APPENDIX E

Cultural Resources Investigations for 30 Acres within the Proposed Preserve at Tower Oaks, Montgomery County, Maryland

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FINAL REPORT DECEMBER 2, 2009

CULTURAL RESOURCES INVESTIGATIONS FOR 30 ACRES WITHIN THE PROPOSED PRESERVE AT TOWER OAKS, MONTGOMERY COUNTY, MARYLAND

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Cultural Resources Investigations for 30 Acres within the Proposed Preserve at Tower Oaks, Montgomery County, Maryland

Final Report

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ABSTRACT

This report summarizes the Phase I cultural resources investigations of approximately 12.1 ha (30 ac) conducted for the planned Preserve at Tower Oaks development, Montgomery County, Maryland. The report was prepared by R. Christopher Goodwin & Associates, Inc., on behalf of BSA Environmental Services, Inc. The archeological investigations were designed to facilitate compliance with county, state, and federal regulations including Article 5A, sections 325 and 326 of the Annotated Code of Maryland.

The objectives of the Phase I archeological investigation were to identify any archeological resources present within the project area; to determine the approximate horizontal and vertical boundaries of any identified resources; and, to make preliminary assessments of the significance of those resources by applying the National Register Criteria for Evaluation (36 CFR 60.4 [a-d]). All work was completed following standards set forth in *Standards and Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994), and in the *Archeology and Historic Preservation: The Secretary of the Interior's Standards and Guidelines* (NPS 1983).

Cultural resource investigations consisted of a combination of archival background research and archeological field survey. During the field survey, a total of 257 shovel tests were excavated within the project area. Cultural deposits identified within the project area consisted exclusively of surface scatters of glass, appliances, vehicle parts, and stone that had been dumped within the project area. Much of the dumping was along now-abandoned all-terrain vehicle paths that crossed through the project area. These deposits are not related to historic occupation of the property and are not considered significant. As such, no archeological sites were identified; therefore, no historic properties, as defined by 36 CFR 800.16(l), are present within the current survey boundaries. No additional archeological investigation is recommended.

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CHAPTER I

INTRODUCTION

This report summarizes the results of Phase I cultural resources investigations of approximately 12.1 ha (30 ac) for the planned Preserve at Tower Oaks development, in Rockville, Montgomery County, Maryland. The report was prepared by R. Christopher Goodwin & Associates, Inc., on behalf of BSA Environmental Services, Inc. The archeological investigations were designed to facilitate compliance with county, state, and federal regulations including Article 5A, sections 325 and 326 of the Annotated Code of Maryland; and in anticipation of compliance with Section 106 of the National Historic Preservation Act of 1966, as amended.

R. Christopher Goodwin & Associates, Inc. undertook the Phase I survey during October 2009. All work was completed in accordance with the National Historic Preservation Act of 1966, as amended, and its implementing regulations "Protection of Historic Properties" (36 CFR Part 800); the Secretary of the Interior's *Standards and Guidelines* (NPS 1983); and with the State's *Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994).

Project Location and Description

The Preserve at Tower Oaks is located in the southern portion of Montgomery County, Maryland, within the incorporated boundaries of Rockville (Figures 1 and 2). The project area lies within the Tower Oaks Industrial Park and is bound on the east by Preserve Parkway, on the west by Woodmont Country Club, and on the north by recent commercial development. The Montrose Industrial Park lies to the south of the project area and the residential development of North Farm lies to the southeast. Along Preserve Parkway, Wooton Parkway is the nearest intersecting road to the project area. This intersection lies approximately 0.23 km (0.14 mi) north of the project area; the intersections of Preserve Parkway and Tower Oaks Boulevard lie approximately 0.37 km (0.23 mi) southwest. Interstate 270 Exit 4 (Montrose Road) is located about 0.61 km (0.37 mi) south of the project area; northbound traffic exits directly onto Tower Oaks Boulevard just south of its intersection with Preserve Parkway.

A commercial property, the Preserve at Tower Oaks will include at least four commercial buildings along with associated infrastructure improvements including the construction of parking lots, roadways, and the installation of utilities. These improvements necessarily will entail modification of the current landscape, including vegetative clearing, grading, excavation, and filling. These activities have the potential to negatively affect the integrity of cultural resources.

Objectives

The objective of the Phase I archeological survey was to identify any archeological resources present within the predetermined study area; to determine the approximate horizontal and vertical boundaries of any identified resources; and, to make preliminary assessments of the significance of any identified resources by applying the National Register Criteria for Evaluation (36 CFR 60.4 [a-d]). For each identified resource, the study

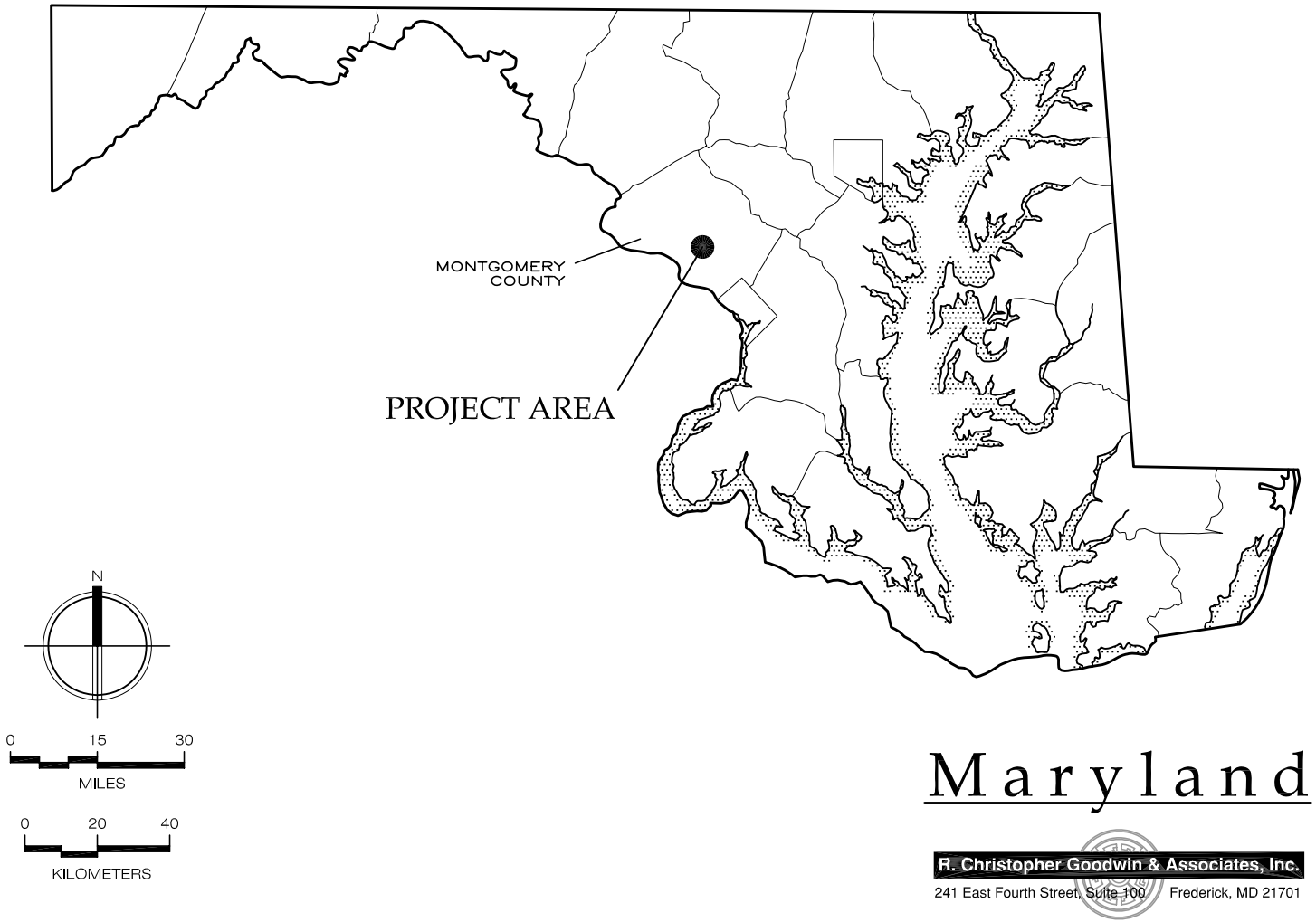


Figure 1. Map of Maryland showing the approximate location of the project area within Frederick County

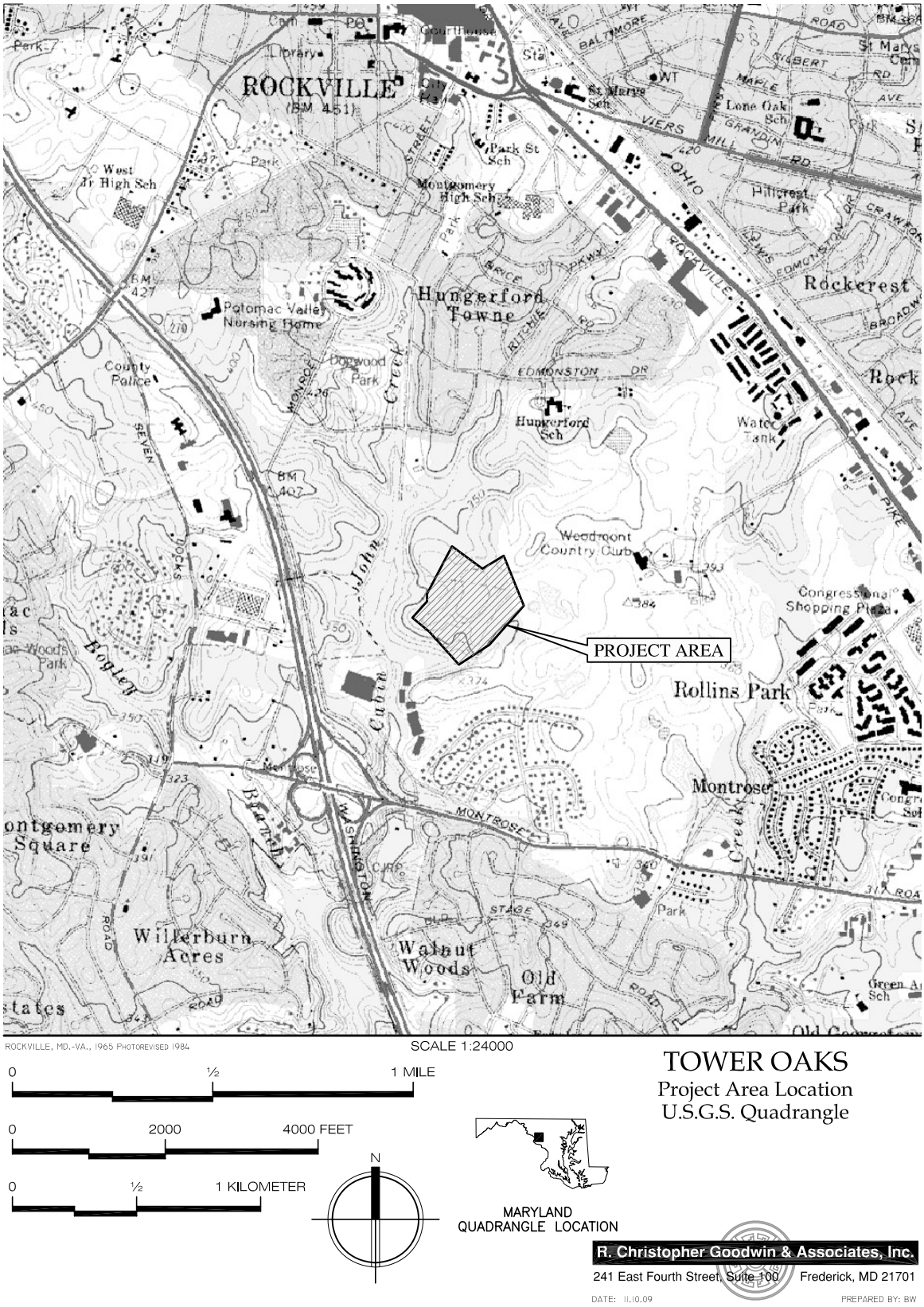


Figure 2. Excerpt from the Rockville, Maryland (1965, photorevised 1985) USGS 7.5 minute quadrangle showing the location of the project area

attempted to provide a preliminary determination of: (1) its nature, age, and function; (2) its horizontal and vertical boundaries; and, (3) its archeological integrity and potential.

The objectives of the Phase I investigation were met through a combination of archival research, archeological field investigations, laboratory analysis of recovered cultural remains, and preparation of this technical report. Background archival research for the Phase I study focused on development of a general historic context for Montgomery County. Phase I archeological field investigations included pedestrian survey and the excavation of 257 systematic shovel tests.

Suzanne Sanders, M.A., served as Principal Investigator and supervised all aspects of the study; Kathleen Child, M.A., served as Project Manager and Field Director. She was assisted in the field by Emma Richardson, B.A.; Benjamin Skolnik, B.A.; and Kevin Stanfield, B.A. Jennifer Evans, M.A. conducted the archival research. Graphics were produced by Barry Warthen and Chris Slemmer. Ms. Sharon Little produced the report.

Organization of the Report

Chapter I contains a brief description of the project. The natural and cultural settings of the project are described in Chapter II, which also contains a discussion of previous research in the area. Chapter III reviews the research methods used in the investigations. Chapter IV reviews the results of the archeological investigations. Chapter V contains a summary of the project and presents the management recommendations. Appendix I contains resumes of key project personnel.

CHAPTER II

NATURAL AND CULTURAL SETTING

Natural Setting

The Preserve at Tower Oaks is located in southern Montgomery County, Maryland within Maryland Archeological Research Unit 12, the Potomac Drainage (Figure 3). The project area lies within the incorporated limits of the city of Rockville and includes lands along the eastern side of Preserve Parkway near its intersection with Wootton Parkway. Situated within the Tower Oaks Industrial Center, the project area is located just north of the Montrose Office Center and west of Woodmont Country Club. Residential developments of North Farm, Wootton Oaks, Hungerford, and the Village at Tower Oaks are located nearby. Interstate 270 crosses within 0.5 km (0.3 mi) of the project area; Exit 4 of Interstate 270 (Montrose Road) empties onto Tower Oaks Boulevard just south of its intersection with Preserve Parkway and about 0.61 km (0.37 mi) south of the project area.

The entire 12.1 ha (30 ac) project area of the Preserve at Tower Oaks currently is maintained as unimproved forest. The project boundaries exclude areas of previous disturbance related to modern commercial development along Preserve Parkway, including areas previously graded for intersecting roads and those containing existing utilities. Areas of previous disturbance related to the entrance road and parking deck for 1 Preserve Parkway also were avoided by project plans. As such, previous disturbances within the project area were limited to areas of prior historic cultivation and to a network of currently abandoned recreational vehicle trails.

The terrain at the Preserve at Tower Oaks project area is gently to moderately rolling. The most prominent landscape feature is the terminus of a broad upland ridge that terminates near the southern end of the project area in a series of eroded finger ridges. Areas of extremely rocky soil are common along the ridge crest, which also includes small areas of exposed rock. Elevations along the upland ridge range from 114 m (374 ft) above mean sea level (amsl) in the northwestern corner of the project area to approximately 117 m (384 ft) amsl on a finger ridge near the southwestern corner of the project area. The lowest elevation occurs in the southwestern corner of the project area along an unnamed tributary of Cabin John Creek, where elevations are approximately 104 m (340 ft) amsl.

Drainage

The nearest water source to the project area is an unnamed drainage of Cabin John Creek, which flows through the southwestern corner of the project area. The drainage has its origin just east of the project area on the grounds of the Woodmont Country Club and joins Cabin John Creek just west of the project area on the opposite side of Preserve Parkway. Cabin John Creek continues southward through Cabin John Regional Park, eventually emptying into the Potomac River near Cabin John Island in Glen Echo, Maryland. The Cabin John Creek watershed encompasses 68.6 km² (26.5 mi²) in Montgomery County and includes 13 sub-watersheds; the project area lies within the Upper Mainstem sub-watershed (Whitman, Requardt and Associates and Coastal Resources, Inc. 2004; Ness and Haddaway 1999:2). Within this sub-watershed, Cabin John Creek has been assessed as a "severely to moderately

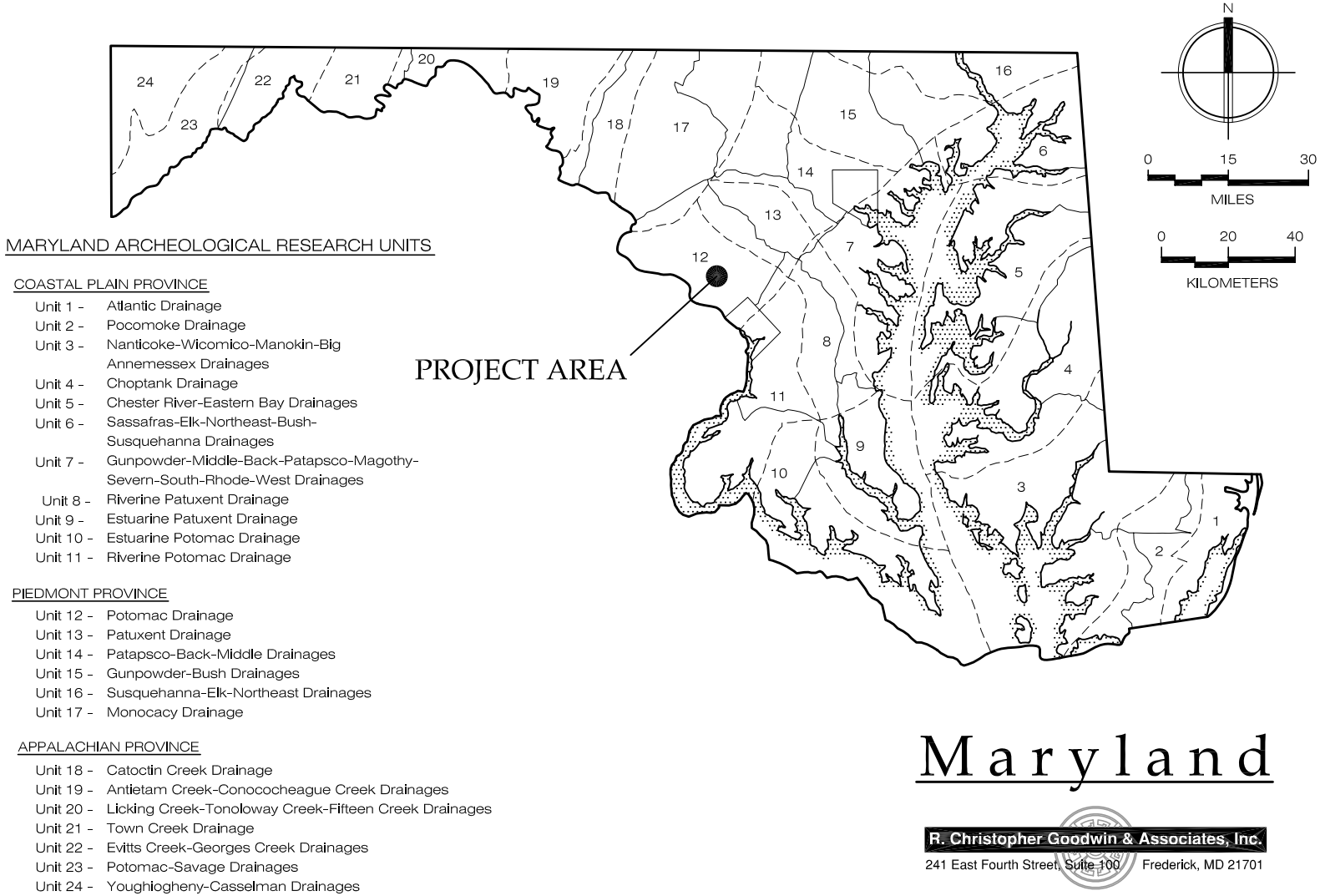


Figure 3. Map of Maryland Archeological Research Units (MARU) showing the approximate location of the project area within MARU 12, Potomac Drainage

entrenched stream channel" (Ness and Haddaway:7).

The U.S. Fish and Wildlife Service has not recorded any digitally mapped wetlands within the project area (U.S. Fish and Wildlife Service 2009a). A section of Cabin John Creek west of the project area is mapped as "Palustrine, Forested, Broadleaf Deciduous, Temporarily Flooded" (PFO1A) and a man-made pond east of the project area is mapped as "Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded" (PUBHh). As defined by the U.S. Fish and Wildlife Service, "the Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens" (U.S. Fish and Wildlife Service 2009b). These wetlands are less than 8 ha (20 ac) in size and have a depth at low water of less than 2 m (6.6 ft).

Geology and Soils

The project area is situated within the Hamstead Upland District of the Upland section of the Piedmont physiographic province (Reger and Cleaves 2008a). This District is characterized by "rolling and hilly uplands interrupted by steep-walled gorges" (Reger and Cleaves 2008a). This topography mirrors the general topography of the Piedmont province, which is typified by rolling hills of relatively low to moderate topographic relief (Reger and Cleaves 2008b). South Mountain and Catoctin Mountain rise up along the western edge of the Piedmont and mark the edge of the adjoining Blue Ridge physiographic province, an area of steep topography marked by higher elevation ridges and distinct valleys (Schmidt 1993:7-10). To the east, lie the low gently rolling hills of the Inner Coastal Plain. Elevations in the Piedmont province range from approximately 30.5 m (100 ft) to 390.8 m (1,282 ft) amsl on top of Sugarloaf Mountain, which is the highest point in Piedmont province.

Geological descriptions for Montgomery County have been revised since the publication of the *Geologic Map of Maryland* (MGS 1968) and Hopson's (1964) *Geology of Howard and Montgomery Counties, Maryland*. Those revisions however have yet to be compiled into a published report for the county and only portions are available through the MGS. The updated *Geologic Map of Maryland* (MGS 1968, 2000) shows the project area is underlain by Upper Pelitic Schist of the Glenarm Series. This series formerly was known as "albite facies of Wissahickon Formation" and initially was thought to date from the Late Precambrian. This formation is now though to date from the Upper Cambrian or Lower Ordovician and may contain up to three sub-divisions (MGS 2000; Crowley 1976; Muller 1990). The general description for Upper Pelitic Schist reads "Albite-chlorite-muscovite-quartz schist with sporadic thin beds of laminated micaceous quartzite" (MGS 2000).

Soils mapped for the project area lie within the Glenelg-Gaila-Occoquan soil association (Brown and Dyer 1995). Soils of this general map unit are common on the crests and side slopes of broad upland ridges in the central and northeastern portions of Montgomery County, between Gaithersburg and Rockville (Brown and Dyer 1995:9). Soils within the Glenelg-Gaila-Occoquan soil association typically are "well drained, deep and very deep soils that are loamy throughout" (Brown and Dyer 1995:9). These soils are extensive within Montgomery County, comprising approximately 41 per cent of the county and including minor soil map units such as Blocktown, Glenville, Eiloak, and Montalto (Brown and Dyer 1995:9). Intermixed between this map unit area irregular areas of Urban land-Wheaton-Glenelg soils, which also are common on crests and side slopes of broad upland ridges (Brown and Dyer 1995:10).

Specific soils mapped for the project area lie within four individual soil map units: Baile, Blocktown, Gaila, and Glenelg. These soil map units are summarized briefly below. Descriptions and soil profiles were provided by the National Resource Conservation Service and are available to the public through the Web Soil Survey (http://soils.usda.gov/) and within the published *Soil Survey of Montgomery County, Maryland* (Brown and Dyer 1995).

In the southern portion of the project area, Baile silt loam (6A), 0-3 per cent slopes, is mapped for low-lying, level areas adjacent to the tributary. Baile soils are described as poorly drained, very deep soils that have a depth to the

seasonal water table of less than 15 cm (6 in) (NRCS 2008:Web Soil Survey) (Table 1). Formed "in local alluvium and in the underlying material weathered mainly from mica schist and gneiss," these soils are common in upland settings along drainages and in depressions (Brown and Dyer 1995:97-98). Baile soils have a land capability rating of 5w, which indicates that although these soils typically do not experience erosion their high water table limits practical use unless the land is drained (USDA n.d.:Part 662.02).

Blocktown channery silt loam (116D), 15-25 per cent slopes, is mapped in an area of moderately rolling terrain in the southwestern corner of the project area. Soils of this map unit are well drained, shallow soils common on ridge crests and slopes (Brown and Dyer 1995:99). Derived from weathered phyllite and schist, Blocktown soils have a shallow profile that terminates at bedrock at about 53 cm (21 in) (Table 2). Blocktown soils have a depth to the seasonal water table of greater than 1.8 m (6 ft) and a land capability rating of 4e, which indicates these soils are subject to erosion and have very severe limitations that restrict planting (USDA n.d.:Part 662.02).

Gaila silt loam (1C), 8-15 per cent slopes, is mapped in the southwestern portion of the project area, on the crest and side slope of a broad upland ridge. Common on uplands, these well drained soils "formed in material weathered from quartz muscovite schist" (Brown and Dyer 1995:107) (Table 3). They are very deep and have a depth to bedrock of greater than 1.5 m (5 ft). Gaila soils have a land capability rating of 3e. Subject to erosion, these soils have severe limitations that restrict planting (USDA n.d.:Part 662.02).

Glenelg silt loam (2B), 3-8 per cent slopes, is mapped in the northern portion of the project area. Composed of weathered schist and gneiss, this upland soil is characteristically well drained and very deep (Brown and Dyer 1995:107) (Table 4). Glenelg soils have a depth to bedrock and a depth to the water table of greater than 1.8 m (6 ft). Containing up to 35 per cent gravel in their lower strata, Glenelg soils also may contain fine mica flakes. These soils are not subject to flooding or ponding. Their non-irrigated land capability rating is 2e, which indicates moderate limitations for crops or plants due to the potential for erosion (USDA n.d.:Part 662.02).

Climate

The climate of Montgomery County is described as temperate (Brown and Dryer 1995:5). The county has an average of 143 days where the daily minimum temperature is above 32˚ F and typically experiences the last freeze during early May and the first freeze during mid-October (Brown and Dyer 1995:Tables 2 and 3). The average daily

Table 1. Summary of Soil Profile for Baile Series (Brown and Dyer 1995:97-98)

Stratum	Depth Below Surface	Soil Description
Ap	0-20 cm (0-8 in)	very dark grayish brown (10YR 3/2) silt loam
Btg	20-79 cm (8-31 in)	gray (N 5/0) silt loam; many medium prominent yellowish red (5YR 5/8) mottles
BCg	79-102 cm (31-40 in)	gray (N 5/0) and dark gray (N 4/0) loam; many coarse prominent yellowish brown (10YR 5/6) mottles; 5% gravel
Cg	102-157 cm (40-62 in)	greenish gray (5BG 6/1) loam; many medium prominent yellowish brown (10YR 5/8) mottles; 5% gravel

Table 2. Summary of Soil Profile for Blocktown Series (Brown and Dyer 1995:99)

Stratum	Depth Below Surface	Soil Description
Ap	0-15 cm (0-6 in)	yellowish red (5YR 4/6) channery silt loam; 30% channers
Bt	15-43 cm (6-17 in)	red (2.5YR 4/6) extremely channery silt loam; 60% channers
Cr	43-53 cm (17-21 in)	variegated red (2.5YR 4/6) and yellowish red (5YR 5/6) soft bedrock; 90% channers
R	53 cm (21 in)	hard phyllite bedrock

Table 3. Summary of Soil Profile for Gaila Series (Brown and Dyer 1995:107)

Stratum	Depth Below Surface	Soil Description
Ap	0-20 cm (0-8 cm)	brown (10YR 4/3) silt loam; 5% gravel
Bt	20-43 cm (8-17 in)	strong brown (7.5YR 5/8) loam
BC	43-51 cm (17-20 in)	yellowish brown (10YR 5/8) loam
C	51-193 cm (20-76 in)	yellowish brown (10YR 5/4) fine sandy loam

Table 4. Summary of Soil Profile for Glenelg Series (Brown and Dyer 1995:107-108)

Stratum	Depth Below Surface	Soil Description
Ap	0-20 cm (0-8 in)	brown (7.5YR 4/4) silt loam
Bw	20-30 cm (8-12 in)	strong brown (7.5YR 5/6) silt loam
Bt1	30-41 cm (12-16 in)	yellowish red (5YR 5/6) silt loam; 5% gravel
Bt2	41-71 cm (16-28 in)	strong brown (7.5YR 5/6) silt loam; 5% gravel
C1	71-89 cm (28-35 in)	yellowish red (5YR 5/8) silt loam; 10% gravel
C2	89-152 cm (35-60 in)	yellowish red (5YR 5/8) loam; 5% gravel

temperature in summer is 23.3˚C (74°F); the highest recorded daily temperature was 40.6°C (105°F), recorded in 1954. Mid-afternoon relative humidity averages 55 per cent. The average daily winter temperature is 1.7°C (35°F); the lowest daily temperature was -24.4°C (-12°F), recorded in 1979 (Brown and Dryer 1995:5). The county receives an average of 43.2 cm (17 in) of snowfall and 101.6 cm (40 in) of rainfall annually (Brown and Dryer 1995:5).

Data accumulated by the National Oceanographic & Atmospheric Administration (NOAA) indicated that during Spring (March-May) 2009 the average daily temperature and the average daily rainfall were slightly above normal for central Maryland (NOAA 2009). The average temperature for Spring 2009, as recorded at National Airport (DCA), was 55.9˚F, with an average maximum temperature of 64.7˚ and an average minimum temperature of 47.0˚ (NOAA 2009). The average precipitation for Spring 2009, as recorded at DCA, was 40.3 cm (15.87 in), which was 14.4 cm (5.68 in) above the normal precipitation for that time of year (NOAA 2009). May 2009 was the wettest recorded since 1955; recording stations at Dulles Airport (IAD) and DCA both reported 8 days of at least 1.3 cm (0.5 in) of rain, with some heavy rainfalls of more than 15.2 cm (6 in) (NOAA 2009). Silver Spring in Montgomery County received 10.7 cm (4.23 in) of rainfall during a storm on May 26, 2009 (NOAA 2009).

Previous Investigations

Previous Cultural Resources Investigations

Twelve cultural resource investigations have been conducted within a 1.6 km (1 mi) radius of the current project area; however no previous archeological surveys have been conducted within the Tower Oaks project area (Table 5). These investigations predominantly related to road surveys, however cultural resource surveys in advance of infrastructure maintenance and public transportation projects also were noted. Three surveys are directly related to the identification, investigation, and relocation of the Poor Farm Cemetery (18MO266). In addition, a Maryland Department of Transportation study (MD 1V3) examined archeological resources in multiple counties in the Piedmont of Maryland.

Table 5. Summary of Previously Conducted Cultural Resources Surveys within 3.2 km (2 mi) Radius of the Project Area

MHT Library #	Author(s) and Year	Purpose	Result
MD1V3	Wesler et al., 1981	Archeological resources survey of state roads	Identified no cultural resources within current project radius.
MO8	Thomas, 1979	Infrastructure Improvements	Identified several areas with a high potential for archeological resources; recommended additional archeological testing including intensive Phase I survey.
MO30	Curry, 1978	Road Construction	No sites were identified during survey; no additional archeological investigation was recommended.
MO33	Kavanagh, 1981	Road Construction	Identified eight historic and five prehistoric sites; recommended additional archeological investigations at the five prehistoric sites and at five of the historic sites.
MO37	Epperson, 1980	Road Construction	Assessed archeological potential of proposed alignments; determined there was at minimum a moderate probability of identifying prehistoric sites, particularly near drainages, and a high probability of identifying historic sites, particularly along historic road traces.
MO37B	Curry, 1983	Road Construction	Identified ten archeological sites; recommended additional archeological investigations at two sites: 18PR206, a possible prehistoric camp site, and 18MO253, an 18th/19th century mill.
MO49	Curry, 1984	Road Construction	Identified an Archaic period site (18MO212) and an historic cemetery (18HO266); recommended no additional archeological investigation for site 18MO212; recommended avoidance or additional archeological investigation for the Poor Farm Cemetery (18HO266)
MO61	Rhodes, 1987	Development	Identified and removed 38 graves at the Poor Farm Cemetery (18HO266).
MO99	Bevan, 1986	Development	Remote sensing survey of the Poor Farm Cemetery (18HO266).
MO 187	Comer and Comer, 2000	Road Construction	Visual inspection of proposed route; recommended archeological testing of the project area
MO216	Fischler et al., 2003	Road Construction	Identified historical site and associated foundations (18MO568); recommended additional archeological investigations at Site 18MO568)
PR20	Gardner, 1976	Public Transportation	No sites were identified during survey; no additional archeological investigation was recommended.

Previously Identified Archeological Sites

Three archeological sites have been identified within a 1.6 km (1 mi) radius of the proposed Tower Oaks project area (Table 6). Of these, one contains solely prehistoric components. Site 18MO212, a Late Archaic lithic scatter located north of the current project area, was identified by Dennis C. Curry in 1984. Curry described the diffuse artifact scatter as "undistinguished among Late Archaic hunting/campsites known in Montgomery County" and recommended no additional archeological investigations at 18MO212 (Curry 1984:12; MHT Site Files).

Of the three previously recorded archeological sites identified within 1.6 km (1 mi) of the current project area, two sites date from the historic period exclusively. Site 18MO191, located south of the current project area, was identified by Maureen Kavanagh in 1981. Kavanagh recommended additional archeological investigation at the historic farmstead should the resource be directly threatened by construction (Kavanagh 1981:8; MHT Site Files). Originally identified by Dennis C. Curry in 1984, the Poor Farm Cemetery (18MO266) is located west of the current project area and was associated with the circa 1789-1950 Montgomery County Alms House. Additional investigations, including remote sensing, resulted in the identification of 38 graves which subsequently were relocated (Maryland-National Capital Park and Planning Commission n.d.; Curry 1984:1, 12; MHT Site Files).

Previously Identified Historic Properties

In addition to the historic period archeological sites, 21 historic properties have been identified within 1.6 km (1 mi) of the current project area (Table 7). None of these properties are located within the current project area. These properties include 18 buildings, one structure, and one site. The structure is the National Register eligible Metropolitan Branch of the Baltimore and Ohio Railroad (MIHP form M: 37-16). The site is the previously discussed site of the former Montgomery County Alms House and the associated Poor House Cemetery (MIHP form M: 26-06). The buildings are predominantly residential; however, three commercial buildings, two schools, and two farmsteads also are present. The National Register eligible Lyddane-Bradley Farm (Woodmont County Club) is located east of the current project area (MIHP form M: 26-20). The Dawson Farm, located north of the Tower Oaks project area, was listed on the National Register of Historic Places in 1985 (MIHP form M: 26-19).

Prehistoric Cultural Sequence

Three chronological periods--Paleo-Indian/Early Archaic, Archaic, and Woodland--commonly are used to define Middle Atlantic prehistory, although more recent research at the Cactus Hill Site (44SX202) in Sussex County, Virginia, has identified a pre-Clovis component dating back some 15,000-16,000 years (Boyd 2003:63). The Paleo-Indian/Early Archaic period typically incorporates cultures that were present at the end of the Pleistocene era; the Archaic period encompasses the people and the lifestyles associated with mobile hunting and gathering in the Eastern deciduous forests; and the Woodland period is associated with elaborated Archaic cultures that evolved into the maize-growing societies encountered by the first European settlers during the early seventeenth century.

Table 6. Summary of Previously Identified Archeological Sites within 3.2 km (2 mi) Radius of the Project Area

Site Number	Site Name	Chronological Affiliation	Site Type	Determination of Eligibility
18MO191	Kavanagh XII	Historic Unknown	Historic Farmstead	No DoE
18MO212	Hungerford Knoll	Late Archaic	Late Archaic Lithic Scatter	No DoE
18MO266	Poor Farm Cemetery	18th - 20th Century	18th-20th Century Pauper's Cemetery	No DoE

Table 7. Summary of Built Resources within 3.2 km (2 mi) Radius of the Project Area

MIHP Number	Historic Name	Address	Type	Date	Determination of Eligibility
M: 26-06	Poor Farm, Site and Cemetery (Montgomery County Alms House)	Seven Locks Road, Rockville	Cemetery	1787	No Doe
M: 26-19; NR-848	Dawson Farm (Rocky Glen)	1070 & 1080 Copperstone Court, Rockville	Residential	1874, 1912	NR Listed, January 1985
M: 26-20	Lyddane-Bradley Farm (Woodmont Country Club)	1201 Rockville Pike (MD 355), Rockville	Farmstead	ca. 1858	Eligible, April 1984
M: 26-21-01	Simmons Building (Rebecca Key Offutt Property)	751 Rockville Pike (MD 355), Rockville	Residential/ Commercial	1888-1889	Not Eligible, March 2000
M: 26-21-02	Tyson Wheeler Funeral Home	1331 Rockville Pike (MD 355), Rockville	Commercial	ca. 1899	No Doe
M: 26-21-04	Sprigg Poole House (Doggett House)	1300 Rockville Pike (MD 355)	Residential	pre-1900	Eligible, April 1977; removed from *Locational Atlas and Index of Historic Sites in Montgomery County* by Montgomery County Planning Board June 1982
M: 26-21-05	Dixie Cream Donuts	1402 Rockville Pike (MD 355), Rockville	Commercial	1965	No Doe
M: 26-21-06	Congressional Airport (Congressional Shopping Plaza)	Rockville Pike (MD 355), Rockville	Commercial	ca. 1930, 1959	No Doe
M: 26-22-01	Hunter-Hyatt House (Batz House)	18 Maryland Avenue, Rockville	Residential	1904	No Doe
M: 26-22-06	Frame House, Rockville Heights Area	Great Falls Road (MD 189) & Maryland Avenue, Rockville	Residential	early 20th century	No Doe
M: 26-22-07	E.C. Smith House	636 Great Falls Road (MD 189), Rockville	Residential	early 20th century	No Doe
M: 26-22-08	Vallonia Bungalow (a Sears House)	2 W. Argyle Street, Rockville	Residential	1927	No Doe
M: 26-26-01	Park Street Elementary School	401 Fleet Street, Rockville	Education	1934-1935	Not Eligible, March 2000
M: 26-26-02	Richard Montgomery High School	250 Richard Montgomery Drive, Rockville	Education	1942	Not Eligible, March 2000
M: 26-29	John Norris House	905 Veirs Mill Road, Rockville	Residential	1925	Not Eligible, November 1996
M: 26-31	Clinton C. and F. Arlene Powell Property	813 Veirs Mill Road, Rockville	Residential	1946	Not Eligible, March 2002
M: 26-32	Owen/ Slye Property	915 Veirs Mill Road, Rockville	Residential	ca. 1938-1945	Not Eligible, March 2002
M: 26-33	Rockcrest Neighborhood	Veirs Mill Road, First Street, and Rockville Pike, Rockville	Residential	1940-1955	Not Eligible, March 2002
M: 26-38	Blandford Apartments	500 Blandford Street, Rockville	Residential	post WWII	Not Eligible, January 2007
M: 30-04	Smokehouse	12012 Old Bridge Road, Rockville	Residential	possibly Colonial	No Doe
M: 37-16	Metropolitan Branch, B&O RR	N/A	Transportation: Railroad	1866-1873	Eligible, October 2000

Paleo-Indian/Early Archaic Period

The Paleo-Indian period represents a prehistoric lifestyle associated with the terminal Pleistocene environment, while the Early Archaic is associated with cultural adaptations to the emerging Holocene forests. Chronologically, these two periods span the time from about 12,000 to 6,500 B.C. The traditionally defined Early Archaic period has been included within the Paleo-Indian period because settlement and subsistence patterns seem not to have changed substantially during that time (Dumont 1981:18-37).

The environmental setting for the Paleo-Indian/Early Archaic period was influenced by the Late Pleistocene/Holocene transition, a period of climatic change marked by warmer temperatures and rising sea levels as glaciers continue to retreat. Melting glaciers and rising sea levels drowned much of the Coastal Plain, forming the Chesapeake Bay as rising waters drowned the former course of the Susquehanna River. The inundation process, which proceeded slowly between 10,000 and 3,000 years ago, removed and relocated estuary and wetlands environments (Dent 1995). Vegetation in the region also began to change, as spruce and pine forests gave way to coniferous and deciduous forests (Steponaitis 1980:15; Steponaitis 1983:39; Carbone 1976:186). Moose, bear, elk, deer, and smaller game animals inhabited the region (Johnson 1986).

The Paleo-Indian/Early Archaic period is the least visible in the archeological record, with only fifty validated sites identified on the entire eastern seaboard (Dent 1995:98). Evidence of continuity in adaptive patterns throughout the Paleo-Indian/Early Archaic has been obtained from a number of areas in the Middle Atlantic (Custer 1984; Gardner 1989). Paleo-Indian components have been identified on local sites such as the Higgins Site (Ebright 1992) in Anne Arundel County, and the Pierpoint and Catoctin Creek (Dent 1995) sites located above the Fall Line on the south banks of the Potomac River.

Direct evidence concerning subsistence strategies for the Paleo-Indian/Early Archaic period in Maryland is sparse, and most "sites" consist of isolated point finds. However, data from other sites in the Mid-Atlantic region suggest that high-quality lithics formed an important focal point for the settlement system, that hunting and foraging constituted the subsistence base, and that settlement concentrated along rivers (Custer 1984:passim; Wesler et al. 1981:184, 215). Uplands probably were used on a periodic basis for hunting forays during both the Paleo-Indian and Early Archaic periods (Custer and Wallace 1982:154). As the Pleistocene climate moderated, the settlement and subsistence regime began to incorporate a more diversified resource base, and prehistoric populations expanded into new, resource rich environmental zones (Johnson 1985:2-11).

Diagnostic artifacts of the period include lanceolate fluted projectile point styles (Clovis, Dalton, Mid-Paleo), and the side-notched and corner-notched points (Kirk, Palmer, Warren) traditionally assigned to the Early Archaic (Gardner 1980; Custer 1984:43). The Williamson site, located south of the James River in Virginia, has yielded over 175 fluted bifaces (McCary 1983:43) and is considered one of the most extensive Paleo-Indian sites in the Mid-Atlantic (Dent 1995). Diagnostics for the latter part of the Paleo-Indian/Early Archaic period include Palmer, Kirk, and Warren side-notched and corner-notched projectile points (Gardner 1980:3; Custer 1984:43). More common on the inner Coastal Plain, these notched points often are identified on Paleo-Indian sites in this region and suggest a pattern of site use, abandonment, and re-use (Steponaitis 1980:62; Dent 1995).

Archaic Period

The Archaic period extended from 6,500 to 1,000 B.C. and includes the traditionally defined Middle Archaic (6,500 - 3,000 B.C.) and Late Archaic (3,000 - 1,000 B.C.). The date of 6,500 B.C. marks the emergence of the full Holocene environment, and corresponds to the beginning of the Atlantic climatic episode. This episode was marked by a warm and humid period that continued until about 5,000 B.C. and was followed by a cooling trend (Custer 1984:62-63). The continuing recession of the glacial ice pack accelerated the inundation of present-day river estuaries and created the present riverine and bay environment. Open

grasslands reappeared and oak/hickory forests expanded on valley floors and hillsides.

The continuing environmental changes of the Holocene forced prehistoric populations to abandon their previous reliance on hunting in favor of a general subsistence strategy of seasonal foraging in the rapidly expanding variety of exploitable ecotones (Gardner 1982:47; Custer 1988:42). Settlement pattern studies also show that, during the Late Archaic, scattered campsites were concentrated in or near major river drainages (Wesler et al. 1981:191), with Late Archaic base camps in low-relief settings and smaller foraging sites in the uplands (Custer and Wallace 1982:139). Dent (1995) observeed that sites were revisited and reused more often. Rock-lined hearths and cooking pits; clusters of possible boiling stones for cooking food; the remains of prepared clay floors surrounded by post molds; and evidence of mortuary practices have been associated with Late Archaic period sites (Chapman 1977:172; Ebright 1992; LeeDecker and Koldehoff 1991).

Steponaitis (1980:89) suggests that during the Late Archaic, the Patuxent River drainage may have been a cultural "interface" zone. (Late Archaic IV: 1,900 and 1,700 B.C). Occupation of the inland and upland non-estuarine sections of the Patuxent drainage continued to intensify during early phases of the Late Archaic. During the Middle Archaic sites in the Patuxent River drainage clustered along the smaller tributaries of the river in upland settings, rather than in estuarine sections of the drainage (Steponaitis 1980:74, 78), though there were likely seasonal shifts in occupation between riverine and upland environments (Dent 1995).

St. Albans, LeCroy, and Kanawha bifurcates, and the Stanly, Morrow Mountain, Guilford, and Neville projectile points are diagnostic projectile points for the Middle Archaic (Stewart 1980; Custer 1984). Point types associated with Late Archaic occupations in Maryland include Piscataway, Vernon, Holmes, Susquehanna Broadspear, Lackawaxen, and Dry Brook. Rhyolite was used more frequently as a raw material for tool manufacture during the Late Archaic, although use of quartz and quartzite for tool manufacture is increasingly common (Steponaitis 1980:82-88). Steatite bowls apparently were in use throughout the entire drainage area and may mark a shift toward a more sedentary lifestyle that occurred during the end of the Archaic period (Steponaitis 1980:83-93).

Woodland Period

The Woodland period extends from approximately 1,000 B.C. to A.D. 1600. This period was characterized by the use of ceramics, and, towards the end of the period, by horticulture based on maize. Because many Early Woodland technologies and subsistence strategies resemble those of the Late Archaic, some regional researchers have combined the Late Archaic with the Early and Middle Woodland into a collective entity called Woodland I, with a date range from 3,000 B.C. to A.D. 1000.

Although the environment after at least 3,000 B.P. has been characterized as approximating modern conditions, climatic changes of varying intensities continued to occur into the Late Holocene. Research indicates that significant climatic changes, termed stress periods, coincided with episodes of environmental and cultural discontinuity on a global level. Correspondences between climatic/environmental patterns and cultural sequences during the Woodland have been noted for the Middle Atlantic region (Carbone 1982), and more locally for the Shenandoah Valley (Fehr 1983) and for the lower Chesapeake Bay tidewater (Hodges 2004).

Gardner (1982:58-60) proposed two settlement pattern models for the Late Archaic/Early Woodland on the Inner Coastal Plain. His "fusion-fission" model suggested that large groups came together seasonally to exploit fish runs on fresh and salt water estuaries, and then dispersed into smaller groups to exploit other seasonal resources. The alternate "seasonal shift" model suggested that the same populations formed large and small groups in both fresh water and saltwater zones, and moved laterally between these zones on a seasonal basis (Gardner 1982:59).

The small Early Woodland sites typically found within the upland drainages of the Patuxent and Potomac River drainages may represent small groups exploiting resources outside of the seasonal estuarine resources

(Steponaitis 1980:97). Middle Woodland subsistence regimes appear to have depended heavily upon riverine and estuarine resources; no definite evidence of horticulture during this period has been found in the region. Steponaitis (1980:99-105) has identified two distinct cultural phases for the Middle Woodland period in the Patuxent River system: the Smallwood/Popes Creek Phase (ca. 300 B.C. to ca. A.D. 200) and the Selby Bay phase (A.D 200-800). The Late Woodland period saw the emergence of tribal, village-dwelling societies that depended to some degree on the cultivation of maize, a practice that began in the Eastern Woodlands around 700 A.D. Wesler et al. (1981:109) summarized the general Late Woodland settlement and subsistence pattern on the Western Shore as "one of staple agriculture, supporting large agricultural villages, usually in floodplain settings."

Diagnostic markers for the Woodland period consist of varying types of ceramic wares. Diagnostic types for the Early Woodland sub-period [ca. 1,000 - 500 B.C.] include steatite-tempered Marcey Creek and Seldon Island wares and sand-tempered Accokeek ceramics (Gardner 1982). Popes Creek Net-Impressed and Mockley ceramics characterize the traditionally defined Middle Woodland period (ca. 500 B.C. - A.D. 1000) in the Coastal Plain, in association with Fox Creek, Selby Bay, and Jack's Reef projectile points. Diagnostic tools are Fox Creek and Rossville points, Selby Bay knives, and during the late Middle Woodland, Jack's Reef pentagonal points. Bifacially retouched rhyolite flakes, bone awls, stemmed scrapers, three-quarter grooved axes, and elliptical two-holed gorgets also have been reported from Selby Bay phase sites (Steponaitis 1980:101).

The advent of agriculture entailed a more sedentary lifestyle; upland processing sites generally occupied locations similar to those of earlier periods, while the large villages containing storage facilities, houses, and fortifications were concentrated along the flood plains and estuaries of major rivers (Custer and Wallace 1982:159). Resources from both woodland and aquatic environments remained important elements of Late Woodland subsistence patterns. This was the subsistence pattern that seventeenth century Europeans first observed along the Chesapeake Bay and its tributaries.

Historic Cultural Sequence

Contact and Settlement Period (1608 - 1780)

Initial European exploration of the upper Potomac River probably occurred at the beginning of the seventeenth century, when Captain John Smith from the Jamestown colony explored the Chesapeake Bay in 1608. Early settlement in Maryland was concentrated along the Chesapeake Bay and its major tributaries (Wilstach 1931). Movement into the Potomac Piedmont region, including the Montgomery County area, began during the late seventeenth century with a gradual spread north and west along the waterways that served as the region's transportation networks. Many of these early settlers were of English or Scottish descent. Arriving in the Piedmont Region during the late seventeenth century, they brought with them tobacco, introducing the labor-intensive, soil-exhaustive crop to the rolling, well-watered meadows bordering the upper Potomac and its tributaries.

By the eighteenth century, tobacco had become the foundation of Montgomery County's economy. Similar to the earlier Tidewater plantations, tobacco plantations in the Piedmont required a large labor force and a location near water routes (Sween 1984:19). Wealthy landowners sought to increase their holdings and to replace worn-out tobacco fields in the eastern part of the state by purchasing land on the frontier. Land speculators also purchased large tracts of land to sell or rent to tenants (Sween 1984:18-19).

Tobacco plantations in the upper Potomac region were simpler than the dwellings of their Tidewater counterparts:

> The typical plantation house of eighteenth century Montgomery [County] was not the white-pillared mansion or even the substantial brick manor house of the great planter on Tidewater. Rather, it was a low, one or two-room cabin with a sharply pitched roof extended to cover a narrow porch. Children or slaves slept in the loft,

> climbing to their room on a ladder. The plantation might add a summer kitchen or an ell for storage. The log house was covered sometimes by plank; less frequently, it was a brick or stone structure (Hiebert and MacMaster 1976:18).

Following the initial period of English settlement, Pennsylvania Germans and German immigrants began moving eastward from the Monocacy Valley. According to Sween (1984:19), early German settlement occurred chiefly in the northern part of what is now Montgomery County. The sudden increase in population in the Piedmont region prompted the subdivision of Prince George's County in 1748; present-day Montgomery County comprised the Lower District of the newly created Frederick County (Sween 1984:21).

Although Great Falls impeded travel along the Potomac River, the first public roads in Montgomery County were not chartered until 1774 (Wesler et al. 1981b:165). As a result, industry developed only in locations near the few existing roads that were by streams strong enough to power a mill or forge. One of the most heavily travelled early routes was the Rock Creek Main Road, which extended from Georgetown to Frederick Town. This route also served as a rolling road for the early transport of hogsheads of tobacco (McGuckian 2001:13).

When the colonies declared independence from England in 1776, the Lower District of Frederick County became an independent political entity. The new county was named after Richard Montgomery, a Major General in the Continental Army who was killed in the 1775 Battle of Quebec (Boyd 1880:52). At this time, the county was divided into eleven "hundreds" that served as the initial organizational districts (Sween 1984:31). The county seat was established at Hungerford's Tavern; this small settlement, later known as Montgomery Court House, eventually evolved into the city of Rockville (McGuckian 2001:15-16).

Agrarian Intensification and Internal Improvement (1780 - 1860)

Following the American Revolution, Montgomery County suffered a period of economic instability and agricultural decline. Many tenants lost their homes and farms when large tracts of Loyalist land were placed on the auction block and purchased by Continental Army officers (Sween 1984:33). In addition, a post-war surplus of tobacco and grain led to a decline in the market value of these products. By the late eighteenth century, long-term tobacco monoculture also adversely affected the once-rich Piedmont soils; farmers who failed to rotate crops found their yields declining with each passing year (Wesler et al. 1981b:167).

According to the first United States census, in 1790, the population of Montgomery County was 18,003 persons. However, a year later the county lost its most populated and prosperous town, when Georgetown was included in the newly created District of Columbia. The remaining towns in the county were scattered rural communities isolated from industrial and commercial centers. As a result, the 1800 census recorded a decline in the population of Montgomery County to 15,058 residents (Hiebert and MacMaster 1976:93; Sween 1984:35; UVA 2004:n.p.).

The problem of inadequate overland transportation was gradually improved during the late eighteenth and early nineteenth centuries, as the call for a system of arterial roads intensified. By 1794, according to Griffith's *Map of Maryland*, six roads radiated from the newly designated county seat including the predecessor of Rockville Pike, located east of the current project area. In 1817, construction commenced on the county's first paved road, the Rockville Turnpike; comprising much of present-day Old Georgetown Road and Rockville Pike, this artery extended from the District of Columbia to Frederick, via Rockville and Clarksburg (Wesler et al. 1981:167).

Local interest in canal construction began well before the opening of the Erie Canal in 1817; this interest originated with George Washington's Patowmack Company's efforts

to "[open] the Potomac to navigation… [by] removing obstacles from the river and building skirting canals around the falls" (High 2000:11). The descendent of the Patowmack Company was the Chesapeake & Ohio (C&O) Canal Company. Backed by local and Federal government funds, as well as by private investors, groundbreaking for the C&O Canal occurred in Georgetown in 1828 (High 2000:20-21). The 37-mile segment within Montgomery County provided a major economic boost to local farmers (Hiebert and MacMaster 1976:101). The canal transported local goods and produce to Georgetown; canal boats brought fertilizer and other supplies to county farms on return trips (Sween 1984:50).

By the mid-nineteenth century, regional agricultural practices and products had shifted away from a tobacco-based system. By 1860, diversified production based on raising cereal grains and on truck and dairy products destined for sale in the District of Columbia made significant inroads into the tobacco monoculture. Between 1840 and 1860 wheat and corn production increased significantly, while tobacco production decreased by nearly 200,000 pounds. The continued soil exhaustion particularly that linked to tobacco cultivation aroused an interest in new farming techniques and sound agricultural practices. Agricultural clubs and societies were formed and began providing planters and gentlemen farmers with information on crop rotation, improved machinery, fertilization techniques, and livestock breeding (Wesler et al. 1981b:167; US Census of Agriculture 1840, 1860).

The Civil War Era (1860 - 1865)

As in other Maryland counties, the loyalties of Montgomery County's residents were divided between the Union and the Confederacy. The county elected to remain in the Union by a narrow margin. However, a number of individuals who disagreed with this vote joined the Confederate Army. Other dissenters formed their own independent units, which patrolled the Potomac and conducted periodic raids on Federal troops in Montgomery County; still others supported the southern cause by supplying and harboring Confederate soldiers and by harassing Federal forces garrisoned in the area (Sween 1984:68-70).

Although no major Civil War battles were fought in Montgomery County, military maneuvers of both armies impacted the daily lives of its residents. County residents suffered substantial losses as both Federal and Confederate armies moved through the countryside; soldiers confiscated food, draft animals, and money from homes and businesses throughout the region (Sween 1984:73, 80).

Economic Adaptation (1865 - 1930)

In the years following the Civil War and Reconstruction, Montgomery County slowly entered the urban age. Railroads and streetcar lines brought development into sparsely-populated regions. With more efficient means of transportation, new towns and suburban communities prospered. Between 1870 and 1900, Montgomery County's population rose almost 50 per cent, from 20,563 to 30,541 people, and its economy became increasingly dependent on the growing metropolis of Washington, D.C. (UVA 2004:n.p.; Sween 1984:85,90; Hiebert and MacMaster 1976:209).

The primary economic focus of Montgomery County remained agricultural during the post-bellum years. The arrival of railroads to the county after the war opened up new markets for county farmers. In 1866, construction began on the Metropolitan Branch of the Baltimore & Ohio Railroad; when completed, this branch line connected Washington D.C. to the existing B & O main line at Point of Rocks. Passing through Rockville, the Metropolitan Branch became a crucial transport route for goods and services in Montgomery County (Stover 1995:142-143). According to Hiebert and MacMaster (1976:210), the opening of the Metropolitan Branch facilitated a rise in dairying as "dairy farmers [gained] access to Washington markets." Not only did railroads transport people and farm produce efficiently, they also brought farmers an abundant supply of lime for improving soil fertility (Wesler et al. 1981b:170).

Established roads still provided access to markets. Post offices frequently were located near the intersection of primary routes, stimulating the development of small hamlets. However, Montgomery County's road system remained largely undeveloped at the turn-of-the-century; there were 790 miles of unimproved roads and only 45 miles of road paved with stone, gravel, or macadam in the county (Hiebert and MacMaster 1976:236).

While 85 per cent of Montgomery County's land remained agricultural during the first quarter of the twentieth century (Sween 1984:104), subdivisions began to proliferate on the fringes of Washington. Suburban residents clamored for improved services, such as paved streets, fire and police departments, and garbage collection. Initial attempts at long-range suburban and regional planning were made during this period (Sween 1984:121-122).

Rising populations brought associated urban problems. Frequently, water supplies in towns surrounding the District of Columbia either were tainted by pollution or were inadequate to meet the demands of residents. A 1918 report from the Washington Suburban Sanitary Commission indicated that the population in the Montgomery County/Prince George's County belt increased from 20,000 to 32,000 people during an eight-year span, without an accompanying improvement in the sewage system. Montgomery County recognized its close ties with the city of Washington during the early twentieth century, when the sanitary commissions of the District and suburban Maryland joined forces to provide modern sewer systems for the Metropolitan Washington area (Brugger 1988:446).

Modern Era (1930-present)

Montgomery County entered a new era after World War II. Continued growth of the Federal bureaucracy spurred a building boom as governmental agencies grew too large for their Washington, D.C. compounds and relocated to the more open spaces of the suburban communities (Hiebert and MacMaster 1976:352). In addition, a housing shortage developed as more and more workers moved to the region. In 1940, the population of the county was 83,912 persons; by 1950, Montgomery County had 164,401 residents. Sween (1984:135) notes that mid-century development in Montgomery County "laid the groundwork for the more 'planned' communities" of the late twentieth century. Many early developments included commercial buildings in addition to a range of housing types (Sween 1984:135-136; UVA 2004:n.p.).

As the population of Montgomery County continued to rise during the latter half of the twentieth century, agriculture declined. By 2008, the population of Montgomery County had reached 950,680 residents and the population density in the county was more than three times greater than the average for the State of Maryland. According to the 1950 agricultural census, there were 1,555 farms in the county, accounting for 316,160 acres of land. By 1987, the number of farms had declined to 669 and farmland had been reduced by two thirds. In 2007, only 67,613 acres of farmland remained in Montgomery County (UVA 2004:n.d.; US Census of Agriculture 1950; USDA 1992, 2007).

CHAPTER III

RESEARCH DESIGN AND METHODS

Archival Research Methods

Background research focused on identifying previously recorded prehistoric and historic sites located on the property and within 1.6 km (1 mi) of the project area. Archeological site files and reports of previous archeological research were reviewed at the Maryland Historical Trust. The Trust also provided information on standing structures recorded in the Maryland Inventory of Historic Properties and listed in the National Register of Historic Places. Archival investigation also included review of historic maps. Secondary histories that detailed the historic development of the area also were examined.

Archeological Research Objectives

The overall objectives of the Phase I archeological survey were to identify any unrecorded cultural resources located within the project area, and to make recommendations regarding the potential significance of those resources.

These objectives were achieved through archival research, archeological field investigations, and preparation of a technical report. Archeological field methods employed during the survey were intended to locate, identify, and delineate any archeological resources within the project area, and to provide a preliminary determination of: (1) the nature, age, and function of each identified resource; (2) the horizontal and vertical boundaries of the resource; and, (3) the integrity of the resource. The archeological survey also was designed to provide a preliminary assessment of the significance of those resources, applying the National Register Criteria for Evaluation (36CFR 60.4 [a-d]).

To be eligible for inclusion in the National Register a resource must meet at least one of the following four criteria:

a. it must be associated with significant events in the broad patterns of national history;
b. it must be associated with the lives of persons significant in our past;
c. it must be representative of a type, period, or method of construction, or the work of a master; or
d. it must be capable of yielding information about the past (36 CFR 60.4 [a-d])

Archeological sites typically are eligible for nomination under Criterion D. In order to be considered significant, archeological sites also must demonstrate sufficient integrity to permit them to answer important research questions.

Archeological Field Methods

A total of 12.1 ha (30 ac) of land within the Preserve at Tower Oaks was subject to archeological field investigation during the current study. Archeological field methods included pedestrian reconnaissance and the excavation of 257 systematic shovel tests. Shovel tests were spaced at 20 m (65.6 ft) intervals along parallel transects spaced 20 m (65.6 ft) apart. Shovel tests that yielded non-modern cultural material were delineated by supplemental shovel tests placed at 10 m (32.8 ft) intervals around each location. All shovel tests were referenced to a temporary survey

datum (N1000/E1000) established near the northeastern corner of the project area and located 30 m (98.4 ft) grid south (148˚) of the southeastern corner of a two-level parking deck (1 Preserve Parkway). Survey transects were aligned perpendicular to a survey baseline, which originated from the survey datum and extended grid west (238˚) to the limits of the project area.

All shovel tests measured a minimum of 35 cm (13.8 in) in diameter and were excavated 10 cm (3.9 in) into sterile soil, or until ground conditions prevented further excavation. Soil was removed according to natural stratigraphic levels and screened through 0.635 cm (0.25 in) hardware mesh. Shovel tests were not excavated in areas in which the slope exceeded 15 per cent (8.5°) or where ground conditions, such as location within a roadway, drainage, or area of extensive surface disturbance, prevented excavation.

Shovel test results, including the position of the shovel test in the testing grid, the depths of soil horizons, and the presence or absence of cultural materials were recorded on standardized shovel test recordation forms. All shovel tests were documented using Munsell Soil Color Chart designations and standard soil nomenclature. All cultural materials recovered during the investigation were placed in paper bags labeled with the appropriate horizontal and vertical provenience information. Artifact bags were inventoried in the field then transported to the laboratory of R. Christopher Goodwin & Associates, Inc., in Frederick, Maryland, for cleaning, cataloguing and analysis of the recovered materials.

All procedures and methods of recordation followed the standards established by the Maryland Historical Trust's *Standards and Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994).

Archeological Laboratory Methods

No cultural materials were recovered during the Phase I archeological survey of the Preserve at Tower Oaks. As such, the laboratory methods section of this report has not been included.

Records and Curation

All field records associated with the project will be curated at the Maryland Archeological Conservation (MAC) Laboratory in St. Leonard, Maryland. Should cultural materials have been recovered during the course of the project, the disposition of these materials, recovered from privately held property is at the discretion of the landowner.

CHAPTER IV

RESULTS OF ARCHEOLOGICAL SURVEY

Archival Results

A review of historic maps failed to identify any built resources within the current project area. The proposed Preserve at Tower Oaks project is located approximately 1.6 km (1 mi) west of Rockville Pike and about the same distance from the Metropolitan Branch of the Baltimore and Ohio Railroad. Although the project is located just south of Rockville, the project's location, away from these two major nineteenth century transportation routes and without direct access to the local transportation network, may account for the lack of historic development of the property.

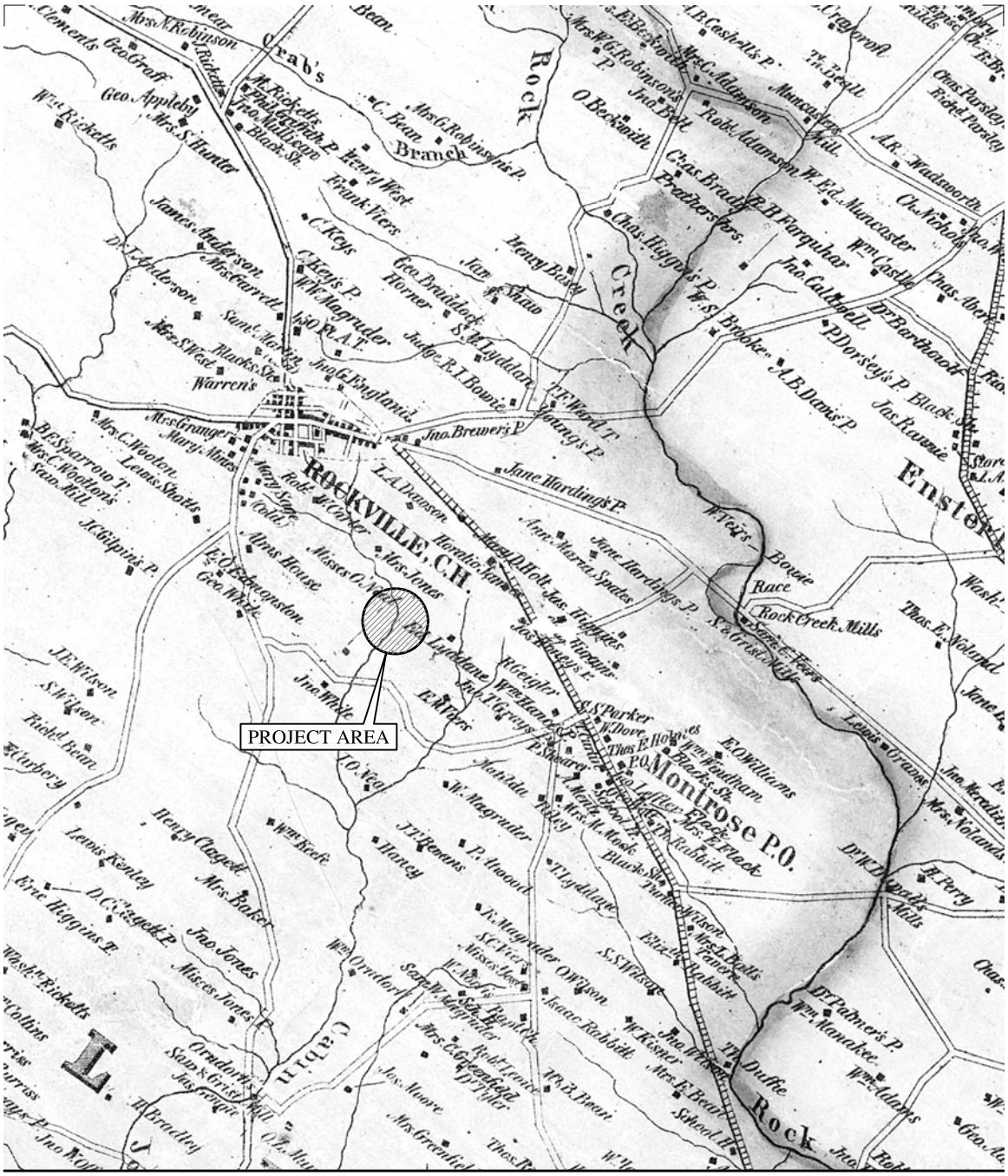
Martenet's 1865 *Martenet and Bond's Map of Montgomery County, Maryland* depicts no historic structures or buildings within the current project area (Figure 4). Property owners depicted in the vicinity of the project area include Ed. Lyddane, Mrs. Jones, E.M. Veirs, and the Misses O'Neal. It is possible that one or more of these individuals owned all or part of the project area however it does not appear that the property was occupied during this time.

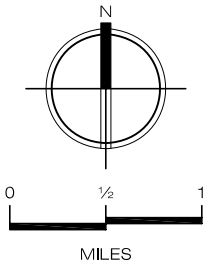
Similarly, the Hopkins' 1879 *Atlas of Fifteen Miles Around Washington Including the County of Montgomery, Maryland* did not depict any built resources within the current project area (Figure 5). Property owners depicted in the vicinity include Catherine O'Neal, Wagner, and Miss M.J. O'Neal; however, there is no indication that any of these individuals resided within the current project area. A review of the 1908 and 1944 USGS 15-minute quadrangles similarly indicates that the property remained undeveloped through at least the early twentieth century (Figures 6 and 7).

Archeological Survey Results

Archeological survey was conducted on approximately 12.1 ha (30 ac) of gently to moderately rolling wooded uplands within the proposed Preserve at Tower Oaks project area. In this area, potential project impacts include vegetative clearing and landscape modification associated with the proposed construction of at least four commercial buildings and supporting infrastructure. These planned impacts define the current Limits of Disturbance (LOD), which encompass an irregular area within the center of the Tower Oaks Industrial Park. Archeological survey was not conducted on portions of the Tower Oaks Industrial Park that lie beyond the current LOD; these areas included wooded buffers along Preserve Parkway, the entrance road for 1 Preserve Parkway, and Woodmont Country Club.

A temporary survey datum (N1000/E1000) was established near the northeastern corner of the project area (Figure 8). All shovel tests within the project area were referenced to this datum, which was placed 30 m (98.4 ft) grid south (148˚) of the southeastern corner of a two-level parking deck at 1 Preserve Parkway, and 20 m (65.6 ft) grid west (238˚) of the eastern edge of the project area. A total of 257 shovel tests were excavated at 20 m (65.6 ft) intervals along 21 survey transects that extended grid north (328˚) and grid south (148˚) from the survey baseline to the boundaries of the project area. Twenty-six planned shovel tests were not excavated due to locations on slopes in excess of 10° (17.6 per cent); in seasonal drainages; or,





TOWER OAKS
Project Area Location
1865, Martenet and Bond

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DATE: 11.10.09 PREPARED BY: BW

Figure 4. Excerpt from Martenet's (1865) *Martenet and Bond's Map of Montgomery County, Maryland* showing the approximate location of the project area

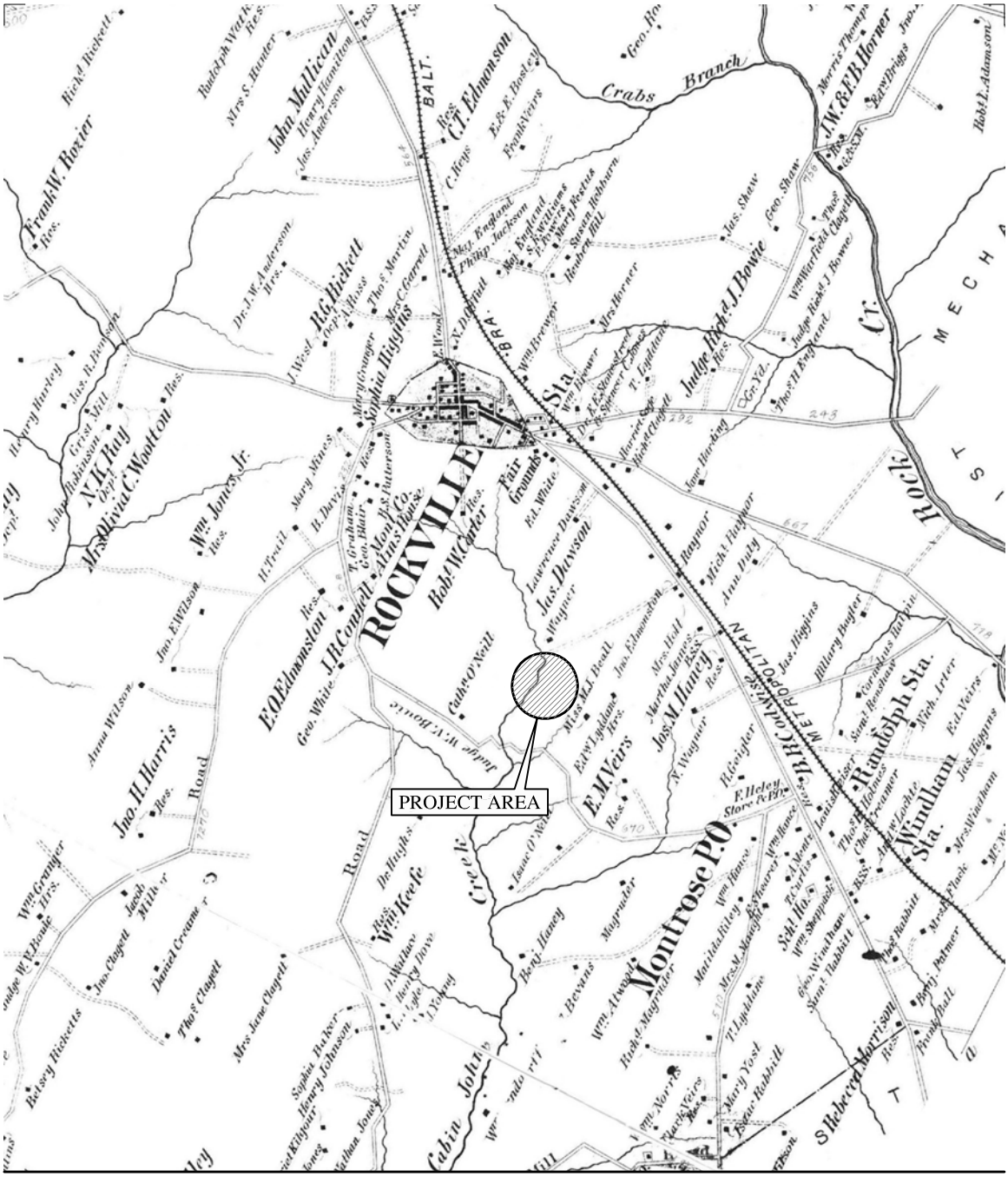
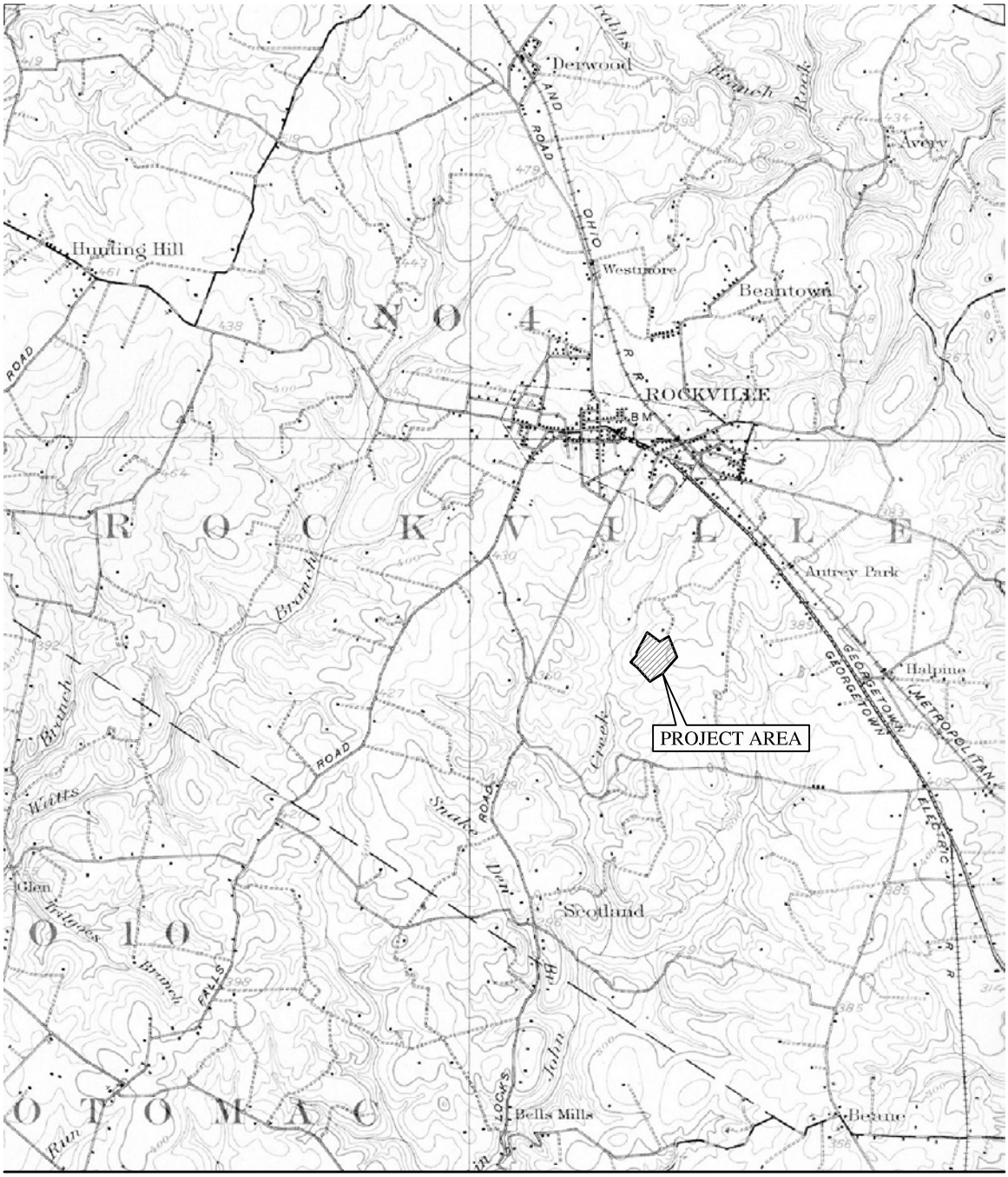
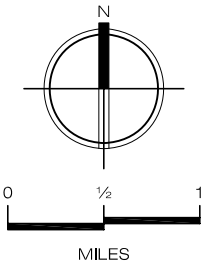


Figure 5. Excerpt from Hopkins' (1879) *Atlas of Fifteen Miles Around Washington, including the County of Montgomery, Maryland* showing the approximate location of the project area





TOWER OAKS
Project Area Location
1908, U.S.G.S.

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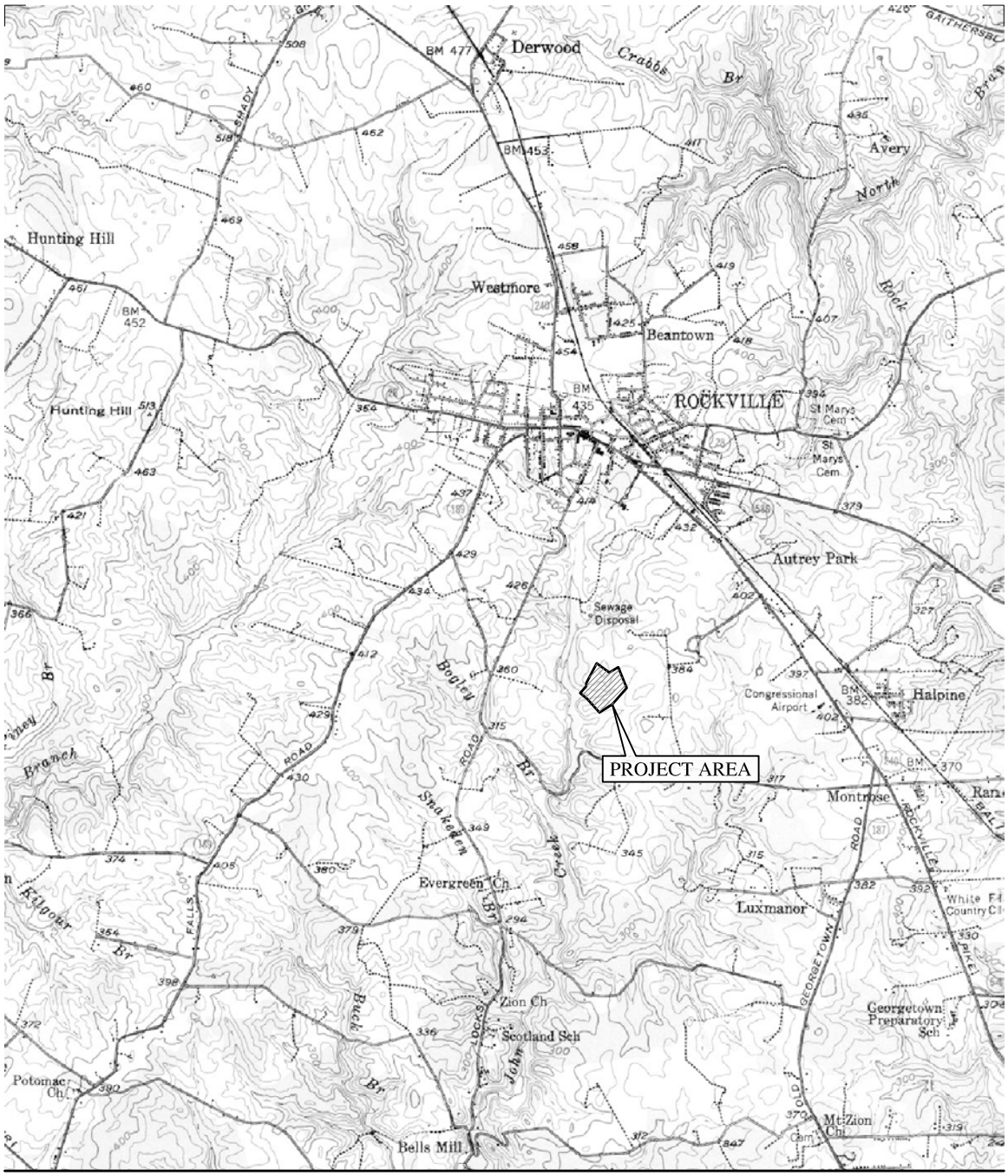
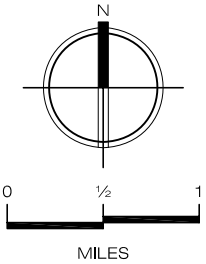
Figure 6. Excerpt from U.S. Geological Survey (1908) Rockville, Maryland 15' Quadrangle Map





TOWER OAKS
Project Area Location
1944, U.S.G.S.

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Figure 7. Excerpt from U.S. Geological Survey (1944) Rockville, Maryland 15' Quadrangle Map

on push piles and areas of disturbance related to the ATV road.

Vegetation

Currently, the Preserve at Tower Oaks is forested with a mixture of deciduous and coniferous trees. Coniferous trees, which consisted exclusively of Virginia Pine, were largely confined to the northern edge of the project area where past land clearing appears to have removed most of the mature deciduous trees. In this area, Virginia Pine and sweet birch were the principal overstory trees. An understory of sapling trees, including maple, dogwood, and tulip poplar, along with mixed vines and thorny plants such as raspberry, green briar, and poison ivy also were present and in some areas grew densely. In the northeastern corner of the project area, adjacent to the entrance road for 1 Preserve Parkway, the woodlot was characterized by a dense tangle of vines and sapling trees (Figure 9).

In the remainder of the project area, mature tulip poplar and a variety of oaks dominated the overstory (Figure 10). Tulip trees ranged from 20-60 cm (7.9-23.6 in) in diameter, with some individuals measuring up to 65 cm (25.6 in) in diameter. These larger Tulip trees were estimated to be about 60 years of age (ESA n.d.). Oaks included Northern red oak, white oak, Southern red oak, chinkapin oak, black oak, and possible scarlet oak. These trees also ranged from 20-60 cm (7.9-23.6 in) in diameter, with the largest specimen being a double trunk white oak estimated to be at least 80 cm (31.5 in) in diameter. Located on the terminus of an eroded finger ridge near the southwestern corner of the project area, this tree was estimated to be at least 150 years old (ESA n.d.).

Also present in the woodlot were occasional big tooth Aspen (Popple), sweet birch, maple, blue beech (American Hornbeam), devils walking stick (Hercules Club), American holly, and hickory. Most of these trees were relatively young and formed a sparse understory that also included ferns, vines, and mixed herbaceous plants. Hickory saplings were most prevalent in the southeastern corner of the project area, where the topography sloped gradually down toward the unnamed tributary (Figure 11). Holly, aspen, birch and beech were most common on level, higher elevation areas, while maple occurred throughout the project area.

Soils

The soil sequence revealed during the archeological survey suggests that the survey area has not been plowed within the recent past. This observation is consistent with the mature stage of most overstory vegetation, which suggests at least 60 years of woodlot growth. The root mat is well developed and, in most shovel tests, is relatively thick. A probable plow zone identified in the northern and eastern portions of the project area also appeared to be relatively old. The interface between this horizon and the underlying subsoil was distinct but exhibited a moderate degree of disturbance from root, worm, and insect penetration.

As a whole, the soil profiles exhibited within the project area are within the range of variation for soils of the Glenelg and Gaila series', mapped for the survey area. These soil series' exhibit very similar soil profiles and are distinguished largely on the basis of the composition of their lower subsoil. In the hillier southwestern portion of the project area, soils appeared to be deflated but otherwise undisturbed. A typical soil profile had a root mat (Ao-horizon) overlying undisturbed subsoil (Bw- and Bt1- horizons). The root mat ranged from dark grayish brown (10YR 4/2) to very dark grayish brown (10YR 3/2) loam and generally was less than 8 cm (3.1 in) in thickness. The underlying Bw-horizon was strong brown (7.5YR 4/6-7.5YR 5/6) silt loam; this horizon typically was 6-11 cm (2.4-4.3 in) in thickness. In most shovel tests, the the Bw-horizon contained 2-5 per cent angular rock.

Soil profiles suggested the more level portion of the project area, on the crest of the upland flat, may historically have been cultivated. A typical soil profile for this area consisted of a root mat (Ao) overlying a probable plow zone (Ap) and subsoil (Bt). The root mat generally was less than 10 cm (3.9 in) thick and was described as very dark gray (7.5YR 3/1) loam. The probable plow zone ranged from 11 to 19 cm (4.3 to 7.5 in) in

Figure 8. Map showing the archeological survey area and testing pattern for the planned Preserve at Tower Oaks

Figure 9. Photograph showing overview of forest cover within northeast corner of project area, view east (RCG&A, October 30, 2009)

Figure 10. Photograph showing overview typical forest cover within project area, view south (RCG&A, October 30, 2009)