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Restoring Landscape Experience: Research & New Design for the Battlefield Landscape of Minute Man National Historic Park

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The background features a stylized map of a landscape. A prominent, thick orange line winds across the map, representing a path or a river. The map includes various shapes representing buildings, roads, and terrain. The overall color palette is muted, with greys, browns, and oranges.

RESTORING LANDSCAPE EXPERIENCE:

**Research & New Design for
the Battlefield Landscape of
Minute Man National Historical Park**

A decorative border at the bottom of the page consists of several large, rounded, grey and tan-colored shapes that resemble rocks or boulders, arranged in a slightly irregular line.

"We are never prepared to believe that our ancestors lifted large stones or built thick walls... How can their work be so visible and permanent and themselves so transient? When I see a stone which it must have taken many yoke of oxen to move, lying in a bank wall...I am curiously surprised, because it suggests an energy and force of which we have no memorials."

-Henry David Thoreau

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RESTORING LANDSCAPE EXPERIENCE: Research & New Design for the Battlefield Landscape of Minute Man National Historical Park

Master Project Presented by Kathleen O'Connor



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ABSTRACT

This project looked critically at the landscape design of three specific battle locations located in Minute Man National Historical Park: Meriam's Corner (West Entrance), Paul Revere Capture Site, and Parker's Revenge (East Main Entrance). The landscape re-designs address three specific goals:

1. Make the landscape central to the visitor experience.
2. Enhance the interpretation of the 1775 landscape of specific sites too often overlooked or passed by.
3. Transform the overall experience of the park through limited interventions at specific sites.

The landscape at Minute Man National Historical Park is at present not conveying its historic significance or landscape character that caused the Battle of April 19, 1775 to occur in this landscape. These goals hope to enhance and restore the 1775 landscape character at MinuteManwhileimprovingtheoverallvisitorexperience.

INTRODUCTION

This design looks specifically at the historic cultural battlefield landscape of Minute Man National Historical Park.

Minute Man National Historical Park's Battle Road unit is located sixteen miles northwest of Boston, in the eastern Massachusetts towns of Concord, Lincoln and Lexington. The Battle Road Unit is a linear unit of nearly eight hundred acres, which links Meriam's Corner in Concord to Fiske Hill in Lexington. The park is responsible for maintaining the first four miles of the historic Battle Road Unit through which the British Regulars fled under colonial fire on April 19, 1775 signifying the start of the American Revolutionary War. The 1775 Battle of Lexington and Concord, which can be argued as one of the most notable events in American history, did not take place on a defined battlefield but along a roadway, parts of which are heavily used to this day.

A connected network of redesigned landscapes at Minute Man will create a powerful interpretive tool, and provide a narrative to explain the history within the landscape. The restoration and rehabilitation of key moments in the park landscape, together with a reconsideration of how these places are linked and how visitors arrive at the park and move through

the historic Battle Road corridor, can be an effective approach to improving the overall perception of the historical significance of the battlefield landscape of Minute Man NHP.

This master's project addresses what I have identified as a principal challenge for this National Historical Park, considering the approaching 250th anniversary of the events of 1775: enhancing the overall experience and conveying the significance of the battlefield landscape for all visitors to the park. Through analysis mapping, three specific locations along the Battle Road corridor emerged as significant, all of which were crucial to the battle, but presently experience interpretive challenges. The significant battle locations along the Battle Road Unit, which will be examined are Parker's Revenge (East Main Entrance), Paul Revere Capture Site, and Meriam's Corner (west entrance). Each individual location is significant as a place in the landscape, and each has potential to enhance visitor experience and awareness of the events that transpired.

When expressed together – as a unit – they effectively communicate the overall series of events that took place throughout the day of April 19, 1775. However, these critical locations

are underappreciated, and interpretive programs are made more difficult due to their conditions and contexts. Visitors cannot easily get to the separate locations and are forced to travel in their vehicles; this limits the visitor experience in the battlefield landscape by isolating these key locations, rather than providing visitors the ability to regard the Battle Road Unit as a series of critical battle moments or as a unit.

Therefore, it is necessary that this master's project looks closer at the current circulation patterns and entry and arrival areas. These aspects of park design, are critical cues to provide visitors with a complete experience of the park landscape while conveying that one has entered a new place. The project intends to better connect these three identified significant battle locations to each other and establish similar landscape designed features to assist in the interpretation of the site, while providing connected designs. This will assist in creating a landscape network of the critical battle moments, which will better connect people to the history rooted in these critical landscapes. The design proposal intends to create new paths and gathering moments and easily accessible circulation patterns to these three underappreciated and hard to experience locations. The network will allow for visitors to traverse key areas along the historic battlefield. Through a series of short and extended trails, visitors

will be provided with a glimpse into the events of April 19, 1775 and be able to experience what it was like for the soldiers and civilians alike. The overall goal of this project is to make sure the integrity of the battlefield landscape is restored through carefully designed landscape interventions to provide visitors with a more meaningful park experience.

This project reveals the Park's integrity, hopefully enables the community to understand and better relate to the Battle of April 19, 1775, encouraging community involvement and most importantly appreciation for this important landscape.

Cultural Landscapes & Battlefield Interpretation //

Cultural landscapes are landscapes that have been influenced or shaped by human interaction; they are a direct expression of either a collective or individual identity. The term cultural landscape is broadly understood to have a variety of meanings and associations. This thesis project understands and explores the role of cultural landscapes as historic landscapes commemorating or associated with a specific event, person, period or date. This project intends to examine the challenges faced with interpretation; attempting to connect people to a past event while in the present context.

Cultural landscapes provide important insights

into our country's past. When properly maintained and interpreted, they can continue to provide educational opportunities allowing communities to better understand and appreciate origins and collective identities. The Cultural Landscape Foundation argues that it is necessary for the ongoing care and interpretation of these sites to improve quality of life while "deepening a sense of place and identity for future generations" (CLF, 2001-06).

Minute Man National Historical Park is located sixteen miles northwest of Boston and extends through the eastern Massachusetts towns of Concord, Lincoln and Lexington. This section of the larger national park is nearly 800 acres, and links Meriam's Corner in Concord to Fiske Hill in Lexington. This portion of the park includes sections of what became known as Battle Road, the colonial road along which British Regulars fled under colonial fire on April 19, 1775. The battle continued all day, with a series of major skirmishes along the road back to Boston, signifying the start of the American Revolutionary War. The park maintains the Battle Road Unit, which extends 9.2 miles through Concord, Lincoln and Lexington. Much of the historic route today lies beneath State Highway 2A, which is a heavily used road in what is now a heavily built up suburban area outside of Boston. The Battle Road Unit includes sections of the Battle Road that were bypassed by highway modernization, and therefore retain far more

integrity than most other sections of the original battle site.

The birth of American democracy occurred along this road, and such there is extensive interest and literature published about Minute Man National Historical Park regarding the events of 1775.

However, the historic importance and significance does not translate in the landscape and current park design. The Battle Road Unit is an unusual battlefield landscape – a long, linear corridor through what is today a densely suburban landscape. The increased growth of suburban communities emerged during the 1950s with the rise of post-World War II economic expansion. The suburban sprawl directly impacted the creation of Minute Man National Historical Park as a National Park. The decline in agricultural jobs throughout the Concord, Lincoln and Lexington area, during this period led to the consolidation of farming onto smaller acreage, thereby providing excess land for residential and roadway construction (Smith, 2005). The available space created the desire for individual homes outside of the cities, in this case Boston, which generated a rapid increase in the construction of new homes which consumed every bit of available space left, minimizing the sizes of local farms. The construction of the Airforce Base triggered the realization to set preserve this historic landscape and it was with this that created the establishment of the park in

1959. Designation of the landscape as a National Park ensures that this area remains preserved and protected for future generations. The landscape of Minute Man and its surrounding area has evolved over time, and many of the features that were characteristic of 1775 are gone or otherwise not apparent.

As with other battlefield landscapes in suburban situations, it can be difficult for visitors to fully appreciate the significance of events that took place, in this case almost 250 years ago, despite the excellent efforts and programs of park interpreters. Due to the suburban influences of heavy vehicular traffic on Route 2A, limited pedestrian access in some areas, and circulation patterns tending towards vehicles, Minute Man National Historic Park struggles in effectively conveying the park as a battlefield and the overall landscape context and experience throughout the park is dominated by modern suburbia. This limits the overall visitor experience and provides little opportunity for meaningful appreciation of this extremely significant battlefield. The lack of a clearly defined entrance and limited connection to remnant features in 1775 landscape, enhances this problem of limited visitor experience, as the current Park landscape is not seen or expressed, as significant.

The rapid expansion and development of the landscape created community encroachment on the

battlefield landscape of Minute Man National Historical Park. The impacts of suburban development are lasting, and its effects are still present and felt to this day.

The noise pollution and visual impairments, some of the effects created, directly impact and sometimes hinders the interpretation of the battlefield landscape. Despite the dramatic and violent events that once took place at Minute Man, the Park is surrounded by development and heavy commuter traffic, leaving visitors to not make this connection.

The suburban sprawl of the Concord, Lincoln and Lexington area jeopardizes the historical integrity of the Park. The proximity to the communities, nestled in suburbia, makes it apparent that the historic integrity and interpretation of the battlefield landscape is overlooked. The historic landscape surrounded by the suburban community poses some challenges for the Park: degradation due to changes in the visual quality of the surroundings, the construction of Hanscom Airforce Base, loss of historic structures, and decline in park visitation by the local community, and effectively interpreting and conveying the historic significance (Steinitz, 1980). As a result, often visitors do not perceive the full significance of the landscape, despite the best efforts of the park's interpretive planning.

At present Minute Man faces a disconnect

between the extensive literature and famous writers, such as Emerson that have written about the Park and its deep history to the actual layout and interpretive programming utilized at Minute Man today. Due to suburban influences, poor circulation tending towards heavy vehicular traffic and limited pedestrian opportunities, the park struggles to effectively interpret this landscape as a battlefield. This limits the overall visitor experience and provides little opportunity for meaningful appreciation of this extremely significant battlefield landscape. The lack of a clearly defined entrance in the densely populated suburban neighborhood does not signify to the community the importance of this historic landscape.

There are a series of battle locations along the Battle Road unit which are places where important skirmishes occurred during the British retreat to Boston. Each location is significant as it is a place in the landscape where individual battles or skirmishes occurred. When these landscape locations are expressed together they effectively communicate the overall series of events that took place throughout the day of April 19.

However, due to the parks location, nestled in a suburban neighborhood, and the tendency towards vehicular circulation as the primary mode of transportation, these critical locations are interpreted as individual parts along an undefined Battle Road unit rather than a whole. This results in a limited

visitor landscape experience. Visitors cannot easily get to the separate locations and are forced to travel in their vehicles; this limits the experience of the battlefield landscape and isolates key locations rather than providing visitors the ability to regard the Battle Road Unit as a series of critical battle moments.

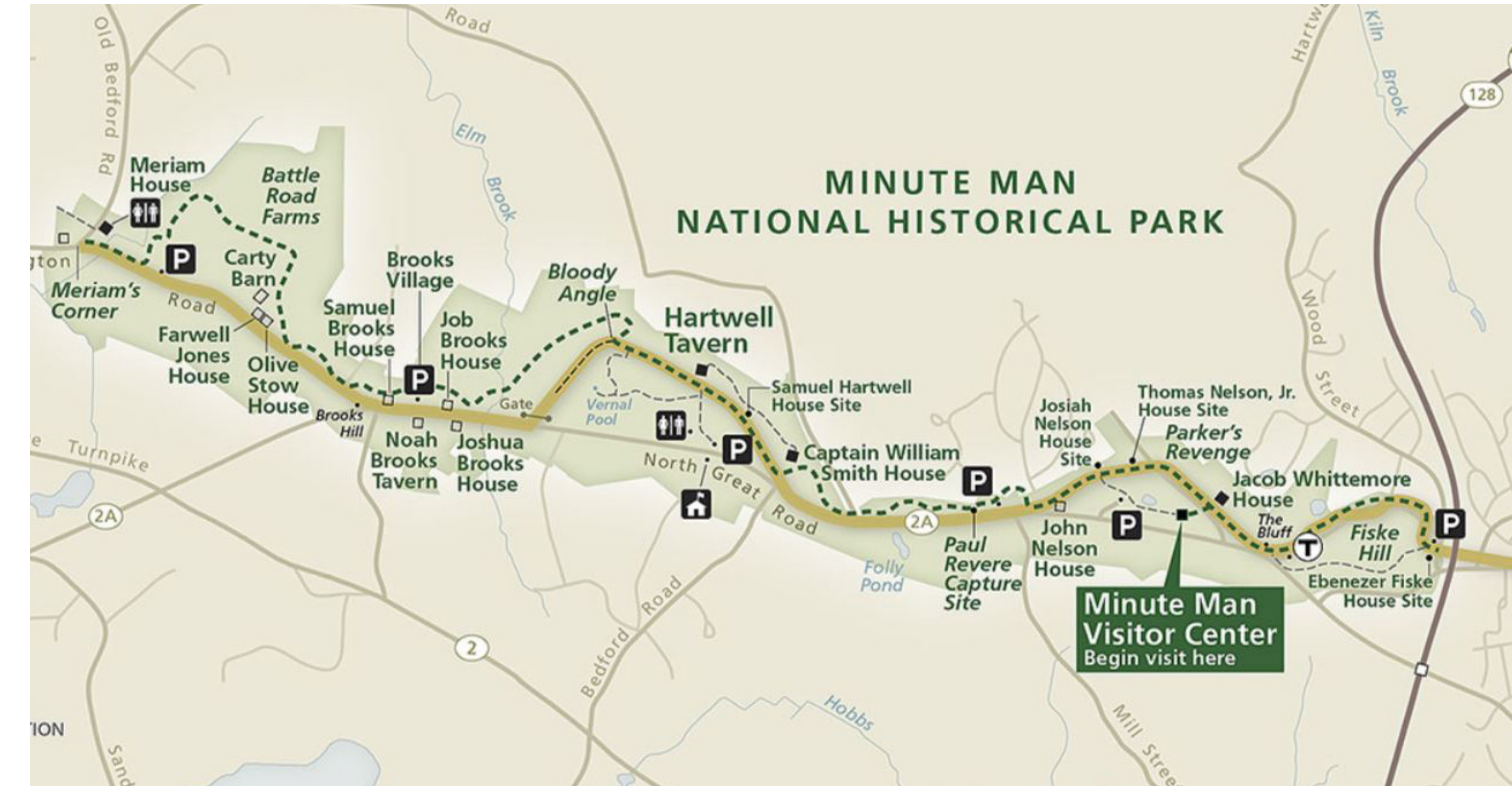
It is therefore desirable that Minute Man National Historical Park take a closer look at the current circulation patterns, entrances, and interpretive use of the landscape. These aspects of park design are critical cues to provide visitors with a complete experience of the park landscape while conveying the significance of the history. This design proposes to examine the east main entrance and visitor's center to provide the park with a clear sense of arrival and to reorient visitors onto Battle Road. The project also examines redesigns for Parker's Revenge and Meriam's Corner (west entrance), all of which are sites of significant battles during the start of the revolution along Battle Road. The project intends to better connect these three locations to each other and to the re-oriented visitor center. This will help to create a landscape network of the critical battle moments, to engage visitors with the history and the battlefield landscape inherent in the park landscape.

The proposed design intends to create a network of trails creating a more connected and easily accessible circulation pattern through the

Battle Road Unit. The newly designed network will allow for visitors to traverse key areas along this battlefield landscape. Through a series of short and extended trails visitors will be provided with a glimpse into the events of April 19, 1775 and be able to experience what it was like for the soldiers and civilians alike. Thus, the overall goal of this project is to make sure the park landscape is understood as a battlefield landscape to create a more meaningful landscape experience for visitors through carefully designed landscape interventions.

Now more than ever there is a need to maintain cultural landscapes for their historical significance. As time continues to move further away from these important historic dates, it becomes difficult for people to value a landscape when they are detached from its history. Important questions worth asking are: how do you ensure lasting appreciation or value in these historic landscapes that people are so far removed from? How do you connect one to landscape history?

Minute Man National Historical Park Map //



NPS Park Map, <https://www.nps.gov/mima/planyourvisit/maps.htm>

CULTURAL LANDSCAPES

Carl Ortwin Sauer, is a cultural geographer who coined the term 'cultural landscape.' His most crucial point in defining landscape:

"Landscape is a cultural entity, something human crafted, a modification of nature rather than a natural environment. Landscape is 'cultural landscape.' The cultural landscape is fashioned from a natural landscape by a cultural group. Culture is the agent, the natural area is the medium, the cultural landscape the result (Wylie, 2007)."

Sauer argued that "people had as great an effect on the physical environment as it had upon them (Riesenweber, 2008), the two are thus not apart but work to influence and inform one another. The Secretary of the interior's guidelines of a cultural landscape is "a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values (Riesenweber, 2008)."

The Cultural Landscape Foundation explains that a cultural landscape can have a variety of associations such as a tiny homestead, grand estate, industrial site, park, garden, cemetery and so forth. Though these are all different the Foundation explains

that "collectively, cultural landscapes are works of art, narratives of culture and expressions of regional identity" (CLF, 2001-06).

Buggey and Mitchell characterize cultural landscapes by patterns and interactions. Their concept of cultural landscapes thus recognizes that many human relationships – religious, artistic, spiritual, and cultural – are not primarily reflected in material evidences but rather are intangible qualities associated with the landscape (Buggey and Mitchell, 2008).

According to the National Park Service, NPS, a cultural landscape is a "geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values" (NPS, Cultural Landscapes). The NPS further notes that there are four, non-mutually exclusive, types of cultural landscapes: Historic Site, Historic Designed Landscape, Historic Vernacular Landscape and Ethnographic Landscape. A historic site is a landscape "significant for its association with a historic event, activity or person," whereas a historic designed landscape is recognized "as a design or work of art; was consciously designed and laid out

either by a master gardener, landscape architect, or horticulturist to a design principle, or by an owner or other amateur according to a recognized style or tradition.” An historic vernacular landscape is one in which “whose use, construction, or physical layout reflects endemic traditions, customs, beliefs, or values; in which the expression of cultural values, social behavior, and individual actions over time is manifested in physical features and materials...in which the cultural features reflect the customs and everyday lives of people.” The NPS lastly defines the ethnographic landscape as “a landscape containing a variety of natural and cultural resources that associated people define as heritage resources.” (NPS, Cultural Landscapes) Historic landscapes are therefore one of the types of cultural landscapes, which is also the category that Minute Man National Historical Park falls under.

The Cultural Landscape Foundation describes Historic Sites as “cultural landscapes significant for their association with a historic event, activity or person.” The World Heritage Convention, WHC, describes these landscapes as the organically evolved landscape. These landscapes are the result of an “initial social, economic, administrative and/ or religious imperative and has developed its present form by association with and in response to its natural environment.” The WHC thus describes these landscapes as reflecting this process of evolution with

respect to these forms and features (UNESCO World Heritage Convention, 1995).

Lastly, the United Nations Educational, Scientific and Cultural Organization defines a cultural landscape as “combined works of nature and man that illustrate the evolution of human society and settlement over time, under the influence of physical constraints and/or opportunities presented by their natural environment and of successive social, economic, and cultural forces, both external and internal” (Ibid, 1995).

According to the National Park Service, NPS, historic landscapes are composed of a variety of ‘character-defining features’ that individually or collectively contribute to the evolution of the landscape’s appearance over time. The NPS notes that “most historic properties have a cultural landscape component that is integral to the significance of the resource” (Birnbaum, 1994).

The Secretary of the Interior’s standards defines preservation as “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” (Riesenweber, 2008). Riesenweber states that preservation is focused on visible

material things that survive from the past and with maintaining in the present keep their appearance in the past.

The preservation of buildings is static, but the preservation of landscapes is fluid. Land changes over time, which is what many “geographers now emphasize in examining landscapes.” The preservation of landscapes is there for rather difficult to capture as they are not static but fluid and ever changing (Ibid, 2008).

According to Riesenweber, landscape is treated as a material thing with the emphasis on the impact of culture on nature. The National Park Service, NPS alludes to culture as the idea of resources and linking the cultural landscape to a geographic area with preservation’s concept of significance through historical association (Ibid, 2008). The integration of cultural landscapes into the preservation movement, recognizes historic resources association to cultural diversity and exemplifies this import relationship between place and identity in communities (Buggey and Mitchell, 2008).

Preservation constructs a story of the past through the lens of the present. The narratives of historic preservation constructs and materializes narratives, which shape our view of the past. Landscapes are central to our personal and collective identities as they create and reinforce self-images and value structures (Riesenweber, 2008).

Management Practices //

According to the National Park Service, management plans “support the preservation of park resources, collaboration with partners, and provision for visitor enjoyment and recreational opportunities” (PEPC, 2018). These plans are created to provide the park with basic guidelines for how the park should “carry out statutory responsibilities for protection of park resources unimpaired for future generations while providing for appropriate visitor use and enjoyment” (Ibid, 2018). Park plans are created by interdisciplinary teams consisting of the park superintendent and staff, landscape architects, community planners, specialists in natural and cultural resources, environmental design specialists, concessions management specialists, interpretation experts, and professionals in other fields as needed (Ibid, 2018). There are many different plans developed by the NPS, some of which include, General Management Plans or GMPs, wild and scenic river plans, visitor use management plans, wilderness plans implementation plans, development plans, among others (Ibid, 2018). These plans are all created and developed, to inform agency decision decision-making and management.

Minute Man National Historical Park’s general management plan presents “alternatives, an analysis of environmental impacts, and a land protection plan”

for the park (NPS, 1988). This general management plan for the park outlines four basic strategies that will ensure the “protection of the park’s significant cultural resources, provide better opportunities for visitor understanding of the events of April 19, 1775 and provide facilities needed for visitors to appreciate the park’s unique resources” (Ibid, 1988). This plan was created in response to State Route 2A, which when the park was established it was assumed that this major road could be realigned, however, public controversy blocked the realignment, which has been a park challenge since. This plan outlines the “encroaching development on all sides of the Battle Road corridor is limiting option for preserving the 18th-century character of Minute Man National Historical Park” (Ibid, 1988).

In 2012, The NPS created a General Management Plan Amendment/ Environmental Assessment of the Battle Road Unit at Minute Man National Historical Park. This GMP describes three alternatives for the management of the Battle Road Unit, while describing the environment that would be affected by the alternatives and the environmental consequences of these alternatives (NPS, 2012). The “purpose of this action is to amend the management objectives for the Battle Road Unit that were outlined in the park’s previous GMP” (Ibid, 2012). The 1991 plan achieved its goals of upgrading the Visitor Center, constructing a 5-mile multipurpose trail, a

rehabilitation of buildings and cultural landscapes and a system of interpretive signs throughout the park.

The park managers, after accomplishing these goals, “are now in need of new strategies to enhance public use and enjoyment of the Battle Road Unit” (Ibid, 2012). In this plan it was recommended that the issues should be addressed now by the NPS, to “continue protecting and preserving its resources in the rapidly developing environment” (Ibid, 2012). This GMP Amendment “lays out a broad vision for the Battle Road Unit for the next 15-20 years”. The goal of the GMP Amendment is “to protect and preserve the Battle Road Unit by developing strategies to enhance public use, enjoyment and stewardship while managing traffic and development that threaten resources and the visitor experience” (Ibid, 2012). The planning issues identified through analysis of available “resource information, and preliminary internal and public-scoping, which analyses of resource conditions, research findings and internal and public scoping identified a number of questions to be addressed, such as: resource protection, visitor use and experience, partnerships and organizational effectiveness” (Ibid, 2012).

Along with the General Management Plan, the park created a Natural Resource Assessment for Minute Man National Historical Park. This report was put together “to provide information on the current condition of natural resources” located in the Park

(NPS, 2009). This plan provided an assessment of current conditions present in the Park, the plan utilized “existing data, technical reports, the published literature...the current condition was related to historical data or trends and was presented in a GIS framework” (Ibid, 2009). According to the data presented in the Resource Assessment, “most of the natural resources at MIMA appear to be in less than desirable condition” (Ibid, 2009). The park established that the “urban lands – roads and residential housing – occupy a considerable portion of the park and these areas may be detracting from the natural resources and cultural atmosphere of MIMA” (Ibid, 2009). The plan also found that the park vegetation is “under assault from invasive plants, which have persisted and increased in abundance and distribution over the years” (Ibid, 2009). Along with these, the Natural Resource Assessment found other threats to the park include “impacts from roads and impaired water quality.”

Another document created by the NPS at Minute Man National Historical Park is, A Management Plan to Balance Cultural and Natural Resources: The Minute Man National Historical Park Case Study. According to this plan, “the Park Service is moving away from policies that ‘museumize’ the landscape, that is, to freeze one specific period. Rather, the NPS is embracing new historic preservation policies that allow for landscape change, and new ways of

interpreting the past through ‘rehabilitation,’ putting the landscape to new use” (Gavrin, 1993). This plan establishes four components to achieve the objective of creating a balance between the cultural and natural resources: landscape history, running battle history, natural resources and agricultural resources (Ibid, 1993). The objective of this plan is to “develop a treatment plan to guide the Park’s programs in landscape management and interpretation. Where and how the landscape will be modified to evoke a rural agricultural scene is the main focus” (Ibid, 1993). Management guidelines were developed in this management plan and “were based on the degree of existing historic character (Ibid, 1993).

The Cultural Landscape Report for Battle Road Unit, “identifies and documents landscape characteristics and features of the 1775 battleground landscape, as well as significant landscape features from subsequent time periods” (Smith, 2005). This report identified integrity and defined it as “the ability of a property to convey its historic identity or the extent to which a property evokes its appearance during a particular historic period” (Ibid, 2005). An assessment established in, The Cultural Landscape Report, establishes that the Battle Road Unit “retains overall integrity in the areas of military, commemoration, and agriculture,” while it maintains that these features have integrity, the report then identifies the features which have

diminishing integrity, including “location, design, setting and feeling” (Ibid, 2005). Using this report’s definition of integrity, it identified and analyzed the “condition of select landscape feature types through a comparison of their historic and existing conditions and evaluates the significance of each of feature type” (Ibid, 2005). The format of the report goes through historic condition, existing condition and evaluation of the identified landscape features. Some of these are: topography & hydrology, spatial organization, circulation, vegetation, orchards, buildings & structures, small-scale features – stone walls, monuments and markers, views and vistas, and archaeological sites. The report analyzes each of the features integrity and provides aspects that contribute to the integrity.

Battle Road, which is the historic route the fighting occurred along in 1775, was designated as a Massachusetts State Scenic Byway in 2006. According to *The Battle Road Scenic Byway: Road to Revolutions – Arlington, Lexington, Lincoln and Concord*, the designation is “intended to recognize, protect and enhance its unique resources” (MAPC, 2011). The Metropolitan Area Planning Council, MAPC, worked closely with Minute Man National Historical Park to develop this corridor management plan. The corridor plan “features an inventory of sites and resources that contribute to the intrinsic qualities of the Byway and a series of maps” (Ibid, 2011).

The goal of implementing the Corridor Management Plan will yield Partnership, Preservation, Promotion and Pride. The Plan provides a guide for “preserving and promoting the Byway while recognizing that development pressures and opportunities exist in close proximity to the Byway’s esteemed resources” (Ibid, 2011). This Plan was created “through input from community members, this corridor management plan proposes strategies to manage transportation, land use, and tourism along the Byway” (Ibid, 2011). It is necessary that the design proposal pay attention to the larger context that Minute Man is associated with and a part of.

The National Register of Historic Places designation provides no legal protection in “preserving such a landscape requires development of management objectives and their integration with local planning, economic development, and tourism initiatives” (Buggey and Mitchell, 2008).

Buggey and Mitchell suggest, successful conservation of cultural landscapes recognize that landscapes are living places subject to change. Historic landscapes with the most integrity can retain its historic landscape character, cultural traditions and economic viability while allowing landscape change to occur (Ibid, 2008). Therefore, it is important that the management of these places acknowledges these places as living landscapes. Buggey and Mitchell argue that one way to ensure proper management

of historic landscapes would be to “develop some type of community-based governance for decision making is also a key ingredient for the success and sustainability of conservation” (Ibid, 2008).

In 1991, a Cultural Landscape Treatment Plan was initiated at Minute Man by the NPS and the University of Massachusetts, which addressed these concepts devised by Buggey and Mitchell. This plan provided the park with “a case study in cultural landscape management for the National Park Service, the historic preservation community, and the public” (Gavrin, 1993), which laid out the plan in two phases. Phase I of the plan, established in the Treatment Plan, “initiated the compilation of a digital spatial data base and the assessment of land suitable for agricultural reintroduction” (Ibid, 1993). This concept of agricultural reintroduction refers “to the process of changing some of the Park landscape from forest back to fields, which is relevant to Minute Man NHP as shown by historical research. The research recorded in phase I suggests that the landscape was heavily farmed the 1650s until the early 1900s (Ibid, 1993). The University and Park Service continued developing ideas and concepts laid out in this plan and established A Management Plan to Balance Cultural and Natural Resources.

Written in the Management Plan to Balance Cultural and Natural Resources: *The Minute Man National Historic Park Case Study*, one of the Park’s

objective is to “provide linkages with the surrounding communities for agricultural use, conservation, and opportunities for recreational walking trails” (Ibid, 1993). The National Park Service intends to “use agricultural reintroduction as a tool to transform the landscape from forest to farm, soil types and capabilities, field size, the type of farming should be addressed” (Ibid, 1993). To assist with the Park’s interpretation of the 1775 Battle, Minute Man is reintroducing modern farming techniques by examining historic agricultural practices. The Park created guidelines focused on agricultural reintroduction “as a way to recapture some of the historic landscape character to better interpret the overall landscape history” and identified areas suitable to agricultural reintroduction (Ibid, 1993). This report identified fields and ranked them as most suitable, suitable and least suitable. It is important to understand the “agricultural landscape of the time of the battle and the ensuing 200 years of continuity of this agricultural land use history is also potentially of historical significance which are significant to its historical or cultural values” (Ibid, 1993).

For the parks interpretive themes to last over time, the park must establish an organizational guideline for planning and management purposes. Minute Man National Historical Park referred these objectives, in the Long-Range Interpretive Plan, as foundation planning, which is “derived from

legislation and provides basic guidance for planning and management decisions” (NPS, 2015). According to the Long-Range Interpretive Plan, a park is created around a purpose statement, which explains the specific reasoning for the Park’s existence. The Minute Man National Historical Park 2014 Foundation Document contains the following purpose statement:

“The purpose of Minute Man National Historical Park is to preserve and interpret the significant historic structures and landscapes associated with the opening of the American Revolution which lie along the route of battle of April 19, 1775, and to foster understanding of the events, causes, and consequences of the American Revolution. Another purpose of Minute Man National Historical Park is to preserve and interpret The Wayside, home of major 19th-century American authors” (Ibid, 2015).

The purpose statement helps to explain the Park’s significance. Established in the Long-Range Interpretive Plan, the Park’s significance provides specific rationale for national recognition by identifying the distinctive natural, cultural, and recreational resources and values located within the park boundaries (Ibid, 2015).

The Long-Range Interpretive Plan identified a series of interpretive themes to be utilized as organizational tools for planning and programming and to help the park meet its management goals. It

is established in the Long-Range Interpretive Plan that the identified interpretive themes are “derived from and capture the essence of park purpose, park significance, resources and values...while serving to focus the development of visitor experience, services and programming” (Ibid, 2015). The key interpretive themes established in the Plan are: Lexington and Concord: Opening Battles of the American Revolution, The “Embattled Farmers” Defend Their Way of Life, April 19, 1775 in Memory – Shaping an American Identity and The Wayside and the Legacy of the American Revolution (Ibid, 2015). The Plan then establishes the challenges and issues affecting the interpretation at Minute Man National Historical Park. The challenges are listed in the Plan as: limited interior meeting space, upgrade Minute Man Visitor Center, Intrusions on the historic scene, orientation, way-finding and connections, Common knowledge and popular culture, the challenge of context, Multiple perspectives, Limited staffing and Missing audiences (Ibid, 2015).

In 2005 the National Park Service with help from the Olmsted Center for Landscape Preservation compiled the Cultural Landscape Report for the Battle Road Unit at Minute Man National Historical Park. This undertaking by the Park was the “last opportunity to preserve and regain a meaningful fragment of the historic Battle Road landscape, compromised by post WWII suburban sprawl” (Smith, 2005). Outlined

in this report are the park’s existing conditions comprised with an analysis and evaluation of the park design; what is working well and what are problematic design challenges that the park is facing? The Cultural Landscape Report states that the park’s current relationship with Route 2A is “threatening” its future. It notes that the Park’s “present failure to plan regionally for local and through traffic lies at the park’s most serious problems” (Smith, 2005). According to a 2002 traffic analysis prepared by the park, Route 2A “is already operating at approximately fifty-percent above its optimal traffic volume for the desired visitor experience and visitor safety” (Smith, 2005).

NATIONAL HISTORICAL PARKS: Case Studies

Minute Man National Historical Park is bisected by a major traffic corridor, Route 2A, that runs the entire length of the park. It is useful to examine similar battlefield parks that have a major road either bisecting the park as well or near the park. Additionally, it is important to focus on other parks interpreting the American Revolutionary War, which are also nestled in a suburban neighborhood where the park boundaries confront urbanization.

Valley Forge National Historical Park *King of Prussia, PA //*

Valley Forge National Historical Park is another recognized National Historical Park interpreting the Revolutionary war. The landscape of the park setting is site of the 1777-78-winter encampment of the Continental Army under the command of George Washington (NPS, 2016). When the Continental Army left the encampment area they left behind a scene of devastation: “the once productive farms in

the vicinity were destitute of vegetation, cattle and horses on area farms requisitioned by the army, all trees cut down in nearby forests and the timber and fence posts used to construct the huts and pickets for the army” (Unrau, 1984).

The Park’s purpose is “to educate and inform present and future generations about the sacrifices and achievements of General George Washington and the Continental Army at Valley Forge, and the people, events, and legacy of the American Revolution” (NPS, 2011).

The location of Valley Forge National Historical Park is similar to the landscape of Minute Man NHP. Both Valley Forge and Minute Man NHPs are in highly urbanized areas that experience the challenges of connecting the local community to the park’s interpretive programming of historic periods. Valley Forge is nestled between the Pennsylvania Turnpike, I-76, to the south and the Benjamin Franklin Highway, Rt. 422, to the east. The Park is located 18 miles northwest of center city Philadelphia and is situated in rapidly growing Philadelphia suburbs.

Suburban arterial roadways cut through Valley Forge as well. The General Management Plan of the Park notes that these roads “serve as extensions of the local transportation network and carry large volumes of non-park related traffic,” (NPS, 2007) which bisect the park each day.

The General Management Plan, GMP, for Valley Forge focused on the heavy traffic volumes through the park and proposed alternative to help mitigate this issue – it is necessary for the “management of the flow of people through the park as it is directly related to visitor experience, positive and negative” (Ibid, 2007). The immediate area surrounding the Park is “the most traffic-choked area in the state and causes daily conflicts in and around the park” (Ibid, 2007). The population increase surrounding the park has “resulted in greater recreational pressure on the park,” (Ibid, 2007) which is primarily how visitors interact with the park history.

The GMP, proposed “traffic calming on public roads, which would have a long-term, major, beneficial impact on the visitor experience as it help to reduce speeding and make pedestrian crossings easier” (Ibid, 2007). This plan also proposes to require a park fee, which they note will be unpopular but “would provide funding for reinvestment in enhancing visitor experience, which would eventually balance out the adverse impacts” (Ibid, 2007). A park fee would not only be able to help with park

funding but incidentally will help in reducing traffic flows through the park, discouraging people to just use the park roads as cut-through streets. Changes to circulation patterns were also addressed to lessen the impact vehicular traffic flows have on visitors. The GMP also outlines the importance on outside partner organizations, “more strategic use of partnerships and volunteers would enable better resource protection and enhanced visitor services and experiences, resulting in a long-term, major, beneficial impact to the visitor experience” (Ibid, 2007).

The Long-Range Interpretive Plan was created by the Park staff to assist with the overall visitor experience and to ensure visitors have a meaningful experience. The plan created interpretive zones and locations, where the park “identified six key locations within the park that were the sites of important activities during the encampment” (NPS, 2011). These six zones are intended “to support key interpretive themes and the locations were developed to support programming and as key stops on any guided or self-guided tour of the park” (Ibid, 2011). Zoned interpretation is ideal, in a park bisected with many roads, as it enables visitors to choose their route and select a narrative of personal interest “allowing for recreational and interpretive opportunities that are integrated and tailored to a user’s interests” (Ibid, 2011).

Morristown National Historical Park Ford Mansion, Morristown, NJ //

Another park to examine is Washington’s Headquarters Museum located in Morristown, New Jersey. This park interprets Washington’s stay at the Ford Mansion house located in Morristown during the winter encampment of the Continental army during December of 1779 to June 1780 (NPS, 2018). General Washington used the Ford family mansion as his headquarters during the winter months of the Continental Army encampment of the American Revolutionary War.

The historical park is situated in a highly developed suburban landscape, which faces similar interpretive challenges to those faced at Minute Man NHP. With two roads and a major highway surrounding the park and the fact that the historical park is a mansion house located in a neighborhood, means that it is not visually as noticeable or recognizable as having historical significance. The Ford Mansion is one historic site of four non-contiguous sites, all part of the Morristown NHP. According to the Morristown Long Range Interpretive Plan, the park faces severe challenges getting visitors between the different park locations due to heavy

traffic and congestion of the Interstate roads, I-287, Route 202. The Plan notes that “there is no single starting point for an exploration of the various sites and no coherent, organized way of communicating a complete message about the park” (NPS, 2007).

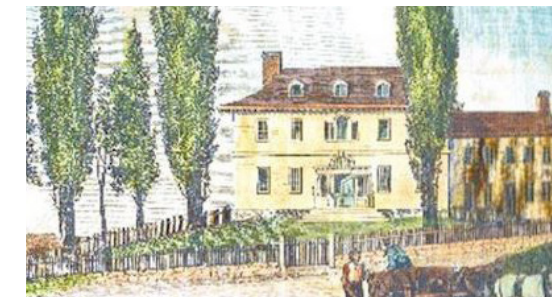
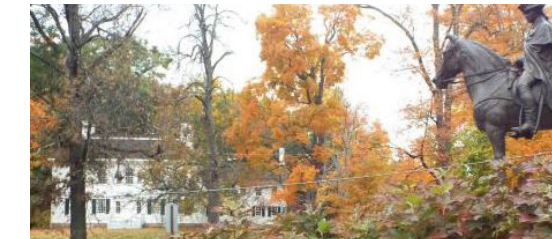
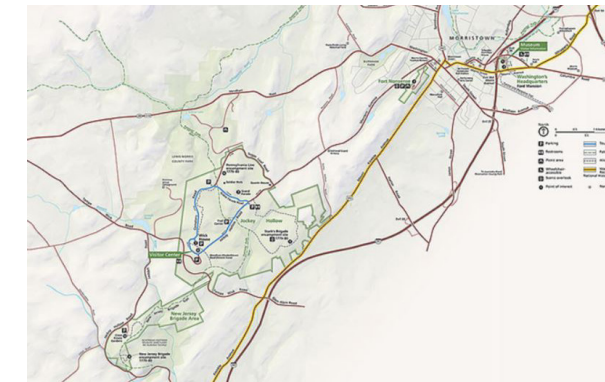
The Plan further notes that there is no “coherent hierarchy or family of sign types” that communicate to visitors how to traverse between each location. The Plan notes that majority of the signs “suffer from neglect and other problems associated with the growth of a city that surrounds the park sites” (Ibid, 2007). The Long Range Interpretive Plan stated that “an effective sign system creates standards for displaying distinct types of user required information and that the information displayed includes site and facility identity, way-finding, and visitor or regulatory information,” however this plan does not establish a hierarchy or how information is to be given to visitors (Ibid, 2007). This plan notes that the park must create a consistent message along the path of movement that provides a “visual message for visitors to trail-blaze the route” (Ibid, 2007). The plan notes that “a sound sign system should function as a stand-alone way-finding component allowing visitors to freely navigate between sites,” which the Park currently does not achieve (Ibid, 2007). The plan hopes to achieve individual sign standards that would enable site specific sign and proper way-finding assessments.

The Historical Park is facing the same problems Minute Man is faced with, how to “make the site more inviting to local residents through landscape design elements” (Ibid, 2007). There is a need to reconnect the historic site, Washington’s Headquarters, to the local community. The proposed plan intends to “add waysides along the grounds of the Ford Mansion to interpret the historic scene for strolling residents and visitors, while providing outdoor exhibits for important story access” (Ibid, 2007). The intention is to hopefully place the park in the context with the American Revolution while providing visitors with the explanation of what happened at the individual locations to understand the full picture of what occurred at Morristown.

Valley Forge National Historical Park *King of Prussia, PA //*



Morristown National Historical Park *Morristown, NJ //*



NATIONAL BATTLEFIELD PARKS: Case Studies

This proposal defines the cultural landscape and examines it as an historic site. The relationship to a specific date in history and the landscape as a battle site are integral components that help to define this landscape as a culturally significant one. Minute Man National Historical Park is a battlefield landscape. It is important to evaluate and look at how other battlefield landscapes are operating. What do their Interpretive Plans look like and how are they actively working to connect people to the battlefield landscapes of the parks? Minute Man National Historical Park is a battlefield landscape that commemorates the first battle fought in the American Revolutionary War. Although other battlefield landscapes are also cultural landscapes, this proposal will only examine other American Revolutionary Battlefield Landscapes, like Minute Man NHP. Revolutionary Battlefield landscapes are a sub group of cultural historic landscapes and the park examples describe below face similar challenges to Minute Man National Historic Park.

Manassas National Battlefield Park *Manassas, VA*

Manassas National Battlefield Park, interprets two battles fought at separate times during the American Civil War between the Confederate and Union troops. The battlefield park is significant in that it is one of only a few Civil War parks that include “majority of the actual battlefield areas where troops formed, fought and died – provides visitors with an opportunity to experience the features that shaped the two battles” (NPS, 2008). The first Battle of Manassas signified to the divided nation that this would not be a quick war, and this battle was critical in holding off Union troops from capturing Richmond, the confederate capitol. The second Battle of Manassas marked another Confederate victory and “opened the way for the south’s first invasion of the north” (Second Bull Run, 2015). As described in the General Management Plan of Manassas National

Battlefield Park the park is significant as it “preserves a historic agrarian landscape as the setting for the two battles. This landscape is also important for its environmental quality and its role in preserving natural resources” (General Management Plan, 2008).

The park utilizes a trail network to bring people in and around the battlefield landscape and to assist with the interpretation of the Battles. Manassas has more than 40 miles of hiking trails in what they developed as “a series of loop trails that traverse key areas of the First and Second Manassas Battlefields,” many of which have trailside interpretive markers. This provides hikers with the opportunity to walk where the soldiers fought and read descriptions “highlighting the experiences of soldiers and civilians alike” (NPS, 2017). Two major loop trails were created each interpreting one of the two Battles fought, provide visitors with longer hiking options. While a series of shorter hiking loop trails were designed to interpret key locations and objects existing in the landscape. The series of designed hiking trails wither interpretive and educational moments, provide visitors with an “understanding of the events of the two battles” (NPS, 2017).

Manassas National Battlefield Park is located in Fairfax and Prince William Counties in Virginia and is approximately 25 miles west of Washington DC. The park is approximately 5,071 acres and is surrounded by highly suburban neighborhoods, which historically

were farmlands and field that surrounded the park. The park is nestled between two major roadways bordering the Park, Interstate 66 to the south and Pageland Lane to the west. The park is bisected by a two major highways, Lee Highway, US Route 29 and Sudley Road, VA Route 234. Heavy traffic flows, of commuter and truck traffic, “create a safety problem and encroach on the visitor experience” (General Management Plan, 2008). As a result, Manassas Battlefield Park underwent an update of the General Management Plan to address these issues and to assist with improving visitor experience and interpretation of the battles.

The Plan provides a series of design alternatives to enhance visitor experience at Manassas. Most notable, found in each alternative, was a proposal for the construction of a Battlefield Bypass Connector road. The connector road would help to “minimize the impacts of traffic congestion and to enhance the visitor experience on the battlefields” (General Management Plan, 2008). The portions of the roads throughout the park would then fall under the jurisdiction of the NPS, with reduced traffic speeds and narrower roads with bike lanes. New entrance facilities would be placed at either end of the park, marking the entrance and fee area into the park. New interpretive displays and view corridors would be designed along the road to better explain and “enhance visitor understanding of key

battle events” (General Management Plan, 2008). In addition, the National Park Service is proposing to establish vegetative buffers and newly designed visitor areas, which are key sequential interpretive sites, to block adjacent development (General Management Plan, 2008).

It is important to understand and examine how this park is approaching battlefield interpretation, as the challenges faced at Manassas National Battlefield Park are similar to those faced at Minute Man National Historical Park. Gaining an understanding of what is working well with battlefield landscape interpretive design at Manassas, can assist with the innovative design interventions at Minute Man and those same principles can be applied to the interpretive programming of the battlefield landscape.

Cowpens National Battlefield Park ***Gaffney, SC//***

Cowpens National Battlefield, located in South Carolina, interprets the battle fought between the British and the Patriots towards the latter half of the American Revolution, which took place in the countryside. The term ‘Cowpens’ refers to the colonial land management practices of open-range stock grazing and it was along one of these cleared areas where the battle was fought (NPS, April 2015). The

Patriot victory over the British Regulars is understood as the turning point for the war waging in the South (Ibid, April 2015).

The battle between the colonists and the British regulars fought the Battle of Cowpens along a long dirt road, connecting to the Green River and eventually extending into North Carolina, known today as Green River Road (NPS, The Green River Road, 2015). This road was highly important in the colonial period as it connected the backcountry woods of South Carolina to other market and wagon roads, making it possible to trade goods. During the war this major thoroughfare was utilized by the soldiers to move their armies and camp alongside in preparation for an attack. On January 17, both armies launched an attack and deployed their armies along the Green River Road (Ibid, 2015). The Patriots held their ground and were able to push the British troops west along the Green River Road, eventually causing them to flee off River Road and into North Carolina (Ibid, 2015).

In 1929 United States Congress recognized the importance of this landscape and created Cowpens National Battlefield Site on one acre of land. In 1972 Congress purchased an additional 845 acres, which included the entire battlefield with a buffer zone around it to allow for visitors and the name was changed to Cowpens National Battlefield (NPS, Battlefield Restoration, 2015). During this time a

park management plan was developed to protect scenic integrity and to “restore the battlefield to its appearance in 1781” for current and future generations (Battlefield Restoration, 2015). In the Park’s Master Plan, a natural vegetation restoration outline was developed to advocate for the removal of invasive tree and plant species, which utilized primary sources from the soldiers who fought in the Battle. To ensure accurate battlefield restoration efforts, the Park Managers aligned with a conservation foundation for “research, manpower and consultation about best restoration practices” (Ibid, 2015). With this extensive management plan, the park successfully removed invasive and early successional trees and dense underbrush and replaced all with native grasses. The park follows this ongoing restoration guideline that helps to restore certain key elements of the battlefield (Ibid, 2015).

In addition to the Park’s extensive restoration plan, the park has a wide-ranging history of interpretive programming to develop the interpretation of the Battle of Cowpens and to better connect visitors directly to the battlefield landscape laid out in chapter six of Cowpens Administrative History. This chapter provides a detailed explanation of the many interpretive tools the park has utilized since its inception. Some of the effective examples are audio tours. There are two trail loops at the park, one hiking and the other car, which bring people

through battle lines and marked with interpretative signage and statues to connect people to the long-fought battle. In addition, the park developed two audio trail loops, one for vehicular transportation and the other for pedestrians on the hiking trails. The Park partnered with local universities and colleges to help with the research and audio script for the interpretive loops (NPS, 2002).

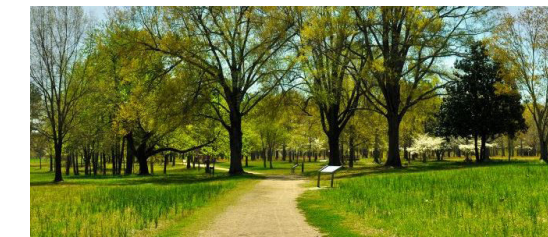
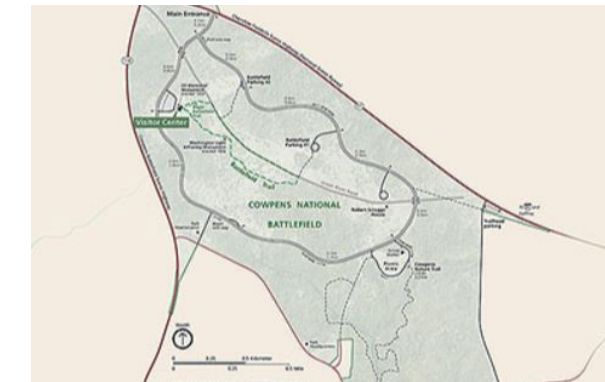
Under the interpretive initiative, the park expanded its visitor center to include exhibits and educational programming. The Park holds annual events, in addition to its many interpretive programming, to maintain continued visitation. The Battlefield Restoration Plan and the Interpretive programming at Cowpens National Battlefield effectively help to connect people to the 1781 landscape and battlefield and more than anything to the history of the area.

Examination of each of the battlefield sites mentioned above is required, as it will help to form an understanding of how parks respond to similar pressures.

Manassas National Battlefield Park Manassas, VA//



Cowpens National Battlefield Park Gaffney, SC//



MONUMENTS & MEMORIALS: Case Studies

Vietnam War Memorial Washington D.C.//

Commemorates
Soldiers who fought
in the Vietnam War.

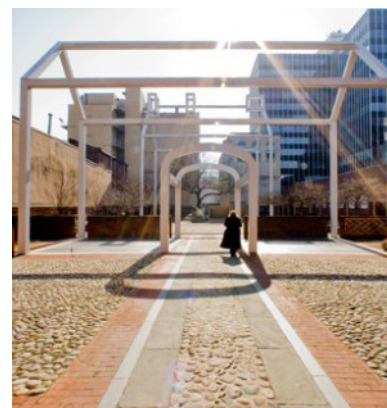
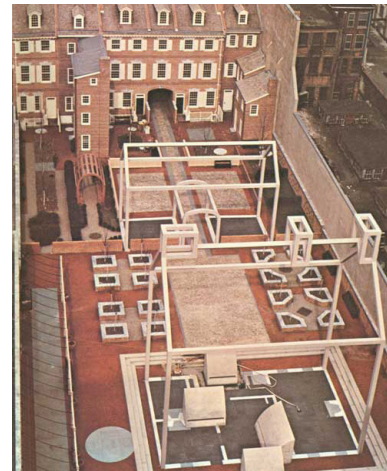
Paid attention to the use
of words and interaction
the engraved letters allow.
Actively engages visitors.



Franklin Court "Ghost" House Philadelphia, PA//

The site consists of the archaeological remains of Benjamin Franklin's house, with the 'ghost' reconstruction of what his house was like.

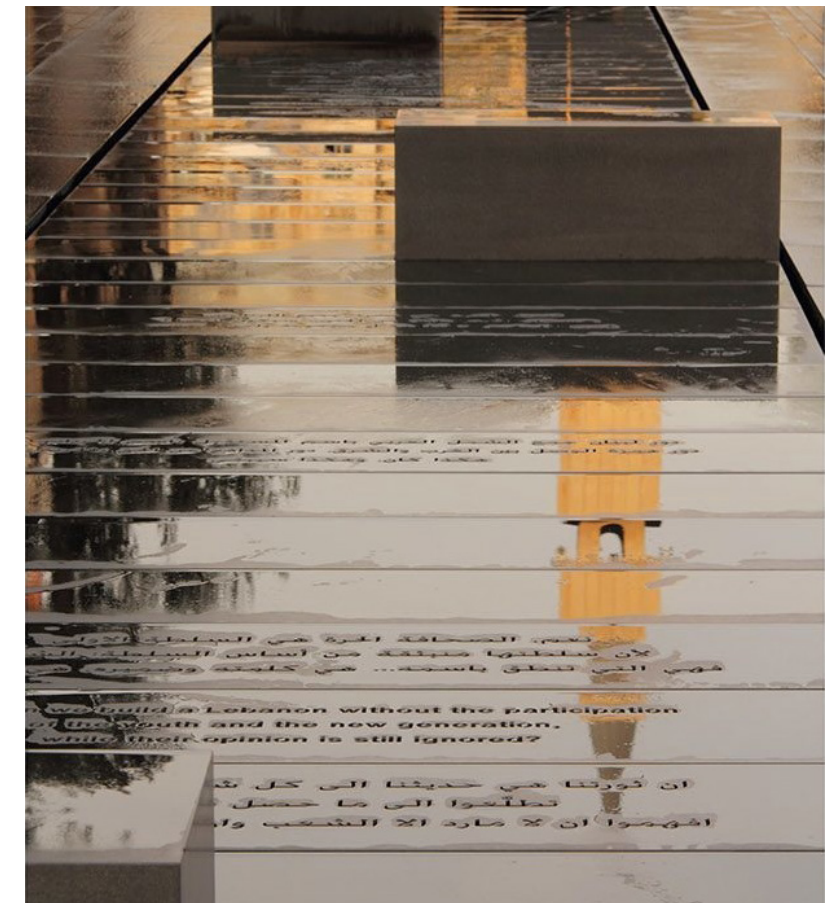
Most important for its representation of something no longer in existence.



Gebran Tueni Memorial Beirut, Lebanon//

The goal of this memorial was to recognize a notable journalist who was assassinated while attempting to create a public space in the Beirut. The linear design is intended to represent what he stood for - as well as connecting the city to its past and future.

The use of stones and engraved quotes and passages and stone seating were important and beautiful design features examined for design ideas.



Gordon Lederer Memorial Croatia//

Commemorates Croatian photographer assassinated by a sniper while filming soldiers in these hills.

This memorial frames a view in the landscape that is connected to the memorial & commemoration of this photographer. Path ends at a lovely resting place.



Shoes on the Danube Budapest, Hungary//

Commemorates Jewish civilians who were shot on this spot during WWII.

Another important memorial to consider in commemorating a tragic event. Helps to interpret a tragic event that occurred at the location while not being too explicit. Important to consider how to connect people to past tragic events.



MINUTE MAN NATIONAL HISTORICAL PARK

Minute Man National Historical Park, MMNHP, is a good example of an historic battlefield landscape. This National Historical Park commemorates a specific date in history, April 19, 1775, as the start of the American Revolution. The current landscape of the park is the location of the first battle fought between the Minute Men and the British; well known for the 'Shot heard around the World.' Within the park's boundaries three important sites emerge in the landscape, specifically Parker's Revenge, Paul Revere Capture Site and Meriam's Corner. These sites were either important battle locations where the Minute Men ambushed the British retreating to Boston or capture locations, where the colonialists were captured by the British. Below is a brief outline of the park's history which, provides an outline of events leading up to April 19, 1775, the date itself and events that took place afterwards to establish the park, concluding with the Park's current conditions.

Literature//

Due to the historical significance of Minute Man National Historical Park, where American democracy was born with the opening battles of the American Revolutionary War, there is extensive literature recorded on the battles fought and, on the park,, itself. Some of the earliest writings about Minute Man National Historical Park date back to 1837 with the dedication of the Obelisk, one of the nation's first war monuments, commemorating sixty years since the Battle fought the North Bridge in Concord, Massachusetts. Ralph Waldo Emerson famously recited "Here once the embattled farmers stood, And fired the shot heard round the world" (Emerson, 1837). These stanzas from Emerson's poem, the Concord Hymn, would become the token phrase used to describe the American Revolution.

Another publication that addresses the historic significance of Minute Man is the Historic Resources Masterplan of Concord, Massachusetts. This report was put together by the Concord Historical

Commission in 1995 and was updated in 2001. The Master Plan was created to “accelerate public interest our historic resources, and to identify protection priorities for decision makers” (Concord Historical Commission, 2001). The stewardship of the historic richness abounds Concord and is “viewed by many, and recorded by history” (Ibid, 2001). There is a growing need in Concord to stimulate public interest in historic resources; the Master plan was created to fill this need, as an educational resource and as a resource reference – a “prioritization of historic resources, a plan of action for stewardship” (Ibid, 2001). Areas of Minute Man National Historical Park are identified as priority sites, such as Meriam’s Corner and Bloody Angle. The plan identifies numerous sites of ‘highest’ priority historic resources in and around Minute Man Park, emphasizes the historic richness throughout the Park and in Concord.

In 2015 the Town of Concord, Massachusetts created the Open Space and Recreation Plan. The objective emphasized in this plan states that as “development threatens to spread, continued awareness and planning to protect the highly sought and much-valued open space and recreation resources in the Town is needed” (OSRPC, 2005). This is a valuable resource to reference for Open Space mapping and GIS work conducted by the town, it would be critical that the design focus on maintaining and establishing connections to these

critical open space areas.

Apart from the Open Space and Recreation Plan, Minute Man National Historical Park is part of the Freedom’s Way National Heritage Area. The mission of the Freedom’s Way is to “connect the people, places and communities of the Heritage Area through preservation, conservation and educational initiatives that protect and promote the natural, historic and cultural resources of the region” (Freedom’s Way National Heritage Area, 2017). The Heritage Area is a network of 45 communities which share connections to the American Revolution through protection of historic structures, landuse, and shared sense of past. Both the area in the Freedom’s Way National Heritage Area and Minute Man National Historical Park are characterized by rural agricultural land surrounded by more suburban areas. Two important corridors explained in the report are the Bay Circuit Trail and the Minuteman Bike Way. In addition to the historical significance, these areas share a great deal of recreational and heritage tourism opportunities. Both the National Heritage Area and Minute Man share significant interpretive goals. It is important to understand how both units can continue to complement each other and is integral to the design process.

Pre-Park Landuse History//

Prior to human settlement in Concord and Lexington, the area surrounding Minute Man NHP was covered by ice a mile thick, this was a period of advance and retreat of glaciers; the last glaciation in Concord was the retreat of the Wisconsin, which left behind Concord as we know it today (Donahue, 2004). Brian Donahue thoroughly describes the glaciation cycles in his book, *The Great Meadow*, it is in this text where he explains that the glaciation periods helped to shape the landscape characteristics of Concord. The glacier left behind prime soils, a “raw mix of soil materials; sandy lands, rocky lands, and moist lands. The lay of those lands, the flow of water through them, the growth of forests and meadows upon them, their long cultivation by human inhabitants – all went to form a place with particular range of ecological opportunities and limits” (Ibid, 2004). During the glacial retreat, the frozen tundra slowly shrank, the glacial lakes drained away, all of which provided room for the forests to return. Donahue states that “in Concord, there was no land before history. Nature has included people since the dimly remembered days when the rocks were still wet” (Ibid, 2004)

Long before the first settlers arrived at

Plymouth, Concord was inhabited by Native American peoples. According to Donahue, the first people to settle in New England were the Paleoindians, “they persisted for thousands of years but undermined their culture by over-hunting their chief game” (Ibid, 2004). The next group of Indians, the Archaic Indians, sustained by broad-based foraging and horticultural practices. The Algonquin people fished, hunted, and raised crops. They engaged in active management of the landscape using fire to promote habitat for game and encourage the growth of edible nuts and berries (Cultural Landscapes Inventory, 2007). The Native Americans had an active role on the landscape, their “subsistence ways...reveal an intricate pattern of adaptation both to and of the landscape” (Donahue, 2004). Donahue notes that the Native Americans of New England “appear to have put in place a succession of cultural systems that made it possible for them to thrive well enough in this landscape for long periods of time” (Ibid, 2004).

The arrival of Europeans beginning in the 1600’s brought the arrival of epidemics and “because they had lower population densities than a fully agrarian people to begin with” (Ibid, 2004), both of which lead to the decimation the Algonquin Tribe. Donahue notes that the English settlers had “a very different agrarian agro-ecology and culture, and a radically different market economy” (Ibid, 2004), than the Native peoples; and during the Colonial

period “the English were to alter the landscape of Concord far more dramatically than the Indians ever had” (Ibid, 2004).

Beginning in 1635, early Puritan settlers of the Massachusetts Bay Colony began to push west, eventually establishing the towns of Lexington and Concord (Cultural Landscapes Inventory, 2007). The European settlers continued to farm the land as the early settlers had while introducing new crops and livestock to the landscape. The early European settlers benefited from their key geographic location, close to the cities of Cambridge and Boston. Bay Road, famously known today as Battle Road, was an important thoroughfare for trade and travel since the earliest days of European settlement connecting the towns of Lexington and Concord to the cities of Cambridge and Boston (Smith, 2005).

The English settlers brought with them landuse practices from England and applied these methods when settling Concord. Donahue writes that “the story of Concord revolves around the adaptation of that English heritage to a new environment” (Donahue, 2004). The English Colonists relied on the balance between three elements, husbandry, woods and water, all of which were applied to the agricultural systems they established in New England (Ibid, 2004). Thus, the Colonists first established “a common field system that integrated livestock husbandry and grain cultivation,” (Ibid, 2004) which

were familiar to those systems in England. Donahue notes that the New England climate and soil did not lend itself to any major staple export crop, which is why New England farmers relied on traditions of village agriculture (Ibid, 2004).

According to Donahue, by the mid eighteenth century the Colonists had effectively adopted the “mixed husbandry system of their English ancestors to the soils and climate of New England to Concord.” The colonists were able to adapt to the New England soils of “a mosaic of rock, sandy, and moist soils to come up with suitable for distinct purposes” (Ibid, 2004). The most common landuse practices during this period were those of “workable proportions of tillage, orchard, mowing, pasture and woodland,” it was here in this dynamic system of interacting landuse types where the formal common system disappeared from Concord and in place was the collaborative undertaking of husbandry (Ibid, 2004).

Each land practice had a specific use, noted by Donahue; “pasture-land was occasionally plowed for tillage, orchards were often mowed for hay, meadows were grazed after mowing, and woodlands were sometimes foraged by livestock” (Ibid, 2004). This system remained profitable for the colonists through the middle of the eighteenth century, however by mid-century Concord faced some challenges, “soil exhaustion or environmental degradation, coupled with a population increase in which husbandry could

not sustain the growth” (Ibid, 2004).

This shift brought about a decline in farming and a depopulation of rural areas, however those who remained shifted production to dairying, and thus Concord in the mid nineteenth century saw an increase in dairy farming. The use of Battle Road to trade goods, led to truck farming to take rise through the mid twentieth century, which enabled the rise of vegetable farming, however ended with the rise of competition from California. The height of landuse production and economic success can be linked to the height of Colonial mixed-husbandry system of pastures, meadows and woodlots, which fit “Concord’s ecological conditions” (Ibid, 2004).

During this same period the Colonists were discovering and establishing the best landuse practices, by the mid-1700, the relationship between Britain and its North American colonies was rapidly deteriorating. Britain began imposing new taxes and regulations on their colonists, which was met with much resistance and disdain. These relations were further soured with the events of the Boston Tea Party and the Boston Massacre. The colonists began stockpiling arms and ammunition in a barn in Concord, out of reach of the British troops occupying Boston, expressing their growing frustration. By April 1775, tensions were rising amongst the colonists and British; discussions of independence were emerging. The British army, thus had reason to suspect that the

stockpiling in Concord could prove dangerous to their own safety (Smith, 2005).

April 19, 1775: Shot Heard ‘Round the World//

On the night of April 18, under the command of General Thomas Gage, British redcoats set off from Boston towards Concord, marching through the night to arrive in Lexington. The Lexington militia met the British troops on the town green. The militia commander, Captain Parker, ordered his men not to fire but rather disperse. A shot was fired, though it is unclear which side fired. Confusion ensued, ending with several militiamen dead and a British soldier wounded (Ibid, 2005).

Shaken, the British proceeded to Concord where the militiamen again confronted them. The Battle Road Cultural Landscape Report states that the British strategically positioned themselves and seized control over North Bridge and watched as the militiamen approached. Then, sighting smoke from Concord, and fearing that the British were burning the town, the militiamen advanced towards North Bridge while the British yielded their line. As the militiamen approached the British, a shot was fired, possibly from a British soldier. This sparked the order from militia leaders to fire on the British

troops, who began retreating towards Boston. This marked the beginning of an 18-mile running battle retreat along the Bay Road, later named Battle Road to commemorate these events. The beleaguered British troops fled to the safety of Boston while being fired upon by colonial militias using strategic locations and guerrilla tactics along the road. The conflict and the ‘shot heard ‘round the world,’ on April 19, 1775, marked the beginning of the American Revolution, which continued until 1783 with the Treaty of Paris (Ibid, 2005).

Pre-Park: Suburban Encroachment//

Victorious, the new Americans at first did little to commemorate the sites of Lexington and Concord. In line with a surge in the popularity and importance of histories of first settlement that swept through New England in the 1800s, prominent New Englanders turned to commemoration by monuments and memorials, of the past on the physical landscape. Throughout the 1800s there were series of commemorative efforts. This included commemorative markers erected on the Lexington Green, at Meriam’s Corner, at the base of the Bloody Bluff, and in 1838, residents erected an obelisk at Northbridge (NPS, Cultural Landscape Inventories, 2007). In 1875, the now iconic Minute Man statue

was installed opposite the obelisk. At the same time, evolving local needs dictated changes to Battle Road.

Beginning in the 1800s, the road was straightened, serving to improve the transport between Boston and the Western communities. By 1890, modern Route 2A was laid out, and the state of Massachusetts would continue to widen this road periodically throughout the 1930s (Smith, 2005). By 1925, the 150th anniversary of the battle, modern development had significantly encroached onto the historic landscape. Additional encroachment by the construction of nearby Hanscom Air Force Base, founded in 1941, spurred some preservation action, and a donation of a few acres from the Air Force became the seed of what would grow to be Minute Man National Historical Park.

The National Park Service partnered with the Department of Transportation, conducted a Traffic Analysis on Route 2A, specifically examining its impact on the Park’s Visitor Experience. The study found that “no more than 1.4% of the two-way traffic on Rte. 2A is visitation to the park, which the majority being split between local trips and trips traveling through the corridor” (Bryan, 2002). The report identified some of the busiest roads in and around the Park, which generate heavy traffic flows and noise pollution: Rte. 2A, Hanscom Drive, Lexington Road, Massachusetts Avenue, Route 128, and Interstate 95. The report conducted a volume

to capacity ratio to understand how the current Rte. 2A handles traffic flows through the park and it concluded that “the level of congestion is reaching a point where the roadway can’t effectively handle any more traffic, especially at peak afternoon hours” (Ibid, 2002).

Early Park Development//

Appalled by this encroachment, the creation of a national park unit was proposed to preserve the historic sites along Battle Road. Minute Man National Historical Park was established as a National Park in 1959 (NPS, Cultural Landscape Inventories, 2007). According to the National Park Service, Minute Man “was established by Public Law, to consolidate, preserve, selectively restore and interpret portions of the Lexington-Concord Battle Road, as well as associated structures, properties and sites so that the visitor may better appreciate and understand the beginning of the American Revolution as a significant chapter in the American Historical Heritage” (NPS, 2012). The act specifically identified the following purposes of the park: “the preservation and interpretation of (1) the historic landscape, (2) sites associated with the causes and consequences of the American Revolution” (Ibid, 2012).

Early park development, over the course of

decades, included purchasing properties and land, demolishing modern structures, and, in some cases, leasing land back to farmers to maintain traditional patterns of agriculture. Throughout the 1960s and 1970s, the NPS continued to develop interpretive programs and facilities for visitors. Visitor facilities included a station at Fiske Hill, as well a Visitor Center at the North Bridge. In 1976 for the forth Bicentennial of the Revolutionary War, the NPS constructed the Battle Road Visitor Center, located at the opposite end of the park from the North Bridge and near Fiske Hill and Parker’s Revenge (Ibid, 2007). This visitor center was remodeled in 1997, and in 1998 the award-winning multimedia presentation, “The Road to Revolution,” debuted. This video now serves as the Park’s main interpretive programming (NPS, Long-Range Interpretive Plan, 2015). In the early 2000s, Minute Man National Historical Park completed important repairs and renovations of historic structures and completed a variety of planning exercises, including Cultural Landscape Reports, Interpretive Plans, and Foundation Document planning.

Minute Man Today: Park Challenges//

Today the park experiences multiple challenges. A particularly significant struggle is

the conflict between the modern roads that border, and at times, bisects the park. The roads not only impacted the physical boundaries but also impact the interpretive and educational mission the park seeks to achieve. The NPS has been able to affect some road closures and restorations of the Battle Road, notably the completion of the Battle Road Trail in 2005. Still, the park's efforts to close Route 2A have failed.

The park remains bisected by both Airport Road, Entrance Drive which provides access to the Hanscom Air Force base, and Route 2A (Refer to Current Park & Surrounding Context Map). The roads through the park create heavy traffic flow of fast moving cars. The park lacks a sense of arrival due to the placement of the visitor's center and road design, resulting in fewer visitor visits. The east main entrance to Minuteman National Historical Park currently lacks a sense of arrival. The initial experience for most visitors is limited to the parking lot and interpretive displays in the visitor center. During the critical first thirty minutes of arrival, visitors typically have no opportunity for meaningful appreciation of the battlefield landscape—the most powerful interpretive tool of all.

The Traffic Analysis report conducted by the NPS in 2002 reported that congestion found on Rte. 2A causes heavy volumes, delays and speeds over Park speed limits all impact the overall visitor

experience to the Park. The average daily traffic volumes on Rte. 2A have increased by a factor of 4 from year 1960, thus has seen tremendous growth in the last 40 years (Bryan, 2002). Other detrimental impacts Minute Man faces due to these heavy traffic flows: safety concerns as accident rates are high, environmental concerns such as air quality and drainage, visual and noise pollution where viewing and hearing automobiles detracts from experiencing the historic landscape (Ibid, 2002).

Current Park & Surrounding Context Map //



1775 BATTLE LANDSCAPE

To understand the events of the Battle and the current Park landscape, it is critical to examine the landscape as it was on the day of April 19, 1775. A recreation of the battle landscape will help with the overall comprehension of the battle events. And examination of different documents such as, old maps, tax records, wills and deeds, can provide insight into land recreation of 1775.

The area of Lexington and Concord was settled for more than a century before the events of the Battle took place. Majority of the land use around this time was devoted to farming. In 1775 farming at this point switched from communal-based to individual or market-based farming and thus, individual properties were delineated with fencing, using either stone or wood. The individual farms further divided the landscape by separating the different crop fields, which sometimes also required the stone or wood fencing. Certain practices were followed and commonplace in colonial farming. The farm land was divided between pasture, tilled field, meadow, orchard and woodlot; all farms required all or a variation of these farming principles. Colonial orchards or pastures customarily were completely fenced using either stone, wood or a combination of

the two. (Malcom, 1985).

The Historic Grounds Report, by Joyce Malcom, provides a detailed description of the battlefield landscape of 1775. Malcom accounts for the different farm owners within what would become the park boundary and provides detailed maps of the colonial farming landscape.

The property of Ebenezer Fiske was the largest and most prosperous farm in the area in 1775. Presently, the East End of the Park, Fiske Hill, is named after this family farm. During 1775, Concord Road or Battle Road, cut through the property as it crossed over the hill; two years prior, 1773, the town of Lexington paid the Fiske family and altered the portion of Concord Road making it "better accommodating of travelers" (Malcom, 1985). In addition to Concord Road, another road of interest described by Malcom was a bridleway, which formed the boundary between the Nelson family farm in Lincoln from the Whittemore family farm in Lexington. Malcom notes that this bridleway played a critical role in the Battle of 1775, as it was "probably the back road to Bedford taken by Josiah Nelson to warn the Bedford Minute Men of the arrival of the British" and the stone wall that lined the road is still

present (Ibid, 1985).

During 1775 there were several farmers living in the area, all had several acres, and thus the farm buildings and homes were spaced apart in the landscape. The Thorning's lived in what is today known as the Whittemore House in the Park. On the day of April 19, 1775 William Thorning used the hilly and rocky landscape to his advantage against the British, the cross walls, or stone walls, dividing the fields also "afforded Thorning additional camouflage" (Ibid, 1985). The fields were strewn with boulders and from "his hiding place behind a large boulder he managed to shoot two of the passing soldiers" (Ibid, 1985).

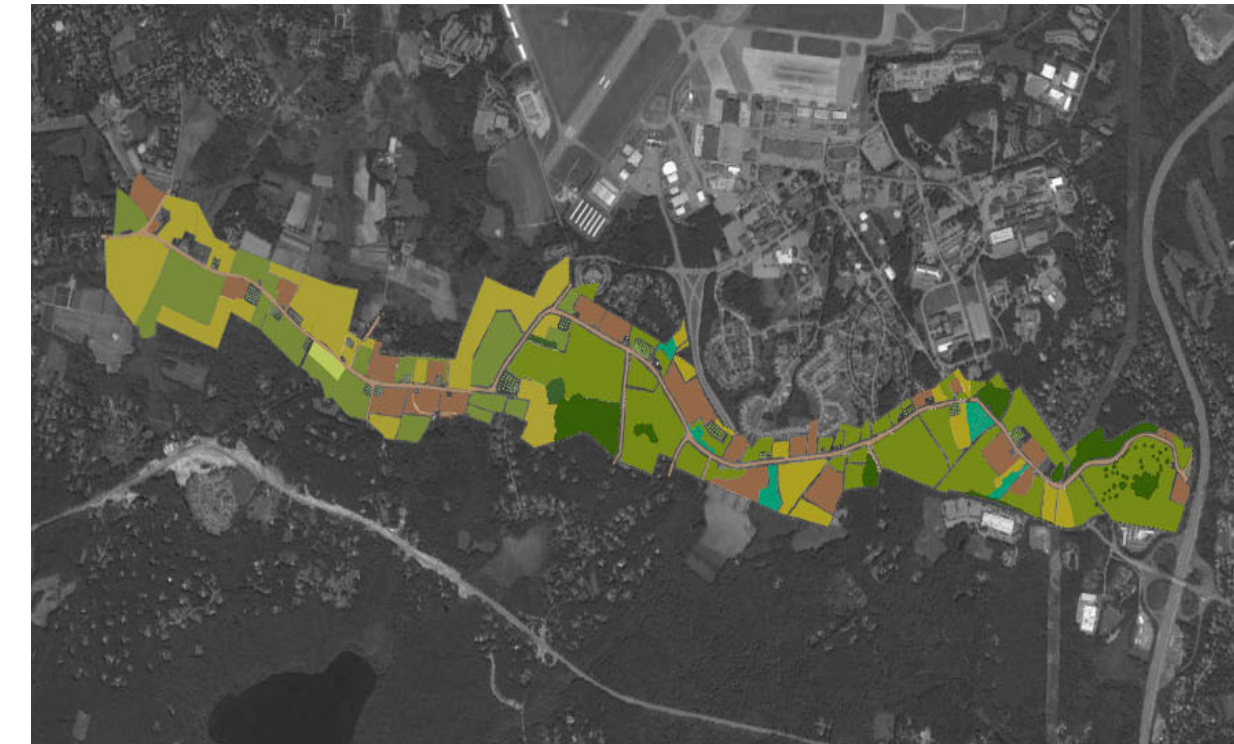
Just east of the old Lexington-Concord line, was the homestead of Jacob Foster, which was a small property just north of Concord Road. Malcom notes that it is on the Foster property where Paul Revere and Dr. Samuel Prescott were stopped by British officer in the early morning hours of April 19. Though the Foster Farm was small, Concord Road split the property and both sides of the property were bounded with stone wall. Thus, it is the Foster pasture "where the British waited to accost, Revere and Prescott, and it was the stone wall marking the old Lexington-Concord line over which Prescott jumped his horse to his escape"— it is the parcel north of the road would have been pasture (Ibid, 1985).

The last farm in the present-day Park boundary is known as Meriam's Corner and was a family farm during 1775. The farm had a tillage plot in front of the family homestead and was surrounded with large open pasture fields. Concord Road at Meriam's Corner, was altered dramatically from the width of the road. The width and route of the road was "altered several times near Meriam's Corner," and it's this house which occupied the northeastern side of Meriam's Corner, "as the intersection of Concord and Bedford roads was known, belonged in 1775 to John Meriam" (Ibid, 1985). This stretch of the road played an important part in the running battle. It was at Meriam's Corner that the Americans, who fought at North Bridge, waited for the British. "They knew once the British left the protection of the ridge which ended just west of Meriam's Corner and set out across the long causeway they would be vulnerable and exposed" (Ibid, 1985). Therefore, it was at Meriam's Corner that the American's "poured a sharp fire on the retreating columns, causing them loss, and then passed round the next hill to renew the attack" (Ibid, 1985).

It was also in this area during 1775, Meriam's Corner to the Lincoln line, that Malcom notes that the farms and houses were owned or occupied by widows or single women. Malcom states that the reasoning for this remain unclear, but "the stretch of road was occupied, and it formed something of a small

shopping district, whose residents must have been particularly terrified by the fierce firing as the British columns passed their homes" (Ibid, 1985).

1775 Field Patterning Analysis Map //



1775 field arrangement map throughout the park. Personal map, compiled by GIS, *The Scene of the Battle* - Malcom & Brian Donahue's maps in *The Great Meadow*.

- Historic Battle Road
- Meadow
- Pasture
- Tilled Field
- Wet Meadow
- Woodlot



IMPORTANCE OF STONE: WALLS, OUTCROPS & DESIGNED INTERVENTIONS

Robert Thorson, a professor at the University of Connecticut, provides a detailed account of the geology and history of New England's stone walls in his book, *Stone by Stone*. New England became stony during the Laurentide Ice Sheet, which covered North America, it "stripped away the last of these ancient soils, scouring the land down to its bedrock, lifting billions of stone slabs and scattering them across the region," thus Thorson notes that New England's stone walls are related to its geologic history (Thorson, 2002). The soil left behind was till or a "hardpan soil," and the settlers found a "landscape underlain by lodgment till, and they encountered the glacial lake-bottom alluvial landscape dominated by sand and silt" (Ibid, 2002). After deforestation and intense tillage, the soil became more exposed to cold, causing it to freeze before each spring where it thawed; which accounts for frost heaving in which stones are incrementally lifted through finer-grained soil to the surface, "clearing stones from pastures and fields became an annual chore for colonial farmers (Ibid, 2002).

Thorson writes that stone walls made an excellent fence over the wood fence because "there were no posts, rails or boards to rot," which made

for an early pioneering farming phenomenon (Ibid, 2002). The transition from communal farming to individual, which transitioned to use the stone as territorial markers (Ibid, 2002). Stone walls were also used to mark town lines, "the old line between Lexington and Concord was marked by a broad, straight stone wall," (Malcom, 1985) before the establishment of Lincoln in 1754 but still existed in 1775.

There is a distinction between function and structure of the colonial stone walls. The stone walls were used as retaining walls, boundary markers, cattle guides, pens or foundation walls and the structure varied between single and double walls (Ibid, 2002). The "majority of walls in New England are tossed walls, taking on either the single wall type – built around pastures for the expedient combination of stone disposal and fencing," the walls were constructed for land clearing rather than fencing (Ibid, 2002). The stone walls, how they are constructed and built, are also linked to bedrock and glacial geology, Thorson finds. He notes that the stone walls of New England are "the height of a man's thigh because of ergonomic factors (Ibid, 2002). The beginning stone walls were boundary markers and

the more fundamental purpose to hold waste stone, which littered farm fields, they were understood as linear landfills holding the agricultural refuse.

Fieldstone walls were closely associated with the colonial landscape and the Battle of 1775. Thorson states that the stone walls were used as “battlements by the colonial militia to protect them from British fire – the minutemen gave the redcoats ball for ball from behind each and every farmyard wall” (Ibid, 2002).

LET THE STONES TELL THE STORY //

Redesign of three specific battle locations provides opportunities to interpret, protect and preserve the integrity and story at Minute Man National Historical Park. The examination of some of the Park challenges, management plans and literature, the historical integrity at Minute Man is threatened, especially as the date moves further away from April 19, 1775. A redesign and examination into creating a more connected network, which better links key battle areas can help to reveal the historical relevancy in people’s minds.

The east main entrance to Minuteman National Historical Park currently lacks a sense of arrival. The initial experience for most visitors is limited to the parking lot and interpretive displays in the

visitor center. During the critical first thirty minutes of arrival, visitors typically have no opportunity for meaningful appreciation of the battlefield landscape. This project reconfigures the existing parking lot and reorients the arrival directly onto a point on the historic Battle Road. From there, visitors follow the road and pass the rock outcrops of Parker’s Revenge, a newly excavated and significant site, and approach the redesigned existing visitor center at a new entrance.

The proposed landscape design references eighteenth-century land uses—meadows, pastures, and woodlots—and incorporates existing rock outcrops with new stones (similar but carefully distinguished from historic fabric) to create thresholds, seating, and sites for entrance and interpretive signage. As visitors arrive by car, they pass through larger-scaled thresholds of woodlots that open into meadows with expansive views. On leaving the parking lot, they proceed on foot directly on Battle Road—the principal landscape feature of the site—pass through the restored agricultural landscape, and finally arrive at the visitor center. The rock outcrops of Parker’s Revenge are of particular importance to the design. Colonial militia troops hid among the rock outcroppings and stonewalls of this rocky, wooded ledge and fired at the British regulars trying to return to Boston. In this landscape design, the boulders and historic stonewalls are exposed,

giving the same vantage point Parker’s militia had. This helps visitors interpret the historic battle, but it also gives today’s visitors a strong point of orientation in the landscape, with views up and down Battle Road.

A new interpretive trail reveals the battle lines of this violent engagement, while serving to loop visitors from the parking lot up to Parker’s Revenge, to the historic Whittemore House (maintained as another site of interpretive programs) and through the visitor center. Visitors then can return to the parking lot by exiting the visitor center and crossing the meadows, rather than retracing their steps.

Throughout the landscape design, key points of arrival and interpretation are distinguished by new arrangements of boulders and cut stone, which suggest but are clearly distinguishable from the many glacial erratics, rock ledges, and other outcrops which are characteristic of the topography in the area. Boulders are placed at the park entrance and again at the entrance onto Battle Road, which emphasize their importance. The newly designed boulders provide seating, bases for signage, and orientation using a material vocabulary. The existing glacial boulders and ledges on site are characteristic of the regional landscape and were key tactical features in the battle of 1775. Together, the stones tell the story in this design.

Importance of Stone //

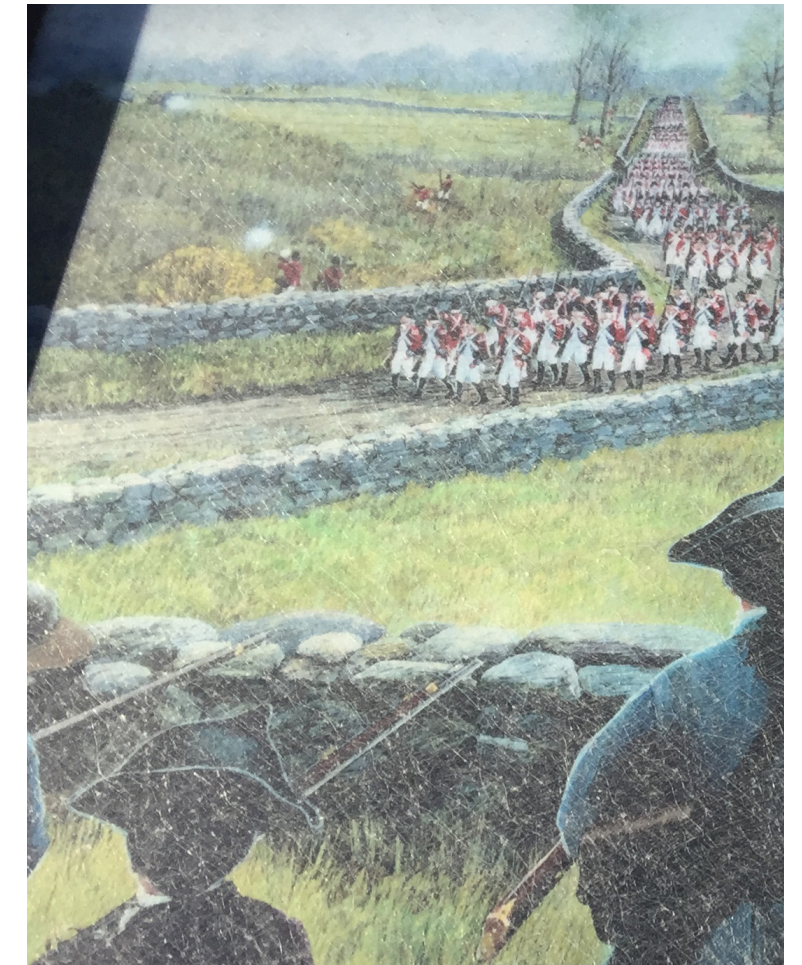


Photo taken from Minute Man Park Service Website.

METHODS

The interpretation of historic battlefield landscapes is threatened as we continue to move further away from these specific moments in history. It is important for these historic and nationally significant places to include a component in their management plans to assist with the engagement, visitation and interpretation of these places. Two questions emerged from the research, which helped to frame the design process:

What role does the design of the park have on the visitor's experience of the battlefield landscape and how can that design be improved?

Can design assist with people's connection to place? More specifically, how would design at Minute Man Park assist with the Park's long range interpretive plan?

The GIS mapping and analysis of historical maps helped to inform the decision to select three separate locations, all important to the battle that highlight specific landscape features critical to the battle of 1775 and the landscape. The analysis informed the decision to select three locations as a means to create a landscape network to create a more meaningful park experience.

Along the landscape network, the design sought to implement the same materials at each location to enhance the network and develop a distinguished material language to assist with battlefield interpretation. The design looked specifically at circulation, stones, vegetation, and selective canopy removal as a layering process to implement the proposed design at the three locations.

GIS MAPPING//

HISTORIC MAPS//

DESIGN PROCESS//

1775 LANDSCAPE: FIELD PATTERNING & BATTLE RD.//

The 1775 surrounding landscape and area within the present park boundary, was primarily open fields. Agricultural fields of till, meadows and pastures repeat throughout the landscape. Meadows were primarily used for hay production. Woodlots were productive and cultivated for trees for fire wood, building, etc. The minimal forested areas and fields created an open landscape in which the Battle of 1775 was fought - long site lines and expansive views allowed the Colonists to easily spot and track the British movements.

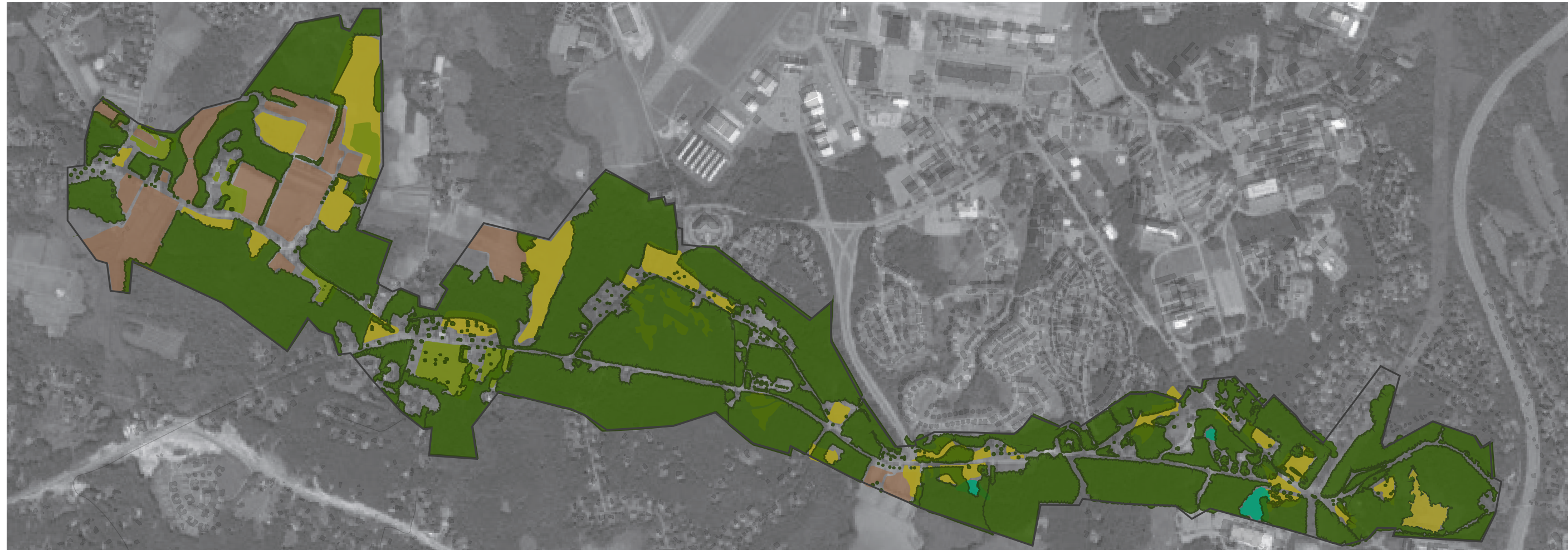


- Historic Battle Road
- Meadow
- Pasture
- Tilled Field
- Wet Meadow
- Woodlot



MINUTE MAN NATIONAL HISTORICAL PARK TODAY //

The current park landscape is nestled in the suburban towns of Concord, Lincoln and Lexington. To the North is the Hanscom Airforce Base, to the South is Minute Man High School. Route 2A, a major roadway, bisects the park. Most people either experience the park through a car at 40 mph or use the Battle Road Trail for recreation. The park struggles to connect people to the history and intense fighting that occurred on April 19, 1775. The two entrances to the park have minimal signage and often people are unaware of the significant landscape they entered.



- Historic Battle Road
- Present Park Boundary
- Roads
- Surrounding Buildings
- Meadow
- Tilled Field
- Wet Meadow
- Woodlot



SURFICIAL GEOLOGY, BEDROCK & 1775 BATTLE MOVEMENTS//

The bedrock and surficial geology are intrinsic and specific to the landscape in which the park is situated. Granite, Mafic and Carbonate bands of rock run through the site. There are many bedrock outcroppings riddled throughout the landscape. The large number of stonewalls throughout the landscape, is directly due to this. When looking closer at the battle movements, it is apparent that fighting occurred where these rock outcroppings are. Stones, glacial erratics and stone walls provided shelter for the Colonists firing on the British troops.



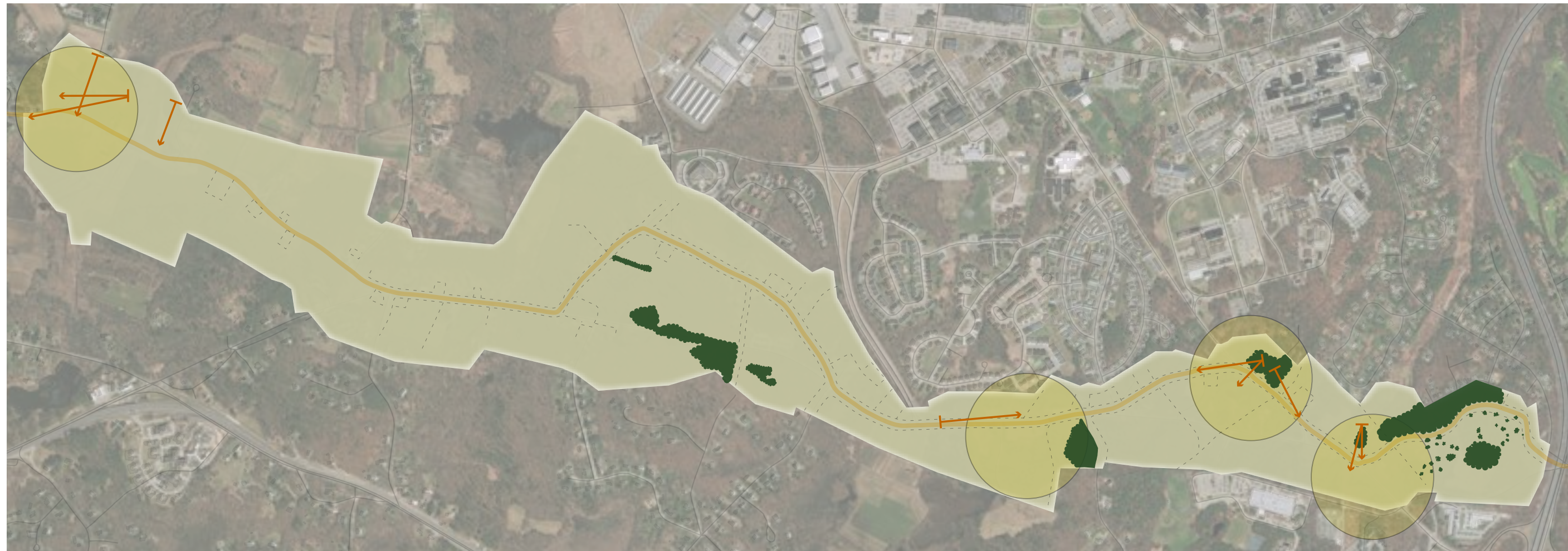
INTERSECTION OF HISTORIC BATTLE RD & RT. 2A//





The historic route of the original Battle Road or Old Concord Road [marked in yellow on the map], which ran from Concord to Boston, is currently buried beneath Route 2A. The areas where Route 2A cover Battle Road are represented in the thick outline, starting in Meriam's Corner and another section in the middle of the park. The Historic Battle Road, where the fighting occurred along, today is masked by fast moving traffic and the connection is lost. The focus areas of the design are in places where the Historic connection is lost to Battle Road.



1775 WOODLOTS & CRITICAL VIEWS//

The 1775 landscape was an open one, with many agricultural fields and limited, though productive, woodlots. The open landscape provided expansive views into the distance. These long views were critical in the Battle as they provided Colonists with long site lines of the British troops. The open landscape and long views were critical in the Battle and these views depicted in this map represent the critical views in the Battle at Meriam's Corner, the capture of Paul Revere and the Battle at Parker's Revenge.



-  Battle Road
-  Focus Areas
-  Historic Critical Views
-  Woodlot



EXISTING TREE CANOPY & SCENIC VIEWS

The landscape of the park today has dramatically changed. The park is almost completely forested and those critical Battle views and expansive landscape is lost. However, there are moments where the evolved landscape is beautiful and lovely. These views are called out in white and provided a framework in the design process as ones to enhance.

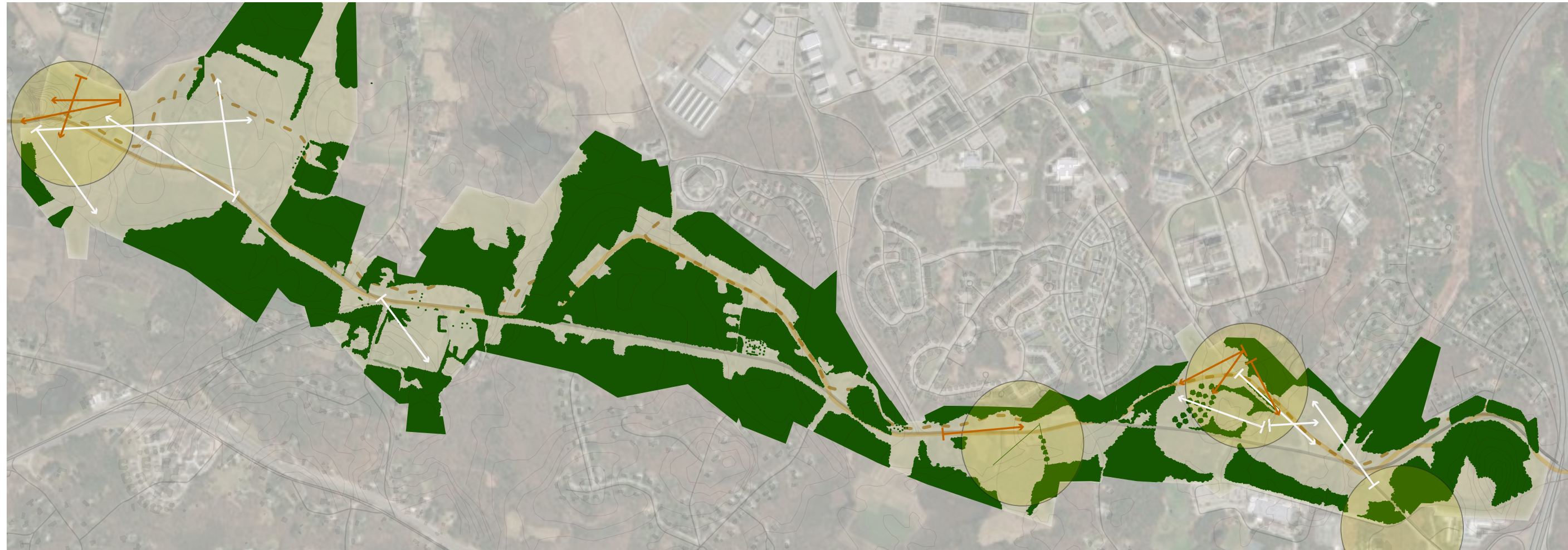


- Battle Road
- Battle Road Trail
- Existing Beautiful Views
- Focus Areas
- Woodlot



PROPOSED TREE CANOPY & RESTORING HISTORIC VIEWS, EMPHASIZING EXISTING VIEWS //

The proposed design of Meriam's Corner, Paul Revere Capture Site and Parker's Revenge, incorporates these historic and existing views into the design. The forest canopy is very carefully and selectively removed in these areas to bring back the character of the 1775 landscape while enhancing existing views. The long expansive views, which were critical in the Battle, are restored and a more open landscape emerges. Selected tree removal is done at each designed focus area. The newly designed open landscape is noticeably different from the rest of the park, which helps visitors to engage with the history.



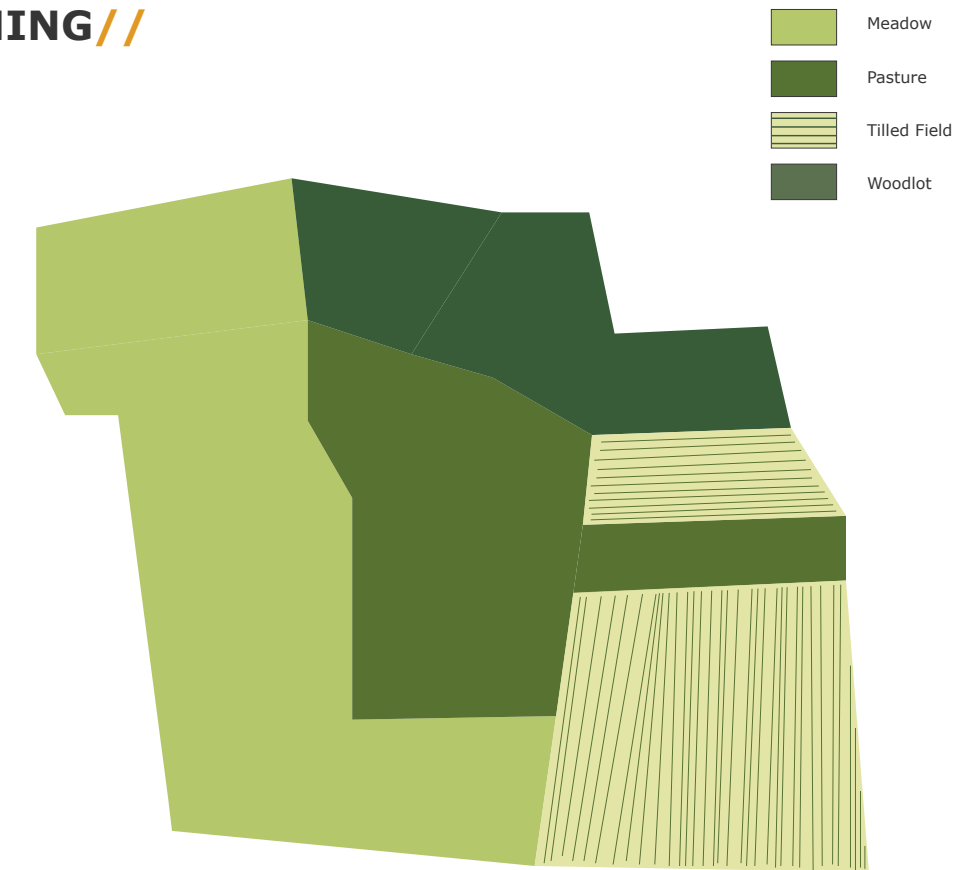
- Battle Road
- Battle Road Trail
- Existing Beautiful Views
- Focus Areas
- Historic Critical Views
- Woodlot



ILLUSTRATIVE DIAGRAM: FIELD PATTERNING

1775 FIELD PATTERNING //

The 1775 field patterning was of meadow, pasture, tilled field and woodlot. This field structure was repeated throughout the landscape. This patterning and repetition of the 1775 landscape, helped to frame the current design and to create a new patterning in the current park landscape. This diagram helped to frame landscape patterning & helped to inform landscape patterning to introduce into the park.



DESIGN

PROPOSED PARK PLAN //

The proposed design at Minute Man focuses on three specific areas: Meriam's Corner (west entrance), Paul Revere Capture Site & Parker's Revenge (east main entrance). The landscape designs are focused on making the landscape central to the visitor experience & reveal the historic character of 1775. The design uses Rt. 2A as a fixture in the landscape, as it was on the road where the running battle took place & changes the materiality of the road to bring visual awareness while assisting to reduce traffic speeds.



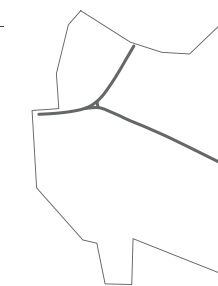
MERIAM'S CORNER: West Entrance

The landscape in 1775 at Meriam's Corner was extensively farmed; pastures and tilled fields were found throughout, which created an open and expansive landscape. The many farm fields and expansive openness of the landscape led to a battle on April 19, 1775 to be fought in these fields and occur in this exact place. At present the landscape of Meriam's Corner is not expressed or viewed as a Battlefield; British soldiers were attacked and killed by the forceful Colonists defending their farmland. This corner also serves as the West Entrance into Minute Man National Historical Park. The landscape, however, is failing to read as a battlefield landscape and as an entrance into this important National Historical Park. The redesign of Meriam's Corner intends to restore the 1775 landscape character and improve views and site lines to the entrance.

A traffic circle is designed as a gateway into the park to not only reduce entry speeds into the park but to also visually connect visitors with landscape and provide them with long views into the battlefield and to the existing agricultural farm. Battle Road is resurfaced to not only visually reveal this historic feature (buried through this portion), but to also create a material change to reduce traffic speeds

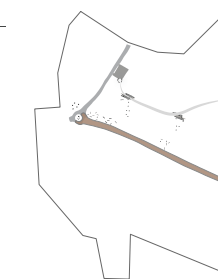
when entering the park; help visitors or others to feel the sense of entering a prominent place. The dense shrubby undergrowth and trees are removed and replaced with meadow and expanded agricultural fields to evoke 1775 landscape and to visually set this area apart. The parking lot is reoriented to the North of the Meriam House. Immediately this provides visitors with expansive views over the newly designed meadow landscape and reflect the landscape character of 1775. Stones are an important material used in the design. Scaled-figure stones are used to symbolize deaths/ intense fighting that occurred here. The human-scale hopes to connect people to the battlefield and each are engraved with quotes from British and Colonial soldiers quotes from the day of the Battle. The new trail begins at the parking lot and brings visitors out across the meadow-scape and through designed scaled-figure stones. Along the trail views are framed to provide visitors with expansive/ long site lines looking out across the meadow, to the agricultural fields and at these stone-scaled figures, which are placed in the landscape along battle lines. The intention for this design is to enhance the landscape experience to better connect people to this important battlefield.

EXISTING CIRCULATION



No Way-finding
Park Lacks a Defined Threshold
High Speed Traffic
Historic Battle Road Sunken

PROPOSED CIRCULATION



Battlefield Trail
Introduced Figure Stones
Gathering Moments
Resurfaced Rt. 2A

VEGETATION



Existing Agricultural Fields
Not as Open as 1775

VEGETATION



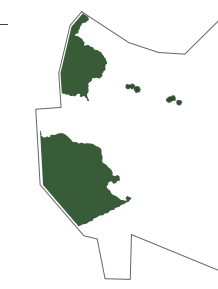
Potential Field Vegetation
Evoking 1775:
Meadow, Pasture & Agricultural Field

CURRENT CANOPY



Existing Forest Filled with
Invasives
Forested Areas Limit Site Lines

SELECTIVE CANOPY CLEARING



Potential Tree Canopy
Cleared to Open Views
Restoring 1775 Landscape

EXISTING MERIAM'S CORNER



Park Boundary
Current Meriam's Corner

PROPOSED MERIAM'S CORNER

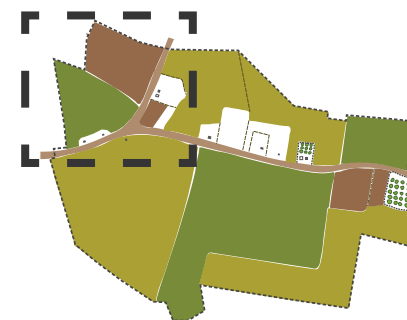


Park Boundary
Potential Meriam's Corner

MERIAM'S CORNER: West Entrance

EXISTING CONDITIONS //

- 1 Meriam's House
- 2 High Point - Critical in 1775 Battle
- 3 Ambiguous Entrance: poorly defined, fast traffic triangle
- 4 Battle Road Trail close proximity to road - heavy traffic flows
- 5 Wooded entrance - limited site lines, poorly defined park boundary
- 6 Visitor parking lot - not near house, battle road trail begins here
- 7 Beautiful existing meadow
- 8 Thick woods - limits site views, not true to 1775 character, filled with invasives
- 9 Historic agricultural field - no visual connection



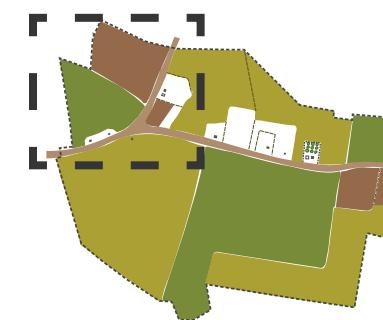
Historic 1775 Landscape of Meriam's Corner



Scale 1:80

PROPOSED CONDITIONS //

- 1 Meriam's House
- 2 Restored Historic Battle Road - new material
- 3 New Traffic Circle - calm speeds, defined entrance
- 4 Gathering Moments - visual views restored, seating
- 5 Introduced Figure Stones - assist in interpreting battle landscape, engraved with quotes of soldiers
- 6 Relocated parking lot - closer to house, new trail/ interpretive moment begins
- 7 Restored Pasture
- 8 Restored Meadow
- 9 Cleared Landscape - restores 1775 landscape character, enhance views



Historic 1775 Landscape of Meriam's Corner



Scale 1:80

EXISTING PARK WEST ENTRANCE //



- 1 Park lacks clearly defined entrance - no threshold into park.
- 2 Battle Road is beneath Lexington Road. Attention is not drawn to this historically important road, instead it is buried.
- 3 Triangle does not manage high traffic volumes or fast speeds. No clear way-finding into park.
- 4 Dense vegetation inhibits site-lines while 1775 landscape character is lost. Visually landscape does not look important.

PROPOSED PARK WEST ENTRANCE //



- 1 Designed figure-stones. Human scale to represent fallen or standing soldiers. All engraved with quotes from the British or Colonial troops.
- 2 Newly designed traffic circle, helps to mitigate fast traffic speeds while providing a threshold into the Park. Historic Battle Road is re-paved with different material to bring attention to the historic road.
- 3 Human-figure stones to mark the entrance into the Park. Planting the traffic circle with native meadow grasses & monument hopes to draw attention to Park boundary, while providing an entrance.
- 4 Newly cleared forest, opens the landscape, provides long views & enhances site lines. Planted native meadow grasses evokes 1775 landscape character.

PAUL REVERE CAPTURE SITE

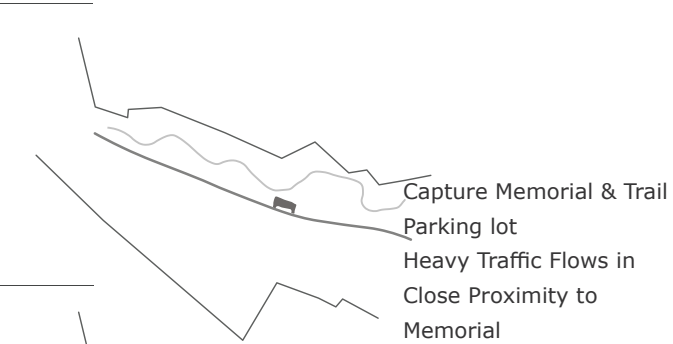
The 1775 landscape of this area were pastures and farm fields owned by the Brook's family. The landscape here in 1775 was open as the area was extensively farmed and worked. It was these open qualities of the working landscape in 1775, long site lines and no canopy cover, which led to Paul Revere's capture on his ride to warn the Minute Men. The landscape today, however, has drastically evolved since 1775 and no longer is the open character felt and the historic significance, intrinsic to this landscape, is lost. The redesign of the Capture Site intends to better situate the memorial in the landscape and evoke some of the 1775 landscape features that are lost today.

The visitor parking lot is moved across the Rt. 2A and is now located off Mill Street. This re-orientation provides visitors with long views towards the monument. An interpretive gathering node is framed to look at the memorial and provide visitors with information. A new trail brings people through the edge of the new pasture, where they can watch animals graze and walk along the wooded edge. The trail then connects visitors to a larger axial trail, with the focal point of the memorial in the distance. Along the way visitors walk the edge of the new meadow

and pasture. Stone seating provides visitors moments to rest and views are framed to emphasize the newly opened landscape. A safe cross walk helps bring visitors across Rt. 2A while also helping to slow traffic speeds along this corridor. The road is resurfaced with the same material used at Meriam's Corner to draw attention to the intersection of Historic Battle Road. A loop trail brings visitors around the memorial while connecting to Battle Road Trail. The intention for the redesign of the Paul Revere Capture Site is to help reveal the historical importance here while better connecting visitors to the landscape providing visitors with a more meaningful experience.

EXISTING

CIRCULATION



VEGETATION



CURRENT CANOPY

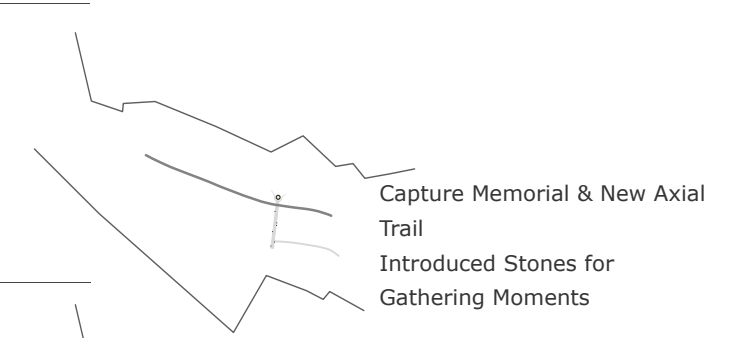


EXISTING PAUL REVERE CAPTURE SITE

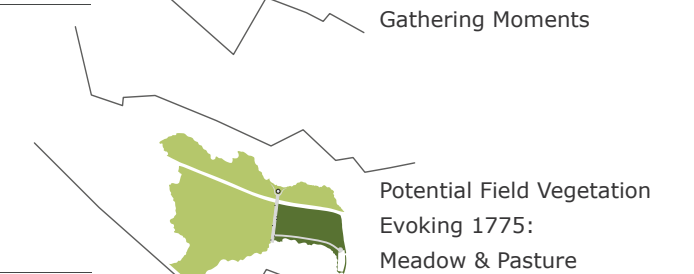


PROPOSED

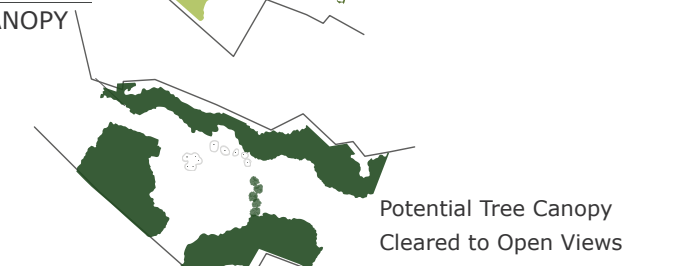
CIRCULATION



VEGETATION



SELECTIVE CANOPY CLEARING



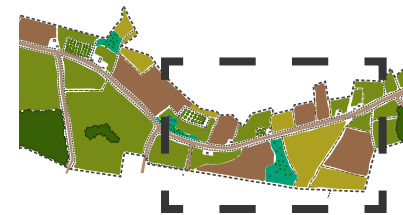
PROPOSED PAUL REVERE CAPTURE SITE



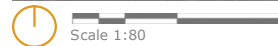
PAUL REVERE CAPTURE SITE

EXISTING CONDITIONS //

- 1 No connection to meadow - split by Route 2A
- 2 Thick forest, no visual lines - inhibits 1775 landscape character
- 3 Sand Parking lot - not designed as entrance to the memorial, no interpretive moment
- 4 Paul Revere Capture memorial, off Battle Road Trail - close to Rt. 2A
- 5 Rt. 2A bisects meadow, historic battle road is underneath 2A here - no visual markers to highlight important road section

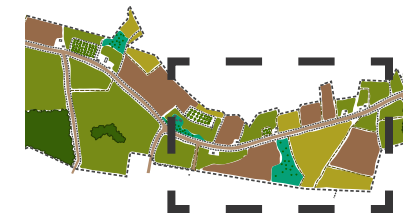


Historic 1775 Landscape of the Paul Revere Capture Site

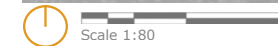


PROPOSED CONDITIONS //

- 1 Restored meadow to evoke 1775
- 2 Restored pasture - grazing opportunity
- 3 for Park to use evoking 1775
- 4 Newly design path and axial trail. Brings people to monument, on edge between pasture & meadow, provides visitors with seating and framing views of meadow and pasture, axial path lined with shade trees
- 5 Re-located parking lot with gathering interpretive area, positioned to provide visitors with view of memorial
- 6 Re-surfaced road, new material to emphasize Historic Battle Road
- 7 New loop trail, brings visitors around memorial & to new path across street



Historic 1775 Landscape of the Paul Revere Capture Site



EXISTING PAUL REVERE CAPTURE SITE //



- 1 Rt. 2A & Historic Battle Road intersect each other - attention is not brought to this historically important road, instead it is buried.
- 2 Capture memorial is close to Rt. 2A, no real relation to surrounding landscape. Battle Road trail connects to monument. Limited interpretive experience.
- 3 Dirt parking lot. No threshold or framing entrance to mark/ explain the capture site & not related to memorial.
- 4 Dense vegetation inhibits site-lines while 1775 landscape character is lost. Landscape not true to the context Paul Revere was captured in.
- 5 No connection to meadow - no way for visitors to cross Rt. 2A, limits experience.

PROPOSED PAUL REVERE CAPTURE SITE //



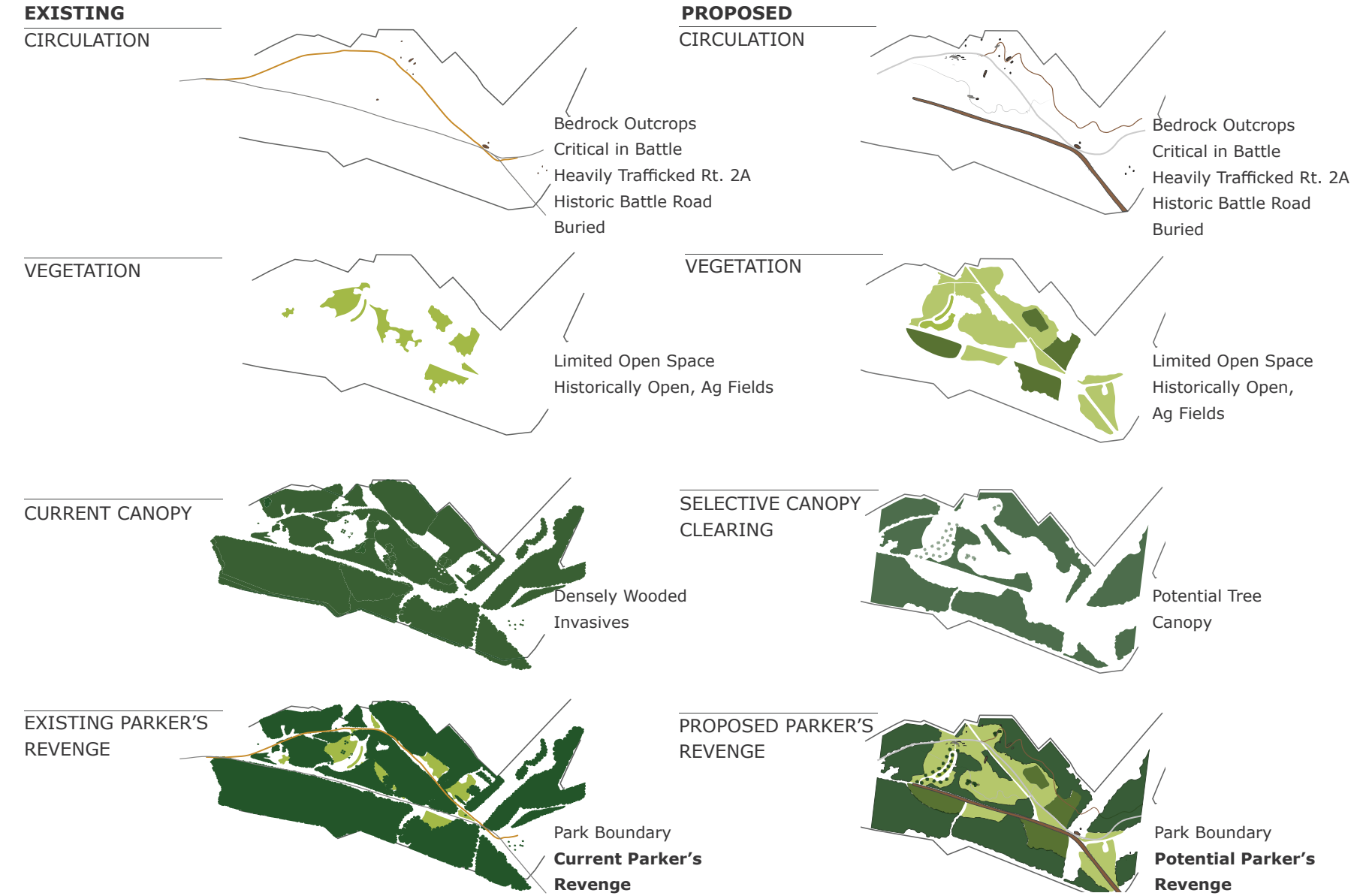
- 1 New material paving on Rt. 2A. This will call attention to Historic Battle Road both in the car and visually.
- 2 Axial monument trail provides visitors with safe walk-way over Rt. 2A to connect to the newly designed pasture and meadow. New trail provides seating while allowing visitors to freely wander.
- 3 Loop trail brings visitors around the monument and connects across.
- 4 Newly cleared pasture - grazing introduced for the park.
- 5 Restored & new fence - evokes 1775 when this area was entirely open.
- 6 Restored & new stone wall reminiscent of 1775.
- 7 Newly designed stone fence rails - frame pasture & provide entry.

PARKER'S REVENGE: East Main Entrance

Parker's Revenge is another critical Battlefield landscape. In 1775 the Colonial Militia Men took coverage in the woodlot on the hill and behind boulders scattered throughout the landscape to fire upon the British troops, marching in an open landscape. The British did not stand a chance against the savvy colonial farmers. Apart from the productive woodlot, the landscape was rather open as again it was cultivated farm fields. Thus, the colonial troops had long site lines of the British troops on their retreat to Boston. The historic landscape today, however, is hidden by invasive forest and shrubby undergrowth and is no longer seen as a key place or viewed as a battlefield.

The **selected removal of shrubs and trees creates a more open landscape and provides visitors with long site lines/ views**, which assists with orientation and evokes the 1775 landscape character. The **entrance of the park is clearly defined with long site views in and newly designed stones mark the entry and act as a threshold into the Park.** Airport Road has a material change to improve visual character, while **Battle Road gets the same material change** as the previous sites to bring visual importance and to slow traffic through this section.

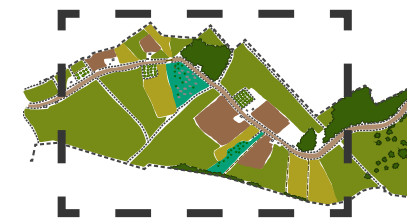
The visitor center is placed in an open meadow landscape and the entry is reoriented to provide easy movement through. The **open meadow surrounding the park references 1775 landscape and provides long visual connections to the Whittemore House and Parker's Revenge.** The parking lot is reoriented to bring people directly onto Battle Road and is visually aligned to Parker's Revenge. The view is framed for visitors to look at the rock outcroppings and connection is made to this important landscape feature. **A newly designed battle loop trail brings visitors through the Parker Revenge site and near the boulders for seating.** The trail references battle lines and provides people with long views onto the new meadow-scape. The trail connects people to the Whittemore House and to the Visitors Center to create a more connected landscape walk for visitors. Throughout the landscape design, **key points of arrival and interpretation are distinguished by new arrangements of boulders and cut stone**, clearly distinguishable from the many glacial erratics characteristic of the landscape. **The design intends to make the landscape central and evoke the 1775 landscape character to improve the visitor experience.**



PARKER'S REVENGE: East Main Entrance

EXISTING CONDITIONS //

- 1 Visitor Center
- 2 Bloody Bluff fault zone, largest bedrock outcrop in Park
- 3 Parker's Revenge, critical battle site but limited visitor experience
- 4 Main parking lot for visitors - not related to surrounding landscape
- 5 Park Main Entrance, ambiguous way-finding, no clear directional sense, entrance not marked with a threshold
- 6 Whittemore House, witness structure
- 7 Thick forest, riddled with some invasives, no connection to this side, site lines are impaired, impacts directional sense into park - hinders entrance experience



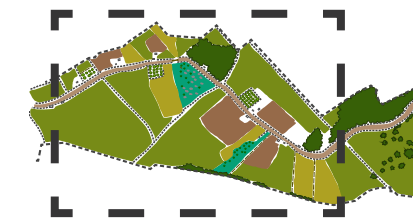
Historic 1775 Landscape of Parker's Revenge



Scale 1:200

PROPOSED CONDITIONS //

- 1 Newly oriented Visitor Center - relates to surrounding landscape - visual connection to Parker's Revenge & Whittemore House
- 2 Exposed, emphasized bedrock outcrop
- 3 Stone Gathering space before walking newly designed battle loop trail following battle movements
- 4 Orchard parking lot, reorients visitors to Battle Road Trail, stone gathering/interpretive moments
- 5 Opened entrance, evokes 1775 landscape, new stones act as thresholds
- 6 Whittemore House - New battle loop trail connects visitors to, new pasture & meadow
- 7 Pasture & Meadow, cleared landscape evokes 1775 landscape, improves visual character



Historic 1775 Landscape of Parker's Revenge



Scale 1:200

EXISTING PARK WEST ENTRANCE//



- 1 Battle Road Trail, Historic Battle Road, same road British soldiers retreated to Boston.
- 2 Dense viny, invasive vegetation - inhibiting site lines & Battlefield landscape not represented. Visual connection to Parker's Revenge & outcrops lost. 1775 open landscape lost, limited site lines & those were critical in Battle
- 3 Airport Road impacts visual integrity through this section
- 4 Historic stone wall. In 1775 the road was lined on both sides with stone walls.

EXISTING PARK WEST ENTRANCE//



- 1 Battle Road Trail connects to newly designed Battle Loop Trail off Parker's Revenge. Removal of selected trees and shrubby undergrowth vegetation helps to open landscape evoking 1775 landscape character. Clearing also provides visitors with visual connections to rock out crops and battle road trail of Parker's Revenge.
- 2 Resurfaced Airport Road. Material strong enough to support heavy loads but color chosen to blend into landscape, assisting in restoring 1775 landscape integrity.
- 3 Newly constructed stone wall to bring back historic character of the road. Lining the trail with another wall conveys importance and helps to place emphasis on this battle landscape.
- 4

INDEX

Stone Typologies

Stones of the Park

Potential Introduced Stones

Clearing Typologies

Existing Sections

Proposed Sections

Edge Conditions

Meadow Edge

Pasture Edge

Paths

Woodland Edge

STONE TYPOLOGIES: EXISTING IN MINUTE MAN//

OLD

Stonewalls//

Stonewalls are a common characteristic throughout New England. Within the park boundary, stonewalls historically lined either side of Battle Road. Colonial troops used these to shield and fire upon the fleeing British troops. Today some of these historic structures remain as some of the only landscape features left from the Battle. Growth of lichen is a feature that helps distinguish historic walls.



NEW

Stonewalls//

Over the course of 250 years the historic stonewall begin to weather & crumble, as anything else. The Park Service has attempted to restore & replace this important features through the park. The newer walls are carefully designed & constructed - either dry laid or with mortar. Easy to distinguish the newer walls have stones with pink tints, as they were quarried from Maine.



NATURAL

Bedrock//

The Bloody Bluff Fault Zone runs through the Park, which creates large bedrock outcrops to be found throughout the East end. Critical in Battle.



Boulders//

Found along Battle Road Trail. Critical in the Battle; Colonist used these features to take cover, hide & fire upon the British Troops.



MARKERS

Engravings//

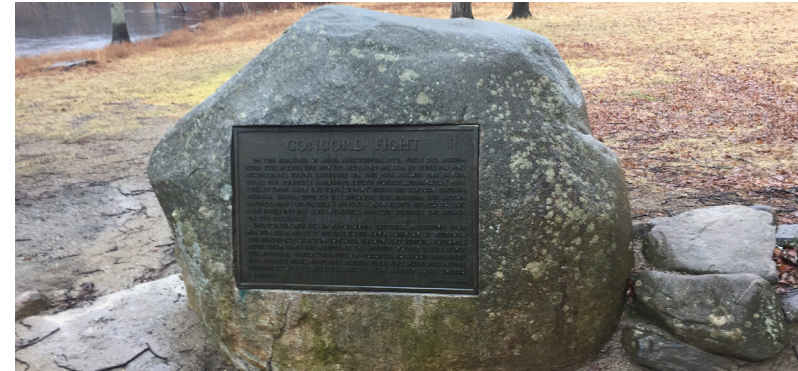
Throughout Minute Man stone is used to convey information. It is used sometimes to mark places where soldiers were killed, it is used as way-finding to mark the Historic Battle Road and it is used again as directional purposes for the NPS. The Park uses stones as signage.



MEMORIALS

Commemoration//

Throughout Minute Man & the surrounding area, stone is used as memorials. Often these are used to mark the location of fallen British soldiers, an event or where a battle took place. Either the memorial is a plaque on a boulder or is a designed stone wall, regardless stone is the main material used.

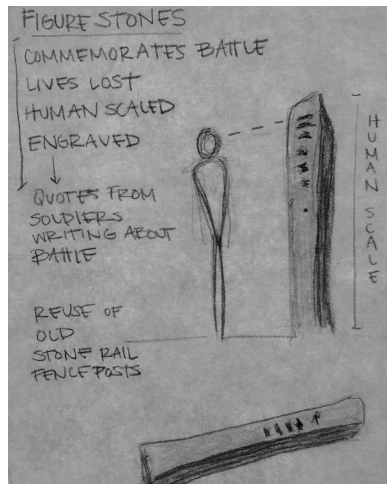


STONE TYPOLOGIES: POTENTIAL IDEAS FOR MINUTE MAN//

FIGURES

Battle Memorials//

To assist with the Battle interpretation, human scaled stones are introduced into Meriam's Corner & Parker's Revenge. The scaled stones physically evoke a figure & are placed according to battle movements. Some are standing others are turned over, both represent chaos & the lives lost. The stones are engraved with quotes from soldiers to connect visitors to a person; soldier who was killed.



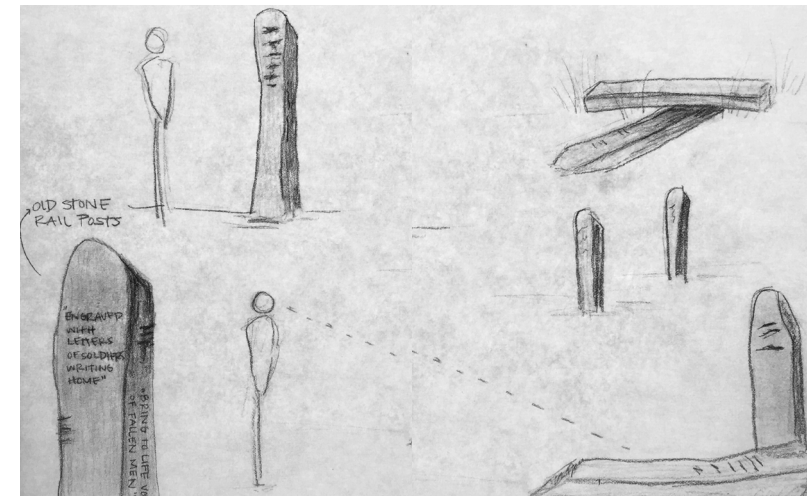
Trulove, 1998.



Reed, 2012.



Trulove, 1998.



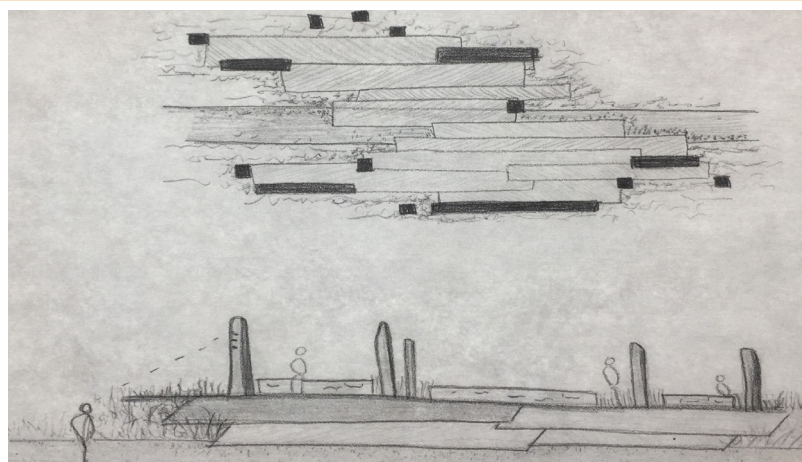
Trulove, 1998.



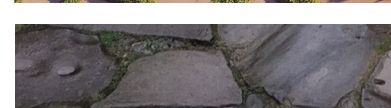
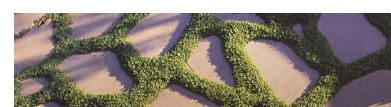
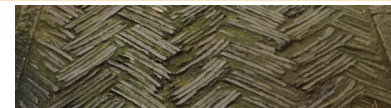
CONTEMPLATING

Gathering/Paving//

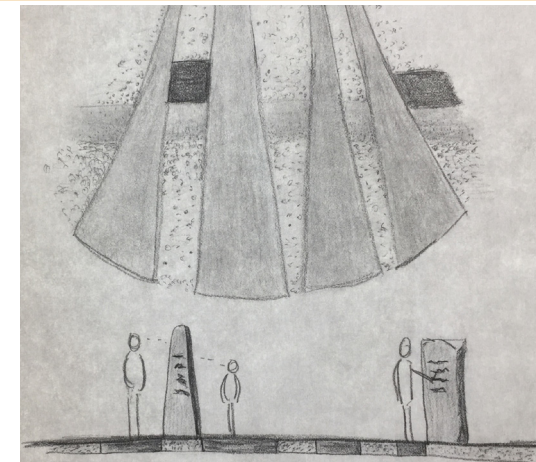
Gathering spaces are introduced, at the three design areas, along the new trail. These places are woven into the trail & allow people to sit, reflect & view the newly designed landscape. The paving pattern is designed to visually catch visitors attention, pull them off the trail & bring them to a specific moment. The gathering spaces allow for critical interpretation of the battlefield landscape.



Reed, 2012.



Trulove, 2000.



Trulove, 2000.

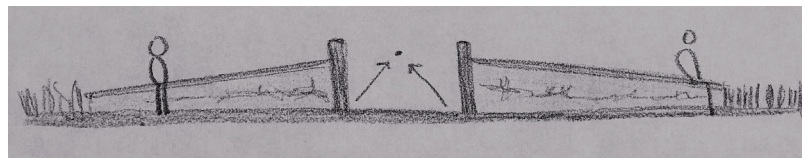


Trulove, 2000.

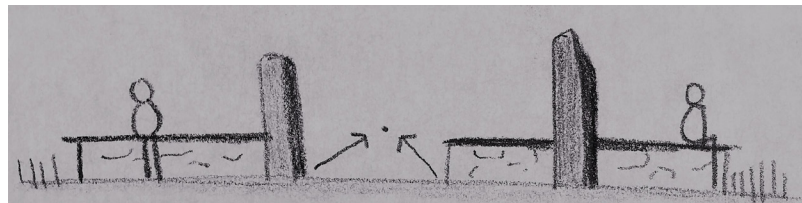
FRAMING

Threshold //

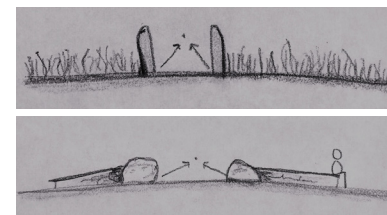
Throughout Battle Road Trail critical views in the landscape are framed to evoke the landscape character of 1775. The designed & selectively framed views help to create a coherent landscape network, which evokes the scene of the Battle of April 19, 1775. These thresholds hope to frame these critical views while encouraging visitors to wander into these newly designed landscapes of meadows & pastures.



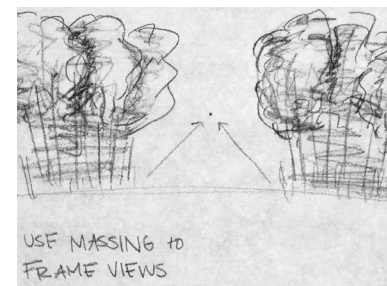
Reed, 2012.



Reed, 2012.



Holden, 1996.



USE MASSING TO
FRAME VIEWS

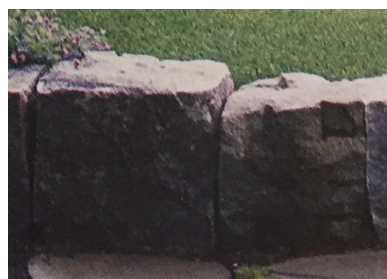


Holden, 1996.

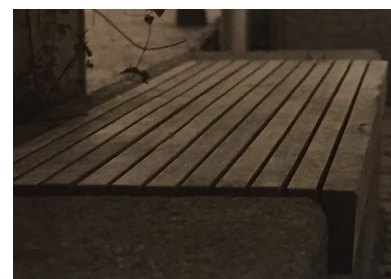
SEATING

Natural Seating //

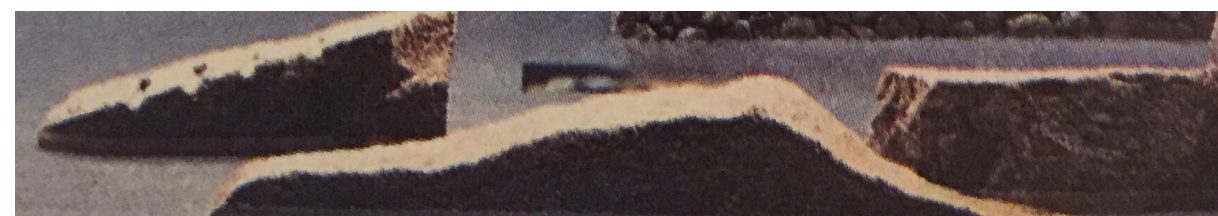
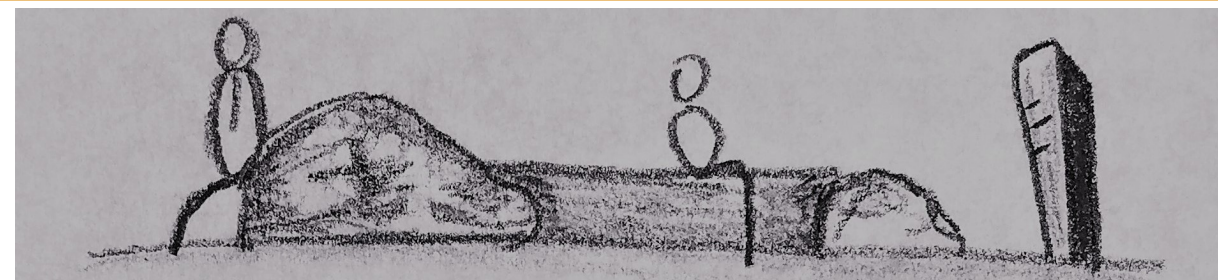
Seating is incorporated into the gathering moments and is of natural stone material to blend in. Boulders & outcrops which are critical features in the landscape are transformed into seating, which allow visitors to directly interact & engage with these features. Seating can be incorporated into walls or thresholds so these features all tie together & work to enhance visitor experience.



Trulove, 1998.



Reed, 2012.



Masuno, 1999.



Masuno, 1999.

CLEARING TYPOLOGIES: POTENTIAL IDEAS FOR MINUTE MAN//

FIELD PATTERNS

Creating Edges//

The current landscape throughout Minute Man is dominated by a regrowth forest, riddled with shrubby invasives. The forest inhibits expansive views & limits site lines throughout the Park. The field patterning throughout the landscape drastically changed from the 1775 field patterning of meadow, pasture & woodlot. The selected removal of forest in the three specific designed areas, hopes to restore the landscape character of 1775 by introducing meadows & pastures. The Park path brings visitors along the various edges of the new field patterns. Visitors can walk the edge of forest & pasture, forest & meadow & lastly meadow & pasture, all of which create a beautiful experience. Emphasizing the edge hopes to convey the importance of these field patterns and restore the landscape character of 1775 to Minute Man NHP

Meadow - Wood//



Meadow - Pasture//



Wood - Pasture//



Creating Edges//

Using the path to mark or define an edge.



Reed, 2012.



Hibi, 1987.



Hibi, 1987.



Hibi, 1987.



Reed, 2012.

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