

**ARCHAEOLOGICAL ASSESSMENT  
BRIDGEWATER BYPASS LOCATION STUDY  
ROCKINGHAM COUNTY AND  
TOWN OF BRIDGEWATER, VIRGINIA**

**VDOT PROJECT NO. 0257-176-101, PE-101; UPC 17541  
VDHR FILE # 2007-1264**

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## ABSTRACT

Coastal Carolina Research, Inc. (CCR), has completed an archaeological assessment for the proposed Bridgewater Bypass in Rockingham County and the Town of Bridgewater, Virginia. The assessment was conducted for Parsons Transportation Group, the firm retained by the Virginia Department of Transportation (VDOT) to prepare the transportation study for the proposed bypass.

This assessment considered the Area of Potential Effects (APE) of each of the two candidate build alternatives (CBAs A and B) for the proposed project connecting Route 257 and Route 257/42 in the area east and northeast of the Town of Bridgewater. The APE for each alternative is defined as a 500-foot- (152.4-m-) wide corridor plus specific sections at road termini and crossings.

CCR conducted reviews of the files at the Virginia Department of Historic Resources (VDHR) and compiled information on previously recorded resources and the historic context for the project vicinity. The archaeological assessment addresses the potential of each of the two alternatives based on thorough review of the known resources, cartographic sources, information available on past cultural practices, archaeological site settlement models pertinent to the region, and reasonably accessible evaluation records at VDHR. The review resulted in the assessment of any appreciable differences between alternatives in terms of the range, quantity, and integrity of archaeological resources. It also allowed the identification of the potential for any alternatives to contain sites meriting preservation in place, or sites that would be extraordinarily complex and/or expensive to excavate.

There are no previously recorded archaeological resources within the APEs for CBAs A and B, but the review of archaeological potential by period suggests that sites from any of the precontact and postcontact periods could be recorded during systematic archaeological survey of the CBAs. Only one of the anticipated site categories, however, would have the potential for extraordinarily costly excavation or preservation in place. This category, based on review of previously recorded resources and documented Civil War activity in the project vicinity, is Civil War-related sites such as battle or skirmish landscapes, earthworks, campsites, and field hospital or headquarters sites. The potential for limestone caves with intact Native American cultural deposits and/or human burials was also considered based on general environmental background for Rockingham County and the cultural context for the project area, but the specific geological background for the project area suggests that this site type would not be present.

The natural and cultural features of the two CBAs are nearly identical, especially since the two alternatives have overlapping APEs for the southern half of the corridors. The results of the assessment suggest that the potential for significant Civil War-related sites is low for both CBAs, and there appears to be little difference between the corridors with respect to potential for sites that might affect decision making.

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**INTRODUCTION**

Coastal Carolina Research, Inc. (CCR), has completed an archaeological assessment for the proposed Bridgewater Bypass in Rockingham County and the Town of Bridgewater, Virginia. The assessment was conducted for Parsons Transportation Group, the firm retained by the Virginia Department of Transportation (VDOT) to prepare the transportation study for the proposed bypass.

This assessment considered the Area of Potential Effects (APE) of each of the two candidate build alternatives (CBAs A and B) for the proposed project connecting Route 257 and Route 257/42 in the area east and northeast of the Town of Bridgewater (Figure 1). The APE for each alternative is defined as a 500-foot- (152.4-m-) wide corridor plus specific sections at road termini and crossings (Figure 2).

CCR has conducted reviews of the files at the Virginia Department of Historic Resources (VDHR) and compiled information on previously recorded resources and the historic context for the project vicinity. The archaeological assessment addresses the potential of each of the two alternatives. The assessment for each began with the identification of any known archaeological sites or significant sites of events not manifested by material remains that may be affected and that may be valued chiefly for preservation in place. In general, such sites may include, but not be limited to, battlefields, mounds, resources containing a substantial number of human burials, and petroglyphs/pictographs. The assessment of potential was then based on thorough review of the known resources, cartographic sources, information available on past cultural practices, archaeological site settlement models pertinent to the region, and reasonably accessible evaluation records at VDHR. The review resulted in the assessment of any appreciable differences between alternatives in terms of the range, quantity, and integrity of archaeological resources. It also allowed the identification of the potential for any alternatives to contain sites meriting preservation in place, or sites that would be extraordinarily complex and/or expensive to excavate.

This information is one component of the cultural resources study and compliance with Section 106 of the National Historic Preservation Act, 1966, as amended, and 36CFR 800, the regulations governing the Section 106 process. The remaining archaeological investigations will include an identification survey of the archaeological resources within the selected corridor (once it is selected) and recommendations for sites that appear potentially eligible for the National Register of Historic Places (NRHP).

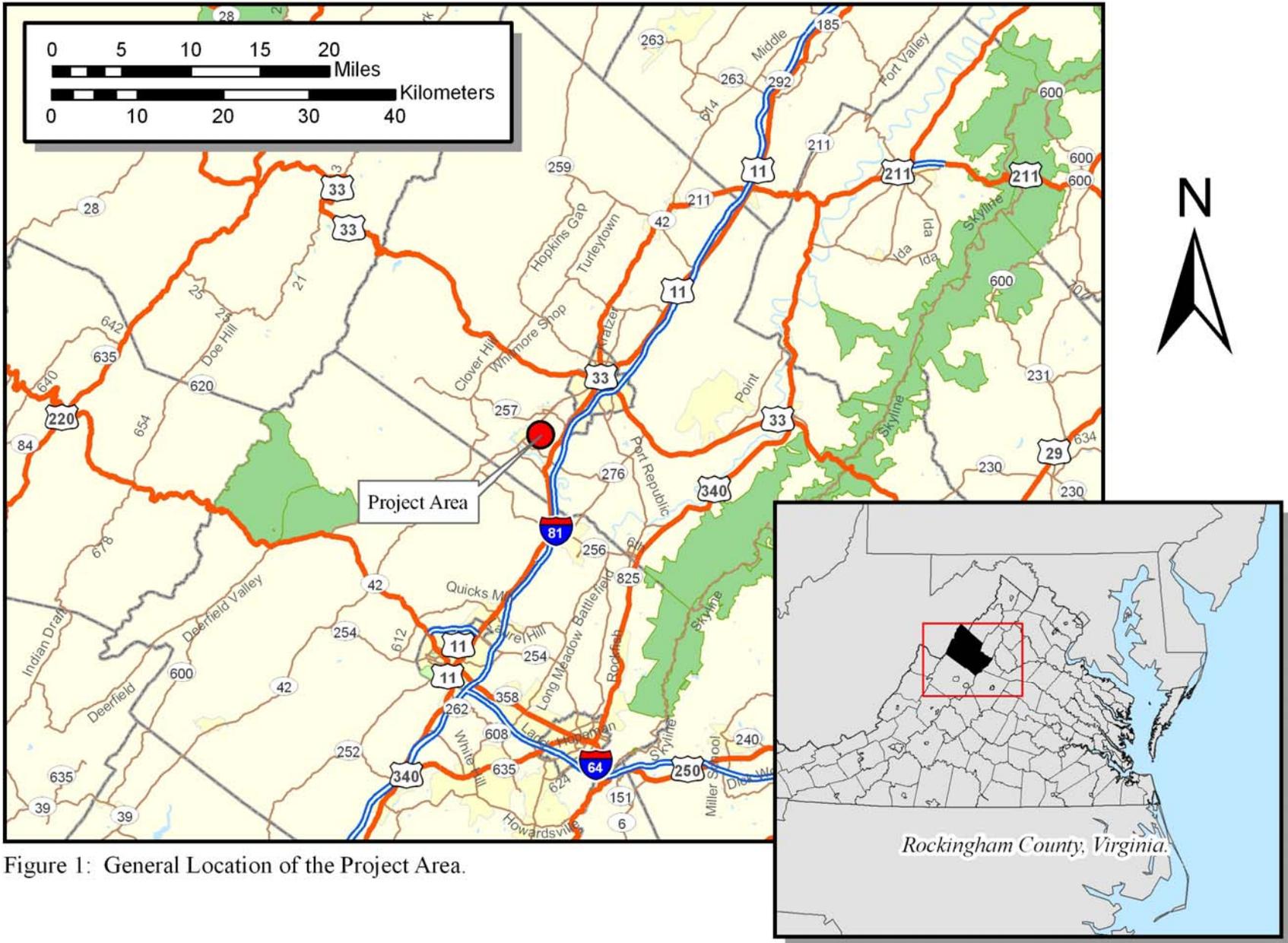


Figure 1: General Location of the Project Area.

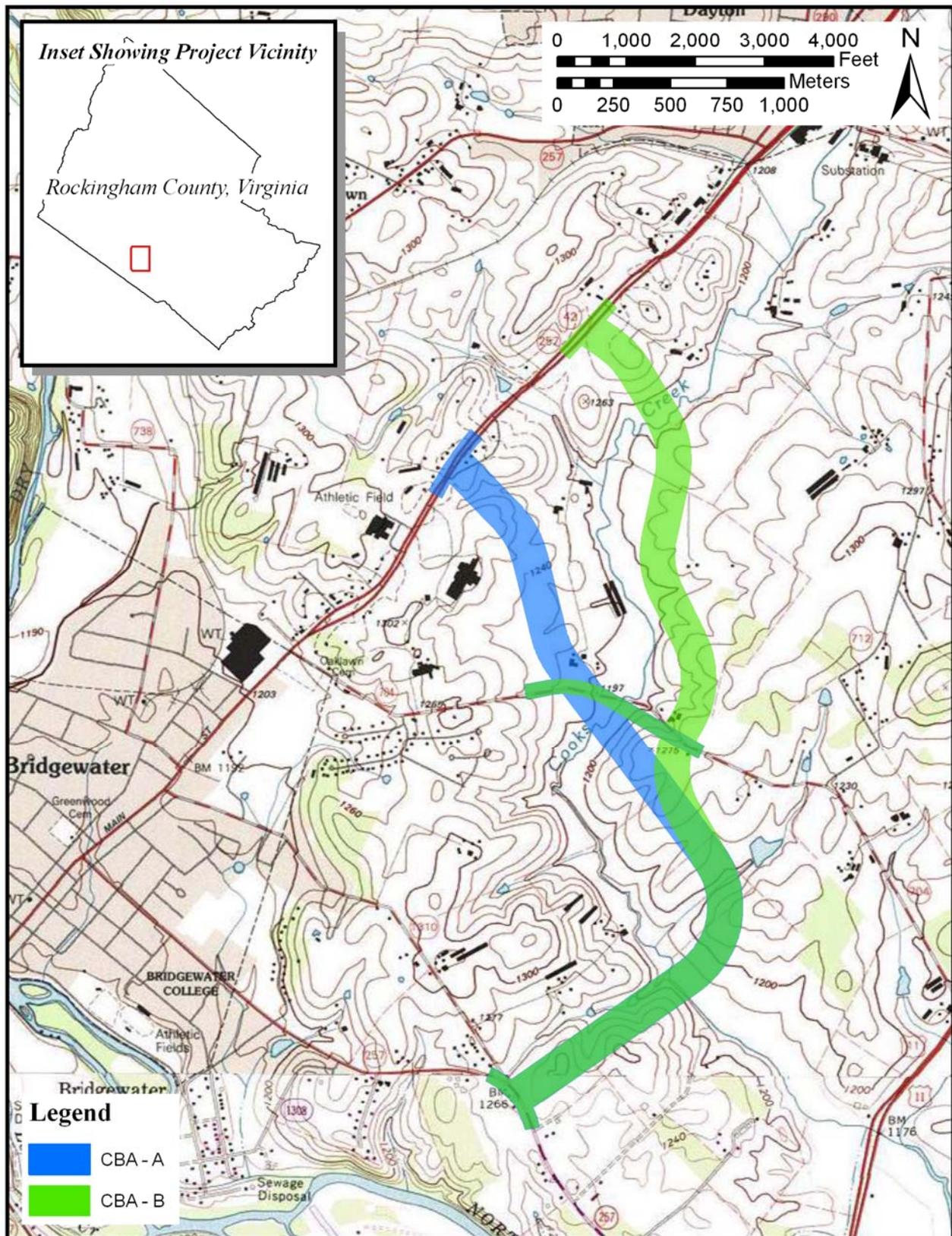


Figure 2: Candidate Build Alternatives A and B, Shown on the USGS 7.5' 1989 Bridgewater, VA, and 1964 (Photorevised 1987) Mount Sidney, VA, Quadrangles.

Loretta Lautzenheiser, RPA, was the project manager and Susan E. Bamann, Ph.D., RPA, was the principal investigator. The background research and compilation of site information was conducted by Bill Hall. Neil Mayberry prepared the report graphics.

Research was conducted at VDHR in Richmond and the library of CCR in Tarboro, and the assessment also draws upon previous research for the Harrisonburg Southeast Connector Location Study (Bamann and Hall 2005) conducted at the Massanutten Regional Library (Main Branch) in Harrisonburg and the Rockingham Historical Society in Dayton. The Virginia Historical Inventory online search engine (Library of Virginia 2007) was also examined to see if resources recorded by the Writers' Project of the Works Progress Administration are located within the alternatives.

The following United States Geological Survey (USGS) 7.5-minute quadrangles were examined for the project:

Bridgewater, VA (1989)

Mount Sidney, VA (1964/photorevised 1987)

## METHODS

To help guide the outcome of the assessment, the following research questions were taken into consideration:

1. Are there areas within the APEs for the alternatives that are so disturbed that no significant archaeological resources are likely to be present and that do not warrant field survey?
2. What types of archaeological resources are likely to be present in the APEs for each alternative?
3. Are there appreciable differences between the alternatives in terms of the significant (on or eligible for the NRHP) archaeological resources that might be present [referring to the range, quantity, and integrity of significant sites; the presence of extraordinarily complex sites; or the presence of sites extraordinarily expensive to excavate (e.g., stratified sites with Paleoindian components or Woodland village sites with burials)]?
4. Do the APEs for the alternatives contain any significant archaeological resources that have compelling associated values other than their potential to yield significant information about prehistory or history?
5. Do the APEs for the alternatives contain any sites of events or patterns of events not manifested by material remains that are on or eligible for the NRHP and may be valued chiefly for preservation?

The assessment was prepared by gathering information on previously recorded sites in the VDHR archives and information on the history of the region. In assessing the two alternatives, information on sites, terrain, and the potential for sites has been gathered. Using this information, an attempt has been made to assess the likelihood that each alternative will contain sites that could affect location decisions. Such sites, for the most part, would merit preservation in place or be costly and time consuming to excavate.

As topography has guided current and past land uses, USGS quadrangles and current aerial mapping were important sources of information on site potential. Areas unlikely to yield sites, such as swamps or areas of extensive disturbance due to modern development, were identified. Key inhabitable landforms, such as broad stream terraces, were also taken into consideration when assessing site potential. Examination of the quadrangles and aerial maps allowed for the subjective assessment of site potential. This was supplemented by examination of historic maps with information on historic settlement and Civil War activity.

### **Mapping Disclaimer**

The mapped data contained within this report is to be used solely for locating the cultural resource components and cannot be substituted for data provided by registered land surveyors or any licensed architect or engineer.

## ARCHAEOLOGICAL POTENTIAL BY PERIOD

### Introduction and Natural Setting

The area covered by the CBAs is located within Virginia's Valley cultural region and falls within Rockingham County and the Town of Bridgewater. The Valley of Virginia is within the Ridge and Valley province of the Appalachian Highlands (Fenneman 1938). The geography of the northeast/southwest trending valley system has influenced settlement, especially with respect to pre- and postcontact trade and migration patterns. The Valley was of strategic importance during the Civil War due to both the transportation corridor it provided and the significance of the rich soils and the food production they supported (VDHR 1996). The current project area is within the northern portion of the Valley known as the Shenandoah Valley.

The two CBAs cross an area to the east and northeast of Bridgewater, most of which is drained by Cooks Creek and its first and second order tributaries. Cooks Creek is a tributary of the North River, which flows into the South Fork Shenandoah River and is part of the Potomac-Shenandoah drainage basin. A small portion of the CBAs, located at the southern terminus, drains directly toward the North River.

The terrain has considerable relief with elevations in both CBAs ranging from 1180 to 1300 feet amsl. The proposed alternatives cross ridge tops, ridge side slopes, narrow drainages, terraces, and floodplains associated with Cooks Creek. The general bedrock mapping for the project area indicates shales, sandstones, siltstones, or limestones of the Martinsburg and Oranda Formation and black limestone or shale of the Edinburg Formation/Lincolnshire and New Market Limestones (Virginia Division of Mineral Resources 1993). The latter is listed as being in part cherty. Due to limestone bedrock, caves and sinkholes are abundant in many parts of Rockingham County (Sherwood 2007), and soil mapping for the current project vicinity (USDA/NRCS 2007) indicates that sinkholes are present within a few thousand feet of the current APEs. The presence of sinkholes is a surface indication of limestone bedrock with potential for caves (Sherwood 2007). However, detailed geological assessment of the specific project area indicates that shale is dominant and there is actually little potential for limestone-based karst topography (Stuart Tyler, personal communication 2007).

Soils crossed by the APEs include loams, silt loams, eroded silty clays, eroded silty clay loams, eroded fine sandy loams, and the Frederick-Rock outcrop complex. The associated slope ranges from nearly level to 15-25 percent, with the majority of the soils falling within the 2-7 percent slope category. Soils at the CBA crossings of Cooks Creek include Edom silty clay loam, 7-15 percent slopes, eroded; Fluvaquents, nearly level; and Aquic Udifluvents, nearly level. None of the soils represent areas of broad, well-drained, and habitable floodplains. The areas of Edom soils have moderate to steep slope, and the Fluvaquents and Aquic Udifluvents soils are classified as deep, nearly level, poorly drained to well drained, and unsuitable for cultivated crops without artificial drainage (USDA/NRCS 2007).

## Previous Research

There are no previously recorded archaeological resources within the APEs for CBAs A and B. Although few systematic surveys have been conducted in the vicinity of the current project area, information on previously recorded sites provides considerable information that can be used to assess the potential for archaeological sites within the proposed alternatives. Table 1 lists sites located within approximately three miles of the current project area. These sites (n=20) include precontact artifact scatters, an indeterminate limestone cave site, a Late Archaic camp, a late eighteenth-century cobbler shop ruin, nineteenth- and/or twentieth-century domestic sites, nineteenth-century mill dams and ruins, and a twentieth-century railroad abutment. Almost all of the sites are unevaluated, and only a small number have suggested integrity or recommendations for further work.

Table 1: Previously Recorded Archaeological Sites in the Vicinity of the CBAs.

Site #	Site Type	Landform	NRHP Status or Previous Recommendation	Reference
44RM0261	unknown historic dwelling with subsurface feature	terrace?	no recommendation	VDHR site form
44RM0319	unattributed Native American	bluff	no recommendation	VDHR site form
44RM0320	unattributed Native American	sideslope	no recommendation	VHDR site form
44RM0325	unattributed Native American, unknown site type	floodplain or terrace	no recommendation	VDHR site form
44RM0326	unknown historic and/or Native American, limestone cave with reported pottery	steep side slope	no recommendation	VDHR site form
44RM0346	early 20 <sup>th</sup> C limestone railroad bridge abutment	North River terrace	no recommendation	VDHR site form; also VDHR # 082-0307
44RM0347	19 <sup>th</sup> and 20 <sup>th</sup> C grist mill (ruins?)	Dry River terrace	no recommendation	VDHR site form; also VDHR #s 082-0280 and 082-0279
44RM0367	Shank site, early 19 <sup>th</sup> C domestic scatter	upland ridge	further work recommended	Akers 1988
44RM0368	Cooks Creek site, early 19 <sup>th</sup> to 20 <sup>th</sup> C domestic scatter	upland ridge	further work recommended	Akers 1988
44RM0369	historic cut stone structure	ridge side slope	no further work	Akers 1988
44RM0383	late 19 <sup>th</sup> C century trash scatter; unattributed Native American lithic scatter	terrace	not eligible	Stuck and McDaid (1994)
44RM0407	19 <sup>th</sup> C mill site with concrete headgates	floodplain	no recommendation	VDHR site form
44RM0408	mid-19 <sup>th</sup> C rock and timber crib dam	North River	no recommendation	VDHR site form
44RM0409	mid-19 <sup>th</sup> C rock and timber crib dam	North River	no recommendation	VDHR site form
44RM0410	19 <sup>th</sup> C rock and timber crib dam	North River	no recommendation	VDHR site form

Table 1: (continued).

44RM0411	historic mill race and crib dam	North River and floodplain	no recommendation	VDHR site form
44RM0412	19 <sup>th</sup> C crib dam and mill remains	North River and floodplain	no recommendation	VDHR site form
44RM0448	unattributed Native American camp	sideslope	no recommendation	VDHR site form
44RM0460	20 <sup>th</sup> Century artifact scatter; Late Archaic Native American camp	terrace	no recommendation; probable subsurface integrity	VDHR site form
44RM0475	late 18 <sup>th</sup> C David Heatwole cobbler shop (mortared limestone ruins)	sideslope	appears to have intact subsurface features	VDHR site form

An architectural identification survey conducted for the Bridgewater Bypass Location Study also provides information on archaeological potential. The survey involved 1000-foot-wide corridors for the CBAs and also considered resources visible from the corridors (Stewart and Lautzenhesier 2007). Seven of the 18 resources are within, or immediately adjacent to, the archaeological APE (Table 2). Several of these are nineteenth-century farms with potential for archaeological components. In general, architectural resources near the project area include antebellum farms as well as the site of a c. 1750 house representing early settlement of the Valley.

Table 2: Previously Recorded Architectural Resources in the Bridgewater Bypass Architectural APE, Including Resources Recently Recorded by CCR (from Stewart and Lautzenheiser 2007).

<b>Inventory Number</b>	<b>Name, Address</b>	<b>Date</b>	<b>Recommended NRHP Eligibility</b>	<b>In Archaeological APE?</b>
082-0058	Herringford (5403 John Wayland Hwy. (Route 257/42)	1750	Resource Moved in 1990	no
082-0316	Mary Miller House, 1436 Oakwood Dr. (Route 704)	1850	Potentially Eligible	yes
082-0318	John A. Herring, "Retirement", 5403 John Wayland Hwy. (Route 257/42)	1850, rebuilt 1867	Not Eligible	no
082-5120	Sundial Dairy, 596 Dinkle Ave. (Route 257)	1840	Potentially Eligible	no
082-5416	Amos Showalter Farm, 5098 John Wayland Hwy (Route 257/42)	1890	Previously Determined Not Eligible	yes
082-5450	Leon Showalter Farm, 786 Dinkle Ave. (Route 257)	c. 1906	Not Eligible	no
082-5451	Switzer Farm, 6500 Milky Way Lane	pre-1880	Not Eligible	no
082-5452	Koogler Farm, 6800 Milky Way Lane	pre-1875	Not Eligible	no

Table 2: (continued).

082-5453	Cline House, 5033 John Wayland Hwy. (Route 257/42)	c. 1911	Not Eligible	no
082-5454	Wimer House, 5396 John Wayland Hwy. (Route 257/42)	c. 1880	Not Eligible	no
082-5455	Willis Showalter Farm, 4961 John Wayland Hwy. (Route 257/42)	c. 1950	Not Eligible	no
082-5456	Showalter House, 5101 John Wayland Hwy. (Route 257/42)	c. 1945	Not Eligible	yes
082-5457	Caricofe House, 5658 Herring Lane	c. 1935	Not Eligible	yes
082-5458	Logan House 1, 5706 John Wayland Hwy. (Route 257/42)	c. 1950	Not Eligible	yes
082-5459	Logan House 2, 5810 John Wayland Hwy. (Route 257/42)	c. 1940	Not Eligible	yes
082-5460	Dwight Wenger, Sr., Farm, 5403 John Wayland Hwy. (Route 257/42)	c. 1920	Not Eligible	no
082-5461	Frank Wenger Farm, 1224 Oakwood Dr. (Route 704)	c. 1880	Not Eligible	yes
082-5462	Hoover House , 935 Oakwood Dr. (Route 704)	c. 1880	Not Eligible	no

Previously recorded resources near the current location study also include the site of the October 2, 1864, Civil War skirmish at Bridgewater (VDHR #176-5006). This resource was preliminarily defined by VDOT in March 2007 and is described on a VDHR site form. The skirmish activity was approximately one mile east of the current CBAs and reflects the moderate level of Civil War activity near the current project.

In 2005, CCR completed an archaeological assessment for the nearby Harrisonburg Southeast Connector Location Study (Bamann and Hall 2005). This study dealt with an area to the east of Interstate 81 approximately 0.75 to 7.00 miles east of the current CBAs. Due to the close proximity of this study and similarities in topography, conclusions on the general potential by period are useful in characterizing potential for the current project.

### **Paleoindian Period (11,500 B.C.-8000 B.C.) Context and Potential**

**Context.** Native American occupation of eastern North America dates to at least the Paleoindian period, the beginning of which is placed at approximately 11,500 B.C (Anderson et al. 2007). The evidence for Paleoindian occupations at this time includes fluted projectile points (i.e., Clovis and Cumberland points) (Griffin 1967; Justice 1987). These points are generally scarce and often occur as isolated finds in disturbed surface contexts. The highest concentrations of fluted points, including the earliest Clovis type, occur in the eastern half of the United States. Nearly 1,000 fluted projectile points have been reported from Virginia (Anderson and Faught 1998). Other Paleoindian projectile point types are Mid-Paleo, Hardaway-Dalton, and Hardaway Side-Notched (Barber and Barfield 1989). In Virginia, the majority of these points were manufactured from cryptocrystalline lithic material. Tools associated with the Paleoindian period include scrapers, graters, wedges, unifacial tools, hammerstones, abraders, and a variety of “banging, smashing, chopping, and hacking tools” (Gardner 1989:18).

More recent evidence for much earlier New World lithic industries suggests that the makers of fluted points may represent relatively late migrations to the New World. Alternatively, the distinct fluted point technology may have developed within the New World in the context of populations established prior to 10,000 B.C. (Anderson and Faught 1998; Meltzer 1989). The Cactus Hill site in southeastern Virginia has produced evidence of human occupation of Virginia dating between 11,000 and 15,000 B.P. (McAvoy and McAvoy 1997). More recently, researchers have estimated that the site may involve as many as five pre-Clovis occupations characterized by prismatic blades and blade cores (Boyd 2003). The stratified site is situated on a sand dune along the Nottoway River. Stratification was the result of relatively steady aeolian sand deposition throughout the occupation of the site (McAvoy and McAvoy 1997). The Topper site, located in the Piedmont of South Carolina, has also produced evidence for pre-Clovis occupations (Goodyear 1999). The evidence includes concentrations of cortical chert with some split cobbles, small flake tools, small blade-like flakes, hammerstones, and cortical debitage. These were recovered from a zone of sandy alluvium at one meter below levels with Clovis deposits (Goodyear 1999, 2000; Boyd 2003).

Other stratified sites containing Paleoindian occupations include the Williamson site and the Thunderbird and Fifty sites of the Flint Run Complex in the Shenandoah Valley (Barber and Barfield 1989; Gardner 1974; Carr 1975; Johnson 1996). Evidence from these sites has been used to construct what has been referred to as the “Flint Run Lithic Deterministic Model” of Paleoindian settlement strategies (Anderson and Sassaman 1996:23). In this model, Paleoindian and Early Archaic settlement patterns were driven by the locations of the high-quality lithic material. Five functionally distinct site types have been identified in the Flint Run Complex: quarries, reduction sites, quarry-related base camps, maintenance camps, and non-quarry associated base camps (Gardner 1989). The small, highly mobile bands characteristic of Paleoindian times were also focused on food collection and the hunting of animals such as caribou, deer, elk, and moose (Turner 1989; Boyd 1989). Therefore, hunting and gathering, as well as lithic procurement played a significant role in settlement patterns. Sites such as base camps are often found on resource-rich floodplains and adjacent alluvial fans (Turner 1989).

**Potential.** There are no sites in the three-mile project vicinity with known Paleoindian components, and the potential for Paleoindian base camps appears to be very low. However, the presence of sites like Thunderbird and Fifty in the Shenandoah Valley, the crossing of terraces along Cooks Creek, and the proximity of the North River suggests that there is at least low potential for Paleoindian hunting or quarry sites within the alternatives. In the study area for the Harrisonburg Southeast Connector archaeological assessment (Bamann and Hall 2005), one of the previously recorded sites is characterized as an upland lithic quarry with high quality light gray and dark gray chert. Though the site is unattributed, it documents the presence of chert outcrops in the region around the current project study area and suggests that Paleoindians could have exploited the area. In general, through, the potential for Paleoindian sites that would affect decision making is very low.

## **Archaic Period (8000-1200 B.C.) Context and Potential**

*Context.* The Archaic period is divided into three phases: Early, Middle, and Late. The tool kits from the Early Archaic are similar to those from the preceding Late Paleoindian tradition, as are the settlement and subsistence patterns (Gardner 1974, 1977; Inashima 1994). Existing data suggests that there was no distinct division between the two periods (Claggett and Cable 1982; Anderson and Sassaman 1996). Instead, the Early Archaic is marked by an expansion of the size of sites and an increase in both the number of artifacts and the number of sites (Egloff and McAvoy 1990).

The onset of this period occurs during a time of climatic change. A shift from boreal forests to northern hardwoods occurred around the time of the Early Archaic period (8000 to 6800 B.C.). In the early Holocene, a cool, moist climate prompted the expansion of species-rich Mixed Hardwood Forest in the eastern United States. During the warmer Hypsithermal Interval (after 6500 B.C.), the Oak-Chestnut forest became dominant in the central and southern Appalachians, and some areas had moister conditions (Delcourt and Delcourt 1981; Delcourt and Delcourt 1985). A significant increase in the number of upland sites in Virginia and a postulated growth in population coincided with this shift in climate (Custer 1990). Hunting and gathering continued as the subsistence pattern during the Archaic, with a possible seasonal round of movement between base camps and hunting camps. The current climate regime developed by about 3000 B. C. (Delcourt and Delcourt 1981).

At sites of the Flint Run Complex, Early Archaic points follow a continuum in which the corner-notched points are gradually replaced by side-notched points (Warren, Big Sandy, Kessell), and these are gradually replaced by stemmed points (Kirk Stemmed) (Geier 1990). The basic tool kit apparently did not change dramatically from Paleoindian through Early Archaic times at the Flint Run sites. The ground stone tools, such as adzes, celts, axes, and grinding stones, which made their first appearance in other regions during this period are not apparent until the Middle Archaic at the Flint Run sites (Gardner 1974, 1986).

The Middle Archaic period (6800 to 3500 B.C.) roughly coincides with the Hypsithermal Interval. Projectile point types characteristic of this period include Stanley, Morrow Mountain, Guilford, Halifax, St. Albans, LeCroy, and Kanawha (Gardner 1986; Custer 1990). Settlement and subsistence patterns are similar to the Early Archaic period but reflect increased use of upland settings and possibly population growth. In addition, it appears that Middle Archaic sites may have been occupied for longer periods of time than their earlier counterparts and may have been more frequently located on the floodplains along larger streams and rivers (Custer 1990; Klein and Klatka 1991).

The Late Archaic period in Virginia began around 3500 B.C. and is marked by distinctive projectile point types, most notably the broad-bladed Savannah River point. Late Archaic points from most sites in Virginia, including those along the South Fork of the Shenandoah River, tend to be manufactured from locally available quartzite (McLearen 1991). The adaptations of this time, however, differ little from those of the

Middle Archaic period. According to Mouer (1991:10), the primary attributes of Late Archaic culture are “small-group band organization, impermanent settlement systems, infrequent aggregation phases, and low levels of regional or areal integration and interaction.” A greater number of Late Archaic sites appears to reflect population increase, and sites appear in riverine contexts with increasing frequency (Stevens 1991; Klein and Klatka 1991; Hodges 1991). The general settlement pattern appears to have involved two base camps for the seasonal round of resource exploitation (Hodges 1991). Toward the end of the Late Archaic, a series of lithic tools appear in the northern Shenandoah Valley and along the Potomac that are distinctive from those associated with Savannah River broadspears. These projectile points and bifaces are referred to as the Susquehanna Complex and are made from rhyolite similar to that of the Blue Ridge of Maryland and Pennsylvania (McLearen 1991). Soapstone vessels are typically associated with both Savannah River and Susquehanna points.

The time from ca. 2500 B.C. until 1200 B.C. is called the Transitional period by some researchers in Virginia (Mouer 1991). By 2500 B.C., the rise in sea level had dramatically altered the Atlantic coast, creating large estuaries and tidal wetlands that, in turn, vastly increased coastal resources such as fish and shellfish. Anadromous fish runs extended from the coast, up the rivers, to the foothills of the Blue Ridge. Settlement during this time was concentrated in the river valleys, and archaeological sites tend to be more numerous and larger than sites from earlier periods. However, this does not seem to be the case in the Shenandoah Valley, where larger base camps are not present at this time, possibly due to the lack of aggregations of anadromous fish (Gardner 1982).

**Potential.** One site listed as Archaic, 44RM0460, has been previously recorded in the three-mile vicinity of the project area. This is a Late Archaic camp site with a diagnostic Orient Fishtail projectile point, a scraper, and debitage. The site is located on a small terrace overlooking Pleasant Run (a tributary of the North River). The VDHR site form indicates that the site has potential for subsurface features, but it was not evaluated. The potential for additional Archaic sites, especially Late Archaic sites, is highest where the alternatives cross Cooks Creek. Large riverine base camps, however, are not likely along this relatively small stream. The potential is lower in upland areas crossed by the alternatives. Larger upland sites, if present, would be expected near drainage heads and outcrops of lithic source materials.

There are five unattributed Native American sites within the three-mile vicinity of the project area that may represent Archaic camps. The sites are located on stream terraces, bluffs, and ridge sideslopes. The presence of these sites suggest that systematic survey of the alternatives will uncover additional unattributed or Archaic sites, and the results of the earlier Harrisonburg Southeast Connector archeological assessment (Bamann and Hall 2005) suggest that most will be lithic scatters. In general, though, Archaic sites that would affect project decision making are unlikely to be encountered.

## **Woodland Period (1200 B.C. to 1600 A. D.) Context and Potential**

*Context.* The Early Woodland period (1200 to 300 B.C.) is marked by the replacement of the large, stemmed projectile points with smaller lanceolate, notched, and stemmed points and by the introduction of ceramics (McLearen 1991). The earliest ceramics recovered from sites in the Shenandoah Valley are Marcey Creek ceramics, followed by Seldon Island ceramics (Gardner 1986; McLearen 1991). Both of these are tempered with steatite, although Marcey Creek ceramics are plain, and Seldon Island ceramics are cord marked. The final Early Woodland ceramic type is sand-tempered Accokeek Cord Marked. Evidence of permanent habitations is noted for the first time in Early Woodland sites, and it appears that clusters of a few houses formed small semipermanent hamlet settlements on levees adjacent to the river (Gardner 1986). These base settlements were probably supported by smaller foray sites (Hodges 1991).

The record for Middle Woodland sites in Virginia is fairly sparse in all except the Coastal Plain region. The Middle Woodland period (300 B.C. to A.D. 1000) is marked by the introduction of triangular projectile points throughout Virginia, as well as an elaboration of local traditions, an increase in sedentism, and an increase in population (McLearen 1992). In the Shenandoah Valley, the Middle Woodland is marked by “evidence of participation in extensive trade networks, the development of ranked societies, changes in settlement pattern and site types, and the appearance of elaborate burial ritual” (Gardner 1982:65). Stone burial mounds are found at sites on bluffs along the South Fork of the Shenandoah River until ca. A.D. 200 (Gardner 1986). Each mound contains at least one human burial, and the mounds often occur in clusters. Gardner (1986) has hypothesized that the clusters of mounds represent sociopolitical centers, with major centers represented by clusters made up of larger numbers of mounds and less important centers represented by smaller concentrations of mounds. These mounds are found throughout northwestern Virginia, which appears to be the easternmost limit of mound complexes related to the Adena and Hopewell complexes of the Ohio Valley (McLearen 1992).

The dispersed semipermanent hamlet settlements that predominated in the Shenandoah Valley during the Early Woodland continued in the Middle Woodland period, although it appears that there was a shift in base camp location from the outer to the inner part of the floodplains (Gardner 1982; Blanton 1992). Gardner (1982:73) hypothesizes that the location of settlements near abandoned channels and backwater sloughs indicates that people were “focusing their subsistence efforts on the plants in these swamps and were quite likely doing some gardening as well.”

The gradual transition from the use of sand as a tempering agent during the Early Woodland to the use of crushed rock during the Middle Woodland has been documented at sites in the northern Shenandoah Valley (Gardner 1982). The surface treatments of the crushed-rock-tempered Albemarle ware of the Shenandoah region included netmarking, cordmarking, and fabric impression (Gardner 1982, 1986).

The Late Woodland period (A.D. 1000 to 1700) was characterized by the introduction of the bow, increased sedentism, the introduction of agriculture, and a rapid growth in population. The shift to agriculture is coupled with a change in settlement location from the inner floodplains to the floodplain levees or broad alluvial terraces (Walker and Miller 1992). By the end of the Late Woodland period, the earlier small hamlet settlements were replaced by larger populations living within palisaded villages.

At the beginning of the Late Woodland period, there was a continuation of the use of crushed-rock-tempered Albemarle ceramics (Walker and Miller 1992). The limestone-tempered Page series gradually became the dominant ceramic in the Shenandoah Valley. Around 1450 A.D. it was abruptly replaced in the northern part of the valley by the shell-tempered Keyser series. Throughout the Shenandoah Valley, the common ceramic wares were the New River and Keyser series (shell temper), the Radford and Page series (limestone temper), and the Potomac Creek series (sand temper). Typical surface finishes included cord marking, fabric impression, and smoothing (Walker and Miller 1992).

Little ethnohistoric information is available on Native American settlement of the Ridge and Valley and Appalachian regions during the protohistoric and early contact periods. Starting in the last part of the seventeenth century, the Valley was probably beginning to feel the effects of European trading activities and related hostilities between rival Native American groups. Groups were either decimated by hostilities and disease, or left the area as fugitives or captives. By the time European settlers were established in the region, there was little obvious evidence of the native populations (Hodges 1993).

**Potential.** No Woodland sites have been recorded in the three-mile vicinity of the current project. For the current alternatives, as was the case for the archaeological assessment of the nearby Harrisonburg Southeast Connector (Bamann and Hall 2005), the lack of river crossings, river bluffs, and well-drained floodplains, suggests that the potential for Woodland hamlet or village sites and stone burial mounds is very low. Smaller foray or resource extraction sites tied to communities along the North River, however, could be encountered in the path of the alternatives. Such sites would most likely be found on terraces of Cooks Creek, though upland areas may have been used for hunting or quarrying forays. In general, though, the limited potential for larger village sites and associated burials or burial mounds suggests that most Woodland sites encountered would be unlikely to affect decision making.

One unattributed Native American site is a limestone cave site (44RM0326) reported by local informants. According to the VDHR site form, the informants found unspecified pottery on the steep slopes outside the large, two-level cave. The site form lists the cave as unknown historic/prehistoric, and it is unclear whether the pottery represents Woodland ceramics. Nonetheless, the presence of this site and the limestone geology of the project vicinity suggests that there is at least some potential for cave sites with archaeological components in the current APEs. A cave site with intact archaeological strata would have the potential for costly excavation or preservation in place. Limestone cave sites with Native American burials are somewhat common in southwestern Virginia and are documented in the northwestern region including the

mountain and Valley zones. A Late Woodland burial cave with partially articulated skeletons was documented in neighboring Page County (44PA0004) (Boyd and Boyd 1992). The presence of burials would result in additional considerations including coordination with tribes and compliance with state statutes regarding the protection of human remains.

### **Postcontact Period (1607 A. D. to present) Context and Potential**

*Context.* During the Settlement to Society (1607-1750) period, perhaps the first Euroamerican to view the Shenandoah Valley was John Lederer, who was commissioned by Governor William Berkley to explore the area. Lederer undertook three expeditions into the wilderness of Virginia and the Carolinas in 1669 and 1670. His observations and a map of his route were published in 1672, providing Europe with the first description of the beautiful Shenandoah Valley (Strickler 1996). In 1670 Lederer is thought to have crossed the Valley at or near Front Royal and Strasburg (Wayland 1996).

The Valley was explored and passed through by other Euroamericans during the late seventeenth and early eighteenth centuries, but the first documented settlement of the Valley did not occur until about 1726-27. Governor William Gooch provided Adam Miller a certificate of naturalization on March 13, 1741-42. This certificate stated that Miller had been a resident of the Valley for the past 15 years. It is known that Miller was claiming land on the South Fork of the Shenandoah River near the present Rockingham and Page County line by 1727. Others settled in the area at the same time or not long thereafter (Wayland 1996).

Soon after the first documented settlement of the Valley, the number of settlers there was so great as to cause the inhabitants to seek organized government. In 1734, the settlers asked the colonial council to appoint magistrates to administer the law. Subsequently five justices were appointed to the Valley. That same year Orange County was formed from part of Spotsylvania County, further aiding in the administration of the law in the Valley. Growth in the region made the formation of Frederick and Augusta Counties necessary in 1738. Modern Rockingham County would later be formed from the area included in Augusta County (Wayland 1996).

The early settlers of what is now Rockingham County were Germans and Scotch-Irish, though other groups were also present. A considerable population could be counted in modern Rockingham County by 1738. Most of these settlers traveled up the Valley from Maryland and Pennsylvania, although some had moved from eastern Virginia (Wayland 1996).

Increasing settlement characterized the Colony to Nation period (1750-1789). Settlement continued at a rapid and steady pace during the years leading up to 1777, which marks the formation of Rockingham County. Homesteads dotted the landscape, and a number of church parishes were established. During this period, at least one company of men from the area participated in the Battle of Point Pleasant (Wayland 1996). The battle, fought in 1774, was a response to a Native American uprising led by

the Shawnee Chief Cornstalk (Jack 1912). The company from what is now Rockingham County was led by Captain William Nalle, who later became one of the first justices of the county. Following the formation of Rockingham County in October 1777, the first court was held in April of 1778 (Wayland 1996).

Among the issues discussed in the first Rockingham County Court session were appointments to various offices and the construction of public buildings. Until public buildings could be completed, it was resolved to hold the court at Smithland, the home of Justice Daniel Smith (Baker 2000; Wayland 1996). This house was on the Valley Pike (now Main Street or Route 11), near present Harrisonburg. Shortly after, the building of a jail was authorized on the Smithland property (Wayland 1996).

The town of Harrisonburg, first referred to as Rocktown, was established in May of 1780 (Peters 1924). It was named for Thomas Harrison, an early settler who donated part of his extensive lands for the establishment of the town (Caldwell and Marshall 2003). By 1781, Rockingham County's population was near 5,000. This population included German, Scotch-Irish, English, and Dutch settlers. Slaves were also present, and in 1790 they comprised approximately 10 percent of the population (Wayland 1996).

The events of this period took place against the backdrop of the American Revolution. Court records show that a number of Rockingham men served in the militia or the Continental Army. In some cases, the records show monetary aid granted to wives and children of serving soldiers (Wayland 1996).

By the early 1800s in the Early National period (1789-1830) there were approximately 3,000 tithables and at least 12,000 individuals in Rockingham County. Records from 1810 indicate that 200 or more free blacks were present, probably due to the abolitionist activities of Methodists and other religious groups (Wayland 1996). By this time, the town of Rocktown, or Harrisonburg, had expanded from its original 50 acres to over 70 acres. The town was growing in both size and infrastructure. A lottery passed in 1803 was used to raise money for street improvements. At the same time, legislative action was taken to prevent hogs from roaming the town (Peters 1924). With the growth of the county's population came attention to infrastructure concerns regarding roads and stream crossings (Wayland 1996).

In 1810, though slave labor was in use in the county, the number of slaves did not exceed 11 percent of the total population. By the close of the Early National period, the population of Rockingham County had declined slightly due to emigration. This was in part due to government policies favoring westward expansion. The formation of Page County in 1831, which took a small part of Rockingham, also accounts for some of the population decline (Wayland 1996).

During the colonial period, the area that grew into Bridgewater was known as Magill's Ford (Heatwole 1998). John Dinkle arrived about 1810, married one of the Magills, and bought land along the river (Heatwole 1998; Wayland 1996). Soon thereafter, Dinkle erected a carding machine, a saw mill, and a grist mill on the north side

of the North River (Wayland 1996). This complex was about a quarter of a mile below the current bridge (Wayland 1996). Sometime during the early nineteenth century, a bridge was constructed across the river. Flatboats already used the location as a loading area for goods bound for destinations east. With the construction of the bridge Dinkletown became Bridgeport (Wayland 1996). Once the port fell out of use by 1830, the town changed its name again to Bridgewater (Heatwole 1998; Wayland 1996). The town was officially chartered as Bridgewater in 1835 (Town of Bridgewater 2007).

A number of religions were established in Rockingham County by the early 1800s. Lutherans, Mennonites, Episcopalians, and the Reformed Church were present early on, while Dunkers, Presbyterians, Methodists, United Brethren, Catholics, Quakers, and Moravians had arrived more recently (Wayland 1996).

Throughout much of Virginia, the Antebellum period (1830-1860) was marked by improvements to agriculture and infrastructure. New methods of crop rotation and erosion control were introduced. Tobacco was a significant cash crop in the Piedmont and had expanded into other regions. Wheat crops, orchards, and dairy farms became common in the Valley (Gottmann 1969). Compared to the Tidewater and Piedmont, Valley agriculture was less dependent on slave labor. Sentiments favoring emancipation were widespread, especially among Methodists and other religious denominations (Gottmann 1969; Wayland 1996).

Road construction was a significant factor in Rockingham County in the 1830s. Major routes include the Valley Turnpike (now Route 11) and Rockingham Turnpike. Roads such as these were used for transportation and wagon commerce, and aided in movement of goods to the major transportation route provided by the Shenandoah River. In subsequent years, lotteries were held to raise money for bridges and road improvements. In 1836, the state passed a resolution authorizing survey for a railroad from Orange County in the Piedmont to Harrisonburg in Rockingham County (Wayland 1996). At the same time, the Baltimore and Ohio Railroad Company had succeeded in connecting with the northern part of the Valley and had begun to draw the grain trade away from Alexandria (Gottmann 1969). It was not until the 1850s that the Manassas Gap Railroad Company linked the Orange and Alexandria Railroad Company with the Valley (Gottmann 1969).

Maps created during the Civil War indicate that a number of communities and roads were in place by the 1860s including Bridgewater, Mount Crawford, Dayton, and roads running between Harrisonburg and Bridgewater (modern Route 257/42) and Harrisonburg and Mount Crawford (modern U.S. 11) (Figure 3). Modern Route 257/42 connecting Harrisonburg and Bridgewater is known historically as the Harrisonburg-Warm Springs Turnpike, or simply the Warm Springs Turnpike. Modern U.S. 11 is known historically as the Valley Turnpike. Civil War-era maps show these roads as major transportation arteries.

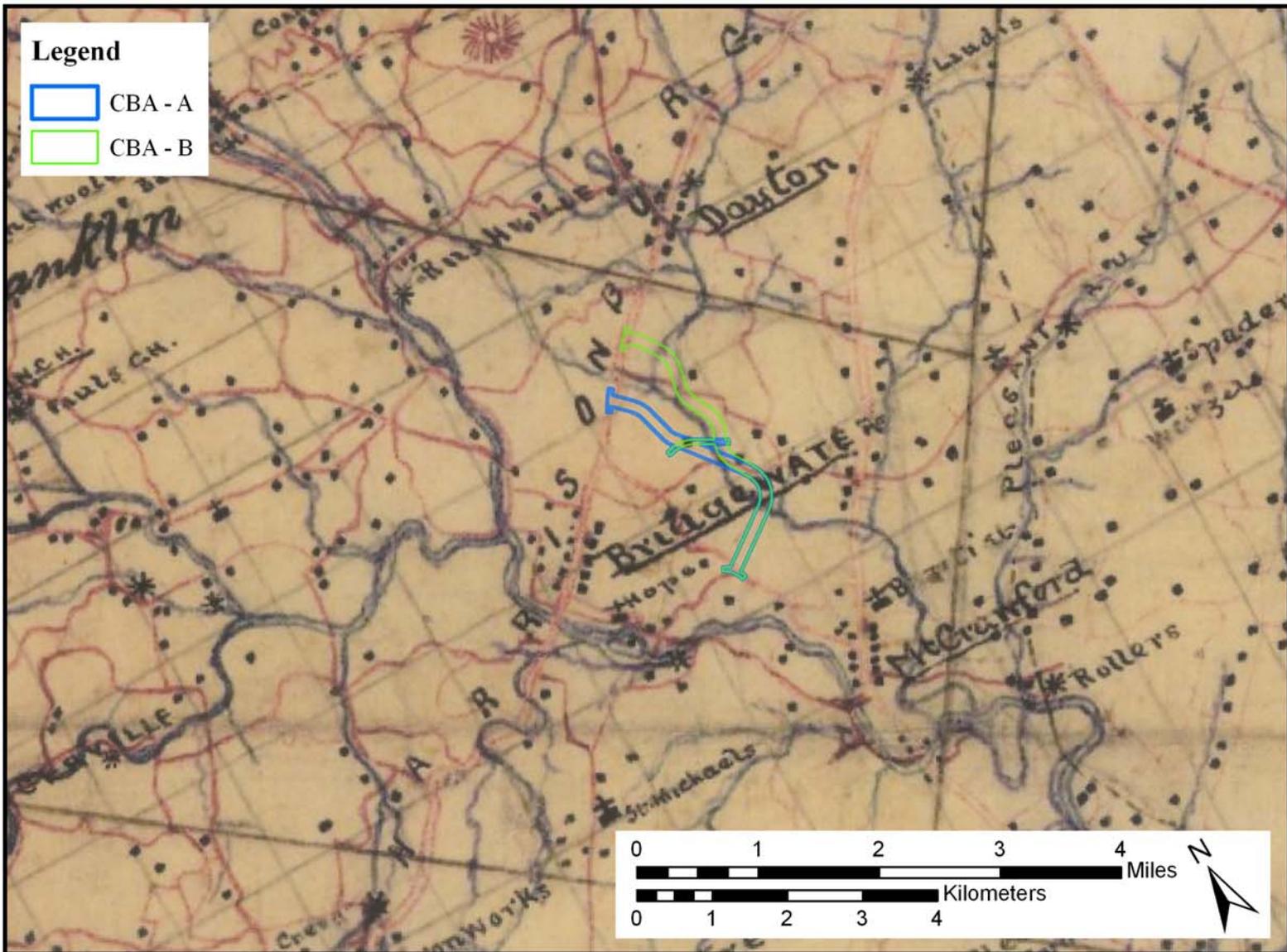


Figure 3: Civil War-Era Map Showing the Roads in the Bridgewater Area (Anonymous 186?).

Bridgewater's location at the intersection of the Harrisonburg-Warm Springs Turnpike and the North River helped make the community quite prosperous by the eve of the Civil War (Figure 4). Mills dotted the river banks near Bridgewater in both directions, and farms dotted the surrounding countryside. Located in the town were a number of churches, a playhouse, and taverns. The taverns had served such notables as Andrew Jackson and Henry Clay (Heatwole 1998).

The Valley saw major activity during the Civil War (1861-1865). The two largest engagements of the war took place in the county's southeastern section. These actions were fought at Cross Keys and Port Republic in June of 1862. The victory gained by the Confederate forces at Cross Keys helped set the stage for their important victory the following day at Port Republic. The actions were a fitting ending to General Thomas "Stonewall" Jackson's 1862 Shenandoah Valley Campaign. Jackson's victories enabled his army to leave the Valley and join General Robert E. Lee in his offensive against the Federals gathered before Richmond (Hutchinson and Kilby 2003).

The location of Bridgewater that had brought it prosperity before the war ensured that it would be active during the war. In April of 1862, as Jackson's Confederate army moved through the area, his troops burned the bridge over the North River at Bridgewater (Hotchkiss 1973). The bridge was not rebuilt until after the war, but old Magill's Ford served as an adequate crossing, failing only during exceptional flooding. The Confederate government placed a commissary post in the town charged with taxing residents. The post collected taxes of produce and other farm products from residents who did not have money. A large storehouse was constructed in the town to store such taxed items that were collected in south-central Rockingham and north-central Augusta Counties (Heatwole 1998).

Confederate troops returned to Bridgewater on May 19. The troops crossed the North River and entered Bridgewater after constructing an improvised bridge of area wagons, since they had only the previous month destroyed the permanent bridge there. Once across, the rear element of the army camped "near Bridgewater." The soldiers continued their march the next day (Hotchkiss 1973:47).

Large numbers of soldiers from both sides were in the area again in 1864. Following the Battle of Fisher's Hill on September 21-22, 1864, the defeated Confederate force of General Jubal Early retreated south towards Port Republic. Fortunately for the Confederates, the Union troops under General Philip Sheridan did not pursue Early, but continued south to Harrisonburg (Wert 1987). The Union advance into the Harrisonburg area was so rapid that the local inhabitants scarcely had time to prepare. With the supplies at the commissary storehouse in Bridgewater threatened with capture, the commissary officer opened the storehouse to local residents, cautioning them to hide the food taken away from the approaching Northerners (Heatwole 1998).

General George Armstrong Custer's Third Cavalry Division occupied Bridgewater in late September 1864. According to Confederate cartographer, Jedediah Hotchkiss, the Federal troopers arrived in Bridgewater on September 29, 1864. He

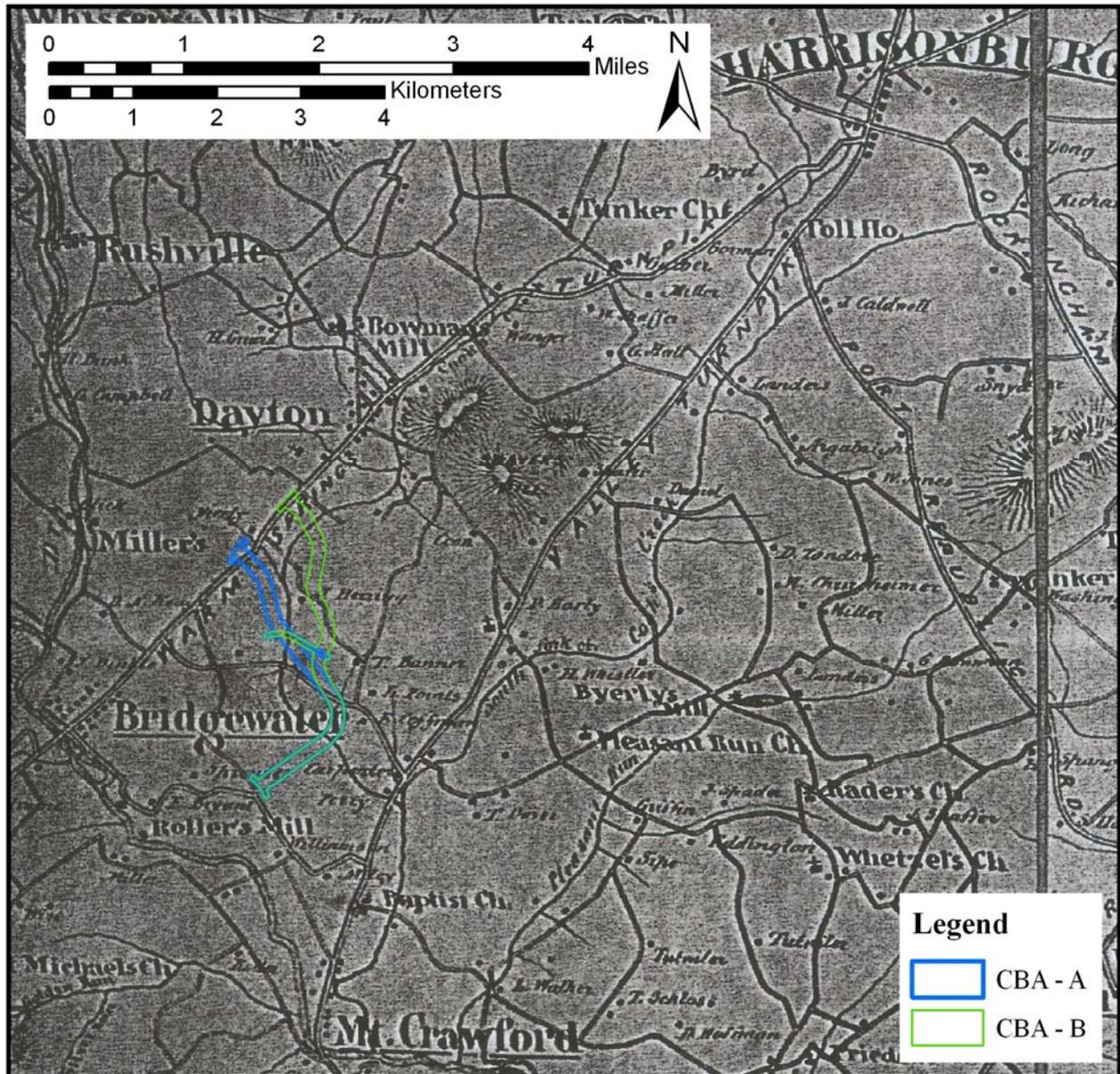


Figure 4: The Bridgewater Area During the Civil War Showing Mills, Farms, and Transportation Arteries (Hotchkiss 1866).

recorded in his diary on September 30 that he had observed from his vantage point a great deal of burning going on in Rockingham County that night (Hotchkiss 1973). This destruction of property was only a small sample of what residents of south-central Rockingham County would experience in less than a week's time. Custer's division occupied camps located in "flat fields just north of town" and a position east of the town "on the rise of the nearly level plateau between Bridgewater and Mount Crawford on the Valley Turnpike" (Heatwole 1998:55-56). Custer's troopers were tasked with picketing the North River crossings from Mount Crawford to Spring Creek. Not long after establishing the camp east of Bridgewater, the troopers were ordered to relocate from the field to some wooded hills a short distance north (Heatwole 1998).

Confederate observers on the south side of the river misinterpreted the change of camp site as a retreat. Two Confederate cavalry regiments from General Williams C. Wickham's brigade crossed the river and drove in the Union pickets posted in Bridgewater (Figure 5). The Confederates seized the town and were beginning to enter the fields that had formerly been occupied by the Union troopers whose movement had precipitated the skirmish, when troopers from the Eighteenth Pennsylvania and Second New York Cavalry attacked. The Confederates were forced back across the river with both sides sustaining some casualties (Heatwole 1998). The small scale of the affair is probably best understood from Jedediah Hotchkiss' entry of October 2: "The cavalry had some fighting at Bridgewater today" (Hotchkiss 1973:234). This entry was his only reference to the skirmish found in his diary, though he did record the following day: "Army quiet, save some skirmishing with Yankee cavalry along the North River" (Hotchkiss 1973:234). The Bridgewater Skirmish was recorded in early 2007 by VDOT architectural historian John Wells (VDHR # 176-5006).

Shortly after the skirmish at Bridgewater, an incident took place that caused great hardship on area citizenry. On the night of October 3, Lieutenant John R. Miegs, General Sheridan's engineer officer, and two men detailed to help him came upon three Confederate scouts just north of Dayton along the Warm Springs Turnpike. Although details of the encounter have been debated, the result was that one of the Confederates shot and killed Miegs, a favorite of Sheridan. Sheridan upon hearing the account blamed the 'murder' on local guerillas and those that provided them safe-haven. As retribution for the act and to discourage future guerilla attacks, Sheridan ordered all buildings within the town of Dayton and the surrounding area burned (Wert 1987:145). Included in the reprisal area were Bridgewater and the current CBAs.

Union officers were called to Sheridan's headquarters on October 4 to receive his instructions for carrying out the burning. During the morning of October 4, local residents in Dayton were awakened by Union soldiers and informed to remove possessions from their homes. The town was to be burned that evening. Similar scenes occurred throughout the surrounding countryside, but these residents often had to move their belongings immediately and then watch as their homes and outbuildings were burned. Many of the Union soldiers were sympathetic, and helped people evacuate their belongings. Guards were even posted at some locations to prevent the stealing of property by less sensitive soldiers.

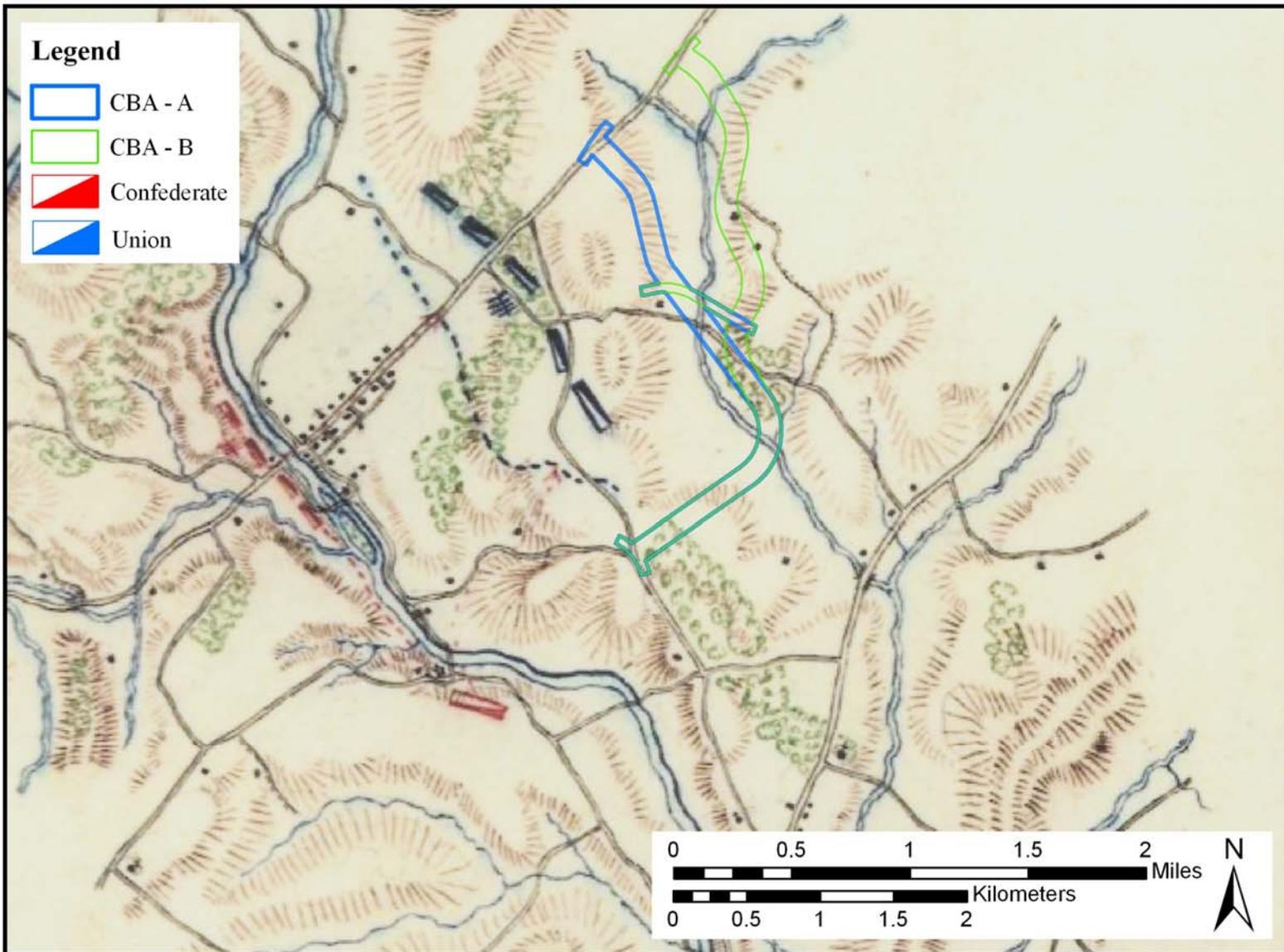


Figure 5: Map of the Skirmish at Bridgewater (Hotchkiss 1864).

Over the next couple of days, Union troops spread destruction through south-central Rockingham County. Mills were a primary target. Mills all along the North River between Bridgewater and Port Republic were burned. Similar fates befell the mills along Dry River and Cooks Creek. Barns were another high-value target for the Union troops. Barns within the targeted area were rarely spared. Houses were also targeted, but the Union soldiers showed more leniency concerning dwellings (Heatwole 1998). Although the CBAs are located in the middle of the targeted area, some antebellum dwellings survived “the burning” and survive to this day.

The town of Dayton was not burned as ordered. The change of orders is largely credited to Lieutenant Colonel Thomas F. Wildes, who sent an impassioned plea to Sheridan to spare the town. By the time Sheridan received his subordinate’s request, he had calmed down somewhat and agreed to spare Dayton. In later years, the town erected a monument to the Union officer that had pleaded to spare their town (Heatwole 1998).

Following the dramatic events of the Civil War, at the inception of the Reconstruction and Growth period (1865-1917), Rockingham County was plagued with lawlessness. Stores and warehouses were burglarized, public property was vandalized, and livestock was raided (Wayland 1996). Agricultural production and marketing was generally depressed across Virginia, and though the number of farms increased, they became smaller and less prosperous (Gottmann 1969). Construction and industry, however, began to counteract these negative trends through employment and economic gains. In Rockingham County, barns, mills, and bridges destroyed by Sheridan were rebuilt, and by 1867, an iron foundry in Harrisonburg was selling plows at capacity. New roads were built, and the Manassas Gap Railroad reached Harrisonburg in 1868 (Wayland 1996).

Rockingham County’s population reached 31,000 by 1890 and 35,000 by 1910. Increases in population led to more pressure for roads. An 1885 atlas of the county (Lathrop and Griffing 1995[1885]; Figure 6) shows that the road currently designated as SR 704, which crosses the CBAs, was a well-established road by that time. Several homes are shown in the vicinity of the CBAs. By 1912 the county included diverse farm enterprises, fish hatcheries, flour mills, creameries, canneries, tanneries, a woolen mill, foundries, brick kilns, lime kilns, summer resorts, and caves open to tourism. Farms included crops and orchards, as well as cattle, swine, sheep, and horses (Wayland 1996).

Rockingham County was well diversified by the World War I to World War II (1917-1945) and New Dominion (1945-present) periods. A 1924 economic and social survey of the county characterizes the area as a diversified manufacturing center (Stinespring 1924a). The list of industries from that time includes clothing manufacturers, electric power companies, flour and feed mills, foundries, tanneries, saw mills, soft-drink bottlers, and marble and lime quarries. Agriculture continued in importance, with over 80 percent of the population residing in rural settings. Corn and wheat were major crops, and dairies were worth over three million dollars in 1920 (Stinespring 1924b). Despite the growing economy, the 1943 USGS Harrisonburg

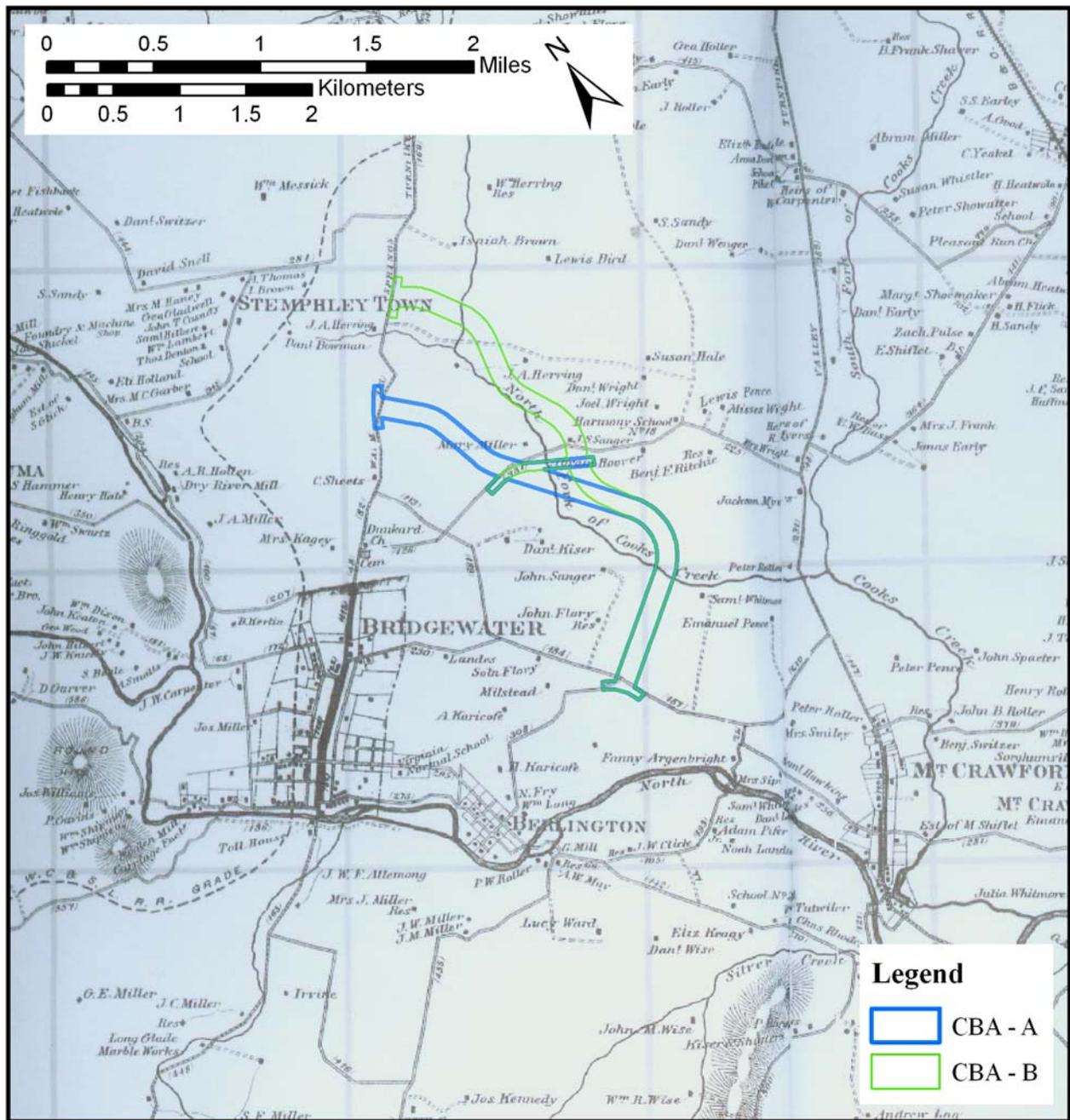


Figure 6: Project Area Vicinity Shown in an 1885 County Atlas (Lathrop and Griffing 1995[1885]).

quadrangle shows very little change of the area to the north and east of Bridgewater since the publishing of the 1885 atlas (Figure 7).

**Potential.** There are 15 previously recorded historic sites or sites with historic components in the three-mile project vicinity. The earliest historic sites date to the eighteenth century. Site 44RM0475 is the site of the late eighteenth-century David Heatwole cobbler shop. This is located to the northeast of Bridgewater along Route 257/42 and consists of ruins of a mortared limestone structure. Although the structure is in ruins, it appears that intact subsurface features may be present at this unevaluated site.

Another resource related to eighteenth-century settlement is the site of the c. 1750 Herringford house (VDHR #082-0058). The house was located in the area between CBAs A and B on a terrace along Cooks Creek, but was moved in 1990. Since the house location has not been rebuilt upon, there is potential for intact features related to early settlement of the area. Similar sites may be present within the current CBAs, especially where they cross or parallel Cooks Creek. The area along Route 257/42, which links Bridgewater and Harrisonburg and has the Heatwole cobbler shop along its route, may also be sensitive for eighteenth-century sites. Early historic sites may be found eligible for the NRHP, but will be unlikely to require extraordinarily costly excavation or preservation in place.

The remaining historic domestic sites in the three-mile vicinity of the project date to the nineteenth and/or twentieth centuries. Among these are 44RM0367, an early nineteenth-century domestic scatter on a upland ridge overlooking Cooks Creek; 44RM0368, an early nineteenth- to twentieth-century domestic scatter on an upland ridge overlooking Cooks Creek; 44RM0383, a late nineteenth-century trash scatter on a terrace overlooking Silver Creek (northwest of Bridgewater); and 44RM0460, a twentieth-century artifact scatter on a terrace overlooking Pleasant Run (southeast of the APEs).

The architectural resources for the current location study (Stewart and Lautzenheiser 2007) also include nineteenth-century farms in the CBAs with potential for archaeological components but little potential for sites requiring preservation in place or costly excavation. These are the c. 1850 Mary Miller house (VDHR #082-0316), the c. 1880 Frank Wenger farm (VDHR #082-5461), and the c. 1890 Amos Showalter farm (VDHR # 082-5416). Other architectural resources in the CBAs are houses dating to after c. 1935 along Route 257/42. No church, municipal, or family cemeteries were encountered during the architectural survey and none are indicated on historic or contemporary maps. It appears unlikely that cemeteries will be recorded during the archaeological survey unless they are small, untended family cemeteries in overgrown areas that were not visible during the architectural fieldwork. Small family cemeteries are normally not eligible for the NRHP.

Seven of the previously recorded archaeological sites in the three-mile vicinity of the current project are nineteenth-century mill-related sites such as crib dams, races, headgates, and mill building ruins. These are all located on terraces or floodplains of the Dry River or the North River and were recorded during river surveys. Although no mill-

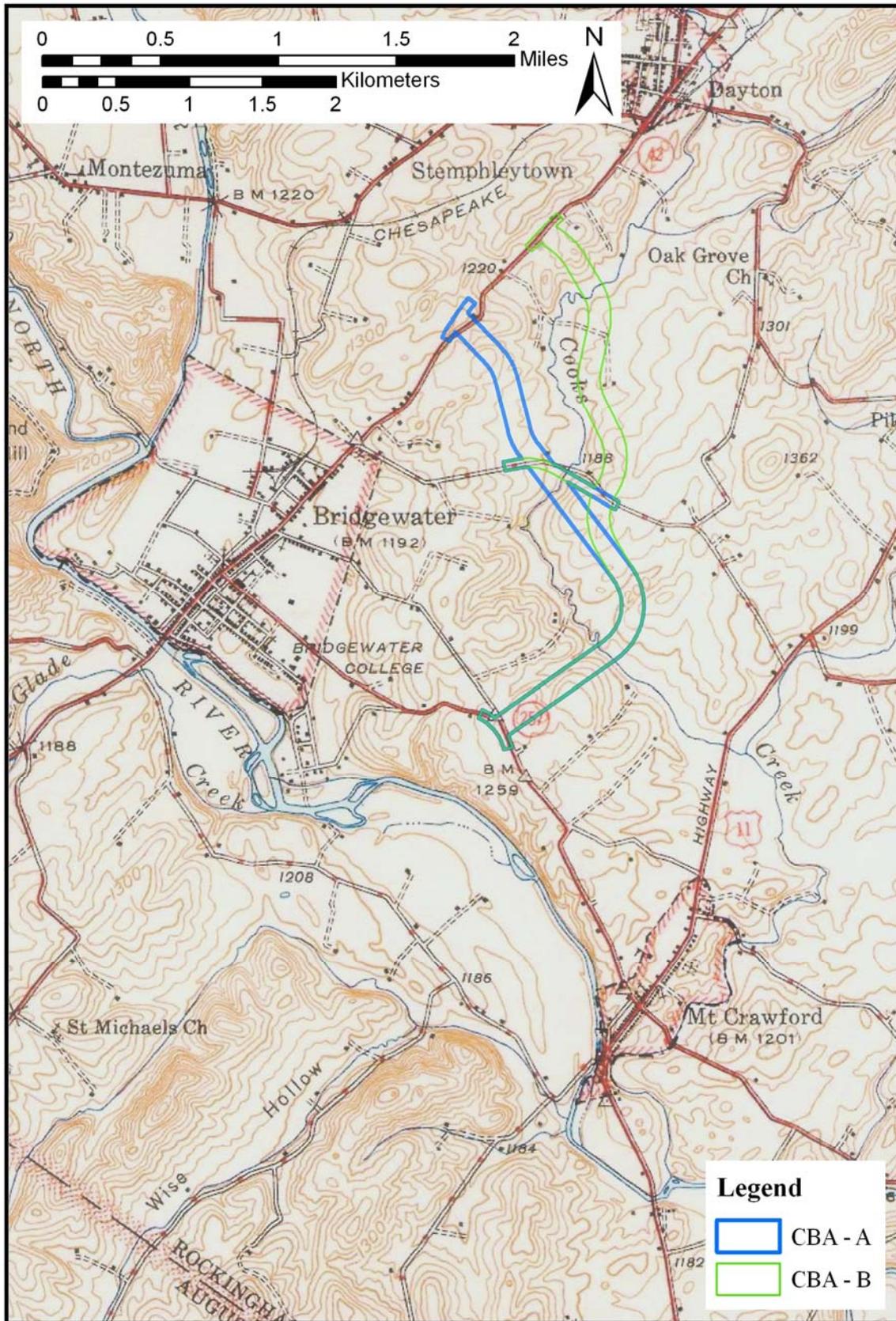


Figure 7: The Project Area Vicinity Shown on the Harrisonburg 15' USGS Quadrangle (Maptech 1989-2007).

related sites have been recorded on Cooks Creek near the current APEs, it is possible that ruins or features of small mills could be encountered at the CBA creek crossings. Passing reference is made to one or more mills destroyed along Cooks Creek during the 1864 burning of the Bridgewater area (Heatwole 1998). However, any ruins or features encountered in the CBAs would likely be small remnants lacking architectural integrity and/or the need for preservation in place.

No Civil War-related sites have been recorded in the three-mile vicinity of the project except the site of the October 2, 1864, Civil War skirmish at Bridgewater (VDHR #176-5006). During the skirmishing at Bridgewater, most of the action appears to have occurred within Bridgewater and its eastern limits. Items related to the Union camp east of the town may remain, but the probability of any subsurface features is low. The units camped on the Bridgewater side of the North River, being cavalry units tasked with picket duty, most probably did not fortify with rifle pits or other earthworks. Any that might have been constructed were probably confined to the river crossings. The possibility of encountering earthworks within the CBAs is therefore very low.

The fact that the Warm Springs Turnpike (Route 247/42) was a major transportation artery in the Valley and evidence confirming the extensive use of the road throughout the war increase the possibility that Civil War-related items might be found in the CBAs. However, even when the soldiers stopped to camp in the vicinity of Bridgewater, they did not remain for a long length of time. The camp sites were usually only used for one or two nights making the probability of finding subsurface features very low.

Remnants of homes and outbuildings that were burned in the fall of 1864 by Sheridan's army may be located within the CBAs. Antebellum homes are still found within the APE, but others may have been burned. Even on plantations where the dwelling was spared, the outbuildings may have been torched. The entire project area is located in what was commonly referred to after the war as "the Burnt District" of Rockingham County. However, it is unlikely that a site from the burning would require preservation in place or extraordinarily costly excavation.

## **Summary**

Table 3 presents the potential for sites from different time periods in each of the CBAs. The results are based on consideration of the previously recorded sites and structures in the study area, settlement patterns discussed for each period, and the nature of the terrain crossed by the alternatives. The previously recorded site types present in the three-mile project vicinity include precontact Native American artifact scatters, an indeterminate limestone cave site, a Late Archaic camp, a late eighteenth-century cobbler shop ruin, the site of a mid-eighteenth century structure, nineteenth- and/or twentieth-century domestic sites and structures, nineteenth-century mill dams and ruins, a Civil War skirmish site at Bridgewater, and a twentieth-century railroad abutment. Additional sites from all time periods have at least some potential of being encountered in unsurveyed areas.

Table 3: Potential for Encountering Sites from Specific Time Periods in Candidate Build Alternatives A and B.

<b>CBA</b>	<b>Paleoindian Period</b>	<b>Archaic Period</b>	<b>Woodland Period</b>	<b>Postcontact Period</b>
<b>A</b>	low	low to moderate	low to moderate	high
<b>B</b>	low	low to moderate	low to moderate	high

The potential for precontact Native American sites is highest at crossings of Cooks Creek, which occur in both CBAs, and somewhat lower in uplands areas away from this stream. The potential for large Paleoindian or Archaic base camps and Woodland villages is generally low given the lack of riverine settings or broad, well-drained floodplains. Smaller resource extraction sites are more likely to be encountered, but these would be unlikely to require costly excavation or preservation in place. Only limestone cave sites with Native American burials or intact Native American cultural deposits would potentially merit preservation in place or require extraordinarily costly excavation. However, the specific bedrock geology of the project area does not support the occurrence of karst features such as limestone caves or sinkholes.

There is potential for postcontact sites dating to as early as the eighteenth century. Postcontact sites will be most likely along historic roads including Route 257/42 and Route 704 or along Cooks Creek. Architectural survey results documenting the presence of nineteenth-century farms in both CBAs suggest that associated sites will be encountered. These however, will probably not affect decision making. Postcontact sites from the Civil War, related to short-term encampments or the 1864 burning of the Bridgewater vicinity, may also be present, but these would be unlikely to require costly excavation or merit preservation in place unless an earthwork or substantial intact features related to longer-term camps such as a headquarters or field hospital were present. In general, the majority of the potential postcontact site types are unlikely to affect decision making.

## ARCHAEOLOGICAL POTENTIAL BY CANDIDATE BUILD ALTERNATIVE

### Introduction

No previously recorded archaeological sites are located in or adjacent to the APEs for CBAs A and B. There are however, several nineteenth-century farms within the archaeological APEs for the CBAs (Figure 8). These were recorded during CCRs architectural survey for the current location study (Stewart and Lautzenheiser 2007) and may have associated archaeological components. Other architectural resources within the APEs are mid-twentieth-century houses with little potential for related archaeological components. Any sites related to the recorded architectural resources would be unlikely to merit extraordinarily costly excavation or preservation in place.

Table 4: Nineteenth-Century Farms Within, or Immediately Adjacent to, the Current APEs for CBAs A and B With Potential for Archaeological Components.

<b>Inventory Number</b>	<b>Name, Address</b>	<b>Date</b>	<b>Recommended NRHP Eligibility</b>	<b>CBA</b>
082-0316	Mary Miller House, 1436 Oakwood Dr. (Route 704)	1850	Potentially Eligible	<b>A</b>
082-5416	Amos Showalter Farm, 5098 John Wayland Hwy (Route 257/42)	1890	Previously Determined Not Eligible	<b>B</b>
082-5461	Frank Wenger Farm, 1224 Oakwood Dr. (Route 704)	c. 1880	Not Eligible	<b>B</b>

The review of archaeological potential by period suggests that while sites from any of the precontact and postcontact periods could be recorded during systematic archaeological survey of the CBAs, only one of the anticipated site categories would have the potential for extraordinarily costly excavation or preservation in place. The category, based on review of previously recorded resources and documented Civil War activity in the project vicinity, is Civil War-related sites such as battle or skirmish landscapes, earthworks, campsites, and field hospital or headquarters sites. The potential for limestone caves with intact Native American cultural deposits and/or human burials was also considered based on general environmental background for Rockingham County, the cultural context for the project area, and the presence of one archaeological cave within three miles of the project area. However, the specific geological background for the project area suggests that this site type would not be present.

The natural and cultural features of the two CBAs are nearly identical, especially since the two alternatives have overlapping APEs for the southern half of the corridors. For the area of divergence, there is little difference in the current land use or topography, and most of the project area consists of cleared agricultural fields with few areas of disturbance (see Figure 8). The major distinction between the two alternatives is the

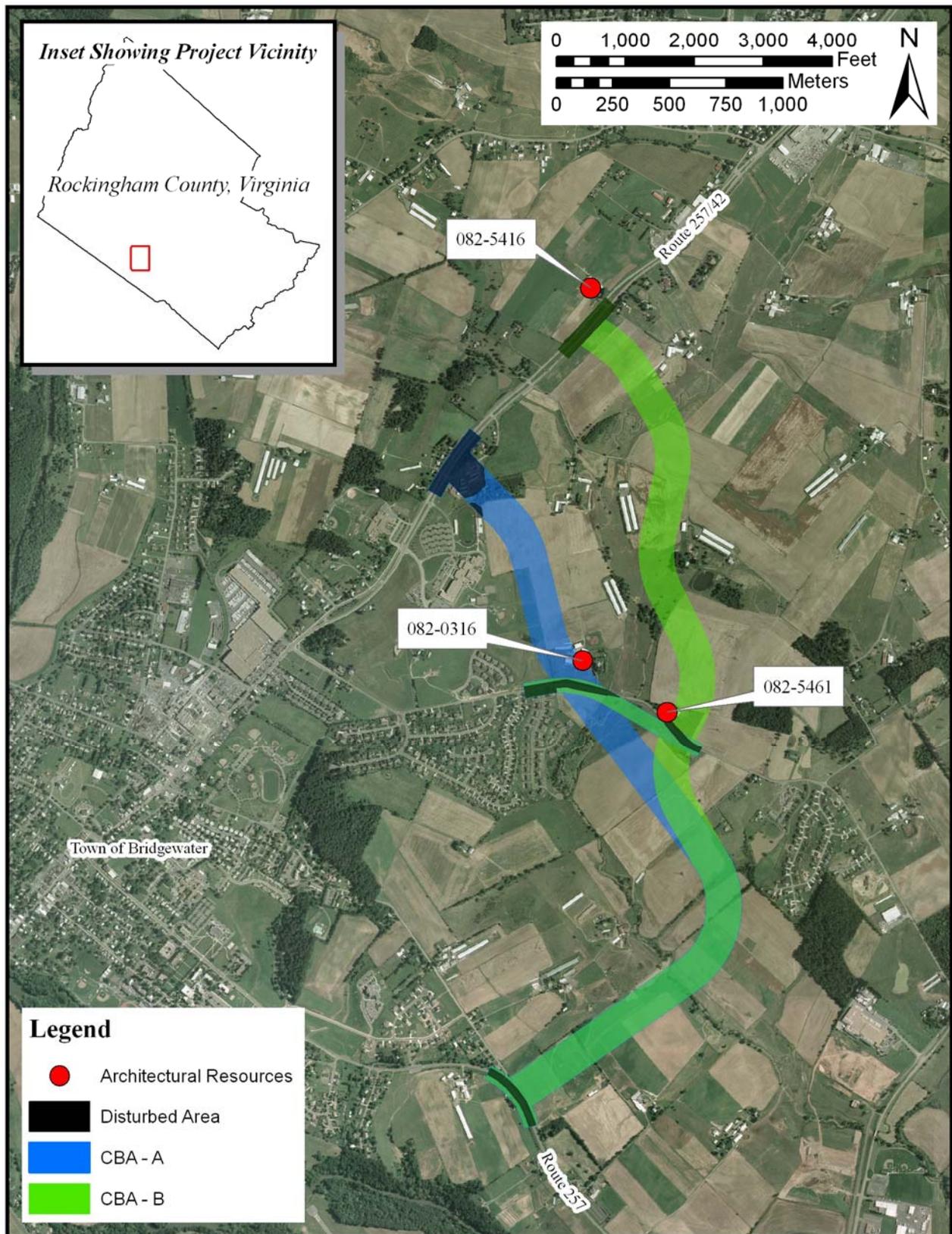


Figure 8: Location of Nineteenth-Century Farms With Potential for Archaeological Components and Disturbed Areas within the CBAs, Shown on a 2003 Aerial Image.

location of crossings of Cooks Creek. Both CBAs involve three creek crossings including the area where the bridge carrying Route 704 over Cooks Creek will be replaced (see Figure 2).

**Candidate Build Alternative A**

CBA A is approximately 12,000 ft. in length and involves an area of approximately 153.0 acres. Of the total area, a small number of acres (16.8 acres) are disturbed due to roads, residential development, or commercial properties. Most of the area covered by this alternative involves open farm fields, and there are only a few very small wooded sections. The topography features considerable relief with a number of different habitable landform types including ridges and terraces. Each of the three crossings of Cooks Creek occur in areas lacking broad floodplains or well-drained alluvial soils with potential for stratified sites or large precontact settlements.

One of the historic farms (VDHR #082-0316, the c. 1850 Mary Miller house) is located within this CBA, but any related archaeological component would be unlikely to affect decision making. This farm is located on a terrace above Cooks Creek and is accessed from Route 704. Other historic sites may be encountered within the alternative along the terrace or along Route 704. Similarly, historic sites could be identified along both Route 257 and Route 257/42 at the project termini. However, again, such sites would be unlikely to affect decision making.

Table 5 summarizes the characteristics of CBA A and the potential for archaeological sites that would affect location decisions. The potential for significant Civil War-related sites is low. During the 1864 skirmishing at Bridgewater, most of the action appears to have occurred within Bridgewater and its eastern limits. Items related to the Union camp east of the town may remain, but the probability of any subsurface features is low. The units camped on the Bridgewater side of the North River, being cavalry units tasked with picket duty, most probably did not fortify with rifle pits or other earthworks. Any that might have been constructed were probably confined to the river crossings. The possibility of encountering earthworks within this alternative is therefore low.

Table 5: Characteristics of CBAs A and B and Potential for Sites Affecting Decision Making.

<b>CBA</b>	<b>Corridor Length</b>	<b>Area Within CBA</b>	<b>Total Area of Developed/Disturbed Land Within CBA*</b>	<b>POTENTIAL FOR CIVIL WAR-RELATED SITES</b>
<b>A</b>	12,000 ft. (3,658 m)	153.0 acres (61.2 ha)	16.8 acres (6.7 ha)	LOW
<b>B</b>	13,500 ft. (4,115 m)	172.1 acres (68.8 ha)	12.0 acres (4.8 ha)	LOW

\*undeveloped land includes woodlands, parklands, farmlands with isolated houses, and sparsely inhabited crossroads while developed land includes paved areas and areas of commercial construction and residential neighborhoods or subdivisions; disturbed land refers to areas such as surface mines, borrow pits, or landfills

The fact that the Warm Springs Turnpike (Route 247/42) was a major transportation artery in the Valley and evidence confirming the extensive use of the road throughout the war increase the possibility that Civil War-related items might be found. However, even when the soldiers stopped to camp in the vicinity of Bridgewater, they did not remain for long and substantial (as opposed to ephemeral) features would be absent.

Some antebellum homes along this alternative may have fallen victim to the burning of the Bridgewater area in 1864. However, this punitive measure, carried out by the troops of General Philip Sheridan, would have left very little with respect to military-related archaeological remains. His troops would not have constructed earthworks, and they moved through very quickly without long-term camping.

### **Candidate Build Alternative B**

CBA B is approximately 13,500 ft in length and involves an area of approximately 172.1 acres, and 12.0 acres can be classified as disturbed due to roads, residential development, or commercial development. Like CBA A, the terrain includes cleared agricultural land with only a few small wooded patches. The topography, with considerable relief, is nearly identical to that of CBA A, and each of the three crossings of Cooks Creek occur in areas lacking a broad floodplain or well-drained alluvial soils with potential for stratified sites or large precontact settlements.

Two of the historic farms (VDHR #s 082-5416 and 082-5461, the c. 1890 Amos Showalter Farm and the c. 1880 Frank Wenger Farm) are located within this CBA, but any related archaeological component would be unlikely to affect decision making. The former is located along the north side of Route 257/42 and the latter is along Route 704 on a terrace overlooking Cooks Creek. Other historic sites may be encountered within this alternative along Route 257/42, along the terraces overlooking the Cooks Creek crossings, or along Route 704. Similarly, postcontact sites could be identified along Route 257 at the project termini. Such sites, however, would be unlikely to affect decision making.

Table 5 includes the summary of the characteristics of CBA B and the potential for sites affecting decision making. The potential for significant Civil War-related archaeological sites is low. The limiting factors are identical to those cited for CBA A, and there appears to be little difference between the corridors with respect to potential for sites that might affect decision making.

## SUMMARY

There are no previously recorded archaeological resources within the APEs for CBAs A and B, but information on previously recorded sites in the three-mile vicinity of the current project has provided considerable information on archaeological potential within the alternatives. Information on historic architectural resources from CCR's recent identification survey for the Bridgewater Bypass Location Study (Stewart and Lautzenheiser 2007) and CCR's archaeological assessment for the nearby Harrisonburg Southeast Connector project (Bamann and Hall 2005) also provided information on archaeological potential.

The previously recorded site types present in the three-mile project vicinity include precontact Native American artifact scatters, an indeterminate limestone cave site, a Late Archaic camp, a late eighteenth-century cobbler shop ruin, the site of a mid-eighteenth century structure, nineteenth- and/or twentieth-century domestic sites and structures, nineteenth-century mill dams and ruins, a Civil War skirmish site at Bridgewater, and a twentieth-century railroad abutment. Additional sites from all time periods have at least some potential of being encountered in unsurveyed areas, as summarized in Table 6.

The potential for precontact Native American sites is highest at crossings of Cooks Creek, which occur in both CBAs, and somewhat lower in uplands areas away from this stream. The potential for large Paleoindian or Archaic base camps and Woodland villages is generally low given the lack of riverine settings or broad, well-drained floodplains. Smaller resource extraction sites are more likely to be encountered, but these would be unlikely to require costly excavation or preservation in place. Only limestone cave sites with either Native American burials or intact Native American cultural deposits would potentially merit preservation or require extraordinarily costly excavation. However, the specific bedrock geology of the project area does not support the occurrence of karst features such as caves or sinkholes.

There is potential for postcontact sites dating to as early as the eighteenth century. Postcontact sites will be most likely along historic roads or along Cooks Creek. Architectural survey results documenting the presence of nineteenth-century farms in both CBAs suggests that associated sites will be encountered. These however, would probably not affect decision making. Postcontact sites from the Civil War, related to short-term encampments or General Sheridan's 1864 burning of the Bridgewater vicinity, may also be present, but these would be unlikely to require costly excavation or merit preservation in place. Only Civil War-related sites such as battle or skirmish landscapes, earthworks, campsites, and field hospital or headquarters sites would be likely to affect decision making. In general, the majority of the potential postcontact site types are unlikely to affect decision making.

Table 6: Summary of Archaeological Potential by CBA.

CBA	POTENTIAL FOR SITES BY PERIOD				POTENTIAL FOR SITES THAT COULD AFFECT DECISION MAKING: CIVIL WAR-RELATED SITES
	Paleoindian	Archaic	Woodland	Postcontact	
<b>A</b>	low	low to moderate	low to moderate	high	LOW
<b>B</b>	low	low to moderate	low to moderate	high	LOW

The natural and cultural features of the two CBAs are nearly identical, especially since the two alternatives have overlapping APEs for the southern half of the corridors. For the area of divergence, there is little difference in the current land use or topography, and most of the project area consists of cleared agricultural fields. The major distinction between the two alternatives is the location of crossings of Cooks Creek. However, none of the crossings involve areas of broad floodplains or well-drained alluvial soils, and the potential for significant sites is low.

Table 6 also summarizes the potential for sites affecting decision making. For both CBAs, the potential for significant Civil War-related sites is low, and there appears to be little difference between the corridors with respect to potential for sites that might affect decision making. The possibility of encountering battlefield landscapes, earthworks, long-term campsites, headquarters sites, or hospital sites is low for several reasons. First, the documented skirmishing in the area appears to have occurred within Bridgewater and its eastern limits, and related short-term camps and pickets are unlikely to have involved earthworks or subsurface features except along the North River outside the current APE. Second, although the Warm Springs Turnpike (Route 247/42) was a major transportation artery in the Valley, any military camps along the route were short-term and would be unlikely to result in intact archaeological features. Third, though some antebellum homes along the alternatives may have fallen victim to the burning of the Bridgewater vicinity in 1864, this punitive measure would have left very little with respect to military-related archaeological remains.

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