 1-1). Rock Creek Park is one of the largest forested urban parks in the United States, nearly a mile wide in some places, and contains a wide variety of natural, historical, and recreational features in the midst of Washington, D.C. It is this rural-like context within an otherwise urbanized area that residents and users suggest make this roadway very unique.

Figure 1-1. Broad Branch Road Project Location Map

Areas west of 27th Street include single and multi-family residential, institutional, and additional park land. The Carnegie Institution of Washington, Department of Terrestrial Magnetism (DTM), a scientific research facility, and Ingleside at Rock Creek, a retirement facility, occur to the north of the roadway. Residences, including those for the ambassadors of Tunisia, Ivory Coast, and Peru also occur in this area. Park land on both the north and south ends of the Broad Branch Road corridor comprise portions of the Civil War Defenses of Washington (Fort Circle Parks) system, another management unit of the NPS. South of 27th Street, areas to the west of Broad Branch Road include the residential neighborhood of Forest Hills, embassy residences for Italy and Malaysia, a trailhead for Soapstone Valley Trail, and Hillwood Museum and Gardens. A small triangle park is located in the traffic island at the intersection of Broad Branch Road and Brandywine Street.

At its southernmost point, Broad Branch Road crosses into NPS property before intersecting with Beach Drive. The road alignment becomes Blagden Avenue after it crosses Rock Creek.

1.2 PROPOSED UNDERTAKING

The proposed undertaking is sponsored by the FHWA and involves federal assistance and federal permitting, licensing, or approval (36 CFR 800.16(y)). As a result, the proposed undertaking is under the purview of Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA governs federal actions that could affect historic properties, as identified in Section 2.2. Identification of National Register of Historic Places (NRHP)-eligible resources, including archeological sites, architectural resources, and Native American resources, was conducted according to requirements of 36 CFR 800 for Section 106 of the NHPA. The Section 106 process was initiated with the District of Columbia State Historic Preservation Office (DC SHPO) on February 24, 2011.

The proposed undertaking is being analyzed in an Environmental Assessment (EA) prepared by DDOT and consists of three Candidate Build Alternatives and the No Action Alternative. The following subsections describe the No Action and three proposed Candidate Build Alternatives for the rehabilitation of Broad Branch Road. Alignment plans for each of the three Candidate Build Alternatives are presented in **Appendix A.**

1.2.1 NO ACTION ALTERNATIVE

Under the No Action Alternative (Alternative 1), the improvements to Broad Branch Road would include short-term minor restoration activities (safety and routine maintenance) that maintain the continuing operation of the existing roadway. Uncontrolled storm water would continue to erode the roadway creating a continuous cycle of road maintenance.

The existing roadway is located within DDOT right-of-way, with minor exceptions. These exceptions occur in six short sections along the project corridor where the existing roadway was constructed outside DDOT-owned property. These small areas account to a total area of 923 square feet. All but one location are located on the east side of the roadway where the northbound lane encroaches on NPS-owned property in Rock Creek Park. The single encroachment on the west side of the roadway occurs where a curve in the southbound lane enters private property owned by a Sovereign Nation (the Republic of Peru). The location of the roadway, outside of the DDOT-owned

right-of-way, may be due to inconsistencies in survey bounds that existed when the current Broad Branch Road was constructed or may be the result of previous repaving projects. The Environmental Assessment will serve to provide the appropriate action needed to correct these inconsistencies, which may include an easement, land transfer, or permit.

1.2.2 CANDIDATE BUILD ALTERNATIVE 2

Candidate Build Alternative 2 is the minimum width alternative that meets the purpose and need of the project. It consists of two 10-foot travel lanes with standard curb and gutter on the east side with either a standard curb and gutter or a linear rain garden (bio-swale) to capture stormwater runoff on the west side (**Figure 1-2**). This alternative allows all elements of the reconstructed roadway to be located within the existing DDOT right-of-way. The 10-foot-wide linear rain garden will be provided for approximately 1,000 feet southward of Linnean Avenue.

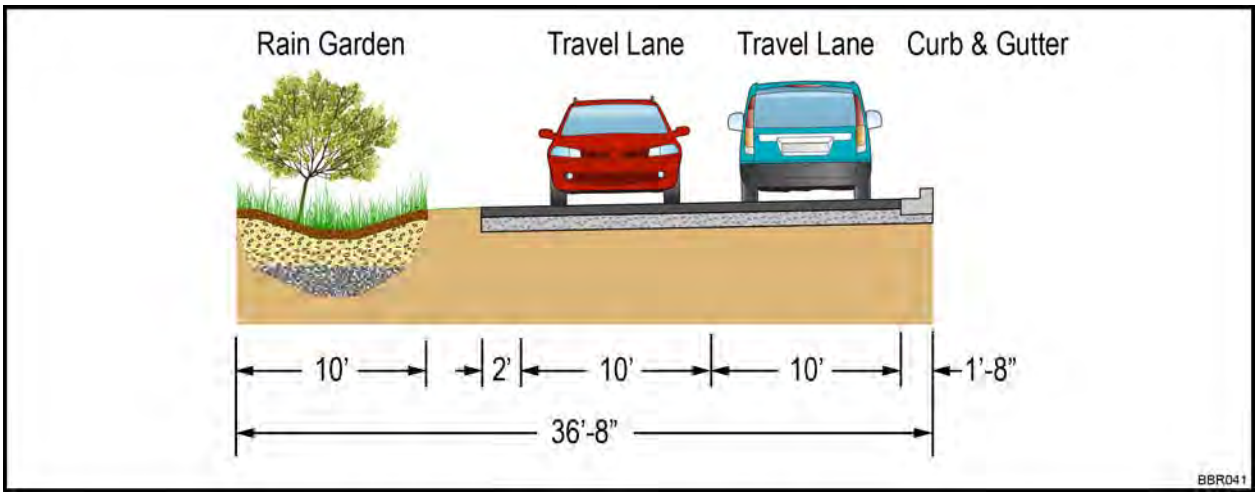

Figure 1-2. Alternative 2

This alternative has a cross-section width ranging from approximately 23 to 34 feet. Areas requiring cut-and-fill activities outside the existing right-of-way are limited to nine discrete locations totaling 249 square feet (91 square feet on the east side and 157 on the west side) and would be accomplished through easements. No permanent right-of-way acquisition would be required for the entire length of the roadway.

Some sections of roadway will require new or replacement retaining walls (or coping walls) to minimize cut-and-fill areas and to limit improvements to the DDOT-owned right-of-way. Runoff from uphill areas behind the walls would be collected in concrete ditches behind the retaining walls and conveyed to existing outfalls via channels or storm sewers. On the east side of the roadway along the banks of Broad Branch, approximately nine segments of retaining walls, totaling over 1,750 feet in length, are estimated to be required. The walls are designed to extend 3.5 feet above the top of the curb, as viewed from within the roadway, to meet DDOT safety standards. To meet these standards and accommodate the steep slope along the edge of the roadway, the total wall height ranges from 8 to almost 15 feet. Much of this height will occur below ground surface so the portion of the wall visible from the stream sidewill be about 4.5 to 6.5 feet high (**Figure 1-3, Table 1-1**). Potential methods for constructing walls on the east side include reinforced concrete walls faced with stone or dry-stacked gravity walls constructed of local stone

(where feasible). Compatible materials may also be brought to the site to supplement existing materials. Walls on the west side would be reinforced concrete faced in stone. The type and depth of wall footers on both the east and west sides will be contingent on the results of geotechnical analysis to be conducted during the final design phase of the project. The majority of walls proposed on the east side of the roadway would be located within several feet of or partially overlap the footprint of existing stone walls. Several of these walls are contributing resources to the Rock Creek Park Historic District and traverse both DDOT and NPS property. DDOT will conduct necessary engineering studies, including stability analysis and wall crash rating analysis, to assess the condition of existing walls. The information will be used to determine whether new walls will need to be constructed to replace existing walls or whether existing walls can be restored and stabilized in their existing location to meet design standards. Where replacement structures are required, DDOT will construct the new walls within the existing wall's footprint. DDOT will also examine feasible methods to tie new walls into existing walls while ensuring structural stability and safety. Where existing walls cannot be restored, stone from the walls will be retained for potential reuse in the construction of new walls. The approximately 12 retaining walls on the west side of the roadway are estimated to range in height from 3 to 7 feet above the top of the curb and total nearly 2600 feet in length. Slope stability analysis will be conducted during final design to confirm the requirement for walls on the west side; walls may be eliminated or reduced in height based on this analysis.

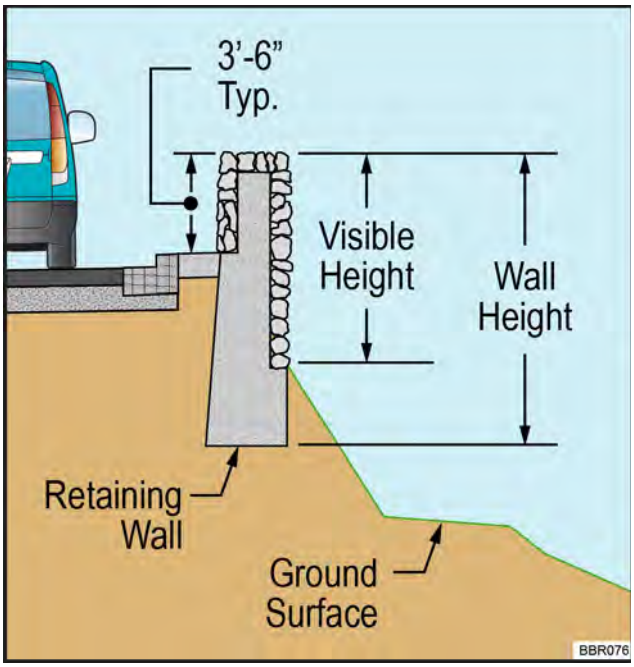

Figure 1-3. Typical retaining wall segment along the east side of Broad Branch Road, facing north

Table 1-1. Retaining Walls – Candidate Build Alternative 2 (measurements in feet)

WEST SIDE						EAST SIDE					
SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH	SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH
R1W	28+30	30+00	4.50	4.50	169	R1E	29+64	30+40	13.50	6.00	79
R2W	33+15	35+60	3.50	3.50	244	R2E	32+74	33+05	9.00	3.75	31
R3W	44+45	45+11	4.00	4.00	72	R3E	33+90	34+15	11.00	4.25	25
R4W	46+58	49+07	3.00	3.00	252	R4E	38+54	38+73	13.25	4.00	18
R5W	51+39	55+36	6.00	6.00	392	R5E	45+90	46+34	14.25	5.50	44
R6W	63+81	65+13	3.50	3.50	129	R6E	47+75	49+95	14.75	6.75	220
R7W	65+18	65+75	5.00	5.00	58	R7E	53+53	53+68	8.00	3.25	15
R8W	69+25	72+61	5.00	5.00	336	R8E	69+34	70+15	10.50	4.50	81
R9W	78+02	80+66	4.50	4.50	266	R9E	77+03	80+25	11.00	4.50	325
R10W	83+37	86+35	7.00	7.00	302		80+25	88+50	8.75	4.00	815
R11W	86+92	87+48	5.00	5.00	56		88+50	89+49	10.50	4.00	98
R12W	88+12	91+34	4.00	4.00	322						
Total Length					**2,597**						**1,751**

A major component of the stormwater management systems improvements to be accomplished in the rehabilitation of Broad Branch Road includes replacement of the Soapstone Creek Culvert. The existing Soapstone Creek Culvert, a six-foot wide, stone arch culvert constructed in 1898, would be replaced with a 16 feet by 9 feet high precast concrete arch culvert with an opening 16 feet wide by 4 feet high. Additional improvements to the existing stormwater management system include upgrades to the 21 existing outfall locations. Although no new outfalls will be added, existing outfalls will be improved with the installation of new reinforced concrete pipe (RCP) in locations where there are existing pipes, some of which are collapsed or broken, or silted in. Replacement of stormwater pipes will require work at outfalls exiting through headwalls or retaining walls. Several of the outfalls occur on NPS property and many are contributing resources to the Rock Creek Park Historic District. Work associated with these outfalls will be conducted in consultation with the NPS. If work is to be performed by DDOT it will require a temporary construction easement. Walls surrounding existing pipes will be reconstructed after old pipes are removed, existing trenches are minimally excavated to accommodate new pipes, and new pipes are installed. Construction activities will be limited to areas immediately surrounding outfalls, following DDOT standards.

1.2.2.1 Option A – Expanded Retaining Wall

Option A for Alternative 2 includes an expanded retaining wall along the west side of the roadway between Stations 39+45 and 45+11 in an area bordering residential development. This option increases the length of the retaining wall from approximately 70 feet to approximately 560 feet. The longer wall segment will reduce the amount of cut for roadway side slopes required for rehabilitation of the roadway within the existing right-of-way. The shorter (70 foot) retaining wall meets the requirement to maintain the existing right-of-way but would require additional cut for side slopes, increasing the potential for erosion in this area.

1.2.2.2 Option B – Sidewalk

An optional 6-foot wide sidewalk can be provided on the west side of Broad Branch Road from Soapstone Creek to the NPS parking lot entrance just north of Beach Drive. This option improves linkages between Park facilities along the roadway. This option also includes a retaining wall along most of the sidewalk's length. The retaining wall varies in height from 3.5 to 12 feet. Portions of the proposed wall and sidewalk occur on property west of the DDOT right-of-way on the Hillwood Museum and Gardens estate. Construction of this option would require acquisition of right-of-way from the private owner for the new roadway elements and a minimal cut line beyond the edge of the wall. The portion of the sidewalk and retaining wall on NPS property would be built as part of a temporary construction easement. No right-of-way would be acquired from NPS.

1.2.2.3 Option C – T-Intersection at Brandywine Street

A new T-intersection is proposed at Brandywine Street to replace the existing forked Y-intersection. The reconfiguration of this intersection is being proposed to reduce the paved area and incorporate additional low impact development (LID) techniques in the roadway design with rain gardens in the interior corners of the new intersection. The reconfigured intersection will also improve roadway safety by minimizing crash risk for northbound drivers on Broad Branch Road turning left

onto Brandywine Street. Requiring drivers to stop at a stop sign at the T-intersection, instead of yielding as with the existing Y-intersection, will also reduce speeds at the intersection.

1.2.3 CANDIDATE BUILD ALTERNATIVE 3

Candidate Build Alternative 3 consists of two 10-foot travel lanes, a 6-foot wide sidewalk on the west side of the roadway for the entire length, and standard curb and gutter (**Figure 1-4**). A 10-foot wide linear rain garden will be provided for approximately 1,000 feet southward of Linnean Avenue where the curb and gutter will be located only along the west side of the roadway. South of that, a 4-foot wide planting strip will separate the sidewalk and roadway for the length of the project and the curb and gutter will be located on both sides. Alternative 3 extends the proposed sidewalk from the end of the DDOT right-of-way into a 6-foot wide sidewalk that reaches the Rock Creek Park parking lot entrance just north of Beach Drive.

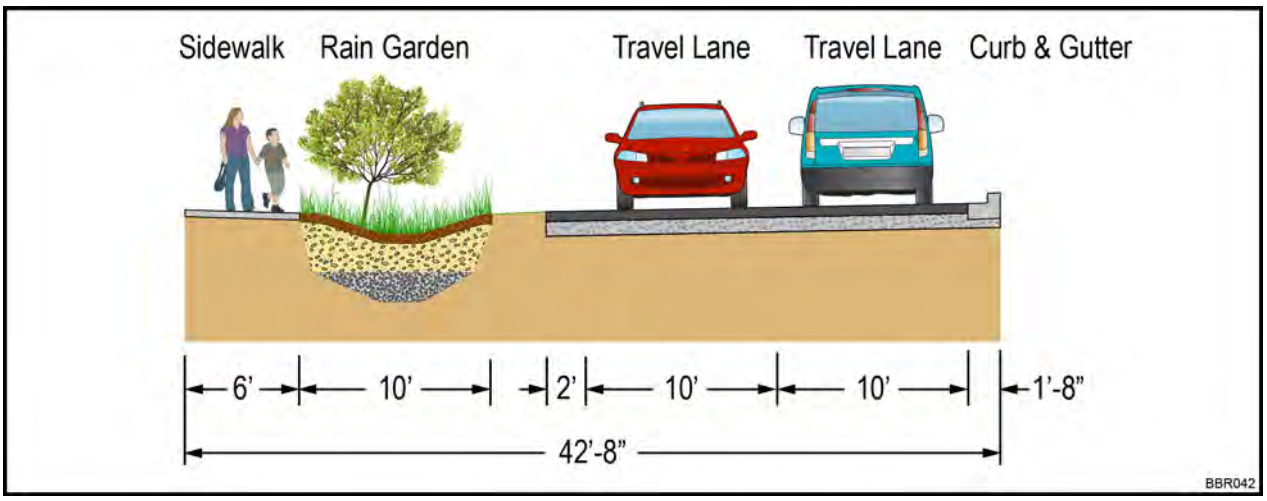

Figure 1-4. Alternative 3

This alternative has a cross-section width ranging from approximately 33 to 43 feet from curb to outer edge of sidewalk. In addition to the areas where the current roadway exceeds existing right-of-way as noted in Section 1.2.1, new right-of-way will be required on the west side along narrow portions of the roadway to accommodate the new sidewalk. Limited right-of-way, approximately 39 square feet, may be required along the east side of the roadway on NPS land to accommodate the construction of proposed new retaining walls; however, the final locations of new retaining walls and need for additional right-of-way will be determined after completion of engineering studies to assess the condition of existing walls prior to a determination regarding the need for new walls. In addition to the potential for right-of-way acquisition, narrow areas proposed for grading (fill) occur along the right-of way, the largest of which is approximately 2 feet wide by 50 feet long at the southern end of the project area south of Ridge Road (Station 91+00). Any grading outside the existing DDOT right-of-way will require a temporary construction easement.

Some sections of roadway will require retaining walls (or coping walls) to minimize right-of-way requirements and stabilize slopes. Like Candidate Build Alternative 2, runoff from uphill areas behind the walls would be collected in concrete ditches behind the retaining walls and conveyed to existing outfalls via channels or storm sewers. On the east side of the roadway along the banks

of Broad Branch, approximately 13 segments of retaining walls, totaling about 1,700 feet in length, are estimated to be required. Like Alternative 2, the walls are designed to extend 3.5 feet above the top of the curb, as viewed from within the roadway, to meet DDOT safety standards. The total wall height ranges from 8 to 16 feet due to the slope down to Broad Branch. Much of this height will occur below ground surface so the portion of the wall visible from the stream side will be limited to 4.5 to 6.5 feet high (**Table 1-2**). Potential methods for constructing walls on the east side include reinforced concrete walls faced with stone or dry-stacked gravity walls constructed of local stone (where feasible). Compatible materials may also be brought to the site to supplement existing materials. Walls on the west side would be reinforced concrete faced in stone. The type and depth of wall footers on both the east and west sides will be contingent on the results of geotechnical analysis to be conducted during the final design phase of the project. The majority of walls proposed on the east side of the roadway would be located within several feet of or partially overlap the footprint of existing stone walls. The wall segments are required to meet design criteria. Several of these walls are contributing resources to the Rock Creek Park Historic District and traverse both DDOT and NPS property. DDOT will conduct necessary engineering studies, including stability analysis and wall crash rating analysis, to assess the condition of existing walls. The information will be used to determine whether new walls will need to be constructed to replace existing walls or whether existing walls can be restored and stabilized in their existing location to meet design standards. Where replacement structures are required, DDOT will construct the new walls within the existing footprint wall's footprint. DDOT will also examine feasible methods to tie new walls into existing walls while ensuring structural stability and safety. Where existing walls cannot be restored, stone from the walls will be retained for potential reuse in the construction of new walls. The approximately 16 retaining walls on the west side of the roadway are estimated to range from 3 to 13 feet high and total about 4500 feet in length, pending soil stability analysis to confirm requirements. Walls may be eliminated or reduced in height based on this analysis.

Stormwater management upgrades are similar to those described in Candidate Build Alternative 2 and will include improvements to existing outfalls. Like Candidate Build Alternative 2, Candidate Build Alternative 3 includes replacement of the Soapstone Creek Culvert. The replacement of the Soapstone Creek culvert will be the same in form, pattern, materials, and color as identified for Candidate Build Alternative 2; however, the structure will be slightly wider over Soapstone Creek than Alternative 2. The concrete strip footing foundations on which the precast concrete arch rests will be approximately 41 feet long and the road deck over Soapstone Creek for Alternative 3 will be approximately 29 feet in width to accommodate the six-foot sidewalk on the west side of Broad Branch Road.

1.2.3.1 Option C – T-Intersection at Brandywine Street

A new T-intersection is proposed at Brandywine Street to replace the existing forked Y-intersection. The reconfiguration of this intersection is being proposed to reduce the paved area and incorporate additional LID techniques in the roadway design with rain gardens in the interior corners of the new intersection. The reconfigured intersection will also improve roadway safety by minimizing crash risk for northbound drivers on Broad Branch Road turning left onto Brandywine Street. Requiring drivers to stop at a stop sign at the T-intersection,

instead of yielding as with the existing Y-intersection, will also reduce speeds at the intersection. The intersection design is very similar to that described in Option C under Candidate Build Alternative 2 with the addition of sidewalks on both sides of Brandywine Street to connect to the sidewalks proposed for the western side of Broad Branch Road. The design also includes wheelchair accessible ramps/aprons, and a crosswalk.

Table 1-2. Retaining Walls – Candidate Build Alternative 3 (measurements in feet)

WEST SIDE						EAST SIDE					
SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH	SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH
R1W	26+17	27+53	5.50	5.50	135	R1E	29+64	30+50	14.50	6.25	89
R2W	28+18	30+41	8.50	8.50	220	R2E	32+73	34+06	10.75	3.00	135
R3W	33+00	35+65	7.50	7.50	262	R3E	38+50	38+68	14.25	4.00	18
R4W	36+60	39+58	3.00	3.00	315	R4E	44+25	44+50	11.50	3.25	20
R5W	39+63	40+28	3.25	3.25	65	R5E	45+83	46+54	16.25	5.00	69
R6W	44+29	45+12	6.00	6.00	94	R6E	47+74	49+94	15.75	8.25	220
R7W	46+53	48+78	8.00	8.00	231	R7E	53+55	53+65	11.50	3.25	10
R8W	51+25	52+66	12.50	12.50	136	R8E	57+83	58+11	10.00	4.50	27
R9W	52+86	54+30	8.50	8.50	141	R9E	69+30	70+25	12.50	4.50	95
	54+30	55+82	11.50	11.50	144	R10E	77+21	77+41	10.25	5.00	24
	55+82	56+69	7.00	7.00	87	R11E	77+71	78+64	8.00	5.50	96
R10W	60+35	61+47	4.50	4.50	112	R12E	79+01	79+12	9.75	4.00	11
R11W	62+23	64+09	6.00	6.00	158	R13E	81+27	82+76	10.00	4.50	145
	64+09	65+29	11.00	11.00	117		82+76	87+50	8.25	4.25	470
	65+29	65+92	7.00	7.00	63		87+50	90+31	11.50	4.00	278
R12W	67+84	68+89	6.25	6.25	105						
R13W	69+23	70+07	4.00	4.00	84						
	70+07	70+87	7.00	7.00	84						
	70+87	71+81	10.75	10.75	91						
	71+81	73+15	5.75	5.75	131						
R14W	73+50	78+04	2.50	2.5	434						
	78+04	81+02	8.00	8.00	301						
	81+02	83+21	3.00	3.00	224						
	83+21	85+26	13.00	13.00	212						
	85+26	86+41	8.25	8.25	116						
R15W	86+84	87+45	5.00	5.00	62						
R16W	87+70	89+50	7.25	7.25	185						
	89+50	91+16	12.50	12.50	163						
	91+16	91+95	6.00	6.00	79						
Total Length					**4,549**						**1,707**

1.2.4 CANDIDATE BUILD ALTERNATIVE 4

Candidate Build Alternative 4 is the widest of the project alternatives and consists of two 10-foot travel lanes, a 6-foot wide sidewalk on the west side, a 4-foot wide bike lane on east side, and standard curb and gutter (**Figure 1-5**). A 10-foot rain garden will be provided for approximately 1,000 feet southward of Linnean Avenue where the curb and gutter will be located only along the west side of the roadway. South of that, a 4-foot wide planting strip will separate the sidewalk and roadway for the length of the project and the curb and gutter will be located on both sides. Alternative 4 extends

the proposed sidewalk from the end of the DDOT right-of-way into a 6-foot wide sidewalk that reaches the Rock Creek Park parking lot entrance just north of Beach Drive. A sidewalk across the traffic island at the Y-intersection with Brandywine Street and crosswalks would be added to facilitate pedestrian access to and use of the new sidewalk on the western side of the road.

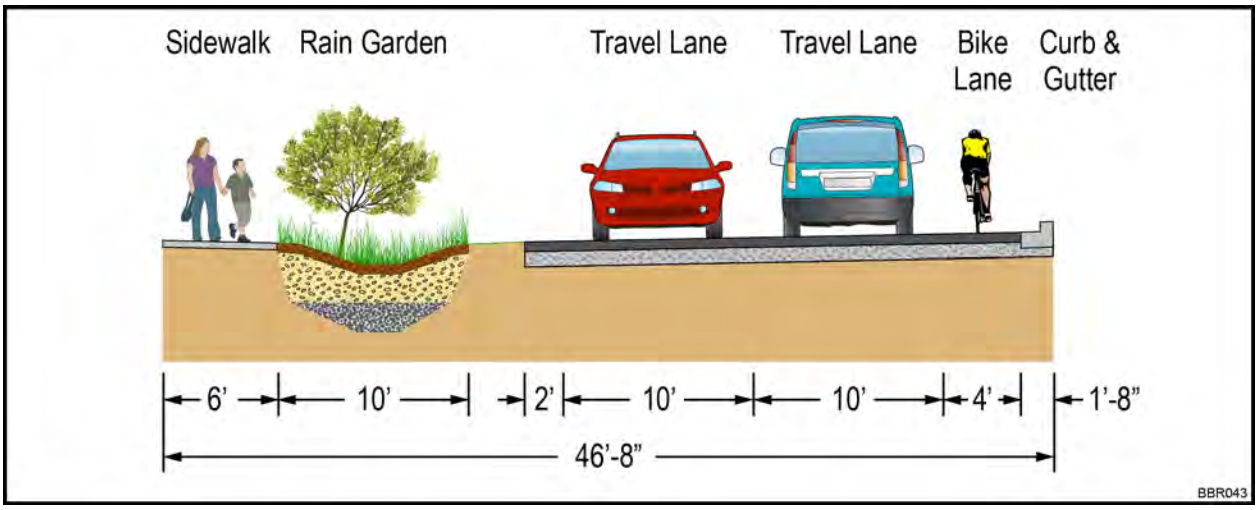

Figure 1-5. Alternative 4

This alternative has a cross-section width ranging from approximately 37 to 47 feet from curb to outer edge of sidewalk. In addition to the areas where the current roadway exceeds existing right-of-way as noted in Section 1.2.1, new right-of-way will be required on both sides of the roadway to accommodate the sidewalk and planting strip on the west side and retaining walls on the east side. Like Alternative 3, Alternative 4, may also require additional right-of-way, approximately 2,200 square feet, along the east side of the roadway on NPS land to accommodate the construction of proposed new retaining walls (pending engineering studies to assess the condition of existing walls). Areas proposed for grading (fill) occur along both the east and west sides of the right-of way. Any grading outside the existing DDOT right-of-way will require a temporary construction easement.

Some sections of roadway will require retaining walls to minimize right-of-way requirements and stabilize slopes. Like Candidate Build Alternatives 2 and 3, runoff from uphill areas behind the walls would be collected in concrete ditches behind the retaining walls and conveyed to existing outfalls via channels or storm sewers. On the east side of the roadway along the banks of Broad Branch, 21 segments of retaining walls, totaling over 2,300 in length, are required. Like Alternatives 2 and 3, the walls are designed to extend 3.5 feet above the top of the curb, as viewed from within the roadway, to meet DDOT safety standards. The total wall height ranges from 3 to 17 feet. Much of this height will occur below ground surface so the visible portion of the wall from the stream side will be 4.5 to 6.5 feet high (**Table 1-3**). Potential methods for constructing walls on the east side include reinforced concrete walls faced with stone or dry-stacked gravity walls constructed of local stone (where feasible). Compatible materials may also be brought to the site to supplement existing materials. Walls on the west side would be reinforced concrete faced in stone. The type and depth of wall footers on both the east and west sides will be contingent on the results of geotechnical analysis to be conducted during the final design phase of the project. The majority of walls proposed on the

east side of the roadway would be located within several feet of or partially overlap the footprint of existing stone walls. Several of these walls are contributing resources to the Rock Creek Park Historic District and traverse both DDOT and NPS property. DDOT will conduct necessary engineering studies, including stability analysis and wall crash rating analysis, to assess the condition of existing walls. The information will be used to determine whether new walls will need to be constructed to replace existing walls or whether existing walls can be restored and stabilized in their existing location to meet design standards. Where replacement structures are required, DDOT will construct the new walls within the existing wall's footprint. DDOT will also examine feasible methods to tie new walls into existing walls while ensuring structural stability and safety. Where existing walls cannot be restored, stone from the walls will be retained for potential reuse in the construction of new walls. The 16 retaining walls on the west side of the roadway range from 3 to 16 feet high and total nearly 4,700 feet in length. Soil stability analysis to be conducted during final design will confirm requirements for the walls; walls may be decreased in height or eliminated based on the results of studies.

Table 1-3. Retaining Walls – Candidate Build Alternative 4 (measurements in feet)

WEST SIDE						EAST SIDE					
SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH	SEGMENT	START	END	HEIGHT	VISIBLE HEIGHT	LENGTH
R1W	26+14	27+69	6.25	6.25	153.69	R1E	18+50	19+57	2.50	2.50	104.82
R2W	28+17	28+73	8.00	8.00	55.95	R2E	29+55	30+05	13.00	6.50	100.65
	28+73	29+61	11.75	11.75	86.66	R3E	31+95	34+45	10.25	5.25	257.59
	29+61	30+40	6.25	6.25	78.34	R4E	38+00	38+35	10.00	4.00	35.34
R3W	33+08	36+06	8.00	8.00	273.49	R5E	39+56	40+35	14.75	4.00	79.77
	36+06	38+86	3.00	3.00	296.31	R6E	44+37	45+00	15.75	5.25	59.36
	38+86	39+12	5.50	5.5	25.86	R7E	45+59	46+09	16.50	4.75	47.18
R4W	39+25	39+96	8.25	8.25	72.27	R8E	46+45	49+65	16.25	5.00	316.62
R5W	42+21	42+42	8.00	8.00	14.97	R9E	53+24	55+05	13.25	4.50	182.01
R6W	43+95	44+82	10.00	10.00	99.16	R10E	57+52	57+93	12.00	4.50	34.91
R7W	46+26	47+56	8.25	8.25	134.63	R11E	65+38	65+69	13.25	4.50	31.34
	47+56	48+86	15.75	15.75	131.47	R12E	66+19	66+59	17.25	4.50	37.84
R8W	51+02	51+30	6.50	6.50	28.70	R13E	68+80	71+10	14.25	5.00	226.08
	51+30	52+22	13.00	13.00	87.85	R14E	76+69	77+16	11.50	4.00	46.77
	52+22	52+43	7.75	7.75	19.24	R15E	77+39	78+90	12.75	5.25	152.35
R9W	52+63	53+85	7.50	7.50	119.27	R16E	80+55	80+70	10.00	4.50	14.90
	53+85	55+23	12.50	12.50	137.51	R17E	81+00	81+90	11.25	5.00	87.82
	55+23	56+47	6.00	6.00	116.36	R18E	82+55	83+50	8.75	4.50	92.60
R10W	60+02	65+63	6.50	6.50	519.02	R19E	83+90	84+39	7.50	4.25	48.69
R11W	67+61	68+55	7.25	7.25	95.73	R20E	85+15	88+24	9.50	5.75	307.67
R12W	68+95	69+69	3.00	3.00	74.26	R21E	90+61	91+40	13.75	6.25	79.20
	69+69	72+75	8.25	8.25	305.88						
R13W	73+28	77+44	2.50	2.5	403.37						
	77+44	78+40	6.25	6.25	92.20						
	78+40	79+26	11.00	11.00	86.64						
	79+26	81+81	6.50	6.50	258.95						
R14W	82+05	82+84	5.75	5.75	82.62						
	82+84	85+50	13.75	13.75	272.50						
	85+50	86+15	6.25	6.25	65.00						
R15W	86+57	87+20	5.00	5.00	62.67						
R16W	87+46	88+34	6.00	6.00	88.76						
	88+34	90+87	13.75	13.75	253.53						
	90+87	91+71	9.00	9.00	82.74						
Total Length					**4,675.59**						**2,343.52**

Stormwater management upgrades are similar to those identified in Candidate Build Alternatives 2 and 3, and will include improvements to existing outfalls. Like Candidate Build Alternatives 2 and 3, Candidate Build Alternative 4 includes replacement of the Soapstone Creek Culvert. The replacement of the Soapstone Creek culvert will be the same in form, pattern, materials, and color as identified for Candidate Build Alternatives 2 and 3; however, the structure will be slightly wider over Soapstone Creek. The concrete strip footing foundations on which the precast concrete arch rests will be approximately 45 feet long and the road deck over Soapstone Creek for Alternative 4 will be approximately 29 feet in width to accommodate the six-foot sidewalk on the west side of Broad Branch Road (the same roadway width as Alternative 3).

1.2.4.1 Option C – T-Intersection at Brandywine Street

A new T-intersection is proposed at Brandywine Street to replace the existing forked Y-intersection (see Figure A-2 [Sheet 6 inset] in Appendix A). The reconfiguration of this intersection is being proposed to reduce the paved area and incorporate additional LID techniques in the roadway design with rain gardens in the interior corners of the new intersection. The reconfigured intersection will also improve roadway safety by minimizing crash risk for northbound drivers on Broad Branch Road turning left onto Brandywine Street. Requiring drivers to stop at a stop sign at the T-intersection, instead of yielding as with the existing Y-intersection, will also reduce speeds at the intersection. The intersection design is very similar to that described in Option C for Candidate Build Alternative 3. Proposed sidewalks on both sides of Brandywine Street in this alternative would connect to the sidewalks proposed for the western side of Broad Branch Road in Candidate Build Alternative 4. The design also includes wheelchair accessible ramps/aprons, and a crosswalk.

1.3 IDENTIFICATION OF THE AREA OF POTENTIAL EFFECTS (APE)

The Area of Potential Effects (APE) was established in coordination with the DC SHPO. As defined by 36 CFR 800.16(d) of Section 106 of the NHPA, the APE represents the "…geographic area or areas within which an undertaking could cause changes in the character or use of historic properties, if any such exists."

DDOT in consultation with the DC SHPO (in a meeting on August 16, 2011) has defined the area of potential effects (APE) boundaries as the east bank of Broad Branch between Beach Drive and 27th Street NW; the first row of structures north of Broad Branch Road between 27th Street NW and Nevada Avenue NW; several residences south of Broad Branch Road along Linnean Avenue; and the first row of residences west of Broad Branch Road between 27th Street NW and Beach Drive. This APE is considered sufficient to include all proposed repairs or modifications to Broad Branch Road, to incorporate any possible construction staging areas, to accommodate any modifications and/or replacement of the Soapstone Creek culvert, and to assess any visual or audible intrusions (**Figure 1-6**).

Figure 1-6. Area of Potential Effects
(Sheet 1)

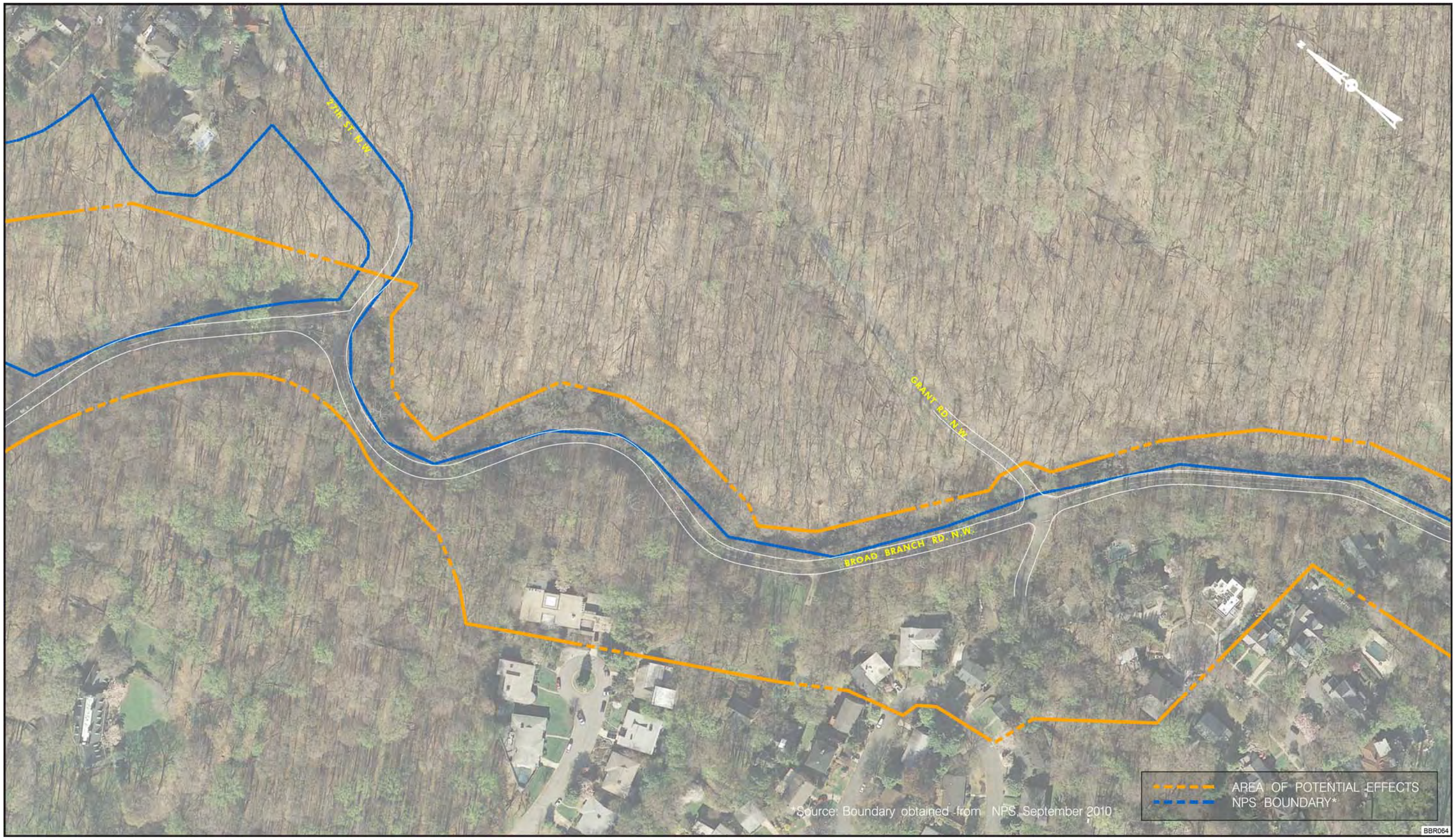

Figure 1-6. Area of Potential Effects
(Sheet 2)

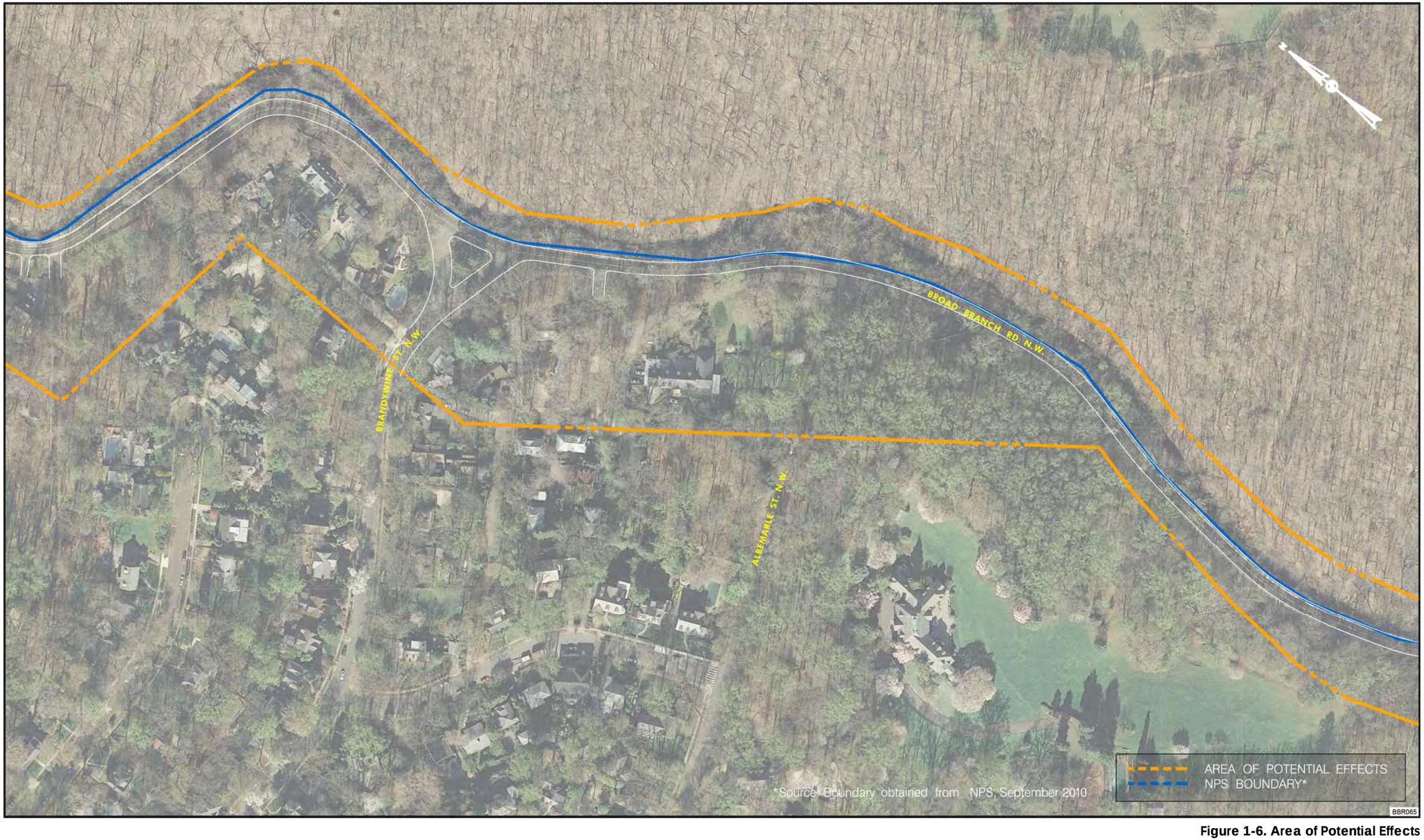

Figure 1-6. Area of Potential Effects
(Sheet 3)

Figure 1-6. Area of Potential Effects
(Sheet 4)

2 CULTURAL RESOURCES

Cultural resources are prehistoric and historic sites, structures, districts, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for traditional, religious, scientific, or any other reason. Cultural resources are discussed here in terms of archeological sites, including both prehistoric and historical occupations; historic structures or architectural resources, and cultural landscapes.

Procedures for the identification, evaluation, and treatment of cultural resources are contained in a series of federal and state laws and regulations and agency guidelines. Archeological, architectural, and Native American resources are protected by a variety of laws and their implementing regulations: the National Historic Preservation Act (NHPA) of 1966, as amended in 2006; the Archeological and Historic Preservation Act of 1974; the Archeological Resources Protection Act (ARPA) of 1979; the American Indian Religious Freedom Act (AIRFA) of 1978; and the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990. The Advisory Council on Historic Preservation (ACHP) further guides treatment of archeological and architectural resources through the regulations, Protection of Historic Properties (36 CFR 800).

Historic properties are the subset of cultural resources listed in or eligible for inclusion in the National Register of Historic Places (NRHP). Section 106 requires federal agencies to take into account the effects of their undertakings, including licensing and approvals, on NRHP-eligible resources and to afford the ACHP and other interested parties a reasonable opportunity to comment.

The significance of historic properties is judged by the property's ability to meet the four criteria for inclusion in the NRHP (36 CFR 60.4):

- Association with events that made a significant contribution to the patterns of our history (Criterion A);
- Association with the lives of persons significant in our past (Criterion B);
- Sites that embody characteristics of a type, period, or methods of construction or that represent the work of a mater, possess high artistic value, or represent a distinguishable entity (Criterion C); or
- Have yielded or may be likely to yield, information important to prehistory or history (Criterion D).

Properties may be eligible for the NRHP for contribution at the national, state, or local level. In order for a resource to be listed in the NRHP, it must possess physical integrity of those features necessary to convey its significance, such as location, design, setting, workmanship, materials, feeling, and association in accordance with NRHP guidelines.

2.1 METHODOLOGY

Archival research and sites files search were conducted at the District of Columbia State Historic Preservation Office (DC SHPO) and with cultural resources staff of Rock Creek Park in Washington, D.C. to identify previously recorded archeological, architectural and Native American resources, and assess the probability of undiscovered archeological sites in the APE. Internet searches were conducted with the Library of Congress, the National Register Information System, and the D.C. Inventory of Historic Sites.

Field investigations included reconnaissance survey of structures within the APE, including preparation of field notes, photography, and a photo log. As a result of the reconnaissance survey, numerous historic structures were identified within the APE; however, no intensive cultural resources survey has been conducted to record all historic structures within the APE. All cultural resources identified within the APE, either through archival research and literature review or through reconnaissance survey, are presented below.

In consultation with the DC SHPO, two Determination of Eligibility (DOE) forms were prepared for the following resources: the Gatehouse associated with La Villa Firenze and the historic retaining wall along the banks of Broad Branch. Additional resources, specifically Rock Creek Park and its contributing resources, have previously been determined eligible for the NRHP.

2.2 ARCHAEOLOGICAL SITES

Archaeological resources include both prehistoric and historic archaeological resources. Prehistoric resources are physical properties resulting from human activities predating written records. These archaeological sites are the loci of human behavior as indicated by concentrations of artifacts, features, or floral and faunal remains. Prehistoric land use patterns were more closely related to local environmental conditions than are most modern settlements. Historic resources are physical properties that post-date the existence of written records and include features such as trails, roadbeds, building foundations, and refuse concentrations.

No archaeological investigations have been conducted of the current project area; however, archeological studies have been conducted in the adjacent Rock Creek Park since W.H. Holmes excavations at Piney Branch Quarry in 1889 (Moran 1997). Recent archeological investigations that have been conducted adjacent to the proposed project area include survey of 31 erosion control and bank stabilization sites along Rock Creek (Inashima 1985) and a four-year study of Rock Creek Park covering areas immediately adjacent to the project area (Bedell et al. 2008; Fiedel et al. 2004, 2005, 2006, 2008). The Phase I survey techniques used in the four-year study included reconnaissance survey, metal detector survey, and shovel testing using both judgmental and systematic sampling strategies (Fiedel et al. 2008).

Six archaeological sites are located with 500 feet of Broad Branch: 51NW169, 51NW172, 51NW183, 51NW184, 51NW185, and 51NW194 (**Figure 2-1**, **Table 2-1**). Three sites have been determined eligible for listing in the NRHP, three have not been evaluated for NRHP eligibility.

Figure 2-1 contains archaeological site locations which cannot be publicly disseminated in accordance with Section 304 of the National Historic Preservation Act.

Figure 2-1. Archaeological Resources

Table 2-1. Archaeological Resources within 500 ft of the Broad Branch Road Project Area

SITE NUMBER	SITE NAME	SITE TYPE	NRHP ELIGIBILITY
51NW169	Unnamed Battery	Civil War battery	Contributing element to the Civil War Fort Sites and Fort Circle Park System Historic District
51NW172	Broad Branch site	Prehistoric lithic scatter	Not evaluated
51NW183	Jane Dickson Site	19th century tenancy	NRHP-eligible
51NW184	J.W. Willis Site	19th century farmstead	Not evaluated
51NW185	Sara Whitby Site	19th century tenancy	NRHP- eligible
51NW194	Broad Branch Quarry	19th century	Not evaluated

2.2.1 Civil War Fort Sites and Fort Circle Park System Historic District

The Civil War Fort Sites and Fort Circle Park System Historic District consists of the locations of forts, batteries, and rifle trenches comprising the Civil War Defenses of Washington constructed between 1861 and 1865 (CEHP, Inc. 2004). By 1865, the Defenses of Washington included 68 forts, 93 detached batteries for field guns, 20 miles of rifle pits and covered ways, three wooden blockhouses, 32 miles of military roads, several stockaded bridgeheads, and four picket stations. Along the circumference of the 37-mile circle of fortifications were emplacements for a total of 1501 field and siege guns (NPS 2004, 2007). Nineteen contributing elements have been identified and include both architectural remains (earthworks) and archaeological manifestations of the seventeen forts and two batteries in D.C., Virginia, and Maryland. The Civil War Fort Sites and Fort Circle Park System Historic District was listed on the NRHP in 1974 with an additional amendment in 1978 to enlarge the district boundary (Dillon 1972, 1976). One contributing element to the Civil War Fort Sites and Fort Circle Park System Historic District is located within the project area: archaeological site 51NW169, an unnamed Civil War battery location (site 51NW169).

Site 51NW169 is an unnamed Civil War battery location, characterized an ovoid flattened area measuring 150 feet by 100 feet and encircled by an earthen berm (Fiedel et al. 2008:160; Googins 2005). A trench is located below the berm on the northwest side (Googins 2005). The unnamed Broad Branch battery was an unarmed auxiliary battery with three vacant gun platforms (Fiedel et al. 2008:160). No artifacts are associated with this site. Site 51NW169 is considered eligible for the NRHP under Criteria A and D under the Civil War Defenses of Washington theme as a contributing element to a multiple property nomination (Fiedel et al. 2008).

2.2.2 Site 51NW172

Site 51NW172 is a small prehistoric lithic scatter consisting of one chalcedony and one quartzite flake identified on the surface along with naturally shattered quartz (Fiedel et al. 2008). A large pit which may represent nineteenth-century gold prospecting was also recorded. This site has not been evaluated to determine NRHP-eligibility.

2.2.3 Site 51NW183

51NW183 is a nineteenth century farmstead and tenancy identified as the Jane Dickson Site, one of the only African-American property owners in Rock Creek Park. The farmstead consisted of a four-room house, an outbuilding, and a garden (Fiedel et al. 2008). The farmstead was leased back to Jane Dickson after she sold it to the Park. No features were identified during shovel testing but artifacts recovered included yielded cut nails, brick fragments, window glass, bottle glass, a small china button, and a whiteware sherd. Site 51NW183 is considered eligible for the

NRHP under Criterion D under the Slavery and Free Black Society theme, and specifically 19th century African-American tenancies in postbellum Washington (Fiedel et al. 2008).

2.2.4 SITE 51NW184

51NW184 is a nineteenth century residence identified as the J. W. Willis Site, occupied in the 1890s and consisting of a house and greenhouse (Fiedel et al. 2008). No features were identified. Shovel testing yielded cut nails, bone, brick fragments, bottle glass, and an unglazed redware sherd in an area approximately 100 feet by 50 feet. This site has not been evaluated to determine NRHP-eligibility.

2.2.5 SITE 51NW185

51NW185 is a nineteenth century tenancy identified as the Sara Whitby Site. The tenancy consisted of a two-room house rented by the Whitby family. A small depression was excavated and was identified as the remains of filled-in cellar with discarded items and a layer of brick and stone rubble (Fiedel et al. 2008). Architectural artifacts suggest that the Whitby residence had stone and brick foundations (or a stone foundation with a brick chimney), a partial cellar, and a tin roof. Shovel tests and test units revealed an 11 foot by 9 foot stone cellar floor and over 800 artifacts including cut and wire nails, window glass, buttons, pipe fragments, bottle glass, colonoware fragments, and whiteware fragments. Site 51NW185 is considered eligible for the NRHP under Criterion D under the Slavery and Free Black Society theme, and specifically 19th century African-American tenancies in postbellum Washington (Fiedel et al. 2008).

2.2.6 SITE 51NW194

51NW194 (the Broad Branch Quarry site) is a 19th century quarry used during the early Park-related construction. The quarry has been cut into the bluff on the east side of Broad Branch Run and is approximately 160 feet by 40 feet with a worked rock face of about 30 feet high (Fiedel et al. 2008). This site has not been evaluated to determine NRHP-eligibility.

2.2.7 SITE SUMMARY

Although the boundary of site 51NW169 extends into the APE, no features associated with the Civil War battery location occur within District Department of Transportation (DDOT) right-of-way. Archaeological deposits related to the unnamed Civil War battery are not likely to occur beneath Broad Branch Road as the road was constructed in 1839 prior to construction of any Civil War defenses. The remaining archaeological sites are situated on the terraces above Broad Branch and none are located within the DDOT right-of-way.

2.2.8 ARCHAEOLOGICAL POTENTIAL

While most of the Broad Branch Road project area is characterized by steep slopes, two locations are relatively flat: the extreme northern end of the project area and immediately north of the confluence of Soapstone Creek and Broad Branch.

Within the current area of potential effects (APE) at the extreme northern end of the Broad Branch Road Rehabilitation project, a geoarchaeological study was conducted for the Broad Branch stream restoration project (Wagner 2011). Although the stream restoration area contains both upland and alluvium terrain, both have experienced extreme modification. The uplands near Linnean Avenue have been either deeply graded or filled, and other uplands near Broad

Branch Road are too steep for direct occupation; therefore, this area contains no potential for prehistoric resources (Wagner 2011).

The area north of the confluence of Soapstone Creek and Broad Branch contains a small residence with a sloping yard bounded by stone retaining walls (the Gatehouse at La Villa Firenze). Originally, this area contained steep slopes on either side of Soapstone Creek and along the west edge of Broad Branch as indicated on historic maps (Boschke 1861; Swinton 1881; USGS 1891, 1898) with no level floodplain. Road, park, and building construction activities at the confluence of Soapstone Creek and Broad Branch have altered the topography at this location. Broad Branch Road was constructed in 1839 and was cut from the steep slopes on the west side of Broad Branch including the area near the confluence with Soapstone Creek. By 1861, a small road was established along the north side of Soapstone Creek to access structures on the ridgetop (Boschke 1861). By 1898, a small structure is located north of the small access road, north of Soapstone Creek (USGS 1898) and this structure is depicted on subsequent historic maps (Baist 1903, 1907, 1911, 1913, 1919). The Soapstone Creek stone arch culvert was constructed in 1898 during a period of initial improvements to adjacent Rock Creek Park and the downstream wing walls were most likely added in 1934 when the culvert was extended. Prior to 1925, the small structure north of Soapstone Creek was demolished and the existing Tudor Revival style gatehouse was constructed. Because of the various ground disturbing activities north of the confluence of Soapstone Creek and Broad Branch, particularly the construction of a structure by 1898, its demolition prior to 1925, and construction of the existing gatehouse, this area contains no potential for prehistoric or historic resources.

Based on historical photographs and park history, archaeological sites related to the establishment of Rock Creek Park and the enhancement of the Park with the construction of rural architectural featuresmay occur. A multi-course stone dam was constructed across Broad Branch north of the Soapstone Creek culvert ca. 1898 to enhance the rural feel by creating a waterfall. Although evidence of the stone dam is no longer visible due to years of siltation at the confluence of Soapstone Creek and Broad Branch, archaeological remnants of the dam could occur. Fifteen segments of a historic stone retaining wall line the west side of Broad Branch in the stream bed; it is possible that the stone retaining wall may have been continuous and through time, portions have been displaced or destroyed by stormwater. Although surface manifestations of the stone wall are lacking along portions of the stream, archaeological remains of the wall foundations could occur.

2.3 HISTORIC STRUCTURES/ARCHITECTURAL RESOURCES

The term "historic structures" encompasses resources purposefully erected to serve some human activity and are typically classified as buildings, structures, objects, or districts. These structures may consist of residential buildings (*e.g.*, farmhouses, plantation manors, and associated outbuildings, including sheds and barns); industrial structures, such as mills and millraces; commercial buildings (*e.g.*, stores, banks, and other business-related office buildings); transportation structures, such as bridges; and resources related to water control and distribution.

Historic structures or architectural resources in the Broad Branch Road project area include contributing and non-contributing elements to the Rock Creek Park Historic District (RCPHD); a stone pedestrian bridge; roadway and water control features associated with District of Columbia infrastructure; residences; and educational and health facilities.

2.3.1 ROCK CREEK PARK HISTORIC DISTRICT

The RCPHD consists of 1,754 acres of land dominated by picturesque landscapes featuring forested areas, streams, valleys, meadows, and sloping hills. The Park meets NRHP Criteria A, B, and C under the themes of architecture, community planning and development, conservation, entertainment and recreation, industry, landscape architecture, military, and horticulture. Important persons associated with the history of the Park include Joshua Pierce and landscape architects Frederick Law Olmsted, Jr. and John C. Olmsted. The Park as a whole retains a high degree of integrity of design, workmanship, location, feeling, association, and setting.

The RCPHD was originally defined as 31 contributing elements and 59 non-contributing elements (Bushong, 1990a and 1990b). Nine of the 31 contributing resources are also individually listed on the NRHP (National Park Service [NPS], 2002). Two of the 31 contributing elements constitute categories or systems of resources pertinent here- the circulation network (historic roads and trails) and culverts and retaining walls. Components of the circulation network which are contributing elements to the Historic District were delineated in the NRHP registration form (Bushong, 1990a and 1990b); however, the individual culverts, outfalls, and retaining walls, scattered throughout the Park, had not been formally surveyed and were not inventoried as part of the nomination. Instead, the nomination documentation described the physical characteristics of culverts from the period ca. 1900 to 1941 that would contribute to the Historic District.

Architectural features associated with the RCPHD located with the project area include: Grant Road Bridge; Broad Branch Road Bridge; Ridge Road Bridge; Grant Road; Ridge (Glover) Road; a historic trail on the north side of Broad Branch Run; Soapstone Creek culvert; storm water outfalls with stone headwalls; stone retaining walls; and stone boundary markers (**Table 2-2**, **Figure 2-2**). The two 1957 bridges, which were constructed under the NPS's Mission 66 program, are currently being re-evaluated as part of the update of the Rock Creek Historic District.

Table 2-2. Rock Creek Park Historic District Contributing Elements in the Project Area

RESOURCE	DATE OF CONSTRUCTION	DESCRIPTION	NRHP STATUS
Historic Bridges	1898	Grant Road Bridge (RCP-RPI 3450-7325)(stone arch culvert)	Contributing element to RCPHD
Historic Bridges	1957	Broad Branch Road Bridge over Rock Creek at Beach Drive (RCP-RPI 3450-7311)	Non- contributing element to RCPHD
Historic Bridges	1957	Ridge Road Bridge over Broad Branch stream (RCP-RPI 3450-7312)	Non- contributing element to RCPHD
Circulation Network – Historic Roads and Trails	1862	Grant Road (RCP-RP 3450-7325)	Contributing element to RCPHD
Circulation Network – Historic Roads and Trails	1899-1901	Ridge (Glover) Road	Contributing element to RCPHD
Circulation Network – Historic Roads and Trails	1830-1941	Trail on east side of Broad Branch stream	Contributing element to RCPHD
Culvert	1898	Soapstone Creek Culvert	Contributing element to RCPHD
Stormwater Outfalls	ca. 1900-1941	Ten stormwater outfalls associated with stone headwalls or stone retaining walls	Contributing elements to RCPHD
Retaining Walls	ca. 1900-1941	Fifteen relatively intact segments lining portions of Broad Branch	Contributing element to RCPHD
Boundary Monuments	ca. 1890s/1920s	Three stone boundary markers	Not evaluated; most likely contributing elements to the RCPHD

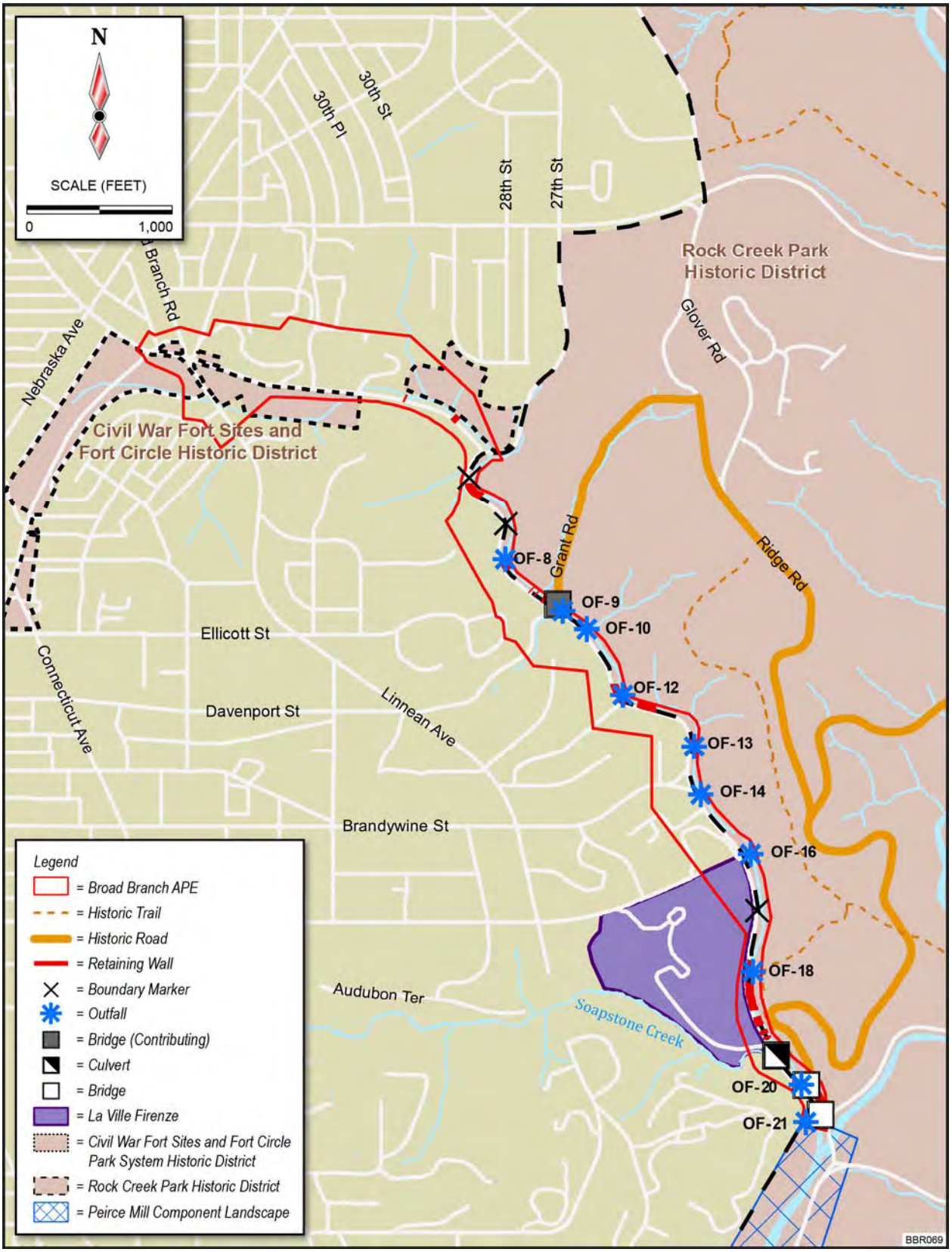

Figure 2-2. Civil War Fort Sites and Fort Circle Park System, and Rock Creek Park Historic Districts with Associated Architectural Resources in the Broad Branch Road APE

2.3.1.1 Historic Bridges

The Grant Road Bridge spans Broad Branch Run at the intersection of Broad Branch Road and Grant Road is a stone arch culvert constructed in 1898 during a period of initial improvements to Rock Creek Park (**Figure 2-3**). The overall length is 10 feet and the roadway width is 21 feet. The stone culvert headwalls are faced with irregularly coursed granite and the interior of the arch is lined with brick. A keystone is located at the center of the arch ring on each side of the bridge (Bushong 1990b; Davis 1996).

Figure 2-3. Grant Road Bridge, looking south

The Grant Road Bridge has been repointed with the exception of a small segment of the wing wall on the southeast corner which retains its original beaded mortar joints. The four pinnacles at the end of the wing walls are capped with crenellated stone in a radiating pattern.

The Broad Branch Road Bridge over Broad Branch near Beach Drive (RCP-RPI 3450-7311) was constructed in 1957 and replaced the old ford that previously crossed Rock Creek. The bridge is a pre-stressed concrete girder bridge over a triple-span concrete box culvert with irregularly coursed stone veneered (gneiss) abutment and steel railing similar in design and materials to the nearby Ridge Road Bridge (**Figure 2-4**). The bridge is considered a non-contributing element to the RCPHD (Bushlong 1990b; Davis 1996).

Figure 2-4. Broad Branch Road Bridge over Broad Branch, looking north

The Ridge Road Bridge over Broad Branch Run (RCP-RPI 3450-7312) was also constructed in 1957 and replaced the "Pebble Dash" Bridge that had carried Beach Drive over Broad Branch Run from 1902 to 1956. The bridge is a pre-stressed concrete girder bridge over a triple-span concrete box culvert, with stone-veneered (gneiss) abutments and steel railings similar in design to the Broad Branch Road Bridge (**Figure 2-5**). The bridge is considered a non-contributing element to the RCPHD (Bushlong 1990b; Davis 1996).

Figure 2-5. Ridge Road Bridge over Broad Branch, looking west

2.3.1.2 Circulation Network – Historic Roads and Trails (1830-1941)

Grant Road was established in 1862 as part of the military road system for Washington's outer defense during the Civil War. Grant Road was widened, regarded, and surfaced with gravel in ca.1898 (Bushong 1990b). The old roadway between Ridge Road and Broad Branch Road, now known as Grant Road, was macadamized in fiscal year 1915. Grant Road (1862) intersects the project area at Broad Branch Road. Grant Road is considered a contributing element to the RCPHD (Bushong 1990b; Davis 1996).

Ridge Road or Glover Drive begins near the intersection of Beach Drive and Broad Branch Road and ends at Military Road. Some segments of Glover Drive follow the alignment of old farm roads that predate the creation of Rock Creek Park. Originally known as "Ridge Road" and renamed to honor park promoter and benefactor Charles C. Glover, this was one of the first roads to be developed for recreational driving after Rock Creek Park was created. Most of the current alignment and grading date to 1899-1901 (Bushong 1990b; Davis 1996; MacKintosh 1985). In 1956, Glover Drive was shifted to intersect with Broad Branch Road, crossing the narrower stream on a short concrete and steel bridge instead of entering Beach Drive directly just north of the confluence of Rock Creek and Broad Branch (Davis 1996). Ridge Road or Glover Drive is considered a contributing element to the RCPHD(Bushong 1990a, 1990b; Davis 1996).

A historic trail is present along the southern end of the project area beginning at the intersection of Broad Branch Road and Beach Drive. The trail is located north of the confluence of the creeks and crosses Ridge Road. The trail parallels Broad Branch creek on the east side climbing onto the ridge and diverging from the creek to join the Western Ridge Trail (Bushong 1990b). The Soapstone Valley trail, which is located in the project area, is currently being re-evaluated as part of the update of the RCPHD.

2.3.1.3 Culverts and Retaining Walls (ca. 1900-1941)

The numerous elements of this structural system, defined as a contributing element to the RCPHD, were not individually surveyed or inventoried in the NRHP Nomination Form for the Historic District (Bushong, 1990a and 1990b). Efforts were later conducted to inventory culverts located along Rock Creek and its tributaries within the Park's boundaries. In 1998, Rock Creek Park personnel inventoried outfalls in a List of Classified Structures for the preparation of a Cultural Landscape Inventory (The Louis Berger Group, Inc., 2005). The inventory documented 117 outfalls, describing size and materials, but did not distinguish between those outfalls that are or are not contributing elements to the Historic Districts or the cultural landscape. The List of Classified Structures provides an overview of the types of culverts located throughout the Park, including circular concrete units, vitrified terra cotta or clay pipes, stone abutments with circular openings, cast iron pipes, corrugated metal pipes, concrete arches, concrete box culverts, and brick abutments (The Louis Berger Group, Inc., 2005).

In 2004, an architectural feature assessment of 166 culvert locations was conducted along the Rock Creek and Potomac Parkway and Beach Drive in Rock Creek Park (The Louis Berger Group, Inc., 2005). Culverts were divided into their components – inlets and outfalls. Many culvert locations feature multiple inlets. In all, roughly 70 outfall locations and 228 inlets were surveyed. Of these, only 20 outfalls and 11 culverts incorporating masonry construction

representing the period ca. 1900-1941 were recommended as contributing elements to the Rock Creek Park and/or the Rock Creek and Potomac Parkway Historic Districts.

Masonry construction of culverts and outfalls was further subdivided into three major subtypes: stone veneer, stone parapet headwalls, and stone headwalls surrounding concrete or terra cotta pipes. Other noted subtypes include box culverts with stone veneer abutments and parapets and a stone veneer arch. Although none of the inlet or outfall locations of culverts documented in the 2004 assessment occurs in or adjacent to the project area, information on the types of culverts contributing to the RCPHD may be applied to culverts that occur in other locations of Rock Creek Park including those in the current project area.

The Soapstone Creek culvert, a 1957 retaining wall and spillway, ten storm drain outfalls associated with stone headwalls or with stone retaining walls, and fifteen segments of 1890s-1920s stone retaining walls occur within the project area. Site visits along Broad Branch were conducted in July 2008 and April 2011. Some of the segments of the retaining walls were photographed if the creek bank was easily accessible. Measurements of the segments were obtained from as built design drawings. Systematic documentation and measurements were not undertaken.

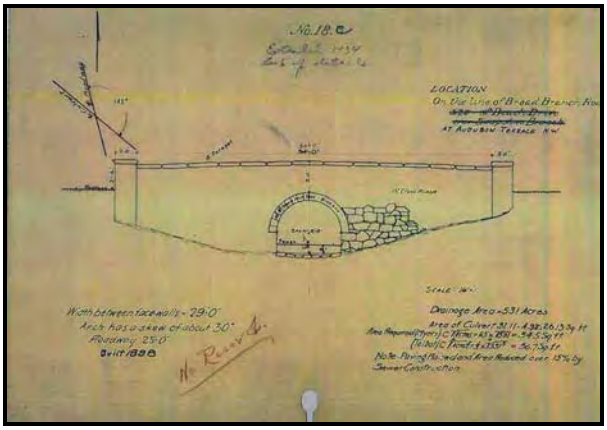

Figure 2-6. 1898 Design Drawing – DDOT Archives

SOAPSTONE CREEK CULVERT

The Soapstone Creek Culvert, located at the confluence of Soapstone Creek and Broad Branch Run, is a six-foot wide, stone arch culvert constructed in 1898 during a period of initial improvements to adjacent Rock Creek Park (**Figure 2-6**). The downstream wing walls were most likely added in 1934 when the culvert was extended (**Figure 2-7**).

Figure 2-7. Pre-1934 Photograph of the Soapstone Creek Culvert (downstream side) without the wing walls – (E. B. Thompson, D.C. Public Library Photo Archives)

Prominent features of the Soapstone Creek Culvert include a downstream headwall with wing walls, an upstream headwall and retaining wall, and a red brick-lined barrel arch. The downstream headwall is faced with irregularly coursed rough cut granite; the interior of the arch is lined with red brick (**Figure 2-8**). Parging was not observed on this portion of the brick lined arch. The parapet retains some of the flat machine cut capstone slabs. The south wing wall on the downstream side is faced with irregularly coursed rough cut granite with beaded mortar; it has been detached from the headwall through slumping. The south wing wall exhibits a

crenellated treatment with pointed stones set in mortar. The north wing wall is faced with irregularly coursed rough cut granite. The downstream headwall has been repointed and the original capstones replaced with the machine cut slabs (**Figure 2-9**). A square opening, most likely a scupper, is located in the parapet on the roadside near the north end of the culvert.

The upstream headwall is irregularly coursed rough cut granite (**Figure 2-10**); the interior of the arch is lined with brick and parged. The parapet on the upstream side was capped with large hand beveled stone slabs. One original capstone is intact on the headwall; the other capstones are leaning against the headwall on the roadside. A square opening, most likely a scupper, occurs in the headwall on the upstream side near the north end; a metal grate is located adjacent to this opening on the roadside deck. The upstream headwall exhibits original beaded mortar joints (**Figure 2-11**). An irregularly coursed rough cut retaining wall with beaded mortar is located in the channel on the southwest edge of the arch opening. Based on comparisons of 1945 and 2008 photographs, the Soapstone Creek culvert has experienced continual degradation through time including heavy siltation filling in about half of the arch opening; a three foot wide collapse of the brick lining at the center of the arch on both sides, and apparent removal of the top several feet of stone along the parapet.

The downstream headwall of the Soapstone Creek Culvert is located within Rock Creek Park and is considered a contributing element to the RCPHD. Although the upstream headwall of the Soapstone Creek culvert is not located in Rock Creek Park, it is the complementary portion to the downstream headwall. The upstream headwall exhibits

Figure 2-8. Downstream Headwall and Wing Walls of the Soapstone Creek Culvert at Broad Branch (2011)

Figure 2-9. Roadside view of the downstream headwall, with Ridge Road Bridge in the background

Figure 2-10. Upstream Headwall of Soapstone Creek Culvert and Retaining Wall

original design characteristics such as irregularly coursed rough cut stone, hand beveled capstones, and beaded mortar joints. The upstream headwall and retaining wall exhibit integrity of location (original 1898 culvert over Soapstone Creek at Broad Branch Road), design (stone headwalls with a brick-lined barrel arch culvert with original parging), setting (within the natural landscape adjacent to Rock Creek Park), materials (rough cut stone and hand cut cap stones), workmanship (irregularly coursed stone with beaded mortar), feeling (rustic architecture within rural undeveloped area) and association (development of similar infrastructure in Rock Creek Park in the late nineteenth century). The Soapstone Creek culvert is considered eligible for the NRHP under Criterion A for its association with the early development of Rock Creek Park and Criterion C as a representative example of rustic architecture. A DOE form was prepared and the DC SHPO concurred with the eligibility determination on June 20, 2011 (**Appendix B**).

Figure 2-11. Roadside view of upstream headwall with original hand beveled capstone and beaded mortar joints

After numerous flooding episodes, a major storm event in April 2011 resulted in sinkholes in the roadway surface and a partial collapse of the Soapstone Creek culvert. DDOT took immediate measures to prevent further damage to the structure by covering the roadway holes with steel plates, installation of a temporary bridging platform to permit one lane travel over the culvert, and a temporary structural repair to the culvert that included installation of a corrugated steel lining to stabilize the arch barrel. The temporary repair was designed to last for approximately two to three years to allow time for design and construction a permanent replacement structure.

STORM DRAIN OUTFALLS

Ten storm water outfalls associated with stone headwalls or stone retaining walls were observed during the site visits along Broad Branch conducted in July 2008 and April 2011 or were identified from current survey drawings and are considered contributing elements to the RCPHD (**Table 2-3;**). These ten outfalls are among the 21 total identified in the entire project area. Although these outfalls drain storm water from nearby D.C. neighborhoods, the stone features are located within Rock Creek Park. The storm water outfall construction includes corrugated metal pipe 18 inches in diameter embedded within the existing stone retaining wall, reinforced concrete pipe varying in width from 15 inches to 42 inches in diameter with regularly coursed rough cut stone headwalls (**Figure 2-12** and **Figure 2-13**) and terra cotta pipe varying in width from 18 inches to 24 inches in diameter with stone headwalls with concrete repairs or embedded within the existing stone retaining walls (**Figure 2-14** and **Figure 2-15**).

Table 2-3. Storm Drain Outfalls Associated with Stone Headwalls or Stone Retaining Walls in Rock Creek Park

OUTFALL NUMBER	LOCATION	DESCRIPTION	NRHP STATUS
OF-21	Between Beach Drive and Ridge Road (Figure 2-12])	15" reinforced concrete pipe (RCP) with regularly coursed rough cut stone headwall; three courses	Contributing element to RCPHD
OF-20	West of Ridge Road Bridge, west bank of Broad Branch	15" RCP with regularly coursed rough cut stone headwall; three courses	Contributing element to RCPHD
OF-18	North of Soapstone Creek, west bank of Broad Branch (Figure 2-13)	18" Terra Cotta pipe in regularly coursed rough cut stone retaining wall segment H6; eleven courses	Contributing element to RCPHD
OF-16	South of Brandywine Avenue, west bank of Broad Branch	24" Terra Cotta pipe with stone headwall	Contributing element to RCPHD
OF-14	South of Brandywine Avenue, west bank of Broad Branch (Figure 2-14)	24" Terra Cotta pipe sheathed in concrete with stone headwall; seven courses	Contributing element to RCPHD
OF-13	North of Brandywine Street	18" corrugated metal pipe in rough cut stone retaining wall segment H7	Contributing element to RCPHD
OF-12	North of Brandywine Street	24" Terra Cotta pipe in rough cut stone retaining wall segment H8	Contributing element to RCPHD
OF-10	South of Davenport Street, west bank of Broad Branch	24" Terra Cotta pipe with irregularly coursed rough cut stone headwall with concrete and tree roots	Contributing element to RCPHD
OF-9	South of Grant Road Bridge (Figure 2-15)	42" RCP with downstream irregularly coursed rough cut stone mortared headwall	Contributing element to RCPHD
OF-8	North of Grant Road Bridge	24" in rough cut stone retaining wall segment H14	Contributing element to RCPHD

Figure 2-12. Storm Water Outfall with 15 inch diameter reinforced concrete pipe with regularly coursed rough cut stone headwall, west bank of Broad Branch, north of Ridge Road

Figure 2-13. Storm Water Outfall with 18 inch diameter terra cotta pipe and stone retaining wall, west bank of Broad Branch Road

Figure 2-14. Storm Water Outfall with 24 inch diameter vitrified clay pipe, stone headwall, and concrete repair, west bank of Broad Branch, south of Brandywine Avenue

Figure 2-15. Storm Water Outfall with 42 inch reinforced concrete pipe with irregularly coursed rough cut stone, mortared headwall, southwest bank of Broad Branch, south of Grant Road

2.3.1.4 Retaining Walls

Two general types of retaining walls have been observed in the Broad Branch project area: mortared and dry laid (**Table 2-4**). The only example of a mortared retaining wall occurs south of the Broad Branch Road Bridge. This retaining wall is irregularly coursed with ashlar or square-cut stone located on a concrete pad or spillway (**Figure 2-16**). Based on the stone pattern and location, this mortared retaining wall was most likely constructed in 1957 when the adjacent Broad Branch Road Bridge was erected. As this bridge is considered a non-contributing element to the RCPHD, the associated retaining wall and concrete spillway are also considered as non-contributing.

Table 2-4. Intact Retaining Wall Segments along Broad Branch

SEGMENT	RESOURCE	LOCATION	DESCRIPTION	NRHP STATUS
HA	Mortared stone wall with concrete spillway	Station 92+62 to 92+77 (West side of Rock Creek, south of Broad Branch Road Bridge)	Irregularly coursed stone ashlar wall, with concrete pad or spillway; 58 feet in length; most likely constructed in 1957 with construction of Broad Branch and Ridge Road Bridges	Non-contributing element to RCPHD
H1	Dry laid stone wall Segment 1	Station 90+60 to 92+64 (East side of Broad Branch Run, between Broad Branch Road Bridge and Ridge Road Bridge)	Regularly coursed rough cut stone wall; at least eight courses visible; 212 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H2	Dry laid stone wall Segment 2	Station 86+13 to 86+39 (West side of Broad Branch, North of Soapstone Creek)	Regularly coursed rough cut stone wall; at least three course visible; 21 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H3	Dry laid stone wall Segment 3	Station 85+68 to 85+97 (West side of Broad Branch, North of Soapstone Creek)	Regularly coursed rough cut stone wall; at least two courses visible; 30 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H4	Dry laid stone wall Segment 4	Station 84+61 to 85+31 (West side of Broad Branch, North of Soapstone Creek)	Regularly coursed rough cut stone block wall; at least five courses visible; 66 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H5	Dry laid stone wall Segment 5	Station 82+14 to 84+14 (West side of Broad Branch, North of Soapstone Creek)	Regularly coursed rough cut stone wall; maximum 6 courses visible; 190 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H6	Dry laid stone wall Segment 6	Station 80+52 to 81+79 (West side of Broad Branch, North of Soapstone Creek)	Regularly coursed rough cut stone wall; maximum 14 courses visible; 124 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H7	Dry laid stone wall Segment 7	Station 63+98 to 64+64 (West side of Broad Branch, North of Brandywine Avenue)	Regularly coursed rough cut stone wall; 71 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H8	Dry laid stone wall Segment 8	Station 59+42 to 60+73 (West side of Broad Branch, South of Grant Road)	Regularly coursed rough cut stone wall; 131 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H9	Dry laid stone wall Segment 9	Station 58+03 to 58+63 (West side of Broad Branch, South of Grant Road)	Regularly coursed rough cut stone wall; 57 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H10	Dry laid stone wall Segment 10	Station 56+78 to 57+89 (West side of Broad Branch, South of Grant Road)	Regularly coursed rough cut stone wall; 89 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD

SEGMENT	RESOURCE	LOCATION	DESCRIPTION	NRHP STATUS
H11	Dry laid stone wall Segment 11	Station 49+13 to 49+40 (West side of Broad Branch, North of Grant Road)	27 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H12	Dry laid stone wall Segment 12	Station 48+56 to 48+70 (West side of Broad Branch, North of Grant Road)	10 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H13	Dry laid stone wall Segment 13	Station 48+00 to 48+32 (West side of Broad Branch, North of Grant Road)	10 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H14	Dry laid stone wall Segment 14	Station 45+02 to 46+05 (West side of Broad Branch, North of Grant Road)	Regularly coursed rough cut stone wall; 96 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD
H15	Dry laid stone wall Segment 15	Station 38+68 to 40+28 (West side of Broad Branch, South of 27th Street)	Regularly coursed rough cut stone wall; 136 feet in length; most likely constructed 1890s-1920s	Contributing element to RCPHD

The other fifteen segments of retaining wall appear to be dry laid with rough cut stone in regular courses. In some places, the stones used are large rectangular or square rough cut blocks (**Figure 2-17;**) and in other places, the walls are a combination of large blocks and tabular pieces (**Figure 2-18**). Observable courses vary by segment with many portions of the wall segments collapsed into Broad Branch Run. No evidence of mortar could be observed on collapsed stones in the creek. These segments may represent the remains of a once continuous stone retaining wall along Broad Branch Road.

Figure 2-16. Mortared Ashlar Stone Wall with concrete spillway south of Broad Branch Road Bridge

The New Deal era programs in the 1930s in Rock Creek Park included Public Works Administration (PWA) and Civilian Conservation Corps (CCC) projects resurfacing roadways, constructing retaining walls, riprapping the creek, planting trees and shrubs, building equestrian trails and jumps, and obliterating abandoned roads and trails (Bushong 1990a). However, based on documentary research, and photographic documentation conducted by the NPS, the stone retaining wall segments were most likely constructed between the 1890s and the 1920s (Monteleone 2011a).

Figure 2-17. Dry laid rough cut stone in regular courses (large block) between the Broad Branch Road and Ridge Road Bridges

At the request of the NPS, a DOE form was prepared and submitted to the DC SHPO (**Appendix C**). On February 15, 2012, the DC SHPO concurred with the finding that the Broad Branch Retaining Walls / Rock Creek Park Retaining Walls located along Broad Branch Road from Beach Drive to 27th Street, NW are eligible for listing in the NRHP as a contributing element to the RCPHD within the category of culverts and retaining walls under Criteria A (overall conservation of natural settings within urban landscapes) and C (landscape architecture). The NPS also reviewed this DOE and concurred with its findings.

2.3.1.5 Boundary Monuments

At least three stone boundary monuments incised with 'R.C.P.', possibly dating to the initial establishment of the Park in the 1890s, mark the border of Rock Creek Park and occur immediately adjacent to the Broad Branch Road project area where the District of Columbia and Rock Creek Park boundaries meet (**Figure 2-19**). Modern metal monuments delineate the official boundary and are co-located with the older boundary markers (**Figure 2-20**). This resource category was not cited as a contributing resource to the RCPHD (Bushong 1990b) but is likely to be considered a contributing element during the NPS re-evaulation and update of the RCPHD.

2.3.2 Stone Pedestrian Bridge

A stone footbridge is located within the DDOT right-of-way past the north end of the Rock Creek Park boundary (**Figure 2-21**) adjacent to the Civil War Fort Sites and Fort Circle Park Historic District and U.S. Reservation 515. The stone footbridge has irregularly coursed stone headwalls, wing walls and abutments. The bridge deck is concrete. The parapets are crenallated and the mortar joints are beaded. Broad Branch Run has eroded the north end of the creek bank exposing a 12" sewer pipe

Figure 2-18. Dry laid rough cut stone in regular courses (combination of blocks and tabular pieces)

Figure 2-19. Rock Creek Park Stone Boundary Marker incised with 'R.C.P'

Figure 2-20. Modern Metal Boundary Marker co-located with the older stone boundary marker

sheathed in concrete extending from the concrete bridge deck. Originally, a wooden bridge crossed Broad Branch at this location (District of Columbia Water and Sewer Authority [D.C. WASA] 1983a) which was later replaced with the stone pedestrian bridge and encased a 12 inch diameter sewer pipe. Based on the D.C. WASA counter map IK-23-24-NW (D.C. WASA 1983a), this portion of the sewer line was abandoned in 1966.

Figure 2-21. Stone Pedestrian Bridge over Broad Branch

2.3.3 D.C. ROADWAY/INFRASTRUCTURE-RELATED RESOURCES

Architectural features associated with D.C. Roadway and Infrastructure include Broad Branch Road, 27th Street, the 27th Street Bridge, roadway guard rails, and water control resources such as storm drain outfalls and inlets, retaining walls, culverts, stone channels, and circular features (**Figure 2-22**).

2.3.3.1 Broad Branch Road

Broad Branch Road was surveyed by county surveyor Lewis Carberry and constructed in 1839 for the convenience of the Peirces who owned the mill located south along Rock Creek (Bushong 1990a, 1990b; Davis 1996:23). Broad Branch Road was laid out as a route north to connect Peirce Mill with Milkhouse Ford, the Brookville, and the Old Baltimore Roads (Bushong 1990b:21). Broad Branch followed the south side of the valley formed by that stream and could be reached by a short connection paralleling the mill race for Peirce Mill,

which left Rock Creek just south of the confluence with Broad Branch. Peirce Shoemaker deeded the roadway to the federal government in 1854, after which it became an official public highway (Davis 1996:24). One of the earliest surveys where the alignment of the road is indicated is aSeptember 1864 survey plat for the Levy Court. The Michler Survey (1867) is an extensive survey of the entire Rock Creek valley, and Broad Branch Road's alignment is similar to the one depicted in the 1864 survey plat (Monteleone 2011a). The original alignment included two areas north of Soapstone Creek and north of Brandywine Street where Broad Branch Road crossed Broad Branch stream; through time, these crossings have disappeared either through road realignment, stream realignment or a combination of both.

Previous alterations have resulted in diminished aspects of integrity to the historic road. The original surface treatment materials and design of the roadway have likely evolved from dirt to gravel and then to pavement. Elements of the rural setting, historic feeling, and association with parkland remain intact because the eastern side of the roadway still bounds an undeveloped, wooded setting that was designated Rock Creek Park in 1890; however, minor road realignments, repeated additions of curb and gutters, the construction of guard rails, and sequential repaving along the alignment as well as the residential development on the northern and western side of the roadway beginning in the 1920s and 1930s have altered the original rural character of the road. As a result of these previous alterations and continued maintenance, the road is not likely to be considered eligible for the NRHP.

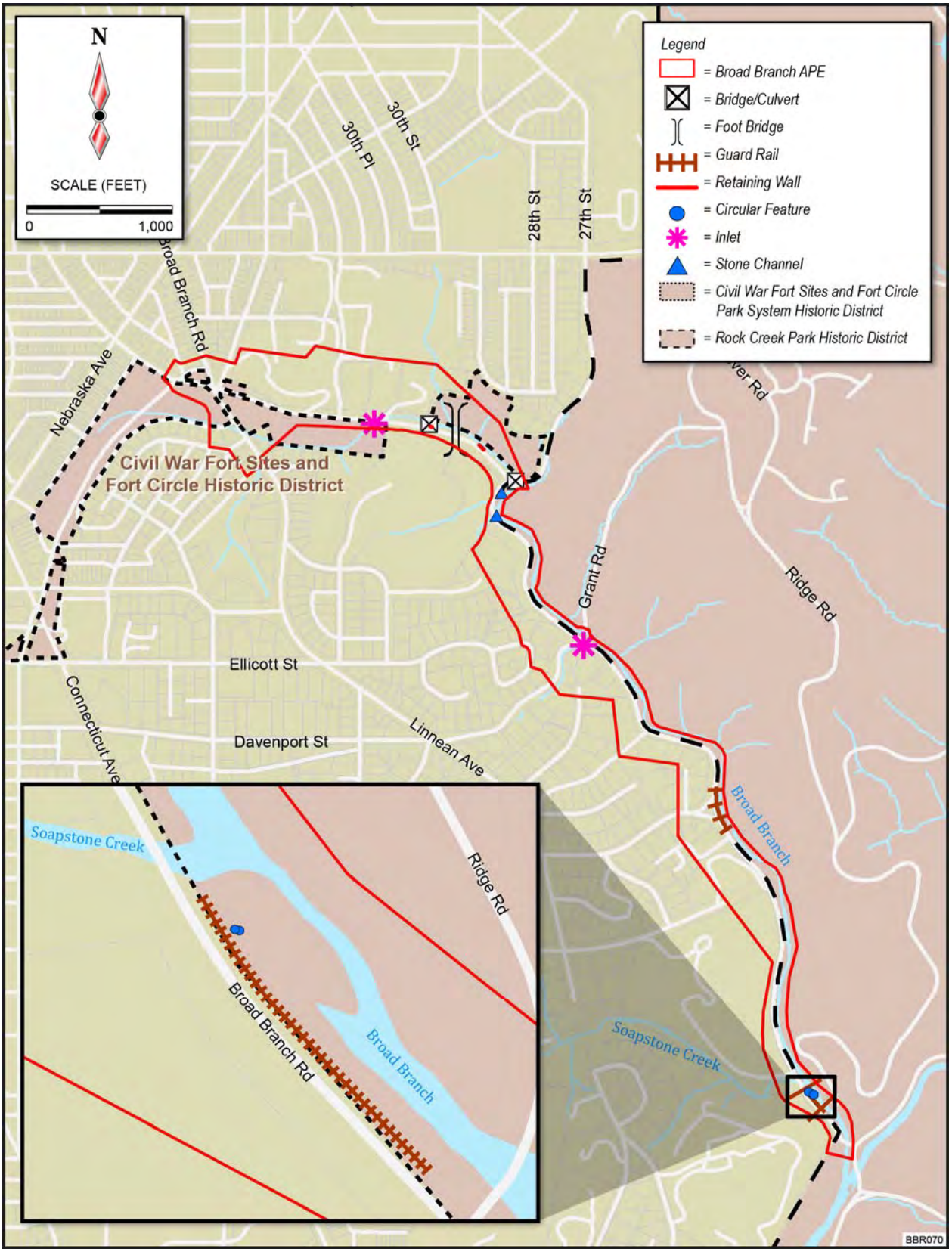

Figure 2-22. DC Roadway/Infrastructure Related Resources

2.3.3.2 27th Street NW

In 1861, 27th Street NW was originally a local farm road linking Broad Branch Road to Military Road (Boschke 1861) and it has retained its original alignment.

Previous alterations have resulted in diminished aspects of integrity to the historic road. The historic alignment of the roadway has probably already been widened from a single lane to two lanes over time. The original surface treatment materials and design of the roadway have likely evolved from dirt to gravel and then to pavement. Elements of the rural setting, historic feeling, and association with parkland remain intact because the eastern side of the roadway still bounds an undeveloped, wooded setting that was designated a national park in 1890; however, previous additions of curbing, catchment basins, and sidewalks in portions of the alignment as well as the residential development on the western side of the roadway beginning in the 1920s and 1930s have somewhat altered the rural character of the road. As a result of these previous alterations, the road is not likely to be eligible for the NRHP.

Figure 2-23. 27th Street Bridge, looking north

Figure 2-24. Irregularly coursed rough cut stone retaining wall on east side of 27th Street Bridge

2.3.3.3 27th Street NW, Bridge

The 27th Street NW, Bridge is a concrete deck bridge and parapet with regularly coursed rough cut stone abutments on concrete foundations (**Figure 2-23**). An irregularly coursed rough cut stone retaining wall on a concrete foundation is located on the east bank on the north side of the 27th Street Bridge (**Figure 2-24**). A hand beveled capstone is intact on the north end of the wall; a second capstone is on the ground. A square opening, most likely a scupper, similar to ones located in the Soapstone Creek culvert headwalls, is located at the juncture of the stone wall and concrete foundation (Figure 2-24). The parapet and stone abutments represent intact elements of the original bridge constructed ca. 1925. The concrete deck bridge was installed in 1950. A DOE form was prepared and submitted to the DC SHPO in conjunction with the Preliminary Engineering Report and Categorical Exclusion for the proposed replacement of the 27th Street NW Bridge (AECOM 2012). The DOE recommended that the 27th Street NW Bridge is not considered individually eligible for listing in the NRHP and is not a contributing resource to the RCPHD. The DC SHPO concurred with this recommendation on June 22, 2012.

2.3.3.4 Roadway Guard Rails

Figure 2-25. Concrete Posts with Metal Cable Guard Rails on Broad Branch Road, south of Brandywine Avenue

Two discrete areas along Broad Branch Road contain possible guard rails: north of the intersection with Ridge Road and at the T intersection with Brandywine Street. Two strands of metal cable are hung between concrete posts (**Figure 2-25**). Although the roadway guard rails may be older than 50 years, they represent ancillary or support features associated with roadway operations and are not likely to be considered NRHP-eligible as a crucial element of the D.C. roadway system (NRHP Criterion A) nor do they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C).

2.3.3.5 Water Control Features

Water control features identified within the project area along the north and west sides of Broad Branch Road include storm drain outfalls and inlets, retaining walls, culverts, stone channels, and circular features (**Table 2-5**). These resources likely date to the development or subsequent improvement of the roadway and are not associated with the development of Rock Creek Park.

Table 2-5. Water Control Features in the Project Area

RESOURCE	LOCATION	DESCRIPTION	NRHP STATUS
Storm Drain Outfall	OF-3 (North of Grant Road Bridge)	15" pipe in stone retaining wall	Not eligible
Storm Drain Inlet	South of Grant Road Bridge, west of Broad Branch Road	42" RCP with stone headwall (upstream); 1930s?	Not eligible
Storm Drain Inlet	North end of project area, south side of Broad Branch Road	36" RCP with brick, concrete and stone headwall and wing wall with crenallated stone; empties into buried concrete box culvert channel; constructed in 1937	Not eligible
Retaining wall (HB)	West of 27th Street, east of stone pedestrian bridge, south side of Broad Branch	42 feet in length	Not eligible
Retaining Wall (HC)	South edge of concrete box culvert	concrete wall; 13 feet in length	Not eligible
Culvert	South side of Broad Branch, opposite Ingleside Manor at the Presbyterian Home	7.75' x 10' concrete box culvert with headwall with irregularly coursed stone veneered wing walls with concrete base; chain link fence set in headwall and wing walls; constructed in 1937	Not eligible
Stone Channel	South of 27th Street, east of Broad Branch Road	Large stones are base of channel; smaller stones line edges	Not eligible
Stone Channel	South of 27th Street, east of Broad Branch Road	Large stones are base of channel; smaller stones line southern edge	Not eligible
Circular Feature	South of Soapstone Creek Culvert, east of Broad Branch Road	Tabular stone with mortar; four courses; completely exposed by erosion from Broad Branch	Not eligible
Circular Feature	South of Soapstone Creek Culvert, east of Broad Branch Road	Brick with mortar on concrete base; at least 12 courses; with terra cotta pipe at bottom; completely exposed by erosion from Broad Branch	Not eligible

STORM DRAIN OUTFALLS/INLETS

One storm water outfall and two inlets were observed during the site visits along Broad Branch conducted in July 2008 and April 2011 or were identified from current survey drawings. The storm water outfall construction included one 15 inch pipe embedded within the existing stone retaining wall. The two inlets observed were reinforced concrete pipe with widths of 36 inches and 42 inches in diameter with either a stone headwall or brick and concrete surrounding the pipe with crenellated stone headwall and wingwalls (**Figure 2-26**). The 36 inch reinforced concrete pipte inlet with brick and concrete surrounding the pipe and a crenellated stone headwall and wingwalls was constructed in 1937 when this tributary was channeled underground (District of Columbia Department of the Environment [D.C. DOE] and NPS 2012).

Figure 2-26. Storm Water Inlet with 36 inch diameter reinforced concrete pipe surrounded by brick and concrete with crenellated stone headwall and wingwall

The first clay pipe was installed in Washington, D.C. in 1815 (Canclay.com 2012). By the 1850s, smaller sewer systems in the United States were made of vitrified clay or cement mortar with brick was used for larger sized conduits (Sewerhistory.org 2004). Poured in place concrete was also used for large diameter mains in Washington, D.C. at this time (Sewerhistory.org 2004). By the 1880s-1900s, vitrified clay pipe with interior and exterior salt glazing was in common use for sewers 30 inches in diameter or less (Sewerhistory.org 2004). The use of pre-cast reinforced concrete pipe was prevalent in Washington, D.C. by the 1930s (American Concrete Pipe Association 1998). It is likely that outfall/inlets with pre-cast reinforced concrete pipe were installed in the 1930s or later.

Although the stormwater outfall and inlets may be older than 50 years, they represent ancillary or support features associated with roadway operations and are not likely to be considered NRHP-eligible as a crucial element of the D.C. roadway system (NRHP Criterion A) nor do they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C).

RETAINING WALLS

Two retaining walls are located west of 27th Street on the south side of Broad Branch near the northern end of the project area. The retaining wall west of 27th Street is 42 feet long and is listed as a stone wall on the design drawings. The second retaining wall is 13 feet long, made of concrete and is adjacent to the south wingwall on a concrete box culvert used to channelize Broad Branch. It is possible that these concrete retaining walls were constructed when the

upstream portion of Broad Branch was channelized underground in 1937 (D.C. DOE and NPS 2012). The concrete retaining walls represents ancillary features of the city's storm drain system and is not likely to be considered NRHP-eligible as a critical element of D.C. stormwater system (NRHP Criterion A) nor does it embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C) .

CULVERT

Broad Branch was channelized from Linnean Avenue east using a 7.75 foot by 10 foot reinforced concrete box culvert in 1937 (D.C. DOE and NPS 2012; D.C. WASA 1983b). The headwall is concrete with irregularly coursed stone veneered wing walls with concrete base; a chain link fence set into the headwall and wing walls (**Figure 2-27**). The concrete headwall represents a small ancillary feature of the city's storm drain system and is not likely to be considered NRHP-eligible as a critical element of D.C. stormwater system (NRHP Criterion A) nor does it embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C).

Figure 2-27. Concrete Box Culvert with Irregularly Coursed Stone Veneer on the north wingwall, looking northwest

Figure 2-28. Example of Stone-lined Channel, located south of 27th Street between Broad Branch Road and Broad Branch

STONE CHANNELS

Two stone-lined channels were observed during the field reconnaissance in 2008 and in 2011. In both cases, large stones serve as the base of the channel; smaller stones line the outside edges. Both channels are located south of 27th Street between Broad Branch Road and Broad Branch Run (**Figure 2-28**). The two stone channels features most likely represent two of many similar ancillary features of the city's storm drain system and are not likely to be considered NRHP-eligible as a critical element of D.C. stormwater system (NRHP Criterion A) nor do they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C).

CIRCULAR FEATURES

Two small circular structures were noted during the field reconnaissance in 2008: one was constructed of stone and the other was brick. Both features are located within 3 feet of each other south of the Soapstone Creek culvert (Figure 2-22). The stone feature seemed to consist of four irregularly coursed mortared rows of tabular stone, most likely schist, with equal diameters for each course. It was completely exposed by erosion from Broad Branch (**Figure 2-29**). The brick feature was constructed in both header and stretcher rows: one header row, four stretcher rows, one header row, six stretcher rows placed on a submerged concrete foundation (**Figure 2-30**). Brick courses were smaller in diameter at the top of the feature presenting a tapered appearance. A terra cotta pipe, approximately 8-10 inches in diameter, is located at the base of the brick feature on the north side. The brick feature was also completely exposed by erosion from Broad Branch.

Figure 2-29. Circular Features south of Soapstone Creek culvert. Stone feature in foreground; brick feature in background near retaining wall, guard rails, and Broad Branch Road

Figure 2-30. Circular Brick Feature south of Soapstone Creek culvert

The first sewer line was installed under the entire length of Broad Branch Road between 1907 and 1911 (Baist 1907, 1911). In 1911, a separate sewer line joined the main Broad Branch line just south of Soapstone Creek (Baist 1911). By 1913, the main Broad Branch line was truncated at the T intersection with the Soapstone Creek line and the main line was moved east of Broad Branch Road closer to the stream bed (Baist 1913). The location of the two circular features appears to coincide where the 1913 sewer line turns south along the stream bed (Baist 1913). By 1919, the sewer line south of Soapstone Creek has been abandoned and the main Broad Branch sewer line has been shifted toward the stream at an angle eliminating the sharp turns (Baist 1919).

The two circular features may be related to the early sewer lines; however, the openings appear to be too small to provide access to the sewer pipes below. Standard manhole openings are 24 inches in diameter; however, these features could represent lampholes for visual inspection (Sewerhistory.org 2004). These features most likely represent two of many similar ancillary features of the city's storm drain system and are not likely to be considered NRHP-eligible as a critical element of D.C. stormwater system (NRHP Criterion A) nor do they embody the distinctive characteristics of a type, period, or method of construction, or that represent the

work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C).

2.3.4 RESIDENCES

Thirty-five residential structures occur along Broad Branch Road in the project area and were constructed from 1920 through 2008. Twenty-five residences are older than 50 years (**Table 2-6**). At the request of the DC SHPO based on their examination of the project area, only one building was identified for preparation of a DOE form: the gatehouse for La Villa Firenze. Based on the DC SHPO assessment, the other houses are not likely to be individually eligible nor are they likely to comprise an historic district that would be eligible for the NRHP for purposes of this undertaking.

Table 2-6. Historic Residences in the Broad Branch Road Project Area

LOCATION	DATE OF CONSTRUCTION	DESCRIPTION	CURRENT OWNER	NRHP STATUS
2701 Albemarle Street NW	1927	Two-story stone residence with slate roof	Federation of Malaysia	Not eligible for purposes of this undertaking
4400 Broad Branch Road	1925-1927	Tudor Revival, one and a half story residence; serves as a gatehouse for La Villa Firenze	Government of Italy	Eligible as a contributing element to La Villa Firenze
4550 Broad Branch Road NW	1959	Contemporary, two-story, six bedrooms, five bath	Private	Not eligible for purposes of this undertaking
4600 Broad Branch Road NW	1934	Two-story, five bedroom, two bath	Private	Not eligible for purposes of this undertaking
4622 Broad Branch Road NW	1934	Three-story, two bedroom, 5 bath	Private	Not eligible for purposes of this undertaking
4636 Broad Branch Road NW	1936	Traditional, four-story, six bedroom, seven bath	Private	Not eligible for purposes of this undertaking
4650 Broad Branch Road NW	1936	Two-story, four bedroom, five bath	Private	Not eligible for purposes of this undertaking
5111 Broad Branch Road NW	1920	1927 Livingston's Vale, four-story	Republic of the Ivory Coast	Not eligible for purposes of this undertaking
5111A Broad Branch Road NW	1920	One and half-story bungalow	Republic of the Ivory Coast	Not eligible for purposes of this undertaking
5131 Broad Branch Road NW	1920	Mediterranean style, three-story	Kingdom of Tunisia	Not eligible for purposes of this undertaking
5300 Broad Branch Road NW	1950	Two-story, three bedroom, three bath	Private	Not eligible for purposes of this undertaking
5301 Broad Branch Road NW	1927	Two-story, three bedroom, 2 bath	Private	Not eligible for purposes of this undertaking
2801 Chesterfield Place NW	1940	Four-story, seven bedroom, seven bath	Private	Not eligible for purposes of this undertaking
2815 Ellicott Street NW	1962	One-story, six bedroom, three bath	Private	Not eligible for purposes of this undertaking
2819 Ellicott Street NW	1962	One-story, four bedroom, five bath	Private	Not eligible for purposes of this undertaking
2823 Ellicott Street NW	1962	Three-story, five bedroom, five bath	Republic of Kenya	Not eligible for purposes of this undertaking
2827 Ellicott Street NW	1962	Two-story, five bedroom, five bath	Private	Not eligible for purposes of this undertaking
2901 Fessenden Street NW	1962	Two-story, six bedroom, eight bath	Private	Not eligible for purposes of this undertaking

LOCATION	DATE OF CONSTRUCTION	DESCRIPTION	CURRENT OWNER	NRHP STATUS
5207 Linnean Avenue NW	1952	One-story, three bedroom, three bath	Private	Not eligible for purposes of this undertaking
5208 Linnean Avenue NW	1952	One-story, three bedroom, three bath	Republic of Zambia	Not eligible for purposes of this undertaking
5213 Linnean Avenue NW	1952	One-story, three bedroom, three bath	Private	Not eligible for purposes of this undertaking
5214 Linnean Avenue NW	1952	One-story, three bedroom, three bath	Private	Not eligible for purposes of this undertaking
5250 Linnean Avenue NW	1953	Two-story, four bedroom, five bath	Private	Not eligible for purposes of this undertaking
5190 Linnean Terrace NW	1953	Two-story, four bedroom, three bath	Private	Not eligible for purposes of this undertaking
5307 Nevada Avenue NW	1931	Tudor style, four-story, four bedroom, four bath	Private	Not eligible for purposes of this undertaking

2.3.4.1 2701 Albemarle Street NW (Federation of Malaysia Ambassador's Residence)

The large two-story residence constructed of gray-yellow Baltimore stone with slate roof was built in 1927 by the Honorable Thomas P. Gore, one of the first two senators from Oklahoma (sworn into office 1907) and president of the National Library for the Blind (1936-1946) (Billington 1961; Vidal 1996). Senator Thomas P. Gore was blinded by two separate accidents as a child (Burke 2012). His grandson, Gore Vidal, spent the first ten years of his life (1925-1935) at his grandparent's residence. As described by Senator Gore's grandson, Gore Vidal:

> On one side there was a steep lawn that overlooked Broad Branch Road and the winding creek while on the other side there was the front door, approached by a circular drive at whose center was a small fountain. In those days, from the house one saw only green woods, a rose garden, rows of flags, as we called irises, and a small vineyard of purple grapes. At the edge of the woods was a slave cabin, falling to pieces.
>
> The main hall always smells of fried bacon, floor wax, irises, books--thousands of dusty books. There is a large dining room on the left, with a fireplace and a niche on either side in which there are two tall gaudy pink and gold vases. Back of a screen there is the door to the large white kitchen. To the right of the hall, a living room with a large bay window framed by bookcases (Vidal 1996).

James E. Cooper (1878-1930) was the designing architect (Society of Architectural Historians 2009) and the Metropolitan Construction Company built the residence (Permit Number 5191 1924). Senator Gore and his wife, Nina Kay Gore, sold the residence during World War II because it was impossible to heat (Vidal 1996).

2.3.4.2 4400 Broad Branch Road (Gatehouse for La Villa Firenze)

The building located at 4400 Broad Branch Road, NW is a Tudor Revival style house constructed between 1925 and 1927 that serves as a gatehouse for La Villa Firenze, currently the Italian Ambassador's residence (**Figure 2-31** and **Figure 2-32**). The gatehouse is a one and a half story building with stucco exterior, half-timbering and two stone chimneys. All windows have stone sills. The first floor windows are four-over-four double hung sash windows (Figure 2-31);

the second floor window on the east façade is a six-over-six double hung sash window (Figure 2-32). The original shutters have been removed and storm windows have been installed over the original windows (Figure 2-32). The original slate roof has been replaced with asphalt shingles. The original stone retaining walls along Broad Branch Road at the entrance to the driveway and the original stone pillars flanking the driveway are intact (Figure 2-31; **Table 2-7**). The light fixtures on the stone pillars have been replaced and a wrought iron fence has been added (Figure 2-32). Minimal alterations to the exterior design of the gatehouse are apparent and the overall integrity of design remains intact.

Figure 2-31. Gatehouse for La Villa Firenze, looking northwest (pre-1935) – (E. B. Thompson, D.C. Public Library Photo Archives)

Figure 2-32. Gatehouse for La Villa Firenze, looking west (2011)

The gatehouse is considered a contributing element to the Estabrook/Firenze House/La Villa Firenze residential complex. Access to the entire estate for NRHP evaluation is restricted at this time as the property is owned by the Italian government and as such the buildings are located on foreign soil. However, based on preliminary research, Estabrook/Firenze House/La Villa Firenze and its contributing elements, would most likely be considered eligible for listing on the NRHP under Criterion B, for its association with philanthropist and prominent Washington hostess, Rebecca Pollard "Polly" Guggenheim Logan, and under Criterion C, as an excellent representative example of the 1920s Tudor-style architecture in Washington, D.C. At the request of the DC SHPO, a DOE form was prepared and on February 15, 2012, the DC SHPO concurred that the gatehouse is most likely eligible as a contributing element to the residential complex known as La Villa Firenze (**Appendix D**).

Table 2-7. Retaining Walls at Broad Branch Road entrance to La Villa Firenze

NO.	RESOURCE	LOCATION		DESCRIPTION	NRHP STATUS
		START	END		
HG1	Stone Retaining Wall	86+70	87+03	Regularly coursed rough cut stone wall, located south of driveway; at least 5 courses; constructed 1925/1927	Contributing element to the Gatehouse, La Villa Firenze
HG2	Stone Retaining Wall	86+23	86+44	Regularly coursed rough cut stone wall, located north of driveway; at least 5 courses; constructed 1925/1927	Contributing element to the Gatehouse, La Villa Firenze

2.3.4.3 5111 Broad Branch Road NW (Livingston's Vale/Republic of the Ivory Coast Ambassador's Residence)

This two-story stone and frame dwelling was built in 1927 and was known as Livingston's Vale. George Livingston was identified as the parcel owner on the 1919 Baist map although no structures are present (Baist 1919). Lily A. Livingston, George's wife was listed as the owner of this parcel on the 1937 Baist map (Baist 1937); three structures are present on the 1937 map (two frame and one stone) and most likely represent the existing main house, the garage, and the small bungalow (**Figure 2-33**).

Figure 2-33. Bungalow Associated with the Republic of the Ivory Coast Ambassador's Residence

2.3.4.4 5131 Broad Branch Road NW (Kingdom of Tunisia Ambassador's Residence)

This Mediterranean style residence was supposedly constructed in 1920 by a family from Portugal (Villegas 2003:298-300). The 1913, 1919 and 1937 Baist maps indicate that this parcel was owned by the Schneider family; the lot appears to have been subdivided and two stone residences were constructed prior to 1937 (Baist 1937). The west half was owned by Thomas Franklin Schneider, Jr. (1900-1965), son of the Washington, D.C. architect Thomas Franklin Schneider (1858-1938), who designed the Cairo Hotel. Tunisia acquired the residence in 1956 when it established diplomatic relations with the United States. The arcs, the torsade carved columns, and the detail carvings on the top of the exterior white walls, and the vivid blue metalwork characterizes the Mediterranean style (Villegas 2003:298-300).

2.3.5 EDUCATIONAL AND HEALTH FACILITIES

Three parcels adjacent to the Broad Branch Road project area contain educational and health facilities including the Carnegie Institution's Broad Branch Campus containing the Department of Terrestrial Magnetism and Geophysical Laboratory (education); the Ingleside Manor at the Presbyterian Home (medical facility), and the Hillwood Estate, Museum and Gardens (education).

2.3.5.1 Carnegie Institution's Broad Branch Campus

Two buildings associated with the Carnegie Institution's Broad Branch campus are located within the APE: Abelson Hall (ca. 1913-1914) and the Research Building (ca. 1989) (Baist 1913; Bauer and Fleming 1915). The Department of Terrestrial Magnetism (DTM) building or Main Building was designed by Waddy Butler Wood in the Italian Renaissance style and constructed by the Davis Construction Company in 1913-1914 (Bauer and Fleming 1915; Brown 2004). With the completion of the new Research Building in 1990, research activities in the DTM building were moved to the new facility. In 1991, the DTM building was renovated which included reorganization of interior spaces, replacement of windows, the addition of an elevator, the addition of a large glass-enclosed three-story exterior stairway on the north elevation, and the addition of large air handling

equipment on the roof extending above the original roof line (Hardy 2012). The DTM building was renamed Abelson Hall in 1999 after Dr. Philip Hauge Abelson (1913-2004), a biochemist, nuclear physicist, and microbiologist, who became the director of the Geophysical laboratory in 1953 and President of the Carnegie Institution of Washington in 1971 (Geophysical Laboratory, Carnegie Institution of Washington 2005b; Washington State Libraries 2011). Construction for the large Research Building began in 1989 (Department of Terrestrial Magnetism, Carnegie Institution of Washington 2007). All activities associated with the Geophysical Laboratory, located at 2801 Upton Street, N.W., were relocated to the Broad Branch Campus in 1990 (Geophysical Laboratory, Carnegie Institution of Washington 2005a). At the request of the Carnegie Institution, no evaluation to assess NRHP eligibility of Abelson Hall was conducted.

2.3.5.2 Ingleside Manor at the Presbyterian Home

The Ingleside Manor was constructed in the 1930s (Ingleside at Rock Creek 2011) (**Figure 2-34**). The 1913, 1919 and 1937 Baist maps indicate that this parcel was owned by the Schneider family; the lot appears to have been subdivided and two stone residences were constructed prior to 1937. The east half was owned by Florence Schneider Montfort (1894-1988), daughter of the Washington, D.C. architect Thomas Franklin Schneider (1858-1938), who designed the Cairo Hotel. In 1960, the Presbyterian Home moved to the Broad Branch location. The Ingleside Manor is currently used for corporate offices, special functions, and Ingleside guests. At the request of the DC SHPO, Ingleside Manor is considered eligible for the purposes of this undertaking.

Source: Westminster Ingleside Foundation. (Ingleside Manor photo from webpage)

Figure 2-34. Ingleside Manor

2.3.5.3 Hillwood Estate, Museum and Gardens

The Hillwood Estate, Musem and Gardens consists of 25 acres of landscaped gardens and natural woodlands surrounding the mansion, a visitor's center and several outbuildings. The Georgian-style mansion was originally designed by John Diebert in 1926 (HillwoodMuseum.org 2011). The mansion was extensively enlarged and redesigned in the mid 1950s by New York architect Alexander McIlvaine and the New York design firms of McMillen, Inc. and French and Company after Mrs. Marjorie Merriweather Post purchased the estate (HillwoodMuseum.org 2011). Marjorie Merriweather Post was the only child of cereal magnate C.W. Post. She inherited the Postum Company in 1914 and began collecting art -- primarily Sèvres porcelain and French furniture and tapestries -- in the 1920s after her marriage to financier Edward F. Hutton. Mrs. Post became interested in Russian art when husband Joseph E. Davies served as

ambassador to the Soviet Union in the late 1930s. During these years, the Soviet government was selling many of the treasures it had appropriated from the church, the imperial family and the aristocracy in an effort to finance the new government's industrialization plan. She acquired the nucleus of her Russian holdings at this time, but she continued to collect French and Russian art for the rest of her life, eventually amassing the most comprehensive Russian imperial collection in the West. Mrs. Post died in 1973 and the Hillwood Estate, Museum and Gardens were opened as a public institution in 1977 (HillwoodMuseum.org 2011). At the request of the DC SHPO, the Hillwood Estate, Museum and Gardens is considered eligible for the purposes of this undertaking.

2.4 CULTURAL LANDSCAPES

Cultural landscapes, as defined by the Secretary of the Interior's *Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, consist of "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values."

Rock Creek Park was established by Congress in 1890 as an open space for the enjoyment of the scenery, bicycle and horseback riding, strolls, picnics, and pleasure driving, and its establishment was an important event in the nineteenth century movement to preserve natural scenic areas in the United States (Bushong 1990b). RCPHD possesses significance as a historic natural landscape, which was adapted and significantly enhanced as a public park by the U. S. Army Corps of Engineers and the National Park Service between 1890 and 1941. The influential 1916 Olmsted report, prepared by acknowledged master landscape architects Frederick Law Olmsted, Jr., and John C. Olmsted, established methods of landscape practice and a general development plan for the Park which has guided management of the reservation's natural resources to the present day. Implemented in 1919 the plan was a significant early application of park landscape planning and scenic preservation.

In 1997, a cultural landscape inventory was conducted for Rock Creek Park (NPS, 2003a and 2003b). Based on the preliminary research gathered during this inventory, Linnaean Hill and Pierce Mill were identified as component landscapes of Rock Creek Park (NPS 2003a, 2003b). As a result, Rock Creek Park met the criteria for significance and integrity for listing on the NRHP as a historic designed landscape. Both Linnaean Hill (including the Pierce-Klingle Mansion) and the Peirce Mill also comprise individually eligible landscape elements (NPS 2003a, 2003b). The Linnaean Hill Component Landscape consists of 31.8 acres located on a bluff overlooking the west bank of Rock Creek near the confluence with Piney Branch and is not located within the project area.

2.4.1 PEIRCE MILL COMPONENT LANDSCAPE

The Peirce Mill Component Landscape consists of 24 acres located on the west bank of Rock Creek within the floodplain, south of its confluence with Broad Branch (Figure 2-2). The Pierce Mill Component Landscape includes the Pierce Mill and is important for illustrating the evolution of land uses through time: a nineteenth century utilitarian landscape associated with a privately owned milling and agricultural use; an early twentieth century picturesque design including a tea house and picnic grounds; and a mid twentieth century living history

interpretative site (NPS 2003b). The Pierce Mill Component Landscape is located on the south end of the proposed project area. No contributing features of the Pierce Mill Component Landscape are located within the proposed project area. No current or lost historic views and vistas have been identified near the proposed project area (NPS 2003b).

2.4.2 HISTORIC TRAILS CULTURAL LANDSCAPE

The NPS is currently preparing a Historic Trails Cultural Landscape study; a final report will be available in 2013 (Monteleone 2011b). Contributing features include specific types of trails and trail alignments, topography and natural features (organizational and spatial patterning), structures, vegetation consisting of understory and canopy, views and vistas, and small scale features such as culverts and headwalls, benches, checkdams, signage, and retaining walls.

Two historic trails, as identified in the draft Historic Trails Cultural Landscape Report (Poss and McMillen 2012), are present along the southern end of the project area near the intersection of Broad Branch Road and Beach Drive (Figure 2-22): the Soapstone Valley foot trail and the bridle trail from the intersection of Broad Branch and Beach Drive to White Horse Trail. The Soapstone Valley foot trail predated the establishment of Rock Creek Park and was originally developed as a carriage road which was converted to a bridle trail by the U.S. Army Corps of Engineers in 1916. The trail was abandoned in 1927 but reconstructed in 1979 using portions of the previous alignment (Poss and McMillen 2012:114). Portions of the Soapstone Valley foot trail are considered eligible as part of the Historic Trails Cultural Landscape. Historic natural views from the Soapstone Valley foot trail within the APE include the upstream headwall and wingwall of the Soapstone Creek Culvert. The view of the trail extending west from the Soapstone Creek culvert is obscured by topography and vegetation. The bridle trail begins north of the confluence of Rock Creek and Broad Branch, crosses Ridge Road, and parallels Broad Branch on the east side climbing onto the ridge and diverging from the stream to join the Western Ridge Trail. The segment of the bridle trail from the confluence of the streams to Ridge Road was developed as part of the Mission 66 funding (1955-1966) and may not be considered eligible as part of the Historic Trails Cultural Landscape (Poss and McMillen 2012). The segment of the trail from Ridge Road to the Westen Ridge Trail was originally a bridle trail that predated the establishment of Rock Creek Park and is considered eligible as part of the Historic Trails Cultural Landscape (Poss and McMillen 2012). Historic natural views from this segment of the bridle trail consist of open vistas to the northwest and west across Broad Branch and include views of the existing Soapstone Creek culvert, five segments of the historic retaining walls (segments H2, H3, H4, H5, and H6), and two stormwater outfall stone headwalls (OF-20 and OF-21).

3 ASSESSMENT OF EFFECTS

3.1 IMPACT METHODOLOGY

In accordance with the Advisory Council on Historic Preservation's (ACHP) regulations implementing Section 106 (36 CFR Part 800, Protection of Historic Properties), impacts to cultural resources were identified and evaluated by (1) determining the area of potential effects (APE); (2) identifying cultural resources present in the APE that are either listed in or eligible to be listed in the National Register of Historic Places (NRHP); (3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the NRHP; and (4) considering ways to avoid, minimize, or mitigate adverse effects.

Under the ACHP's regulations, a determination of either adverse effect or no adverse effect must be made for affected NRHP listed or eligible cultural resources. An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualifies it for inclusion in the NRHP (e.g., diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance, or be cumulative (36 CFR 800.5, Assessment of Adverse Effects). Adverse effects on historic properties would include, but not be limited to:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the NRHP;
- Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- Neglect of a property resulting in its deterioration or destruction; and
- Transfer, lease, or sale of the property (36 CFR 800.9[b]).

A determination of no adverse effect means historic properties are present, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the NRHP.

Alteration or destruction of those characteristics or qualities that make a cultural resource potentially eligible for inclusion in the NRHP would be an adverse effect under Section 106 of the National Historic Preservation Act (NHPA). While archaeological sites or historic buildings or structures can be destroyed during a single event, more often it is the cumulative effect of recurrent disturbing actions that diminish the integrity of the cultural resource and its defining characteristics.

3.2 EFFECTS TO ARCHAEOLOGICAL SITES

Project effects to archaeological sites include physical disturbance through road reconstruction (i.e. cut and fill activities), trenching for utility lines, excavation of retaining wall piers and Soapstone Creek culvert subsurface, surface modification for rain gardens, use of staging areas for heavy equipment and supplies, and vandalism of archaeological materials from temporary or permanent increased access to sites. Any ground-disturbing action in the area of an NRHP-eligible or potentially eligible archaeological site, or modification to such a site, can affect the physical integrity of that cultural resource, resulting in alteration or destruction of those characteristics or qualities which make it potentially eligible for inclusion in the NRHP.

3.2.1 ALTERNATIVE 1– NO ACTION ALTERNATIVE

Continued erosion and natural degradation of areas within Rock Creek Park which contain archeological resources will continue to occur as a result of uncontrolled stormwater runoff. Archeological resources would continue to be managed in accordance with Sections 106 and 110 of the NHPA and the National Park Service's Conservation Planning, Environmental Impact Analysis and Decision Making (Director's Order #12). Implementation of the No Action Alternative (repaving and general maintenance) would result in no adverse effects to archeological resources.

3.2.2 ALTERNATIVE 2 WITH OPTIONS A AND B

No archaeological sites occur within the District Department of Transportation (DDOT) right-of-way The area along Broad Branch Road between Linnean Avenue and 27th Street has been previously disturbed; the uplands near Linnean Avenue have been either deeply graded or filled, and other uplands near Broad Branch Road are too steep for direct occupation. This area contains no potential for archaeological resources (Wagner 2011). The area along Broad Branch Road from 27th Street to Beach Drive is characterized by steep uplands on the west side and Broad Branch on the east side. The original topography was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. The original topography in the area at the existing Y-configured intersection at Brandywine Street and Broad Branch Road was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. The original topography along Brandywine Street was modified during construction of the street prior to 1945 (USGS 1945) and no archaeological sites prior to 1945 would have been located on the hill slopes. The area north of the confluence of Soapstone Creek and Broad Branch contains a small residence with a sloping yard bounded by stone retaining walls (the Gatehouse at La Villa Firenze). Road, park, and building construction activities at the confluence of Soapstone Creek and Broad Branch have altered the topography at this location, particularly the construction of a structure by 1898, its demolition prior to 1925, and construction of the existing gatehouse, this area contains no potential for prehistoric or historic resources. No archaeological sites will be affected by implementation of Alternative 2.

3.2.2.1 Option A – Retaining Wall

The original topography in the area designated for the 561 foot retaining wall in Option A was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. No archaeological sites will be affected by implementation of Option A for Alternative 2.

3.2.2.2 Option B – Sidewalk

No archaeological sites occur within DDOT right-of-way or within NPS land at this location. The original topography in the area designated for the connecting sidewalk, from the National Park Service (NPS) parking lot at Beach Drive and Broad Branch Road to the Soapstone Valley trail, in Option B was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. No archaeological sites will be affected by implementation of Option B for Alternative 2.

3.2.3 Alternatives 3 and 4

No archaeological sites occur within the existing DDOT right-of-way or the proposed additional rights-of-way to be obtained from the NPS, private landowners, and sovereign nations. The area along Broad Branch Road between Linnean Avenue and 27th Street has been previously disturbed; the uplands near Linnean Avenue have been either deeply graded or filled, and other uplands near Broad Branch Road are too steep for direct occupation. This area contains no potential for archaeological resources (Wagner 2011). The area along Broad Branch Road from 27th Street to Beach Drive is characterized by steep uplands on the west side and Broad Branch on the east side. The original topography was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. The original Brandywine Street/Broad Branch Road intersection was constructed as a Y-intersection and the entire area has been previously disturbed by topographic recontouring and road construction. The original topography along Brandywine Street was modified during construction of the street prior to 1945 (USGS 1945) and no archaeological sites prior to 1945 would have been located on the hill slopes. The area north of the confluence of Soapstone Creek and Broad Branch contains a small residence with a sloping yard bounded by stone retaining walls (the Gatehouse at La Villa Firenze). Road, park, and building construction activities at the confluence of Soapstone Creek and Broad Branch have altered the topography at this location, particularly the construction of a structure by 1898, its demolition prior to 1925, and construction of the existing gatehouse, this area contains no potential for prehistoric or historic resources.

3.2.4 Option C – T-Intersection at Brandywine Street

No archaeological sites occur within DDOT right-of-way at the Brandywine Street intersection. The original topography in the area designated for the reconfigured T-intersection at Brandywine Street and Broad Branch Road in Option C was modified in 1839 when Broad Branch Road was constructed and no archaeological sites prior to 1839 would have been located on the hill slopes. The original topography along Brandywine Street was modified during construction of the street prior to 1945 (USGS 1945) and no archaeological sites prior to 1945 would have been located on the hill slopes. The original Brandywine Street/Broad Branch Road

intersection was constructed as a Y-intersection and the entire area has been previously disturbed by topographic recontouring and road construction. No archaeological sites will be affected by implementation of Option Cfor Alternatives 3 and 4.

3.3 EFFECTS TO HISTORIC STRUCTURES

Project effects to architectural resources include demolition, alteration of architectural traits, structural instability through vibration, short-term audio intrusions during construction, and visual intrusions to historic settings. Any visual or audio intrusions to the setting or demolition or alteration of architectural traits, can affect the physical integrity of an NRHP-eligible or potentially eligible architectural resource, resulting in alteration or destruction of those characteristics or qualities that make it potentially eligible for inclusion in the NRHP.

3.3.1 ALTERNATIVE 1– NO ACTION ALTERNATIVE

Deterioration of historic structures such as the bridges, culverts, and retaining walls, along Broad Branch Road will continue to occur as a result of uncontrolled stormwater runoff. Historic resources in Rock Creek Park would continue to be managed in accordance with Sections 106 and 110 of the NHPA and the National Park Service's Conservation Planning, Environmental Impact Analysis and Decision Making (Director's Order #12).

3.3.2 ALTERNATIVE 2 WITH OPTIONS A AND B

Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze will be affected by implementation of Alternative 2. The historic setting of the RCPHD along Broad Branch will be affected by visual intrusions related to reconstruction of roadway and drainage elements.

The Soapstone Creek culvert will be demolished and replaced with concrete arch culvert. Demolition of the Soapstone Creek culvert will have an adverse effect on this NRHP-eligible resource.

Even though most of the historic stone retaining wall segments are located beyond the cut and fill lines for the roadway and will not be directly affected by surface and subsurface grading activities, portions of historic retaining wall segments H9, H10, H11, H14, and H15 are located within the DDOT right-of-way. Use of heavy grading equipment will cause ground vibration which will damage or topple adjacent historic retaining wall segments.

New retaining walls have been proposed near historic stone retaining wall segments H2, H3, H4, H5, H6, H11, H12, H13, H14, and H15. These historic retaining wall segments will be restored and stabilized or removed and replaced with architecturally compatible designs and materials.

Twelve of the twenty-one outfall locations are associated with either stone headwalls or the historic stone retaining wall segments. Portions of existing stone retaining wall segments H3, H6, H7, H8, H14 and H15 (OF-6, OF-8, OF-12, OF-13, OF-18 and OF-19) and six existing storm

water outfall stone headwalls (OF-9, OF-10, OF-14, OF-15, OF-20 and OF-21) will be removed and replaced during excavation and replacement of the outfall pipes.

Three Rock Creek Park stone and metal boundary markers may be disturbed through roadway cut and fill activities. These markers may be inadvertently moved during roadbed preparation near the DDOT right-of-way or covered with fill.

The original stone retaining walls at the entrance to the driveway to the Gatehouse at La Villa Firenze will be demolished with the expansion of the right-of-way and the construction of new retaining walls on the west side of Broad Branch Road.

The original Brandywine Street/Broad Branch Road intersection was constructed as a Y-intersection and was modified in 1839 when Broad Branch Road was constructed and no architectural resources prior to 1839 would have been located on the hill slopes. The original topography along Brandywine Street was modified during construction of the street prior to 1945 (USGS 1945) and no architectural resources prior to 1945 would have been located on the hill slopes.

Visual intrusions to the historic setting of RCPHD would be minimized with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls during outfall replacement.

3.3.2.1 Option A – Retaining Wall

No architectural resources occur within the DDOT right-of-way at this location. The original topography in the area designated for the 561 foot retaining wall in Option A was modified in 1839 when Broad Branch Road was constructed and no architectural resources prior to 1839 would have been located on the hill slopes. No architectural resources will be affected by implementation of Option A for Alternative 2.

3.3.2.2 Option B – Sidewalk

No architectural resources occur within DDOT right-of-way at this location. The original topography in the area designated for the connecting sidewalk, from the NPS parking lot at Beach Drive and Broad Branch Road to the Soapstone Valley trail, in Option B was modified in 1839 when Broad Branch Road was constructed and no architectural resources prior to 1839 would have been located on the hill slopes. No architectural resources will be affected by implementation of Option B for Alternative 2.

3.3.3 Alternatives 3 and 4

Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the RCPHD and the stone retaining walls associated with the gatehouse at La Villa Firenze will be affected by implementation of Alternative 3. The historic setting of the RCPHD along Broad Branch will be affected by visual intrusions related to reconstruction of roadway and drainage elements.

The Soapstone Creek culvert will be demolished and replaced with concrete arch culvert. Demolition of the Soapstone Creek culvert will have an adverse effect on this NRHP-eligible resource.

Even though most of the historic stone retaining wall segments are located beyond the cut and fill lines for the roadway and will not be directly affected by surface and subsurface grading activities, portions of historic retaining wall segments H9, H10, H11, H14, and H15 are located within the DDOT right-of-way. Use of heavy grading equipment will cause ground vibration which will damage or topple adjacent historic retaining walls.

New retaining walls have been proposed near historic stone retaining wall segments H2, H3, H4, H5, H6, H11, H12, H13, H14, and H15. These historic retaining wall segments will be removed and replaced with architecturally compatible designs and materials.

Twelve of the twenty-one outfall locations are associated with either stone headwalls or historic stone retaining wall segments. Portions of existing stone retaining wall segments H3, H6, H7, H8, H14 and H15 (OF-6, OF-8, OF-12, OF-13, OF-18 and OF-19) and six existing storm water outfall stone headwalls (OF-9, OF-10, OF-14, OF-15, OF-20 and OF-21) will be removed and replaced during excavation and replacement of the outfall pipes.

Three Rock Creek Park stone and metal boundary markers may be disturbed through roadway cut and fill activities. These markers may be inadvertently moved during roadbed preparation near the DDOT right-of-way or covered with fill.

The original stone retaining walls at the entrance to the driveway to the Gatehouse at La Villa Firenze will be demolished with the expansion of the right-of-way and the construction of new retaining walls on the west side of Broad Branch Road.

Visual intrusions to the historic setting of RCPHD would be minimized with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls during outfall replacement.

3.3.4 Option C-T Intersection at Brandywine Street

No architectural resources occur within DDOT right-of-way at the Brandywine Street intersection. The original topography in the area designated for the reconfigured T-intersection at Brandywine Street and Broad Branch Road in Option C was modified in 1839 when Broad Branch Road was constructed and no architectural resources prior to 1839 would have been located on the hill slopes. The original topography along Brandywine Street was modified during construction of the street prior to 1945 (USGS 1945) and no architectural resources prior to 1945 would have been located on the hill slopes. No architectural resources will be affected by implementation of Option C for Alternatives 3 and 4.

3.4 EFFECTS TO CULTURAL LANDSCAPES

Project effects to cultural landscapes include alteration of character defining features, short-term audio intrusions during construction, and visual intrusions to established viewsheds. Any

visual or audio intrusions to the cultural landscape or alteration of character defining features, can affect the physical integrity of an NRHP-eligible or potentially eligible cultural landscape, resulting in alteration or destruction of those characteristics or qualities that make it potentially eligible for inclusion in the NRHP.

3.4.1 Alternative 1– No Action Alternative

Deterioration of historic structures such as the bridges, culverts, and retaining walls, along Broad Branch Road will continue to occur as a result of uncontrolled stormwater runoff. This deterioration of rustic architectural features diminishes the overall feeling of the Rock Creek Park cultural landscape. Historic resources in Rock Creek Park would continue to be managed in accordance with Sections 106 and 110 of the NHPA and the National Park Service's Conservation Planning, Environmental Impact Analysis and Decision Making (Director's Order #12).

3.4.2 Alternatives 2, 3, and 4

Two historic trails in which segments are considered contributing elements of the Historic Trails Cultural Landscape (Poss and McMillen 2012), are present along the southern end of the project area near the intersection of Broad Branch Road and Beach Drive (Figure 2-22): the Soapstone Valley foot trail and the bridle trail from the intersection of Broad Branch and Beach Drive to White Horse Trail. Visual intrusions to the viewshed of this cultural landscape of RCPHD would be minimized with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls during outfall replacement.

Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape will likely occur during the period of construction for any of the alternatives for reconstruction of Broad Branch Road. Visual intrusions may include the presence of large machinery, excavated roadway and earth, spoil and fill piles, stockpiling of new construction material, and road blocks and detours. Temporary audible intrusions may include increased noise from construction activity such as excavation; large vehicle movement, braking, and back-up signals; and construction crews. Long-term visual intrusions are not expected to occur because the roadway will be rehabilitated in its existing corridor. Long-term audible intrusions are not anticipated because reconstruction of Broad Branch Road is not a capacity-building project; no increased noise from additional vehicular traffic is expected to occur.

3.5 MITIGATION MEASURES

Because the Broad Branch Road Rehabilitation project will have an adverse effect on potentially NRHP- eligible or listed resources, a revised Memorandum of Agreement (MOA) will be prepared by FHWA and DDOT in consultation with the DC SHPO, NPS, and ACHP to resolve and mitigate the adverse effects in accordance with Section 106 of the NHPA. This MOA will expand upon a Draft MOA for mitigation of adverse effects to Soapstone Creek Culvert that was initiated in 2011 but not executed.

4 SUMMARY AND RECOMMENDATIONS

The District Department of Transportation (DDOT) and the Federal Highway Administration (FHWA), in conjunction with the National Park Service (NPS), plans to rehabilitate Broad Branch Road between Bech Avenue and Linnean Avenue on the west edge of Rock Creek Park to correct operational deficiencies, improve safety, replace aging infrastructure, and address storm water management needs. As a result of implementation of this project, adverse effects will occur to historic structures or features that are contributing elements to the Rock Creek Park Historic District (RCPHD) and to the National Register of Historic Places (NRHP)-eligible Gatehouse at La Villa Firenze (**Table 4-1**).

Table 4-1. Determination of Effect by Alternative/Option

ALTERNATIVE/ OPTION	ARCHAEOLOGICAL SITES	HISTORIC STRUCTURES	CULTURAL LANDSCAPES	DETERMINATION OF EFFECT
Alternative 2	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Option A	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Option B	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Options A and B	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect

ALTERNATIVE/ OPTION	ARCHAEOLOGICAL SITES	HISTORIC STRUCTURES	CULTURAL LANDSCAPES	DETERMINATION OF EFFECT
Alternative 2 with Option C	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Options A and C	No	Demolition or removal ofSoapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Options B and C	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 2 with Options A, B, and C	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 3	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 3 with Option C	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 4	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect
Alternative 4 with Option C	No	Demolition or removal of Soapstone Creek culvert, storm water outfalls, segments of retaining walls, and boundary markers that are considered contributing elements to the Rock Creek Park Historic District (RCPHD) and the stone retaining walls associated with the gatehouse at La Villa Firenze	Temporary visual and audible intrusions to the two trails associated with the Rock Creek Park cultural landscape	Adverse Effect

The No Action Alternative would result in no effects to archaeological resources. Alternatives 2, 3, and 4 and options A, B, and C would result in no effects to archaeological resources.

Implementation of the No Action Alternative would result in no effects to historic structures. Alternatives 2, 3, and 4 would result in adverse effects to contributing elements to the RCPHD: the demolition of Soapstone Creek culvert, segments of retaining walls, and storm water outfall headwalls, and demolition of the original stone retaining walls at the entrance to the driveway to the Gatehouse at La Villa Firenze. In addition, Alternatives 2, 3, and 4 would result in short-term visual and audible effects to historic structures during construction. Options A, B, and C would result in no effects to historic structures.

Implementation of the No Action would result in no effects to cultural landscapes. Alternatives 2, 3, and 4 would result in no adverse effects to cultural landscapes with the use of architecturally compatible designs and materials for the replacement of Soapstone Creek culvert, new retaining walls, new outfall headwalls, and repair of historic stone retaining walls during outfall replacement. In addition, Alternatives 2, 3, and 4 would result in short-term visual and audible effects to cultural landscapes during construction. Options A, B, and C would result in no effects to cultural landscapes.

Because the Broad Branch Road Rehabilitation project will have an adverse effect on NRHP-listed or eligible resources, a Memorandum of Agreement (MOA) will be prepared to resolve and mitigate the adverse effects in accordance with Section 106 of the National Historic Preservation Act (NHPA).

5 COORDINATION

5.1 COORDINATION

The National Park Service (NPS) and the District of Columbia State Historic Preservation Office (DC SHPO) have reviewed documents and/or participated in the study of the proposed design alternatives plans for the Broad Branch Avenue rehabilitation project, Washington, D.C. The concerns of these agencies have been addressed during the planning process and solutions have been suggested that would avoid adverse effect to National Register of Historic Places (NRHP)-listed resources.

Project meetings, field visits, and phone contact with stakeholders regarding the preliminary design plans and specific design elements were conducted (**Table 5-1**).

Table 5-1. Agency Coordination and Project Meetings

DATE	MEETING	PARTICIPANTS
11/30/10	Project Kick-Off Meeting	DDOT, FHWA, NPS/ROCK CREEK PARK
3/24/11	Agency Scoping Meeting	DDOT, FHWA, NPS/ROCK CREEK PARK, NCPC, DEC
4/8/11	Project Research at ROCK CREEK PARK	NPS/ROCK CREEK PARK
4/27/11	Field Visit	DDOT, FHWA, NPS/ROCK CREEK PARK
5/24/11	Section 106 Meeting on Soapstone Creek Culvert	DDOT, DC SHPO
6/21/11	Section 106 Meeting	DDOT, DC SHPO
7/13/11	Public Scoping Meeting	DDOT, NPS/ROCK CREEK PARK, General Public
7/26/11	Section 106 Meeting	DDOT, DC SHPO
8/25/11	Agency Alternatives Development Meeting	DDOT, NPS/ROCK CREEK PARK, NCPC, DEC, DC Water
11/8/12	Public Alternatives Development Meeting	DDOT, NPS/ROCK CREEK PARK, General Public
4/26/13	Site Visit/Section 106 Meeting	DDOT, FHWA, NPS/ROCK CREEK PARK, DC SHPO

5.2 CONTACTS

Mr. Wayne Wilson
Project Manager
District Department of Transportation
55 M Street, SE
Washington, D.C. 20003

Ms. Cynthia Cox
Deputy Superintendent, Rock Creek Park
National Park Service
3545 Williamsburg Lane, NW
Washington, D.C. 20008

Mr. Joel Gorder
Regional Planning and Environmental Coordinator
National Park Service
National Capital Region
1100 Ohio Drive, SW
Washington, D.C. 20242

Ms. Simone Monteleone
Cultural Resources Program Manager
Rock Creek Park
3545 Williamsburg Lane, NW
Washington, DC 20008

Mr. Faisal Hameed
Manager
Project Development & Environment Division
Infrastructure Project Management Administration (IPMA)
District Department of Transportation
55 M Street, SE
Washington, D.C. 20003

Mr. Michael Hicks
Urban/Environmental Engineer
Federal Highway Administration,
District of Columbia Division
1990 K St. NW, Suite 510
Washington, D.C. 20006

Mr. Saadat Khan
Environmental Policy Analyst
Project Development & Environment Division
Infrastructure Project Management Administration (IPMA)
District Department of Transportation
55 M Street, SE
Washington, D.C. 20003

Ms. Tara Morrison
Superintendent, Rock Creek Park
National Park Service
3545 Williamsburg Lane, NW
Washington, D.C. 20008

Mr. Andrew Lewis
Senior Historic Preservation Specialist
D.C. State Historic Preservation Office
1100 4th Street, SW, Suite E650
Washington, D.C. 20024

Dr. Ruth Trocolli
City Archaeologist
D.C. State Historic Preservation Office
1100 4th Street, SW, Suite E650
Washington, D.C. 20024

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A CONCEPTUAL ALIGNMENT PLANS – CANDIDATE BUILD ALTERNATIVES

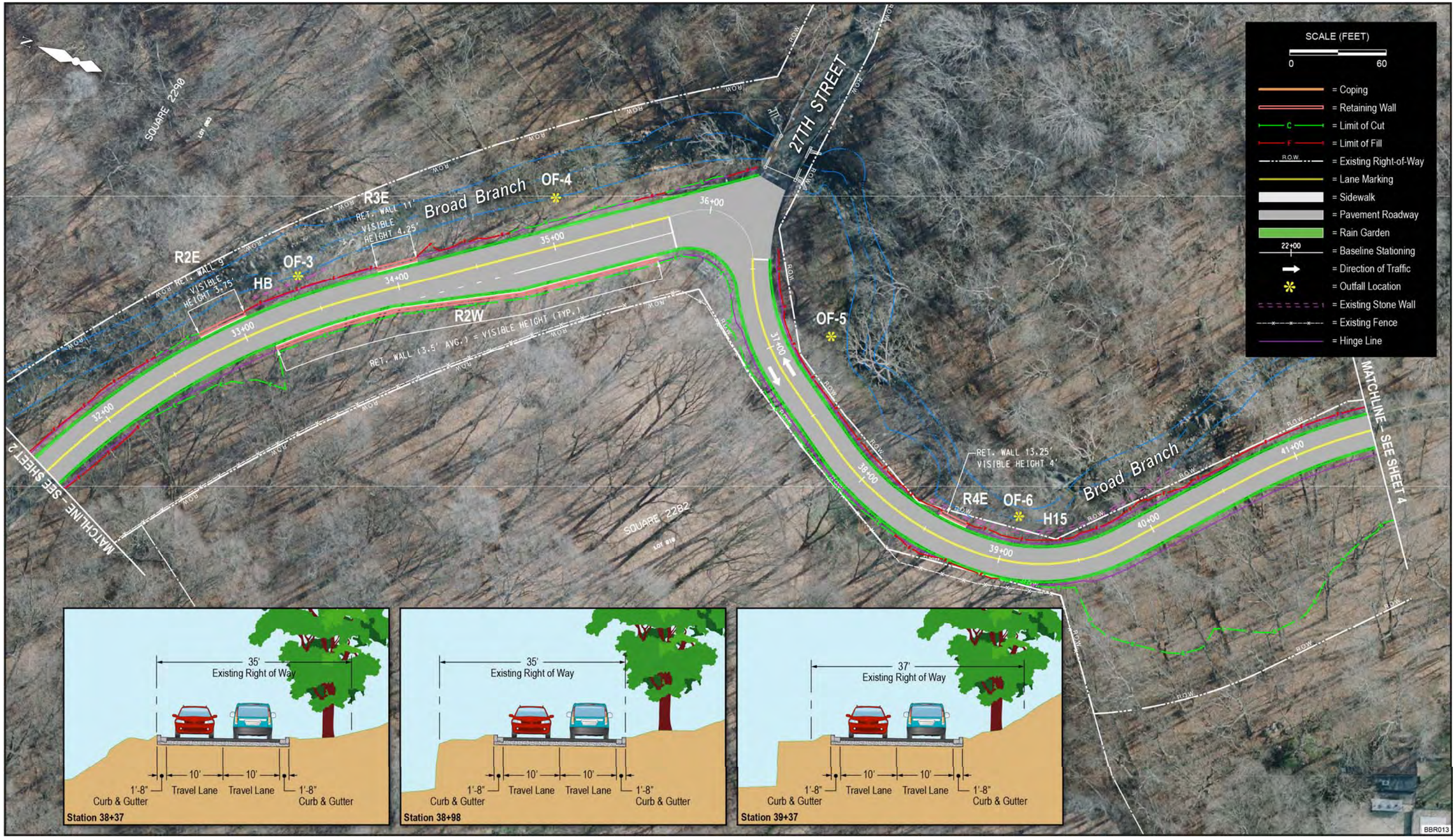
The following exhibits present the conceptual alignment plans for each of the three Candidate Build Alternatives. These plans depict the general extent of roadway, sidewalks and bike lanes, as well as general locations of coping and retaining walls. Areas of cut and/or fill required for roadway construction are presented to indicate the area of potential disturbance. Typical sections are included at several locations to illustrate the relationship to existing right-of-way lines. All typical sections are oriented so the viewer is looking southbound.

The 1.5-mile project is depicted on nine separate sheets as noted in the key map below. Baseline stations are shown at 100-foot intervals starting with Station 15+00 at the Linnean Avenue intersection and moving in a southbound direction. These station points are presented to reference specific locations described in the document. Additional sheets are shown at the end of Alternative 2 for Options A and B.

Figure A-1.Key Map

Figure A-2. Alternative 2
(Sheet 1)

Figure A-2. Alternative 2
(Sheet 2)



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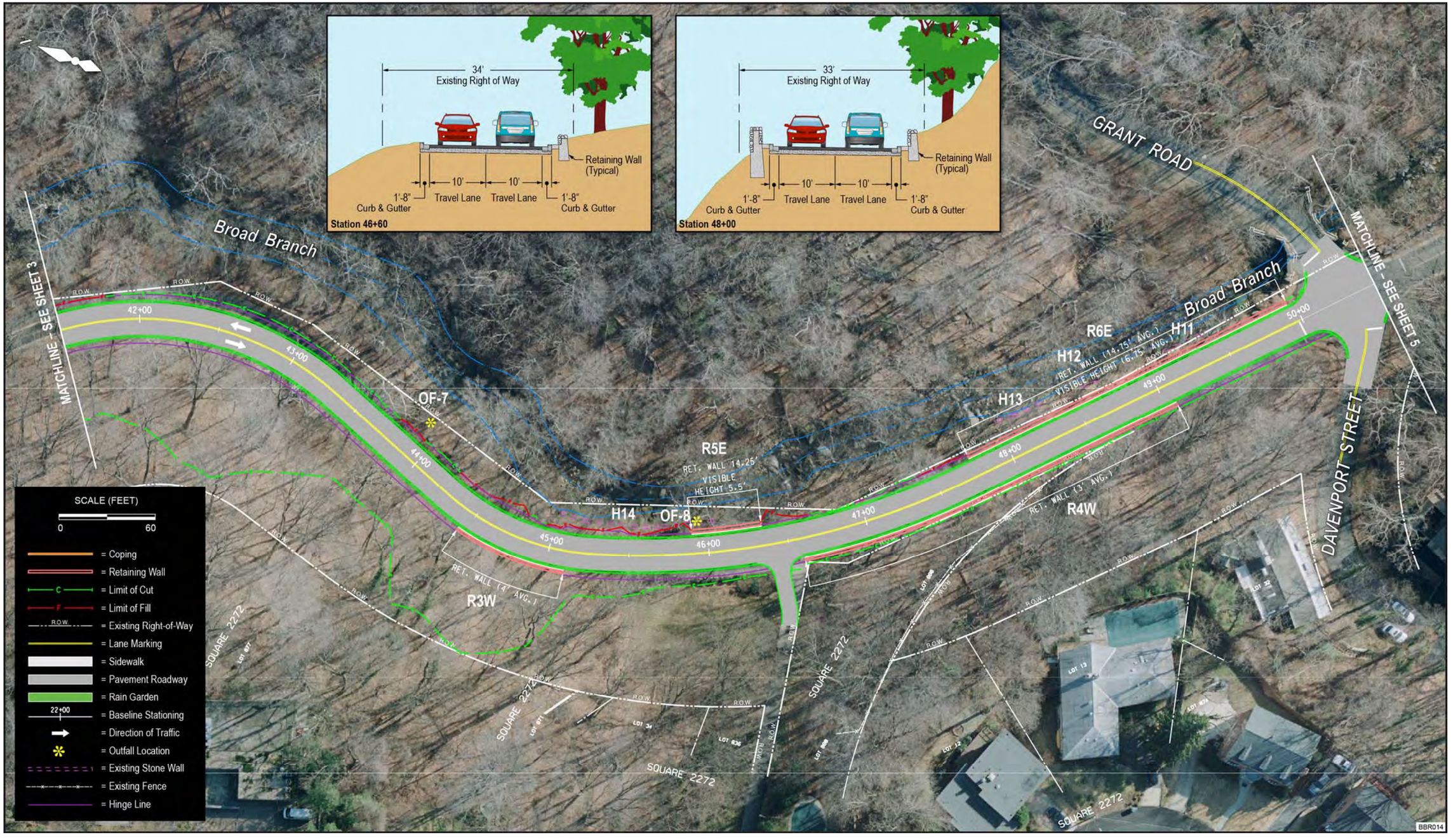
(Sheet 3)



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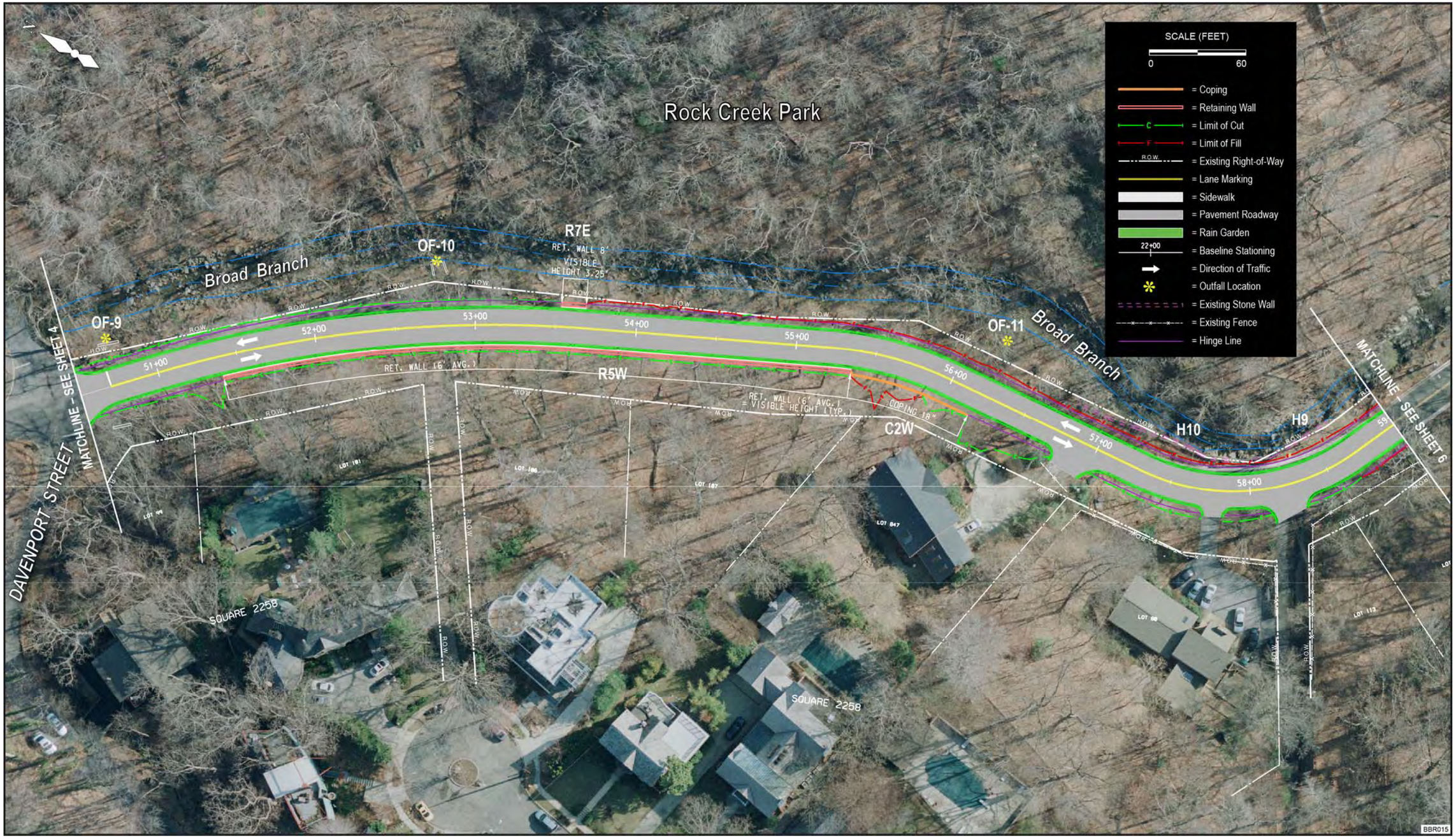

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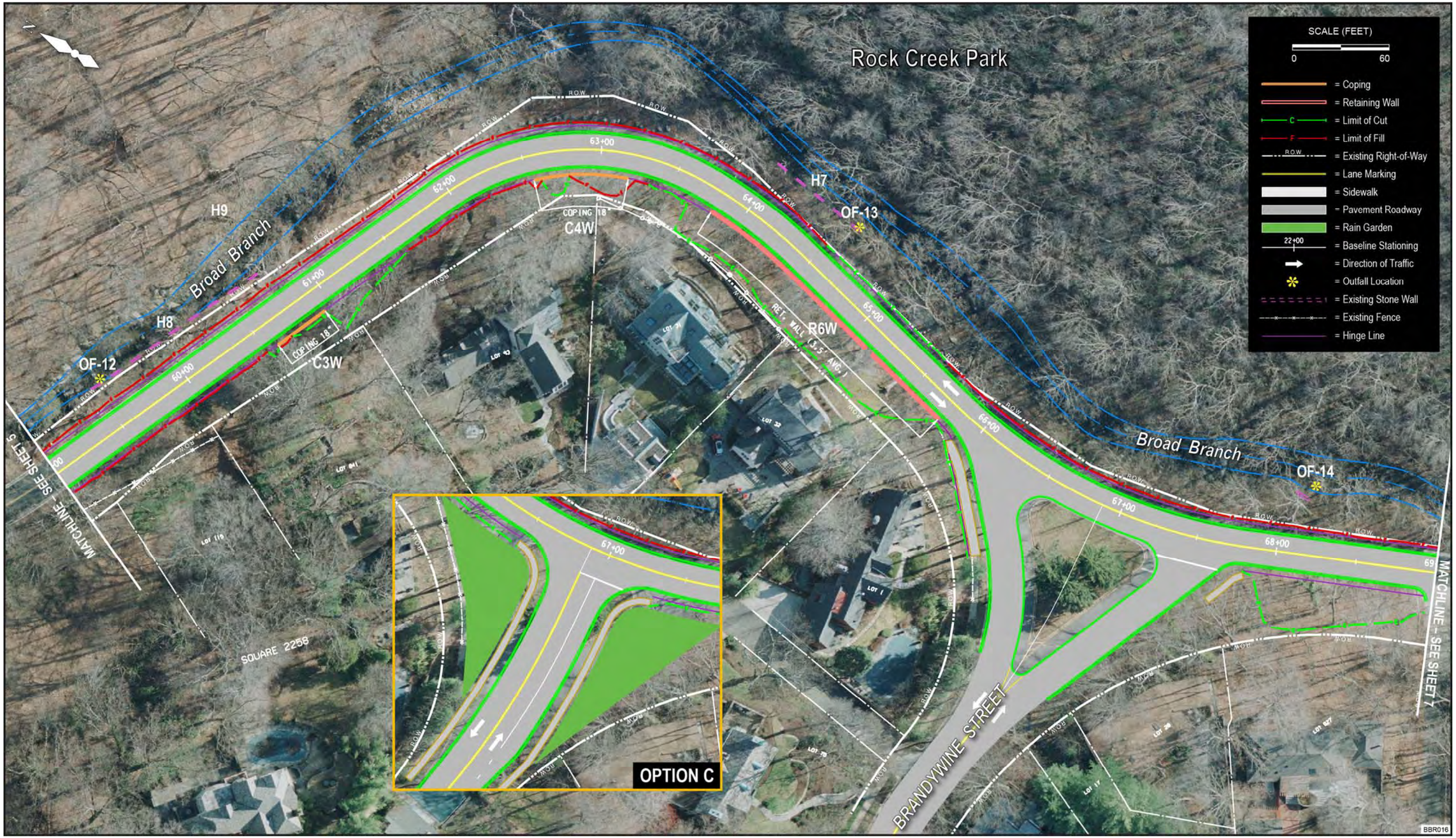
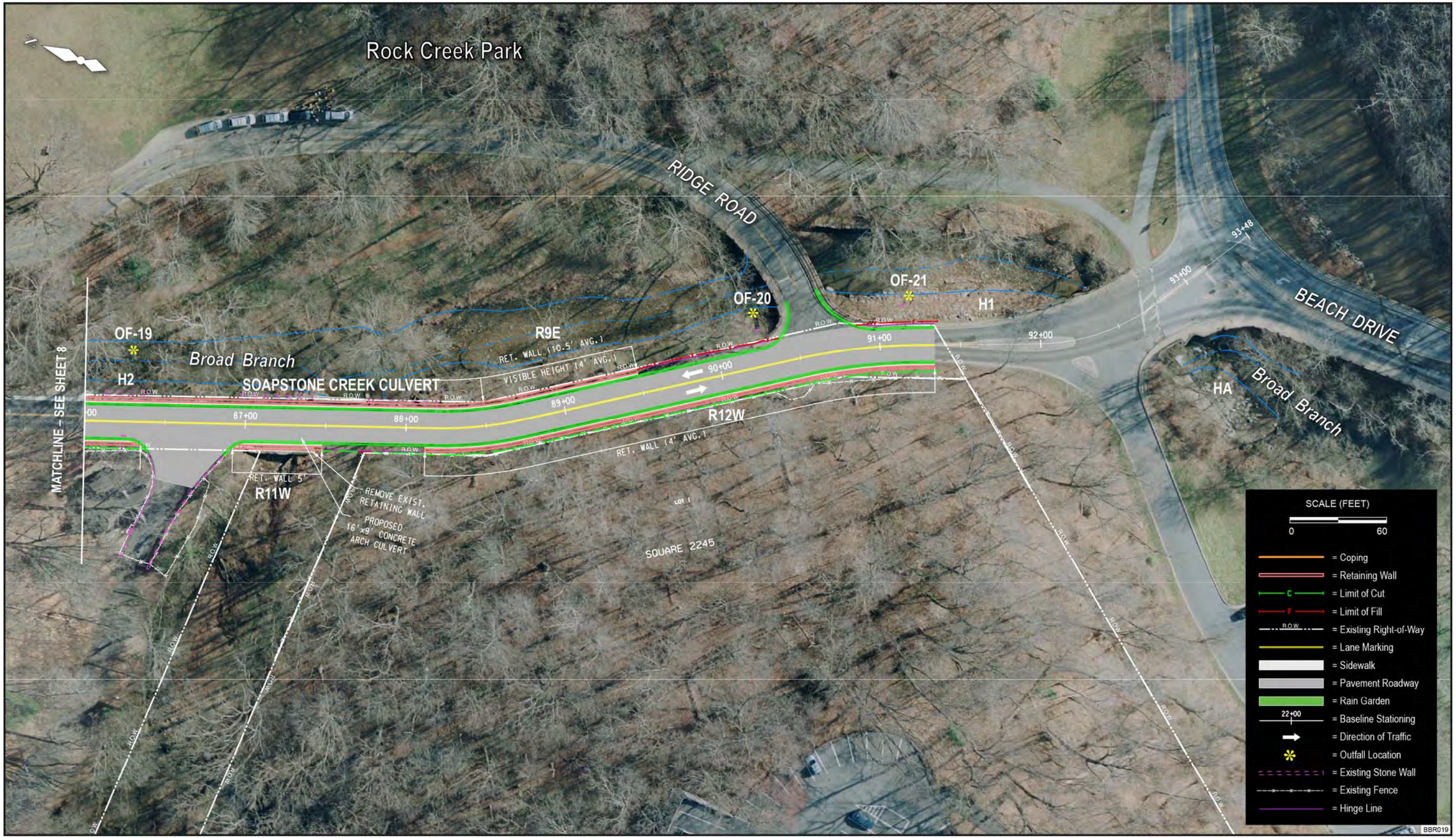


Figure A-2. Alternative 2
(Sheet 6)

Figure A-2. Alternative 2
(Sheet 7)

Figure A-2. Alternative 2
(Sheet 8)



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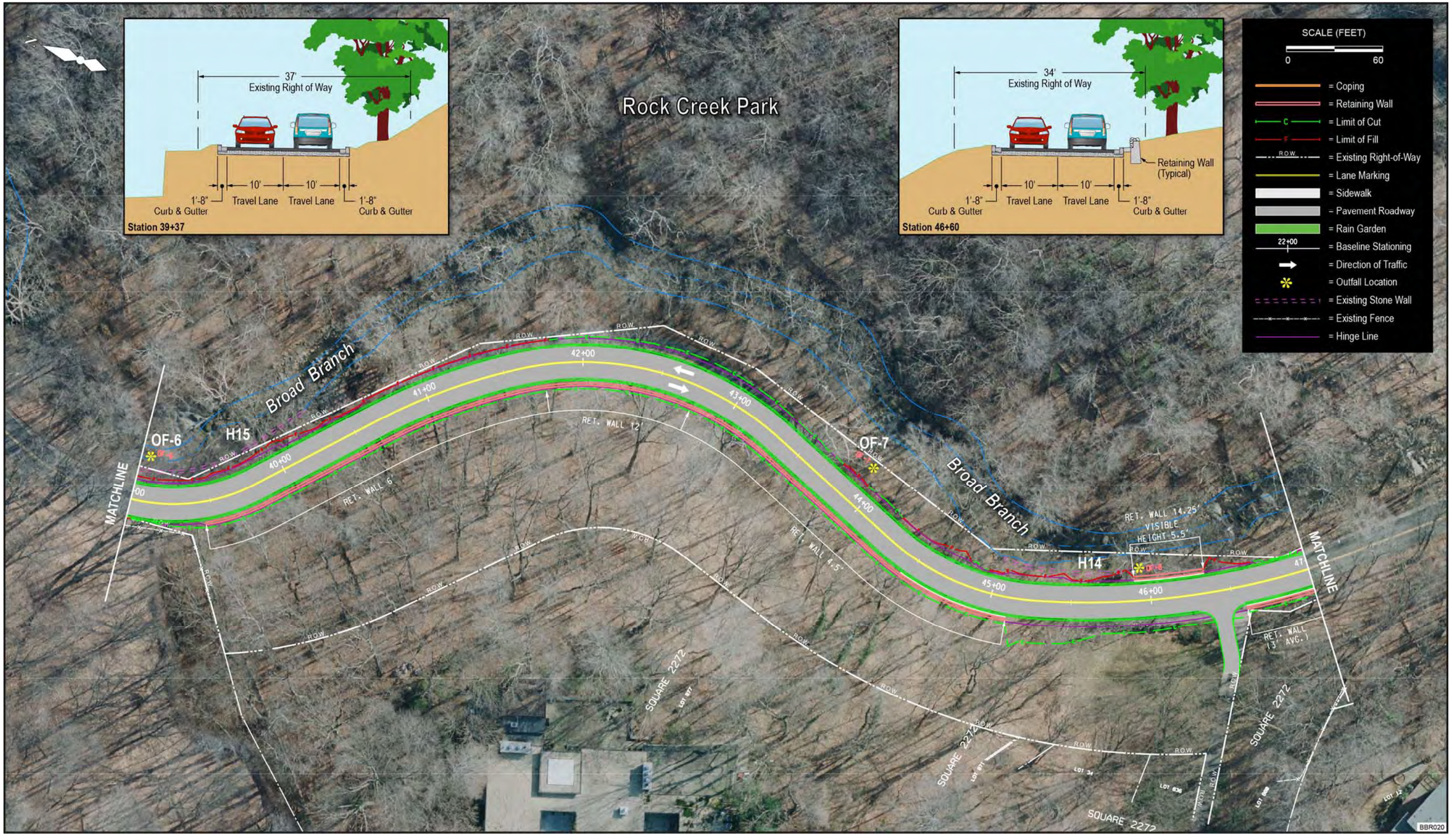


Figure A-2. Alternative 2 Option A
(Sheet 10)

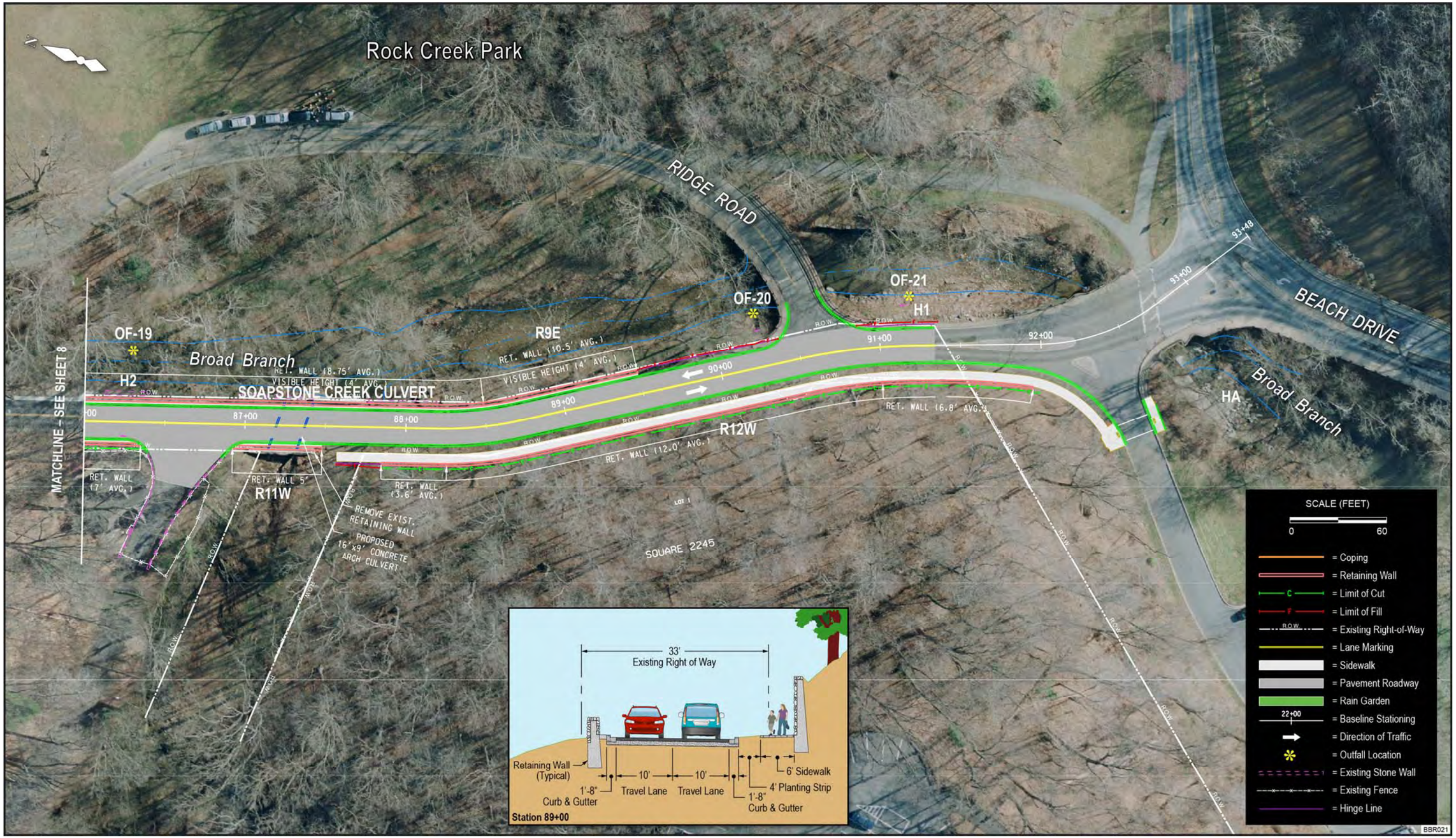
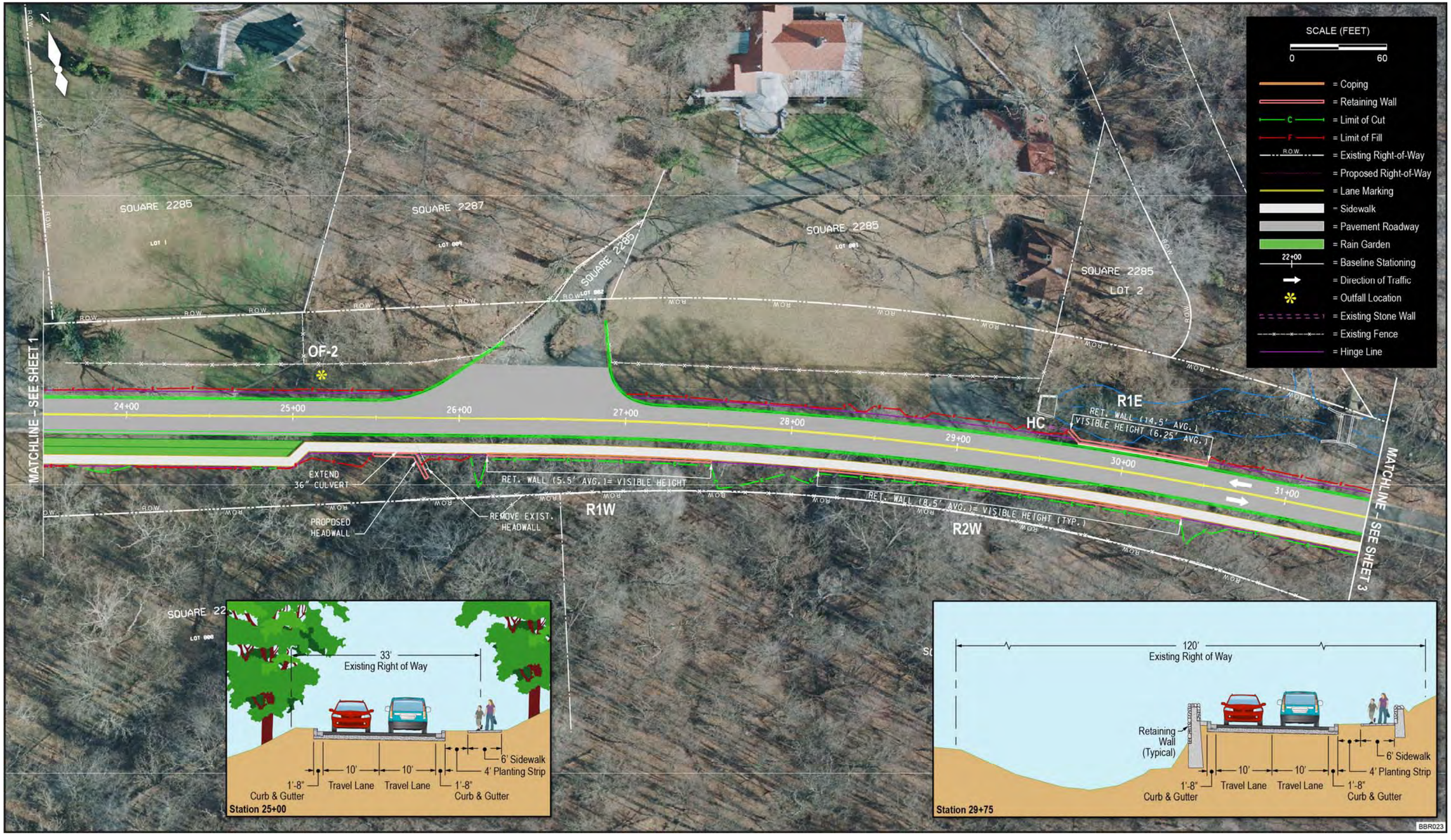


Figure A-2. Alternative 2 Option B
(Sheet 11)

Figure A-3. Alternative 3
(Sheet 1)



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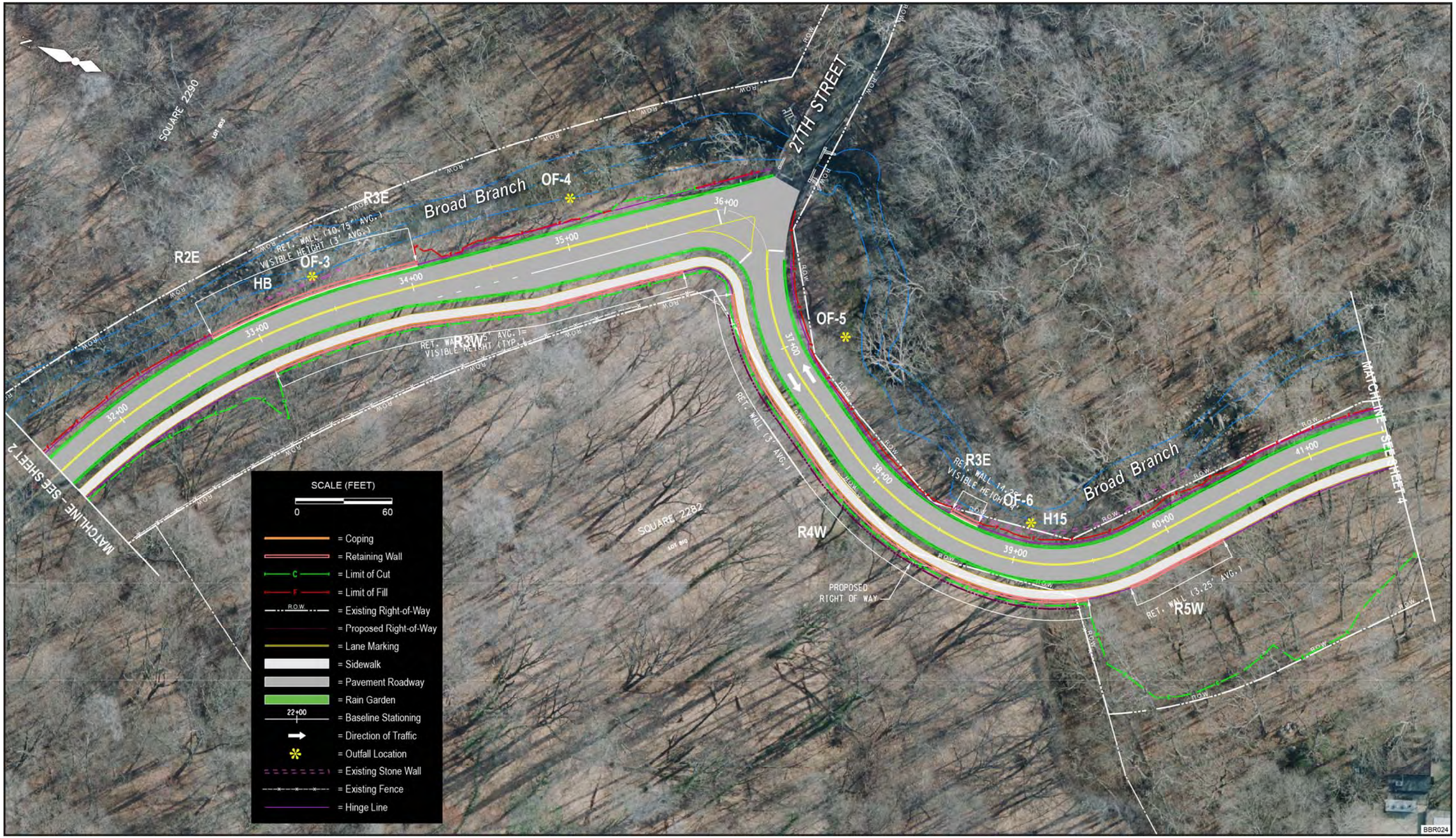

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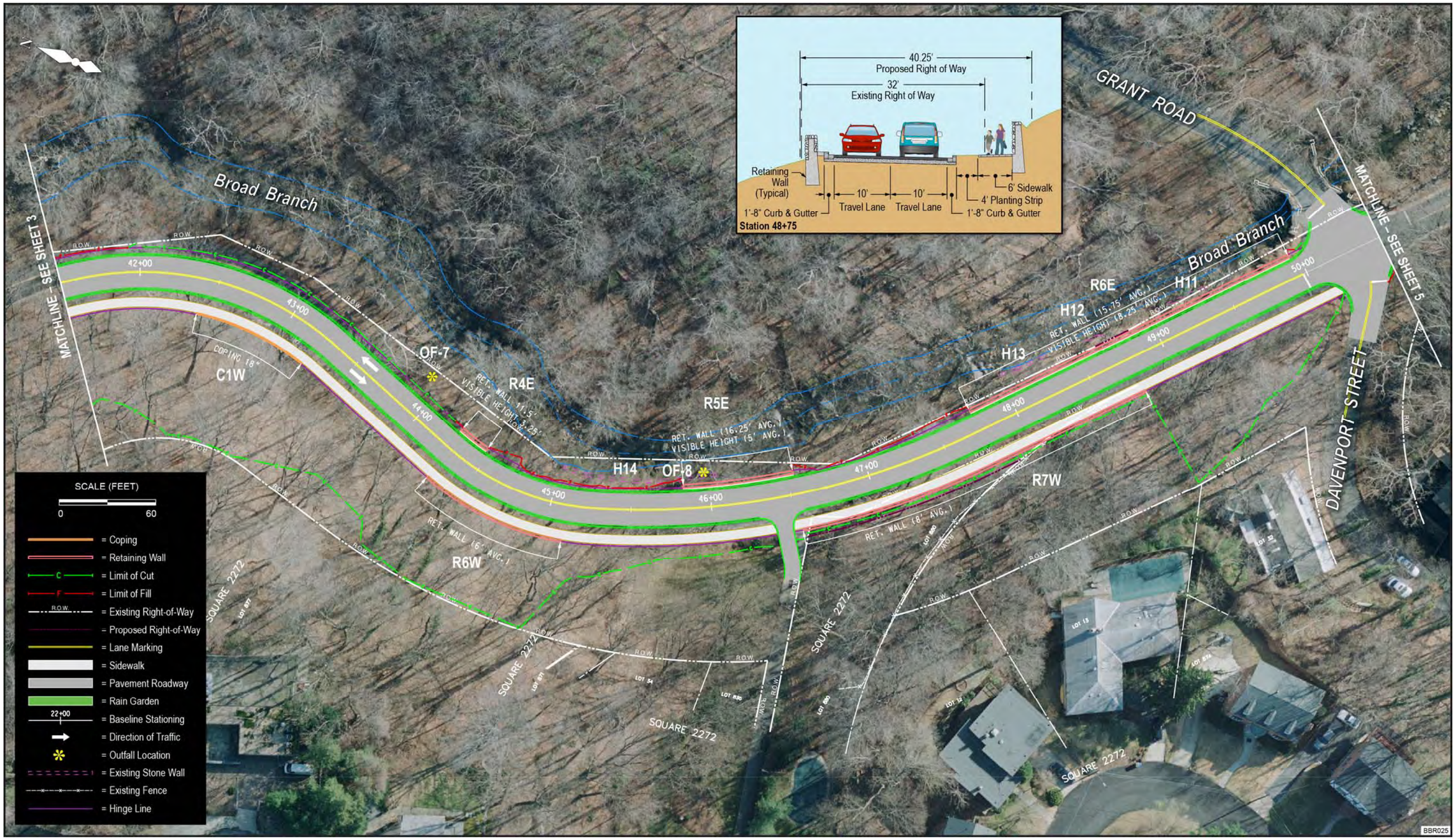

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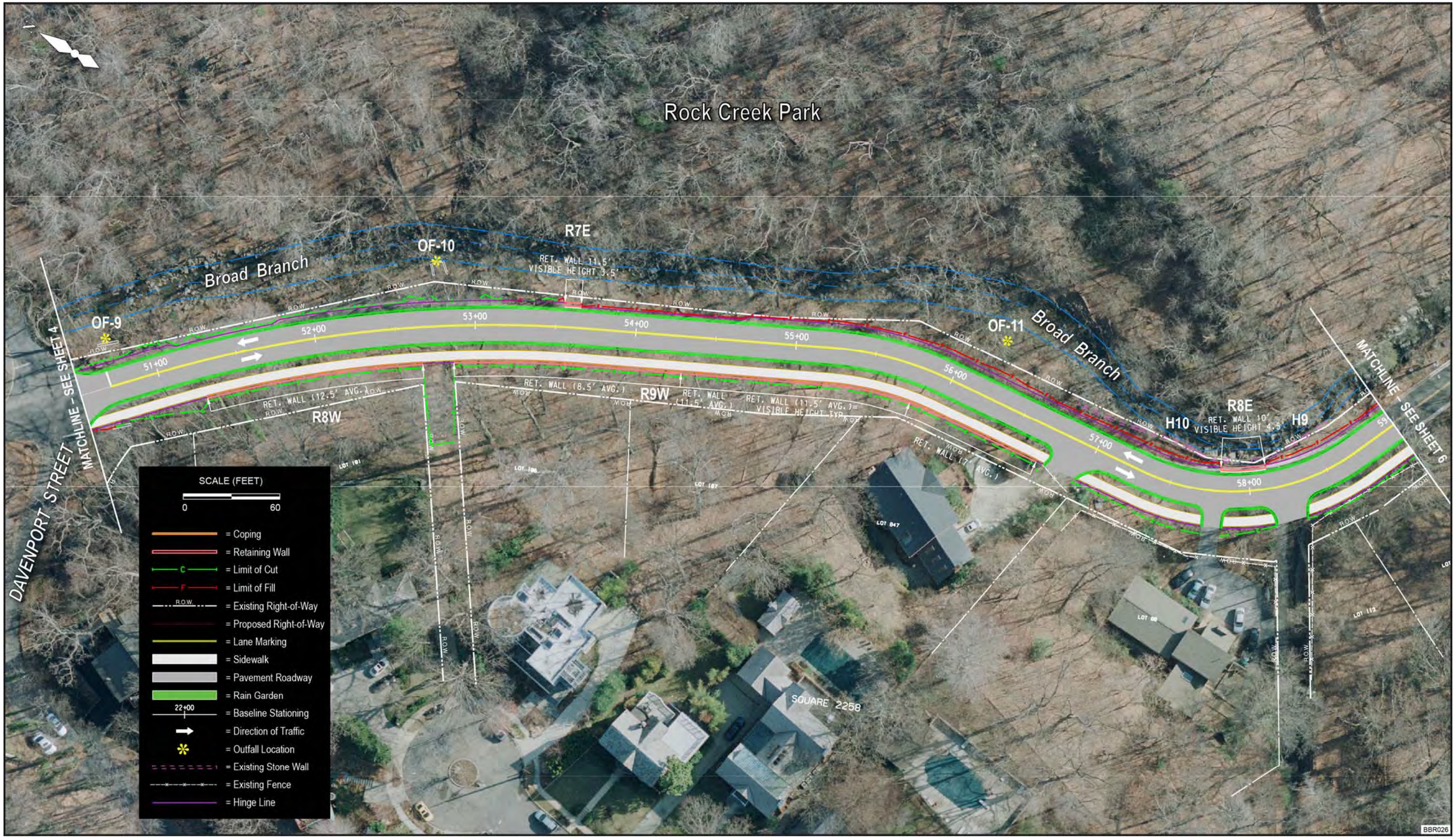

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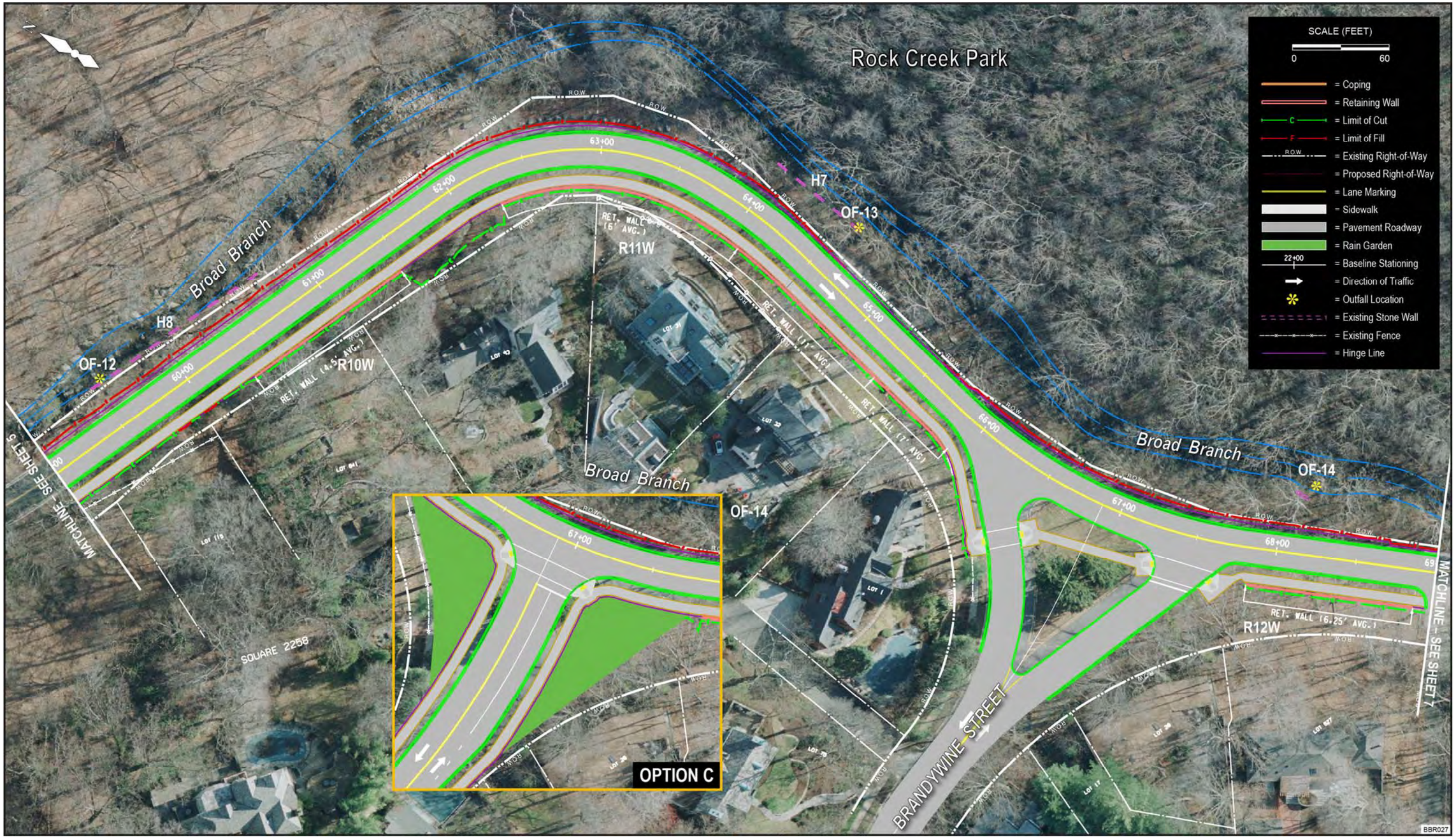

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(Sheet 6)

Figure A-3. Alternative 3
(Sheet 7)

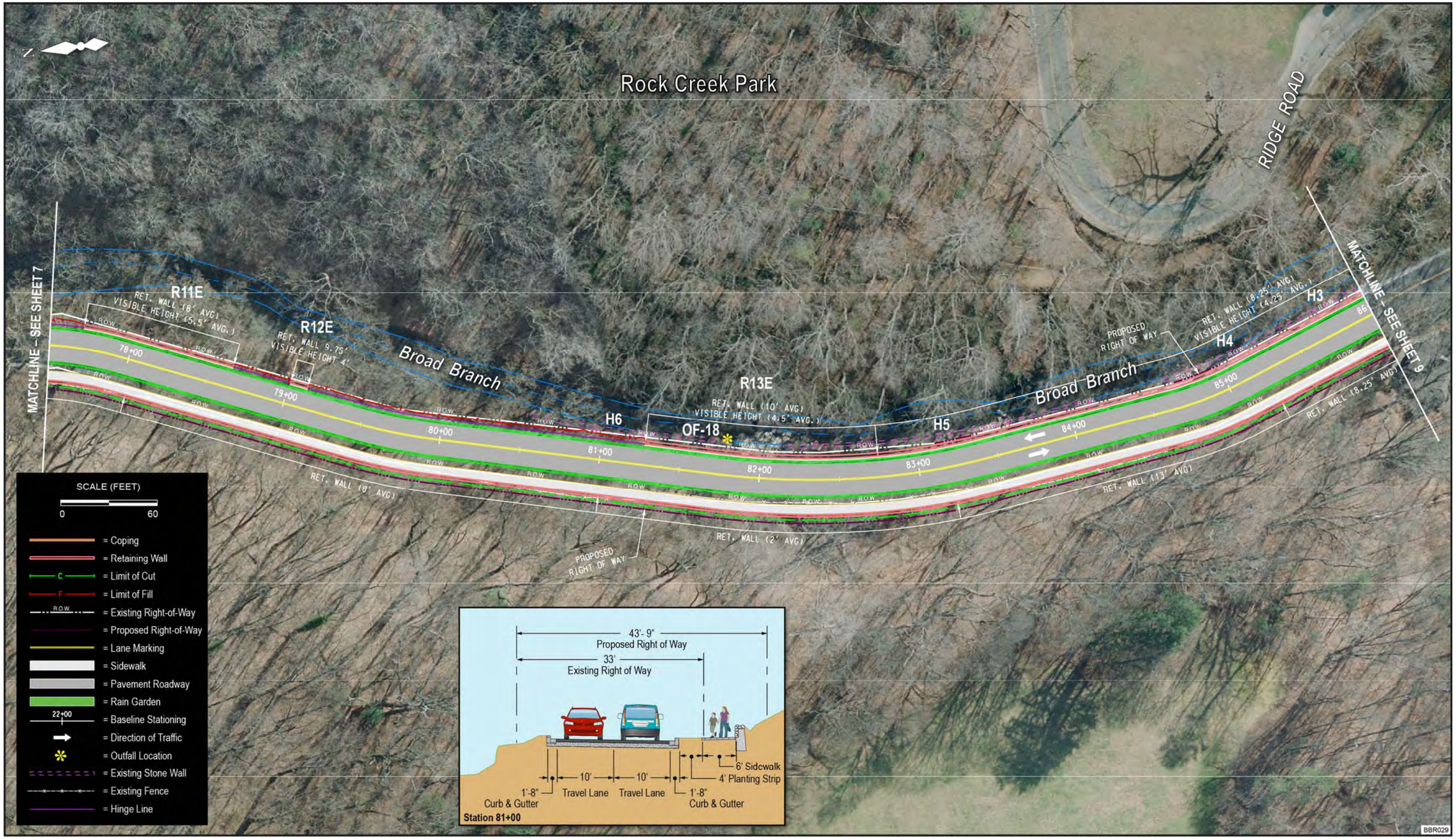

Figure A-3. Alternative 3
(Sheet 8)

Figure A-3. Alternative 3
(Sheet 9)

Figure A-4. Alternative 4
(Sheet 1)

Figure A-4. Alternative 4
(Sheet 2)

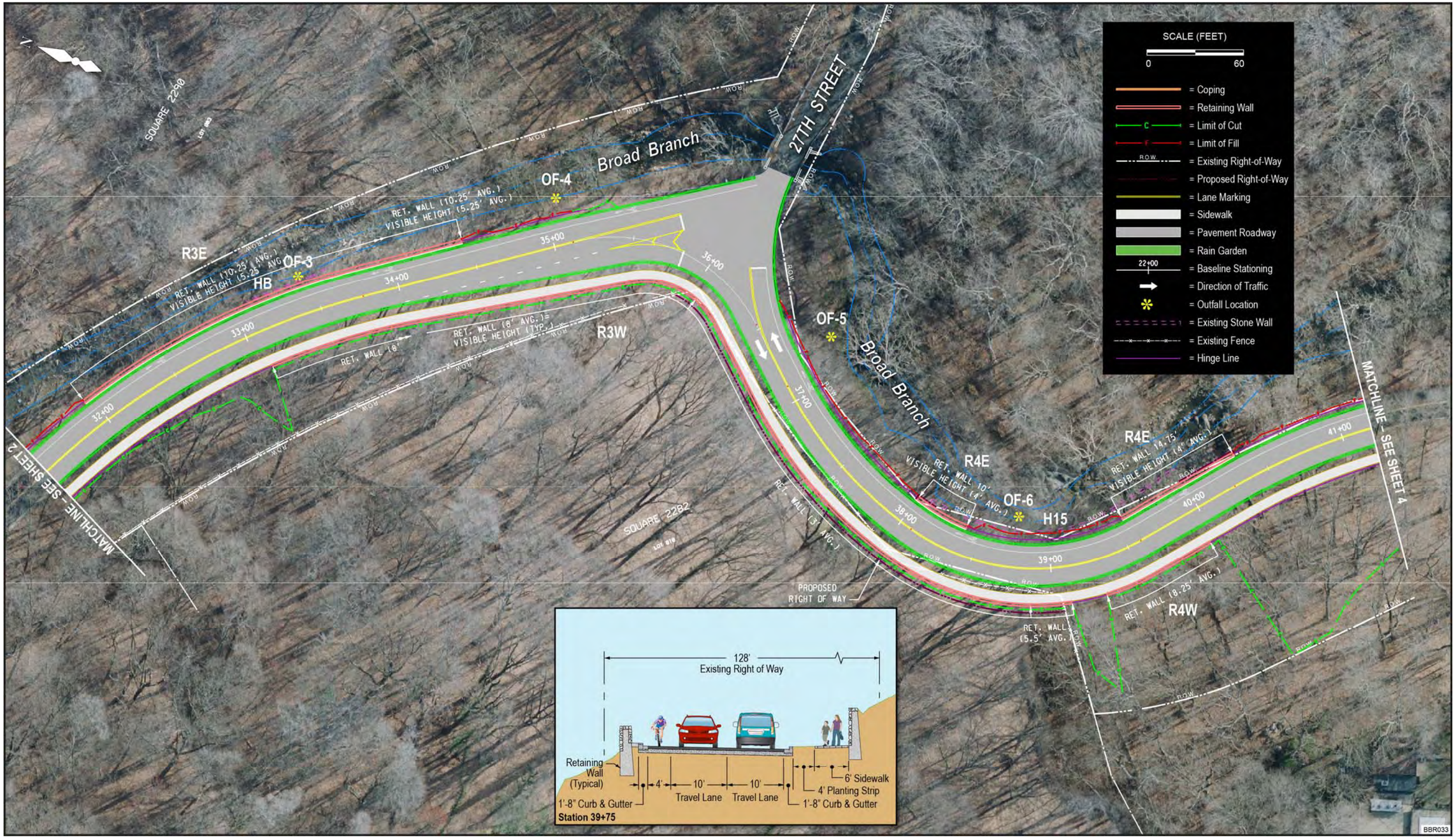

Figure A-4. Alternative 4
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Figure A-4. Alternative 4
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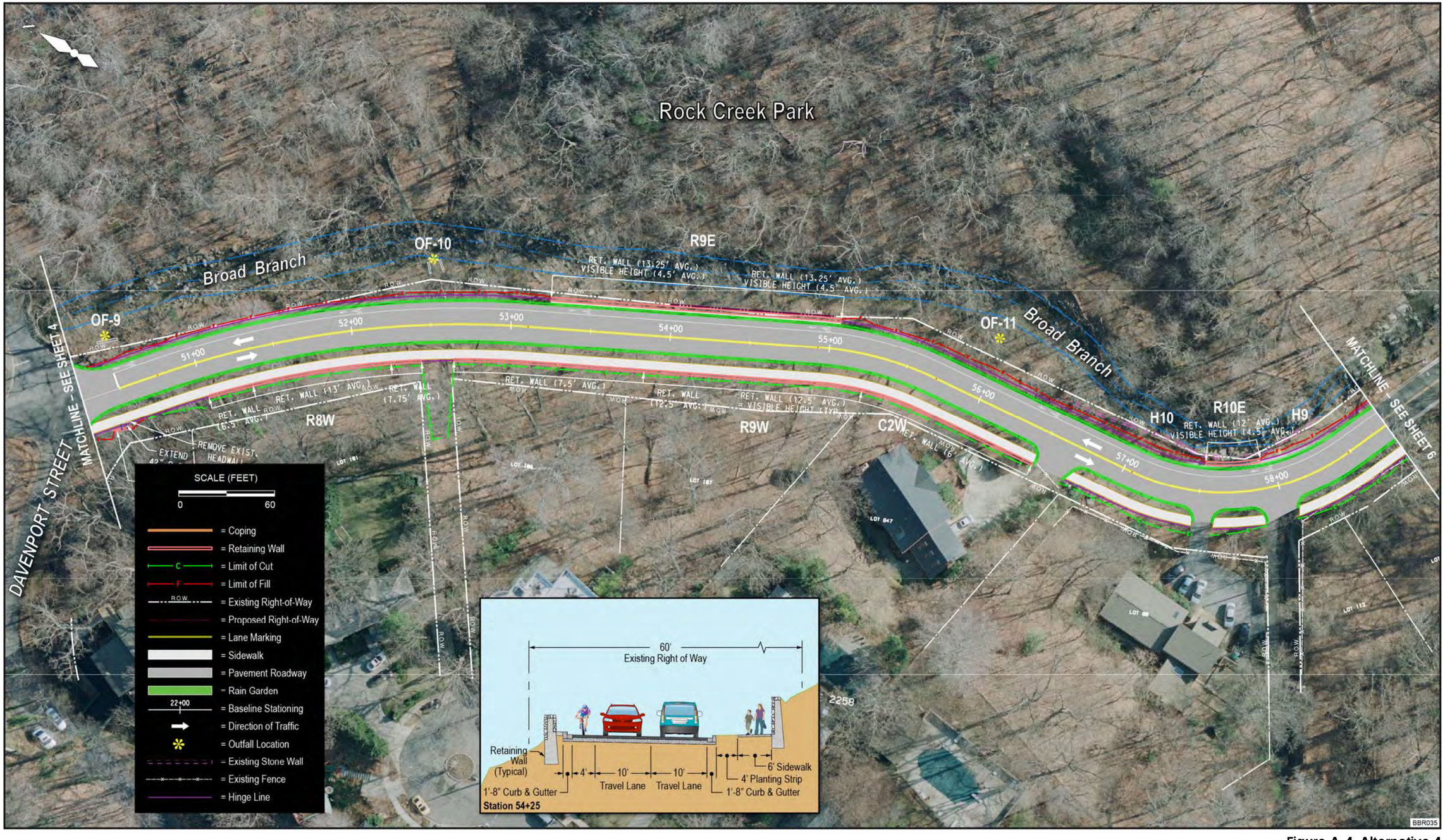

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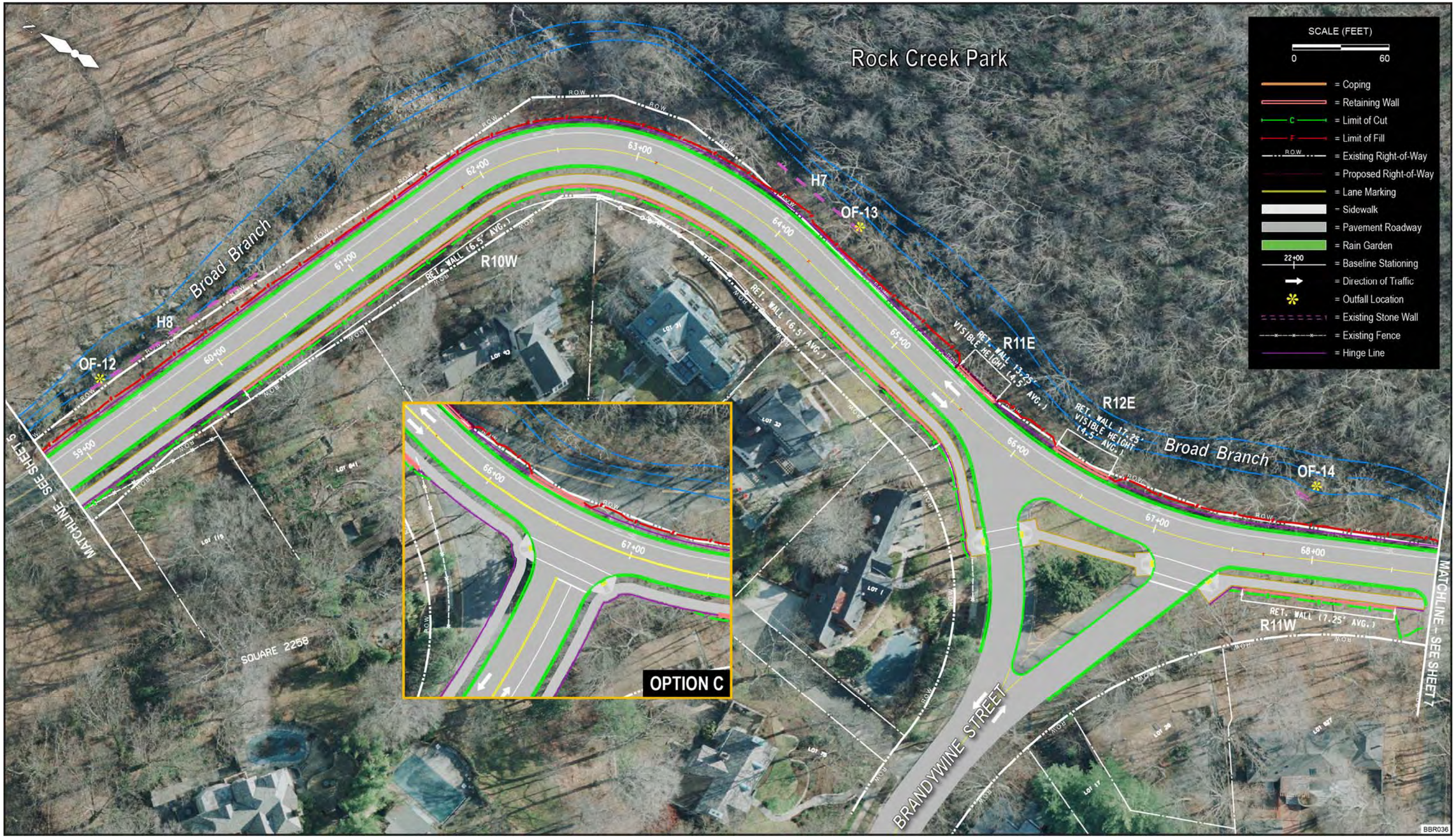

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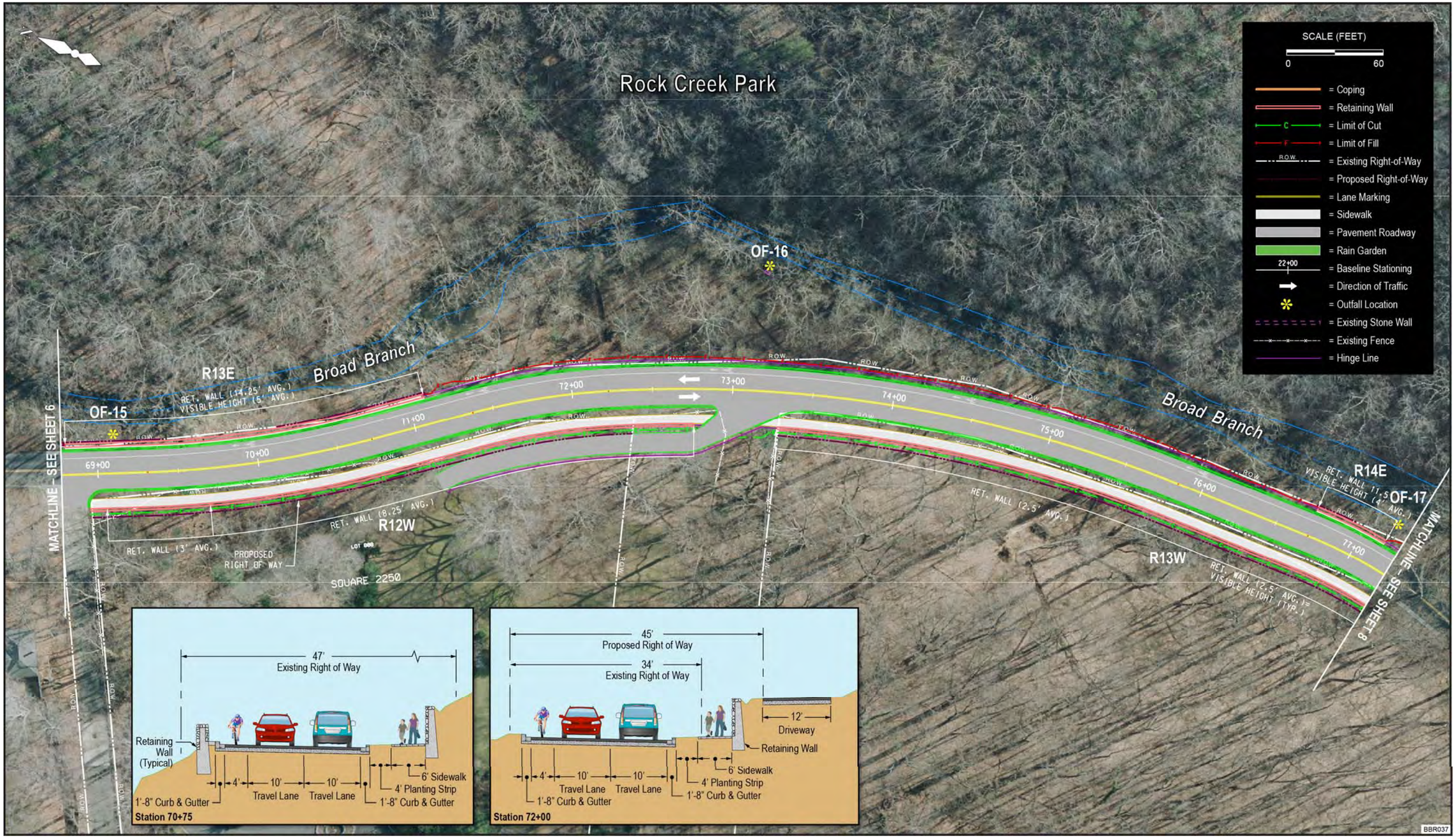

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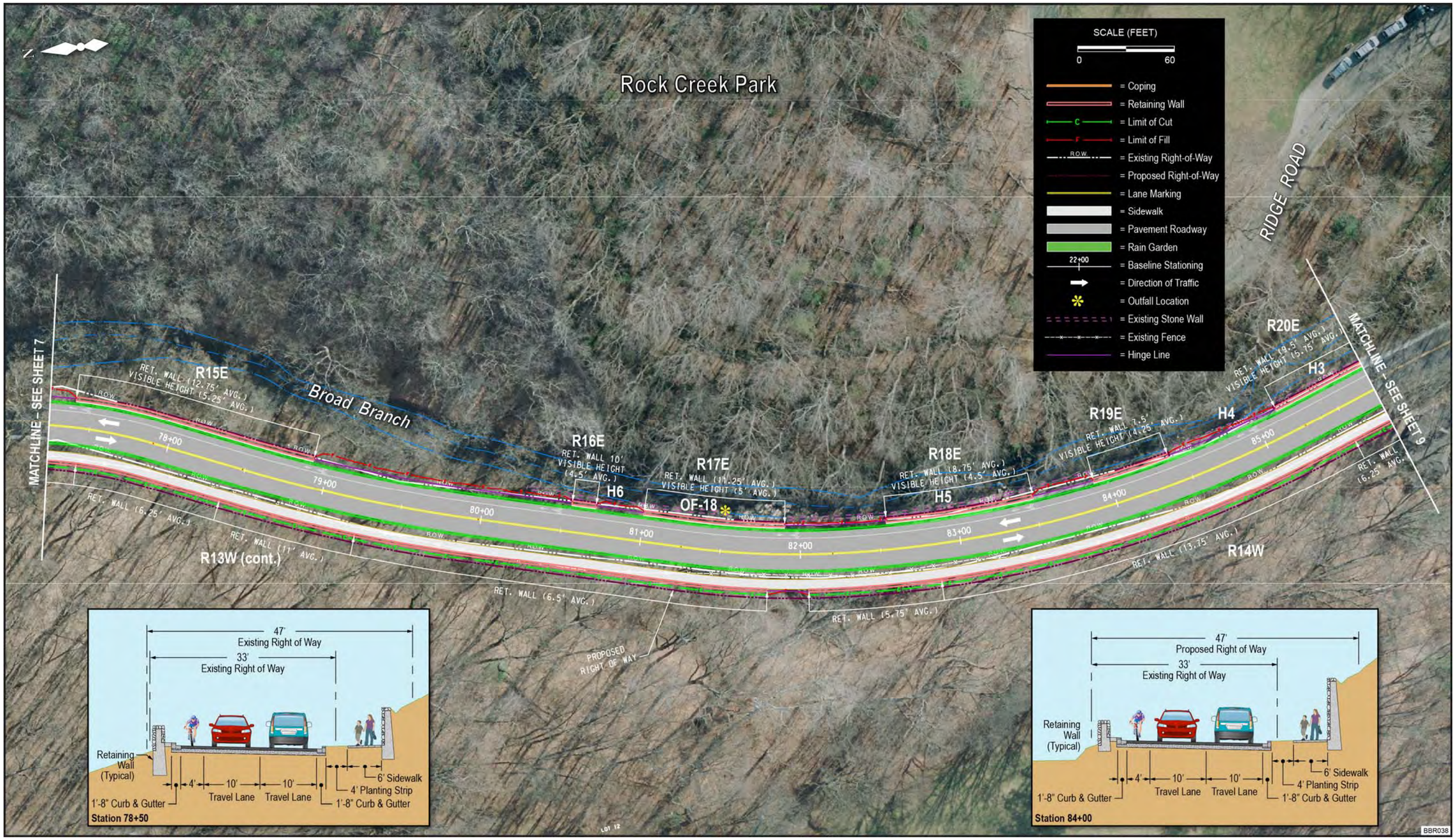

Figure A-4. Alternative 4
(Sheet 8)

Figure A-4. Alternative 4
(Sheet 9)

B DETERMINATION OF ELIGIBILITY FORM- SOAPSTONE CREEK CULVERT

DC STATE HISTORIC PRESERVATION OFFICE
DETERMINATION OF ELIGIBILITY FORM

PROPERTY INFORMATION

Property Name(s): Soapstone Creek Culvert
Street Address(es): Broad Branch Road, NW, Washington, DC
Square(s) and Lot(s): Unzoned Rock Creek Park (between Square 2248, Lot 12 and Square 2245, Lot 1 on west side)
Property Owner(s): District of Columbia Department of Transportation (upstream headwall and retaining wall); Rock Creek Park, National Park Service (downstream headwall and wing walls)
Please attach a map(s) to this form to indicate the location of the property/properties.

See attached location map and APE map
The property/properties is/are being evaluated for potential historical significance as:

☒ An individual building or structure. (District of Columbia Department of Transportation)
☒ A contributing element of a historic district (specify): Rock Creek Park Historic District (National Park Service)
☐ A possible expansion of a historic district (specify):
☐ A previously unevaluated historic district to be known as (specify):
☐ An archaeological resource with site number(s) (specify):
☐ An object (e.g. statue, stone marker etc.) (specify):
☐ A new multiple property/thematic study regarding (specify):
☐ A contributing element of a multiple property/thematic study (specify):
☐ Other (specify):

Property description, rationale for determination & other pertinent information (enter text below):

Property History and Description

The Soapstone Creek Culvert, located at the confluence of Soapstone Creek and Broad Branch Run, is a six-foot wide, stone arch culvert constructed in 1898 during a period of initial improvements to adjacent Rock Creek Park (Figure 1). The downstream wing walls were most likely added in 1934 when the culvert was extended (Figure 2).

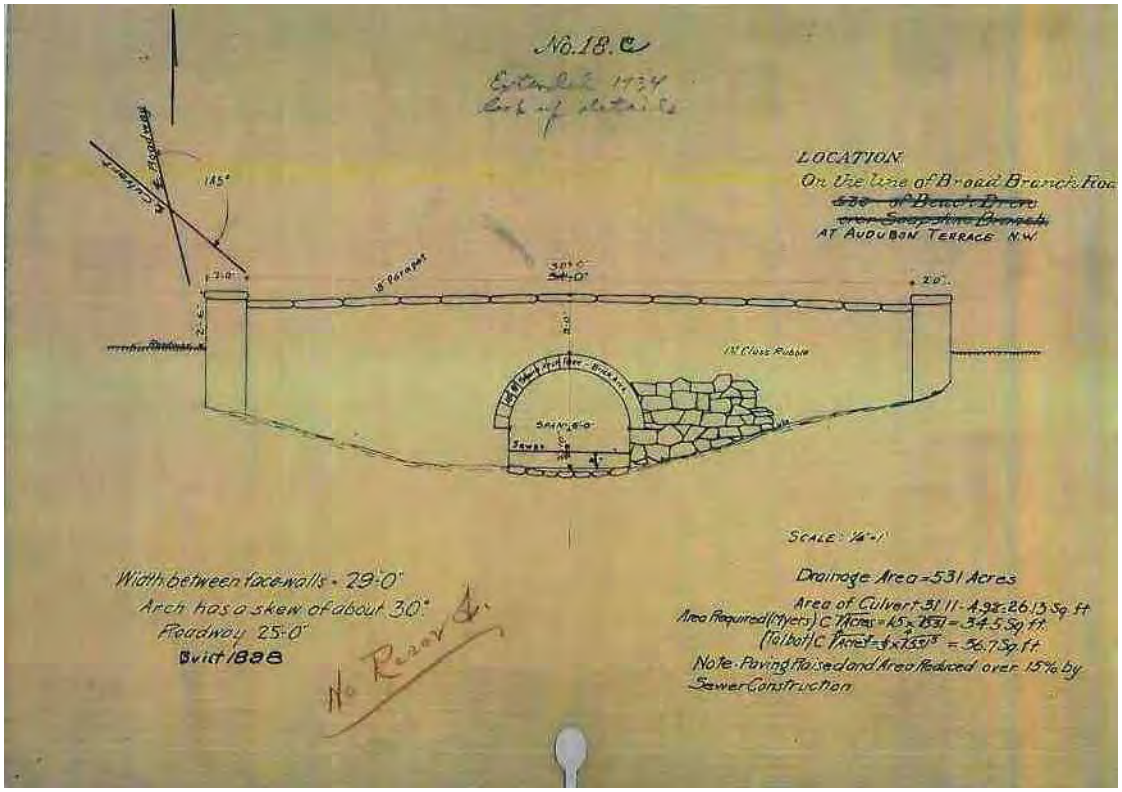

Figure 1. 1898 Design Drawing. DDOT Archives.

Prominent features of the Soapstone Creek Culvert include a downstream headwall with wing walls, an upstream headwall and retaining wall, and a red brick-lined barrel arch. The downstream headwall of the Soapstone Creek Culvert is located within Rock Creek Park and is considered a contributing element to the Rock Creek Park Historic District (RCPHD). The upstream headwall of the Soapstone Creek Culvert is located within District Department of Transportation (DDOT) Right-of-Way and outside Rock Creek Park and the historic district.

Figure 2. Pre-1934 Photograph of the Soapstone Creek Culvert (downstream side) without the wing walls. (E. B. Thompson, DC Public Library Photo Archives).

Downstream Headwall and Wing Walls of the Soapstone Creek Culvert at Broad Branch Run (NPS). The downstream headwall is faced with irregularly coursed rough cut granite; the interior of the arch is lined with red brick (Figure 3). Parging was not observed on this portion of the brick lined arch. The parapet retains some of the flat machine cut capstone slabs. The south wing wall on the downstream side is faced with irregularly coursed rough cut granite with beaded mortar; it has been detached from the headwall through slumping (Figure 4). The south wing wall exhibits a crenellated treatment with pointed stones set in mortar. The north wing wall is faced with irregularly coursed rough cut granite. The downstream headwall has been repointed and the original capstones replaced with the machine cut slabs (Figure 5). A square opening is located in the parapet on the roadside near the north end of the culvert.

Figure 3. Downstream Headwall and Wing Walls of the Soapstone Creek Culvert at Broad Branch Run (2011).

Figure 4. South Wing Wall of Soapstone Creek Culvert with Crenellated Treatment (2011).

Figure 5. Roadside view of the downstream headwall with machine cut capstones, with Ridge Road Bridge in the background (2011).

Upstream Headwall of the Soapstone Creek Culvert at Broad Branch Run (DDOT). The upstream headwall is faced with irregularly coursed rough cut granite (Figure 6); the interior of the arch is lined with red brick and parged. The parapet on the upstream side was capped with large hand beveled stone slabs. One original capstone is intact on the headwall; the other capstones are leaning against the headwall on the roadside. A square opening occurs in the headwall on the upstream side near the north end; a metal grate is located adjacent to this opening on the roadside deck. The upstream headwall exhibits original beaded mortar joints (Figure 7). An irregularly coursed rough cut retaining wall with beaded mortar is located in the channel on the southwest edge of the arch opening and is perpendicular to the headwall.

Figure 6. Upstream Headwall of Soapstone Creek Culvert and retaining wall (2011).

Figure 7. Roadside view of upstream headwall with original hand beveled capstone and beaded mortar joints (2011).

Pre-2011 Alterations. The Soapstone Creek Culvert has been affected by both natural degradation and general maintenance activities. Conditions resulting from natural degradation include:

- Missing and loose capstones on downstream parapet
- Capstones collapsed onto the shoulder from the upstream parapet
- Cracked mortar joints with efflorescence in upstream headwall and retaining wall
- Cracked mortar joints with efflorescence in downstream headwall and wing walls
- Missing stones in downstream headwall parapet
- North downstream wing wall collapsed into Broad Branch Run
- Downstream barrel arch collapse at south edge; bricks and stone collapsed into Broad Branch Run
- Loss of parging in barrel arch on downstream side
- Slumping of south downstream wing wall into Broad Branch Run

Conditions resulting from general maintenance activities consist of:

- Repointing mortar in downstream headwall
- Concrete stabilization added to south downstream wing wall

2011 Collapse

In April 2011, two areas in the middle of the red brick-lined barrel arch collapsed (Figure 8) and two large holes were created in the road deck from flooding and debris (Figure 9). The areas of collapse may coincide with the location of the sewer line which originally reduced the culvert area by 15 percent when installed (Figure 1). Additional damage included the loss of rough cut stone along a mortar crack between the south wing wall and the downstream headwall, and loss of additional rough cut stone and brick on the south edge of the barrel arch (Figures 10 and 11).

Figure 8. Collapse of the red brick lined barrel arch on opposite sides in the middle of the arch (2011).

Figure 9. Holes created in the Broad Branch Road deck, looking upstream (2011).

Figure 10. South Wing Wall and Downstream Headwall of Soapstone Creek Culvert pre-collapse (2009).

Figure 11. South Wing Wall and Downstream Headwall of Soapstone Creek Culvert after the collapse (2011).

National Register of Historic Places (NRHP) Determination of Eligibility

The downstream headwall of the Soapstone Creek Culvert is located within Rock Creek Park and is considered a contributing element to the RCPHD. Although the upstream headwall of the Soapstone Creek culvert is not located in Rock Creek Park, it is the complementary portion to the downstream headwall. The upstream headwall exhibits original design characteristics such as irregularly coursed rough cut stone, hand beveled capstones, and beaded mortar joints. The upstream headwall and retaining wall exhibit integrity of location (original 1898 culvert over Soapstone Creek at Broad Branch Road), design (stone headwalls with a brick-lined barrel arch culvert with original parging), setting (within the natural landscape adjacent to Rock Creek Park), materials (rough cut stone and hand cut cap stones), workmanship (irregularly coursed stone with beaded mortar), feeling (rustic architecture within rural undeveloped area) and association (development of similar infrastructure in Rock Creek Park in the late nineteenth century). Although the Soapstone Creek Culvert has been subject to natural degradation and general maintenance activities that were not architecturally compatible, the culvert retains sufficient physical integrity to convey its significance.

The Soapstone Creek Culvert is recommended as eligible for listing in the NRHP under Criterion C as a representative example of rustic architecture constructed in the early improvement campaign (ca. 1898) for Rock Creek Park and continued application of those design elements in

the post-1934 wing walls on the downstream side. Collectively, the two headwalls, the downstream wing walls, the upstream retaining wall, and the red brick arch interior are character-defining features of the Soapstone Creek Culvert.

PREPARER'S DETERMATION

Eligibility Recommended ☒ Eligibility Not Recommended ☐

Applicable National Register Criteria: A☐ B☐ C☒ D☐

Applicable Considerations: A☐ B☐ C☐ D☐ E☐ F☐ G☐

Susan L. Bupp, Cultural Resources Specialist, Parsons	June 7, 2011

Prepared By: (specify Name, Title & Organization): Date:

DC SHPO DETERMINATION AND COMMENTS

Determined Eligible ☒ Determined Not Eligible ☐

The DC SHPO concurs that the Soapstone Creek Culvert is eligible for listing in the National Register of Historic Places under Criterion C as a representative example of "rustic architecture" and under Criterion A for its association with the early development of Rock Creek Park.

D'l Maloney	June 20, 2011

Reviewed By (specify): David Maloney, Andrew Lewis, Kim Williams Date:

C DETERMINATION OF ELIGIBILITY FORM – ROCK CREEK PARK HISTORIC RETAINING WALLS ALONG BROAD BRANCH

DC STATE HISTORIC PRESERVATION OFFICE
DETERMINATION OF ELIGIBILITY FORM

PROPERTY INFORMATION

Property Name(s): Broad Branch Retaining Walls / Rock Creek Park Retaining Walls
Street Address(es): Broad Branch Road, from Beach Drive to 27th Street, NW
Square(s) and Lot(s):
Property Owner(s): National Park Service, Rock Creek Park

The property/properties is/are being evaluated for potential historical significance as:

☐ An individual building or structure.
☒ A contributing element of a historic district (specify): Rock Creek Park Historic District
☐ A possible expansion of a historic district (specify):
☐ A previously unevaluated historic district to be known as (specify):
☐ An archaeological resource with site number(s) (specify):
☐ An object (e.g. statue, stone marker etc.) (specify):
☐ A new multiple property/thematic study regarding (specify):
☐ A contributing element of a multiple property/thematic study (specify):
☐ Other (specify):

Property description, rationale for determination & other pertinent information (enter text below):

The Rock Creek Park Historic District (RCPHD) consists of 1,754 acres of land dominated by picturesque landscapes featuring forested areas, streams, valleys, meadows, and sloping hills. The park meets NRHP Criteria A, B, and C under the themes of architecture, community planning and development, conservation, engineering, entertainment and recreation, industry, landscape architecture, military, and horticulture. Important persons associated with the history of the park include Joshua Pierce and landscape architects Frederick Law Olmsted, Jr. and John C. Olmsted. The park as a whole retains a high degree of integrity of design, workmanship, location, feeling, association, and setting. The period of significance for the district is 1791 to 1941.

The RCPHD was originally defined as 31 contributing elements and 59 non-contributing elements (Bushong 1990a and 1990b). Ten of the 31 contributing resources are also individually nominated to the NRHP (NPS 2002). One of the 31 contributing elements constitutes a category or system of resources pertinent here- the culverts and retaining walls. Individual culverts and retaining walls (ca. 1900-1941), scattered throughout the park, were not formally surveyed or inventoried as part of the NRHP nomination of the park. "Sections of retaining wall and small culverts (in many cases these structures are retaining walls pierced by a drain) are located throughout Rock Creek Park. In general the historic characteristics of this system of landscape elements can be defined as a native stone material laid in a variety of sizes in mortar or in a few cases dry designed to appear informal and inconspicuous" (Bushong 1990: 184).

At least fifteen segments of a stone retaining wall exist along Broad Branch (Figures 1-3; Table A). They are primarily located on the west side of the creek bank adjacent to Broad Branch Road. The visible portions of the segments vary in height from two to 14 courses of rough cut, irregularly coursed, dry designed (laid) stone. Although no mortar was identified in these retaining wall segments, it is possible that the mortar has been severely deteriorated to the extent it is no longer visible and lending to the appearance of the wall as dry laid. The stone is the

native brown and grey stone common in buildings and structures throughout the park. The condition of the wall segments varies. Storm water runoff from the nearby neighborhoods has eroded the banks of Broad Branch and damaged segments of wall; in addition, previous maintenance and repair projects of the road surface and utility lines have undermined portions of

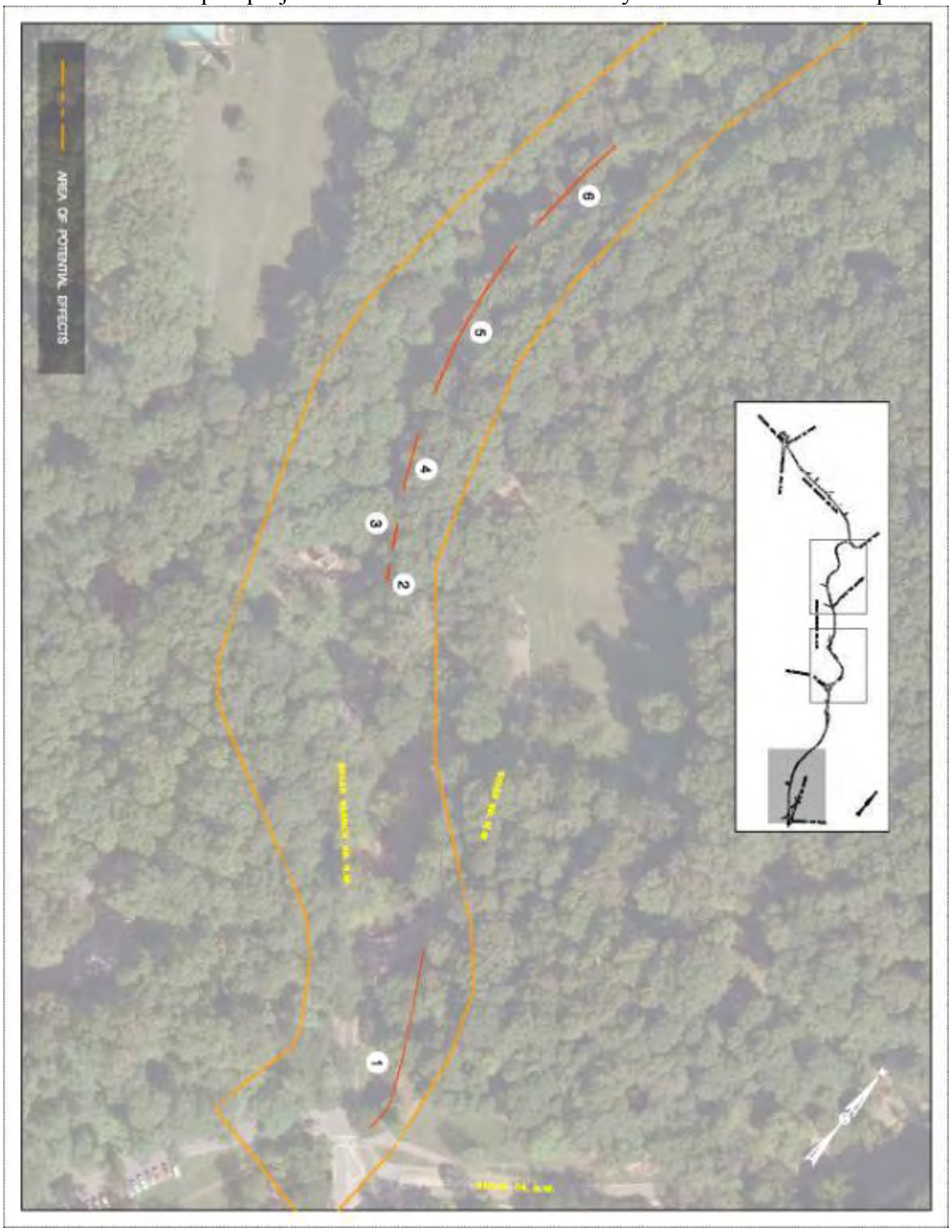

Figure 1. Location of Broad Branch Retaining Wall Segments, North of Beach Drive, NW, Rock Creek Park.

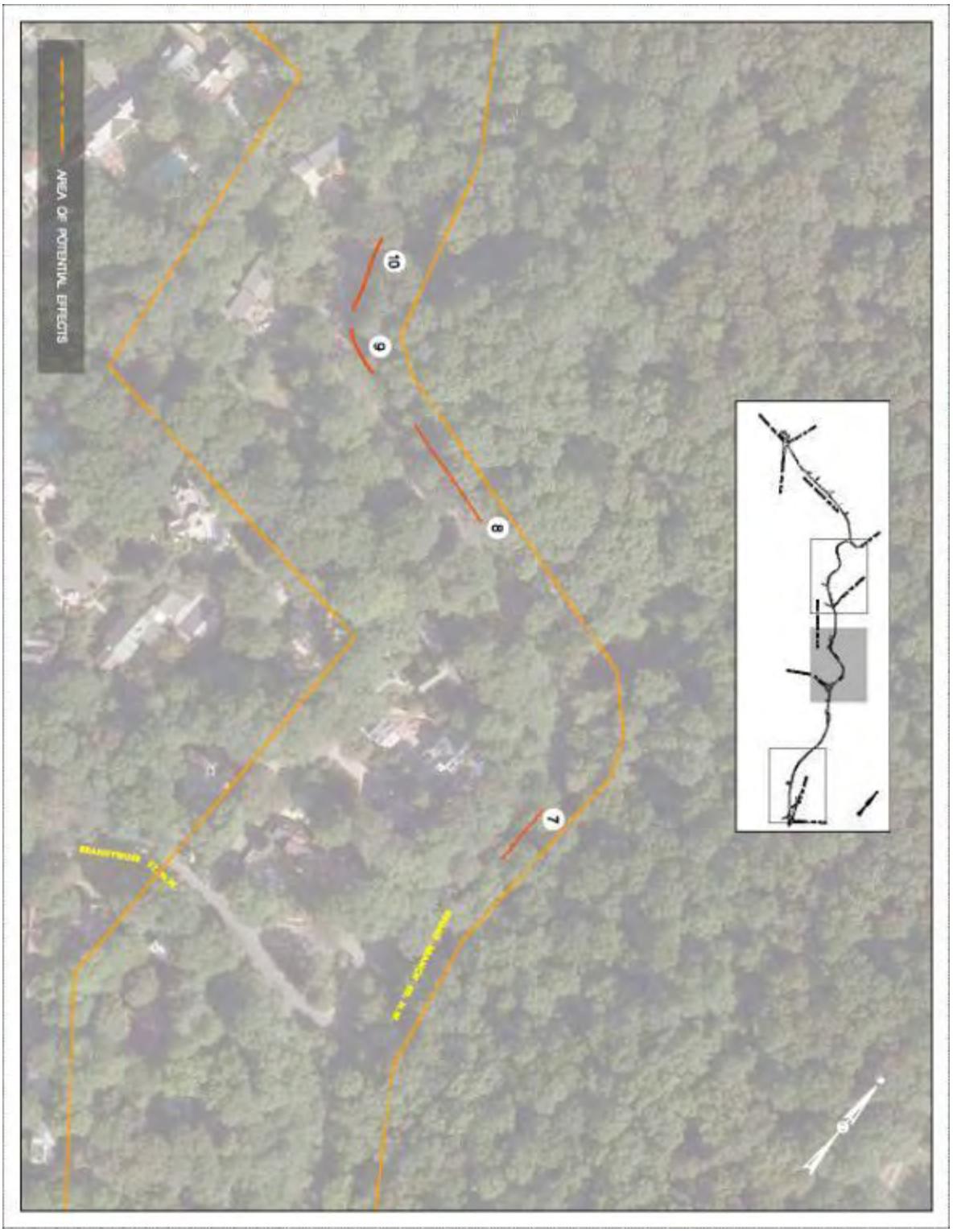

Figure 2. Location of Broad Branch Retaining Wall Segments, North of Brandywine Street, NW, Rock Creek Park.

Figure 3. Location of Broad Branch Retaining Wall Segments, Grant Road, NW to 27th Street, NW, Rock Creek Park.

Table A. Intact Retaining Wall Segments along Broad Branch

Resource	Location	Description	NRHP Status
Dry laid stone wall Segment 1 (Figure 4)	East side of Broad Branch, between Broad Branch Road Bridge and Ridge Road Bridge (Station nos. 90+50 and 92+50)	Regularly coursed rough cut stone wall; at least eight courses visible; 212 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 2 (Figure 5)	West side of Broad Branch, North of Soapstone Creek (Station nos. 86 and 86+50)	Regularly coursed rough cut stone wall; at least three courses visible; 21 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 3 (Figure 6)	West side of Broad Branch, North of Soapstone Creek (Station nos. 85+50 and 86)	Regularly coursed rough cut stone wall; at least two courses visible; 29 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 4 (Figure 7)	West side of Broad Branch, North of Soapstone Creek (Station nos. 84+50 and 85+50)	Regularly coursed rough cut stone block wall; at least five courses visible; 66 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 5 (Figure 8)	West side of Broad Branch, North of Soapstone Creek (Station nos. 82+50 and 84+50)	Regularly coursed rough cut stone wall; maximum six courses visible; 190 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 6 (Figure 9)	West side of Broad Branch, North of Soapstone Creek (Station nos. 80 and 82+50)	Regularly coursed rough cut stone wall; maximum 14 courses visible; 124 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 7	West side of Broad Branch, North of Brandywine Avenue (Station nos. 63+50 and 64+50)	Regularly coursed rough cut stone wall; 71 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 8	West side of Broad Branch, South of Grant Road (Station nos. 59 and 60+50)	Regularly coursed rough cut stone wall; 131 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 9	West side of Broad Branch, South of Grant Road (Station nos. 58 and 58+50)	Regularly coursed rough cut stone wall; 57 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 10	West side of Broad Branch, South of Grant Road (Station nos. 56+50 and 57+50)	Regularly coursed rough cut stone wall; 90 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 11	West side of Broad Branch, North of Grant Road (Station nos. 48+50 and 49+50)	27 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 12	West side of Broad Branch, North of Grant Road (Station nos. 48 and 48+50)	10 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 13	West side of Broad Branch, North of Grant Road (Station nos. 47+50 and 48)	10 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 14	West side of Broad Branch, North of Grant Road (Station nos. 44+50 and 47)	Regularly coursed rough cut stone wall; 96 feet in length	Contributing element to RCPHD
Dry laid stone wall Segment 15	West side of Broad Branch, South of 27th Street (Station nos. 38 and 40)	Regularly coursed rough cut stone wall; 136 feet in length	Contributing element to RCPHD

Figure 4. Dry laid tabular stone retaining wall (Segment 1) located on the east side of Broad Branch, between Broad Branch Road Bridge and Ridge Road Bridge.

Figure 5. Dry laid stone retaining wall (Segment 2) located on the west side of Broad Branch, north of Soapstone Creek, showing a deteriorated wall of stone blocks, close to the road.

Figure 6. Dry laid stone retaining wall (Segment 3) located on the west side of Broad Branch, north of Soapstone Creek showing compromised stone blocks close to the road.

Figure 7. Dry laid stone retaining wall (Segment 4) located on the west side of Broad Branch, north of Soapstone Creek partially supporting the asphalt surface of the roadway. Photographed from the hillside on the east bank of Broad Branch, facing west.

Figure 8. Dry laid tabular stone retaining wall (Segment 5) located on the west side of Broad Branch, north of Soapstone Creek.

Figure 9. Dry laid tabular stone retaining wall (Segment 6) located on the west side of Broach Branch, north of Soapstone Creek.

the walls. However, in most cases, the original material is extant but has been shifted or displaced. The portions of the wall that are most intact are in the areas where the creek channel

is farthest from Broad Branch Road. This distance varies along the length of the channel, from as much as several feet to areas where the retaining wall is partially supporting the asphalt pavement of the roadway.

The following information was compiled from analysis provided by Simone Monteleone, Cultural Resources Program Manager, Rock Creek Park in April 2011.

> In determining the stone retaining wall's construction period, historic documentation (maps and photographs), secondary documentation, and physical evidence were gathered to assist in narrowing the date of construction. Broad Branch Road was extant before the creation of Rock Creek Park in 1890. Laid out by county surveyor Lewis Carberry, Broad Branch Road was established in 1839 for the Peirce family. The road followed the south side of the valley along the stream and was accessed by a short connection that paralleled the original mill race (since demolished) for Peirce Mill (ca. 1829). The road was deeded to the federal government in 1854 and became an official public highway (Davis 1996). One of the earliest surveys where the alignment of the road is indicated is a September 1864 survey plat for the Levy Court. The Michler Survey (1867) is an extensive survey of the entire Rock Creek valley, and Broad Branch Road's alignment is similar to the one depicted in the 1864 survey plat.
>
> None of these maps indicate when the stone retaining wall was constructed and no documentation has been discovered that discusses improvements to Broad Branch Road during the last quarter of the 19th century. The stone retaining wall is not continuous along the road and is evident in specific areas as the branch and road extend east toward Rock Creek. An improvement campaign, ca. 1898, was initiated for Rock Creek Park that impacted Broad Branch Road. Part of this campaign included improvements to Grant Road, which leads north into the park and connects to Glover Road. Grant Road was originally established as part of the road system constructed for the military during the Civil War (Davis 1996). The arched stone culvert constructed for this effort is believed to date to ca. 1898 and was built using similar local stone although the arched stone culvert exhibits beaded mortar joints. In 1902, the Pebble Dash Bridge was constructed at the east end of this stretch, where Broad Branch meets Rock Creek. The bridge carried traffic from Beach Drive over Broad Branch. The alignment of Broad Branch Road did not change, as demonstrated by maps from the 1890s through the turn of the 20th century. Based on the documentary evidence, it is believed that the stone retaining wall was in place by 1902.
>
> In the late 1950s, the Pebble Dash Bridge and a ford over Broad Branch were replaced with the modern concrete bridges that are extant today. The current bridge that crosses over Broad Branch to access Glover Road is located west of the site of Pebble Dash Bridge. The limits of disturbance for the new bridge did not impact the stone retaining walls that are located further west along Broad Branch. Photographs of the construction confirm this.

During the 1930s, as part of New Deal work programs during the Great Depression, 7,516 square yards of roadway in the park was resurfaced and some retaining walls in the park were constructed (Bushong 1990: 143). Although it is not clear, it is possible that Broad Branch Road

was among the extant roadways that was resurfaced and that segments of retaining walls along the creek bank were built or improved during that time.

Additional photographic evidence shows a retaining wall along the west bank of Broad Branch in front of a building on the west side of Broad Branch Road (the gate house for La Villa Firenze). The photograph was accessioned in the 1940s but appears to have been taken before 1935 based on the absence of wing walls around the Soapstone Creek culvert, known to have been installed in that year. The retaining wall visible in the photo coincides with the location of the Broad Branch retaining wall documented here as Segment 2. The stones in Segments 2 and 3 are blockier than the thinner, tabular stones in other segments of the wall. Whether the retaining walls date to the turn of the 20th century or as late as the 1930s, they were confirmed at their current location from a photograph dating to before 1935.

National Register of Historic Places (NRHP) Determination of Eligibility.

Based on documentary research, photographic documentation, and on-site testing, it is estimated that the segments of the stone retaining wall at Broad Branch Road were constructed between the 1890s and the 1930s. The 15 segments of the retaining wall along the bank of Broad Branch represent a landscape element constructed within the early decades of Rock Creek Park development. They are constructed in the rustic stone style and material and within the period of significance (ca. 1900 to 1941) of retaining walls and culverts considered contributing elements to the Rock Creek Park Historic District. Although their integrity has been diminished from erosion and improper maintenance, the 15 segments collectively convey their purpose as a retaining wall. They are recommended as a contributing element to the Rock Creek Park Historic District within the category of culverts and retaining walls under Criteria A (overall conservation of natural settings within urban landscapes) and C (landscape architecture). The fifteen segments of the retaining wall along the bank of Broad Branch represent a landscape element which is a contributing element of the Rock Creek Park Historic District. The retaining wall segments represent an architectural resource which is located in areas where the steepness of the slope along Broad Branch indicates little to no potential for archaeological deposits. No field assessment of the archaeological potential was conducted as part of the NRHP evaluation of the retaining walls in this area; therefore, it is not being evaluated under Criterion D for archaeological significance.

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PREPARER'S DETERMATION

Eligibility Recommended ☒ Eligibility Not Recommended ☐

Applicable National Register Criteria: A☒ B☐ C☒ D☐

Applicable Considerations: A☐ B☐ C☐ D☐ E☐ F☐ G☐

Susan L. Bupp, Senior Cultural Resources Specialist, Parsons	February 1, 2012
Prepared By: (specify Name, Title & Organization):	Date:

DC SHPO DETERMINATION AND COMMENTS

Determined Eligible ☒ Determined Not Eligible ☐

The DC SHPO concurs that the Broad Branch Retaining Walls / Rock Creek Park Retaining Walls located along Broad Branch Road from Beach Drive to 27th Street, NW are eligible for listing in the National Register of Historic Places as described above. We also note that Simone Monteleone of the National Park Service reviewed this DOE and concurred with its findings.

Reviewed By): David Maloney, Andrew Lewis & Kim Williams Date: February 15, 2012

DC Government Project/Permit Project Log Number (if applicable): 11-129

D DETERMINATION OF ELIGIBILITY FORM – GATEHOUSE AT LA VILLA FIRENZE

DC STATE HISTORIC PRESERVATION OFFICE
DETERMINATION OF ELIGIBILITY FORM

PROPERTY INFORMATION

Property Name(s): Gatehouse for La Villa Firenze
Street Address(es): 4400 Broad Branch Road, NW
Square(s) and Lot(s): 2248, Lot 12
Property Owner(s): Government of Italy

The property/properties is/are being evaluated for potential historical significance as:

☐ An individual building or structure.
☐ A contributing element of a historic district (specify):
☐ A possible expansion of a historic district (specify):
☐ A previously unevaluated historic district to be known as (specify):
☐ An archaeological resource with site number(s) (specify):
☐ An object (e.g. statue, stone marker etc.) (specify):
☐ A new multiple property/thematic study regarding (specify):
☐ A contributing element of a multiple property/thematic study (specify):
☒ Other (specify): A contributing element to La Villa Firenze complex, most likely NRHP-eligible, but now on foreign soil (Italian government)

Property description, rationale for determination & other pertinent information (enter text below):

The residence located at 4400 Broad Branch Road, NW is a Tudor Revival style house constructed between 1925 and 1927 that serves as a gatehouse for La Villa Firenze, currently the Italian Ambassador's residence (Figures 1 and 2). The gatehouse is a one and a half story building with stucco exterior, half-timbering and two stone chimneys. All windows have stone sills. The first floor windows are four-over-four double hung sash windows (Figure 1); the second floor window on the east façade is a six-over-six double hung sash window (Figure 2). The original shutters have been removed and storm windows have been installed over the original windows (Figure 2). The original slate roof has been replaced with asphalt shingles. The original stone retaining walls along Broad Branch Road at the entrance to the driveway and the original stone pillars flanking the driveway are intact (Figure 1). The light fixtures on the stone pillars have been replaced and a wrought iron fence has been added (Figure 2). Minimal alterations to the exterior design of the gatehouse are apparent and the overall integrity of design remains intact.

La Villa Firenze, the Italian Ambassador's residence, is located at 2800 Albemarle Street, NW (Figure 3). Originally constructed between 1925 and 1927 for Mrs. Blanche Estabrook O'Brien (Williams 2004; Realtor.com 2011), La Villa Firenze is a 24,000 square foot Tudor revival mansion with 59 rooms including seven bedrooms and eleven baths, located on 22 acres west of Rock Creek Park (Williams 2004; Landsman 2006) (Figure 3). Mrs. O'Brien was the widow of Paul Roebling, a member of a New Jersey family responsible for financing and building the Brooklyn Bridge, which opened in 1883. She was married to her second husband, Colonel Arthur O'Brien, Assistant Secretary of War under Newton D. Baker, when construction began on the residence (Williams 2004). Mrs. O'Brien selected architect Russell O. Kluge to design the home and H. F. Huber to design the interiors (Washington DC Visitor Information 2011); former U.S. Army Corps of Engineers General Richard Marshall was the contractor. When construction

was complete, the estate was named Estabrook by Mrs. O'Brien (Williams 2004). The following description is excerpted from several magazine articles (Dan 2010; Williams 2004).

Figure 1. Gatehouse for La Villa Firenze, looking northwest (pre-1935). (E. B. Thompson, DC Public Library Photo Archives)

Figure 2. Gatehouse for La Villa Firenze, looking west (2011).

Figure 3. Site Plan of La Villa Firenze and location of the Gatehouse, Washington, DC.

The main residence was constructed of gray fieldstone, quarried on the site, with limestone trim (Figure 4). A variegated slate roof, green shutters, and leaded glass windows completed the design. Several outbuildings also graced the estate, including a large gatehouse on Broad Branch Road, garage with servant's quarters, 90-foot swimming pool, tennis courts, and a barn which later became an art studio (Williams 2004; Barnes 1994). Like many homes of the era, the Tudor-styled residence featured rather dark interior rooms, furnished with Jacobean-style furniture. O'Brien purchased fine paneling and mantels that had been designed by noted mid-17th century architect Sir Christopher Wren in London, and had them incorporated into the house during its construction (Williams 2004). The home's interiors reflected a variety of styles, dominated by an enormous three story grand hall with carved oak beams and stairway.

Figure 4. La Villa Firenze, looking northwest (source: Dan 2010).

Following the Great Depression, Colonel and Mrs. O'Brien leased the property to the Minister of Hungary until it was sold in 1942 (Williams 2004). Colonel and Mrs. O'Brien are both buried at the Forest Lawn Memorial Park, Omaha, Nebraska (Find a Grave 2012a, 2012b; Forest Lawn Memorial Park 2012).

Colonel Meyer Robert Guggenheim, Sr. (1885-1959) purchased the stately mansion overlooking Rock Creek Park in 1942 and named the residence after his mother, Florence (Dan 2011; Williams 2004). The Guggenheim fortune stemmed from the M. Guggenheim and Son Mining and Smelting Company, the family business for which he began to work in 1925, and later from the Guggenheim Exploration Company. Col. Guggenheim retired from business in 1929 (Williams 2004). Col. Guggenheim served as Ambassador to Portugal from 1953 to1954; however, his indifferent work habits, gambling, habitual womanizing, and social faux pas led to an early demise of his political career (Spinzia and Spinzia 2007). The Guggenheims changed much of the dark interiors of the residence into a lighter appearance by utilizing a number of

interior decorating ideas like pickling the oak staircase, for example. They installed two Waterford chandeliers in the drawing room (Williams 2004). Unfortunately, a fire in 1946 destroyed a large amount of original paneling. Austrian architect, Michael Rosenauer, was hired that year to restore the interiors of the house.

M. Robert Guggenheim died in 1959 and his fourth wife and widow, Rebecca Pollard "Polly' Guggenheim, married John A. Logan in 1962, and together they resided at the estate until 1976 (Williams 2004). Rebecca Pollard ``Polly'' Guggenheim Logan was a philanthropist and prominent Washington hostess who also was an artist and patron of the arts (Barnes 1994). From the 1940s to the mid-1970s, Mrs. Logan was a leading entertainer of high government officials, diplomats and influential figures in the political, business and art communities, holding parties and receptions at Firenze House including Supreme Court Justices William O. Douglas and Tom C. Clark, Five-Star General Omar N. Bradley, Joint Chief of Staff Admiral Arthur Radford, presidential advisor Clark M. Clifford, evangelist Oral Roberts, pianist Van Cliburn, philanthropists Marjorie Merriwether Post and Perle Mesta, and Kermit Roosevelt, Jr., who planned the CIA's 1953 overthrow of the Iranian government (Gallery of History 2009). Among Washington's grandest estates, Firenze House was the setting for charity balls, art shows, scholarship benefits and barbecue fund-raisers for such organizations as the Children's Hearing and Speech Center. An artist and portrait painter, Mrs. Logan was a serious student of art and a founder and major supporter of the Art Barn in Rock Creek Park, a restored carriage house where the works of painters, sculptors, photographers and artisans are exhibited (Barnes 1994).

Complete with a swimming pool, a bowling alley, tennis courts and a pipe organ big enough for a cathedral, Firenze, at one time, required an 11-person service and maintenance staff. The Guggenheims converted one of the barns on the estate into an art studio. Mrs. Logan painted in oils and water colors, specializing in portraits and still lifes. Her paintings have been exhibited at the Smithsonian Institution, in Boston and in private collections. As a Washington hostess, she was known for an easygoing charm and unruffled disposition, but also a sharp and attentive eye for detail. For years, she was hostess of an annual Firenze House Christmas party, featuring special lighting and decorating, caroling and dancing. As her entertaining increased, she found less time for painting, but she continued to raise money for various art scholarships and organizations. During the presidency of Lyndon Johnson, the two Johnson daughters gave a party for their father at Firenze House featuring the famed Texas barbecue chef Walter Jetton. So successful was the barbecue, that Mrs. Logan made it an annual charity fund-raiser. The Corcoran Gallery of the Art borrowed the estate for its annual tour of private art collections. Mrs. Logan was a founder and charter member of the Washington chapter of the National Society of Arts and Letters, a member of the women's committee of the Corcoran Gallery of Art, the women's board of the National Symphony and the women's board of the Opera Society of Washington (Barnes 1994).

The Italian Government purchased the Tudor Revival mansion and its formal gardens, encompassing over 17 acres of lawns and woodlands, from Rebecca Pollard „Polly' Guggenheim Logan in 1976 (Landsman 2006). The entire estate, recorded as nearly 22 acres, is valued at more than $42 million.

The construction contractor, former Brigadier General Richard C. Marshall, Jr. was one of four retired Army officers (along with Major Henry Cabell Maddux, Colonel James A. Moss and Lieutenant Commander C. K. Mallory) who founded the real estate development firm, Maddux, Marshall and Company and later known as Maddux, Marshall, Mallory and Moss or the 4-Ms

(Town of Garrett Park 2007). The firm primarily developed middle class suburbs during the 1920s such as Battery Park and Garrett Park in Montgomery County, Maryland (KCI Technologies, Inc. 1999a, 1999b). Battery Park featured a system of curving, discontinuous streets lined with approximately 200 lots. Maddux, Marshall and Company offered eight house types ranging from Bungalow to Spanish Revival to Colonial Revival. Clients were also free to submit their own plans for approval. A clubhouse was constructed in 1923, and a commercial area developed along Old Georgetown Road. Advertisements for Battery Park targeted military veterans through journals and magazines. Lots sold quickly, and the subdivision was almost completely constructed by 1940 (KCI Technologies, Inc. 1999a). The second phase of development in Garrett Park began after World War I, when Maddux, Marshall and Company began marketing small, mass produced cottages aimed at lower income government employees. The cottages frequently came with a choice of one of six types of Chevrolet automobile and therefore became known as "Chevy" houses. The cottages were constructed as infill around existing development (KCI Technologies, Inc. 1999b). The firm eventually owned hotels and apartments in Washington and were so successful that the firm was featured in a special section of the Washington Post in 1926 (Town of Garret Park 2007). However, the firm went out of business during the Depression.

Russell O. Kluge (1894-1967) designed La Villa Firenze and was a 4-M architect who designed the Chevy houses in Garrett Park. The compact 830-square foot interior of a typical Chevy house consisted of a living room with fireplace and dining nook. The small kitchen had a glass-fronted "dresser" for storage, an oil range, and a combination sink and laundry tray. Two bedrooms and a bath opened off a small hall, and some models included a 96-square foot rear sleeping porch. Space was maximized by the use of built-ins--a murphy bed in the living room, table and benches in the dining nook, medicine/linen cabinet in the bathroom. Plaster walls were papered and trim was stained wood. There were electric light fixtures in each room and a single "utility outlet" in the living room, and, of course, the built-in radio. The full basement had hollow-tile walls and cement floor (Town of Garret Park 2007). Russell O. Kluge was associated with the architectural firm, A.B. Mullett & Co., in 1924 and later inherited the firm in 1935 with Thomas Mullett's death. Kluge operated the firm until he was drafted in World War II (Library of Congress 2012).

Hugo F. Huber (1869-1934) was an interior decorator and his company (H. F. Huber & Co.) was one of New York's first American interior decorating firms that successfully designed, executed, and installed complete high end commercial, hospitality, and residential interiors in close conjunction with project architects. Despite significant commercial contracts Hugo F. Huber's career was built on a range of residential work for wealthy clients, often German-American like Huber (Limbach 2010). Huber designed the interiors for the late Victorian style Christian Heurich Mansion (1892-1894), in Washington, DC and the Tudor Revival style Stan Hywet Manor (1911-1917), in Akron, Ohio.

Michael Rosenauer (1884-1971) was born in Austria and was an internationally acclaimed architect who practiced in London, Vienna, and New York. In Vienna, he built a villa for his friend, the composer Richard Strauss in 1925 with curly tops to the window surroundings and sweeping Central European hip roof. Rosenauer also built thousands of working-class flats. Less romantic, these tenements won an international reputation – enough for the British planner Sir Raymond Unwin, chief architect of the Ministry of Health, to invite Rosenauer to London to advise on social housing in 1928. Rosenauer moved in an artistic and theatrical world, for some of whose leading members he would create homes. In 1940, Rosenauer left for America to form

a committee for a welfare project to house French refugee children. He went on to advise the US housing authority in Washington. While in the United States, Rosenauer acquired an understanding of American expectations of efficiency and quality. Rosenauer also designed the Time and Life Building, and numerous hotels including the Westbury, the Portman, the Inn on the Park, and the Carlton Tower in London, the Emerald Beach Hotel at Nassau, Bahamas, and hotels in the Canaries and Madeira.

National Register of Historic Places (NRHP) Determination of Eligibility.

The gatehouse associated with Estabrook/Firenze House/La Villa Firenze was originally constructed as part of the overall residential compound and has remained part of the estate through three successive owners: Colonel Arthur and Mrs. Blanche Estabrook O'Brien (1927-1942); Colonel Meyer Robert and Rebecca Pollard "Polly" Guggenheim (1942-1976); and the Government of Italy (1976-present). Estabrook/Firenze House/La Villa Firenze is also associated with the real estate development firm of Maddux, Marshall, Mallory and Moss, architect Russell O. Kluge, New York based interior designer Hugo F. Huber, and international architect Michael Rosenauer.

The gatehouse at Estabrook/Firenze House/La Villa Firenze is considered a contributing element to this residential complex; however, it is the only building visible from the public right of way. Other elements of the estate documented from the public right of way include the stone retaining walls at the entrance to the driveway and the stone pillars flanking the drive. Access to the entire estate for NRHP evaluation is restricted at this time as the property is owned by the Italian government and as such the buildings are located on foreign soil. However, based on preliminary research, Estabrook/Firenze House/La Villa Firenze and its contributing elements, would most likely be considered eligible for listing on the NRHP under Criterion B, for its association with philanthropist and prominent Washington hostess, Rebecca Pollard „Polly' Guggenheim Logan, and under Criterion C, as an excellent representative example of the 1920s Tudor-style architecture in Washington, DC. The integrity of location, design, setting, materials, workmanship, feeling, and association remain largely intact. The main residence and gatehouse exist in their original location and both buildings retain their original exterior design, including elements of the Tudor style such as half-timbering and steeply pitched roofs. No major additions or alterations appear to have occurred to the gatehouse based on a comparison of the current building to an historic (pre-1935) photograph (Figures 1 and 2). The setting of the estate is unchanged as it is located across from Rock Creek Park, designated a national park by the time of the construction of the estate and accessible from Broad Branch Road, a winding, former county road, forming the southwest boundary of the park. The use of stone features may reflect a connection to the rustic stone architecture prominent in features of the park, including the many bridges, culverts, and retaining walls that comprise the park's architecture. Minor changes or additions to or removal of materials from the gatehouse and landscape features at the entrance include the replacement of the slate roof with asphalt shingles, removal of window shutters, and installation of a new metal fence and gate, new light fixtures in the stone pillars along the drive, and a new tall lamppost along the drive. Workmanship of the gatehouse and stone retaining walls and pillars appears undiminished. The Tudor-style gatehouse and stone features convey a sense of the aesthetic of the property as an opulent country estate. Its association with the wealthy or politically prominent echelon of Washington, DC remains with its current use as a residence for foreign dignitaries.

Although the O'Brien's owned Estabrook for 15 years, little information could be gleaned on the extent of their professional or social activities. The real estate firm of Maddux, Marshall, Mallory and Moss were known primarily for the development and construction of the modest suburban „Chevy' houses in Montgomery County, Maryland; Although Richard Marshall and 4M architect Russell O. Kluge were involved with the design and construction of larger estate homes such as Estabrook, neither achieved acclaim for architectural design or innovation of these custom homes. Hugo F. Huber established a nationally acclaimed interior decorating firm; unfortunately his original interiors designed for Estabrook were likely destroyed by fire in 1946. Michael Rosenaur, an internationally acclaimed architect re-designed the interior after the fire; however, whether these interiors remain intact cannot be ascertained.

The gatehouse at Estabrook/Firenze House/La Villa Firenze is considered a contributing architectural element to this residential complex which is owned by a foreign government. Documentation of this standing structure for evaluation of NRHP eligibility was conducted from the public right-of-way and access to the parcel on which this structure is located was not obtained. No assessment of the archaeological potential was conducted as part of the NRHP evaluation of the gatehouse on this parcel; therefore, it is not being evaluated under Criterion D for archaeological significance.

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PREPARER'S DETERMATION

Eligibility Recommended ☒ Eligibility Not Recommended ☐

Applicable National Register Criteria: A☐ B☒ C☒ D☐

Applicable Considerations: A☐ B☐ C☐ D☐ E☐ F☐ G☐

Susan L. Bupp, Senior Cultural Resources Specialist, Parsons	February 1, 2012
Prepared By: (specify Name, Title & Organization):	Date:

DC SHPO DETERMINATION AND COMMENTS

Determined Eligible ☒ Determined Not Eligible ☐

The DC SHPO concurs that the Gatehouse for La Villa Firenze located at 4400 Broad Branch Road, NW is eligible for listing in the National Register of Historic Places and the DC Inventory of Historic Sites as outlined above.

Reviewed By: David Maloney, Andrew Lewis & Kim Williams Date: February 15, 2012

DC Government Project/Permit Project Log Number (if applicable): 11-129

District Department of Transportation
55 M Street, SE
Washington, DC 20003
www.ddot.dc.gov