Gettysburg National Military Park

Little Round Top

Cultural Landscape Report, Treatment & Management Plan



FINAL March 2nd , 2012 National Park Service U.S. Department of the Interior Gettysburg, Pennsylvania

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Table of Contents

SE	CTION ONE: UNDERSTANDING LITTLE ROUND TO	JΡ	6.	Treatment Options	
1.	Introduction			Overview	6-1
Ι.	Purpose of the Project	1-7		Elements Common to All Options	6-1
	Scope of Work	1-8		How Many is Too Many?	6-6
	Location, Context & Setting	1-8		Circulation and Gathering Options	6-8
	_	1-0			
	Methodology	1-11	7.	Recommended Treatment Plan	
	Summary of Findings			Treatment Plan Selection	7-1
	Suggestions for Further Research	1-14		Recommendations	7-1
2.	Site History			Treatment Recommendations Matrix	7-6
۷.	Historic Narrative Summary	2-1			
	Pre Colonial Human History & Environment	2-1	AP	PENDIX	
	Colonial Settlement Patterns & Farmsteads	2-2 2-4		Bibliography	HR-A
		2-4 2-7		Graphics Index	HR-E
	The Second Day's Battle for Little Round Top	2-7		Key Graphics Index	HR-C
	The Gettysburg Battle-field Memorial Association	2-12		Traffic Report	HR-D
	& The Early Commemorative Era, 1864-1894	2-12			
	The Gettysburg National Park Commission/U.S. War	2 47	PL/	ANS & SECTIONS (by figure number)	
	Department Commemorative Era, 1895-1933	2-17		Period Plan: Pre-Civil War (1808-1862)	2.47
	Early National Park Service Improvements,	2.24		Period Sections: Pre-Civil War	2.48-9
	1933-circa 1950	2-24		Period Plan: The Battle of Gettysburg (1863)	2.50
	National Park Service Management & Mission 66			Period Plan: Gettysburg Battle-fied Memorial	
	Period, circa 1951-Present	2-26		Association (1864-1894)	2.5
	Period of Significance	2-28		Period Plan: Gettysburg National Park	
	Periods of Landscape Development	2-29		Commission (1895-1932)	2.5
_				Period Plan: Early National Park Service	
3.	Existing Conditions & Character Area Analysis			Improvements (1933-1950)	2.5
	Circulation	3-1		Paving & Circulation Map	3.127
	Furnishings & Signage	3-8		Paving & Circulation Map Enlargement	3.128
	Monuments	3-10		Furnishings, Signage & Structures Map	3.129
	Structures	3-30		Character Areas and Monuments Map	3.130
	Topography, Drainage & Geomorphology	3-33		Topography & Drainage Map	3.131
	Vegetation	3-37		Slope Analysis Map	3.132
	Views & Visual Relationships	3-41		Vegetation Map	3.133
	Character Areas	3-44		OAKOC Map	4.15
				OAKOC Map Enlargement	4.16
4.	Evaluation of Historic Integrity			Circulation and Gathering Option A	6.13
	Period of Significance and Landscape Classification	4-1		Circulation and Gathering Option B	6.15
	Understanding the OAKOC System	4-3		Circulation and Gathering Option C	6.17
	Landscape Descriptions by Battle Participants	4-4		Circulation and Gathering Option D	6.19
	Contributing Features by Character Area	4-13		Circulation and Gathering Existing Conditions	
				Summary	7.05
SE	CTION TWO: TREATMENT & MANAGEMENT OF			Circulation and Gathering Preferred Treatment	
LIT	TLE ROUND TOP			Plan	7.06
				Circulation and Gathering Preferred Treatment	, .00
5.	Treatment & Management Approach			Plan Enlargement	7.07
	Treatment Philosophy	5-1		=	, .0,
	Management Approach	5-4			

1. Introduction



Figure 1.01. View of Little Round Top (left) and Big Round Top (right) from the observation tower on Warfield Ridge (Photo by RHI, 2010). Refer to View 1 on the Context & Access Map (Figure 1.03).

Purpose of the Project: Provide solutions for overuse, overcrowding and landscape degradation and identify appropriate locations for visitor conveniences at Little Round Top, one of Gettysburg National Military Park's most heavily visited sites.

Purpose of the Project

"War is for the participants a test of character; it makes bad men worse and good men better." Few people understand this passage more than the men who bravely fought on the slopes of Little Round Top on July 2 and 3, 1863. Often considered one of the turning points in the Civil War, the human and military events that took place at Little Round Top during the Battle of Gettysburg are among the most poignant of the entire conflict.

1. Joshua L. Chamberlain, *The Passing of the Armies; An Account of the Final Campaign of the Army of the Potomac, Based Upon Personal Reminiscences of the Fifth Army Corps.* New York: G.P. Putnam's Sons, 1915. p. 386.

The incredible events that occurred here during the Battle of Gettysburg and the iconic views that directly contributed to its strategic, cultural and historic significance, make Little Round Top one of the most heavily visited sites within the Gettysburg National Military Park (GNMP). The enormous volume of visitors to Little Round Top far exceeds the present capacity of paths and roads that now exist, causing significant and recurring damage to the site's natural and cultural resources. Individuals and groups often stray from the prescribed pathway system onto a web of social trails and informal gathering spaces worn into the landscape by visitors wishing to make their own connections between monuments and key views throughout the site.

In the fall of 2010, the National Park Service (NPS) issued a Scope of Work "to provide a solution(s) for overuse, overcrowding and landscape degradation on and around the area known as Little Round Top and to identify appropriate locations for visitor conveniences including restrooms, parking, access and interpretive zones." The result of that Scope of Work is this document: a Cultural Landscape Report, Treatment and Management Plan for Little Round Top. Using initial treatment alternatives developed by the design team in 2005³ and following the Secretary of the Interior's Standards for the Treatment of Historic Properties, this report

^{2.} National Park Service, "Cultural Landscape Report: Little Round Top, Scope of Work for Architect & Engineer Services (SOW)." 30 June, 2010.



Figure 1.02. View of Little Round Top from the location of General Longstreet's Confederate Headquarters along Emmitsburg Road (Photo by RHI, 2010). Refer to View 2 in Figure 1.03 Context & Access Map.

documents the landscape characteristics, features, materials and qualities of Little Round Top, analyzes its development, evolution and use, evaluates its historic integrity and makes recommendations for an approach to its management and treatment.

Scope of Work

The focus of this Cultural Landscape Report (CLR) is the visual character, terrain, hydrology, natural and built features that comprises the area within the Gettysburg National Military Park known as Little Round Top. The design team's work has made full use of the extensive research already compiled by National Park Service historians, as well as key supplemental research conducted at the Adams County Historical Society. In addition to the narrative presented in the Site History section of this report (Chapter 2), the design team's historical research yielded an index of over 800 drawings, maps and photographs, searchable by date, landscape feature or author.

As part of the scope of work for this project, a full topographic survey of the project area was generated using aerial photogrammatery and field verification methods. In addition to providing updated information to the park's Geographic Information System (GIS) library, the survey data collected was used to prepare a base map on which the project's existing conditions were recorded (Chapter 3) and treatment recommendations were prepared (Chapter 7).

3. Rhodeside & Harwell, *Gettysburg National Military Park Little Round Top, Cultural Landscape Report, Treatment and Management Plan.* Prepared for the National Park Service, 2005.

This Cultural Landscape Report follows the guidelines for preparation of cultural landscape reports set forth by the National Park Service in A Guide to Cultural Landscape Reports: Contents, Process and Techniques,⁴ and is consequently divided into two parts. The first part (Chapters 1-4) presents a site history, existing conditions, analysis and evaluation of development of Little Round Top, including plans showing the evolution of the landscape over time. The second part (Chapters 5 and 7) proposes a treatment philosophy, management objectives and strategies, treatment options and a recommended treatment plan for the landscape of Little Round Top, all within the purview of the 1999 General Management Plan and Environmental Impact Statement and the 2004 Treatment Philosophy: The 1863 Landscape for Gettysburg National Military Park.

Location, Context & Setting

Despite its location in the extreme southeastern corner of the Gettysburg National Military Park, Little Round Top played a central role in the Battle of Gettysburg. The project site is bounded by Wheatfield Road on the north, Crawford Avenue on the west, Warren Avenue on the south and the National Park Service's property line on the east (see Figure 1.03 Context & Access Map). Sykes Avenue runs to the summit of Little Round Top from the north and south, effectively bisecting the northern portion of the project area, While Wright Avenue runs through the southern portion of the project area. The rocky outcrop of the Devil's Den lies in the shadow of Little Round Top, just to the southwest of its base, and the Wheatfield lies just to the northwest. Although surrounded on three sides by flat, fertile agricultural fields,

^{4.} Robert R. Page, Cathy A. Gilbert, Susan A. Dolan. *A Guide to Cultural Landscape Reports: Contents, Process and Techniques.* Washington, D.C.: U.S. Department of the Interior, 1998.

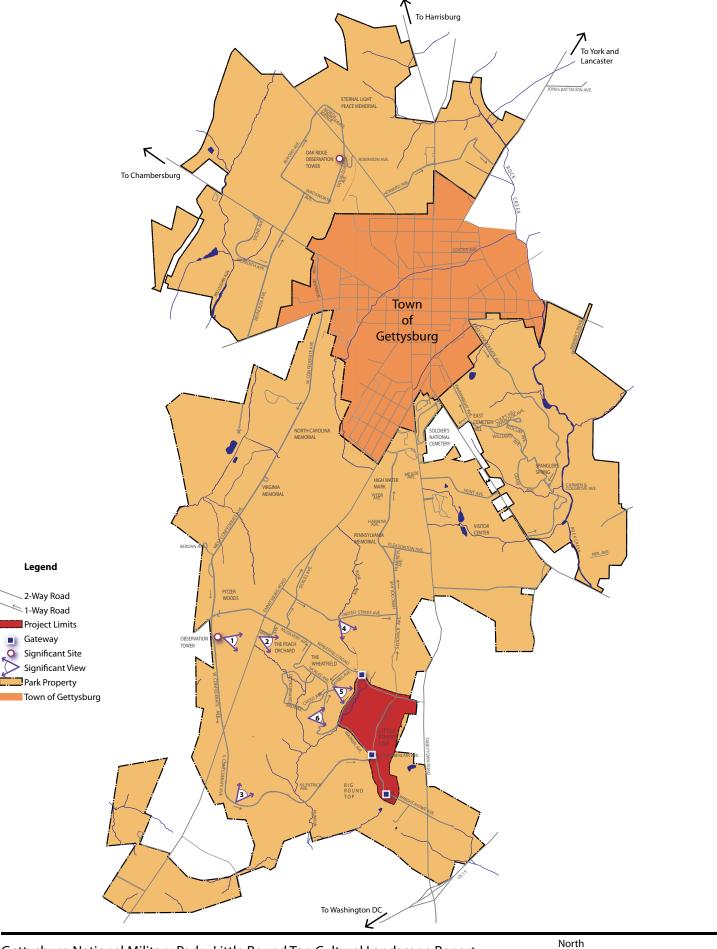




Figure 1.04. View of the Devil's Den and Little Round Top from South Confederate Avenue at Warfield Ridge (Photo by RHI, 2010). Refer to View 3 in Figure 1.03 Context & Access Map.



Figure 1.05. View of Little Round Top from the Trostle Farm site along United States Avenue. A non-historic bridge constructed for the park's equestrian trail system is in the foreground. (Photo by RHI, 2011). Refer to View 4 in Figure 1.03 Context & Access Map.

the terrain leading up to Little Round Top's summit is steep and rocky, densely forested to the south and east, and covered with low meadow grasses, groundcovers and shrubs to the north and west.

Although significantly smaller than its southern neighbor, Big Round Top, Little Round Top's exposed northern and western slopes are distinctly visible from as far as Mummasburg, Pennsylvania, nearly seven miles away. Visitors are provided a number of different views of the unique landform from a variety of historically significant vantage points as they travel along the park's commemorative avenues (Figures 1.02 and 1.04-1.07).

The observation tower on West Confederate Avenue (View 1 in Figure 1.03 Context & Access Map) provides visitors with the best explanation of Little Round Top's setting within the park. Interpretive panels at the viewing deck of the tower explain the various sites associated with the Battle of Gettysburg, providing context for Little Round Top's role



Figure 1.06. View across the Valley of Death to Little Round Top's western slope from Ayres Avenue. Big Round Top is visible in the background, to the right of Little Round Top (Photo by RHI, 2011). Refer to View 5 in Figure 1.03 Context & Access Map.



Figure 1.07. View of Little Round Top from the top of the Devil's Den (at right) (Photo by RHI, 2011). Refer to View 6 in Figure 1.03 Context & Access Map.

in the battle. The view from Emmitsburg Road (View 2) is similar to the view General Longstreet would have had from his Confederate Headquarters on Warfield Ridge at the time of the battle. As one emerges from the woods where South Confederate Avenue crosses over Warfield Ridge (View 3), Little Round Top is once again visible, this time from the perspective of charging Confederate troops who would eventually engage the Union soldiers defending the steep rocky slopes in front of them. Standing on the United States Avenue Bridge near the Trostle Farm site (View 4), one's view can follow Plum Run all the way to the base of Little Round Top. The view from Ayres Avenue atop Houck's Ridge (View 5) offers perhaps the most comprehensive depiction of Little Round Top's iconic western face and summit. From here, one can see from Little Round Top's base in the Valley of Death all the way up to the pathways that wind their way along the summit, including views of the site's breastworks, monuments and other contributing features. From the Devil's Den (View 6) one gets a true understanding of the enormity of the task facing Confederate troops as they prepared to charge up the western face of Little Round Top to the awaiting Union soldiers above.

For visitors taking the park's self guiding auto tour, the approach to Little Round Top is from the southwest, along the forested northern slope of Big Round Top and up to the summit via Sykes Avenue. Visitors also approach Little Round Top from its base along Crawford Avenue before turning onto Warren Avenue to climb the southern slope to the summit. This approach, which allows visitors to see Little Round Top as advancing Confederate troops would have, is popular among licensed tours operating via bus, bicycle, Segway or on foot. Wheatfield Road, the study area's northern boundary, serves as both a shortcut for commuters crossing between the primary routes of Emmitsburg Road (Business Route 15) to the west and Taneytown Road (PA 134) to the east and by visitors and licensed battlefield guided groups as a connector route to adjacent battlefields.

Methodology

The methodology for the historical research conducted for this report was to review, organize and synthesize sources of primary and secondary historical data related to Little Round Top's landscape. Emphasis was placed on those sources that lent themselves to study specific landscape features, particularly those that existed on Little Round Top in July 1863 and those that dated to the significant Commemorative Era of 1864 to 1938. To gain a full picture of the landscape's evolution, research was also undertaken into the site's pre-battle history, including review of prehistoric and settlement patterns. As well, a study was made of NPS management of the landscape from 1933 to present. To this end, the work effort was directed toward photographs, maps and drawings, supplemented by a review of published and unpublished written sources. Based on guidance from Gettysburg National Military Park (GNMP) staff historians and archivists, graphic data was thought most likely to facilitate the desired assessment of the authenticity of specific battle landscape features, such as breastworks, and the evolution of specific park features, such as avenues and pedestrian pathways within the Little Round Top study area.

The digitization and indexing of graphic data (historical photographs, maps and drawings) is one of the principal work products of the CLR. The majority of graphic data is from GNMP collections; it was reviewed on site and, when possible, scanned into archival digital format (TIFF format, 600 dpi). A spreadsheet index (Appendix HR-B) was prepared that identifies each digital file, the collection from which it came, a basic description, and the date of the photograph, map or drawing. To facilitate use, the index was further subdivided into a list of landscape features (monuments, avenues, breastworks, etc.) and vistas to and from Little Round Top. More than 800 photographs, maps and drawings were indexed, and of those about 200 were identified as "key" to an understanding of the cultural landscape of Little Round Top. The key graphics, presented in chronological order, are included

in Appendix HR-C of this report, and all 800 graphics are provided to the NPS in a seven-DVD set. The graphic data has been used to analyze the landscape at different time periods and to compare historic landscape features against existing ones. It has informed the preparation of period plans and the development of preservation treatment recommendations.

In addition to graphic data, research included a review of published sources and park research files for primary-source materials describing the battle terrain of 1863. The principal sources of this information are the Official Records of the Union and Confederate Armies, the Bachelder Papers and the GNMP Historians' Vertical Files. Written descriptions of the battle terrain have been compiled in two formats. The first compilation is a selection of descriptions organized chronologically from July 1863 to 1894. The second compilation is a selection of descriptions organized by the landscape areas shown on Sheet 22 of the park's cultural resources draft base map of battlefield conditions in 1863. The second compilation was prepared by Park Historian Kathy Georg Harrison prior to the commencement of this study. These compilations provide a source of firsthand observation and experience of landscape by officers and soldiers who participated in the battle or visitors to the battlefield in the months and years after the battle and are presented in the Evaluation of Integrity section of this report (Chapter 4). Most battle participants noted the rugged, rocky nature of Little Round Top and the topography that factored into the decision of Union officers to establish a defensive position on the summit. They also noted the obstacle that Little Round Top's terrain, from the marshes along Plum Run to the slopes littered with boulders, presented to the movement of troops in an orderly fashion considered desirable of the military tactics of the time. This is discussed in greater detail in the section of this report dealing with OAKOC military terrain analysis (Chapter 4) and for this reason has been for the most part left out of the historic landscape narrative (Chapter 2).

The GNMP Archives, as the largest repository of primary-source materials related to the management of the park, was central to understanding how Little Round Top evolved from a pre-battle vernacular rural landscape to post-battle military park landscape. Data was collected on the acquisition of property for the park, the laying out of avenues and pathways, the management of vegetation and vistas, the maintenance of field defenses and landscape, and the establishment and care of monuments on Little Round Top. This research assisted in defining periods of landscape development related to the management of Little Round Top by the Gettysburg Battle-field Memorial Association (1864-1893), the Gettysburg National Park Commission/U.S. War Department (1894-1933) and the NPS (1933-present).

Following the completion of the topographic survey, the design team conducted on-site investigations of the project area to compile an inventory of natural and man made site features and to document the condition of the landscape. Between November, 2010 and May, 2011, the design team spent several days on site cataloging and assessing the condition of the views, roads, paths, furnishings, signage, monuments, structures, vegetation, terrain, hydrology and geomorphology that exists on Little Round Top. The result of these field investigations is a collection of several annotated maps, notes, sketches and over 600 photographs which were used to prepare the Existing Conditions Inventory and Character Analysis (Chapter 3). Additionally, a study of the vehicular traffic patterns on Little Round Top was conducted during the park's peak season in order to better understand the circulation and parking needs on and around Little Round Top. The full findings of this study are included as Appendix HR-F of this report.

Once completed, the existing conditions and site inventory components of the CLR were synthesized to create a full understanding of the landscape classification and historic integrity of the extant features on Little Round Top. This process and its results are documented in the Evaluation of Integrity portion of the CLR (Chapter 4). In order to better understand the evolution of Little Round Top's landscape throughout its Period of Significance, the site's history was analyzed in terms of two eras: The Battle Era (1863) and the Commemorative Era (1864-1938). Although the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (1996) is readily applied to the analysis of the primarily man made features contributing to the Commemorative Era, it does not provide a meaningful process for examining those landscape elements that directly influenced the course of battle and defined the Battle Era of the Period of Significance. To that end, the National Park Service adopted the U.S. Army's OAKOC method of terrain analysis in order to interpret landscape features in a manner similar to the way a commanding officer would have during the Battle of Gettysburg. The OAKOC method is based on one's ability to understand five key military aspects of terrain, specifically:

- Observation and fields of fire
- Avenues of approach
- Key and decisive terrain
- Obstacles
- Cover and concealment.

Finally, the research, documentation, and analysis of Little Round Top's features were combined to inform treatment and management recommendations, plans, details and guidelines to aid the preservation of the cultural landscape of Little Round Top. The Recommended Treatment Plan is the synthesis of several treatment options generated by the design team in coordination with various offices within the Gettysburg National Military Park and represents an historically and ecologically sensitive approach to "restore, preserve and interpret the topographic feature known as Little Round Top." 5

^{5.} SOW, op cit.

Summary of Findings:

- The Cultural Landscape of Little Round Top is classified as an Historic Site.⁷
- The Period of Significance for Little Round Top is 1863-1938.
- The site retains a high degree of historic integrity.
- Built and natural elements contribute to Little Round Top's significance.
- Ten distinct character areas are defined.
- Treatment alternatives seek to return Little Round Top to its appearance during the Period of Significance.

Summary of Findings

The research conducted for this Cultural Landscape Report in no way captures the full breadth of scholarship related to Little Round Top. From Oliver Willcox Norton's classic The Attack and Defense of Little Round Top (1913) to Glenn W. LaFantasie's Twilight at Little Round Top (2007) probably no other single location on the battlefield has lent itself to such focused study, as well as speculation of what might have happened if the battle for Little Round Top had played out differently, especially if Confederate infantry units had been able to reach the summit before it was reinforced by Union infantry and artillery. Of particular note are the many histories that delve into the leadership qualities of the officers and the unit cohesion of the soldiers. The details of the action at each of the locations on Little Round Top are told well in other sources and have not been repeated in this report for reasons related to the defined scope of work and the many possible interpretations of the military significance of the battle.

Similar to other battlefield sites in the care of the National Park Service (NPS), the agency has adopted the philosophy of treating Gettysburg National Military Park's natural resources as cultural resources, recommending their preservation, conservation and rehabilitation to Battle Era conditions so visitors can fully comprehend the terrain, vegetation and other natural features that affected strategic decisions and drove the course of battle.⁶ Above and beyond the man made elements that contributed to the Battle of Gettysburg and

6. National Park Service. *General Management Plan and Environmental Impact Statement, Gettysburg National Military Park (GMP)*. Gettysburg, Pennsylvania: U.S. Department of the Interior, 1999. p.15

Subsequently were erected to commemorate it, the National Park Service is addressing the natural resources that make up the battlefield itself. Natural resources at Gettysburg are important not only for themselves, but for how they influenced the battle. In light of this landscape approach adopted by the NPS, this study interprets the landscape that influenced the events that took place on Little Round Top in July of 1863 and those elements and systems later created to commemorate them.

The key findings and recommendations of this report are summarized below.

- For the purposes of this Cultural Landscape Report, Little Round Top is classified within the category of Cultural Landscapes as an Historic Site, which is defined in the National Park Service's *Cultural Resource Management Guideline* as "a landscape significant for its association with a historic event, activity, or person."⁷
- The Period of Significance of Little Round Top is defined as 1863 to 1938. 1863 marks the year in which the Battle of Gettysburg took place and 1938 represents the 75th anniversary of the battle and the last time that the Blue and Gray held a reunion at the park. The Period of Significance is divided into two eras: the Battle Era (1863) and the Commemorative Era (1864-1938).
- Despite the loss of integrity of landscape features because of NPS-era changes in circulation patterns throughout the site, Little Round Top retains numerous authentic features from the Period of Significance and generally retains sufficient integrity to contribute to the site's significance as a whole.
- Elements contributing to Little Round Top's significance include roadway alignments; Battle Era fence locations, stone walls and breastworks; Commemorative Era signage, monuments and markers; natural features such as rock outcrops, steep slopes and stream corridors; distant panoramic views; trees, and limited vegetation.
- For the purposes of treatment and management, the study area can be understood as ten distinct character areas with distinct physical and visual definitions. While a number of site-wide management practices are recommended, lists of contributing features and individual treatment recommendations are organized in terms of these ten character areas.
- Treatment options for Little Round Top range from simply repairing and rehabilitating circulation, drainage and vegetative features on the site to the wholesale relocation of significant non-contributing site elements with the goal of returning Little Round Top's landscape setting to its appearance during the Period of Significance.

^{7.} National Park Service. *Director's Order #28: Cultural Resource Management*. June 11, 1998. www.nps.gov/applications/npspolicy/DOrders.cfm, Appendix A.



Figure 1.08. LIDAR topography mapping used to document the historic channels of the Willamette River near Corvallis, Oregon (Image by Oregon Department of Geology and Mineral Industries, 2010).

Suggestions for Further Research

Throughout the preparation of this Cultural Landscape Report, the design team maintained a list of items that fell beyond the purview of a Cultural Landscape Report, yet merited mention as opportunities for further research, with the goal of better understanding the evolution of the landscape on Little Round Top.

• Conduct LIDAR topography mapping at Little Round Top. LIDAR (Light Detection and Ranging) is an optical remote sensing technology used to measure distance (Figure 1.08). When mounted on an aircraft, downward-looking LIDAR instruments can be used to map topography and landscape features with an extremely high resolution. A National Aeronautics and Space Administration (NASA)/United States Geological Survey (USGS) collaboration known as the Experimental Advanced Airborn LIDAR (EAARL) system has yielded highly detailed topographic maps for several National Park Service properties along the east coast.8 This data has been used to monitor changes in vegetation, terrain and water levels as well as to discover potential archaeological sites. A LIDAR survey of Little

Round Top at a resolution of one foot or better would capture minor disturbances to terrain and physical features hidden beneath dense vegetation, possibly revealing new archaeological sites not picked up using conventional survey methods.

- Utilize ground-penetrating radar at Sykes Avenue. Although historic research has found references for the "obliteration" of the original Sykes Avenue and Chamberlain Avenue alignments, the design team found nothing to document the provenance of the retaining walls constructed along the Sykes Avenue original alignment. There is speculation amongst park historians that portions of the historic retaining walls remain beneath Skyes Avenue as it is currently aligned. Ground-penetrating radar is a noninvasive detection method that sends high-frequency radio waves into the ground (Figure 1.09). Whenever a wave bounces off of a buried object that has a different density from the materials around it, that variation is recorded. A ground-penetrating radar survey of Sykes Avenue could help determine whether the historic Sykes Avenue retaining walls are still extant without having to disturb the potentially archaeologically sensitive sites beneath the roadway.
- Determine historic location of logging traces. While several Battle Era accounts describe at least one logging trace along Little Round Top's eastern slopes used by Union soldiers to reach the summit, detailed narratives or illustrations have not been discovered to determine the exact location or condition of these avenues of approach during the battle. Further research should be combined with field investigation in an attempt to uncover the locations of these historic logging traces that allowed the Union Army to deploy troops and artillery to the summit of Little Round Top.

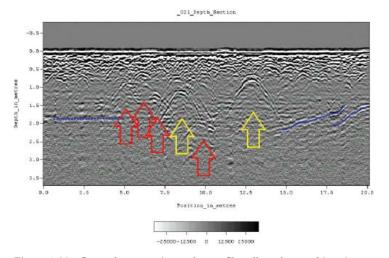


Figure 1.09. Ground-penetrating radar profile collected on an historic cemetery in Alabama. Yellow arrows indicate distinct reflections, probably associated with human burials. Red arrows indicate less distinct reflections, which may be associated with human burials. Blue lines are smaller deflections, possibly instances of bedrock or tree roots (Image by Tapatio, 2007).

^{8.} United States Geological Survey, *Lidar Topography Mapping in NPS Parks.* http://ngom.usgs.gov/dsp/mapping/lidar_topographic_mapping.html (2009).

2. Site History

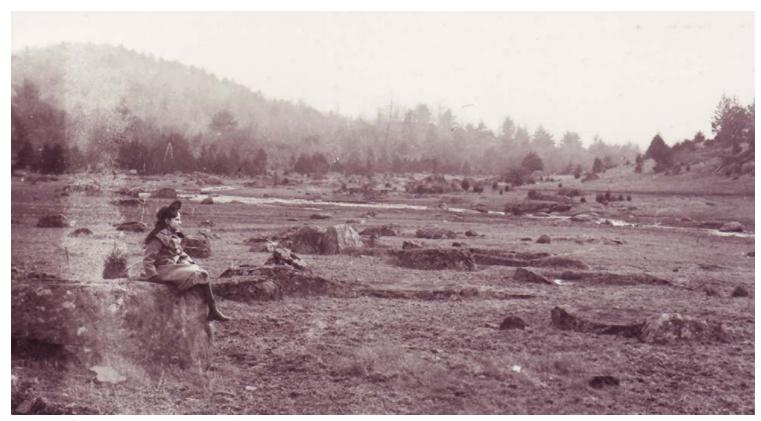


Figure 2.01. "At the Round Tops - the Valley of Death." Tipton stereoview #503, ca. 1882-1884 (GNMP Tipton Photographic Prints GETT 41136 #1954).

The purpose of this section of the Cultural Landscape Report (CLR) is to identify Little Round Top's historic periods of development (landscape contexts) and to build understanding of the characteristics that make its landscape historically and culturally significant. Historical research is the foundation for making educated recommendations for preservation treatments and facilitating ongoing maintenance, management, interpretation and compliance requirements.

Historic Narrative Summary

Little Round Top is among the dominant landscape features on the Gettysburg Battlefield, rising nearly 160 feet above the surrounding topography. Its height, combined with a rocky terrain of large, jumbled boulders, presents a striking contrast to the rolling fields and shallow ridges encountered throughout much of the battlefield. It is one of the most frequented areas of the military park, noted for its vistas as well as its association with one of the most dramatic and bloodiest turning points in the battle.

Little Round Top is geologically distinct from the lowland valley floors to its east and west being composed of a rock formation known as the York Haven diabase, an intrusive igneous rock that is more erosion resistant than the Gettysburg Formation sedimentary rocks forming the lowland valleys The diabase underlies the high ground position assumed by the Union Army on the second day of the battle from Culps Hill to the Round Tops. At the Round Tops the diabase pluton dome is particularly high and rounded. At the surface, the diabase formation is littered with boulders, which were to play an important role in providing cover for soldiers (Figure 2.01). The boulders are characteristic of the erosion pattern of the diabase, which breaks apart at the surface via frost wedging along the natural fracture lines in the otherwise waterresistant rock. Over time, this leaves the distinct rounded masses and columns of standing rocks and boulders. Frost wedging was especially active during the Pleistocene glacial epoch, which ended about 12,000 years ago.1

^{1.} U.S. Department of the Interior, National Park Service, Natural Resources Program Center, *Gettysburg National Military Park & Eisenhower National Historic Site Geologic Inventory Report* (March 2009): 24.

Periods of Development:

- Pre-Colonial History and Colonial Development prior to 1802
- Pre-Civil War 1802 to 1862
- Gettysburg Battle-field Memorial Association 1864 to 1894
- Gettysburg National Park Commission 1895 to 1933
- Early National Park Service Improvements 1933 to 1950
- National Park Service Management 1951 to Present

Pre-Colonial Human History & Environment

Some 56 prehistoric archeological sites are currently recorded within a four-mile radius of the study area, 24 of them within the park boundaries.² In Adams County as a whole, sites from all periods of prehistory are known, including Paleo-Indian and Early Archaic sites dating to before 6,500 B.C. A characteristic of the region is the extensive use of rhyolite as a lithic resource. There is a major quarry site for rhyolite at the Carbaugh Run Quarry [36-AD-30], about ten miles west-northwest of the study area. This was particularly heavily exploited in the Late Archaic Period (3,000-1,000 B.C.).³

In the immediate pre-Contact and Contact periods the Iroquoian Susquehannock tribe dominated the area, replacing or absorbing earlier cultural groups. The Susquehannock were effectively destroyed as a political and cultural entity by 1675, and by 1750, few Indians were still living in Adams County.⁴

Topographic Setting		# of sites	% of total
Stream Bench		10	19.2
Lower Slopes		9	17.3
Floodplain		8	15.4
Middle Slopes		7	13.5
Upland Flat		7	13.5
Hilltop		4	7.7
Hillslope		2	3.8
Ridgetop		2	3.8
Terrace		2	3.8
Upper Slopes		1	1.9
	Totals	52	100.0

Figure 2.02. Topographic analysis of prehistoric archaeological sites within a five mile radius of Little Round Top (Hunter Research, 2011).

The quality of the archeological data is variable. Several of the sites within the park have been located during cultural resource surveys undertaken in fulfillment of NPS responsibilities under the National Historic Preservation Act of 1966 (as amended), and fairly detailed information is available for these. There is by contrast little detailed information on the date and function of the majority of the remaining resources, which were in many cases reported by avocational archeologists. Locational and topographic data is, however, recorded for most sites, and this provides some predictive information with regard to the archeological potential of the Little Round Top study area itself.

None of the recorded archeological sites falls within the boundary of the study area.⁵ The nearest lie on the west side of Plum Run at the Slyder and Rose Farms, and at the Peach Orchard, about 0.75 miles west of the summit of Little Round Top. The Slyder Farmstead Site (GETT122.00) is an intact prehistoric site that produced a Late/Terminal Archaic Koens-Crispin projectile point. At Rose Field (GETT 090.00) surface collection survey recovered secondary reduction flakes and tools. The Peach Orchard Prehistoric Site (GETT 077.00) is a multi-component location with Middle and Late Archaic and Late Woodland materials. Together, these and other resources demonstrate that the study area vicinity was used throughout prehistory.

The focus of this aspect of the historical study has been to make an assessment of the potential of the Little Round Top study area to contain prehistoric archeological resources.

^{2.} Pennsylvania Archeological Site Survey (PASS) accessed through CRGIS January 2011; Jerry D. Fairchilde, *Overview and Assessment of the Archeological Resources of Gettysburg National Historical Park*, 1986 (draft on file GNMP); Jill Y. Halchin, *Overview and Assessment of Archeology and Archeological Resources at Gettysburg National Military Park*, 1998 (On file, GNMP); *Final General Management Plan and Environmental Impact Statement*, Volume 1 (June 1999): 172-173; Archeological Records on EISE at GNMP (Accessed December 10, 2010), Map of Archeological Sites.

^{3.} Jay F. Custer, *Prehistoric Cultures of Eastern Pennsylvania*, Pennsylvania Historical and Museum Commission, 1996: 198.

^{4.} Custer op. cit. Chapter 6.

^{5.} Testing at Sykes Avenue did not locate any prehistoric resources. See Michael Alterman, et al. *Archeological Survey for the Rehabilitation of Park Roads, Gettysburg National Historical Park, Pennsylvania*, 1991: 20.

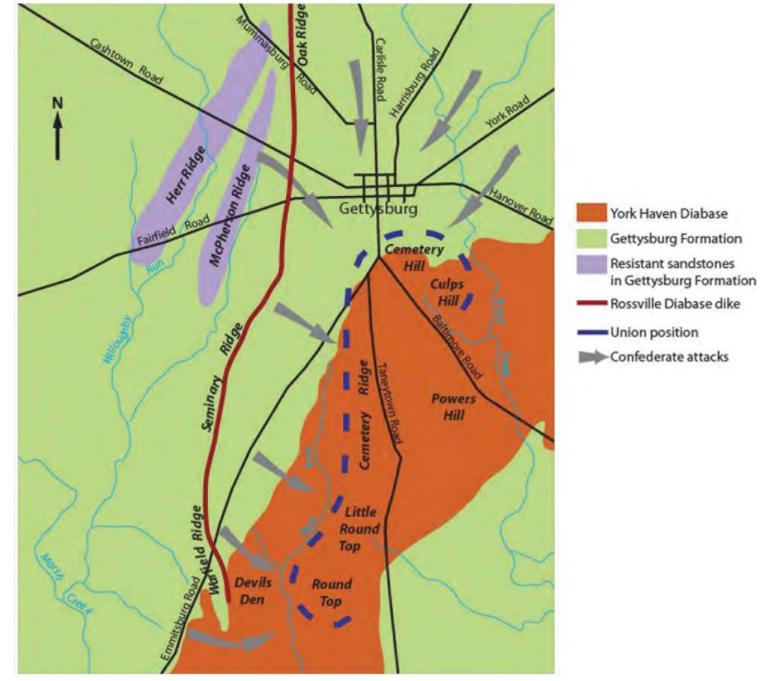


Figure 2.03. Generalized geologic map of the Gettysburg Battlefield (From National Park Service, Natural Resources Program Center, 2009).

In the absence of known resources, this must be done on a comparative basis, in this case by setting the topographic and soils information from Little Round Top against that of surrounding areas where sites have been located.

Figure 2.02 presents the topographic information from 52 of the 56 prehistoric sites recorded in a radius of five miles around Little Round Top, using the terminology of the Pennsylvania Archeological Site Survey (PASS). Almost 56% of the sites are in close relationship to flowing water, lying in Floodplain, Terrace, Stream Bench or Lower Slope locations. An additional 13.5% are on Upland Flats and another 13.5% on Middle Slopes. The remaining 17% are on steeper slopes or ridgetops.

The Little Round Top study area possesses most of these landforms (Figure 2.03). Plum Run has a very narrow floodplain (mapped as Hatboro Silt Loam) and no true terrace landform, but there is a clear Lower Slope component, mapped as Watchung Silt Loam (WbB), on the lower western slopes of Little Round Top and extending southeastwards on level ground along Warren Avenue.⁶ The eastern, wooded, slopes of Little Round Top below the steep ridge are classed here as upland Flats and Middle Slopes. The remainder is Ridgetop, Hilltop and steep Upper Slopes.

^{6.} http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx



Figure 2.04. View from Devil's Den to Little Round Top. The intersection of Crawford and Warren Avenues is in the foreground, with the Warren Avenue bridge across Plum Run at the extreme right. An area of moderate sensitivity for prehistoric archeological resources lies between Plum Run and the beginning of the steeper rock-strewn slopes. The 1893/4 – 1917 electric railroad (GETT 00035) ran from left to right across this landform in the area to the rear of the 40th New York Infantry monument (Photo by Hunter Research, 2010).

The majority of the Little Round Top study area is mapped as very bouldery Neshaminy channery silt loams (Na, Nd), with smaller areas of Mount Lucas silt loam (MdB) with slopes from 3 to as much as 45% (Figure 2.06). Both the nature of the soils, the steep slopes, distance to flowing water, absence of useful lithic raw materials, and the obstacles posed by the innumerable rocks and boulders, suggest that areas with these soils would have been unattractive for other than brief visits chiefly for foraging and hunting in the oak-chestnut-hickory climax forest. An exception may be portions of the Upland Flats and Middle Slopes on the west side of Little Round Top adjacent to springheads and streams.

In terms of prehistoric potential, the fairly level areas of Watchung silt loam on slightly elevated ground on the west side of Plum Run are however considered to have the highest potential to contain archeological resources. Some disturbance of any such earlier resources can be expected from the 1893 to 1917 electric railroad (GETT 00035; 36Ad282) (Figures 2.04-2.05).

Colonial Settlement Patterns and Farmsteads

Colonial settlement in Adams County dates to the late 1730s and 1740s and followed a treaty made in 1736 between the Iroquois tribes and the representatives of the sons of William Penn. The Penns reserved for themselves a 30,000-acre, rectangular tract of land, known as the Manor of Maske, in what today is south-central Adams County including the town of Gettysburg and most of the battlefield (Figure 2.07). The early settlers of the manor were mostly Scots-Irish who established subsistence farms, almost always locating the



Figure 2.05. View from Houck's Ridge towards the northern end of Little Round Top with Plum Run in the center foreground. The bed for the 1893/4 – 1917 electric railroad is clearly visible crossing from the lower right to the upper left. An area of moderate sensitivity for prehistoric archeological resources lies between Plum Run and the railroad bed. (Photo by Hunter Research, 2010).

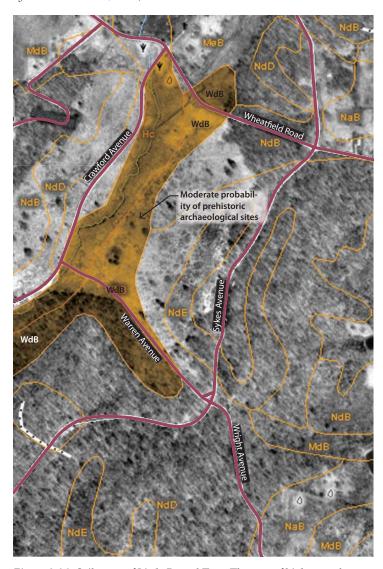


Figure 2.06. Soils map of Little Round Top. The area of highest probability for the existence of prehistoric archaeological sites is highlighted in orange (from NRCS Web Soil Survey, December, 2010).

farm nuclei near sources of fresh water and on soils that were arable. The slopes of Little Round Top met neither of these conditions, so its value was mostly, if not entirely, as wood lot, or once cleared possibly as pasture.⁷

Chains of title for early colonial farms in the vicinity of Little Round Top are complicated by the land history of the Manor of Maske. The settlers usually did not possess land warrants and were squatters resistant to recognizing the authority of the Penns. The American Revolution further cut off the settlers and their descendants from opportunities to patent their lands with the consequence that it was not until 1797 that an agreement was reached with the Penn heirs to divest of their proprietary rights to the established residents. Deeds issued after 1797 are consistent with a pattern of land use in which the slopes of Little Round Top were serving as the rear wood lots to farms located on flatter more arable lowland along Taneytown Road to the east. By 1808, Conrad Hoke had acquired a 187-acre tract that was inclusive of the approximately 40 acres that makes up the summit and slopes of Little Round Top. Most available evidence suggests that Hoke maintained Little Round Top as wood lot, a common practice on well-managed farms since farmers never wanted to be without a source of wood, used as fuel and construction material. By the early 19th century, the stands of hickory, chestnut and oak on Little Round Top had likely been harvested several times over as farmers took away select mature trees and allowed younger trees to grow to maturity.8

Between 1824 and 1863, the Hoke tract was sold several times and subdivided (see Figures 2.47-2.49 Pre-Civil War Period Plan). On the eve of the battle, the slopes of Little Round Top were held within three tracts: a 20-acre tract purchased by George Bushman in 1861 as part of his property on Taneytown Road, which included the northeast slope of Little Round Top; an 82-acre tract purchased by Jacob Weikert as part of his farm on Taneytown Road in 1840, which included the southeast slope of Little Round Top; and a 29-acre tract purchased by Ephraim Hanaway in 1858 including most of the north and west slope of Little Round Top to east of Plum Run. The tract of land including the marshy bottom land along Plum Run at the western foot of Little Round Top was attached to a 41-acre property owned by John Houck, who lived in town and likely used the valley and the ridge to its west (later known as Houck's Ridge) as pasture.9

Critical to the battle, the Bushman and Weikert tracts on the east slopes of Little Round Top were wooded in July 1863, but

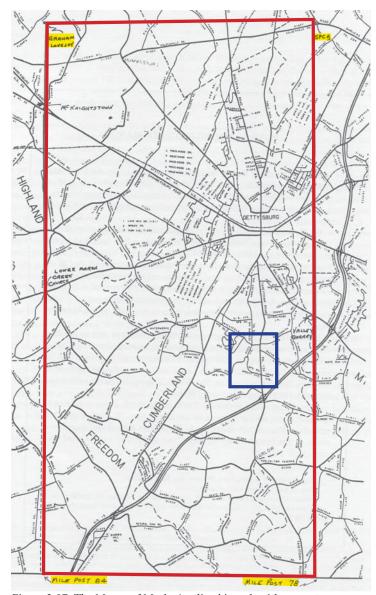


Figure 2.07. The Manor of Maske (outlined in red, with property corners highlighted in yellow) as shown on the street map of Adams County. The project area is outlined in blue (Source: The Manor of Maske: Its History and Individual Properties (Gettysburg, Pa.: Adams County Historical Society, 1992), p. 24).

the Hanaway tract had been mostly cleared of trees opening the view from the summit of Little Round Top over Houck's Ridge and the ground lying to its north and west (Figure 2.08). This unobstructed view is what made Little Round Top a desirable signal station for the Union Army as it took up its position south of Gettysburg on the evening of July 1st and early morning hours of July 2nd. A two-man signal detachment sent messages from Little Round Top reporting Confederate troop movements before noon on July 2nd. It is unknown

^{7.} The Manor of Maske: Its History and Individual Properties (Gettysburg, Pa.: Adams County Historical Society, 1992). 8. Ibid.

^{9.} GNMP, Research Notes on Title Searches and Deed Traces, 2010.

^{10.} Many reports after the battle described Union units passing through these woods to the rear of Little Round Top. See, Appendix HR-D: 26-29.

^{11.} Lt. Col. A.W. Cameron, A Communicator's Guide to the Gettysburg Campaign (February 24, 1989): 19-33.



Figure 2.08. View looking westward from Little Round Top toward Houcks Ridge and the Valley of Death. Photography by Brady, 1863 (GNMP General Historic Photographic Prints GETT 41135 #SF-2B-2090).

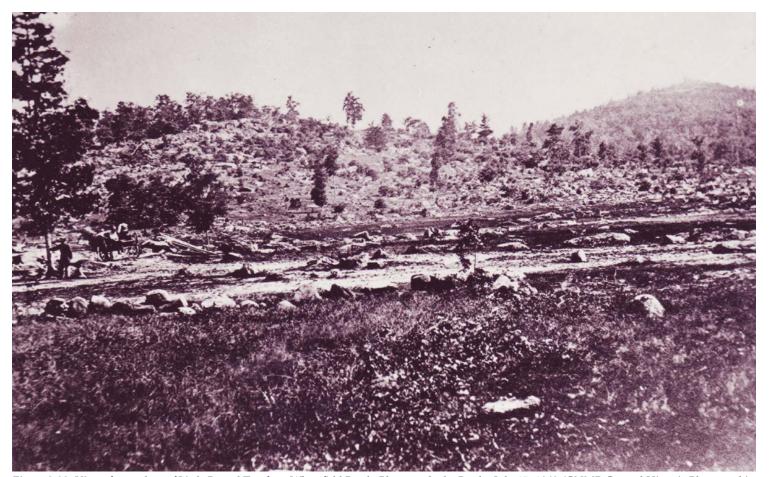


Figure 2.09. View of west slope of Little Round Top from Wheatfield Road. Photography by Brady, July 15, 1863 (GNMP General Historic Photographic Prints GETT 41135 #SF-2B-2087)).



Figure 2.10. View from Little Round Top showing Warren statue and looking over Valley of Death to the Wheatfield. Photograph by Tipton, ca. 1890 (GNMP Tipton Photographic Prints GETT 41136, #2444).



Figure 2.11. Stone breastworks on the summit of Little Round Top, July 6, 1863. Photograph by O'Sullivan (GNMP General Historic Photographic Prints GETT 41135 #SF-2B-2095).

exactly when Hanaway had cleared the west slope of Little Round Top. Many subsequent secondary sources have stated that the timber was cleared the year before the battle but this has not been confirmed by any known primary sources. Photographs taken after the battle show a considerable amount of secondary growth (various shrubs) as well as some scattered medium-size oaks and pines (Figure 2.09). It seems likely that substantial portions of the hill had been cleared some years prior to the battle, perhaps as early as 1858 when Hanaway acquired the land.¹²

The Second Day's Battle for Little Round Top

By late afternoon on July 2nd, 1863, the summit of Little Round Top was a surveillance point and had become the strategic geographic anchor, the so-called loop of the "fishhook," for the left flank of the Union line. It offered the last defense of the Taneytown Road and protected the Union Army's rear. The Bushman-Weikert farm woods on the east side of Little Round Top offered cover and a staging area for Union troops. At about 3:30 p.m., after a long march, 14,000 Confederate soldiers of the divisions of Major General Lafayette McLaws and Major General John B. Hood of Longstreet's Corps advanced westward from Warfield Ridge toward the Union's left flank held by the Third Corps under the command of Major General Daniel E. Sickles. The Third Corps had formed a line of battle from the Devil's Den northwest to the Peach Orchard and Emmitsburg Road in advance of Little Round Top. By 6 p.m., the Southern assault had crushed a section of the Third Corps' left flank and regiments of Law's Brigade of Hood's Division were advancing toward the summit of Little Round Top, the capture of which would have threatened the entire Union position. General Gouvernor K. Warren, who had joined the Signal Corps at Little Round Top's summit late that afternoon, is generally credited as being the first Union officer to perceive the threat of the advancing Confederates and take action to reinforce the summit. His heroism is commemorated by the Warren statue, placed in 1888 atop a boulder reported to be one from which he made his observations (Figure 2.10).13

^{12.} William A. Frassanito, Early Photography at Gettysburg (Gettysburg, Pa.: Thomas Publications, 1995): 242

^{13.} An anonymous post-war article commented that General Warren's chief position was on top of a butternut tree, which overlooked the other trees on top of the hill. Warren was deceased by the time the statue was erected. The tree was also near death having been ravaged by relic seekers prying shrapnel and bullets from it. Quoted from *Meehan's Monthly for March* in *The Gettysburg Compiler*, March 15, 1892.

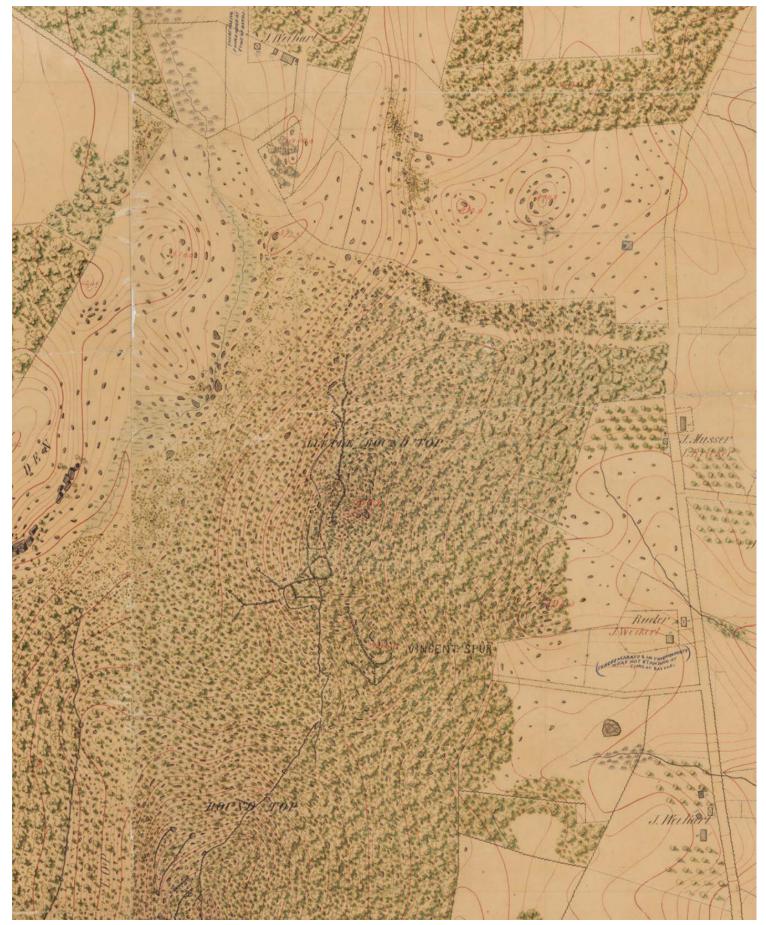


Figure 2.12. Detail of Little Round Top study area from Warren's Map of the Battle Field of Gettysburg, 1868-69 (GNMP General Maps Collection GETT 41137).

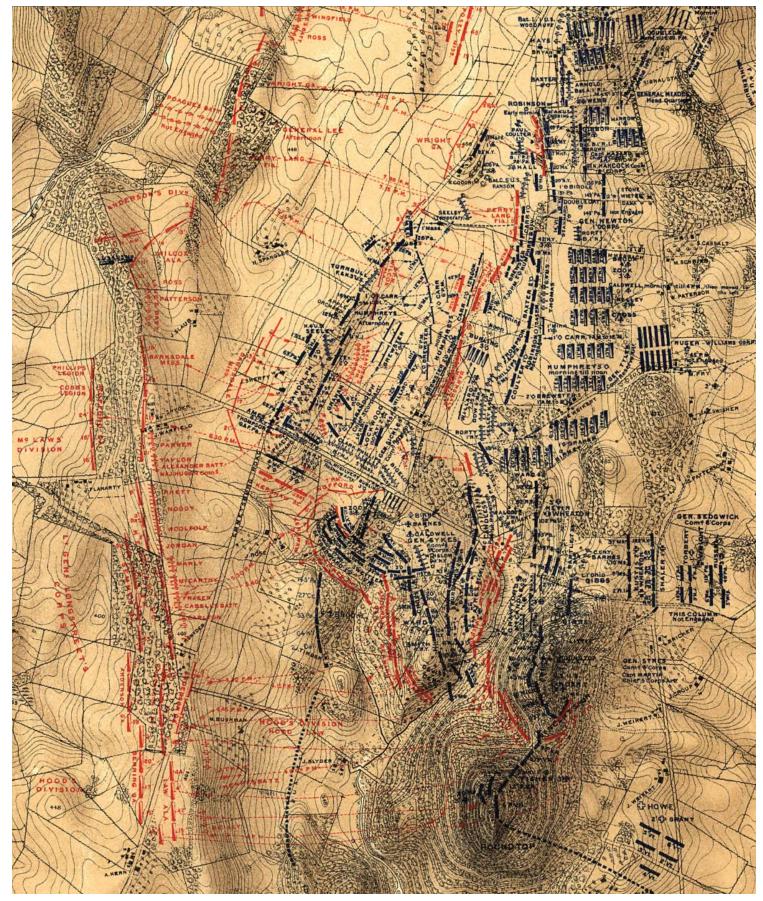


Figure 2.13. Detail of Little Round Top study area on Day Two of the Battle of Gettysburg from John B. Bachelder's Map of the Battle of Gettysburg, 1876 (GNMP General Maps Collection GETT 41137).

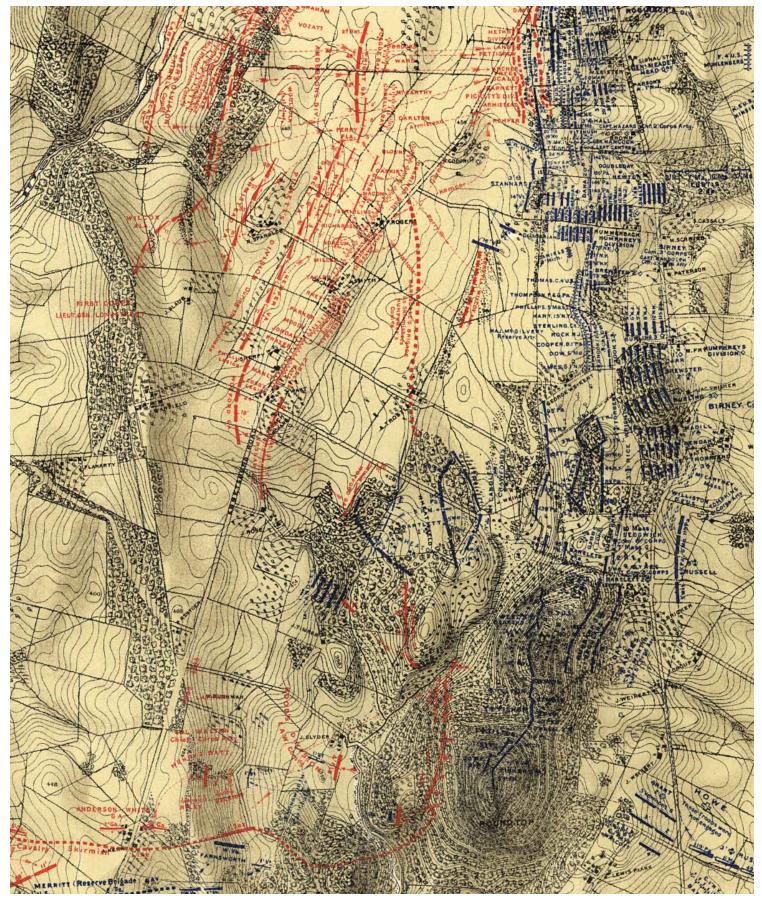


Figure 2.14. Detail of Little Round Top study area on Day Three of the Battle of Gettysburg from John B. Bachelder's Map of the Battle of Gettysburg, 1876 (GNMP General Maps Collection GETT 41137).



Figure 2.15. View to Seminary Ridge from Little Round Top Summit, ca. 1870-1880. Unknown Photographer (GNMP General Historic Photographic Prints GETT 41135 #SF-21P-1299).

On the upper slopes of Little Round Top, the Confederates were met by the Union reinforcements, principally from Vincent's and Weed's Brigades of the Fifth Corps, who rushed into position from the north and east of Little Round Top by way of the cover provided by its eastern wooded slopes. Hazlett's Battery also reached the summit, likely making use of a rough "wood road," perhaps used for lumbering, on the northeast slope. 14 The defense of Little Round Top was aided materially by the broken, rocky and rough summit, which offered formidable defensive cover that one Confederate officer called "the strongest natural position I ever saw." 15 Another observed, "The ground was difficult – rocks in many places presenting, by their precipitous sides, insurmountable obstacles."16 (Figure 2.15) During this fighting, the 20th Maine and the 15th Alabama clashed on Vincent Spur (a ridge on the south slope of Little Round Top overlooking the swale between the two Round Tops), a fight that ended

with Colonel Joshua Chamberlain's famous order to the 20th Maine to "refuse the line" followed by a bayonet charge that swept away the 15th Alabama¹⁷. The valiant Colonel Vincent, General Weed, Colonel O'Rourke and Lieutenant Hazlett lost their lives to mortal wounds. The Union regiments successfully repulsed the weary Confederates, and as night fell, advanced against them, the 20th Maine charging across the swale to secure Big Round Top, and General Samuel W. Crawford's Pennsylvania Reserves attacking across Plum Run (the Valley of Death). At twilight, the Confederates withdrew to defensive positions beyond the slopes of Little Round Top among the boulders in the Devil's Den and the Slaughter Pen, the woods at the western base of Big Round Top, and the tree line west of Houck's Ridge. That night, Union forces dug in on Little Round Top strengthening the natural defenses with lines of stone breastworks (see Figure 2.50 The Battle of Gettysburg Period Plan).

^{14.} Although mention of this wood road is made in several first-hand accounts of the battle, its exact location was never documented. See Appendix HR-D: 23.

^{15.} U.S. War Department, *The War of the Rebellion: A Compilation of Official Records of the Union and Confederate Armies (OR)*, Series I, Volume 27, Part 2 (Capt. George Hillyer, Ninth Georgia), p. 399. 16. *OR* (Brig. Gen. Henry L. Benning, Benning's Georgia Brigade), p. 415.

^{17.} Part of the left wing of the 20th Maine pursued elements of the 15th Alabama into the Jacob Weikert lane leading to the Taneytown road, south of Weikert's farm buildings, where they were killed, wounded or captured. Ellis Spear to Mildred, March 14, 1910, in William B. Styple, ed, With a Flash of His Sword: The Writings of Major Holman S. Melcher 20th Maine Infantry (Kerney, New Jersey: Bell Grove Publishing, 1994), pp. 300-301; Thomas A. Desjardin, Stand Firm Ye Boys From Maine (Gettysburg, Pennsylvania: Thomas Publications, 1995), pp. 70-73.

On July 3rd, Little Round Top was mostly the site of desultory sniper fire while the climax of the Battle of Gettysburg occurred against the Union Army's center on Cemetery Ridge and right on Culp's Hill, the Confederates choosing not to renew the assault on the Union far left and the strong defensive position on Little Round Top. Union soldiers holding their positions on Little Round Top's summit later spoke in awe of watching the panorama of battle unfold between Cemetery and Seminary ridges to the north. This view is still one of the highlights of any trip to the military park.¹⁸

After the battle, Little Round Top quickly found a place of honor within the narrative of the Battle of Gettysburg, particularly as seen through Union eyes (Figures 2.13-2.14). From a physiographic standpoint, the terrain of the hill was not greatly changed by the battle with the exception of the dismantling of several stone walls that delineated properties to create stone breastworks stacked rapidly by Union forces immediately before and during battle (Figure 2.11). There was, of course, the inevitable destruction of farm fences and the trampling and cutting down of vegetation that followed a fierce battle. For months, the ground was littered with the detritus of war – knapsacks, uniforms, abandoned or broken equipment, ammunition boxes, and the like. Corpses were the most grim of remains. Some burials were made on the southeast and northwest slopes of Little Round Top but later relocated to the Soldiers' National Cemetery. The majority of artifacts related to the battle were eventually removed by the army or collected by relic hunters. Archeological studies conducted in the mid-1990s in advance of an expansion to the east side of the Sykes Avenue parking lot found thin soils of less than one foot depth and no evidence of archeological materials, nonetheless, the entire study area should still be treated as archaeologically sensitive.19

18. The strategy and battle movements are covered in many sources. The classic monograph on Little Round Top is Oliver Willcox Norton, *The Attack and Defense of Little Round Top, Gettysburg, July 2, 1863* (New York: The Neal Publishing Company, 1913). A more modern perspective on the battle is Glenn W. LaFantasie, *Twilight at Little Round Top: July 2 – The Tide Turns at Gettysburg* (New York: Random House, 2007). Garry E. Adelman's booklet, *The Myth of Little Round Top, Gettysburg, PA* (Gettysburg, Pa.: Thomas Publications, 2003), offers an interesting historiographic analysis of the military significance of Little Round Top, particularly how recent generations have tended to inflate Little Round Top's significance to the final outcome of the Civil War. Just how much of a view was to be gained from Little Round Top is debatable. The battleground would have been covered in smoke. There was also considerable danger from sniper fire to any exposed position on Little Round Top.

19. Typescript of letter of F.M. Stoke to J.M. Stoke, October 26, 1863 is one of the more descriptive post-battle letters. It describes the fields toward Round Top as "tramped like the road, no fences anywhere." Letter on file in GNMP Historian's Vertical Files, Folder #131; Gregory A. Coco, *A Strange and Blighted Land, Gettysburg: The Aftermath of a Battle* (Gettysburg, Pa.: Thomas Publications, 1995): 35-37.

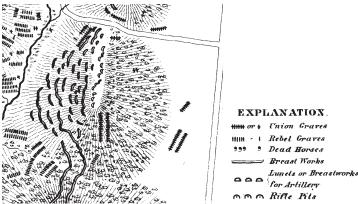


Figure 2.16. Detail of study area. S.G. Elliott, Elliott's Map of the Battle of Gettysburg, Pennsylvania (*Philadelphia*, 1864. GNMP General Maps Collection GETT 41137).

The Gettysburg Battle-field Memorial Association & the Early Commemorative Era, 1864-1894

Remarkably, stewardship of Little Round Top and its evolution into a commemorative landscape began soon after the battle, meaning that there was little chance for post-battle property owners to alter the landscape in significant ways. The Gettysburg Battle-field Memorial Association (GBMA) acquired the 29-acre Hanaway tract covering most of the north and west slope of Little Round Top on April 4th, 1864 (nine months after the battle and a year before the end of the Civil War). It was among the first 70 acres acquired for preservation within the military park. The two earliest commemorative markers in the park – the Strong Vincent boulder and the Weed-Hazlett boulder – were inscribed on Little Round Top at about this time. The GBMA was the visionary creation of David McConaughy, a Gettysburg lawyer, who believed that there could be no greater memorial to the triumphs of the Union Army than the battlefield itself. In April 1864, the Pennsylvania legislature granted the GBMA a charter authorizing it to acquire land occupied by the Union Army. In 1882, with the purchase of the Bushman-Weikert wood parcels on the east slope of Little Round Top, the GBMA had acquired most of the land in the area of Little Round Top where battle action had occurred (see Figure 2.51 Gettysburg Battle-field Memorial Association Period Plan). The GBMA would eventually amass over 500 acres before turning the property over to the federal government in 1896.20

20. Adams County Deed Book KK, p. 156,Ephraim and Maria Hanaway to David McConaughy and Thomas D. Carson in trust for the GBMA, April 4, 1864. As noted in property title and deed traces notebook, on file at the GNMP, Historians' Office; Barbara L. Platt, "This Is Holy Ground", A History of the Gettysburg Battlefield (Gettysburg, Pa.: The Gettysburg Battlefield Foundation, 2001, revised 2009): 4. Some parcels along the edges of the study area were not acquired for another twenty years. The Tipton tract encompassing the Devil's Den and the area along Plum Run near the intersection of Warren and Crawford Avenues was not acquired by the federal government until 1901.



Figure 2.17. 16th Michigan Infantry Monument, looking west from original location with rebuilt stone breastworks behind it. Photograph by Tipton, 1889 (GNMP Tipton Photographic Prints GETT 41136 #OS-5036).

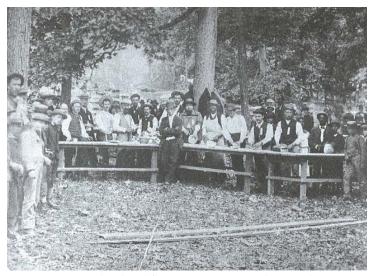


Figure 2.18. Crowd gathered for an ox roast at Round Top Park, 1884. (Adams County Historical Society).



Figure 2.19. View of Little Round Top from Devil's Den, ca. 1896. Note the electric trolley line in the background. Photograph by Tipton (GNMP General Historic Photographic Prints GETT 41135 #OS-2B-2175).

Despite this promising beginning, the GBMA was before long working against a variety of threats to its stated goal of holding "in perpetuity the most interesting portions of the illustrious Battlefield that we may retain them in the actual form & condition they were in during the battle."21 On Little Round Top field defenses eroded, vegetation took over, and tourists wore unwanted paths and took home relics. The preservation challenges of the late 19th century were strikingly similar to those of today, although approached with fewer resources and different attitudes toward revealing battle-era appearances. There was also a vast difference in the number of visitors between then and now. The stone breastworks on Little Round Top, for example, were restacked between 1882 and 1887, and the rehabilitated walls presented a much more refined appearance than the original battle works, and individual soldier barricades that peppered the boulders on the face of Little Round Top (Figure 2.17).22

Around the edges of Little Round Top, the landscape was changing in response to the growth in tourism. In 1884, the Gettysburg and Harrisburg Railway built a spur from Gettysburg to the rear (northeast) of Little Round Top where it terminated at Round Top Park, a popular picnic area, located just south of Wheatfield Road west of its intersection with Taneytown Road (Figure 2.18). Acts of vandalism, including the painting of advertisements on boulders, were noted and controversy simmered over the appropriateness of a recreational area in such proximity to the hallowed ground of Little Round Top. In 1885, John Rosensteel opened the Round Top Museum displaying relics from the battlefield in a building located northeast of the intersection of Wheatfield Road and Sedgwick Avenue at the foot of the north slope of Little Round Top. David Weikert, a disabled veteran operated a much smaller relic shop, with GBMA permission, between the two Round Tops just west of the future site of the 38th Pennsylvania Monument (Figure 2.28). About the same time, Gettysburg photographer William Tipton purchased land in the Devil's Den area opening a restaurant, refreshment stand and photography studio known as Tipton Park (Figure 2.20).²³

In April 1893, construction began on the Gettysburg Electric Railway, a tourist trolley line that cut through Devil's Den, the Valley of Death and Cemetery Ridge (Figures 2.19-2.22). The grading damaged sensitive areas, including a swath of right-of-way that ran along the GBMA's property at the western foot of Little Round Top. The trolley line cut an angle across the Valley of Death from Plum Run east of Devil's Den to near the present-day intersection of Wheatfield Road and Sykes Avenue. The trolley marked an important moment in

^{21.} Letter of David McConaughy to Andrew Curtin (Governor of Pennsylvania), July 25, 1863, as quoted in Platt (2009): 3.
22. Kathleen Georg Harrison, *Gettysburg National Military Park/Sol*

^{22.} Kathleen Georg Harrison, *Gettysburg National Military Park/Soldiers' National Cemetery, National Register of Historic Places Registration Form,* Revised November 4, 2003: Section 8: 24.

^{23.} Adelman (2001): 49-50; Platt (2009): 13-20.

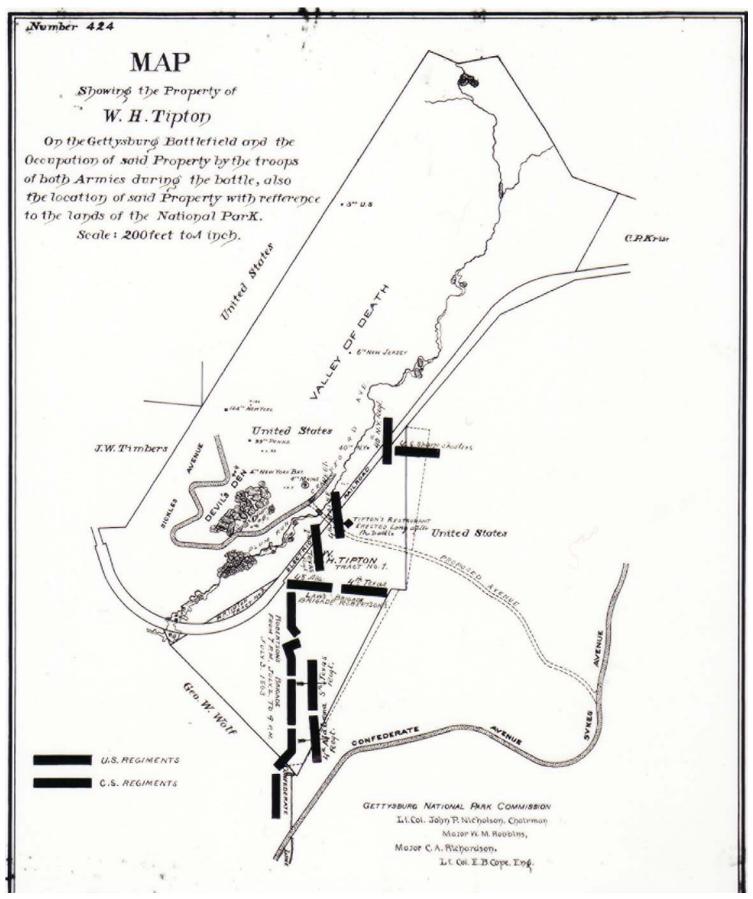


Figure 2.20. Map showing the property of W.H. Tipton on the Gettysburg Battlefield and the Occupation of Said Property by the troops of both armies during the battle, circa 1896-1900. Note the location of the railway and Tipton Park, which were intruding on the original landscape of Little Round Top (GNMP General Maps Collection GETT 41137 #NMP-GET-8424).

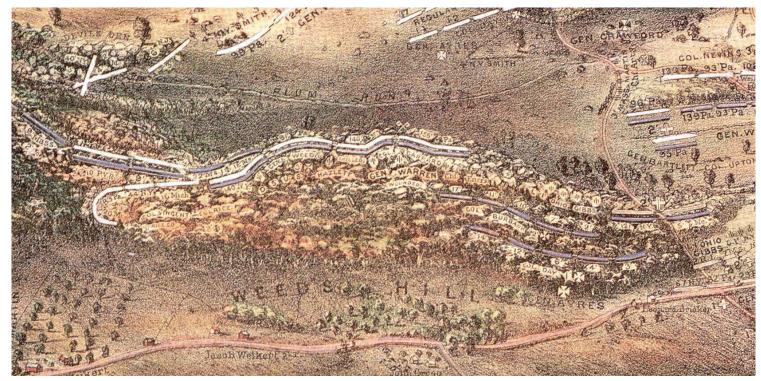


Figure 2.21. Enlarged section of Little Round Top by John B. Bachelder. Watercolor, 1864. (GNMP General Historic Photographic Prints GETT 41135 #SF-121-0218).



Figure 2.22. Photograph of the north slope of Little Round Top showing contours that mark the former location of the Gettysburg Electric Railway (Hunter Research, 2010).

the military park's history; it galvanized public opposition to development within the battlefield and was a factor in motivating Congress to establish the Gettysburg National Park Commission (Commission) in 1893.²⁴

The GBMA also promoted commemorative activities and the placement of memorials. Veterans began to show a strong interest in placing memorials beginning in the late 1870s and 1880s. The GBMA had a close working relationship with

Union veterans and veterans groups such as the Grand Army of the Republic and regimental associations. Fortunately, the GBMA was guided in memorial efforts by a relatively accurate knowledge of the Union positions during the battle. John Bachelder, an amateur historian who was to become a leading figure in the preservation of the battlefield and a commissioner, visited Gettysburg in 1863 and spent over three months interviewing battle participants and studying and mapping the land. In 1864, he published an isometric map that was well-received by high ranking Union officers.

However, it is another set of maps that is widely regarded as the most accurate of the maps created after the battle. These are the topographic maps made under the direction of General Warren, a West Point trained engineer, in 1868-69 (Figure 2.12). The Warren maps portrayed the woods, fields, fence lines, streams, and topography of the battlefield in a fashion as precisely as could be achieved using the tools available at the time. The Warren maps are still used as the primary source for locating the original breastworks, fence lines, wood lots and other battle-era landscape features at Little Round Top and throughout the park. Warren's maps were available in time for a reunion of Union officers at Gettysburg in August 1869. The principal subject of the gathering was making field views to drive stakes in the ground marking the precise flank positions of the units in the Union battle line. Later these stakes were replaced by the stone flank markers found in the park today. 25

^{25.} GBMA, Report of the Reunion of Officers of the Army of the Potomac, August 23-28, 1869. Typescript on file, Historians' Vertical File #234, GNMP.



Figure 2.23. Topographic Map of Gettysburg Battlefield, Sheet E3, circa 1895. Prepared by the Commission in the mid-1890s, this topographic map shows the location of monuments and alignment of the new Sykes Avenue, as well as other roadways in the vicinity of the Round Tops that were in existence prior to the avenue improvements (GNMP General Maps Collection GETT 41137 #NMP-GET-8067).



Figure 2.24. General Strong Vincent Tablet. Stereoview by Tipton, ca. 1879-1880 (GNMP Tipton Photographic Prints GETT 41136 #1874).

Placed atop a boulder at the southern tip of Little Round Top in 1878, the Gen. Strong Vincent Marker is regarded as the battlefield's first documented monument outside of the Soldiers' National Cemetery (Figure 2.24). It is a simple tablet bearing the Maltese cross symbol of the Fifth Corps and an inscription to Vincent. Whether this monument or an older inscription carved into a boulder north of the 44th and 12th New York Monument actually marks the spot where Vincent was mortally wounded has been a matter of debate for more than a century.

The GBMA's policy was to place monuments funded and erected by the Union volunteer regiments only within the area a unit occupied in the battle line, normally at the center of the line between the right and left flank markers. The period from 1887 to 1894 was the most active period for the erection of regimental monuments on the summit and slopes of Little Round Top with placement of the 20th Maine, 20th Maine Company B, the 38th Infantry, the 83rd Pennsylvania, 16th Michigan Sharpshooters, 44th New York (Figure 2.25), 140th New York, 91st Pennsylvania, 146th New York, 155th Pennsylvania, Battery L 1st Ohio, 98th Pennsylvania, and 121st New York. The 44th New York Monument, erected in 1893, is the largest regimental monument on the battlefield. It is a symbolic 44-feet high and incorporates a spiral staircase and viewing platform within its castle-like design.²⁶



Figure 2.25. 44th New York Monument. Photograph by Tipton, ca. 1893-1894 (GNMP General Historic Photographic Prints GETT 41135 #SF-16M-1231).

The Gettysburg National Park Commission/U.S. War Department Commemorative Era, 1895-1933

The transition to Commission management from 1894 to 1895 initiated an active phase in the military park's landscape development (Figure 2.23). Improvements were made using a standardized approach to the construction of avenues, the erection of cast-bronze and iron markers and tablets, and the placement of fencing. This standardized approach had the effect of unifying the landscape, allowing visitors to know when they had entered or left the military park, while maintaining the essential character of the battlefield.

The Commission, backed by federal finances and overseen by the U.S. War Department, was charged with surveying and acquiring the battle lines of both armies (the GBMA's charter was for acquisition of Union positions only). This expansion in the park was representative of the nation's growing desire for reconciliation and a practical response to the realization among the Union veterans active in battlefield preservation that Gettysburg could not be properly understood without consideration of the land that had been occupied by the Confederate Army.

^{26.} The 44th New York Monument was modified in 1900 to also commemorate the 12th New York.

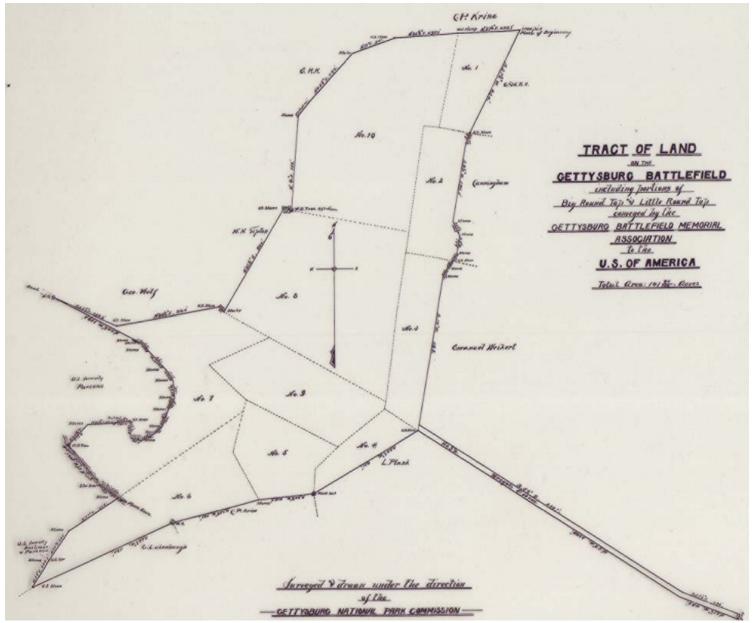


Figure 2.26. Tract of land on the Gettysburg Battlefield including portions of Big Round Top and Little Round Top conveyed by the Gettysburg Battlefield Memorial Association to the U.S. of America. Total Area: 141 acres (Drawn ca. 1895). The roadway at the bottom right-hand corner of the map is Wright Avenue (GNMP General Maps Collection GETT 41137 #NMP-GET-8214).

In late 1895, the GBMA voted to dissolve and deed its lands to the Commission, which immediately went about the business of expanding the park, acquiring additional parcels around the core 500 acres that had been previously acquired by the GBMA (Figure 2.26). The Commission brought a condemnation suit against the Gettysburg Electric Railway, winning a landmark U.S. Supreme Court Case (United States vs. Gettysburg Electric Railway) upholding the government's right to condemn the land for purposes of historic preservation. During the mid-1930s, Civilian Conservation Corps (CCC) forces under direction of the National Park Service worked to restore the natural topography disrupted by the trolley line. This effort was not entirely successful in

obliterating evidence of the grade; the section of right-of-way through the Little Round Top study area can still be identified by contour lines and the large rocks that were used to fill portions of the grade along the north slope (Figure 2.22).²⁷

In 1902, the last remaining structure in the compound of buildings that comprised Tipton Park was removed in order to restore the Battle Era view from Little Round Top to the

^{27.} Distribution Plan, Works Projects Proposed for a Civilian Conservation Corps in Gettysburg National Military Park, June 1933 (File NMP-GET-8997); Harrison (2003): Section 8: 25-26; Platt (2009): 17-20.

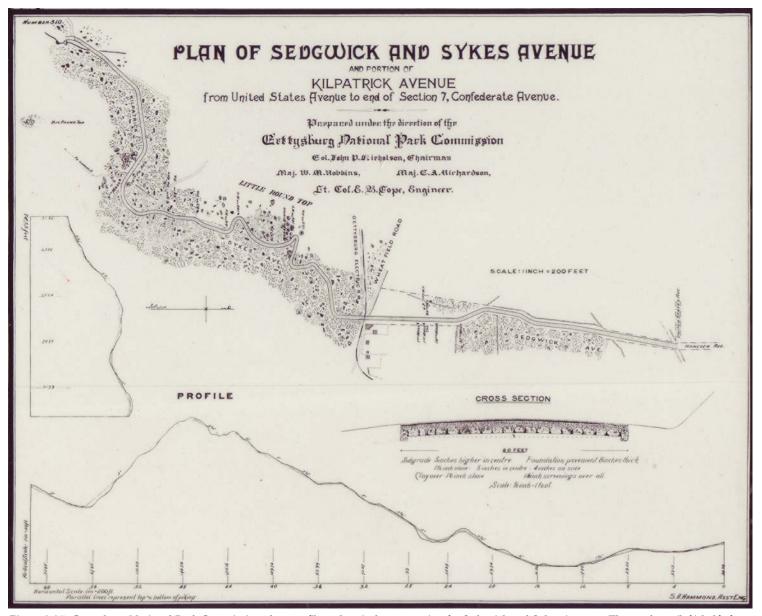


Figure 2.27. Gettysburg National Park Commission plan, profile and typical cross-section for Sedgwick and Sykes Avenue. The southern (left) half of this drawing shows the steep gradient and winding alignment of Sykes Avenue, ca. 1897. Drawn by the Gettysburg National Park Commission (GNMP General Maps Collection GETT 41137 #NMP-GET-8310).

Devils Den. Instead of being completely discarded, however, the former restaurant operated by William Tipton was moved "several hundred yards up the new Warren Avenue," so that David Weikert could use the building for his souvenir stand, the only concession permitted to remain on Little Round Top by the GBMA (Figure 2.28).²⁸

The most significant of the Commission Era improvements on Little Round Top was the formalization of a circulation network of avenues (see Figure 2.52 Gettysburg National Military Park Commission Period Plan). Only Wheatfield

Figure 2.28. David Weikert souvenir stand, circa 1902. (GNMP General Historic Photographic Prints GETT 41135).

^{28. &}quot;The Last of Tipton Park." in *The Gettysburg Compiler*. 12 August, 1902.

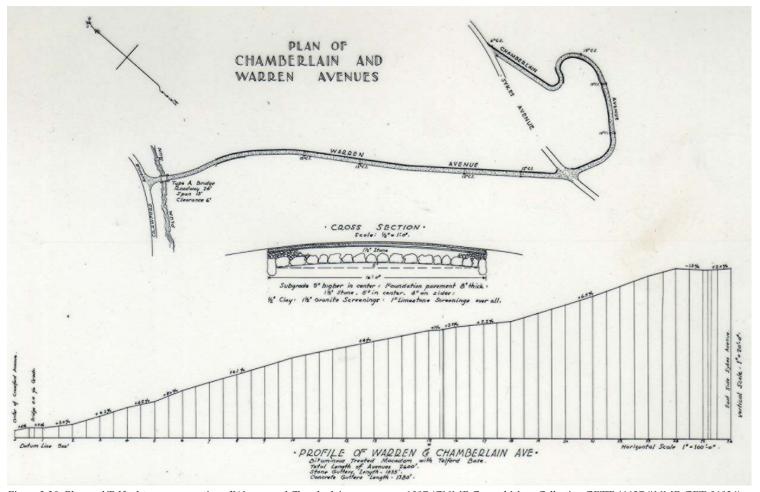


Figure 2.29. Plan and Telford-type cross-section of Warren and Chamberlain avenues, ca. 1897 (GNMP General Maps Collection GETT 41137 #NMP-GET-81934).

Road predated the battle. In the early 1880s, the GBMA had begun the process of establishing a road network along Union battle lines within the park. Notable was the construction of Hancock Avenue, a good, wide carriage road between the National Cemetery and the north slope of Little Round Top in 1882. Other pre-Commission roads in the vicinity of Little Round Top were less formal, little more than dirt farm lanes. By 1882, there was a lane extending from the Weikert farm on Taneytown Road through the gap between the Round Tops and past David Weikert's souvenir shop continuing westward to the Devil's Den and Tipton Park. Little evidence of this lane, which was a precursor to the original alignment of Warren Avenue, remains with the exception of a section of depressed lane just outside of the park boundary, located north of the 20th Maine Company B Monument east of Little Round Top. Near Vincent Spur, this lane intersected with another that wound northward to the summit of Little Round Top, a precursor to Chamberlain Avenue. By the late 1880s, a precursor to Crawford Avenue was in use along the west side of Plum Run between the Devil's Den and Wheatfield Road.²⁹

Figure 2.30. Construction of Sykes Avenue at the foot of Big Round Top, showing men laying base stones, looking in the direction of Vincent Spur. Photograph by Tipton, 1897 (GNMP Tipton Photographic Prints GETT 41136 #3098).

^{29.} Commission, Topographic Map of the Round Tops, NMP-GET-8067, circa 1896; Harrison (2003): Section 8: 24-26.



Figure 2.31. Sykes Avenue at the north slope of Little Round Top, showing the paving surface and sweeping curves that made for a smooth and interesting carriage ride. Photograph by Tipton, 1897 (GNMP Tipton Photographic Prints GETT 41136 #3106).

In 1895, the Commission began building avenues using Telford-type construction consisting of a foundation of wedge-shaped stones as a base topped by a riding surface consisting of smaller stones held within a clay matrix (Figure 2.29). This surface gave a smooth, relatively dust-free ride to horse-drawn carriages and wagons, making for a pleasurable outing within the park. The avenues were 20 to 25 feet wide, ample for the time, and lined with flagstone gutters (Figure 2.32). Between 1895 and 1905 more than 20 miles of avenues were opened or improved throughout the battlefield. At Little Round Top work was completed on Sykes, Chamberlain, Warren and Crawford Avenues from 1895 to 1897 (Figure 2.27 and 2.30). Wheatfield Road was similarly improved west of the intersection with Sykes Avenue. Wright Avenue was also opened in about 1902 but it was only 18-feet wide, slightly narrower than the other avenues, reflecting its secondary status within the park's circulation plan. Wherever possible, the Commission's engineers used fill to meet grade requirements instead of cutting by excavation in order to avoid disturbing battle-era elements. Original battlefield features and terrain could therefore guite possibly be preserved beneath the fill. Little Round Top was one of the more challenging locations due to the steep grade and boulders. As a result, the original Sykes Avenue was a winding road with a hairpin turn on the north slope (Figure 2.31 and 2.36). It also required several sections of fill, held back by stone retaining walls including a 228-footlong wall on the south slope of Little Round Top at Vincent's Spur (Figure 2.33). After reaching the top of Little Round Top, Sykes Avenue looped out to the western side of the summit with a pullover for visitors to take in the vista from near the



Figure 2.32. Detail of flagstone gutter paving on Warren Avenue. Photograph by Tipton, 1904 (GNMP Tipton Photographic Prints GETT 41136 #3140).

140th New York Monument (Figure 2.39).³⁰

The avenues featured a number of standard roadside treatments including cast-iron hitching posts at popular stopping points, cast-iron avenue identification tablets, identification tablets for park features, and shell stones (cannonballs mounted on granite posts) to mark the road edges (Figures 2.34 and 2.38). The latter were found along the edge of avenue curves on Little Round Top and other sites throughout the park. A small one-room, one-story, gableroofed, guard station was placed on the east side of Sykes Avenue, northeast of the present-day parking lot where the concrete-base of the building can still be seen. The guard on duty during high tourist season provided information services and protected the resources of the park. Bridges carrying Warren and Crawford Avenues over Plum Run at the foot of Little Round Top were standard steel I-beam bridges on rusticated ashlar abutments (Figure 2.35). The bridges were finished with wood-plank decks and simple pipe railings. These bridges were widened in the mid-1930s, encasing the original steel beams in concrete decks. The Commission also took a standardized approach to erecting cast-bronze markers and tablets, most set so that they were visible from the avenues, indicating battery, brigade, division and corps locations (Figure 2.38). On Little Round Top markers were placed to the 5th Corps in 1906-07; Battery D, 5th U.S. Artillery in 1907-08; 3rd Brigade, 1st Division, 5th Corps (Vincent's Brigade) in 1911-12; 3rd Brigade, 2nd Division, 5th

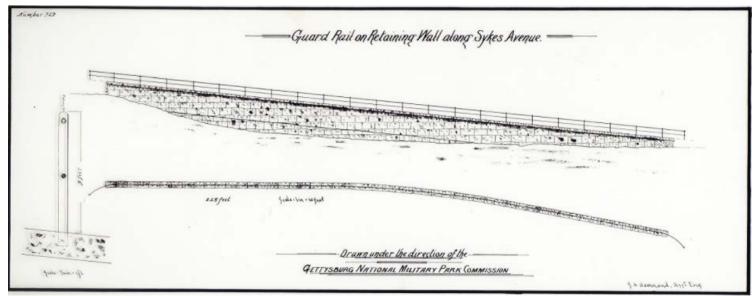


Figure 2.33. Elevation and plan of a stone retaining wall on Sykes Avenue (south slope, near Vincent Spur), ca. 1895 (GNMP General Maps Collection GETT 41137 #NMP-GET-8329).

Corps (Weed's Brigade) in 1911-12; Artillery Brigade, 5th Corps (Martin's Battery); and the U.S. Signal Corps in 1919.³¹

Cognizant of the importance spatial landscape relationships played in the course of the battle, the Commission sought to maintain the arrangement of existing woods and fields. In many parts of the park, the Commission leased battlefield farms. Atop Little Round Top, as in many areas of the park, the most notable change was in the maturing vegetation in areas not cultivated or pastured, and this included the western slope of Little Round Top from roughly the old trolley line to the summit. Photographs over the years document cyclical clearing of brush to maintain the historically significant vistas (Figure 2.37). Cutting seems to have been done whenever growth impinged on the views or viny plants swallowed the breastworks. Tree lines present at the time of the battle in 1863 were not strictly maintained and photographs show evidence that the viewshed to the northwest and southwest of the summit progressively narrowed. Some trees identified as having been alive at the time of the battle, such as an old pine forward of the 140th New York Monument, were venerated and thus maintained.32

The Commission's Chief Engineer, Emmor B. Cope, was the creative force in the shaping the Commemorative Era design elements throughout the park. On Little Round Top, most of these elements had been placed in a flurry of improvement surrounding the construction of the avenues between 1895 and 1902. Afterward, landscaping activities on Little Round Top were in the category of general maintenance as efforts shifted elsewhere, particularly the more recently acquired



Figure 2.34. Shell stones (mounted cannonballs) along Sykes Avenue at the 155th Pennsylvania monument, ca. 1905-1910. Unknown photographer (GNMP General Historic Photographic Prints GETT 41135 #SF-21P-2141).



Figure 2.35. View of completed bridge on Warren Avenue over Plum Run. Photograph by Tipton, 1903. (GNMP Tipton Photographic Prints GETT 41136 #3020).

^{31.} *Ibid*.

^{32.} Ibid.



Figure 2.36. Panorama view overlooking Little Round Top from the Big Round Top observation tower. Note Sykes Avenue winding near the top of the Little Round Top summit. Photograph by Tipton, 1896 (GNMP Tipton Photographic Prints GETT 41136 #4239).



Figure 2.37. View from Wheatfield Road near junction of future Ayres Avenue with deteriorated stone & rider fencing between Crawford tract & Wheatfield in foreground. Cattle grazing & visitors seated on rocks beyond fence, Round Tops in distance. Photograph by Tipton, circa 1890-1893 (GNMP Tipton Photographic Prints GETT 41136 #2436).

Confederate areas. Cope died in 1927, and, as the last of the battle-veteran managers, his passing marked the end of a significant era in the development of the commemorative park. In 1933, the U.S. War Department passed management to the National Park Service (NPS), a federal agency with different attitudes toward parkland and pubic access to it, although with an equally strong commitment to the military park's core mission to preserve the battlefield.



Figure 2.38. Cast-iron tablet identifying the 4th U.S. Infantry, with Little Round Top in the background. Photograph by Tipton, 1897 (GNMP Tipton Photographic Prints GETT 41136 #4728).

Early National Park Service Improvements, 1933-ca.1950

Among the NPS's goals for the military park was to make it more accessible to automobile tourism, which meant adapting the Commission Era's carriage avenues to heavier and faster traffic. The avenues were straightened, regraded, widened and paved with asphalt (see Figure 2.53 Early National Park Service Improvements Period Plan). From 1934 to 1936, Sykes Avenue was straightened and widened, including the construction of a parking lot immediately east of the summit (Figure 2.40). Combined with the grading required for rerouting Sykes Avenue, the parking lot required the cutting of an approximately 300-foot by 50-foot terrace into the top of the eastern slope, a landscape feature that today stands out as probably the most violent alteration in the original battle terrain of Little Round Top. At the time, NPS historians raised objections to the so-called "by-pass" of Little Round Top stating that it "would mar the terrain over which the troops advanced to action" and that it "would tend to violate the principle of an educational program for this Park" but their appeals to the park superintendent and the Chief of the NPS's Historical Division were not persuasive.33

Also associated with the avenue improvement program were the straightening and widening of Warren and Wright Avenues, and the reworking of their intersection with Sykes in the gap between the two Round Tops (Figure 2.41). The previous intersection had awkward turning angles and thus was modified into a more typical four-way intersection. Engineering drawings for the Sykes Avenue by-pass also called for the "obliteration" of the old Sykes and Chamberlain Avenues. This perhaps was an indication of the desire to ensure that old avenues were no longer available to motor vehicles. In practice, however, some large portions of the old Telford roadways were abandoned in place and, as with the upper part of Chamberlain Avenue, used as the basis for level pedestrian pathways that are still in use today. Plans called for the removal of the stone retaining walls, although the final disposition of the masonry is currently unknown. There is an unproven possibility that the several piles of stone debris in the Bushman-Weikert Woods are the remains of these walls. The NPS was assisted in the avenue improvement projects by workers from other federal agencies including highway engineers of the U.S. Department of Agriculture's Bureau of Public Roads (BPR, precursor to the Federal Highway Administration) and laborers of the Civilian Conservation Corps (CCC), a New Deal works program for unemployed young men. Between 1933 and 1937, the CCC operated two camps in the military park, housing over 400 men at its peak.34

^{33.} Letter from the GNMP Historical Section to Verne E. Chatelain, Chief, Historical Division (June 18, 1934), Historian Files, 1933-1965, Box 9, Folder 12, GETT 41151, GNMP Archives.
34. Platt (2009): 38-39



Figure 2.39. View westward from atop 44th & 12th NY monument on Little Round Top, looking over Houck's Ridge & Devil's Den towards Warfield Ridge. Note the vegetation patterns. Photograph by Tipton, ca. 1900s (GNMP Tipton Photographic Prints GETT 41136 #OS-2760).

With a large manual labor pool at its disposal, the NPS coordinated with the CCC for other types of park improvements and maintenance including the construction of new paths, "obliteration" of the old trolley line, brush clearing, and vista cutting projects on Little Round Top. Path construction included the provision for a gravel path looping between the Warren Monument and the 44th and 12th New York Monument, to incorporate some portions of the old Sykes Avenue, as well as steps connecting that path to the new parking lot (Figure 2.42). A hiking trail was also opened through the woods of the eastern slope. CCC forces were initially put to work clearing brush on Little Round Top, both to improve appearance and reduce the risk of fire. With the exception of brush clearing to preserve historic vistas and to construct the realigned Sykes Avenue, this practice was terminated in 1935 because it conflicted with the NPS philosophy of allowing natural processes to run their course (Figur 2.39). Forces also planted ornamental trees, such as dogwood, and photographs document this work being done in the area between the monuments and the Sykes Avenue parking lot from 1936 to 1937.35

GNMP's staff historian Frederick Tilberg undertook the first historical landscape study of the vistas from Little Round Top, reporting on his findings in 1939 (Figure 2.44). His goal was to establish an historical basis for vista cutting, which involved the selective cutting of woodlands and clearing of brush in an attempt to maintain vistas as they existed in July 1863.

Relying on the Warren map and Brady/Tipton photographs, Tilberg recommended opening the view from the summit of Little Round Top by thinning out the brush of the western slope and leaving a scattered growth of medium-height pine and oak. A considerable number of taller trees were removed to open the line of sight from Little Round Top to the Devil's Den. Vistas were also cleared of tall trees in the direction of the Wheatfield and the Trostle Farm. The Plum Run "swale" at the northwestern foot of Little Round Top was cleared to open a view from Sedgwick Avenue westward to the Wheatfield. Carrying out of Tilberg's vista restoration recommendations had been largely completed by the late 1940s. Later NPS management attempted to maintain the vistas through occasional pruning but over time considerable regrowth occurred on the west face of Little Round Top.³⁶



Figure 2.40. New Sykes Avenue parking lot, cut into the east slope of Little Round Top, ca. 1936 (GNMP General Historic Photographic Prints GETT 41135 #SF-22R-068).

36. Frederick Tilberg, "Vista Cutting Project, Area of Little Round Top, Devil's Den, the Wheatfield, and Peach Orchard," September 28, 1939. Historian Files, 1933-1965, Box 7, Folder 30, GETT 41151.



Figure 2.41. Relocating and preparing to resurface roads at the intersection of Sykes and Warren avenues, ca. 1935 (GNMP General Historic Photographic Prints GETT 41135 #SF-17M-002).



Figure 2.42. Construction of walkways and retaining wall at the Sykes Avenue parking lot on Little Round Top, ca. 1936-1937 (GNMP General Historic Photographic Prints GETT 41135 #SF-30W-093).

National Park Service Management & Mission 66 Period, ca. 1951-Present

Since the 1950s, NPS management of Little Round Top's landscape has resulted in only slight changes to the terrain and its significant contributing features. Preservation and management approaches have changed over time to address various needs and concerns, and the park has made use of a growing range of technologies and expertise to manage the landscape. The Mission 66 era (circa 1955-1966) at GNMP was one with an emphasis on improved visitor services and interpretation. On Little Round Top, this included the installation of wayside exhibits and "talking walls" (signs with recorded messages activated by pushing a button) at the overlook north of the 91st Pennsylvania Monument (Figure 2.43). The interpretive station, which included an asphalt plaza and walks that lapped around the 91st Pennsylvania Monument, is still in use, although the talking walls, which remained in operation



Figure 2.43. Wayside exhibits on Little Round Top, ca. 1965 (GNMF General Historic Photographic Prints GETT 41135 #SF-6E-020).

until the 1980s are now gone and the interpretive panels are of a more recent vintage.

Another Mission 66-era initiative was the restoration of fences and breastworks. This work was guided by historical research identifying four types of fences for use within the park based on historic types in use by farmers at the time of the battle in 1863. The four fence types adopted were Virginia worm fence, post-and-rail fence, stone-and-rider fence and stone wall. Efforts were made to restore these fences to locations indicated by the Warren map, although they were also sometimes used for other reasons such as to enclose pasture for the park's agricultural lease program. Breastworks on Little Round Top were researched and their locations compared against the Warren map. In the late 1960s, volunteer labor from a fraternity at Gettysburg College was used to restack the breastworks (Figure 2.45).³⁷

Since the 1970s, the park has become increasingly aware of degradation of the landscape caused by vandalism, invasive plant species and heavy visitation among other factors (Figure 2.46). On Little Round Top, the Strong Vincent marker was broken by vandals and replaced in-kind in 1978. From time-to-time, the park revisits its policy on vegetation control and examines effective treatments. Maintaining the historic appearance of the rocky western slope of Little Round Top requires a constant commitment of park resources. Allowing the succession of plants to continue for more than about five years without treatment begins to result in an undesirable appearance that detracts from the interpretation of the historic scene. Following a study of potential vegetation

^{37.} Frederick Tilberg, "Location and Type of Fences on the Battlefield of Gettysburg," December 27, 1961. Historian Files 1933-1965, Box 8, Folder 3, GETT 41151.

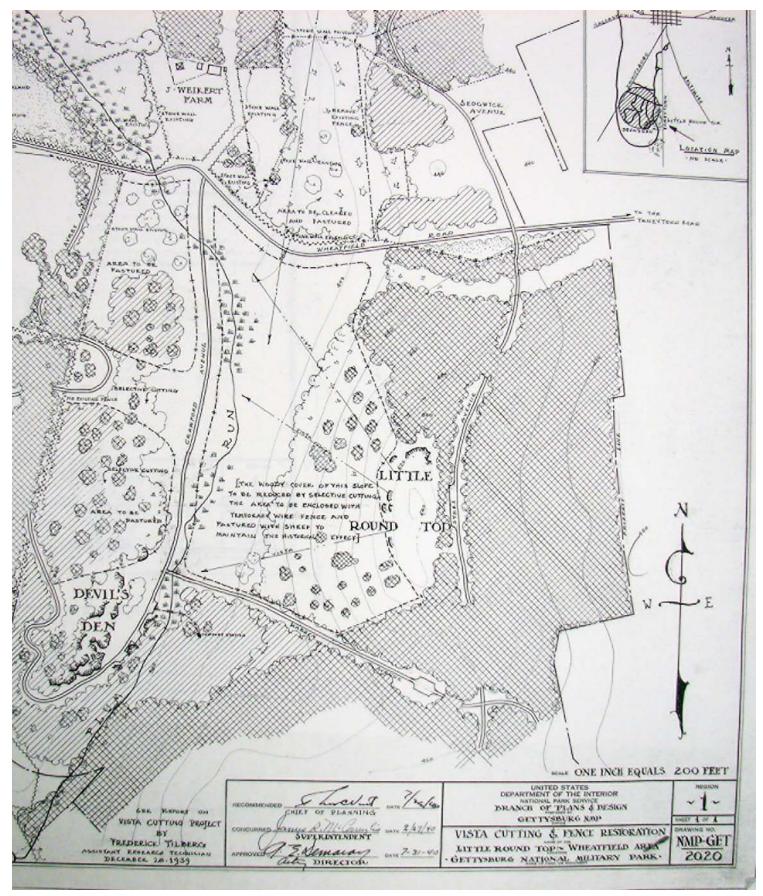


Figure 2.44. Detail from Vista Cutting and Fence Restoration Map, 1940 (GNMP General Maps Collection GETT 41137 #NMP-GET-2020).

control techniques in 1977, the western slope of Little Round Top was cleared and an attempt made to control vegetation through the introduction of livestock. Cows and sheep were pastured in the Plum Run Valley but they proved ineffective at controlling vegetation growth. Worm fences were built along the roadways to enclose the pasture and the breastworks at the east end of the pasture were converted into stone-rider fences, with the result of introducing features into the landscape that were confusing to some visitors and had not existed in July, 1863. At this time, vegetation is controlled through a combined approach of herbicidal application and manual removal/cutting.³⁸

The impacts of heavy visitation on Little Round Top are most evident in the erosion of the naturally thin soil and the wearing of unwanted social trails that trample vegetation and accelerate erosion creating gullies and undermining historic landscape features. The park's Draft Development Concept Plan Environmental Assessment (May 1985) specifically addressed this issue recommending that designs for the core interpretive area at the summit be studied to better define visitor spaces and accommodate the maximum number of individuals and groups that would use the site at any one time. One aspect of this proposal that was implemented in the late 1990s was the expansion of the parking lot's east side to better accommodate buses. Defining pedestrian circulation patterns so as to minimize the impacts of heavy visitation has continued to be an elusive goal, particularly given the terrain and placement of the historic monuments.³⁹



Figure 2.45. Rebuilding stone works on Little Round Top by a Gettysburg College fraternity, 1969 (GNMP General Historic Photographic Prints GETT 41135 #SF-17M-222)).

38. Todd W. Bowersox, Larry H. McCormick, and Donald H. Thompson, "Restoration of Historic Vegetation Lines at the Gettysburg National Military Park," December 1977. GETT 41172.
39. U.S. Department of the Interior, National Park Service, "Draft Development Concept Plan Environmental Assessment, Little Round Top/Devil's Den, Gettysburg National Military Park, Pennsylvania," May 1985

The Period of Significance for Little Round Top is 1863 to 1938, with significant dates of 1863, 1864, 1893, 1895, 1896, 1913, 1927 and 1938.

Period of Significance

As defined by its National Register of Historic Places nomination, the period of significance for the Gettysburg National Military Park (GNMP) is 1863 to 1938. The nomination also singles out significant dates of 1863, 1864, 1893, 1895, 1896, 1913, 1927 and 1938, marking specific dates of events, such battle anniversaries and significant transitions in park management, such as the incorporation of the Gettysburg Battle-field Memorial Association (GBMA) in 1864 and the establishment of the park in 1895. The period of significance recognizes first-and-foremost the immensity of the battle fought at Gettysburg and subsequent efforts to commemorate and preserve the battlefield led by veterans. The terminal date of 1938 represents the 75th anniversary of the battle and the last time that the Blue and Gray held a reunion at the park.⁴⁰

Resources specifically identified by the National Register nomination as contributing and non-contributing are identified below within the periods of landscape development. It should be noted that all CCC/NPS development has been deemed as

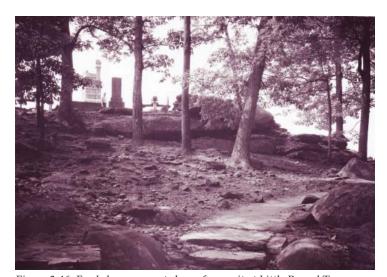


Figure 2.46. Eroded area on east slope of summit at Little Round Top, 1967-1970. Erosion has been noted and an on-going challenge to landscape management for more than 40 years. (GNMP General Historic Photographic Prints GETT 41135 #SF-17M-143).

40. Harrison (2003):4.

non-contributing by the NPS and the Pennsylvania Historical and Museum Commission whether it pre-dates or post-dates 1938. As a result, some specific features, such as the realigned Sykes Avenue and parking lot from the mid-1930s, although dating to the battlefield's National Register period of significance, are treated as non-contributing resources.

Little Round Top, as a component of the GNMP, shares in its overall period of significance of 1863 to 1938, but due to the specific pattern of events and park development that impacted Little Round Top, its periods of landscape development (landscape contexts) can be somewhat more refined than those outlined in the nomination. The following periods of landscape development are recommended for use in defining the characteristics that make Little Round Top's landscape historically and culturally significant.

Periods of Landscape Development

<u>Geologic/Natural Feature Contexts:</u> The following are large-scale natural landscape features that were formed by geologic processes. They are common to all of Little Round Top's historic periods of landscape development, but gained significance on July 2nd, 1863, as part of the landscape of the battlefield that was used by the armies for strategic or tactical advantage.

- •Little Round Top (NR Contributing Large-Scale Landscape Feature, scene of major battle action and observation, provided defensive position to Vincent's and Weed's Union Brigades)
- Bushman Woods (NR Contributing Large-Scale Landscape Feature, wooded east slope of Little Round Top, provided cover for staging of Union troops)
- Devil's Den/Houck's Ridge (NR Contributing Large-Scale Landscape Feature, scene of major battle action, provided defensive position to both sides, separated from Round Tops by Plum Run)
- Plum Run (NR Contributing Large-Scale Landscape Feature, scene of major battle action, the stream and its marshy floodplain were an obstacle to troop movements of both sides)
- Vincent Spur (NR Contributing Large-Scale Landscape Feature, rocky and grove-like saddle between the two Round Tops, provided strong defensive position for Vincent's Union Brigade)

Prehistoric and Native American Period Context, circa 10,000 B.C. to circa 1740: This period encompasses prehistoric people's occupation and use of the land from about 10,000 B.C. up until the period of colonial settlement in the 1740s.

The landscape of Little Round Top from the end of the last ice age until colonial settlement was a mature native hardwood forest, probably of the oak-chestnut-hickory type. 41

The following are landscape features associated with the Prehistoric and Native American Period:

•Moderate probability of prehistoric archeological sites along the lower slopes adjacent to Plum Run and at locations near drainages on the eastern upland slopes and flats; low probability elsewhere (based upon evaluations using the Pennsylvania Archaeological Site Survey (PASS) methodology described earlier)

Settlement and Pre-Battle Subsistence Farms Period Context, ca. 1740-1862: This period encompasses the settling of the land in the late colonial period as settlers of mostly Scots-Irish background migrated into the vicinity of Gettysburg. The period extends through several generations as Gettysburg grew and outlying areas became established farms. The Little Round Top study area, based on its rocky soils and steep topography, was not well suited to cultivation and served as a wood lot, or perhaps pasture, for nearby farms. Wood lots on Little Round Top were actively managed. Evidence from land titles and post-battle photographs suggest that the west slope was lumbered several years prior to the battle. Tree lines, stone walls and fences marked property boundaries and enclosed pasture.

The following are landscape features associated with the Settlement and Pre-Battle Subsistence Farm Period:

- •Bushman Tract (aka Bushman Woods) (east-slope wood lot acquired by George Bushman in 1861)
- •Weikert Tract (aka Weikert woods, wood lot acquired by Jacob Weikert in 1840)
- •Hanaway Tract (tract on western slope of Little Round Top, cleared of most trees prior to 1863)
- **Houck Tract** (tract along east side of Crawford Avenue)
- •John Munshower Tract (Tract jutted into the cleared field south of Wheatfield Road)
- •Tree line at summit of Little Round Top dividing Hanaway
 Tract from wooded east-slope tracts.
- Fence lines shown on Warren map of 1868-69 (includes 20th Maine stone wall, stone wall and rider fence on boundary to south and east of Big Round Top, stone wall and rider or worm fence enclosing portions of Wheatfield Road)

^{41.} James M. Dyer, "Revisiting the Deciduous Forests of Eastern North America," *Bioscience*, Vol. 56, No. 4 (April 2006), pp. 341-352.

- Potential wood-road paths and cartways (exact locations unknown, but written documentation of a "wood road" on the east slope, used by Hazlett's artillery, and a cartway on west slope)
- Entrance to Weikert Lane at east boundary of study area to Taneytown Road.
- Wheatfield Road (1829, NR Contributing)

The Battle of Gettysburg Context, July 1-3, 1863: Little Round Top was a key position in the Second Day's battle. Its western slope, cleared by prior logging, provided a significant vantage point for the Union Signal Corps before noon. On the late afternoon of July 2nd, the right flank of Longstreet's Corps drove Union forces from the Devil's Den and Houck's Ridge and into the Valley of Death at the foot of Little Round Top. As the Southerners advanced, Union forces occupied the summit of Little Round Top, using the elevated and defensive position offered by the rocky summit as a position to repulse a determined assault. The terrain had a significant impact on the course of the battle. The topography and many of the key terrain features (rocky slope, Vincent's Spur, Devil's Den, Valley of Death, Slaughter Pen, boulder clusters, etc.) remain as they were in 1863. Changes have been mostly related to the development of later memorials, the construction of roads, the trolley line and pathways to provide public access, management of vegetation, and erosion/deterioration related to visitation and use. Key primary sources include post-battle photographs, written descriptions of the battle participants, and the maps produced after the battle, particularly the Warren map of 1868-69, used in conjunction with the 1863 surveys and work of Bachelder (isometric map) and Cope (horseback survey).

In addition to the large-scale geologic features listed above and the pre-battle farming landscape features listed above from prior periods, the following are landscape features associated with the Battle of Gettysburg Period:

- •Stacked stone breastworks on Little Round Top (1863, NR Contributing)
- •Little Round Top archaeologically sensitive battle areas (Vincent Spur, signal rock, cannon and interment locations)

Gettysburg Battle-field Memorial Association Period Context, 1864-1894: The Gettysburg Battle-field Memorial Association (GBMA) was established in 1864 to hold and preserve the battlegrounds associated with the Union positions. One of the key properties acquired by the GBMA was the 29-acre Hanaway tract at the summit and west slope of Little Round Top in April 1864. The majority of monuments on Little Round Top were funded and erected under the auspices of the GBMA from 1878 to 1893. The GBMA monitored and approved monument placement according to plans that recognized the

official Union battle lines and regimental locations. Veterans assisted with the placement of the regimental flank markers and raised funds to commission and erect memorials. The beginning of a system of avenues was established but not formalized. Certain parcels in or adjacent to the study area not owned by the GBMA were used for purposes other than commemoration, especially the promotion of tourism. The Gettysburg Electric Railway built a line along the western slope of Little Round Top, immediately west of the GBMA's property, in 1893. A popular stop on the railway was the Round Top Park at Bushman's Woods in the northeast corner of the study area where passengers detrained for picnics and outdoor activities, including hiking to the summit. William H. Tipton operated a photo gallery and park near the Devil's Den on the south side of an early alignment of Warren Avenue. The fields at the western foot of Little Round Top were used as pasture. Key documentary sources for this period include historic photographs by Tipton and others.

The following are landscape features associated with the GBMA Period:

- •Company B, 20th Maine Volunteers Monument (1889, NR Contributing)
- •20th Maine Infantry Monument (1886, NR Contributing)
- •9th Pennsylvania Reserves (38th Infantry) Monument (1890, NR Contributing)
- •83rd Pennsylvania Infantry Marker (1889, NR Contributing)
- •2nd Massachusetts Sharpshooters Marker post (circa 1889)
- •22nd Massachusetts Infantry Marker remnant (circa 1889)
- •18th Massachusetts Infantry Marker post (circa 1889)
- •Strong Vincent Marker (1878, restored 1978, NR Contributing)
- •Strong Vincent Inscribed Boulder (1863-64, NR Contributing)
- •16th Michigan Infantry Monument (1889, NR Contributing)
- Michigan Sharpshooters Monument (1889, NR Contributing)
- •44th and 12th New York Infantry Monument (1893/1900, NR Contributing)
- •140th New York Infantry Monument (1889, NR Contributing)
- Weed-Hazlett Inscribed Boulder (1863-64, NR Contributing)
- •Weed and Hazlett Monument (1883, NR Contributing)
- •91st Pennsylvania Infantry Monument (1889, NR Contributing)
- Major General G. K. Warren Statue (1888, NR Contributing)
- •146th New York Infantry Monument (1880-90, NR Contributing)
- •155th Pennsylvania Infantry Monument (1886/1889, NR Contributing)
- Battery L, 1st Ohio Artillery Monument (1887, NR Contributing)

- •98th Pennsylvania Infantry Monument (1889, NR Contributing)
- •121st New York Infantry Monument (1889, NR Contributing)
- •147th Pennsylvania Infantry Monument (1885, NR Contributing)
- •5th Maine Left Flank Marker (1889, NR Contributing)
- •95th Pennsylvania Infantry Monument (1888, NR Contributing)
- •96th Pennsylvania Infantry Monument (1888, NR Contributing)
- •3rd Massachusetts Battery (1885, NR Contributing)
- •139th Pennsylvania Infantry Monument (1889, NR Contributing)
- •6th New Jersey Left Flank Marker (1888, NR Contributing)
- •40th New York Infantry Monument (1888, NR Contributing)
- proto-Chamberlain Avenue (circa 1880s)
- proto-Crawford Avenue (circa 1880s)
- •proto-Sykes Avenue (circa 1880s)
- •proto-Warren Avenue (circa early 1880s or earlier)
- proto-Wright Avenue (circa 1880s or earlier)
- Round Top Schoolhouse (1889, NR Non-contributing)
- •Round Top Park and rail spur (1884)
- •Gettysburg Electric Railway Trolley Bed (1893, NR Contributing)
- •John Rosensteel Museum Archeological Site (1885, NR Non-contributing)
- Rosensteel Ice House and Pond Site (circa late 1880s, NR Non-contributing)

Gettysburg National Park Commission Period Context, 1895 -1933: In 1893, the federal government established the Gettysburg National Park Commission (Commission) to acquire and preserve land associated with the battle, including the prior holdings of the GBMA. In 1895, the GBMA officially conveyed its property, inclusive of the tracts it had acquired on the east and west slopes of Little Round Top, to the federal government. The Commission, under the leadership of Colonel John P. Nicholson, undertook significant improvements to the park, including the realignment and paving of avenues on Little Round Top. The Commission acquired parcels at the western foot of Little Round Top in the Valley of Death, initiated condemnation of the electric railway, and adopted standard landscape treatments such as walls, fences, bridges, Telford (stone) road surfaces, and the like, suitable to a park setting. Much of this work on Little Round Top was completed between 1895 and 1902. Some 20 years later in 1922, the U.S. Army Quartermaster Corps took over management of the park from the Commission, continuing the Commission's policies and marking the end of the era when veterans of the battle played a significant role in

the park's management. This period is well documented by photographs and maps/plans prepared by the Commission.

The following are landscape features associated with the Commission Period:

- •Chamberlain Avenue (1895, NR Contributing)
- Crawford Avenue (original alignment) (1895-1897, NR Contributing)
- •Sykes Avenue (original alignment) (1895-97, NR Contributing)
- •Warren Avenue (1896-1902, NR Contributing)
- Wright Avenue (1903, NR Contributing)
- Crawford Avenue Bridge (circa 1902, widened 1934, NR Contributing)
- •Warren Avenue Bridge (circa 1902, widened 1934, NR Contributing)
- David Weikert Souvenir Stand Site (circa 1902, NR Noncontributing)
- Crawford Avenue Identification Tablets (1900, NR Contributing)
- Warren Avenue Identification Tablet (circa 1900, NR Contributing)
- •Little Round Top Identification Tablet (1900, NR Contributing)
- •20th Maine Stone Breastworks Identification Tablet (1894-1915, NR Contributing)
- •Warren Boulder Regulatory Tablet (circa 1894-1915, NR Contributing)
- •U.S. Signal Corps Tablet (1919, NR Contributing)
- •5th Corps Tablet (1906-07, NR Contributing)
- •Battery D, 5th U.S. Artillery Tablet (1907-08, NR Contributing)
- Vincent's Brigade Tablet (1911-12, NR Contributing)
- •Crawford's Division Tablet (1909-10, NR Contributing)
- •Weed's Brigade Tablet (1911-12, NR Contributing)
- Bartlett's Brigade Tablet (1911-12, NR Contributing)
- •Nevin's Brigade Tablet (1909-10, NR Contributing)
- Martin's Brigade Tablet (1911-12, NR Contributing)
- •Square-topped stone culverts (1895-1913, NR Contributing)

Early National Park Service Improvement Period Context, 1933-ca. 1950: When the National Park Service (NPS) took over management of the park in 1933, it began to adapt the park to the boom in automobile tourism. On Little Round Top, the most significant change was the realignment of Sykes Avenue, the construction of a parking lot, and the construction of a system of pathways on the summit. Most

of this work was carried out between 1934 and 1941 with assistance from Civil Conservation Corps (CCC) and federal Bureau of Public Roads (BPR) engineers. BPR engineers were persuasive in their desire for park roads to maintain grades and curvatures conducive to automobiles and buses, even if it meant altering terrain and avenue alignments. Park staff, particularly historian Frederick Tilberg, undertook the first landscape studies of Little Round Top. The Warren map of 1868-69 and historic photographs taken after the battle were used to inform decisions, including restoration of breastworks and brush and tree clearing projects to restore vistas to their appearance at the time of the battle. The period is well documented by photographs and maps/plans prepared by or for the NPS. By 1941, most of the first-generation NPS improvements were complete and most remaining work was put on hold until after the Second World War ended in 1945.

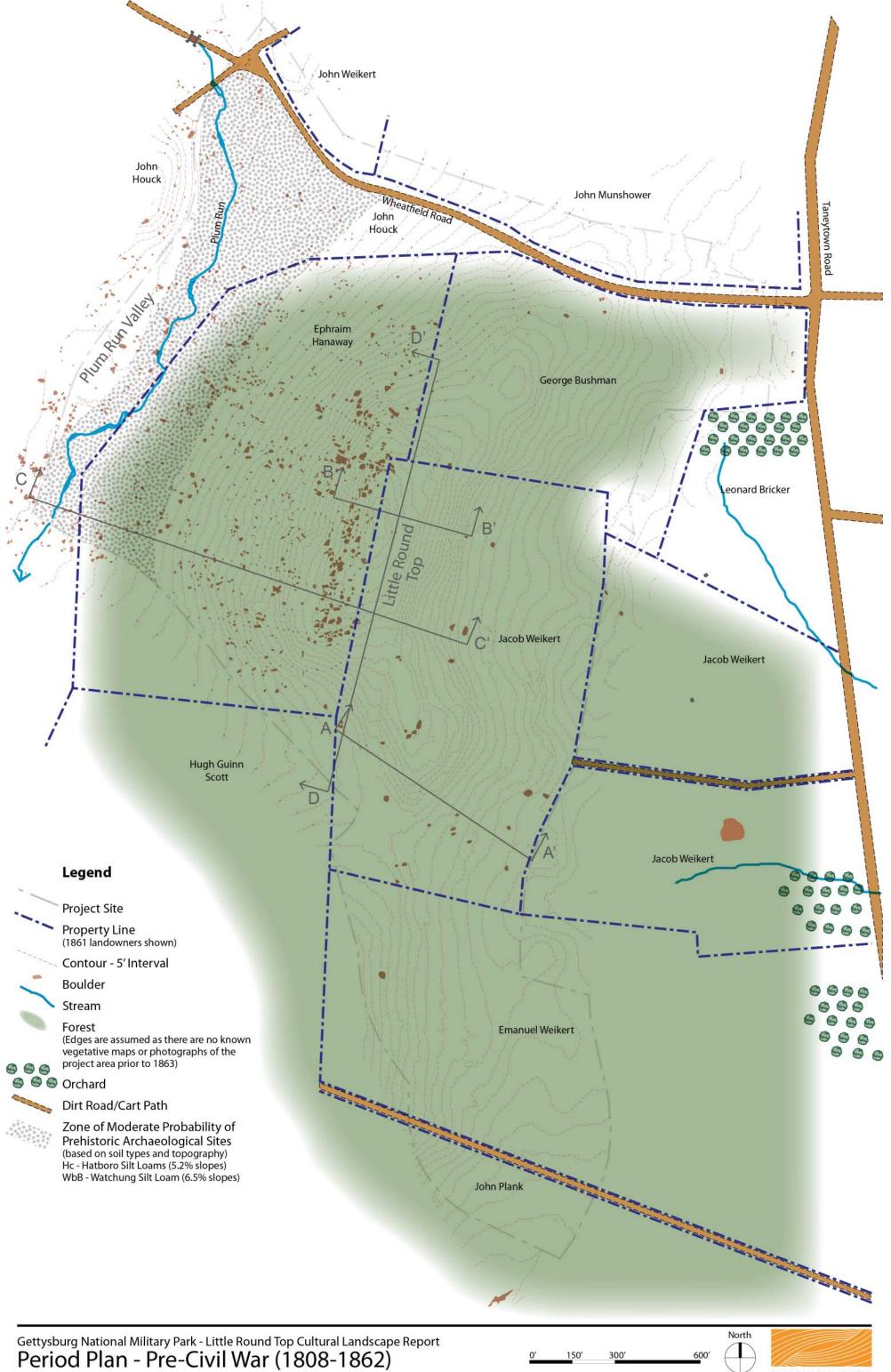
The following are landscape features associated with the Early NPS Improvement Period:

- •Stone retaining wall, Little Round Top parking area (circa 1936, NR Non-contributing)
- Parking lot, Little Round Top (circa 1935-36, NR Noncontributing)
- Pathways and stairs connecting parking area to summit monument area (circa 1936-37)
- •Realigned Sykes Avenue "bypass" (circa 1935-36)
- •Infilling of trolley line (circa 1935-37)
- •Stone debris, presumably from earlier park walls, dumped in Bushman-Weikert woods (circa 1934-37)
- •Arch-topped stone culverts (circa 1935-39)

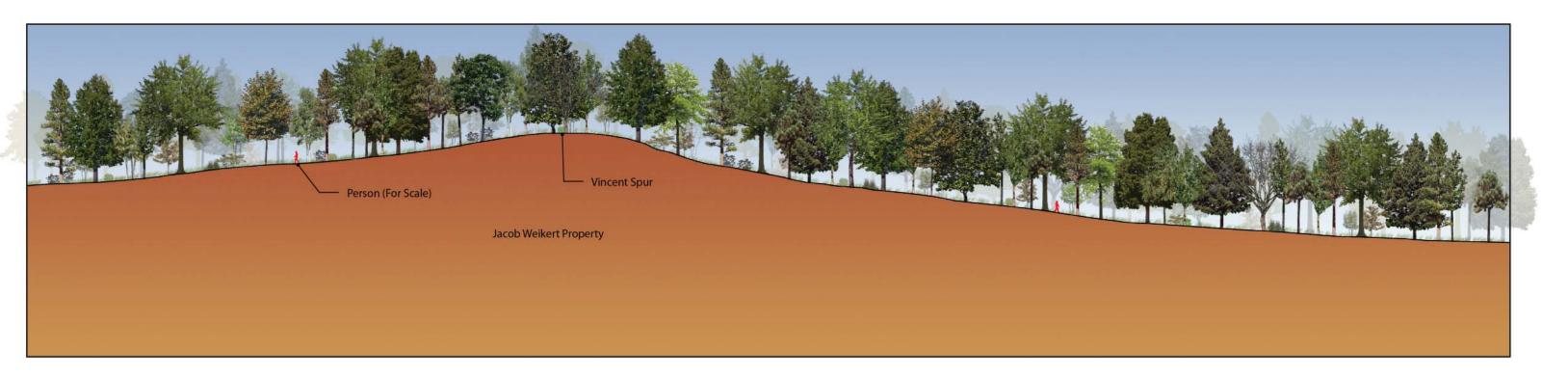
NPS Management Period Context, ca. 1951-Present: Preservation and management approaches have changed over time but alterations to the terrain of Little Round Top have been minimal, with the exception of evolving NPS philosophy about approaches to the management of vegetation and beautifying of historic places. the 1950s to 1960s, efforts were made to improve visitor experience with new wayside exhibits, updated signage, paved walkways, expansion of the parking lot and regularization of maintenance activities such as clearing of brush and rebuilding of fences and breastworks. Since the 1970s, the park has become increasingly aware of degradation to the landscape caused by visitation, vandalism and invasive plant species. The park has instituted and/or studied various approaches to managing and minimizing these impacts. Features such as fences, pathways, steps, parking expansions and traffic control devices dating from the NPS Management Period are all considered non-contributing.

The following are landscape features associated with the NPS Management Period:

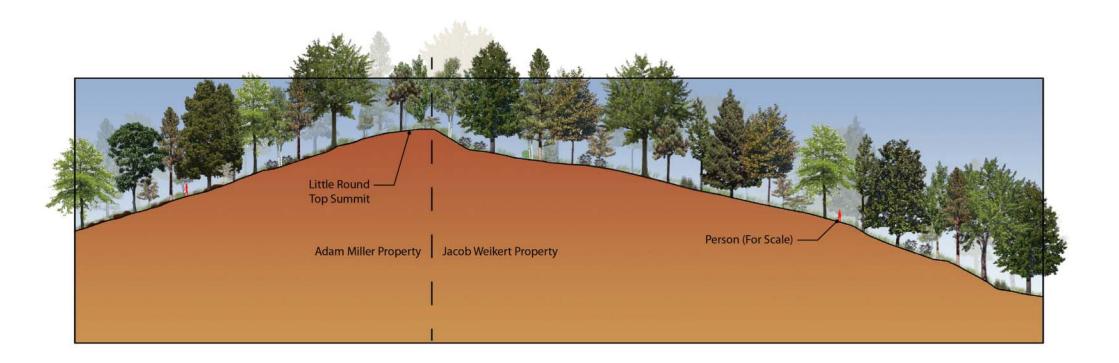
- Wayside exhibit and retaining wall (former talking wall area) north of the 91st Pennsylvania monument (circa 1965)
- •Brigadier General Samuel W. Crawford Statue (1988, NR Contributing)
- Asphalt pull-offs
- Gravel parking areas
- Concrete curb on Wheatfield Road
- Mown grass paths
- Social trails
- •NPS Era directional signage
- Grass swales
- Asphalt gutters
- Roadway erosion
- Concrete wheel stops
- Maintained trails
- Bicycle rack
- Stacked rail barricades
- Vehicular gate
- •Rip-rap lined drainage channel
- Wooden trellis enclosure





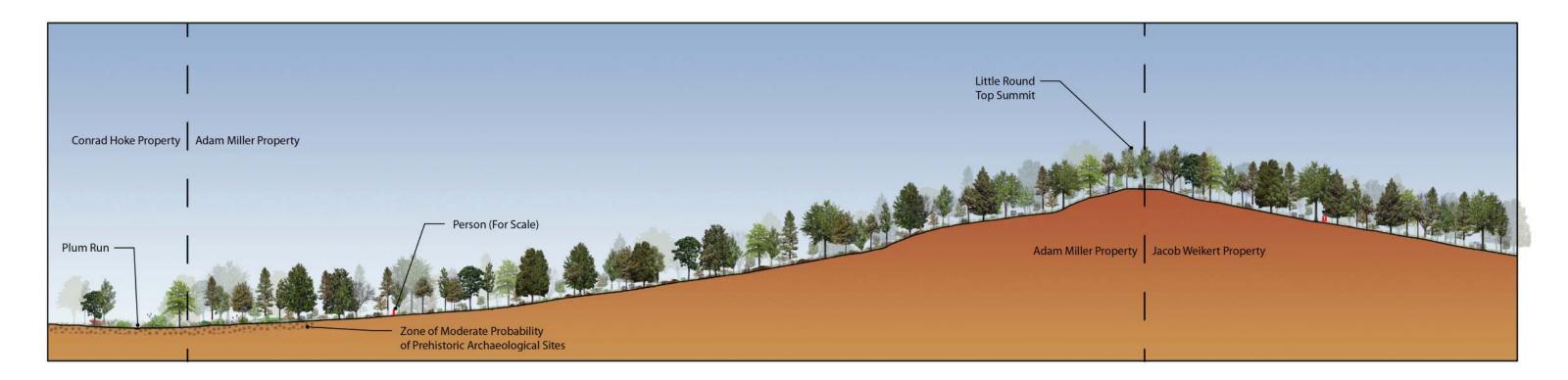


Section A - A'

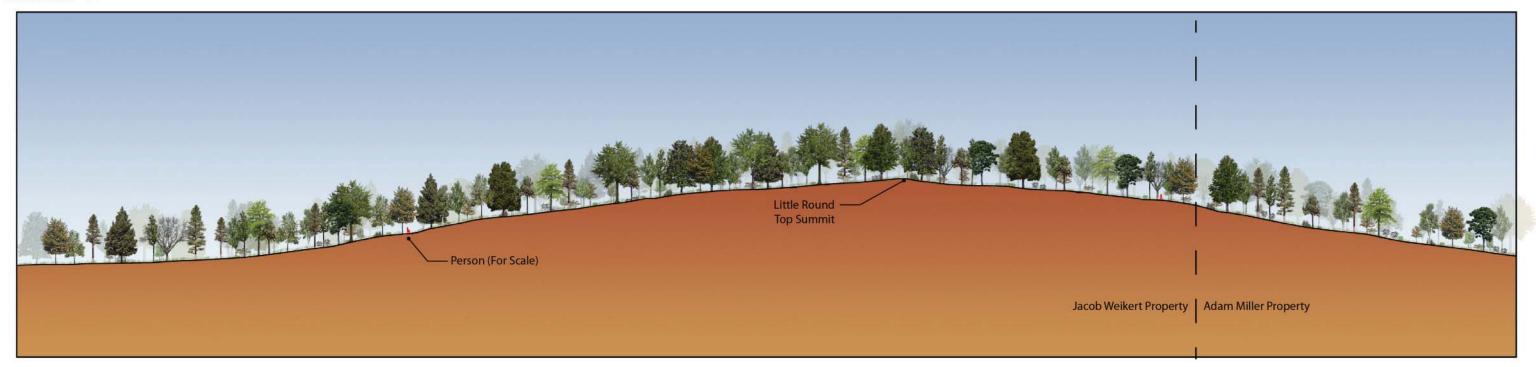


Section B - B'

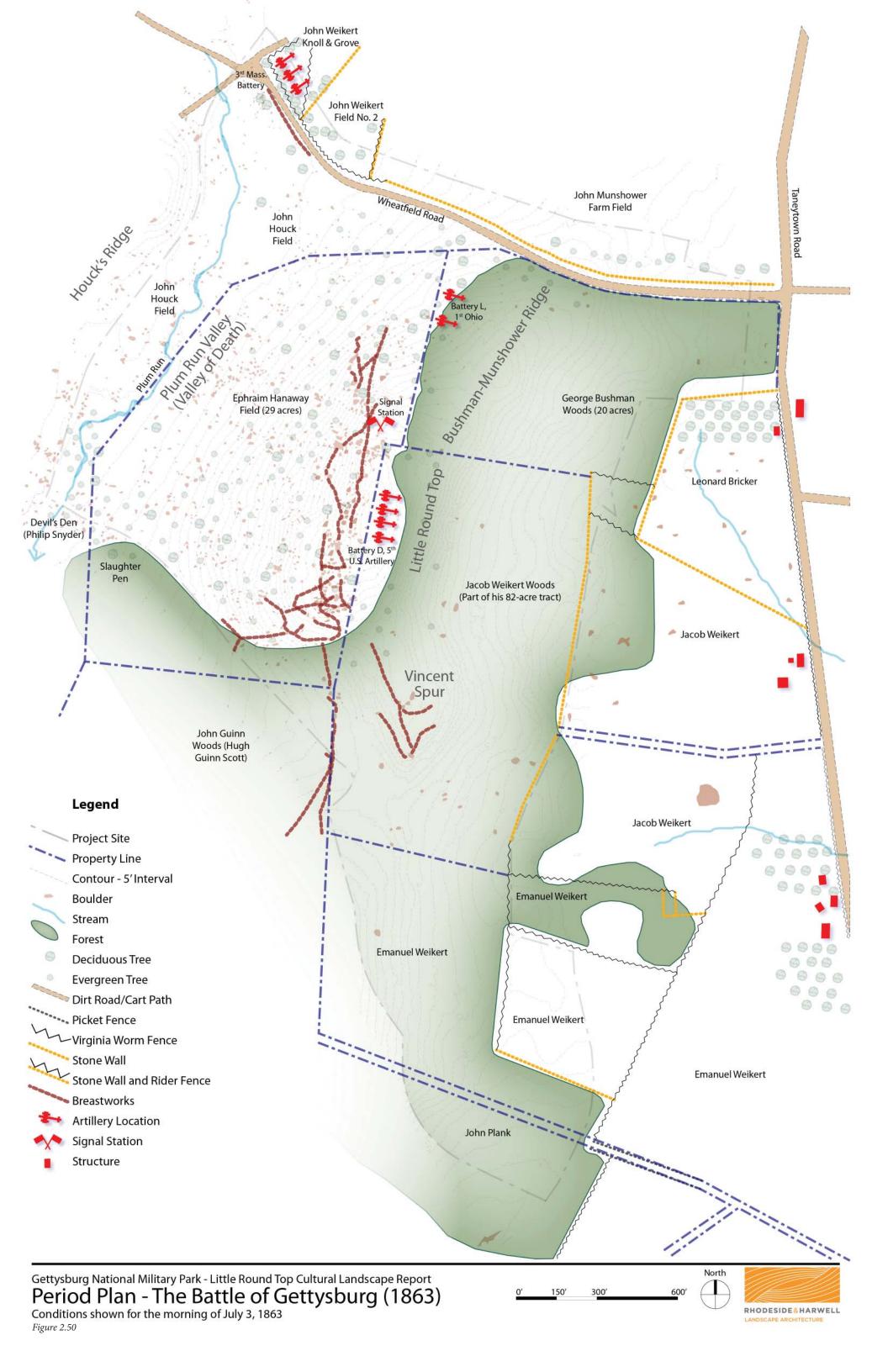


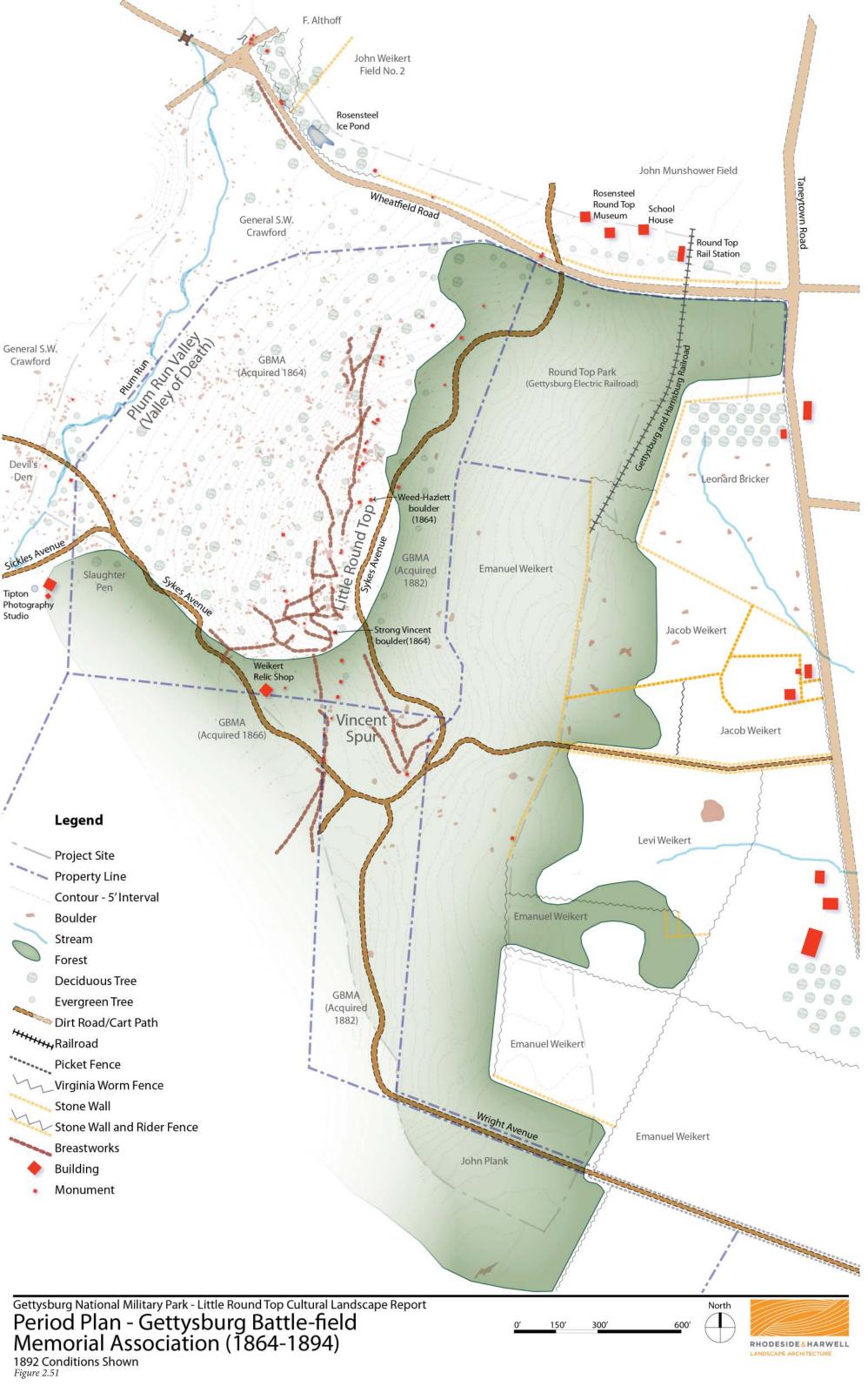


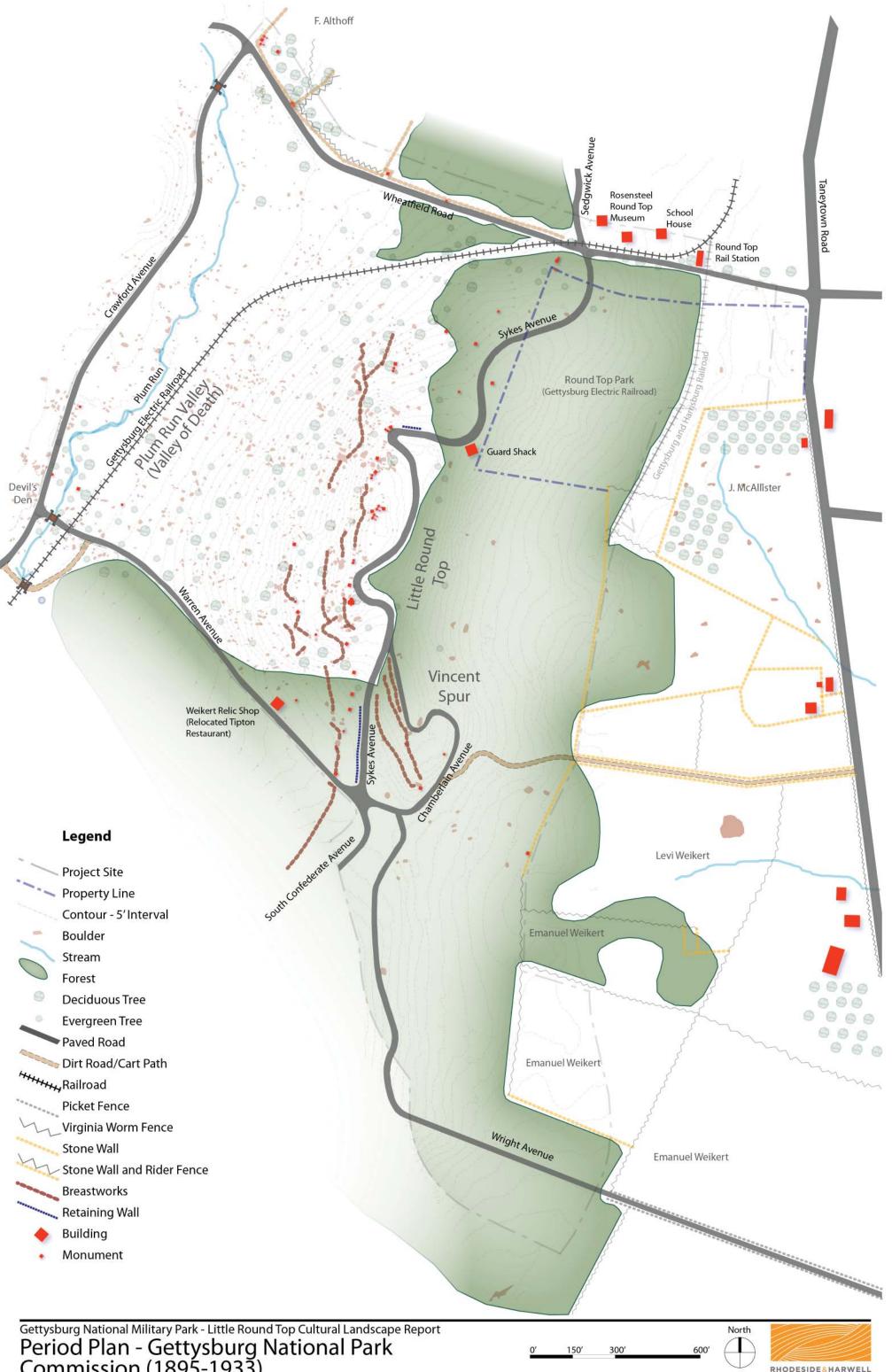
Section C - C'



Section D - D'

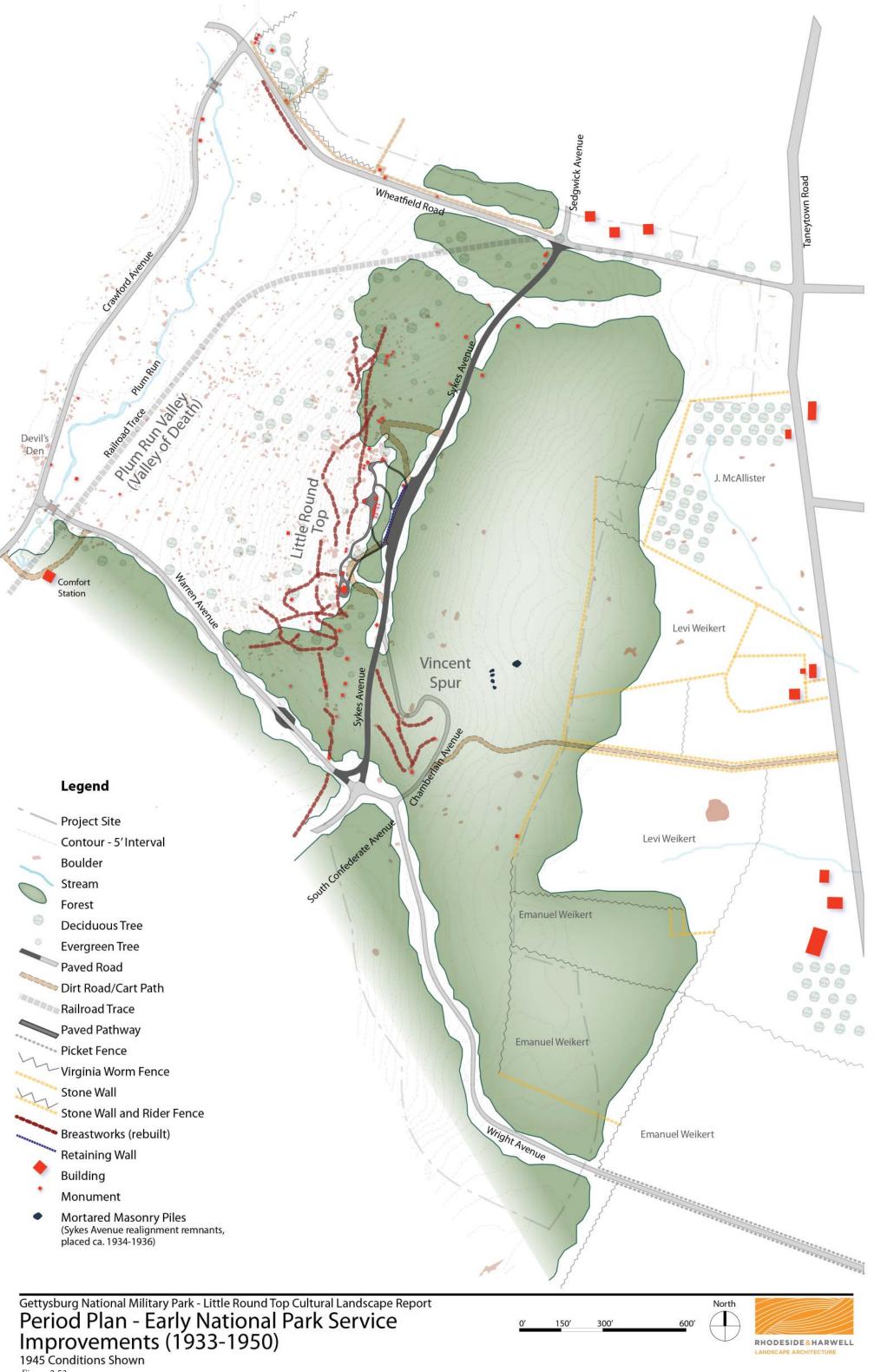






Period Plan - Gettysburg National Park Commission (1895-1933)







3. Existing Conditions & Character Area Analysis



Figure 3.01. Little Round Top and Big Round Top (beyond) from the Trostle Farm site (Photo by RHI, 2011).

Circulation and accessibility patterns, structures, monuments furnishings, landform and vegetation are all key in describing the typical visitor experience at Little Round Top from the Commemorative Era through today.

"The landscape upon which the battle was fought – the ridges, hills, woodlots, lanes and fields – determined the tactics of the armies...without all of these resources, the battle cannot be fully understood."

This statement, found in the General Management Plan for Gettysburg National Military Park, holds particularly true for Little Round Top. By understanding the topography, geology,

1. National Park Service. *General Management Plan and Environmental Impact Statement, Gettysburg National Military Park (GMP)*. Gettysburg, Pennsylvania: U.S. Department of the Interior, 1999. p.80.

hydrology, vegetation and visual character - extant today much as it was on July 2nd and 3rd, 1863 – one can easily grasp the reasoning behind both the tactics and sequence of events that gained this place such a prominent spot in Civil War history (Figure 3.01). Furthermore, the circulation and accessibility patterns, structures, monuments, furnishings, landform and vegetation are all key in describing the typical visitor experience at Little Round Top from the Commemorative Era through today.

Circulation

A variety of trails, paths, sidewalks and roadways allow visitors to experience Little Round Top from nearly every aspect of the site and via a number of different forms of transportation. Although most of these circulation routes are well maintained and, in some cases, preserved in their historic alignment, many paths are the result of park visitors forging their own 'social trails' through the landscape in order to reach some of the project area's more remote monuments and vistas and to travel between Little Round Top and the Devil's Den. Current park management philosophy is to "remove non-historic trails and restore the landscape," and to "prohibit new, non-historic circulation systems that do not



Figure 3.02. Wheatfield Road, looking west (Photo by RHI, 2010).

meet the park's mission and purpose."² However, requiring visitors to stay on maintained paths has proven challenging (see Figures 3.127 and 3.128 Paving & Circulation Maps).

Wheatfield Road GETT #RD11, IDLCS 005674

Running east to west along the study area's northern boundary, Wheatfield Road is the only roadway in the study area that predates the Battle of Gettysburg (Figure 3.02).³ The roadway is often used by commuters as a shortcut between Emmitsburg Road to the west and Taneytown Road to the east. The 18-foot wide asphalt roadway is unstriped within the study area, but beyond, to the west of the study area, a double yellow stripe denotes the road's center line. The corridor itself is characterized by open, gently rolling terrain, offering views in all directions.

<u>Crawford Avenue</u> GETT #RD317, IDLCS 080960

Originally built in 1887 and Telfordized in 1897, Crawford Avenue occupies a portion of the property purchased by the Battlefield Commission from General Crawford in May, 1893 (Figure 3.03).⁴ The 18-foot wide roadway runs oneway south from Wheatfield Road to the Devil's Den and forms the study area's western boundary as it runs parallel to Plum Run, which flows just to the east. The relatively flat, gently curving roadway crosses a bridge over Plum Run and allows expansive views up to the summit of Little Round Top.



Figure 3.03. Crawford Avenue, looking south (Photo by RHI, 2010).

Because it only permits one-way traffic, Crawford Avenue is wide enough to allow cars to pull over so visitors can explore the monuments on both sides of the roadway. Furthermore, an asphalt pull-off midway along the west side of the avenue provides space for one tour bus to pull off.

Warren Avenue GETT #RD316, IDLCS 080983

Warren Avenue first appears in an 1887 map of Gettysburg advertising the Smith Granite Company of Boston Massachusetts, which produced many of the monuments within the park. As late as 1899, the roadway was described by E.B. Cope as a "poor earth road." It was finally paved by the Gettysburg National Park Commission and shifted to the alignment seen today in 1902. Running from Crawford Avenue at the base of the Devil's Den to a four-way intersection with Sykes Avenue, Wright Avenue and South Confederate Avenue, the 18-foot wide, two-way road changes character as it climbs the slope of Little Round Top. At the base of Little Round Top,



Figure 3.04. Warren Avenue, looking north, with asphalt pull-offs in the foreground (Photo by RHI, 2010).

^{2.} GMP, op cit. p. 95.

^{3.} A dirt road in the same general location and alignment as Wheatfield Road appears on several battle era maps and accounts of the battle. *Wheatfield, Little Round Top and Devil's Den 1863 Conditions Map.* Drawn by K.G. Harrison, 2003 (Labeled for digital copy 2008). 4. Historic American Engineering Record (HAER). *Gettysburg National Military Park Tour Roads (HAER No. PA-485)*. Washington D.C.: U.S. Department of the Interior, 1998. pp.153-155.

^{5.} Ibid. pp.204-205.



Figure 3.05. An unpaved trail follows the historic alignment of Sykes Avenue as it approaches the 44th and 12th New York Infantry Monument (Photo by RHI, 2011).



Figure 3.06. Just north of the Sykes Avenue parking area, a trace of the historic Sykes Avenue alignment is still visible and is used as a pedestrian trail leading to the 155th Pennsylvania Infantry Monument (Photo by RHI, 2011).

the gently sloping roadway has an open character as it crosses Plum Run, affording views both to the Devil's Den and to the summit of Little Round Top. Approximately halfway along the avenue, woodlands on both sides of the road begin to screen views and enclose the corridor. Two asphalt parking areas flank the roadway adjacent to the 38th Pennsylvania Infantry monument, allowing visitors to park and explore the monuments in the Warren Avenue Monuments Character Area.

Sykes Avenue GETT #RD362, IDLCS 080996

Sykes Avenue was originally constructed in 1897 as a sinuous carriage trail that conveyed visitors all the way to the summit of Little Round Top, providing a choreographed sequence of views as the roadway turned out to the summit and then back into the forest.⁶ In 1934, despite the objections of park historians,⁷ the National Park Service determined that the historic roadway alignment was too dangerous for automobiles and realigned



Figure 3.07. Sykes Avenue parking area, looking south along Sykes Avenue (Photo by RHI, 2010).

Sykes Avenue to take a straighter path just east of the summit, where it remains today. Remnants of the old Sykes Avenue alignment as it approached the summit of Little Round Top are still apparent today and are used as unpaved pedestrian trails from the Sykes Avenue Parking Area to the monuments above (Figure 3.06). The steeply sloping, 18- foot wide one-way roadway brings vehicles up to a parking area just behind the summit before bringing them back down to an intersection at Wheatfield Road (Figure 3.05). A rutted, compacted area just south of the point where Chamberlain Avenue meets Sykes Avenue is the result of visitors often parking their cars here and walking to the 20th Maine Infantry monument.

Sykes Avenue Parking Area: Located just behind the summit of Little Round Top along Sykes Avenue, this parking area allows visitors to leave their cars and walk up to the monuments, interpretive signage and panoramic vistas on the summit (Figure 3.07). The asphalt parking lot is striped to allow for 24 pull-in spaces on the west side of Sykes Avenue and another 12 parallel parking spaces on the east side. The single bus



Figure 3.08. Looking north along Wright Avenue (Photo by RHI, 2010).

^{6.} *Ibid.* pp. 204-205.

^{7.} Gettysburg National Military Park to Verne E. Chatelain, 18 June, 1934 (from Gettysburg National Military Park Cultural Resources Division archives).



Figure 3.09. Parking area at the south end of Chamberlain Avenue (Photo by RHI, 2010).



Figure 3.10. Chamberlain Avenue road trace. All that remains is the Telford base (Photo by RHI, 2010).

parking space at the southeast corner of the parking area is nearly always occupied. As one of the most heavily visited sites in Gettysburg, the Little Round Top parking lot is often congested with a combination of tour buses, private vehicles, Segways and bicycles and occasionally requires a park ranger to direct traffic. Additionally, there are no designated handicapped parking spaces, making access for disabled visitors difficult.

Wright Avenue GETT #RD319, IDLCS 080987

Initially surveyed in 1887, Wright Avenue remained an unimproved avenue until 1903. Coming from the four-way intersection with Warren Avenue, Sykes Avenue and South Confederate Avenue, the 16-foot wide roadway twists and turns to avoid the several large boulders strewn throughout the forested landscape (Figure 3.08). Combined with the hilly terrain and forested enclosure, the curving roadway allows only limited sight distances, requiring drivers to slow down or risk hitting one of the boulders that comes within feet of the edge of pavement. Toward the southern tip of the project area, the roadway begins to straighten out as it is aligned between two fieldstone fences used to delineate property lines and enclose the farm-woodlot lane.

Chamberlain Avenue: Just off of the east side of Sykes Avenue, the rocky remnants of a Telford road base are evident, leading into the forest toward the 20th Maine Infantry monument (Figure 3.10). This road base is all that remains of Chamberlain Avenue, built in 1902 on the area known as Vincent Spur, to delineate the key position held by the 20th Maine on July 2nd, 1863. In 1970, the National Park Service removed the roadway that curved its way down the steep slope from Sykes Avenue to Wright Avenue, just south of the four-way intersection with Warren Avenue, Sykes Avenue and South Confederate Avenue. The southern terminus of the roadway remains as an asphalt paved parking area for three cars, while some of the remainder of the roadbed serves as the primary means of pedestrian access to the 20th Maine Infantry monument from Little Round Top (Figure 3.09). The concrete wheel stops at the end of the parking area provide an inadequate barrier as visitors will often drive past them, onto the removed portion of the avenue.

<u>Bridges:</u> War Department Era bridges at the northwest end of Warren Avenue and the northeast end of Crawford Avenue carry traffic over Plum Run (Figures 3.11 and 3.12). Constructed of mortared stone with metal bar and pipe railings, these bridges remain largely unmodified from their original appearance, although their construction has been modified to meet contemporary safety standards.

Gettysburg Electric Railway Trace: Operating from 1893 to 1916, the Gettysburg Electric Railway was a privately owned trolley system that provided tours of the battlefield. Although extensive efforts have been undertaken to restore the natural topography disrupted by the construction of the trolley line, the trace of the line as it cuts through the Valley of Death just east of Plum Run Can still be seen (Figure 3.13).

Asphalt Pull-Offs: In order to afford visitors a closer look at roadside monuments without stopping traffic or damaging the roadside landscape, the National Park Service created asphalt pull-off parking spaces in areas where there are concentrations of monuments. These pull-off areas, which occur along the west side of Crawford Avenue and both sides of Warren Avenue, are approximately 16 feet wide and long enough to accommodate one bus each.



Figure 3.13. Remnant of the Gettysburg Electric Railway rail bed, slightly elevated from the surrounding terrain. (Photo by RHI, 2011).



Figure 3.11. War Department Era bridge over Plum Run at Crawford Avenue, near the intersection with Wheatfield Road (Photo by RHI, 2011).



Figure 3.12. War Department Era bridge over Plum Run at Warren Avenue, near the intersection with Crawford Avenue (Photo by RHI, 2011).



Figure 3.14. Gravel parking area at Wheatfield Road. (Photo by RHI, 2010).



Figure 3.15. **Concrete curb** along the northern edge of VVheatfield Road. (Photo by RHI, 2010).



Figure 3.16. Granite curb and asphalt sidewalk at the Sykes avenue parking area (Photo by RHI, 2010).

Gravel Parking Areas: Two gravel parking areas provide opportunities for visitors to park their cars at the edges of the project area and experience Little Round Top on foot. On the eastern side of Wright Avenue, toward the southern edge of the project boundary, a small, flat, gravel paved clearing approximately 50 feet by 30 feet allows for cars to pull off the side of the road. Along the north side of Wheatfield Road, just east of Sedgwick Avenue, an approximately tencar gravel parking area is a remnant from the old Round Top Museum building (Figure 3.14). The little-used lot has recently been incorporated into vehicular parking for some ranger programs.

Concrete Curb: Approximately 200 feet of cast-in-place concrete curb (without gutter) retains the inside corner of Wheatfield Road, allowing the adjacent grade to rise six inches and slope away from the roadway (Figure 3.15). Constructed in the 1990s as part of Federal Highways improvements within the park, this section of curb is noteworthy in that it is one of two curbed portions of roadway within the project area, and the only concrete curb.

Granite Curb and Asphalt Sidewalk: Along the west side of the Sykes Avenue parking area a four-inch tall monolithic granite curb acts as a barrier between the parking stalls and the adjacent asphalt sidewalk that leads to the summit (Figure 3.16). Originally constructed by the National Park Service, the curb appears to have once been taller (likely six inches), but the grade of Sykes Avenue was likely raised slightly against it every time it was repaved. The adjacent asphalt sidewalk is severely degraded; several areas have worn away completely, exposing the aggregate base below.

<u>Concrete Wheel Stops:</u> An NPS Era introduction, concrete wheel stops are used in several locations as barriers against vehicular traffic (Figure 3.17). In addition to being far less expensive than cast-in-place curbs, the wheel stops do not require foundations, which would cause unnecessary subsurface disturbance to this archaeologically sensitive site.

Asphalt Paths: Networks of asphalt pathways weave their way through the most heavily visited areas of Little Round Top (Figure 3.18). Although initially installed by the NPS to help mitigate erosion and compaction from the site's many visitors, the paths themselves are now the victim of heavy degradation (Figure 3.19). Ranging from three to seven feet wide, these paths are often quite steep and constricted by overgrown vegetation.

<u>Stone Steps:</u> Ranging from relatively flat natural boulders to quarried stones specifically cut for the purpose and consisting of no more than three risers, stone stairs are used along asphalt pathways in areas of excessively steep grades (Figure 3.20). Excessive foot traffic has worn many of these steps smooth, making them dangerous, particularly in wet conditions.

<u>Mown Grass Paths:</u> Small grassy clearings are maintained around several of the monuments along both Warren and Crawford Avenues (Figure 3.21). These mown grass paths provide access to visitors who would otherwise have to wade through waist-high meadow grasses to get a closer look at the monuments.

<u>Maintained Trails</u>: The horse trail that bisects the forested eastern slope of Little Round Top is part of a network of maintained trails that allows hikers and horseback riders to connect to various sections of the park without having to travel on the vehicular roadways (Figures 3.22 and 3.23). These trails are cleared of brush and fallen trees and marked with small aluminum signs.

<u>Social Trails:</u> "On a battlefield where the resource is literally the ground that was contested, well-meaning and curious visitors



Figure 3.17. Concrete wheel stops prevent vehicles from driving off the side of Sykes Avenue and down the adjacent slope. (Photo by RHI, 2010).



Figure 3.18. **Asphalt path** leading from the top of Vincent Spur to Wright Avenue (Photo by RHI, 2011).

are eroding the very surface of the park: the public is loving the battlefield to death."⁸ This line from the park's General Management Plan is particularly applicable to the web of rutted social trails and eroded gathering spaces that cover much of the project area. Caused by visitors wishing to get a closer look at the site's monuments without a clearly defined path to get to them, these trails are the single largest cause of erosion and degradation to Little Round Top. Additionally, many tour groups will reenact the Confederate charges made throughout the course of the battle up the slopes of Little Round Top and Vincent Spur, further degrading the landscape.



Figure 3.19. Asphalt paths show significant erosion at the edges. These paths line the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.20. Smooth **stone steps** along the asphalt path leading to the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.21. Mown grass path near the 9th Pennsylvania Reserves monument (Photo by RHI, 2011).

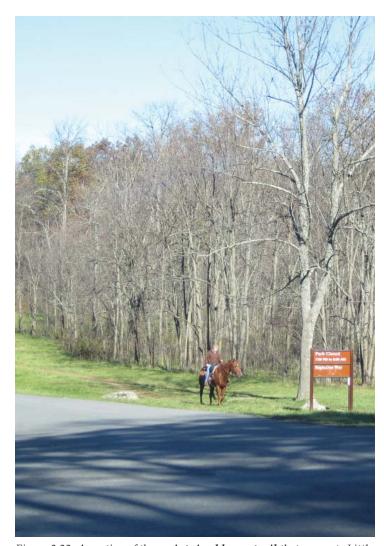


Figure 3.22. A portion of the *maintained horse trail* that connects Little Round Top to other areas of the park, taken at the intersection of Wheat-field Road and Sedgwick Avenue (Photo by RHI, 2010).



Figure 3.23. The *maintained horse trail* that traverses Little Round Top's eastern slope utilizes a portion of the historic Sykes Avenue alignment. At the intersection with Wheatfield Road, a portion of the Telford road base and asphalt paving is still apparent. (Photo by RHI, 2011).

In keeping with Gettysburg National Military Park's management philosophy, signage and furnishings on Little Round Top are kept to a minimum.

Furnishings & Signage

Military Consistent with Gettysburg National management philosophy, furnishings and signage on Little Round Top is kept to a minimum, and visitors are advised to use the visitor map to find their way around the park.⁹ This philosophy was adopted in an effort to retain the landscape character that existed during the Battle of Gettysburg. The limited signage falls into four categories based upon its age and function; however, today, styles are diverse as are materials, lettering and use of color. Site furnishings are also kept to a minimum so as not to interrupt the visual quality of the site (see Figure 3.129 Furnishings, Signage & Structures Map). Although elements such as trash receptacles are not to be found within the project area, the site remains relatively litter free due to the diligent grounds maintenance by NPS staff and volunteers.

<u>Bicycle Rack:</u> Testament to the popularity of touring the Gettysburg National Military Park via non-motorized means of transportation, a simple aluminum bicycle rack sits at the north end of the Sykes Avenue parking area, just behind the summit of Little Round Top (Figure 3.31). Visitors also travel the park via horseback, Segway and on foot.

Commemorative Era Signage: Installed during the Commemorative Era and designed by long time park engineer E.B. Cope, these cast iron tablets on metal posts mark the name of commemorative avenues and significant sites within the park (Figure 3.25). Six such tablets exist within the project area, including one identifying Little Round Top. Additionally, a smaller tablet stands at the edge of a breastworks just to the east of Sykes Avenue and reads: "This wall was built for defense, July 3rd P.M., 1863." (Figure 3.26)

NPS Era Wayside Exhibits: At the northern end of Chamberlain Avenue and throughout the Core Interpretive Character Area, interpretive sign panels mark significant views and explain key historic elements or describe noteworthy events that occurred during the battle (Figures 3.27 and 3.28).



Figure 3.24. Heavily rutted **social trail** leading from the Strong Vincent marker to Warren Avenue. Trails like this, formed from repeated visitor use, are found throughout the project area (Photo by RHI, 2011).



Figure 3.31. Bicycle rack (Photo by RHI, 2010).



Figure 3.25. Commemorative Era avenue sign (Photo by RHI, 2010).

^{9. &}quot;...Additional signs would conflict with the historic character of the park's landscape." *GMP op. cit.*, p.184.

THE WALL WAS TRULY IN DEFENDE

Figure 3.26. Commemorative Era sign reads, "This wall was built for defense, July 3rd P.M. 1863" (Photo by RHI, 2010).



Figure 3.27. NPS Era wayside exhibits at the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.28. NPS Era wayside exhibit detailing one's view from the summit of Little Round Top (Photo by RHI, 2010).

<u>NPS Era Directional Signage:</u> Additional roadside signs ranging from those required on all motorways to small wayfinding markers dot the landscape of Little Round Top (Figure 3.29).

<u>Property Markers:</u> At the eastern edge of the National Park Service's property, several boundary markers can be found. These markers range from small, worn stone obelisks to newer aluminum signs posted on trees (Figure 3.30).





Figure 3.29. In addition to standard road signs, directional signage such as these provides visitors with information about park tours and regulations (Photo by RHI, 2010).



Figure 3.30. Various types of **property markers** found along the park's eastern boundary (Photo by RHI, 2010).

The 56 memorials and monuments on and around Little Round Top can be divided into three categories:

- Gettysburg National Military Park Commission Tablets
- Location-Specific Markers
- Regimental and Flank Monuments

Monuments

Throughout the Park's Commemorative Era, battle veterans and memorial associations returned to Gettysburg to erect statues, monuments, tablets and markers signifying the placement of regiments and the location of specific events that took place during the battle (see Figure 3. 130 Character Areas & Monuments Map). To ensure monuments were accurately sited based upon the location of troops during the battle, the Gettysburg Battle-field Memorial Association field located each troop's position, which was later verified by the War Department prior to the placement of monuments and markers. ¹⁰

As increasing numbers of veterans groups and memorial associations requested permission to erect memorials, the Park Commission took a more active role in the approval process, often serving as arbiter in the case of disputes between groups.

The 56 memorials and monuments that have been placed within the vicinity of Little Round Top can be divided into three categories, based upon the group that erected the marker or the group or action the marker is memorializing.

Gettysburg National Park Commission Tablets

(Map Designation "A"): These markers are usually located immediately adjacent to the park's avenues and mark the general location of various divisions, brigades, headquarters, hospitals and other aspects of the battle on both the Confederate and Union sides. Commissioned by the Gettysburg National Military Park Commission, the tablets were staked out by E.B. Cope, commissioners John P. Nicholson and Charles A. Richardson between 1896 and 1920. Cope produced several tablet designs, each memorializing a

unique aspect of the battle, while Nicholson and Richardson provided the text for the tablets' inscriptions. Although found in a variety of shapes and sizes, the markers within this category all consist of bronze-inscribed tablets with granite bases. Several of the bronze tablets were produced from reclaimed war era cannon barrels.

Location-Specific Markers (Map Designation "B"): Often more austere than the regimental monuments described below, these tablets and plaques commemorate the location of specific events such as the wounding of an officer or the site of a signal station. Many of this category of marker are among the oldest memorials in the park, often placed by the Gettysburg Battlefield Memorial Association.

Regimental Monuments (Map Designation "C"): Built in a variety of shapes, sizes and materials, these monuments mark the general position of individual regiments during the Battle of Gettysburg. Each of these monuments was erected by the veterans of the regiment they represented and often contain an inscribed record of the number of men who served, were wounded and died during various campaigns of the Civil War.

Regimental Flank Monuments (Map Designation "L" or "R"): Accompanying many of the Regimental Monuments is a pair of smaller markers denoting the left and right flank of each regiment. These markers help visitors understand the placement of troops during battle. The flank markers of adjacent regiments often abut one another, forming a continuous troop line. This is especially clear at the summit of Little Round Top.

The following Monument Inventory provides a catalogue of all of the memorials, markers and monuments that were placed within the vicinity of Little Round Top during the Commemorative Era. The name, placement date and description of each marker was taken from the Resource Inventory that was created as part of the Gettysburg National Military Park/Soldiers' National Cemetery nomination to the National Register of Historic Places and the National Park Service's List of Classified Structures. For the most part, all monuments remain in excellent condition, the result of durable materials, careful craftsmanship and strong preventative maintenance. Damage, degradation and wear are noted where they were observed.

^{10.} Annual Report of the Gettysburg National Park Commission (GNPC), 1898 Office of the Commissioners, bound annual report, 1893-1920 (GETT 41114), (from Gettysburg National Military Park archives).



Figure 3.32 (Photo by RHI, 2010).



Figure 3.33 (Photos by RHI, 2010).

01B Position of Company B, 20th Maine Volunteers, Capt. Walter G. Morrill

Placed October 3, 1889

Location: This marker is set in a small, forest clearing in front of a fieldstone fence that marks the park's eastern boundary.

Description: Square granite shaft with text inscribed its sloping face. Approximately 2' by 2' and 2' tall at its highest point.

Capt. Morrill's Company B held this position on the afternoon and evening of July 2, 1863 as skirmishers attacked the Army of Northern Virginia's right flank.

The clearing around the marker is heavily compacted, the result of tour groups gathering in this location to hear the story of the 20^{th} Maine Infantry.

02C **20**th **Maine**02L **20**th **Maine, Left Flank**02R **20**th **Maine, Right Flank**GETT #MN089-B, IDLCS 009635
Placed June, 1886 (left flank marker replaced July 1998)

Location: Placed on a boulder near the crest of Vincent Spur on the south slope of Little Round Top, south of the old Chamberlain Avenue roadbed.

Description: Polished granite shaft, 3' square with peaked cap on a 4' polished base; inscriptions on all four sides. The flanking marker is slant faced, 1.6' by 1'.

For many years it was mistakenly purported that this monument marked the apex of the "V" formed by Col. Joshua Chamberlain as he prepared to meet the oncoming Alabamans on the evening of July 2, 1863. The actual location of the apex is approximately 20 yards northwest of the monument. The monument was erected by survivors of the 20th Maine Infantry.

There is a small chip in the left corner of the monument's peaked cap. There are also several small chips on the face of the right flank marker.



Figure 3.34 (Photo by RHI, 2011).

03C 9th Pennsylvania Reserves (38th Infantry) 03R 38th Pennsylvania Infantry, Right Flank GETT #MN090-B, IDLCS 009889

Placed May 1889, dedicated September 1890

Location: Situated atop a boulder in a grassy forested clearing at the southern base of Little Round Top, just north of the intersection of Warren and Sykes avenues.

Description: 5' by 2' granite shaft with rough edges on a 6.9' by 3.1' rough granite base. The east face is adorned with a relief sculpture of an infantryman pausing beside the grave of a fallen comrade, and a bronze casting of the Pennsylvania state seal at the base. An historical inscription is incised into the polished surface of the west face. Flanking markers are 1' by 1.6' granite markers with rough edges. The right flank marker sits atop breastwork remnants near the infantry monument, while the left flank marker is outside the study area boundary in a clearing between Warren Avenue and South Confederate Avenue.

The 9th Pennsylvania Reserves arrived at this location on the evening of July 2, 1863 and held it until the end of the battle.



Figure 3.35 (Photos by RHI, 2010).

04C **83**rd **Pennsylvania Infantry** 04L **83**rd **Pennsylvania Infantry, Left Flank** 04R **83**rd **Pennsylvania Infantry, Right Flank** GETT #MN091-B, IDLCS 009723 Placed September 12, 1889

Location: Set on the wooded south slope of Little Round Top, uphill from the 9th Pennsylvania Reserves marker.

Description: Bronze statue of Col. Strong Vincent atop an 8' by 5.6' rough hewn granite base with a bronze casting of the Pennsylvania state seal and raised Maltese cross, atop a 5' by 3' smooth granite shaft with inscriptions on all four sides; total height of 20.9'. The flanking markers are 1.8' by 1.4' granite shafts with cross-gable tops.

Origin: Constructed by P.F. Eisenbrown and Sons, with the bronze sculpture of Gen. Vincent by S.J.O. Kelly.

This sculpture of Col. Vincent marks the general position held by the 83rd Pennsylvania Infantry as it was attacked by Confederate troops on the evening on July 2, 1863. After driving the Confederate troops back, the infantry was sent to Big Round Top before being withdrawn around noon on July 3 and moved to a position farther north.

The ground around the monument is severely compacted, the result of social trails created by park visitors.



Figure 3.36 (Photo by RHI, 2011).

05C 2nd Massachusetts Infantry

Location: Placed under cover of the tree stand that lines the southwestern portion of Sykes Avenue, behind a breastworks that lines the southern slope of Little Round Top.

Description: A 3' tall, severely fluted iron post is all that remains of this monument. When originally installed, this post held an ornate, darkly painted cast iron tablet with raised letters, painted in a light color for contrast. The tablet was surmounted by an iron likeness of the American Indian that appears on the state seal of Massachusetts and flanked by two flags.

Origin: The State of Massachusetts originally paid for 32 cast iron markers, similar to this one, however they were largely removed as regimental survivors erected more ornate stone markers in their place. Manufactured in Boston, this is one of the few surviving remnants of early state-installed iron regimental tablets.

The 2nd Massachusetts Infantry occupied this position on July 3, 1863, until the end of the battle.

06C 22nd Massachusetts Infantry

Location: Placed under cover of the tree stand that lines the southwestern portion of Sykes Avenue, behind a breastworks that lines the southern slope of Little Round Top.

Description: A 3' tall, severely fluted iron post is all that remains of this monument. When originally installed, this post held an ornate, darkly painted cast iron tablet with raised letters, painted in a light color for contrast. The tablet was surmounted by an iron likeness of the American Indian that appears on the state seal of Massachusetts and flanked by two flags.

Origin: The State of Massachusetts originally paid for 32 cast iron markers, similar to this one, however they were largely removed as regimental survivors erected more ornate stone markers in their place. Manufactured in Boston, this is one of the few surviving remnants of early state-installed iron regimental tablets.

The 22nd Massachusetts Infantry occupied this position on July 3, 1863, until the end of the battle.



Figure 3.37 (Photo by RHI, 2011).



Figure 3.38 (Photo by RHI, 2011).

07C 18th Massachusetts Infantry

Location: Placed under cover of the tree stand that lines the southwestern portion of Sykes Avenue, behind a breastworks that lines the southern slope of Little Round Top.

Description: A 3' tall, severely fluted iron post is all that remains of this monument. When originally installed, this post held an ornate, darkly painted cast iron tablet with raised letters, painted in a light color for contrast. The tablet was surmounted by an iron likeness of the American Indian that appears on the state seal of Massachusetts and flanked by two flags.

Origin: The State of Massachusetts originally paid for 32 cast iron markers, similar to this one, however they were largely removed as regimental survivors erected more ornate stone markers in their place. Manufactured in Boston, this is one of the few surviving remnants of early state-installed iron regimental tablets.

The 18th Massachusetts Infantry occupied this position on July 3, 1863, until the end of the battle.

08A **3**rd **Brigade, 1**st **Division, 5**th **Corps (Vincent's Brigade)** GETT #MN488, IDLCS 080786 Placed 1911-1912

Location: Immediately west of Sykes Avenue, just south of the main parking area behind the summit of Little Round Top.

Description: Bronze tablet measuring 4' by 3.8', resting on a 3' square granite base, with an overall height of 5.4'.

Origin: This is one of 75 Brigade Tablets placed by the Gettysburg National Park Commission. The foundations and granite pedestals were installed by Charles Kappes of Gettysburg for \$19 each; the granite pedestals were provided by John Maxwell's Sons for \$188 each; the bronze inscriptions were cast by Albert Russell and Sons Company.

See the discussion at the beginning of this section for further information regarding these tablets.

THAST DIVISION

WOUNDED

JULY 2. DIED JULY

T. 1853

Figure 3.39 (Photos by RHI, 2011).





Figure 3.40 (Photos by RHI, 2010).

09B Strong Vincent Marker 09B Strong Vincent Boulder GETT #MN092, IDLCS 09980

Inscribed 1863-1864, tablet placed 1878 (replaced 1978)

Location: Set atop a boulder in the steep wooded area just west of Sykes Avenue and at the southern tip of the Core Interpretive Character Area. A nearby boulder, immediately adjacent to the 44th and 12th New York Infantry Monument, contains an inscription similar to the one on the tablet.

Description: Marble tablet approximately 3" thick, 2' wide and 4' tall. A Maltese cross adorns the top half of the tablet with an inscription below. This inscribed boulder and tablet mark the location where Col. Strong Vincent was mortally wounded in combat on July 2, 1863. He died on 7 July, 1863. Mentioned in a 1864 written account from an early battlefield visitor, the inscribed boulder is one of the two first battlefield monuments.

Dating to 1864 or earlier, the inscribed boulder is one of the park's earliest known memorials. Placed in 1878, the marble tablet is one of the park's earliest constructed monuments. The tablet that exists today is a replica; the original tablet was replaced in 1978 when vandals broke it in half. The original tablet was installed with the inscription facing Devil's Den, while the existing replica was installed incorrectly, with the inscription facing Sykes Avenue.

10C **16**th Michigan Infantry 10L **16**th Michigan Infantry, Left Flank 10R **16**th Michigan Infantry, Right Flank GETT #MN095-B, IDLCS 009779 Placed June 12, 1889

Location: Placed on a boulder cantilevered over a cliff at the edge of a plateau midway up the southwest face of Little Round Top.

Description: 5.4' by 1.6' granite monument with a double slant cap containing a relief of a musket, set atop a sarcophagus-shaped granite base, 7.4' by 3.7'. Inscriptions are incised on both the east and west faces and a bronze Michigan state seal adorns the east face. The flanking markers have a blunted-apex top and are 1' square.

Marking the position held by the regiment on July 2 1863, the siting of this monument affords clear views all the way to the Devil's Den. After suffering many casualties at this advanced position, the regiment was moved into a position farther north on July 3.

This monument was originally placed at ground level and later moved to its current location. The monument's original base remains approximately 10 yards southeast of its current location.



Figure 3.41 (Photo by RHI, 2010).

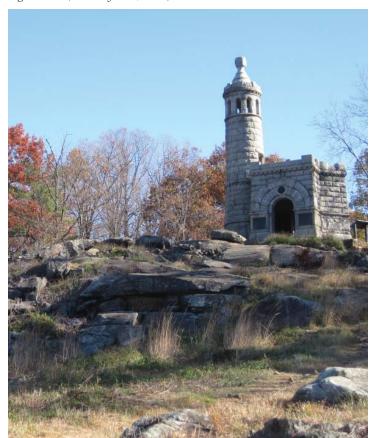


Figure 3.42 (Photo by RHI, 2010).

11C Michigan Sharpshooters GETT #MN098, IDLCS 009781 Placed June 12, 1889

Location: Little Round Top's most difficult-to-reach monument, located midway up the western slope, several yards downhill from the Core Interpretive Character Area.

Description: Rough hewn granite block shaft, five courses in height, set on a 5.4' square base for an overall height of 7'. Inscriptions are incised into polished granite panels on all four sides. A cross-gable cap adorns the top of the monument.

Origin: The monument was made by the Smith Granite Company for a fee of \$500.

This monument recognizes the 1st US Sharpshooters, Companies C, I & K and the 2nd Sharpshooters, Company B, all from Michigan. Although the monument is quite visible from both the core interpretive area and the knoll around the 16th Michigan monument, access along the rocky western slope of Little Round Top is quite difficult. The clear views to the Devil's Den from this position make the strategic decision for placing a company of sharpshooters here immediately apparent.

12C **44**th and **12**th New York Infantry GETT #MN093, IDLCS 009648

Placed July 3, 1893, modified 1900 (12th New York)

Location: Located at the summit of Little Round Top, this monument is visible from as far away as the Warfield Ridge observation tower, over a mile away.

Description: This monument, resembling a castle, is constructed of undressed granite block and has a footprint of 21.8' by 28'. The top of the tower stands 44.6' above grade and houses a spiral stair that accesses the castellated overlook atop the arched chamber. The arched chamber contains bronze tablets memorializing the members of the 44th and 12th New York infantries.

Origin: Built by George H. Mitchell for \$10,965, the granite for the monument came from Prospect Hill in Waldo County, Maine.

The largest monument on Little Round Top marks the position the 44th New York held during the evening of July 2, 1863 until they were relieved during the morning of July 3, 1863. The tablets for the 12th New York, which served as headquarters guard during the battle, later were added as a tribute to the sister regiment. Although there are no left or right flank markers, an inscription on the monument describes a monument that marks the forward position of the 44th New York to be farther down the slope of Little Round Top.

The asphalt paving surrounding the monument is severely degraded, often breaking away in large chunks at the edges, revealing the walkway's gravel base.







Figure 3.43 (Photos by RHI, 2010).





Figure 3.44 (Photos by RHI, 2010).

13C **140**th New York Infantry 13L **140**th New York Infantry, Left Flank 13R **140**th New York Infantry, Right Flank GETT #MN094-B, IDLCS 009695 Placed September 17, 1889

Location: Sited on a flat area of the summit of Little Round Top, just north of the 44th and 12th New York Monument.

Description: Rough hewn granite shaft, on a 7' by 5.8' rough hewn granite base, with an overall height of 7.3'. A bronze relief portrait of Col. Patrick O'Rourke adorns a recess in the stone on the west face of the monument and bronze inscription tablets are affixed to the north and south sides. Flanking markers are apex topped granite shafts, 1' square.

Origin: The monument was constructed by the Smith Granite Company for \$1,500. The relief of Col. O'Rourke was sculpted by J.G. Hamilton.

This monument marks the spot where Col. O'Rourke was shot dead after leading the 140th New York to the summit of Little Round Top minutes before being attached by Confederate Troops. A long-standing legend states that rubbing O'Rourke's nose will bring good luck. As a result, his nose is polished from visitors continually rubbing it.

Additionally, the pavement covers a portion of the monument's base, altering the monument's original appearance. The asphalt paving surrounding the monument is heavily worn and cracked. Both of the flanking markers also sit below their original grade.

14A Battery D, 5th U.S. Artillery GETT #MN684-D, IDLCS 080849 Placed 1907-1908

Location: This monument consists of four cannons flanking a tablet, lining the eastern side of the walkway that traverses the highest point of Little Round Top.

Description: Rock faced granite monolith with bronze inscription tablet and bronze seal of the U.S. coat of arms, 4' by 2', 7' in height. Four flanking cannons are replicas of the style and size used during battle.

Origin: This is one of 44 tablets marking the positions of the United States Regular Army commands placed by the Gettysburg National Park Commission. Three 10-pounder Parrott cannons were placed on Little Round Top in 1895, with a fourth added later. This fourth cannon is the exact same style as the cannon used at this location during battle.

See the discussion at the beginning of this section for further information regarding these tablets.

The ground around this tablet and the mounted cannons is heavily compacted due to overcrowding of visitors on the asphalt paving on Little Round Top's summit.



Figure 3.45 (Photos by RHI, 2010).







Figure 3.46 (Photos by RHI, 2010).

15B Weed and Hazlett Inscribed Boulder 15B Weed and Hazlett Monument GETT #MN096 IDLCS 009982

Inscribed 1863-1864 (boulder), placed 1889

Location: The monument is set atop an inscribed boulder, several feet away from the paved path at the summit of Little Round Top.

Description: Granite monolith constructed of rock quarried from the Devil's Den, 1.9' square on a 2.1' square base, with an overall height of 6'.

Origin: Originally the monument to the 91st Pennsylvania Volunteers, text inscription was modified in 1889 when the monument was re-purposed and moved to memorialize Gen. Hazlett and Brig. Gen. Weed.

A granite sphere that topped the monument was vandalized and has been missing since at least 1960.

The inscribed text on the monument and boulder are illegible because of the composition of the granite. Later monuments did not use this type of granite, resulting in much more legible inscriptions.

The ground around this tablet is heavily compacted due to overcrowding of visitors on the asphalt paving on Little Round Top's summit.

16C **91**st Pennsylvania Infantry 16L **91**st Pennsylvania Infantry, Left Flank 16R **91**st Pennsylvania Infantry, Right Flank GETT #MN097-B, IDLCS 009728 Placed September 12, 1889

Location: Set at the highest point of Little Round Top, this monument appears to hang over the western edge of hillside, just off the asphalt path that winds throughout the summit.

Description: A castellated granite tower comprised of three tiers of granite block courses, 5' square on a 7' square base and 25.6' tall. The flanking markers are 1' square blocks of granite with a flat top and mitred edges. Three inset polished panels carry the incised inscriptions and the 5th Corps Maltese Cross finial tops the monument.

Origin: Fabricated by the Ryegate Granite Works of Ryegate, Vermont.

Marking the position held by the 91st Pennsylvania Infantry on July 2 and 3, 1863, this is the second monument erected at this site to the 91st Pennsylvania Regiment. The first monument was moved and repurposed in 1889 when this monument displaced it. It was inscribed to honor General Weed and Lieutenant Hazlett and moved to it current location.

The mitred corners on the flanking markers are not original, but were later added to remove chipped corners and make the markers appear more uniform. The left flank marker sits below its original grade.



Figure 3.47 (Photos by RHI, 2010).



Figure 3.48 (Photo by RHI, 2010).

17B Major General G.K. Warren Statue

GETT #MN099, IDLCS 009945

Placed August 8, 1888

Location: Affixed to a prominent boulder on the summit of Little Round Top on the uphill side of rocky precipice that forms the top of the north slope.

Description: A bronze statue of General Gouverneur K. Warren, measuring 8.4' in height, with a bronze tablet affixed to the south face of the builder and the inscription "Warren" cut into the boulder's north face. A bronze sign forbidding visitors to climb on the boulder was added to the north face in 1899.

Origin: Sculpted by Karl Gerhardt and cast by the Henry Bonnard Bronze Company for a cost of approximately \$5,000.

Dedicated on the anniversary of Warren's death, this statue marks the "exact position of General Warren as he stood when looking over the field, July 2nd, 1863." Upon discovering that Little Round Top was undefended at this time, Warren dispatched staff to locate reinforcing troops. Soldiers from the Union Army's 5th Corps arrived just in time to meet Attacking Confederate troops.

The statue's location and ease of accessibility made it such an attractive nuisance to vandals that the 5th New York Veterans Association requested and paid for signage prohibiting anyone from climbing on the boulder, thus creating the oldest surviving regulatory signage at Little Round Top.

18C United States Signal Corps

GETT #MN403, IDLCS 009992

Placed May 16, 1919

Location: Set into the face of a boulder that lines one of the asphalt walkways on the summit of Little Round Top.

Description: Bronze tablet measuring 3.5' by 2.1' surmounted by an eagle in relief, with talons holding an olive branch and unsheathed arrows. Two unfurled signal flags separate the eagle from the inscription. The tablet is set onto the northeast face of a boulder known as the signal rock.

Under orders from Gen. Meade, Gen. Warren went to the summit of Little Round Top to investigate the location of Confederate troops. When he arrived, he found that only the signal corps occupied this highly significant spot. He ordered the signal station to remain while he dispatched staff to locate reinforcing troops. This is the only signal station at Gettysburg that has been permanently marked and the only memorial to the signal corps in the park.



Figure 3.49 (Photo by RHI, 2010).







Figure 3.50 (Photos by RHI, 2010).

19A **3**rd **Brigade, 2**nd **Division, 5**th **Corps (Weed's Brigade)** GETT #MN491, IDLCS 080856 Placed 1911-1912

Location: Situated at the extreme northwest corner of the Sykes Avenue parking lot, just off of the edge of the asphalt sidewalk that leads to the summit.

Description: Bronze tablet measuring 4' by 3.8', resting on a 3' square granite base, with an overall height of 5.4'.

Origin: This is one of 73 brigade tablets placed by the Gettysburg National Park Commission. The foundations and granite pedestals were built by Charles Kappes of Gettysburg for \$19 each; the granite pedestals were provided by John Maxwell's Sons for \$188 each; the bronze inscriptions were cast by Albert Russell and Sons Company.

See the discussion at the beginning of this section for further information regarding these tablets.

Erosion and compaction from exessive pedestrian traffic in the area has resulted in the tablet's concrete foundation becoming exposed.

20C **146**th New York Infantry 20L **146**th New York Infantry, Left Flank 20R **146**th New York Infantry, Right Flank GETT #MN100-B, IDLCS 009697 1880-1890

Location: Sitting on a flat area at the base of a rocky precipice that forms the top of Little Round Top's north slope.

Description: Quincy granite shaft with a ridge cap and rough hewn base 9.6' by 6.6' with an overall height of 8.4'. Raised inscriptions adorn all four faces. Flanking markers are 1' square flat granite tablets affixed to boulders approximately the same size as the tablet.

Origin: Constructed by Frederick and Field for \$1,500.

The 146th New York Infantry deployed here and erected stone wall breastworks on the afternoon of July 2, 1863 and remained here until the end of the battle. Gen. George Gordon Meade observed the battle from this position for a time on July 3, 1863. Heavy visitor traffic in this area has caused the ground immediately around this monument to become compacted.



Figure 3.51 (Photos by RHI, 2010).



Figure 3.52 (Photos by RHI, 2010).

21C 155th Pennsylvania Infantry 21L 155th Pennsylvania Infantry, Left Flank 21R 155th Pennsylvania Infantry, Right Flank GETT #MN101-B, IDLCS 009773

Dedicated September, 1886, Modified September 12, 1889

Location: Set on a boulder at the base of a rocky precipice that forms the top of Little Round Top's north slope, punctuating an open, flat area along the slope.

Description: Polished granite shaft, 3.5' square and topped with a sculpture of a Zouave loading a musket. The plinth and shaft contain incised inscriptions, and the base is adorned with an acanthus-type cornice. Flanking markers are flattopped, 1' square.

Origin: Erected by the Ryegate Granite Works of Ryegate, Vermont. The monument was originally topped with an apex top. When the state of Pennsylvania appropriated \$1,500 for each veterans group to erect a monument, the statue of the Zouave was added by the survivors of the 155th Pennsylvania Infantry in September of 1889.

The monument occupies the location of the 155th Pennsylvania Volunteers on July 2 and 3, 1863.

The stone right hand of the Zouave, and the upper part of his rifle's muzzle are broken off.

Heavy visitor traffic in this area has caused the ground immediately around this monument to become compacted. The foundation of the left marker is exposed from erosion.

22C Battery L, 1st Ohio 22L Battery L, 1st Ohio, Left Flank GETT #MN102-D, IDLCS 009857 Placed September 14, 1887

Location: Set at the edge of a grassy plateau along the north slope of Little Round Top.

Description: Rectangular granite shaft capped with a pyramid of granite cannon balls and a 7.2' by 5.2' base, with an overall height of 10'. A sculptured relief of Napoleon tubes adorns the west face with inscriptions on the east and a polished Maltese cross on the north and south faces. Flanking markers are flat topped, 1.2' by 2.4'.

Origin: Constructed by the Ryegate Granite Works of Ryegate, Vermont.

The 1st Ohio Battery was situated in two sections on the afternoon of July 2, one section on each side of Wheatfield Road. The left flank marker and the monument itself are on the south side of Wheatfield, marking Lieutenant H.F. Guthrie's section of the battery.

The monument is normally flanked by two 12-pound bronze Napoleon cannons, which, at the time this document was prepared, were temporarily removed for rehabilitation. The bases remain in place, awaiting the return of the cannons.

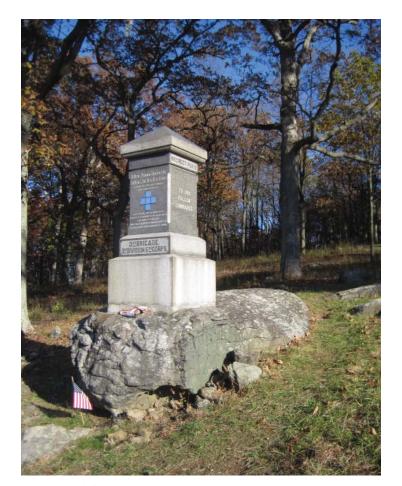


Figure 3.53 (Photo by RHI ,2010)



Figure 3.54 (Photos by RHI, 2011).

23C **98**th **Pennsylvania Infantry** GETT #MN104-B, IDLCS 009733 Dedicated July 2, 1885, placed 1889

Location: Set on a boulder at the northwestern edge of the forest that encloses Sykes Avenue.

Description: 4' square polished granite shaft with an apex cap set on a six foot square smooth base and an overall height of 12.1'. The shaft has chamfered edges with raised and incised inscriptions on all four sides. The west side is adorned with a blue tile 6th Corps Greek Cross.

Origin: The older of two monuments to the 98th Pennsylvania Infantry, this monument was moved here when a newer monument was erected in its original place, just east of the Althoff Farm Lane.

This monument indicates the position of the 98th Pennsylvania Infantry just before it was ordered to attack the Confederate Army through the Valley of Death on July 2, 1863.

24C **121**st New York Infantry 24L **121**st New York Infantry, Right Flank 24R **121**st New York Infantry, Right Flank GETT #MN103-B, IDLCS 009685 Placed October 10, 1889

Location: Placed in a grassy clearing just west of Sykes Avenue, on the north side of Little Round Top.

Description: 17.6' tall monument consisting of a bronze statue of an infantryman on a 7' square Quincy granite base. The base contains a bronze 6^{th} Corps emblem, raised inscriptions and a bronze state seal on the west side, and bronze tablets on the north and south faces.

Origin: The bronze sculpture was made by S.J.O. Kelly and the granite base by Frederick and Field for \$2,900.

The 121st New York Infantry lay in reserve at this location from the night of July 2, 1863 till the end of battle. They were not actively engaged in battle.

The ground around the monument has become worn and compacted as a result of heavy pedestrian traffic.



Figure 3.55 (Photo by RHI, 2010).



Figure 3.56 (Photo by RHI, 2011).

25A **5**th **Corps** GETT #MN421, IDLCS 080855 Placed 1906. 1907

Location: Situated in a relatively flat forest clearing on the east side of Sykes Avenue, just south of Wheatfield Road.

Description: Granite monolith measuring 4.2' by 2.4' and 7' tall, with a bronze tablet and corps insignia affixed to the west side.

Origin: This is one of eight tablets marking the positions of the Union corps during battle placed by the Gettysburg National Park Commission. The tablets were manufactured by the Van Amringe Granite Company and Bureau Brothers.

See the discussion at the beginning of this section for further information regarding these tablets.

In 1934, This monument was rotated 180 degrees about its base to face the newly realigned Sykes Avenue.

26A Artillery Brigade, 5th Corps (Martin's Brigade)

GETT #MN525, IDLCS 080858 Placed 1911-1912

Location: Situated at the extreme northwest corner of the Sykes Avenue parking lot, just off of the edge of the asphalt sidewalk that leads to the summit.

Description: Bronze tablet measuring 4' by 3.8', resting on a 3' square granite base, with an overall height of 5.4'.

Origin: This is one of 73 brigade tablets placed by the Gettysburg National Park Commission. The foundations and granite pedestals were built by Charles Kappes of Gettysburg for \$19 each; the granite pedestals were provided by John Maxwell's Sons for \$188 each; the bronze inscriptions were cast by Albert Russell and Sons Company.

See the discussion at the beginning of this section for further information regarding these tablets.

In 1934, this monument was rotated about its base to face the newly realigned Sykes Avenue. Today, the granite pedestal still rests askew of the base, indicating the monument's original orientation. The base has since been exposed, the result of regrading efforts related to the Sykes Avenue realignment.







Figure 3.57 (Photos by RHI, 2010).



Figure 3.58 (Photo by RHI, 2010).

27C **147**th Pennsylvania Infantry 27L **147**th Pennsylvania Infantry, Left Flank 27R **147**th Pennsylvania Infantry, Right Flank GETT #MN105-B, IDLCS 009764 Placed October 13, 1885

Location: Set in the woods, on a small boulder just off the east side of Sykes Avenue, south of its intersection with Wheatfield Road.

Description: Granite marker in the shape of the 12th Corps star, measuring 3' tall and equally as wide, with inscriptions on the east and west faces. The flanking markers are 1' square granite shafts with apex tops. This is a smaller version of the main regimental monument, located on the southwest side of Geary Avenue.

Origin: Made by the Smith Granite Company.

This monument marks the position of the 147th Pennsylvania Infantry on the evening of July 1, 1863, approximately 24 hours before fighting broke out at Little Round Top. The regiment was moved to Culp's Hill on the morning of July 2, 1863.

28L **5**th **Maine Infantry, Left Flank** GETT #MN106-D, IDLCS 009627 Placed 1889

Location: The 5th Maine Infantry monument is located just northwest of the intersection of Sedgwick Avenue and Wheatfield Road, just north of the study area boundary. The left flank tablet is located inches from the northern edge of Wheatfield Road. A narrow reflector strip marks the location of the monument, in an attempt to warn drivers from hitting it

Description: Slanted top granite marker, measuring 1.6' by 1.2'.

This marker defines the extent of the left flank of the 5th Maine Infantry on July 2 and 3, 1863.

The edges of this marker are chipped and worn, most likely the result of vehicles veering off the roadway and damaging the marker. This marker's position has fallen victim to grade creep. It should be approximately 1.2' high, similar to the 5th Maine Infantry's right flank marker, which sits outside of the project boundary.



Figure 3.59 (Photo by RHI, 2010).



Figure 3.60 (Photo by RHI, 2010).

29A **2**nd **Brigade, 1**st **Division, 6**th **Corps (Bartlett's Brigade)** GETT #MN495, IDLCS 080805

Placed 1911-1912

Location: Just north of Wheatfield Road, between the edge of pavement and the fieldstone fence.

Description: Bronze tablet measuring 4' by 3.8', resting on a 3' square granite base, with an overall height of 5.4'.

Origin: This is one of 73 brigade tablets placed by the Gettysburg National Park Commission. The foundations and granite pedestals were built by Charles Kappes of Gettysburg for \$19 each; the granite pedestals were provided by John Maxwell's Sons for \$188 each; the bronze inscriptions were cast by Albert Russell and Sons Company.

See the discussion at the beginning of this section for further information regarding these tablets.

30C **95**th **Pennsylvania Infantry** GETT #MN115-A, IDLCS 009731 Dedicated July 2, 1888

Location: Set in an indentation of the fieldstone fence that delineates the property north of Wheatfield Road.

Description: 3.2' square granite shaft topped with an apex cap with arches and set on a rough hewn, 5.6' square base with an overall height of 12.3'. The shaft has rough hewn edges with a bronze tablets. There is one flanking marker to this monument, however it is set outside of the project area.

This monument marks the defensive position the 95th Pennsylvania Infantry was placed in from July 2-5, 1863.

The fieldstone fence that surrounds this monument on three sides was adjusted for the erection of this monument. The entire wall--in its 1863 configuration along Wheatfield Road and in the portion reconfigured for the monument-is documented on the National Register of Historic Places Cultural Resource Inventory because of its significance to both the Battle Era (1863) and Commemorative Era (after 1888) periods of significance, respectively (GETT #WA07, IDLCS 006995).







Figure 3.61 (Photos by RHI, 2010 and NPS, 2011).



Figure 3.62 (Photo by RHI, 2010).

31C **96**th **Pennsylvania Infantry**31L **96**th **Pennsylvania Infantry, Left Flank**31R **96**th **Pennsylvania Infantry, Right Flank**GETT #MN116-B, IDLCS 009732
Dedicated June 21, 1888

Location: This monument replaces a section of the fieldstone wall that lines the north side of Wheatfield Road and denotes the Weikert Farm property line.

Description: 8.9' by 2.8' rough hewn granite shaft topped with a sculpture of a prone infantryman, all set on a base of mortared granite blocks. The infantryman is lying in a defensive position with his gun cocked, ready to fire at a moment's notice. The granite shaft has smooth, recessed inscription tablets on two sides. The end panels bear bronze tablets in their recesses.

Origin: The model for the monument was designed and sculpted by August Zellers, while the granite monument was created by Richard Collins. The total price for the monument was \$1,500.

The 96th Pennsylvania occupied this position from 5 p.m. on July 2 until the morning of July 5 when it exited the battlefield in pursuit of the retreating Confederate troops.

The left flank marker is almost entirely buried, the result of several regrading and repaving efforts along Wheatfield Road over the past century.

32C **3**rd **Massachusetts Battery** GETT # MN117-B, IDLCS 009833 Placed 1885

Location: Situated on the corner of Wheatfield Road and F. Althoff/John Weikert Lane, just behind the fieldstone fence.

Description: 1.8' square granite shaft topped by four polished granite cannon balls and set on a 3.6' base, with a total height of 6.8'. All four sides of the shaft are adorned with the polished insignia of the 5th Corps. The monument is flanked by two bronze Napoleon cannons on cast iron carriages.

A battery of 6 Napoleons was placed here on the afternoon on July 2. Along with Gibbs battery on the western slope of Little Round Top, these cannons formed what Confederate Commanders referred to as "a Yankee Ring of Fire." The cannons were overrun by Gen. William Wofford's Confederate troops and re-captured by a Union counterattack.

The top cannon ball on the stack of cannon balls that makes the monument's capital was restored atop the stack in 1981 after it had been vandalized in the 1960s. The cannon ball has since been vandalized again and remains missing from the monument.



Figure 3.63 (Photos by RHI, 2010).



Figure 3.64 (Photo by RHI, 2010).

33C **139**th Pennsylvania Infantry 33L **139**th Pennsylvania Infantry, Left Flank 33R **139**th Pennsylvania Infantry, Right Flank GETT #MN118-B, IDLCS 009756 Placed 1889

Location: Set north of Wheatfield Road, just behind a fieldstone fence, at the western edge of a hedgerow.

Description: 3.1' by 2.1' granite shaft set on a 6.5' by 5.4' rough hewn base, with an overall height of 14.3'. Inscribed polished panels adorn all four sides of the base. The west face has a relief of crossed flags and eagle, and a bronze Pennsylvania state seal. The cap contains a Greek Cross in relief. The right flank marker is a 1' square, flat topped granite shaft. The left flank is outside of the project area.

This monument marks the location of the 139^{th} Pennsylvania Infantry during the evening of July 2, 1863. They were sent here to help recapture the 3^{rd} Massachusetts Battery C.

This is the second monument to the 139th Pennsylvania on this site. The original privately funded monument was moved to Sickles Avenue after the Commonwealth of Pennsylvania funded this one.

34A **3**rd **Brigade**, **3**rd **Division**, **6**th **Corps** (Nevin's Brigade) Placed 1911-1912

Location: Just north of Wheatfield Road, between the edge of pavement and the fieldstone fence.

Description: Bronze tablet measuring 4' by 3.8', resting on a 3' square granite base, with an overall height of 5.4'.

Origin: This is one of 73 brigade tablets placed by the Gettysburg National Park Commission. The foundations and granite pedestals were built by Charles Kappes of Gettysburg for \$19 each; the granite pedestals were provided by John Maxwell's Sons for \$188 each; the bronze inscriptions were cast by Albert Russell and Sons Company.

See the discussion at the beginning of this section for further information regarding these tablets.

The fieldstone fence in front this tablet existed prior to the time of battle and is documented on the National Register of Historic Places Cultural Resource Inventory as a contributing feature (GETT #WA08, IDLCS 006989).



Figure 3.65 (Photo by RHI, 2010).



Figure 3.66 (Photo by RHI, 2010).

35C Brigadier General Samuel W. Crawford

GETT #MN803, IDLCS 080852

Dedicated June 25, 1988

Location: Situated on Crawford Avenue, just east of the edge of pavement and south of the intersection with Wheatfield Road.

Description: Bronze statue of Gen. Crawford on a granite base with a bronze plaque. The statue is 11' tall, and the total monument is 14' tall. The flag has a bullet hole for each state in the Union.

Origin: Sculpted by Ron Tunison and cast by Tallix Foundry in Beacon, New York, this statue was erected by the Commonwealth of Pennsylvania during the 125th anniversary of the Battle of Gettysburg.

Gen. Crawford commanded the 3rd Division of the 5th Corps, which was instrumental in seeing that the Confederate overrun of The Wheatfield did not progress further east into Union lines.

Following the battle, Crawford purchased the land around the Valley of Death so it would not be developed. The park purchased the land from Crawford's heirs in 1894.

36A 3rd Division, 5th Corps (Crawford's Division)

GETT #MN437, IDLCS 080851

Placed 1909-1910

Location: Facing Crawford Avenue, between the edge of the roadway and Plum Run, just south of the intersection with Wheatfield Road.

Description: Granite monolith measuring 4.2' by 2.4' and 7' tall, with a bronze tablet and corps insignia affixed to the west side.

Origin: This is one of 23 tablets marking the positions of various Union divisions during battle placed by the Gettysburg National Park Commission. The tablets were manufactured by the Van Amringe Granite Company and Bureau Brothers.

See the discussion at the beginning of this section for further information regarding these tablets.



Figure 3.67 (Photo by RHI, 2011).



Figure 3.68 (Photos by RHI, 2011).

37L 6th New Jersey (Left Flank Marker)

GETT #MN125B, IDLCS 009795

Placed 1888

Location: The 6th New Jersey monument and its right flank marker sit west of the project area, along the hill leading up to Houck's Ridge. The left flank marker is on the east side of Crawford Avenue, set in the mown grass edge just off of the roadway's pavement.

Description: The flanking marker is an apex topped granite shaft, 1' square.

The 6th New Jersey Infantry was actively engaged in this advanced position for two hours on the afternoon of July 2, 1863, until the unit was ordered to fall back in line with the rest of Ward's Brigade.

38C 40th New York Infantry Monument 38C 40th New York Infantry Boulder 38L 40th New York Infantry, Left Flank 38R 40th New York Infantry, Right Flank GETT #MN124-B, IDLCS 009644 Placed July 2, 1888

Location: Monument sits in a mown grass clearing just east of Plum Run, at the intersection of Crawford Avenue and Warren Avenue, surrounded by tall meadow plantings.

Description: Granite shaft top with a sculpture of an infantryman laying behind boulders with his musket at the ready. The sculpture is set on a 7' by 4' base and has an overall height of 6.1'. The shaft has a bronze New York state seal on the north face and bronze inscription tablets on the south and west faces. The flank markers are 1' square granite shafts with apex tops

Origin: Sculpted by R.D. Barr of the Smith Granite Company for \$2,225. The bronze was cast by the Bureau Brothers.

The 40^{th} New York Infantry took up position here at approximately 4 p.m. on July 2, 1863, where they drove the Confederate troops back into the Devil's Den. The monument was later raised onto a larger base when the state of New York contributed additional funds. The monument still bears the marks of a 1913 act of vandalism that struck the hammer off of the soldier's gun.

An adjacent boulder features a diamond insignia of the Union's 3rd Corps and "40 NYV" carved into its face. This carving predates the formal monument.



Figure 3.69. Round Top Schoolhouse (right) and Rosensteel Stable and Carraige House (left) (Photo by RHI, 2011).

Structures

Ranging from the simple stone breastworks created by Union troops during the battle to the NPS Era wooden trellis that hides a pair of portable toilets, a variety of structures representing every era of Little Round Top's history can be found throughout the project area (see Figure 3.129 Furnishings, Signage & Structures Map). Although constructed at various times throughout the site's history, all of the structures found within the project area are made of wood or stone, with the exception of the brick Round Top Schoolhouse.

Round Top Schoolhouse: Between 1889¹¹ and 1948¹², a one-room schoolhouse operated on the north side of Wheatfield Road between Taneytown Road and Sedgwick Avenue. The building still stands today, but it has been repurposed as NPS staff housing (Figure 3.69).

<u>Rosensteel Barn:</u> A small stable and carraige house is all that remains of the Rosensteel compound that once occupied the northwest corner of the intersection of Wheatfield Road and Sedgwick Avenue (Figure 3.69).

<u>Fieldstone Fence:</u> These low (30 to 36 inches tall), dry-stacked walls were historically used to delineate property lines (Figure 3.70). Although most have been reconstructed over the course of the park's history, many of these fences mark historic property boundaries and would have been in place during the Battle of Gettysburg.



Figure 3.70. Fieldstone fence along Wheatfield Road (Photo by RHI, 2010).



Figure 3.71. Fieldstone fence with rider along Wheatfield Road (Photo by RHI, 2010).

^{11.} GNPC, op. cit., 1893.

^{12. &}quot;Enrollment in Local Schools to Set Record." The Star and Sentinel [Gettysburg, PA], September 4, 1948, p. 2.

<u>Fieldstone Fence with Rider:</u> A portion of the fieldstone fence north of Wheatfield Road is topped with a wood split rail fence (Figure 3.71). The field enclosed by this fence was likely grazing land for livestock, as the additional height created by the wood rails would have kept animals from escaping from or intruding on a private field.

Stone Breastworks: Hastily constructed on the night of July 2, 1863, in preparation for the next day's battle, these low fieldstone barricades provided a modest amount of cover for Union troops defending Little Round Top when battle resumed on the morning of July 3 (Figures 3.72 and 3.73). Throughout its occupation until July 5, Union forces extended and revined these stone wall breastworks. The nearly continuous lines of breastworks just south and west of the summit of Little Round Top provide evidence of the location of troops during



Figure 3.72. Stone breastworks surrounding the 16th Michigan monument. These neatly stacked stone walls have been rebuilt several times in the years following the battle (Photo by RHI, 2011).



Figure 3.73. Stone breastworks along Little Round Top's steep western face. This breastworks is only visible in winter, as dense old field vegetation obscures it during the warmer months (Photo by RHI, 2010).

the battle. Nearly all of the breastworks that are extant today have been rebuilt or restored several times throughout Little Round Top's post- war history, usually in the same location as they appeared during the battle. Breastworks are in various physical conditions: those that are most accessible to visitors have suffered varying degrees of damage and some nearly eradicated, while the more inaccessible breastworks are regularly overgrown with vegetation and sometimes dislodged by vines and roots.

Stone and Mortar Retaining Walls: Within the most heavily trafficked areas of Little Round Top (the parking area and the summit), stone retaining walls are used to expand the amount of flat, usable space (Figure 3.74). The wall that lines the parking area along Sykes Avenue was constructed in the



Figure 3.74. Stone and mortar retaining wall at the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.75. Damage to the cap of the stone and mortar retaining wall at the Sykes Avenue parking area (Photo by RHI, 2010).

1930s, while another, used to create an overlook just north of the 91st Pennsylvania Infantry monument was constructed in the 1960s as part of the Mission 66 development. Nearly two-thirds of this latter wall was dismantled in the 1990s to restore the original appearance of the 91st Pennsylvania Infantry monument's surrounding plaza and to expose 1863 topography. While both walls appear to be structurally sound, a significant amount of mortar and several cap stones are missing (Figure 3.75).

<u>Stacked Rail Barricades:</u> Although constructed to resemble historic worm fences that would have been found surrounding farm fields at the time of battle, these stacked rail barricades are actually NPS Era introductions to the site, used to keep visitors on the paved trails as they walk from the Sykes Avenue parking area to the summit (Figure 3.76). Actual worm fences are typically much taller than the stacked rail barricades.

<u>Post Footings:</u> In another attempt to keep visitors on paved trails, a post-and-chain system was installed along a small stretch of asphalt path at Little Round Top's summit on a trial basis. This system proved ineffective and was removed less than three years after it was installed, leaving only concrete patches where the post footings once stood as evidence (Figure 3.78).

<u>Vehicular Gate:</u> Two triangular wooden gates were erected on the north end of Sykes Avenue in the 1980s, when traffic flowed to the summit of Little Round Top from the north (Figure 3.77). Originally, the NPS would close the gates during inclement weather, when ice and snow would have made vehicular travel to the summit dangerous. Today, Sykes Avenue traffic flows from south to north, rendering these gates obsolete.

<u>Wooden Trellis Enclosure:</u> At the northeast corner of the intersection of Wheatfield Road and Sedgwick Avenue, a ten foot tall, three-sided wooden trellis is used to enclose two portable toilets (Figure 3.79). Although the toilets are removed during the colder months, the trellis remains in place year-round.

<u>David Weikert Well:</u> Just north of the asphalt pull-off along Warren Avenue, a concrete pad covers the well that once serviced David Weikert's relic shop that operated nearby for several years during the War Department Era (Figure 3.80). The well has been capped by a concrete pad with an unattached steel cover over an opening in the pad, posing a visitor safety issue.

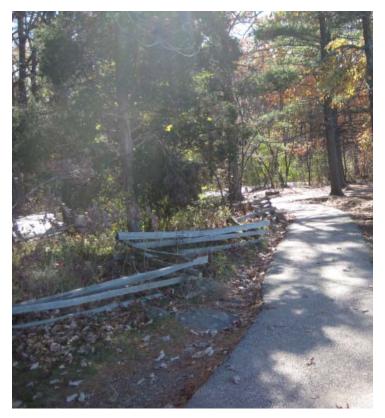


Figure 3.76. Stacked rail barricade designed to keep visitors on the path leading to the summit (Photo by RHI, 2010).



Figure 3.77. Vehicular gate and sign at the north end of Sykes Avenue (Photo by RHI, 2010).



Figure 3.78. Remnant of the post-and-chain system installed to keep visitors on the asphalt paths at the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.79. Wooden trellis enclosure near the intersection of Wheatfield Road and Sedgwick Avenue (Photo by RHI, 2011).



Figure 3.80. Concrete well cap near the asphalt pull-off on Warren Avenue (Photo by RHI, 2011).

The views afforded by Little Round Top's exposed summit, as well as the protection provided by its rocky outcrops, gave occupying forces many tactical advantages that directly contributed to Little Round Top's significance in the outcome of the Battle of Gettysburg.

Topography, Drainage & Geomorphology

Little Round Top is a rocky landform about 115 acres in size whose summit rises approximately 165 feet from Plum Run, which flows north to south along Little Round Top's western base. At 670 feet above mean sea level, Little Round Top is just over half the size of Big Round Top to the south. Despite its height relative to Big Round Top, the open character of Little Round Top's steep, rock-strewn terrain makes it distinguishable in the landscape from its much larger, forested neighbor (see Figure 3.131 Topography & Drainage Map). The slopes of Little Round Top range from slight two percent inclines along the floodplain of Plum Run at the landform's western base to a one-to-one gradient along much of its western face (See Figure 3.132 Slope Analysis Map for a detailed look at the topography around the summit and Vincent Spur). Additionally, the views afforded by the exposed summit and intermediary plateaus, as well as the protection provided by the rocky outcrops, gave the occupying forces of Little Round Top many tactical advantages during battle. All of these factors directly contributed to Little Round Top's significance in the outcome of the Battle of Gettysburg.

<u>Geology:</u> Little Round Top is part of a dense, 2,000 foot thick igneous rock formation known as the Gettysburg Sill, which extends from Big Round Top north to Cemetery Ridge before turning east to underlie Cemetery Hill and Culp's Hill. The large rock outcrops that define much of the landscape of Little Round Top are the result of the gradual erosion of the softer rock and soil layers that covered the sill during the course of about 180 million years (Figure 3.81).¹³

In contrast to the craggy slopes and summit, the gently rolling terrain at the base of Little Round Top is ideal for the roadways and open grasslands that surround the project area. The continuous flow of Plum Run has gradually eroded the less resistant Gettysburg shale that underlies the western



Figure 3.81. View up the steep, rocky western slope of Little Round Top. The exposed character of this slope sets it apart from the much taller Big Round Top, beyond and to the right. (Photo by RHI, 2010).

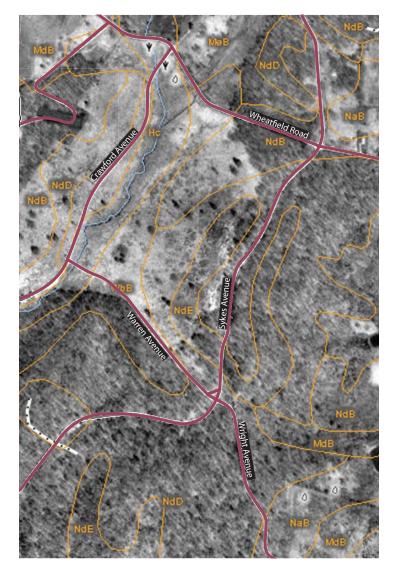


Figure 3.82. Soils map of Little Round Top (from NRCS Web Soil Survey, December, 2010).

base of Little Round Top to create the low-lying flat valley between Little Round Top and the Devil's Den. 14

Soils: The majority of the project area is mapped as bouldery Neshaminy channery silt loams (Na, Nd), with smaller areas of Mount Lucas silt loam (MdB), sloping anywhere from three percent to as much as 45 percent (Figure 3.82). These soils are characterized as deep, rocky and well drained, typical of steeply sloping woodlands in the region. These soil characteristics and the slopes they are found on are not typically conducive to farming or suitable for building foundations. The floodplain of Plum Run is mapped as Hatboro silt loam (Hc) and there is a mapped band of Watchung silt loam (WbB) on the lower western slopes of Little Round Top, extending southeast along Warren Avenue. 15 These poorly drained soils are typically found in flat areas near water sources and provide excellent growing media for both native vegetation and agriculture. Because of its soil characteristics, topography and proximity to water, the areas of the study area classified as Watchung silt loam have the highest potential to contain prehistoric archaeological resources.

Gently Rolling Vehicular Corridors: Wheatfield Road, Crawford Avenue and the northwestern portion of Warren Avenue can be characterized by the subtle changes in topography along the roadways themselves, contrasted with the dramatically rising terrain that begins just beside the roadway edges.

<u>Hilly Vehicular Corridors:</u> The rolling topography, dense vegetative cover and winding roadway alignment of Wright and Sykes avenues provide a sense of enclosure and reduced

^{14.} Ibid.

^{15.} Natural Resources Conservation Service. Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/websoilsurvey.aspx, accessed December, 2010.

lines of sight when compared with the other roadways within the project area. The limited visibility that results from the steep, winding roads makes pedestrian safety a concern along these avenues.

<u>Steep, Rocky Slopes:</u> Both the heavily forested eastern face and the sparsely vegetated western face of Little Round Top are characterized by their precipitous, boulder-strewn slopes.

<u>Flat, Forested Clearing:</u> The spaces around the 20th Maine Company B monument and the top of Vincent Spur are each defined by their relatively flat topography and the lack of forest undergrowth, making them excellent gathering spaces



Figure 3.83. Tour group gathered in the flat, forested clearing atop Vincent Spur (Photo by RHI, 2010).



Figure 3.84. Mid-slope plateau that surrounds the 16th Michigan Infantry monument (Photo by RHI, 2010).

for groups of visitors (Figure 3.83). Unfortunately, volume and frequency of these groups creates a level of compaction that is extremely unhealthy to the surrounding terrain.

Mid-Slope Plateaus: Located along the eastern face of Little Round Top, the plateaus that define both the 16th Michigan Character Area and the North Slope Monuments Character Area provide small clearings of level terrain on the otherwise steep climb to the summit (Figure 3.84).

<u>The Summit:</u> Defined by the steep, rocky outcrops that surround it on all sides, the exposed summit of Little Round Top is among the most popular destinations for visitors to Gettysburg (Figure 3.85).



Figure 3.85. View to the summit of Little Round Top. The summit can generally be classified as the area between the 91st Pennsylvania Infantry monument (left) and the 44th and 12th New York Infantry monument (right) (Photo by RHI, 2010).

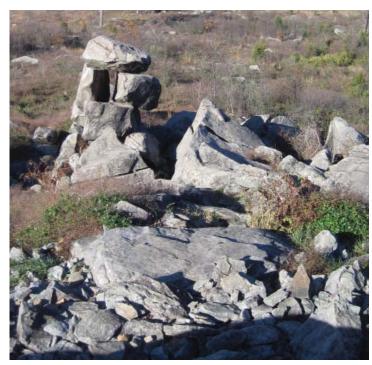


Figure 3.86. Prominent rock outcrop on Little Round Top's west slope. Large boulders like these characterize the entire project area. (Photo by RHI, 2010).

<u>Prominent Rock Outcrops:</u> The large, weathered boulders that cover the landscape of the project area are exposed portions of the Gettysburg Sill (Figure 3.86).

<u>Plum Run:</u> The flat, low-lying stream corridor of Plum Run at the base of Little Round Top collects all of the stormwater runoff from the western half of the project area as it flows south into Rock Creek, a tributary of the Potomac River. Additional flow comes from the fields north of Wheatfield Road, flooding the valley during periods of heavy rain (Figure 3.87).



Figure 3.87. View of the Plum Run stream corridor, with the summit of Little Round Top in the background (Photo by RHI, 2011).



Figure 3.88. War Department Era square-topped stone culvert (Photo by RHI, 2011).



Figure 3.89. NPS Era round-topped stone culvert, constructed by the Civilian Conservation Corps (Photo by RHI, 2011).

<u>Stone Culverts:</u> Two types of stone culvert convey stormwater beneath the site's roadways: the square-top culverts were constructed during the War Department Era, while the arched-top culverts were part of the Civilian Conservation Corps' efforts during the early portion of the NPS Era (Figures 3.88 and 3.39).

<u>Grass Swale:</u> Two- to three-foot wide mown grass swales line the east and west sides of Crawford Avenue and the north and south ends of Sykes Avenue, where stormwater is captured and allowed to infiltrate back into the water table (Figure 3.90).



Figure 3.90. Grass swale lining Crawford Avenue (Photo by RHI, 2011).



Figure 3.91. Asphalt gutter on the west side of Sykes Avenue (Photo by RHI, 2011).



Figure 3.92. Rip-rap lined drainage channel along Wheatfield Road (Photo by RHI, 2010).

Asphalt Gutters: 12- to 18-inch wide asphalt channels were constructed by the National Park Service along portions of Wright and Sykes avenues as a means of protecting areas of the site that are susceptible to erosion (Figure 3.91). Before the NPS Era, gutters were constructed of hand-laid cobbles, whose rough texture was effective in slowing runoff and preventing washouts.

Rip-Rap Lined Drainage Channel: In order to handle the heavy, fast-moving stormwater that runs off of Little Round Top's north slope, a three foot wide channel of 8- to 12-inch stones was placed by NPS along the south side of Wheatfield Road (Figure 3.92). This channel slows the flow of water into Plum Run, reducing erosion and siltation that can occur during big storms.

Roadway Erosion: Despite all of the NPS Era efforts to control stormwater runoff on and around Little Round Top, periods of heavy rain and snow still cause significant erosion to the landscape. After a particularly wet winter season in 2010-2011, the road base underneath the northern edge of Warren Avenue completely washed out, causing a portion of the roadway to fail (Figure 3.93). The National Park Service continues to explore solutions to prevent further degradation to the landscape caused by heavy erosion.



Figure 3.93. Undercutting of the roadbed along the north side of Warren Avenue has caused a partial failure of the roadway (Photo by RHI, 2011).

Today, the landscape of Little Round Top is maintained to appear much as it did in July of 1863.

Vegetation

From the old field plant species that cover the western slope to the mature hardwood tree canopy that covers the eastern slope, Little Round Top contains examples of nearly every phase of ecological succession (see Figure 3.133 Vegetation Map). The range of soils from the riparian corridor of Plum Run to the rocky silt loams of the summit of Little Round Top supports this variety within the plant communities that populate the project area.

Like most of the Gettysburg National Military Park, the vegetation of Little Round Top is relatively young. Even the mature forest along the eastern portion of the site contains few trees over 150 years old, due to the logging practices that occurred there by private owners prior to the Battle of Gettysburg and later by both the War Department and the National Park Service. Today, the landscape of Little Round Top is maintained to appear much as it did in July of 1863, perpetuating the cleared woodlot that covers the western slope, while allowing the forest of the eastern slope to mature.

Mown Grass Road Edge: A narrow strip of mown grass adjacent to the road edges of Crawford Avenue, Wheatfield Road, the north side of Warren Avenue and portions of Sykes Avenue allows park visitors to easily reach the many monuments that are just off the edges of the roads (Figure 3.94). These grass edges generally denote the limits of the War Department avenue commemorative corridors and are maintained as park-defined "Class A" areas, adhering to the highest level of groundskeeping standards within Gettysburg National Military Park.

Old Field: The western face of Little Round Top is managed to appear much as it did in July of 1863, having been cleared of many trees and brush some time before the battle. Although the appearance of the western slope is similar, the species that populate it today indicate a slightly more mature old field than what would have existed in 1863: smooth sumac (*Rhus glabra*) and eastern red cedar (*Juniperus virginiana*) are commonly found mixed in with the grasses, perennials and annuals indicative of an old field. In addition to these native species, several species of invasive, exotic vegetation can be found on the western slope of Little Round Top.

16. Glenn W. LaFantasie. *Twilight at Little Round Top.* New York: Vintage Books, 2005. p.1.



Figure 3.94. Mown grass road edge with adjacent old field vegetation along Wheatfield Road (Photo by RHI, 2010).

Tree-of-Heaven (*Alianthus altissima*), Japanese honeysuckle (*Lonicera japonica*), multiflora rose (*Rosa multiflora*) and wild raspberry (*Rubus idaeus*) can all be found throughout the project area. The National Park Service has instituted an aggressive species management plan to preserve the open character of the slope.

Wet Meadow: The low-lying wet meadow that lines either side of Plum Run is the most densely vegetated zone within the study area (Figure 3.95). Along the stream are shrubs including black willow (Salix nigra), nine bark (Physocarpus opulifolius), silky dogwood (Cornus amomum), and graystemmed dogwood (Cornus racemosa). Numerous species of sedges (Carex sp.) and rushes (Juncus sp.) dominate the open wet areas including some state listed rare species. Indian grass (Sorghastrum nutans) is common in the dryer areas. Forbs in the area include swamp milkweed (Asclepias incarnata), indianhemp (Apocynum cannabinum), roadside agrimony (Agrimonia striata), New York ironweed (Vernonia noveboracensis) great lobelia (Lobelia siphilitica) and cardinal flower (Lobelia cardinalis), sneezeweed (Helenium autumnale) and white turtlehead (Chelone glabra). The National Park Service encourages native vegetation on along the Plum Run stream corridor to stabilize its banks and to provide natural habitat. On the north side of Wheatfield Road, another wet meadow occupies the former Rosensteel ice pond site (Figure 3.96). The pond, which provided ice for cold storage, was filled by the Gettysburg National Military Park Commission in 1905. 17 The area continues to be fed by a small stream that meets Plum Run on the south side of Wheatfield Road, accounting for the constant inundation and



Figure 3.95. Wet meadow with dense riparian vegetation along the Plum Run stream corridor (Photo by RHI, 2010).



Figure 3.96. Wet meadow just north of Wheatfield Road, former site of the Rosensteel ice pond (Photo by RHI, 2011).

^{17.} Gettysburg National Military Park Commission, Plan for Walling Pond in Valley of Death, NPM-GET-8544, 1905.



Figure 3.97. Closed forest, with filtered views west (Photo by RHI, 2010).



Figure 3.98. A brush pile blocks visitors' access down a portion of Chamberlain Avenue (Photo by RHI, 2010).



Figure 3.99. View west from the 20th Maine Infantry, Company B monument. Notice the lack of understory vegetation, signifying a **disturbed wood-land** (Photo by RHI, 2010).

wetland plant species. The wet meadow north of Wheatfield Road also hosts several state-listed rare species.

<u>Disturbed Dry Oak-Mixed Hardwood Forest:</u> The areas along Sykes Avenue, around Vincent Spur and near the 20th Maine Company B monument differ from the surrounding forest since they have minimal understory or shrub layer (Figures 3.97 & 3.99). This condition is the result of repeated understory control by volunteer groups who cut back small

vegetation and remove brush. These areas also receive heavy foot traffic, compacting the soil and providing an inhospitable environment for new vegetation.

<u>Tulip Tree Forest:</u> Much of the landscape east of Little Round Top's summit consists of mature forest with a healthy understory and shrub layer. Current management of these areas is minimal, consisting of trail clearing and occasional invasive species removal programs.



Figure 3.100. Mature trees along Sykes Avenue near the summit of Little Round Top (Photo by RHI, 2010).



Figure 3.101. A lone mature white pine tree standing at the edge of the plateau held by the 16th Michigan Infantry (Photo by RHI, 2010).



Figure 3.102. *Individual mature trees and tree stands* along the western slope of Little Round Top (Photo by RHI, 2010).

<u>Brush Piles:</u> Large piles of downed tree limbs and brush have been placed to block access to many of the social trails that have significantly degraded forested areas (Figure 3.98).

Individual Mature Trees at the Summit: As part of the effort to realign Sykes Avenue in the 1930s, the Civilian Conservation Corps undertook a massive tree planting effort on the summit of Little Round Top. ¹⁸ This planting effort attempted to restore the wooded character of the summit that was altered by the removal of the old Sykes Avenue alignment. Several of the

large canopy trees that line Sykes Avenue at the summit can be attributed to this planting effort (Figure 3.100).

Mid-slope Trees and Tree Stands: Several mature deciduous and evergreen trees can be seen dotting the otherwise exposed western slope of Little Round Top (Figure 3.102). A major tree removal effort in 1980 sought to restore the western face of Little Round Top to its 1863 character, leaving these and other intermittent mature trees (some of which have since died), while removing all others. Although not necessarily in historically significant locations, the mature trees as a grouping are significant in that they represent the battle-era character of the slope.

^{18.} Gettysburg National Military Park General Photograph Collection, CCC Tree Plantings at Little Round Top ca. 1934-1938, SF-30W-089.

Views & Visual Relationships

Little Round Top's significance to the Battle of Gettysburg stems not only from its difficult, boulder-strewn terrain, but from its unique visual character: both the commanding views afforded from the summit as well as far-reaching visibility of the rocky and sparsely vegetated western slope. The fact that so many of these views remain intact today makes this iconic site one of the most popular places in all of Gettysburg. In addition to the panoramic vistas to and from Little Round Top's summit, a variety of visual corridors helps to define the various character areas within the project site.

<u>Spatial Transitions</u>: The abrupt transitions from enclosed, tree lined corridors with limited visibility to open areas with expansive vistas mark the borders between character areas, particularly those that encompass the project area's avenues (Figure 3.103).

<u>Open Vehicular Corridor:</u> The gentle curves, low vegetation and relatively flat topography of Wheatfield Road, Crawford Avenue and the western portion of Warren Avenue combine to create the excellent lines of sight and open vistas of the Open Vehicular Corridor Character Area (Figure 3.104).

<u>Forest Lined Roadways:</u> In contrast to the open vistas of the Open Vehicular Corridor, the roadways that comprise the eastern portion of the project area are sharply curving with rolling topography and limited lines of sight (Figure 3.105).



Figure 3.103. The forest edge along Warren Avenue creates a transition between two character areas (Photo by RHI, 2010).



Figure 3.104. Open vehicular corridor of Wheatfield Road (Photo by RHI, 2010).



Figure 3.105. Forest lined roadway at the intersection of Sykes Avenue and Wright Avenue (Photo by RHI, 2010)

<u>Views to The Summit:</u> Not until one is all the way at the bottom of the Plum Run Stream valley is the entire summit of Little Round Top visible (Figure 3.106).

<u>Views to Devil's Den:</u> The prominent rocky outcrop of the Devil's Den is visible from much of Little Round Top's southern and western slopes (3.107). This line of sight provided the defending Union troops a tactical advantage over the Confederate troops who launched attacks from the Devil's Den.

<u>Views to Big Round Top:</u> For the most part, the forest at the base of Big Round Top to the southwest of the project area obscures one's view of the larger peak (Figure 3.108). The sparsely vegetated plateau of the 16th Michigan Character

Area provides the only viewing platform to the peak of Big Round Top within the project area (Figure 3.111).

<u>Partially Screened Distant Views West:</u> The transition from the dense vegetation along Sykes Avenue to the open vistas of the North Slope Monuments Character Area provides only glimpses of the panoramic views available when one is standing farther out on the western slope of Little Round Top (Figure 3.109).

<u>Distant Panoramic Views West:</u> The 180 degree panorama available from nearly every point along the top half of Little Round Top's western slope is one of the reasons for the site's popularity (Figure 3.10).



Figure 3.106. View up to the summit of Little Round Top from Plum Run (Photo by RHI, 2010).



Figure 3.107. View across the Slaughter Pen to the Devil's Den, with the 16th Michigan Infantry monument in the foreground (Photo by RHI, 2010).



Figure 3.108. Filtered view of Big Round Top from the top of the 12^{th} and 44^{th} New York Infantry monument (Photo by RHI, 2011).



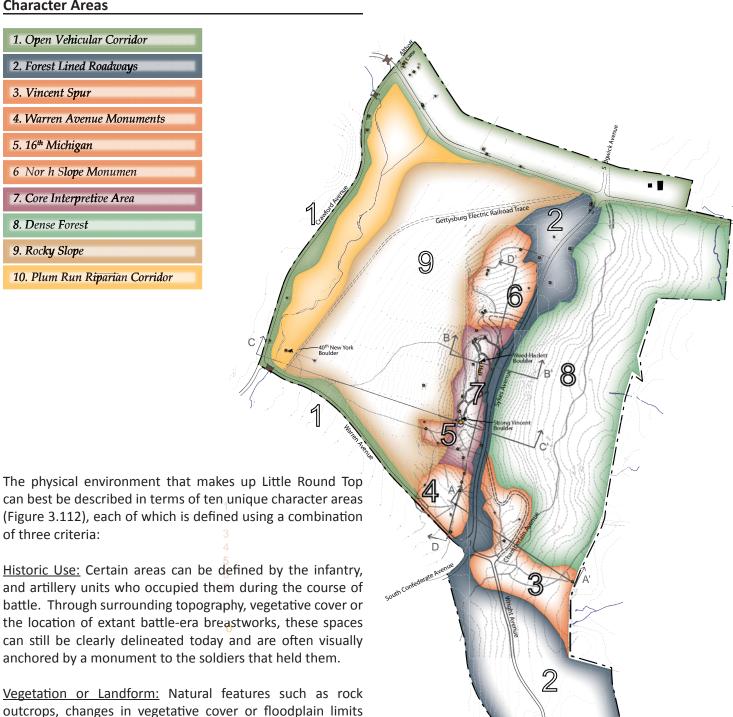
Figure 3.111. View of Big Round Top from the top of the 16^{th} Michigan monument plateau (Photo by RHI, 2011).



Figure 3.109. Distant views west from Sykes Avenue are partially screened by the forest edge that extends west from the roadway (Photo by RHI, 2010).



Figure 3.110. Distant panoramic views west from the summit of Little Round Top (Photo by RHI, 2010).



Circulation Elements: Because Commemorative Era roadways were typically placed along battle lines¹⁹ or at the fringes of natural features, they often serve as de-facto boundaries

often serve as easily identifiable boundaries between character areas. Natural features themselves, such as forest stands, stream corridors and plateaus can also serve as

Figure 3.112. Character Areas Map. See the full-size Character Areas Map at the end of this chapter for further detail (Map by RHI, 2010).

defining features of character areas.

between two character areas.

1. Open Vehicular Corridor

The roadways that serve as the north, west and south boundaries of the project area are characterized by their 18-foot wide asphalt drive lanes that take visitors through an open landscape surrounded by old-field successional plantings punctuated with large boulders (Figure 3.113). Narrow grass strips along the roadways generally mark the historic widths of the War Department avenue commemorative corridors. Although the open visual character of the vehicular corridors provides for excellent lines of sight for drivers, the narrow right-of-way and lack of pedestrian space along these corridors make it difficult and often dangerous for pedestrians to walk between the several monuments and markers that line the roadway.

Circulation

Wheatfield Road
Crawford Avenue
Warren Avenue
Bridges
Asphalt Pull-Offs
Gravel Parking Areas
Concrete Curb
Mown Grass Paths

• Furnishings & Signage

Social Trails

Commemorative Era Signage NPS Era Directional Signage

Monuments

28L - 5th Maine Infantry

29A - 2nd Brigade, 1st Division, 6th Corps (Bartlett's Brigade)

30C - 95th Pennsylvania Infantry

31C, 31L, 31R - 96th Pennsylvania Infantry

32C - 3rd Massachusetts Battery

33C, 33L, 33R - 139th Pennsylvania Infantry

34A - 3rd Brigade, 3rd Division, 6th Corps (Nevin's Brigade)

35C - Brigadier General Samuel W. Crawford

36A - 3rd Division, 5th Corps (Crawford's Division)

37L - 6th New Jersey (Left Flank)

Structures

Round Top Schoolhouse Rosensteel Barn Fieldstone Fence Fieldstone Fence with Rider Wooden Trellis Enclosure

• Topography, Drainage & Geomorphology

Gently Rolling Vehicular Corridors Prominent Rock Outcrops Stone Culverts Rip-Rap Lined Drainage Channel Grass Swales Asphalt Gutter Roadway Erosion

Vegetation

Mown Grass Road Edge Wet Meadow

Views & Visual Relationships

Spatial Transitions
Open Vehicular Corridor



Figure 3.113. Open Vehicular Corridor Character Area along Warren Avenue as it transitions from the Forest Lined Roadway Character Area. (Photo by RHI, 2010).

2. Forest Lined Roadways

This character area, along Wright and Sykes avenues, comprises the approach roads to the summit of Little Round Top (Figure 3.114). Defined by steep, curving roadways surrounded on all sides by forest cover, the dense woodland screens or obscures distant views and provides a sense of enclosure. The narrow right-of-way and low visibility for drivers make this character area difficult for safe pedestrian and bicycle circulation, however.

Circulation

Sykes Avenue

Sykes Avenue Parking Area

Warren Avenue

Wright Avenue

Gravel Parking Areas

Granite Curb and Asphalt Sidewalk

Concrete Wheel Stops

Asphalt Paths

Stone Steps

Maintained Trails

Social Trails

• Furnishings & Signage

Commemorative Era Signage NPS Era Directional Signage Property Markers Bicycle Rack

Monuments

08A - 3rd Brigade, 1st Division, 5th Corps

19A - 3rd Brigade, 2nd Division, 5th Corps (Weed's Brigade)

25A - 5th Corps

26A - Artillery Brigade, 5th Corps (Martin's Battery)

27C, 27L, 27R - 147th Pennsylvania Infantry

Structures

Fieldstone Fence Stone Breastworks Stone and Mortar Retaining Wall Stacked Rail Barricade Vehicular Gate

Topography, Drainage & Geomorphology

Hilly Vehicular Corridors
Prominent Rock Outcrops
Stone Culverts
Grass Swales
Asphalt Gutters

Views & Visual Relationships

Spatial Transitions
Forest Lined Roadways
Partially Screened Distant Views West



Figure 3.114. Forest Lined Roadway Character Area along Sykes Avenue, looking north (Photo by RHI, 2010).

3. Vincent Spur

Connected by the abandoned historic roadbed of Chamberlain Avenue, a series of degraded asphalt pathways and a network of visitor-created social trails, this collection of monuments, interpretive signs and battle-laid breastworks tells the story of the 20th Maine Infantry. Located on the eastern slope of Little Round Top, in an area known as the Vincent Spur, the surrounding dense vegetation, rocky outcrops and steep surrounding topography isolate this character area from the rest of the site (Figure 3.115).

Circulation

Chamberlain Avenue Wright Avenue Concrete Wheel Stops Asphalt Paths Stone Steps Maintained Trails Social Trails

• Furnishings & Signage

Commemorative Era Signage NPS Era Wayside Exhibit

Monuments

01B - Position of Company B, 20^{th} Maine Volunteers 02C, 02L, 02R - 20^{th} Maine

Structures

Fieldstone Fence Stone Breastworks

Topography, Drainage & Geomorphology

Steep, Rocky Slopes Flat, Forested Clearing Prominent Rock Outcrops

Vegetation

Disturbed Woodland Brush Piles

Views & Visual Relationships

Forest Lined Roadways



Figure 3.115. Forest clearing typical of the Vincent Spur Character Area. The roadbed of Chamberlain Avenue is visible at the bottom left of the photograph, and the breastworks constructed following the fighting on 2 July, 1863 is on the right (Photo by RHI, 2010).

4. Warren Avenue Monuments

This cluster of monuments occupies a small, relatively flat forest clearing at the southern base of the slope leading up to Little Round Top's summit. From the edge of Warren Avenue, the first monuments in this cluster are accessible via a mown grass path that lines a breastworks and defines the character area's edge (Figure 3.117). Though easily visible from the first few monuments in this cluster, additional monuments require a climb up much steeper and rockier terrain that eventually divides this character area from the Core Interpretive Character Area.



Figure 3.116. View along stone breastworks toward the 9th Pennsylvania Reserves monument within the Warren Avenue Monuments Character Area. A remnant of the 2nd Massachusetts Infantry is in the foreground (Photo by RHI, 2011).

Circulation

Warren Avenue Asphalt Pull-Offs Mown Grass Paths Maintained Trails Social Trails

Monuments

03C, 03R - 9th Pennsylvania Reserves 04C, 04L, 04R - 83rd Pennsylvania Infantry 05C - 2nd Massachusetts Infantry 06C - 22nd Massachusetts Infantry

Structures

Stone Breastworks
David Weikert Well

• Topography, Drainage & Geomorphology

Steep, Rocky Slopes Prominent Rock Outcrops

Vegetation

Mown Grass Road Edge Closed Forest

Views & Visual Relationships

Spatial Transitions



Figure 3.117. Looking south along Warren Avenue, with the Warren Avenue Monuments Character Area on the left. The asphalt pull-off along Warren Avenue is in the foreground (Photo by RHI, 2011).

5. 16th Michigan

This exposed promontory halfway up the slope of Little Round Top was occupied by the 16th Michigan Regiment and part of the 44th New York Regiment on July 3rd, 1863 (Figure 3.118). The steep, rocky approach from all directions, protective breastworks that define the character area's edges and clear views to the Devil's Den help to explain the strategy behind the placement of the 16th Michigan on this triangular-shaped plateau (Figure 3.119).



Figure 3.118. Prominent rock outcrops that separate the 16th Michigan, Warren Avenue and Core Interpretive character areas (Photo by RHI, 2010).

Circulation

Social Trails

• Monuments

10C, 10L, 10R - 16th Michigan Infantry

• Structures

Stone Breastworks

• Topography, Drainage & Geomorphology

Steep, Rocky Slopes Mid-Slope Plateau Prominent Rock Outcrops

Vegetation

Old Field

• Views & Visual Relationships

Views to Devil's Den Views to Big Round Top Distant Panoramic Views West



Figure 3.119. View of the triangular-shaped plateau that forms the 16th Michigan Character Area. The Slaughter Pen and Devil's Den can be seen in the background (Photo by RHI, 2010).

6. North Slope Monuments

Separated from the Core Interpretive Area by a large rock outcropping, this cluster of monuments is visible both from the Core Interpretive Area and from a forest clearing along Sykes Avenue and is characterized by informal paths cut through meadow grasses and expansive views across the valley to the west (Figure 3.120).

Circulation

Sykes Avenue Historic Sykes Avenue Alignment Trace Maintained Trails Social Trails

Monuments

20C, 20L, 20R - 146th New York Infantry 21C, 21L, 21R - 155th Pennsylvania Infantry 22C, 22L - Battery L, 1st Ohio 23C - 98th Pennsylvania Infantry 24C, 24L, 24R - 121st New York Infantry

• Structures

Stone Breastworks

Topography, Drainage & Geomorphology

Steep, Rocky Slopes Mid-Slope Plateau Prominent Rock Outcrops

Vegetation

Individual Mature Trees at Summit

• Views & Visual Relationships

Spatial Transitions
Partially Screened Distant Views West
Distant Panoramic Views West



Figure 3.120. The boulder-strewn plateau that forms the North Slope Monuments Character Area. The Flowering Dogwood (left), 155th Pennsylvania Infantry monument (center) and 146th New York Infantry monument are all visible (Photo by RHI, 2010).

7. Core Interpretive Area

The exposed summit of Little Round Top is the main attraction for most visitors to the area surrounding Little Round Top, because of its high concentration of monuments, relative ease of accessibility and panoramic views to much of the rest of Gettysburg National Military Park (Figure 3.121). Although it is one of the few character areas with asphalt-paved paths, the high volume of visitors exceeds the capacity of the paths, causing heavy compaction and erosion throughout the character area.

Circulation

Sykes Avenue Asphalt Paths Maintained Trails Social Trails

• Furnishings & Signage

NPS Era Wayside Exhibits Commemorative Era Signage

• Monuments

07C - 18th Massachusetts Infantry

09B - Strong Vincent Marker

09B - Strong Vincent Boulder

12C - 44th and 12th New York Infantry

13C, 13L, 13R - 140th New York Infantry

14A - Battery D, 5th US Artillery

15B - Weed and Hazlett Inscribed Boulder

15B - Weed and Hazlett Monument

16C, 16L, 16R - 91st Pennsylvania Infantry

17B - Major General G.K. Warren

18C - United States Signal Corps

Structures

Stone Breastworks
Stone and Mortar Retaining Wall
Post Footings

• Topography, Drainage & Geomorphology

Prominent Rock Outcrops
The Summit

Vegetation

Closed Forest
Disturbed Woodland
Individual Mature Trees at Summit

• Views & Visual Relationships

Views to Devil's Den Views to Big Round Top Distant Panoramic Views West

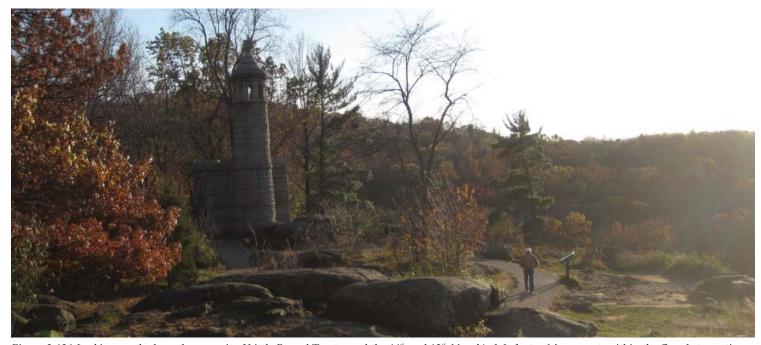


Figure 3.121 Looking south along the summit of Little Round Top toward the 44th and 12th New York Infantry Monument, within the Core Interpretive Character Area. Note the degradation to the landscape on either side of the asphalt path (Photo by RHI, 2010).

8. Dense Forest

The dense forest that covers Little Round Top's eastern slope defines the eastern edge of the battle while isolating the area around Little Round Top from the open agricultural fields to the east. Traversed only by a horse path, this character area is largely inaccessible due to its dense vegetation and steep slopes (Figures 3.122 and 3.123).

Circulation

Historic Sykes Avenue Alignment Trace Maintained Trails Social Trails

• Furnishings & Signage

NPS Era Directional Signage Property Markers

• Structures

Fieldstone Fence

• Topography, Drainage & Geomorphology

Steep, Rocky Slopes
Prominent Rock Outcrops

Vegetation

Closed Forest



Figure 3.122. Horse trail that leads through the Dense Forest Character Area (Photo by RHI, 2010).



Figure 3.123. Fieldstone fence that marks the edge of the NPS property within the Dense Forest Character Area (Photo by RHI, 2010).

9. Rocky Slope

The steep, rocky slope leading up to Little Round Top was a major obstacle to the charging Confederate troops attempting to take the summit from the Union Army. The loose rocks create an unsure footing that necessitates a slow, cautious ascent to the summit today, as it did during the battle (Figure 3.124). The low, dense vegetation along the slope allows for clear views to the summit of Little Round Top from as far away as the Observation Tower on Warfield Ridge, over a mile to the west (Figure 3.125).

Circulation

Gettysburg Electric Railroad Trace Mown Grass Paths Social Trails

Monuments

11C - Michigan Sharpshooters

Structures

Stone Breastworks

• Topography, Drainage & Geomorphology

Steep Rocky Slopes Prominent Rock Outcrops

Vegetation

Old Field Mid-Slope Trees and Tree Stands

Views & Visual Relationships

Views to the Summit Views to Devil's Den Distant Panoramic Views West

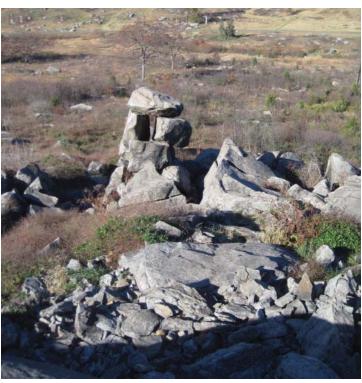


Figure 3.124. Rock outcrops along the Rocky Slope Character Area. Warfield Ridge is visible in the distance (Photo by RHI, 2010).



Figure 3.125. Looking up the Rocky Slope Character Area to the summit of Little Round Top. Monuments visible in this photo include (from left to right): 91st Pennsylvania Infantry, Michigan Sharpshooters, 12th New York and 44th New York Infantry and 16th Michigan Infantry (Photo by RHI, 2010).

10. Plum Run Riparian Corridor

The base of Little Round Top's western slope is characterized by flat terrain and Plum Run, a slow moving stream, fed by several culverts that carry runoff underneath Crawford Avenue and Wheatfield Road. Densely vegetated with riparian plant species, this zone provides a distinct buffer between Crawford Avenue and the steep western slope of Little Round Top. A few large canopy trees scattered throughout this character area punctuate one's view to the summit (Figure 3.126).

Circulation

Bridges Mown Grass Paths

Monuments

38C, 38L, 38R - 40th New York Infantry

Topography, Drainage & Geomorphology

Plum Run

• Vegetation

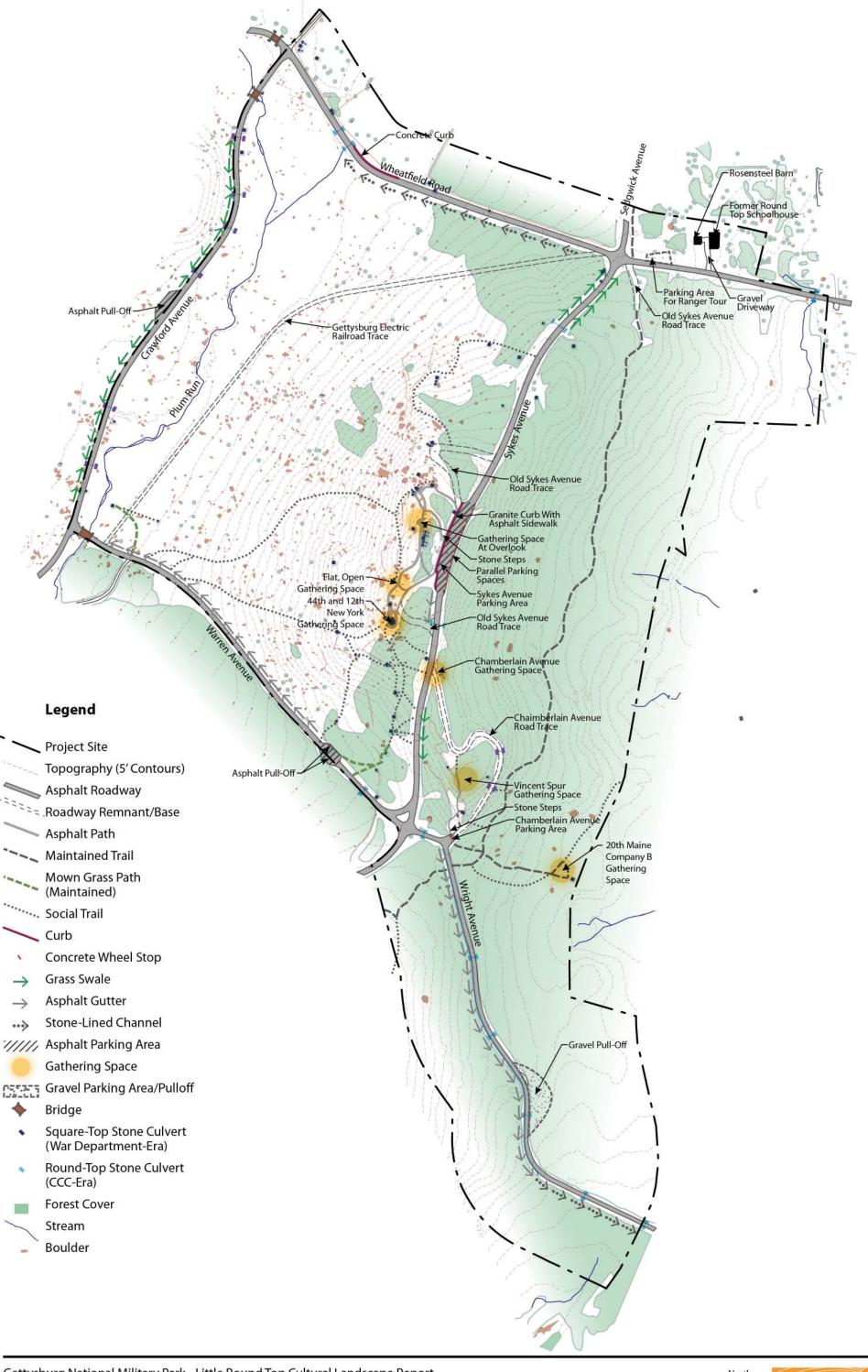
Wet Meadow Mid-Slope Trees and Tree Stands

• Views & Visual Relationships

Views to the Summit Views to Devil's Den

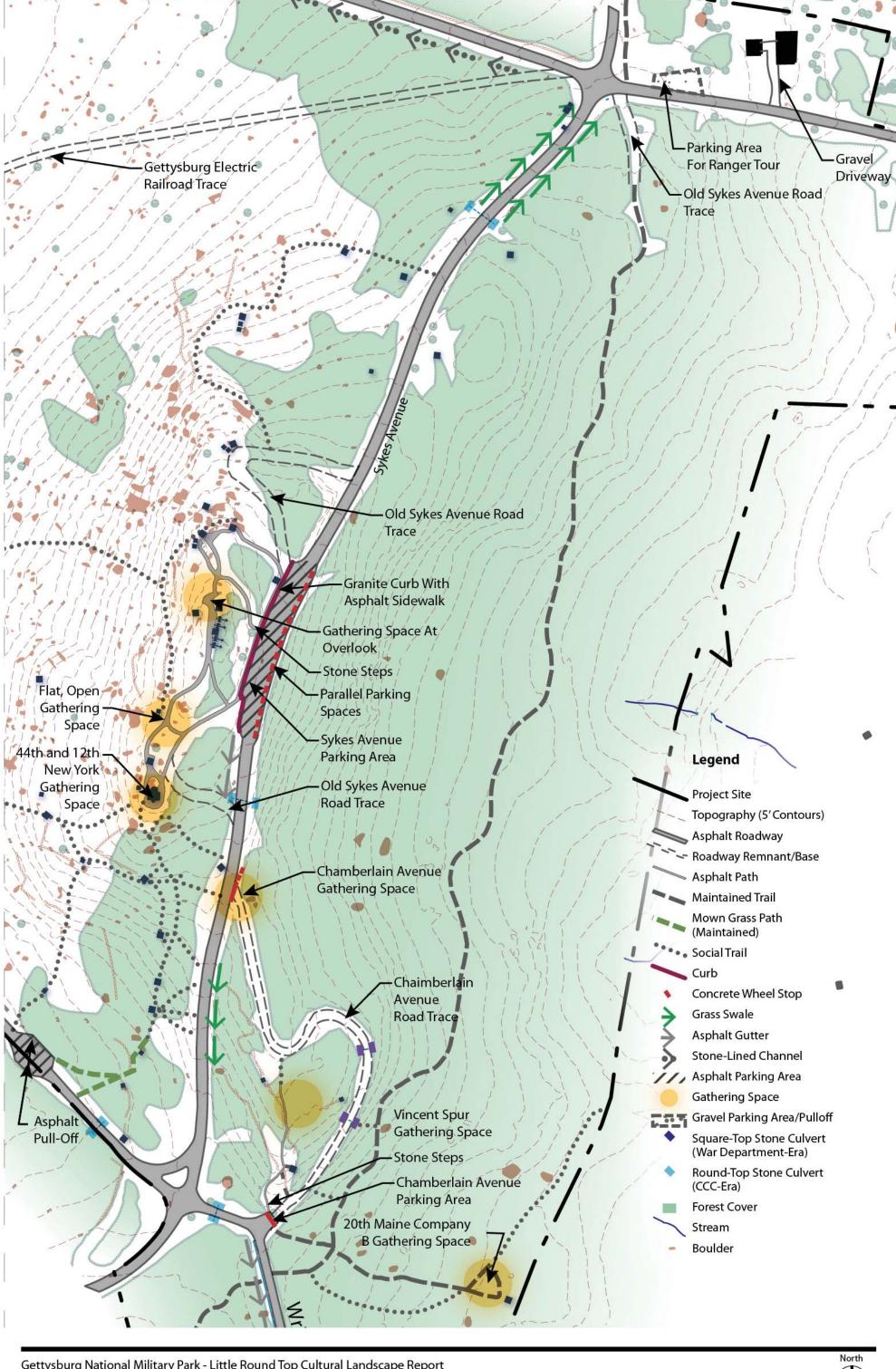


Figure 3.126. View across the dense vegetation of the Plum Run Riparian Corridor to the summit of Little Round Top (Photo by RHI, 2011).



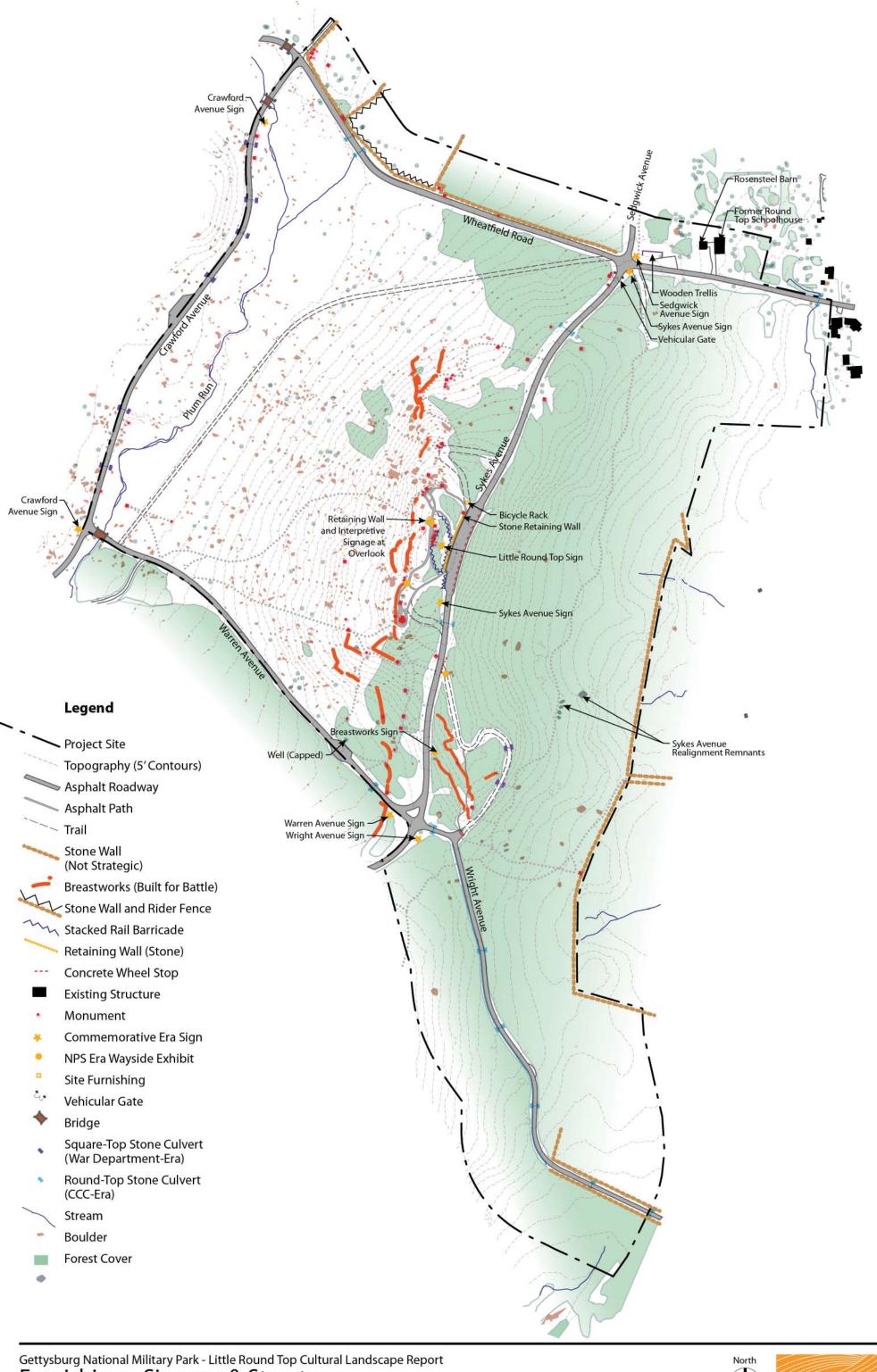
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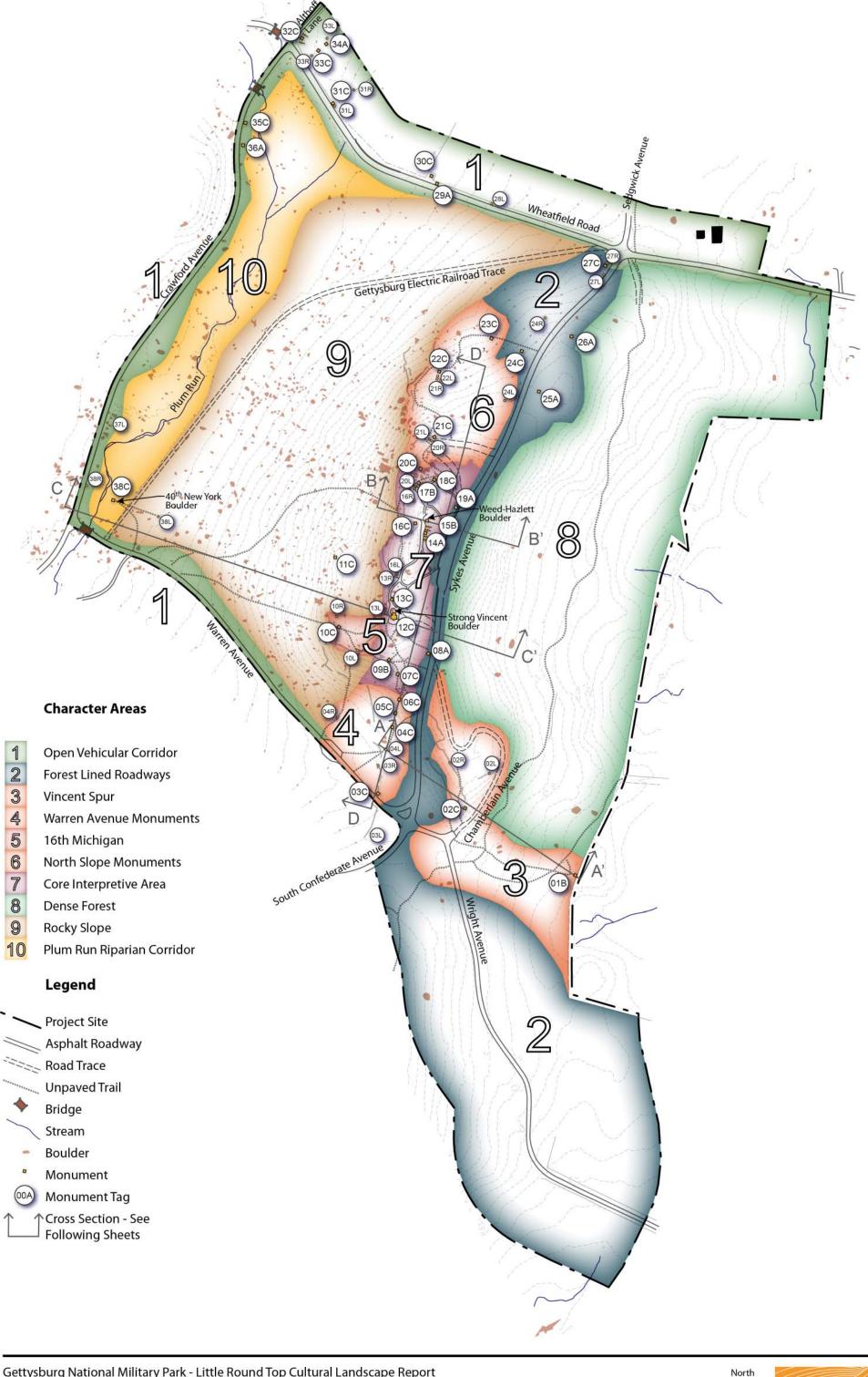
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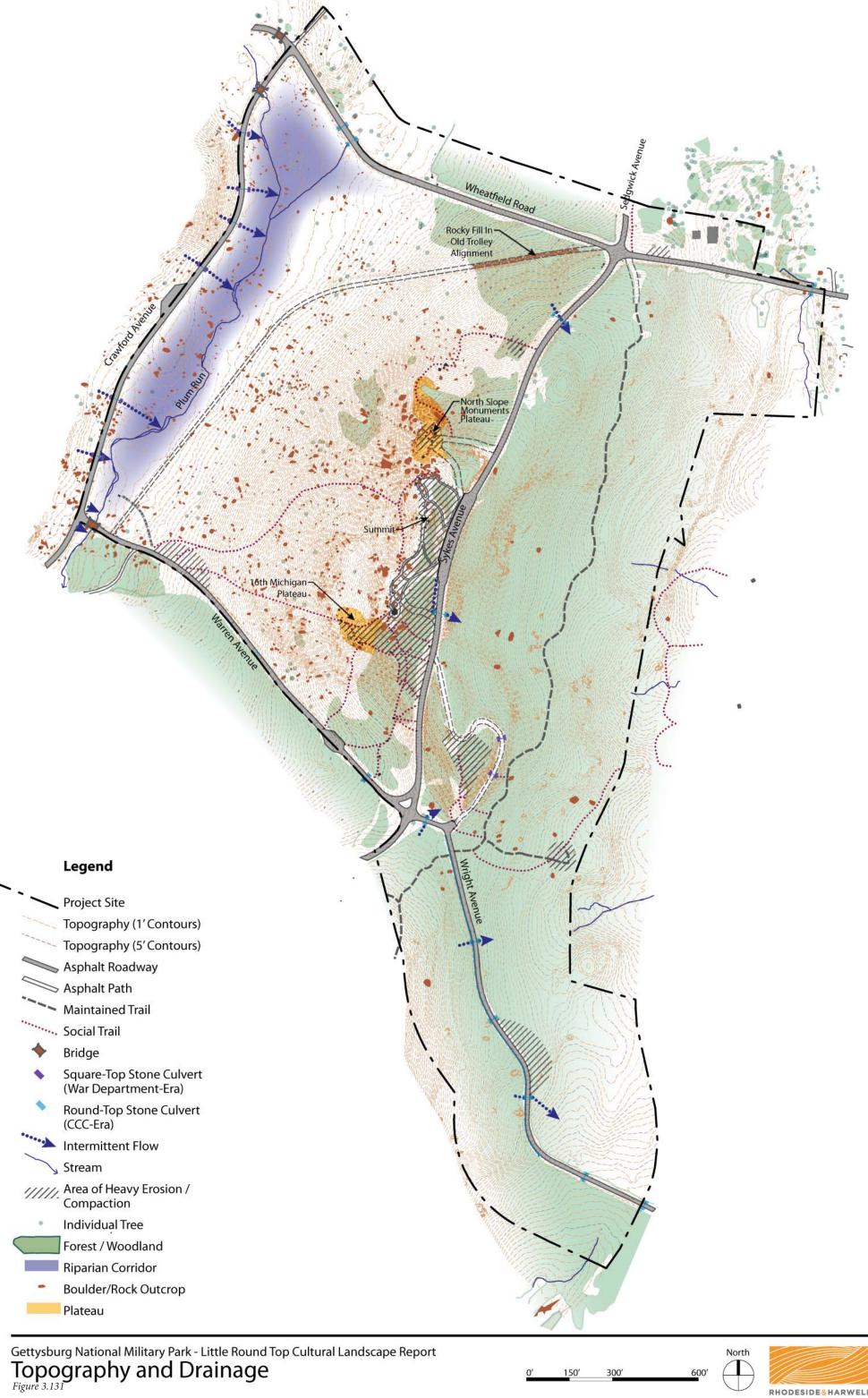


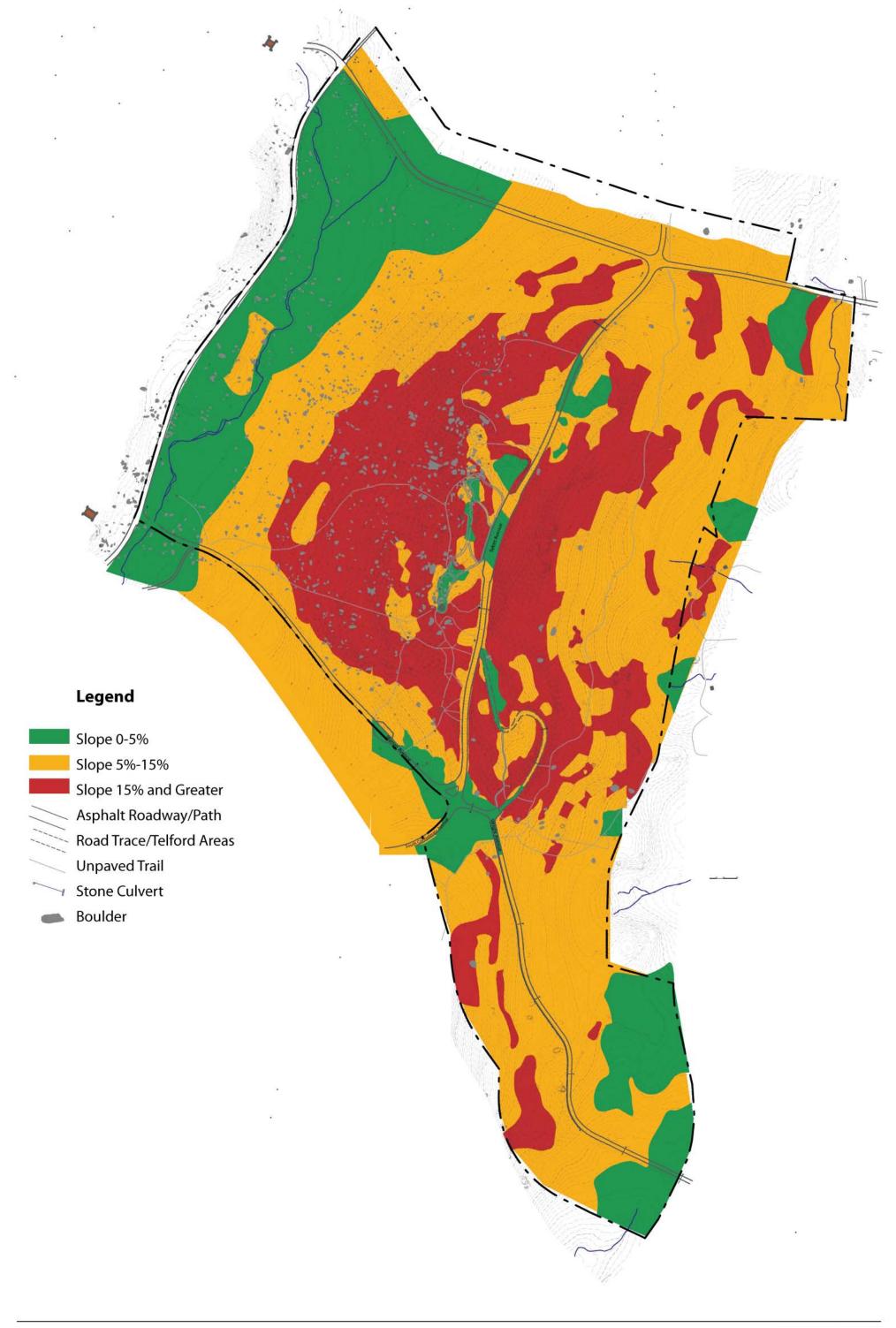
Gettysburg National Military Park - Little Round Top Cultural Landscape Report Paving & Circulation Enlargement

0' 75' 150' 300'



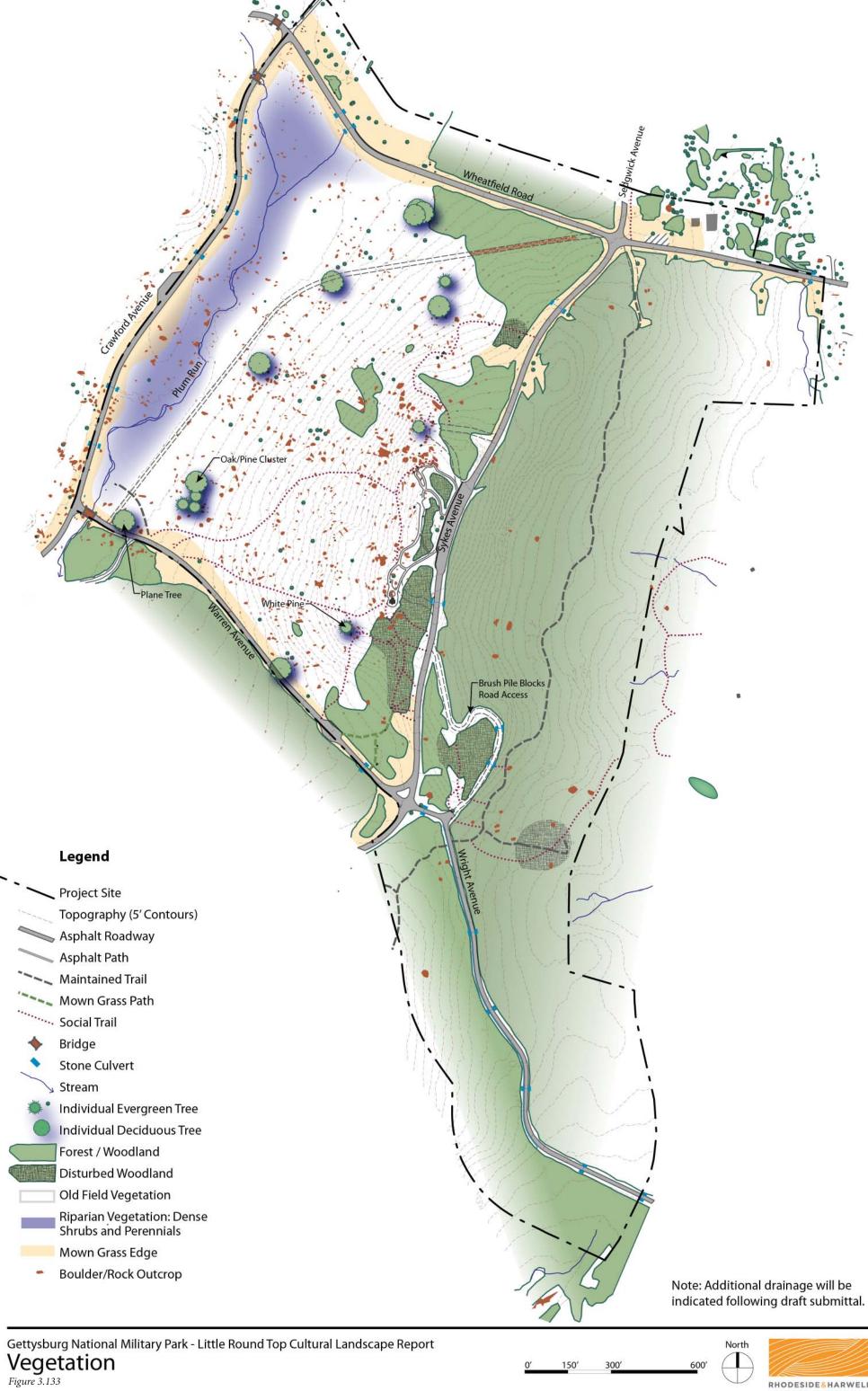






150′







4. Evaluation of Historic Integrity



Figure 4.01. Aerial view of Little Round Top from the west, ca. 1933 (GNMP General Historic Photographic Prints GETT 41135 #SF-21P-2152).

The Period of Significance for Little Round Top (1863 to 1938) is divided into two eras: the Battle Era (1863) and the Commemorative Era (1864-1938).

"The position to which we marched, on the extreme left, was what was afterwards known as Little Round Top. It was an irregular rocky rise of ground, sloping down on two sides (the front and rear) to low marshy ground, and might have been a hundred feet above its level. It consisted of a huge, solid rock, covered over with a thousand other loose boulders of every size and shape, and was most admirably adapted for a defensive position. Upon the top of the solid rock, the access to which was very steep and difficult, several of our batteries had been hauled and planted. On the left was Big Round Top, a high, rocky hill, covered with woods and overlooking Little Round Top. Between the two hills there was a small vale (not a ravine as it is commonly called), about a hundred feet in width, and covered with trees, but rather open and underbrushed."

Even before the dust settled on the battlefields, veterans, scholars and historians began collecting descriptions of the Battle of Gettysburg from its participants. Narratives such as the one above, culled from official reports, letters from soldiers to their families and interviews published in the era's newspapers, paint a detailed picture of the sequence of battle and the landscape over which it occurred.

These descriptions, combined with an extensive catalog of photographs and surveys taken throughout the park's Commemorative Era, provide a thorough history of Little Round Top's crucial role in the Battle of Gettysburg and its subsequent transformation into a memorial landscape.

Period of Significance and Landscape Classification

As stated in the Site History chapter, The Period of Significance for Little Round Top is 1863 to 1938. During the Period of Significance, Little Round Top evolved from a battlefield to a commemorative landscape, impacting both the way this landscape was understood and how it was modified to meet its users' needs. To better understand Little Round Top's historic integrity and significance, the Period of Significance is divided into two eras correlating to the site's shift in utilization over time. The Battle Era (1863) covers the Battle of Gettysburg itself, while the Commemorative Era (1864-1938), documents the creation of Gettysburg National Military Park and efforts to memorialize the battle.

^{1.} Amos M. Judson. *History of the Eighty-Third Regiment Pennsylvania Volunteers*. Erie, Pennsylvania: B.F.H. Lynn, Publisher, 1865. p.66.

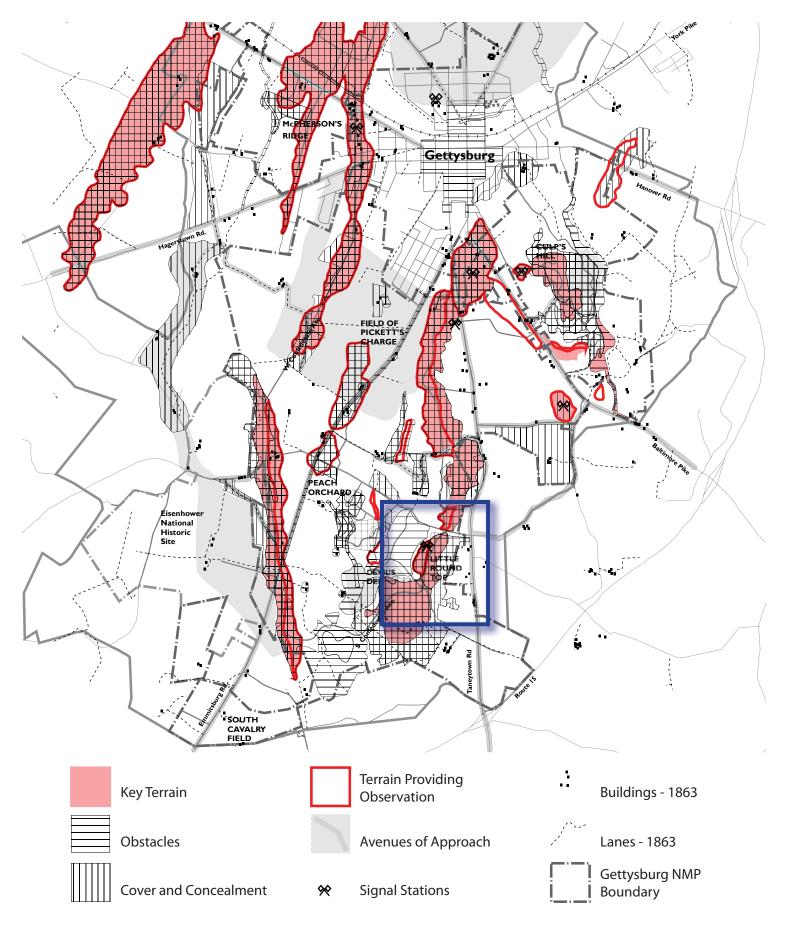


Figure 4.02. Key Battle Landscape Features Map for all of Gettysburg National Military Park. Note that the project area (surrounded in blue) contains all five of the military aspect of terrain (National Park Service, 2010).

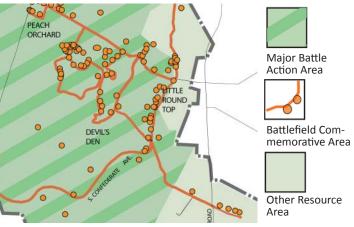


Figure 4.03. Major Battle Action Areas and Battlefield Commemorative Areas map of Little Round Top. Taken from the GNMP General Management Plan (National Park Service, 1999).

While the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes presents a logical, concise methodology for identifying and understanding the significance of man-made elements within a landscape², it does not define a process specific to the context of a battlefield. As a result, the National Park Service has adopted the U.S. Army's OAKOC method of terrain analysis to understand and prioritize landscape features extant during the Battle Era. Although this exact system had not been officially adopted by the military at the time of the Civil War, the basic concepts can be applied to the Battle of Gettysburg to understand troop placements and battle strategy. Through a careful analysis of the descriptions of terrain by battle participants and photographs taken in the days immediately following the battle, a clear sense emerges of how the landscape of Little Round Top affected the events that occurred there between July 1 and July 3, 1863.

In contrast to the Battle Era, the following documentation and analysis of changes to the landscape of Little Round Top during the Commemorative Era utilizes the Secretary of the Interior's prescribed standards. The National Park Service's Cultural Resource Management Guideline classifies cultural landscapes in four general categories: historic site, historic designed landscape, historic vernacular landscape and ethnographic landscape. For the purpose of this report, Little Round Top can be classified as an historic site, which is defined as "a landscape significant for its association with a historic event, activity, or person."³

The U.S. Army employs a process of analyzing terrain expressed in the memory aid OAKOC:

- Observation and Fields of Fire
- Avenues of Approach
- Key and Decisive Terrain
- Obstacles
- Cover and Concealment

Understanding the OAKOC System

Standing at the summit of Little Round Top, one can immediately understand the tactical advantage gained by the Union Army when General Weed's and Colonel Vincent's brigades took control of it on the afternoon of July 2, 1863; this easily defensible vantage point afforded a far-reaching view of the entire Battle of Gettysburg. Looking at the individual landscape elements that make up Little Round Top, the role that the site's natural and man made features played in the battle to control this significant vantage point becomes clear (Figure 4.02).

The U.S. Army employs a process by which "terrain is normally analyzed using the five military aspects of terrain, expressed in the memory aid, OAKOC:

- Observation and fields of fire
- Avenues of approach
- Key and decisive terrain
- Obstacles
- Cover and concealment"4

The OAKOC process is based on the tenet that "terrain has a direct impact on selecting objectives; location, movement, and control of forces; effectiveness of weapons and other systems; and protective measures. Effective use of terrain diminishes the effects of enemy fires, increases the effects of friendly fires and facilitates surprise."

Observation and Fields of Fire: Observation is defined as the extent of a battlefield that can be seen from a given feature or vantage point. Places for observation can be either natural, pre-existing elements such as rock outcrops, or they can be purpose-built to afford better views. Fields of Fire are the

^{2.} U.S. Department of the Interior. *Historic Landscapes Initiative* Washington, D.C. 1996.

^{3.} Director's Order 28, op. cit. Appendix A

^{4.} U.S. Army. *Field Manual No. 6-0, Mission Command: Command and Control of Army Forces.* Washington, D.C.: Department of the Army, 2003) Appendix B.

5. *ibid.*

areas within direct lines of sight that can be covered or fired upon from a given position. During the Civil War, fields of fire consisted of long range views for artillery fire and short range views for infantry fire. **Dead Space** is defined as the terrain within a field of fire that cannot be observed or fired upon. Dead space, such as the area behind a boulder, can provide cover and concealment for an attacking enemy.

Avenues of Approach: An Avenue of Approach is the overland route that leads to an objective or key terrain. Large scale avenues of approach take a logistical role when considering the rapid movement of entire brigades of soldiers and supplies in anticipation of an engagement. During the Civil War, armies relied heavily on existing road networks for troop movement and logistical support. Once an engagement begins, smaller scale avenues of approach become important on a tactical level. Farm lanes, logging traces and riverbeds allow for the maneuvering of troops in preparation for an offensive action or defensive reaction.

Within avenues of approach, **Corridors** such as stream valleys or hedgerows can act as natural avenues of approach (when they run toward an objective) or as obstacles to movement (when they run perpendicular to an objective). Although corridors can hinder the movement of large bodies of troops by causing a bottleneck, they can provide cover and concealment for light forces.

Equally as important as avenues of approach are **Avenues** of **Withdrawal**, defined as any relatively unobstructed route *away* from an objective. Avenues of withdrawal must be carefully considered when evaluating terrain, should a rapid retreat become necessary.

Key and Decisive Terrain: Key Terrain describes any site that affords a notable advantage to whichever combatant controls it. During the Civil War, key terrain was usually defined as high ground that provided good observation and clear fields of fire, but could also include the point of entry to an avenue of approach.

Decisive Terrain consists of any terrain that must be controlled in order to accomplish a given mission. Although not necessarily present in every battle situation, decisive terrain may consist of urban areas, lines of communication and supply and key military installations.

<u>Obstacles</u>: An **Obstacle** is any feature specifically constructed or employed to prevent, restrict, divert or delay the movement of opposing forces. **Existing Obstacles** can be natural (bodies of water, woodlots or boulders) or man made (fences, walls or buildings). By this definition, the steep, rock-strewn slopes of Little Round Top make the site's entire terrain an obstacle. **Reinforcing Obstacles** such as entrenchments or breastworks are purpose-built during battle to further prevent or delay the movement of opposing forces.

<u>Cover and Concealment</u>: Concealment is protection from enemy observation and surveillance. Advancing troops will take advantage of elements providing concealment in order to get as close to opposing forces as possible without being detected. Concealment is usually gained by larger-scale features, such as ridges, woodlots or ravines to allow for the movement of troops and supplies without the fear of direct or indirect fire.

Once an advancing force has been detected, it must rely on **Cover** to provide protection from enemy fire. Cover can be provided by smaller scale features such as fences, swales or buildings in order to limit an enemy's field of fire.

Landscape Descriptions by Battle Participants

The following are descriptions of the terrain and landscape of Little Round Top from firsthand accounts of the officers and soldiers involved in the battle. Many are from the official reports made in the days and weeks following the battle, supplemented by descriptions from letters and other sources. The purpose of collecting these descriptions, within the context of this report, is to provide data for understanding how the participants experienced the landscape and, within short order, began interpreting the landscape's impact on the battle and the actions that were taken or not taken. The location and orientation of the elements described in these narratives are noted in the OAKOC Map at the end of this chapter to provide a detailed understanding of both the extant and lost landscape features that played a direct role in the outcome of the Battle of Gettysburg (Figures 4.15 and 4.16). This provides a way to see the landscape as it was seen on July 2 and 3, 1863, and to compare it with the landscape that exists today, creating the basis for future improvements designed to preserve, interpret and restore key battle features.

Very few of the participants provided overly detailed descriptions of the landscape, but they almost all noted the rugged, rocky nature of the terrain and the variations in elevation that influenced the decision of Federal officers to establish a defensive position on the summit of the Little Round Top at a critical moment within the battle (Figures 4.04, 4.05 and 4.09) . The Federal regimental officers, such as Col. Joshua Chamberlain, tended to provide some great level of detail about the landscape, noting particular spurs or locations on Little Round Top, no doubt an advantage of having held the defensive position on the high ground from the fighting late in the day of July 2 and through the day of July 3 as fighting raged elsewhere on the field. The Confederate officers provide considerably less detail, no doubt a disadvantage of having been on the offensive and with little chance to examine the ground leading them uphill except during the heat of battle. Indeed, Confederate reports offer mostly brief impressions of Little Round Top's landscape and observations that it presented a significant obstacle at the end of a long day of marching and fighting.

The difference in the Federal and Confederate contexts for the landscape is expressed nowhere more obviously than in which of the armies had a proper name for Little Round Top and which did not. None of the Confederate officers in their official reports uses a proper name for the location whereas many of the Federal officers do, although not consistently. Federal officers variously refer to it as Little Round Top, Round Top (not making a differentiation between 'Little' and 'Big,' or describing Little Round Top as a spur of Big Round Top), Granite Spur, Sugar Loaf, Wolf Hill or Rock Hill. Some names were likely made known to the officers by local residents.

One strong impression that does arise from reading both Union and Confederate reports is the strong language used to describe Little Round Top as a steep rocky mountain and the Plum Rum valley and the gap between Little and Big Round Top as a ravine or gorge. These terms suggest, at least from a modern perspective, a description that might be aptly applied to some of the high ridges and valleys of the nearby Alleghenies, but probably not to Little Round Top. Within the context of the day's battle, however, the use of strong language to describe the landscape was apt; the soldiers found the terrain difficult and physically exhausting to traverse, especially while keeping the required order of battle.

The descriptions that follow are organized by aspect of terrain analysis that they are describing. Several of the photographs included in this section were taken just days after the close of battle, providing an accurate record of the condition of Little Round Top before it could be altered by any natural processes or human interventions (Figures 4.04-4.05 and 4.09-4.11). The following numbered descriptions correspond to the numbers located on the OAKOC Map at the end of this section (Figures 4.15 and 4.16).

Observation and Fields of Fire

01. An anonymous post-war article by a purported witness to the observation post of General G.K. Warren on Little Round Top remarked on the park's forest and viewshed management efforts. "The forest that grew on Little Round Top has been all cut away, that spectators may have a clearer view of the twenty-five square miles occupied during battle. General Warren's statue is placed on the spot supposed to be his chief observation point. The writer of this had the sad privilege [sic] of knowing that General Warren's chief position was on the top of a large butternut tree, which overlooked the other



Figure 4.04. View westward from Little Round Top toward Houck's Ridge, 1863 Photography by Brady, 1863 (GNMP General Historic Photographic Prints GETT 41135 #SF-2B-2090).

trees on the top of the hill. This was his observation point...

Fortunately in cutting away the forest this butternut tree is just beyond the line which received the woodman's axe. It is, however, in very dilapidated conditions, visitors having been allowed to hack it to pieces to get out the bullets and pieces of shell. It seems to us such a usefull [sic] tree having so much to do with the success of the armies on that great occasion, deserves to be protected and cared for as long as it possible for nature to allow it to exist.."

02. Early battle historian John B. Bachelder described the condition of the vegetation on Little Round Top. "At the time of the battle the wood had been recently cut away, on its western face, which gave the rough naked sides of this artillery crowned crest the appearance of an immense battlement, while **the view of the battle from this spot was supremely good**."⁷

A gunner in Hazlett's Battery D, 5th U.S. Artillery assessed the view from his position on the summit of Little Round Top as an artillery position. "Little Round Top was the best position on the whole field for artillery."

A report on the operations and duties of the U.S. Army Signal Department described the different signal stations during the Battle of Gettysburg. "A station was established upon Round Top Mountain, on the left of our line. From this point the greater part of the enemy's forces could be seen and their movements reported. The signal officer here stationed early

^{6.} Anonymous. *Meehan's Monthly for March*. Quoted in the *Gettysburg Compiler*, March 15, 1892.

^{7.} John B. Bachelder. Gettysburg: What to See and How to See It. Boston: John B. Bachelder, 1889. p.66.

^{8.} Thomas Scott. "On Little Round Top." From Richard A. Sauers, ed. Fighting them Over: How the Veterans Remembered Gettysburg in the Pages of the National Tribune. Baltimore: Butternut and Blue, 1998. p. 254.



Figure 4.05. View looking north from the summit of Little Round Top, July 1863 (Library of Congress Civil War Photos #01632u).

in the afternoon discovered the enemy massing upon General Sickles' left. This information was conveyed by signals to the general in command...The keen-sighted officer had prevented the consummation of a movement, which, without discovery, would have proved fatal to our prospects on that field...With the engagement general, every signal station was kept at work. But among them all the station on Round Top stood prominently. Conspicuous in its elevation, and the site from which a complete view of the surrounding country could be secured, it was coveted by both combatants...The day nearly expired witnessed the stations in working order and busily employed in the transmission of messages. When all were enveloped in darkness, the swinging torch still gave evidence of the fidelity with which the party performed their duties and denoted the constant labors exacted of the signal observer."

A soldier in the 2nd South Carolina regiment of Kershaw's Brigade described his view eastward on the afternoon of July 2, 1863. "I looked and saw a Yankee flag waving signals from the apex of Little Round Top. Indeed, we were so much exposed to view that the enemy had no trouble counting the exact numbers under Hood and McLaws."¹⁰

03. Oliver Norton, flag bearer for Vincent's Brigade, believed that the marble marker erected to memorialize the mortal wounding of Col. Vincent was incorrectly placed (Figure 4.06). "That rock [where the marker stands] afforded a good view of all the regiments of the brigade and I think Vincent stood



Figure 4.06. "Tablet where Gen. Strong Vincent fell - Little Round Top." Young foliage obscures distant views west. Photography by Tipton, 1880 (GNMP Tipton Photographic Prints GETT 41136 #1869).

there from the time the brigade got into place until the break occurred in the [line of] the 16th Michigan, when he went there to stop it." Gettysburg National Park Commissioner John P. Nicholson agreed with Norton, stating that the site of the Vincent-inscribed boulder was more likely the spot. "[It was] the large rock against which the right of the 16th Michigan rested...that big rock will probably stand there as long as any of the monuments do. No man living can point out the exact spot where Vincent stood when he was shot. In my opinion it was very near that big rock."¹¹

04. Just four days after the close of battle, Col. Joshua L. Chamberlain provided a detailed report that described the conditions surrounding the 20th Maine Infantry during the battle. "...Mounting a large rock I was able to see a considerable body of the enemy moving by the flank in the rear of their line engaged, and passing from the direction of the foot of Great Round Top through the valley toward the front of my left...Forced from our position, we desperately recovered it, and push the enemy down to the foot of the slope...[Between brief intervals in the fighting] rude shelters were thrown up of the loose rocks that covered the ground."¹²

Avenues of Approach

05. A field officer in the 20th Maine regiment of Vincent's Brigade recalled how his unit moved into position on the left flank of the brigade at Vincent Spur on the afternoon of July 2, 1863 (Figure 4.08). "We moved along this wooded [eastern] slope, the 16th Michigan leading and the 20th [Maine] following, until we left the lower ground or base between the south end of Little Round Top and the north end of Big

^{9.} Albert J. Myer. *Report of the Operations and Duties of the Signal Department of the Army, 1860-1865.* p. 147. From Vertical Files, Gettysburg National Military Park Library.

^{10.} John Coxe. "The Battle of Gettysburg." Confederate Veteran Magazine, vol. 21 (1913) p. 434.

^{11.} Oliver W. Norton to M.V.B. Gifford, 31 August, 1911. From Oliver Norton Papers, Clarke Historical Library, Central Michigan University.

^{12.} Report of Col. Joshua L. Chamberlain, 20th Maine Infantry. Report No. 196, 6 July, 1863.

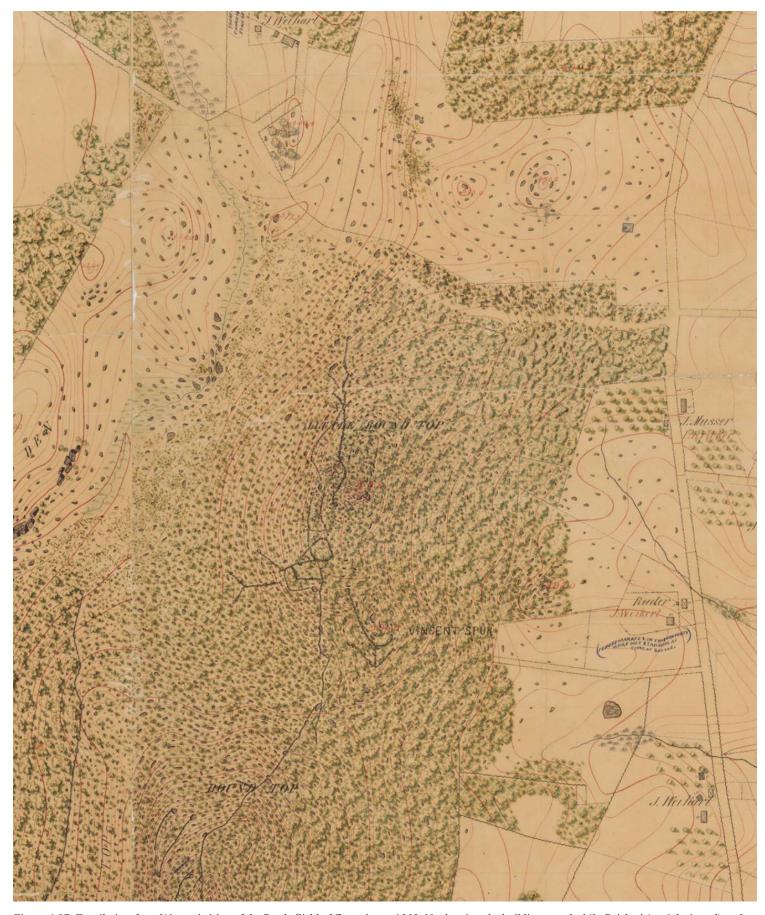


Figure 4.07. Detail view from Warren's Map of the Battle Field of Gettysburg, 1868-69, showing the buildings marked 'L. Bricker' (at right in red) and the summit of Little Round Top (GNMP General Maps Collection GETT 41137).

Round Top. This base, as well as the slope on both sides is covered with oak trees, or chiefly with oak of perhaps a foot in diameter, more or less, with here and there a sprinkling of pines. The boulders were everywhere, some large and some small...I could see through the trees to the south, the steep and thickly wooded side of Big Round Top, two or three hundred yards distant. Towards the rear the east, there was the same open forest and beyond was a fenced field not visible from our position with a lane crossing it bordered by 'worm' fences." 13

06. The assistant adjutant general of Gen. Sykes' 5th Corps was sent to scout artillery positions for that corps in support of the 3rd Corps, whose flanks were dangerously exposed. "My orders were to examine the ground in Sickles' rear with a view to massing our corps and deploying it In performing this duty [Aide de Camp] Capt. Williams and myself came out directly in front of 'Little Round Top.' I said to the Captain, 'what a grand place for artillery, but we cannot get guns up there,' not knowing at the time that **there was a wood road passing up from the rear of the hill.**"¹⁴

07. Testifying before Congress, General S.W. Crawford described the approach of his division from Baltimore Pike to the scene of the fighting at the base of Little Round Top. "I crossed the Taneytown Road, on a cross-road running from it to Emmettsburg [sic] Road, and to the right of Little Round Top. I rode at once and reported to General Sykes. He said to me he was gratified to see I was so promptly upon the field and that the other division [Ayres'] had just come up. He directed me to mass my command in a field of scrub oak, to the right, and hold them in readiness for any movement. Before I could complete the movement I received and order for him to move to the left, across this cross-road that runs from Emmettsburg to the Taneytown Road, and there to support our men, in case they were compelled to fall back. I crossed the road and formed my division on the slope of Little Round Top, to the right of the summit."15

08. Oliver Norton, flag bearer for Vincent's Brigade described his memory of the landscape from where he stood on the John Weikert property, northwest of Little Round Top, just before climbing to the summit (Figure 4.07). "Looking toward Little Round Top, the face of the hill was a confused mass

of broken stone. On the northern slope there was scarcely any vegetation, and the ascent was not practicable for a man on horseback. When Vincent started I followed him of course. We did not follow any road. There is on the map a by-road, leading from the Weikert buildings, to and across the Taneytown Road. I think our position must have been somewhat to the east of this road and that we crossed this road, avoiding the rocky face of Little Round Top. Passing to the east of the hill we climbed the east acclivity, going up from the low ground in the neighborhood of the buildings marked on the map, 'L. Bricker,' a little to the south of the spot designated as the Signal Station. We came out on the top of the hill to an open place among the rocks, which overlooked the whole country toward the Emmetsburg [sic] Road. Vincent sat there on his horse a moment and I sat beside him holding the flag. We had been there but a few seconds when a shell exploded close behind us and in a moment more two or three other shells came in quick succession. Vincent turned to me and said they are firing at the flag. Go behind the rocks with it. I obeyed his order and the rocks were so numerous that it was little trouble to find a sheltered spot."16

Key and Decisive Terrain

09. Testifying before Congress, Maj. Gen. George G. Meade described the position of the 3rd Corps at the base of Little Round Top. "[The 3rd Corps commander had left] a large gap between his right and General Hancock's left, and that his left, instead of being near the Round Top mountain, was in advance of the Round Top, and that his line, instead of being a prolongation of General Hancock's line, as I expected it would be, made an angle of about 45 degrees with General Hancock's line...The enemy threw immense masses upon general Sickles's corps, which, advanced and isolated in this way, it was not in my power to support promptly. At the same time that they threw these immense masses against General Sickles a heavy column was thrown upon the Round Top mountain, which was the key-point of my whole position. If they had succeeded in occupying that, it would have prevented me from holding any of the ground which I subsequently held to the last."17

General Gouvernor K. Warren, assigned to General Meade's staff as its topographical engineer, recalled his initial assessment of Little Round Top. "I continued on till I reached Little Round Top. There were not troops on it and it was used as a signal station. I saw that this was the key of the whole position, and that our troops in the woods in front of it

^{13.} Ellis Spear. "Recollections." Attachment to Abbot Spear to Thomas J. Harrison, 28 February, 1978. From Kathleen Georg Harrison Personal Files.

^{14.} Frederick T. Lock to Joshua L. Chamberlain, 5 July 1886. From Yale University Library.

^{15.} United States Congress. Report of the Joint Committee on the Conduct of the War, at the Second Session Thirty-Eighth Congress. Army of the Potomac. Battle of Petersburg (Report of the Joint Committee). Washington, D.C.: Government Printing Office, 1865. pp. 469-70.

^{16.} Oliver Norton to Frank Huntington, 28 September, 1888. From United States Army Military History Institute.

^{17.} Report of the Joint Committee op. cit., p. 332

could not see the ground in front of them, so that the enemy would come upon them before they would be aware of it. The long line of woods on the west side of the Emmitsburg Road (which road was along the ridge) furnished an excellent place for the enemy to form out of sight..."¹⁸

Obstacles

10. General James Longstreet described the advance of his Confederate troops against Little Round Top. "[the Federals were] soon dislodged and driven back upon a commanding hill, which is so precipitous and rough as to render it difficult of ascent. Numerous stone fences about its base added greatly to its strength. The enemy, taking shelter behind these, held them, one after another with great tenacity."¹⁹

11. On July 2, 1896, longtime park engineer E.B. Cope escorted Col. William C. Oates and others through the battlefield in order to confirm the accurate location of troops during the battle. "[We] drove a stake along the stone wall near the Farnsworth Monument [1st Vermont Cavalry] to mark the right of Col. Oates' advance, commanding the 15th Alabama. From this stake he moved in a straight line reaching to the summit of Big Round Top. At 4 to 4 1/2 [p.m.] his right flank reached the summit. Finding it impossible to advance further in that direction on account of the abruptness of the descent, he moved his command north by the left flank to better ground, then formed line facing east of North he was now near the foot his line with his left near where 10th Reserve Monument now stands and his Right extending to east edge of woods between the Round Tops. Here he attacked the 20th Maine Regiment, his Right advancing and enveloping the south end of Little Round Top, driving the 20th Maine out of their position behind a slight stone defense hastily thrown up, his line extending across the spur and the center at the 20th Maine flank marker; here he was charged five times."19

12. The day after fighting at Gettysburg ceased, New York Herald correspondent G.W. Hosmer described the conditions on Little Round Top. "[Little Round Top] was not particularly precipitous, but on the front it was very rough and rocky, and the crest was covered with a growth of scrub oaks...[Hood's] and McLaw's [divisions came] over rocks and through the low wood."²¹

18. Henry J. Hunt. "The Second Day at Gettysburg." Battles and Leaders of the Civil War, vol. 3. New York: The Century Co. 1888. p. 307
19. U.S. War Department. The War of the Rebellion: a Compilation of the Official Records of the Union and Confederate Armies (Official Records). Washington, D.C.: Government Printing Office, 1889. vol 27, p. 358.
20. U.S. Gettysburg Battlefield Commission. "A Record of the Positions of Troops on the Gettysburg Battlefield." pp. 27-28 GNMP Engineer's Records 1893-1922 From Gettysburg National Military Park Archives.
21. G.W. Hosmer. "The Battle of Thursday." New York Herald, 4 July 1843.



Figure 4.08. 20th Maine Monument at Vincent Spur, showing boulders and stone breastworks. Photography by Tipton, ca. 1886 (GNMP Tipton Photographic Prints GETT 41136 #6101).



Figure 4.09. Little Round Top from the Devils Den, showing the landform's rough, rocky western face. Photography by Gibson, 6 July 1863 (GNMP General Historic Photographic Prints GETT 41135 #SF-28-2083).

In a letter to his brother, a soldier in the 1st Pennsylvania Battalion described the swampy conditions at the base of Little Round Top. "Between [Rose] Woods and Stony Ridge is an open field, blue swamp mud and very rocky. This the Rebels had to cross in order to assault our works, which they did, in spite of all the grape and canister [sic] our men could pour into them."²²

13. A line officer in the 98th Pennsylvania Infantry related the positions and actions of the unit during the closing hour of battle on July 2, 1863. The Regiment received orders to fix

^{22.} Frank M. Stoke to J.M. Stoke. 26 October, 1863. From Gettysburg College Library Collections.



Figure 4.10. Little Round Top from the area of the 9th Georgia Infantry attack on Crawford's Pennsylvania Reserves. Photography by Brady, 15 July 1863 (GNMP General Historic Photographic Prints GETT 41135 #SF-28-2087).

bayonets and charge down the western Slope of Little Round Top in order to rally broken forces in the Plum Run Valley and halt the Confederate pursuit of the disorganized troops. "We charged through the marsh of Plum Run, advancing to the foot of the ridge on the west side of the swamp; whatever there was in our immediate sight of the enemy, in our direct front, retreating before us with little firing; we however received a livelier fire from the left (Devil's Den) while crossing the swamp, which, together with the difficulty of crossing through the soft slough, had the effect to break our line up somewhat, so that the halt at the foot of the ridge, though for a few moments only, allowed those who became delayed (stuck in the mire) in crossing, to catch up."²³

14. In a letter to his mother, a soldier in the 4th Texas regiment of Robertson's Brigade described the terrain of Little Round Top on the afternoon of July 2, 1863. "We had to fight the Yankees on a Mountain, where it was very steep and rocks as large as a meetinghouse...[I] had gone a considerable distance up the mountain [before being wounded]."²⁴

15. Capt. George Hillyer of the 9th Georgia Infantry described the strength of the Union Army's position on Little Round Top in an official report submitted just one week after the battle (Figure 4.10). "The whole line now again pressed forward, and, though entirely without support, dispersed and scattered a fresh line of the enemy who came up against us, and pursued them 400 or 500 yards farther to **the base of the mountain upon which the enemy's heavy batteries were posted, which we found to be the strongest natural position I ever saw.** Our little band, now thinned and exhausted by



Figure 4.11. Breastworks on Little Round Top with Big Round Top in the background, July 1863 (Library of Congress, HAER Collection #4a40122u).

three and a half hours' constant fighting, made a gallant attempt to storm the batters, but the enemy being again heavily reinforced, we were met by a storm of shot and shell against which, in our worn-out condition, we could not advance."²⁵

Cover and Concealment

16. In a later letter, the same soldier in the 4th Texas regiment of Robertson's Brigade recounted his advance on Little Round Top. "[We] had to charge through a wheat field about 500 yards wide with the Yankee artillery about 100 guns firing on us. After reaching the woods where there was a stone fence, we run the Yankees from the fence and up the side of the mountain which was quite steep and covered all over with large rocks and heavy timber."²⁶

17. A soldier in the 96th Pennsylvania Infantry described a counterattack led by the Pennsylvania Reserves to reclaim the 3rd Massachusetts Battery. "The enemy was driven back and we regained the ground lost a short time before. We halted in the hollow behind a stone fence..."²⁷

18. A veteran of Company G, 140th New York Infantry recalled constructing breastworks after the first day of fighting came to a close (Figure 4.11). "[We] picked up our dead and buried them; **then we built stone walls** in the dark to protect us from the sharpshooters the next day."²⁸

^{23.} John P. Nicholson, ed. *Pennsylvania at Gettysburg*, vol. 1. Harrisburg: E.K. Meyers, State Printer, 1893. pp. 520-21.

^{24.} Zack Landrum to his mother. 15 July, 1863. From Gettysburg National Military Park Historian Files.

^{25.} Report of Capt. George Hillyer, 9th Georgia Infantry. Report No. 449, 8 July, 1863.

^{26.} Zack Landrum to his mother. 4 August, 1863. From Gettysburg National Military Park Historian Files.

^{27.} Henry Keiser. *Diary*. From Harrisburg Civil War Round Table Collection, United States Army Military History Institute. p. 71

^{28.} Samuel R. Hazen, "Fighting the Good Fight. The 140th N.Y. and Its Work on Little Round Top." *The National Tribune*, 13 September, 1894.

19. The regimental history of the 146th New York Volunteers described the defenses used by that unit on Little Round Top during the afternoon of July 2, 1863. "As soon as the regiments [of Weed's Brigade] took their positions, men from each went down the slope to the front and stationed themselves behind the rocks which thickly strewed the side of the hill. They were also instructed by Colonel Garrand to erect a rough stone wall to afford better protection for themselves. Soon after this disposition was made, the Confederates attacked vigorously, advancing for a considerable distance up the slope in a final effort to take the hill...They struck the skirmish line in front of the One Hundred and Fortieth New York and Ninety-first Pennsylvania first, but soon reached the point where our regiment and the One Hundred and Fifty-fifth Pennsylvania were stationed "29

Col. Garrand of the 146th New York Volunteers described the construction of breastworks on the slopes of Little Round Top following the first afternoon of fighting. "As soon as the regiments had their positions, men from each regiment were advanced down the slope to the front, in among the rocks, and, together with those in line on the crest, actively engaged the enemy during the rest of that day. At night this ridge, naturally strong, was strengthened by building a stone wall about half way down the slope, wherever the rocks offered no protection to the men."³⁰

20. In an attempt to clarify a portion of the sequence of events during the battle, a veteran of the 1st Pennsylvania Reserves described the construction of stone breastworks on Little Round Top (Figure 4.12). "[The stone breastworks in front of the line of the 16th Michigan Infantry] were thrown up on the night of the 3rd of July, 1863 principally by Crawford's Division of the Fifth Corps. That they were not there at the time of the battle [on July 2] at that point is not disputed. We have survivors of Crawford's division living here [in Gettysburg] who helped to throw up those breastworks on the night of the 3rd of July..."³¹

21. In a letter home, veteran of Company A of the 44th New York Infantry described his position on Little Round Top



Figure 4.12. "From Little Round Top looking to Devil's Den." Stone breastworks near the position of the 16th Michigan. The breastworks to the left of the photograph were reconstructed several years after the battle. Photography by Tipton, 1888 (GNMP Tipton Photographic Prints GETT 41136 #1896).

during the fighting of July 2, 1863. "Our brigade lay on the side hill. It was covered with large stones. We threw up a small breast-work to protect us. I was where I could see nearly one half of the field."³²

22. The regimental history of the 121st New York Infantry described the natural features that were used as cover during battle. "[The regiment] occupied an advanced position under cover of a narrow strip of woods, along which were scattered a number of large rocks."³³

23. A soldier in the 147th Pennsylvania Infantry described the vegetation his regiment used as cover during the night of July 1, 1863. "In the early part of the evening the regiment was about faced, and we were moved to the rear, in a small pine thicket, with instructions to fire upon anything that should advance upon us. Thus we passed the long night."³⁴

24. Major Ellis Spear, of the 20th Maine Infantry, described the thick vegetation that separated his regiment from those to his right. "Apparently our line was not long enough to reach over and occupy Big Round Top so that our left was refused. The 83rd Penna. was on the right of the 20th but not visible by reason of the bushes, chiefly small pines amongst the larger and more scattered grove of oak trees."³⁵

^{29.} Mary Genevie Green Brainard. *Campaigns of the One Hundred and Forty-Sixth Regiment New York Volunteers*. New York: G.P. Putnam's Son, 1915. pp. 112-13

^{30.} Report of Col. Kenner Garrand, 146th Pennsylvania Infantry. Report No. 217, 16 July, 1863.

^{31.} Calvin Hamilton to A.M. Apsted, 10 October, 1892. From "Resolutions of Col. Hill," Gettysburg National Military Park Archives.

^{32.} Eugene Arus Nash. *A history of the Forty-fourth Regiment New York Volunteer Infantry in the Civil War, 1861-1865.* Chicago: R.R. Donnelley & Sons Company, 1911. p. 326.

^{33.} Isaac O. Best. *History of the 121st New York State Infantry*. Chicago: James H. Smith, 1921. p.89.

^{34.} Lewis G. Schmidt. *A Civil War History of the 147th Pennsylvania Regiment, 1st ed.* Allentown, PA: Lewis G. Schmidt, 2000. p. 320 (Quote by Joseph A. Lumbard).

^{35.} Ellis Spear. "Recollections." op. cit.

25. A veteran of Company H, 20th Maine Infantry described the condition of the landscape at the southern base of Little Round Top on the afternoon of July 2, 1863. "[The 20th Maine was] on the left [of Vincent's brigade] and consequently on the extreme left of all our line of battle. The ground sloped to our front and left and was sparsely covered with a growth of oak trees, which were too small to afford us any protection. Shells were crashing through the air above our heads making so much noise that we could hardly hear the commands of our officers; the air was filled with fragments of exploding shells and splinters torn from mangled trees..."³⁶

26. The regimental history of the 20th Maine Infantry described the terrain of Vincent Spur. "[Big and Little Round Tops were separated by] a smooth, thinly wooded valley... [The 15th and 47th Alabama regiments formed their ranks] in the shrubbery and rocks in the bottom of the valley."³⁷

27. In a letter to Colonel Joshua Chamberlain of the 20th Maine Infantry, Captain Walter G. Morrill of Company B of the same regiment described the position of his detached unit to the east of Little Round Top (Figure 4.13). "The enemy having come in on our right and attacked the 20th Maine. I at once ordered my co. to march by the left flank so as to uncover the enemy, and at the same time to guard against flank movement on the left. Having arrived on the field at the left of the woods, I found some twelve or fifteen U.S. Sharpshooters under the command of a non-commissioned officer, and he asked leave to remain under my command during the battle. We took position behind a stone wall there...We remained in that position until the enemy made its appearance on the right of us and at the edge of the woods, and about that time your regiment charged them, at which time we opened fire on them, at the same time giving loud commands to charge, in order to have them think I had a large body of troops there. At which time we broke and run, going in the direction of Big Round Top. We immediately followed them part way up the hill until they began to stop and fire at us and having two men wounded and knowing my command could not expect to make much of a fight with them, I ordered my men to cover themselves the best they could in which position we remained until about nine o'clock P.M. At which time you ordered me to report to you with my co. for duty with the regt., which I did, having performed my duty to the best of my ability and hoping the same was satisfactory to you."38



Figure 4.13. Marker of Company B, 20th Maine Infantry. The stone wall mentioned in Captain Morrill's report can be seen behind the marker. Photography by Tipton, 1898 (GNMP Tipton Photographic Prints GETT 41136 #4363).

28. Lieut. Col. K. Brian of the 5th Texas Infantry described the fortified position of the 44th New York and 83rd Pennsylvania Infantries as he advanced his troops toward them. "At our approach, the enemy retired to the top of the first height, protected by a ledge of rocks. A short halt was made at the stone fence, to enable those who had fallen behind to regain their places. When the command 'Forward' again fell from the lips of our gallant colonel, every man leaped the fence, and advanced rapidly up the hillside. The enemy again fled at our approach, sheltering himself behind his fortified position on the top of the second height, about 200 yards distant from the first. From this position, we failed to drive them. Our failure was owing to the rocky nature of the ground, over which we had to pass the huge rocks forming defiles through which no more than 3 or 4 men could pass abreast, thus breaking up our alignment and rendering its formation impossible. Notwithstanding the difficulties to overcome, the men pressed on to the pass of the precipitous stronghold, forming and securing the enemy's second position, many of our officers and men falling in passing the open space between the heights. Here we halted, there being small clusters of rocks far below the elevated position of the enemy, which gave us partial protection. From this position we were enabled to deliver our fire for the first time with accuracy."39

29. Col. William C. Oates of the 15th Alabama Infantry described his assault on the 20th Maine Infantry at the far right of the Confederate Line (Figure 4.14). *"I halted my regiment as its left reached a very large rock, and ordered*

^{36.} Theodore Gerrish, "Battle of Gettysburg." from Richard A. Sauers, ed. op. cit.

^{37.} Maine Gettysburg Commissioner's Executive Committee. *Maine at Gettysburg*. Portland: The Lakeside Press, 1898. pp. 254, 257.

^{38.} Walter G. Morrill to Joshua Chamberlain, 8 July, 1863. From John G. Bachelder Papers, pp. 1029-30.

^{39.} Report of Lieut. Col. A Bryan, 5th Texas Infantry. Report No. 456, 8 July, 1863.

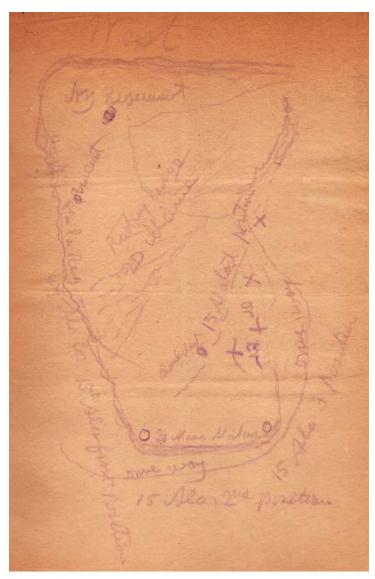


Figure 4.14. Sketch by Col. William Oates accompanying his correspondence to the battlefield commission, showing the movement of the 15th Alabama Infantry against the 20th Maine Infantry, 1905. (GNMP Oates Correspondence GETT 41139).

a left-wheel of the regiment, which was executed in good under fire, thus taking advantage of a ledge of rocks running off in a line perpendicular to the one I had just abandoned, and affording good protection for my men. This position enabled me to keep up a constant flank and cross fire upon the enemy, which in less than fine minutes caused him to change front."40

Although Little Round Top has evolved over time, changes to the landscape have not compromised the core character and aesthetic, giving it a high degree of historic integrity.

Contributing Features by Character Area

The National Register of Historic Places defines historic integrity as "the ability of a property to convey its significance," and has established seven aspects for evaluating integrity:

- Location
- Design
- Setting
- Materials
- Workmanship
- Feeling
- Association⁴¹

The contributing landscape features listed at the end of the Site History narrative, combined with the landscape descriptions from battle participants, above, and the Character Area Analysis provided in the Existing Conditions narrative, provide a comprehensive framework for understanding the historic integrity of Little Round Top during the Period of Significance, 1863-1938. Although Little Round Top has evolved over time, changes to the landscape have not compromised the core landscape character and aesthetic, giving it a high degree of historic integrity.

The following list of contributing features classifies extant and lost landscape elements both by Character Area and by the specific era to which they contribute. This list will be used to assist future planning and design efforts at Little Round Top by defining areas of relatively high integrity and areas of relatively low integrity.

^{40.} Report of Col. William C. Oates, $15^{\rm th}$ Alabama Infantry. Report No. 444, 8 August, 1863.

^{41.} U.S. Department of the Interior. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.* (http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm) accessed May, 2011.

Open Vehicular Corridor

Despite minor modifications to the paving material and drainage patterns, the open character and roadway alignments of Wheatfield Road, Crawford Avenue and Warren Avenue have remained relatively intact since they were constructed. Furthermore, Wheatfield Road was in place during the Battle of Gettysburg and several accounts exist of that roadway being used as an avenue of approach for troops during fighting. Overall, the Open Vehicular Corridor Character Area possesses a high degree of integrity, with the exception of the former Rosensteel Property at the northeast corner of the project area. This site, northeast of the intersection of Wheatfield Road and Sedgwick Avenue, has been modified several times since the Period of Significance, including the removal of the Round Top Museum, development and removal of the Sedgwick Post Office and one-time use as site of the park's "restoration shop".

Battle Era Extant Features

- Wheatfield Road (alignment)
- Fencelines (location)
- Prominent Rock Outcrops
- Munshower Field

Commemorative Era Extant Features

- Crawford Avenue (alignment and Telford road base)
- Warren Avenue (alignment and Telford road base)
- War Department Era Bridges (railings and facade)
- Commemorative Era Signage
- 28L 5th Maine Infantry Monument
- 29A 2nd Brigade, 1st Division, 6th Corps (Bartlett's Brigade) Tablet
- 30C 95th Pennsylvania Infantry Monument
- 31C, 31L, 31R 96th Pennsylvania Infantry Monument
- 32C 3rd Massachusetts Battery Monument
- 33C, 33L, 33R 139th Pennsylvania Infantry Monument
- 34A 3rd Brigade, 3rd Division, 6th Corps (Nevin's Brigade) Tablet
- 35C Brigadier General Samuel W. Crawford Monument
- 36A 3rd Division, 5th Corps (Crawford's Division) Tablet
- 37L 6th New Jersey Monument, Left Flank
- Gently Rolling Vehicular Corridors
- Square-Top Stone Culverts
- Mown Grass Edge (at historic limits of Commemorative Era rights-of-way)
- Open Vehicular Corridor Visual Character

Commemorative Era Lost Features - Known Location

• Flagstone Paved Gutters

Forest Lined Roadways

Although the alignment of Wright Avenue and the character of the forest that comprises the southern portion of the project area have remained intact throughout much of the Commemorative Era, Sykes Avenue has been altered significantly, giving the entire character area a relatively low degree of integrity. The 1930s realignment of Sykes Avenue and the construction of a parking lot just behind the summit of Little Round Top had significant negative impacts to the design, setting, workmanship and feeling related to a visitors experience of Little Round Top. While traces of the old Sykes Avenue still remain, that alignment is little used or interpreted.

Battle Era Extant Features

- Fencelines (location)
- Stone Breastworks (location)
- Prominent Rock Outcrops
- Partially Screened Distant Views West

Commemorative Era Extant Features

- Wright Avenue (alignment and Telford road base)
- Historic Sykes Avenue Telford base
- Commemorative Era Signage
- 08A 3rd Brigade, 1st Division, 5th Corps Tablet
- 19A 3rd Brigade, 2nd Division, 5th Corps (Weed's Brigade) Tablet
- 25A 5th Corps Tablet (rotated 180 degrees)
- 26A Artillery Brigade, 5th Corps (Martin's Brigade) Tablet (rotated 90 degrees)
- 27C, 27L, 27R 147th Pennsylvania Infantry
- Hilly Vehicular Corridors
- Square-Top Stone Culverts
- Forest-Lined Roadways

Commemorative Era Lost Features - Known Location

- Sykes Avenue (original alignment)
- Sykes Avenue Retaining Walls
- Guard House At Summit

Vincent Spur

Due in large part to its location away from the majority of monuments and iconic viewpoints that attract so many visitors to Little Round Top, the Vincent Spur Character Area enjoyed a high degree of historic integrity for much of the Commemorative Era and as recently as the 1970s. The 1974

publication of Michael Shaara's Killer Angels, Ken Burns' 1990 Civil War television documentary and the 1994 Hollywood film Gettysburg have all contributed to the increased popularity of the story of Joshua Chamberlain and the 20th Maine, increasing visitorship to the Vincent Spur and further endangering its historic integrity. Although Chamberlain Avenue has long since been abandoned, the Telford road base remains as a clearly defined pedestrian path. To the east and south of Chamberlain Avenue, the terrain and vegetation are maintained according to the narrative descriptions of the area provided by battle participants. Unfortunately, as a result of the NPS attempts to maintain this character area with a high degree of historic integrity, the unimproved terrain surrounding the monuments and gathering spaces has become severely degraded due to years of compaction and erosion from foot traffic. Historically appropriate soil stabilization measures will need to be implemented here to prevent further degradation of this character area.

Battle Era Extant Features

- Fencelines (location)
- Stone Breastworks (location)
- Steep, Rocky Slopes
- Prominent Rock Outcrops
- Dense Understory Growth

Commemorative Era Extant Features

- Chamberlain Avenue (alignment and Telford road base)
- Wright Avenue (alignment)
- Commemorative Era Signage
- 01B Position of Company B, 20th Maine Monument
- 02C, 02L, 02R 20th Maine Infantry Monument
- Forest-Lined Roadway Visual Corridor

Commemorative Era Lost Features - Known Location

• Chamberlain Avenue: Intersection at Wright Avenue

Warren Avenue Monuments

With little apparent change to the terrain, vegetation character and other Battle Era extant features, today's Warren Avenue Monuments Character Area is likely similar to its Battle-Era appearance. Despite disturbance to the landscape caused by activity surrounding the David Weikert souvenir stand, combined with the construction of Warren Avenue and the removal of several monuments, this character area still has a moderate degree of integrity.

Battle Era Extant Features

- Stone Breastworks (location)
- Steep, Rocky Slopes
- Prominent Rock Outcrops
- Closed Forest

Commemorative Era Extant Features

- Warren Avenue (alignment)
- 03C, 03R 9th Pennsylvania Reserves
- 04C, 04L, 04R 83rd Pennsylvania Infantry
- 05C 2nd Massachusetts Infantry Tablet Base
- 06C 22nd Massachusetts Infantry Tablet Base
- Mown Grass Edge (at historic limits of Commemorative Era rights-of-way)

Commemorative Era Lost Features - Known Location

- 05C 2nd Massachusetts Infantry Tablet
- 06C 22nd Massachusetts Infantry Tablet

16th Michigan

Much as the steep slopes and rocky outcrops of Little Round Top protected the soldiers charged with defending this location during the Battle of Gettysburg, they serve today as a means of protecting the landscape of the 16th Michigan Character Area from an onslaught of park visitors. Because the stone breastworks within this character area were replaced in their known historic locations, this character area maintains a high degree of integrity as a restored landscape.

Battle Era Extant Features

- Stone Breastworks (location)
- Steep, Rocky Slopes
- Mid-Slope Plateau
- Prominent Rock Outcrops
- Old Field Vegetation
- Dense Understory Growth
- Views to Devil's Den
- Views to Big Round Top
- Distant Panoramic Views West

Commemorative Era Extant Features

• 10C, 10L, 10R - 16th Michigan Infantry Monument

North Slope Monuments

Much like the Vincent Spur Character Area, the North Slope Monuments Character Area is located away from Little Round Top's main visitor attractions and view points. Separated from Little Round Top's Core Interpretive Area by a large rock outcrop, the North Slope Monuments Character Area does not contain any paved trails or wayside exhibits. It does, however, contain many of the natural features, stone breastworks and distant views that were extant during the Battle Era, giving it a high degree of historic integrity. Similar to Vincent Spur, this area has suffered the effects of compaction and erosion from foot traffic. Although some Commemorative Era monumental elements had been temporarily removed at the time of this report, the National Park Service is in the process of repairing and re-installing them to their historic locations.

Battle Era Extant Features

- Stone Breastworks (location)
- Steep, Rocky Slopes
- Mid-Slope Plateau
- Prominent Rock Outcrops
- Partially Screened Distant Views West
- Distant Panoramic Views West

Commemorative Era Extant Features

- Original Sykes Avenue Roadway Remnant
- 20C, 20L, 20R 146th New York Infantry Monument
- 21C, 21L, 21R 155th Pennsylvania Infantry Monument
- 22C, 22L, Battery L, 1st Ohio Monument
- 23C 98th Pennsylvania Infantry Monument
- 24C, 24L, 24R 121st New York Infantry Monument
- Individual Mature Trees at Summit

Commemorative Era Lost Features - Known Location

- Original Sykes Avenue (alignment and Telford road base)
- Sykes Avenue retaining wall
- Shell Stones to Mark Road Edges
- 22C Battery L 1st Ohio Cannons (to be re-installed)

Core Interpretive Area

As the site of the highest concentration of monuments, interpretive elements and distant, iconic views, the summit of Little Round Top is the most heavily visited site within the project area. The creation of so many interpretive and memorial elements in one location was most certainly detrimental to preserving the Battle Era character of this

place, but, because it has been maintained much as it was during the Commemorative Era (with the exception of the removal of portions of the old Sykes Avenue alignment at the north and south boundaries of the Character Area), it retains a relatively high degree of integrity. The preservation of monuments, retention of pathway alignments and management of invasive vegetation all contribute to this character area's high integrity. The site's heavy use, however, is contributing to the degradation of many of the natural features that define its character.

Battle Era Extant Features

- Stone Breastworks (location)
- Steep, Rocky Slopes
- Prominent Rock Outcrops
- Views to Devil's Den
- Views to Big Round Top
- Distant Panoramic Views West

Commemorative Era Extant Features

- Original Sykes Avenue Roadway Remnant
- Commemorative Era Signage
- 07C 18th Massachusetts Infantry Tablet Base
- 09B Strong Vincent Marker
- 09B Strong Vincent Boulder
- 12C 44th & 12th New York Infantry Monument
- 13C, 13L, 13R 140th New York Infantry Monument
- 14A Battery D, 5th U.S. Artillery Monument & Cannons
- 15B Weed & Hazlett Boulder
- 15B Weed & Hazlett Monument
- 16C, 16L, 16R 96th Pennsylvania Infantry Monument
- 17B Major General G.K. Warren Monument
- 18C United States Signal Corps
- Individual Mature Trees at Summit
- Views north to Cemetery Ridge

Battle Era Lost Features - Known Location

- General G.K. Warren's "Large Butternut Tree"
- Stone Breastworks
- Stone Wall Property Lines

Commemorative Era Lost Features - Known Location

- Original Sykes Avenue Alignment
- Cast Iron Hitching Posts
- Shell Stones to Mark Road Edges
- 07C 18th Massachusetts Infantry Tablet

Dense Forest

With very few Commemorative Era improvements and limited modern-day access, this character area retains an appearance similar to the descriptions provided in Battle Era narratives, giving it a high degree of integrity. Unfortunately, very few archaeological or historical records exist to tell the Battle Era story of this character area. Although Battle veterans describe one or more logging traces leading from this character area to the summit of Little Round Top, the exact location of these traces have not yet been determined.

Battle Era Extant Features

- Steep, Rocky Slopes
- Prominent Rock Outcrops
- Closed Forest
- George Bushman Woods

Commemorative Era Extant Features

 Original Sykes Avenue Alignment at Wheatfield Road (modern-day horse trail)

Battle Era Lost Features - Unknown Location

• Wood Road Paths and Cartways

Commemorative Era Lost Features - Known Location

- Gettysburg and Harrisburg Rail Spur
- Avenue "A" Marker

Rocky Slope

Similar to the 16th Michigan Character Area, the Rocky Slope Character Area enjoys relative seclusion from the rest of the project area due to the steep, boulder-strewn terrain that defines it. Although the 1890s construction of the Gettysburg Electric Railroad had significant visual and physical impacts to the terrain of this Character Area, the trolley bed is considered a contributing resource to the overall Period of Significance, giving this character area a high degree of integrity.

Battle Era Extant Features

- Stone Breastworks (location)
- Steep, Rocky Slopes
- Prominent Rock Outcrops
- Old Field Vegetation
- Mid-Slope Trees and Tree Stands

- Views to the Summit
- Views to the Devil's Den
- Views north to Wheatfield Road
- Distant Panoramic Views West

Commemorative Era Extant Features

- Gettysburg Electric Railroad Trace
- 11C Michigan Sharpshooters Monument

Commemorative Era Lost Features - Known Location

Gettysburg Electric Railroad Tracks

Plum Run Riparian Corridor

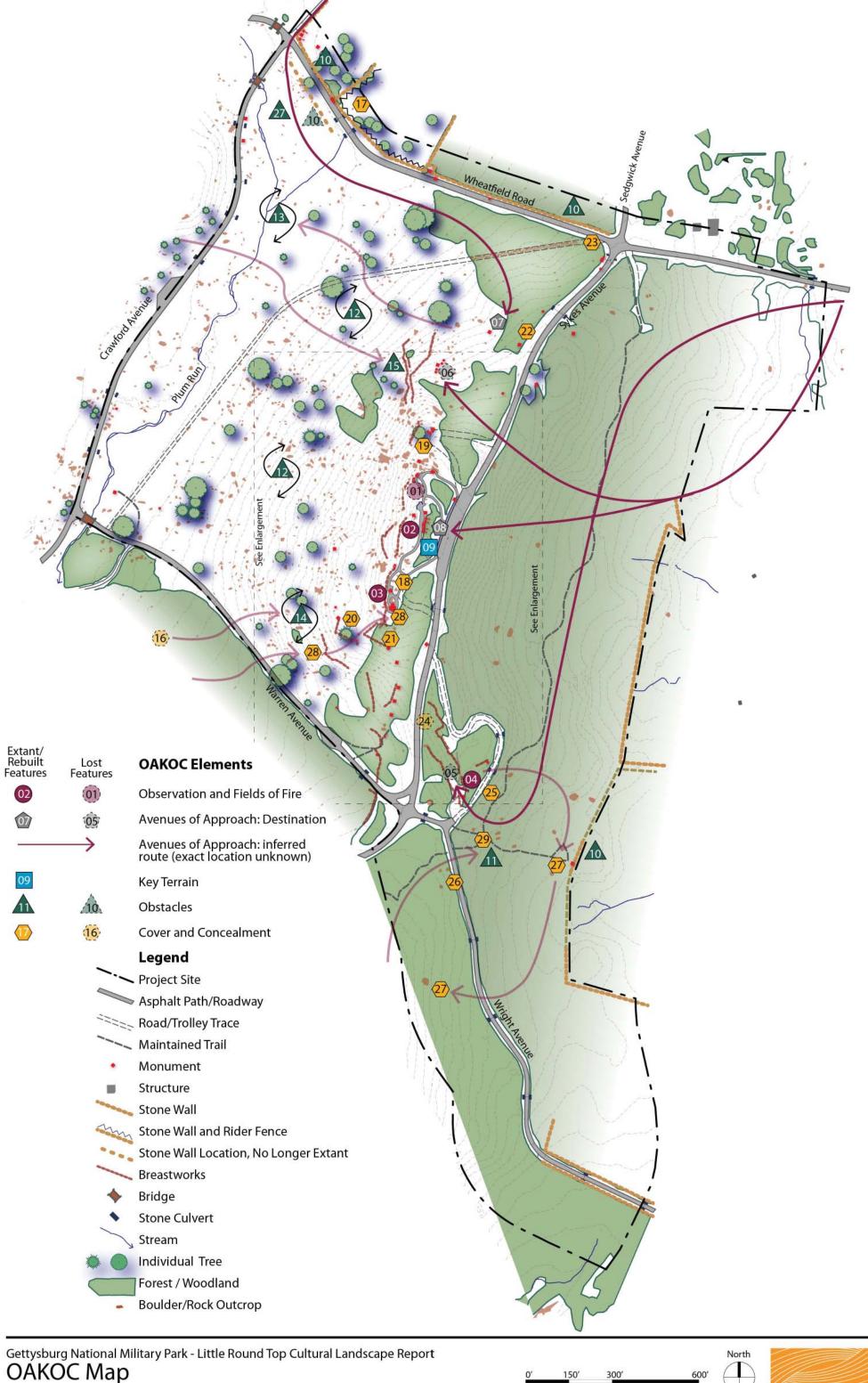
Battle Era narratives are relatively consistent in describing the marshy, muddy conditions at the base of Little Round Top. Although Commemorative Era and modern stormwater management interventions have likely increased the flow of Plum Run through the project area, this increase, when compared with historic photographs, appears to be relatively minimal. In addition to the high degree of historic integrity the Plum Run Riparian Corridor maintains, recent historically sensitive planting efforts along the stream banks have helped promote species diversity and prevent erosion along the corridor.

Battle Era Extant Features

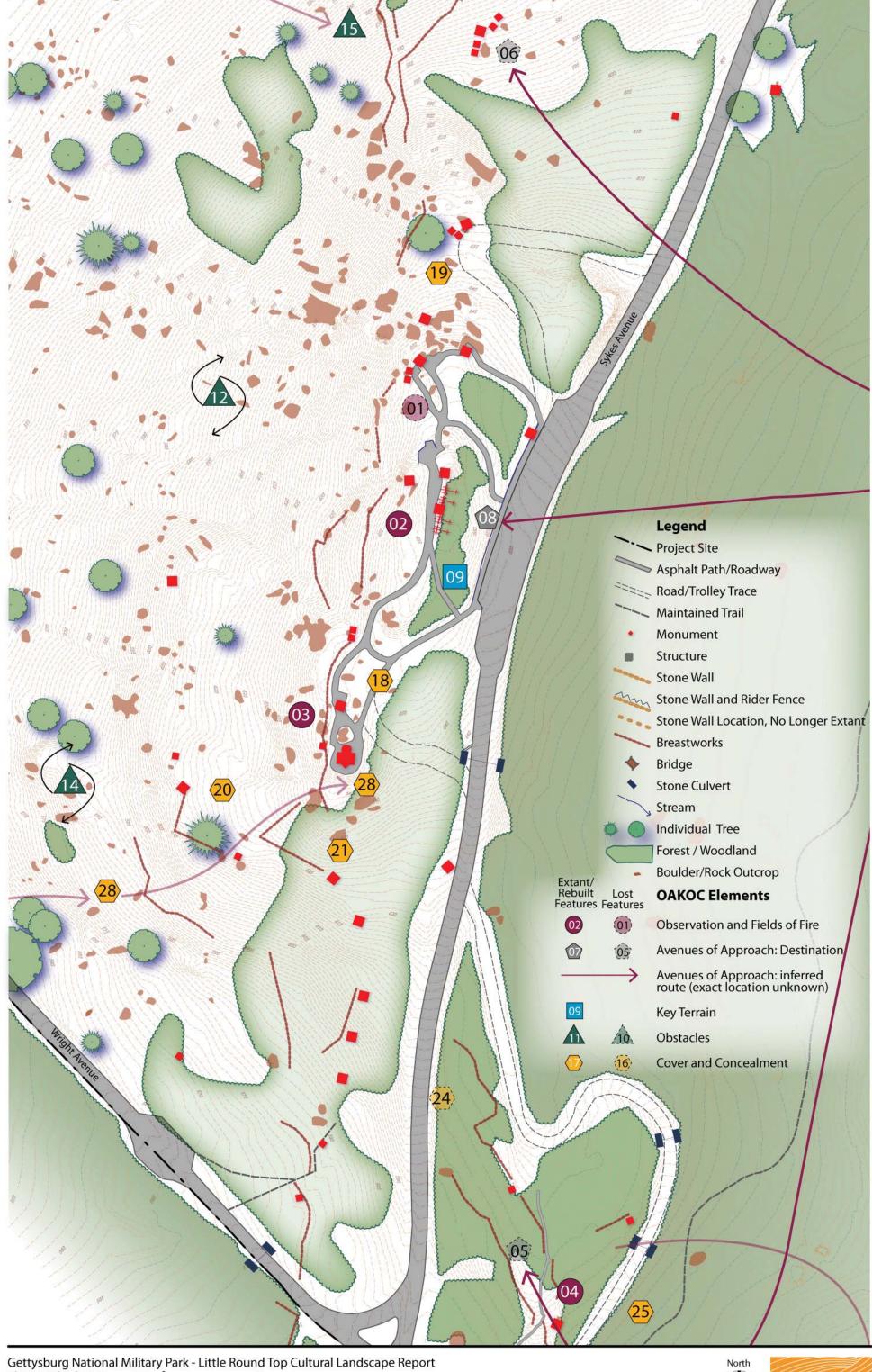
- Plum Run
- Wet Meadow Vegetation
- Mid-Slope Trees and Tree Stands
- Old Field Vegetation
- Mid-Slope Trees and Tree Stands
- Views to the Summit
- Views to the Devil's Den
- Distant Panoramic Views West

Commemorative Era Extant Features

- 38C 40th New York Infantry Boulder
- 38C, 38L, 38R 40th New York Infantry Monument







Gettysburg National Military Park - Little Round Top Cultural Landscape Report OAKOC Map Enlargement
Locations of Elements from Descriptions by Battle Participants
Figure 4.16

200'



5. Treatment & Management Approach



Figure 5.01. View from Little Round Top showing Warren statue and looking over Valley of Death to the Wheatfield. Photograph by Tipton, ca. 1890 (GNMP Tipton Photographic Prints GETT 41136, #2444).

Treatment Philosophy: Provide the maximum possible level of access to, and interpretation of, key battle and commemorative features, while ensuring the protection and stewardship of this highly significant site.

Treatment Philosophy

Little Round Top is a popular destination for park visitors today for many of the same reasons that it was a key strategic location during the Battle of Gettysburg, coveted by the commanding officers on both sides of the conflict. The site's steep, exposed, rocky slopes are an iconic landform, discernible and dramatic from miles away, while the summit provides distant panoramic views of a large portion of the battlefield. Combined with the site's high degree of historic integrity relative to its Period of Significance (1863 to 1938) and the dense concentration of Commemorative Era monumentation, it is easy to understand why Little Round Top is Gettysburg National Military Park's



Figure 5.02. View from Little Round Top at the same location as Tipton's 1890 photograph. (Photo by RHI, 2010). Note how forest management efforts have preserved this historic view across the Wheatfield for 120 years.

most heavily visited battlefield site.¹ According to the park's General Management Plan, "One of the park's most important purposes is to preserve the topographic, landscape and cultural features that were significant to the outcome of the battle. However, over years of institutional management of the landscapes, and especially during the last 60 years, some of those features have been obscured or changed. In many cases, natural processes have taken over."² On Little Round Top, cultural resources and natural resources are often one and the same. As a result, a treatment philosophy that balances protection of historic elements with stewardship of ecological processes is necessary for the successful preservation and management of Little Round Top.

The management recommendations and treatment plans presented in the following two chapters provide the maximum possible level of access to, and interpretation of, key battle and commemorative features, while ensuring the protection and stewardship of this highly significant site. Furthermore, the recommendations proposed below conform with the NPS philosophy of allowing natural processes to run their course, only intervening to preserve cultural resources and historically significant viewsheds (Figures 5.01 and 5.02).

^{1. 82%} of park visitors reported visiting Little Round Top, second only to the park's visitor center. *GMP*, *op. cit.*, p. 184.

^{2.} National Park Service. *General Management Plan and Environmental Impact Statement, Gettysburg National Military Park (GMP)*. Gettysburg, Pennsylvania: U.S. Department of the Interior, 1999, p. 31.

Chapter 4 of this report describes the site's cultural and historic resources and the varying degrees of integrity each element possesses, the result of shifting management philosophies throughout the history of the Gettysburg National Military Park. The Secretary of the Interior classifies the treatment of historic properties into four distinct categories: preservation, rehabilitation, restoration and reconstruction.³ At Little Round Top, a combination of all four treatments will be applied to the site's cultural resources, depending on each resource's integrity and significance, with the ultimate goal of retaining and interpreting the features and character that defined the 1863 landscape and subsequent efforts to commemorate the events that occurred there.

Preservation

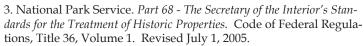
"Preservation means the act or process of applying measures necessary to sustain the existing form, integrity and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction."

Preservation should be used as the baseline treatment for all cultural and historic resources at Little Round Top, ensuring that any extant historic landscape character and fabric is respected and retained. Elements with the highest degree of integrity, such as key views, natural features and Commemorative Era monuments, should continue to be maintained, conserved and repaired in their current condition.

Rehabilitation

"Rehabilitation means the act or process of making possible an efficient compatible use for a property through repair, alterations and additions while preserving those portions or features that convey its historical, cultural or architectural values." 5

Little Round Top has seen numerous rehabilitation efforts as it evolved from a battleground to a commemorative landscape and then to an interpretive site. Today, with deterioration of the site's resources due to an increasing number of visitors, efforts to rehabilitate the landscape of Little Round Top are necessary to accommodate additional foot traffic while preserving the character and elements that visitors are coming to see (Figure 5.03). One specific example of necessary



^{4.} *ibid*.5. *ibid*.

5-2 | Treatment & Management Approach



Figure 5.03. The terrain along the summit of Little Round Top has suffered significant deterioration from heavy foot traffic, on and off of existing pathways, and is in need of rehabilitation. (Photo by RHI, 2010).



Figure 5.04. An example of degradation to the pathway system at the summit of Little Round Top. Deteriorating conditions such as this cause damage to the surrounding unimproved terrain through increased erosion and compaction from visitors stepping off the path (Photo by RHI, 2010).

rehabilitation at Little Round Top is the pathway system that conveys visitors to the summit and to various monuments throughout the site. Paving materials, construction methods and design solutions to keep visitors on designated paths will all need to be reconfigured in a coherent manner in order to preserve the surrounding landscape (Figure 5.04).

Restoration

"Restoration means the act or process of accurately depicting the form, features and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period." 6



Figure 5.05. Fences, such as this stone fence with rider along Wheatfield Road, are regularly restored in their original locations, using historic methods and materials. Restoration projects like this are crucial to providing visitors with the most accurate interpretive experience possible. (Photo by RHI, 2010).



Figure 5.06. Stone breastworks as they appeared immediately following battle. Breastworks were hastily erected during battle to provide immediate protection for defending Union troops. Photograph by O'Sullivan (GNMP General Historic Photographic Prints GETT 41135 #SF-2B-2095).



Figure 5.07. Rehabilitated stone breastworks behind the 16th Michigan Infantry Monument. Although more structurally sound than the original construction, the rehabilitated breastworks often do not convey the haste with which the original breastworks were constructed. Photograph by Tipton, 1889 (GNMP Tipton Photographic Prints GETT 41136 #5036).

Throughout the site's history, many of the built elements that existed during the Battle of Gettysburg, such as breastworks, stone walls and wooden fences, have been restored in order to give visitors the most accurate interpretive experience possible (Figures 5.05-5.07). The continued, meticulous restoration and maintenance of these elements through study of their materials, location, size and configuration is crucial to accurately portraying Battle-Era conditions.

Reconstruction

"Reconstruction means the act or process of depicting, by means of new construction, the form, features and detailing of a non-surviving site, landscape, building, structure or object for the purpose of replicating its appearance at a specific period of time and in its historic location."7

This report has identified a number of historic resources that have been lost over time as a result in changes to management philosophies and operational practices throughout the park's history. One such example is the historic roadway alignment of both Sykes and Chamberlain Avenues (Figure 5.08). The re-establishment of these road alignments as pedestrian trails would be a useful part of efforts to interpret the historic roadways. Opportunities exist to reconstruct or interpret several additional Commemorative Era resources that have been lost over time.

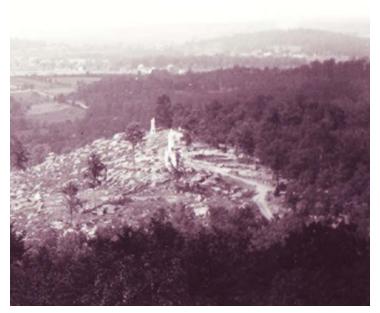


Figure 5.08. View of the historic Sykes Avenue alignment as it extended near the 12th and 44th New York Infantry Monument. This roadway alignment can be reconstructed as a pedestrian path in order to interpret a significant, lost Commemorative Era resource. Photograph by Tipton, 1896 (GNMP Tipton Photographic Prints GETT 41136, #4239).

7. ibid.

Management Goals:

- Protect Battle and Commemorative Era features and restore the landscape to Battle Era Conditions.
- Conserve natural resources and allow nature to run its course where it does not conflict with Battle Era views.
- Enhance the visitor experience through improved interpretation and accessibility.

Management Approach

Successful management of the landscape at Little Round Top must preserve historic resources and foster the health of the site's natural systems while meeting the interpretive needs of the visitor. Treatment and management recommendations proposed for Little Round Top synthesize the broad suggestions presented in the General Management Plan with the data and analysis presented in the previous chapters of this Cultural Landscape Report to create solutions for challenges specific to the conditions at Little Round Top.

Although the focus of this report is on Little Round Top and the lands immediately surrounding it, many other sites throughout Gettysburg National Military Park could benefit from similar treatments proposed here. In an effort to create a unified visitor experience, landscape treatments proposed in this Cultural Landscape Report have been evaluated for their ability to be adapted and implemented at other significant sites throughout the park. Treatment recommendations take into account financial feasibility, impacts to natural and cultural resources and effects to the unified interpretive and visual experience both at Little Round Top, and throughout the park.

In order to guide the development of treatment recommendations, the design team established three management goals to measure its recommendations. These goals manage the balance of the four main components that drive preservation efforts at Little Round Top: historic resources, natural resources, visitor accessibility and interpretation.

Management Goals

- Preserve and protect Battle and Commemorative Era contributing features, both natural and man made.
 Wherever feasible and without destroying or preempting contributing Commemorative features, restore and manage landscape elements and views to Battle Era conditions.
- Rehabilitate and conserve natural resources and processes that are found within the project area or that directly contribute to it. Where they do not conflict with National Register-eligible views or characteristics, allow natural processes to run their course as they would in an environment not affected by human development.
- Provide for the access, circulation, interpretation, security and comfort needs of the numerous visitors traversing Little Round Top individually and in groups, via a wide range of transportation modes. Enable visitors to understand and experience Battle and Commemorative Era conditions while protecting the natural and cultural resources that contribute to Little Round Top's significance and popularity.

6. Treatment Options



Figure 6.01. View of Little Round Top (left) and Big Round Top (right), across the Valley of Death from Ayres Avenue. The Fourth U.S. Infantry tablet can be seen at the right of this photograph (Photo by RHI, 2011).

Recommendations for the treatment of Little Round Top can be separated into two categories: Elements Common to All Options site-wide and Circulation and Gathering Options for pedestrians and vehicles at the summit.

Overview

"Resource protection priorities and public use sometimes conflict. At Gettysburg National Military Park, some resources are experiencing damage from public use. Most of the resource damage is of four types: damages to roadsides from vehicles; erosion, compaction, vegetation loss and other damage to monuments, their foundation mounds and the landscape of highly visited sites; erosion and vegetation loss along the unimproved modern trails; and facilities that are built on the site of Battle resources."

The General Management Plan creates definitive parameters for protecting Gettysburg National Military Park's cultural, historic and natural resources while providing a high level

1. National Park Service. *General Management Plan and Environmental Impact Statement, Gettysburg National Military Park (GMP)*. Gettysburg, Pennsylvania: U.S. Department of the Interior, 1999, p. 205.

of visitor access, interaction and interpretation. It also allows for a wide range of options for landscape treatment alternatives within these parameters. For example, the General Management Plan states, "paths and trails must provide educational opportunities to access historic sites that fit the park's mission and purpose," but it does not prescribe carrying capacities, specific alignments or materials for these paths. Similarly, the General Management Plan identifies acceptable modes of transit through the park, but it does not state a preferred mode or prescribe parking availability or levels of accessibility required for each mode.

The Treatment Options presented in this chapter were developed from the extensive historic and existing conditions documentation presented in the earlier sections of this report, the extensive experience and knowledge of park staff, and the professional sensibilities of the design team. Recommendations for the treatment of Little Round Top can be separated into two distinct categories: Elements Common to All Options site-wide and Circulation and Gathering Options for pedestrians and vehicles at Little Round Top.

Elements Common to All Options

While the Circulation and Gathering Options focus on possible solutions for alleviating traffic congestion, safety concerns and damage to resources at and around the summit

^{2.} GMP, op. cit., p. 95.



Figure 6.02. Existing gravel parking area along Wheatfield Road (Photo by RHI, 2010).

of Little Round Top, several recommendations for elements within and outside of the Core Interpretive Area are common to all Options. These recommendations, outlined below, will be incorporated into the Recommended Treatment Plan and described in further detail in the following chapter.

Circulation

- Utilize areas of relatively low historic integrity for remote visitor parking facilities. Relocating a majority of visitor parking away from the summit of Little Round Top will ease vehicular congestion during peak visitation times. The gravel area along the north side of Wheatfield Road, between Sedgwick Avenue and the old Round Top Schoolhouse, provides an opportunity for expanded visitor parking, with adequate room for planting and visual buffering from Wheatfield Road (Figure 6.02).
- · Discourage unauthorized parking through the use of appropriate barriers at road edges. "However, the greatest amount of resource damage comes from automobiles... Damage occurs because cars and buses often park off the road surface, fail to negotiate curves, or pull-off near monuments instead of parking lots."3 Depending on the specific location, a variety of appropriate barriers can be introduced to encourage vehicles to stay on paved surfaces. Within the Forest Lined Roadways (Character Area 2), maintenance practices can be modified to allow vegetation to grow closer to the road edge. Along the Open Vehicular Corridors (Character Area 1) and in steeply sloping areas, the Commemorative Era flagstone gutter can be re-introduced to define the edge of pavement. Commemorative Era shell stones are also appropriate to prevent drivers from pulling their vehicles off the roadway near monuments.

- Utilize Commemorative Era features for modern infrastructure wherever possible. Although long since taken out of service, traces of elements such as Chamberlain Avenue and the historic Sykes Avenue alignment are still clearly visible on the landscape. Re-capturing these elements for modern use will allow additional access and interpretation opportunities for visitors without impacting undisturbed areas of the landscape.
- Adapt select 'social' trails as NPS-maintained interpretive trails. Currently, the only way to access many of the monuments on Little Round Top is through the use of the many social trails that have been cut through the landscape by curious visitors. Left unmaintained, these social trails have a significant impact on the landscape, causing erosion along slopes and damage to tree roots. Instead of attempting to dissuade visitors from approaching these monuments in an ad-hoc manner, providing clearly marked and maintained pathways will allow access while providing interpretive opportunities and preventing further damage to the landscape. For some of the most remote monuments, such as the Michigan Sharpshooters monument, neither maintained nor social trails exist. Access to these more distant monuments should be left as-is, allowing visitors to choose their own route without creating additional social or maintained trails, while providing interpretive signage at points where such monuments may be viewed from a distance.
- Implement a hierarchy of trail types. Paved pathways through some of the most heavily visited areas of Little Round Top are of inadequate size to handle the volume of visitors they receive. As a result, pedestrians often spill off the pathways, compacting the surrounding soil and damaging vegetation. By implementing a hierarchy of trail types, based on location, volume of use and paving type, visitors will more readily differentiate between major pedestrian routes and minor paths that provide access to specific sites. By providing wider pathways where necessary, and providing narrow, less intrusive pathways where only social trails exist, visitors will be more likely to remain on intended routes of travel, reducing damage to the surrounding terrain. The existing horse trail is currently in poorly maintained condition. Pending discussion between NPS and horse-trail outfitters, this trail should be either closed to horses and used for pedestrian only, closed to all users and revegetated, or used by pedestrian and horseback riders jointly.
- Provide tightly controlled, clear site access between parking/bus drop off areas and main interpretive and gathering spaces. Combined with the undersized pathways and undefined gathering areas throughout the Core Interpretive Area (Character Area 7), the lack of access control measures allow visitors to wander off of

prescribed paths, damaging surrounding terrain. Current access control consists of periodically placed stacked rail barricades, which are both ineffective and anachronistic, as visitors assume the barricades - constructed to appear historic - are contributing historic elements. Controlling pedestrian flow to and within the Core Interpretive Area will further protect adjacent cultural and natural resources from damage. There are a variety of options for providing this control, ranging from full height railings, to lower, less intrusive 'toe rails' with minimal signage. A low edge made of metal, wood, or stone, can gently communicate "do not cross this line," while offering an opportunity for interpretation that can supplement vertical signage.

Furnishings & Signage

- Retain the minimal use of directional signage and pavement markings on the park's commemorative avenues and pedestrian trails. The wayfinding philosophy implemented by the park relies heavily on the use of the visitor brochure, readily available at the park's visitor center. "Without this map, visitors have no clear direction about how to get around the park. Few directional or identifying signs are available in the park, and additional signs would conflict with the historic character of the park's landscape. The park is not contiquous and it has many entrances and exits. Without a map, visitors may become disoriented by the oneway road system or become frustrated because they cannot find their way around the 6,000 acre park."4 Smartphone apps may be appropriate for providing direction consistent with the park's minimal signage philosophy. A few well placed informational signs for viewing distant monuments may discourage visitors from creating social trails to reach the more remote sites.
- Continue to implement the philosophy of minimal furnishings throughout the project area. The National Park Service has adopted a policy of not installing any permanent site furnishings on or around Little Round Top. At the time of this report, the only contemporary site furnishing identified within the project area was a bicycle rack at the Sykes Avenue parking area. Little Round Top's ubiquitous boulders provide enough seating throughout the site for most visitors so that additional benches are not necessary. Additionally, moveable trash receptacles are temporarily placed in areas of relatively low historic integrity and only during extremely busy times, supplemented by regular trash pick-up details by NPS staff. The limitation on site furnishings directly contributes to the site's Battle Era and Commemorative Era visual character, and this policy should continue.

Monuments

- Restore missing monuments or monument components. Despite the overall excellent condition of the collection of Commemorative Era monuments on Little Round Top, a small number of monuments are missing or damaged and are in need of repair, rehabilitation or replacement. While some missing elements, such as the Battery L, 1st Ohio cannons, were temporarily removed by the park for restoration and are scheduled to return to their proper place, others have been placed in storage indefinitely, or have been damaged by acts of vandalism. Monuments needing repair are:
 - 20th Maine Infantry: Repair the chip in the left corner of the monument's peaked cap.
 - 2nd Massachusetts Sharpshooters: Replace the missing tablet.
 - 22nd Massachusetts Infantry: Replace the missing tablet.
- 18th Massachusetts Infantry: Replace the missing tablet.
- Strong Vincent Marker: Rotate the replica Strong Vincent Marker 180 degrees to its historic orientation.
- 140th New York Infantry: Excavate and raise the buried left and right flank markers so the entirety of the stone markers are exposed.
- Weed and Hazlett Monument: Restore the granite sphere to the apex of the monument's die.
- 91st Pennsylvania Infantry: Excavate and raise the buried left flank marker so the entirety of the stone marker is exposed.
- 3rd Brigade, 2nd Division, 5th Corps (Weed's Brigade): Raise the grade around the monument to protect its exposed foundation.
- 155th Pennsylvania Infantry: Restore the missing stone right hand of the Zouave, and the broken part of his rifle's muzzle.
- Battery L, 1st Ohio: Replace the missing cannons once they are repaired/restored.
- Artillery Brigade, 5th Corps (Martin's Brigade): Rotate the monument to its historic orientation and raise the grade around the monument to protect its exposed foundation.
- 96th Pennsylvania Infantry: Excavate and raise the buried left flank marker so the entirety of the stone marker is exposed.
- 3rd Massachusetts Battery: Replace the missing top cannon ball on monument's capital.
- 40th New York Infantry: Restore the missing hammer on the soldier's gun.
- Sykes Avenue "A" Tablet: Restore and replace the missing marker along the original route of Sykes Avenue.
- 5th Maine Infantry: Left Flank Marker: Install a permanent barrier to prevent vehicles from hitting the marker.



Figure 6.03. Currently used as storage and staff housing, respectively, for the Gettysburg National Military Park, the Rosensteel Barn (left) and former Round Top Schoolhouse (right) are both NPS property (Photo by RHI, 2011).

Structures

• Replace portable toilets with permanent facilities. The recent relocation of the wooden trellis enclosure and plastic toilet structures from the intersection of Wright and South Confederate avenues to the gravel parking area along the north side of Wheatfield Road has made significant improvements to the visual character of the Vincent Spur. Although they have been moved to an area of lower integrity, these facilities still have a negative visual impact. One possible solution is to convert the historic Round Top Schoolhouse and/or the adjacent Rosensteel Barn into a visitor orientation station, similar to John Rosensteel's Round Top Museum that stood near that site in 1885 (Figure 6.03).

Breastworks

- Restore and stabilize breastworks as they deteriorate. Nearly all of the breastworks on Little Round Top today have been rebuilt or reconstructed since they were initially created during the Battle of Gettysburg. Despite this fact, their proportions and locations are relatively accurate to Battle Era conditions and they convey the Battle Era visual character of the western slopes of Little Round Top. NPS staff should continue to regularly monitor the condition of the stone breastworks throughout Little Round Top in an effort to ensure natural processes or visitor interaction do minimal harm to these contributing features. The policy of rebuilding damaged breastworks should continue (Figures 6.04 and 6.05).
- Remove overgrown vegetation from breastworks. Several
 of the breastworks that line Little Round Top's western

- slopes have become overgrown with invasive vines and groundcovers. In addition to obscuring views of these contributing features, this vegetation can endanger the stability of these elements. Regular removal of vegetation from breastworks will help to ensure their structural integrity and provide further interpretive opportunities for visitors.
- Keep visitor pathways away from breastworks. Currently several paths either cut through breastworks or pass very close to them, resulting in visitor contact with the stone and continued damage. New or relocated pathways should avoid cutting through breastwork alignments, and minimize the proximity of path and breastworks to the greatest possible extent.

Topography, Drainage & Geomorphology

• Replace NPS Era swales and gutters with Commemorative Era flagstone gutters. Once found alongside many of the park's commemorative avenues, these heavily rusticated, u-shaped cobble gutters helped to define roadway limits and slow the speed of stormwater flowing off of paved surfaces. The gutters were paved over in later decades to allow for wider roadways that could accommodate the increases in vehicular traffic witnessed by the park in the 1930s. Restoring the historic flagstone gutters in steeply sloping areas of Little Round Top will provide several benefits to the park. First, the gutters will significantly reduce erosion issues that have recently plagued the park's avenues by slowing the rate of flow of stormwater runoff and containing it as it flows toward Plum Run. Check dams of matching stone could be included as well, to further



Figure 6.04. Reconstructed breastworks on Little Round Top, circa 1880. Breastworks constructed during battle would have been much simpler than the high stone wall depicted here. The need to interpret this key battle-era feature was recognized early, however, and breastworks have been continually rebuilt throughout the park's history (Susan Boardman Collection of Historic Stereographic Views #SV-713).



Figure 6.05. Reconstructed breastworks at the 16th Michigan Infantry monument, 1896 (GNMP Tipton Photographic Prints GETT 41136 #4419).

control stormwater velocity. Additionally, the rough surface of the gutter will delineate the edge of the roadway, discouraging cars from pulling off paved surfaces. Finally, replacing the gutters will restore a contributing feature to the site's historic avenues.

• Ensure the upstream and downstream stewardship of Plum Run. Plum Run is the collection point for well over half of the Little Round Top project area drainage, and eventually contributes to the much larger Chesapeake Bay Watershed. By monitoring rates of flow, sedimentation, siltation and pollutants of their streams and creeks, NPS is setting an example of stewardship and environmental responsibility throughout the region. Erosion control and the promotion of biodiversity within riparian areas are all components of watershed stewardship.

Vegetation

 Implement a preservation program for individual trees and tree clusters that are contributing resources. Although not necessarily dating all the way back to the Battle of Gettysburg, several of the mature trees on the slopes of Little Round Top (Character Areas 5,6 and 9) are historically significant and contribute to the Battle Era character of the site. Much like management programs that have been implemented to ensure the health of forests and tree stands throughout the park, significant individual trees and clusters should be regularly monitored, pruned, fertilized and aerated as necessary.

- Continue to develop forest management practices to control invasive species. As new products and techniques to combat invasive plant species emerge, the ongoing effort to systemically control exotic vegetation on Little Round Top should continue. The recent success of work to control Redbud (Cercis canadensis) populations in the Dense Forest Area (Character Area 8) has yielded noticeable results. As new invasive species introduce themselves into the plant community on Little Round Top, NPS staff should develop new strategies for species control and management.
- Continue to manage the west face of Little Round Top as an old field. Photographs and narrative documentation describing the landscape of Little Round Top during the Battle of Gettysburg clearly indicate that the site's west face had been recently cleared of trees, creating the relatively barren slope that can still be seen today. In an effort to preserve historic views to and from Little Round Top, this slope should continue to be managed as a successional old field.
- Allow additional understory vegetation within the Vincent Spur Area. Several of the battle accounts presented in Chapter IV indicate that the understory vegetation along Vincent Spur (Character Area 3) was much more dense than it is today, blocking views between regiments. Today, understory growth is minimal, providing more visibility than what was described by battle participants. By managing this wooded area to allow additional understory growth, historic visual character will be restored. Additionally, this new growth will promote groundcover plant and animal diversity in the forested area and help to mitigate erosion from stormwater runoff.
- Continue to promote species diversity within the Plum Run riparian corridor. In recent years, the NPS has allowed vegetation to encroach upon Plum Run much more so than existed during the Battle of Gettysburg. Although this is a rare deviation from known historic conditions, the species diversity and habitat creation that NPS management is fostering will likely be beneficial to the health of the Plum Run Corridor. Vegetation should continue to be managed so that it does not block key historic views from Plum Run Valley to the face of Little Round Top.

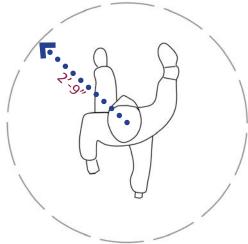


Figure 6.06. 2'-9" is the radius of the sphere of personal space, based on the average height of an American person (5'-6").

How Many is Too Many?

In an effort to define a range of acceptable use for visitation at Little Round Top, the design team analyzed the relationship of visitor crowd levels within the Core Interpretive Character Area to possible quantities and modes of transit bringing visitors to Little Round Top. The analysis determined that a maximum of 283 people can comfortably⁵ fit on the existing improved trail system and gathering spaces within the Core Interpretive Area at any given time (Figures 6.06 and 6.07). Using the current maximum pedestrian capacity of 283 as a baseline, and generally accepted figures for average number of visitors arriving per bus (39) and per car (3), diagrams were developed to depict the number of visitors within the Core Interpretive Character area as the result of different amounts and types of parked vehicles (Figures 6.08-6.11). The qualitative depiction of potential visitor numbers served as a guide for developing parking and pedestrian circulation options in order to disperse and manage visitors at various densities.

Because NPS' management of the park seeks to allow maximum visitor access to this beloved site, it is understood that, during the most extreme peaks of visitation (particularly during special events), the number of visitors could rise even higher than these diagrams depict. During these times of extreme crowding on Little Round Top, temporary crowd control measures such as timed visits or additional ranger support, may need to be introduced to prevent further damage to the resource.

^{5.} Determined using Jan Gehl's principle of Arm's Length Distance, whereby, "wherever physically possible the individual seeks to maintain the narrow but vital distance [of one arm's length] that keeps the situation secure and comfortable." Jan Gehl. Cities for People. (Washington, DC: Island Press, 2010), p. 49.



Figure 6.07. 283 people is the maximum number of people that can comfortably fit along the paths at the summit of Little Round Top.

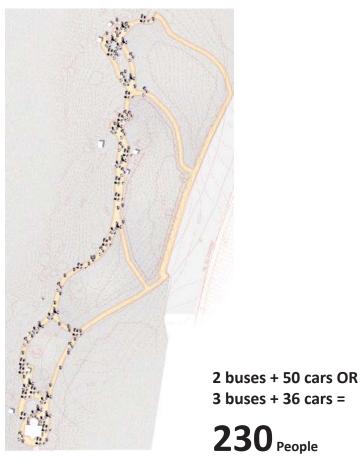


Figure 6.08. 230 people at the summit of Little Round Top.

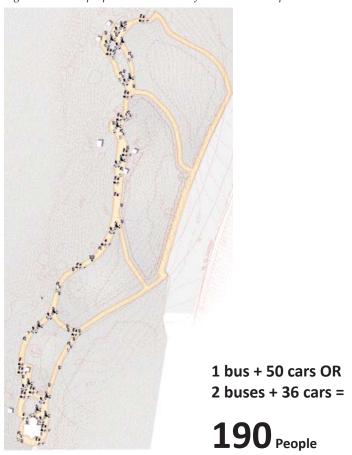


Figure 6.09. 190 people at the summit of Little Round Top.

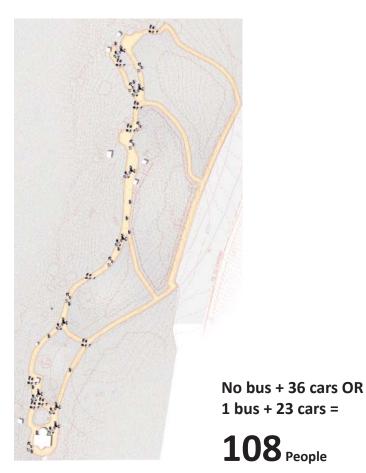


Figure 6.10. 108 people at the summit of Little Round Top.

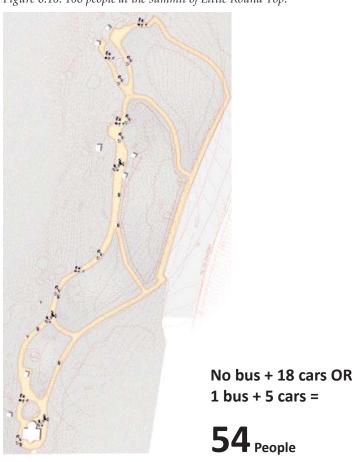


Figure 6.11. 54 people at the summit of Little Round Top

Four Circulation and Gathering Options were developed to handle peak season traffic loads. Each option places emphasis on a different mode of transportation used to access Little Round Top.

Circulation and Gathering Options

Four alternatives were developed to provide a range of options to handle visitor access, parking, and circulation issues at Little Round Top, for vehicles and pedestrians, individuals and large tour groups. All four options can accommodate parking for up to eight buses with a range of 56 to 86 private vehicle parking spaces during peak visitation times. While all four Circulation and Gathering Options incorporate the Elements Common to All Options described previously, each option presents a slightly different refinement of those elements, placing emphasis on different modes of transit, types of gathering space and overall visitor experience.

Although four distinct options are presented, certain elements are interchangeable between options, creating the possibility that the Recommended Treatment Plan could be the result of a combination of two or more of the concepts presented below.

Circulation and Gathering Option A

(Figures 6.12 and 6.13)

Vehicular Circulation. The goal of Circulation and Gathering Option A is to minimize the presence of vehicles at the summit of Little Round Top to the greatest extent possible. Cars and buses may drop visitors off at the Summit before proceeding to parking areas farther north.

- Parking. A new bus parking area utilizes a portion of the historic Sykes Avenue alignment northeast of the Summit. Additional bus parking is provided at the newly created parking lot and comfort station at the old Round Top Schoolhouse. Other than six ADA accessible parking spaces at the summit, all private vehicles must park at the new 50-car parking lot near the Round Top Schoolhouse, for a total of 56 available car parking spaces. Outside of peak season, private vehicles may use the Sykes Avenue bus parking area north of the summit.
- **Pedestrian Circulation.** Pedestrian circulation takes advantage of historic road alignments, with the northern portion of the historic Sykes Avenue alignment serving as the major pedestrian route between the Round Top Schoolhouse comfort station and the summit; and Chamberlain Avenue serves as the primary route to the 20th Maine Monument.

• Gathering. Gathering areas of various sizes are located strategically throughout the summit to allow for different types of interpretive experiences. Two large gathering spaces, each capable of holding 100 to 125 people, are constructed at the two hairpin turns that once provided overlooks along the historic Sykes Avenue alignment (just north of the 140th New York Infantry Monument and just south of the 155th Pennsylvania Infantry Monument, respectively). spaces will allow for large tour groups to gather on a stable, paved area without causing damage to the surrounding, unimproved terrain. Three smaller gathering areas (each sized to fit 60 people, equal to the average tour bus capacity) are spaced along the summit and at the Vincent Spur to allow for more intimate interpretive opportunities. Combined, the visitor gathering spaces can accommodate 525 people at the summit and 120 people at Vincent Spur, for a total of 645 possible visitors at Little Round Top at any one time.

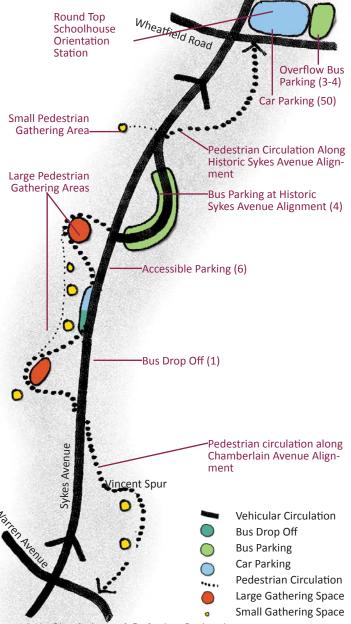
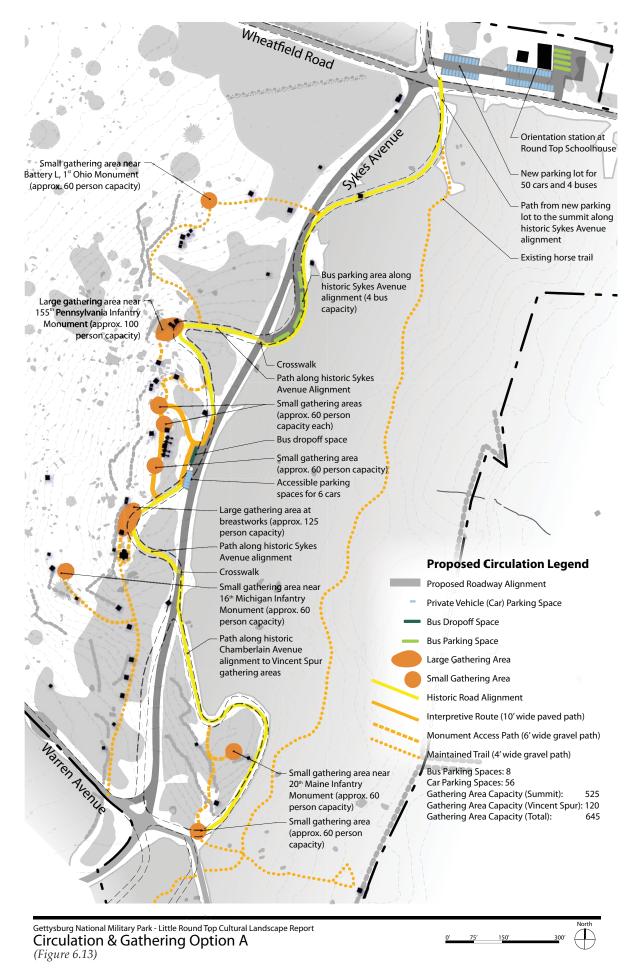


Figure 6.12. Circulation and Gathering Option A.



Circulation and Gathering Option B

(Figures 6.14 and 6.15)

- **Vehicular Circulation.** Circulation and Gathering Option B seeks to maximize the number of separate tour groups that can comfortably occupy the summit without having to compete with one another for parking or gathering spaces. Under this option, Sykes Avenue remains one-way, conveying vehicles south-to-north. With the exception of ADA accessible parking spaces, private vehicles may drop visitors off at the summit but can no longer park there.
- **Parking.** The existing Sykes Avenue parking area is reconfigured to allow parking for up to four buses. Similar to Option A, six ADA accessible parking spaces would be provided at the summit, while all other private vehicle parking would be accommodated at the Round Top Schoolhouse comfort station, for a total of 56 car parking spaces. Outside of peak season, private vehicles may use the bus parking at the summit.
- **Pedestrian Circulation.** As in Option A, historic roadway alignments are repurposed as pedestrian paths, leading from parking areas to the summit.
- Gathering. Several small gathering spaces are placed throughout the Vincent Spur, 16th Michigan, North Slope Monuments and Core Interpretive character areas. Large enough to comfortably hold one bus load of park visitors, each of these gathering areas will take advantage of existing terrain, historic resource locations and views to create separate places for battlefield guides to speak to groups without having to speak over one another or spill onto unimproved terrain. These separate, individual gathering spaces are connected to one another such that visitors can pass through them in sequence, learning about an adjacent monument, view or other historic resource unique to each gathering space. As many as 60 visitors can gather in each of the designated gathering areas for a total 420 possible visitors at one time at the summit and 120 possible visitors at Vincent Spur, for a total of about 540 visitors within the project area.

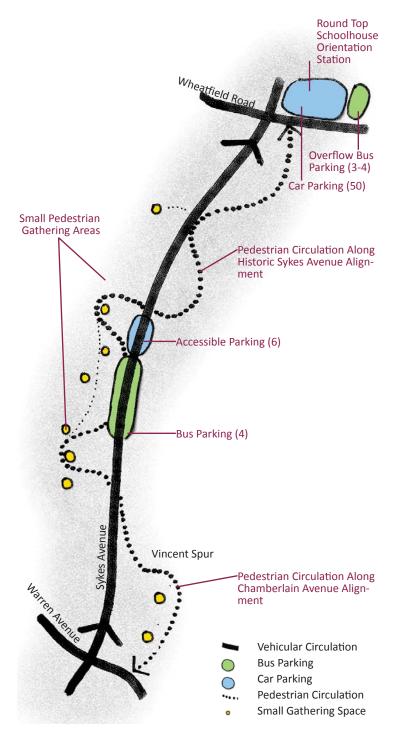
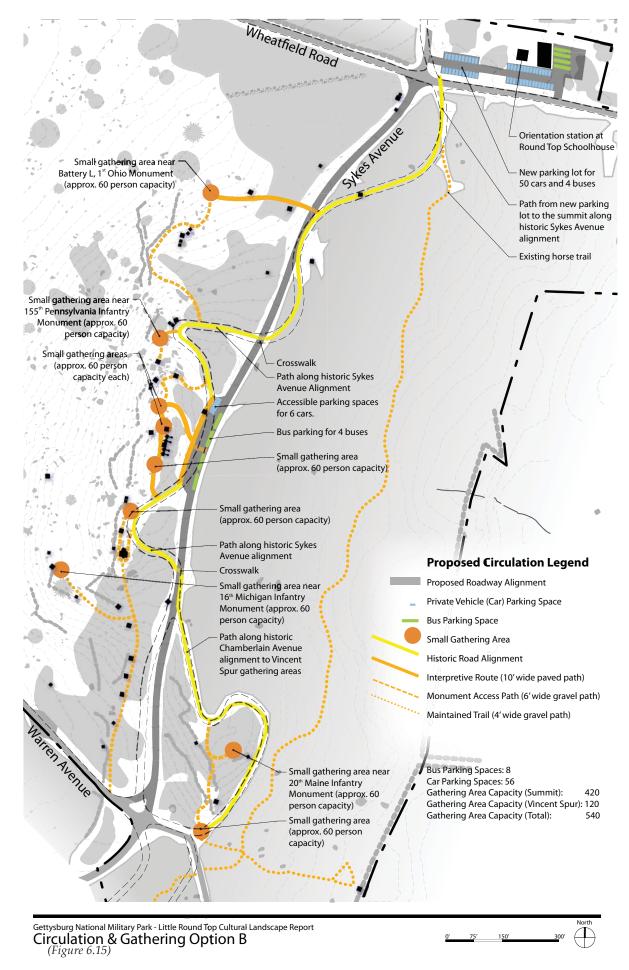


Figure 6.14. Circulation and Gathering Option B.



Circulation and Gathering Option C

(Figures 6.16 and 6.17)

- **Vehicular Circulation.** Circulation and Gathering Option C adds to existing infrastructure to maximize accessibility to the summit of Little Round Top. Sykes Avenue remains one way, north-to-south, and the existing bus drop-off remains at the summit.
- **Parking.** The existing 36-car parking area at the summit remains and is supplemented by a new bus parking area along the historic Sykes Avenue alignment and a new parking lot near the Round Top Schoolhouse comfort station. In total, 86 private vehicles will be able to park within the vicinity of Little Round Top.
- **Pedestrian Circulation.** In addition to the new bus parking area north of the summit, the historic Sykes Avenue alignment will be used as pedestrian access between the Round Top Schoolhouse comfort station and the summit. Similarly, the remnant of the Chamberlain Avenue roadbed will be upgraded to provide an accessible path to small gathering spaces along the Vincent Spur.
- **Gathering.** Like in Option A, gathering spaces of various sizes are provided at the summit. These gathering spaces take advantage of existing flat or minimally sloping areas to allow groups of varying sizes to gather without disturbing surrounding vegetation or unimproved terrain. The pedestrian gathering spaces on the summit are sized to handle a total of 465 visitors while the gathering spaces within Vincent Spur will be able to handle 120 visitors at any given time, for a total of 585 visitors.

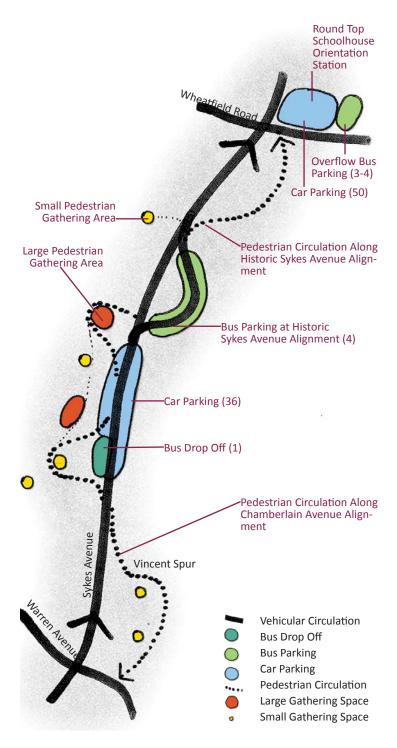
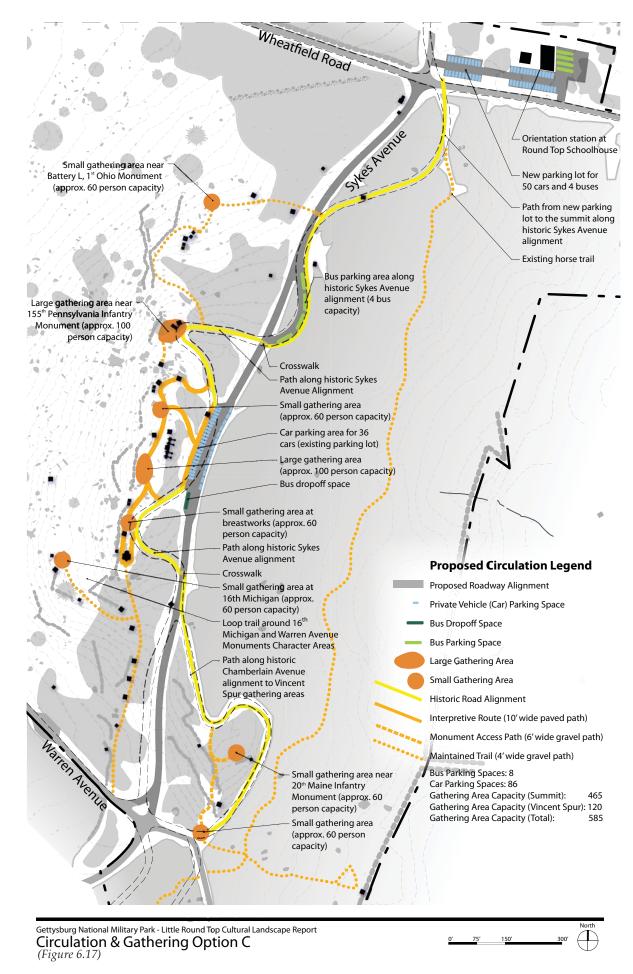


Figure 6.16. Circulation and Gathering Option C.



Circulation and Gathering Option D

(Figures 6.18 and 6.19)

- Vehicular Circulation. The goal of Option D is to provide maximum opportunities for accessibility and interpretation without dramatically impacting historic or natural resources. The existing roadway and parking area along Sykes Avenue will be reconfigured to allow a bus drop-off and parallel parking spaces for cars along the east side of the roadway only. By moving buses and cars to the right side of the roadway, passengers are no longer exiting vehicles by stepping into the travel lane of Sykes Avenue, but onto the safety of a sidewalk that would line the east side of Sykes Avenue.
- **Parking.** After dropping passengers off at the summit, buses can park at a new bus parking area created along a portion of the historic Sykes Avenue Alignment. Meanwhile, the contemporary Sykes Avenue right-of-way is slightly expanded, where existing grades permit, to allow for as many as 36 parallel car parking spaces near the summit. Additional car and bus parking is provided at the Round Top Schoolhouse comfort station. A total of 86 private vehicles are able to park in the vicinity of Little Round Top at any given time.
- **Pedestrian Circulation.** After crossing Sykes Avenue via clearly marked and highly visible crosswalks, visitors would gather at an enlarged pedestrian space on the west side of the road, before heading to the summit. As with previous Circulation and Gathering Options, a restored historic Sykes Avenue alignment serves as pedestrian access between the schoolhouse and the summit.
- Gathering. In an effort to maximize accessibility and interpretation, several large pedestrian gathering spaces are placed throughout Vincent Spur, the North Slope Monuments area and the summit of Little Round Top, improving all existing level terrain in these areas to accommodate as many visitors as possible. Without having to travel to multiple gathering spaces throughout the summit, each of these large gathering areas would provide visitors with a broad understanding of the events that occurred at Little Round Top during the Battle of Gettysburg and the contributing resources still extant throughout the site. This one-stop approach allows battlefield guides more efficient and controlled management of their tour groups while at Little Round Top. These enlarged pedestrian gathering areas will allow for up to 635 visitors to congregate on the summit of Little Round Top, with another 100 at Vincent Spur, for a capacity of 735 visitors within the project area.

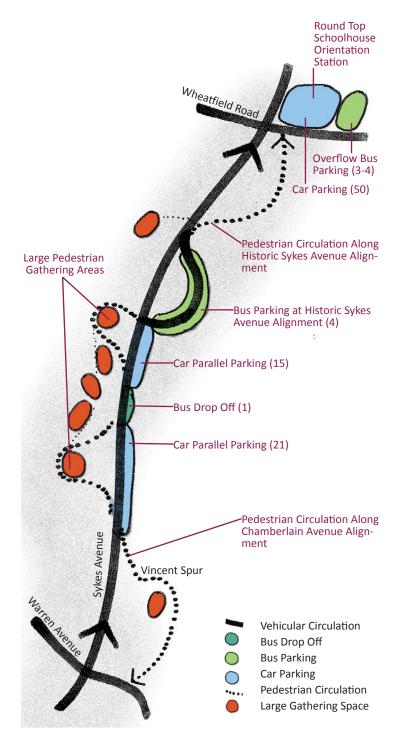
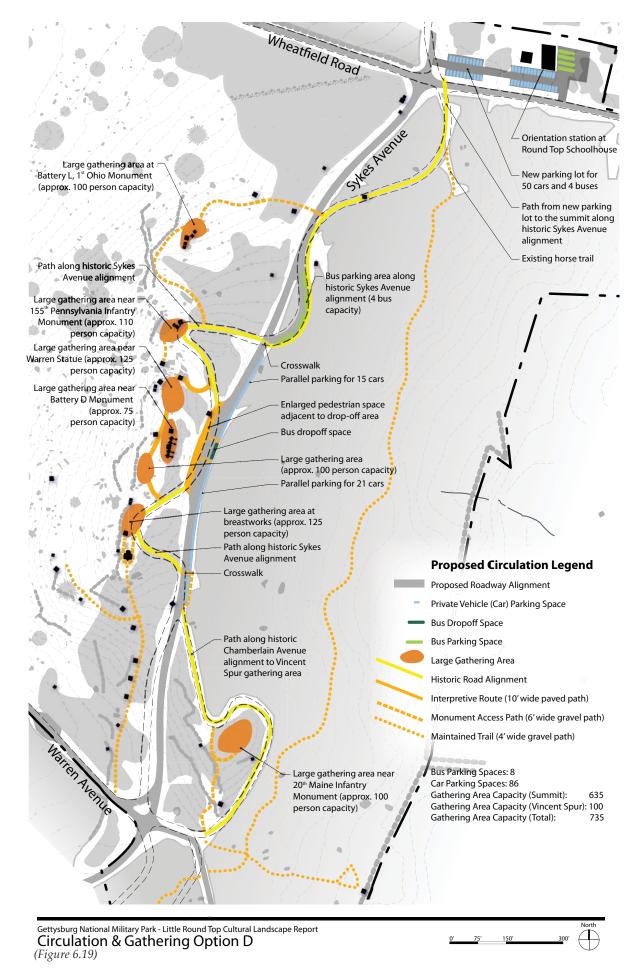
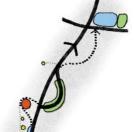


Figure 6.18. Circulation and Gathering Option D.



Circulation and Gathering Options: Pros and Cons



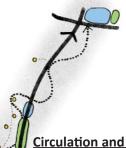
Circulation and Gathering Option A Summary

Pros:

- Minimizes the presence of vehicles at the summit to the greatest extent possible. This includes no parking for buses or private automobiles. A few ADA accessible parking spaces remain at the summit.
- Repurposing of the historic Sykes Avenue alignment to create, in conjunction with the interpretive route, an experiential pedestrian loop from Little Round Top's base to the summit and back.

Cons

- Unless dropped off by bus or car, visitors need to walk a long distance up hill from the Round Top Schoolhouse parking lot to the summit of Little Round Top.
- Management by NPS may be difficult, as visitors might park at the summit despite parking restrictions causing chaos and ad-hoc use of the roadway



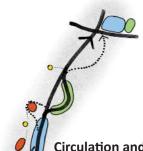
Circulation and Gathering Option B Summary

Pros

- Several small gathering areas are carefully spaced through the interpretive route, rather than a few large and two small areas. This accommodates the maximum number of separate tour groups on the summit without overcrowding the gathering spaces or diminishing the visitor experience.
- Tour bus groups are favored, since up to four buses can park on the summit, but no private automobiles during peak periods. A few ADA accessible parking spaces remain at the summit.
- Repurposing of the historic Sykes Avenue alignment to create, in conjunction with the interpretive route, an experiential pedestrian loop from Little Round Top's base to the summit and back.

Cons

- Unless dropped off by bus or car, visitors need to walk from the Round Top Schoolhouse parking lot to the summit of Little Round Top. (Note: A few ADA accessible parking spaces remain at the summit.)
- Bus parking on the summit negatively impacts the visual character and noise quality of the place.



Circulation and Gathering Option C Summary

Pros

- Maximizes accessibility to the summit of Little Round Top for most visitors.
- Parking for 36 private automobiles at the summit limits the amount of walking required by visitors in order to experience Little Round Top.
- Added parking at the Round Top Schoolhouse further increases the number of visitors able to gain access to the summit.
- A bus drop-off without bus parking on the summit provides convenience while limiting the visual intrusion of the vehicles.
- Repurposing of the historic Sykes Avenue alignment to create, in conjunction with the interpretive route, a clear pedestrian circulation pattern from Little Round Top's base to the summit and back.
- A balanced mix of large and small pedestrian gathering areas.

Cons

- Infrastructure for thirty-six private automobiles and a bus drop off will require careful design so as not to impact the visual character and noise quality of the summit arrival.
- Presence of vehicles at the summit is the first visitor experience at the site



Pros

- Bus parking is kept away from the summit, reducing congestion.
- Repurposing of the historic Sykes Avenue alignment to create, in conjunction with the interpretive route, a clear pedestrian circulation pattern from Little Round Top's base to the summit and back.
- Maximizes accessibility and interpretation by providing several large pedestrian gathering spaces throughout Vincent Spur, the North Slope Monuments and the summit of Little Round Top.
- Enlarged pedestrian sidewalk adjacent to parking area on west side.
- Parking for 36 private automobiles immediately adjacent to the summit minimizes the amount of walking required for many visitors.

Cons

- Infrastructure for thirty-six private automobiles and a bus drop off negatively impacts the visual character of the summit.
- Accommodation of large numbers of visitors in the study area at one time impedes each individual's experience of the place.
- Maximizing access and keeping all vehicles on the east side of contemporary Sykes Avenue forces all automobile visitors to cross the road upon arrival at the sites.
- Presence of vehicles is the first visitor experience of the site.

7. Recommended Treatment Plan



Figure 7.01. View to Crawford Ave (Photo by RHI, 2012).

Due to the sensitivity of the Little Round Top site and its crucial importance as a park resource, the recommendations generally reflect Circulation and Gathering Option C, balancing visitor access and education opportunities while protecting critical historic and ecological features.

Treatment Plan Selection

Due to the sensitivity of the Little Round Top site and its crucial importance as a park resource, the recommendations generally reflect Circulation and Gathering Option C, which balances visitor access and education opportunities in while protecting critical historic and ecological features. The intent of the plan is to convey the character and qualities of the visitor experience and to clarify the routes for tours and individuals. It is important to note that the Core Interpretive Area is ADA accessible. However, some trails to nearby monuments cannot be made ADA accessible due to steep and rocky terrain in which construction would destroy site resources. Chapter 7 describes the visitor experience and makes specific recommendations for site-wide management. Where 'porous asphalt' is noted as a surfacing material, its use must be based on careful on-site soil analysis.

Recommendations

The plan addresses the recommendations according to:

- Vehicular Circulation and Parking
- Pedestrian Circulation at the Summit and Core Area (including typical access to the summit)
- Pedestrian Circulation to Additional Sites in the Study Area (including the west face monuments and the 20th Maine)
- Gathering Area Configurations

At the end of this chapter is a matrix highlighting specific short- and long-term recommendations for streets, trails, site furnishings, monuments, structures, and protection of ecological features (Figure 7.04). Figure 7.05 maps existing circulation and gathering conditions in the study area. Figures 7.06 and 7.07 map the circulation and gathering treatment recommendations as described in this chapter.

Vehicular Circulation and Parking

- Direction of Traffic. All vehicular traffic will flow, as it does currently, along contemporary Sykes Avenue, south to north from its intersection with Warren Avenue toward Wheatfield Road.
- Private Automobile Drop-Off. The plan provides three locations for parking private vehicles. A pull-off location to the right hand side of the Sykes Avenue parking lot will accommodate up to two cars dropping off passengers at

one time. Passengers will exit onto a paved shoulder along the eastern side of the roadway, and cross Sykes Avenue at the clearly-marked (potentially raised) crosswalk to access the summit. A planted curb extension delineates the drop-off zone and helps separate it from the parking. A clearly marked crosswalk on Sykes Avenue helps guide visitors across the street to the summit.

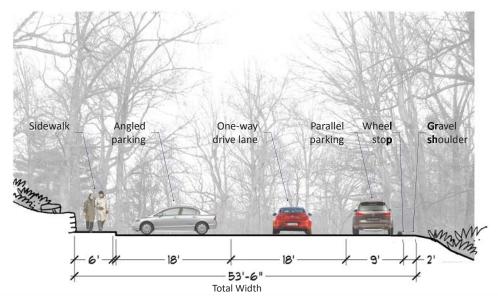
- Private Automobile Parking. Nineteen parking spaces are striped parallel on the east side of Sykes Avenue, where informal parking currently occurs. A second parking opportunity for private automobiles is at the angled spaces in the Sykes Avenue parking lot immediately adjacent to the summit. Drivers pass the car and bus drop-off areas and then approach eight diagonal parking spots on the west side of the street. Three of these diagonal spaces are ADA accessible. The third privatevehicle parking opportunity is located to the north of Little Round Top, at the old Round Top Schoolhouse. This lot accommodates 70 cars of which 50 spaces are paved with porous asphalt, and an additional 20 are accommodated in a mowed grass overflow area. In all, 97 car spaces are provided.
- Bus Drop-Off. A pull-off location on the west side of the road will accommodate one bus dropping off passengers with room for another bus waiting behind. Passengers would exit the bus onto a pedestrian safety island located between the bus drop-off space and the vehicle through travel lane, then cross the bus drop-off lane onto the sidewalk. A total of approximately 170 linear feet is allowed for bus movement. This dimension is in accordance with measurements used in other national parks. Figure 7.02 (a and b) depict existing conditions at the Sykes Avenue parking lot and proposed conditions at the bus drop-off area along Sykes Avenue.
- Bus Parking. No bus parking is available at the Sykes Avenue parking lot. Instead, after dropping off passengers, buses continue to the north side of Little Round Top and use a designated parking area to the east of contemporary Sykes Avenue, just below the summit, within the historic Sykes Avenue alignment. This area accommodates up to four parked buses at one time. An additional four buses can park in a designated area at the Round Top Schoolhouse site. In all, eight bus spaces are provided.
- Bicycles and Segways. Circulation for bicycle and segway vehicles is the same as the route for private automobiles.
 Parking for these vehicles will be available at the summit, along the edges of the historic Sykes Avenue alignment, somewhat separated from the activity of bus arrival and drop-off. Additional spaces are provided at the old Round Top Schoolhouse.

Pedestrian Circulation at the Summit and Core Area

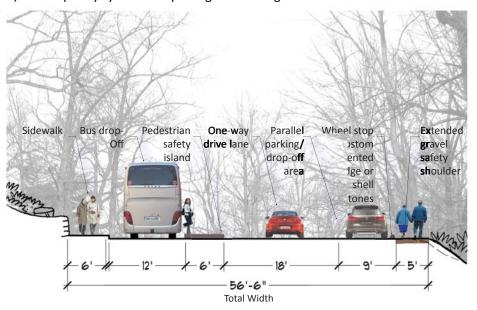
- sykes Avenue Parking Area. The Sykes Avenue parking and drop-off area is designed to prioritize pedestrian safety, particularly in crossing contemporary Sykes Avenue. Curb extensions are provided on both the east and west sides of the street to minimize crossing distance. The central crosswalk is raised to signal to drivers that pedestrians have the right-of-way, and vehicles must move slowly through the area. Other crosswalks are clearly marked, but not raised. Currently concrete wheel stops act as the barrier between cars and pedestrians on the east side of the Sykes Avenue parking lot. An ultimate solution may be to replace these with a custom segmented edge or shell stones.
- Core Interpretive Area. Typical pedestrian circulation through the Core Interpretive Area is counterclockwise, north to south. Although this is the most common circulation pattern for tours, the core area configuration allows for flexibility in the visitor experience and can be experienced from either direction. The Summit Trail is the basic pedestrian loop and will be ADA accessible extending from the Sykes Avenue parking lot through the core interpretive area and back to the Sykes Avenue parking lot. Grades will need to be studied and modified to meet ADA standards. A portion of this core area path utilizes the southern half of the historic Sykes Avenue alignment. Only 10 feet of this historic alignment is paved. The balance of the historic width is vegetated with native plantings, small enough in stature to convey the historic width of Sykes Avenue but allowing for a permeable surface that is appropriate for the surrounding landscape character of Little Round Top (Figure 7.02 c).

Gentle pedestrian containment and management is a key component of successfully protecting Little Round Top while allowing the public intimate access to the site (Figure 7.03). Numerous options, such as cable railing and improved signage, are potentials and should be studied during detailed design. The method suggested in this alternative provides a low 'toe rail' which can fulfill the functions of creating a visual reminder as well as a place for signage, both interpretive and for gentle behavior management.

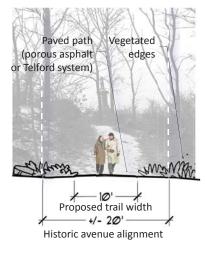
The toe rail is approximately 12"-18" high, could be made of metal, wood, or stone, and extends along the edge of the core interpretive area path. This discreet element gently defines the "do not walk" areas in order to protect historic features, soil and vegetation. It also provides opportunities for direction and interpretation without negatively interrupting the visitor experience. The view from Warren Avenue uphill is also uninterrupted by built objects using this approach. The toe rail could also be used for interpretive opportunities and may offer a physical 'storyline' in addition to a discreet barrier.



a) Contemporary Sykes Ave at parking lot - Existing



b) Contemporary Sykes Ave at bus drop-off area in parking lot - Proposed



c) Historic Sykes Ave - Proposed

Figure 7.02. Sykes Ave Vehicular and Pedestrian Circulation Sections - Existing and Proposed

• Access from Car. Visitors arriving by private automobile park parallel on the eastern side of Sykes Avenue, in the Sykes Avenue parking lot, or at the old Round Top Schoolhouse. Those who park in the angled spaces at the Sykes Avenue parking lot have immediate access to the Core Interpretive Area. Those who parallel park on the eastern side of the avenue use an extended gravel shoulder along contemporary Sykes Avenue to reach the a crosswalk and then the summit.

Visitors who park at the old Round Top Schoolhouse access the summit and Core Interpretive Area along a trail that begins at the Schoolhouse and follows the historic Sykes Avenue alignment to its crossing of contemporary Sykes Avenue. As with the Core Area, historic Sykes Avenue is partly paved and partly vegetated. Visitors cross the street, then follow the sidewalk along a section of contemporary Sykes Avenue to a Core Interpretive Area access trail. Returning to the parking lot, visitors may retrace their steps or follow the historic Sykes Avenue back to their vehicle. (Figure 7.02 b)

An alternate route between the Schoolhouse parking lot and Little Round Top is by way of the 155th Pennsylvania Monument and the Battery L, 1st Ohio Monument. Circulation to these monuments is described under "additional sites"; the trail is not ADA accessible.

• Access from Bus. Visitors arriving by bus are dropped-off in the Sykes Avenue parking lot adjacent to the summit, and have immediate access to the Core Interpretive Area. Following their Little Round Top tour, visitors return to their buses at the designated bus parking area along the historic Sykes Avenue alignment. Other visitors may choose to travel the sidewalk on the west side of contemporary Sykes Avenue to its intersection with historic Sykes Avenue. Visitors cross the street and meet their buses in the parking lot. This route is fully ADA accessible. Visitors whose buses have parked in the old Schoolhouse lot walk through the woods on the historic Sykes Avenue alignment path or have their bus pick them up on the summit.

<u>Pedestrian Circulation to Additional Sites within the Study Area</u>

- 155th Pennsylvania. The 155th Pennsylvania Monument is accessible from contemporary Sykes Avenue via the historic Sykes Avenue trail which is ADA accessible. Alternately, a monument trail connects from the General Warren statue area to contemporary Sykes Avenue. The existing terrain may prevent this trail from meeting ADA accessibility standards.
- Battery L, 1st Ohio. The Battery L, 1st Ohio Monument is located north of the 155th Pennsylvania, along the same monument trail. The existing steep terrain will preclude this trail from meeting ADA accessibility standards.

- **16**th **Michigan.** A new stone staircase is located to the east of 44th New York and leads to a monument access path leading toward the 16th Michigan Monument. This new staircase and reconfigured path take the place of an existing social trail that currently crosses breastworks. Repair of the breastworks and significant revegetation of this area will allow it to be protected while visitors use the new, clearer trail. This trail will not meet ADA accessibility standards.
- **Sharpshooters.** The Sharpshooters Monument is accessible via the 16th Michigan on an existing maintained trail which is not ADA accessible.
- 9th and 83rd Pennsylvania. These monuments are accessible along a monument access path from the south side of 44th New York. The existing terrain will preclude this trail from meeting ADA accessibility standards.
- 20th Maine. Historic Chamberlain Avenue extends to the south and east of contemporary Sykes Avenue and leads to a monument access path for the 20th Maine Monument. Further investigation will determine if the grades on this trail will meet ADA accessibility standards.

Gathering Area Configurations

- Entry Gathering Point. The first large gathering area is located adjacent to the bus drop-off area at the Sykes Avenue parking lot. The curb extension on the west side of the street plus additional sidewalk area together accommodate 60-people at this entry gathering point.
- **Core Interpretive Area.** The Core Interpretive Area includes five pedestrian gathering areas for 60 persons each at strategic locations along the path. A total of 300 visitors are accommodated.
- Other Gathering Area Locations. There is one 60-person gathering area at 155th Pennsylvania and another 60-person gathering area at Battery L, 1st Ohio. The gathering area at 16th Michigan can accommodate 20-people, and 20th Maine can accommodate 75-100 people.
- Materials. The gathering areas are designed to comfortably support 60-visitors at one time. Gathering areas are paved with stone, blending with the existing landscape, set on a porous surface to aid in stormwater management. In some cases, where slopes are steep, platforms or decking should be considered as a means of extending visitor gathering space to appropriate capacity, without relying on heavy earthwork and intrusive construction. Platforms or path edges should be less than 30 inches above adjacent grade to avoid the requirement for railings. Low, subtle signage, in addition to standard ADA signage requirements, can be a further opportunity for interpretive story lines and gentle reminders for proper behavior at the site (Figure 7.03).

Toe rail acts as a discreet barrier while providing interpretive opportunities

Random stone paving



Toe rail acts as a discreet barrier

Where slopes are steep, platforms or decking could be considered for visitor gathering areas

Random stone paving



Figure 7.03. Summit Trail and Gathering Areas

Gettysburg National Military Park Little Round Top Treatment Recommendations Matrix

	Short-Term	Long-Term
Circulation (Vehic	cular)	
Wheatfield Road Page 3-2	 Preserve existing roadway alignments and War Department-Era road width (20'). Inspect and maintain roadways, repair potholes and areas of washout. 	Keep historic visual quality of roads as currently defined.
Crawford Avenue Page 3-2	 Preserve existing roadway alignment. Inspect and maintain roadways, repair potholes and areas of washout. 	 Restore War Department-Era road width to a maximum of 20' based on historic photos. Reconstruct historic flagstone gutters of that period along road edges to define limits of paving, convey stormwater and prevent offroad parking. Remove non-historic boulders placed along roadway to prevent parking. When large areas of existing asphalt roads are to be replaced, consider porous asphalt or Telford road base, pending site specific soil testing.
Warren Avenue Page 3-2	 Preserve existing roadway alignment. Inspect and maintain roadways, repair potholes and area of washout. 	 Restore War Department-Era road width to a maximum of 20' based on historic photos. Reconstruct historic flagstone gutters of that period along road edges to define limits of paving, convey stormwater and prevent offroad parking. Remove non-historic boulders placed along roadway to prevent parking. When large areas of existing asphalt roads are to be replaced, consider porous asphalt or Telford road base, pending site specific soil testing.
Sykes Avenue Page 3-3	 Inspect and maintain roadways, repair potholes and areas of washout. Utilize the Sykes Avenue alignment for new visitor service improvements such as paths and vehicle circulation/parking 	 When large areas of existing asphalt roads are to be replaced, consider porous asphalt or Telford road base pending site specific soil testing. Consider the addition of War Department-Era flagstone gutters where needed to manage stormwater
Wright Avenue Page 3-4	 Preserve existing roadway alignment. Inspect and maintain roadways, repair potholes and areas of washout. 	 Restore War Department-Era road width to 16'. When large areas of existing asphalt roads are to be replaced, consider porous asphalt or Telford road base pending site specific soil testing.

	Short-Term	Long-Term
Car Parking Areas Page 7-1, 7-2, 7-3, 7-4	 Sykes Ave: Provide 17 parallel parking spaces on the east side of contemporary Sykes Avenue. Sykes Avenue parking lot, immediately adjacent to the summit: Provide a car drop-off area. Provide 5 diagonal parking spaces (non-ADA). Provide 3 ADA accessible parking spaces. Old Round Top Schoolhouse: Provide a parking lot to accommodate 50 cars. Use porous asphalt or gravel. 	 When large areas of existing asphalt roads are to be replaced, consider porous asphalt or Telford road base, pending site specific soil testing. If needed, expand the Old Round Top Schoolhouse parking lot to accommodate an additional 20 cars on a mowed grass overflow area.
Bus Parking Areas Page 7-2,7-3	 Provide a bus drop-off area in the Sykes Avenue parking lot for 1 bus with room for another waiting. Provide bus parking northeast of the summit, within the historic Sykes Avenue alignment, to accommodate four bus vehicles. Provide parking for four buses in the Old Round Top Schoolhouse parking lot. Use porous asphalt material for paved vehicular surface. 	
Circulation (Pede	strian)	
Historic Road Trails Page 7-2,7-3	 Use porous asphalt (with optional aggregate to better match local stone) or Telford system as the trail material, pending site specific soil testing. Establish a 10 foot width and vegetate edges. (See Vegetation) 	
Summit Trail Page 7-2	 Resurface the path with random stone paving on gravel base with permeable joints. Select color to match native stone. Establish an 8-10 foot width. Meet ADA accessibility standards. 	Install a 12" -18" high toe rail made of metal, wood, or stone that extends along the edge of the summit trail. This discreet element gently defines the "do not walk" areas in order to protect historic features and soil conditions, and provide opportunities for direction and interpretation without vertical signage.
Monument Access Trails	 Apply porous asphalt (with an optional aggregate to better match local stone) or stabilized decomposed granite to the trails, pending site specific soil analysis. Establish a 4-6 foot width. Note: These trails do not meet ADA accessibility standards due to steep, rocky terrain. 	

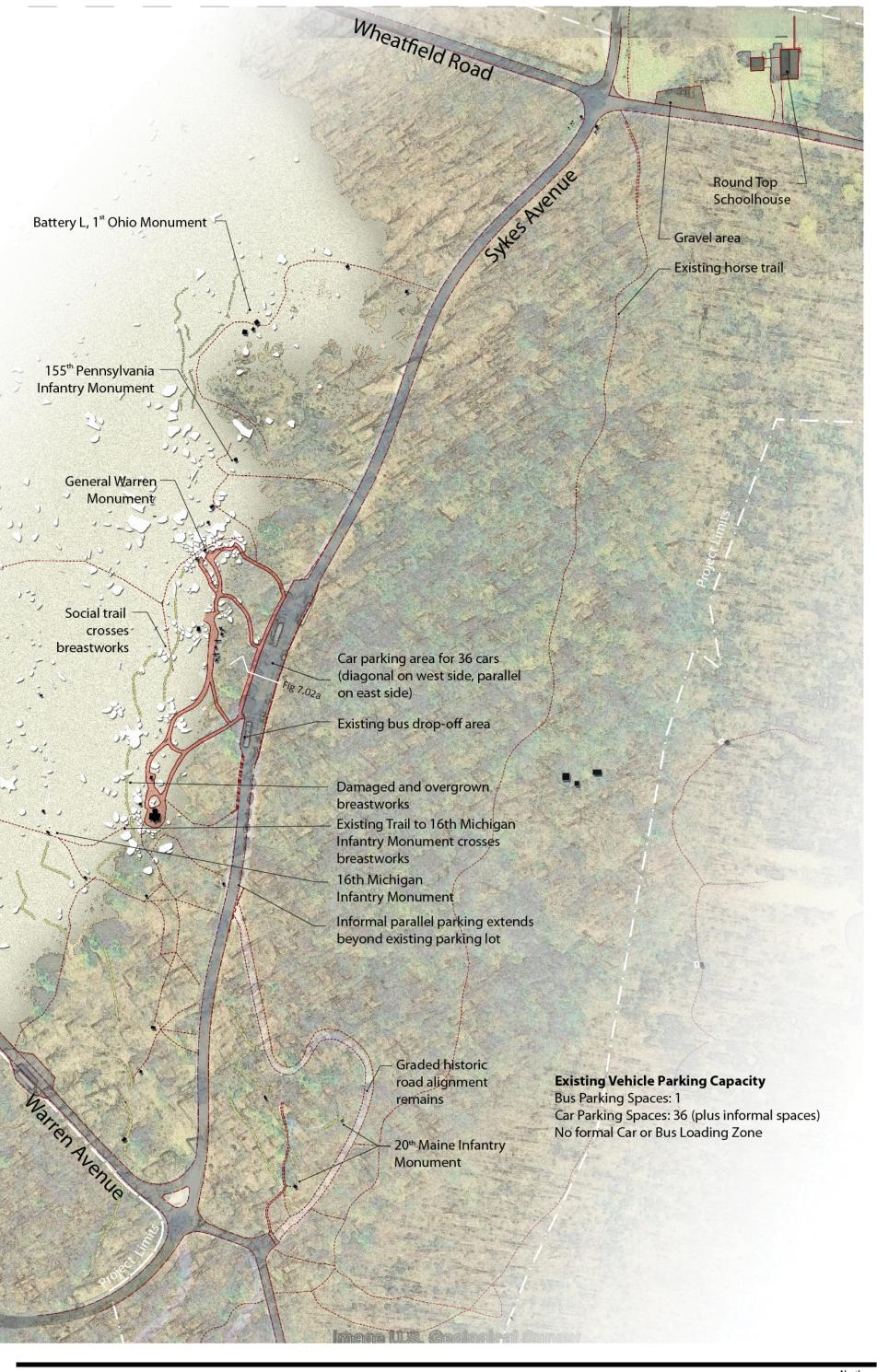
	Short-Term	Long-Term
Maintained Existing Trails Page 6-2	 NPS to select and maintain informal paths as interpretive trails that provide access to remote monuments. Maintenance to include occasional brush clearing. Note: These trails do not meet ADA accessibility standards due to steep, rocky terrain. 	
Social Trails (existing)	 Remove existing social trails (Figures 7.06 &7.07). Plant native vegetation cover to deter further pedestrian access. 	
Gathering Spaces Page 7-4,7-5	 Define large and small gathering spaces along the Summit Trail. Ensure appropriate material use to support the expected group sizes. Install random stone paving with mortared joints where grades permit. Use decking with toe rail where grades require (no higher than 30" from the ground to eliminate need for railings). May be edged with stone/ boulder retaining walls. 	
Sykes Avenue Sidewalks and Safety Shoulders	 Maintain the 6 foot wide sidewalk on the west side of Sykes Avenue between the Sykes Avenue parking lot and the bus parking area on historic Sykes Ave Establish a 5 foot wide extended gravel safety shoulder on the east side of Sykes Avenue adjacent to the parallel parking spaces. The shoulder immediately adjacent to the drop off area should be paved to meet ADA requirements. Use porous asphalt or stabilized decomposed granite or gravel as the material, pending site specific soil testing. 	

	Short-Term	Long-Term
Furnishings & Sig	nage	
Commemorative Era Signage and Furnishings Page 3-8	Inspect Commemorative Era signage. Repair as necessary.	 Complete Commemorative Feature Analysis Return missing Commemorative elements.
Wayside Exhibits, Directional Signage & Property Markers Pages 3-8 & 3-9 Furnishings	 Retain policy of minimizing directional signage and pavement markings within Battle Action Areas. Continue the policy of minimizing non- 	Signage should be studied park wide, and should be a consistent, elegant, 21 st century signage family that harmonizes with the overall Gettysburg National Park setting.
Page 3-8	contributing furnishings within the Battle Action Areas.	
Monuments Page 3-10, 6-3	 Battery L, 1st Ohio: Replace missing cannons. 96th Pennsylvania Infantry: Excavate and raise the buried left flank marker. 5th Maine Infantry, Left Flank Marker: Install a permanent barrier to prevent vehicles from hitting the marker. Strong Vincent Marker: Rotate 180 degrees to its historic orientation 140th New York Infantry: Excavate and raise the buried left and right flank marker. 91st Pennsylvania Infantry: Excavate and raise the buried left flank marker. 3rd Brigade, 2nd Division, 5th Corps (Weed's Brigade): Raise grade to protect foundation. 	 20th Maine Infantry Monument: Repair the chip in the left corner of the monument's peaked cap. 2nd Massachusetts Sharpshooters: Replace missing tablet. 22nd Massachusetts Infantry: Replace missing tablet. 18th Massachusetts Infantry: Replace missing tablet. 40th New York Infantry: Restore hammer on soldier's gun. Weed and Hazlett Monument: Restore granite sphere to apex 155th Pennsylvania Infantry: Restore missing stone hand and rifle's muzzle. Artillery Brigade, 5th Corps (Martin's Brigade): Rotate monument and raise grade around monument to protect foundation. 3rd Massachusetts Battery: Replace missing cannon ball Sykes Ave "A" Tablet: Restore and replace
Structures Visitor Orientation Station at Round Top Schoolhouse Page 3-30		 Convert the historic Round Top Schoolhouse property and/or the adjacent Rosensteel Barn into a visitor orientation station.
Historic Fence & Wall Locations Pages 3-30 & 3-31	Inspect and maintain fences and walls in historic locations. Restore to original character (size, materials and location) as they deteriorate.	

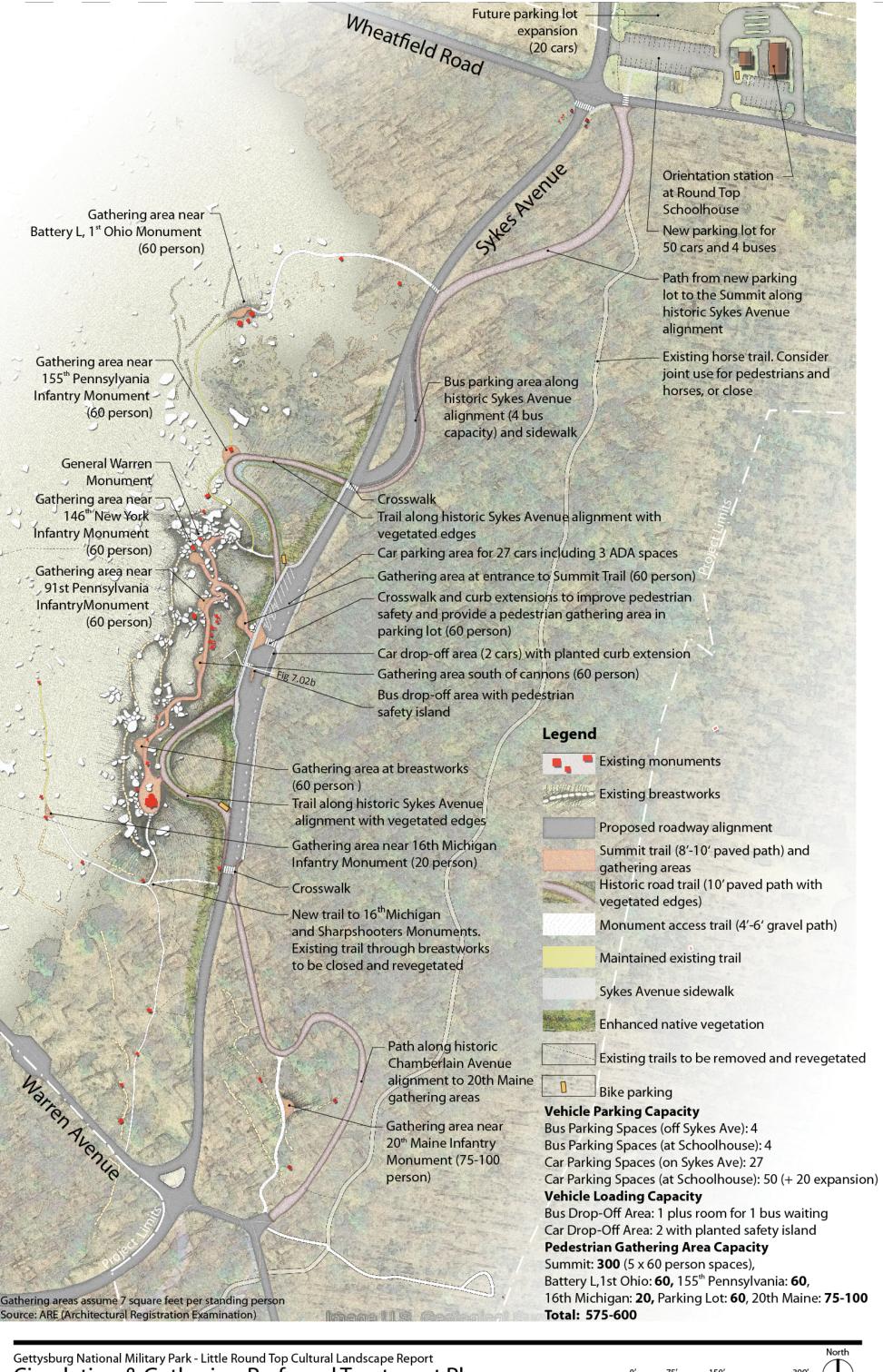
	Short-Term	Long-Term
CCC-Era Sykes Avenue Retaining Wall Page 3-32	 Repoint mortar throughout the wall. Replace missing stones on the wall cap. 	
Mission 66-Era Retaining Wall at Summit Page 3-32	 Repoint mortar throughout the wall. Replace missing stones on the wall cap. 	
Non-Historic Barricades Page 3-32	Remove non-historic barricades from the path leading to the Summit.	Remove NPS-Era gate at the north end of Sykes Avenue.
Low Barrier/Toe Rail Page 7-2	Install an approximately 12" high toe rail made of metal, wood, or stone that extends along the edge of the summit trail. This discreet element gently defines the "do not walk" areas in order to protect historic features and soil conditions, and provide opportunities for direction and interpretation without vertical signage.	
Barrier beside parallel parking on Sykes Ave Page 7-2	Retain concrete wheel stops to protect pedestrians from vehicles.	Replace concrete wheel stops with a custom segmented edge or shell stones.
Stone Breastwork	rs	
Stone Breastworks Page 3-31 & 6-4	 Restore and stabilize breastworks with historical accuracy. Remove overgrown vegetation from breastworks, and continue periodically. Generally divert new trails away from the breastwork. 	 Incorporate interpretive signage, including historic photographs of the breastworks. To the greatest extent possible locate paths so that visitors are not encouraged to touch, climb, or sit on breastworks.

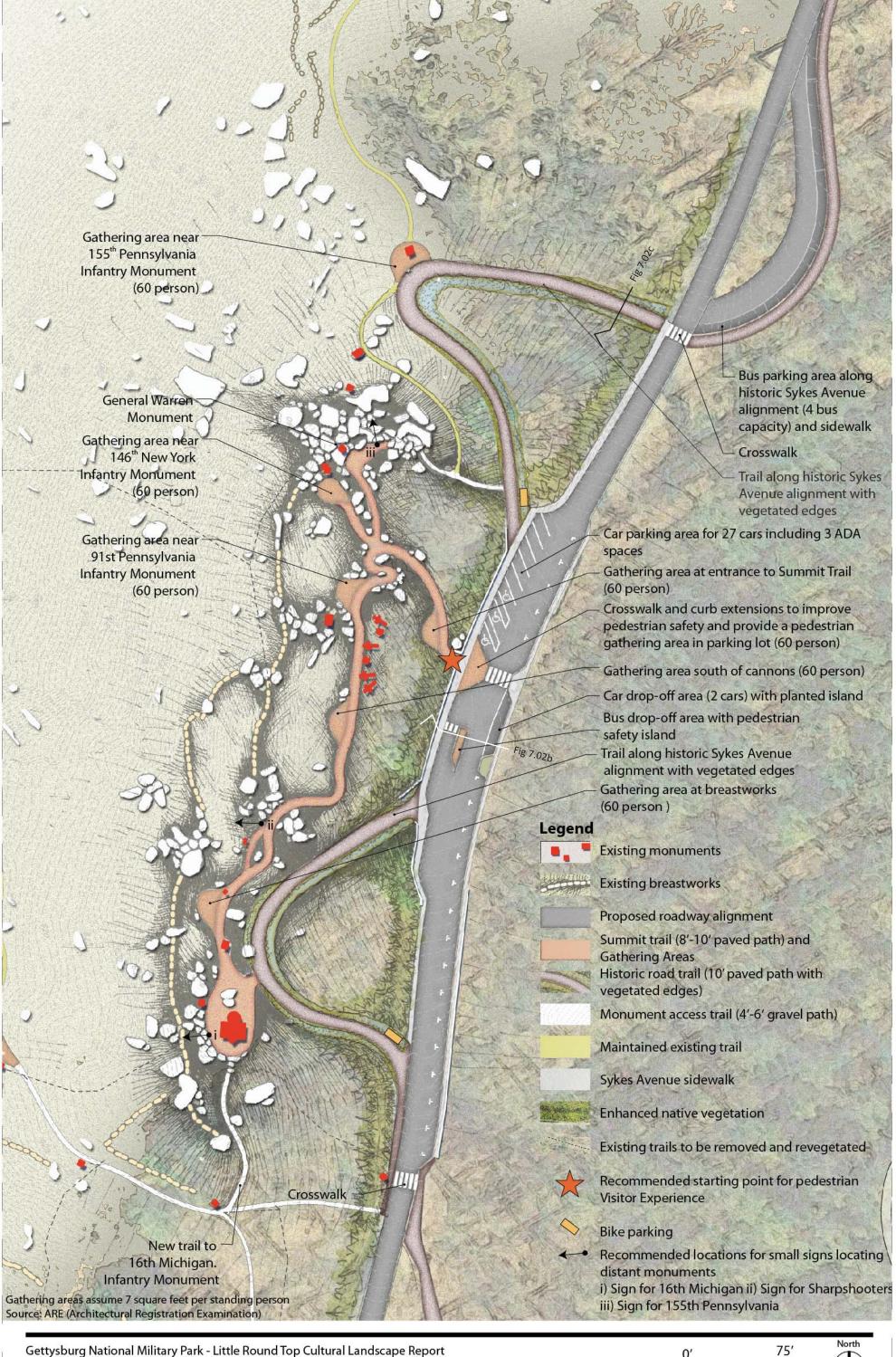
	Short-Term	Long-Term
Topography, Drai	nage & Geomorphology	
Topography Page 3-33	Any grading as a component of new construction work within Battle Action Areas shall be done by filling, not cutting.	
Boulders & Rock Outcrops Page 3-36	Place new stone only as required for construction of gathering areas.	Remove non-historic boulders placed along roadways.
Stone Culverts Page 3-36	Inspect and maintain historic stone culverts. Repoint as necessary.	
Roadside Drainage/Swales Page 3-36		Replace NPS Era swales and gutters with Commemorative Era flagstone gutters where historically appropriate.
Plum Run Page 3-36	Ensure the upstream and downstream stewardship of Plum Run.	
Vegetation		
Edges of New Paths on Historic Sykes Avenue Alignment Page 7-2	 Vegetate with native species, small enough in stature to convey the historic width of Sykes Avenue. Maintain vegetation height no taller than 18 inches. 	
Old Field on West Slope Page 3-37	Manage the west face of Little Round Top as an old field through regular mowing and maintenance. Continue current practices.	
Individual Mature Trees Page 3-40	Implement a preservation program for individual trees and tree clusters which are contributing resources.	
Forest-Lined Roadways Page 3-46	Develop forest management practices to control invasive species.	
West Edge of Sykes Avenue Page 3-46	 Increase planting density using native shrubs and ground covers to control visitor access and increase erosion control. 	Add additional native shrubs and ground cover to maintain appropriate visitor access and erosion control.
Forest Cover at Vincent Spur Page 3-47	Develop forest management practices to control invasive species.	Allow additional understory growth within the Vincent Spur Character Area only where historically present.
Dense Forest at Eastern Slope	Develop forest management practices to control invasive species.	

	Short-Term	Long-Term
Page 3-52		
Plum Run Riparian Corridor Page 3-54	Continue current practices to promote species diversity.	
Views & Visual Re	elationships	
Views West from the Summit Page 3-42	Continue forest and woodland management practices in order to preserve historic views.	Follow recommendations made in the future Landscape Preservation Plan.
Battle Action Areas	Continue forest and woodland management practices in order to preserve historic character.	



North







Appendix HR-A: Bibliography

The historical research methodology adopted for this study was to review accessible and relevant sources of data on the cultural landscape within the Little Round Top study area, particularly materials at the Gettysburg National Military Park's library and archives and the Adams County Historical Society. A work plan was developed based on the scope of work, Cultural Landscape Report outline requirements (as defined in *Directors Order 28: Cultural Resources Management*), and practical cost constraints. The research methodology focused on primary source materials with an emphasis on original manuscripts, maps and photographs that were most likely to yield the greatest amount of useable data for developing period landscape plans and answering questions about the authenticity of various landscape features. Written descriptions of terrain by battle participants were also considered key.

The park's archives, as the largest repository of primary source materials related to the management of the park, were seen as central to understanding how the battlefield evolved into managed parkland. Specific landscape elements related to Little Round Top such as the laying out of roads, management of vegetation and vistas, and maintenance of monuments and breastworks were all studied.

The shear volume of materials that have been collected and written about the Battle of Gettysburg and, more specifically, Little Round Top, makes any plan of research on the subject a daunting one. This bibliography is by no means exhaustive of the primary source materials or the many worthy secondary histories. The purpose of the landscape study, however, is not historiography nor is it reinterpretation of the action on Little Round Top, July 2, 1863. Rather, the landscape study is designed to be a tool that assists the Gettysburg National Military Park with preserving and managing the Little Round Top landscape, consistent with the park's mission, so that this and later generations can continue to take advantage of opportunities to experience an authentic cultural landscape.

Published Sources

Adelman, Garry E. Little Round Top, A Detailed Tour Guide. Gettysburg, Pa.: Thomas Publications, 2000. Adelman, a licensed battlefield guide, has integrated his historical knowledge with ways that the landscape can be used to tell visitors about tjr battle for Little Round Top. This is one of the few books that explicitly incorporates details from the existing physical resource within a larger historiographic picture. It identifies a walking tour route with 18 stops, relating landscape features at each stop with the history of the battlefield.

. The Myth of Little Round Top, Gettysburg, PA. Gettysburg, Pa.: Thomas Publications, 2003. A useful and accessible monograph, in the form of a historiographic essay, wrestles with the question of the military significance of Little Round Top. Points out that Shaara's Killer Angels (1974) transformed the understanding of the battle and due to its focus on Joshua Chamberlain and the 20th Maine, has given the action on Little Round Top more significance than was given to it by the veterans of the battle and most later historians. Many historians and authors post-1974 have accepted without question an interpretation that the Confederate capture of Little Round Top would have changed the course of the war.

Adelman, Garry E. and Timothy H. Smith. *Devil's Den: A History and Guide*. Gettysburg, Pa.: Thomas Publications, 1997. Mainly of interest to this study due to its description of Round Top Park, page 78.

Bandy, Ken and Florence Freeland, compilers. *The Gettysburg Papers, Volume II.* Dayton, Ohio: The Press of the Morningside Bookshop, 1978. A collection of reprints, includes on pages 485-530: Boyd Vincent, The Attack and Defense of Little Round Top, c. 1915; Oliver W. Norton, Strong Vincent and His Brigade at Gettysburg [similar to a portion of his book, published in 1913]; and Benjamin F. Rittenhouse, The Battle of Gettysburg as Seen from Little Round Top, 1887 [Rittenhouse served in Hazlett's Battery].

Brown, Andrew. *Geology and the Gettysburg Campaign*. Commonwealth of Pennsylvania, Department of Environmental Resources, Bureau of Topographic and Geologic Survey, 1962. Despite the title, this booklet is mostly a summary of the cam-

- paign and battle, noting along the way the influence of the Piedmont physiographic region on the larger strategy and some minor observations on the geology of the battlefield itself, including that the diabase bedrock of Little Round Top made trenching impossible and its boulders offered cover.
- Coco, Gregory A. A Strange and Blighted Land, Gettysburg: The Aftermath of a Battle. Gettysburg, Pa.: Thomas Publications, 1995. Little Round Top in the days and weeks after the battle, particularly first-hand accounts related to corpses, the debris of battle, and damage done to the landscape. See pages 26-34.
- Coddington, Edwin B. *The Gettysburg Campaign: A Study in Command.* New York, N.Y.: Charles Scribner's Sons, 1984. See Chapter XV for a narrative of the battle for Little Round Top and the Peach Orchard.
- Darrah, William C. *The Ecology of Big Round Top*. Eastern National Park and Monument Association, n.d. [c. 1970]. Booklet describing vegetation, plant disease, geologic background and hydrology. Appendix lists over 70 wild flower species found in the area.
- Discorfano, Ken. *They Saved the Union at Little Round Top, Gettsyburg, July 2, 1863.* Gettysburg, Pa.: Thomas Publications, 2002. A readily accessible account of the battle that weaves the battle action together with details from the personal lives of the participants.
- Frassanito, William A. *Early Photography at Gettysburg*. Gettysburg, Pa.: Thomas Publications, 1995. In-depth analysis of several of the early views of Little Round Top, see pages 241-266.
- ______. Gettysburg, A Journey in Time. New York, N.Y.: Charles Scribner's Sons, 1975. This was a pathbreaking work in the analysis of historic photographs and comparison of them with the existing terrain. Group V, pages 154-197, is an insightful analysis of post-battle photographs of Little Round Top.
- Gehl, Jan. *Cities for People*. Washington, D.C.: Island Press, 2010. Gael's principle of Arm's Length Distance was used to determine a baseline carrying capacity for the existing paths at the summit of Little Round Top. For a complete description of this theory, see page 49.
- Georg, Kathleen R. *History of Rose Farmhouse and Farm*. Gettysburg, Pa.: Gettysburg National Military Park, 1982. Covers the pre-battle history of the farm, which included portions of the Plum Run Valley and Devil's Den.
- Ladd, David L. and Audrey J. *The Bachelder Papers: Gettysburg in Their Own Words*. Dayton, Ohio: Morningside, 1994. Bachelder's considerable correspondence with battle veterans documents their recollections of the battle, particularly geared toward sequence of events and precisely locating the regiments and battle lines. Some letters provide terrain descriptions.
- LaFantasie, Glenn W. *Twilight at Little Round Top: July 2, 1863 The Tide Turns at Gettysburg*. New York, N.Y.: Random House, Inc., 2007. A readable, modern narrative, drawing widely from primary and secondary source materials, and offering an up-to-date perspective on reconciling the inconsistencies in the first-hand accounts of the battle. Uses quotes from participants and knowledge of military practice to place the reader in the shoes of the soldiers, with equal weight given to the mundane periods of waiting and preparing for battle, as to the action itself. Landscape is described in detail, drawing upon the participants' descriptions as well as the author's personal knowledge. Suggests the type of topics related to the "everyday" life of Civil War soldiers that are of interest to some modern audiences.
- The Manor of Maske: Its History and Individual Properties. Gettysburg, Pa.: Adams County Historical Society, 1992. Provides useful background on pre-1800 settlement patterns and land ownership.
- Nolfi, Albert A. *The Gettysburg Campaign, June and July 1863*. Conshohocken, Pa.: Combined Books, 1986. Battle action at Little Round Top described and analyzed, pages 78-96.
- Norton, Oliver Willcox. *The Attack and Defense of Little Round Top, Gettysburg, July 2, 1863*. The Neale Publishing Company, 1913. Norton was a participant in the battle and wrote the classic historical monograph specific to the action on Little

Round Top, drawing heavily on an analysis of the official reports and his own experience and contacts. Norton had a keen appreciation of the landscape as an actor in the battle, and he was not afraid to correct what he perceived as the inaccuracies of prior commentators.

- Pfanz, Harry W. *Gettysburg, The Second Day.* Chapel Hill, N.C.: The University of North Carolina Press, 1987. See Chapter 10 for description of the action on Little Round Top.
- Platt, Barbara L. "This Is Holy Ground" A History of the Gettysburg Battlefield, 1863-2009. Gettysburg, Pa.: The Gettysburg Foundation, 2001. Rev. 2009. Provides an overview of the park's development and administration with particular emphasis on the National Park Service-era. Good overview of evolving trends in preservation management for the battlefield as a whole but little specific to Little Round Top.
- U.S. Army Center of Military History. *Gettysburg Staff Ride, Briefing Book*. n.p., n.d. Object-lesson study guide in military decision making and leadership, includes analysis of the impact of terrain. A case study of the 20th Maine is focused mainly on leadership and unit cohesion.
- U.S. Department of the Interior, National Park Service. *Final General Management Plan and Environmental Impact Statement, Gettysburg National Military Park. Volume 1*. June 1999. Provides overall guidance for stewardship and interpretation of the park landscape.
- _____. Directors Order 28: Cultural Resources Management. Effective Date June 11, 1998. http://www.nps.gov/applications/npspolicy/DOrders.cfm. The National Park Service's guidelines for managing cultural resources.
- U.S. Department of the Interior, National Park Service, Natural Resource Program Center. *Gettysburg National Military Park & Eisenhower National Historic Site Geologic Resource Inventory Report.* Natural Resource Report NPS/NRPC/GRD/NRR 2009/083. March 2009. Geologic makeup of Little Round Top and the processes that formed it.
- U.S. War Department. The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies. Series 1, Volume 27. Parts 1-3, The Gettysburg Campaign. Washington, D.C.: U.S. Government Printing Office, 1889. An indispensible source of information for first-hand accounts of the battle, written by commanding officers in the weeks and months after the battle. Descriptions of Little Round Top terrain have been excerpted for use with this study.
- U.S. War Department, Gettysburg National Military Park Commission. *Annual Report of the Gettysburg National Military Park Commission, 1893-1920.* Washington, D.C.: U.S. Government Printing Office, 1905. Contains summary and description of various landscape issues dealt with by the commission, particularly construction of avenues and acquisition of property, but also some information on fences and general maintenance activities that relate to Little Round Top.
- Vanderslice, John M., *Gettysburg: Then and Now* G.W. New York, N.Y.: Dillingham Company, 1899. Includes some references to activities of the Gettysburg Battlefield Memorial Association acquiring property, placing memorials and opening avenues.

Unpublished Sources and Manuscripts

- Alterman, Michael L., John H. Sprinkle, Jr., and Ingrid Wuebber. *Archeological Survey for Rehabilitation of Park Roads, Gettysburg National Military Park, Gettysburg, Pennsylvania*. Prepared for the National Park Service by the Cultural Resources Group, Louis Berger & Associates, Inc., June 1991. Describes testing at various locations, including the east side of the Little Round Top parking lot. Twenty-five shovel test pits were placed in a line 25 feet from Sykes Avenue. Each hit bedrock within one foot of the surface. No cultural material was recovered.
- Bowersox, Todd W., Larry H. McCormick and Donald N. Thompson. *Restoration of Historic Vegetation Lines at the Gettysburg National Military Park.* December 1977. GETT 41172, Resource Planning Compliance File. Detailed analysis of tree species growing on Little Round Top and recommendations for use of herbicides and other measures, including pasturing of animals, to control vegetation.

- Cultural Landscape Study File, Gettysburg National Military Park, December 2010. A file of diverse materials collected by the park historians for use with this cultural landscape study, included research notes, photocopies of official reports, reports on conditions and terrain on Little Round Top from a variety of primary and secondary sources. Some items from this file are cross-referenced in this bibliography. See particularly, the manuscript prepared by park historians titled, "Sheet 22: Wheatfield, Little Round Top and Devil's Den." This is documentation associated with the park's cultural resources map and cross-references landscape features of 1863 (fences, fields, orchards, woods, walls, etc.) against first-hand written accounts.
- Gettysburg Battlefield Memorial Association. *Transcribed Minutes, 1873-1895.* On-file at the Gettysburg National Military Park Archives. References the acquisition of property, placement of memorials and discussion of various issues that came before the association, particularly activities that were deemed to be a threat to the battlefield preservation effort, such as the painting of advertisements on boulders, sale of alcohol at Round Top Park and construction of the trolley line.
- Gettysburg National Park Commission, Office of the Commissioners, *Daily Journals*, 1893-1921. GETT 41144. Includes description of commission's concern with land-use and landscape alterations at Little Round Top caused by the construction of the trolley.
- Harrison, Kathleen Georg. *Gettysburg National Military Park/Soldiers' National Cemetery, National Register of Historic Places Registration Form*. Revised November 4, 2003. On-file, Gettysburg National Military Park, Gettysburg, Pa. Provides context for evaluating significance of features within the park, including list of contributing and non-contributing features on Little Round Top.
- Historians' Files, 1933-1965. GETT 41151. Relevant materials include notes and annotated historic photographs, drawings and maps related to the documentation and restoration of Little Round Top vistas and breastworks, mostly with use of works program laborers from 1934 to 1941. There is also an interesting exchange of views on the realignment of Sykes Avenue in 1935, with the park historians objecting to the new alignment as an unnecessary alteration to the historic landscape. The new alignment was built over the historians' objections.

List of Key Items from Historian's Files Scanned for Use with the Landscape Study

- Allison, William H. and Louis E. King. *Avenues and Their Historical Significance, 1935.* This and a series of other supporting documents address issues surrounding the realignment and improvement of various avenues in the early National Park Service period, includes an interesting discussion of the pros and cons of realigning Sykes Avenue and constructing a parking lot on Little Round Top. The park's historians had objections to the project but were overruled by the park superintendent and federal bureau engineer.
- Tilberg, Frederick. *Vista Cutting Project. Area of Little Round Top, Devil's Den, the Wheatfield and Peach Orchard.* December 28, 1939. Describes methodology and approach used to determine vistas and clearing by the National Park Service. This approach, which used the Warren map and photographs as source documents, has defined the restoration and maintenance of vistas during the early National Park Service management period.
- ______. Report on Field Defenses on the Battlefield of Gettysburg. April 2, 1943. Research on the location of the original breastworks on Little Round Top and approach to their restoration in the early National Park Service management period.
- ______. Location and Type of Fences on the Battlefield at Gettysburg. December 27, 1961. Early effort to identify location and types of fences, includes discussion of Little Round Top.
- Historians' Vertical Files, 1933-present. Gettysburg National Military Park. Research notes and materials on topics related to Little Round Top were reviewed. Among the folders reviewed were the following:
 - Folder #1 "Field Defenses: Tilberg Material #1." Notes prepared by park historians, apparently in support of the April 2, 1943 Historians' Report on Field Defenses (see above).

Folder #92 "July 2nd General Information on Movements and Battle." Includes several articles and manuscripts related to the movements of various corps and division involved in or near the action at Little Round Top. Several of the photocopied articles/chapters in this vertical file are listed in the published sources section of the bibliography.

Folder #98 "July 2: Little Round Top." Includes copies of articles, letters, and research notes, some are first-hand accounts written by veterans from c. 1880 to c. 1915. Several contain descriptions of terrain.

Folder #99 "July 2: Little Round Top: 20th Maine Infantry vs. 15th Alabama Infantry." Includes correspondence of Wiliam C. Oates discussing the erection of a monument to his regiment on Little Round Top, including some descriptions of terrain and a rough sketch map of where Oates believed the 15th Alabama monument should be built. Also letters from Joshua Chamberlain that dispute certain of Oates's memories.

Folder #131 "U.S. Army Quartermaster Reports after the Battle of Gettysburg (Clean-up)." Of interest is the letter of Frank M. Stoke, October 1863, with very good description of Little Round Top.

Folder #137 "Telegraphy and the Signal Corps in the Civil War." Includes report by Lt. Col. A. W. Cameron, U.S. Army War College, A Communicator's Guide to the Gettysburg Campaign, with observations on the Little Round Top signal station.

Folder #166 "Gettysburg by Col. T. Rafferty." Text of address given by Rafferty, Third Corps, in 1883. Interspersed within it are good descriptions of the general terrain of Little Round Top.

Folder #234 "Bachelder – Position of troops, officers' reunion (1869)." Includes report of the officers of the Army of the Potomac, August 23-28, 1869 and the stakes that were placed on Little Round top to mark the right and left flank positions of the regiments and brigades.

- Pennsylvania Historical and Museum Commission. *Cultural Resources GIS*. On-line at http://www.portal.state.pa.us/portal/server.pt/community/crgis/3802. Accessed January 2011. Background information on prehistoric archaeological resources in the Gettysburg area. Nothing specific to Little Round Top was identified.
- Research Agronomist and Research Soil Scientist, Center for Urban Ecology. *Memorandum to Chief of Maintenance, Get-tysburg National Military Park*. Trip Report for Gettysburg National Military Park, August 14, 1995. Discusses impact of heavy visitation on the park's natural resources. Specific to Little Round Top, it suggests educating guides on how their tour routes and gathering spots degrade the ecology and requests that they contain tour groups to areas to be designated.
- Superintendent's Monthly Reports, Park Main (Central) Files, 1916-1954. GETT 41113. A good source of information on the construction of roads and walks, and the clearing of vegetation on Little Round Top from 1935 to 1944.
- U.S. Department of the Interior, National Park Service. *Draft Development Concept Plan Environmental Assessment, Little Round Top/Devil's Den, Gettysburg National Military Park, Pennsylvania*. May 1985. Good overview of existing conditions and degradation of the landscape as it existed in the early 1980s. Recommended expansion of Little Round Top parking lot and formalization of the design of the interpretive area and pathways atop the summit, including barriers, such as stone walls, fences, curbs and logs to keep visitors in the developed areas and reduce impacts.
- U.S. War Department, Gettysburg National Park Commission Office of the Commissioners *Oates Correspondence*, *1895-1910*. GETT 41139. Documents attempt by Col. Oates (15th Alabama) to have a marker placed on the battlefield honoring his brother Lt. John A. Oates and other members of the 15th Alabama in the ravine between the round tops. Includes recollections of the battle against the 20th Maine and a sketch map showing location where Oates believed the 15th Alabama reached before being turned back. Material similar to that in the Historians' Vertical File #99 [see above].

Maps and Drawings

Bachelder, John B. *Gettysburg Battle-field*. Boston: George H. Walker & Company: 1863.

_____. Map of the Battle-field of Gettysburg, July 1-3, 1863. Boston: John B. Bachelder, 1876.

- Cope, Emmor B. [Map of] Battlefield of Gettysburg, Pa., 1st, 2nd, & 3rd of July, 1863. RG 77, National Archives and Records Administration. Copy on file Gettysburg National Military Park Archives.
- Title search and deed traces for property tracts within the Gettysburg Battlefield. Hand-written research notes and drawings of metes and bounds. On-file at the Gettysburg National Military Park, Historian's Office. Accessed December 2010. Photocopies were acquired for the properties that make up the Little Round Top study area.
- General Maps and Drawings, 1922-1933. GETT 41156. Mostly related to road development and ownership within the park. A selection of relevant maps and drawings are included with this report.
- Gettysburg National Park Commission Maps and Drawings, 1893-1922. GETT 41106 and GETT 41137. Maps and drawings related to the creation of the commemorative landscape specific to Little Round Top, especially the development of avenues and property acquisitions. One of the principal primary-source data sets for the cultural landscape study. A selection of relevant maps and drawings are included with this report.
- Map of the Battle Field of Gettysburg ... surveyed and drawn under the direction of Bvt. Gen. G.K. Warren ...1868-1869. 25 sheets. RG 77, National Archives and Records Administration. Copy on file at Gettysburg National Military Park Archives. The Warren map long served as the park's historical base map. It indicates the location of breastworks, farm buildings, fence line, woods, orchards, fields, etc. Over the years, various corrections have been made to it, but it still fundamentally underlies our understanding of the field of battle.
- Park Maps and Drawings, 1933-1980. GETT 41107. Includes drawings documenting the work of the Civilian Conservation Corps (CCC) and the Department of Agriculture's Bureau of Public Roads in the park in the 1930s and early 1940s as part of the New Deal. Related to Little Round Top are road realignment, parking lot construction, walkway construction and brush clearing. Also available are park master planning and interpretive maps.
- U.S. Department of the Interior, National Park Service. Archeological Sites LRT Vicinity, Gettysburg National Military Park, December 15, 2010.
- ______. Geologic Map of Gettysburg NMP & Eisenhower NHS. 1 Sheet. Produced by the Geologic Resources Inventory. January 2009.

Photographic Collections

- General Historical Photographic Prints, 1863-1986. GETT 41135. A wide-ranging collection of photographs gathered by the Gettysburg National Military Park to support research and interpretation, as well as document projects, programs and activities. A selection of relevant photographs of Little Round Top are included with the documentation gathered for this report.
- Susan Boardman Collection of Historic Stereographic Views. Private Collection. Accessed December 2010. A selection of relevant view of Little Round Top are included with the documentation gathered for this report.
- William H. Tipton (1850-1929) Prints, 1863-1931. GETT 41135. Perhaps the single most important source of landscape data from the park's Commemorative Era. Tipton took numerous views of the memorials and the landscape. His studio was in the area of the Slaughter Pen, southwest of Little Round Top. Tipton's collection included photos taken by other photographers as well, including copies from original plates by O'Sullivan and Brady. The bulk of the collection dates circa 1880 to 1915. A selection of relevant views of Little Round Top are included with the documentation gathered for this report.

Appendix HR-B: Graphics Index Under separate cover

Appendix HR-B: Key Graphics Index

Under separate cover

Appendix HR-D: Traffic Report Under separate cover