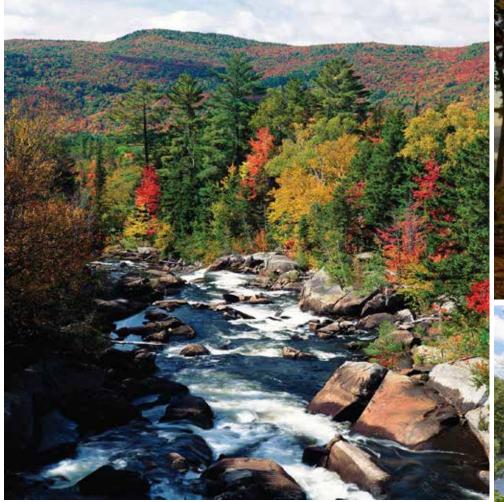
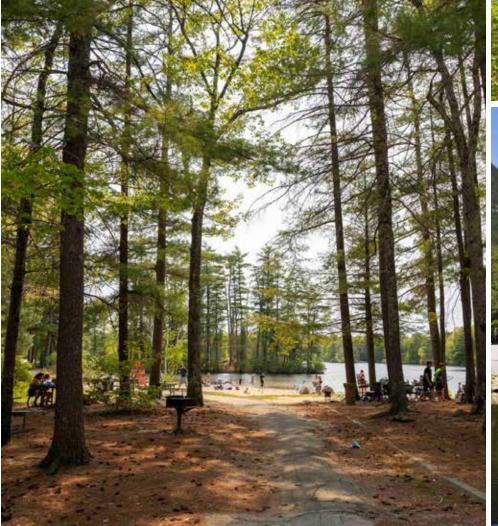


New Hampshire State Parks

# CAMPGROUND EXPANSION FEASIBILITY STUDY

2022











PREPARED BY:

### SE GROUP

### **TABLE OF CONTENTS**

A.	INTRODUCTION
	1. TEAM OVERVIEW AND ROLES
В.	NORTHERN PARKS
	1. CRAWFORD NOTCH STATE PARK, DRY RIVER CAMPGROUND
	2. JERICHO MOUNTAIN STATE PARK CAMPGROUND
	3. MOLLIDGEWOCK STATE PARK CAMPGROUND

#### C. SOUTHERN PARKS

1. BEAR BROOK STATE PARK, BEAR HILL CAMPGROUND
2. BEAR BROOK STATE PARK, CATAMOUNT POND CAMPGROUND
3. PAWTUCKAWAY STATE PARK CAMPGROUND

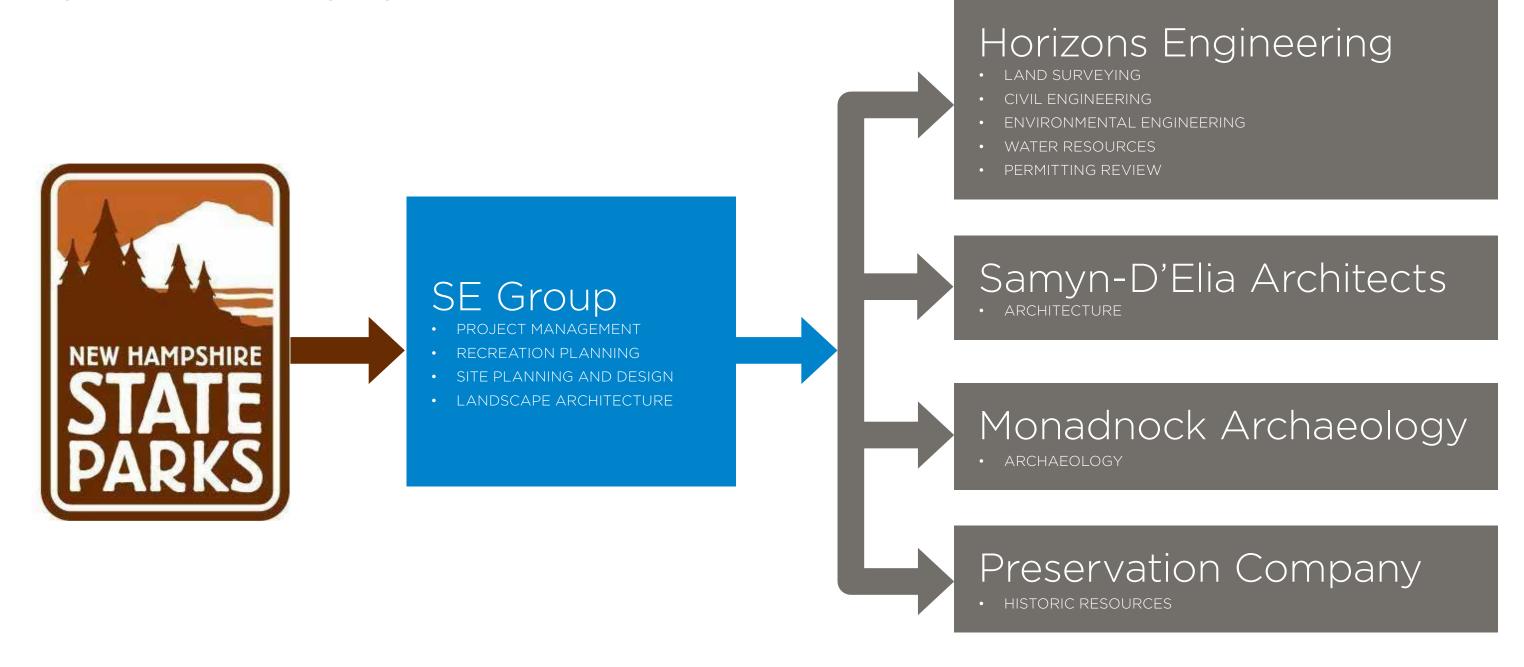
#### D. FINAL RECOMMENDATIONS

1. MAKING THE MOST OF THE AVAILABLE FUNDS
2. WHY THE OTHER CAMPGROUND PROJECTS DIDN'T MAKE THE CUT D3
3. PHASING RECOMMENDATIONSD4
4. PROPOSED PHASE I IMPROVEMENTS
a. Jericho Mountain State Park
b.Millidgewock State Park
c.Pawtuckaway State Park

#### E. APPENDIX

- 1. HISTORIC REPORTS
- 2. PHASE 1A ARCHAEOLOGY REPORTS
- 3. PRELIMINARY BUILDING CONCEPTS
- 4. PRELIMINARY UTILITY
  INFRASTRUCTURE CONCEPTS
- 5. DETAILED COST ESTIMATES AND PHASING OPTIONS

### **TEAM OVERVIEW AND ROLES**



**ACKNOWLEDGMENTS** 

We would like to thank ...

### **PROCESS**

# PHASE 1 Feasibility Studies

Project
Understanding
& Data Gathering

Site Visits & Design Options

Constructability & Permitting Review

Conclusions

- Overall guidance and strategic approach for Phase 1 Feasibility
- Individual campground kickoff meetings
- Data collection: GIS data, surveys, previous plans and studies, State Park websites, maps, etc.
- Develop base maps and desktop review

#### **Site Visit**

- Field review of expansion areas
- Site, infrastructure, and building assessment
- Conversations with park supervisor/staff
- Archaeological Resources Assessment
- Review with client team

#### **Design Options**

- Preliminary site plan studies/ options
- Preliminary building concepts
- Review with client team

- Resource mapping as needed (natural, cultural, historic)
- Additional site surveying (as needed)
- Permitting process review (AOT/Stormwater, Wetlands, DOT, Local, Shoreland, and/or Water/Wastewater)
- Concept refinement (Schematic Design)
- Preliminary cost estimates
- Review with client team
- Community presentations

## Feasibility summary document with recommendations for Phase 2 implementation

- Schematic Design plans
- Project costs
- List of required permits
- Critical path timeline for bidding and implementation
- Overall implementation matrix to assist in investment decision-making
- Review with client team

### A. INTRODUCTION

### **EXECUTIVE SUMMARY**

The State of New Hampshire saw record-breaking attendance throughout its State Park system in 2020 and 2021. The surge in outdoor recreation is nation-wide due to the increased awareness regarding the health benefits of outdoor recreation and the surge presented by the COVID pandemic. To respond to this increasing interest in outdoor recreation, the New Hampshire Division of Parks and Recreation (NHPDR) identified the need to expand camping opportunities at their State Parks for the Division to continue to fulfill its mission of "providing New Hampshire's citizens and guests with outstanding recreational, educational, and inspirational experiences." Six campground sites were identified by NHPDR for the feasibility study: Pawtuckaway State Park, Crawford Notch State Park, Jericho Mountain State Park, Mollidgewock State Park, and Catamount Pond and Bear Hill within Bear Brook State Park.

The New Hampshire State Parks Campground Expansion Feasibility Study was conducted to assist NHPDR evaluate the feasibility, conceptual design, probable construction costs, and priorities of the campground expansion options at all six campground sites. The project was supported by a multi-disciplinary team of consultants that included landscape architects, recreation planners, civil engineers, architects, architectural historians, natural resource specialists, and archaeologists. The project team worked through a comprehensive process to gather data; conduct site visits; analyze existing conditions, facilities, and operations at the parks; develop feasibility information and concept alternatives for each site; identify a preferred design concept for each park; and provide feasibility information around probable costs, project phasing, and permitting considerations.

Key elements for the study included analysis of the visitor experiences and site-specific recreation opportunities, consideration of current and projected camping demand and other recreational trends, investigation of individual site utilization and operational

considerations for the overall campground, sensitivity to historic CCC-era architectural resources, shoreland protection and natural resource conservation, and balance for maintaining park operations with manageable staff resources. Understanding sustainable capacities for the campgrounds and facilities was critical as well, as the goal of supporting increased visitation is balanced by the desire to maintain and enhance the quality of the experience that makes these parks such wherished resources.

The Feasibility Study delivered campground expansion, recreation concepts, and probable costs for all six campground expansion opportunities. These findings are summarized in this report along with the final recommendations for the three selected campground sites that will move forward with design development, permitting, and struction - to deliver expanded outdoor recreation opportunities for the State of New Plampshire.

The camparounds selected for expansion collectively provide a wide range out outdoor recreation opportunities, including swimming, fishing, paddling, boating, mountain biking and off-road motorized recreation. The campgrounds selected for expansion also represent a geographic mix, with two northern parks (Mollidgewock State Park, Jericho Mountain State Park) and one southern park (Pawtuckaway State Park.)

The financial investment required to make the desired impact to the recreational offerings was a factor in selecting which campgrounds should receive funding for implementation, along with a consideration for the apparent market demand. There was a need to strike a balance between spreading the investment around while ensuring that the level of investment for any individual campground is sufficient to have significant impact to the recreational opportunities provided in the state. This impact is a function of not only the number of additional campsites being offered to the public, but also the quality of the camping experience being provided.

#### **NEW HAMPSHIRE STATE PARKS MISSION STATEMENT**

The mission of the Division of Parks and Recreation is to provide New Hampshire's citizens and guests with outstanding recreational, educational, and inspirational experiences through the responsible management and cooperative stewardship of the state's natural, recreational, and cultural resources.

### A. INTRODUCTION

Below is a summary of the selected campgrounds.

#### JERICHO MOUNTAIN STATE PARK

- > High occupancy/utilization rates for campsites indicates a strong market demand for more camping opportunities.
- > With its impressive ATV/OHRV offerings, including an annual ATV festival, Jericho Mountain provides a unique recreational opportunity that would benefit from further investment to fully capitalize on the ATV enthusiast market. Many ATV enthusiasts enjoy RV camping, but the campground does not currently provide campsites that are optimized for this use.
- > A large area of the campground adjacent to the ATV event area was cleared years ago with the thought of campground expansion, and this area presents an excellent opportunity to develop RV sites in an otherwise underutilized area.

#### MOLLIDGEWOCK STATE PARK

- > Key location for taking advantage of all the recreational opportunities that the Androscoggin River and Thirteen Mile Woods Scenic Area offer. The existing campground has factors that likely affect the level of visitation:
- Primitive/substandard amenities typical of a remote camping experience being provided in a non-primitive setting. The lack of modern camping amenities (flush toilets and showers, permanent office/store building with offerings beyond firewood) limit the demographic reach of potential visitors.
- Campsites along the river are spatially constrained, with many sites having minimal or no privacy. Most parking spaces are very small, limiting the vehicle size that can be supported.
- A dump station is not currently provided, further limiting desirability to RV users.
- Water access is in need of improvement
- > Making investments to address these deficiencies, in addition to providing new campsites that provide more space and privacy in a wooded environment, would make the campground more appealing to more potential visitors to this popular scenic and recreational region of the state.

#### PAWTUCKAWAY STATE PARK

- > High occupancy/utilization rates for campsites indicates a strong market demand for more camping opportunities, and the park is close to population centers.
- > A large undeveloped area of the park has qualities that are conducive to campground development:
- Extensive attractive shoreline
- Mature wooded canopy
- Slopes within acceptable slope range
- Minimal natural resource constraints (e.g. wetlands)
- Centrally located with easy access from existing campground road network

Combined, the investment in the selected campground expansions would deliver additional capacity in needed locations, expand the recreation offerings, and balance the investment across the state portfolio in a strategic method to support and deliver the mission of the park system.

#### A. INTRODUCTION

First phase improvements include:

#### **JERICHO MOUNTAIN STATE PARK**

- > 9 Pull-Through Premium Sites (water/electricity/septic)
- > 10 Back-In Premium Sites (water/electricity/septic)
- > Dump station
- > Infill Sites: 3 Standard, 2 Shelter, 1 Double Shelter
- > Electricity in existing campground

#### MOLLIDGEWOCK STATE PARK

- > New, centrally located Bathhouse/Office/Store
- Approximately 10-15 existing Standard Sites upgraded to be Improved Sites (water + electricity)
- > New boat launch dock behind the new Store
- > Four Walk-in Sites along entry road
- > Wooded campsite loop with approximately 17 Standard Sites + pit toilet
- > Existing road improvements
- > General site/landscape improvements
- > Decommission underutilized campsites where needed (net add of 15-20 campsites to campground total)

#### PAWTUCKAWAY STATE PARK

- New campground pod with 35 Improved Sites (water + electricity)
- > Bathhouse serving the new campsites
- > Dump station

Although the funding did not support campground expansion at all six campgrounds included in this Feasibility Study, it is worth noting that the remaining campground projects identified in the Feasibility Report deserve consideration for future investment. The proposed Dry River Campground expansion would represent a tremendous opportunity to broaden the camping offerings in that iconic recreational area, with a strong market demand. Bear Hill at Bear Brook State Park, with its assemblage of historic structures, would provide a unique opportunity for group and event-oriented camping. At minimum, upkeep of the structures should be prioritized to maintain the opportunity in the future. Lastly, an equestrian campground at the Catamount Pond area of Bear Brook State Park would provide a form of camping not currently provided by any other NH State Parks.

The following comprehensive feasibility study offers all the supporting information for the project - and offers the insights, opportunities, and conclusions discovered throughout the process.

### **CAMPGROUND CONTEXT**









- > Appalachian Trail
- > Hiking
- > Waterfalls
- > Waysides
- > Views of the incredible Route 302 corridor surrounding the campground
- > Historic sites and railroads

NEAREST URBAN AREA NORTH: BRETTON WOODS / CARROLL NEAREST URBAN AREA SOUTH: NORTH CONWAY / BARTLETT

#### **PARK INFO**

- > 5,775 Acres
- > 36 Tent Sites
- > Established: 1913 Willey House: 1920's Dry River: 1950's

#### **ACTIVITIES**

- > Fishing
- > Hiking
- > MTN Biking
- > Snowshoeing
- > XC Skiing

#### **PARK AMENITIES**

- > Bathhouse
- > Pit Toilets
- > Visitor Center
- > Store

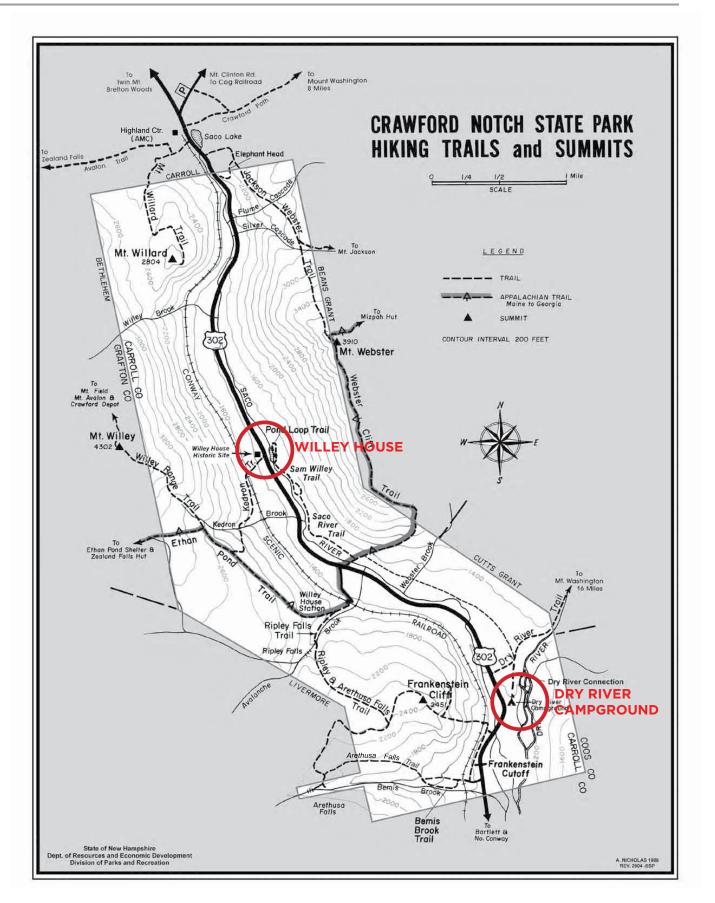
#### **CAMPSITE TYPES**

- > Lean-To
- > Tent Only
- > Standard (room for trailer, no hookups)

- > Crawford Notch State Park was established as a state reservation in 1913 and became a state park in 1950.
- > The park consists of nearly 6,000 acres on both sides of NH 302. The land extends to the summits of the mountains that border the Saco River Valley
- > The headquarters at the Willey House Site in the middle of the park includes visitor center, picnic areas and restrooms overlooking a small pond.
- > The Dry River Campground is near the southern edge of the park, in a flat area within the confluence of the Saco and Dry rivers.
- > The park offers a diverse array of hiking opportunities accessing both waterfalls and vista points.







### **EXISTING CONDITIONS DRY RIVER**

#### **ENTRANCE AND ARRIVAL**

- > Office proximate to entry
- > Lack of trash / recycling enclosure at exit

#### **ROUTE 302**

> Proximity to road adds a level of noise to the campground

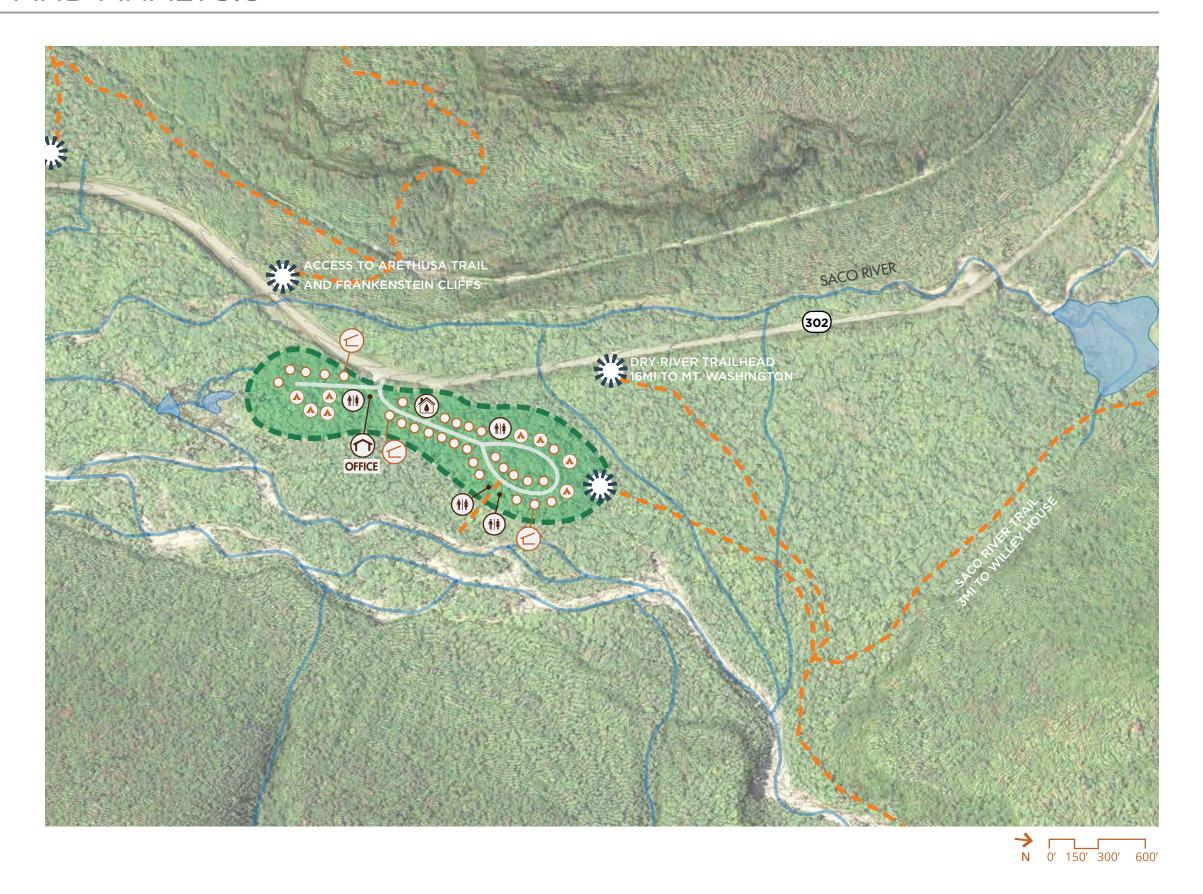
#### **RIVER CORRIDOR AND HYDROLOGY**

- > River is an asset to the campground and guest experience
- > Flooding and erosion are challenges

#### TRAIL NETWORK

- > Trail to river crosses several drainages and is hard to follow
- > Proximity to overall trail network is great
- 25 Standard Sites (Can accommodate tent, pop-up, or RV)
- 3 Lean-to Shelters
- 8 Tent Only
- Trail head

- Bath House
- 4 Pit Toilets
- Trails
- River / Stream



### SITE UTILIZATION **DRY RIVER**

#### QUICK FACTS

Average 5-Year Utilization: 57.64% Average Peak-Season Utilization: 81.46% Average Off Season Utilization: 44.96%

#### **KEY**

- < 15 Percent Annual Utilization
- < 50 Percent Annual Utilization
- > 50 Percent Annual Utilization

#### UTILIZATION TRENDS

Dry River Campground has 36 campsites which include 7 pop-up/tent sites, 3 lean-tos, 19 standard sites, and 8 tent only sites. Of the available sites, 5 sites have less than a 50 percent utilization rate, and 3 have a utilization rate of less than 15 percent.



# **EXISTING CONDITIONS**WILLEY HOUSE

#### INFO CENTER / GIFTSHOP / MEMORIAL

- > Very popular stop for tourists making their way through Crawford Notch
- > Roadway crossing from adjacent parking area is not friendly (no crosswalk / flashing lights)

#### **PICNIC AREA (P1)**

- > Popular picnic spot with lawn and mature birch trees
- > Site is underutilized
- > Dramatic views of steep ridge to the east

#### **PICNIC AREA (P2)**

- > Popular picnic spot adjacent to natural/water area
- > Dramatic views up the valley
- > Adjacent to parking with easy access

#### TRAIL ACCESS

> Easy access to Kedron Trail, Willey Trail, and Saco River Trail

#### **CABIN OFFICES**

- > Two existing historic cabins on site are used for offices and staff housing
- 25 Standard Sites (Can accommodate tent, pop-up, or RV)
- 3 Lean-to Shelters
- 8 Tent Only
- Trail head

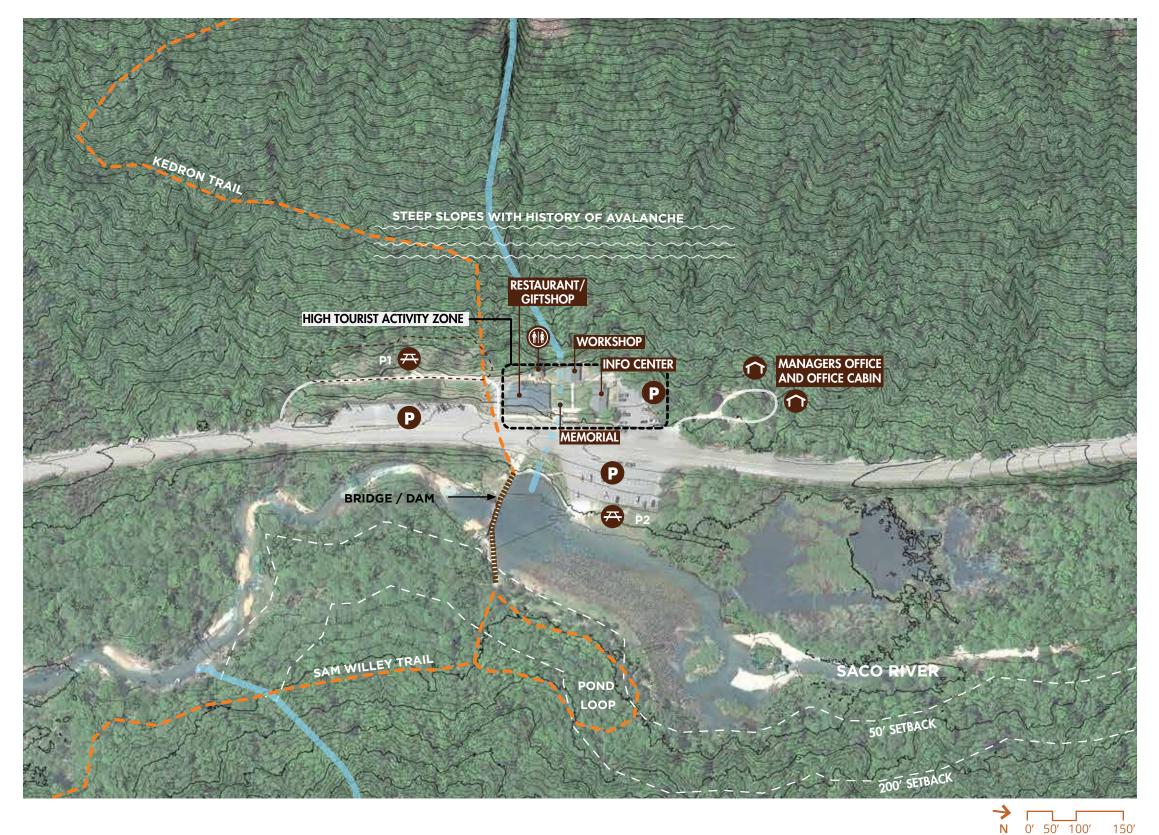
- - Bath House



4 Pit Toilets

Trails

River / Stream



### **STRUCTURES**



#### TOILET BUILDING

Year Built	1970's	
Construction/ Architectural Style	Traditional log construction	
Accessible	Yes	
Historically Significant	Yes	
General Condition	Appears to be in good shape. May need to be upgraded with more modern facilities.	



#### WORK SHOP

Year Built	1930
Construction/ Architectural Style	Traditional log construction
Accessible	No
Historically Significant	Yes



#### GENERATOR HOUSE

Year Built	1994
Construction/ Architectural Style	Stick built.
Historically Significant	No.

### **STRUCTURES**



GIFT SHOP & SNACK BAR

Year Built	1924 and 1950's with later additions.	
Size	60'x80' ±	
Construction Type	Tradition log construction and stick-built additions	
General Condition	Structure needs work on the foundation, which is sitting on piers. Log structure will also likely need repairs, as well as the stick-built addition.	
History	Has been used as this way since 1924	
Accessible	Yes	
Historically Significant	Yes	



TOURIST INFORMATION

Year Built	1930's	
Size	Traditional log construction	
Construction Type	Generally good condition	
General Condition	Museum and Information Center	
History	Constructed by Civilian Conservation Corp as a rest house	
Accessible	Yes	
Historically Significant	Yes	



MANAGER'S CABIN AND OFFICE CABIN

Year Built	1950's	
Construction Type	Stick-built	
General Condition	Generally good shape, but will need maintenance upgrade	
Accessible No		
Historically Significant	Yes	

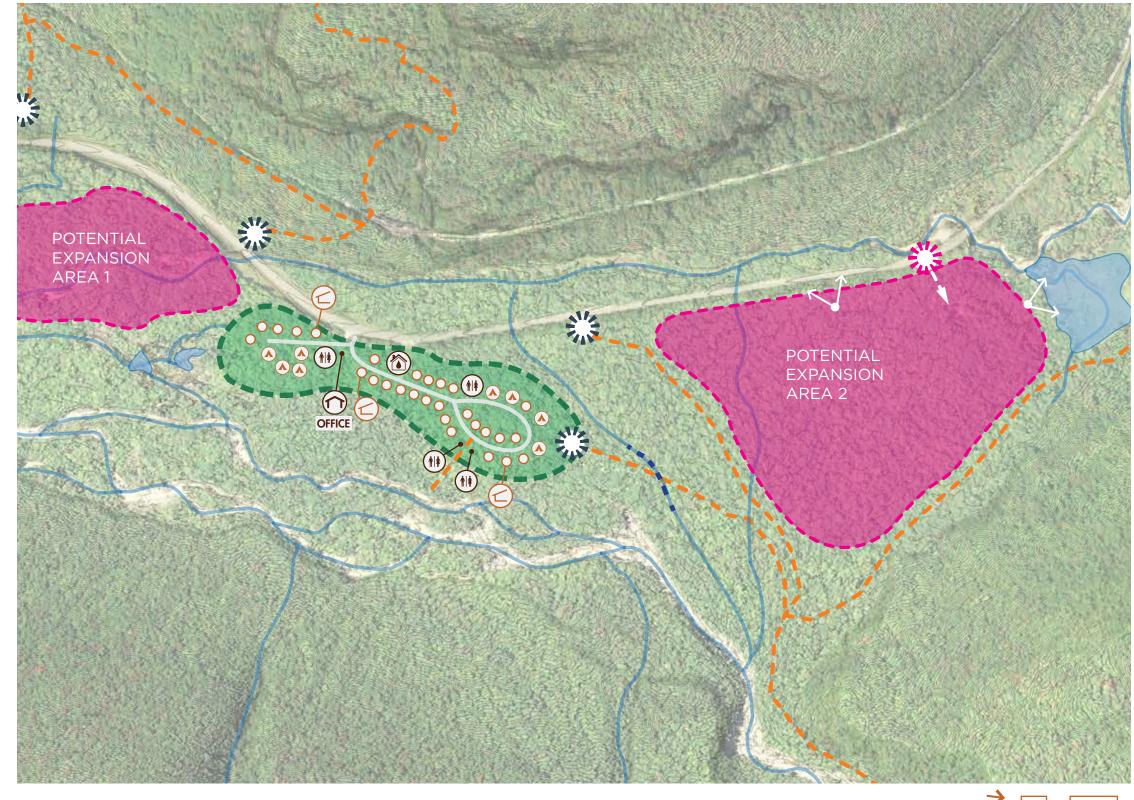
### **EXPANSION OPPORTUNITIES DRY RIVER**

#### **EXPANSION AREA 1**

- > Size: Aprox. 24 Acres
- > Slope: 2-10%
- > Adjacent to existing campground
- > Constrained by existing drainages and flooding

#### **EXPANSION AREA 2**

- > Size: Aprox. 60 Acres
- > Slope: 2 15%
- > Relatively flat terrain conducive to development with mature deciduous forest canopy
- > Proximate to existing campground with existing trail network connection
- > Potential to open up views of cliffs to west
- > Potential views of peaks, over brook and wetlands to the north
- > Maintain buffer from road to protect from highway sounds
- > Deep gully washed out from flood, road connection between sites would require longspan bridge



# EXPANSION OPPORTUNITIES WILLEY HOUSE

#### **EXPANSION AREA 1**

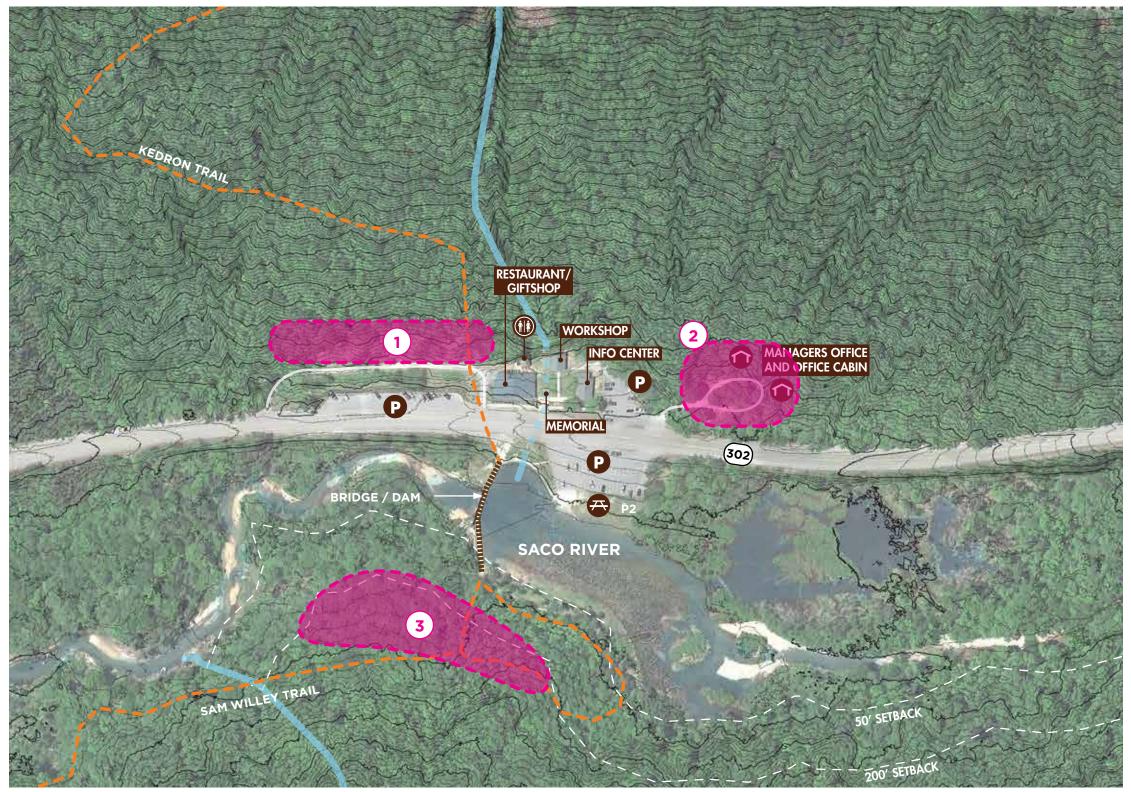
- > Size:.75 Acre
- > Slope: 8-25%
- > Site of original cluster of cabins
- > Excellent views
- > Would need to negotiate public vs. private space

#### **EXPANSION AREA 2**

- > Cabin renovation and infill opportunity
- > Slope: 8-15%
- > Close to existing buildings and infrastructure

#### **EXPANSION AREA 3**

- > Size: 1.2 Acre
- > Slope: 2% 25%, gentle slopes on southern portion
- > Away from noise and activity of Willey House site
- > Trail system runs through area





### **ARCHAEOLOGY REVIEW**

Phase IA Archaeological Sensitivity Assessment was completed for the proposed Crawford Notch State Park Campground Expansion Project in Harts Location, New Hampshire. The project area is situated in extremely rocky, uneven terrain. No archaeological sites or areas of archaeological sensitivity were identified, and no further study is recommended.

### HISTORIC SIGNIFICANCE

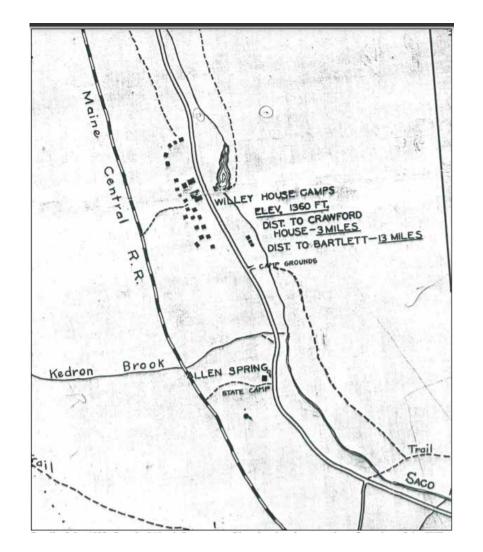
Crawford Notch State Park was established as a state reservation in 1913 and became a state park in 1950.

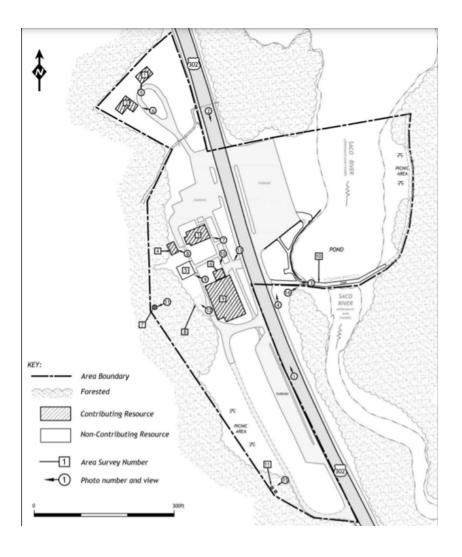
At the Willey House Site, the buildings and grounds on 6.8 acres were surveyed as a historic district and found eligible for the National Register in 2013. A Phase 1A Archaeological Sensitivity Report, also by PAL in 2013, included extensive historic and prehistoric background and context. The 2013 survey area was confined to the park headquarters area at the Willey House Site. Crawford Notch State Park as a whole has not been evaluated for eligibility for the National Register as a larger district and the Dry River Campground has not been documented.

The Willey House Site Historic District was determined eligible for significance in the areas of conservation and recreation, specifically White Mountain tourism, and for the rustic architecture. The district recorded in 2013 counted five contributing buildings from the 1920s to ca. 1950. The Willey House site, the boulders, and the landscape as a whole contribute to the district.

The Dry River Campground at the south end of the state park dates around 1950 when the state park was established. The roads and site layout and the office building are historic features that would contribute to a historic district. The campground road may be the old logging railroad bed. The small office building at the campground entrance is historic, with characteristic wood shingle siding, 6/6 windows. A new washhouse was built in the early 2000s. Additional small buildings are four pit toilets, two of which are more than fifty years old, and three shelters of unknown age.

See Appendix for complete historic resources overview by the Preservation Company.







Circa 1925 postcard view of the two restroom, store, and restaurant cabins before they were combined into the present Restaurant Building. Overnight cabins, now demolished, are at the rear.



From NH State Parks Historic Context by Lisa Mausolf

### **SITE PLAN OPTION A**

#### **TOTAL NUMBER OF SITES: 87**

#### 1. CAMPGROUND ENTRANCE

> The main entry has shifted 500' to the south from the vertex of the roadway curve

#### 2. CAMPGROUND CORE

- > The office core is located at the center of the park and is combined with the common space
- > A centrally located office and store serves the new campground and Dry River campground

#### **EXISTING**

Standard Site

Pit Toilets

Tent Only Lean-to Shelter

#### **PROPOSED**

Premium Site

Tent Site

Lean-to Shelter

Cabin

Walk-in Site

Structure Pit Toilets

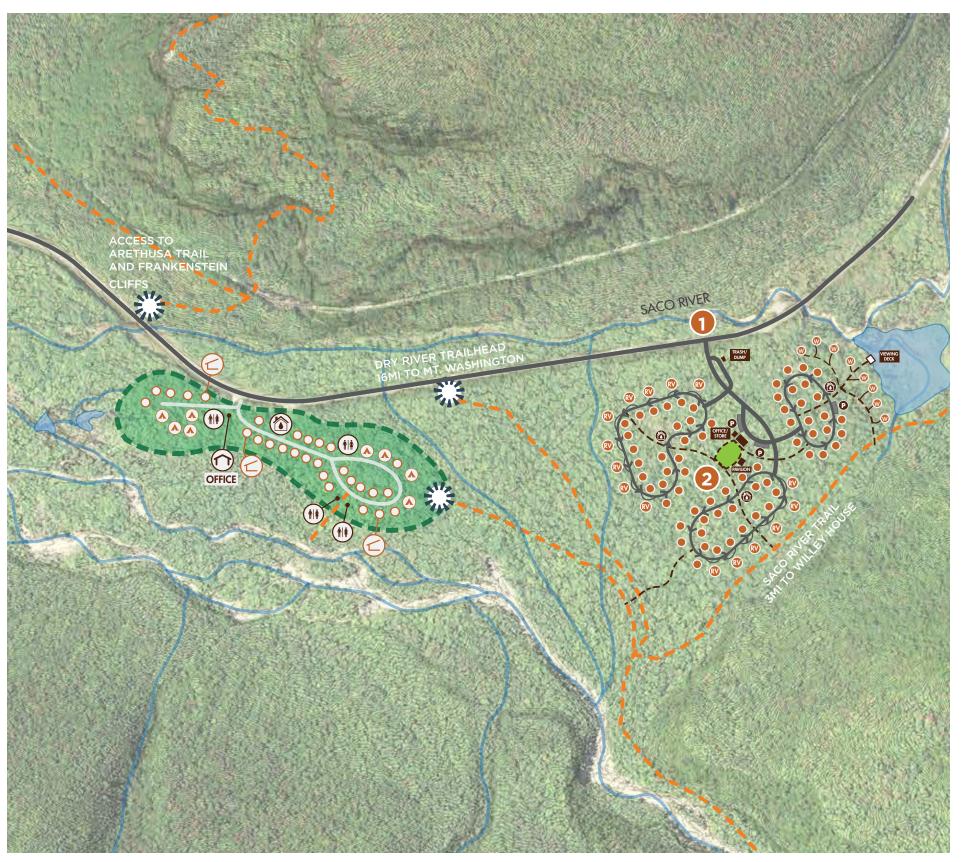
Structure

Parking

Bathhouse

One-way Road





### **SITE PLAN OPTION A CONTINUED**

#### 3. CAMPGROUND CORE

- > Centrally located office, store, and firewood shed
- > Creates a lively space that mixes the office and store with amenities such as a common green space and picnic pavilion

#### 4. PHASABLE AND DIVERSE CAMPING PODS

- > 3 camping pods with a diverse site selection
- > Mix of premium sites with water, sewer, and electric hookups, standard sites, lean-tos, and cabins (% of each TBD)

#### 5. PEDESTRIAN CONNECTIVITY AND CIRCULATION

- > Path network provides a safe alternative to walking/biking on roads
- > Road network is designed to minimize vehicular traffic within campground pods, and 1-way loops promote bike/ped safety

#### **EXISTING**

Standard Site

Structure

Tent Only

Pit Toilets

Lean-to Shelter

#### **PROPOSED**

Premium Site Tent Site

Pit Toilets

Lean-to Shelter

Walk-in Site

Bathhouse

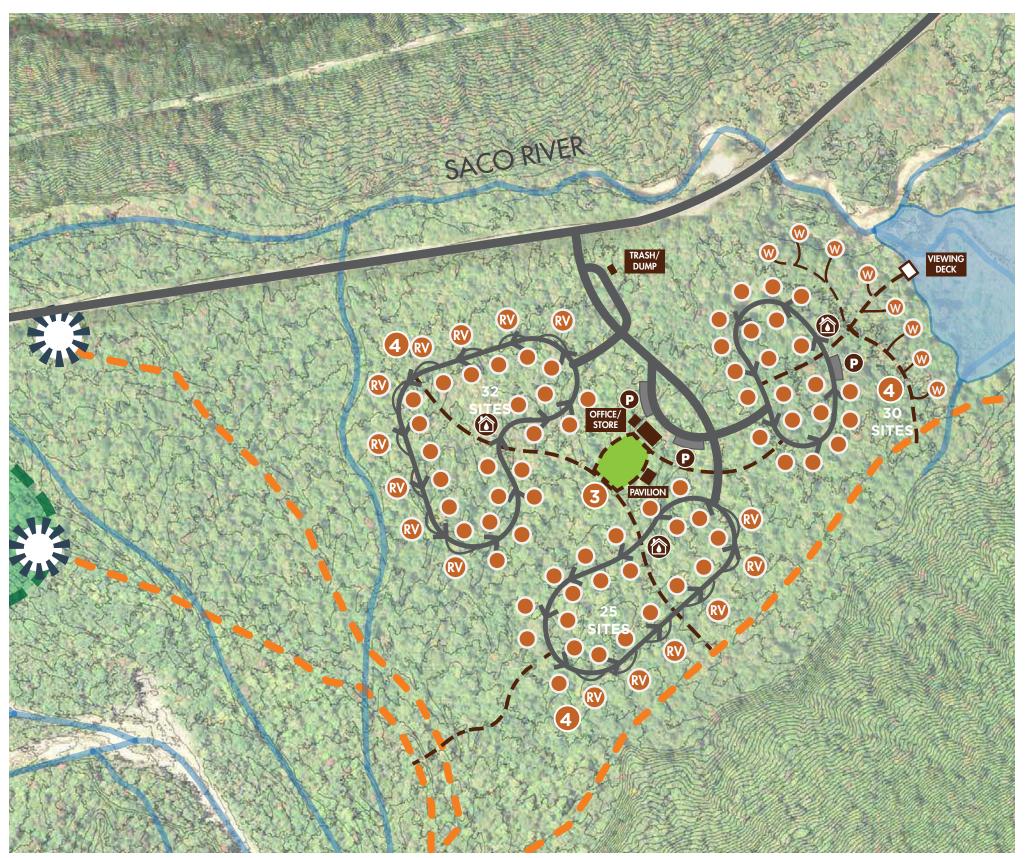
Structure

Parking

Cabin

One-way Road





### **SITE PLAN OPTION B**

#### **TOTAL NUMBER OF SITES: 92**

#### 1. CAMPGROUND ENTRY

- > The main entry uses the existing stump dump entry location
- > The office core is located at the entry of the park

#### 2. CENTRAL COMMON SPACE

> A common space consisting of a picnic pavilion and open green are located at the center of the park

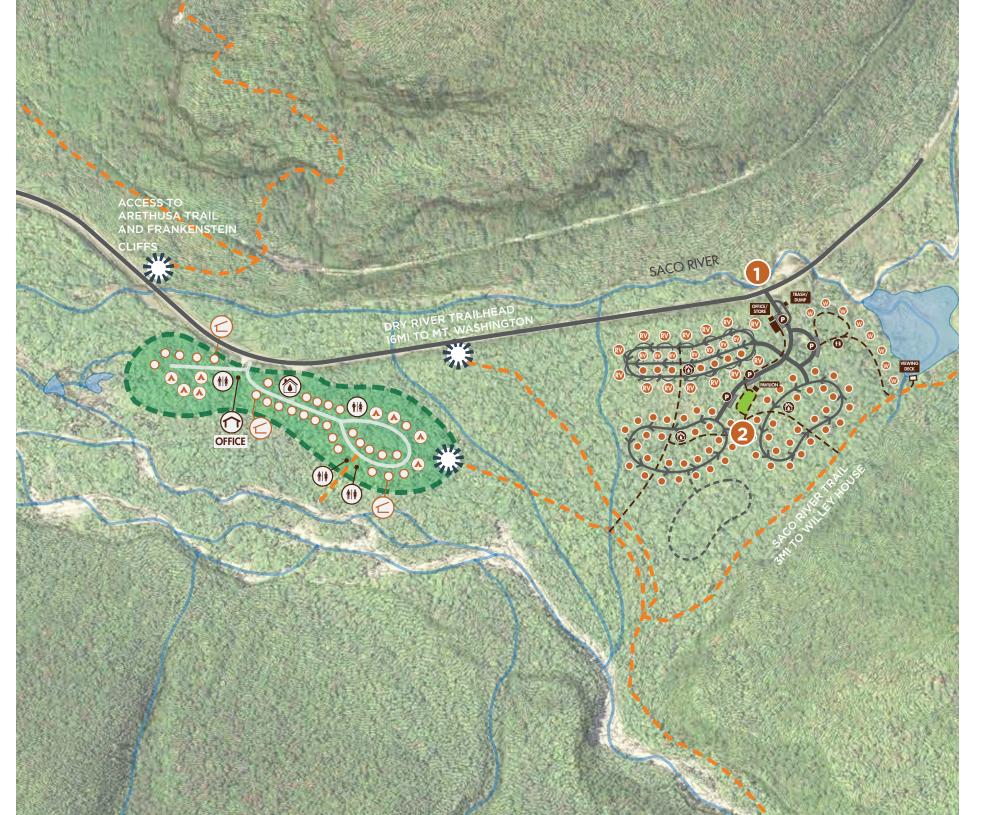
#### **EXISTING**

- Standard Site
- Tent Only
- Lean-to Shelter

#### **PROPOSED**

- Premium Site
- Tent Site
- Lean-to Shelter
- Cabin
- Walk-in Site

- Structure
- Pit Toilets
- Structure
- Pit Toilets
- Parking
- Bathhouse
- One-way Road





## SITE PLAN OPTION B CONTINUED

#### 3. RV CAMPING POD

- > RV dedicated camping pod
- > 21 pull-through RV sites
- > 7 back-in sites (could be used for tent camping)

#### 4. CAMPING PODS

- > 2 camping pods consisting of standard sites, cabins, lean-tos, platform, and tent-only sites. Mix to be determined
- > Road network is designed to minimize vehicular traffic within campground pods, and 1-way loops promote bike/ped safety
- > Potential for another pod (additional 25 sites)

#### 5. WALK-IN SITES

> Dedicated walk-in camping area

#### **EXISTING**

Standard Site

Structure

Tent Only

Pit Toilets

Lean-to Shelter

#### **PROPOSED**

Premium SiteTent Site

(iii) Pi

Structure
Pit Toilets

Parking

Lean-to Shelter

Walk-in Site

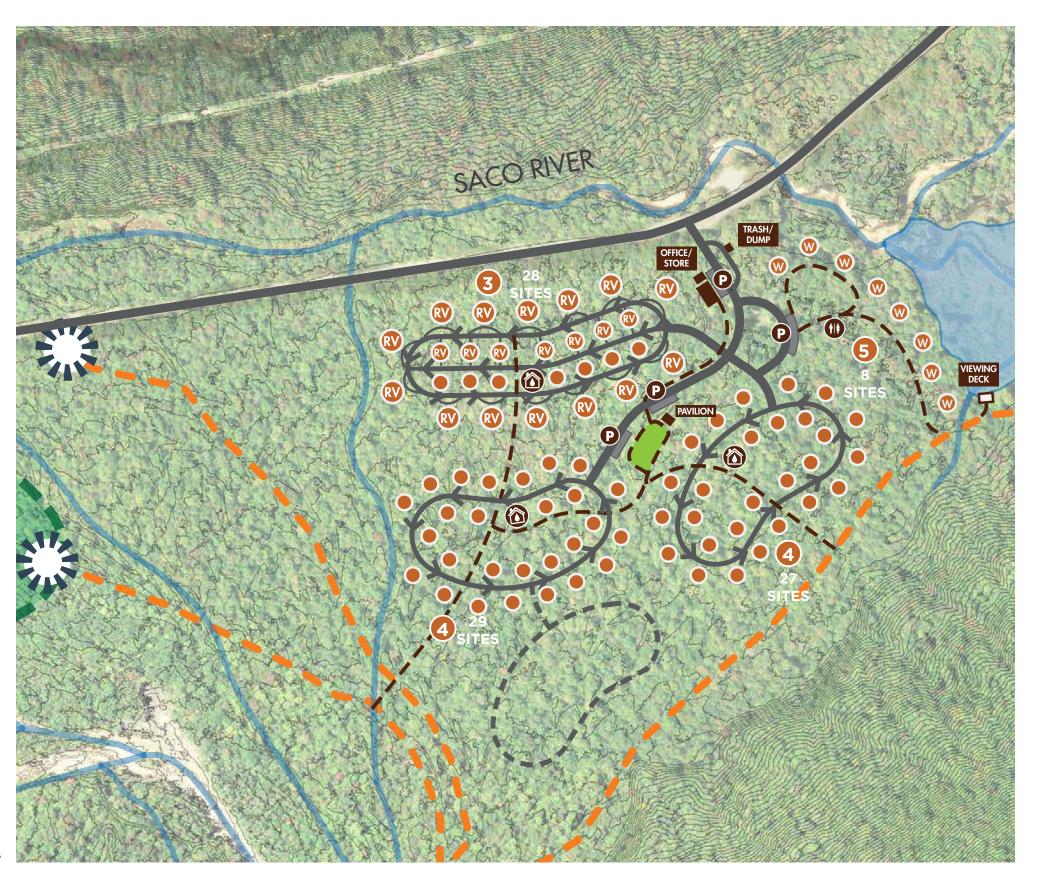
Bathhouse

Cabin

J

One-way Road





### SITE PLAN

**NUMBER OF SITES** 

**DRY RIVER: 32** 

**EXPANSION AREA: 85** 

**TOTAL NUMBER OF SITES: 117** 

#### 1. DRY RIVER EXPANSION AREA

- > Centrally located office and common space with 3 camping pods made up of standard, improved, and shelter sites
- > Road network is designed to minimize vehicular traffic within campground pods and promote bike/pedestrian safety

#### 2. DRY RIVER CAMPGROUND

> The existing campground will undergo needed improvements and receive additional amenities

#### 3. MULTI-USE PATH

- > A paved multi-use path will create a bike/ped connection between Dry River and the Expansion area
- > This will be the first section of the Crawford Notch Recreation path

#### 4. RECREATION TRAIL

> A recreation trail will be located between Dry River Campground and the Expansion Area creating an informal play space for kids and adults, as well as opportunities for interpretive walks and education

#### 5. VIEWING DECK

> A viewing deck with panoramic views of the White Mountains will be an amenity for all campers

#### **EXISTING**

Standard Site

Tent Only

Shelter Site

Structure

Pit Toilets

#### **PROPOSED**

Standard Site

Shelter Site

Improved Site (W/E)

Structure

Pit Toilets

Parking

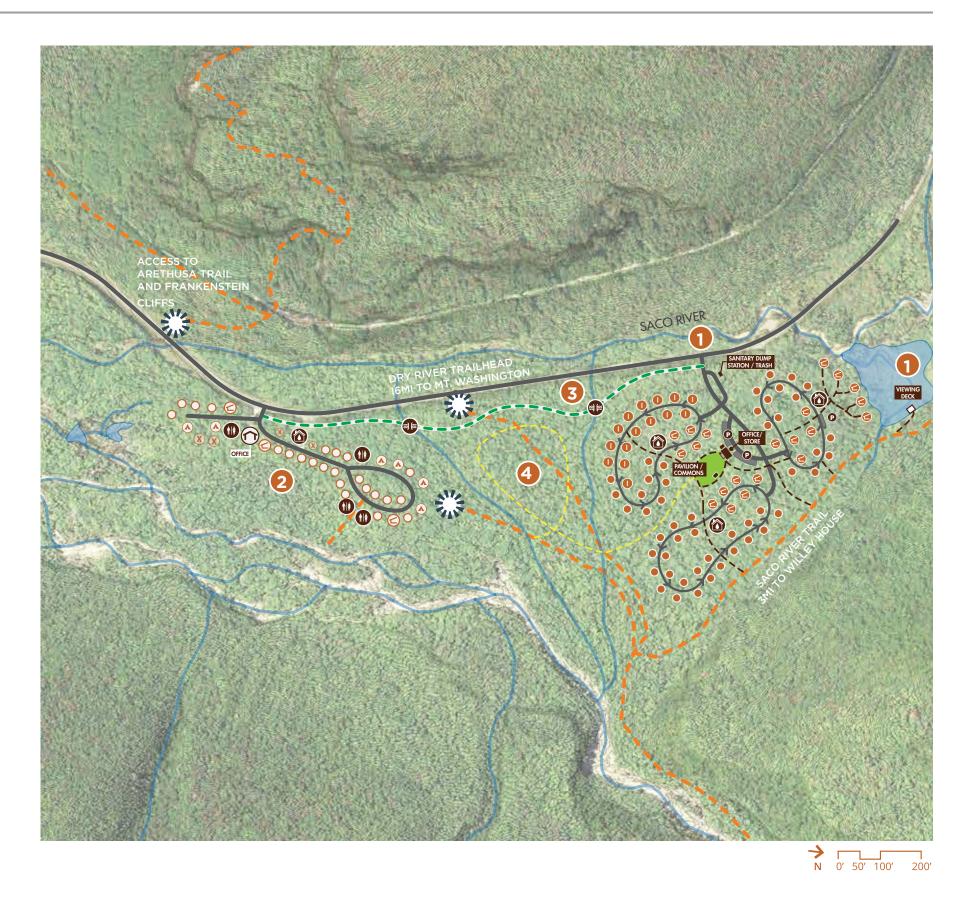
Bathhouse

Rec Bridge

Recreation Path

∫ One-way Road

- Multi-use Path



### **SITE PLAN EXPANSION AREA**

#### 1. CAMPING POD 1 - 30 SITES

- >1 Bathhouse
- > 15 Improved sites with water and electricity
- > 5 Shelter Sites
- > 10 Standard Sites

#### 2. CAMPING POD 2 - 30 SITES

- > 1 Bathhouse
- > 6 Shelter Sites
- > 24 Standard Sites

#### 3. CAMPING POD 3 - 25 SITES

- >1 Bathhouse
- > 10 Shelter Sites (5 walk-in)
- > 15 Standard Sites

#### 4. CAMPGROUND CORE

- > The office core is located at the center of the park at a common area, which includes a shade pavilion and natural play area
- > The office and store will serve the Expansion Area and Dry River Campground

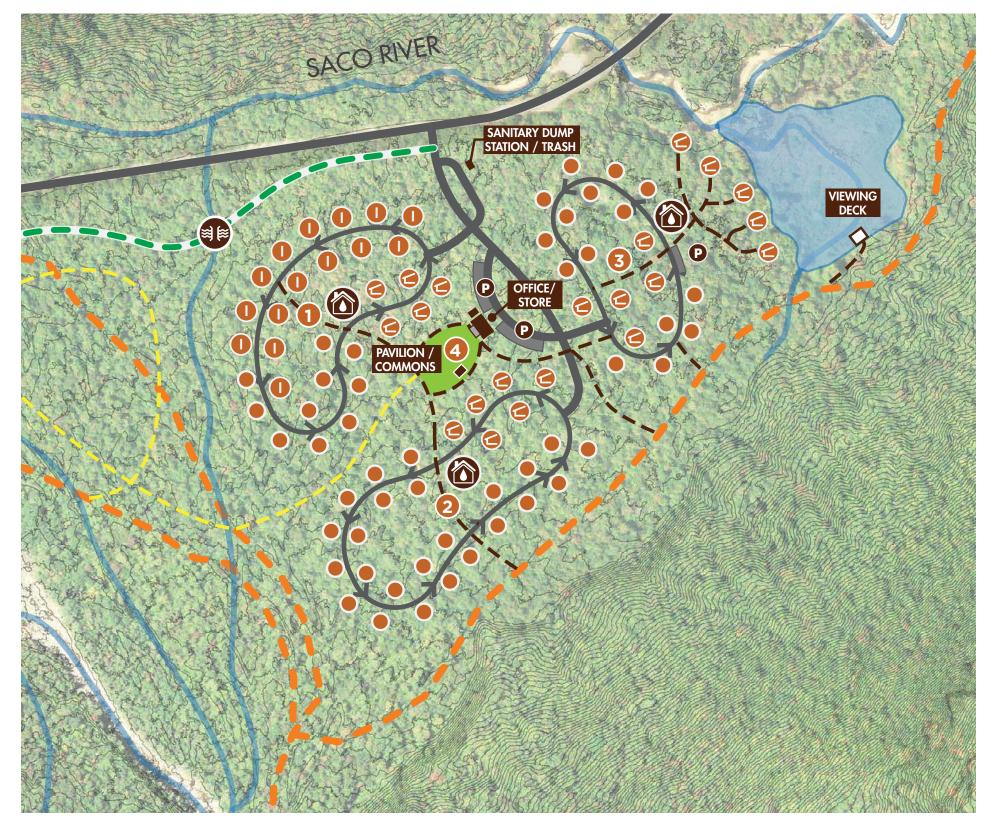
#### **EXISTING**

- Standard Site
- Tent Only
- Shelter Site
- Structure
- Pit Toilets

#### **PROPOSED**

- Standard Site
- Shelter Site
- Improved Site (W/E)
- Structure
- Pit Toilets
- P

- **B**athhouse
- Rec Bridge
- Recreation Path
- One-way Road
- Multi-use Path





### **SITE PLAN DRY RIVER**

**EXISTING SITES: 36** 

**REMOVED SITES: 4** 

**TOTAL NUMBER OF SITES: 32** 

#### 1. REMOVE UNDERUTILIZED SITES

> 4 sites have been removed that have very low utilization rates

#### 2. RENOVATE BATHHOUSE AND PIT TOILETS

- > The bathhouse will be renovated and a dish washing station will be added on
- > New Pit Toilets

#### 3. CAMPGROUND ROAD AND SITE REPAIRS

> The campground road and campsites will be repaired and improved where needed

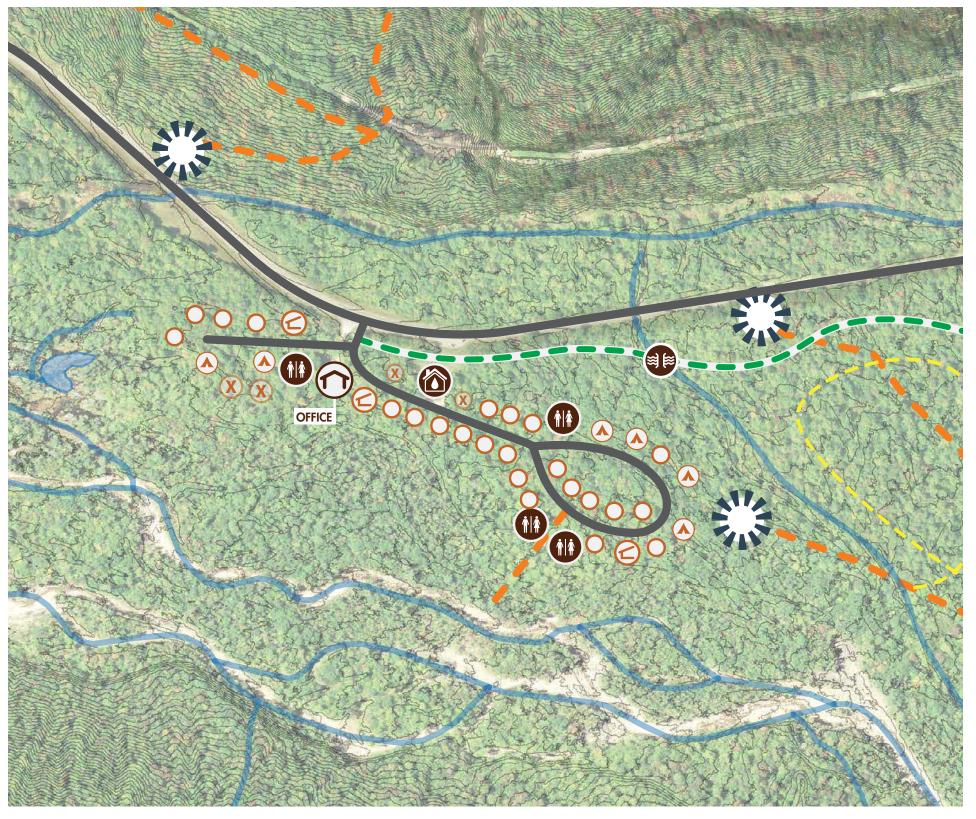
#### **EXISTING**

- Standard Site
- Tent Only
- Shelter Site
- Structure
- Pit Toilets

#### **PROPOSED**

- Standard Site
- Shelter Site
- Improved Site (W/E)
- Structure
- Pit Toilets

- - Bathhouse
- - Rec Bridge
- Recreation Path
  - One-way Road
- Multi-use Path









- > ATV Utopia. Over 1,000 miles of interconnected trails and an annual
  - ATV Festival
- > Dedicated 2.5 mile 4x4 Jeep/Truck offroading trail over a variety of difficult terrain. The first 4x4 Jeep/truck trail on public lands in the Northeast.
- > Beautiful setting on Jericho Lake

NEAREST URBAN AREA: BERLIN - 15 MINUTE DRIVE

#### **PARK INFO**

- > 7,400 Acres
- > 20 Camp Sites
- > Year Built: 2005 / 1970's

#### **ACTIVITIES**

>ATV

> Mushing

> XC Skiing

- > Jeep
- > Snowmobiling
- > Swimming
- > Paddling
- > Fishing
- > Horseback Riding
- > Hiking
- > MTN Biking

#### **PARK AMENITIES**

- > Beach
- > Boat Rentals
- > Visitor Center
- > Bath House
- > Wash Facilities
- > Pit Toilets
- > Boat Ramp

#### **CAMPSITE TYPES**

- > Cabin
- > Lean-to Shelters
- > Standard (room for trailer, no hookups)
- > Tent Only

CONTEXT

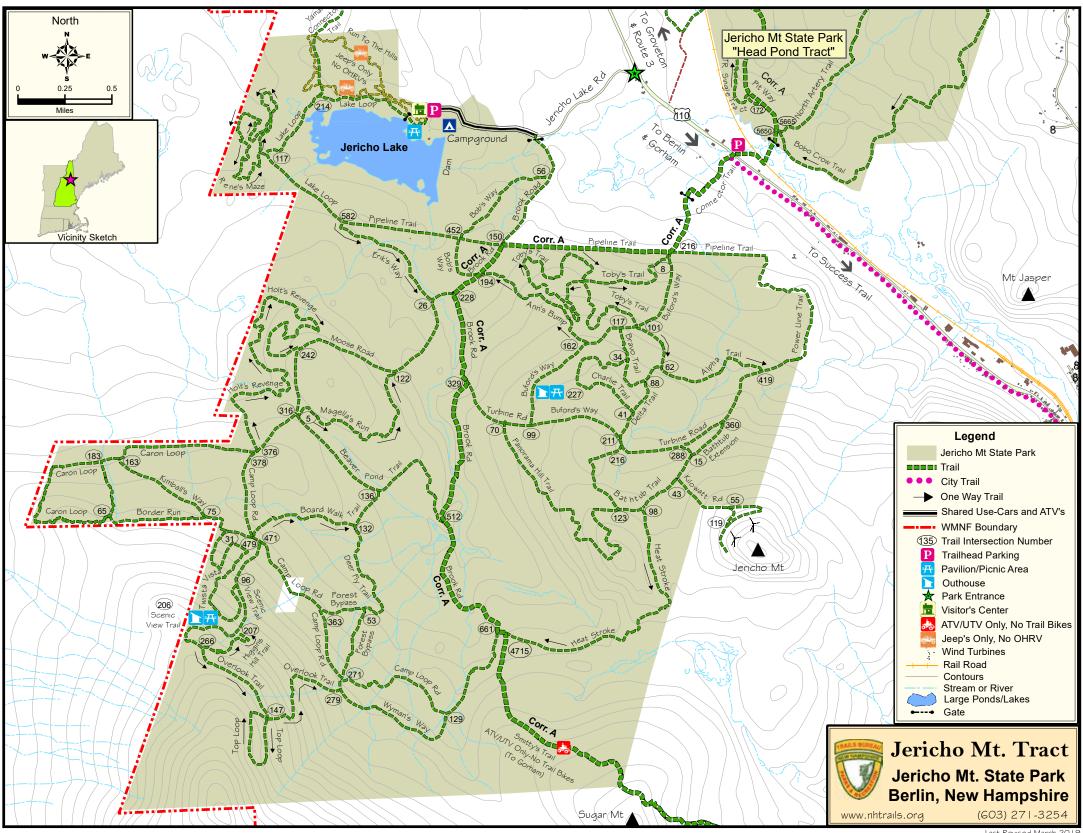
JERICHO MOUNTAIN

### THE ESTABLISHED CAMPGROUND IS JUST A SMALL PIECE OF THE PARK

> The campground makes up only 8 acres of Jericho Mountain State Parks 7,400 acres

#### TRAIL CONNECTIONS

- > There are over 80 miles of OHRV trails within Jericho Mountain State Park open to ATVs, UTVs and Trail Bikes
- > The park connects to over 1,000 miles of trails in Coos County



Last Revised March 2019 Name: Jericho Mtn Trail Map 2019



### **ATV FESTIVAL**









### **EXISTING CONDITIONS**

- **–** 4 x4 Trails
- OHRV Trails

#### 1. THREE MAIN AREAS

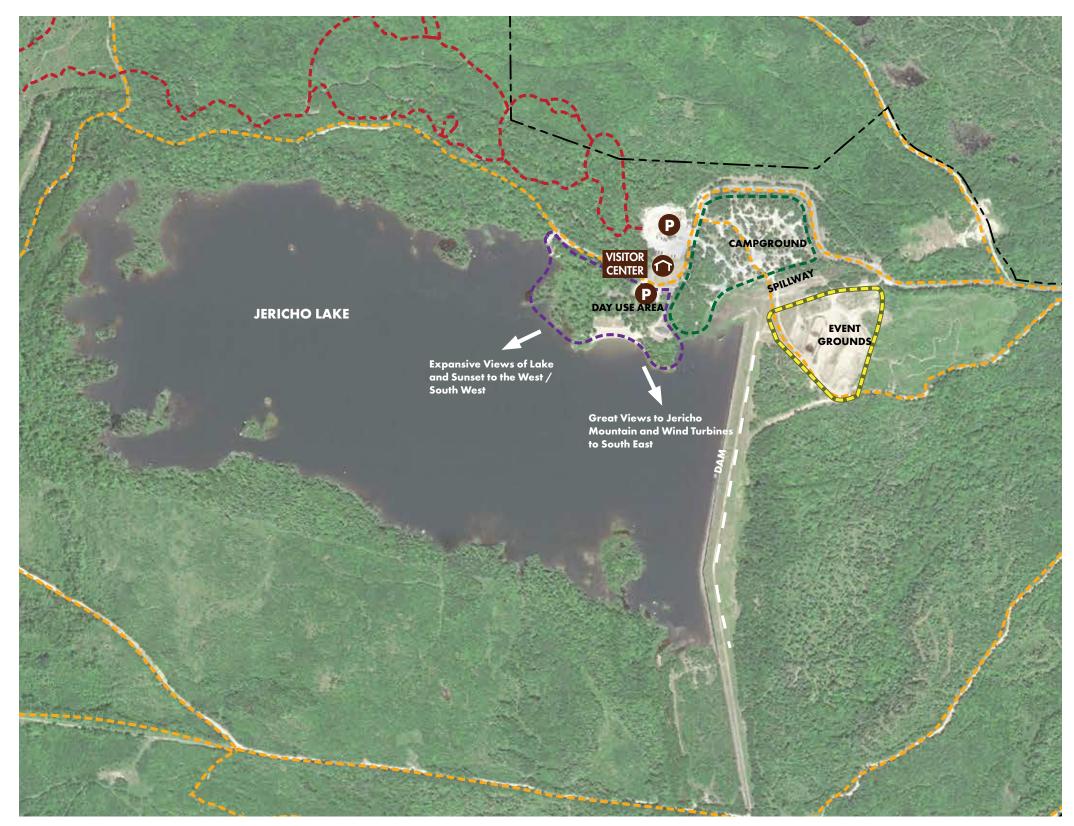
- > Day Use Area
- > Campground
- > Event Grounds

#### 2. JERICHO LAKE

- > Size: 127 acres
- > Warm water fishery
- > No motorized boats
- > Undeveloped shoreline great for canoeing / kayaking

#### 3. DAM

- > Earthen dam constructed in 1969
- > Roughly 2,000 LF
- > Can walk across dam, cannot drive across
- > Spillway separates Campground from Event Grounds





### **EXISTING CONDITIONS**

#### 1. DAY USE AREA

- > The beach, boat launch, and picnic pavilion are primarily used by day guests.
- > Road congestion between boat launch and upper parking area (day-use beach visitors, cars with boats, ATVs) ATVers take up boat
- > Toll Booth does not intercept all day use beach / lake visitors
- > Bathhouse with toilet facilities, showers. laundry, facilities, pot washing station, and park store serves day-use visitors and campers

#### 2. CAMPGROUND

- > ATV circulation within campground and beyond
- > 20 campsites including 5 camping cabins and 15 camping sites
- > No hookups for RVs

#### **3. EVENT AREA**

- > 8,000 attendees for ATV Festival
- > Need for flexible RV sites for visitors and vendors
- > Large open space with mud pit
- > Minimal vegetation
- 9 Standard Sites-1 accessible (Can accommodate a trailer or RV)
- 5 Cabins 1 Accessible
- 2 Lean-to Shelters

- - **3 Pit Toilets**
- X Site Visit Wetland Flags
- OHRV / Pedestrian Trails
- 4 x4 Trails





### SITE UTILIZATION

#### **QUICK FACTS**

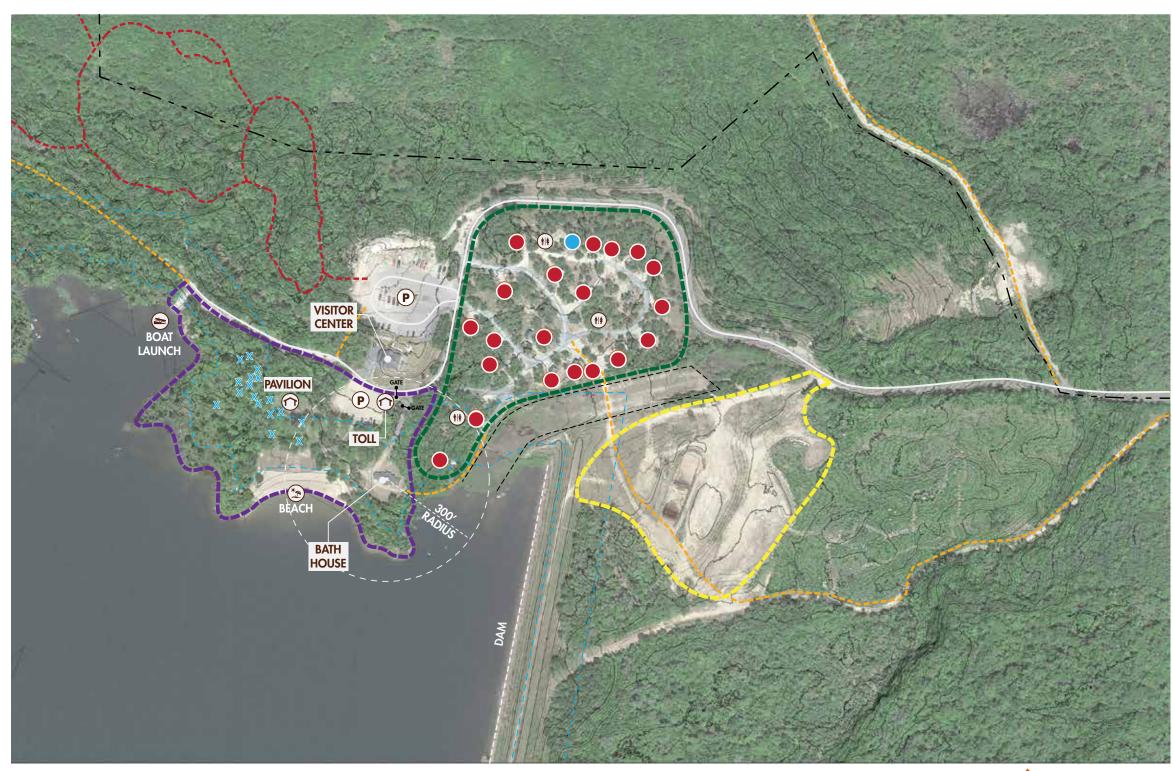
- > Average 5-Year Utilization: 59.08%
- > Average Peak-Season Utilization: 83.79%
- > Average Off Season Utilization: 46.57%%

#### KEY

- < 50 Percent Annual Utilization</p>
- > 50 Percent Annual Utilization

#### UTILIZATION TRENDS

Jericho Mountain State Park has 20 ride in/out campsites which include 5 cabins, 4 tent sites, 2 Adirondack shelters, and 9 RV sites. Of the available sites, only one campsite has less than a 50 percent utilization rate. The cabins, leanto options, and RV sites maintain the highest utilization on a year-round basis.





### **INFRASTRUCTURE**

#### WATER SUPPLY

Water is supplied from a **well (1)** east of the bath house (high iron content). The water is distributed to supply five water spigots, the visitor center and the bath house.

#### WASTEWATER

The visitor center is served by its own gravity septic system (2) east of the building.

The bathhouse has a tank and pump station (3) on the south side of the building. Wastewater effluent is pumped from there through the campground area to a distribution box (4). From there, effluent flows to a "bellows" tank (5) that distributes it to the large disposal field (6).

The campground is served by two full restroom facilities in the visitor center and bath house, and three pit toilets distributed throughout the campground.

#### POWER

Provided overhead to Visitor's Center and bathhouse.



### **STRUCTURES**



#### VISITOR CENTER

Built	2005
Toilets	(2) Men's, (2) Women's
Construction/ Architectural Style	Natural Cedar Shingles
Winterized	Yes
Accessible	Yes
Historically Significant	No



#### BATHHOUSE

Built	2005
Toilets	(4) Men's, (4) Women's.
Showers	3
Laundry	(2) washers and dryers.
Family Bathroom	1
Construction/ Architectural Style	Natural Cedar Shingles.
Capacity	18'x30'; Serves 240 people.
Winterized	Yes
Utilities	Yes
General Condition	Good
Historically Significant	No



#### CABIN

Built	Recent construction
Use	Sleeps 4 to 6
Dimension	13'x19'
Construction Type	Stick, faux log and some log construction
Condition	Good
Original Use	Yes
Utilities	No
Historically Significant	No
Utilities	Yes
General Condition	Good
Historically Significant	No



**PAVILION** 

Year Built	1970's
Construction/ Architectural Style	Timber and stick
Condition	Needs upgrade and repair
Original Use	Yes
Utilities	No
Historically Significant	Potentially

## **EXPANSION OPPORTUNITIES**

#### **EXPANSION AREA 1**

- > Size: 2.5 Acres
- > Slope: Variable, generally flat
- > Good access to OHRV Trails
- > Proximity to trails would be noisy

#### **EXPANSION AREA 2**

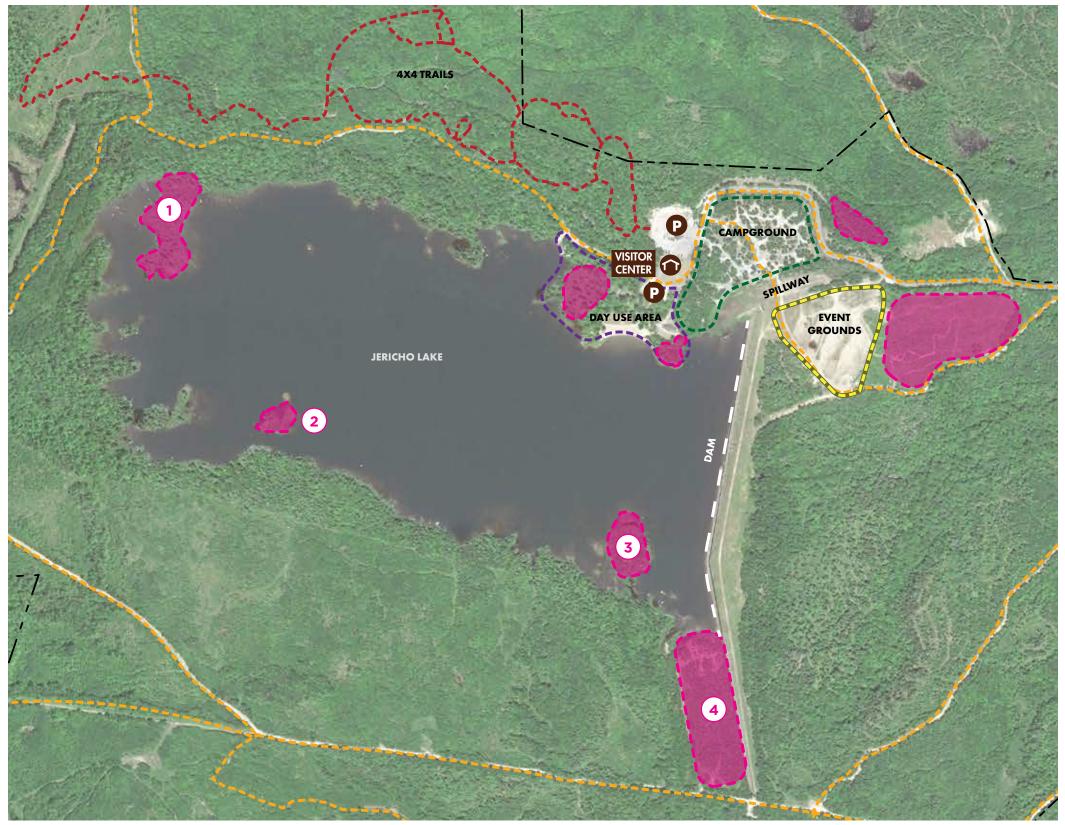
- > Size: .5 Acres
- > Slope: Mostly flat
- > Unique spot for paddle-to campsite
- > Away from OHRV trails

#### **EXPANSION AREA 3**

- > Size: 1.5 Acre
- > Slope: 1-4%, Sloping on half of area
- > Unique spot for paddle-to campsite
- > Away from OHRV trails

#### **EXPANSION AREA 4**

- > Size: 6 Acres
- > Slope: 1.5%
- > .4 miles from beach
- > Walking access across dam
- > Thin soil cover over ledge
- > Access to ATV trails





## **EXPANSION OPPORTUNITIES**

#### **EXPANSION AREA 5**

- > Size: 1.4 Acres
- > Slope: 5-20%, lots of microtopography
- > Close to beach
- > Waterfront views to West / South
- > Extensive wet areas

#### **EXPANSION AREA 6**

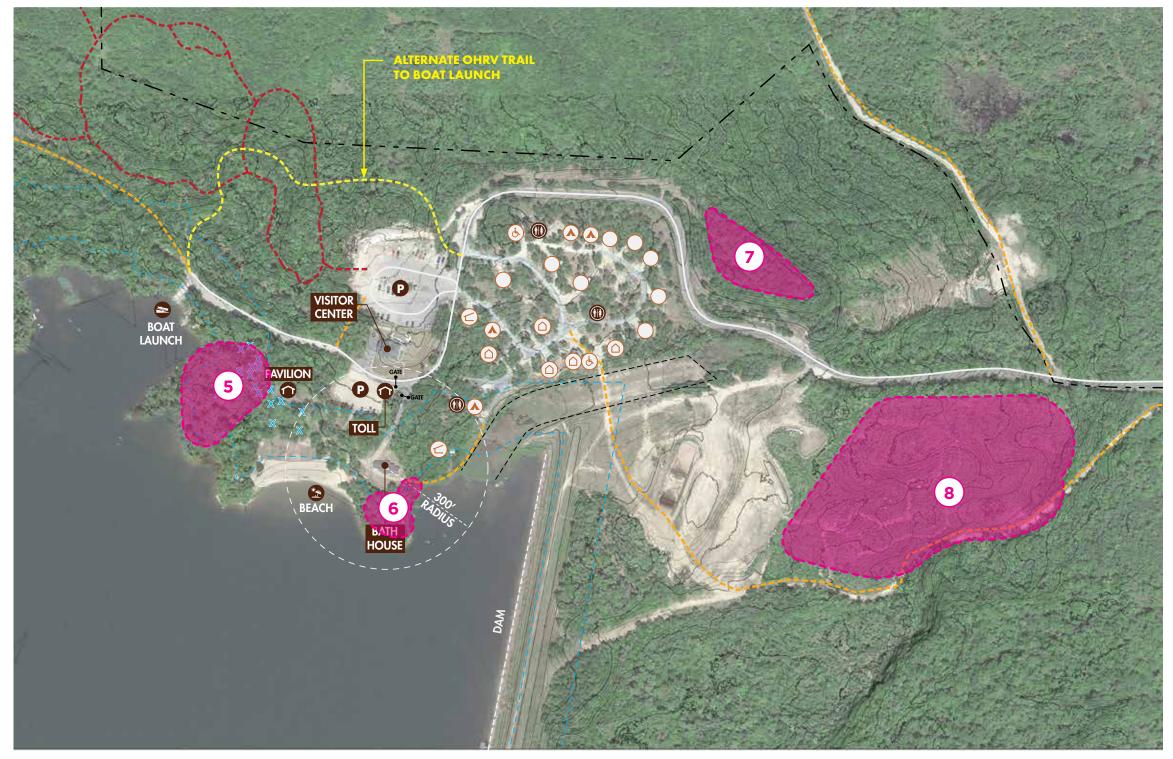
- > Size: .4 Acres
- > Slope: 4-16%
- > Close to beach
- > Waterfront views to south
- > Great southern exposure

#### **EXPANSION AREA 7**

- > Size: 1 Acre
- > Slope: 1-10%,
- > Power corridor runs through site
- > Secluded with filtered view

#### **EXPANSION AREA 8**

- > Size: 6 Acres
- > Slope: Highly Variable, 5-30%
- > No mature trees
- > Large boulders
- > Close to event grounds





## **ARCHAEOLOGY REVIEW**

Phase IA Archaeological Sensitivity Assessment was completed for the proposed Jericho Mountain State Park Campground Expansion Project in Berlin, New Hampshire. The project area is situated in steep, rocky terrain that has undergone extensive disturbance from historic logging and the construction of Jericho Lake and Jericho Mountain State Park. No archaeological sites of areas of archaeological sensitivity were identified, and no further study is recommended.

## HISTORIC SIGNIFICANCE

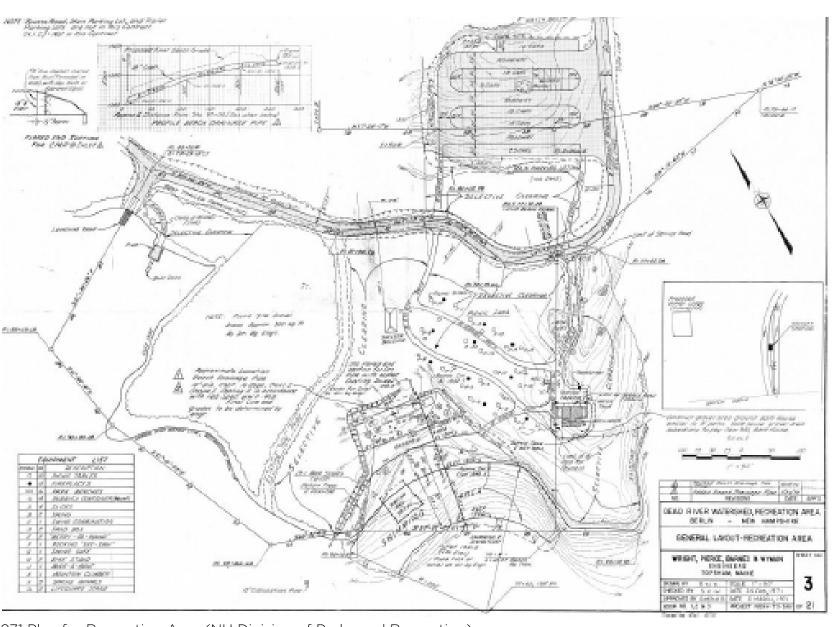
Jericho Lake Park within Jericho Mountain State Park was developed as a municipal park nearly fifty years ago. At the time of survey, it is not fifty years old and does not have exceptional significance. Integrity for the 1975 picnic area and beach and the 1977 campground has been changed by construction of new buildings and reconstruction of roads and paths, so it no longer fully conveys the 1970s historic associations. The park does not represent the achievements of a historically important individual. The original landscape design of the recreation area completed in 1975 is of interest for the overall layout of the beach, picnic area and boat launch, but many components have been added or replaced in recent years. The Dead River Dam No. 1 that formed Jericho Lake was completed just over fifty years ago in 1970. This was one of many such projects carried out in the 1960s-70s period, some of which were systems of multiple dams. The dam is typical but not significant individually for its engineering.

There has been no previous architectural survey within the state park. Properties along West Milan Road-NH 110 northwest of the park entrance were surveyed in 2004, but none were found eligible for the National Register.

See Appendix for complete historic resources overview by Preservation Company.



Old bathhouse built ca. 1975, replaced 2016 (NH Division of Parks and Recreation)



1971 Plan for Recreation Area (NH Division of Parks and Recreation)

## **SITE PLAN OPTION A**

**EXISTING SITES: 21** 

**NEW SITES: 35** 

**TOTAL NUMBER OF SITES: 56** (NOT INCLUDING REMOTE SITES)

#### 1. EVENT AREA

- > 8 Pull through Premium Sites
- > 7 Standard Sites
- > 5 Cabins
- > 8 Lean-tos
- >1 Bathhouse
- > 2 Pit Toilet
- > Relocated Helipad
- > Expanded Event Area

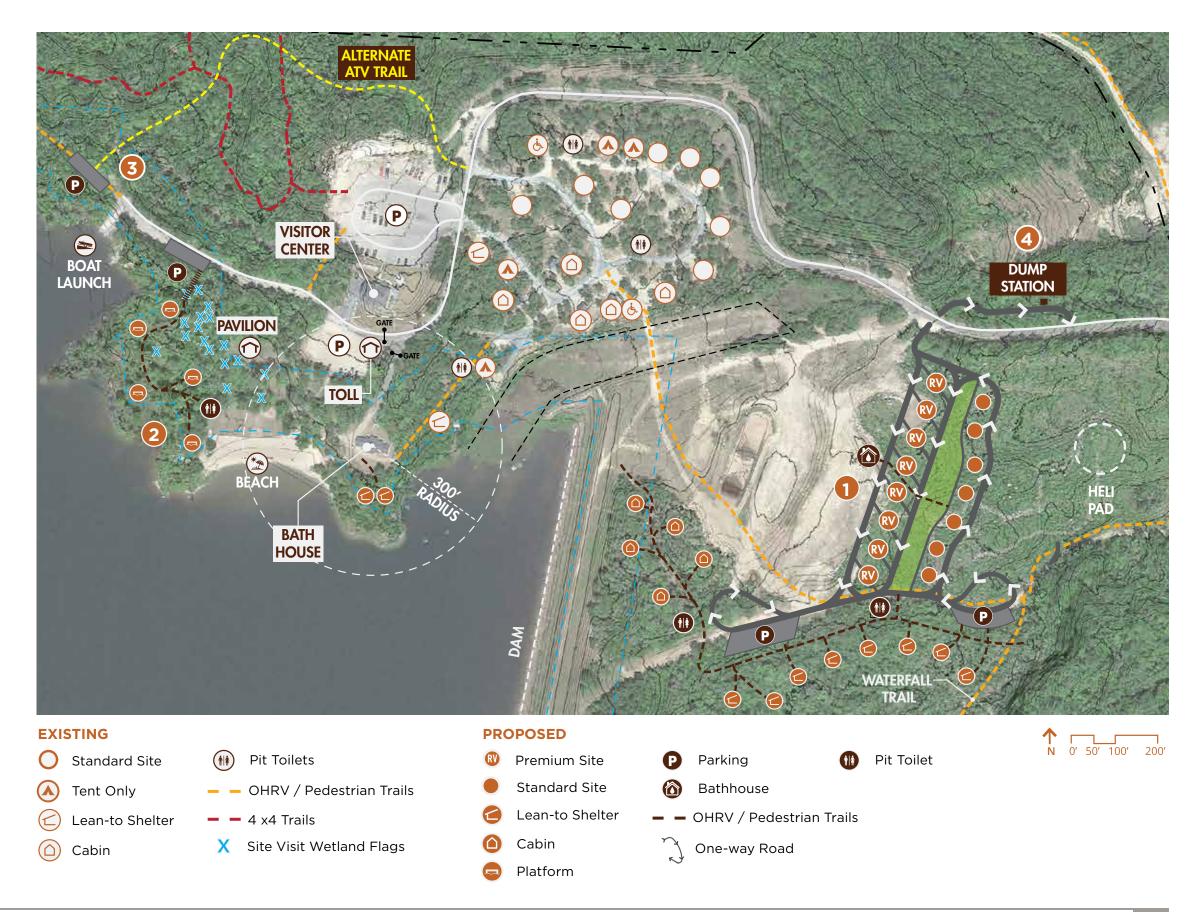
#### 2. WATERFRONT SITES

- > Boardwalk and Path
- > 2 Lean-tos
- >1 Pit Toilet
- > 5 Platform Sites

#### 3. ATV TRAIL AND PARKING

> Alternate ATV trail and parking to reduce congestion at boat launch

#### 4. SANITARY DUMP STATION



## **SITE PLAN OPTION B**

**EXISTING SITES: 21** 

**NEW SITES: 35** 

**TOTAL NUMBER OF SITES: 56** (NOT INCLUDING REMOTE SITES)

#### 1. EVENT AREA

- > 2 Standard Sites
- > 10 Pull-through Premium Sites
- > 9 Lean-tos
- > 5 Cabins
- > 5 Platforms
- >1 Bathhouse
- >1 Pit Toilet

#### 2. INFILL SITES

> Potential for 4+ infill sites within existing campground

#### 3. ATV TRAIL AND PARKING

> Alternate ATV trail and parking to reduce congestion at boat launch

#### 4. SANITARY DUMP STATION

> Pull-through sanitary station at exit



## SITE PLAN

**EXISTING SITES: 20** 

**REMOVED SITES: 1** 

**NEW SITES: 48** 

TOTAL NUMBER OF SITES: 67
(NOT INCLUDING REMOTE SITES)

#### 1. JERICHO BROOK

- > 32 Premium Sites
- > 5 Shelter Sites
- > 5 Standard Sites

#### 2. JERICHO LAKE

- > 2 Single Shelter Site (Infill)
- > 3 Standard Sites (Infill)
- >1 Double Shelter Site

#### 3. COMMON SPACE

- > Common gathering area with fire pit and boulders
- > Small bathhouse building combined with maintenance space

#### 4. ATV TRAIL AND PARKING

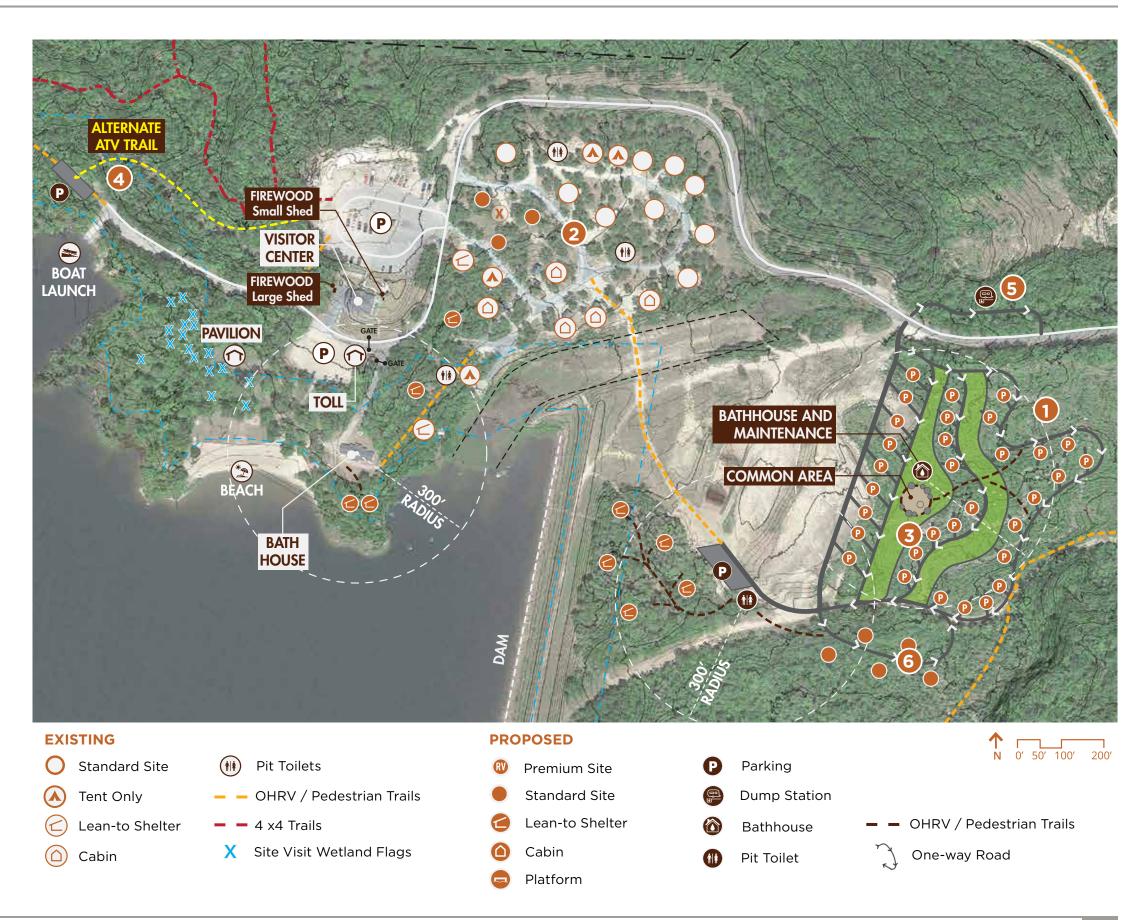
> Alternate ATV trail to boat launch and trail system

#### **5. SANITARY DUMP STATION**

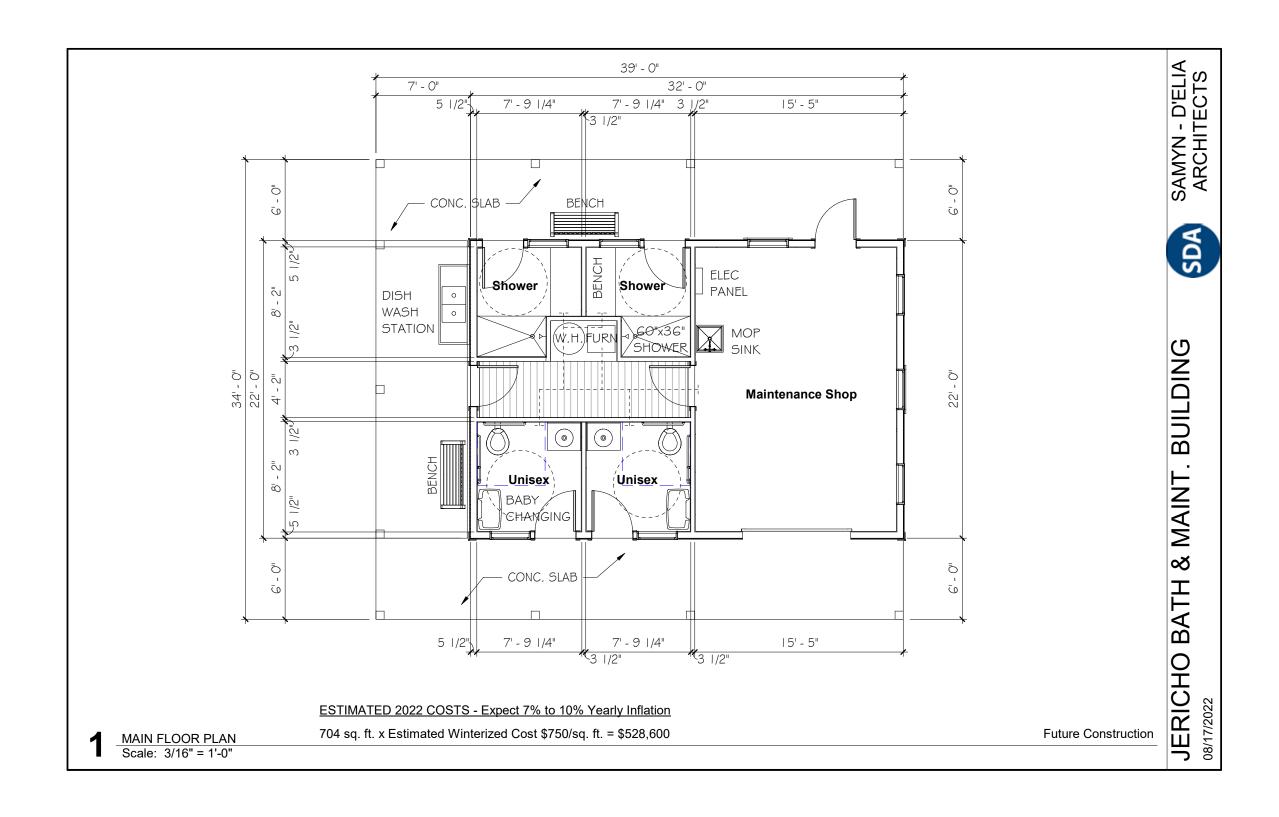
> Pull-through sanitary station at exit with trash/ recycling

#### **6. STANDARD CAMPSITES AREA**

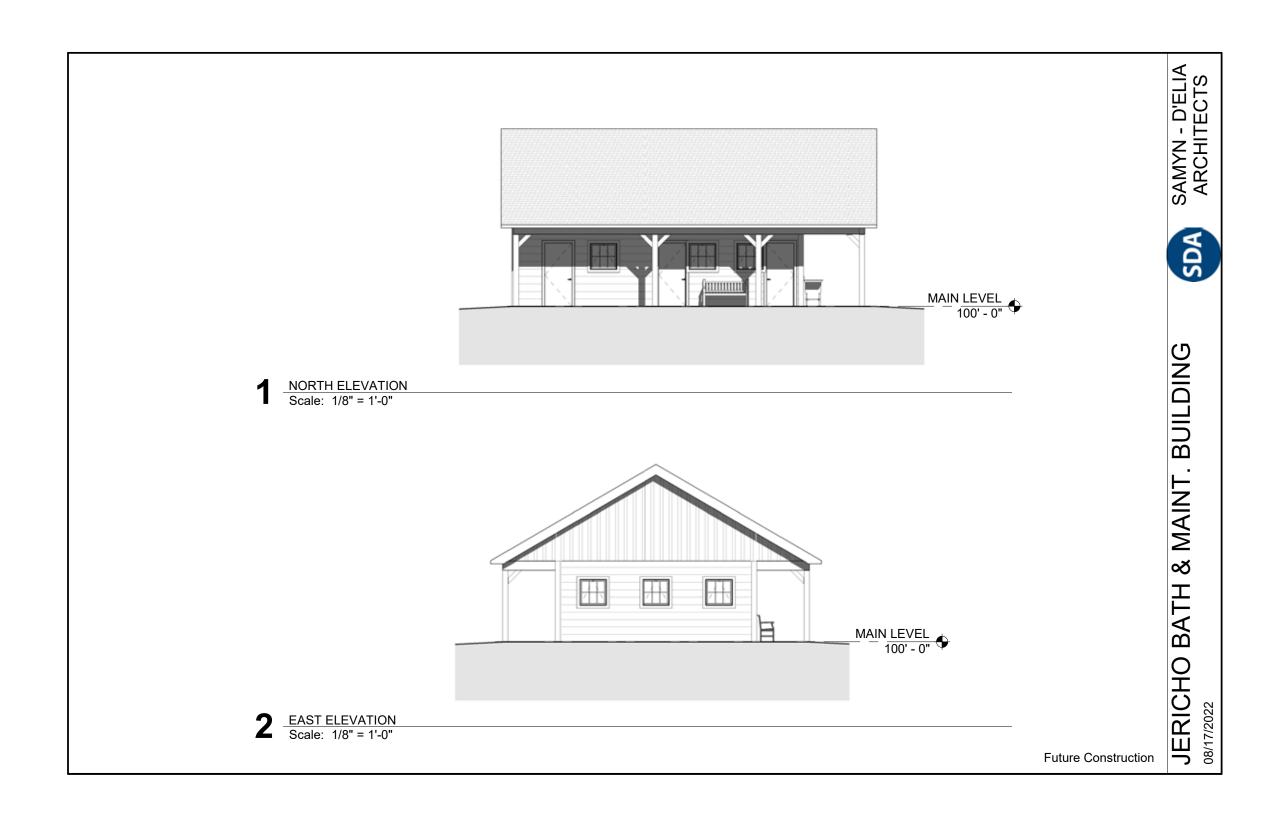
> Option for walk/ride-in sites, potential item for NH State Parks to construct



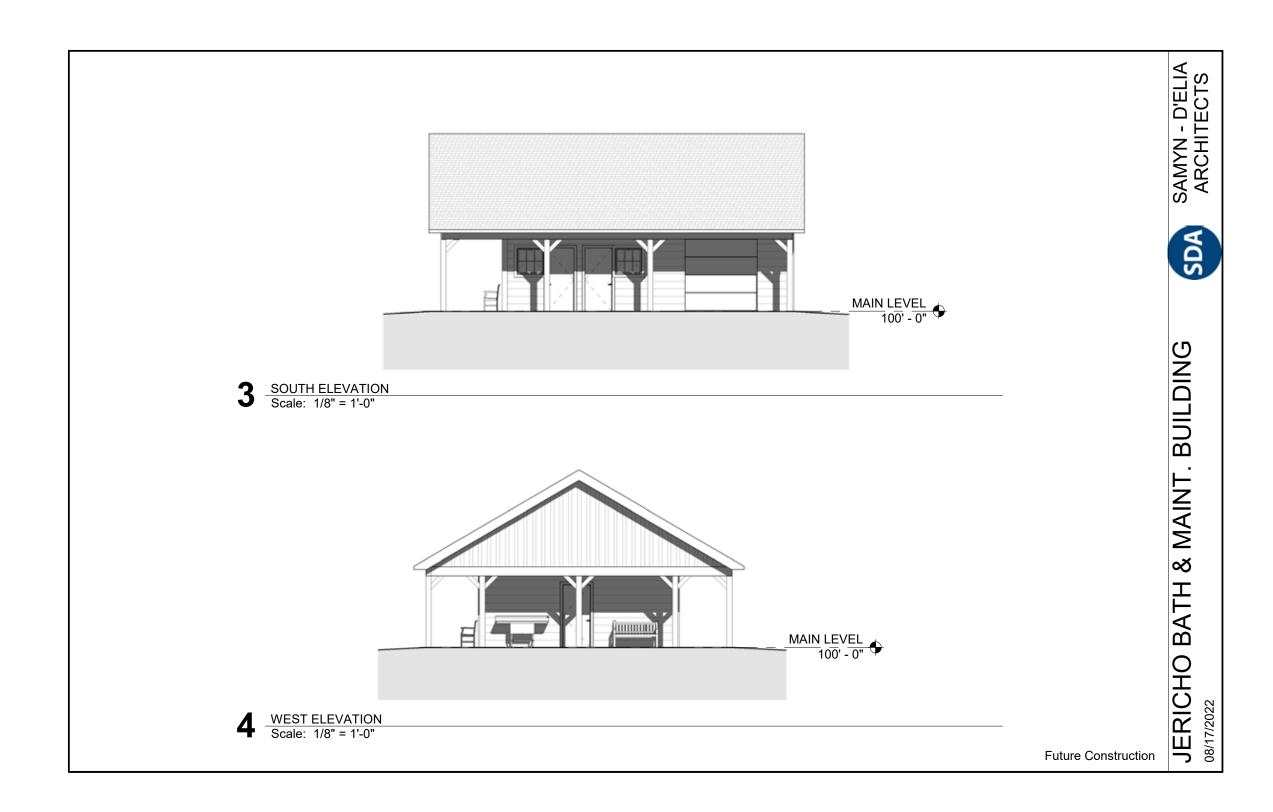
## **ARCHITECTURE BATHHOUSE FLOOR PLAN**



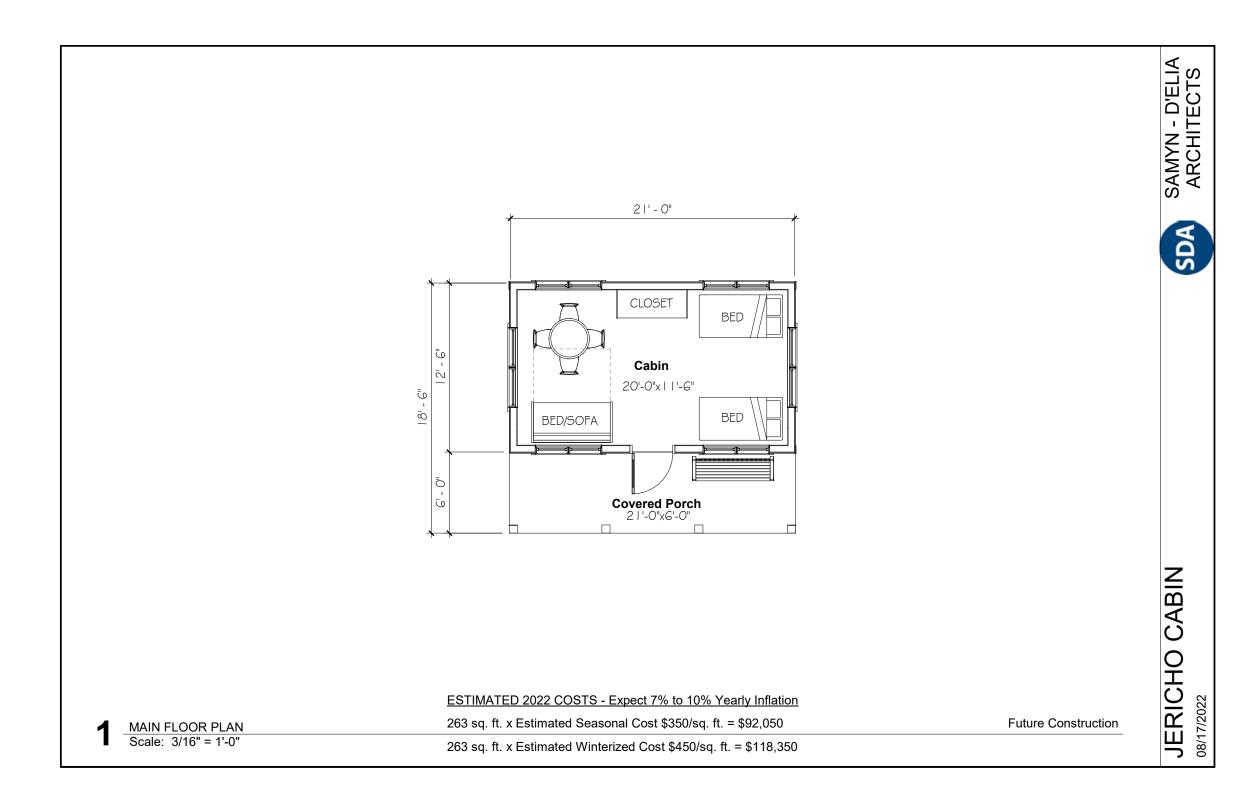
## **ARCHITECTURE BATHHOUSE ELEVATION 1**



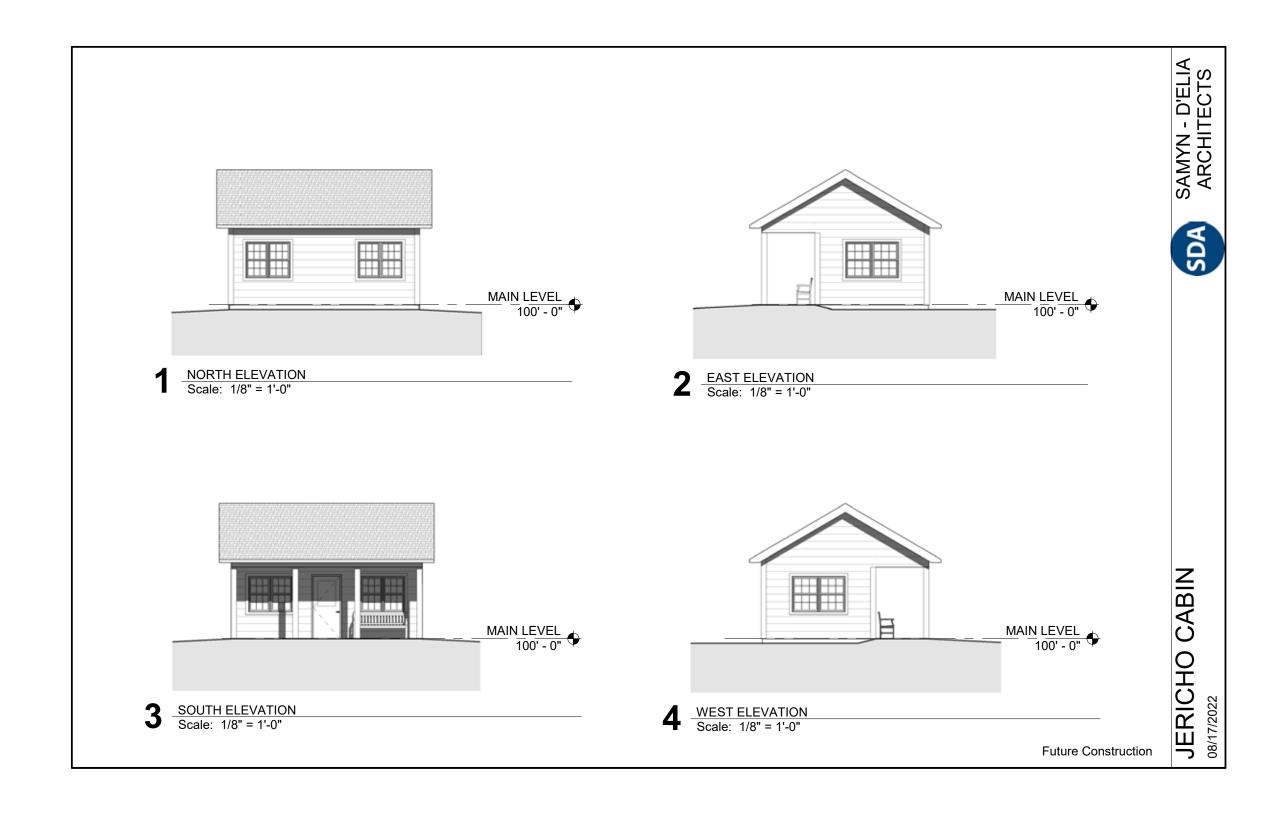
## **ARCHITECTURE BATHHOUSE ELEVATION 2**



## **ARCHITECTURE CABIN FLOOR PLAN**



## **ARCHITECTURE CABIN ELEVATION**









- > Connection to the Androscoggin River
- > It's out there! Sense of wilderness and remoteness
- > Entry level recreation opportunities
- > Fishing, paddling, and floating are part of the culture as a stop along the Northern Forest Canoe Trail
- > Great access to outdoor recreation and wildlife at Umbagog Lake State Park and Umbagog National Wildlife Refuge

NEAREST URBAN AREA: BERLIN - 39 MINUTE DRIVE

#### **PARK INFO ACTIVITIES PARK AMENITIES CAMPSITE TYPES** > 46 Acres > Paddling > Canoe Rentals > Lean-to > 44 Campsites > Pit Toilets > Swimming > Standard (no room for trailer hookups) > Fishing > Beaches > Tent Only > Park Store > Remote > Boat Launch > Picnic Pavilion > Potable Water

## **EXISTING CONDITIONS**

#### 1. PARK ENTRY

- > Poorly defined / confusing entrance, very constrained
- > High traffic speed on highway, easy to miss entry
- > Regular visitors often use cut-off entry
- > Line-of-sight limits options for entry relocation

#### 2. CHECK-IN ENTRY

- > Temporary trailer being used as park office
- > Two old cabins being used for firewood storage operational challenge
- > Canoe / kayak rental

#### **3. BOAT LAUNCH AREA**

- > Steep grade on lawn-covered boat launch
- > Tight conditions for vehicles with trailers
- > Commercial boat operators use this as launching point, pickup down river

#### 4. ENTRY ROAD

- > Very narrow area for campsites between road and river
- > Parking challenging at some sites due to grade change
- > Multiple clogged culverts under road
- > Wetlands between highway and entrance road
- > Long, straight road lends itself to speeding
- Closed portion of road would be expensive to reconstruct and would face permitting challenges

#### **5. CAMPSITES / WATERFRONT**

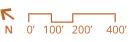
- > Many campsites are very close together with no buffer
- > Water access is poorly defined and prone to erosion.
- > No "beach"
- > Water level can fluctuate +/- 2'
- 37 Tent Sites
  - Sites
- Picnic Pavilion

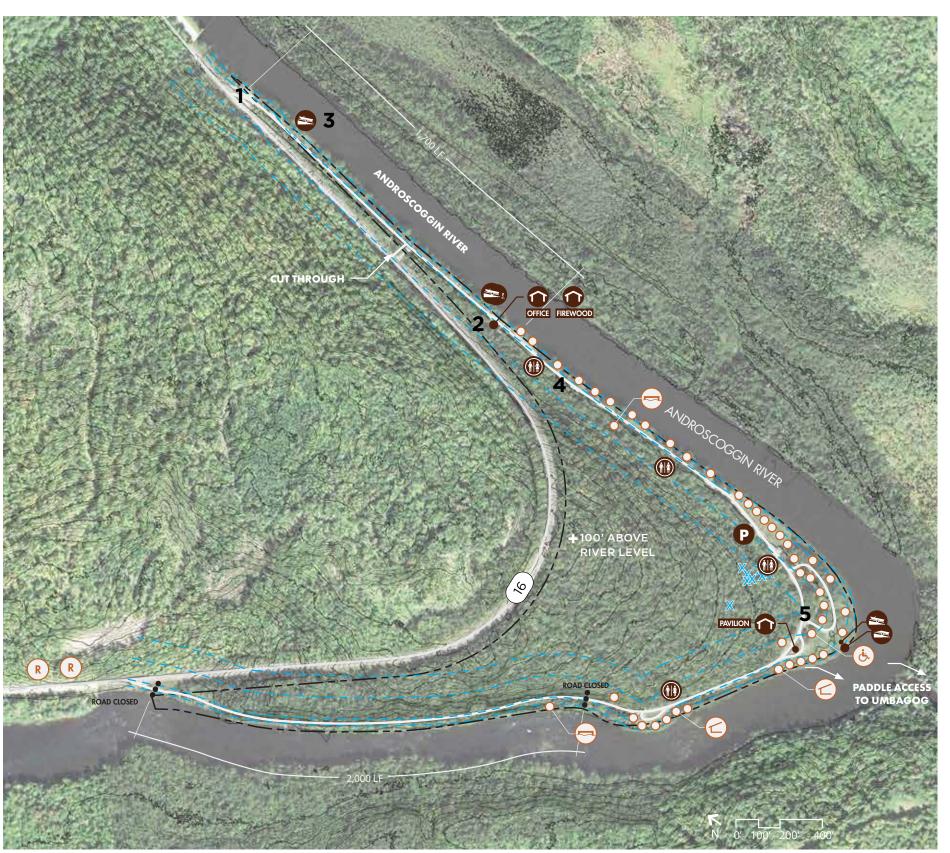
**Boat Launch** 

- (b) 1 Accessible Sites
  - s **U**
- Registration and Office
- 2 Lean-to Shelters

2 Remote Sites

- 2 Platform Sites
- Pit Toilets
- X Site Visit Wetland Flags





## **SITE UTILIZATION**

#### QUICK FACTS

Average 5-Year Utilization: 35.12%

Average Peak-Season Utilization: 45.66%

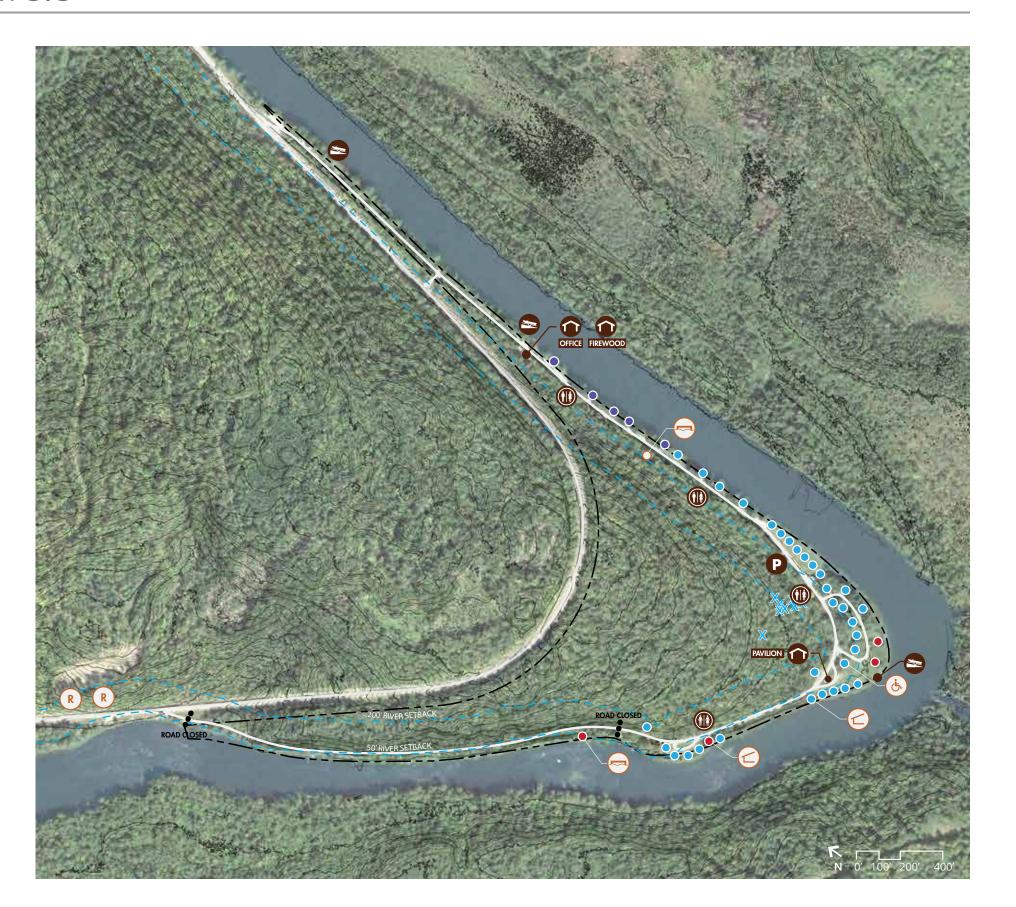
Average Off Season Utilization: 19.78%

#### KEY

- < 15 Percent Annual Utilization</p>
- < 50 Percent Annual Utilization</p>
- > 50 Percent Annual Utilization
- Remote Site (>50 Percent Annual Utilization)

#### UTILIZATION TRENDS

Of the 44 campsite options, six of the sites achieve an annual utilization of 50 percent or more. Five campsites have less than a 15 percent utilization rate. These site are located closest to the entry to the campsite.



## **INFRASTRUCTURE**

#### WATER SUPPLY

Supply is from a drilled **well (1)** next to site 7A. A small pump house with a State 36-gallon hydropneumatic tank that maintains pressure for the system

Distribution goes north and south from the well location to supply the office buildings and six spigots throughout the campground

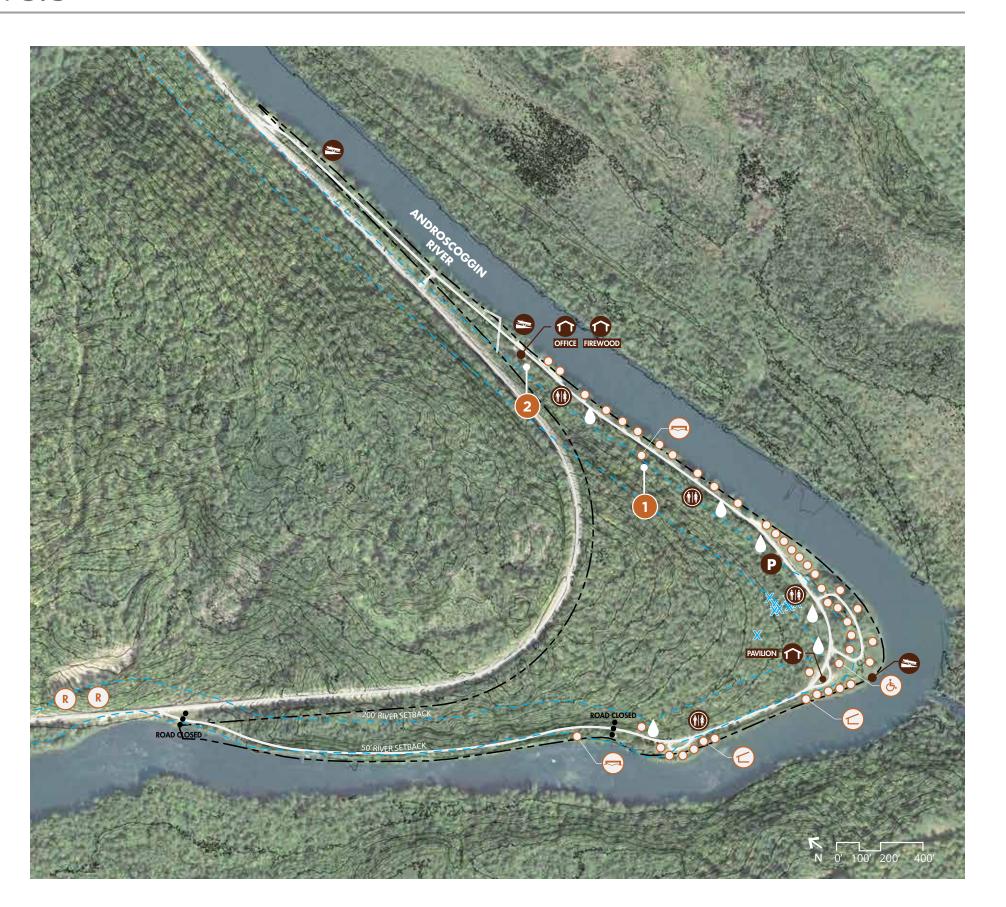
#### WASTEWATER

The office buildings are served by a small septic system (2) south of the buildings.

A toilet structure sits directly over the tank. The leach field area is in a small area surrounded by wetland and close to the river.

#### POWER

Overhead power is served to a pole near the office buildings. Service from that pole are underground to those two buildings and the well pump house.



## **STRUCTURES**



#### **CABINS**

Number	2 cabins
Original Use	#1 office; #2 living
Current Use	Wood storage; Maintenance
New Use	Demo rear addition to original cabins. Could be part of new service building or rental cabins
Year Built	1940, moved current location, when park was established
Construction	Traditional log construction
History	Logging company built and used both cabins before the area became a state park. An additional Trailer was added when the cabins were not fit for habitation. The trailer will be removed along with later additions to each original building.
Size	12'x18' original building
Upgrade needed	Foundation, general repair roof logs and walls, some interior work.
Accessible	Could be made so
Historically Significant	Possibly (Not endemic to site)



#### LEAN-TO

Number	2
Condition	Good



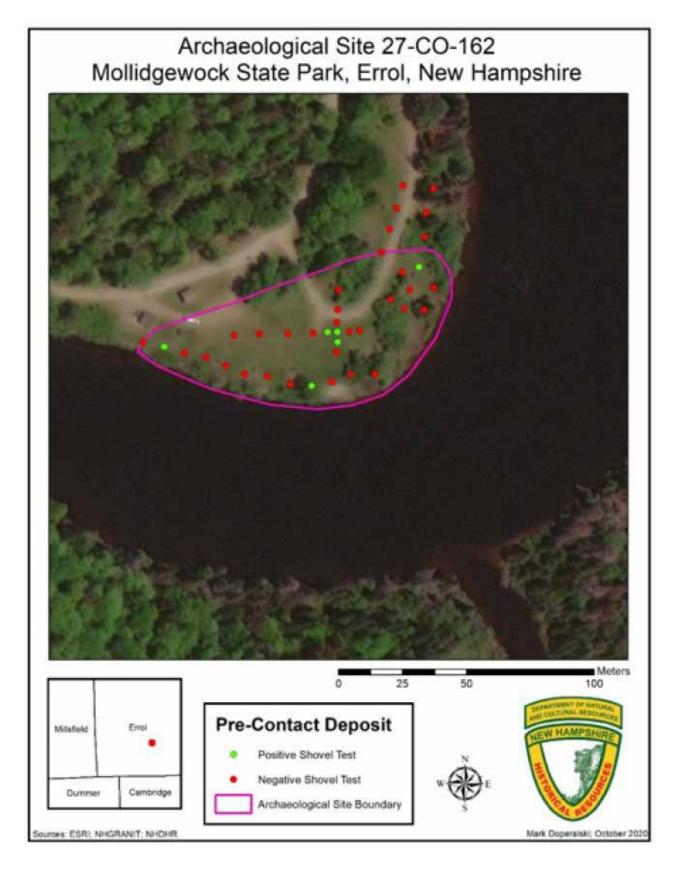
#### GAZEBO

Number	1
Current Use	Wood storage; Maintenance
Year Built	2006
Construction	Heavy Timber and Stick Built.
Size	12'x12'
Condition	Good
Accessible	No
Historically Significant	No

## **ARCHAEOLOGY REVIEW**

A Phase IA Archaeological Sensitivity Assessment was completed for the proposed Mollidgewock State Park Campground expansion project in Errol, New Hampshire. This study identified a previously recorded Native American archaeological site (27CO0162) in the southern portion of the project area. An expanded Phase IB Intensive Archaeological Investigation and Phase II Determination of Eligibility study is recommended for this site to gather additional data on its age, nature, integrity, and spatial extent. This will include the excavation of a maximum of twenty additional shovel test pits to complete testing in the well-drained portions of the project area not addressed by the earlier NHDHR survey, and to close any gaps in the portion of the project area that was included in the survey. It would also include the excavation of a maximum of eight one-meter square excavation units placed judgmentally around the previous identified feature or other areas of potential features or artifact concentrations, as well as provisions for a maximum of two radiocarbon dates and analysis of calcined bone by a qualified zooarchaeologist. This study would also provide a determination of the eligibility of site 27CO0162 for listing on the National Register of Historic Places.

The remainder of the project area, because of its sloping, rocky, and poorly drained terrain, is not considered sensitive for Native American archaeological sites, and no further study is recommended.









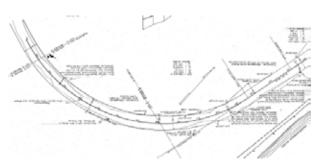
## HISTORIC SIGNIFICANCE

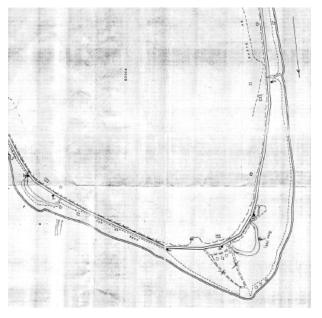
Mollidgewock State Park is a relatively recent addition to the State Park system. The campground is of interest for its origins in the early 1970s but most of its buildings and features are less than fifty years old. The site was developed over a period of years in the 1970s-80s, and additional changes were made by the State in the 1990s. As a property created within the past fifty years, it is not of exceptional importance for its historic associations with outdoor recreation. The individuals associated with the camparound did not rise to the level of importance to make it eligible under Criterion B. Mollidgewock State Park is not significant under Criterion C as an example of campground or park layout. It does not represent a particular period of construction and is not a designed landscape. The two log cabins are of interest for their early twentieth century construction. However, as moved buildings, they no longer have integrity for their original use, and individually, the structures do not have significance for their architecture or construction. The land may have significance under Criterion D for information potential. Previous testing has confirmed a site with high archaeological sensitivity and there has been limited disturbance by the surficial campsites.

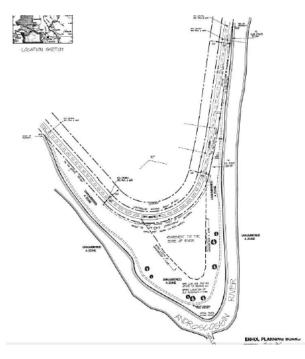
See Appendix for complete historic resources overview by Preservation Company.











**MOLLIDGEWOCK CONCEPT ALTERNATIVES** 

## **SITE PLAN OPTION A**

**EXISTING SITES: 44** 

**SITES REMOVED: 14** 

**NEW SITES: 14** 

**TOTAL # OF SITES: 44** (NOT INCLUDING 5 REMOTE SITES )

#### 1. PARK ENTRY

- > Main entry moves to existing cut through
- > Improved entry sign, open up view to river

#### 2. OFFICE CORE

- > New office/store building and firewood storage shed
- > New floating dock / boat launch

#### 3. UPLAND CAMPING

> A short 2-way road serves new campsites and a new bathhouse. at the end to access platform sites

#### **EXISTING**

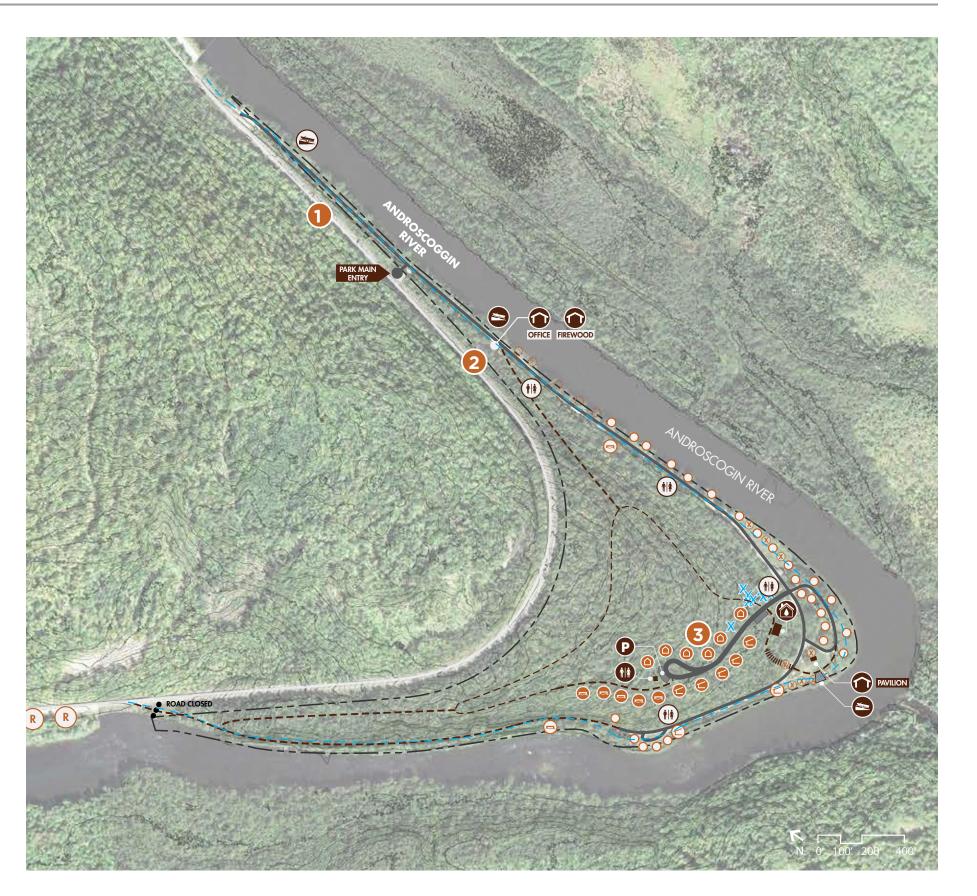
- Standard Site
- Accessible Site
- Lean-to Shelter
- Platform Site
- Remote Site

#### **PROPOSED**

- Standard Site
- Lean-to Shelter
- Cabin
- Removed Site
- Paddler Only
- ) One-way Road

- Structure
- Boat Launch
- Pit Toilets
- X Site Visit Wetland Flags

- Structure
  - Boat Launch
  - Pit Toilets
  - Parking
  - Bathhouse
  - Boardwalk / Dock



## **SITE PLAN OPTION A**

#### CONTINUED

#### 4. UPLAND

- > 5 Lean-Tos
- > 6 Cabins (2 Existing)
- > 5 Platforms

#### **5. BATHHOUSE**

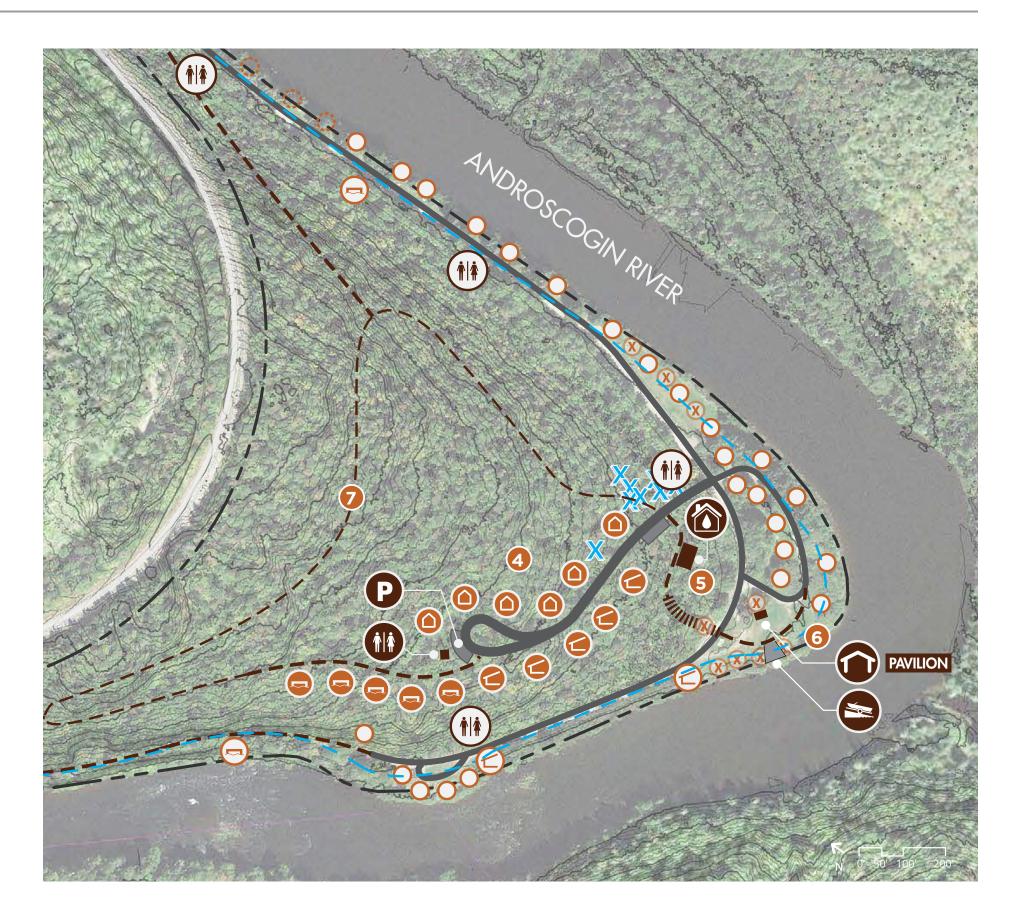
- > The bathhouse is located on the uphill side of the road outside of the expected wetland area.
- > Location is centralized between the new uphill camping area and the existing waterfront sites

#### **6. COMMON SPACE**

- > The pavilion shifted to the center of the common area
- > Open lawn area for informal play, seating with views of river
- > Improved infrastructure for water access and seating centered on the pavilion

#### 7. TRAIL LOOP / BOARDWALK

- > New trails move users through the common space, over wetlands via a boardwalk, and into a trail loop in the hillside forest
- > Main connection to trails is at the common space
- > Multi-use trail loop provides another activity option



## **SITE PLAN OPTION B**

**EXISTING SITES: 44** 

**SITES REMOVED: 14** 

**NEW SITES: 18** 

**TOTAL # OF SITES: 49** (NOT INCLUDING 5 REMOTE SITES )

#### 1. PARK ENTRY

- > Main entry moves to existing cut through
- > Improved entry sign, open up view to river
- > Potential relocation of boat launch to existing pull-off with improved access
- > Road between parking area and new main entry is converted to path

#### 2. UPLAND CAMPING

- > New 1-way loop road serves new wooded campsites.
- > Circulation in existing campground core becomes 1-way for improved pedestrian safety

#### **EXISTING**

- Standard Site
- Accessible Site
- Lean-to Shelter
- Platform Site
- Remote Site
- Structure
- Boat Launch
- Pit Toilets
- X Site Visit Wetland Flags

#### **PROPOSED**

- Standard Site
- Lean-to Shelter
- Cabin
- Removed Site
- Paddler Only
- One-way Road

- Structure
- Boat Launch
- Pit Toilets
- Parking
- Bathhouse
- Boardwalk / Dock



## **SITE PLAN OPTION B**

#### CONTINUED

#### 3. OFFICE CORE

- > The office, store, rentals, and boat put-in are moved to the center of the campground allowing for easier guest access
- > The Camp store will service paddlers and guests

#### 4. UPLAND

- > 8 Lean-Tos (2 Existing)
- > 10 Cabins (2 Existing)
- > 2 Platforms (2 Existing)

#### **5. BATHHOUSE**

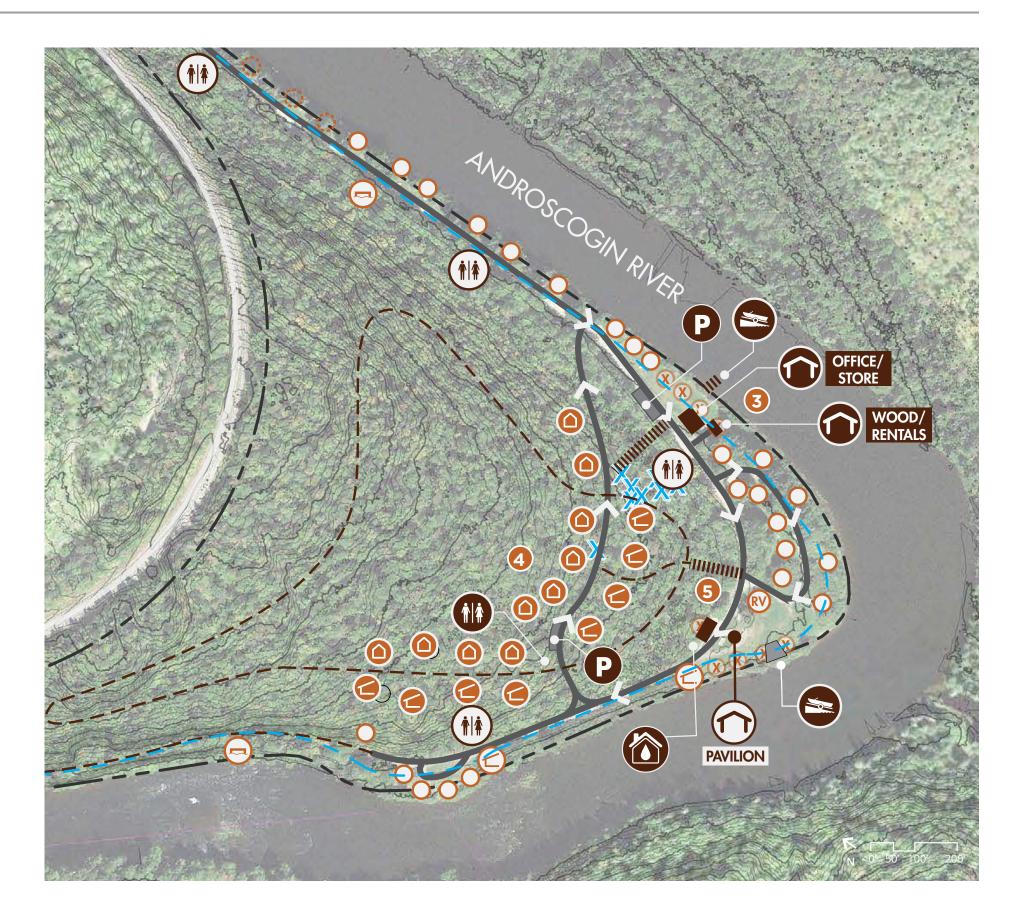
> New bathhouse in central location over existing campsite

#### **6. COMMON SPACE**

- > Open lawn area for informal play, seating with views of river
- > Improved infrastructure for water access and seating

#### 7. TRAIL LOOP / BOARDWALK

- > Boardwalk connections from the office core and bathhouse allow for access to trails in the uphill forest
- > Multi-use trail loop provides another activity option



## **SITE PLAN**

**EXISTING SITES: 45** 

**REMOVED SITES: 15** 

**NEW SITES: 23** 

**TOTAL # OF SITES: 53** (NOT INCLUDING PADDLE ONLY SITES)

NOTE: GOAL IS TO CONVERT 15 STANDARD SITES TO IMPROVED SITES (W/E), FINAL NUMBER AND LOCATION OF SITES TO BE CONVERTED TBD

#### 1. PARK ENTRY

> Main entry moves to the existing cut through with improved signage

#### 2. BACK OF HOUSE

> Existing office location to be re-purposed as the back-of-house space used for long-term wood storage, trash and recycling, and a dump station

#### 3. MULTI-PURPOSE TRAIL / TRAIL LOOP

> A multi-purpose trail along the water will connect to a trail loop in the upland forest

#### **EXISTING**

- Standard Site
- Shelter Site
- Platform Site
- Remote Site

#### **PROPOSED**

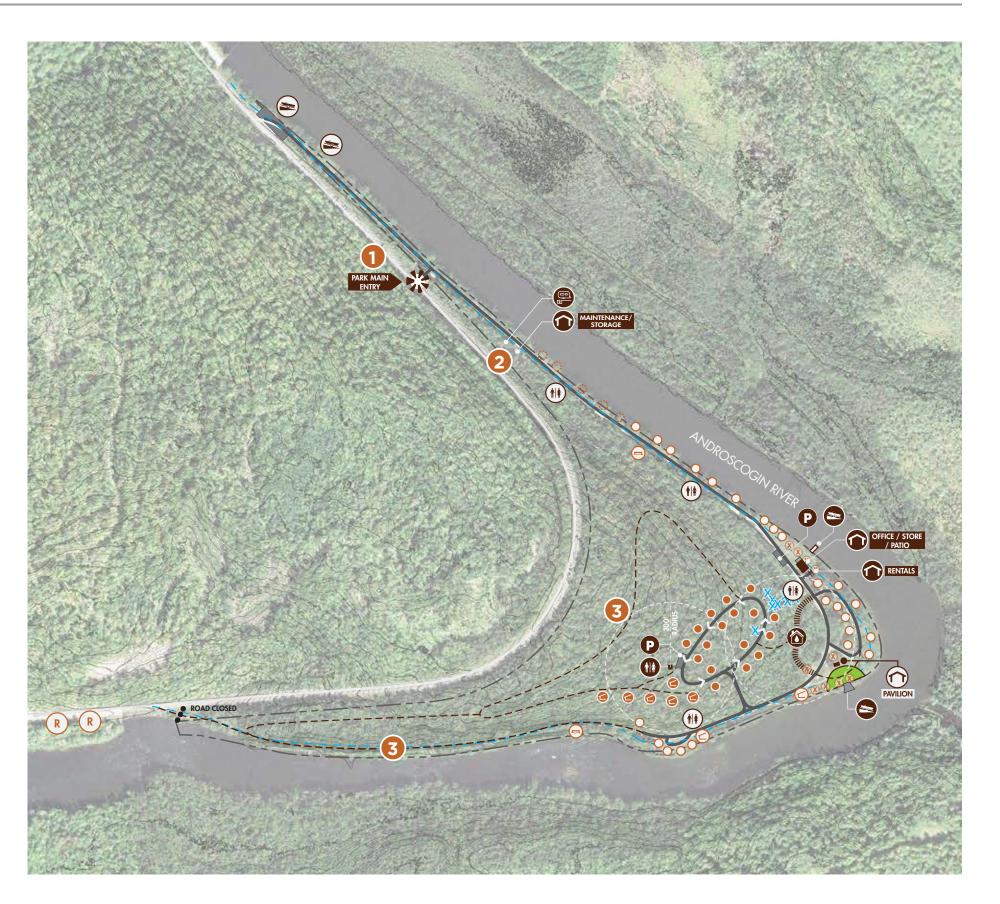
- Standard Site
- Shelter Site Removed Site
- Paddler Only

- Structure
- **Boat Launch**
- Pit Toilets
- X Site Visit Wetland Flags

#### Structure

- Boat Launch
- Pit Toilets
- Parking Bathhouse

N 0' 100' 200'



**Dump Station** 

Boardwalk

One-way Road

**MOLLIDGEWOCK** PREFERRED CONCEPT

### **SITE PLAN CONTINUED**

#### 4. CENTRAL OFFICE

> The office, store, rentals, and boat launch have moved to the center of the campground allowing for easier guest/paddler access and staff supervision

#### 5. UPLAND CAMPING POD

- > A 1-way loop road provides access to new upland wooded campsites.
- > 6 walk-in Shelter Sites
- > 15 Standard Sites

#### **6. COMMON SPACE**

> A new common space along the waterfront provides an open lawn area for informal play, relocated pavilion, and a stone stabilized shoreline for improved water access

#### 7. BATHHOUSE

> A new accessible bathhouse will be conveniently located between the upland and waterfront campsites

#### **EXISTING**

- Standard Site
- Shelter Site
- Platform Site
- Remote Site

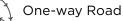
#### **PROPOSED**

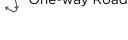
- Standard Site
- Shelter Site
- Removed Site
- Paddler Only

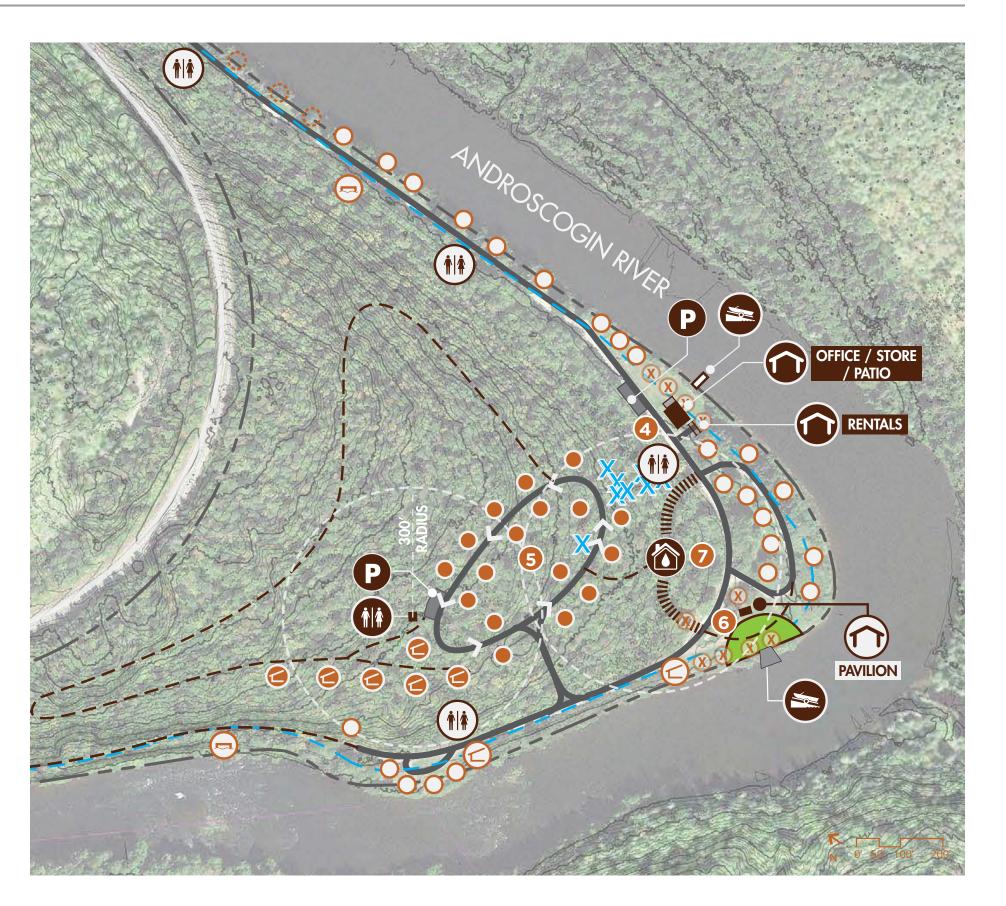
- Structure
- **Boat Launch**
- Pit Toilets
- X Site Visit Wetland Flags

#### Structure

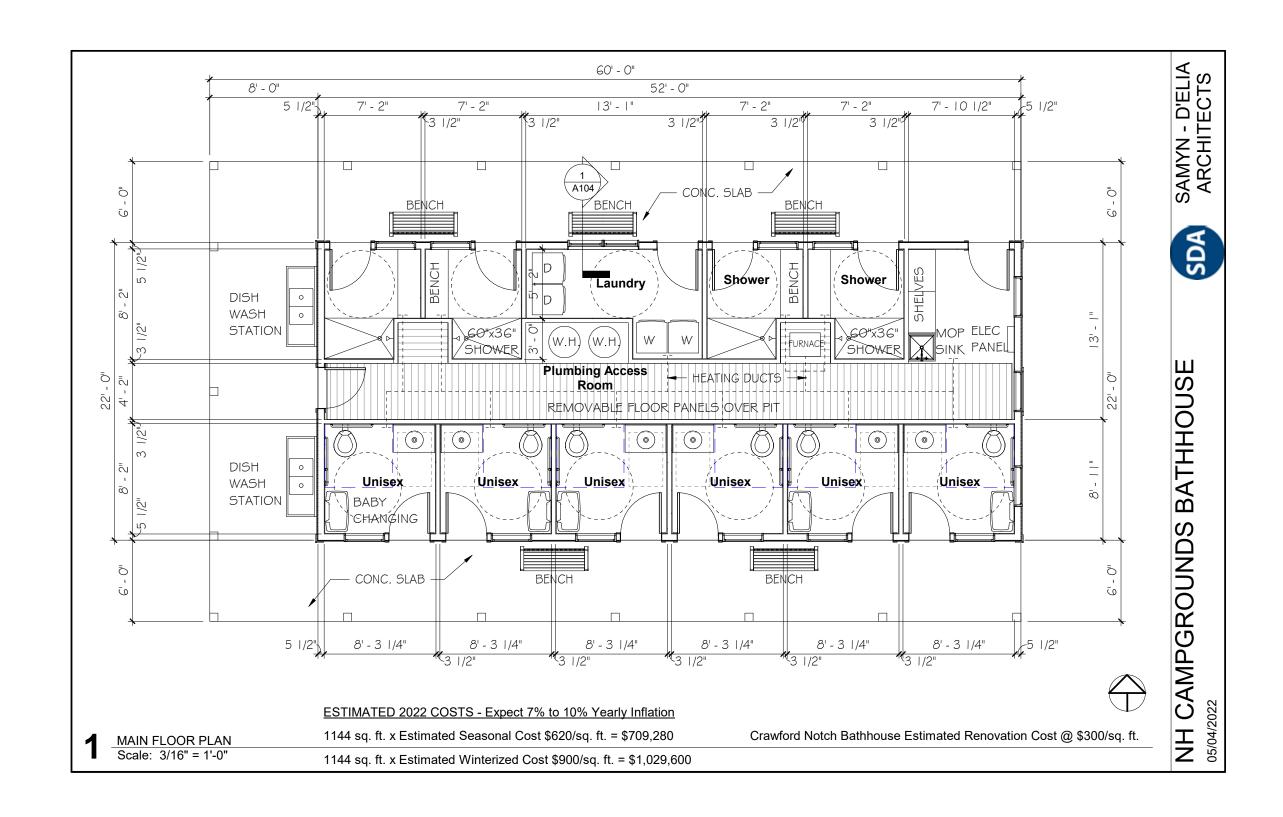
- Boat Launch
- Pit Toilets
- Parking Bathhouse
- **Dump Station** 
  - Boardwalk



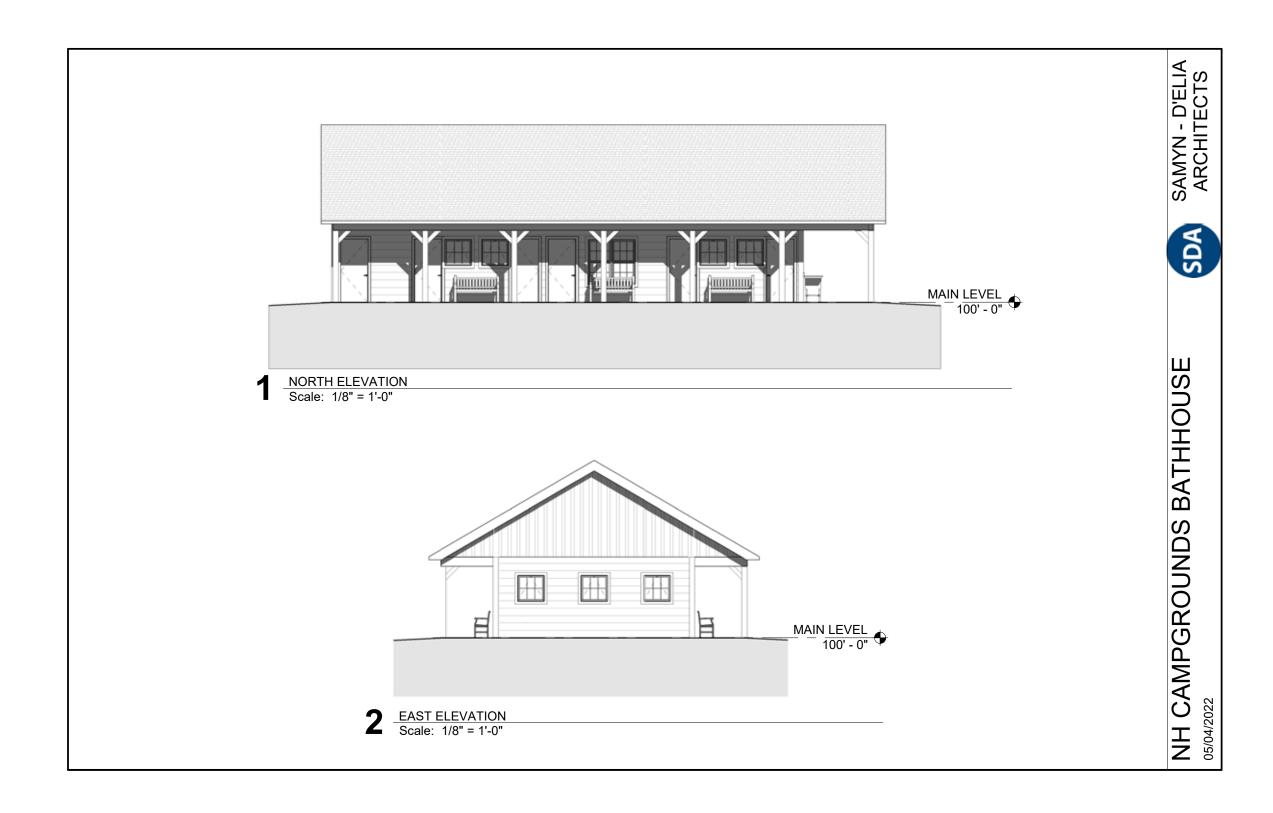




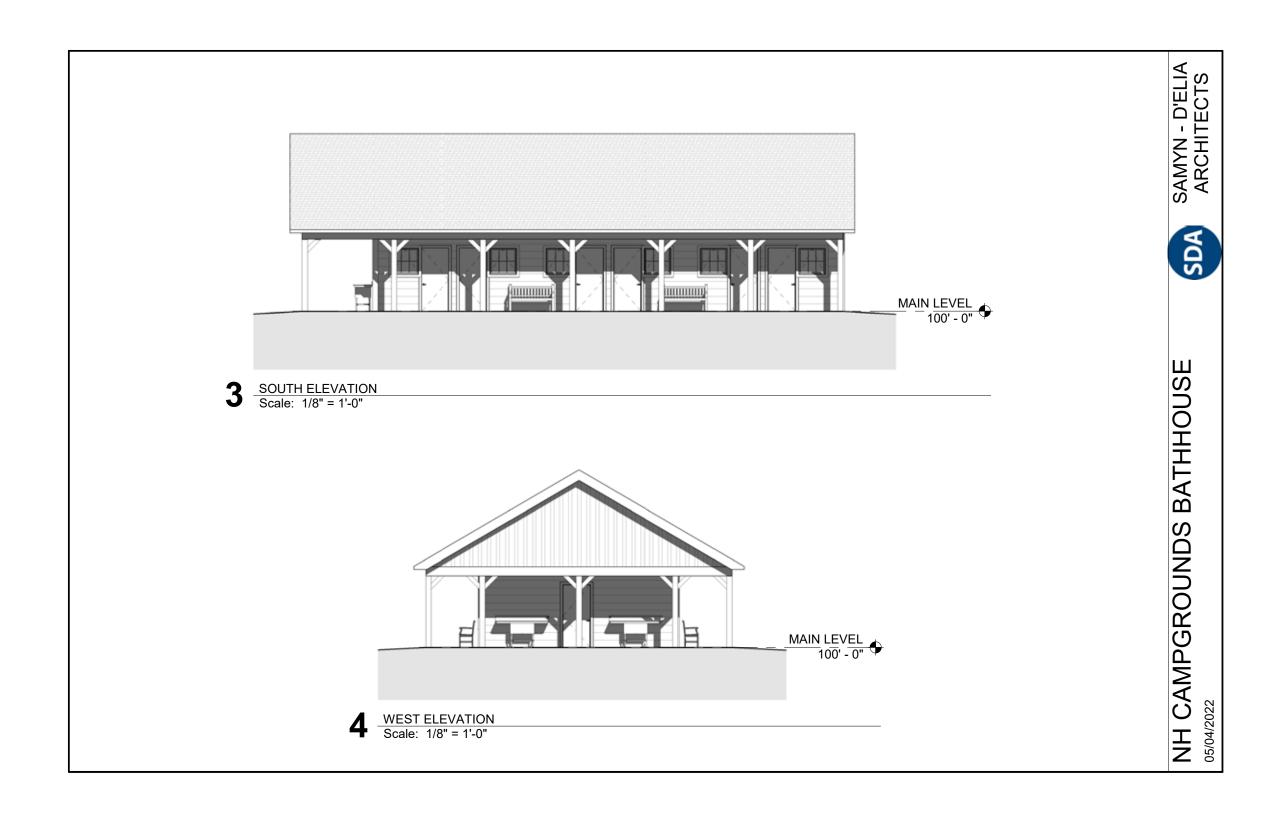
## **ARCHITECTURE** BATHHOUSE **FLOOR PLAN**



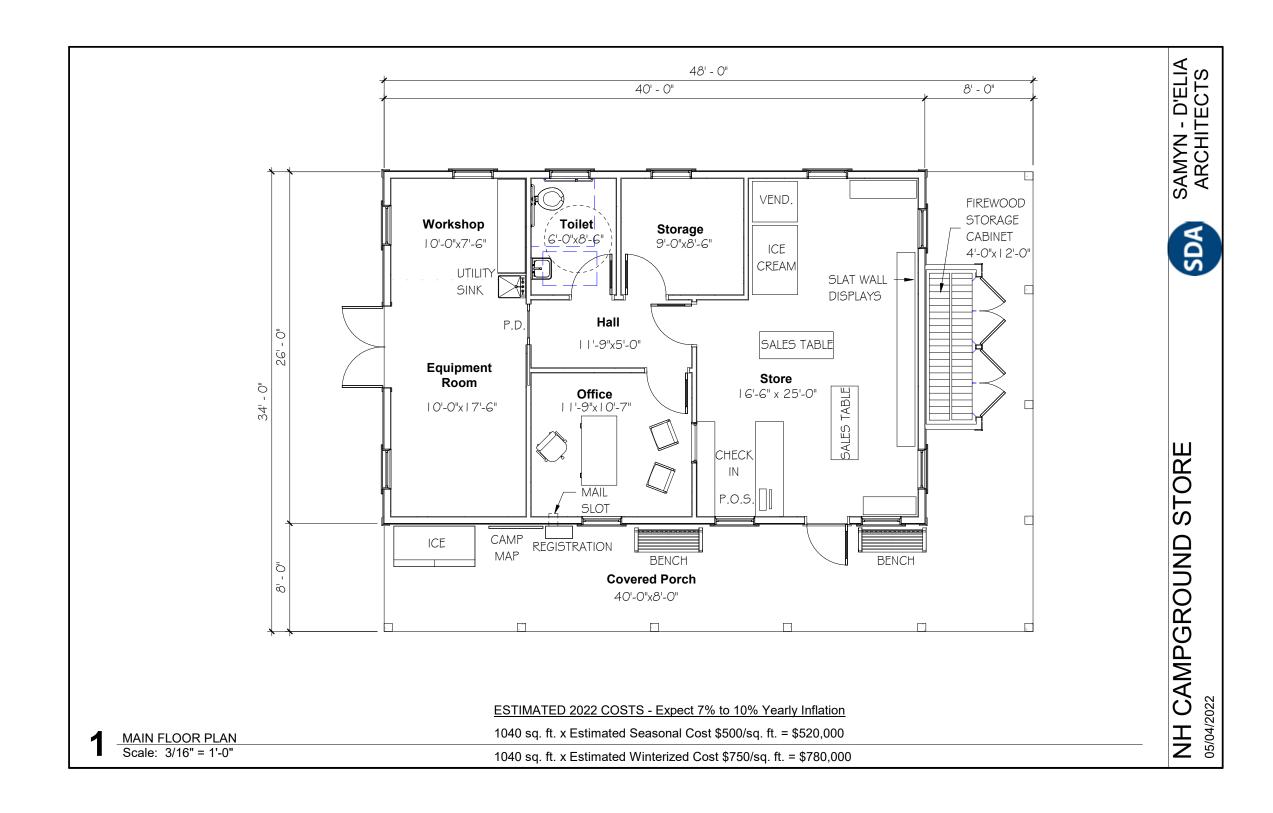
# ARCHITECTURE BATHHOUSE ELEVATION 1



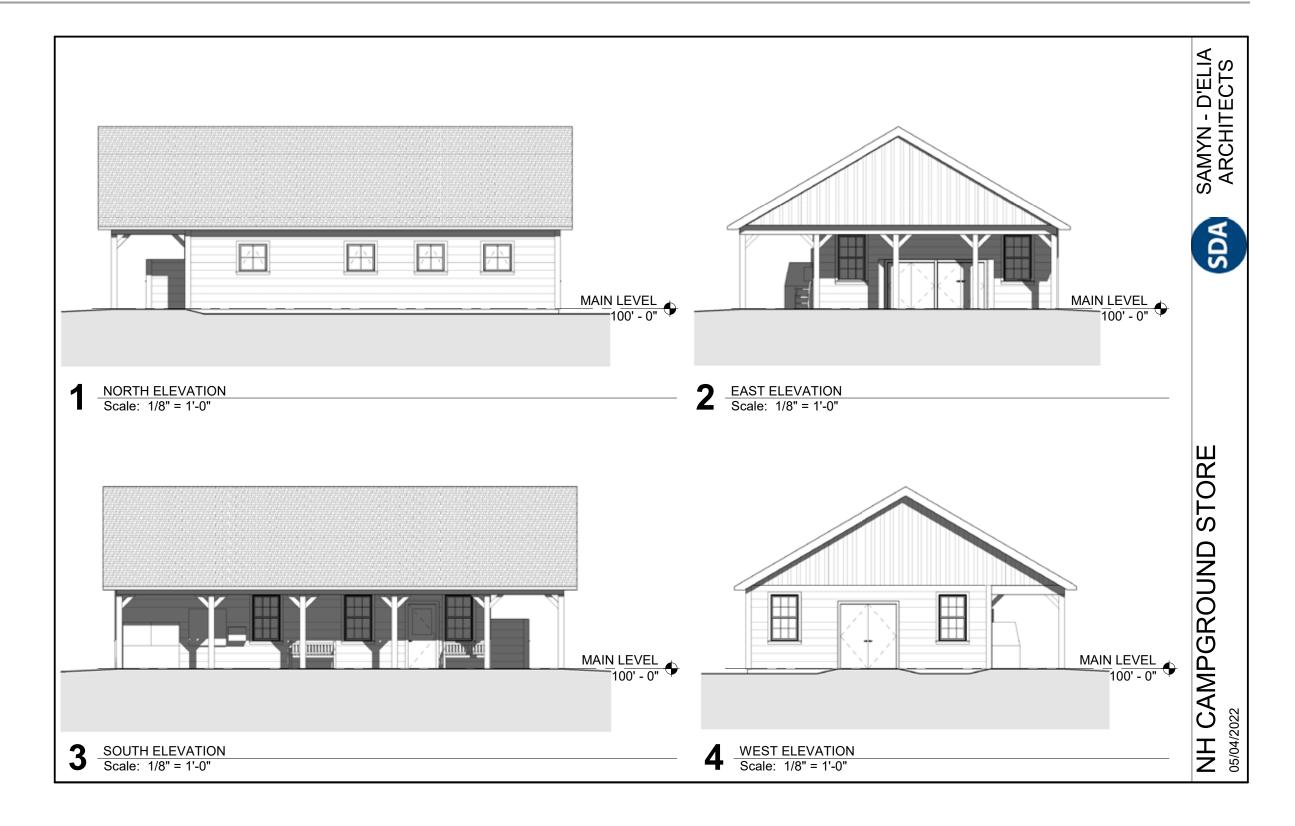
## **ARCHITECTURE BATHHOUSE ELEVATION 2**



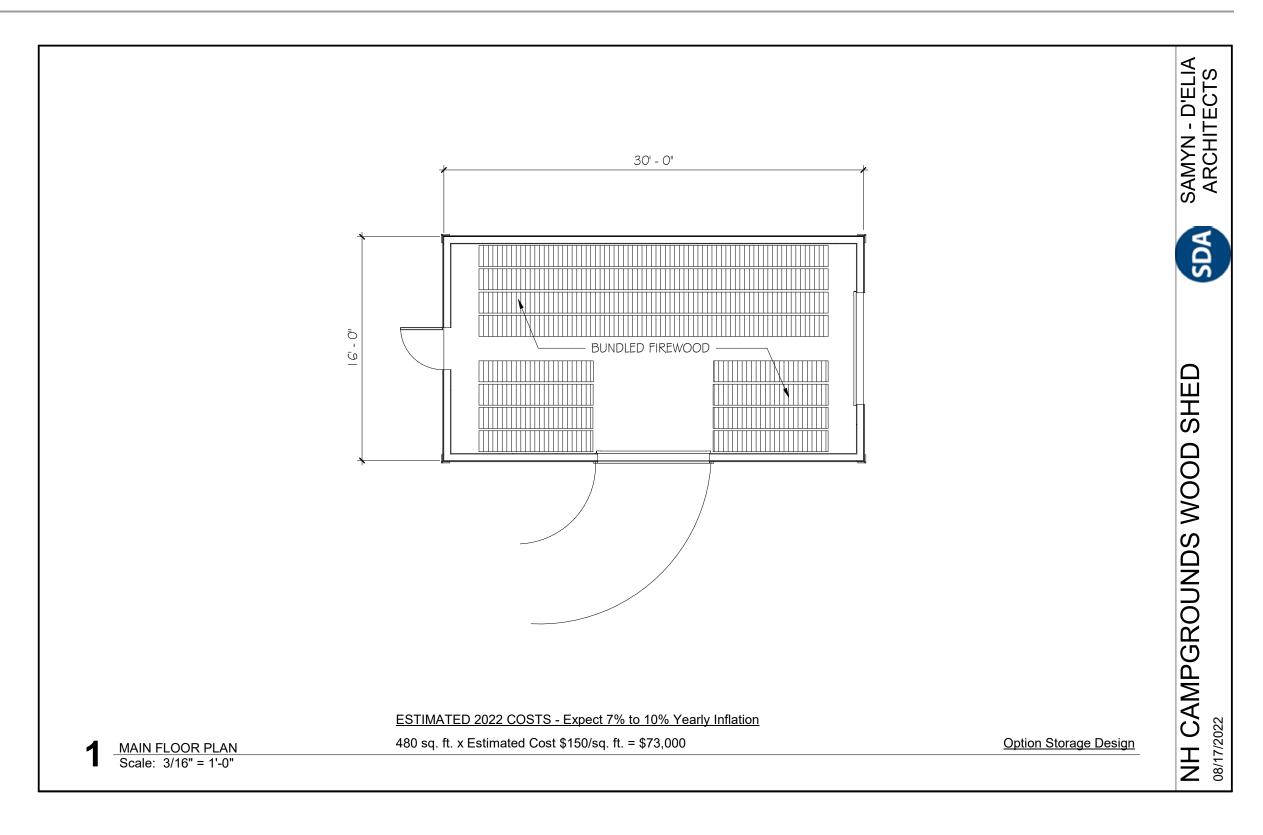
# ARCHITECTURE STORE & OFFICE FLOOR PLAN



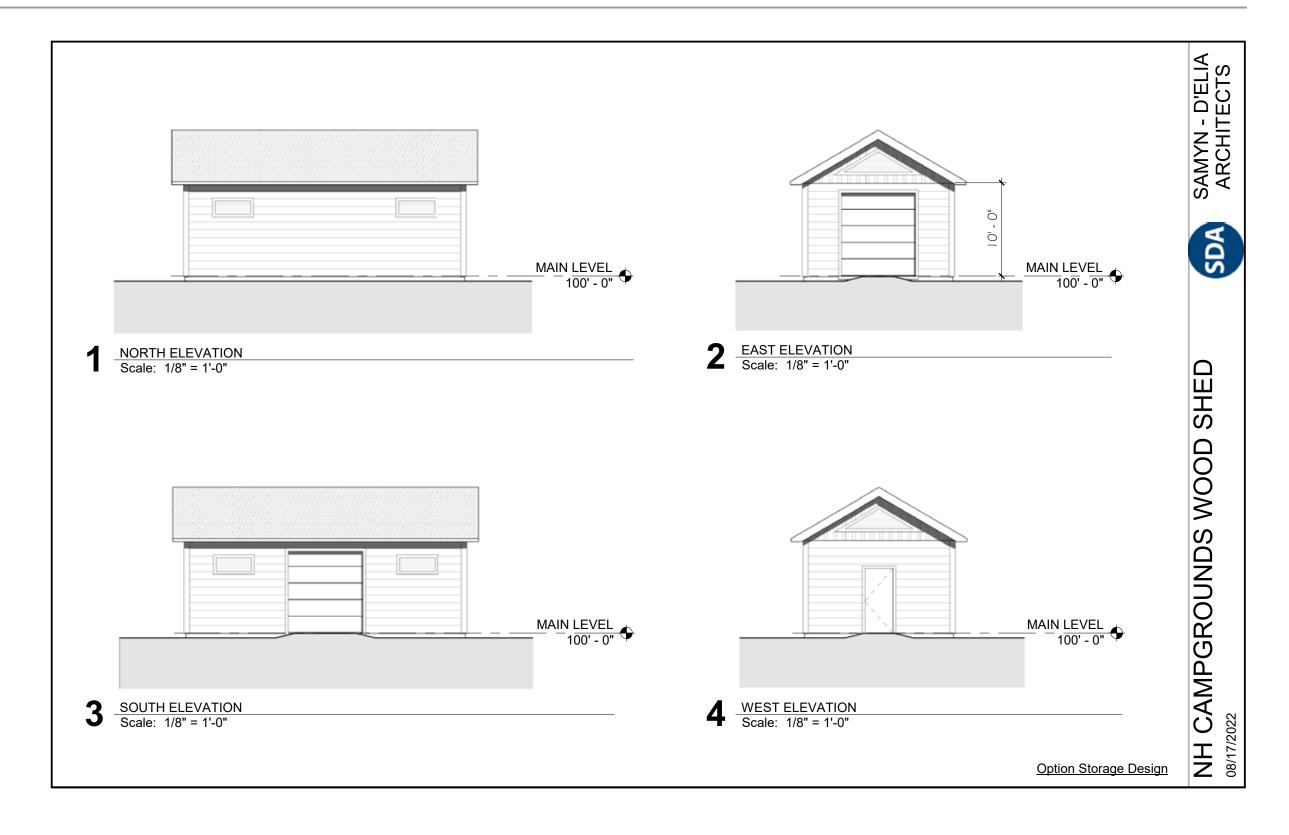
## **ARCHITECTURE STORE & OFFICE ELEVATION**



## **ARCHITECTURE WOOD SHED FLOOR PLAN**



## **ARCHITECTURE WOOD SHED ELEVATION**









- > Largest developed state park in New Hampshire
- > Activities for everyone
- > Group sites and event spaces
- > Horseback riding
- > Mountain biking
- > CCC historic resources and museum complex

NEAREST URBAN AREA NORTH: MANCHESTER - 25 MINUTE DRIVE NEAREST URBAN AREA SOUTH: CONCORD - 30 MINUTE DRIVE

#### **PARK INFO**

- > 9,976 Acres
- > 2 Working Campgrounds: Beaver Pond (101 Sites) and Bear Hill Camp (8 Cabins)
- > Established as State Forest: 1916

- > Established as State Park: 1943
- > Much of park is on or eligible for the National Historic Register

#### **ACTIVITIES**

> Mountain

> Snowmobiling

> Snowshoeing

Biking

> Mushing

> XC Skiing

- > Swimming
- > Fishing
- > Hiking
- > Horseback Riding
- > Wildlife Viewing
- > Archery/Bow Hunting
- > Canoe/Kayak

#### **PARK AMENITIES**

- > Beach
- > Playground
- > Canoe Rentals
- > Camp Store
- > RV Dump Station
- > Learning Environments
- > Picnic Pavilion
- > Event Pavilion

#### **CAMPSITE TYPES**

- > Cabin
- > Pop-up/Tent
- > Standard (room for trailer)
- > Tent Only

#### BEAR BROOK STATE PARK WAS ESTABLISHED IN 1943

> The park began its life as a start forest in 1916 with the gift of Catamount Hill and Catamount Brook. Civilian Conservation Corps began work at Bear Brook in 1935 constructing one of the nation's first Recreation Demonstration Areas.

#### 2 WORKING CAMPGROUNDS - BEAVER POND AND BEAR HILL CAMP

> Located in the southeast of the park, Beaver Pond is the largest working campground with 101 campsites. Bear Hill Camp currently has 8 cabins available for rent.

#### CATAMOUNT POND AND PAVILION

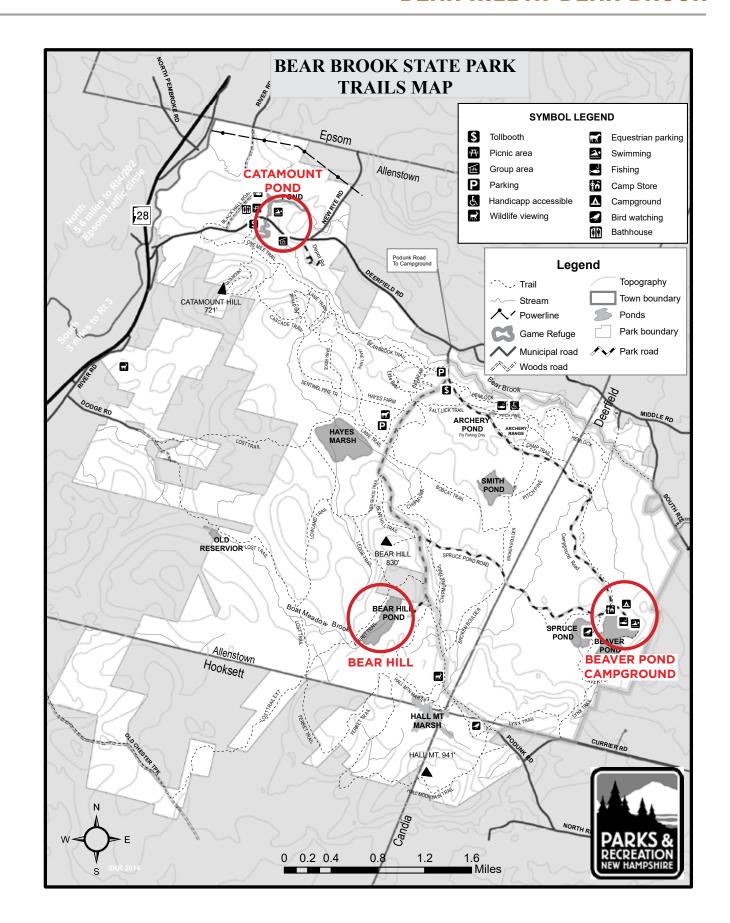
> At the northern entry of the park is the Catamount Pond Picnic Pavilion and Group Pavilion. This is a popular location for day use guests and events.

#### HAYES FIELD

> At the center of the park is Hayes Field. This is a popular starting point for mountain bikers and equestrian riders.

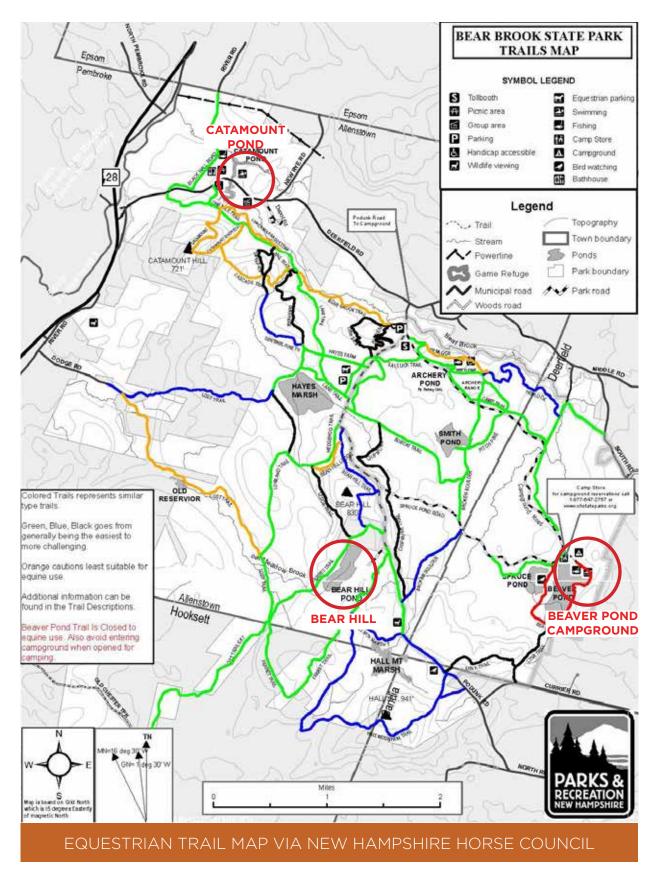
#### ARCHERY POND

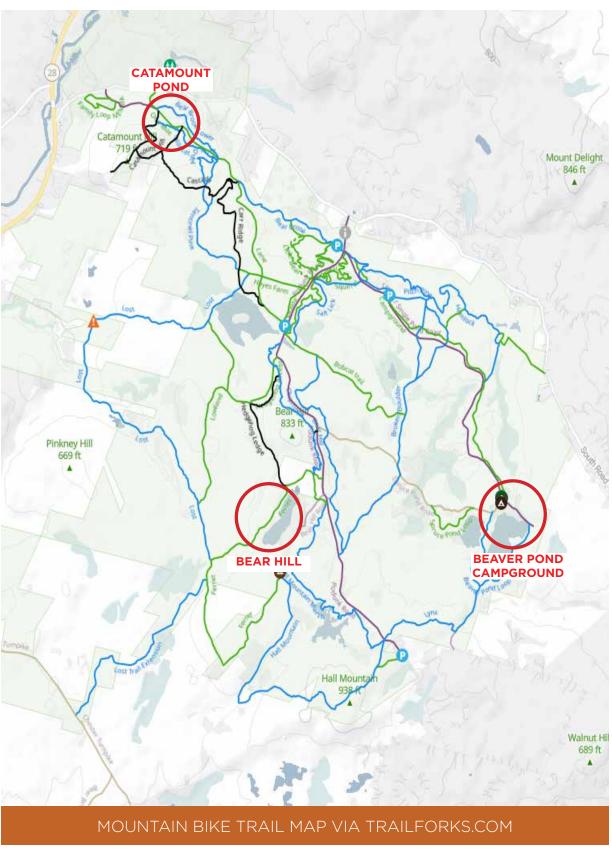
> On the east side of the park is Archery Pond, a universally accessible flyfishing-only pond. There are also two public archery ranges.

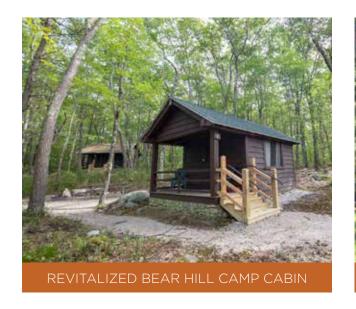


### TRAIL CONNECTIONS

- > Over 60 miles of trail on 10,000 acres
- > Trails are available for hiking, running, mountain biking, and equestrians
- > Bear Hill Campground sits in the heart of the Bear Brook trail system and Catamount Pond is at the northern head of the trail system
- > Mountain biking trails at Bear Brook are ranked #2 in state after Highland Mountain Bike Park on singletracks.com.
- > Trails are very popular for equestrian use
- > Managing the network to prevent potential conflict will be important

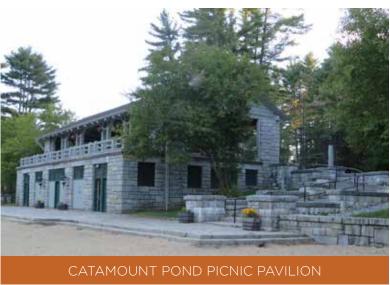








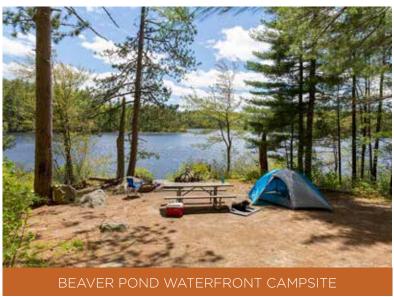












# **EXISTING CONDITIONS**

#### **CABIN CLUSTERS**

- > The Pines, Ledges, Maples, and Oaks cabin clusters all have 8 cabins, 1 washroom, and 1 shared lodge
- > Despite the consistency of the architecture, each cluster has a slightly different character due to terrain, vegetation, and views
- > The Oaks cluster was recently renovated and are the only cabins available for rent

#### **COMMON SPACE**

- > The core of the Bear Hill Camp is the shared common space which includes the dining hall, staff quarters, infirmary, rec. hall, and several other buildings.
- > Currently no clear use for the common buildings but most are in good shape.

#### **ADMINISTRATION AREA**

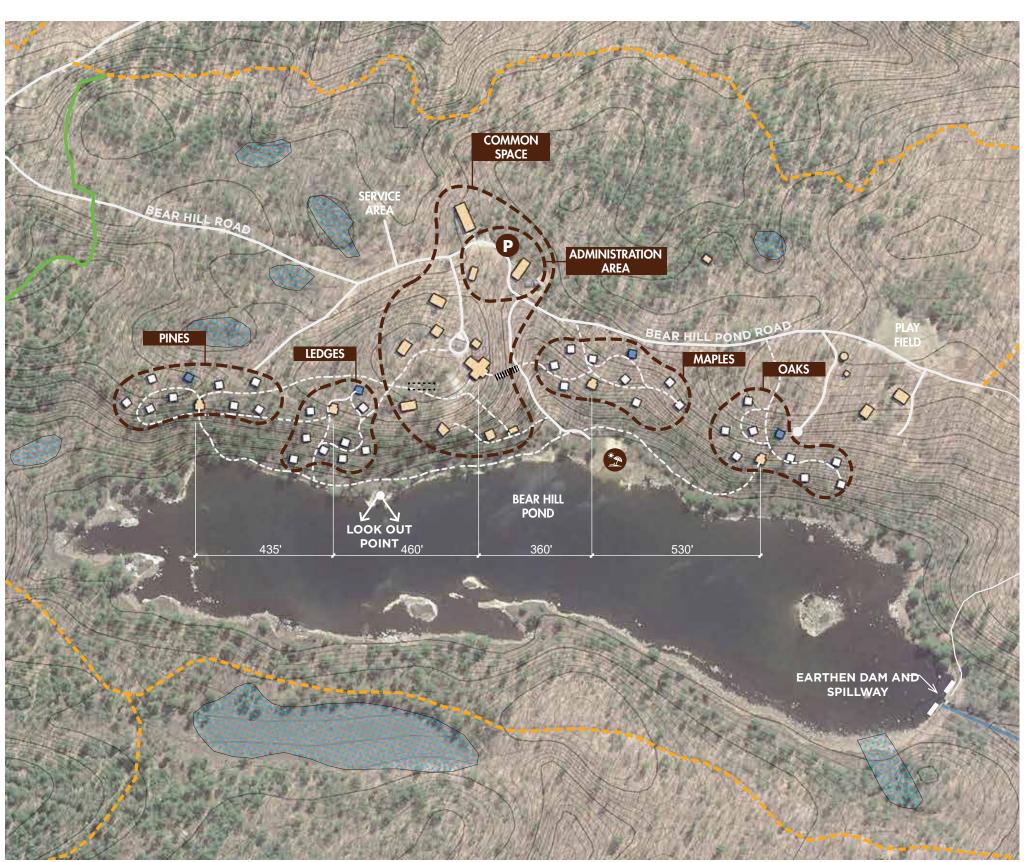
> This area, which includes the office building, maintenance garage, and parking area, is the primary point of access for visitors

#### **BEACH**

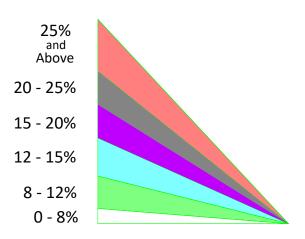
- > A dock and several buildings used to be located at the
- > Access to the water for swimming and non-motorized boating

- Mountain Bike Trails Cabins Washhouse River / Stream **Shared Structures**  Removed Structure Shared Trails ■ ■ Stairs
- Wetlands





# **SLOPES**



#### **CABIN CLUSTERS**

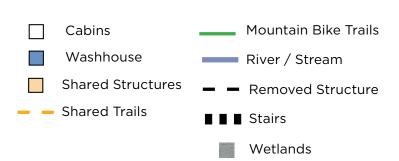
- > Slopes at Maples and Oaks clusters are predominately 15-25%.
- > Slopes at Ledges are 8-30%
- > Slopes at Pines are more favorable with 75% of cabins on slopes of 2-8%
- > Steep slopes along shoreline make accessing the water anywhere other than the beach challenging.

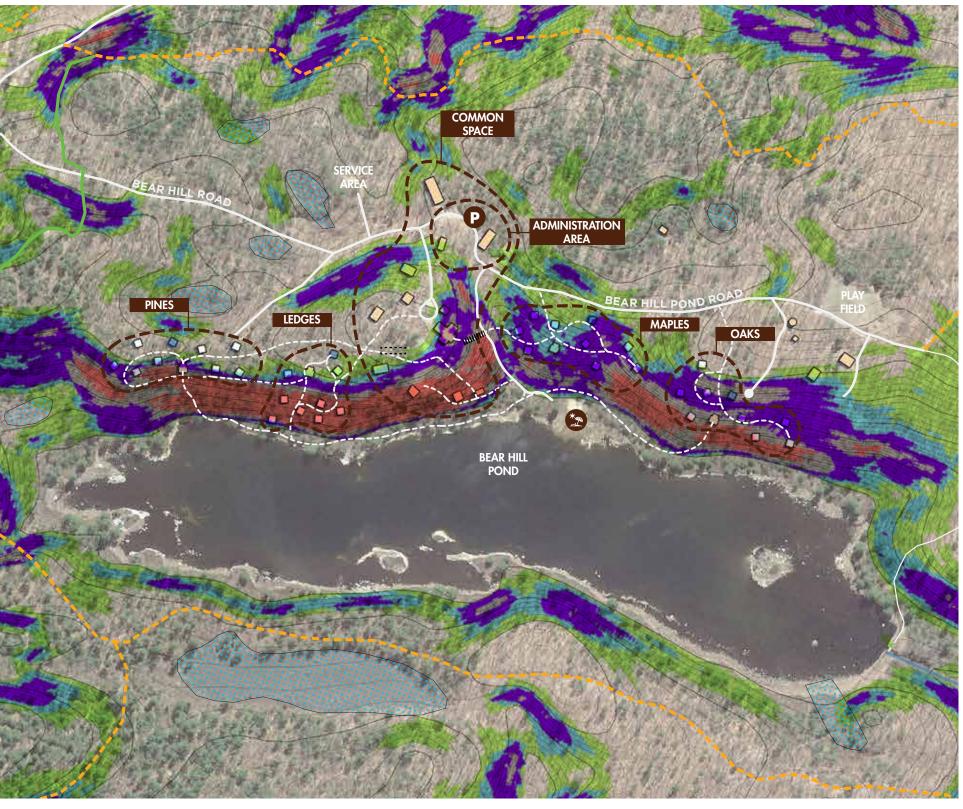
#### **COMMON SPACE**

- > Slopes in most of the common spaces are favorable for accessible circulation.
- > There is currently no accessible connection to the dining hall / common space from the Maples and Oaks clusters

#### **BEACH**

> There is road access to the beach but the slope is not accessible for pedestrians, access road ranges from 8-20%





Note: Topography observed on-site appeared less extreme in some areas than topographic information indicates



# **INFRASTRUCTURE**

### WATER SUPPLY

Water supply is provided by a drilled well that feeds a pump house (1) with a Well-X-Trol WX-250 hydropneumatic pressure tank.

Water is distributed in HDPE piping laid on the ground to the bathroom buildings and various common building with water services. These buildings include bathroom buildings for the Central, Oaks, Maples, Ledges, and Pines, dining hall, infirmary, staff quarters, art studio, and Scannel Hall.

### POWER

Power is primarily supplied by overhead distribution (2).

### WASTEWATER

Central Leach Field: The buildings served by the central leach field (3) were not definitively identified. It appears that the Pines and Ledges washhouses both have wastewater tanks with a pump system that most likely sends wastewater to the central leach field. The condition and functionality of the pump systems is unknown. We assume the infirmary and the dining hall are served by tanks that gravity flow to the leach field.





# **INFRASTRUCTURE**

### WASTEWATER CONTINUED

Art Studio: This building has a wash sink only and no bathrooms or other wastewater use. An apparent old wastewater pipe was observed leaving underneath the building to the north.

Oaks Washhouse: A tank gravity feeds to a distribution box and leach field (4). The system appears to be in good working condition.

The Maples Washhouse: A tank gravity feeds to a distribution box and leach field. The tank and distribution box are a bit more removed from the immediate building area, and the leach field (5) is down the trail in a clearing west of the cabin cluster.

Shower Building: There is reportedly a tank with a leach field (6), but the tank has to be pumped with extreme frequency.

Pit Toilet (BBR100): There is an old hot water tank that is not in use, indicating that there may have been a shower facility there at some point, but no water supply or wastewater system were observed.





# **STRUCTURES CABIN CLUSTERS**





### **CABINS**

Built	1936	
Number of Buildings	24	
Size	12'-6"x20'x6" 13'x19'-4	
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch heavy timber construction.	
General Condition	The condition of the remaining cabins varies quite a bit, but in general all need some stone foundation repair, replacement of some wood foundation sills, waney board replacement, re-roofing, interior clean up and general carpentry.	
History	Sleeping cabin for 4 campers,	
Potential Re-Use	Continue with original use with some upgrades by adding more ADA accessible cabins, window. Could sleep 6 guests.	
Accessible	Some cabins can be made ADA accessible.	
Historically Significant	Yes	
Summary of Renovations for the Oaks Unit	Historical character has been maintained with only minimal modifications, i.e. window storm shades, ADA accessibility, modified porch railing.	





### COUNSELOR CABIN

Built	1936	
Number of Buildings	6	
Size	14'x12'	
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch heavy timber construction.	
General Condition	Cabin conditions vary; problems with foundation, siding framing, windows are consistent with all cabins, but some are worse than others.	
History	Sleeping cabin for two counselors.	
Potential Re-Use	Camper cabin for four.	
Accessible	Doesn't meet ADA Accessibility, but could be provided.	
Historically Significant	Yes	
Summary of Renovations for the Oaks Unit	Historical character has been maintained with only minimal modifications, i.e. window storm shades, improved accessibility, modified porch railing.	

# **STRUCTURES CABIN CLUSTERS**





### WASH HOUSE

Built	1936	
Number of Buildings	4	
Size	21'-3'x10'-6'	
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, shingle roofing, porch with heavy timber construction. Electric and plumbing utilities. Slab on grade.	
General Condition	Unrenovated building shells are generally in same condition as other buildings. Interior will need new toilet and wash facilities and interior finishes that are hygienically appropriate.	
History	Latrine and wash house had three stalls inside.	
Potential Re-Use	Renovate to current restroom standards either for latrine or eventual new septic system.	
Accessible	Doesn't meet ADA Accessibility, but could be provided.	
Historically Significant	Yes	
Summary of Renovations for the Oaks Unit	Renovated several years ago with a toilet and sink and interior paneling.	



### LODGE

Built	1936	
Number of Buildings	4	
Size	728 square feet	
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch heavy timber construction.	
General Condition	The condition varies quite a bit, but in general all need some stone foundation repair, replacement of some wood foundation sills, waney board replacement, re-roofing, interior clean up and general carpentry, and window repair or replacement.	
History	Meeting place for unit campers to get together for activities.	
Potential Re-Use	Would make a good group and family cabin rental or continue original use as a meeting place for campers.	
Accessible	Doesn't meet ADA accessible, but could be provided.	
Historically Significant	Yes	
Summary of Renovations for the Oaks Unit	Historical character has been maintained with only minimal modifications, i.e. window storm shades, improved accessibility, modified porch railing.	



### SCANNEL HALL

Built	1972
Size	2002 square feet
Construction Type	Standard stick construction with wood truss roof framing, concrete slap, pier foundation, TS-11 siding casement windows. Electric service provided.
General Condition	Good condition, solid construction, not part of original camp.
History	Replaced burned down original recreation building, and was used as recreation building ad general assembly.
Potential Re-Use	Building is a large hall and probably would continue to serve that purpose.
Accessible	Yes
Historically Significant	No



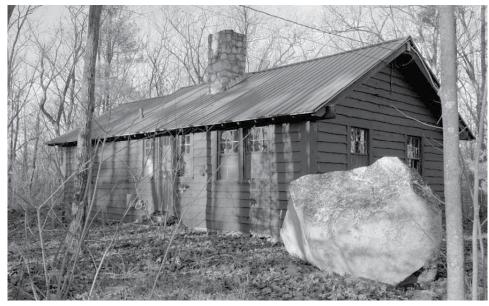
### HELPS QUARTER'S

Built	1936
Size	660 square feet; 36"x17"
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing, heavy timber construction.
General Condition	Overall good condition needing typical repair of stone foundation, windows repair or replace, interior clean up clean up and general carpentry.
History	Camp service employees housing.
Potential Re-Use	Could be converted into larger rental cabin for groups and families, or camp staff housing.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### CENTRAL WASH HOUSE

Built	1936
Size	11'0"x21'-3"
Construction Type	Stone foundation, concrete foundation, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch heavy timber construction. Electric and plumbing utilities.
General Condition	Overall the structure is in good condition. Typical repair of stone foundation, windows replace or repair), general clean up & carpentry, interior is tongue and groove paneling.
History	Original building with shower room, two small bathrooms, dressing area.
Potential Re-Use	Could have modernized interior layout and design and continue to be a wash house. Connected to camp electrical, water and septic system.
Accessible	Doesn't meet current ADA standards, but can be provided.
Historically Significant	Yes



### INFIRMARY

Built	1936
Size	812 square feet
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. Electric and plumbing utilities (1990).
General Condition	General condition is good needing typical repair of stone foundation, general carpentry windows repaired or replaced, interior demo of more recent additions to the interior
History	Infirmary with required spaces, three beds rooms, nurses bedroom, dispensary laundry, and bathroom.
Potential Re-Use	Could be converted into bath house with toilets, shower, and laundry.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### ICE HOUSE/STORAGE

Built	1936
Size	300 square feet
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing.
General Condition	Poor
History	Storage of cut ice and kitchen supplies.
Potential Re-Use	Unknown
Accessible	No
Historically Significant	Yes



### KITCHEN/DINING HALL

Built	1936
Size	2363 square feet with "T" shape plan.
Construction Type	Stick built construction, stone fireplace, waney board siding, exposed rafters, heavy timber framing of porch, large window openings for screens.
General Condition	This building I, if used as a place of assembly would need complete structural analysis of frame, many modifications and repairs done over the years particularly after 1971 time. Building will need significant repairs and upgrades.
History	Dining, kitchen, assembly, and meetings.
Potential Re-Use	Could be renovated o be a kitchen and dining hall. Good size and location with view of the lake.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### STAFF QUARTERS

Built	1936
Size	41'-3"x17'-9"
Construction Type	Stone foundation, stone fireplace, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch, heavy timber construction. Electric and plumbing utilities.
General Condition	Overall the structure is in good condition. Typical repair of stone foundation, windows replace or repair), general clean up & carpentry. Stone fireplace that needs inspection.
History	Staff housing four bedrooms, main living room and large porch. Did no have bathroom and kitchen
Potential Re-Use	Future camp operation could redesign interior for staff housing or group rental. Potential as bath house.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### CRAFT CABIN

Built	1937
Size	27 1/2' X 19'-0"
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, porch, electric and plumbing utilities.
General Condition	General condition is good needing typical repair of stone foundation, general carpentry windows repaired or replaced, interior demo of more recent additions to the interior
History	Used by camp organizations for craft and other workshop activities.
Potential Re-Use	Could be reconfigured to be large group family rental cabin. Excellent location with view of pond.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### NATURE LODGE

Built	1936
Size	27'-6"x14'-6"
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. gable roofing porch heavy timber construction. Electric and plumbing utilities.
General Condition	Overall the structure is in good condition. Typical repair of stone foundation, windows replace or repair),
History	Nature museum and nature "base" exhibits with displays and cabinets for programs for campers
Potential Re-Use	Good location overlooking pond. Good rental cabin for larger groups and families.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### ADMINISTRATION BUILDING

Built	1936
Size	674 square feet
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. Electric and plumbing utilities.
General Condition	Overall good condition needing typical repair of stone foundation, windows repair or replace, interior clean up and general carpentry.
History	Administrative offices and camp store, "canteen."
Potential Re-Use	Could continue to be used for administrative services for future camp operations.
Accessible	Doesn't meet current ADA standards, but could be provided.
Historically Significant	Yes



### MAINTENANCE GARAGE

Built	1936
Size	3 Bay Garage
Construction Type	Stone foundation, stick framing, double hung windows, waney board siding, recent metal roofing. Electric service provided, and plumbing is unknown.
General Condition	Appears to be in similar condition as other buildings, but needs a more thorough inspection.
History	Vehicle storage and maintenance workshop and storage.
Potential Re-Use	Garage and workshop.
Accessible	Possibly
Historically Significant	Yes

# **EXPANSION OPPORTUNITIES**

#### 1. EXPANSION AREA

- > Size: 2.5 Acres
- > Slope: 0-8%
- > Existing pit toilet in expansion area
- > No focal point or views, not close to water
- > Some wet areas to avoid

#### 2. BEACH REVITALIZATION

> Opportunity to improve swimming access and expand water activities

### 3. TRAIL CONNECTIONS

> Opportunity to improve access to existing trail network

#### 4. LOOK OUT POINT

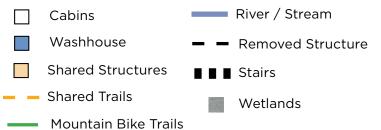
> Opportunity for new lookout destination

#### **5. CABIN CLUSTERS**

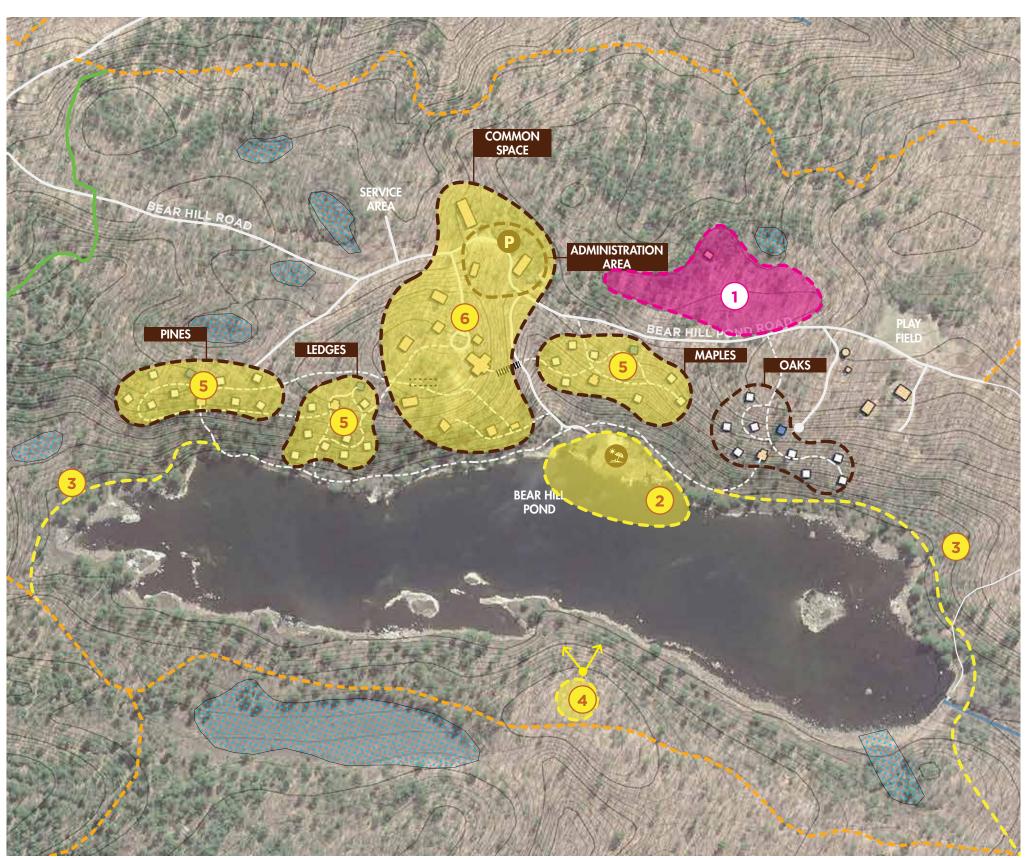
- > Opportunity to renovate cabin clusters (similar to Oaks) and add additional amenities
- > Maintain pedestrian-oriented spaces

#### **6.COMMON SPACE**

- > Opportunity to convert some buildings to lodging rental, camp store, etc.
- > Larger buildings like dining hall present more questions in terms of program and operations
- > Opportunities for staff housing in ex. buildings







# **ARCHAEOLOGY REVIEW**

Phase IA Archaeological Sensitivity Assessment was completed for the proposed Bear Brook State Park Bear Hill Pond Campground Expansion Project in Allenstown, New Hampshire. The project area is situated on extremely rocky terrain. No archaeological sites or areas of archaeological sensitivity were identified, and no further study is recommended.

### HISTORIC SIGNIFICANCE

Bear Brook State Park was created by the National Park Service as a Recreational Demonstration Area and built by the Civilian Conservation Corps in 1935-1942. It has been a state park since 1943. Facilities include a swimming beach with pavilion and bathhouse, picnic areas with shelters, a public archery range, fishing ponds, a campground and two group camps.

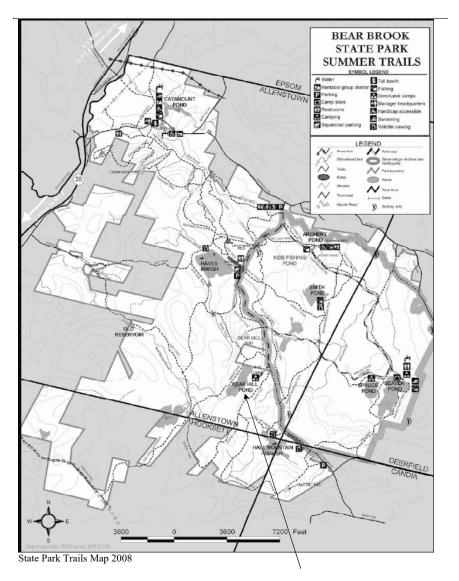
The Bear Brook State Park Historic District was determined eligible for the National Register of Historic Places in 2017. The boundary of the historic district encompasses the entire park. All buildings and structures and built landscape features more than fifty years old are assumed to contribute. Most date from the 1930s-40s and retain historic groupings and layout.

Within the large district, Bear Hill Pond Camp was previously determined eligible as a historic district in 2013.

Bear Brook State Park is eligible for the National Register under Criteria A and C, in the areas of recreation and conservation, as well as politics and government, architecture and landscape architecture. Bear Brook was designed and built by the federal government as a work-relief project, to be operated as a model state park. Bear Brook State Park is significant for its "Park Service Rustic" architecture. There have been few changes to the buildings and structures planned by the National Park Service and erected by the Civilian Conservation Corps.

Bear Hill Pond Camp is significant as a fully developed and well preserved example of an organized group summer camp built in an RDA. Built in 1936-37, the camp remains as designed except for the loss of one or two buildings and a few recently built at the edges. The layout of buildings and relationship to landscape and features like the pond are significant. The central administrative buildings include the lodge, infirmary, offices, nature and crafts buildings, etc. are all original. The four units each have eight cabins, a small lodge and a washhouse. The designs by NPS architects are similar to buildings in other RDA camps.

See Appendix for complete historic resources overview by Preservation Company.











# **SITE PLAN OPTION A**

### 1. RENOVATE CABIN PODS

- > Renovate all 4 cabin pods for group and individual rentals
- > Option: renovate cabin pod lodge buildings for overnight use

### 2. ACCESSIBLE CABIN POD/PATH

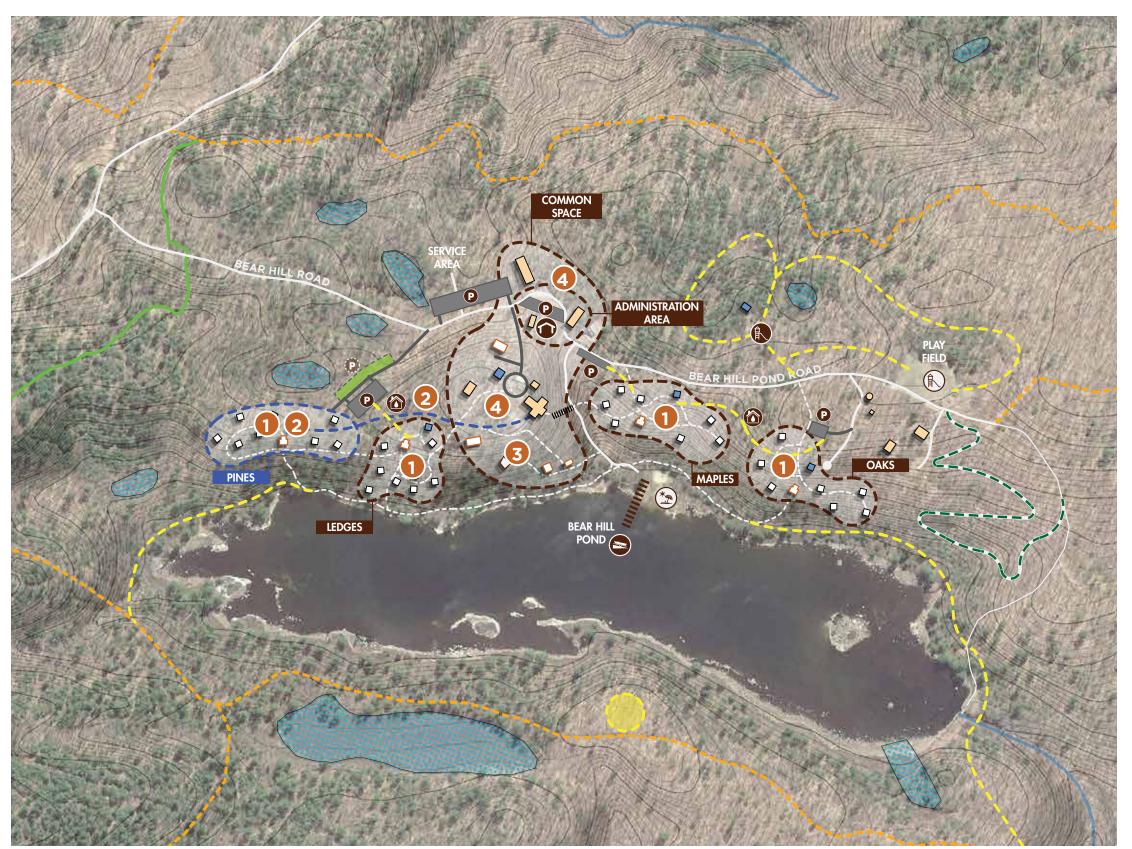
> The Pines terrain is most suitable for an accessible pod due to its gentle terrain within the pod and between the dining hall

### 3. RENOVATE COMMON SPACE BUILDINGS

> Renovate the craft, nature, helpers quarters, and staff quarters buildings into overnight rentals

### 4. IMPROVED ENTRY

- > A formalized parking area, renovated admin building (office/store) with new wood storage shed
- > Improve entry loop for emergency access



# **SITE PLAN OPTION B**

### 1. IMPROVED PARKING ACCESS

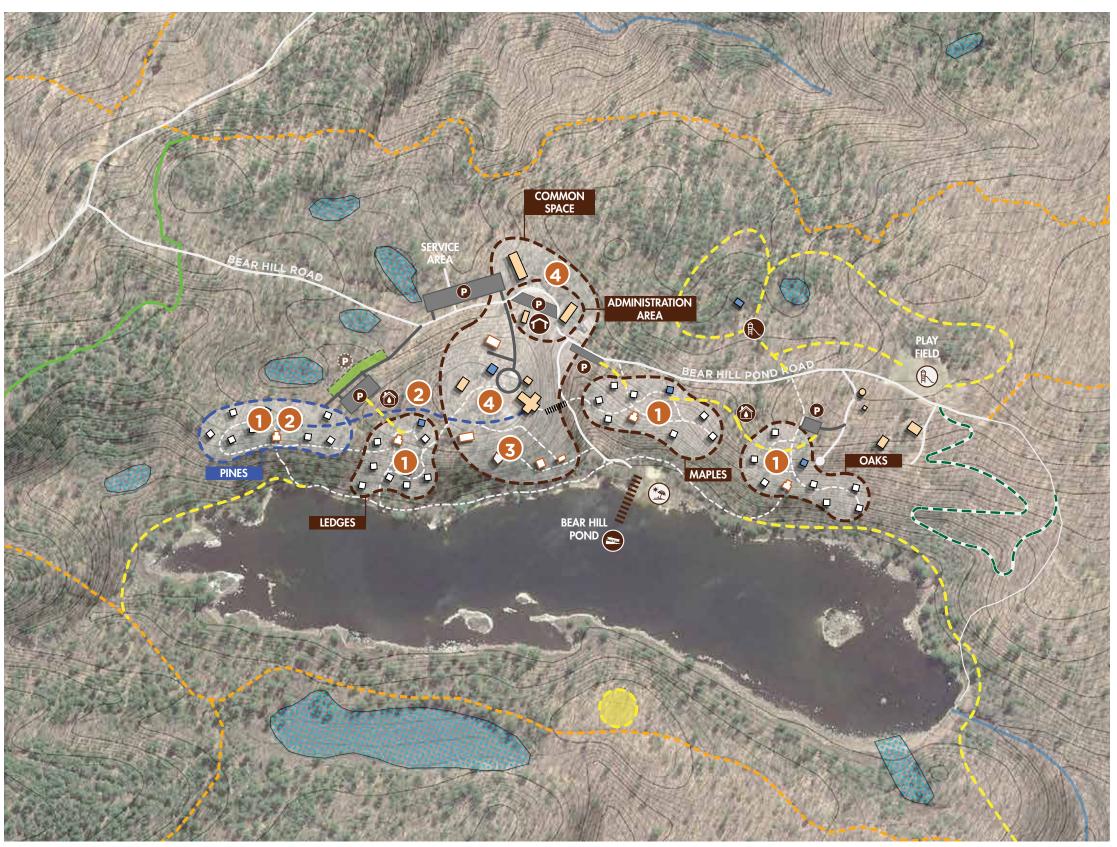
- > Each pod will now have a dedicated parking area and new overflow parking areas for events
- > Wagons could be used to help guests move their belongings to their cabins

### 2. ACCESSIBLE BATHHOUSES

> New bathhouses are proposed between the Pines and Ledges, and also between Maples and Oaks

#### 3. NEW DOCK AT BEACH

A new dock at the beach will help create a sense of place and allow for improved water access





# **SITE PLAN**

#### 1. IMPROVED TRAIL CONNECTIONS

- > New trails create improved access to the existing trail system
- > A pond loop makes exploration easy for guests

### 2. MOUNTAIN BIKE FLOW TRAIL

> A family-friendly flow trail is fun for a whole family and good practice before hitting the trails

#### 3. NATURE LOOP

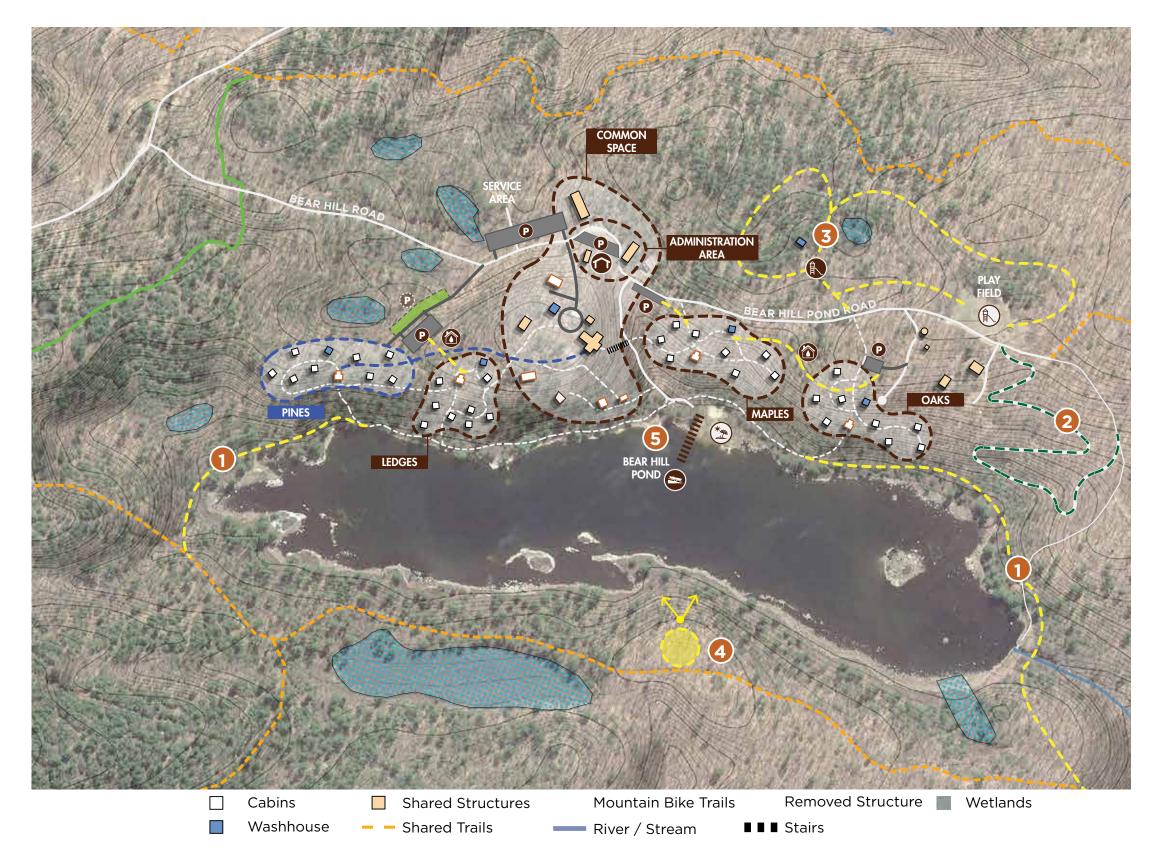
> An interpretive and interactive play loop

### 4. SCENIC OVERLOOK

> A scenic overlook encourages guests to explore

### **5. BOAT RENTALS / SWIMMING DOCK**

- > Non-motorized boat rentals for guests to explore Bear Hill Pond
- > A dock provides improved swimming and fishing





# **CABIN CAPACITY**

### **CABIN POD CAPACITY:**

<b>TOTAL CAPACITY FOR 4 PODS</b>	176
Guest Capacity per pod	44
Staff Cabin = 4 x 2 cabins	8
Camper Cabin = 6 x 6 cabins	36



# **CABIN CAPACITY**

#### **CABIN POD CAPACITY:**

Camper Cabin = 6 x 6 cabins	36
Staff Cabin = 4 x 2 cabins	8
Lodge Capacity = 8 x 1	8
Guest Capacity per pod	52
CAPACITY FOR 4 CABIN PODS	208

COMMON SPACE CAPACITY	
A. Scannel Hall	O
B. Maintenance Garage*	0
C. Administration *	0
D. Help's Quarters*	6-8
E. Central Washhouse*	0
F. Infirmary*	0
G. Ice House*	0
H. Dining Hall/ Kitchen*	0
I. Staff Quarters*	8-10
J. Lookout Deck	0
K. Craft Shop*	6-8
L. Nature Lodge*	6-8
COMMON SPACE CAPACITY	26-34

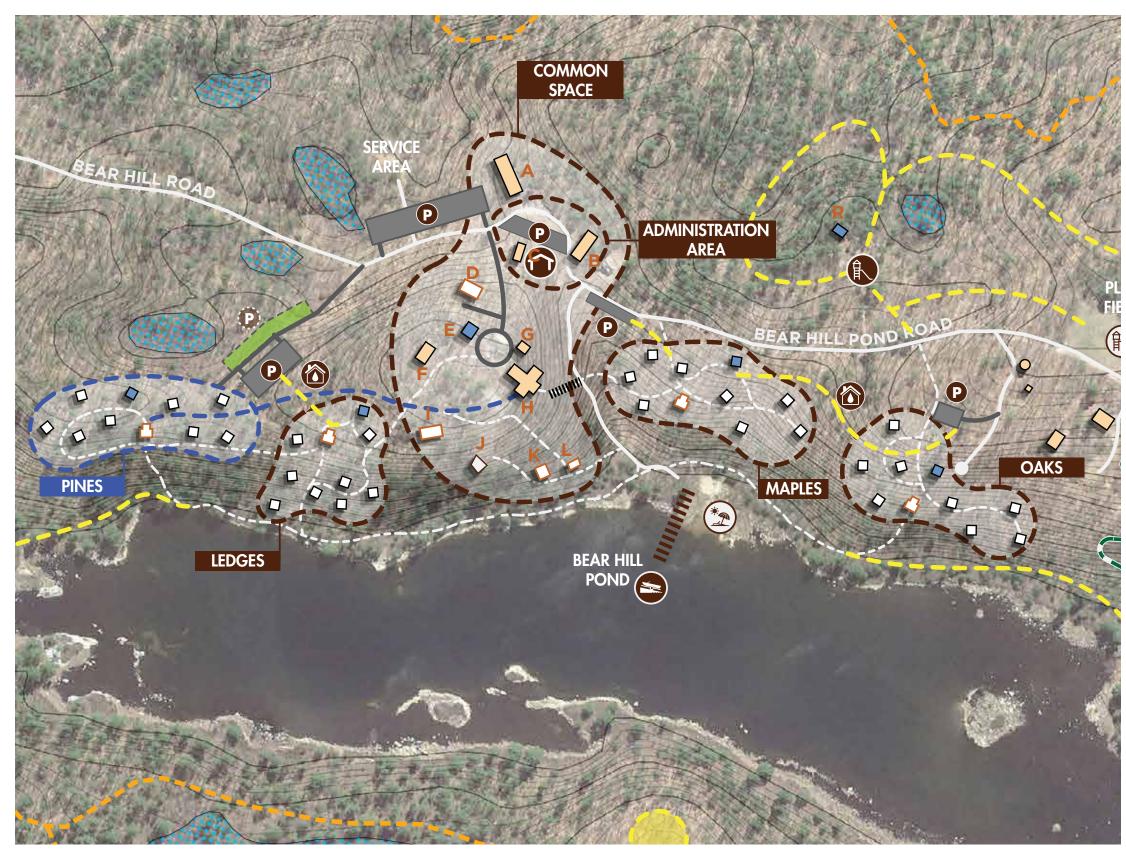
### **SCANNEL HALL EVENT CAPACITY**

Approximately 100 people

### **DINING HALL SEATING CAPACITY**

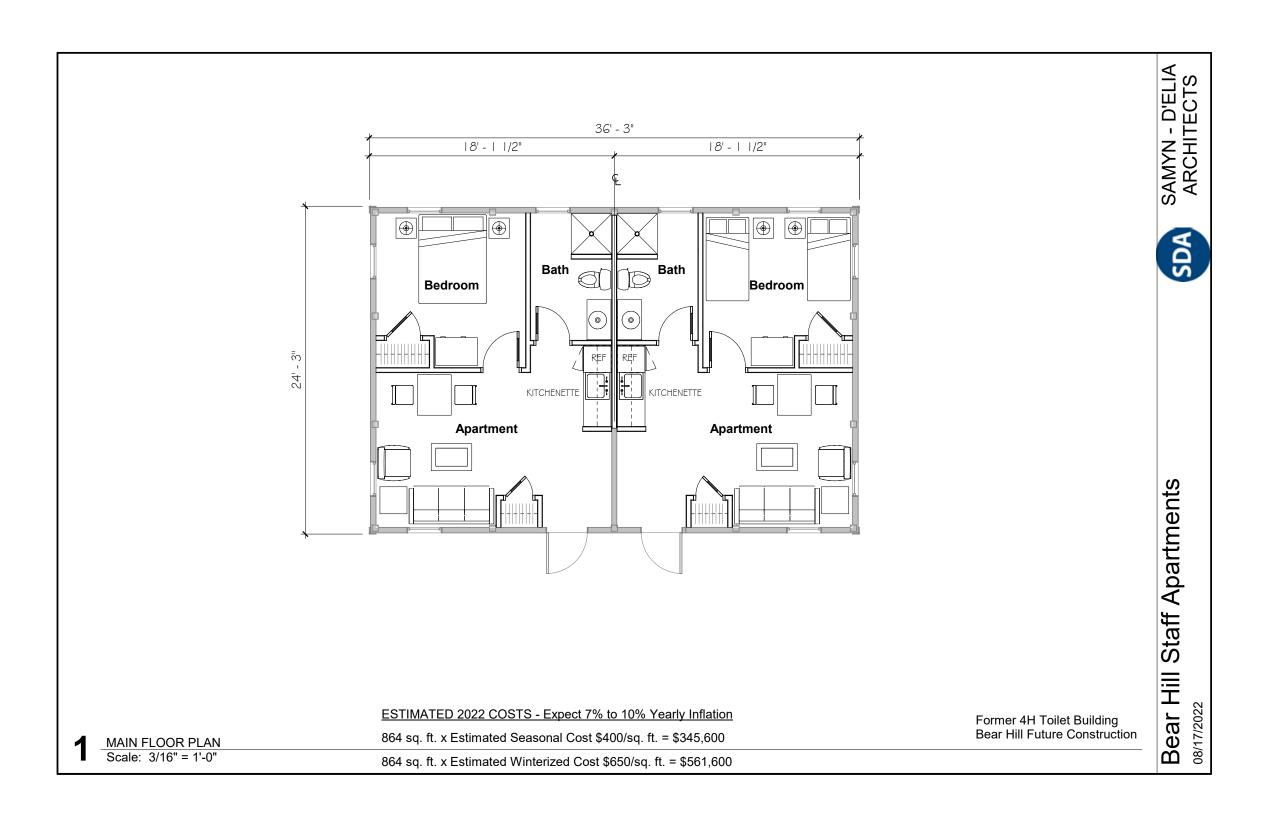
Approximately 115 people

\* Structures with Historic Significance





# ARCHITECTURE STAFF APARTMENTS FLOOR PLAN







- > Largest developed state park in New Hampshire
- > Activities for everyone
- > Group sites and event spaces
- > Horseback riding
- > Mountain biking
- > CCC historic resources and museum complex

NEAREST URBAN AREA NORTH: MANCHESTER - 25 MINUTE DRIVE NEAREST URBAN AREA SOUTH: CONCORD - 30 MINUTE DRIVE

### **PARK INFO**

- > 9,976 Acres
- > 2 Working Campgrounds: Beaver Pond (101 Sites) and Bear Hill Camp (8 Cabins)
- > Established as State Forest: 1916

- > Established as State Park: 1943
- > Much of park is on or eligible for the National Historic Register

### **ACTIVITIES**

> Mountain

> Snowmobiling

> Snowshoeing

Biking

> Mushing

> XC Skiing

- > Swimming
- > Fishing
- > Hiking
- > Horseback Riding
- > Wildlife Viewing
- > Archery/Bow Hunting
- > Canoe/Kayak

### **PARK AMENITIES**

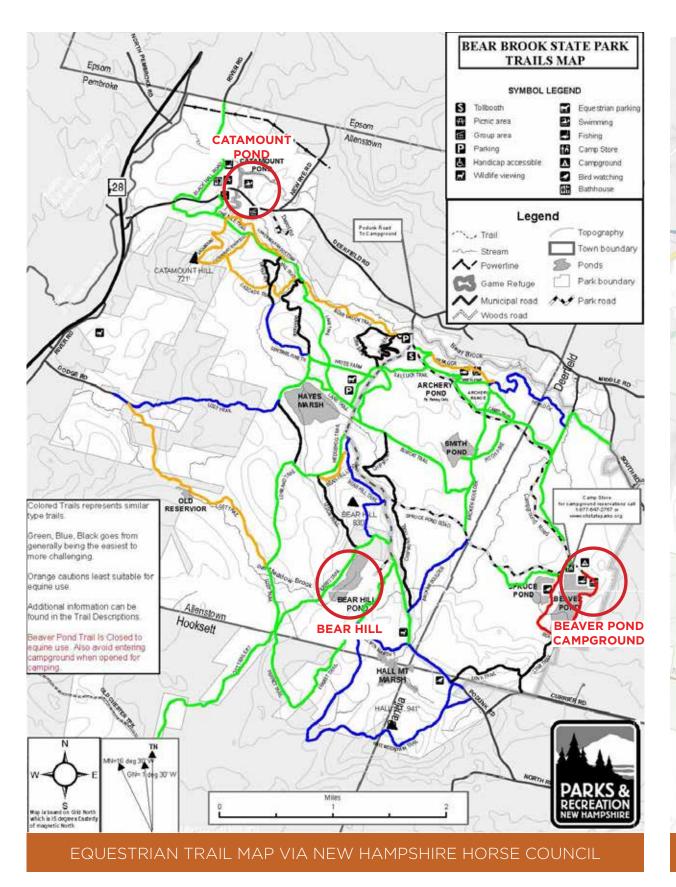
- > Beach
- > Playground
- > Canoe Rentals
- > Camp Store
- > RV Dump Station
- > Learning Environments
- > Picnic Pavilion
- > Event Pavilion

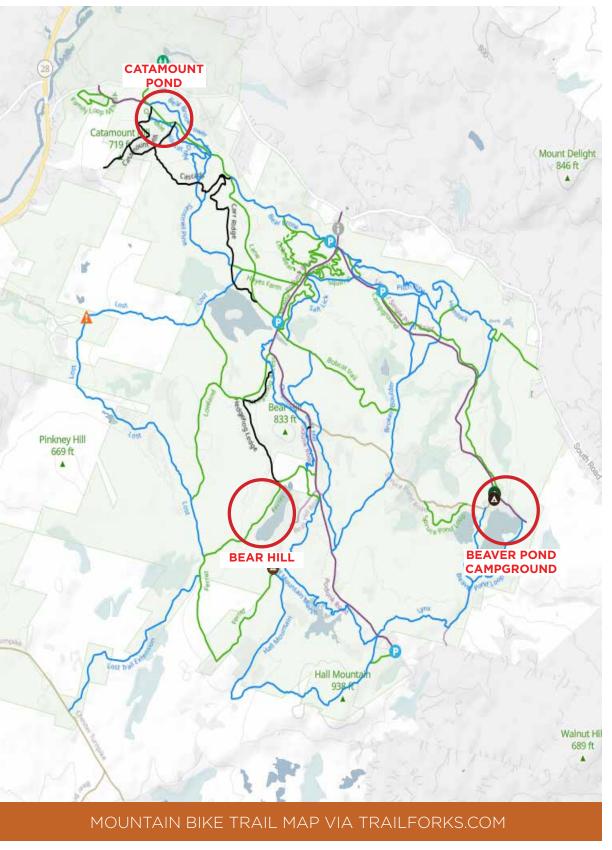
### **CAMPSITE TYPES**

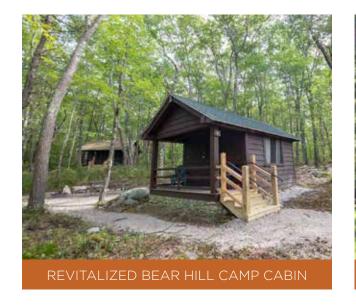
- > Cabin
- > Pop-up/Tent
- > Standard (room for trailer)
- > Tent Only

### TRAIL CONNECTIONS

- > Over 60 miles of trail on 10,000 acres
- > Trails are available for hiking, running, mountain biking, and equestrians
- > Bear Hill Campground sits in the heart of the Bear Brook trail system and Catamount Pond is at the northern head of the trail system
- > Mountain biking trails at Bear Brook are ranked #2 in state after Highland Mountain Bike Park on singletracks.com.
- > Trails are very popular for equestrian use
- > Managing the network to prevent potential conflict will be important

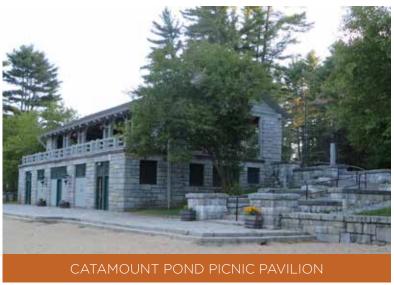






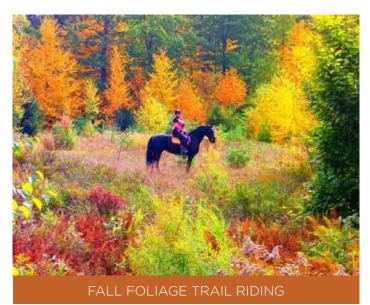














# **EXISTING CONDITIONS**

### DAY USE AREA

- > Includes historic CCC Picnic Pavilion / Bathhouse, Beach, Playground, and Family Picnic area.
- > Popular for day-use guests as well as overnight guests

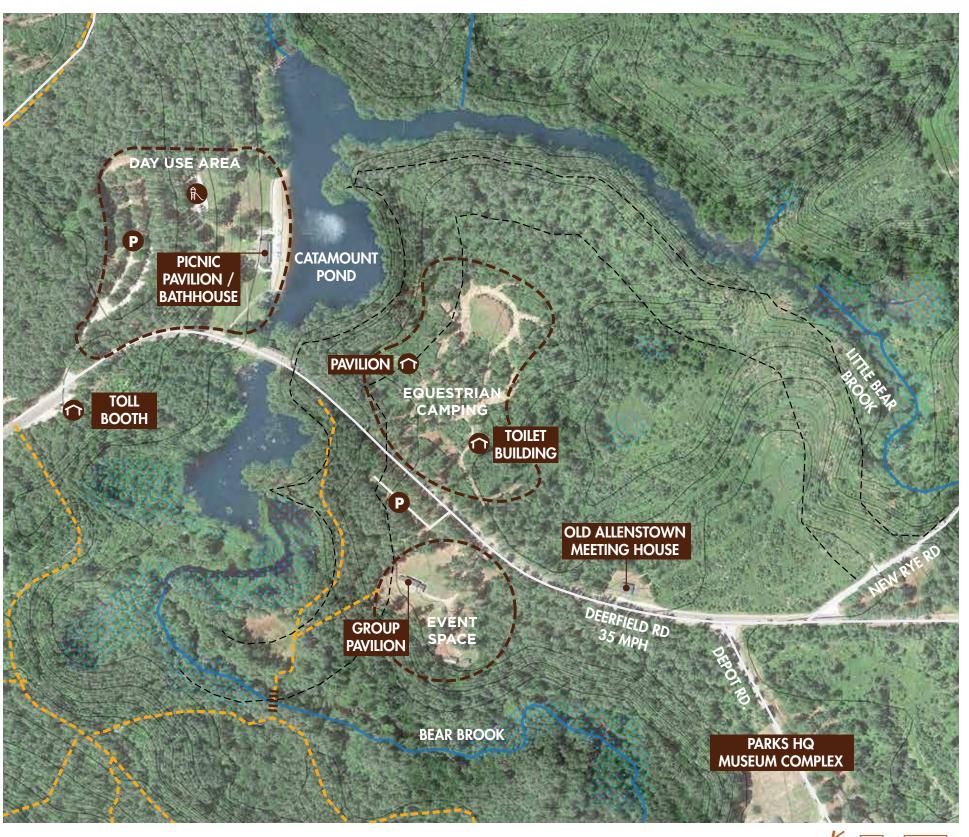
### **EVENT SPACE**

- > Includes historic CCC Group Pavilion
- > Space is available for the public to rent and is often booked for weddings and parties

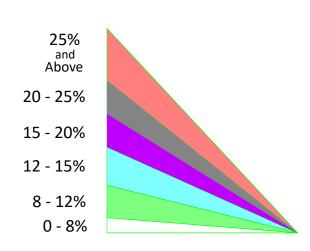
### **EQUESTRIAN CAMPING**

- > Newly cut sites for future equestrian use
- > Previously picnic site with ball field
- > Cleared of mature Red Pines and features young White Pine stands and open areas
- > Steep slopes separate the equestrian area from Catamount Pond
- > Equestrian trail connection requires road crossing, with possible line-of-sight issues



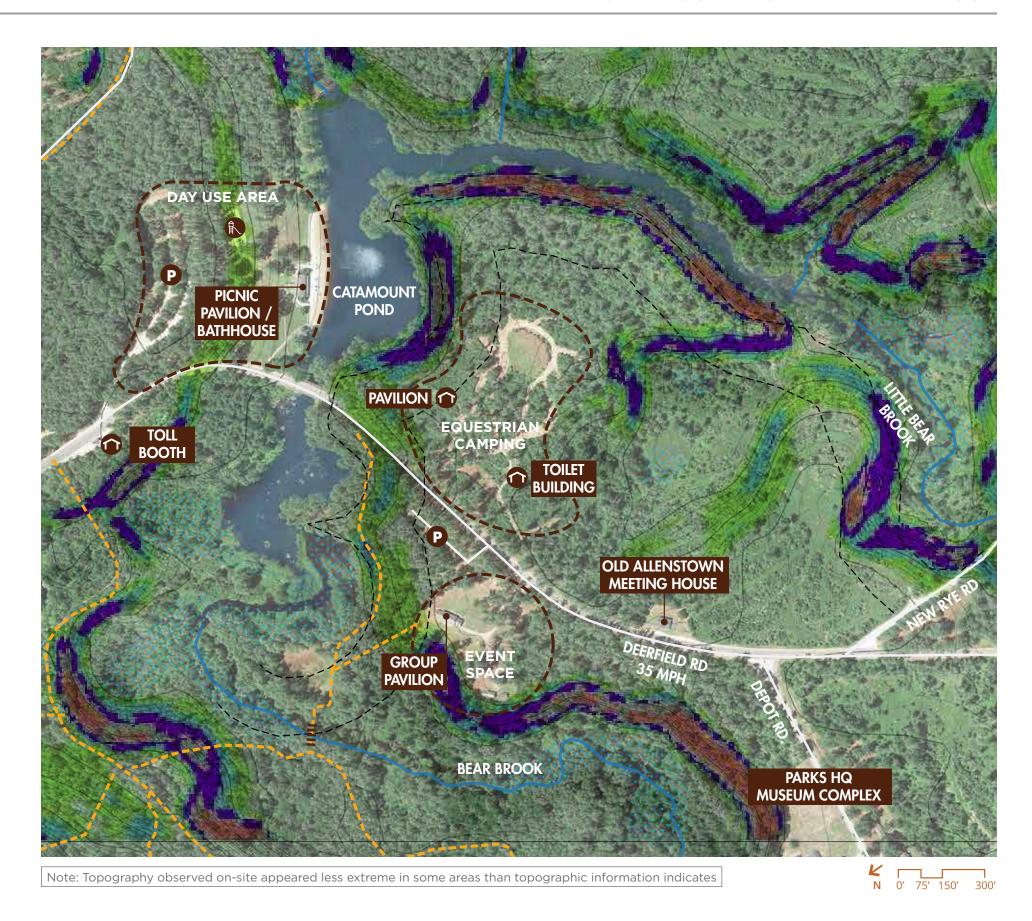


# **SLOPES**



- > Much of the Catamount Pond proposed equestrian camping area is in the 0-8% range
- > Steep slopes border Catamount Pond and the Event Space





# **INFRASTRUCTURE**

### WATER

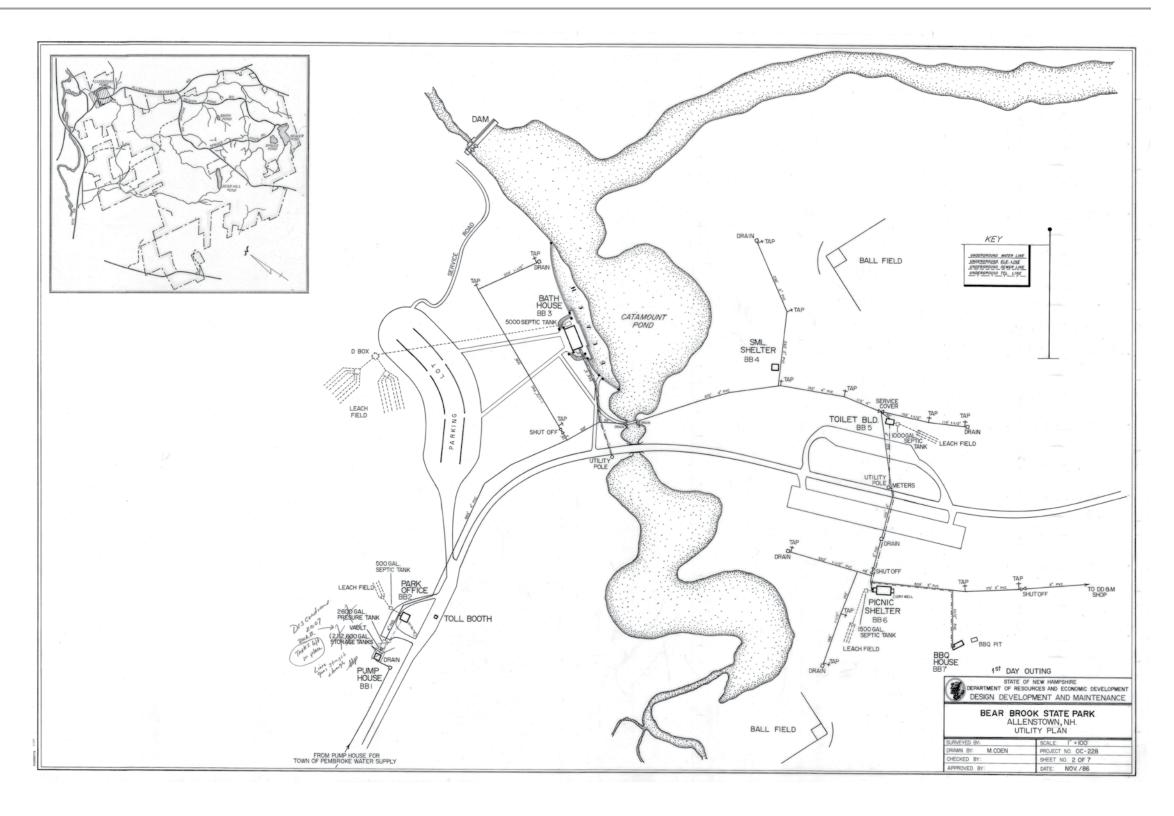
- > Water supply is provided by municipal service from the Town of Pembroke.
- > Distribution to the potential horse camping area (picnic area) is provided from the road to the picnic shelter/ bathroom building, the barbecue pavilion, and five spigot taps throughout the site

### WASTEWATER

- > Wastewater disposal is reportedly handled with a septic tank and leach field area west and south of the picnic shelter.
- > No evidence of the system was observed, and based on vegetation the leach field is likely in poor condition with root intrusion.

### **EQUESTRIAN CAMPING**

> Power is provided to the picnic shelter underground from a pole at the road with a meter on the pole.



# **STRUCTURES**





### TOILET BUILDING

1930's - 1990's
Discontinued use in 2010
(3) Woman's and (3) Men's Stalls
None
None
None
Standard stick with live edge siding
+/- 12' x 20'
No
Yes
Very Poor
Yes
No
Building in very poor condition and requires complete structural building envelope and interior renovation as well as expansion for ADA compliance. The facility can serve 8 campsites. Additional campsite (18) would probably require an additional restroom building.





### PAVILION

Year Built	1930's
Construction / Architectural Style	Traditional Log Construction
Size	+/- 12' x 20'
Historically Significant	Yes
ADA Accessible	No, can b easily modified

# **EXPANSION OPPORTUNITIES**

#### 1. EXPANSION AREA

- > Size: 6 Acres
- > Slope: 0-8%
- > Positive aspects of the site for equestrian camping: distance away from other campers, proximity to multi-use trails and day use area, existing utility infrastructure
- > Potential for group camping
- > Potential for water view sites
- > Existing toilet building ( would require significant renovation / expansion)

### 2. EXPANSION AREA

- > Size: 5 Acres
- > Slope: 0-8%
- > Open with minimal mature tree cover
- > Close to existing roadways and Group Pavilion / Event Space

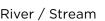
🞆 Wetland

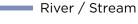
■ ■ Bridge

> Potential for group camping

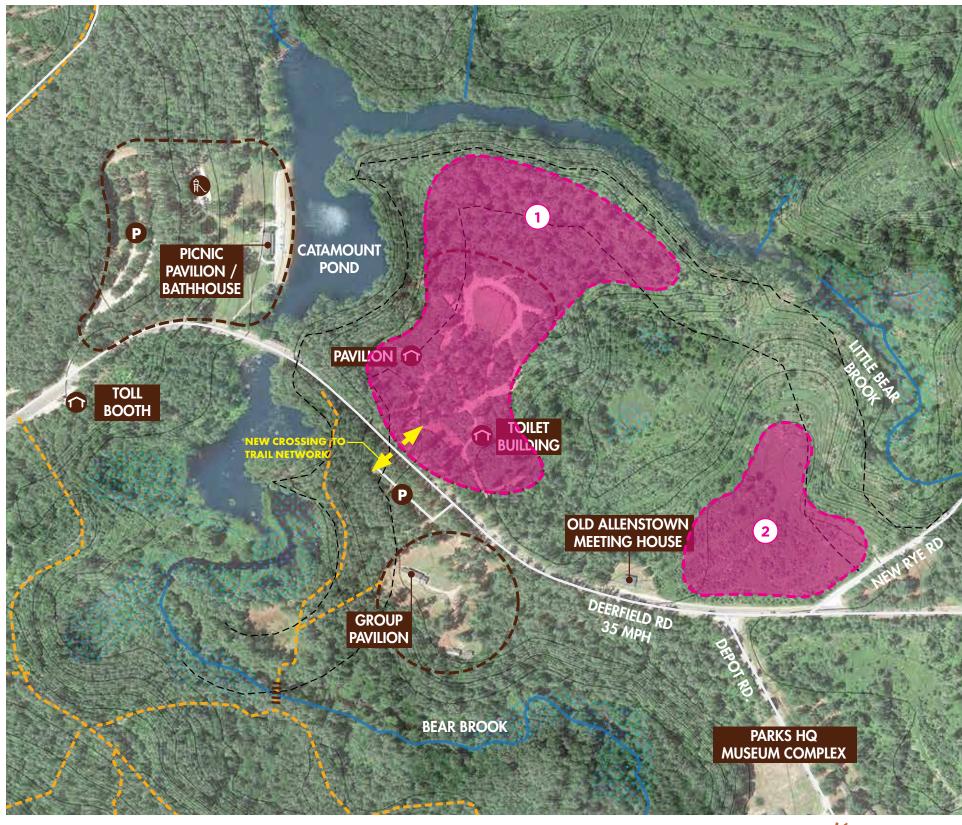








Shared Trails



### **ARCHAEOLOGY REVIEW**

This archaeological assessment included background research, visual inspection of the project area, and preparation of this letter report. Background research included review of previous archaeological studies in the Suncook River drainage (Borstel et al. 2002; Chan et al. 2011; Goodby 2010; Goodby and Deshler 2018; Hannum and Wheeler 2003), archaeological site files, historic maps (Figures 5-8), and soil survey data. Visual inspection of the project area was conducted on May 4, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs and the excavation of selective shovel probes to assess underlying soils (Figure 4; Plates 1-13). Brian Deshler served as Project Archaeologist and Robert Goodby, Ph.D. served as Principal Investigator.

A Phase IA Archaeological Sensitivity Assessment was completed for the proposed Catamount Pond Campground Expansion project in Bear Brook State Park in Allenstown, New Hampshire. Two portions of the project area exhibited sensitivity for Native American archaeological sites. A Phase IB Intensive Archaeological Investigation, including excavation of 50cm square shovel test pits, is recommended for both of these areas to assess the presence of Native American sites.





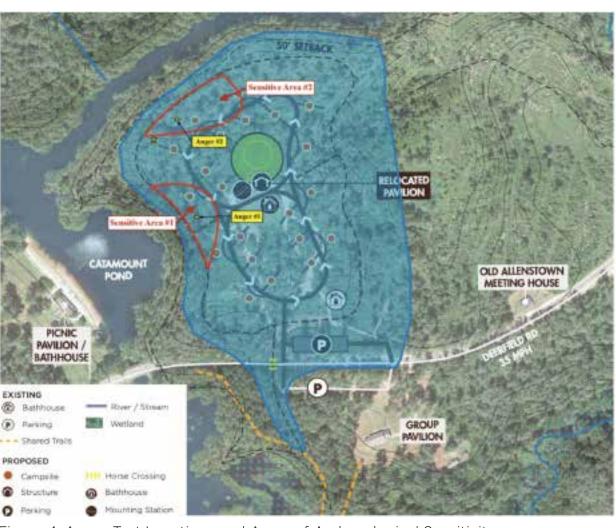


Figure 4. Auger Test Locations and Areas of Archaeological Sensitivity





Plate 5. Archaeologically Sensitive Area #1 and Location of Auger #1, View North Plate 6. Profile of Auger #1 Showing Sandy, Well-Drained Soil

# HISTORIC SIGNIFICANCE

Bear Brook State Park was created by the National Park Service as a Recreational Demonstration Area and built by the Civilian Conservation Corps in 1935-1942. It has been a state park since 1943. Facilities include a swimming beach with pavilion and bathhouse, picnic areas with shelters, a public archery range, fishing ponds, a campground and two group camps.

The Bear Brook State Park Historic District was determined eligible for the National Register of Historic Places in 2017. The boundary of the historic district encompasses the entire park. All buildings and structures and built landscape features more than fifty years old are assumed to contribute. Most date from the 1930s-40s and retain historic groupings and layout.

Within the large district, Bear Hill Pond Camp was previously determined eligible as a historic district in 2013.

Bear Brook State Park is eligible for the National Register under Criteria A and C. in the areas of recreation and conservation. as well as politics and government, architecture and landscape architecture. Bear Brook was designed and built by the federal government as a work-relief project, to be operated as a model state park. Bear Brook State Park is significant for its "Park Service Rustic" architecture. There have been few changes to the buildings and structures planned by the National Park Service and erected by the Civilian Conservation Corps.

The Day-Use Area in the northwest part of the park is located on both sides of the local Deerfield-Allenstown Road that passes through the park. The tollbooth and park office are alongside the road near the entrance to the Catamount Pond parking lot. The family day-use area on Catamount Pond is north of the road and the group area with its own parking lot is to the south. The pavilion and bathhouse, stone staircase and walls, beach, pond with stone dam and footbridge all date to ca. 1938-1940. There is a small picnic shelter in the former family picnic area (potential horse camping site) on the opposite side of the pond. The bathroom building there is like those built in the campground in 1949. The group picnic area south of Deerfield Road dates to 1936-39 and includes a large picnic shelter with stone cooking fireplace and hearth and a slab sided outbuilding.

See Appendix for complete historic resources overview by Preservation Company.









# **SITE PLAN OPTION A**

#### 1. EXISTING EQUESTRIAN SITES

> Continue use of existing 9 campsites that have already been cut

### 2. SECONDARY EQUESTRIAN POD

- > A secondary equestrian camping pod made up of pull-through and back-in sites would provide another 10 campsites
- > Some earthwork would be required

#### 3. BATHHOUSE ADDITION

- > This scheme allows the existing toilet building to serve both equestrian camping pods in a central location
- An addition to the existing toilet building would be required to provide space for showers

#### 4. PERIMETER MULTI-USE LOOP TRAIL

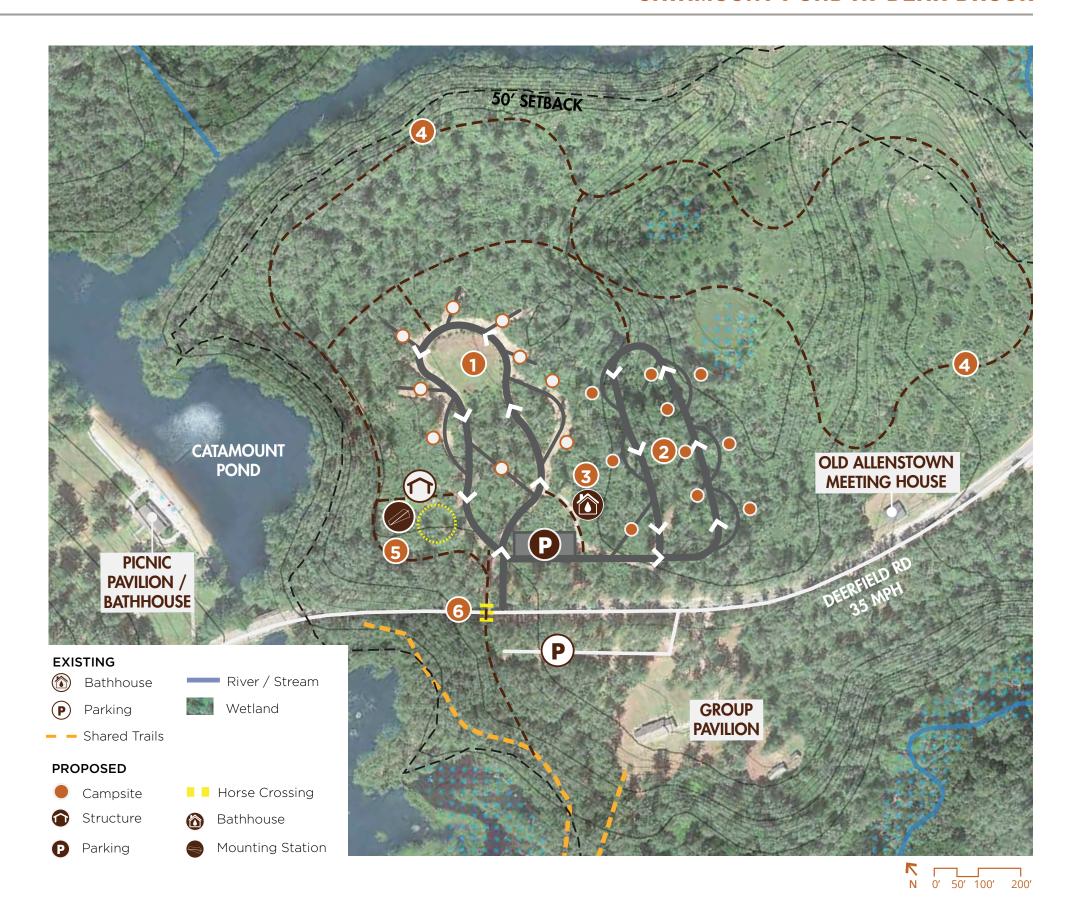
> A perimeter multi-use loop trail provides a family friendly space to stroll with or without horses

#### 5. PAVILION AND ROUND PEN

> This option locates the round pen adjacent to the existing pavilion

### 6. HORSE CROSSING

A separated horse crossing using a horsefriendly surface material and traffic calming measures



# **SITE PLAN OPTION B**

#### 1. EQUESTRIAN CAMPING POD

- > Potential for 21+ equestrian Camp Sites
- > Each site would have a 2-horse corral, manure management container, tent pad, fire pit, and picnic table
- > Mix of pull-through and back-in sites
- > Could be implemented in phases

#### 2. CENTRAL BATHHOUSE

> A new bathhouse would be needed to keep all campsites in a comfortable distance to a restroom

### 3. COMMON SPACE @ RELOCATED PAVILION AND ROUND PEN

- > The existing pavilion is relocated to provide a common area for campers and group functions in a central location
- > A view of the round pen from the pavilion creates a unique and lively family atmosphere
- > Round pen can be a permanent or temporary structure

#### 4. PERIMETER MULTI-USE LOOP TRAIL

> A perimeter multi-use loop trail provides a family friendly space to stroll with or without horses

### 5. HORSE CROSSING

> A separated horse crossing using a horse-friendly surface material and traffic calming measures



### SITE PLAN

**EXISTING SITES: 20** 

**REMOVED SITES: 1** 

**NEW SITES: 48** 

**TOTAL NUMBER OF SITES: 67** (NOT INCLUDING REMOTE SITES)

### 1. JERICHO BROOK

- > 32 Premium Sites
- > 5 Shelter Sites
- > 5 Standard Sites

#### 2. JERICHO LAKE

- > 2 Single Shelter Site (Infill)
- > 3 Standard Sites (Infill)
- >1 Double Shelter Site

#### 3. COMMON SPACE

- > Common gathering area with fire pit and boulders
- > Small bathhouse building combined with maintenance space

#### 4. ATV TRAIL AND PARKING

> Alternate ATV trail to boat launch and trail system

### **5. SANITARY DUMP STATION**

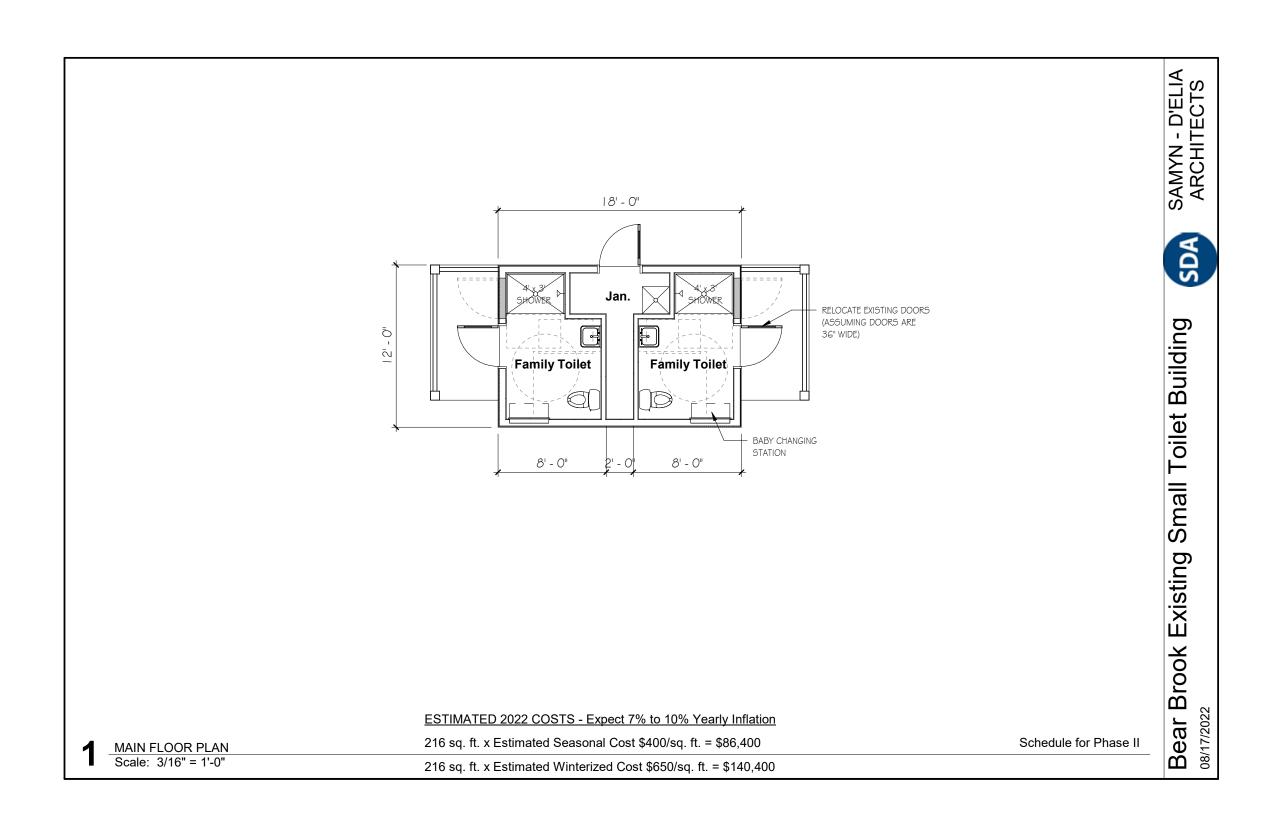
> Pull-through sanitary station at exit with trash/ recycling

### **6. STANDARD CAMPSITES AREA**

> Option for walk/ride-in sites, potential item for NH Parks to construct



# ARCHITECTURE TOILET BUILDING FLOOR PLAN









- > Close to population centers and transit (Boston, Portsmouth, Portland, I-95)
- > Beach, boating, and lake!
- > Waterfront campsites
- > Lots to do! Activities for everyone
- > Unique landscape features and wildlife

**NEAREST URBAN AREAS:** MANCHESTER - 30 MINUTE DRIVE PORTSMOUTH - 35 MINUTE DRIVE **BOSTON- 70 MINUTE DRIVE** PORTLAND - 80 MINUTE DRIVE

### **PARK INFO**

- > 5.500 Acres
- > Opened as State Park in 1966
- > 3 Working Campgrounds:
  - Big Island
  - Horse Island
  - Neal's Cove
- > 1 Youth Group Overnight Area and Pavilion

### **ACTIVITIES**

> Mountain

> XC Skiing

> Snowmobiling

> Snowshoeing

Biking

- > Swimming
- > Fishing
- > Hiking
- > Rock Climbing
- > Horseback Riding
- > Wildlife Viewing
- > Paddling
- > Motor Boating

### **PARK AMENITIES**

- > Beach
- > Bath House
- > Playground
- > Canoe/Kayak/ Paddleboard Rentals
- > Camp Store
- > Learning Environments
- > Picnic Pavilion
- > Fire Lookout Tower
- > Unique Geology

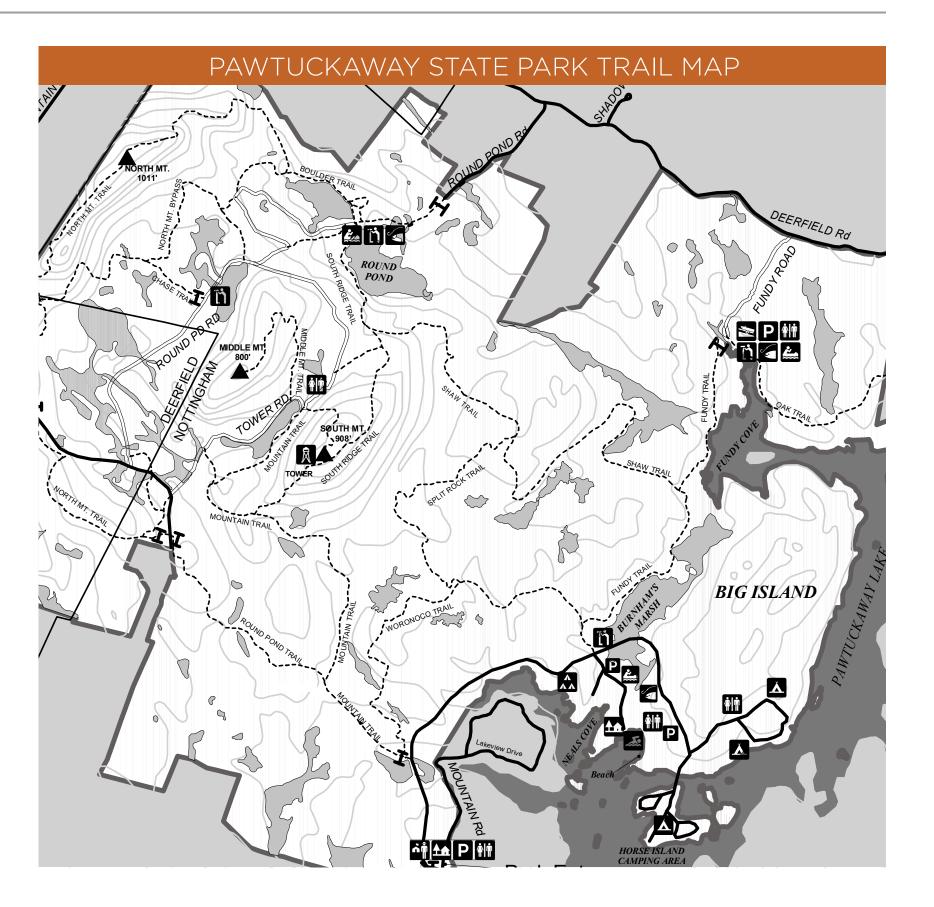
### **CAMPSITE TYPES**

- > Cabin
- > Pop-up/Tent
- > Standard (room for trailer)
- > Tent Only

- > Pawtuckaway State Park is made up of two connected sections:
- Recreation facilities on Lake Pawtuckaway to the Southeast
- Pawtuckaway State Reservation to the Northwest
- > Historic resources are cast throughout the landscape including: cemeteries, cellar holes, historic ruins, a fire-tower, and much more.
- > The park has a unique geologic history, formed by its volcanic past. Many large boulders can be found throughout the park and especially in the boulder fields!
- > The unique geology gives rise to a high level of plant diversity with 6 exemplary natural community systems, 18 exemplary natural communities, and 29 rare plant populations documented in the park.
- > Eastern Shoreline of Pawtuckaway Lake is privately owned with extensive residential development

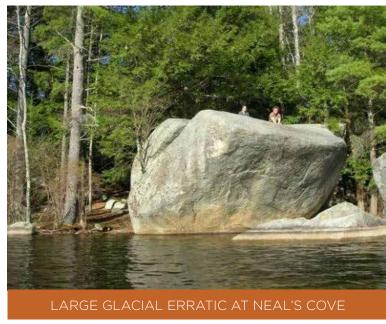


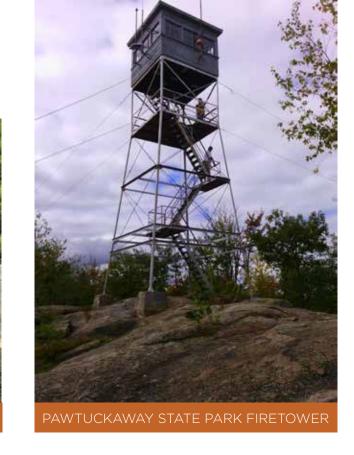




### **SITE PHOTOS**

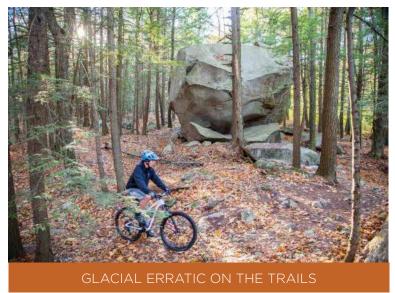


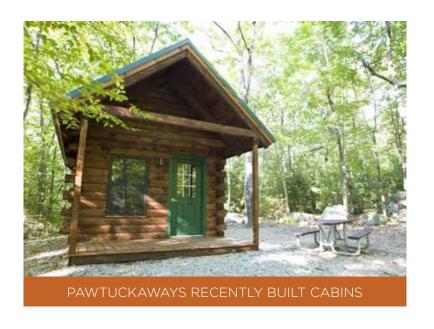














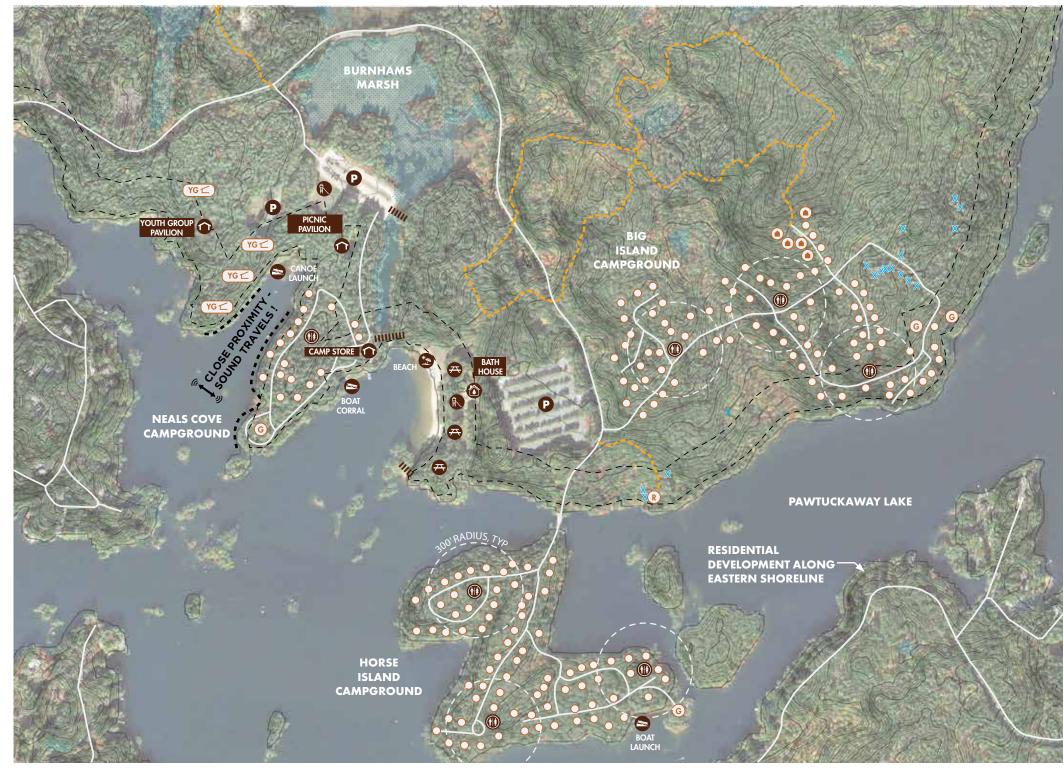
### **EXISTING CONDITIONS**

#### **NEALS COVE CAMPGROUND AND DAY USE AREA**

- >1 Large pavilion and 4 group campsites with lean-tos
- > Reserved for youth groups only
- > Has associated parking lot and small playfield
- > Underutilized during week due to lack of youth groups availability
- > Proximity to Neal's Cove campground makes noise a potential issue
- > Developed in 1965, was part of the first phase of construction at Pawtuckaway
- > Home to the Camp Store, Boat Corral, and Picnic Pavilion
- > Campground is fully built-out and densely populated
- > Features great views, waterfront campsites, and unique natural features
- > Very popular area and a staple of the Pawtuckaway experience
- > Already at capacity, 700-1,000 guests per day prepandemic
- > Facilities include parking lot, bathhouse, playground, and picnic area
- > Used by overnight and day guests

- 175 Camp Sites: >61 Tent/Pop-up >59 Standard Sites >55 Tent Only
- G 4 Group Sites
- YG 4 Youth Group Lean-tos
- R 1 Remote Sites
- 5 Cabins

- **B**athroom
- Picnic Site
- Playground Play Field
- X Site Visit Wetland Flags
- Trails
- ■ Bridge





### **EXISTING CONDITIONS**

### **HORSE ISLAND CAMPGROUND**

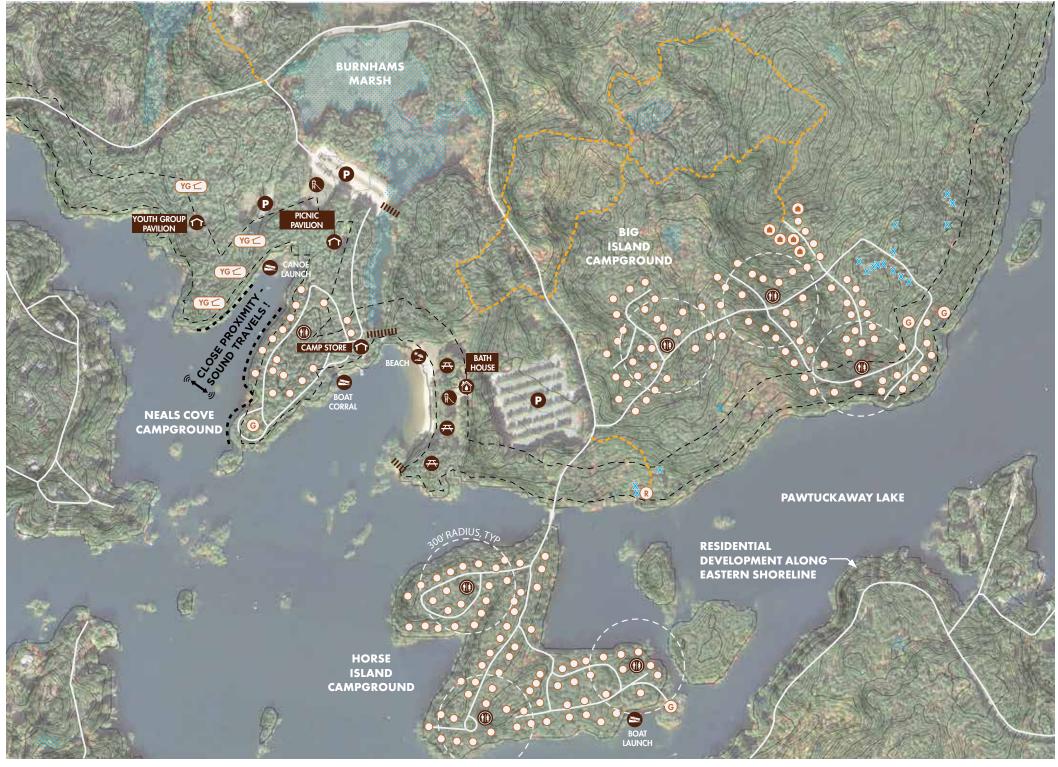
- > Developed in 1966, campsite is fully built out and densely populated
- > Features standard, tent-only, and 1 group campsites, as well as 3 toilet buildings and a boat launch for campers only.
- > Fantastic waterfront views

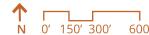
### **BIG ISLAND CAMPGROUND**

- > Developed in 1967, Big Island is the largest campground at Pawtuckaway
- > Camping options include standard sites, 5 cabins, and 1 remote campsite
- > Majority of sites are inland and do not have water views

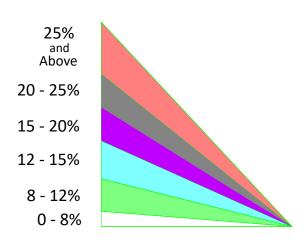
- 175 Camp Sites: 61 Tent / Pop-up 59 Standard Sites 55 Tent Only
- **G** 4 Group Sites
- 4 Youth Group Lean-tos
- R 1 Remote Sites
- 5 Cabins

- **B**athroom
- Picnic Site
- Playground/Play Field
- X Site Visit Wetland Flags
- Trails
- ■ Bridge





### **SLOPES**



- > Throughout the campgrounds slopes are generally 2-12% within the developed areas
- > The Big Island Campground has the most variability, ranging from 2-25%, but majority of developed areas within the Big Island Campground are in the 2-12% range

- 175 Camp Sites: 61 Tent / Pop-up 59 Standard Sites 55 Tent Only
- **G** 4 Group Sites
- YG ∠ 4 Youth Group Lean-tos
- R 1 Remote Sites

- **B**athroom
- Picnic Site
- Playground/Play Field
- X Site Visit Wetland Flags
- Trails
- ■ Bridge



Note: Topography observed on-site appeared less extreme in some areas than topographic information indicates

## SITE UTILIZATION 2019-2021

### QUICK FACTS

- > Average 3-Year Utilization: 57%
- > Average Peak-Season Utilization: 76%
- > Average Non-Peak Season Utilization: 47%

### KEY

- Over 70% Annual Utilization
- Under 35% Annual Utilization

### UTILIZATION TRENDS

Pawtuckaway State Park has 5 cabins, 58 tent only sites, 62 pop-up/tent sites, 59 standard sites, and 4 youth group Adirondack shelters.

The most utilized sites are near water with ample space around them. The one remote site is also highly popular.



### **INFRASTRUCTURE**

### POWER

Power is supplied in a combination of overhead and underground distribution. Most of the building services are underground. Horse Island power is supplied from a pole near the beach parking lot in a conduit that goes under the lake. Big Island is served underground.

### WATER SUPPLY

Water supply is provided by three different sources with distribution to three separate areas:

**Beach:** The well **(1)**, located north of the beach with a small pump house, serves the beach bath house and the Neals Cove area including the store, 5 spigots, and one toilet building.

Horse Island: The well house (2) north of Site 26, serves the Horse Island campground area including three toilet buildings and 13 spigots. The well house was not accessible, so more info is needed. No drilled well was observed in the area, but it might be in the building.

**Big Island:** The water source **(3)**, which includes a pump house and a large hydropnuematic tank, serves 3 toilet buildings and 17 spigots throughout the Big Island campground area. The pump house was not accessed, and the type of source is not known.



Water Spigot



### **INFRASTRUCTURE**

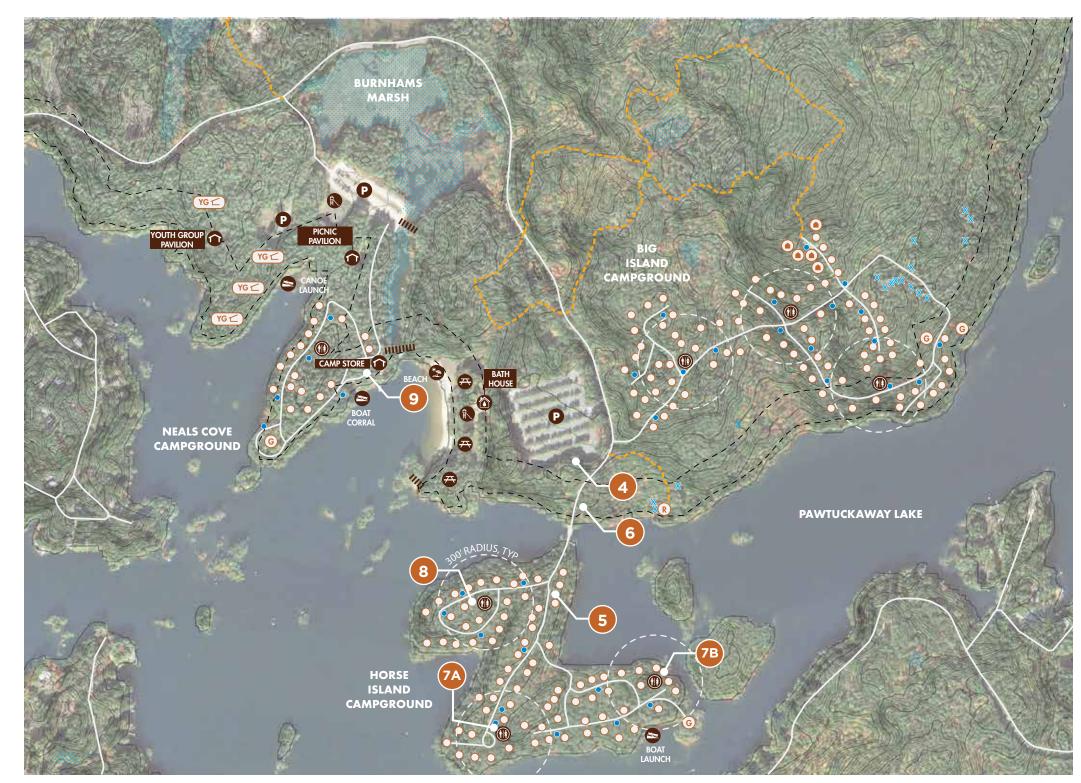
### WASTEWATER

Beach Area: This leach field **(4)** serves the Horse Island and beach bath house building. The bath house has a waste pipe with cleanout leaving the west side of the building to a tank and then a pump chamber with duplex pumps. That pump chamber is presumed to pump up to this leach field, but the routing is unknown.

Horse Island: The Horse Island toilet buildings reportedly flow from their individual tanks by gravity to a pump station (5). From there, effluent is pumped across the bridge to a wastewater booster pump station (6) northeast of the bridge and then to the leach field. The tanks for the toilet buildings near Site 57 (7A) & 71 (7B) were completely full of solids at the time of observation in Dec 2021. The toilet building near Site 9 (8) was under construction and new tanks were installed.

**Neals Cove:** The store has a tank near the west side of the building **(9)**, but nothing else is known about the wastewater disposal for this building, the toilet building, or the group site pavilion bathroom.

**Big Island:** According to the design plans, the three toilet buildings each have their own tank and disposal system. The disposal systems were designed to each have four 5' diameter seepage pits with associated distribution boxes. The tank covers were located for the building near Site 150, but the others were not definitively located.



Water Spigot



### **STRUCTURES**



### TOILET BUILDING

Built	1960's upgraded 1990's
Number of Bathroom Buildings	6
Toilets	(4) woman's & (6) men's
Showers	2
Laundry	None
Family Bathroom	None
Construction/Architectural Style	Standard framing with T1-11 siding.
Capacity	N/A
Winterized	No
Utilities	Yes
General Condition	Fair to good - Renovation underway on some.
Historically Significant	Yes
ADA Accessible	Doesn't meet current standards; upgrading program underway.



### CABIN, TYPICAL

Year Built	2008
Number of Cabins	5
Original Use	Rental cabins
Current Use	Sleeps 6
Dimension	12x20
Construction Type	Traditional log construction
Condition	Good
Upgraded Needed	N/A
ADA Accessible	1 is accessible. 4 are not accessible.
Utilities	Electricity
Historically Significant	No

### **STRUCTURES**



YOUTH GROUP PAVILION



TOLL BOOTH



ADMINISTRATION BUILDING



**BOAT RENTAL** 



NEALS COVE PICNIC PAVILION



YOUTH GROUP LEAN-TO, TYPICAL



NEALS COVE CAMP STORE



NEW TOILET BUILDING

### **EXPANSION OPPORTUNITIES**

175 Camp Sites: 61 Tent / Pop-up 59 Standard Sites 55 Tent Only

G 4 Group Sites

YG 4 Youth Group Lean-tos

R 1 Remote Sites

5 Cabins

### Bathroom





X Site Visit Wetland Flags

Trails

■ ■ Bridge

### 1. EXPANSION AREA

- > Size: 1.5 Acres
- > Slope: 2-8%, Edges slope quickly to 8-35%
- > Potential for waterfront sites
- > Close access to beach and bathhouse
- > Potential conflict with disc golf course

#### 2. EXPANSION AREA

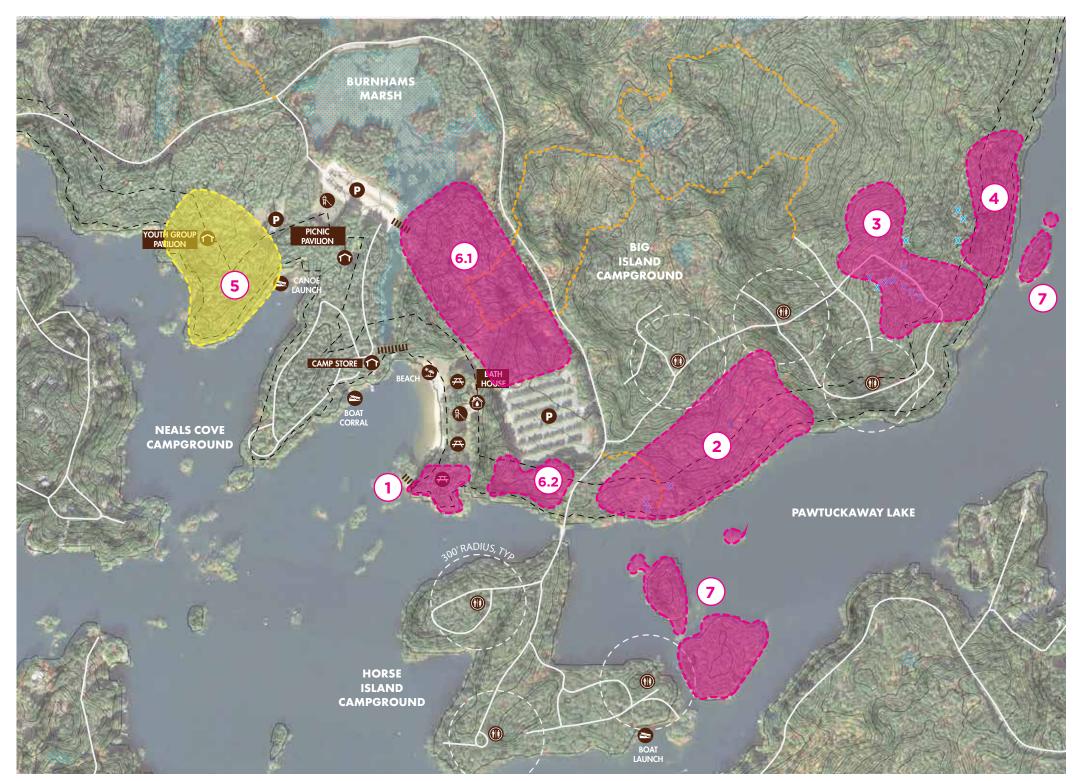
- > Size: 14 Acres
- > Slope: Mostly 2-12%, some 12-20%
- > Favorable terrain for development
- > Potential for waterfront and inland campsites
- > Some wet areas located during site visit

### 3. EXPANSION AREA

- > Size: 10 Acres
- > Slope: Mostly 8-12%
- > Road and utilities are already in place
- > Wet areas located during site visit

### 4. EXPANSION AREA

- > Size: 6 Acres
- > Slope: Variable, 5-25%
- > Waterfront views





### **EXPANSION OPPORTUNITIES**

175 Camp Sites: 61 Tent / Pop-up 59 Standard Sites 55 Tent Only

G 4 Group Sites

YG 4 Youth Group Lean-tos

R 1 Remote Sites

5 Cabins







Site Visit Wetland Flags

Trails

■ ■ Bridge

### 5. YOUTH GROUP AREA

> Should consider if youth group sites are the highest and best use of this area

### **6.1 PROPOSED DISC GOLF AREA 1**

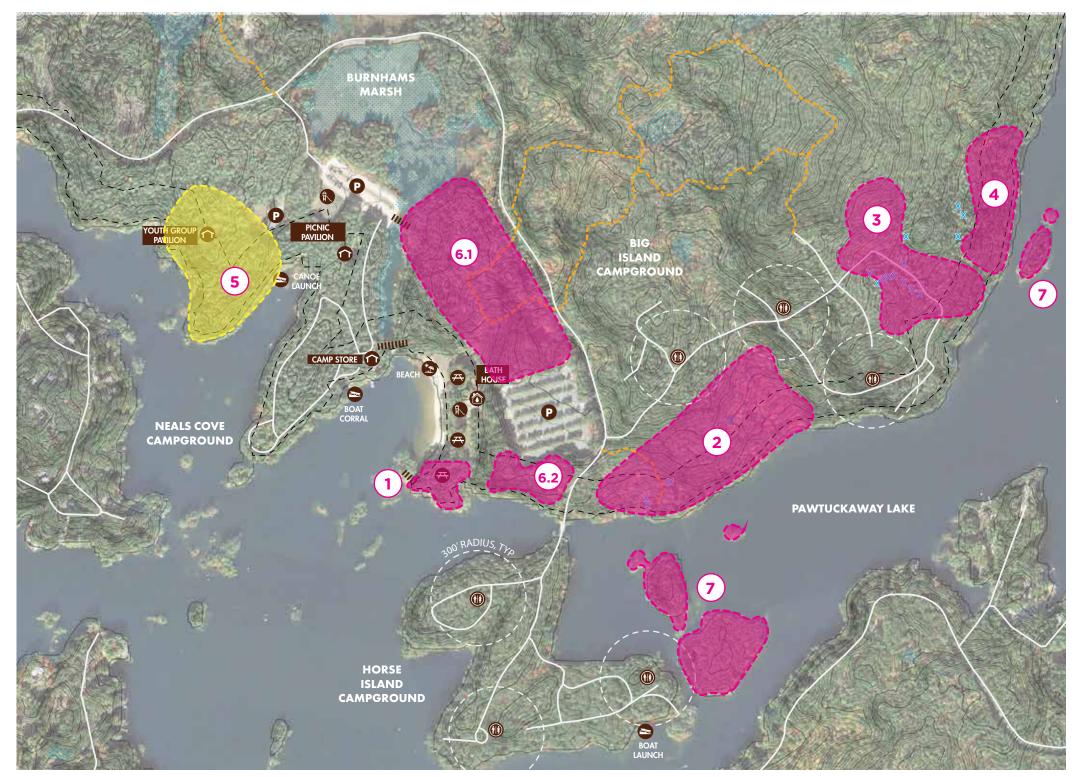
- > Size: 17 Acres
- > Slope: Highly variable ranging from 2-30%, two large areas (6 acres) are in the 2-12% range
- > Potential campground expansion area
- > Close to beach, parking, and amenities
- > Close to wetlands
- > Existing trails in area

#### **6.2 PROPOSED DISC GOLF AREA 2**

- > Size: 2.5 Acres
- > Slope: Highly variable ranging from 2-30%, a 1.2 acre area is the 2-12% range
- > Potential campground expansion area with waterfront campsites
- > Close to beach, parking, and amenities

### 7. ISLANDS

- > Several islands in close proximity to established camping zones could be used for paddle-to or remote camping
- > Approval by lake association and public is a must and could be challenging





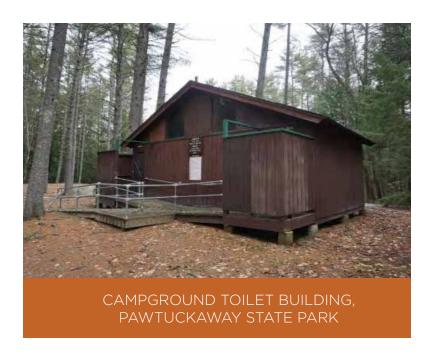
### **ARCHAEOLOGY REVIEW**

Phase IA Archaeological Sensitivity Assessment was completed for the proposed Pawtuckaway State Park Campground Expansion Project in Nottingham, New Hampshire. The project area is situated on rocky, uneven, and poorly drained terrain. No archaeological sites or areas of archaeological sensitivity were identified, and no further study is recommended.

### **HISTORIC SIGNIFICANCE**

- > In 2022, Pawtuckaway State Park is being recorded on a NHDHR historic district area form. It was determined eligible for the National Register of Historic Places as a large district and cultural landscape in January of 2022.
- > The resources and design of the park are important as a prototype mixed-use recreational area in New Hampshire that combined intensive recreational use with protected conservation land.
- > The park has an array of 1960's buildings constructed with a modern aesthetic, including campgrounds, an administration building, park store, toll booth, several toilet buildings and picnic pavilion.
- > The network of trails and old woods roads contributes to the historic park, and there are cellar holes where nineteenth century farmhouses stood, particularly in the northwest corner of the park.

See Appendix for complete historic resources overview by Preservation Company.







Principle of the Market

### **SITE PLAN OPTION A**

### 1. SECONDARY STORE

> New secondary store located between Horse Island and Big Island

#### 2. CAMPING POD OPTION

> Multiple areas have the potential for expansion but do not all need to happen. Park capacity and user experience should be considered

#### 3. BEACH AREA GROUP SITE

- > The picnic area south of the beach can be converted to a premium group site
- > Will need to use public facilities and parking

#### 4. REMOTE ISLAND CAMPING

- > The islands off of Horse Island and Big Island are compatible for remote paddle to camping
- > Need to consider maintenance of sites, access, and public opinion

### 5. ADDITIONAL WATER ACCESS

> Additional water access points will help reduce capacity issues at the beach and provide convenient water access through-out the campgrounds

#### **EXISTING**

( Cabin

Existing Site

(G) Group Site

**PROPOSED** 

- Pit Toilets
- Picnic Site
- Playground / field
- Structure

Proposed Site

Boat Launch

- Pit Toilets Lean-to Shelter
- Cabin
- Walk-in Site
- Structure
- Parking
- Toilet Building
- Water Access

One-way Road

Toilet Building

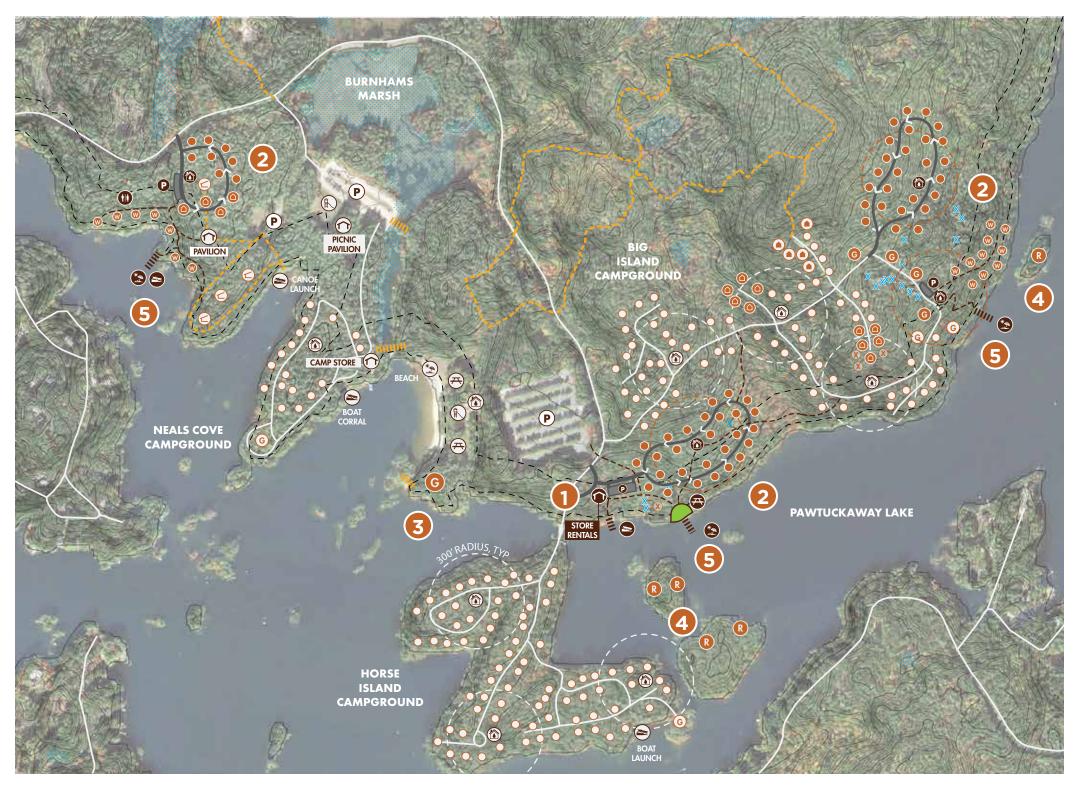
X Wetland Flag

Trails

■ ■ Bridge

Trails

■ ■ Dock





### **SITE PLAN OPTION A** CONTINUED

#### 1. CAMPING POD OPTION 1

- > Camping pod of 31 sites and 1 toilet building
- > Waterfront location with secondary water access

### 2. CAMPING POD OPTION 2

- > Camping pod of 26 sites and 1 toilet building
- > Wooded location

### 3. STORE / RENTAL

- > Store hub located strategically between campgrounds
- > Secondary boat rental and launch

#### 4. WALK-IN SITES

> 10 walk-in sites with associated parking, toilet building, and water access

#### **5. HIGH UTILIZATION INFILL**

- > Use cabins to replace low utilization campsites
- > Infill Big Island loop with group sites away from the rest of the campground

### **EXISTING**

- Existing Site
- Pit Toilets
- Toilet Building X Wetland Flag

- ( Cabin
- Picnic Site (R) Playground / field
  - Trails

Structure

G Group Site

### **PROPOSED**

Proposed Site

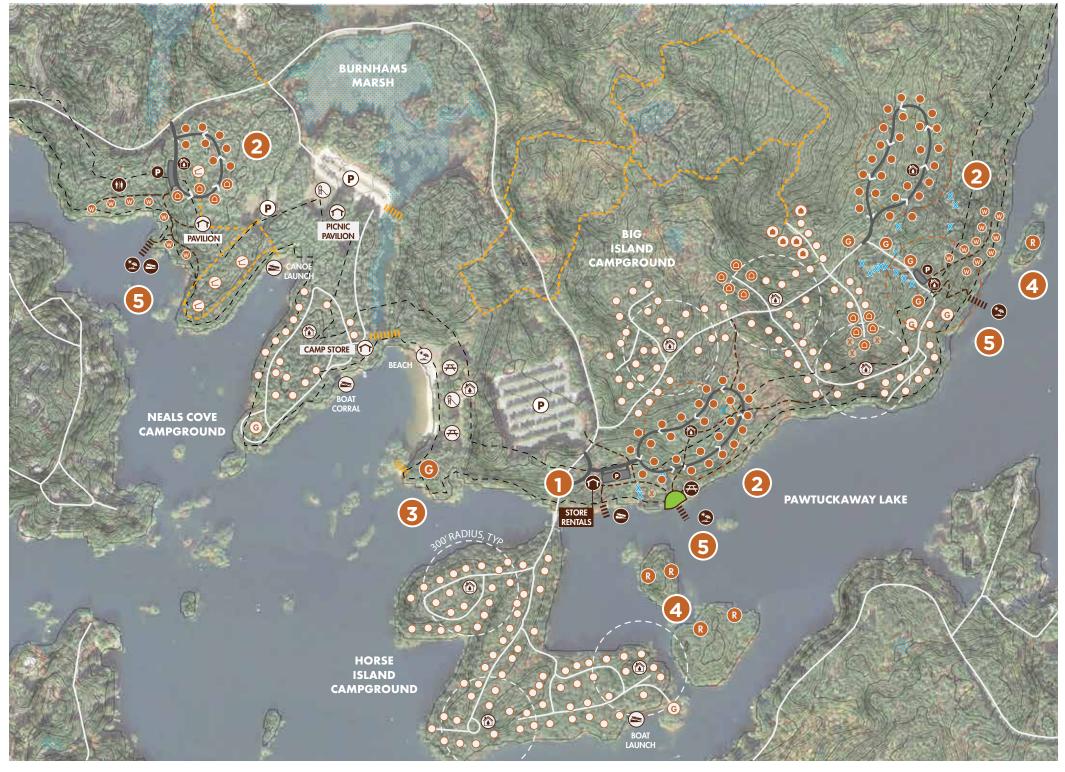
Lean-to Shelter

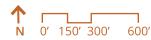
Structure

Boat Launch

- **—** Trails Pit Toilets ■ ■ Dock
- Cabin
- Walk-in Site
- Parking
  - Toilet Building
- One-way Road Water Access

■ ■ Bridge





### **SITE PLAN OPTION A CONTINUED**

#### 1. CAMPING POD OPTION 3

- > Camping pod made up of a mix of cabins and standard sites with an associated bath house
- > Adjacent pavilion makes this pod ideal for events
- > 7 waterfront sites with associated parking, water access, and pit toilet

### 2. GROUP SITES

> Organized youth group sites are now available for us by any group

#### **EXISTING**

Existing Site

( Cabin

G Group Site

Structure

**PROPOSED** 

Pit Toilets

Picnic Site

X Wetland Flag Trails

Playground / field

Boat Launch

### **—** Trails

Pit Toilets Lean-to Shelter

Cabin

Walk-in Site

Proposed Site

Structure

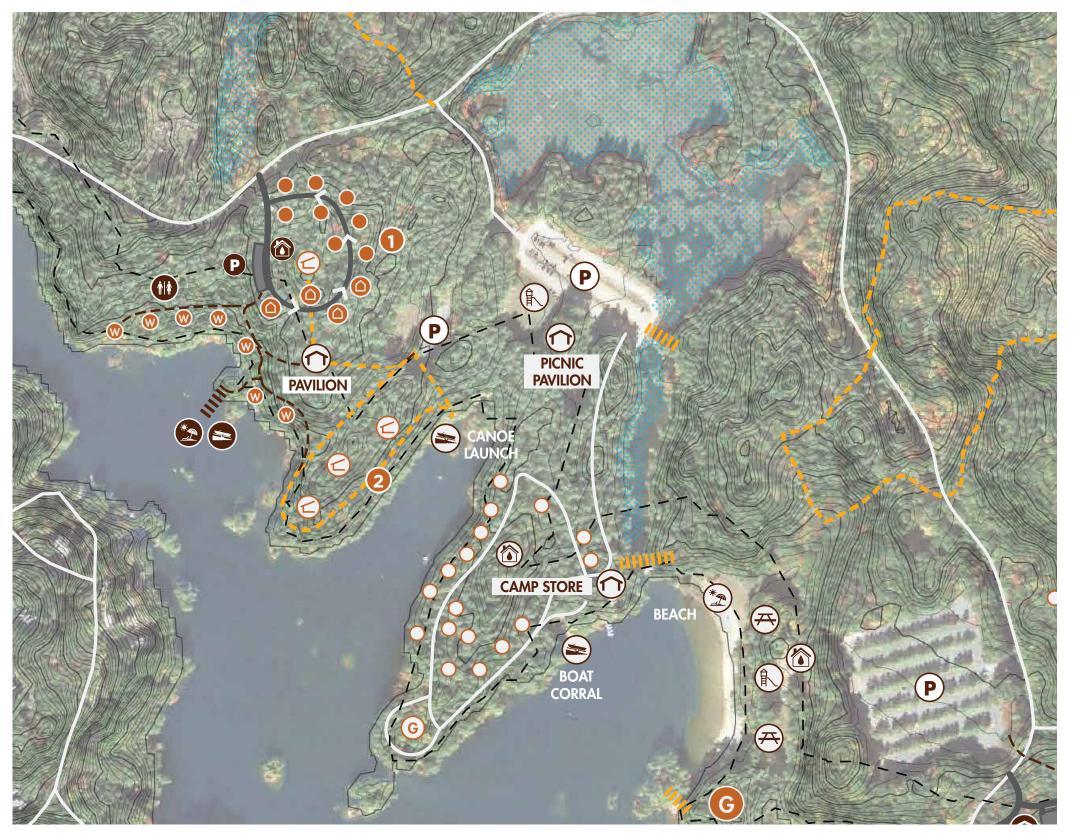
■ ■ Dock One-way Road

Parking Toilet Building

Water Access

■ ■ Bridge

Toilet Building







### **SITE PLAN OPTION B**

#### 1. WALK-IN CAMPSITE OPTIONS

> Low impact camping pod made up of walkin sites that offer a different type of camping experience at Pawtuckaway

#### 2. BEACH EXPANSION AREA

- > The picnic area south of the beach has been converted to a premium group site
- > Will need to use public facilities and parking

### 3. REMOTE ISLAND CAMPING

- > The islands off of Horse Island and Big Island are compatible for remote paddle to camping
- > Need to consider maintenance of sites, access, and public opinion

#### 4. SECONDARY WATER ACCESS

> Additional water access points will help reduce capacity issues at the beach and provide convenient water access through-out the campgrounds

### **EXISTING**

- Existing Site
- Cabin
- **G** Group Site
- Structure
- **PROPOSED**
- Proposed Site
- Lean-to Shelter
- Cabin
- Walk-in Site

Parking

Pit Toilets

- Picnic Site
- Playground / field Trails
- Boat Launch
  - ■ Bridge
- Structure Trails
- ■ Dock Pit Toilets
  - One-way Road
- Water Access Toilet Building





Toilet Building

X Wetland Flag

### **SITE PLAN OPTION B CONTINUED**

#### 1. WALK-IN CAMPSITE OPTION 1

- > Camping pod of 17 sites and 2 pit toilets
- > Potential to phase in a toilet building as needed
- > Mix of platform, lean-to, and tent-only sites

### 2. WALK-IN CAMPSITE OPTION 2

> 5 walk-in sites with associated parking and pit toilet

### 3. HIGH UTILIZATION INFILL

- > Use cabins to replace low utilization campsites
- > Infill Big Island loop with group sites away from the rest of the campground
- > Associated pit toilet

### **EXISTING**

- Existing Site
- ( Cabin
- G Group Site
- Structure
- **PROPOSED**
- Proposed Site
- Lean-to Shelter
- Cabin
- Walk-in Site

- Pit Toilets
- Toilet Building X Wetland Flag
- Picnic Site
- Playground / field Trails

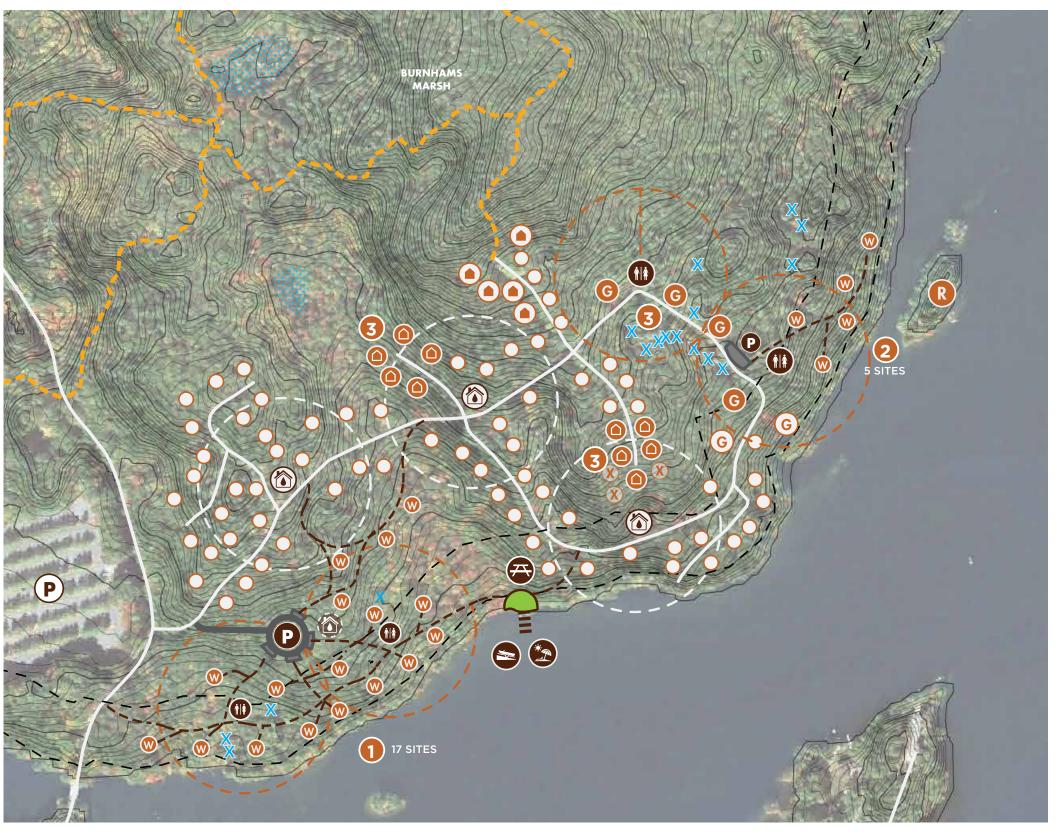
■ ■ Bridge

- Boat Launch
- - **—** Trails
- Pit Toilets
- ■ Dock
- Parking

Structure

- One-way Road
- Toilet Building
- Water Access





### **SITE PLAN OPTION B CONTINUED**

#### 1. EXPANSION AREA 1

> New waterfront camping pod of 35 Improved Sites and a new bathhouse carefully sited to minimize impacts to views of the shoreline from the water

### 2. BEACH PARKING LOT IMPROVEMENTS

- > A new store/office, bathhouse, wood storage building, and pavilion will be located at the existing beach parking lot
- > New amenities will serve campers from Horse Island and Big Island, as well as day-use guests

#### 3. NEW DUMP STATION

### **EXISTING**

Existing Site

Playground / field

Cabin

Boat Launch

Group Site Structure

Toilet Building X Wetland Flag

Trails

Pit Toilets

Picnic Site

■ ■ Bridge

### **PROPOSED**

Improved Site (W/E)

Bathhouse

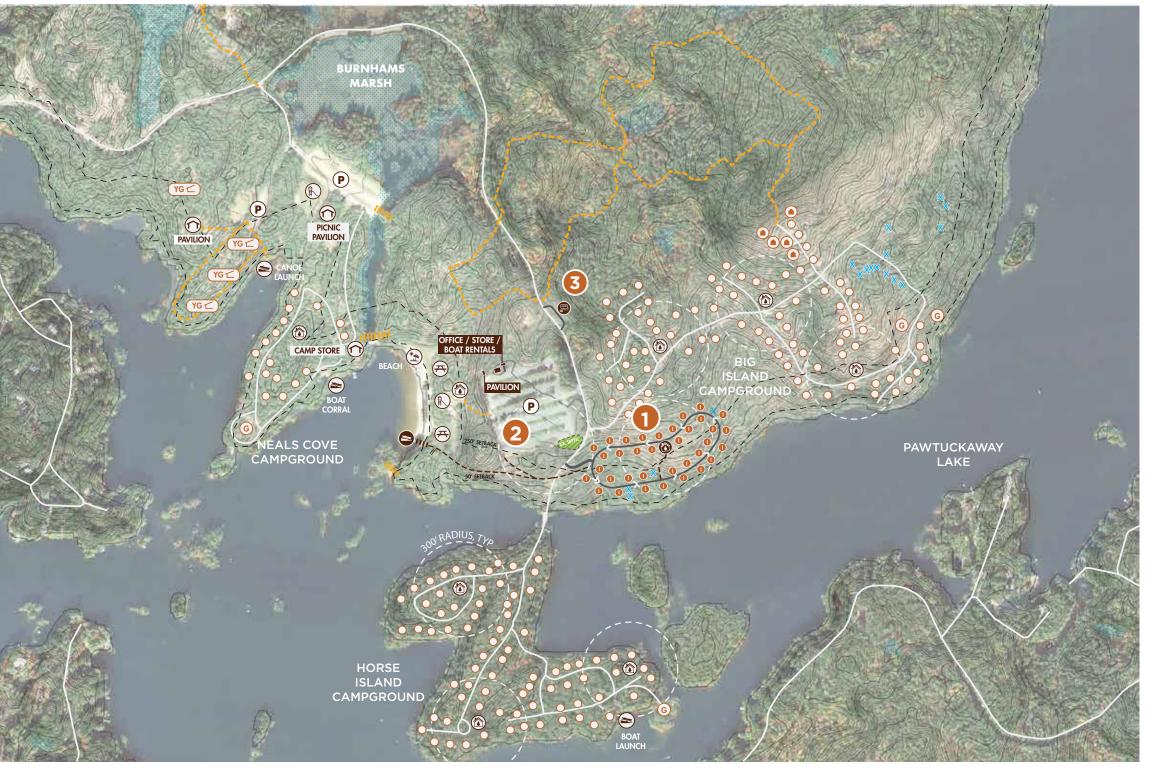
Dump Station

■ ■ Dock

**—** Trails

Two-way Road

One-way Road



### **SITE PLAN OPTION B CONTINUED**

#### 1. WALK-IN CAMPSITE OPTION 3

> 7 waterfront sites with associated parking, water access, and pit toilet

#### 2.. GROUP SITES

> Organized youth group sites are now available for us by any group

### **EXISTING**

- Existing Site
- ( Cabin
- G Group Site
- Structure

### **PROPOSED**

- Proposed Site
- Lean-to Shelter
- Cabin
- Walk-in Site

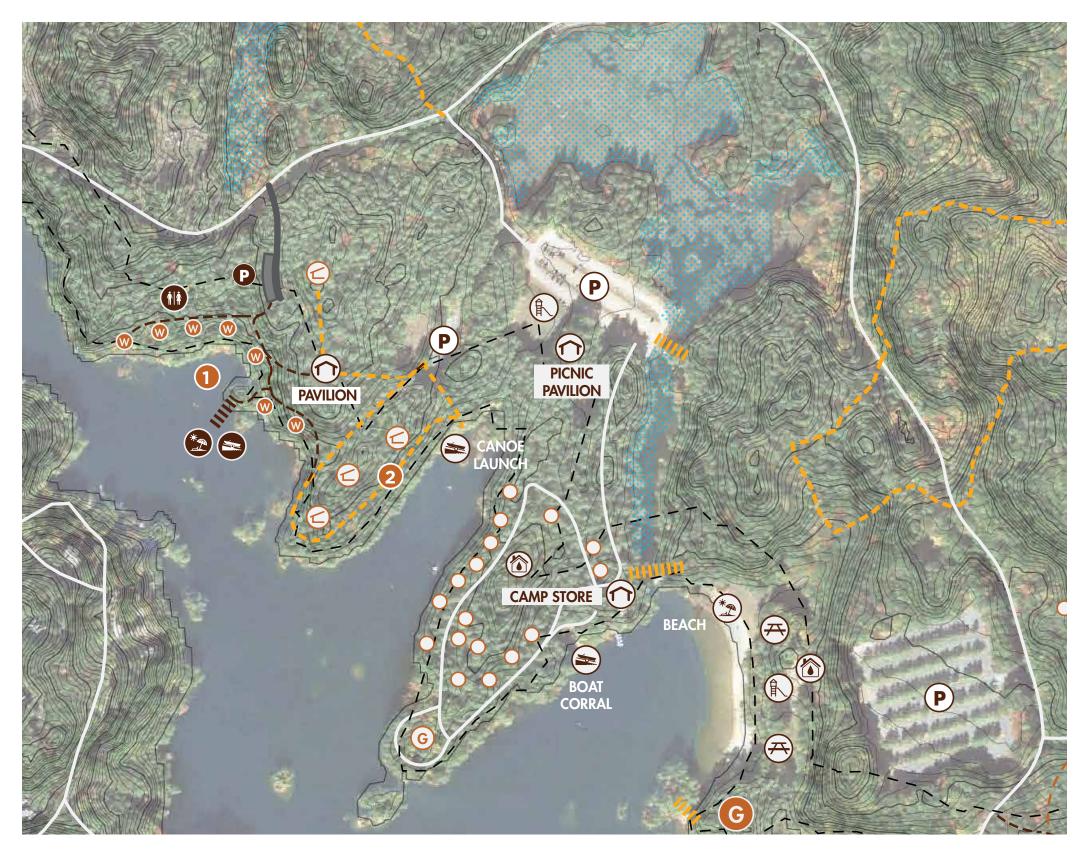
- Pit Toilets
- Picnic Site
- X Wetland Flag

Toilet Building

- Playground / field Trails
- Boat Launch
- ■ Bridge
- Structure
- Pit Toilets
  - ■ Dock
  - One-way Road
- Parking
- Toilet Building
- Water Access

**—** Trails





### SITE PLAN

#### 1. EXPANSION AREA 1

- > 35 Improved Sites (W/E)
- >1 Bathhouse

### 2. NEW STORE / OFFICE

- > A new store/office will be located at the beach parking lot making use of the existing parking
- > The facility will include retail, an office, storage, and restrooms
- > A pavilion and wood storage shed will be sited near by

### 3. CANOE / KAYAK LAUNCH

- > An accessible path leads to a non-motorized boat launch
- > Rental registration and paddle/life jacket pickup will be located at the store
- > Canoe / Kayak rentals will be located near the launch

### 4. SANITARY DUMP STATION / TRASH

> A dump station with trash/recycling drop-off will be located along the access road

#### **EXISTING**

Existing Site

(R) Playground / field

( Cabin

G Group Site

Structure

Pit Toilets

Picnic Site

Boat Launch

Toilet Building

X Wetland Flag

Trails

■ ■ Bridge



#### **PROPOSED**

Improved Site (W/E)



Bathhouse Dump Station ■ ■ Dock

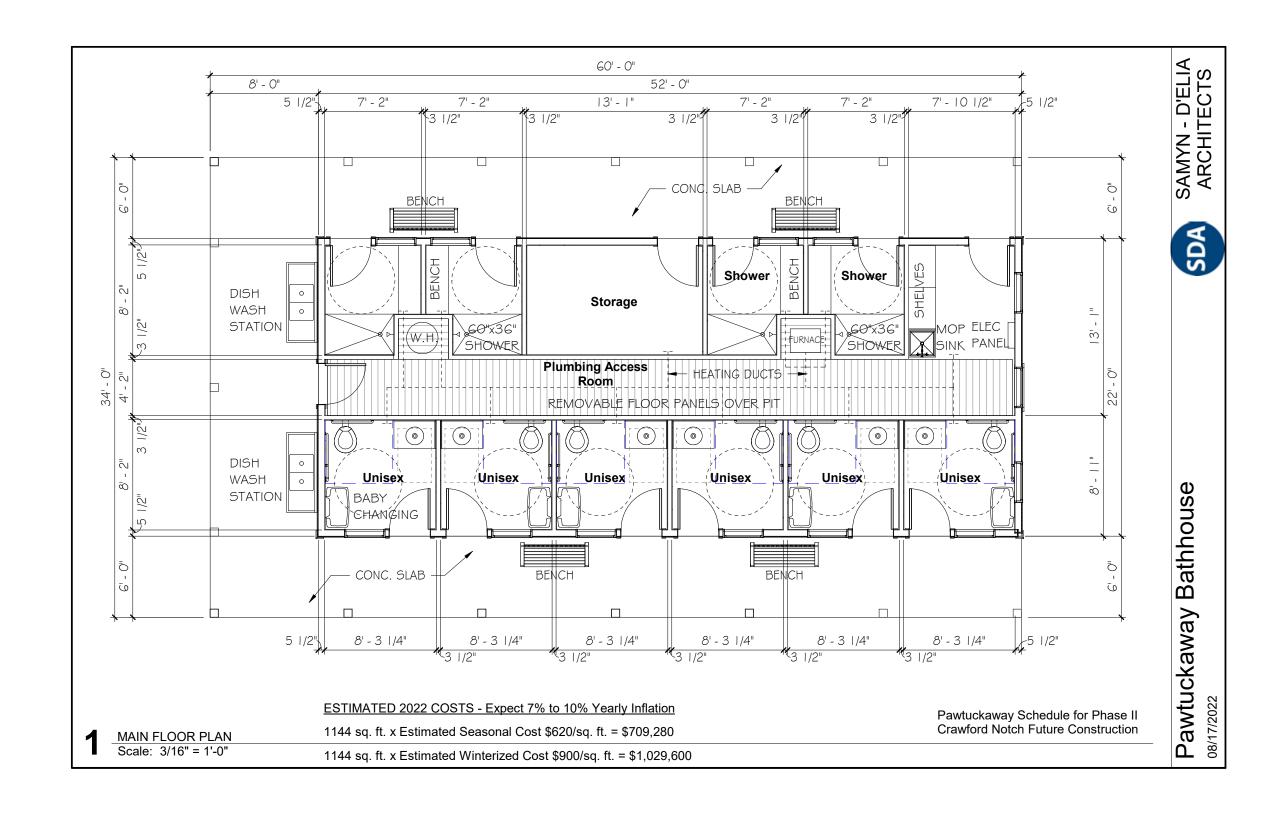
Two-way Road

Trails

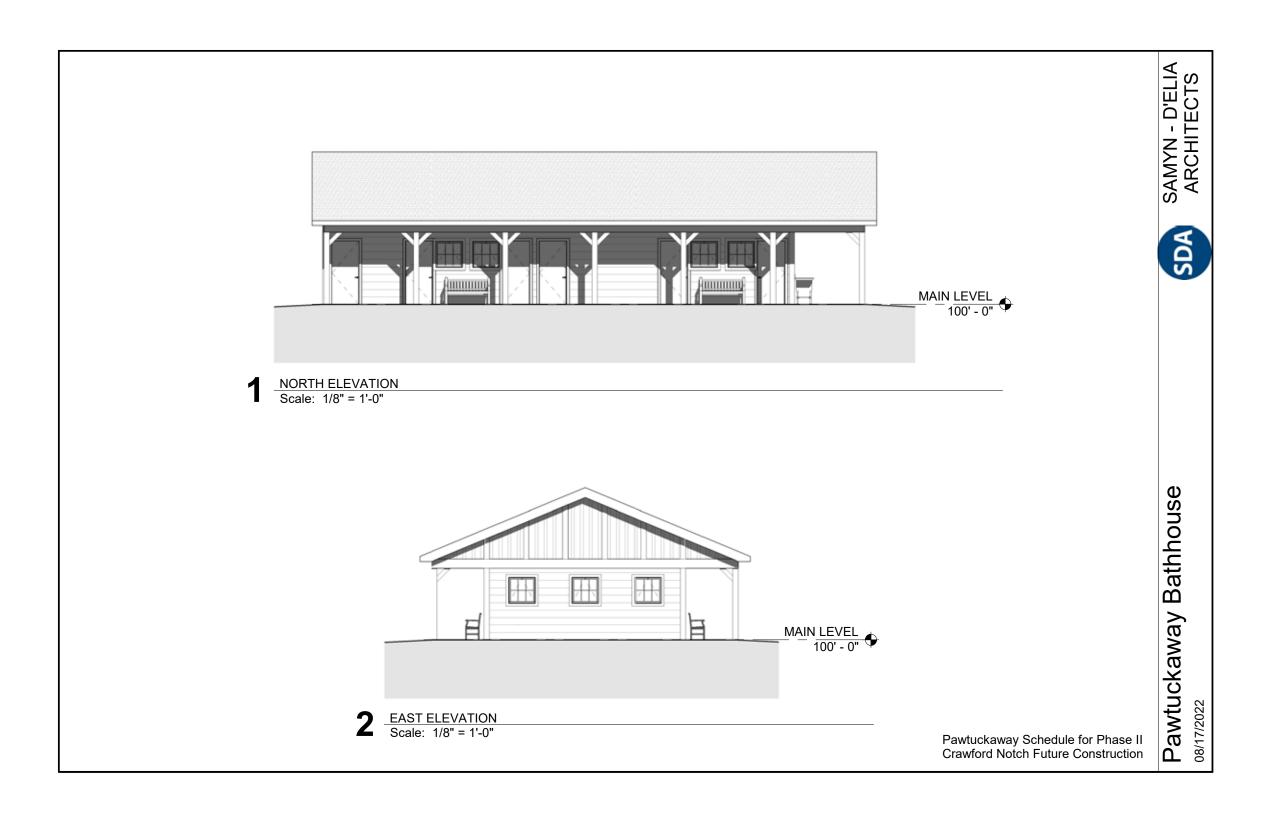
One-way Road



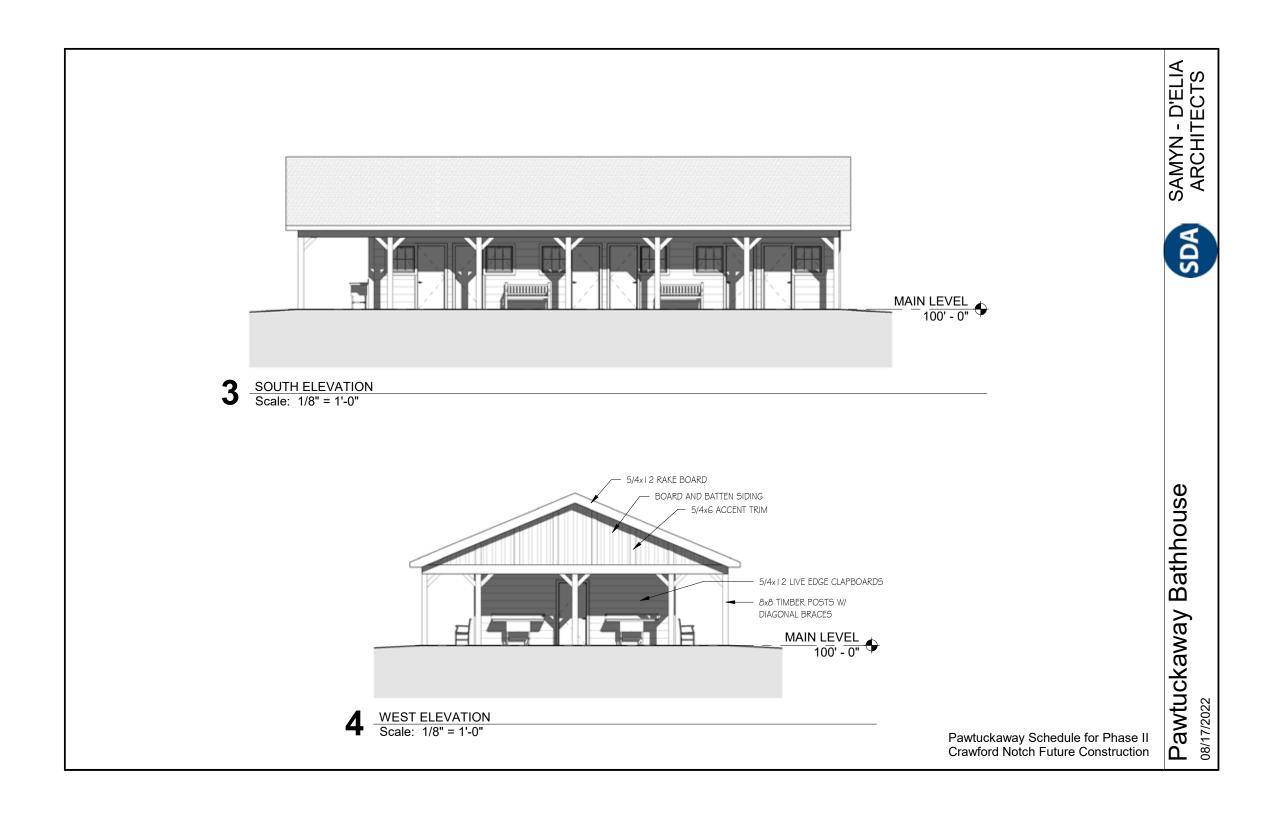
# ARCHITECTURE BATHHOUSE FLOOR PLAN



### **ARCHITECTURE BATHHOUSE ELEVATION 1**



### **ARCHITECTURE BATHHOUSE ELEVATION 2**





### MAKING THE MOST OF THE AVAILABLE FUNDS

The cost estimating conducted for each of the six potential campground expansion projects determined that the costs of the proposed enhancements exceeded the available funds. Three of the six campgrounds were selected for expansion, striking a balance between spreading the investment around while ensuring that the level of investment for any individual campground is sufficient to have significant impact to the recreational opportunities provided in the state. This impact is a function of not only the number of additional campsites being offered to the public, but also the quality of the camping experience being provided.

The amount of financial investment required to make the desired impact to the recreational offerings was a factor in selecting which campgrounds should receive funding for implementation, along with a consideration for the apparent market demand for additional campsites.

The campgrounds selected for expansion also represent a geographic mix, with a couple northern parks (Mollidgewock State Park, Jericho Mountain State Park) and one southern park (Pawtuckaway State Park,) and they collectively provide a wide range of outdoor recreation opportunities.

### MOLLIDGEWOCK STATE PARK

#### WHY INVEST HERE?

- > Key location for taking advantage of all the recreational opportunities that the Androscoggin River and Thirteen Mile Woods Scenic Area offer. The existing camparound has factors that likely affect the level of visitation:
  - Primitive/substandard amenities typical of a remote camping experience being provided in a non-primitive setting. The lack of modern camping amenities (flush toilets and showers, permanent office/store building with offerings beyond firewood) limit the demographic reach of > potential visitors.
  - Campsites along the river are spatially constrained, with many sites having minimal or no privacy. Most parking spaces are very small, limiting the vehicle size that can be supported.
  - A dump station is not currently provided, further limiting desirability to RV users.
  - Water access is in need of improvement.
- > Making investments to address these deficiencies, in addition to providing new campsites that provide more space and privacy in a wooded environment, will make the campground more appealing to more potential visitors to this popular scenic and recreational region of the state.

### JERICHO MOUNTAIN STATE PARK

### WHY INVEST HERE?

- > High occupancy/utilization rates for campsites indicates a strong market demand for more camping opportunities.
- > With its impressive ATV/OHRV offerings, including an annual ATV festival, Jericho Mountain provides a unique recreational opportunity that will benefit from further investment to fully capitalize on the ATV enthusiast market. Many ATV enthusiasts enjoy RV camping, but the campground does not currently provide campsites that are optimized for this use.
- A large area of the campground adjacent to the ATV event area was cleared years ago with the thought of campground expansion, and this area presents an excellent opportunity to develop RV sites in an otherwise underutilized area.

### PAWTUCKAWAY STATE PARK

#### WHY INVEST HERE?

- > High occupancy/utilization rates for campsites indicates a strong market demand for more camping opportunities, and the park is close to population centers.
- > A large undeveloped area of the park has qualities that are conducive to campground development:
  - Extensive attractive shoreline
  - Mature wooded canopy
- Slopes within acceptable slope range
- Minimal natural resource constraints (e.g. wetlands)
- Centrally located with easy access from existing campground road network

### WHY THE OTHER CAMPGROUND PROJECTS DIDN'T MAKE THE CUT

All of the six campgrounds studied for this feasibility study deserve consideration for future investment. In weighing the pros and cons of each campground project, the following issues for the projects that were not selected were factored into the decision to prioritize the other three projects:

### CRAWFORD NOTCH STATE PARK

### DRY RIVER CAMPGROUND (EXPANSION AREA DOWN THE ROAD)

> High infrastructure cost due to lack of on-site utilities, road network, or existing buildings

### **BEAR BROOK STATE PARK**

#### CATAMOUNT POND CAMPGROUND

- > Operational/management challenges with equestrian camping.
- > Market demand for equestrian camping here is unknown.
- > Increasing equestrian use of the shared trail network could present additional conflicts with mountain bikers.
- > A renovation of the existing CCC-era toilet building will not provide a facility large enough to support the campground bathroom/shower needs, so significant investment in a separate bathhouse will be required. In addition, the existing toilet building is not centrally located.

### **BEAR BROOK STATE PARK**

#### **BEAR HILL CAMPGROUND**

- > High capital costs required to renovate so many structures in particular for the shared buildings like the dining hall.
- > Operational/management challenges with supporting events/group rentals, which are needed to justify investment in the shared buildings.
- > Market demand for events/group rentals here is not fully understood at this time. Market demand for rental of individual cabins is also not fully understood, given the somewhat remote location within the park and more limited recreational options within the immediate area.

### PHASING RECOMMENDATIONS

All of the six campgrounds studied for this feasibility study deserve consideration for future investment. In weighing the pros and cons of each campground project, the following issues for the projects that were not selected were factored into the decision to prioritize the other three projects:

### **MOLLIDGEWOCK STATE PARK**

- > A new bathhouse/office/store will represent a significant improvement in the quality of camping experience. Although some visitors are content to "rough it" with just pit toilets and no showers, providing a bathhouse with flush toilets and warm showers will be a huge draw for many potential visitors who are interested in recreating here. In addition to the bathhouse, a fully stocked camp store will be very appealing to families. Replacing the existing office, which is currently housed in an old trailer, will improve the "curb appeal" with a higher quality aesthetic that one will expect to see at a NH State Park. This new location for the office/store will also function better from an operational standpoint give its central location within the campground.
- > Upgrading 10-15 campsites to be improved sites (with water/electricity) will make the campground more conducive to RV camping, which is a growing activity nationally.
- > A new boat launch dock will support improved water access in a more convenient location within the core of the campground and adjacent to the proposed office/store/bathhouse.
- > Improving the road network is overdue, and smoother roads with better drainage will make for a better experience - especially for visitors not driving vehicles equipped for offroad use.
- > Landscape improvements, such as vegetative screening, will help provide much needed privacy and could provide additional habitat within the riparian corridor.
- > Providing a handful of walk-in sites along the entry road will provide a different type of camping experience that appeals to people looking for more privacy and seclusion.
- > Providing a pod of campsites organized around a loop road in an attractive wooded area will also provide a more private camping experience, with the convenience of car camping. Although located a bit upland, access to the river is still relatively close by. A pit toilet will be provided for convenience, while the proposed bathhouse is a short walk away.

### JERICHO MOUNTAIN STATE PARK

- > The addition of a new camping area that caters to RV's, with a total of 19 premium campsites that include water, electric, and sewer connections, will be a welcome addition to a camparound that gets heavy use by RV owners. Designed to accommodate large contemporary RV's, the campground will include approximately nine pullthrough RV sites and ten back-in RV sites.
- > A dump station is proposed to support RV users in other areas of the existing campground that don't have sewer hookups.
- > A total of six infill campsites within the existing campground area will provide additional camping opportunities at a variety of price points: three Standard Sites, two Shelter Sites, and 1 Double Shelter Site near the shore.
- > Adding electricity to the existing cabins will be another big upgrade to the quality of the camping experience.

### PAWTUCKAWAY STATE PARK

- > A new camparound loop with a total of approximately 35 Improved Sites will represent a significant increase in the overnight capacity of the camparound.
- > A new bathhouse, designed to a standard that is appropriate for the modern historic context of the park, will support the new campground pod.
- > A dump station, located along the existing road adjacent to the day use parking lot, will support RV users from all the different campgrounds within the park.

### PROPOSED PHASE I **IMPROVEMENTS**

- > 9 Pull-through RV sites
- > 10 Back-in RV sites
- > Dump Station
- > Infill Sites: 3 Standard, 2 Shelter, 1 Double Shelter
- > Electricity in existing campground

### **ESTIMATED COST: \$2,950,120**

### **EXISTING**

- Standard Site
- Tent Only
- Lean-to Shelter
- ( Cabin
- — OHRV / Pedestrian Trails

Pit Toilets

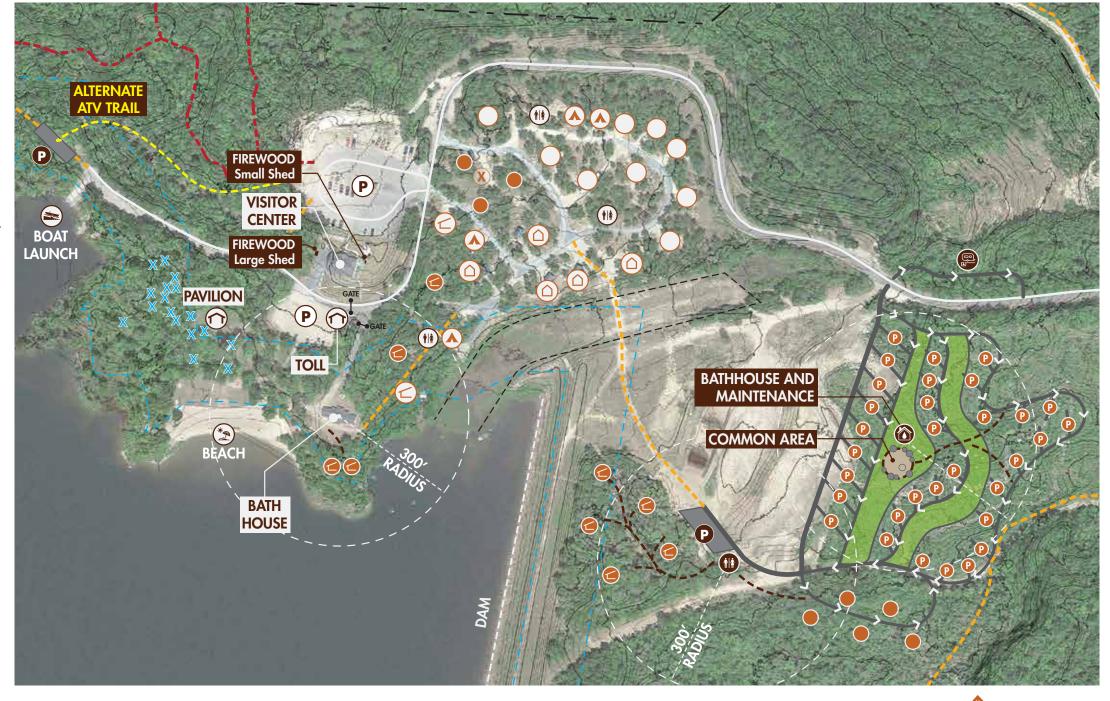
- **-** 4 x4 Trails
- X Site Visit Wetland Flags

#### **PROPOSED**

- Standard Site
- **Shelter Site**
- Premium Site (W/S/E)
- Removed Site
- Parking
- **Dump Station**
- Bathhouse
- Pit Toilet
- OHRV / Pedestrian Trails



One-way Road





### PROPOSED PHASE I **IMPROVEMENTS**

- > New Bathhouse/Office/Store @ Proposed Store Location
- > Upgrade 10-15 sites to Improved Sites
- > New Boat Launch Dock at Proposed Store
- > Existing Road Improvements
- > General Site/Landscape Improvements
- > 4 Walk-in Sites Along Entry Road
- > Upland Campsite Loop (no shelters) + Pit Toilet
- > Addition of 15-20 Campsites

**ESTIMATED COST: \$2,988,211** 

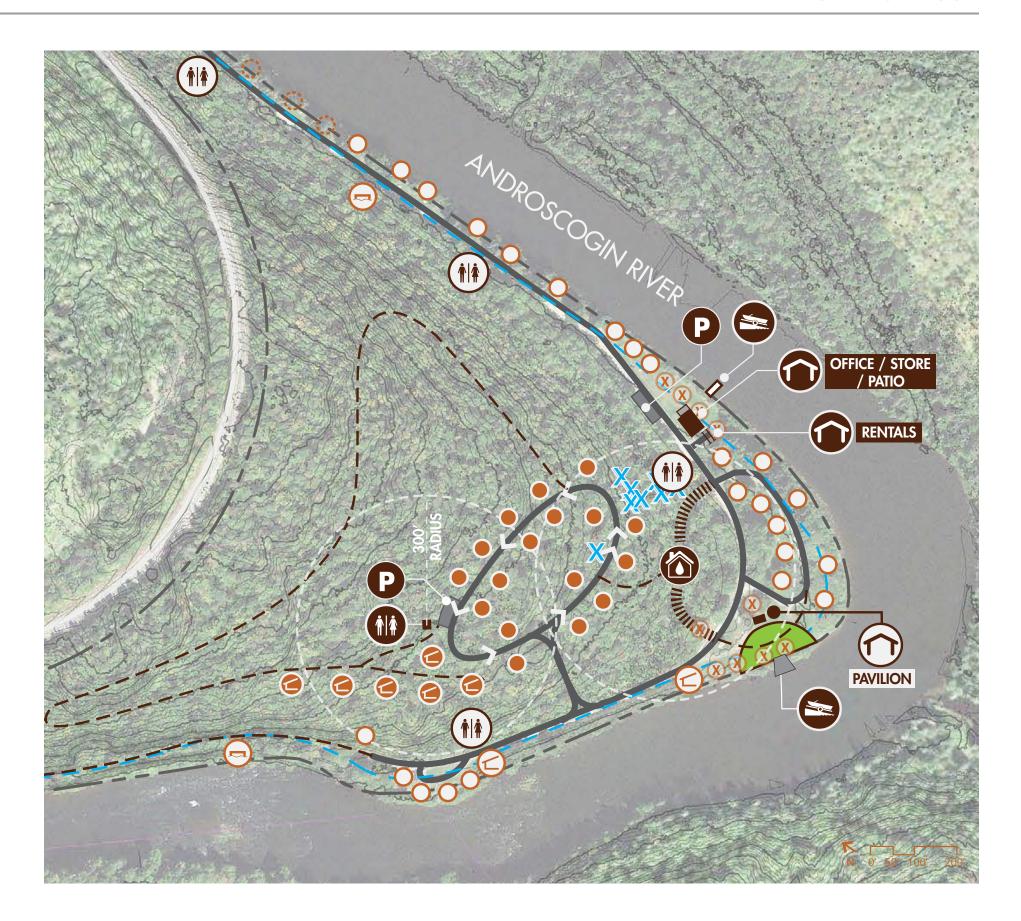
#### **EXISTING**

- O Standard Site
- Shelter Site
- Platform Site
- Remote Site

#### **PROPOSED**

- Standard Site
- Shelter Site
- (X) Removed Site
- Paddler Only

- Structure
- **Boat Launch**
- Pit Toilets
- X Site Visit Wetland Flags
- Structure
- Dump Station Boardwalk
- Boat Launch Pit Toilets
- One-way Road
- Parking
- Bathhouse



### PROPOSED PHASE I **IMPROVEMENTS**

- > 35 Improved Sites
- > Dump Station
- > Bathhouse

**ESTIMATED COST: \$3,518,000** 

### **EXISTING**

- Existing Site
- Playground / field Boat Launch

Toilet Building

X Wetland Flag

Trails

- Cabin
- G Group Site
- Structure
- Pit Toilets
- Picnic Site
  - ■ Bridge

### **PROPOSED**

- Bathhouse
- **Dump Station**
- Improved Site (W/E) Trails ■■■ Dock
  - One-way Road

— Two-way Road





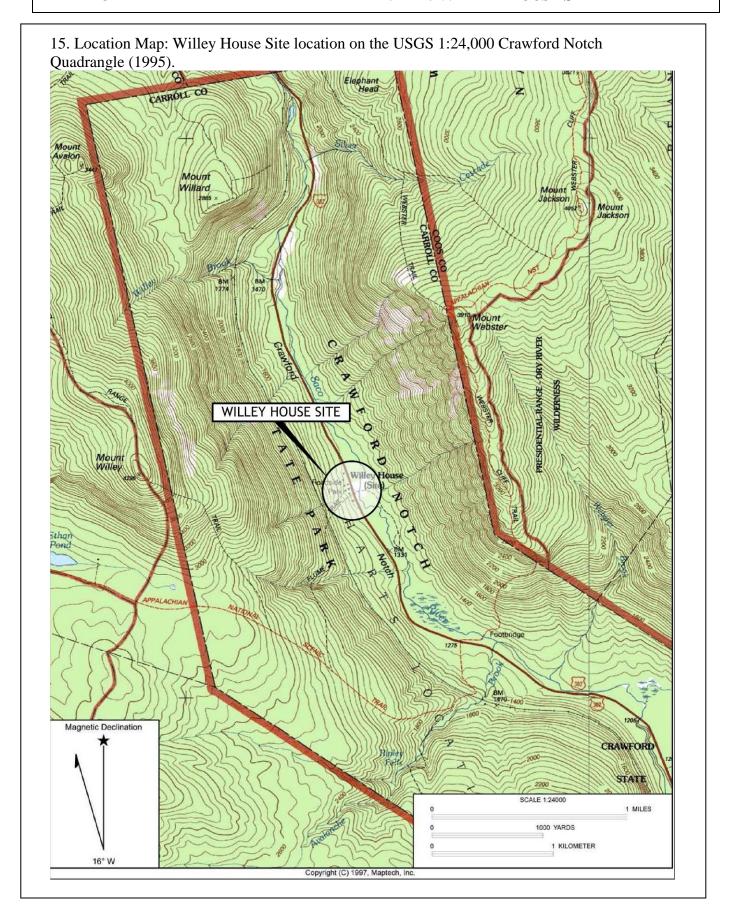
- 1. HISTORIC REPORTS
- 2. PHASE 1A ARCHAEOLOGY REPORTS
- 3. PRELIMINARY BUILDING CONCEPTS
- 4. PRELIMINARY UTILITY INFRASTRUCTURE CONCEPTS
- 5. DETAILED COST ESTIMATES AND PHASING OPTIONS

- > CRAWFORD NOTCH AREA FORM FINAL WILLEY HOUSE SITE
- > CRAWFORD NOTCH TECHNICAL REPORT
- > JERICHO AREA FORM DRAFT 2022-06-28
- > MOLLIDGEWOCK AREA FORM DRAFT FOR REVIEW 2022-06-28
- > MOLLIDGEWOCK STATE PARK CAMPGROUND EXPANSION PHASE IA REPORT
- > MOLLIDGEWOCK STATE PARK PHASE IA COMPLETION LETTER
- > BEAR BROOK STATE PARK BEAR HILL POND CAMPGROUND EXPANSION PHASE IA SHORT REPORT
- > ALLENSTOWN CATAMOUNT POND PHASE IA COMPLETION LETTER
- > PAWTUCKAWAY STATE PARK CAMPGROUND EXPANSION PHASE IA SHORT REPORT

New Hampshire Division of Historical Resources Page 1 of 41							
AREA FORM	AREA NAME: WILLEY HOUSE SITE						
1. Type of Area Form  Town-wide:  Historic District:	9. Inventory numbers in this area:  Not applicable						
<ul><li>2. Name of area: Willey House Site</li><li>3. Location: 1464 US Route 302</li></ul>	10. Setting: Complex of visitor and service cabins and recreation areas set in a clearing within Crawford Notch at Crawford Notch State Park.						
4. City or town: <u>Harts Location</u>	11. Acreage: 6.8 acres						
5. County: <u>Carroll County</u>	12. Preparer: John J. Daly, Senior Industrial <a href="https://doi.org/10.1001/j.jupi.com/">Historian</a>						
6. USGS quadrangle name(s): <u>Crawford No</u>	otch 13. Organization: PAL, Pawtucket, Rhode Island						
7. USGS scale: <u>1:24,000</u>	14. Date(s) of field survey: July 8 and 9, 2013						
8. UTM reference:							

190308152 E; 4895057 N 190308348 E; 4894982 N 190308335 E; 4894778 N 190308259 E; 4894744 N **AREA FORM** 

AREA NAME: WILLEY HOUSE SITE

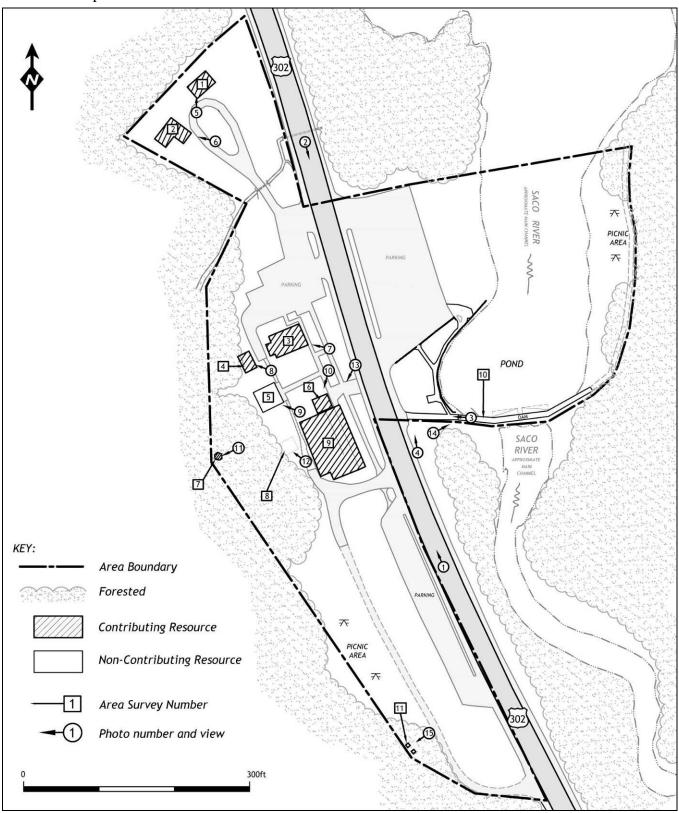


**Page 3** of 41

**AREA FORM** 

AREA NAME: WILLEY HOUSE SITE

# 16. Sketch map



# 17. Methods and Purpose

The Public Archaeology Laboratory (PAL) prepared this Area Form at the request of the State of New Hampshire, Department of Resources and Economic Development (DRED), Division of Parks and Recreation. The objective of the Area Form is to establish the National Register of Historic Places (National Register) eligibility status of the Willey House Site, or components therein, as a means to facilitate the division's long-term planning for Crawford Notch State Park.

Background research, survey, identification, and evaluation efforts took place in July and August, 2013. Primary source historical research was completed in the files and collections of the DRED and its divisions, the New Hampshire State Archives, the New Hampshire Historical Society Library, New Hampshire Division of Historical Resources (NHDHR), the Massachusetts Historical Society, Loeb Library at Harvard University, and Plymouth State University. State reports, maps, photographs, plans, and historical accounts pertaining to the history of the Willey House and the state's management of the site were reviewed. Secondary studies relating to the histories of travel, tourism, outdoor recreation, the State's forest reservation system, landscape architecture, and rustic architecture were consulted to establish appropriate contexts for the area's physical development.

The extent of the survey area was determined through comparative analysis of the historic-period improvements made to the Willey House Site against existing conditions at the complex.

#### 18. Geographical Context

European settlement and subsequent economic activity in Hart's Location and at the Willey House Site has been strongly influenced by the geological history of the region. In broad terms, Crawford Notch and the surrounding White Mountains were the products of three phases of mountain building (orogenies). These occurred over 200 million years of continental collision between the ancestral North American and European/African tectonic plates that continued up until roughly 335 million years ago. The White Mountains within this ancestral Appalachian Mountain chain were subsequently reshaped during the Wisconsin glaciation period (roughly 35,000 to 11,150 years before present) when the ice sheets extended from Canada on a southeasterly course across New Hampshire to as far as Long Island, New York. Glacial activity created a variety of distinctive landforms across the White Mountains, including glacial troughs. These were formerly irregular mountain valleys that were recontoured with even, U-shaped profiles through the movement of ice sheets. Crawford Notch is one such glacial trough, and was also a spillway for glacial Lake Crawford to the west. Large amounts of meltwater flowing down Crawford Notch created a smaller V-shaped incision on the classic trough profile (Allen et al. 2001).

During the Colonial Period, the White Mountains were largely perceived as a void or wasteland between the settled regions of southern and southeastern coastal New England and the arable lands of the upper Connecticut River Valley. Settlement in the White Mountains and the northern tier of New Hampshire in Coos County was retarded by the unsuitability of the terrain for farming, in the case of the former, and by its relative inaccessibility, for the latter. The mountains created a barrier to overland transportation into the northern tier of New Hampshire and forced travelers to take a longer indirect route via the Connecticut River. The first European to visit the mountains was Darby Field, who climbed Mount Washington in 1642, but little permanent settlement followed. Hunting and trapping were the primary eighteenth-century European activities. The name "White Hills" first appeared on John Foster's 1677 map of New England. After 1760, several towns were chartered and settled along the southern and northern foothills of the mountains. These included Fryeburg (1762) and Conway (1765) in Carroll County and Lancaster (1763), the first town in Coos County. Subsequent settlements were established up the Connecticut River, largely bypassing the White Mountain region (AMC 1982; Purchase 1999:22-24).

Crawford Notch was not known to Colonial Period settlers until 1771 when Lancaster resident Timothy Nash made a chance discovery of the Notch while hunting. The Notch offered an important new means of access to the north country that was preferable to the lengthy passage up the Connecticut River. When informed of the

# AREA FORM AREA NAME: WILLEY HOUSE SITE

discovery, Governor John Wentworth offered Nash a grant of 2,000 acres near the west gateway of the Notch if he could bring a horse from Lancaster to Portsmouth. After Nash and a fellow hunter, Benjamin Sawyer, accomplished the feat and the area became known as Nash and Sawyer's Location, now part of Carroll Township. A crude road constructed with confiscated Tory money was opened a few years later in 1775. In 1803, the Tenth New Hampshire Turnpike was chartered and constructed through the Notch using funds generated by a lottery (AMC 1982; Hancock 1965).

**Page 5** of 41

Permanent settlement within Nash and Sawyer's Location followed establishment of the road. In 1784, Jeremy Belknap, New Hampshire's first historian, explored the region and climbed Mount Washington. His map of the region, drawn in 1791, was the first to show the Notch. In 1790, Abel Crawford (1776-1851) and his wife Hannah, established a homestead the north side of the Notch at what is now Fabayan in Bretton Woods. Two years later, Hannah's father Eleazer Rosebrook (1747-1814) moved his family to this site and the Crawfords relocated to Hart's Location. Both the Crawfords and the Rosebrooks operated inns for travelers through the Notch (see tourism context below). However, the surrounding mountainous regions remained largely unsettled until the tourist and logging industries of the mid- and late-nineteenth centuries brought more substantial permanent development and economic activity across large portions of the White Mountains (AMC 1982; Division of Parks and Recreation n.d.; Hancock 1965; Purchase 1999:22-24).

The Tenth New Hampshire Turnpike became the principal route of travel from Portland, Maine and southern New Hampshire to Coos County during the first half of the nineteenth century and was important in facilitating access and economic development for that region. Coos County farmers exported large amounts of forest and agricultural products such as potash, lumber, hogs, butter, cheese, and grain to markets in southern regions until the farming decline of the 1830s and 1840s (AMC 1982; Garvin 1988:49; Hancock 1965; *New Hampshire Highways* 1924; State of New Hampshire DRED 1973).

# 19. Historical Background

#### The Willey House in the Eighteenth and Nineteenth Centuries

The Willey House was the first residence in the Notch proper and, according to early histories of the area, was built in 1793 by a man named Mr. Davis (Spaulding 1862:55). The site seems to have been chosen as a third inn location for travelers passing through the Notch, as it lay at the approximate midpoint of the 12 miles that separated the two inns operated by the Crawford family. Davis stayed for only a few years. The house was subsequently occupied by Henry Hill (Anon. 1952; Purchase 1999:42; Tolles 1998:33).

By about 1823, Ethan Allen Crawford had acquired the house. In 1825, he sold it to Samuel Willey, Jr. (1788-1826). Willey and his wife, Polly Lovejoy, five children, and two hired men moved into Crawford Notch in the fall of 1825. Willey was a native of Bartlett, New Hampshire and owned 110 acres of cropland, pasture, and woodlot along the Saco River in North Conway (then Lower Bartlett). The family's chief motive in moving seems to have been the business prospects offered by running an inn in the Notch and they enlarged and improved the house for this purpose. By that time, there was a steady stream of travelers through the Notch for routine trade and business between Coos County and the southern tiers of New Hampshire and Maine. There were early tourists as well, although these seem to have been the smaller component of the highway-goers. Period accounts of the valley relate that the house was in a small grassy meadow along the Saco River and that it was surrounded by a forest of maple trees. Historical photographs and drawings show that the house was set on the west side of the Notch Road, facing south. The one-and-one-half story, timber-frame, Cape Cod cottage had an ell extending off the north side of the main block and was sided in clapboards (Anon. 1952; Division of Parks and Recreation n.d.;

-

<sup>&</sup>lt;sup>1</sup> Abel Crawford had a son-in-law, Nathaniel T.P. Davis, who later ran the Mount Crawford House. The relationship between Mr. Davis of the Willey house and Nathaniel is not known.

**Page 6** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

Garvin 1998; Museum of the White Mountains Collection, Plymouth State College; Purchase 1999:42; Stanhope 1982; Tolles 1998:33).

The Willey family resided in the Notch for about a year until they were killed in a tragic event that immortalized their name in the lore of the White Mountains and Crawford Notch. Following a period of sustained drought in the summer of 1826, a heavy rainfall triggered a massive landslide from the west side of the Notch (present-day Mount Willey). The Willeys, apparently fearing the house was unsafe, fled to either seek shelter in a refuge they had previously constructed or to escape rising flood waters. Before they could reach safety, the avalanche killed the entire family and the hired men. By a twist of fate, the avalanche debris was diverted around the house by a ledge outcrop, the Willey Boulders (photo 11, map no. 7), uphill of the building and it survived relatively untouched. When friends and would-be rescuers arrived at the house after the disaster, they were confronted scenes of devastation throughout the floor of the Notch, which was dramatically altered by the effects of the slide. Large debris fields of trees, rock, and mud had slid past the house, nearly to the Saco River. There was no sign of the family, although their personal effects remained. All of the bodies except for three of the children were eventually found and buried near the site, then later moved to Conway (Division of Parks and Recreation n.d.).

Following the disaster, the Willey House was vacant for a short period, until John Pendexter moved into the house in 1827. Over the next 15 years, Pendexter was succeeded by several other short-term owners and/or tenants in rapid succession. These included a Colonel Moore, John Moore, Alexander Bond, John T. Dutton, Dutton and Wilson, John T. Dutton, Frank Atwood, Jack Whalen, Jack Mahew, and Henry Leonard. During this period, a small barn was constructed on the opposite side of the road (*The Farmer's Monthly Visitor* 1839: 118; Roberts 1924).

In 1844, tourism entrepreneur and hotelier Horace Fabyan purchased the property. Fabyan, who owned hotels elsewhere in the vicinity (see discussion below) repaired the house and improved it "to accommodate the public with every comfort and convenience" (as quoted in Sears 1989:85). He constructed the Willey House Hotel immediately south of the Willey House. This 70-by-40 foot (seven-bay-by-five-bay), two-story, frame building was set on a raised foundation or terrace above the roadway and was connected with the Willey House via a continuous porch. A barn or carriage shed was located just north of the Willey House. A second barn and a stable were located on the east side of the road. John Davis of Conway purchased the property soon after its construction, although the exact date of this transfer is not known. It then passed through additional owners, culminating with George H. Moran, who leased the premises to Leonard & Mayfield of Whitefield, New Hampshire. The Willey House and other buildings on the west side of the road burned in a fire in September 1899 (Division of Parks and Recreation n.d.; Purchase 1999:34; Roberts 1924).<sup>2</sup>

The Willey House site was undeveloped for the first two decades of the twentieth century, during which time the ruins of the Willey House and Hotel remained within a clearing that was the only break in the forested floor of the Notch. Visitors continued to stop at the site to view the ruins and ponder the story of the Willey family. Occasionally, gravel deposited by the great slide was excavated by the state to maintain the roadway (Skidmore 2008:15; State of New Hampshire Forestry Commission 1922).

### Public Development of the Willey House Site

In 1913, the State of New Hampshire took title to the Willey House Site along with 5,925 acres of Crawford Notch for preservation as forest reservation and recreation property. The purchase was authorized in a special act passed by the New Hampshire State Legislature in January 1911, but was not completed until 1913 because of difficulties in establishing the funding. The lands were organized as the Crawford Notch State Forest and placed under the care of the state's Forestry Commission. The reservation was acquired with the express purpose of preserving Crawford Notch's scenic beauty, with active forest management made secondary to this goal (Division

<sup>2</sup> The year of the fire is quoted as 1898 in some accounts, 1899 in others. This document relies on Purchase's *Grand Resort Hotels of the White Mountains* (page 44), which cites the *Littleton Courier* of September 27, 1899 as a source for the date.

of Parks and Recreation n.d.; New Hampshire General Court 1911:Chapter 130; State Land Record: Crawford Notch, Card #1, November 29, 1913; State of New Hampshire Forestry Commission 1914:49, 1916:80-81, 1922:75).

At the time the park was established, state officials identified the Willey House Site as a location suitable for active recreational use and development. Two private camps were active in Crawford Notch at the time of the acquisition. The Forestry Commission intended to lease the Willey House Site as a third camp, provided that the arrangement was profitable and that "a thoroughly high grade tea room or restaurant" could be maintained as a stopping point for tourists. Concessionaire leases were standard practice during this period, as the state had little funds to provide for ongoing operation. The location was a logical one, since travelers by the thousands were already stopping to view the Willey House ruins and sometimes to camp in the meadow on the east side of the road. Additionally, the clearing provided one of the best roadside views of the Notch (State of New Hampshire Forestry Commission 1916:81, 1922:77. 78).

Establishment of facilities for visitors and employees in the reservation was ongoing between about 1915 and 1922. Arthur A. Shurcliff, noted landscape architect of Boston (see biography below), donated his time to examine the Notch and prepared a report recommending locations at which selective tree cutting could open up "vistas to give good views of the mountains from points along the highway" (State of New Hampshire Forestry Commission 1916:81). Work at the Willey House Site commenced in 1920, when the stable, the last standing nineteenth-century structure, was removed from the east side of the road. The location was leased to J.F. Donahue & George C. Hamlin (Donahue & Hamlin) of Bartlett, for development as the Willey House Camps. Shurcliff donated additional services to prepare construction plans used by Donahue & Hamlin to build two "peeled spruce cabins." The cabins are now combined in the present-day **Restaurant Building**, situated approximately on the site of the Willey House Hotel (CRW06, 1924, map no. 9, photo no. 13). One cabin served as a public rest room with a fireplace and toilets. The other cabin was a store and lunch room that offered food and supplies. Additional small cabins of spruce were "placed artistically in the rear" for overnight stays. It is not clear from available records whether these too were designed by Shurcliff.<sup>3</sup> Completed between 1923 and 1924, the complex initially consisted of the aforementioned two cabins, as well as six log cabins for overnight use, one log cabin containing an electrical plant, and one log building or store used for auto supplies. Postcards and Forestry Commission park plans from the 1920s and 1930s indicate that the overnight guest cabins were simple, one-room log structures organized in two tiers along the hillside behind the Restaurant Building and to the south, within the present-day picnic area. Donahue & Hamlin also built the Workshop (CRW05, map no. 4, photo no. 8) either during the original construction or soon thereafter, but its exact construction date and original function are not known. The original Willey House Dam was built in the early 1920s, but was replaced with the current structure built in 1980 (Mortgage Deed, Donahue & Hamlin, December 31, 1923 – New Hampshire State Archives Collection; NHDHR Collection; Plymouth State University Collection; Roberts 1924; State of New Hampshire Forestry Department 1916, 1932; State of New Hampshire Forestry and Recreation Department 1938).

By 1924, promotional brochures for the Willey House Camps advertised that the facilities included "eating and lodging accommodations...a souvenir store, toilets, auto filling station, small log cabins for rent for the night or longer" (Roberts 1924:24). The cabins were intended for overnight use by automobile travelers, hikers, and other campers intending to access the backcountry, as well as for staff. The Appalachian Mountain Club (AMC) also incorporated the Willey House into its hut system, which was then in the early stages of development. Open fields east of the road adjacent to the river were utilized for free camping (Division of Parks and Recreation n.d.; Roberts 1924:24; State of New Hampshire Forestry Commission 1922:77-78).

3

<sup>&</sup>lt;sup>3</sup> Shurcliff's work is documented only anecdotally in Forestry Commission Reports. Research at repositories of Shurcliff papers, the Parks and Recreation Division, Forestry Division, State Historical Commission, and State Archive has failed to locate reports, drawings, or other documents that describe the full extent of Shurcliff's donated services at the Willey House Site or elsewhere in Crawford Notch.

During the late 1920s and 1930s, both the Forestry Commission and Donahue & Hamlin expanded the Willey House Site with additional visitor services. The number of overnight cabins was increased to between 25 and 30 units, and some were moved around the site to optimize auto circulation and parking. In 1926, on the centennial anniversary of the Willey Slide, the Daughters of the American Revolution (DAR) – Anna Stickney Chapter from North Conway installed the commemorative boulder and plaque at the Willey House Foundation (1793, 1926, map no. 6, photo 10). The Willey House Dam was reconstructed in 1927. The Great Depression brought support to the Forestry Commission's state parks in the form of Civilian Conservation Corps (CCC), and the Civil Works Administration programs, which were very active in assisting states with public recreation facilities. In 1930, CCC laborers at the Willey Site constructed the Tourist Information Center (CRW07, map no. 3, photo 7) as the so-called Rest House to offer "an opportunity for tired travelers to rest and enjoy the mountain scenery" and for the use of overnight guests in the evening (State of New Hampshire Forestry Commission 1930:71-72). The low retaining wall associated with the Willey House was built up and enlarged and a lawn established on the terrace behind it. The dam was rebuilt to provide a larger pond, a picnic area cleared on the east side of the impoundment, and new trails and trail improvements made (Parshley 1926; New Hampshire State Archives Collection; State of New Hampshire Forestry Commission 1928:139; 1930:72).

The Willey House Site continued under additional lessees in the 1940s, but little in the way of physical development occurred due to World War II. Between 1945 and 1950, the **Help Quarters** (CRW04, map no. 1, photo 5) and **Manager's Cabin** (CRW01, map no. 2, photo 6) were built for park worker accommodations. The Willey House Dam was replaced in 1946 (Brown 1958:157; State of New Hampshire Forestry and Recreation Commission 1944:15; 1946:10; 1952:98).<sup>4</sup>

Substantial changes were made to the Willey House Site in the 1950s. Park visitation at Crawford Notch and other state parks was increasing rapidly (384,000 in 1951 to 438,000 in 1952) in line with state and national recreation trends. There were also changes in the organization and funding of the parks system. In 1949, a Division of Recreation was established alongside the Forestry Division and control of maintenance for park buildings transferred from the Forestry Division to the new division. State funding for operations was to be decreased or terminated and recreation facilities were to be self-funded using income generated from user fees, merchandise sales, and from logging sales. In line with the new policy, there was a new emphasis on improving visitor services and attractions so as to generate revenue. In 1950, the Forestry and Recreation Commission terminated lessee operations at Crawford Notch and placed retail, food, and campground facilities directly under the control of the Recreation Division. As state law did not permit for the operation of overnight cabin rentals, most of the sleeping cabins were demolished between 1950 and 1952. Some of the vacant cabin sites were converted to the present picnic grounds to the south of the Willey House Site. Sometime in the 1950s, a new Information Center (later referred to as the Old Visitor's Center, now demolished) was constructed on the north edge of the Wiley Site. The parking areas and lawn adjacent to the Willey Foundation were improved. A New Hampshire wildlife exhibit (discontinued in 1972) was established on the east side of the pond and a perimeter trail around the pond established (Anon. 1952; Brown 1958:167,174; Garvin 1992; John Dickerman, personal communication, July 9, 2013; State of New Hampshire Forestry Division 1951:41; State of New Hampshire Forestry and Recreation Commission 1952:98-99).

For the next two decades, the Willey House Site largely maintained its 1950s configuration and management. The Forestry and Recreation Commission developed a comprehensive plan for the improvement of the park in the 1960s. The plan was submitted by planners Charles T. Main, Incorporated of Boston, Massachusetts in 1964 and called for extensive reconfiguration of the site, but was never acted upon. The present **Bathroom** (CRW08, map no. 5, photo 9) was built in 1970 and a new path was established from the road to the building. The present **Willey House Dam** (map no. 10, photo no. 14) was constructed in 1980 as a replacement to the 1947 structure. **Pit** 

\_

<sup>&</sup>lt;sup>4</sup> The Division of Parks and Recreation building list provides a date of 1950 for both buildings. According to the report for 1944-1946, "two cabins" were built in 1945. These are presumed to be the existing buildings (Forestry and Recreation Commission 1946:10).

<u>Toilets</u> (map no. 11, photo 15) were constructed around 1965-1970 adjacent to the picnic area on the west side of the road (Charles T. Main, Inc. 1964; John Dickerman, personal communication, July 9, 2013; Stern 1979).

By late 1985, site plans and correspondence indicate that the Willey House Site had been reduced in size to seven of the present buildings, six cabins on the hillside above (presumably from concessionaire development), and the Information Building to the north of the present Tourist Information Center (Reid 1986). In 1986, the state demolished the six remaining concessionaire cabins. In 1992, the Information Building was demolished. The **Generator House** (CRW02, map no. 8, photo 12) was added behind the Restaurant Building in 1994 (John Dickerman, personal communication, July 9, 2013;correspondence, NHDHR Files). The Willey House Dam, which was replaced in 1980, was upgraded in 1996. In 2000, a new parking lot was constructed on the site of the Information Building and the other two parking lots improved (NHDHR Inventory Files; Dam Safety Office File No. 110.01; State of New Hampshire DRED 1996; State of New Hampshire Forestry Commission 1928:139; State of New Hampshire Forestry and Recreation Commission 1946).

# The Willey House Site and Recreation and Tourism in the White Mountains

The landslide at the Willey House was an important event that had a strong influence on the development of tourism in Crawford Notch and the White Mountain region. The White Mountains and Crawford Notch were objects of curiosity for eighteenth century travelers in the region but were virtually inaccessible. The establishment of the road through the Notch and its improvement as a turnpike in 1803 ended the "frontier" era in the White Mountains and marked the beginning of permanent settlement in the region – an activity that was practically simultaneous with the development of a travel and tourism trade. The turnpike created a steady stream of travelers, primarily for mundane business, but also for sight-seeing. Eleazer Rosebrook, who had been living in the cabin constructed by Abel Crawford, is credited with opening the first inn for summer tourists in the mountains. Rosebrook had hosted a number of site-seeing visitors prior to the establishment of the turnpike. These included the Reverend Timothy Dwight, an early travel writer and later president of Yale College. Rosebrook constructed a large inn and stables almost immediately following the establishment of the new road (AMC 1982; Tolles 1998:29-30).

Rosebrook left the house to his grandson, Ethan Allen Crawford (1792-1846), who, along with his wife Lucy, made the first concerted effort to cater to and develop a tourist trade in the region. After the house built by Rosebrook burned in 1818, the Crawfords moved another frame house to the location from a short distance away. They hosted visitors in the region, escorted them through the Notch, cut walking trails (including the first up Mount Washington in 1819), and advertised their facilities in urban newspapers. In 1824, Crawford constructed a large addition to his house for travelers and the inn became known as the Old Moosehorn Tavern. Meanwhile, his father Abel also operated his house at the south end of the Notch as an inn and escorted travelers through the Notch. Sometime before 1820, he expanded this residence into the Mount Crawford House, which could accommodate upwards of 60 people. In 1827-1828, Ethan Allen Crawford constructed the Notch House just above the gate of the Notch as an inn for travelers hiking through the Notch on foot. This was managed by his brother Thomas until the building was destroyed in an 1853 fire. Data on early hotels in New Hampshire shows that these inns were among the earliest in the state and were predated in the White Mountains region only by a few establishments in North Conway (AMC 1982; Division of Parks and Recreation n.d.; Garvin 1988:49; Hancock 1965; Purchase 1999:26; Tolles 1998: 29-31, Appendix A).

The demise of the Willeys in 1826 resulted in an almost immediate shift in the function of the Willey House from wayside inn to tourist attraction. Heretofore, the Notch had been a highlight of trips through the White Mountains. However, the tale of the Willeys added a substantial component of human interest to the locale and thereby increased its fame and value as a tourist attraction. In this way, the Willey House transcended local lore to become a foundational component of cultural place-making in the Notch, particularly in the nineteenth century. Henceforth the Willey House, and later its ruins, would be an object of fascination for tourists in the region.

**Page 10** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

At the time of the incident, the story of the family's demise received extensive coverage in the New England press. The fall of 1826 witnessed a substantial increase of visitors to the Notch and the Willey House, according to cultural historian John Sears, "became one of America's first major tourist attractions" (Sears 1989:74). Visitors included many members of New England's cultural elite, as well as a number of artists whose interpretations of the visual and literary aspects of the story spread and reinforced the both the tale itself and the splendor of Crawford Notch in the popular imagination. Renowned landscape painter Thomas Cole visited the Notch in 1828 and produced sketches and paintings of the house and surrounding scenery. Author Nathaniel Hawthorne passed through the Notch in September of 1832 and stayed at the Crawford House for two nights. He used the tale as the basis for his short story, "The Ambitious Guest", which was published in New England Magazine in June 1835 and later reprinted in the expanded second edition of his collection, Twice-Told Tales, in 1841. Hawthorne also published a description of his trip through the Notch in "Sketches from Memory, By a Pedestrian" in the New-England Magazine in November 1835. Several poets wrote works based on the incident. The event was recounted in numerous mid-nineteenth century travelogues, gazetteers, guides, and regional histories that invariably included illustrations of the site. Finally ministers and philosophers took up the tale, attempting to find a moral or instruction in the Willey family's demise that was linked to American citizens' relationship with God, God's manifestation in nature, and domesticity (Hawthorne 1835a, 1835b; Mellow 1980:51; Purchase 199:13; Sears 1989:75; Wineapple 2003:154).

Although somewhat removed from visitor experience of Crawford Notch today, this outpouring of artistic, religious, and popular response to the Willey tragedy was instrumental in shaping tourist experiences of the Notch in the nineteenth century. Prior to the arrival of the railroad, tourism in the Notch was primarily an experience for middle and upper-class tourists whose moral, philosophical, and aesthetic education made them acutely sensitive to the philosophical repercussions of the Willey tragedy. These tourists were following the European vogue for the scenic tour, which sought dramatic and picturesque natural environments that could invoke feelings of awe or the sublime. The Willey's tale and its reinterpretation in the cultural sphere imbued Crawford Notch with such values, which had not previously been part of its appeal as a tourist site. That the event occurred so early in the history of tourism in the Notch and the White Mountains leant it special weight (Sears 1989).

In practical terms, the Willey House, and later its site, were subject to immediate and prolonged commemoration and exploitation for economic gain. According to the memoir of his wife Lucy, Ethan Allen Crawford participated in the recovery of the Willey bodies and quickly realized the significance of the place: "for a monument, I wrote with a piece of red chalk on a planed board, this inscription: 'The Family found here.' I nailed it to a dead tree, which was standing near the place where they were found" (Crawford 1846:102). The Crawfords immediately incorporated the Willey House into the list of attractions at the Notch to which they would escort visitors. The home was fully furnished and evoked a morbid curiosity in visitors, who could walk through the house and envision for themselves the last moments of the family before they rushed outside into catastrophe (Crawford 1846:114; Garvin 20-21).

The construction of the Willey House Hotel in 1844 incorporated the Willey House into the beginning of the grand hotel trade that would eclipse family efforts like those of the Crawfords. Owner Horace Fabyan recognized the growing potential of tourism as an industry and worked to develop the capacity of Crawford Notch facilities. A Maine native, Fabyan had worked as an innkeeper in Conway, New Hampshire. He also purchased Ethan Allen Crawford's Moosehorn Tavern in 1841 and enlarged it as the Mount Washington House. The construction of railroads into the White Mountains accelerated development of large-scale hotels like Fabyans's and of the tourist trade generally. The first line to reach the region was the Atlantic and St. Lawrence Railroad, which reached Gorham in 1851. The Portland and Ogdensburg Railroad, chartered 1867, achieved direct access to Crawford Notch under the leadership of the Anderson Brothers of Maine. After surmounting numerous engineering and logistical obstacles to establish the tracks through the rugged terrain, the line opened in 1875 with stations at Bemis to the south of the Notch and Crawford Notch Depot on the north side of the gap, adjacent to the Notch House. The railroad provided tourists with easier access to the White Mountains, and the ride through the Notch was an attraction in itself and could be enjoyed from open observation cars. A number of new hotels in the region followed the opening of the railroads, including the first Crawford House (1852), and the Summit House (1852)

**Page 11** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

and Tip Top House (1853) on Mount Washington (AMC 1983; Hancock 1965:38). In 1872, the New Hampshire Board of Agriculture estimated that the state's economy received nearly \$3 million in summer visitor income annually. By 1896, the estimate was over \$5 million. Much of this money was spent in rural areas where it provided a valuable supplement, or even substitute, to the depressed wages offered by farming and other rural occupations of the northern regions (AMC 1982; Robertson and English 1987; Tolles 1998:30-31).

The destruction of the Willey House in 1898 and its subsequent purchase by the state in 1913 coincided with a fundamental shift in the tourist industry. The advent of the automobile at the opening of the twentieth century ended the era of the grand hotel and simultaneously reshaped the experience and the geographic range of the tourist, who was no longer constrained to the routes of the railroad and proximate sites that were accessible by stage. Automobile travelers were more transient and self-guided, and could rapidly move through the White Mountains from overnight stop to overnight stop. Roadway infrastructure expanded, while railroad ridership decreased. The State of New Hampshire created its highway department in 1905, and by 1920, had committed to the construction of a network of all-weather highways. Service stations and tourist shops rose up rapidly along key roadways to cater to auto travelers. Between around 1910 and 1930 motor camping, or "gypsying" emerged as popular alternative to railroad travel. It offered individual freedom and opportunity to "rough it" and travel at one's own pace and was preferred by many over more regimented and passive railroad travel. States, towns, and businesses recognized the trend and began to establish campgrounds and rustic cabins to capture this potential business and grand hotels like the Crawford House slowly diminished in importance (AMC 1982; (Skidmore 2008:13).

The State of New Hampshire took an active interest in promoting automobile tourism. State promotional literature had pictured "enticing mountain views as seen from the automobile" as early as 1907 (as quoted in Skidmore 2008:10). The New Hampshire Forestry Commission had recognized the automobile tour trend, commenting: "While our mountain roads and trails have long been used by trampers, the auto camping party has come into his own quite recently...the possibility for recreation throughout our mountain region is very great" (State of New Hampshire Forestry Commission 1922:78). The Turnpike through the Notch was incorporated into the new Theodore Roosevelt Trail, a cross-country auto road established in 1919. The road through the Notch was already well-established, but participation in the trail system presented an opportunity to market the White Mountains to a broader audience. The construction of the Willey House Camps was a logical step to capitalize on auto camping and both acknowledged and capitalized on the interest of the public in the Willey tragedy, which, despite the loss of the house and lack of any visitor services, continued to be a favored roadside stop. The Willey House Site became a key marketing point for the Notch as a tourist destination. The New Hampshire Chapter of the Roosevelt Highway Association published in 1921 a twenty-two page brochure titled The Roosevelt Memorial Highway in New Hampshire that included a map, list of hotels, photos, and a written description of the route. Crawford Notch was featured prominently in the publication and a picture of "automobile camping parties" at the Willey House Site was included (as quoted in Skidmore 2008:12). When the Forestry Commission acquired the Willey House site, they placed a low log fence around the house foundation and erected a wood sign commemorating the spot. Concessionaires also perpetuated the story, publishing a pamphlet in the 1920s to commemorate the slide, and postcards of both the foundation and "the boulders that split the slide". A traveler recounted arriving at the site in 1920, prior to establishment of the Willey House Camps:

Some distance beyond the Crawford House, we saw a number of automobiles parked by the side of the road, their occupants gathered in little groups just beyond. At first I could not surmise what had brought these people here, and then I suddenly recalled what the attraction was...the grass-grown ruin...attracted many interested visitors (as quoted in Skidmore 2008:15; *New Hampshire Highways* 1924; Roberts 1924:9).

The placing of the DAR memorial at the Willey House Site in 1926 represented a shift in the meaning of the tragedy from the mid-nineteenth century view. The boulder and tablet, placed "in the exact center of the old cellar hole, now nearly filled up," were unveiled on July 16, 1926 near the centennial of the famous slide. The idea for the tablet was conceived by Florence P. Morey, whose family owned much of the land in Hart's Location from

**Page 12** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

which the state reservation was drawn. Dissatisfied with the wood sign constructed by the state, she partnered with the DAR – Anna Stickney Chapter, North Conway to construct the monument. Preceding the ceremony was a pageant which reenacted noteworthy events in the history of the area. Women dressed in period outfits then rode to the Willey House Site on a six-horse stage coach. These events fixed the family within a pantheon of pioneers and founding citizens in the north country – a theme consistent with other commemorative activities undertaken by the Ann Stickney Chapter of the DAR and with the national Colonial Revival movement in America (Folsom 1930:91, 127; Parshley 1926; 91).

Throughout the remainder of the twentieth century, the Willey House Site has continued to serve as a noteworthy attraction in the itinerary of the White Mountain tourist. Local historians and promoters have continued to reprint the story of the slide in popular media. Most recently, the overgrown Willey Boulders, or the rock that "split the slide" was relocated by an amateur historian. It was cleared of vegetation in 2008 or 2009 and posted with a sign recounting its significance (Colquhoun 2009; Eastman 1999; Hancock 1965; Peterson 2001:C1).

# State of New Hampshire Forestry Conservation and Parks System

The Willey House Site is associated with the history of forestry conservation and attendant development of the parks system in the state. Crawford Notch was the first state reservation to be purchased with state funds, rather than through private bequests, was the second to be managed as a park, and was the fourth state forest reservation to be established. Forestry conservation had developed nationally as a movement in the late nineteenth century in response to the industrial-scale logging methods that were developed during the period. The movement's maturation came with President Theodore Roosevelt's establishment of the federal Division of Forestry (now the Forest Service) in 1901, which was placed under the leadership of Chief Forester and noted conservationist Gifford Pinchot.

In New Hampshire, use of trees and forestry by-products had been a substantial portion of the state economy since the Colonial Period. The introduction of steam-powered sawmills, logging equipment, and railroads dramatically expanded the geographic scale and tempo of the work beginning in the 1870s. Between 1850 and 1900, the value of timber product output from New Hampshire forests multiplied nine-fold. The state's forestry conservation movement emerged slowly in the 1870s under the leadership of Concord lawyer Joseph B. Walker, who had stayed in one of the Crawford inns in 1838. Walker and other concerned individuals led the movement that created a temporary commission on New Hampshire Forests in the 1880s. A permanent Forestry Commission was appointed in 1893. The commission was granted the power to acquire lands for conservation purposes. In 1901, the Society for the Protection of New Hampshire Forests was formed and organized with an interlocking directorate to that of the state commission. The Society hired Philip W. Ayers (1861-1945) in 1901. Ayers brought the cause to a national audience, advocating for and eventually winning the establishment of the White Mountain National Forest in 1911. In 1909, a State Forestry Department was established to administer public lands and implement state forestry policy (AMC 1982; Blaine 2011; Brown 1958:16-23, 29, 35; State of New Hampshire Division of Parks and Recreation n.d.).

Logging's development as a large-scale extractive industry was essentially contemporaneous with the maturation of the White Mountain tourist industry. The practice of clear-cutting large swaths of forest and the frequent forest fires that fed on the residual "slash" of lumbering cutting operations prompted increasing concern on the part of interested professionals, conservationists, and proponents of White Mountain tourism. Many views from the grand hotels of the White Mountains were despoiled by logging activities. Groups of outdoor recreation enthusiasts such as the AMC (founded 1876) advocated for the preservation of forests and a natural alignment between conservation, tourist, and recreation interests emerged. The result was an early recognition that conservationist goals should not only include scientific management of forests for future logging, but also preservation of certain areas for their recreational and scenic value (AMC 1907:128, AMC 2013; Brown 1958:33-34).

Recognition of the forest's value as a scenic commodity was institutionalized within the Forestry Commission, whose mission included management of forested areas as parks for recreational purposes and the preservation of exceptional scenic areas for such uses. The precedent for setting aside public lands for parks had been set in 1872 with the establishment of Yellowstone National Park and had followed at the state level with New York State's founding of Niagara Falls in 1884. Thereafter, states across the country established park systems of their own in rapid succession between about 1890 and 1920. Up until the purchase of Crawford Notch in 1911, New Hampshire's state park and forest system consisted of only three small tracts. This was due in part a restriction on the expenditure of state monies on reservations. The first state forest reservation, which was also the first state park, was the 3-acre Miller Park in Peterborough, acquired in 1891. By 1910, there was a "growing feeling" that the state needed to actively fund the purchase of spots of "rare natural beauty" (State of New Hampshire Forestry Commission 1912:76). According to the 1912 biennial report, the Commission's attention was focused on the purchase of Crawford Notch, which was under imminent threat from loggers. The commission reports do not reference the protracted and as yet incomplete political effort to establish the White Mountain National Forest. However, it seems likely that this feeling was both a general evolution in the public's attitude towards conservation and also a response to the federal governments' inability to establish the national forest in the White Mountains. When the purchase of the Notch was legislated in 1911 and completed in 1913, it marked the first time that the State purchased a reservation with public funds expressly for scenic and recreational purposes. By 1914, the state had established eight state forests and parks totaling over 7,500 acres under the auspices of the Forestry Commission, with the Crawford Notch State Forest by far the largest of the early tracts. Some of these were managed for active harvesting, others for demonstration of forestry principles (McClelland, Linda Flint 1993; State of New Hampshire Forestry Commission 1906:199, 1914:49-50, 1916:80-81, State of New Hampshire Division of Parks and Recreation n.d.).

The State's active management of reservations for recreational purposes expanded in the 1930s. In part, this was due to advocacy on by the Forestry Commission, which viewed management of state parks for recreation as an integral component of competition for vacation profits with other regions. The federal government also became involved with making improvements to state-owned properties. This was largely an outcome of the CCC and WPA programs, which established visitor service facilities at 10 different state forest properties, including Crawford Notch. The CCC improvements at the Willey House Site represented a relatively small proportion of the federal assistance effort directed to the State. The New Hampshire Forestry Department alone received \$690,000 in total relief monies during 1933-1934 and used it to employ over 6,000 men at least 19 different work sites. By 1935, there were 11 state parks. To administer the new areas, the Forestry Commission was expanded in 1935 and renamed the Forestry and Recreation Commission, which still oversaw the Forestry Department. After World War II, recreational oversight was expanded further with the establishment of a Division of Recreation comparable to the Division of Forests. During the post-war years, park holdings and activities became increasingly diverse and also service oriented. The state currently has 75 state parks that are managed expressly for recreation (Brown 1958:111, 114-115, 129; McClelland 1993; State of New Hampshire Division of Parks and Recreation n.d.; State of New Hampshire Forestry Commission 1934:23; State of New Hampshire Forestry and Recreation Commission 1933).

- 20. Applicable NHDHR Historic Context(s) (See appendix C)
- 81. New Hampshire State Parks, Sites, and Forests
- 73. Summer and Vacation Home Tourism
- 21. Architectural Description and Comparative Evaluation

The Crawford Notch State Park - Willey House Site (hereinafter referred to as the Willey House Site) is a recreation and visitor services facility operated by the State of New Hampshire Division of Parks and Recreation. The site is a component of the larger 5,950-acre Crawford Notch State Park, a reservation which occupies the northern half of Crawford Notch in Hart's Location, New Hampshire. The area contains 7 buildings, 1 structure, 2

sites, and the park landscape. Eight of these resources contribute to the significance of the property: 5 buildings and 1 site are over 50 years of age, and 1 additional site that is a natural feature, and the landscape. The four non-contributing resources in the property include 3 buildings that are less than 50 years of age and 1 structure that was established in the historic period but was replaced less than 50 years ago.

The setting of the complex (and the boundaries of Hart's Location and the state park within it) is defined by the geological formation of Crawford Notch, a wooded, winding, approximately 5-mile-long valley or pass between the Willey and Presidential ranges of the White Mountains. The defining characteristic of the Notch is a glacial trough of striking uniformity that defines its center. This formation runs on a north-northwest axis and is about 2 miles in length, 1 mile in width, and has over 2,000 feet of elevation difference between the valley floor and the surrounding ridge lines. The dominant peaks are Mounts Willard and Willey to the west and Mount Jackson to the east. The Saco River flows along the floor of the valley on the east edge of the Willey House site and is roughly paralleled by State Route 302 (Rt. 302, Crawford Notch Road), a modern two-lane asphalt roadway. The route of the Conway Scenic Railroad (originally the Portland and Ogdensburg and later the Boston and Maine Railroad and Guilford Transportation Group) runs along the west slope of the Notch, about 0.25 miles west of and 250 feet in elevation above the Willey House Site. The right-of-way is not visible from the site. Several hiking trails begin at the site and connect with the larger trail network of the White Mountains and also with the Appalachian National Scenic Trail (Appalachian Trail), which crosses Crawford Notch approximately 1 mile south of the Willey House site.

The Willey House Site is in a clearing on the valley floor near the approximate mid-point of the glacial trough. The location has almost unobstructed views of the Notch and woodlands in every direction. All of the buildings, as well as a picnic area, are located on the west side of the road. A parking area, the Willey Pond, and a second picnic area are located on the east side of the road (photos 1-4). The Willey House Site Landscape incorporates both formal and informal areas in accordance with intended functions and has been improved incrementally both within and outside of the historic period since the establishment of the Willey House Camps in 1924. Resources along the west side of the road are organized into three groupings that are strung along the more gentle slope of the valley floor adjacent to and looking down on the roadway. At the north end are two employee residences set in an informal grouping (established ca. 1950). The residences are accessed via a gravel cul-de-sac driveway that crosses a small brook on a low deck bridge with wood railings. Little grading or clearing has been attempted in this area. The buildings and structure are set within a glade whose natural terrain appears unbroken except for the building pads and driveway. A small concrete block pump house is located at the south end of the driveway.

A group of five buildings and the foundation remains of the Willey House are located at the center of the complex on the west side of Rt. 302, about 120 feet south of the employee residences. The grouping is bounded to the north by a small asphalt-paved parking area and to the south by an asphalt driveway that leads to a service area and to the picnic area. The buildings serve as the focal point of the visitor experience. All of the buildings are oriented east towards the roadway and are organized in a symmetrical, rectilinear arrangement on a terraced lawn. The terraces are retained behind low walls constructed of a mixture of un-coursed granite and rhyolite rubblestone. The largest of these walls had its origins in the construction of the Willey House, but has since been expanded to create the lawn. Gravel walks with wood plank stairs provide circulation in this area. Set on the north edge of this lawn, adjacent to the Tourist Information Center, is a bronzed aluminum flag pole with a ball finial and a concrete anchorage. The Willey House Foundation is set in the southeast corner of the lawn.

South of the visitor buildings is a picnic area. This is set on a grassy, rock-strewn, irregular slope and accessed via a gravel drive that runs north-south through the picnic sites. Birch trees stand throughout the site. Picnic benches constructed of steel tubing and wood planks are sited along the hillside on small terraces that appear to be former cabin locations (see site history). Two outhouses are situated in the southwest corner of the grouping. An asphalt parking is set between the picnic area and Rt. 302.

The portion of the Willey House Site on the east side of the road is dedicated to parking and recreational use. A large, asphalt-paved parking lot (improved in 2000) is set between the road and the river, which has been damned

**Page 15** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

to create a pond. Gravel paths line the southwest corner of the pond and extend across the pond's dam to the east. The south end of the parking lot and the southwest edge of the pond are lined with low rubblestone walls similar in construction to those on the west side of the road. On the east bank of the pond is a second picnic area set within a cleared glade. Steel and wood picnic benches and small cooking grills are interspersed in the glade.

The following resource description moves north to south along the west side of the road and then proceeds to the resources on the east side of the road. Park building codes (where assigned), construction dates, and the assigned area form map numbers follow each building name in parentheses.

At the north end of the employee residence driveway is the **Help Quarters** (CRW04, ca. 1950, map no. 1, photo 5). It is a one-story, three-bay-by-two-bay, wood frame cabin with an end-gable orientation and a rectangular plan. The entry faces northwest. The roof is clad in asphalt shingles and has overhanging eaves with exposed. beveled rafter tails. The plank gable rakes are ornamented with projecting, beveled timber rafter plates. The gable ends are sheathed in vertical planks. The wide, rough-sawn clapboard walls have plank corner boards and regularly-spaced fenestration. Windows are six-over-six double-hung, wood sash with hook-mounted, woodframed exterior storms and screens. These windows are set in pairs on the side (north and south) walls and singly on the end walls and have wood plank surrounds and sills. Small, three-light, wood, inward-tilting hopper windows are centered on the side walls below the eaves. The primary entry is set off-center on the west end. It has a varnished wood plank door with a painted wood screen door, both mounted on cast plate hinges and set in a simple plank surround. A short stone walkway leads to a plank doorstep with open risers. A second entry, now covered with plywood, is located on the east end of the building and accessed via a second set of plank steps. The building is elevated on exposed, truncated pyramidal, concrete footings. Vertical plank boards are employed as screening between the sill line and grade level. The interior consists of an open-plan living, dining, and kitchen area with two bedrooms set off by an interior partition wall. Architectural materials are consistent with the rustic exterior treatment. The painted ceiling is composite panel with plank battens. The walls are varnished, beaded, shiplap, pine planks with varnished plank window surrounds. The floor is plank and linoleum. The kitchen is fitted with built-in varnished pine cabinets and a built-in plank shelf divides the kitchen and living areas. Little information is available concerning the original design of this building.

The Manager's Cabin (CRW01, ca. 1950, map no. 2, photo 6) is located immediately west of and adjacent to the Help Quarters. This wood-frame, one-story, end-gable cabin has a three-bay-by-three-bay "L"-shaped plan with a main block running east-west and an ell addition (built 1959) projecting from the south wall. The building is similar to the Help Quarters in its roof, walls, trim, entry, and foundation. Entrances are located on the east and west ends of the main block. A brick chimney is centered on the ridgeline of the main block. The regularly-spaced fenestration consists of six-over-six, double-hung, wood sash; paired eight-light hopper windows; a twelve-light casement window; and a fixed, six-light unit. The ell has a large picture window flanked with four-light casement units. The cabin interior is organized into an open-plan living, dining, and kitchen area occupying the east end of the main block and the entirety of the ell. Bedrooms are set off along the north side of the cabin. The overall approach to the interior design is similar to that of the Help Quarters, particularly in the wall and floor treatments and the organization of the kitchen. The ceiling is a combination of linoleum and painted and unpainted V-groove planking. A built-in table with booth seating forms a half-wall between the kitchen and dining areas. Little information is available concerning the original design of this building.

On the northeast corner of the terraced lawn is the <u>Tourist Information Center</u> (CRW07, 1930, map no. 3, photo 7), originally constructed by the CCC as a Rest House. This one-story log cabin has a three-by-three-bay rectangular plan with an end-gable configuration and is assembled from two log pens. A small wood plank deck with steps and a handicapped ramp provides access to the entry. The building originally had a veranda that wrapped around the facade and two sides of the building. A shed-roofed plywood ell addition extends off the rear of the structure. The asphalt shingle roof (formerly sheathed in wood shingles) has deep overhanging eaves with exposed plank soffits and log rafters and purlins. A fieldstone chimney is placed on the ridge line at the juncture of the two log pens. The walls are painted, peeled spruce logs with saddle-notched log crowns and painted jute chinking. The cabin's main entry consists of a two-leaf French door with outward swinging wood screen doors.

**Page 16** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

The doors are set within a painted wood plank surround topped by a shallow wood plank drip cornice. A second entry on the north elevation provides access to the rear crib. This door consists of a battened panel topped with a single window (now painted). A third entry on the south elevation is covered with plywood. The fenestration consists of regularly-spaced, fixed, four-light, wood picture windows. Window frames are identical to those of the doors. The log walls rest on sawn, dimensional timber sills that are clad on the side elevations with logs. The sills rest directly on exposed concrete block footings. A painted, carved wood plank sign is hung above the entry and reads "New Hampshire Tourist Information Courtesy of Division of Parks". The building interior is organized into two rooms corresponding to the two log pens. The larger east room is open to the public and furnished as a museum and information center using materials consistent with the rustic exterior. The tray ceiling has exposed timber framing and plank sheathing. Walls are rough-sawn vertical pine planks. The floor is painted strip wood. A large granite fieldstone fireplace occupies the west wall and has a firebrick hearth. A variety of stained wood display cases provide information on the natural history and settlement of the Notch. The west room is unfinished and used for storage.

Behind the Tourist Information Center is the Workshop (CRW05, ca. 1930, map no.4, photo 8), constructed for an unknown purpose as part of the Willey House Camps development. This one-story, single crib log cabin has two-by-one-bay, square footprint with an end-gable orientation. The roof is clad in painted corrugated steel installed in 2001 (DRED - Development Design, Development and Maintenance Section 2013). It has open soffits with exposed log rafter tails and plank gable rakes. The walls are painted, peeled logs that terminate at log corner posts and are chinked with painted jute. A pair of entries flanked by windows are set on the east wall. Each entry has a door leaf assembled from vertical, beaded wood planks and hung on strap hinges. The doors are framed in a wood plank surround that is shared by the flanking window. The windows are six-over-six, doublehung, wood sash with exterior hardware cloth screens. A single window of the same type is set off-center on each side elevation of the cabin, although the window on the north elevation is now covered with plywood. An exterior concrete block chimney is set on the rear wall of the cabin. Centered on this wall and partially covered by the chimney is a second entry, now covered with plywood. The walls rest on sawn timber sills, which in turn are supported on concrete block footings. The cabin interior is a single room with a beaded V-groove, wood plank ceiling and walls and a plank floor. A wood post-and-beam system runs longitudinally through the space and supports a beam that is flush with the ceiling, possibly indicating where a former partition wall may previously have been removed from the cabin. A small plywood shed, informally called the annex, is set close to the rear wall of the shop.

South of the Workshop is the <u>Bathroom</u> (CRW08, 1970, map no. 5, photo 9). A pressure-treated dimensional lumber deck (added 1991) with a pipe railing runs across the front of the building (DRED – Development Design, Development and Maintenance Section 2013). This four-by-three-bay log cabin has a painted, corrugated steel roof with overhanging eaves and exposed log purlins and rafter plates. The walls are assembled from splined, dimensional logs that are sawn on their upper and lower surfaces and terminate in log crowns at the building corners. Entries for the women's and men's rooms are set at the corners of the east elevation and have wood screen doors with narrow log surrounds. The symmetrically-disposed windows have six-over-six, double-hung, wood sash set within painted log surrounds. The building rests on a concrete slab and poured concrete sills. The interior is divided into men's and women's areas with a storage room in the northwest corner of the cabin. The ceiling is the exposed, varnished underside of the purlins and plank roof deck. Walls are varnished, vertical, tongue and groove planking. The floor is a concrete slab.

Anchoring the southeast corner of the terrace is the **Restaurant Building** (CRW06, 1924, map no. 9, photo 13). This consists of two parallel log cabins that have been extensively altered through both historical and modern-period additions to create a single large building. These originally housed the restrooms, store, and restaurant of the Willey House Camps. A wood plank and timber porch wraps around the front (east) and south sides of the Restaurant, replacing a log porch of the same general configuration. Each cabin originally consisted of a two-by-three-bay, single-crib building sited about 15 feet away from the other. The two buildings have been joined through longitudinal infill that extends for the length of the building and the original walls in this location removed. The cabins have been lengthened by about 15 feet to the rear and widened on the north side by about 10

**Page 17** of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE

feet through one or more building campaigns. The addition has a log wall on its south side, plywood sheathing on the rear (west) side, and board-and-batten siding on the north side. The addition has also added a half story in height to the cabins, which are now surmounted by a large, shallow-pitched gable roof that extends to within about 10 feet of the front facade, leaving a small portion of the original roofline visible. The new roof extends north and south beyond the original side walls to enclose the addition on the north and the porch on the south side. Only the cabins' east ends, the south wall of the south cabin, and a small portion of the north wall of the north cabin are retained. These have painted, peeled spruce log walls with jute chinking. An entry is centered on the south elevation and consists of a pair of French doors and painted wood screens with flanking eight-light sidelights, all set in a plank surround. Windows on the east elevation appear to date from the 1930s (based on postcard illustrations) and consist of pairs of nine-light wood sash sliding windows with wide plank frames and plank drip cornices. These replaced smaller windows with a vertical rectangular opening. Original portions of the building are founded on wood posts that rest on large granite blocks. New portions of the building utilize a combination of concrete slab and concrete block foundations. The interior of the restaurant building is divided into a single large public space across the front of the building (within the original cabin areas) and storage and food service spaces across the rear of the building (within the additions). The public spaces of the interior are divided by a longitudinal service counter into a gift shop to the north and restaurant to the south. Ceilings in the space are varnished pine V-groove planks and are supported with an extensive post-and-beam system. Walls are also varnished pine planks. The floors are painted wood planks. Several varnished plywood booths have been constructed along the front wall of the eating area. Light is provided by fluorescent strip fixtures and an assortment of modern ceiling fixtures with glass globes.

Behind the Restaurant Building is the <u>Generator House</u> (CRW02, 1994, map no. 8, photo 12). This small, wood frame, utility building has a one-by-one-bay rectangular end-gable plan. It has an asphalt shingle roof, textured plywood siding, and concrete slab foundation. A two-leaf screen door is offset on the east elevation. Window openings on the north and south elevation are covered with hardware cloth, without any operable sash. Wood plank trim is utilized on the gable rakes, corners, and window and door surrounds. The interior is a single unfinished room used for storage. The generator was removed circa 2011.

Located near the south edge of the lawn is the <u>Willey House Foundation</u> (1793, 1926, map no. 6, photo 10). The exposed upper courses of three of the Willey House foundation walls, in combination with the terrace retaining wall, frame a small sunken lawn. Set within the lawn is the Daughters of the American Revolution (DAR) monument. This is a single boulder resting on a plinth of granite rubble. A bronze plaque fastened to the boulder reads:

SITE OF THE WILLEY HOUSE
THE LANDSLIDE 1826
MARKED BY
ANNA STICKNEY CHAPTER
DAUGHTERS OF THE AMERICAN REVOLUTION
1925<sup>5</sup>

Set on a slope at the rear of the visitor complex is a second site associated with the Willey Family. Here is a large rock outcrop known as the <u>Willey Boulders</u> (map no. 7, photo 11). This natural formation is marked with a modern-period wood sign that reads:

# WILLEY BOULDERS THIS OUTCROPPING OF ROCKS

-

<sup>&</sup>lt;sup>5</sup> Although the plaque carries the date of 1925, the plaque was not unveiled in public until the summer of 1926, and the construction date of 1926 is accordingly used in this document. This is within the spirit of the commemorative act, which occurred on the centennial of the 1826 landslide.

**Page 18** of 41

AREA FORM

**AREA NAME: WILLEY HOUSE SITE** 

# SAVED THE WILLEY HOUSE FROM DESTRUCTION ON AUG. 28, 1826.

Adjacent to the outcrop is the foundation of a former well house. This small plank-formed concrete structure is now topped with a pressure-treated wood observation deck. A trail from the terrace has been cut up to the slope to afford visitors access to the boulders and observation deck.

In the extreme southwest corner of the site, adjacent to the picnic area, are two <u>Pit Toilets</u> (1965-1970, map no. 11, photo 15). These wood frame sheds have corrugated fiberglass roofs, wood frame walls clad in V-groove wood planks, and concrete block sills. They are vented with screens and steel chimneys.

East of Route 302 the land slopes gradually down from the road to the Saco River. The Willey House Dam (State Dam No. 110.01, 1980, map no. 10, photo 14) is an approximately 220 foot-long wood and concrete structure that creates an approximate 5-foot fall, exclusive of stoplogs. The dam incorporates is a rock-filled timber crib spillway flanked by reinforced concrete wingwalls and topped with a combined walkway and gate frame structure constructed of wood. The spillway crib has plank upstream face, and spillway and an exposed crib air (downstream) face. A boulder splash pad is set downstream of the spillway. A low-flow outlet is centered in the crib spillway and actuated via a vertical-lift, rack-and-pinion mechanism. A pathway leads from the parking lot across the dam to the picnic area and trail network (out side the study area) on the east side of the pond.

# Rustic Log Architecture

The Willey House Site contains examples of rustic log architecture as applied to recreational and state park buildings in the early and mid- twentieth century. Rustic architecture consists of buildings made from native materials that blend in with a natural setting and sometimes incorporate elements found in nature. The cabin building type originally developed out of convenience. Nineteenth-century settlers in the remote regions of New Hampshire, as in many northern locations, used readily available local timber to build simple log and wood-frame shelters, with practical and minimal designs. This general form, constructed with on-site materials was repeated in hunting lodges and makeshift shelters throughout New Hampshire. Such buildings utilized simple rectangular plans, compact scale, wood frames and gable roofs, minimal ornament derived from natural materials, affordable or local building materials including logs and board sheathing, open floor plans with lofted sleeping areas, and limited amenities.

Rustic architecture as a motif in architectural practice and the related (re)introduction of log cabin design to the profession is generally credited to Andrew Jackson Downing, who published his *Treatise on the Theory and Practice of Landscape Gardening* in 1841. Downing imported English practices of landscape design and the appreciation of native landscapes into American landscape architecture. Included in the publication was Downing's approach to architecture for country pleasure grounds, which emphasized construction of amenities in designs that utilized native materials and emulated the forms found in the natural landscape. This included construction of benches, bridges, and shelters from unprocessed logs. Downing's ideas took root in latenineteenth and early twentieth century architecture and landscape architecture and were evidenced in Richardsonian Romanesque, Craftsman, and Prairie Style architecture. The style was initially made popular by the grand examples constructed in New York's Adirondack Mountains in the late nineteenth century. Its spread to other areas was assisted by publications such as William S. Wicks' *Log Cabins: How to Build and Furnish Them* (1889) (McClelland 1993).

The development of rustic architecture and the reinvention of the log cabin was synchronous with and closely related to the origins of the conservation and outdoor recreation movements. The romantic notion of a simpler lifestyle and desire to reconnect with nature that occurred in the beginning of the late-nineteenth century encouraged the development of rustic architecture for recreation purposes. Recreationists expressed these sentiments through activities involving "camping out" and "roughing it", which typically meant sleeping in remote wilderness in a tent or such minimal wood-frame structures. Cabins were incorporated into roadside motor

**Page 19** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

courts and campgrounds and also utilized as private vacation homes. Rustic design, including log structures, was incorporated into the early national parks by concessionaires and then by the National Park Service when it took charge of the parks beginning in 1917. That institution would codify its approach to rustic design in its 1938 *Park and Recreation Structures* (Good 1938). Influential state parks such as New York's Bear Mountain would incorporate rustic log cabin design into their comprehensive planning, and the form was promulgated as an appropriate park solution through the National Conference on State Parks, formed in 1921. The United States Forest Service also adopted rustic design for its facilities when Chief Forester Gifford Pinchot directed that, wherever possible, forest rangers and guards build cabins of logs with shake roofs for their housing and headquarters. The Forest Service standardized its architectural approach in 1908 with the issuance of plans for a variety of rustic log and wood frame building types (McClelland 1993; U.S. Forest Service 2012).

The Restaurant, Workshop, and Tourist Information Center at Crawford Notch State Park exemplify early rustic park and forestry architecture in New Hampshire. Although comparative evaluation is complicated by the fact that there was no documented and concerted effort on the part of the Forestry Commission and its successors to narrowly define its rustic style, log cabin or otherwise; sufficient examples exist to demonstrate that rustic architecture was state's preferred design approach for this infrastructure. This was evident whether the construction of early public facilities was left to concessionaires, as was the case at the Willey House Site, or was built with planning assistance from the CCC, which provided resources for a number of reservations in the 1930s. For example, Crawford Notch reservation's original headquarters were located at the Allen Spring Camp. This small building was a frame cabin clad in shingles with porch of peeled log poles. While not identical in construction to those at the Willey House Site, the simplicity of design and roughly-finished materials evidenced a consistent concern for appropriateness to the natural setting. A concessionaire completed the Community Lodge in Franconia Notch State Park's Lafayette Campground in 1934. This building, described in the state's annual report as a "rustic lodge," was a large, three-pen, log-type building raised on a stone foundation (State of New Hampshire Forestry and Recreation Commission 1937:68). Bear Brook State Park, established in 1935, had several rustic buildings used for restrooms, activities, and other purposes. The CCC built this so-called Recreational Demonstration Area (or RDA) in the late 1930s to plans provided by the National Park Service. The buildings, which are still in use, were assembled from dimensional lumber frames and clad with wide clapboards. The U.S. Forest Service, with the help of the CCC, also constructed a rustic style, administrative compound for the Bartlett Experimental Forests Headquarters & Bartlett Supply Depot at Bartlett, New Hampshire. These clapboard-sheathed wood frame buildings were built between 1923 and 1934 (Brown 1958; Good 1938:141,155,159, 179; Heck 1992; State of New Hampshire Forestry Commission 1922:75-77; State of New Hampshire Forestry and Recreation Commission 1937:66; U.S. Forest Service 2012).

#### Arthur A. Shurcliff

Arthur Asahel Shurcliff (born Shurcliff, 1870-1957) was a Boston-born landscape architect, planner and educator. His significance is derived from his influence on the early development of landscape architecture as a profession in the United States and for his achievements in urban, parkway, and garden design.

Shurcliff was born to a Boston, Massachusetts family that owned a business manufacturing surgical instruments. He attended the Massachusetts Institute of Technology and graduated in 1894 with a degree in mechanical engineering, intending to join the instrument business. However, his love of the outdoors and the influence of writings by regional Transcendentalist authors led to a different career. After consulting with Frederick Law Olmsted, Sr. and Charles Eliot (another prominent Boston landscape architect and planner), Shurcliff attended Harvard University and the Bussey Institution, where he pieced together classes to obtain an education in landscape architecture, for which no degree program existed at the time. After obtaining his second bachelor's degree in 1896, Shurcliff worked in the Olmsted offices for eight years, where he was particularly influenced by the tutelage of Eliot. In collaboration with Frederick Law Olmsted Jr., Shurcliff established the country's first four-year landscape program at Harvard University, where he taught until 1906 (Cushing 1995, 2000).

**Page 20** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

Shurcliff opened his own practice in 1904 and his early projects emphasized his large-scale planning skills. From the outset, he completed ambitious projects that were recognized within the field. These included highway studies for the Boston Metropolitan Improvement Commission and the Massachusetts State Highway Commission, as well as industrial communities at Bemis, Tennessee and Hopedale, Massachusetts. His housing project at Bridgeport, Connecticut remains a widely-cited early work. For several decades, Shurcliff consulted for the Boston Parks Department and the Massachusetts Metropolitan District Commission and was instrumental in creating recreational and water supply facilities in the city and eastern portions of the state. His most notable contribution was the Charles River Basin project of the 1930s. Shurcliff's private commissions included hundreds of gardens and multiple collegiate and secondary school campuses. The most outstanding and cited project of Shurcliff's career was the re-creation of gardens at Colonial Williamsburg. As chief landscape architect for the organization from 1928-1941, he integrated planning, landscape architecture, and systematic historical and cultural studies to create an authentic design for the gardens (Cushing 2000).

In addition to his design accomplishments, Shurcliff authored about 30 articles on his own work and studies on topics including parkways and street planning, English and Colonial American gardens, and urban park design. He served two terms as president of the American Society of Landscape Architects and was a founding member of the American City Planning Institute (Cushing 1995, 2000).

As a New England-based professional, Shurcliff's work included a number of studies and completed projects in New Hampshire. Archival records at Harvard University and the Massachusetts Historical Society indicate that these included about 30 clients. Shurcliff consulted with the State of New Hampshire on planning for land acquisition and visitor services at Franconia Notch following the acquisition of lands at the location for a state forest in 1927. He was also active in the AMC as an elected officer and kept the organization informed of his activities at Crawford Notch (*Appalachia* 1916:104-105; Brown 1958:99).

# 22. Statement of Significance

The Willey House Site is recommended to be eligible for listing in the National Register of Historic Places under Criteria A at the state level in the areas of recreation and conservation. The Willey House Site is significant for its associations with the development of summer tourism in the White Mountains and with the development of the New Hampshire state parks system. The death of the Willeys in 1826 was regionally, and perhaps nationally, publicized. The event substantially contributed to the cultural perception of the Notch as a sublime and picturesque landscape worthy of visitation and precipitated a marked increase in the scale of tourism in Crawford Notch during the mid nineteenth century. The Willey House, and later its foundation, were and remain an important visitor stop on tours through the White Mountains. The area was developed as a summer hotel destination in the mid nineteenth century, then as an overnight motor-court for automobile campers in the early twentieth century. The State of New Hampshire purchased the Willey House Site along with the majority of Crawford Notch in 1913 for recreational purposes. This was a landmark acquisition in the establishment of a state park system due to both its scale and prominence as a natural and cultural resource. The Willey House Site has served as the primary location for state visitor services within the Notch since 1924.

The Willey House Site is <u>not recommended to be eligible for listing in the National Register under Criterion B</u>, as the property is not associated with any significant person or persons.

The Willey House Site is recommended eligible for listing in the National Register under Criterion C in the area of architecture as a significant and distinguishable grouping of state park resources that embodies the distinctive characteristics of rustic architecture, an important architectural movement that was adopted by the New Hampshire Forestry Commission and its lessees. The contributing buildings; in particular the Restaurant Building, Workshop, and Tourist Information Center; display the simple massing, log construction, and orientation towards the natural landscape that typify this architectural motif. Due to a loss of integrity (discussed below), the Willey

**Page 21** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

House Site is not recommended eligible under this criterion as an example of the work of noted landscape architect Arthur Shurcliff or as an example of a motor-court complex property type.

A Phase IA archaeological sensitivity assessment has been conducted at the Willey House Site to assess potential areas of significance for the property under <u>Criterion D</u> and to aid in future project planning at the site (Banister et al. 2013). Moderate pre-contact archaeological sensitivity has been assigned to the property for its potential to contain small, temporary camp sites dating to the Archaic and Woodland periods. Moderate post-contact archaeological sensitivity has been assigned to the core visitor complex west of Route 302 for its potential to contain archaeological deposits associated with the evolution of the site as a mid nineteenth-century summer hotel destination to an overnight motor-court in the early twentieth century. Moderate post-contact archaeological sensitivity also has been assigned to areas between Route 302 and the Saco River for containing structural remains associated with former barn, carriage house, and dam structures. Finally, high post-contact archaeological sensitivity has been assigned to the landscape immediately surrounding the remains of Willey House Foundation and the area beneath the extant Restaurant Building for containing structural, landscape, and artifact deposits associated with the former Willey House Hotel. A full evaluation of the property's significance under this Criterion would be undertaken as part of future archaeological studies.

# 23. Periods(s) of Significance

The period of significance for the Willey House Site extends from 1826 until circa 1955. The Willey House Site's significance in the area of recreation commences in 1826, when the avalanche killed the Willey family. This event instituted the site and Crawford Notch's rise to prominence as a tourist destination. The site's significance in the area of conservation commenced when the State of New Hampshire purchased the site in 1913. Circa 1955 marks the date when the last substantial elements of the recreation facility, the two employee cabins, were constructed, and the landscape reached a form approximating its current state.

# 24. Statement of Integrity

The Willey House Site was first developed as a commercial enterprise under Forestry Commission guidance to service as a combined roadside motel and visitor center. It was then slowly altered during and after the period of significance to meet the programmatic demands of a state park facility. The alterations to the complex have resulted in the demolition of well over 50 percent of the historic-period buildings constructed in the 1920s and 1930s during the development of the site as a concessionaire-leased motor court. Two new buildings have been inserted into the complex. The Restaurant Building has been substantially altered.

Despite these modifications, the Willey House Site retains sufficient integrity to convey its significance under Criterion A in the areas of recreation and conservation. Within the tourism context, the most important elements of the site are the Willey House Foundation and Willey Boulders themselves, along with their location and setting within the Notch. These components are tangible artifacts of the event that made the site famous and thus convey the property's associations with the Willey House Slide. The loss of the Willey House itself has not resulted in a loss of the ability of the resource to convey the sensational nature of these events, which tourists continued to appreciate even after the house was destroyed. The park-related infrastructure and commemorative installation at the site are thematically consistent with the site's role in the overall development of Crawford Notch tourism and therefore do not constitute an alteration to the design or setting of the resources that detracts from their significance. Within the conservation context, the remaining historic-period buildings, landscape, and Willey House Foundation and Boulders are sufficient to convey the property's association with state park development. The location and setting of the complex demonstrate its status as the primary visitor center for Crawford Notch State Park. These elements, along with the remaining log architecture and landscape design allow the property to retain its feeling as an early- and mid-twentieth-century recreational facility.

Page 22 of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

The property retains its ability to convey under Criterion C its significance as a rustic architectural grouping. The necessary characteristics that embody this architectural style such as the simple building designs, log workmanship, and natural materials are retained and clearly interpretable in the Restaurant Building, Workshop, and Tourist Information Center and the rustic design approach was continued in later contributing and non-contributing buildings within the property. However, the repeated and substantial alterations to the property have negated the ability of the property to convey its significance as an example of the work of Arthur Shurcliff or the tourist motor court property type. The removal of all of the overnight cabins and auto supply store and the heavy alterations to the Restaurant Building have compromised the design, feeling, and association necessary to demonstrate Shurcliff's role in the site's development and to convey the property's original function as an early nineteenth century motor court for automobile tourists.

## 25. Boundary Justification

The Willey House Site is contained within a single 5,925-acre parcel of state reservation land. The boundaries of the area have been drawn using available man-made and natural features of the site to encompass the concentration of buildings, structures, sites, and landscape features that remain from the historic period.

# 26. Boundary Description

The Willey House Site boundaries begin at the intersection of Route 302 and a driveway leading to the Help Quarters and Manager's Cabin. The boundary extends eastward following a line of convenience established by the north edge of visitor parking areas on the east side of Route 302, crossing the Willey House Pond and terminating at the walking path near the east bank of the impoundment. The boundary then proceeds south along the east edge of the path to intersect with the downstream side of the Willey House Dam. The boundary follows the downstream side of the dam structure, and a line of convenience established thereby, on a westerly course to cross Route 302. It then follows the west edge of Route 302 to the picnic area driveway. The boundary then turns northwest on a line of convenience established by the driveway to intersect with the Pit Toilets. It then turns north-northwest on a line of convenience that runs between the back edge of the Pit Toilets and the Willey Boulders. It then runs due north from the boulders to intersect with the southeast bank of an unnamed stream. The boundaries follow the unnamed stream until reaching the cleared portion of the Willey House Site, then turn northwest and northeast to encompass the glade around the Help Quarters and the Manager's Cabin before intersecting with Route 302 and turning south to the point of beginning.

**Page 23** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

27. Bibliography and/or References

#### Maps and Plans

Maps and plans are on file at the Division of Parks and Recreation, Concord, New Hampshire, unless otherwise noted.

#### Reid, Harry L.

Hand Drawn Sketch Plan of the Willey House Site. February 15. New Hampshire Division of Parks and Recreation. On file, New Hampshire Division of Historical Resources, Concord, NH.

#### State of New Hampshire Department of Resources and Economic Development

1996 Willey House Dam Repairs, Harts Location. April.

# State of New Hampshire Division of Parks and Recreation

1984 *Site Plan of Willey House Area, Crawford Notch State Park.* On file, New Hampshire Division of Historical Resources, Concord, NH.

#### State of New Hampshire Forestry Department

- 1916 *Crawford Notch Reservation. State Forest.* Drawn by E.S. Atkinson, State of New Hampshire Forestry Department, Concord, NH.
- 1932 *Crawford Notch Reservation*. Drawn by H.K. Bugbee, State of New Hampshire Forestry Department, Concord, NH.

#### State of New Hampshire Forestry and Recreation Department

1938 Roads and Trails Plan, Part of the Master Plan for Crawford Notch State Reservation. State of New Hampshire Forestry and Recreation Department, Concord, NH.

#### State of New Hampshire Recreation Division

1959 Crawford Notch – Cabin Addition.

#### Stern, Ken

1979 Willey House Dam, 110.01, Crawford Notch. August. On file, State of New Hampshire Dam Safety Office, Concord, NH.

#### **Documents and Published Works**

#### Allen, T., Creasy, J., Davis, P.T., Eusden, J.D., Fowler, B.K., and Thompson, W.B.

2001 The Notches: Bedrock and Surficial Geology of New Hampshire's White Mountains. David P. West and Richard H. Bailey, editors, *Guidebook for Geological Field Trips in New England*, Geological Society of America, 2001 Annual Meeting:C1-C33.

# Anonymous

1952 A Notch in the Hills. Photocopy of article on file at the New Hampshire Division of Historical Resources, Concord, NH.

#### Appalachia

1916 Proceedings of the Club. *Appalachia* XIV:1:100-107.

**Page 24** of 41

# AREA FORM AREA NAME: WILLEY HOUSE SITE

# Appalachian Mountain Club (AMC)

- 1907 Guide to the Paths and Camps in the White Mountains, Part I. Appalachian Mountain Club, Boston, MA. N. Allen Lindsey & Company, Printers, Boston, MA.
- 1982 The Notch Through the Ages. Appalachian Mountain Club, Crawford Notch, New Hampshire.
- 2013 AMC History. Electronic document, http://www.outdoors.org/about/history.cfm, accessed July 20, 2013.

# Banister, Jennifer, Kristen Heitert, and Sarah Sportman

2013 Phase IA Archaeological Sensitivity Assessment, Willey House Site – Crawford Notch State Park, Harts Location, New Hampshire. PAL Report No. 2833. Submitted to the State of New Hampshire Department of Resources and Economic Development, Concord, NH.

#### Blaine, Marcia Schmidt

The Public Forests. In *Beyond the Notches: Stories of Place in New Hampshire's North Country*. John R. Harris, Kay Morgan, and Mike Dickerman, eds. Bondcliff Books in partnership with Monadnock Institute of Nature, Place, and Culture at Franklin Pierce University, Rindge, NH.

#### Brown, William Robinson

1958 Our Forest Heritage: A History of Forestry and Recreation in New Hampshire. New Hampshire Historical Society, Concord, NH.

#### Charles T. Main, Incorporated

1964 General Report: Engineering, Site Planning Studies, and Cost Estimates for Improvement of Crawford Notch State Park, Harts Location, New Hampshire. Prepared for the State of New Hampshire, Department of Resources and Economic Devolvement, Concord, NH by Charles T. Main, Incorporated, Boston, Massachusetts.

#### Colquhoun, Lorna

2009 Rock Legend. New Hampshire Union Leader Tuesday, July 7:A1, A8.

#### Crawford, G. Henry

1967 General Information: New Hampshire State Parks, Historic Sites, Wayside Picnic Areas. Prepared by the State parks Promotion Section, Division of Economic Development.

#### Crawford, Lucy

1846 *History of the White Mountains from the First Settlement of Upper Coos and Pequaket.* Printed by F.A. and A.F. Gerrish, Portland, ME.

#### Cushing, Elizabeth Hope

- 1995 Shurcliff, Arthur Asahel (Shurcliff). In *Pioneers of American Landscape Design: An Annotated Bibliography*. Charles A. Birnbuam and Julie K. Fix, ed. U.S. Department of the Interior, National Park Service, Cultural Resources, Washington, DC:110-113.
- 2000 Shurcliff, Arthur Asahel (Shurcliff). In *Pioneers of American Landscape Design*. Charles A. Birnbuam and Robin Karson, ed. McGraw-Hill, New York, NY:351-356.

Department of Resources and Economic Development (DRED) – Development Design, Development and Maintenance Section

2013 Projects Report. Published July 26. On file, Department of Resources and Economic Development, Concord, NH.

**Page 25** of 41

**AREA NAME: WILLEY HOUSE SITE** 

# AREA FORM

#### The Farmer's Monthly Visitor

1839 The White Mountains, the Notch and the Willey House. *The Farmer's Monthly Visitor* 1:118-120.

#### Eastman, Tom

1999 Recalling a White Mountain Legend: The Famed Willey Slide Disaster of August, 1826. *Mountain Ear* August 19:18.

#### Folsom, Elizabeth Knowles, ed.

1930 New Hampshire State History of the Daughters of the American Revolution. The News-Letter Press, Exeter, NH.

#### Garvin, James

- 1988 On the Road North of Boston: New Hampshire Taverns and Turnpikes 1700-1900. University Press of New England, Lebanon, NH.
- 1992 Old Visitor's Center, Crawford Notch State Park. NHDHR Individual Resource Inventory Form. August 7. On file, NHDHR, Concord, NH.

#### Good, Albert H.

1938 *Park and Recreation Structures*. United States Department of the Interior, National Park Service, Washington, DC. Reprinted in 2000 by the Princeton Architectural Press, New York, NY.

#### Hancock, Frances Ann Johnson

1965 Crawford Notch: Southwestern Approach to the White Mountains of New Hampshire. Self-published.

#### Hawthorne, Nathaniel

- 1835a The Ambitious Guest. *The New-England Magazine June:*425-431.
- 1835b Sketches from Memory. *The New-England Magazine* November:321-326.

#### Heck, Marlene Elizabeth

Bear Brook State Park Civilian Conservation Corps (CCC) Camp Historic District. National Register of Historic Places Registration Form. Prepared by Hardy, Heck, Moore, Incorporated, Hanover, NH. On file, New Hampshire Division of Historical Resources, Concord, MA.

#### McClelland, Linda Flint

1993 Presenting Nature: The Historic Landscape Design of the National Park Service, 1916-1942.U.S. Department of the Interior, National Park Service, Cultural Resources, Washington, DC.

#### Mellow, James R.

1980 Nathaniel Hawthorne In His Times. The Johns Hopkins University Press, Baltimore, MD.

### New Hampshire Division of Forests and Lands

2013 Forests in Alphabetical Order. Electronic document, <a href="http://www.nhdfl.org/new-hampshire-state-lands/state-owned-reservations/forests-in-afphabetical-order.aspx">http://www.nhdfl.org/new-hampshire-state-lands/state-owned-reservations/forests-in-afphabetical-order.aspx</a>, accessed July 18, 2013. New Hampshire Division of Forests and Lands

#### New Hampshire Division of Historical Resources

Old Visitors' Center, Crawford Notch State Park: NHDHR Determination of Eligibility. August 13. On file, New Hampshire Division of Historical Resources, Concord, NH.

New Hampshire Division of Parks and Recreation

n.d. Crawford Notch History. New Hampshire Division of Parks and Recreation, Concord, NH.

#### New Hampshire Highways

1924 Crawford Notch: A State Forest Reservation. *New Hampshire Highways* June:n.p. photocopy on file, New Hampshire Division of Historical Resources.

#### Parshley, Edward J.

Imperishable bronze for the Willey Family. *New Hampshire Highways* August:n.p. Photocopy on file, New Hampshire Division of Historical Resources.

#### Peterson, Natalie

2001 The Willey Slide: Site of Tragedy Still Evokes Sadness after 175 Years. *The Granite State News – Carroll County Independent* August 23:C1.

#### Potter, Jane

1994 New Hampshire's Landscape and Environment. The New Hampshire Archaeologist 33/34 (1).

#### Purchase, Eric

1999 Out of Nowhere: Disaster and Tourism in the White Mountains. Johns Hopkins University Press, Baltimore, MD.

#### Roberts, Guy

1924 The Willey Slide: Its History, Legend, and Romance. Whitefield, NH.

#### Robertson, Edwin B. and Benjamin W. English, Jr.

1987 A Century of Railroading in Crawford Notch. Published by Edwin B. Robertson, Portland, ME.

#### Sears, John F.

1989 Sacred Places: American Tourist Attractions in the Nineteenth Century. Oxford university Press, New York, NY.

#### Skidmore, Max J.

2008 Following the Theodore Roosevelt Trail into the Heart of New Hampshire. *Historical New Hampshire* Spring:3-18).

#### Spaulding, John H.

1862 Historical Relics of the White Mountains. Also A Concise White Mountain Guide. J.R. Hitchcock, Mt. Washington, NH.

#### Stanhope, William F.

1982 Willey Family Research. Typewritten Manuscript. On file, New Hampshire Division of Historical Resources.

#### State of New Hampshire Department of Resources and Economic Development

1973 Fact Sheet – New Hampshire's Crawford Notch. State of New Hampshire Department of Resources and Economic Development, Division of Economic Development, Concord, NH.

#### State of New Hampshire Division of Parks and Recreation

n.d. History of the State Park System. Electronic document, http://www.nhstateparks.org/uploads/pdf/HistoryOfTheStateParkSystem.pdf, accessed July 18, 2013. State of New Hampshire Division of Parks and Recreation.

#### State of New Hampshire Forestry Commission

- 1914 Biennial Report of the Forestry Commission for the Years 1913-1914. John B. Clarke Company, Manchester, NH
- 1916 Biennial Report of the Forestry Commission for the Years 1915-1916. John B. Clarke Company, Manchester, NH.
- 1922 Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1922. Concord, NH.
- 1927 Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1928. Concord, NH.
- 1930 Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1930. Concord, NH.
- 1935 Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1934. Concord, NH.

#### State of New Hampshire Forestry Division

- 1951 Biennial Report of the Forestry Division, 1949-1950. Concord, NH.
- 1952 Biennial Report of the Forestry Division, 1951-1952. Concord, NH.
- 1954 Biennial Report of the Forestry Division, 1953-1954. Concord, NH.

#### State of New Hampshire Forestry and Recreation Commission

- [1933?] A Report of the Facilities and Equipment for Recreation which are Maintained by the Forestry and Recreation Department. Photocopied extract on file, New Hampshire Division of Historical Resources, Concord, NH.
- 1937 Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1935-36. Published by the Commission, Concord, NH.
- Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1944. Published by the Commission, Concord, NH.
- Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1946. Published by the Commission, Concord, NH.

## State of New Hampshire General Court

1911 Chapter 130. An Act to Provide for the Acquisition by the State of the Crawford Notch, so called, in Hart's Location and Contiguous Territory, as a Forest Reservation and State Park. Reprinted in *Laws of the State of New Hampshire Passed January Session*, 1911. Concord, NH:133-134. Printed by the John B. Clarke Company, Manchester, NH.

#### Tolles, Bryant F.

1998 The Grand Resort Hotels of the White Mountains. David R. Godine, Boston, MA.

# New Hampshire Division of Historical Resources Page 28 of 41 AREA FORM AREA NAME: WILLEY HOUSE SITE

United States Forest Service

Bartlett Experimental Forest Headquarters & Bartlett Supply Depot. New Hampshire Division of Historical Resources Area Form. Prepared by the U.S. Forest Service, Heritage Stewardship Group, September 5. On file, New Hampshire Division of Historical Resources, Concord, NH.

Wineapple, Brenda

2003 Hawthorne: A Life. Random House, Incorporated, New York, NY.

#### **Archives and Repositories**

Arthur Asahel Shurcliff papers, 1865-1957. Massachusetts Historical Society, Boston, MA. This collection contains Shurcliff family history, records, photographs, personal correspondence, and writings, including diaries.

Museum of the White Mountains Collection. Plymouth State University, Plymouth, NH. Electronic collection, http://digitalcollections.plymouth.edu/cdm/landingpage/collection/p15828coll7, accessed July 30, 2013. Postcard and stereoscope views.

New Hampshire Division of Historical Resources, Concord, NH. Project review files, town background files, and survey files.

New Hampshire State Archives, Concord, NH. Secretary of State Miscellaneous Papers relating to the Willey House Camps.

Shurcliff, Arthur A. and Shurcliff, Sidney N., Papers. 1900 ca.-1981. Special Collections, Frances Loeb Library, Graduate School of Design, Harvard University, Cambridge, MA. This collection contains Drawings, plans, manuscripts, correspondence, photographs, slides and ephemera related to the landscape design practice founded by Arthur A. Shurcliff and its successor firms.

State Land Records for Crawford Notch. Copies on file in the Division of Parks and Recreation, Concord, NH.

State of New Hampshire Dam Safety Office Files. Department of Environmental Management, Water Resources Bureau, Concord, NH.

28. Surveyor's Evaluation								
NR listed:	individuals within district yes		R eligible: district not eligible		NR Criteria:	A B C D		
no more info needed E  If this Area Form is for a Historic District: # of contributing resources: 8 # of noncontributing resources: 4								

AREA FORM AREA NAME: WILLEY HOUSE SITE

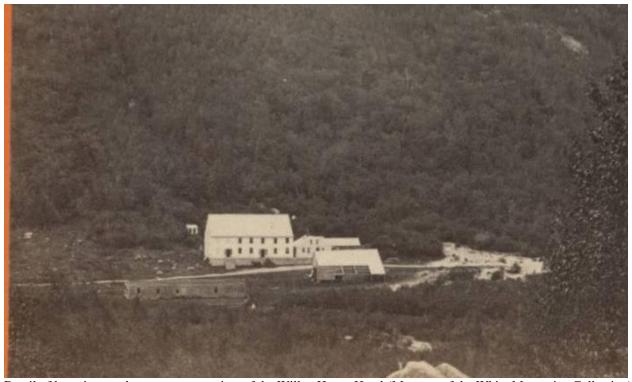
Willey House Site – District Data Table

Map No.	Resource Name	Park Building Code	Historic Name/Function	Style/Type	Date	Photo No.	C/NC*
1	Help Quarters	CRW04	Unknown	Frame cabin	Ca. 1950	5	С
2	Manager's Cabin	CRW01	Unknown	Frame cabin	Ca. 1950	6	С
3	Tourist Information Center	CRW07	Rest House	Log cabin	1930	7	С
4	Workshop	CRW05	Willey House Camps - cabin	Log cabin	Ca. 1930	8	С
5	Bathroom	CRW08	Restrooms	Log cabin	1970	9	NC
6	Willey House Foundation	N/A	Willey House/Willey House Site	Site: stone foundation and memorial	1793/1926	10	С
7	Willey Boulders	N/A	"The Boulders that Split the Slide"	Site: natural rock outcrop	N/A	11	С
8	Generator House	CRW02	N/A	Log cabin	1994	12	NC
9	Restaurant Building	CRW06	Willey House Camps – Restroom, restaurant, and souvenir store	Log cabin	1924	13	С
10	Willey House Dam (State Dam No. 110.01)	N/A	Willey Dam	Timber crib spillway with concrete wingwalls	1980	14	NC
11	Pit Toilets	N/A	Pit Toilets	Wood frame outhouses	About 1965-1970	15	NC
N/A	Willey House Site Landscape	N/A	N/A	Recreational park including both picturesque and formal design elements: stone walls, gravel paths, glades, a pond, signs, and picnic furniture.	Ca. 1930 - present	1-4	С

<sup>\*</sup>C – Resource contributes to the significance of the district. NC – resource does not contribute to the significance of the district.

**Page 30** of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE



Detail of late nineteenth century stereo view of the Willey House Hotel (Museum of the White Mountains Collection).



Ca. 1890 photograph of the Willey House (Museum of the White Mountains Collection).

**AREA FORM** 

**AREA NAME: WILLEY HOUSE SITE** 



Ca. 1900 postcard view of the Willey House Site prior to state redevelopment (Museum of the White Mountains Collection).



Circa 1925 postcard view of the two restroom, store, and restaurant cabins before they were combined into the present Restaurant Building. Overnight cabins, now demolished, are at the rear.

**Page 32** of 41

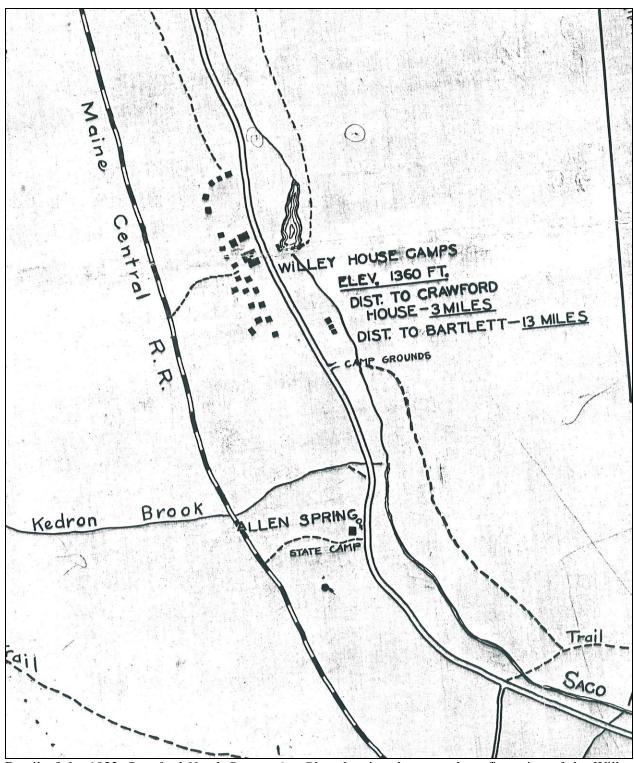
AREA FORM AREA NAME: WILLEY HOUSE SITE



Circa 1935 general view of the Willey House Camps. The Restaurant Building, Tourist Information Building, and Workshop appear in this view. Not shown are the extensive ranks of overnight cabins surrounding the buildings.

**Page 33** of 41

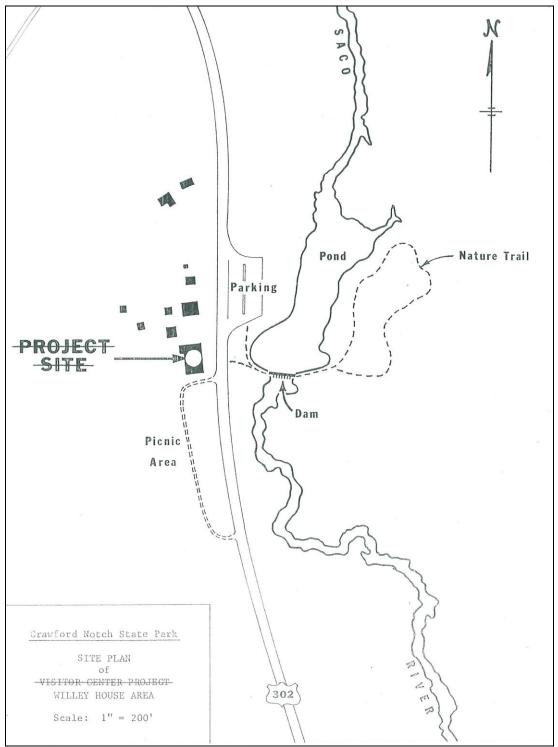
AREA FORM AREA NAME: WILLEY HOUSE SITE



Detail of the 1932 *Crawford Notch Reservation Plan* showing the general configuration of the Willey House Camps. This is the earliest available plan of the facility and shows the camp at or near the height of its development as a private concession. Only the four largest buildings adjacent to the road at the center of the complex survive today (State of New Hampshire Forestry Department).

**AREA FORM** 

AREA NAME: WILLEY HOUSE SITE



1984 plan of the Willey House Site. The three buildings indicated at the southeast corner and two northernmost buildings remain today (State of New Hampshire Division of Parks and Recreation).

New Hampshire Division of Historical Resources Page 35 of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 1 description: General view of Willey House Site

Roll: \_\_\_\_\_ Frame: \_\_\_\_ Direction: North \_\_\_ Date taken: 7/8-9/13 Negative stored: PAL



Photo 2 description: General view of Willey House Site.

Roll: \_\_\_\_\_ Frame: \_\_\_\_\_ Direction: South \_\_\_ Date taken: 7/8-9/13 \_ Negative stored: PAL

**Page 36** of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE





Photo 4 description: General view of Willey House Site on east side of Route 302.

Roll: \_\_\_\_\_Frame: \_\_\_\_\_Direction: North \_\_\_\_Date taken: 7/8-9/13 \_Negative stored: PAL

# AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 5 description: Help Quarters (CRWO4, map no. 1)

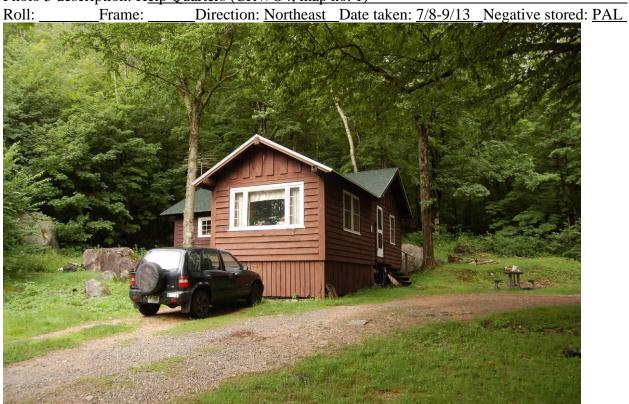


Photo 6 description: Manager's Cabin (CRW01, map no. 2)

Roll: \_\_\_\_\_ Frame: \_\_\_\_\_ Direction: North \_\_\_ Date taken: 7/8-9/13 \_ Negative stored: PAL

**New Hampshire Division of Historical Resources** 

**Page 38** of 41

AREA FORM AREA





Photo 7 description: Tourist Information Center (CRW07, map no. 3)





Photo 8 description: Workshop (CRW05, map no. 4)

Roll: \_\_\_\_\_ Frame: \_\_\_\_ Direction: Northwest Date taken: 7/8-9/13 Negative stored: PAL

**New Hampshire Division of Historical Resources** 

**Page 39** of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 9 description: <u>Bathroom (CRW08, map no. 5)</u>

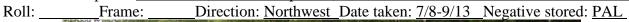




Photo 10 description: Willey House Foundation (map no. 6)

Roll: \_\_\_\_\_ Frame: \_\_\_\_\_ Direction: <u>Southwest\_Date taken: 7/8-9/13\_Negative stored: PAL\_</u>

**New Hampshire Division of Historical Resources** 

**Page 40** of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 11 description: Willey Boulders (map no. 7)



Photo 12 description: Generator House (CRW02, map no. 8)

Roll: \_\_\_\_\_ Frame: \_\_\_\_ Direction: Northwest Date taken: 7/8-9/13 Negative stored: PAL

New Hampshire Division of Historical Resources Page 41 of 41

AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 13 description: Restaurant Building (CRW06, map no. 9)



Photo 14 description: Willey House Dam (State Dam No. 110.01, map no. 10)

Roll: \_\_\_\_\_ Frame: \_\_\_\_ Direction: East \_\_\_\_ Date taken: 7/8-9/13 Negative stored: PAL

# AREA FORM AREA NAME: WILLEY HOUSE SITE



Photo 15 description: Pit Toilets (map no. 11)

Roll: \_\_\_\_\_ Frame: \_\_\_\_\_ Direction: West \_\_\_\_ Date taken: 7/8-9/13 Negative stored: PAL

## PHOTO KEY IS LOCATED ON PAGE 3

I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they conform to the standards set forth in the NHDHR Photo Policy. These photos were printed using the following printer, ink, and paper: <a href="Epson: Stylus Pro Printer">Epson: Stylus Pro Printer</a>, Photo Black T5801 Ink, <a href="Permium Photo Paper">Premium Photo Paper</a>. (Color photos must be professionally printed.) The negatives or digital files are housed at/with: <a href="PAL">PAL</a>, Pawtucket, RI.

SIGNED: John J. Daly

## CONTAINS CONFIDENTIAL INFORMATION - NOT FOR PUBLIC DISTRIBUTION

## TECHNICAL REPORT

# PHASE IA ARCHAEOLOGICAL SENSITIVITY ASSESSMENT WILLEY HOUSE SITE - CRAWFORD NOTCH STATE PARK

**Harts Location, New Hampshire** 

Jennifer Banister Kristen Heitert Sarah Sportman

Submitted to:

# State of New Hampshire Department of Resources and Economic Development

Division of Parks and Recreation 172 Pembroke Road Concord, New Hampshire 03302-1856

Submitted by:

The Public Archaeology Laboratory, Inc.

26 Main Street Pawtucket, Rhode Island 02860



## **PAL Publications**

CARTOGRAPHERS
Dana M. Richardi/Jane Miller
GIS SPECIALIST
Jane Miller
GRAPHIC DESIGN/PAGE LAYOUT SPECIALISTS
Gail M. Van Dyke

## MANAGEMENT ABSTRACT

PAL conducted a Phase IA archaeological sensitivity assessment at the Willey House Site, located in Crawford Notch State Park in Harts Location, New Hampshire. The Phase IA survey was undertaken as part of a larger Historic Resource Study, and provides an archaeological sensitivity assessment to aid in future project planning at the site. For the purposes of the survey, PAL developed a study area measuring 1100 feet (ft) north-south and 685 ft east-west that encompasses the core historic house site and the camping and recreation areas immediately surrounding it. Moderate pre-contact archaeological sensitivity has been assigned to two areas east of Route 302 and north of the extant dam for the potential to contain small, temporary camp sites dating the Archaic and Woodland periods. Moderate post-contact period archaeological sensitivity has been assigned to the core visitor complex west of Route 302 for its potential to contain archaeological deposits associated with the evolution of the site as a summer hotel destination in the mid nineteenth century to an overnight motor-court for automobile campers in the early twentieth century. Moderate post-contact period archaeological sensitivity also has been assigned to portions of the study area sandwiched between Route 302 and the Saco River for containing structural remains associated with former barn, carriage house, and dam structures. Finally, high post-contact period archaeological sensitivity has been assigned to the landscape immediately surrounding the remains of Willey House Foundation and the area beneath the extant Restaurant Building for containing structural, landscape, and artifact deposits associated with the former Willev House Hotel.

As future project plans become formalized, PAL recommends that the New Hampshire Department of Resources and Economic Development - Division of Parks and Recreation (NHDPR) consult with the New Hampshire Division of Historical Resources (NHDHR) concerning potential construction impacts within areas assigned moderate and high archaeological sensitivity so that an appropriate archaeological scope-of-work may be developed (as necessary). In the event that proposed project impacts exceed the study area as delineated in this report, additional Phase IA survey may be required. Additionally, any project plans involving remodeling or restoration of the current Restaurant Building and Willey House Dam should consider the possible presence of intact archaeological remains related to the nineteenth-century Willey House Hotel and earlier historic structural dam remains so that potentially significant archaeological (or architectural) resources are not impacted during project-related construction activities.

# TABLE OF CONTENTS

M	ANAGEMENT ABSTRACT	i
1.	INTRODUCTION	1
_•	Project Scope	
	Project Personnel	
	Disposition of Project Materials	
2.	RESEARCH DESIGN AND FIELDWORK METHODS	7
	Archaeological Significance and Historic Contexts	7
	Archival Research	
	State Site Files, Artifact Collection Reports, and Town Reconnaissance Surveys	
	Cultural Resource Management Reports	
	Histories and Maps	
	Environmental Studies	
	Informant Interviews	
	Walkover Survey	
	Archaeological Sensitivity Assessment	
	Pre-Contact Period Archaeological Sensitivity	
	Contact Period Archaeological Sensitivity	
	Post-Contact Period Archaeological Sensitivity	
	Archaeological Sensitivity Ranking	13
3.	ENVIRONMENTAL CONTEXT	
	Geology and Geomorphology	
	Soils	
	Hydrology	
	Existing Conditions	18
4.	CULTURAL CONTEXT	23
	Pre-Contact Period	23
	PaleoIndian Period (9500–7000 B.C.)	23
	Archaic Period (7000–900 B.C.)	25
	Woodland Period (900 B.CA.D. 1600)	
	Contact Period and Exploration Period	
	Post-Contact Period.	
	Settlement of the White Mountains and Crawford Notch	
	Willey House Site History	36
	Summary of Pre- and Post-Contact Period Sites in Proximity to the Willey House Site Study Area	44
_	DECH TC	45
٥.	RESULTS  Pre-Contact Period Archaeological Sensitivity	
	Post-Contact Period Archaeological Sensitivity	
	rost-Contact retion Archaeological Sensitivity	43
6.		
	Management Recommendations	52

REFERENCES	55
APPENDICES	
A. NHDHR POST-CONTACT ARCHAEOLOGICAL SITE FORM	65

# LIST OF FIGURES

Figure 1-1.	Map of New Hampshire showing the location of Harts Location	2
Figure 1-2.	Location of Willey House Site study area on the Crawford Notch USGS topographic quadrangle, 7.5 minute series	3
Figure 1-3.	Map of the Willey House Site Phase IA archaeological study area	5
Figure 3-1.	Map of the physiographic regions and major soil groups of New England showing the location of the Willey House Site study area (source: Fenneman 1938)	14
Figure 3-2.	Soil units within the Willey House Site study area (source: USDA-NRCS 2013)	16
Figure 3-3.	Map of the Saco River watershed showing the location of the Willey House Site study area	17
Figure 4-1.	1892 Map of Harts Location showing the location of the Willey House Site study area	35
Figure 4-2.	1946 Crawford Notch USGS topographic quadrangle showing the location of the Willey House Site study area	37
Figure 4-3.	Late nineteenth-century postcard showing the Willey House and the adjoining Willey House Hotel (source: Museum of the White Mountains Collection)	38
Figure 4-4.	Late nineteenth-century stereo view of the Willey House Hotel (source: Museum of the White Mountains Collection)	39
Figure 4-5.	Circa 1900 postcard view of the Willey House Site before state redevelopment (source: Museum of the White Mountains Collection)	40
Figure 4-6.	Circa 1925 postcard view of the restrooms, store, and restaurant buildings before they were combined into the present Restaurant Building (note: overnight cabins to the rear no longer extant)	41
Figure 4-7.	1932 Crawford Notch Reservation Plan showing the general configuration of the Will House Camps (note: only the four largest buildings adjacent to the road are exta (source: State of New Hampshire Forestry Department)	nt)
Figure 4-8.	Circa 1935 view of the Willey House Camps	43
Figure 4-9.	Circa 1950's photograph of the Willey House Dam (source: Museum of the White Mountains Collection)	43
Figure 5-1.	Pre-contact period archaeological sensitivity map, Willey House Site study area, Crawford Notch State Park.	47

Figure 5-2.	Post-contact period archaeological sensitivity map, Willey House Site	
	study area, Crawford Notch State Park	49

# LIST OF PHOTOGRAPHS

Photograph 3-1.	General view of the study area, view west, Willey House Site, Crawford Notch State Park	19
Photograph 3-2.	General view of the Saco River from on top of the Willey House Dam, view southwest, Willey House Site, Crawford Notch State Park	19
Photograph 3-3	Help Quarters and Manager's Cabin, view northwest, Willey House Site, Crawford Notch State Park	20
Photograph 3-4.	Willey House Foundation, view southwest, Willey House Site, Crawford Notch State Park	20
Photograph 3-5.	Willey Boulders, view west, Willey House Site, Crawford Notch State Park	21
Photograph 3-6.	General view of picnic area south of visitor complex, view northwest, Willey House Site, Crawford Notch State Park	21
Photograph 3-7.	Willey House Dam, view northeast, Willey House Site, Crawford Notch State Park	22
Photograph 5-1.	Possible foundation stones from the Willey House Hotel under the current Restaurant Building, view northwest, Willey House Site, Crawford Notch State Park	46

# LIST OF TABLES

Table 2-1.	Archaeological Sensitivity Rankings Used for the Willey House Site Study Area				
Table 4-1.	Native American Cultural Chronology for Northern New England				
Table 4-2.	Post-Contact Cultural Chronology for New Hampshire	32			

#### CHAPTER ONE

#### INTRODUCTION

The New Hampshire Department of Resources and Economic Development - Division of Parks and Recreation (NHDPR) is interested in exploring options to improve the Willey House Site in Crawford Notch State Park, Harts Location, New Hampshire (Figures 1-1, 1-2). The lands of Crawford Notch State Park were acquired by the State of New Hampshire in 1911 with the purchase of 6,000 acres including the Willey House Site. The site is the original location of the circa (ca.) 1793 Willey House that was the scene of a catastrophic landslide in 1826. While the house survived the disaster, the Willey family did not. Following the landslide, the house was operated as a lodging house, with a 70-x-40-foot (ft) hotel constructed adjacent to it. The complex was destroyed by fire in 1898. The popularity of automobiles spurred the state to lease the Willey House Site to Messieurs Donahue and Hamlin who built log cabins, a restaurant and gift shop on the site in 1922. The Willey House Site remained under concession agreements until 1998 when the Division of Parks and Recreation took over its operation.

## **Project Scope**

In anticipation of future redevelopment planning, NHDPR has requested a Historic Resource Survey (HRS) of the Willey House Site. The HRS comprised a Phase IA archaeological sensitivity assessment of the study area as detailed in this report and a Historic District Area Form that summarizes the history, architecture, and significance of the Willey House Site area and provides an evaluation of its potential for listing in the National and/or New Hampshire State Registers of Historic Places (submitted under separate cover).

As per New Hampshire Division of Historical Resources (NHDHR) guidelines, the purpose of a Phase IA archaeological sensitivity assessment is

to identify areas of obvious disturbance and archaeological sensitivity through limited field investigations; to gain an understanding of previous significant construction projects in the area; document the site density and cultural development of the locale or region through data gained from the literature search; and identify the current and significant past environmental parameters (NHDHR 2004).

Because no specific redevelopment plans have been proposed to date for the Willey House Site, PAL has developed a study area measuring 1100 feet (ft) north-south and 685 ft east-west for the purposes of conducting the Phase IA survey (Figure 1-3). This study area encompasses the core historic house site and camping and recreation areas immediately surrounding it, and is designed to capture those areas that are most likely to be subject to future redevelopment impacts.

All tasks associated with the Phase IA survey were carried out in accordance with the standards outlined in the Secretary of the Interior's 1983 Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716, 1983) and follow the guidelines established by the National Park Service in the Recovery of Scientific, Prehistoric, Historic, and Archaeological Data (36 CFR Part 66, Appendix A). The work also was conducted in accordance with guidelines provided by the New Hampshire Division of Historical Resources (NHDHR) Archaeological Standards and Guidelines (2004).

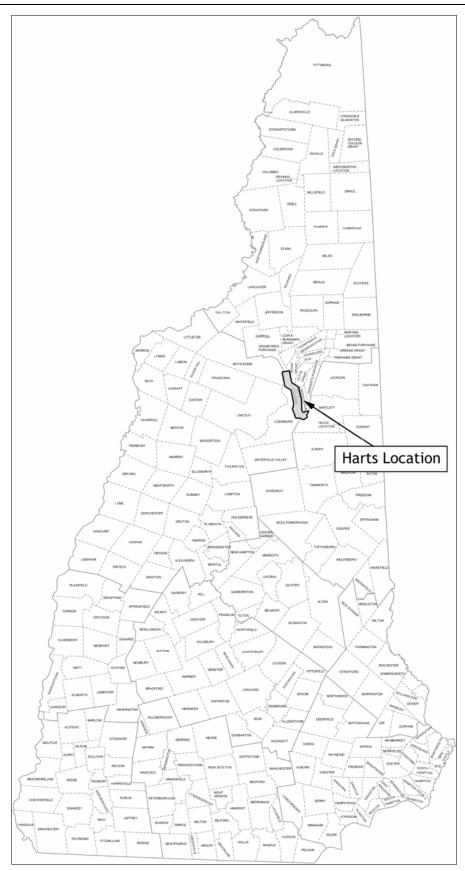


Figure 1-1. Map of New Hampshire showing the location of Harts Location.

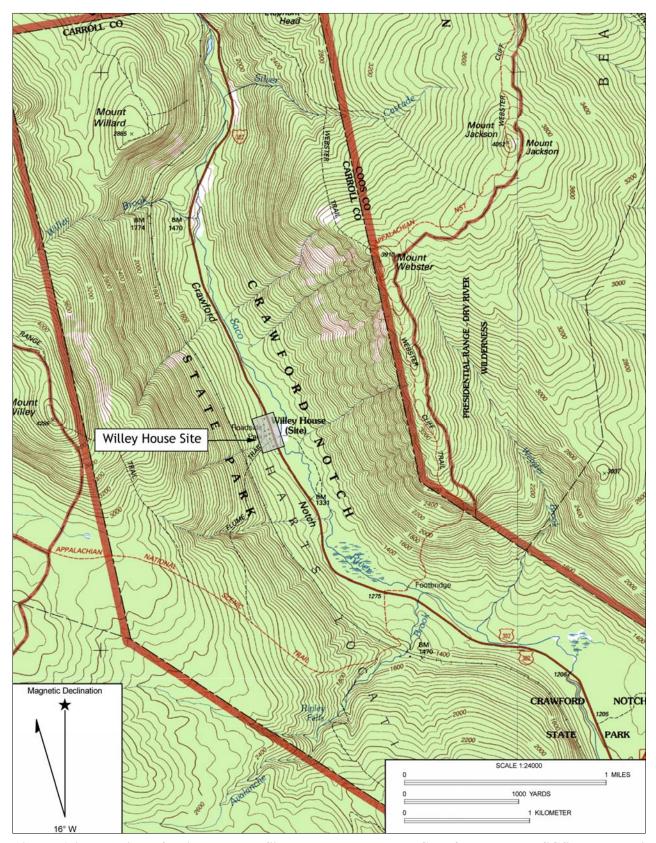


Figure 1-2. Location of Willey House Site study area on the Crawford Notch USGS topographic quadrangle, 7.5 minute series.

## **Project Personnel**

PAL conducted Phase IA fieldwork at the Willey House Site from July 9-10, 2013. PAL staff involved in the survey included Kristen Heitert (principal investigator, senior archaeologist), John Daly (senior architectural historian), and Sarah Sportman and Jennifer Banister (project archaeologists).

## **Disposition of Project Materials**

All project information (field recording forms, maps, photographs) is currently on file at the PAL offices at 26 Main Street, Pawtucket, Rhode Island, until a permanent repository is designated by NHDPR.

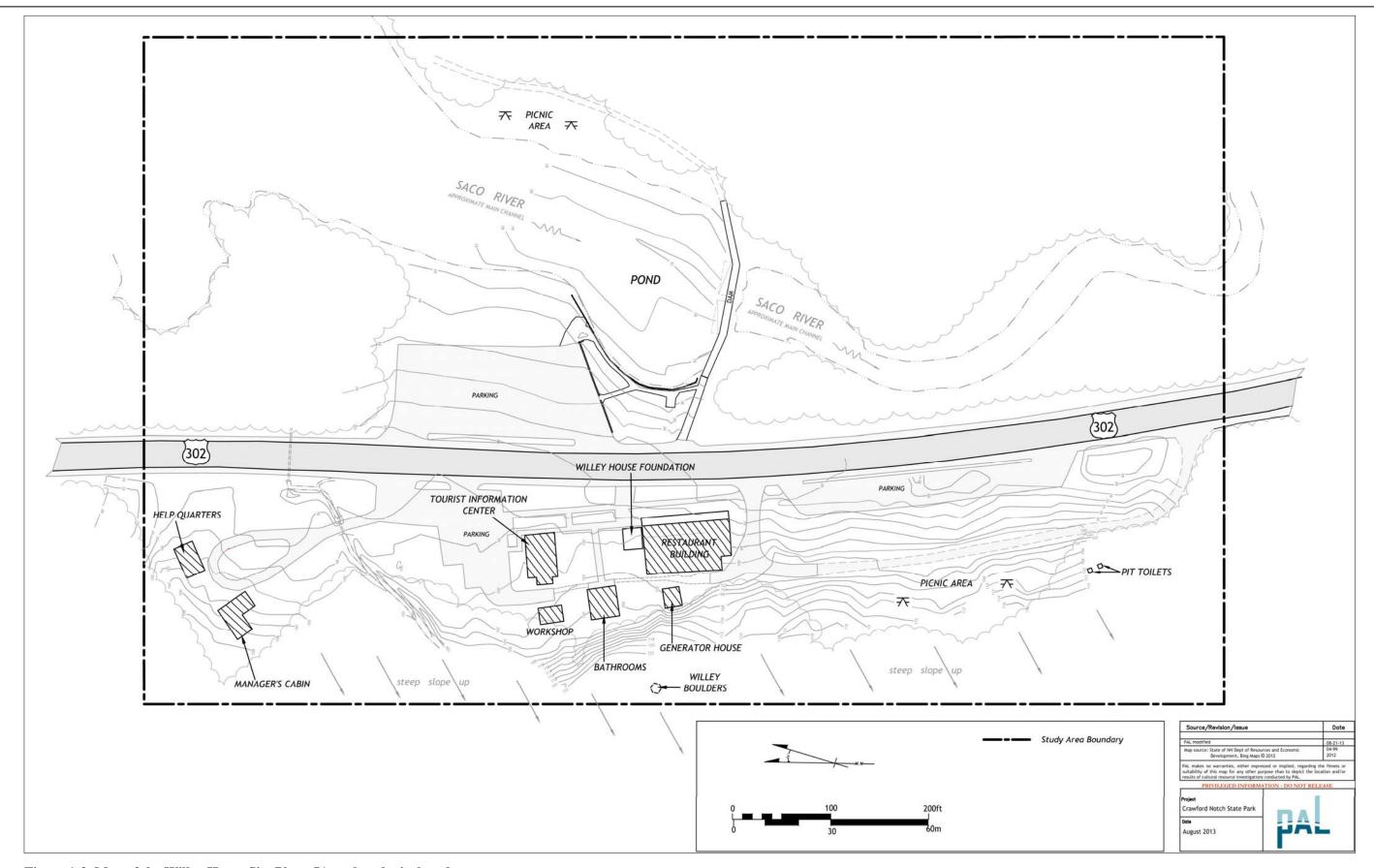


Figure 1-3. Map of the Willey House Site Phase IA archaeological study area.

#### CHAPTER TWO

#### RESEARCH DESIGN AND FIELDWORK METHODS

The purpose of the Phase IA archaeological sensitivity assessment at the Willey House Site was to determine the pre- and post-contact period archaeological sensitivity of the designated study area to aid in future project planning. To accomplish this objective, two research strategies were used including:

- archival research, including a review of historic literature and maps, and informant interviews; and
- field investigations, consisting of a "walkover" assessment survey.

The archival research and walkover survey provided the information necessary to develop environmental and historic contexts for the study area and develop a predictive model for archaeological sensitivity. Archaeological sensitivity is defined as the likelihood for belowground cultural resources to be present and is based on various categories of information:

- locational, functional, and temporal characteristics of previously identified cultural resources in the study area or vicinity; and
- local and regional environmental data reviewed in conjunction with existing study area conditions documented during the walkover survey, and archival research about the study area's land use history.

This report section describes the methods used during each of the background research and field activities. The results of the research and field investigations are presented in Chapter 5.

#### Archaeological Significance and Historic Contexts

The different phases of archaeological investigation (reconnaissance, intensive survey, site examination, and data recovery) reflect preservation planning standards for the identification, evaluation, registration, and treatment of cultural resources (National Park Service [NPS] 1983). This planning structure pivots around the eligibility of cultural resources for inclusion in the National Register of Historic Places (National Register). The National Register is the official federal list of properties studied and found worthy of preservation. The results of an intensive (locational) survey and site examination are used to make recommendations about the significance and eligibility of any resource.

The standards for determining the significance of cultural resources are the guidelines provided by the NPS (36 CFR 60): the National Register Criteria for Evaluation. The following four criteria are given for determining if the "quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association" (36 CFR 60):

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important to prehistory or history.

Most archaeological sites listed in the National Register have been determined eligible under criterion A or D. For eligibility under these criteria, a number of issues must be addressed, including the kind of data contained in the site, the relative importance of research topics suggested by the data, whether these data are unique or redundant, and the current state of knowledge relating to the research topic(s) (McManamon 1990:14-15; Little et al. 2000). A defensible argument must establish that a site "has important legitimate associations and/or information value based upon existing knowledge and interpretations that have been made, evaluated, and accepted" (McManamon 1990:15).

The criteria used to evaluate the significance of cultural resources are applied in relation to the historical contexts of the resources. A historical context is defined as follows:

At minimum, a historical context is a body of information about past events and historic processes organized by theme, place, and time. In a broader sense, an historic context is a unit of organized information about our prehistory and history according to the stages of development occurring at various times and places (NPS 1985).

Historical contexts provide an organizational format that groups information about related historical properties based on a theme, geographic limits, and chronological periods. A historical context may be developed for Native American, historic, and/or modern cultural resources. Each historical context is related to the developmental history of an area, region, or theme (e.g., agriculture, transportation, waterpower), and identifies the significant patterns that particular resource can embody.

Historical contexts are developed by:

- identifying the concept, time period, and geographic limits for the context;
- collecting and assessing existing information about these limits;
- identifying locational patterns and current conditions of the associated property types;
- synthesizing the information in a written narrative; and
- identifying information needs.

"Property types" are groupings of individual sites or properties based on common physical and associative characteristics. They serve to link the concepts presented in the historical contexts with properties illustrating those ideas (NPS 1983:44719).

A summary of an area's history can be developed by a set of historical contexts. This formulation of contexts is a logical first step in the design of any archaeological survey. It is also crucial to the evaluation of individual properties in the absence of a comprehensive survey of a region (NPS 1983:9). The result is an approach that structures information collection and analyses. This approach further ties work tasks to

the types and levels of information required to identify and evaluate potentially important cultural resources.

The following research contexts have been developed to organize the data relating to the archaeological resources identified within the study area:

- 1. Pre-contact Native American land use and settlement in the Saco River drainage, circa (ca.) 12,500 to 450 years before present (B.P.); and
- 2. Post-contact period land use and settlement patterns of Harts Location, New Hampshire, ca. A.D. 1650 to present.

Cultural contexts, along with expected property types and locational patterns, are discussed in detail in Chapter 4. The potential research value of the known and expected archaeological resources identified within the study area is evaluated in terms of these historic contexts. This evaluation, along with management recommendations, is presented in Chapter 6.

#### Archival Research

The development of a historic context and a predictive model of expected property types and densities within the study area began with archival research, consisting of an examination of primary and secondary documentary sources. These sources include written and cartographic documents relating both to past and present environmental conditions as well as documented/recorded sites in the general study area. The information contained in archival sources formed the basis of the predictive models developed for the study area, and were an integral part of the archaeological survey.

Specific sources reviewed as part of the archival research for the Willey House Site study area include:

## State Site Files, Artifact Collection Reports, and Town Reconnaissance Surveys

The state site files at NHDHR were reviewed for information about known historic and archaeological resources including National Register properties and historic districts in proximity to the study area. As a matter of protocol, NHDHR provides a 5-km (3-mile) radius of recorded sites around a specified study area. While this information was provided, PAL only reviewed the inventory file forms for the recorded pre- and post-contact period archaeological sites within 1 mile of the study area as they provide the most relevant context information for the Willey House Site study area.

## Cultural Resource Management Reports

The inventory of cultural resource management (CRM) reports for the town of Harts Location was also reviewed to determine whether any portions of the study area had been subject to prior archaeological investigations. These reports included *Archaeological Assessment of Hart's Location (BR-F-031-1(12) P-2661)* (Bolian 1977); *Site Evaluation Report, Harts Location (BR-F-03201(11) P-2323)* (Foster 1977); and *Historical Assessment of Hart's Location (BR-F-031-1(12) P-2661)* (Wallace 1977).

### Histories and Maps

Primary and secondary histories and historical maps and atlases were examined to assess changes in land use, to locate any documented structures, and to trace the development of transportation networks, an important variable in the location of post-contact period archaeological sites. Town, county, state, and regional histories were consulted to locate possible sites dating to this period within and close to the study

area (Appalachian Mountain Club [AMC] 1982, 2013; Brown 1958; Crawford 1846; Eastman 1999; Garvin 1988; Hancock 1965; NHDPR n.d.; New Hampshire Highways 1924; Peterson 2001; Roberts 1924; Robertson and English 1987; Spaulding 1862; Tolles 1998) and historical maps and atlases (Reid 1986; State of New Hampshire Forestry Department 1916, 1932).

#### **Environmental Studies**

Bedrock and surficial geological studies provided information about the region's physical structure and about geological resources near the study area. The United States Department of Agriculture (USDA) Soil Conservation Service soil survey for Carroll County (1977) supplied information about soil types and surficial deposits within the study area and the general categories of flora and fauna that these soil types support. In addition, studies of past environmental settings of New England were consulted (Fenneman 1938; Saco River Local Management Advisory Committee 1994; Sillas 1984; Van Diver 1987).

#### **Informant Interviews**

Local informants were consulted during the course of the survey. John Dickerman, the park manager at Crawford Notch State Park for over 30 years, was an invaluable source of historical and anecdotal information concerning the recent development of the park. Johanna Lyons, State Park Planning and Development Specialist, provided important documentary information about the standing structures and park utilities. A member of the Crawford Notch State Park staff provided a collection of historical photographs and postcards of the general Crawford Notch area that depict several different phases of the park's history and development.

## Walkover Survey

A walkover survey of the study area was conducted to document and assess present environmental conditions. Environmental information recorded on project maps during the walkover included the presence, types, and extent of fresh water; drainage characteristics; presence of bedrock outcrops and level terraces; and the angle of any slopes.

The current physical condition of the study area has been affected by flooding episodes, landslides, plowing, and/or previous construction and site preparation activities. Such disturbances can reduce the probability for the presence of cultural resources. Plowing is the most common type of disturbance in New England. It can move artifacts from their primary vertical and horizontal contexts, but it does not necessarily compromise the physical integrity of all cultural deposits. Construction, site preparation, and earth-moving activities are more likely to seriously impact or destroy archaeological deposits, while landslides and flooding can deeply bury some cultural materials and features while at the same time expose or erode others.

Another purpose of the walkover survey was to document surface indications of archaeological sites. While pre-contact sites in New England are most often found belowground, artifact scatters are sometimes exposed on the surface through cultural agents such as pedestrian and vehicular traffic, and natural processes such as erosion. Post-contact archaeological site types that might be visible include stone foundations, stone walls, and trash deposits. If the remains of a built resource such as a farmstead are present within a study area, it is likely that a cellar hole and associated landscape features such as stone walls, overgrown orchards and fields, and ornamental plantings may be visible on or above the ground's surface.

The information collected during the walkover was recorded on project maps and was used in the development of pre-contact and post-contact archaeological sensitivity maps for the Willey House Site study area.

# Archaeological Sensitivity Assessment

Information collected during the archival research and walkover survey was used to develop a predictive model of potential site types and their cultural and temporal affiliation. The development of predictive models for locating archaeological resources is an important aspect of CRM planning.

The predictive model considers various criteria to rank the potential for the study area to contain archaeological sites. The criteria are proximity of recorded and documented sites, local land use history, environmental data, and existing conditions, with the study area then "stratified" into zones of expected archaeological sensitivity based on the nature of those criteria. Table 2-1 provides a summary of the different factors used to develop the archaeological rankings.

Table 2-1. Archaeological Sensitivity Rankings Used for the Willey House Site Study Area.

	Presence of Sites		Proximity to Favorable Cultural/Environmental Characteristics		Degree of Disturbance		Sensitivity Ranking	
Known	Unknown	< 150 m	$\geq 150 \leq 500 \text{ m}$	> 500 m	None/Minimal	Moderate	Extensive	
		•			•			High
•		•				•		High
•		•					•	Low
•			•		•			High
•			•			•		High
•			•				•	Low
•				•	•			High
•				•		•		High
•				•			•	Low
	•	•			•			High
	•	•				•		Moderate
	•	•					•	Low
	•		•		•			Moderate
	•		•			•		Moderate
	•		•				•	Low
	•			•	•			Moderate
	•			•		•		Low
	•			•			•	Low

## **Pre-Contact Period Archaeological Sensitivity**

Archaeologists have documented 12,000 years of pre-contact Native American occupation of the glaciated Northeast, and oral traditions of some contemporary tribes tell of a 50,000-year cultural legacy. Before 7,000 years ago, Native groups ocused primarily on inland-based resources, hunting and collecting along the region's waterways. After 7,000 years ago, settlement became more concentrated within the region's major river drainages. By 3,000 years ago, concurrent with a focus on coastal and riverine settlement, large populations were living in nucleated settlements and developing complex social ties, with language, kinship, ideology, and trade linking peoples across the Northeast. The chronology of the pre-contact period is presented in detail in Chapter 4. Assessing the pre-contact archaeological sensitivity of any given study area depends on a consideration of past and present geographical, geological, and ecological characteristics, known site locations, and knowledge of distinctive temporal and cultural patterns.

## Contact Period Archaeological Sensitivity

The contact period in New England roughly dates from AD 1500 to AD 1650, and predates most of the permanent Euro-American settlements in the region. This period encompasses a time when Native and non-Native groups interacted with one another through trade, exploration of the coastal region, and sometimes conflict. While contact period sites are usually associated with Native American activity during this period, they can also include sites utilized by Native and non-Native groups such as trading posts. Native settlement patterns during the contact period are generally thought to follow Late Woodland traditions, but with an increased tendency toward the fortification of village settlements. Larger village settlements are frequently expected along coastal and riverine settings, often at confluences. Inland villages are known to occur near swamp systems, which were exploited both as resource areas and as places of refuge in the event of attack. Such sites would likely contain material remnants reflecting the dynamics of daily life, trade, and preparedness for defense. The earliest contact period sites are often located at or near coastal and estuarine margins that historically served as anchorage locations for newlyarrived European colonists.

## Post-Contact Period Archaeological Sensitivity

The extant landscape of a study area, in combination with available documentary and cartographic resources, is used to predict the types of post-contact period archaeological sites likely to be present, with the most relevant predictive attributes differing by site type. Domestic and agrarian sites (houses and farms) are characteristically located near water sources, arable lands, and transportation networks. Industrial sites (e.g., mills, tanneries, forges, and blacksmith shops) established before the late nineteenth century are typically located close to waterpower sources and transportation networks. Commercial, public, and institutional sites (e.g., stores, taverns, inns, schools, and churches) are usually situated near settlement concentrations with access to local and regional road systems (Ritchie et al. 1988).

Written and cartographic documents aid in determining post-contact period archaeological sensitivity. Historical maps are particularly useful for locating sites in a given area, determining a period of occupation, establishing the names of past owners, and providing indications of past use(s) of the property. Town histories often provide information, including previous functions, ownership, local socioeconomic conditions, and political evolution, which is used in the development of a historic context and to assess the relative significance of a post-contact period site.

The written historic record, however, tends to be biased toward the representation of Euro-American cultural practices and resources, particularly those of prominent individuals and families. Archival materials generally are less sensitive to the depiction of cultural resources and activities associated with socioeconomically or politically "marginalized" communities (MacGuire and Paynter 1991; Scott 1994). These communities may include, but are not limited to, Native Americans, African-Americans, and "middling" farming or working-class Euro-Americans.

Information about post-contact period land use within a study area can also be collected through written and oral histories passed through family members and descendant communities. These types of information sources can often fill in gaps in the documentary record and provide details that are not available through more conventional archival sources. While informants and other oral sources are subject to contradictory interpretations just like the documentary record, this type of information can also provide important data for the identification and interpretation of archaeological sites. The sole use of and reliance on the written and oral historical records during archival research, however, can lead to an underestimation of the full range of post-contact period sites in any given region. Therefore, walkover surveys and subsurface testing, in conjunction with the critical evaluation of available documentary and cartographic resources, are required to locate and identify underdocumented post-contact sites.

## Archaeological Sensitivity Ranking

The Willey House Site study area was ranked according to the potential for the presence of archaeological resources based on information collected during the archival research and walkover survey. Chapters 3 and 4 describe the results of the environmental and pre- and post-contact period cultural context development, and Chapter 5 details the results of the walkover survey and delineates areas of high, moderate, and low pre- and post-contact archaeological sensitivity based on those results.

## **CHAPTER THREE**

## ENVIRONMENTAL CONTEXT

The environmental context of an area, including its geology, topography, hydrology, and natural resources, plays a significant role in determining the nature of human activity that took place within it over time. This chapter presents an overview of the environmental setting of the Willey House Site study area, proceeding from macrolevel considerations, such as the effects of glacial activity on the regional landscape, to study area-specific conditions.

## Geology and Geomorphology

The Willey House Site study area is nearly centrally located within the boundaries of Crawford Notch State Park, part of the greater White Mountains National Forest. The rugged terrain of this region has

been extensively eroded by glaciations and is characterized by steep mountain ridges separated by deeply cut valleys (Saco River Local Management Advisory Committee 1994). The highest point in the region is Mount Washington, rising 6,288 feet above sea level (ft asl). Elevations in the general vicinity of the study area range from approximately 1,240 ftasl to 3,910 ftasl and 4,285 ftasl at the top of nearby Mount Webster and Mount Willey, respectively. Elevations within the Willey House Site study area range from approximately 1300–1400 ft asl.

The surficial geology of the region consists of silt, sand, and gravel of glacial origin (Figure 3-1). The glacial till is generally thick in the valleys, but thins out on the upper slopes to expose the underlying bedrock on the steep hills and mountain tops. The bedrock in the area consists of granite, gneiss. and schists. In the broader valleys many ponds and swamps have formed in glacial depressions (Sillas 1984).

The topography along the Saco River generally consists of a fertile, well-drained intervale ranging from 0.5–3 miles in width across both sides of the river. This intervale, or floodplain, has been produced by the slow accumulation of sand and silt after each period of flooding. Beyond the

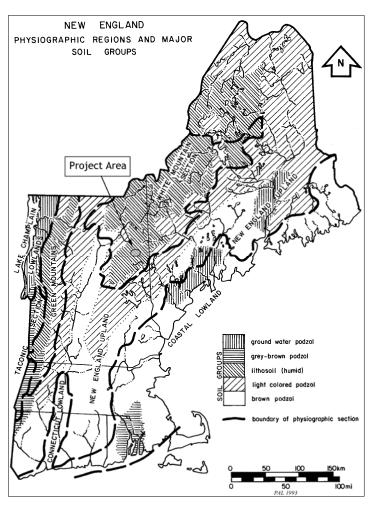


Figure 3-1. Map of the physiographic regions and major soil groups of New England showing the location of the Willey House Site study area (source: Fenneman 1938).

intervale, low and high terraces were formed by the postglacial downcutting of the Saco River through the floodplain deposits (Van Diver 1987). Beyond the limits of the terraces lie hilly uplands and the White Mountains themselves. These uplands often have steep slopes with stony surfaces and outcroppings of bedrock.

#### Soils

Soils within the Willey House Site study area are identified as primarily Marlow fine sandy loam, very stony with lesser amounts of Berkshire very stony fine sandy loam and Limerick silt loam (Figure 3-2). The Marlow series consists of well-drained soils that formed in deposits of loamy glacial till. These soils have a pan layer at a depth of 15 to 36 inches. They are located on smooth mountainsides, valley walls and foot slopes associated with the White Mountains and surface stones are common. The Berkshire series consists of well-drained soils that formed in deposits of loamy glacial till. These soils are on hillsides and mountainsides with stones common on the surface. The Limerick series consists of poorly drained soils that formed in alluvial deposits of silt and very fine sand. These soils are in wet depressions and oxbows on the flood plains (intervals) of major rivers. They have a long-duration high water table and generally flood every year (USDA 1977; USDA-NRCS 2013).

## Hydrology

The Willey House Site study area is located within the Saco River watershed of eastern New Hampshire, and covers a total area of approximately 1,071 square miles along on the Maine-New Hampshire border (Figure 3-3). The Saco River flows from its headwaters at Saco Lake in Bethlehem, New Hampshire, in the White Mountains and drops nearly 1500 feet in elevation as it flows for approximately 40 miles through Crawford Notch and the towns of Harts Location, Bartlett, and Conway before entering Maine and continuing another 80 miles to Ferry Beach where it enters the Atlantic Ocean. The watershed upstream from the New Hampshire-Maine border encompasses approximately 427 square miles, eighty percent of which is within the White Mountains National Forest. The entire western border of the watershed comprises mountain ranges including, from north to south, the Presidential Mountains, the Sandwich Range, and the Ossipee Mountains. The Green Hills are located along the Maine border. Ossipee, Silver and Conway lakes, the largest in the watershed, are located in the southeastern portion of the New Hampshire section of the watershed (New Hampshire Department of Environmental Services [NHDES] 2013; Saco River Local Management Advisory Committee 1994).

In Harts Location, the Saco River flows through Crawford Notch, a narrow, steep-sided valley with exposed rock cliffs. The upper portion of the Saco River is characterized by fast-moving water over rocks and boulders with frequent cascades. In Crawford Notch, near the mouth of Nancy Brook, the river has cut a narrow, steep-sided gorge into the bedrock forming a short turbulent waterfall. Many of the tributaries of the Saco River in Crawford Notch have waterfalls or cascades: the Flume Cascade and the Silver Cascade at the head of the Notch, Ripley Falls on Avalanche Brook, Arethusa Falls on Bemis Brook, and Nancy Cascades on Nancy Brook (Saco River Local Management Advisory Committee 1994).

With the exception of scattered residential housing, private lands in the river corridor are generally undeveloped and forested (NHDES 2013). The Saco River valley supports a diverse and rich plant and animal environment and would have supported pre-contact period Native American populations. Although no wetlands are located within the study area vicinity, it is located approximately 100 ft from the river and near where Bemis Brook enters the Saco River.



Figure 3-2. Soil units within the Willey House Site study area (source: USDA-NRCS 2013).

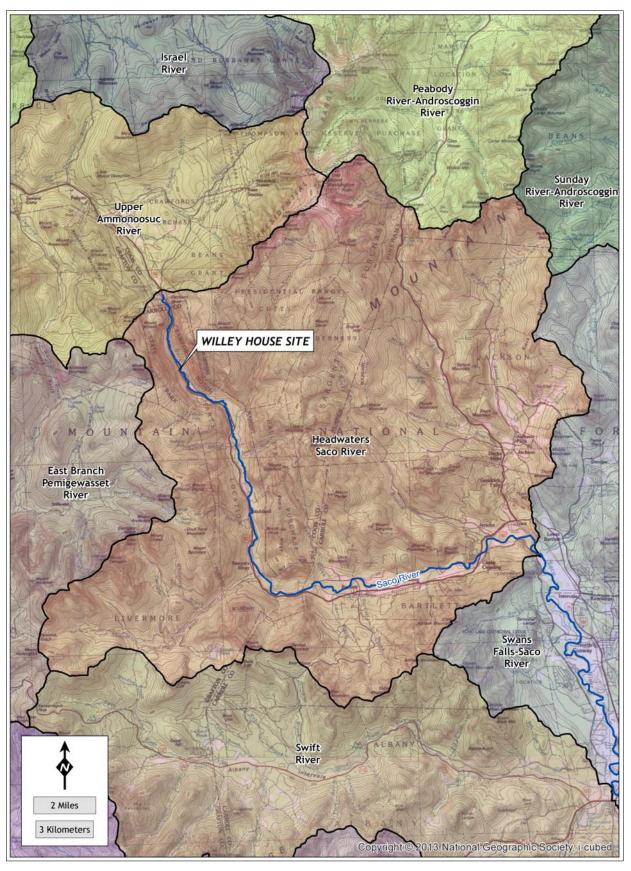


Figure 3-3. Map of the Saco River watershed showing the location of the Willey House Site study area.

## **Existing Conditions**

The Willey House Site is a recreation and visitor services facility operated by the State of New Hampshire Division of Parks and Recreation (Photograph 3-1). The site is a component of the larger 5,950-acre Crawford Notch State Park, a reservation that occupies the northern half of Crawford Notch in Hart's Location, New Hampshire. Several hiking trails begin at the site and connect with the larger trail network of the White Mountains and also with the Appalachian National Scenic Trail (Appalachian Trail), which crosses Crawford Notch approximately 1 mile south of the Willey House Site.

The Willey House Site study area is in a clearing on the valley floor near the approximate mid-point of the glacial trough. The location has almost unobstructed views of the Notch and woodlands in every direction. The Saco River flows along the floor of the valley on the east edge of the Willey House Site and is roughly paralleled by State Route 302 (Rt. 302, Crawford Notch Road), a modern two-lane asphalt roadway (Photograph 3-2).

All of the buildings, as well as a picnic area, are located on the west side of the road. At the north end of the study area are two employee residences, the Help Quarters and Manager's Cabin, accessed via a gravel cul-de-sac driveway that crosses a small brook on a low deck bridge (Photograph 3-3). A group of five buildings and the foundation remains of the Willey House are located at the center of the complex and serve as the focal point of the visitor experience. The Willey House Foundation is set in the southeast corner of the lawn (Photograph 3-4) and the Willey Boulders are set on the slope to the rear of the visitor complex (Photograph 3-5). South of the visitor buildings is a picnic area set on a grassy, rock-strewn, irregular slope and accessed via a gravel drive that runs north-south through the picnic sites (Photograph 3-6). The picnic tables are sited along the hillside on small terraces that are the former cabin locations. An asphalt parking lot is set between the picnic area and Rt. 302.

The portion of the Willey House Site study area on the east side of the road is dedicated to parking and recreational use. A large, asphalt-paved parking lot (improved in 2000) is set between the road and the river, which has been damned to create a pond. The Willey House Dam is approximately 220-ft long and is constructed of wood and concrete (Photograph 3-7). A pathway leads from the parking lot across the dam to a second picnic area in a cleared glade and trail network on the east side of the pond.



Photograph 3-1. General view of the study area, view west, Willey House Site, Crawford Notch State Park.



Photograph 3-2. General view of the Saco River from on top of the Willey House Dam, view southwest, Willey House Site, Crawford Notch State Park.



Photograph 3-3. Help Quarters and Manager's Cabin, view northwest, Willey House Site, Crawford Notch State Park.



Photograph 3-4. Willey House Foundation, view southwest, Willey House Site, Crawford Notch State Park.



Photograph 3-5. Willey Boulders, view west, Willey House Site, Crawford Notch State Park.



Photograph 3-6. General view of picnic area south of visitor complex, view northwest, Willey House Site, Crawford Notch State Park.



Photograph 3-7. Willey House Dam, view northeast, Willey House Site, Crawford Notch State Park.

### CHAPTER FOUR

### **CULTURAL CONTEXT**

Archaeological research studies, in combination with surveys performed in compliance with municipal, state and federal requirements, document nearly 12,000 years of human occupation in the northeastern United States. This chapter provides an overview of the pre- and post-contact period history of central New Hampshire generally, and the Crawford Notch area specifically. This review is by no means exhaustive, but provides a framework within which to predict and interpret archaeological resources in the area. The database for this context has been assembled as a result of professional CRM surveys and through a review of state site files at the NHDHR. Additional sources include synthetic pre-contact culture histories of the area and academic research reports, primary and secondary histories, maps, and atlases.

### **Pre-Contact Period**

This section summarizes the available information about regional pre-contact Native American land use. The discussion is subdivided into temporal periods that are considered by archeologists to mark changes in social organization, settlement patterns, technology, and/or subsistence practices (Table 4-1). Temporal assignments are based on radiocarbon dates derived from samples of organic materials that have been collected in association with Native American artifacts. Identified archeological sites in the study area vicinity are discussed within this framework to better understand Native American settlement of the area and to develop predictive statements about potential Native American cultural resources within the study area.

### PaleoIndian Period (9500-7000 B.C.)

The retreat of the Laurentide ice sheet into northern New England approximately 16,000 years ago set into motion a series of profound environmental changes that shaped the landscape for the earliest inhabitants of New Hampshire during the PaleoIndian Period. Glacial meltwaters formed end moraines that impounded massive lakes, including Lake Vermont in the present-day Champlain Valley and Lake Hitchcock in what is now the Connecticut River valley. Beginning roughly 14,500 years ago, erosion and/or isostatic rebound precipitated by the retreating ice mass breached many of the lake impoundments and resulted in the creation of deltaic plains as the draining lakes cut down through unconsolidated sediments to form elevated terraces above the newly formed river channels (Potter 1994). During this period, the vegetative profile of the region was sparse, comprising lichen, moss, and low-growing scrub growth. Exploitable animal communities included elk, caribou, and mastodon, and likely played a major role in the diet of these early populations.

Settlement strategies during the PaleoIndian Period are poorly understood, although research continues to provide new information. Because of the range of variability at identified sites, large base camps, small residential camps, and very small task-specific loci have been advanced as the primary settlement models. Vail and Bull Brook I in Ipswich, Massachusetts, covering several acres and yielding thousands of artifacts, serve as examples of the large base camp models, while the Reagan Site is a good illustration of a smaller residential camp. Data about task-specific sites is uncommon, but those that have been identified, including the Hidden Creek Site (72-163) in southern Connecticut suggests short-duration occupations by small groups of highly- mobile PaleoIndian population using few durable artifacts.

Table 4-1. Nat	tive American Cultu	ıral Chronology for	Table 4-1. Native American Cultural Chronology for Northern New England.
Period	$Y_{EARS}$	IDENTIFIED TEMPORAL. SUBDIVISIONS	CULTURAL ASPECTS
PaleoIndian	12,500–10,000 B.P. (10,500–8000 B.C.)	• Eastern Clovis	Exploitation of migratory game animals by highly mobile bands of hunter-gatherers with a specialized lithic technology.
Early Archaic	10,000—7500 B.P. (8000—5500 B.C.)	Bifurcate-Base Point Assemblages	Few sites are known, possibly because of problems with archaeological recognition. This period represents a transition from specialized hunting strategies to the beginnings of more generalized and adaptable hunting and gathering, due in part to changing environmental circumstances.
Middle Archaic	7500–5000 в.р. (5500–3000 в.с.)	Neville     Stark     Merrimack     Otter Creek     Vosburg	Regular harvesting of anadramous fish and various plant resources is combined with generalized hunting. Major sites are located at falls and rapids along river drainages. Ground-stone technology first utilized. There is a reliance on local lithic materials for a variety of bifacial and unifacial tools.
Late Archaic	5000–3000 в.р. (3000–1000 в.с.)	Brewerton     Squibnocket     Small Stemmed     Point Assemblage	Intensive hunting and gathering were the rule in diverse environments. Evidence for regularized shellfish exploitation is first seen during this period. Abundant sites suggest increasing populations, with specialized adaptations to particular resource zones. Notable differences between coastal and interior assemblages are seen.
Transitional	3600–2500 в.р. (1600–500 в.с.)	• Atlantic • Watertown • Orient • Coburn	Same economy as the earlier periods, but there may have been groups migrating into New England, or local groups developing technologies strikingly different from those previously used. Trade in soapstone became important. Evidence for complex mortuary rituals is frequently encountered.
Early Woodland	3000–1600 B.P. (1000 B.C.—A.D. 300)	• Meadowood • Lagoon	A scarcity of sites suggests population decline. Pottery was first made. Little is known of social organization or economy, although evidence for complex mortuary rituals is present. Influences from the midwestern Adena culture are seen in some areas.
Middle Woodland	1650–1000 в.р. (A.D. 300–950)	• Fox Creek • Jack's Reef	Economy focused on coastal resources. Horticulture may have appeared late in period. Hunting and gathering were still important. Population may have increased from the previous low in the Early Woodland. Extensive interaction between groups throughout the northeast is seen in the widespread distribution of exotic lithics and other materials.
Late Woodland	1000–450 B.P. (A.D. 950–1500)	• Levanna • Madison	Horticulture was established in some areas. Coastal areas seem to be preferred. Large groups sometimes lived in fortified villages, and may have been organized in complicated political alliances. Some groups may still have relied solely on hunting and gathering.
ProtoHistoric and Contact	450–300 в.р. (л.р. 1500–1650)	Algonquian groups     Abenaki groups	Abenaki subgroups such as the Mahican and Pocumtuck, and Algonquin subgroups such as the Wampanoag, Narragansett, and Nipmuck were settled in the area. Political, social, and economic organizations were relatively complex and underwent rapid change during European colonization.
<sup>1</sup> Termed Phases or Complexes <sup>2</sup> Before Present	Complexes		

The PaleoIndian Period in New Hampshire is represented by a number of diagnostic points recovered from locations throughout the state. Larger, more complex sites also have been identified and researched. The Whipple Site, a PaleoIndian occupation dating to roughly 10,500 B.P., occurred along a tributary of the Connecticut River in Swanzey, New Hampshire (Curran 1984). More recently, Richard Boisvert has published a series of articles on the Israel River Complex, a series of fairly large PaleoIndian sites located in Jefferson, New Hampshire on the Israel River tributary of the Connecticut. Jefferson I–III (27-CO-28, 29 and 30) yielded diagnostic fluted points and channel flakes as well as chipping debris associated with tool production. Analysis of the complex and artifact assemblages suggests an innovative and flexible approach to projectile point manufacture in the Gainey/Bull Brook style, an eclectic lithic profile of local and non-local sources suggesting wide-scale movement throughout northern New England during the PaleoIndian Period, and a settlement profile focused on major river terraces (Boisvert 1998, 1999, 2000).

Other major PaleoIndian sites in northern New England include the Reagan, Davis, Kings Road, West Athens Hill, and Dutchess Quarry sites. Recently, a small PaleoIndian site was discovered in Tamworth, New Hampshire (Ives et al. 2005). Boisvert (1999) has synthesized available PaleoIndian site data and find spots in New Hampshire, and has demonstrated a significant presence, with five sites in seven locations from the Saco River valley in the southern White Mountains, north to the Israel River Complex and Colebrook. The distribution of sites that have been identified in the region suggest that settlement was based around stream and wetland networks located within the remains of glacial lakes (Bunker 1994).

### Archaic Period (7000-900 B.C.)

The Archaic Period in New Hampshire spans roughly 6,000 years and is marked by a gradual movement into and "settling in" of the region (Goodby 2002). Archaeological evidence suggests that settlement and subsistence patterns during this period were dynamic and likely represent a response to the shifting climatic conditions in the wake of the final retreat of the Laurentide ice sheet. On balance, the Archaic is poorly understood in northern New England as the database remains rather limited and few solid radiocarbon dates exist for identified sites.

### Early Archaic Period (7000–5500 B.C.)

The Early Archaic Period in northern New England marked the end of the Wisconsin glaciation and a substantial temperature increase referred to as the Hypsithermal period. During this time, average temperatures actually were higher than current temperatures, and plant and animal communities reacted accordingly. Dry, warm summers and dry, cold winters encouraged the spread of pine-dominated forest but also precipitated the decline of the megafauna populations on which earlier human communities were dependent. In place of the megafauna, smaller prey such as deer and bear emerged as well as a broader range of riverine, estuarine, and plant life that could not survive under the previously frigid conditions.

The lithic technology of the Early Archaic reflects this shift from a primary reliance on big game hunting to a more diversified subsistence strategy. Corner-notched, stemmed, and bifurcate-based points serve as the diagnostic artifact class for the period, but in general biface dominated assemblages are rare. A non-bifacial tool kit including beaked unifacial edge tools, cores, and flakes has been proposed as an alternative diagnostic marker for the period (Robinson et al. 1992). This type of assemblage, subsumed within the Gulf of Maine Archaic tradition, also includes hammerstones, milling slabs, and notched pebble sinkers, indicating an increased utilization of plant and fish resources (Robinson 1992). Characteristic of both assemblage types is the predominance of expedient tools and the nearly exclusive use of local lithic sources, the latter of which suggests a more settled lifestyle.

Settlement strategies during this period remain somewhat speculative. By the end of the period, people were moving into the area using two overlapping settlement methods: "restricted wandering," defined as

seasonally based group movement within well-defined territorial limits, formed the basis for small residential groups foraging from one resource locus to another; and "central-based wandering communities," interpreted as a large band of individuals, perhaps as many as several hundred, spending an extended period of time in a single location to which they may or may not return at a later date (Ritchie 1969). It is unlikely that the two settlement models were mutually exclusive, but the terms do provide general typological tools with which to interpret sites dating to that period.

The relatively low density of sites dating to the Early Archaic, particularly when compared to subsequent periods, has fueled the notion of commensurately low population densities. The low productivity of the early Holocene has been cited as a contributing factor. Recent studies, however, indicate that major waterways throughout the state meandered dramatically between 10,000 and 7000 B.C., and did not stabilize into their present channels until ca. 7000 B.C. The sediment erosion and accumulation resulting from this meandering likely destroyed and/or deeply buried many cultural deposits, resulting in low archaeological visibility for sites dating to the Early Archaic. The identification of deeply buried Early Archaic sites on floodplains, including the Eddy Site at Amoskeag Falls on the Merrimack River and the Wadleigh Falls Site on the Lamprey River provide evidence of this phenomenon, and suggest that the perception of lower population densities may be more apparent than real (Bunker 1992; Maymon and Bolian 1992: Petersen and Putnam 1992).

Research to date indicates that by the end of the Early Archaic Period, groups were utilizing lake shores, and river terraces, especially those located at major fall lines (Bunker 1994). Two sites identified in the Saco River valley in the vicinity of North Conway (Pudding Pond East and West) may contain Early Archaic components.

### Middle Archaic Period (5500-4000 B.C.)

The Middle Archaic Period saw a shift from the dry conditions of the preceding period to a climate characterized by significant increases in precipitation, perhaps as much as 25 to 30 percent higher than current levels. Increased rainfall and snowmelt caused extensive flooding along major river systems. Vegetation patterns also shifted in response to the increased rainfall as the pine-dominated landscape gave way to a deciduous forest of oak, beech, sugar maple, elm, ash, and beech, with smaller numbers of hemlock and white pine. With the emergence of this "mast" forest, deer populations expanded and likely became a major subsistence focus. Bear, wolf, otter, and wild turkey also emerged in greater numbers, while comparatively smaller populations of moose, elk, and caribou populations persisted in spruce-fir northern hardwood forests.

The period is defined by three stemmed projectile points that have their origin along the Atlantic coastal plain including Neville, Neville Variant, and Stark. The Neville type site was identified by Dincauze in Manchester, New Hampshire and contained a substantial collection of these points, some with slightly bifurcate bases hinting at their Early Archaic lineage (Dincauze 1976). Despite its northern New England identification origin, subsequent finds tend to be concentrated in southern New England. Neville, Neville Variant, and Stark points often are found in association with steep-bitted scrapers, flake knives, perforators, adzes, axes, and choppers.

In New Hampshire there appears to be an increasing reliance on the use of volcanic material in the production of tools quarried from such sources as Ossipee Mountain and the Boston Basin, although quartz remained the raw material of choice (Bunker 1994). Heavy woodworking tools also are common and suggest the appearance of dugout canoes during this period, perhaps a response to the increased river travel concomitant with increased precipitation. Excavations of a sealed, dated mortuary feature at Annasnappet Pond in Carver, Massachusetts have conclusively linked the emergence of atlatl weights to

this period (Cross 1999; Doucette and Cross 1997). Like the Early Archaic, informal tools appear to dominate the many Middle Archaic assemblages.

Settlement and subsistence patterns among Middle Archaic people in New Hampshire are difficult to infer because of the extremely limited database. Middle Archaic components have been identified along large rivers as well as along river tributaries, on secondary perennial streams, and on high terraces away from main rivers (Bunker and Potter 1993; Potter 1993). The Robert Thorndike collection from Windham contained at least one Neville point as did the Harlan Marshall Collection from the shores of Lake Massabesic and along Cohas Brook (Potter and Bunker 1991). Archaeologically recovered Middle Archaic sites in New Hampshire include the Dickey Plains Site II in Manchester (Potter and Bunker 1991) and NH 31-20-5 in Belmont (Starbuck 1982).

This limited database suggests that Middle Archaic sites are oriented toward ponds, lakes, and rivers with an attendant emphasis on seasonal rounds. This subsistence strategy suggests the hypothetical presence of base camps and residential camps, although physical evidence of houses or shelters has yet to be identified in the Northeast. The Neville Ste in Manchester and the WMECO Site (19-FR-15) in the Riverside archaeological district in Gill, Massachusetts are both posited as base camps because of their locations on highly productive fisheries along major falls (Dincauze 1976; Thomas 1980).

Burial sites dating to the Middle Archaic are exceedingly rare in New Hampshire. If coastal burial practices are to serve as a guide, elaborate ceremonialism is characteristic of the period. L'Anse Amour, on the southern coast of Labrador, included a single individual buried face down with its head oriented toward the east and interred with a rich variety of ocher-stained grave goods. The Morrill Point burial complex in Maine and the Table Land burial site in Manchester, New Hampshire, both contained ocher-stained human remains, some of which had been cremated and all of which were interred with elaborate grave goods. To date, no deposits dating to the Middle Archaic Period have been identified in the general study area vicinity.

### Late Archaic Period (4000–900 B.C.)

Environmental conditions during the Late Archaic Period were marked by a climatic shift to drier and slightly warmer conditions with a significant decrease in precipitation. River and lake flooding became an uncommon event. During this period, oak, pine, and beech reached their full extent, while hemlock became much scarcer in response to the increasing dryness. Wetlands also became more abundant along river margins. Animal communities remained essentially the same as the preceding period, but it is likely that deer became even more plentiful with the full maturity of the mast forest, and that wetland/estuarine resources became an even greater subsistence resource.

Perhaps in response to an increasingly resource-rich natural environment, Late Archaic populations underwent a substantial growth spurt relative to previous periods. This growth spurt, in turn, spurred an elaboration of settlement and subsistence models as well as an unprecedented diversification in lithic technology. As a means to better categorize and interpret the many local expressions of Late Archaic culture, the period has been divided into three traditions. One unifying element of all three periods is the elaboration of burial ceremonialism. A site in Litchfield, for example, provided evidence of the ritual breakage or "killing" of Susquehanna points within the larger context of cremation burial (Bunker 1988). The use of steatite in the manufacture of cooking and storage vessels also serves as a diagnostic marker for the period as a whole.

The Laurentian tradition (3600–2400 B.C.) was first identified in New York on the basis of "Proto-Laurentian" lithic assemblages including broad side-notched points with ground bases. These points generally resemble Otter Creek and Brewerton side-notched points. These point types later were

recognized as diagnostic of the period along with Brewerton corner-notched and Vosburg projectile points. In addition to projectile points, ground slate blades, celts, gouges, plummets, and ulus also serve as distinctive diagnostic markers for the period.

The Narrow Point tradition (2400–1600 B.C.) is distinguished by the presence of relatively long and narrow bladed projectile points, with generally weak shoulders and straight, expanding and side- or corner-notched stems. These points tend to be made from locally available materials, often quartz, and are abundant in both southern and northern New England. Variants of the narrow point/narrow stemmed projectile point type include Lamoka, Bare Island, Wading River, Sylvan side-notched, Sylvan Stemmed, and Normanskill. However, none of the points have been securely associated with a single component site. Artifact assemblages dating to this period tend to be less diverse than during the Laurentian. Knives, drills, side and end scrapers, pestles, choppers, and hammerstones occur but in less eclectic groupings and there are significantly fewer ground-stone woodworking tools, suggesting a shift away from dugout canoes toward bark canoes. Settlement occurred in a wide variety of locations including elevated bluffs, rockshelters, inland streams and lakes, and the back-country, all of which suggest a continuation and intensification of broad-based resource exploitation. During this period new settlement patterns also begin to emerge, including a more intensive use of marginal uplands and the occupation of upland ridges.

The Susquehanna tradition (1800-800 B.C.) also is referred to as the "Broadspear" or "Transitional/Terminal" Archaic. Diagnostic projectile points include large, broad-bladed stemmed points (Atlantic, Snook Kill, Perkiomen, Genessee, and Susquehanna Broad) as well as smaller "fishtail" points with expanding stems (Orient Fishtail). Flat-bottomed, lug-handled soapstone vessels also appear during this period, often in association with Susquehanna Broad and Orient points. Evidence suggests that some of the earliest fired ceramics may date to this time as well. Known as Vinette 1, these earliest pots were coil built with conoidal bases and finished with cord-wrapped paddles. Atlatl weights, end and side scrapers, expanded-base drills, retouched flake knives, pestles, notched sinkers, whetstones, and hammeranvil stones round out the Susquehanna assemblage. Settlement patterns appear to have shifted at approximately 3000 B.P. in response to a shift to a cooler, wetter climate, a decline of the mast forest, and the virtual abandonment of upland areas by roughly 800 B.C. Susquehanna tradition sites are comparatively rare in northern New England and tend to be identified in plow zone or multicomponent contexts. The Sumner's Falls Site in Hartland contained Orient Fishtail points and a steatite cooking pot, while surface collection in the Skitchewaug area in Springfield resulted in the recovery of soapstone vessel fragments. "Killed" Susquehanna bifaces also have been identified at a site in Litchfield, New Hampshire along the Merrimack River (Bunker 1988).

Late Archaic Period sites have been identified in all ecozones in New Hampshire, including substantial deposits at the Smyth, Neville and Eddy sites at Amoskeag Falls. No Late Archaic sites have been identified within the general study area vicinity.

### Woodland Period (900 B.C.-A.D. 1600)

The Woodland Period in New England is marked, in its earliest phases, by a remarkable degree of continuity with the previous Archaic traditions. By the end of the period, a series of dramatic developments, including the development of horticulture and the earliest contacts with European populations, profoundly changed Native American lifeways.

### Early Woodland Period (900–100 B.C.)

Climatic conditions during the Early Woodland Period remained essentially the same as those that marked the Late Archaic Period after 1000 B.C. Group sizes are assumed to have been relatively small, perhaps between 30 and 50 people that in some cases splintered into even smaller residential camps of 5 to 15

individuals. Diagnostic cultural material for the Early Woodland includes stemmed and side-notched Adena and Meadowood projectile points. Both point types are relatively rare and tend to occur in small numbers within Early Woodland assemblages. Lagoon points also are indicative of the period but are far more common in southern New England. Lithic assemblages for this period comprise a high percentage of "exotic" lithic materials, including Munsungen cherts from northern Maine, and speak to an expansion and elaboration of long-distance trade networks. The evolving trade network that resulted in the predominance of non-local lithic materials in many Early Woodland assemblages might also explain the increasingly elaborate and exotic mortuary complex that developed during the period. Low-fired Vinette I pottery, which seems to make its first appearance during the Late Archaic, also becomes much more visible in the archaeological record during this time. Ceramic sherds recovered from the Eddy Site at Amoskeag Falls and the Beaver Meadow Brook at Sewall's Falls in Concord represent some of the earliest pottery in New Hampshire and appear to straddle the Late Archaic and Early Woodland periods (Bunker 1986; Howe 1988). A radiocarbon-dated pottery sherd from a site in the Pennichuck drainage also supports this early date range (Carini 1994).

### Middle Woodland Period (100 B.C.-A.D. 1050)

Beginning about 150 B.C., the climate appears to have stabilized as the previously damp and cold environment gave way to generally drier and warmer conditions. If the number of identified sites is any guide, it appears that population densities increased during the Middle Woodland Period but aggregated almost exclusively in the Champlain and Connecticut River valleys. This population expansion may have overtaxed the subsistence resources of the changing environment and led to a more diffuse hunting and gathering strategy that saw a return to a more intensive exploitation of the uplands. Pottery style and decoration became far more deliberate and stylized than is evident in the preceding period. The elaboration of pottery design may take its cue from the population expansion hypothesized for the period, in which a diversity of groups may have felt a cultural imperative to distinguish themselves from one another through decorative motifs. Technologically, Jack's Reef Corner Notched projectile points function as the most diagnostic artifact for this phase, although Jack's Reef pentagonal points also are common. Raw material types derive from both local and non-local sources. Pottery also takes on an increasingly diverse stylistic profile, including grit-tempered, coil built vessels with a stamped, incised, and dentate decoration of varying quality (Petersen 1977, 1980, 1992; Petersen and Power 1985; Petersen and Toney 2000). To date, no Woodland Period sites have been identified in the vicinity of the study area.

### Late Woodland Period (A.D.1050–1600)

The Late Woodland Period encompasses a period of continuity and innovation, one in which lithic technologies underwent very little change, while at the same time the development of horticulture dramatically altered the social and cultural landscape for Native American communities. During this period, archaeological and ethnohistoric literature begins to make reference to distinct Native American communities, for example the Penacook and Abenaki. This distinction is not arbitrary but appears to reflect increasing levels of self-identification among these populations as reflected in distinctive ceramic styles and restricted trade networks relative to earlier periods (Haviland and Power 1994).

The adoption of horticulture was undoubtedly the most significant cultural adaptation during the Late Woodland, and precipitated dramatic changes in nearly every other aspect of Native American life during that time. Settlement patterns became markedly more sedentary from A.D. 1100–1450, and residential groups became larger. Villages comprising small hamlets adjacent to cultivated fields began to emerge during this period and appear to have been occupied during the growing season. This intensive occupation of horticultural camps, however, did not preclude the continuance of seasonal camps.

Levanna projectile points remain the "diagnostic" projectile point marker for the Late Woodland and are commonly manufactured from locally available stone. Assemblages tend to be rather restricted and often contain a narrow range of preforms, scrapers, drills, and expedient flake tools. It is possible that rather than using a restricted range of artifact classes, Late Woodland people are instead using a broader range of materials (bone, antler, and wood) with which to fashion an equally broad range of tools. These types of organic materials do not survive well archaeologically and, as such, would produce an assemblage skewed toward lithic materials that may or may not be representative of the assemblage overall.

Although perishable materials dating to pre-contact sites are rarely found in New Hampshire, dugout canoes from the Late Woodland have been reported. The extensive distribution of dugouts, combined with radiocarbon data from the recovered specimens, indicate that they were frequently used in ponds and marshes well into the Late Woodland Period. Between four and six dugout canoes of unknown age have been retrieved from New Hampshire lakes (Potter and Switzer 1989).

Mortuary ceremonialism is markedly less elaborate than in previous periods. Individuals tended to be interred on their sides in a flexed position with few or no grave goods, although some bodies have been reported in a sitting position in the Connecticut River valley. To date, no Woodland Period sites have been identified in the vicinity of the study area.

### Contact Period and Exploration Period

The traditional cultural systems of Native Americans were rapidly transformed during the contact period. Contact with European populations slowly but completely disrupted Native American lifeways including their social, economic, and political culture. The lifeways of the Native populations during this period are believed to have been similar to those of the Late Woodland Period. There were a number of large permanent base camps and villages, some fortified, as well as smaller satellite hunting and fishing camps. Large groups may have gathered together at certain times of the year for resource exploitation as well as for social and ceremonial functions.

The 1524 voyage of Giovanni Verrazano is the first documented European exploration of the area that now comprises New Hampshire, and initiated the Contact and Exploration Period (1500-1679). The Abenaki were the dominant population group of northern New England at the time of European contact. Divided into three primary subgroups, the eastern Abenaki were concentrated in Maine east of New Hampshire's White Mountains, the western Abenaki lived west of the mountains across Vermont and New Hampshire to the eastern shores of Lake Champlain, and the maritime Abenaki occupied the St. Croix and the St. John's River valleys near the border between Maine and New Brunswick. The southern boundaries of the Abenaki homeland were near the present northern border of Massachusetts, excluding the Pennacook country along the Merrimack River of southern New Hampshire. Valuable allies to the French in their struggle against the English for dominion in northern New England, the Abenaki waged battles against the Mohawk for control of the lucrative fur trade up and down the Connecticut and St. Lawrence rivers (Haviland and Power 1994).

While the day-to-day lives of pre-contact Abenaki tribes remain somewhat speculative, it is most likely that they were very similar to those posited for the Late Woodland Period. At the time of Verrazano's arrival, the Abenaki were highly dependent on horticulture and many large villages were located along fertile floodplains of major rivers, including the Connecticut, Merrimack, and Nashua rivers. Despite the primacy of horticulture, seasonal rounds of hunting, fishing, and gathering remained an important part of the Abenaki subsistence economy.

The Abenaki social structure consisted of small bands of extended families. Villages ordinarily were fairly small, averaging about 100 people, although much larger villages did arise among the western groups. Before contact, political power was largely decentralized, with individual tribes functioning as the primary locus of political organization. A more centralized form of tribal government, the Abenaki Confederacy, arose in 1670 as the product of post-contact stressors, most critical of which was continuous warfare with the neighboring Iroquois and English colonists.

Disease, warfare, and complex political maneuvering combined to decimate the Abenaki population within a very short period after initial European contact. Epidemics such as typhus, smallpox, and influenza precipitated a mortality rate as high as 75 percent among the eastern Abenaki in the sixteenth century, with subsequent epidemics occurring every several years between 1631 and 1758. By the close of the American Revolution, there were less than 1,000 surviving Abenaki within their former territorial boundaries. The devastating loss of life resulted in the amalgamation of previously distinct Abenaki groups in an attempt to maintain a viable, self-sustaining population.

One of the major documented shifts in settlement practices during the seventeenth century was the establishment of French Jesuit missions along the Connecticut River, near Lake Champlain, and along the St. Lawrence and Hudson rivers. The establishment of these "permanent" Catholic settlements did not preclude the continuance of seasonal rounds among the Native groups that populated them, nor did they guarantee Catholic conversion. They did, however, provide shelter from hostile European and Native groups, food and farming opportunities, and a central meeting place for Abenaki families displaced by war and disease (Calloway 1990).

The Hormel Site (27-CA-15) located near Lake Ossipee contained a significant Contact Period component, including a European gunflint, a clay pipe bowl, triangular metal and copper projectile points and a pit feature that contained a high density of butchered mammal bone. The site has been interpreted as a probable seventeenth-century trading post (Boisvert et al. 1994). Native habitation in the Saco River valley may have centered on a large village site in present-day Glen, New Hampshire. In 1672, a village containing as many as 200 wigwam structures was reported in the present Conway area (Harp 1977). The Native group living in the general area of Conway and Fryeburg were known as the Pequawket Indians and likely took advantage of the resources located along the Saco River, a name adapted from the indigenous word "Skog-kooe" or "snake-shaped stream running midst pine trees" (Merrill 1971:817).

### **Post-Contact Period**

This section focuses on the settlement in the White Mountains, Crawford Notch and Harts Location by Europeans and on the subsequent development of the area. The synopsis of development in Harts Location and the surrounding vicinity provides a context in which to assess the archaeological sensitivity of the study area. The post-contact period for New Hampshire is divided into distinct temporal subdivisions as summarized in Table 4-2.

### Settlement of the White Mountains and Crawford Notch

European exploration of the White Mountains region of New Hampshire began with Darby Field, who climbed Mount Washington, the highest peak in the range, in 1642. Despite his early exploration of the region, no major influx of settlers followed as the area was too remote to be attractive for English settlement (Appalachian Mountain Club [AMC] 1982).

The name "White Hills" first appeared on John Foster's 1677 map of New England. The name may have been derived from the fact that the highest summits are covered with snow much of the year or that when viewed from a great distance the mountains appear grayish to whitish in color. The French and Indian War (1754–1763) further inhibited settlement in the region. War parties from New France (present day

Period/Years	Period/Years Cultural Aspects
Exploration & Exploration Exploitation 1500–1679	Initial European exploration and contact with Algonquian-speaking Native American population. Increasing interaction introduced European diseases (e.g., Indian fever of 1616–1618) and material culture, altered Native American culture and society, and lead to encroachment on tribal lands. Exploitation of natural resources, especially fish and timber, encouraged settlement, initially along coast and coastal rivers. In 1622 the Council for New England granted all the lands between the Merimack and Kennebec rivers to Sir Ferdinando Gorges and Captain John Mason, called the "Masonian Grant." Seven years later Gorges and Mason divide the grant, resulting in the separation of New Hampshire and Maine. By 1634 pine masts being ship ed in large numbers to British ports. First sawmill erected in Exeter in 1634. Waterways and Native American trails provide major transportation routes. A small frontier trading post was established on the Merrimack River near present Concord in 1659. Crown first declared New Hampshire to be a royal colony in 1679.  Majolica, early tin-glaze earthenware, Rhennish and Bellarmine stonewares predominate ceramic assemblage. Pipestems with mean bore diameter of 7–9/64ths
<b>Colonial</b> 1679–1775	inch. Handwrought nails only. Freeblown glass bottles, pontil scar, no mold mark.  Hannah Dustin, a Haverhill, MA woman who was captured by Indians, escaped from her captors near "Penny Cook" in 1697. In 1725 the "Plantation of Penacook" was granted. Agriculture, fishing, and raw material collection, especially forestry, remain principal economic activities in peripheral areas. Industrial and commercial pursuits (e.g., distilling, shipbuilding, crafts, trade, etc.) focused in urban and coastal areas. Portsmouth developed as emerging regional core, served as political, social, and economic focus of New Hampshire. In 1740/1741 conflict between New Hampshire and Massachusetts was settled and the south boundary of New Hampshire established. The French and Indian War (1754–1763) threat curtailed European settlement on the northern frontier; expansion followed once the threat was removed. Population increased from 14,108 in 1732 to 83,575 in 1775/1776. Depletion of white pines used for masts in the vicinity of Portsmouth during mid-eighteenth century, in part because of massive forest fire in 1761, resulted in center of mast collection activity moving up the coast into Maine. Sixty percent of the 240 modern townships in state were settled by 1765. Dartmouth College established in 1769 by Eleazar Wheelock.
	Imported tin-glaze earthenware, white salt-glaze, English brown, Westerwald and scratch-blue stonewares. Imported and domestic redwares. Mean pipestem bore diameter of 4-6/64 inch. Handwrought nails only. Freeblown and molded glass bottles.
<b>Federal</b> 1775–1830	Revolutionary War (1775–1783) had limited effect on New Hampshire, the only colony not invaded by British forces. New Hampshire adopted first state constitution in January 1776. Capital moved inland to Exeter initially, then to Concord in 1782. Privateers and naval contracts brought money to coastal merchants and artisans. Political and social stress, including high taxes, was major impact on populace. Maritime commerce increased following Peace of Paris (1783) ending Revolutionary War. Capital moved permanently to Concord in 1808, with construction of statehouse in 1816–1819. Agriculture remains basis of rural economy. Shift toward industrial-based economy began with improvements of waterpower technology and development of new mill privileges. First cotton mill introduced in New Ipswich in 1804 by a workman from the Rhode Island mills of Samuel Slater. By 1823 industrial activities included: 28 cotton and 18 woolen factories, 256 fulling mills, 22 distilleries, 20 oil mills, 304 tanneries, 54 trip hammers, and 12 paper mills. Villages developed around rural mills to house workers. Between 1790 and 1820 state legislature incorporated 59 bridge companies and 53 turnpike ventures, leading to massive improvements of transportation network. Middlesex Canal completed in 1814 linked Boston and Concord, NH, via Lowell through Merrimack Valley. In 1827 Lewis Downing (wheelwright) and J. Stephen Abbot (journeyman coach builder) completed first of some 3,000 Concord Coaches built over next century.
	Creamware and pearlware predominate ceramic assemblage. Hand-painted and transfer print decorated. Small bore diameter (4/64 in.) pipestems. Both handwrought and machine-cut nails. Post 1810, three-piece molded bottles introduced. First tin cans (post 1819).
	(continued on next page)

# Table 4-2. Post-Contact Cultural Chronology for New Hampshire (cont.).

, M.	
PERIOD/YEARS	CULTURAL ASPECTS
Early Industrial	Early Industrial First railroad in state linked Manchester with Lowell, MA in 1836 (arrived in Concord in 1842) and marked beginning of revolution in transportation network.
1830-1870	Increasing industrialization focused around waterpower sites (e.g., Amoskeag Mills built in 1838). Decline in agriculture linked to emigration of farmers to
	newly opened western territories and to factory and mill jobs, and because of decline in market caused by arrival of western produce via railroads. Concord was
	incorporated as a city in 1849. Civil War (1861–1865) generated major expansion of manufactures, including textiles, metal working, machinery, and shoe and
	boot industry. Decline in cotton supply because of war embargoes caused many mills to close or convert to manufacture of woolen goods or worsteds. Large-scale

1858. Lettered panel bottles introduced in 1867. Pressed or sandwich-type glass (post 1827). Condensed milk can patented 1856. Vulcanization process patented by predominate. Two-piece mold bottles replace three-piece mold bottles (post 1840). Snap-case bottle bottom finish, no pontil scar (post 1857). Mason jar patented Pearlware, hard white earthenware, yellow ware, and domestic stoneware most common. Transfer print design technique predominates. Machine-cut nails Goodyear (1839) resulted in increased production of rubber products.

immigration (especially French Canadian, Irish, and northern Europeans) generally to work in mills. State population increased slowly from 269,328 in 1830 to

318,300 in 1870.

## Technological developments resulted in major changes (e.g., steam power, electrification, gas lighting, etc.). Arrival of large numbers of immigrants, especially challenge company's power. Beginnings of summer and winter resort development primarily associated with lakes and mountains. White Mountain National French Canadians. By 1890 some 45.5 percent of Manchester's population was foreign born. Expansion and development of large-scale industrial concerns (e.g., Amoskeag and shoe industry). Growth of Boston and Maine Railroad as monopoly in state government from 1895 to 1906, when reformers begin to Forest established by Weeks Act in 1911. Population of New Hampshire reached 430,572 in 1910. Late Industrial 1870-1915

bottling machine (post 1881); replaced by fully automatic machine-made bottles (post 1903). Hutchinson stopper (post 1872/9); canning jar closure (post 1875); Hard white earthenware predominates ceramic assemblage with yellow ware and domestic stoneware. Machine-made bottles most common. Semi-automatic crown bottle cap (post 1892). Double-seamed tin can introduced in 1904.

### Hampshire presidential primary acclaimed as first in nation. Introduction of automobile and major improvements in automobile transportation network spurred southeastern portion of state with many commuting to Boston area and to development of high tech industries in New Hampshire. Construction of Seabrook during Great Depression (1930s). Decline temporarily reversed by World War II boom in industrial production, then continued following war. In 1952 New by Federal Highway Act of 1956 (e.g., Interstates 89, 93, and 95). Agriculture remains important in rural economy with market gardens shipping produce to urban areas. State began large-scale advertising campaign to promote New Hampshire, resulting in increased tourism. State population more than doubled Heavy early spring rain on deep snow resulted in damaging flood in March 1936. Decline of mill industry following labor strikes (e.g., Amoskeag in 1922), between 1920 and 1980, rising from 443,003 to 920,610. Rapidly increasing population through 1970s and 1980s due in large part to suburbanization of Nuclear Power Plant begun in 1975 amid anti-nuclear controversy. 1915-present Modern

Source: Hefferman and Stecker 1986; Hurd 1892; Morison 1976; Turner 1986

Canada) travelled south through the notches to raid British territory in southern Maine, New Hampshire and northern Massachusetts. The British victory over the French and their Native American allies opened the region to pioneers (AMC 1982).

To develop the northern region of New Hampshire it was necessary to seek passages through the White Mountains. Before 1760, Crawford Notch was utilized by Native Americans but was not recognized by Europeans as a possible route through the mountains. In 1771, Timothy Nash "discovered" the Notch by chance. He informed Governor John Wentworth, who granted Nash and his friend, Benjamin Sawyer, a tract of land that included the Notch on the condition they bring a horse through it. They accomplished this feat which marked the beginning of settlement of the area (AMC 1982).

Several towns, including Fryeburg (1762) and Conway (1765), were chartered and settled after 1760 and by the end of the century the region had many small settlements and farms. The principal economic engine in the region was farming with most families providing for the majority of their own needs. But agriculture in the area was at best marginal, and many farmers abandoned their holdings within a few decades (AMC 1982).

Eleazar Rosebrook and his son-in-law, Abel Crawford, were early pioneers who helped open up the region in the early nineteenth century. In 1803, Rosebrook built a large two-story building at Fabyan, possibly the first house in the White Mountains built for the accommodation of travelers. At about the same time, Abel Crawford constructed the Mount Crawford House in present-day Bemis (AMC 1982).

Construction of the Tenth New Hampshire Turnpike also began in 1803. As the activities of Rosebrook and Crawford indicate, it greatly increased travel through the Notch. The turnpike provided greater accessibility to the region and marked the end of the "pioneer and frontier" era in the White Mountains. The completion of the turnpike and the establishment of travelers' accommodations encouraged early tourism to the region beginning in the 1830s, with an increasing number of people travelling north to view the mountains for their beauty and grandeur. The turnpike also provided the means to transport freight and goods between northern New Hampshire, Vermont, and coastal Maine. Wagons carrying goods between the upper Connecticut Valley and Portland travelled through the notch in all seasons of the year (AMC 1982).

Eleazar Rosebrook died in 1817 and left his property to his grandson Ethan Allen Crawford. Ethan Allen and Abel Crawford opened the first path to the summit of Mount Washington in 1819, beginning at the site of the Crawford House. The Crawfords advertised the existence of their new trail and their guide services to the summit. The effort proved successful although the experience at the summit could vary considerably. The services and facilities provided by the Crawfords were among the first developed solely for the benefit of tourists (AMC 1982).

During the 1830s and 1840s more and more summer visitors traveled to the White Mountains. Notable visitors included Daniel Webster, Nathaniel Hawthorne, Thomas Cole, and Ralph Waldo Emerson. Hawthorne viewed the site of the Willey disaster (see below) on one of his trips and used the incident as the basis of his story "The Ambitious Guest." Thomas Cole painted his famous works of the region during this period and was just one of several artists viewed the Whites as an iconic representation of the American landscape (AMC 1982).

The 1850s saw the introduction of railroad into the region. Atlantic and St. Lawrence Railroad reached Gorham in the summer of 1851 and transformed the White Mountain region from one that was accessible only with difficulty by stagecoach to one within convenient reach of major urban centers throughout the Northeast. A number of hotels were constructed to take advantage of the new influx of tourists the railroads brought. The 1850s commenced the era of the grand hotels with the construction of the first

Crawford House (1852), the Summit House (1852), the Tip Top House (1853), and the Carriage Road to the summit of Mt. Washington in 1855. (AMC 1982).

The last four decades of the nineteenth century were described as the "era of elegance and grandeur." The White Mountains were now a major tourist attraction for the middle and upper classes and all the latest amenities in travel and accommodations were provided (Figure 4-1). Competition was stiff between hotels and railroads to capture business. Visitors generally went to one hotel for their vacation and as a result the hotels strove to serve as "complete resorts" providing a full spectrum of activities and amenities for their guests including golf courses and tennis courts. The amount of business brought into New Hampshire by summer tourists was striking, and by 1896 it was estimated that the state's economy received over \$5,000,000 annually from summer tourism alone (AMC 1982).

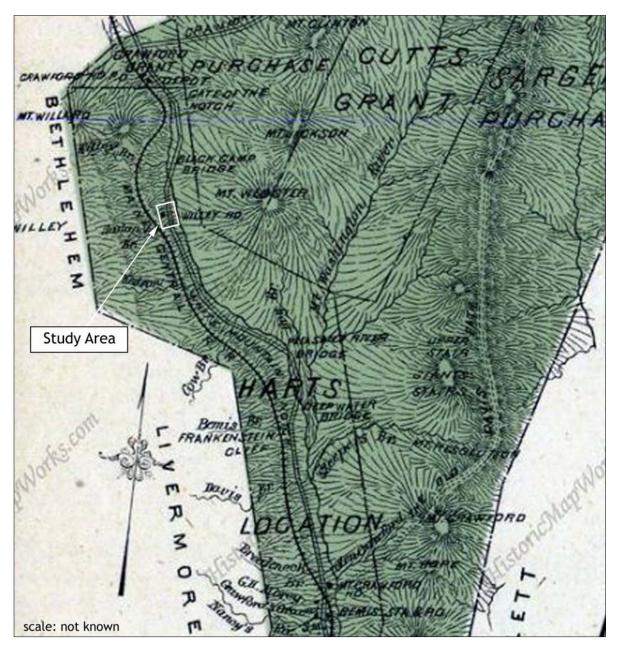


Figure 4-1. 1892 Map of Harts Location showing the location of the Willey House Site study area.

The same technological developments that served to open up the region to tourism also threatened the environmental setting that attracted visitors. Advances in the forestry industry allowed for faster cutting in areas that had been previously inaccessible. Large sawmills appeared in the White Mountains after the 1850s, and the application of steam power to the sawing and milling of lumber greatly accelerated the rate at which logs could be used. This, combined with the introduction in the 1870s of railroads exclusively used for logging, allowed for the systematic cutting of larger and larger tracts of forest. There were 17 logging railroads operating in the White Mountains between 1870 and the 1940s, and lumbering became a major economic force in the region (AMC 1982).

In 1881 state officials noted that "the continued depletion of the forests had reached a point where reproduction was necessary to sustain the industries dependent upon wood and to conserve water supply and scenery." These themes of scenery, sustainable forestry, and water conservation would become rallying points for those seeking to check large-scale timbering. In 1901, a group of men formed the Society for the Protection of New Hampshire Forests. From 1901–1911, the Society, joined by organizations like the Appalachian Mountain Club, led the effort to create a National Forest Reservation. After a massive lobbying effort throughout the nation, the Weeks Act passed in 1911 and under this legislation the federal government began the purchase of land in the Appalachian states. These purchases formed the nucleus of the new National Forests. By mid 1914, 138,572 acres had been purchased and in September of that same year, Mount Washington and its environs were added. Presently, the White Mountain National Forest includes over 700,000 acres within its border. The federal government was not alone in helping to preserve the White Mountains region. In 1913, the State of New Hampshire purchased a 6,000 acre tract in Crawford Notch as "a forest reserve," an area that would later become Crawford Notch State Park (AMC 1982).

The advent of the automobile began a prolonged and steady decline in rail passenger traffic in the White Mountains (Figure 4-2). The end of the "railway age" brought difficult times to many hotels in the region. Larger hotels had to cope with the changing trend of shorter vacations and the loss of wealthy visitors that used to come for extended stays who now could own their own summer residences easily accessible by car. Many of the grand hotels closed or burned between the 1920s and 1940s (AMC 1982). The Mount Washington Hotel, which opened in 1902, is one of the last surviving grand hotels in the White Mountains. It was declared a National Historic Landmark in 1986.

### Willey House Site History

The Willey House was the first residence in Crawford Notch proper and, according to early histories of the area, was built in 1793 by a man named Mr. Davis (Spaulding 1862). The site seems to have been chosen as a third inn location for travelers passing through the Notch, as it lay at the approximate midpoint of the 12 miles that separated the two inns operated by the Crawford family. Davis stayed for only a few years. The house was subsequently occupied by Henry Hill (Anon. 1952; Purchase 1999; Tolles 1998).

By about 1823, Ethan Allen Crawford had acquired the house. In 1825, he sold it to Samuel Willey, Jr. (1788–1826). Willey and his wife, Polly Lovejoy, their five children, and two hired men moved into Crawford Notch in the fall of 1825. Willey was a native of Bartlett, New Hampshire and owned 110 acres of cropland, pasture, and woodlot along the Saco River in North Conway (then Lower Bartlett). The family's chief motivation in moving seems to have been the business prospects offered by running an inn in the Notch, and they enlarged and improved the house for this purpose. By that time, there was a steady stream of travelers through the Notch for routine trade and business between Coos County and the southern tiers of New Hampshire and Maine. There were early tourists as well, although these seem to have been the smaller component of the highway-goers. Period accounts of the valley relate that the house was in a small grassy meadow along the Saco River and that it was surrounded by a forest of maple trees.

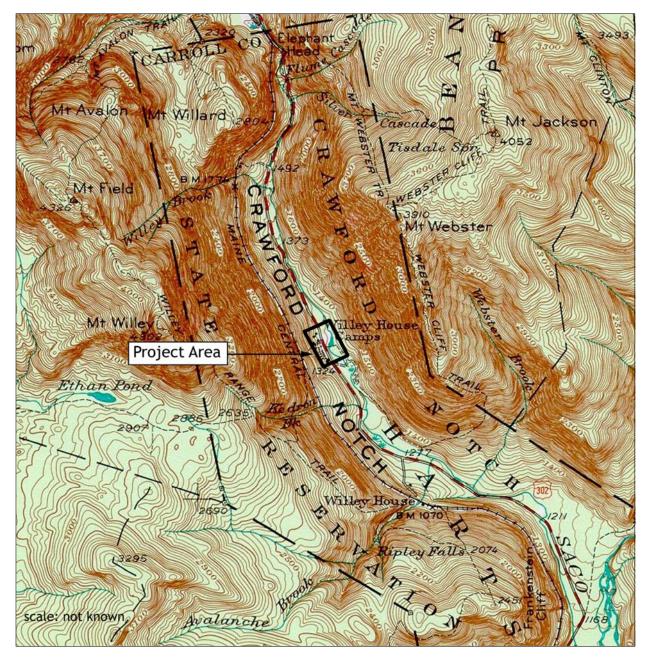


Figure 4-2. 1946 Crawford Notch USGS topographic quadrangle showing the location of the Willey House Site study area.

Historical photographs and drawings show that the house was set on the west side of the Notch Road, facing south. The one-and-one-half story, timber-frame, Cape Cod cottage had an ell extending off the north side of the main block and was sided in clapboards (Anon. 1952; NHDPR n.d.; Garvin 1998; Purchase 1999; Stanhope 1982; Tolles 1998).

The Willey family resided in the Notch for about a year until they were killed in a tragic event that immortalized their name in the lore of the White Mountains and Crawford Notch. Following a period of sustained drought in the summer of 1826, a heavy rainfall triggered a massive landslide from the west side of the Notch (present-day Mount Willey). The Willeys, apparently fearing the house was unsafe, fled to either seek shelter in a refuge they had previously constructed or to escape rising flood waters. Before

they could reach safety, the avalanche killed the entire family and the two hired men. By a twist of fate, the avalanche debris was diverted around the house by a ledge outcrop (now known as the Willey Boulders), uphill of the building and it survived relatively untouched. When friends and would-be rescuers arrived at the house after the disaster, they were confronted scenes of devastation throughout the floor of the Notch, which was dramatically altered by the effects of the slide. Large debris fields of trees, rock, and mud had slid past the house, nearly to the Saco River. There was no sign of the family, although their personal effects remained. All of the bodies except for three of the children (2 sons and a daughter) were eventually found and buried near the site, then later moved to Conway (NHDPR n.d.).

Following the disaster, the Willey House was vacant for a short period until John Pendexter moved into the house in 1827. Over the next 15 years, Pendexter was succeeded by several other short-term owners and/or tenants in rapid succession. These included a Colonel Moore, John Moore, Alexander Bond, John T. Dutton, Dutton and Wilson, John T. Dutton, Frank Atwood, Jack Whalen, Jack Mahew, and Henry Leonard. During this period, a small barn was constructed on the opposite side of the road (The Farmer's Monthly Visitor 1839; Roberts 1924).

In 1844, tourism entrepreneur and hotelier Horace Fabyan purchased the property. Fabyan, who owned hotels elsewhere in the vicinity, repaired the house and improved it "to accommodate the public with every comfort and convenience" (Sears 1989:85). He constructed the Willey House Hotel immediately south of the Willey House. This 70-by-40 foot, two-story, frame building was set on a raised foundation or terrace above the roadway and was connected with the Willey House via a continuous porch (Figure 4-3). A barn or carriage shed was located just north of the Willey House. A second barn and a stable were located on the east side of the road (Figure 4-4). John Davis of Conway purchased the property soon after its construction, although the exact date of this transfer is not known. It then passed through additional

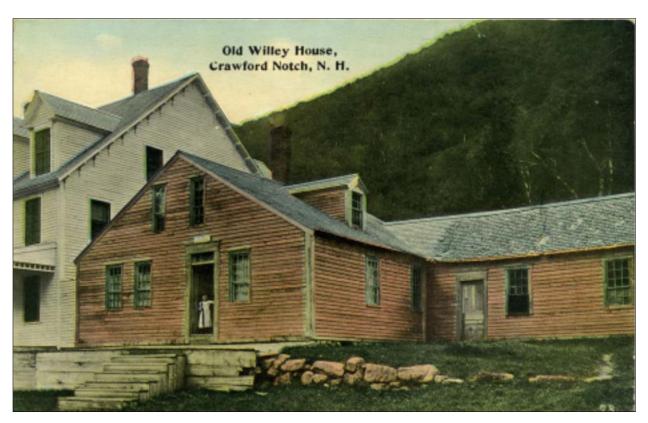


Figure 4-3. Late nineteenth-century postcard showing the Willey House and the adjoining Willey House Hotel (source: Museum of the White Mountains Collection).

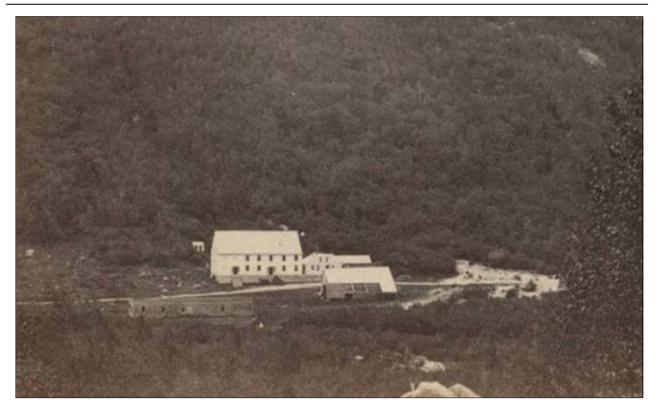


Figure 4-4. Late nineteenth-century stereo view of the Willey House Hotel (source: Museum of the White Mountains Collection).

private owners, ending with George H. Moran, who leased the premises to Leonard & Mayfield of Whitefield, New Hampshire. The Willey House and other buildings on the west side of the road burned in a fire in September 1899 (NHDPR n.d.; Purchase 1999; Roberts 1924).

The Willey House site was undeveloped for the first two decades of the twentieth century, during which the ruins of the Willey House and Hotel remained within a clearing that was the only break in the forested floor of the Notch (Figure 4-5). Visitors continued to stop at the site to view the ruins and ponder the story of the Willey family. Occasionally, gravel deposited by the great slide was excavated by the state to maintain the roadway (Skidmore 2008; State of New Hampshire Forestry Commission 1922).

### Public Development of the Willey House Site

In 1913, the State of New Hampshire took title to the Willey House Site along with 5,925 acres of Crawford Notch for preservation as forest reservation and recreation property. The lands were organized as the Crawford Notch State Forest and placed under the care of the state's Forestry Commission. At the time the park was established, state officials identified the Willey House Site as a location suitable for active recreational use and development. Two private camps were active in Crawford Notch at the time of the acquisition. The Forestry Commission intended to lease the Willey House Site as a third camp, provided that the arrangement was profitable and that "a thoroughly high grade tea room or restaurant" could be maintained as a stopping point for tourists. Concessionaire leases were standard practice during this period, as the state had little funds to provide for ongoing operation. The location was a logical one, since travelers by the thousands were already stopping to view the Willey House ruins and sometimes to camp in the meadow on the east side of the road. Additionally, the clearing provided one of the best roadside views of the Notch (State of New Hampshire Forestry Commission 1916, 1922).

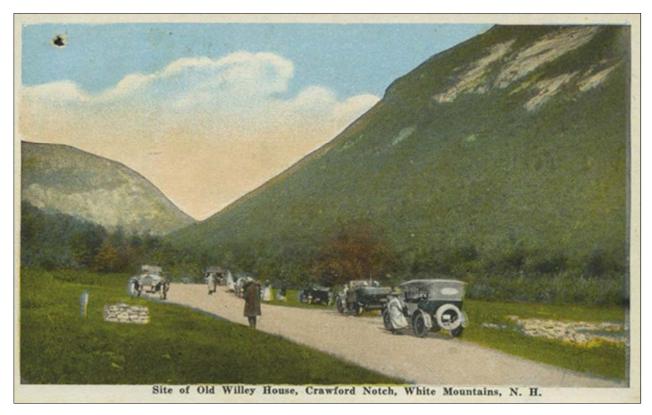


Figure 4-5. Circa 1900 postcard view of the Willey House Site before state redevelopment (source: Museum of the White Mountains Collection).

Establishment of facilities for visitors and employees in the reservation was ongoing between about 1915 and 1922. Arthur A. Shurcliff, noted landscape architect of Boston, donated his time to examine the Notch and prepared a report recommending locations at which selective tree cutting could open up "vistas to give good views of the mountains from points along the highway" (State of New Hampshire Forestry Commission 1916). Work at the Willey House Site commenced in 1920 when the stable, the last standing nineteenth-century structure, was removed from the east side of the road. The location was leased to J.F. Donahue & George C. Hamlin (Donahue & Hamlin) of Bartlett, for development as the Willey House Camps. Shurcliff donated additional services to prepare construction plans used by Donahue & Hamlin to build two "peeled spruce cabins." The cabins are now combined in the present-day Restaurant Building, situated approximately on the site of the Willey House Hotel. Additional small cabins of spruce were "placed artistically in the rear" for overnight stays.

Completed between 1923 and 1924, the complex initially consisted of the aforementioned two cabins, as well as six log cabins for overnight use, one log cabin containing an electrical plant, and one log building used for auto supplies. Postcards and Forestry Commission park plans from the 1920s and 1930s indicate that the overnight guest cabins were simple, one-room log structures organized in two tiers along the hillside behind the Restaurant Building and to the south, within the present-day picnic area. The original Willey House Dam was built in the early 1920s, but was replaced with the current structure built in 1980 (Roberts 1924; State of New Hampshire Forestry Commission 1916, 1932).

By 1924, promotional brochures for the Willey House Camps advertised that the facilities included "eating and lodging accommodations...a souvenir store, toilets, auto filling station, small log cabins for rent for the night or longer" (Roberts 1924:24) (Figure 4-6). The cabins were intended for overnight use by automobile travelers, hikers, and other campers intending to access the backcountry, as well as for staff. The Appalachian Mountain Club (AMC) also incorporated the Willey House into its hut system,

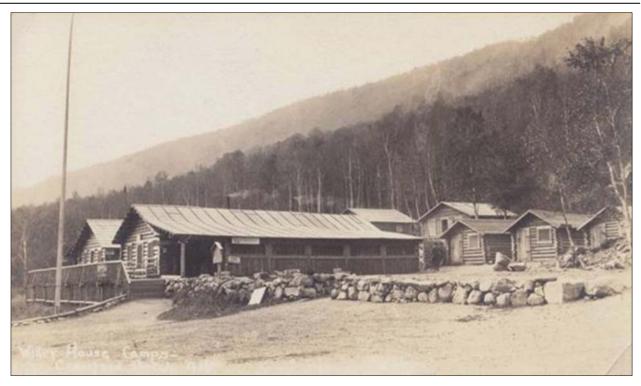


Figure 4-6. Circa 1925 postcard view of the restrooms, store, and restaurant buildings before they were combined into the present Restaurant Building (note: overnight cabins to the rear no longer extant).

which was then in the early stages of development. Open fields east of the road adjacent to the river were utilized for free camping (NHDPR n.d.; Roberts 1924; State of New Hampshire Forestry Commission 1922).

During the late 1920s and 1930s, both the Forestry Commission and Donahue & Hamlin expanded the Willey House Site with additional visitor services. The number of overnight cabins was increased to between 25 and 30 units, and some were moved around the site to optimize auto circulation and parking. In 1926, on the centennial anniversary of the Willey Slide, the Daughters of the American Revolution (DAR) – Anna Stickney Chapter from North Conway installed the commemorative boulder and plaque at the Willey House Foundation. The Great Depression brought support to the Forestry Commission's state parks in the form of Civilian Conservation Corps (CCC), and the Civil Works Administration programs, which were very active in assisting states with public recreation facilities. In 1930, CCC laborers at the Willey Site constructed the Tourist Information Center as the so-called Rest House to offer "an opportunity for tired travelers to rest and enjoy the mountain scenery" and for the use of overnight guests in the evening (State of New Hampshire Forestry Commission 1930) (Figures 4-7, 4-8). The low retaining wall associated with the Willey House was built up and enlarged and a lawn established on the terrace behind it. The dam was rebuilt in 1927 to provide a larger pond, a picnic area cleared on the east side of the impoundment, and new trails and trail improvements made (Parshley 1926; State of New Hampshire Forestry Commission 1930).

The Willey House Site continued under additional lessees in the 1940s, but little in the way of physical development occurred due to World War II. Between 1945 and 1950, the Help Quarters and Manager's Cabin were built for park worker accommodations. The Willey House Dam was replaced in 1946 (Figure 4-9) (Brown 1958; State of New Hampshire Forestry and Recreation Commission 1944; 1946; 1952).

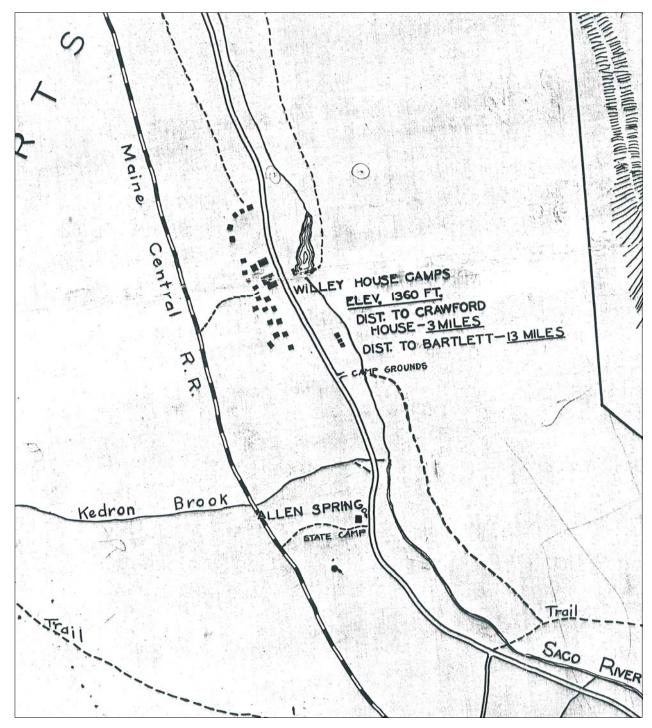


Figure 4-7. 1932 Crawford Notch Reservation Plan showing the general configuration of the Willey House Camps (note: only the four largest buildings adjacent to the road are extant) (source: State of **New Hampshire Forestry Department).** 

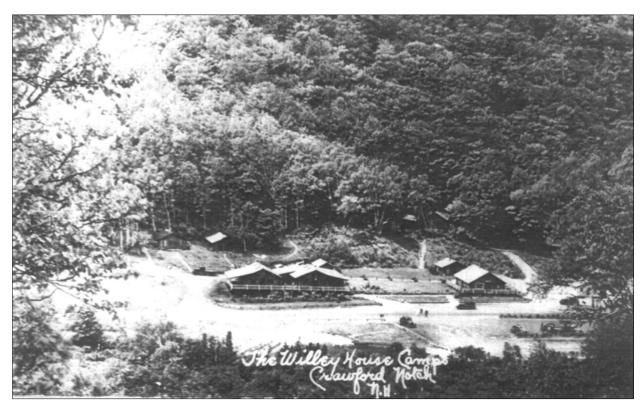


Figure 4-8. Circa 1935 view of the Willey House Camps.

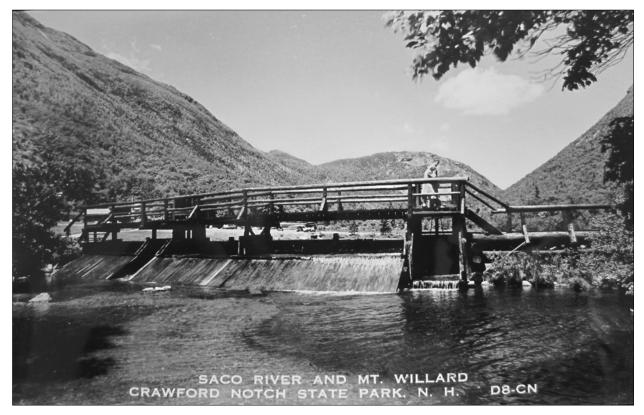


Figure 4-9. Circa 1950's photograph of the Willey House Dam (source: Museum of the White **Mountains Collection).** 

Substantial changes were made to the Willey House Site in the 1950s. In 1950, the Forestry and Recreation Commission terminated lessee operations at Crawford Notch and placed retail, food, and campground facilities directly under the control of the Recreation Division. As state law did not permit for the operation of overnight cabin rentals, most of the sleeping cabins were demolished between 1950 and 1952. Some of the vacant cabin sites were converted to the present picnic grounds to the south of the Willey House Site. Sometime in the 1950s, a new Information Center (later referred to as the Old Visitor's Center, no longer extant) was constructed on the north edge of the Willey Site. The parking areas and lawn adjacent to the Willey Foundation were improved. A New Hampshire wildlife exhibit (discontinued in 1972) was established on the east side of the pond and a perimeter trail around the pond established (Anon. 1952; Brown 1958; Garvin 1992; John Dickerman, personal communication, July 9, 2013; State of New Hampshire Forestry Division 1951; State of New Hampshire Forestry and Recreation Commission 1952).

For the next two decades, the Willey House Site largely maintained its 1950s configuration and management. The present Bathroom was built in 1970 and a new path was established from the road to the building. The present Willey House Dam was constructed in 1980 as a replacement to the 1947 structure. By late 1985, site plans and correspondence indicate that the Willey House Site had been reduced in size to seven of the present buildings, six cabins on the hillside above (presumably from concessionaire development), and the Information Building to the north of the present Tourist Information Center (Reid 1986). In 1986, the state demolished the six remaining concessionaire cabins. In 1992, the Information Building was demolished. The Generator House was added behind the Restaurant Building in 1994 (John Dickerman, personal communication, July 9, 2013). The Willey House Dam, which was replaced in 1980, was upgraded in 1996. In 2000, a new parking lot was constructed on the site of the Information Building and the other two parking lots improved (Dam Safety Office File No. 110.01; State of New Hampshire Department of Resources and Economic Development 1996; State of New Hampshire Forestry Commission 1927; State of New Hampshire Forestry and Recreation Commission 1946).

### Summary of Pre- and Post-Contact Period Sites in Proximity to the Willey House Site Study Area

No pre-contact period archaeological sites have been identified within 5-km of the Willey House Site study area. No post-contact period sites have been identified to date within 1-mile of the study area but eight post-contact sites have been identified within 5-km. All eight sites are White Mountain National Forest archaeological sites. Four of the sites area located southwest of the study area in Grafton County outside of Crawford Notch State Park. The first site is the Ethan Pond Shelter (27-GR-2151) and is an AMC shelter for eight people. No further information is provided on the site form. The other three sites, Camp 21 (27-GR-2152), Camp 21-A (27-GR-2154) and Shoal Pond Camp (27-GR-2155) are logging camps of unknown dates but are referenced on Hurd's 1892 Atlas and are associated with the East Branch and Lincoln and Zeal and Valley railroads.

The remaining four sites are all located in Coos County. One site, Dry River Shelter #1 (27-CO-2090) is located southeast of the study area outside of Crawford Notch State Park on the Dry River. The site was an AMC shelter of unknown date that was removed in 1975. The Crawford House Dump (27-CO-2119) is located approximately 4.5-km (2.8-mi) north of the study area within Crawford Notch, although outside the state park boundaries. This site dates from the nineteenth through twentieth centuries and is a dumping area associated with the old Crawford House. Artifacts recovered include cans, bottles, and "hotel ware". No information on the other two sites (27-CO-2129, 27-CO-2149) was available at the NHDHR.

### CHAPTER FIVE

### RESULTS

PAL staff conducted a walkover survey of the Willey House Site study area to assess and document current environmental conditions and note the presence of any surface indications of archaeological sites. This information was incorporated with the background research and provides the basis for the following assessments about the archaeological sensitivity of the study area.

### Pre-Contact Period Archaeological Sensitivity

No pre-contact period archaeological sites have been identified within 5-km (3-mi) of Willey House Site study area. The potential for survival of pre-contact period cultural resources within the study area is largely dependent on the degree of landscape alteration that has occurred as part of the residential (Willey House), commercial (Willey House Hotel), recreational (State Park), and industrial (Willey House Dam) development of the study area.

Based on factors used to develop sensitivity rankings presented in Table 2-1, the portion of the study area on the west side of Route 302 is assigned low pre-contact period archaeological sensitivity (Figure 5-1). Soils in this area have likely been heavily disturbed through both natural (landslides) and manmade (park development and improvements) processes. While pre-contact period cultural materials may be present in the area, there is a very low probability that they possess any stratigraphic integrity and associated interpretive value.

Undisturbed portions of the study area on the east side of Route 302, north of the dam, are assigned moderate pre-contact period archaeological sensitivity (see Figure 5-1). This area has seen minimal historic disturbance and was used primarily as a free camping site in the mid-twentieth century (west side of river) and as a wildlife exhibit area in the 1950s and 1960s (east side of river). The Saco River was a known mode of transportation through the mountains for Native American groups and this area is a relatively level terrace along the river and contains well drained soils. These soil conditions combined with the proximity of the river would have made it an attractive location for camp sites associated with riverine subsistence activities, particularly during the Archaic and Woodland periods. However, flooding episodes may have deeply buried any such deposits. The area south of the dam does not contain well drained soils and is frequently inundated with water therefore it is assigned low pre-contact period archaeological sensitivity (see Figure 5-1).

### Post-Contact Period Archaeological Sensitivity

The Willey House Site study area has undergone substantial natural and man-made landscape disturbances over the course of its more than 200 year post-contact period history. These disturbances, with several exceptions discussed below, have had the effect of largely erasing or burying the earlier nineteenth-century landscape associated with the residential and travelers' inn use of the property. The subsequent development of the parcel as a camping and recreation site beginning in the second decade of the twentieth century, however, produced a series of landscape and structural changes that reflected the emergence of the White Mountains as a tourism destination. These changes are directly applicable to NHDHR Historic Context 81 - New Hampshire State Parks, Sites, and Forests and, to a lesser extent, NHDHR Historic Context 73 - Summer and Vacation Home Tourism.

A group of five buildings and the foundation remains of the Willey House, located on the west side of Rt. 302, form the functional center of the study area and serve as the focal point of the visitor experience. All of the buildings are oriented east towards the roadway and are organized in a symmetrical, rectilinear arrangement on a terraced lawn. The terraces are retained behind low walls constructed of a mixture of un-coursed granite and rhyolite rubblestone. The largest of these walls may have had its origins in the construction of the Willey House, but has since been expanded to create the lawn.

The Willey House Foundation (ca. 1793) is set in the southeast corner of the lawn (see Photograph 3-4). The exposed upper courses of three of the Willey House foundation walls, in combination with the terrace retaining wall, frame a small sunken lawn. The foundation itself appears to be reconstructed but a review of late nineteenth-century photographs showing the Willey House and Hotel indicate it is in the correct

location. These photographs also show a one-story ell off the back of the house and at least one photograph also shows a barn off the north end of the ell in the approximate location of the extant Tourist Information Center (ca. 1930). Restaurant Building (ca. 1924) is built over the location of the Willey House Hotel. Evidence of foundation stones are present under the building (Photograph 5-1), although their integrity cannot be fully determined at this time. A review of utility maps for the study area indicate that to the west and north of the Willey House Foundation in the grassy terrace is a leech field and buried septic tanks (filled in the 1970s), respectively. A vent for the leech field can be seen in Photograph 3-4.



Photograph 5-1. Possible foundation stones from the Willey House Hotel under the current Restaurant Building, view northwest, Willey House Site, Crawford Notch State Park.

Set on a slope at the rear of the visitor complex is a large rock outcrop known as the Willey Boulders, marked with a modern-period wooden sign (see Photograph 3-5). Adjacent to the outcrop is the foundation of a former well house. This small plank-formed concrete structure is now topped with a pressure-treated wood observation deck. A trail from the terrace has been cut up to the slope to afford visitors access to the boulders and observation deck. South of the visitor buildings is a picnic area. This is set on a grassy, rock-strewn, irregular slope and accessed via a gravel drive that runs north-south through the picnic sites. North of the core visitor complex are two employee residences, the Help Quarters (ca. 1950) and the Manager's Cabin (ca. 1950). accessed via a gravel cul-de-sac driveway that crosses a small brook on a low deck bridge. This area was likely cleared and/or graded when these two cabins were constructed (see Photograph 3-3). There is a steep slope directly behind these cabins.

The visitor complex section of the study area, including the location of the Managers Cabin and Help Quarters, has been assigned moderate archaeological sensitivity for post-contact period resources dating to the development of the site as a lodging and recreation complex during the late nineteenth century into first half of the twentieth century (Figure 5-2). While there have been numerous utility, sewage, and building alterations to the complex over the past 100 years, those alterations are directly linked to development of the site as a state park. There is the potential for the preservation of earlier landscape and structural features associated with that development including buried or re-aligned roads, pathways, or parking lots; former outbuildings, camp locations, or utility installations; and discrete refuse deposits that could provide important information about the transition of the property from a summer hotel destination

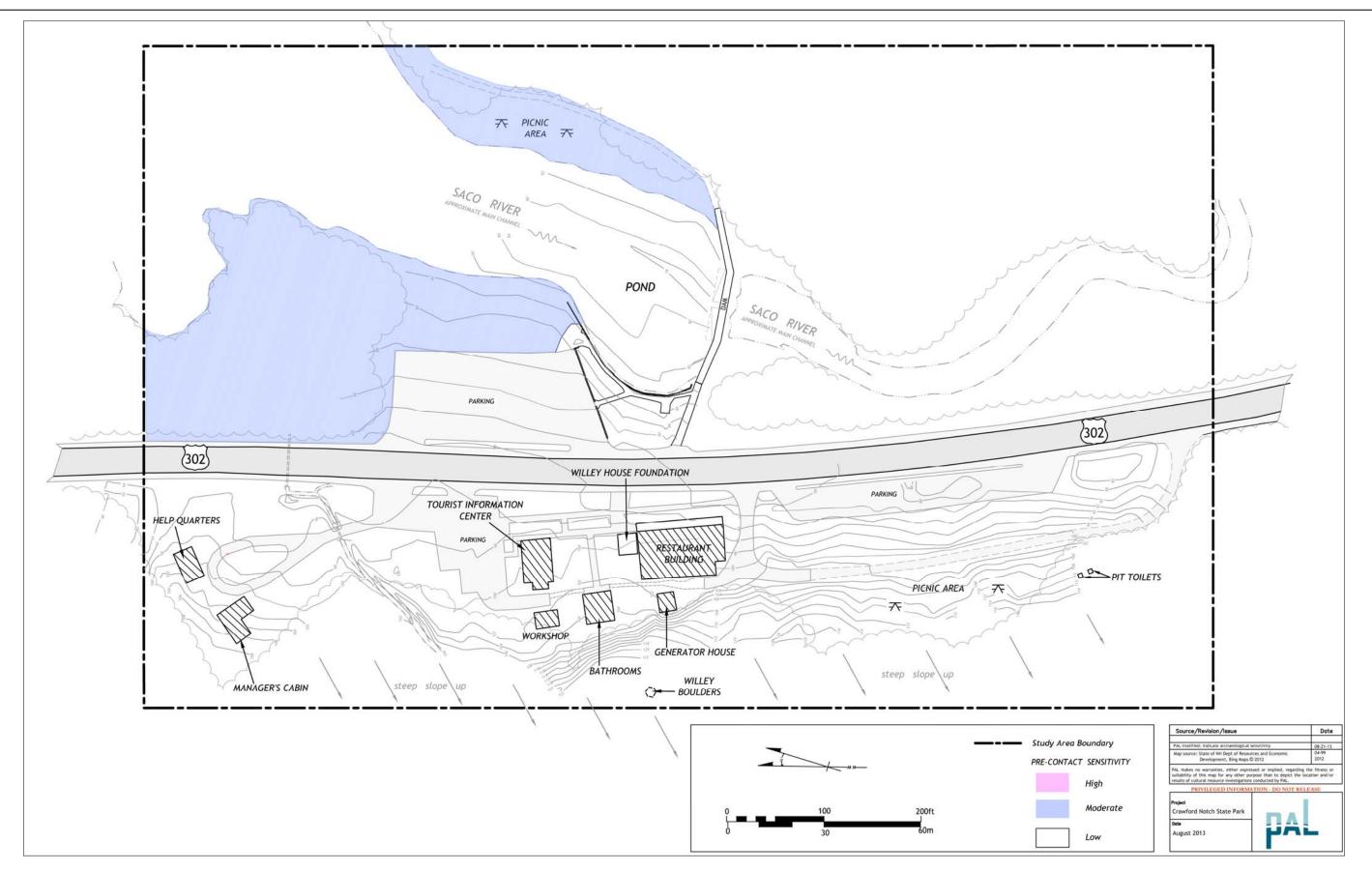


Figure 5-1. Pre-contact period archaeological sensitivity map, Willey House Site study area, Crawford Notch State Park.

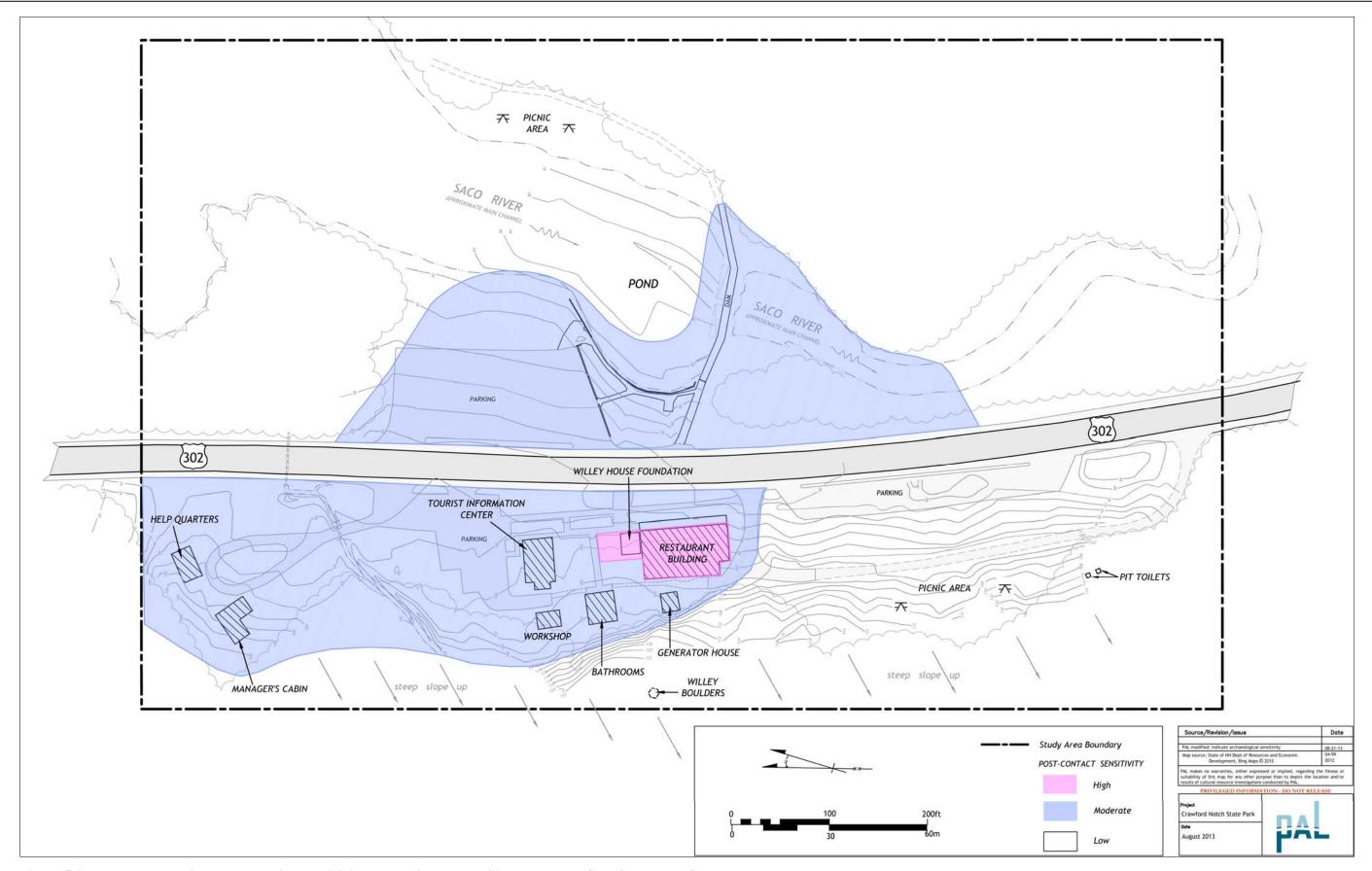


Figure 5-2. Post-contact period archaeological sensitivity map, Willey House Site study area, Crawford Notch State Park.

in the mid nineteenth century to an overnight motor-court for automobile campers in the early twentieth century.

The landslide and subsequent cleanup likely destroyed any evidence of the earlier historic period occupation of the site, specifically that of the iconic Willey tenure. Two areas, however, are assigned high post-contact period archaeological sensitivity for that earlier period. The first location is the small area around the Willey House Foundation that was spared the devastation of the landslide. The extant landscape appears consistent with late nineteenth-century photographs, and may contain belowground deposits associated with the house and hotel. The areas of the ell and barn likely were substantially disturbed if not completely destroyed by the installation of the Bathroom building (1970) and associated leech field and the construction of the Tourist Information Building (1930) and septic tanks, and as such are unlikely to contain deposits dating from that period.

The area under the current Restaurant Building is also assigned high post-contact period archaeological sensitivity. The presence of possible foundation stones relating to the Willey House Hotel are visible in the area where the building is built on wood posts and stone footings. Intact deposits relating to the Hotel may also be present in this area.

South of the visitor buildings is a second parking lot and picnic area. The picnic area is set on a grassy, rock-strewn, irregular slope and accessed via a gravel drive that runs north-south through the picnic sites (see Photograph 3-6). The picnic tables are sited along the hillside on small terraces that are former cabin locations. From the picnic area, down a steep slope, is the asphalt parking lot which is set between the picnic area and Rt. 302. This area is assigned low post-contact period archaeological sensitivity due to park development and the steepness of the hillside (see Figure 5-2).

East of Route 302 the land slopes gradually down from the road to the Saco River. A nineteenth-century stable/barn formerly was located in the general location of the current parking lot before being removed in 1920, and a second carriage house (?) structure is shown south of the extant dam structure on a late nineteenth-century image of the property(see Figure 4-4). It is possible that structural elements associated with one or both buildings may survive in their respective locations that could provide concerning the function of the buildings, particularly as they relate to the Willey House Hotel period about which there is little surviving above-ground evidence.

The Willey House Dam (State Dam No. 110.01) is an approximately 220 foot-long wood and concrete structure that creates an approximate 5-foot fall, exclusive of stoplogs (see Photograph 3-7). Archival research indicates the dam has been rebuilt (1927), replaced (1946, 1980) and upgraded (1996) at least four times since it was built in the early 1920s. Very little information is available on this dam or its purpose (John Daly, senior PAL Industrial Historian, personal communication). There is a possibility that earlier dam structural remains may survive within the existing structure and, as such, the area has been assigned moderate post-contact period sensitivity.

### CHAPTER SIX

### **CONCLUSIONS AND RECOMMENDATIONS**

Despite many years of landscape disturbances associated with the development of the Willey House Site as a state park and recreation destination, the Phase IA archaeological assessment identified several areas of moderate to high pre- and post-contact archaeological sensitivity within the designated study area. Moderate pre-contact archaeological sensitivity has been assigned to two areas east of Route 302 and north of the dam. These relatively level terraces contain sandy, well-drained soils and would have presented attractive camp site locations for Archaic and Woodland Period Native American populations traveling down the Saco River or on foot through the Notch. Low pre-contact archaeological sensitivity was assigned to the remaining portions of the study area due to the likelihood that they have been heavily disturbed through both natural (landslides and flooding) and manmade (park development and landscape improvements) processes.

Moderate post-contact archaeological sensitivity also has been assigned to the core visitor complex for its potential to contain archaeological deposits associated with the evolution of the site as a summer hotel destination in the mid nineteenth century to an overnight motor-court for automobile campers in the early twentieth century. In this instance, the landscape and structural alterations to the property associated with that evolution are more properly considered as mechanisms for the creation, rather than destruction, of potentially significant archaeological deposits including, but not limited to, buried or re-aligned roads, pathways, or parking lots; former outbuildings, camp locations, or utility installations; and discrete refuse deposits.

These later landscape changes, however, did have the effect or largely destroying the archeological signature of earlier occupations of the property with several important exceptions. The extant landscape immediately surrounding the remains of Willey House Foundation was spared the devastation of the landslide and is consistent in appearance with late nineteenth-century photographs of the area. Consequently, that location has been assigned high archaeological sensitivity for containing landscape, structural, and artifact deposits associated with the former house and hotel. Similarly, possible structural evidence of the Willey House Hotel foundation was noted under the current Restaurant Building and that area has been assigned high post-contact period archaeological sensitivity for containing additional structural and artifact data associated with that period. Finally, moderate archaeological sensitivity has been assigned to portions of the study area sandwiched between Route 302 and the Saco River for containing structural remains associated with a former barn, carriage house, and dam structure.

### **Management Recommendations**

This report is intended as planning tool for NHDPR as it moves forward in its proposed redevelopment plans for the Willey House Site. As future project plans become formalized, PAL recommends that the NHDPR consult with the NHDHR concerning potential construction impacts within areas assigned moderate and high archaeological sensitivity so that an appropriate archaeological scope-of-work may be developed (as necessary). In the event that proposed project impacts exceed the study area as delineated in this report, additional Phase IA survey may be required. Additionally, any project plans involving remodeling or restoration of the current Restaurant Building and Willey House Dam should consider the possible presence of intact archaeological remains related to the nineteenth-century Willey House Hotel

and earlier historic structural dam remains so that potentially significant archaeological (or architectural) resources are not impacted during project-related construction activities.

### REFERENCES

### Anon.

A Notch in the Hills. Photocopy of article on file at the New Hampshire Division of Historical Resources, Concord, NH.

### Appalachian Mountain Club (AMC)

- 1982 *The Notch through the Ages*. Brochure funded by the New Hampshire Council for the Humanities, Concord, NH.
- 2013 AMC History. Electronic document accessed July 20, 2013: <a href="http://www.outdoors.org/about/history.cfm">http://www.outdoors.org/about/history.cfm</a>.

### Boisvert, Richard A.

- 1998 Israel River Complex: A PaleoIndian Manifestation in Jefferson, New Hampshire. Archaeology of Eastern North America 26:97–106.
- PaleoIndian Occupation of the White Mountains, New Hampshire. *Geographie Physique et Quaternaire* 53:159–174.
- 2000 Tracing PaleoIndian Movements in Northern New England. Paper presented at the New Hampshire Archaeological Society Meeting.

### Boisvert, R. A., A. Spiess, and S. Fulton.

Evidence Of 17<sup>th</sup>-Century Fur Trade At The Hormell Site, Freedom, New Hampshire. Paper Presented at the Annual Spring Meeting of the Vermont Archaeological Society, Rutland, VT.

### Bolian, Charles E.

1977 Archaeological Assessment of Hart's Location (BR-F-031-1(12) P-2661). Report on File NHDHR, Concord, NH.

### Bragdon, Kathleen J.

Native Peoples of Southern New England, 1500-1650. University of Oklahoma Press, Norman, OK.

### Brown, William Robinson

1958 *Our Forest Heritage: A History of Forestry and Recreation in New Hampshire.* New Hampshire Historical Society, Concord, NH.

### Bunker, Victoria

- The Eddy Site. Notes on file at the Phillips Exeter Academy, Exeter, NH.
- 1988 Archaeological Survey of Litchfield, New Hampshire. Report on file at the New Hampshire Division of Historical Resources, Concord, NH.

- 1992 Stratified Components of the Gulf of Maine Archaic Tradition at the Eddy Site, Amoshkeag Falls. In Early Holocene Occupation in Northern New England, edited by Brian S. Robinson, James B. Peterson, and Ann K. Robinson. Occasional Publications in Maine Archaeology, No. 9, Augusta ME.
- 1994 New Hampshire's Prehistoric Settlement and Chronology. The New Hampshire Archaeologist 33/34 (1).

### Bunker, Victoria, and Jane S. Potter

1993 Archaeological Research Study: Data Recovery at the Mason Site, a Stone Tool Manufacture Site on the Merrimack River. Northeast Settlement Project, Tennessee Gas Pipeline Co., Pembroke, NH. Prepared for Stone and Webster Engineering Corporation, Boston, MA.

### Calloway, Colin G.

1990 The Western Abenakis of Vermont, 1600-1800. University of Oklahoma Press: Norman and London.

### Carini, Stephen

1994 Archaic And Woodland Occupations In The Pennichuck Drainage: Archaeological Investigations At Six Prehistoric Sites In The Merrimack 10103 Project. Report Prepared for The New Hampshire Department of Transportation. Report submitted by The Cultural Resource Group, Louis Berger & Associates, Inc., East Orange, NJ.

### Crawford, Lucy

1846 History of the White Mountains from the First Settlement of Upper Coos and Pequaket. Printed by F.A. and A.F. Gerrish, Portland, ME.

### Cross, John R.

1999 "By Any Other Name...": A Reconsideration of Middle Archaic Lithic Technology and Typology in the Northeast. In *The Archaeological Northeast*, edited by Mary Ann Levine, Kenneth E. Sassaman, and Michael S. Nassaney. Bergin & Garvey, Westport, CT.

### Curran, Mary Lou

1984 The Whipple Site and PaleoIndian Tool Assemblage Variation: A Comparison of Instrasite Structuring. Archaeology of Eastern North America 12:5–45.

### Dincauze, Dena F.

- 1974 An Introduction to the Archaeology of the Greater Boston Area. Archaeology of Eastern *North America* 2(1):39–67.
- 1976 The Neville Site: 8,000 Years at Amoskeag, Manchester, New Hampshire. Peabody Museum Monographs 4. Harvard University, Cambridge, MA.
- 1993 Fluted Points in the Eastern Forests. In From Kostenki to Clovis: Upper Paleolithic-PaleoIndian Adaptations, edited by Olgo Soffer and N.D. Praslov, chapter 20, pp. 279-292. Plenum Press, New York, NY.

### Doucette, Dianna, and John R. Cross

1997 Annasnappet Pond Archaeological District, North Carver Massachusetts. An Archaeological Data Recovery Program. The Public Archaeology Laboratory, Inc. Report No. 580. Prepared for U.S. Department of Transportation, Federal Highway Administration and Massachusetts Highway Department, Boston, MA.

### Eastman, Tom

Recalling a White Mountain Legend: The Famed Willey Slide Disaster of August, 1826. *Mountain Ear* August 19:18.

### The Farmer's Monthly Visitor

The White Mountains, the Notch and the Willey House. *The Farmer's Monthly Visitor* 1:118-120.

### Fenneman, N.E.

1938 Physiography of the Eastern United States. McGraw-Hill, New York, NY.

### Foster, Donald W.

1977 Site Evaluation Report, Harts Location (BR-F-03201(11) P-2323). Report on File NHDHR, Concord, NH.

### Garvin, James

1988 On the Road North of Boston: New Hampshire Taverns and Turnpikes 1700-1900. University Press of New England, Lebanon, NH.

Old Visitor's Center, Crawford Notch State Park. NHDHR Individual Resource Inventory Form. August 7. On file, NHDHR, Concord, NH.

### Gibson, Susan G. (editor)

1980 Burr's Hill: A Seventeenth Century Wampanoag Burial Ground in Warren, Rhode Island. Haffenreffer Museum of Anthropology, Brown University, Providence, RI.

### Goodby, Robert G.

First People: Native Americans in the Piscataqua Region. In *Cross-Grained and Wily Waters: A Guide to the Piscataqua Maritime Region*, edited by Peter E. Randall, pp. 173–175. Peter E. Randall, Portsmouth, NH.

### Hancock, Frances Ann Johnson

1965 Crawford Notch: Southwestern Approach to the White Mountains of New Hampshire. Self-published.

### Harp, Elmer

1977 A Cultural Resources Evaluation of the White Mountain National Forest Area, New Hampshire-Maine. On file, USDA, White Mountain National Forest, Laconia, NH.

### Hasenstab, Robert

Wetlands as a Critical Variable in Predictive Modelling of Prehistoric Site Locations: A Case Study from the Passaic Basin. *Man in the Northeast* 42:39–61.

#### Haviland, William A., and Marjory W. Power

1994 The Original Vermonters: Native Inhabitants Past and Present. University Press of New England, Hanover, NH.

#### Howe, Dennis E.

1988 The Beaver Meadow Brook Site: A Prehistory on the West Bank of Sewall's Falls, Concord, New Hampshire. The New Hampshire Archaeologist, Vol. 29(1):49–107.

#### Hurd, D.H.

1892 Harts Landing. New Hampshire State Atlas. D.H. Hurd & Co., Boston, MA.

# Ives, Timothy H., Alan Leveillee, and Joseph Waller

2005 Intensive Archaeological Survey, CMI Development Project Area, Tamworth, New Hampshire. PAL Report No. 1582.02. Submitted to CMI and ESS Group, Wellesley, MA.

#### Johnson, Eric S.

1999 Community and Confederation: A Political Geography of Contact Period Southern New England, pp. 155–168. In *The Archaeological Northeast*. Edited by Mary Ann Levine, Kenneth Sassaman, and Michael S. Nassaney. Bergin & Garvey, Westport, CT.

#### Jones, Brian D.

1997 The Late PaleoIndian Indian Creek Site in Southeastern Connecticut. Archaeology of Eastern North America 25:45-80.

#### Kerber, Jordan E.

2006 Cross-Culural Collaboration. University of Nebraska Press, Lincoln, NE.

## King, Marsha

1988 Historic Site Location in Large Project Areas. Paper presented at the 28th Annual Meeting of the Northeastern Anthropological Association, Albany, NY.

### Kintigh, Keith

1992 Tools for Quantitative Archaeology, Programs for Quantitative Analysis in Archaeology. Tempe, AZ.

#### Leveillee, Alan

1999 Transitional Archaic Ideology as Reflected in Secondary Burials at the Millbury III Cremation Complex. Archaeology of Eastern North America 27:157–183.

# Little, Barbara, Erika Martin Seibert, Jan Townsend, John H. Sprinkle Jr., and John Knoerl

2000 Guidelines for Evaluating and Registering Archeological Properties. National Register Bulletin No. 36. U.S. Department of the Interior, National Park Service, National Register, History and Education, Washington, D.C.

#### MacGuire, Randall H., and Robert Paynter

1991 The Archaeology of Inequality. Basil Blackwell, Oxford, England.

#### Massachusetts Historical Commission (MHC)

Historic and Archaeological Resources of Southeast Massachusetts. Massachusetts 1982a Historical Commission, Office of the Secretary of State, Boston, MA.

- 1982b Historic and Archaeological Resources of the Boston Area: A Framework for Preservation Decisions. Massachusetts Historical Commission, Office of the Secretary of State, Boston, MA.
- 1984 *Historic and Archaeological Resources of the Connecticut Valley.* Massachusetts Historical Commission, Office of the Secretary of State, Boston, MA.

# Maymon, Jeffrey, and Charles Bolian

The Wadleigh Falls Site: An Early and Middle Archaic Period Site in Southeastern New Hampshire. In Early Holocene Occupation in Northern New England, edited by Brian S. Robinson, James B. Petersen, and Ann K. Robinson. Occasional Publications in Maine Archaeology No. 9, Augusta, ME.

### McManamon, Francis P.

A Regional Perspective on Assessing the Significance of Historic Period Sites. *Historical Archaeology* 24(2):14–22.

# Merrill, Georgia Drew

1971 *History of Carroll County*. Reprinted. New Hampshire Publishing Company, Somersworth, NH.

#### Mulholland, Mitchell T.

1984 Patterns of Change in Prehistoric Southern New England: A Regional Approach.
Unpublished Ph.D. dissertation, Department of Anthropology, University of Massachusetts, Amherst, MA.

# National Park Service (NPS)

- Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines. *Federal Register* 48(190). National Park Service, Department of the Interior, Washington, D.C.
- Guidelines for Local Surveys: A Basis for Preservation Planning. *National Register Bulletin* 24. National Park Service, Department of the Interior, Washington, D.C.
- National Register Bulletin How to Apply the National Register Criteria for Evaluation. Electronic document: <a href="http://www.nps.gov/history/nr/publications/bulletins/nrb15/">http://www.nps.gov/history/nr/publications/bulletins/nrb15/</a>.

## New Hampshire Department of Environmental Services (NHDES)

2013 *The Saco River*. Electronic document accessed August 5, 2013: <a href="http://des.nh.gov/organization/divisions/water/wmb/rivers/saco\_river.htm">http://des.nh.gov/organization/divisions/water/wmb/rivers/saco\_river.htm</a>

### New Hampshire Division of Historic Resources (NHDHR)

2004 Archaeological Standards and Guidelines. New Hampshire Division of Historic Resources, Concord, NH.

## New Hampshire Division of Parks and Recreation (NHDPR)

n.d. Crawford Notch History. New Hampshire Division of Parks and Recreation, Concord, NH.

# New Hampshire Highways

Crawford Notch: A State Forest Reservation. New Hampshire Highways June:n.p. 1924 photocopy on file, New Hampshire Division of Historical Resources, Concord, NH.

#### Nicholas, George P.

Places and Spaces: Changing Patterns in Wetland Use in Southern New England. Man in 1991 *the Northeast* 42:75–98.

#### Parker, Patricia, and Thomas F. King

1998 Guidelines for Evaluating and Documenting Traditional Cultural Properties. National Register Bulletin No. 38. U.S. Department of the Interior, National Park Service, National Register, History and Education, Washington, D.C.

### Parshley, Edward J.

1926 Imperishable bronze for the Willey Family. New Hampshire Highways August:n.p. Photocopy on file, New Hampshire Division of Historical Resources.

#### Petersen, James B.

- 1977 A Study of Prehistoric Ceramics of VT-CH-5, the Ewing Site. Manuscript, Department of Anthropology, University of Vermont, Burlington, VT.
- 1980 The Middle Woodland Ceramics of the Winooski Site, A.D. 1-1000. The Vermont Archaeological Society, Burlington, VT.
- 1992 "Iroquoian" Ceramics in New England: A Reconsideration of Ethnicity, Evolution, and Interaction. Paper presented at the 57<sup>th</sup> Annual Meeting of the Society for American Archaeology, Pittsburgh, PA.

## Petersen, James B., and Marjory Power

1985 Three Middle Woodland Ceramic Assemblages from the Winooski Site. Occasional *Publications in Northeastern Anthropology* 9:109–147.

#### Petersen, James B., and David E. Putnam

1992 Early Holocene Occupation in the Central Gulf of Maine. In Early Holocene Occupation in Northern New England, edited by Brian S. Robinson, James B. Petersen, and Ann K. Robinson, pp. 13-62. Occasional Publications in Maine Archaeology No. 9, Augusta, ME.

# Petersen, James B., and Joshua R. Toney

2000 Three Native America Ceramic Vessels from Western Vermont: The Colchester and Bolton Jars Revisited. *The Journal of Vermont Archaeology* 3:1–16.

#### Petersen, James B., Robert N. Bartone, and Belinda J. Fox

2000 The Varney Farm Site and the Late PaleoIndian Period in Northeastern North America. Archaeology of Eastern North America 28:113–140.

#### Peterson, Natalie

2001 The Willey Slide: Site of Tragedy Still Evokes Sadness after 175 Years. The Granite State News - Carroll County Independent August 23:C1.

#### Potter, Jane

1993 *Phase II Intensive Archaeological Survey: Nashua Project (11057)*. Report on file at New Hampshire Division of Historic Resources, Concord, NH.

1994 *New Hampshire's Landscape and Environment*. The New Hampshire Archaeologist 33/34 (1).

### Potter, Jane, and Victoria Bunker

1991 *Interstate-93 Corridor Project, Manchester-Salem, New Hampshire, Volume I.* Submitted to the New Hampshire Department of Transportation, Concord, NH.

#### Potter, Parker, and David Switzer

1989 *Historic Context 65: Shipwreck.* New Hampshire Division of Historic Resources, Concord, NH.

#### Purchase, Eric

1999 *Out of Nowhere: Disaster and Tourism in the White Mountains.* Johns Hopkins University Press, Baltimore, MD.

## Reid, Harry L.

Hand Drawn Sketch Plan of the Willey House Site. February 15. New Hampshire Division of Parks and Recreation. On file, New Hampshire Division of Historical Resources, Concord, NH.

#### Rhode Island Historical Preservation Commission (RIHPC)

1982 Standards for Archaeological Survey. Rhode Island Historical Preservation Commission, Providence, RI.

## Ritchie, Duncan, Marsha K. King, and Martha Lance

Archaeological Survey of Westville Dam and Reservoir in Southbridge and Sturbridge, Massachusetts. The Public Archaeology Laboratory, Inc. Report No. 158-2. Submitted to IEP, Inc., Northborough, MA and the Army Corps of Engineers, New England Division, Waltham, MA.

#### Ritchie, William A.

1969 *The Archaeology of New York State*. Revised edition. The Natural History Press, Garden City, NY.

#### Roberts, Guy

1924 The Willey Slide: Its History, Legend, and Romance. Whitefield, NH.

#### Robertson, Edwin B. and Benjamin W. English, Jr.

1987 A Century of Railroading in Crawford Notch. Published by Edwin B. Robertson, Portland, ME.

#### Robinson, Brian S.

Early and Middle Archaic Period Occupation in the Gulf of Maine Region: Mortuary and Technological Patterning. In *Early Holocene Occupation in Northern New England*, edited by Brian S. Robinson, James B. Petersen, and Ann K. Robinson. Occasional Publications in Maine Archaeology No. 9, Augusta, ME.

#### Robinson, Brian S., James B. Petersen, and Ann K. Robinson (editors)

Early Holocene Occupation in Northern New England. Occasional Publications in Maine 1992 Archaeology No. 9, Augusta, ME.

#### Robinson, Paul, Marc Kelley, and Patricia E. Rubertone

1985 Preliminary Biocultural Interpretations from a Seventeenth-Century Narragansett Indian Cemetery in Rhode Island. In Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern North America, A.D. 1000-1800. Smithsonian Institution, Washington, D.C.

#### Saco River Local Management Advisory Committee

1994 Saco River Corridor Management Plan. Electronic document accessed August 5, 2013: http://des.nh.gov/organization/divisions/water/wmb/rivers/documents/saco-plan.pdf.

#### Scott, Elizabeth M.

1994 Those of Little Note: Gender, Race, and Class in Historical Archaeology. University of Arizona Press, Tucson, AZ.

#### Sears, John F.

1989 Sacred Places: American Tourist Attractions in the Nineteenth Century. Oxford university Press, New York, NY.

#### Sillas, Albert

1984 The Saco River Overview. U.S. Fish and Wildlife Service, Laconia NH, Internal Report.

#### Simmons, William S.

1970 Cautantowwit's House: An Indian Burial Ground on the Island of Conanicut in Narragansett Bay. Brown University Press, Providence, RI.

# Simon, Brona G.

1991 Prehistoric Land Use and Changing Paleoecological Conditions at Titicut Swamp in Southeastern Massachusetts. *Man in the Northeast* 42:63–74.

### Skidmore, Max J.

2008 Following the Theodore Roosevelt Trail into the Heart of New Hampshire. Historical New Hampshire Spring:3-18).

# Spaulding, John H.

1862 Historical Relics of the White Mountains. Also A Concise White Mountain Guide. J.R. Hitchcock, Mt. Washington, NH.

#### Stanhope, William F.

1982 Willey Family Research. Typewritten Manuscript. On file, New Hampshire Division of Historical Resources.

#### Starbuck, David R.

1982 A Middle Archaic Site: Belmont, New Hampshire. Department of Anthropology, University of New Hampshire Report. Submitted to New Hampshire Department of Public Works and Highways, Concord, NH.

# State of New Hampshire Department of Resources and Economic Development

1996 Willey House Dam Repairs, Harts Location. April.

# State of New Hampshire Forestry Commission

- 1916 Crawford Notch Reservation. State Forest. Drawn by E.S. Atkinson, State of New Hampshire Forestry Department, Concord, NH.
- Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1922. Concord, NH.
- 1930 Biennial Report of the Forestry Commission for the Two Fiscal Years Ending June 30, 1930. Concord, NH.
- 1932 *Crawford Notch Reservation*. Drawn by H.K. Bugbee, State of New Hampshire Forestry Department, Concord, NH.

# State of New Hampshire Forestry Division

1951 Biennial Report of the Forestry Division, 1949-1950. Concord, NH.

# State of New Hampshire Forestry and Recreation Commission

- Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1944. Published by the Commission, Concord, NH.
- Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1946. Published by the Commission, Concord, NH.
- Biennial Report of the Forestry and Recreation Commission for the Two Fiscal years Ending June 30, 1952. Published by the Commission, Concord, NH.

# Thomas, Peter

The Riverside District, the WMECO Site, and Suggestions for Archaeological Modeling. In *Early and Middle Archaic Cultures in the Northeast*, edited by David R. Starbuck and Charles Bolian, pp. 73–96. Occasional Publications in Northeastern Anthropology, No. 7. Department of Anthropology, Franklin Pierce College, Rindge, NH.

#### Thorbahn, Peter F.

The Prehistoric Settlement Systems of Southern New England: Final Report of The Interstate 495 Archaeological Data Recovery Program, vol. I. Public Archaeology Laboratory, Department of Anthropology, Brown University Report. Submitted to the Massachusetts Department of Public Works, Boston, MA.

### Thorbahn, Peter, F., Leonard Loparto, Deborah Cox, and Brona Simon

1980 Prehistoric Settlement Processes in Southern New England: A Unified Approach to Cultural Resource Management and Archaeological Research. Public Archaeology Laboratory, Department of Anthropology, Brown University Report. Report on file, Massachusetts Historical Commission, Office of the Secretary of State, Boston, MA.

# Tolles, Bryant F.

1998 The Grand Resort Hotels of the White Mountains. David R. Godine, Boston, MA.

### United States Department of Agriculture (USDA)

1977 Soil Survey of Carroll County, New Hampshire. Soil Conservation Service. U.S. Government Printing Office, Washington, D.C.

# United States Department of Agriculture- Natural Resources Conservation Service (USDA-NRCS)

Web Soil Survey, Carroll County, New Hampshire. Electronic document accessed July 2013 31, 2013: <a href="http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx">http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx</a>.

### Van Diver, Bradford B.

1987 Roadside Geology of Vermont and New Hampshire. Mountain Press Publishing Company, Missoula, MT.

# Wallace, R. Stuart

1977 Historical Assessment of Hart's Location (BR-F-031-1(12) P-2661). Report on File NHDHR, Concord, NH.

# APPENDIX A

# NHDHR POST-CONTACT ARCHAEOLOGICAL SITE FORM

				1
-				
				i i
				!
				-
				ļ
				1

# NEW HAMPSHIRE POST-CONTACT ARCHAEOLOGICAL INVENTORY FORM New Hampshire Division of Historical Resources

New Hampshire State Historic Preservation Office

27 - CA - 189

Site # 27 - CA - 189 Site Name Willey House and Hotel Site
NHAS Site # NH (SHPO use only) WMNF Site # (if applicable) 09-22-
Version of form   ☐ New ☐ Revised ☐ Transcribed
LOCATION
County Carroll City/Town Harts Location
USGS Quadrangle Crawford Notch
UTM Zone 19 Easting 308237 Northing 4894958
NH State Plane, feet Easting 1054405 Northing 613300
USGS Datum ☐ WGS 84 ☐ NAD 27 ⊠NAD 83
Status (Select as many as appropriate)  Private (Single) Private (Multiple) Local Government  State Government Non-Profit Unknown Other (Specify):
Name of Owner(s) State of NH, Dept of Resources and Economic Dev.
Street Address 172 Pembroke Rd
City/Town, State, Zip Concord, NH 03302-1856
REPORTING INFORMATION
Name of Form Preparer(s) K. Heitert
Phone Number 401-728-8780 Email kheitert@palinc.com
Institutional Affiliation/Employer PAL
Date Surveyed 7/1/2103 E. Date Form Prepared 8/1/2013
Investigative Type (Select One)  ☐ CRM contract ☐ Sponsored research ☐ Volunteered data ☐ Other (Specify)
Investigative Techniques (Select as many as appropriate)  Oral history Documentary Collection analysis  Non-recovery survey Aerial photography Map interpretation  Mapping Arbitrary surface col. Controlled surface collection  Auger / Soil core Shovel test Test pit excavation  Heavy equipment Block excavation Remote sensing
Bibliographic Citation Banister, Jenifer, Kristen Heitert, and Sarah Sportman (2013) Phase IA Archaeological Sensivitiy Assessment, Willey House Site - Crawford Notch State Park, Harts Location, New Hampshire.

This form is designed for recording "historic" (post-contact) sites. Please refer to the <u>Archaeology Site Form Manual</u> for direction on completing this form. The NH Division of Historical Resources (DHR) works hard at protecting and preserving our archaeological heritage. By completing this site form and submitting it to the DHR you are helping the DHR in protecting these non-renewable resources. Archaeological site location information is exempt from accessibility under the Freedom of Information Act, therefore not for public access. Only professional archaeologists and the land owner are allowed access to this completed site form. The DHR maintains strict access to site information in order to inhibit site vandalism. For questions regarding this form please contact <u>Tanya Krajcik</u> at 603.271.6568

#### NEW HAMPSHIRE POST-CONTACT ARCHAEOLOGICAL INVENTORY FORM New Hampshire Division of Historical Resources

New Hampshire State Historic Preservation Office

27 - CA - 189

# **POST-CONTACT ERA SITE DATA**

	Period of Occupation	
	☐ Diagnostic artifacts ☐ Diagnostic features ☐ Oral tradition ☐ Map interpretation ☐ Other (Specify):	☐ Architectural ☑ Documentary
	Post-Contact Site Type (select as many as appropriate)  Residential Agricultural Crafts production Industrial Education Governmental Transportation Recreational Social Health care Other (Specify):	□ Commercial     □ Cemetery     □ Religious     □ Military     □ Shipwreck
	Post-Contact Material Present at Site Artifact category / Artifact type / Quantity: N/A	☐ Collected ☐ Observed on site
SPE	ECIAL STATUS LAND USE	
	Special Use Categories (Select as many as appropriate)  None Wilderness Area  Nature Preserve Public Park Military Land Archaeological Preserve Federal Forest Historic District Current Use (Other) Other (Specify):	☐ Wildlife Preserve ☐ Scenic River ☑ State Forest ☐ Current Use (Historic)
SITE	E DESCRIPTION	
	Describe where the site is located, including a description of how to get to the site and setting of the site. Site dimensions should be included. Describe the current of the site appears disturbed, describe the type of disturbance (for example: vand Also include any comments relevant to how the site was discovered or reported as	t condition of the site. dalism, erosion, logging, etc.)
	The Willey House and Hotel Site is located in Crawford Notch State Park, Harts Loc River, and is publicy accessible via Route 302. The area is actively used as a camp a Restaturant Building, Tourist Information Center, Bathrooms, and administrative s fieldstone foundation remains of the Willey House (ca. 1793) and the Willey House visible adjacent to and below the extant Restaurant Building. No archeological investite to date, so exact site boundaries have not been established.	ing and recreation facilty that includes tructures. The site comprises the Hotel (ca. 1844), both of which are

# <u>MAPS</u>

- ✓ Attach a USGS topographic map (or non photo-reduced copy) of the site area.
- ✓ Attach sketch map of site (include north arrow and scale).

### **PHOTOGRAPHS**

✓ Attach photographs of site (if available). Digital Photographs are acceptable. All photographs must be clear, crisp and focused.

# \*\*\*\*\*\*\*The remainder of this form is required for professional archaeologists only\*\*\*\*\*\*\*

Narrative desc	ription of the as presence	e research w	hich may be p	roposed for the s	site, any additic	ssional archaeologists only) onal aspects of the site which may additional research, especially if t
century occupation	on of the area urism in the \	a, and in par White Moun	ticular its use	as a travelers' in	n and hotel dur	ghteenth- through early twentieth ring the early development of nformation about pre-contact
				al archaeologists d its research po		ete for intensive level forms)
		***************************************				
				-	gists only)	
. Principal Co	ontext 81	- NH State F	Parks, Sites, a	nd Forests	gists only)	
. Principal Co	ontext 81 Context 73	- NH State F		nd Forests	gists only)	
Secondary Secondary	ontext 81 Context 73 Context	- NH State F	Parks, Sites, a	nd Forests	gists only)	
a. Principal Co	ontext 81 Context 73 Context	- NH State F	Parks, Sites, a	nd Forests	gists only)	
A. Principal Co.  Secondary  Secondary  Secondary	ontext 81 Context 73 Context Context	- NH State F - Summer a	Parks, Sites, a	nd Forests lome Tourism		
<ul><li>Principal Co</li><li>Secondary</li><li>Secondary</li><li>Secondary</li></ul>	ontext 81 Context 73 Context Context	- NH State F - Summer a	Parks, Sites, a	nd Forests lome Tourism		
Principal Construction Secondary Secondary Secondary	context 81 - Context 73 Context Context Context  ATION (Req	- NH State F - Summer a	Parks, Sites, a	nd Forests lome Tourism naeologists only)		eligible:
Principal Co Secondary Secondary Secondary	ontext 81 Context 73 Context Context ATION (Req	- NH State F - Summer a	Parks, Sites, a nd Vacation F	nd Forests lome Tourism naeologists only) ria:		individually individually
Principal Co. Secondary Secondary Secondary NR listed:	context 81 Context 73 Context Context ATION (Req	- NH State F - Summer a	Parks, Sites, a nd Vacation F	nd Forests lome Tourism naeologists only)		
. Principal Co . Secondary . Secondary . Secondary	context 81 - Context 73 Context Context Context  ATION (Req	- NH State F - Summer a	Parks, Sites, a nd Vacation F	nd Forests lome Tourism naeologists only) ria:		☐ individually☐ within district
A. Principal Co. B. Secondary C. Secondary D. Secondary D. Secondary NR listed:	ontext 81 Context 73 Context Context  ATION (Req individual within a c	- NH State F - Summer a	Parks, Sites, a nd Vacation F	nd Forests lome Tourism naeologists only) ria:		☐ individually☐ within district☐ not eligible

	I
	1
	1
	1
	1
	1
	1
	1
	ì
	Ť
	1
	1
	1
	İ
	ł
	İ
	1
	i
	L
	Т
	į.
	Ť
	İ
	ļ
	I
	į.
	1
	li
	1
	J.
	j
	1
	j

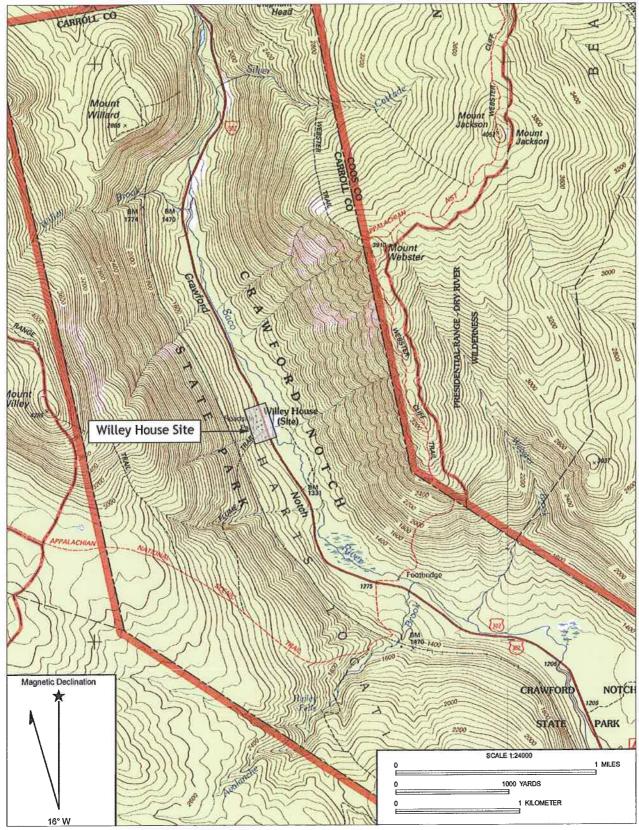


Figure 1. Location of Willey House Site study area on the Crawford Notch USGS topographic quadrangle, 7.5 minute series.

į
ļ
ī
1
] r

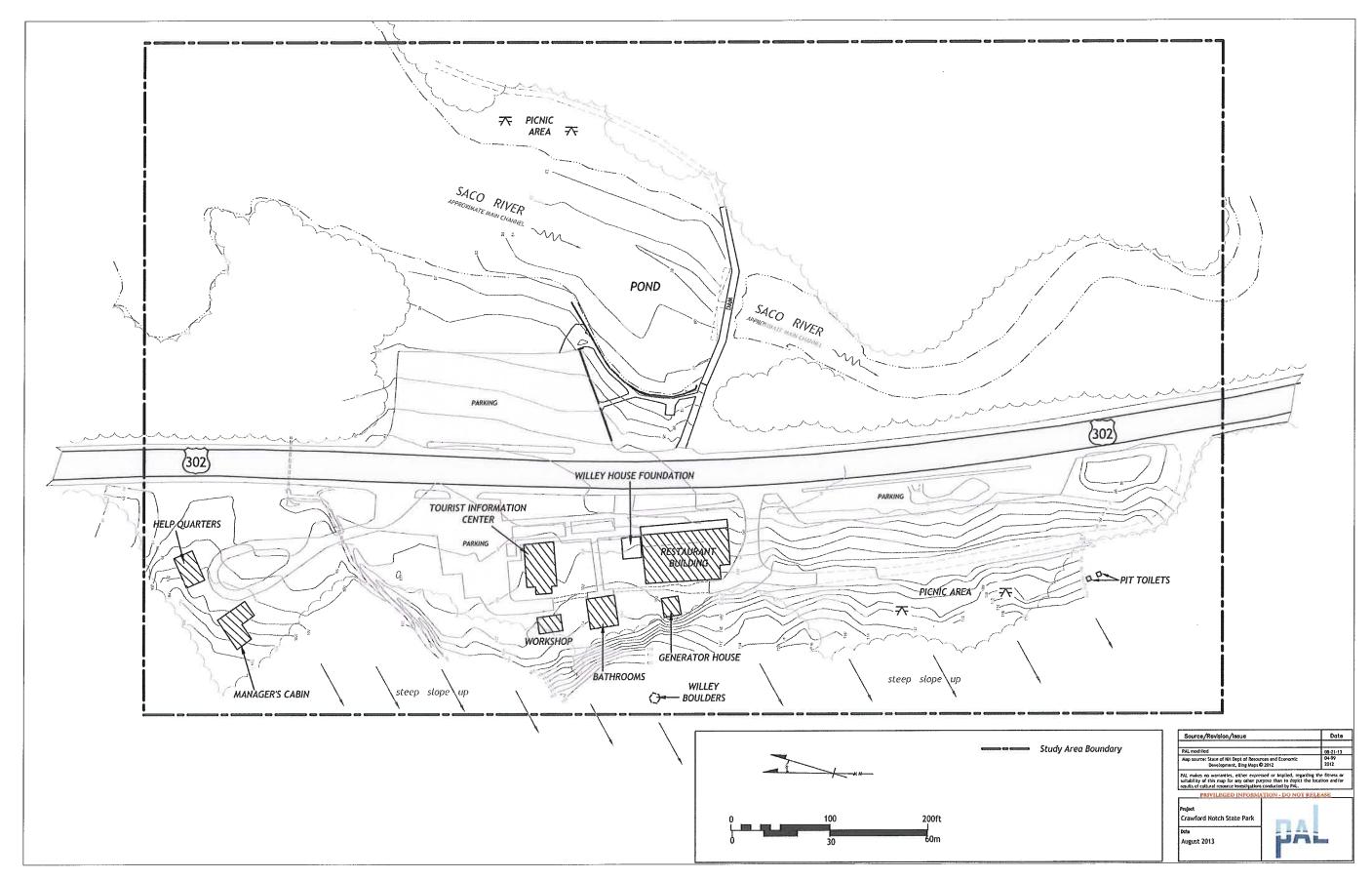


Figure 2. Map of the Willey House Site Phase IA archaeological study area.

# Jericho Mountain State Park (BER0084)

1. Type of Area Form

Town-wide:

Historic District:

Project Area:

- 2. Name of area: Jericho Mountain State Park
- 3. Location: Jericho Mountain Road, off NH 110
- 4. City or town: Berlin
- 5. County: Coos
- 6. USGS quadrangle name(s): Mt. Crescent, NH 1:24000; Berlin, NH 1:24000; West Milan, NH 1:24000; Milan, NH 1:24000
- 7. Dataset: SP Feet, NAD83
- 8. SP Feet (approximately): see Location Map

#### Jericho Mountain tract:

- X 1088007.990029
  - Y 731199.246404
- X 1100372.824826
- Y 726375.105104
- X 1094591.556875 Y 713863.019132
- X 1081896.913372 Y 716034.540674

## Head Pond tract:

- X 1102922.399730
  - Y 739131.045907
- X 1108294.343337 Y 739206.258244
- X 1102310.912311 Y 728283.002507
- X 1098839.448781 Y 732459.761385

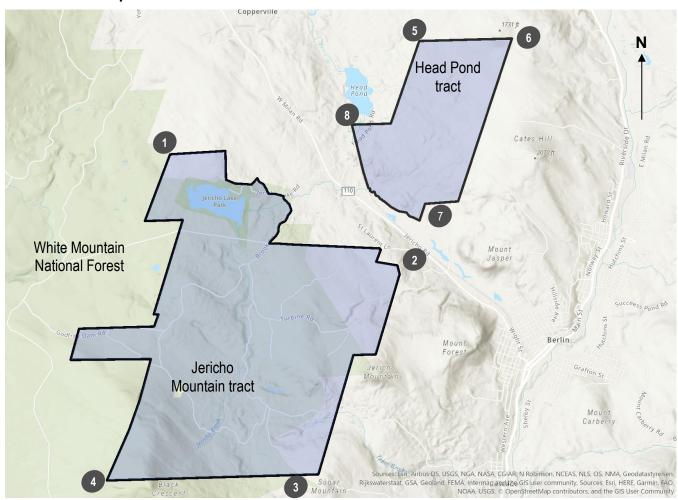
9. Inventory numbers in this area:

N/A

- 10. Setting: <u>Large</u>, mountainous wooded park with small lake and beach, off-road vehicle trails, campground and events center
- 11. Acreage: approximately 7,800 acres
- 12. Preparer(s): Lynne Monroe, Kari Laprey, Reagan Ruedig
- 13. Organization: Preservation Company
- 14. Date(s) of field survey: April 2022

# Jericho Mountain State Park (BER0084)

# 15. Location Map



# 16. Sketch Map



Jericho Lake State Park Recreation Area

Jericho Mountain State Park (BER0084)

# 17. Methods and Purpose

The following NHDHR Historic District Area Form for Jericho Mountain State Park was prepared for the New Hampshire Division of Parks and Recreation in 2022 to document the development of the park and evaluate its eligibility for the National Register. Jericho Mountain State Park is New Hampshire's newest park, opened in 2007 as an off-highway recreational vehicle (OHRV) riding area. Within the park, Jericho Lake was dammed in 1969-70 and the City of Berlin beach facilities opened nearly fifty years ago in 1975.

The area form addresses the entire park, including the lake and surroundings, and the two large forest tracts of thousands of acres. Most of the large park was historically timberland, logged in the early 2000s before the State acquired it. The survey of historic resources focuses on Jericho Lake, the oldest developed part of the park and the location of proposed campground expansion.

Fieldwork was conducted in the spring of 2022. Research sources included the Division of Parks and Recreation files, Coos County deeds, oral history, historic topographic maps, and aerial photos.

# 18. Geographical Context

Jericho Mountain State Park is located off NH Route 110 about four miles northwest of downtown Berlin. The park occupies a large area in the middle of Berlin, west of the city center and east of the White Mountain National Forest. It includes two large parcels of land. The 6000+ acre Jericho Mountain tract southwest of NH 110 contains the beach and day-use area and the main trail network. The 1,669-acre Head Pond tract on the opposite side of NH 110 is connected by an off-road vehicle right-of-way. Jericho Lake is about a mile west of NH 110 via Jericho Lake Road. The artificial lake was formed by a dam built 1969-70. The park on the northern shore dates to ca. 1975. A large new visitor center overlooks the beach. The campground, rebuilt ca. 2012, fills the area between the curving access road and the dam emergency spillway. A flat open grassy area nearby is the event grounds that opened ca. 2010. The Caron Camp at the far western edge of the park was a previously private cabin on leased land acquired by the State in 2012.

Jericho Lake covers roughly 127 acres, impounded by an earthen dam at its east end. It was created from a natural wetland along Jericho Brook at an elevation of 1,417 feet above sea level. The brook forms near Berlin's southern border on the slope of Black Crescent Mountain and flows northerly through the middle of the park land, before turning east toward the Dead River. The dam was built in 1969-70 as Dead River Site No. 1 to provide flood control by creating a reservoir to store runoff from the surrounding hills. The lake is roughly a quarter-mile across and two-thirds of a mile long. Jericho Brook exits via an outlet pipe in the middle of the embankment at the east end of the lake. The stream flows east and northeast through a wooded area south of the park access road. It becomes the Dead River in the broad flat valley near NH Route 110 and flows southeast for 3.5 miles to the Androscoggin in downtown Berlin. Nearly flat or "dead," for most of its course, the Dead River drops 40' in the last half mile. The State Park spans a watershed divided. North of NH Route 110, Head Pond at an elevation of 1075 feet, drains north into the North Branch Upper Ammonoosuc River. NH Route 110 is an east-west highway, connecting NH Route 16 at Berlin in the Androscoggin Valley with US Route 3 in the Connecticut River Valley. The St. Lawrence and Atlantic Railroad, formerly the Grand Trunk Railway is roughly parallel.

Jericho Mountain State Park surrounds Jericho Lake, and the wooded hilly land extends south for over three miles. The park contains the western slopes of Jericho Mountain. The peak (elevation 2454') is just east of the park boundary. Originally called Black Mountain, the name was changed in the 1930s

Jericho Mountain State Park (BER0084)

to avoid duplication, at the request of the USGS. Jericho Mountain has five wind turbines erected in 2014. Sugar Mountain (2,449') is at the southeast corner of the park. Black Crescent Mountain (3264') and the Crescent Range rise south of the park in the town of Randolph. Immediately west of Jericho Mountain State Park, the White Mountain National Forest (WMNF) covers the entire western part of Berlin.

# 19. Historical Background

The mountainous terrain around Berlin was historically used as timberland for the industries located in the downtown along the Androscoggin River. Berlin's development as an industrial and commercial center of the Great North Woods region began with the construction of sawmills in the mid-nineteenth century. The Berlin Mills Company was established in 1868 and production of wood pulp and paper manufacturing began in the 1870s-80s. The population center and the main road (now NH 16) was on the Androscoggin River in the eastern part of town. NH Route 110 was an early highway but was unsettled except for sawmills on the upper reaches of the Dead River and one at the falls on Jericho Brook. The Grand Trunk Railway, built across the northern part of the state in the early 1850s, parallels NH 110 above Berlin. Berlin's population boomed in the late nineteenth century, and it became a city in 1897. In the early twentieth century, the Berlin Mills, renamed Brown Company during WWI, was one of the world's largest pulp and paper companies, and the city had a population of over 20,000 people. In the surrounding mountains, logging was the main activity. The paper company owned millions of acres of timberland. Thousands of men worked in the woods during the winters cutting and hauling the wood.

The White Mountain National Forest land in Berlin was acquired by the government ca. 1917. The WMNF contains York Pond, the head of the West Branch Upper Ammonoosuc River, which is the location of the Berlin Fish Hatchery and the Barry Conservation Camp. A water pipeline with a jeep trail along it runs across the park south of the lake from the Godfrey Dam reservoir, built ca. 1920 as city water supply. The water treatment built in the 1990s is east of the park, off of NH Route 110. The Jericho Mountain area was included in the proposed boundaries of the National Forest in the 1910s, and it shows that way on some maps, but it remained in private ownership.

The paper mills suffered during the Depression. In 1935, Brown Company filed for bankruptcy and reorganized under new owners. Logging continued to provide the softwood pulp logs. Aerial photos show there were logging roads in the Jericho area including the origins of the park access road. Major flooding in 1927, 1936 and 1953 damaged the mills and infrastructure along the Dead River and the Androscoggin.

#### Dead River Dam No. 1

Jericho Lake was created for flood prevention, with the added benefit of recreation, where there was previously only forest. The lake was designed to store large volumes of runoff for slow release. The lake impounds a drainage area of 6.5 square miles at the head of the Dead River on Jericho Brook. Flood control was necessary to allow for development of land in the Dead River flood plain on the outskirts of the downtown, including industrial sites on NH 110 and a new high school. The Dead River project was one of many flood control projects in New Hampshire built under the Watershed Protection and Flood Control Act (P.L. 84-566) of 1954. Public Law 87-703 of 1962 enabled cost sharing with local entities, like the City of Berlin, that agreed to develop and manage the reservoirs for other purposes like fish and wildlife habitat and recreation. There was a lack of water-based recreational facilities in the region because of the industrial use of the Androscoggin River, and the nearest lakes are over twenty miles away. Planning for the Dead River project began in 1965. Soil

Jericho Mountain State Park (BER0084)

testing was done in December 1966. The Brown Company donated the nearly 300 acres of land for the lake and its surroundings, shortly before its assets were taken over by Gulf and Western and then the James River Corporation. The St. Laurent family and C.N. Hodgdon Co. gave land along the access road. Plans were completed in 1968. The dam and impoundment were designed by the Soil Conservation Service of the US Department of Agriculture, now the Natural Resources Conservation Service, which built thousands of dams nationwide. Excavation and construction took place in 1969-70. The federal share of funding for Phase I was \$500,000 and the local share \$175,000 (Berlin Historical Society clippings binder). The land at the north end of the dam, where the campground and parking areas were later built, was cleared for construction staging. The original road was south of the event grounds, coming right up to the dam. The rest of the newly created shoreline was wooded (NETROnline 1972).

# Jericho Lake Park

Development of a swimming beach and recreation area was Phase II of the project. Plans for the Dead River Watershed Recreation Area were drawn in 1971 by Wright, Pierce, Barnes & Wyman engineers of Topsham, Maine (NH Division of Parks and recreation files). The plans were approved in the spring of 1972. Funding for construction of the recreational facilities and access road was delayed another year or two, because not all city councilors approved of the spending at a time when the local industries were in decline and the population was shrinking (Berlin Historical Society clippings binder).

The summer of 1975 saw the opening of the new municipal park. There were about 9,000 visitors the first year. The official dedication was held on August 25, 1975. Governor Meldrim Thomson gave the keynote speech. Construction of Jericho Lake Road was ongoing in 1976 and landscaping continued for several years according to City Reports. The park was used by families and for public events, such as the first Olde Time Picnic, held in 1977. A campground opened in 1977 where the present one is now. It was available to city residents and groups. A reported 94 campers used it in 1978, when the park had a total of 6,300 visitors. Parking lot improvements in 1983 may have involved grading of the beach lot where picnic area was originally planned. The picnic pavilion was used for group rentals. Senior picnics were regular events. Day camp programs were held at the park during the 1990s. The dam was maintained by the City of Berlin under inspection by the NH Dam Bureau. Barricade fences were installed in the 1990s to prevent vehicles driving on top of the dam. The City of Berlin saw economic uncertainly and budget cuts in the early 2000s. Park usage declined. In 1999 only three groups rented the shelter, nine attendees were reported at the senior picnics and a similar number used the campground according to the city report.

The local pulp and paper mills continued under a series of owners on a reduced scale. The population declined by almost 5,000 people between 1970 and 2000. Frasier Paper operated the Burgess Mill until 2006, and then only the Cascade paper mill in Gorham remained in operation. Timberland formerly owned by the Brown Company was sold off. Land in the Jericho Lake area was acquired in 2003 by Scott A. and Thomas R. Dillon, then of Maine. T.R. Dillon Logging Company supplied the last of the area pulp mills, harvesting the timber including by clear-cutting. During the timber harvesting process many gravel roads and landing areas were developed. During the same period, land on Jericho Mountain was cleared and roads built for the construction of the first wind turbines in the state in 2006. The logging roads and existing trails were used by off-road vehicles and snowmobiles.

Jericho Mountain State Park (BER0084)

Jericho Mountain State Park 2006-present

The importance of recreation to the local economy increased with the closure of the mills in the early 2000s. Demand for a park with high quality trails for off road vehicles led the State to begin planning for an off highway recreational vehicle (OHRV) riding area. State lawmakers charged the New Hampshire Bureau of Trails with locating sites for improved ATV and snowmobile trails. In 2003, a plan for developing a statewide trail system was completed. In 2004, representatives from the Department of Resources and Economic Development (NHDRED) and the City of Berlin met to discuss expanding off road vehicle recreational opportunities in the Berlin area that would draw private investment and businesses. Mayor Danderson is credited with the idea of a park incorporating the underutilized city beach and surrounding timberland. In 2006, the Dillon Company provided two tracts of land of 5,525 and 1,669 acres, and a 6.6 mile, 30-foot-wide trail easement to connect them (Deed 1161:975). The cost was \$2,160,000, payable over five years. Dillon retained the right to harvest timber for four years and logging continued (Berlin Historical clippings binder). The City of Berlin turned Jericho Lake on 293 acres and another ten-acre parcel over to the State in 2007, retaining the right of Berlin residents to use the beach free of charge. The deed was recorded in 2008 (Deed 1238:415).

The NH Bureau of Trails and local volunteers developed approximately fourteen miles of OHRV trails, mainly from existing gravel logging roads during the first year. Since then, there have been ongoing improvements for a total of over eighty miles of trails. The Head Pond area opened in 2010. The park is used by ATVs, all-terrain vehicles also known as 4-wheelers or quads, UTV utility vehicles or side-by-sides, trail bikes, trucks, jeeps and snowmobiles. The trail system is operated and supported by the Androscoggin Valley ATV Club and by the White Mountain Ridge Runners Snow Machine Club. The NH Bureau of Trails assists with maintenance. Trailside buildings, including lookout shelters and two pit toilets, were built ca. 2010, and a warming hut in 2012. The ATV event center with mud pit was developed ca. 2010 and enlarged in 2012. The first jeep/ 4 x 4 truck trail was built in 2015 by the North Woods Off Road Club. Park trails connect to the vast regional trail network. A connector trail on local roads between Jericho and the Success Pond ATV trails was created by the City of Berlin in 2009. In 2014, Berlin opened its downtown streets to ATVs.

State Park facilities were expanded. The visitor center was built 2010-11 with a grant from the Land and Water Conservation Fund. The building was constructed by local high school students in the vocational arts program and named for former Berlin Mayor Robert Danderson who was active in formation of the State Park. It contains offices and equipment storage, restrooms, information, and concessions. A new septic system was installed in 2012. The campground was redeveloped in 2012 reusing some of the sites and paths of the 1970s layout. Cabins were built followed by two shelters and pit toilets. In 2012, the State purchased an additional eleven acres east of the day use and campground areas from the lumber company (Deed 1357:624). Another 266 acres, in several parcels, was added to the eastern edge of the park. A Land and Water Conservation Fund grant was received in 2014 for construction of a new bathhouse. It was completed in 2016 with toilets, showers, laundry facilities, dishwashing station, and park store.

# 20. Applicable NHDHR Historic Context(s)

- 404. Logging, lumbering and sawmills, 1620-present.
- 606. Winter recreation and the ski industry, 1890-present.
- 608. Outdoor recreation in New Hampshire.
- 611. New Hampshire State Parks, Sites and Forests

Jericho Mountain State Park (BER0084)

902. Engineering in New Hampshire, 1623-present 1100. Local government, 1630-present.

# 21. Architectural Description and Comparative Evaluation

Jericho Mountain State Park is primarily wooded with an extensive network of gravel roads and trails. Park access is via Jericho Lake Road an asphalt road from NH Route 110. A traditional wooden New Hampshire State Park sign marks the entrance. NH 110 is a rural two-lane highway with scattered mid to late twentieth century residences, industries and construction companies, and modern businesses related to off road vehicles. Jericho Lake Road winds southwest through wooded land to the park headquarters at Jericho Lake. The only access to the Head Pond tract northeast of NH 110 is by off-road vehicle on a connector trail across private land, known as St. Laurent Road and Head Pond Road. State-owned land includes several parcels. Jericho Lake and perimeter, totaling 293 acres is 407-10, formerly owned by the City of Berlin. Parcel 407-3.3 is the main Jericho Mountain parcel. A landlocked parcel that was once WMNF land (416-1) contains 100+ acres acquired by the State in 2014. The Head Pond Tract on the northern side of the highway is 402-32.10, 1505 acres and 402-31, 164 acres.

Jericho Lake is bounded on the east by a raised earthen dam. The beach is an artificial sandy area in a cove within a point of land on the northern shore. Picnic sites are scattered on the uphill side of the beach, accessed from a gravel parking lot. The visitor center is on the hill overlooking the beach and the main parking lot is to the north. The bathhouse at the east end of the beach serves the day use area and the campground. The campground fills the area north of the dam. The event grounds are below the dam at the east edge of the developed park.

The current trail network was developed beginning in 2006. There were logging roads and trails used by off-road vehicles predating the state park. The oldest existing trail is the Pipeline Trail along the 1920s water pipeline that crosses the park to the Godfrey Dam in the WMNF. There were early 20th century trails up the east side of Jericho Mountain from near downtown Berlin. USGS maps show the Jericho Trail continued across the present park land, but not much of it remains in use. The Lake Loop dates from construction of the lake and dams. Bufford's Way and Moose Road pre-date the state park. Brook Road, formerly Godfrey Dam Road developed in the 1970s-80s according to aerial views and Turbine Road also dates to that period.

Visitor Center, 2010-11, Photos 7-9

A large 1½-story building with exposed basement level is set on the hillside overlooking the beach area between the two parking lots. The entrance is on the north elevation from the main parking lot. The building is clad in natural wood shingles and trimmed with white boards. The roof is green standing seam metal. Porches on square posts span the east and south sides and a gable roof shelters the front entry. A wooded area was cleared for the building's construction. The large parking lot location is as built ca. 1975. It was expanded to the north and west ca. 2012. A new central kiosk installed ca. 2015 has tourist information and interpretive signage. The structure is white with a tan shingled hip roof. A traditional state park kiosk with trail maps and notices stands at the edge of the lot.

Toll Booth, 2011, Photo 10

A small ticket booth it the corner of the beach parking lot and picnic area entrance is a one-room building with overhanging front porch. The walls are wood shingles stained dark brown with green trim. The roof is green asphalt shingle. A nearby kiosk has an overhanging gable roof.

Jericho Mountain State Park (BER0084)

Picnic Area, Beach and Playground, 1975, Photos 2, 10-13, 16-20

The location and layout of the beach area are as designed in 1971 and completed in 1975. The beach, play area, picnic shelter and wooded picnic area and location of the bathhouse are part of the original design. The present beach parking lot was designed as picnic area according to the plan but was used as parking by the 1980s. The rest of the picnic area retains scattered picnic sites with new picnic tables and modern fireplaces. New gravel paths were installed in recent years for accessibility. The sand beach is roughly 290' long with 240' of shoreline and 65'-70' wide. North of the beach is a mown grass play area. There is a horseshoe pit at the far end. The two metal swing sets may date to the 1970s.

Picnic Shelter ("Pavilion"), 1975, Photos 17-18

A group shelter is in a small clearing at the west edge of the picnic area. It was part of the original 1970s design with improvements in the 1980s. The structure has a hip roof supported on square posts with diagonal knee braces. The roof frame is exposed and covered with green corrugated fiberglass sheets. The floor is a concrete slab. The northern end of the building is enclosed with plywood walls. There is a group charcoal grill on an older concrete base nearby.

Bathhouse, 2016, Photos 13, 14

A new bathhouse was opened in 2016. The architect was Kyle Barker of Warrenstreet Architects. The placement east and footprint are similar to the original bathhouse built ca. 1975. It had a broad gable roof and a front porch facing the lake. The walls were board and batten, stained dark red, and the roofs and gable ends were clad in translucent green corrugated sheets. The new building is clad in natural wood shingles and has white trim. The gable roof is green standing seam metal and topped by a ventilator cupola. A store window is located at one end facing the picnic area and outside stainless-steel dishwashing sinks are sheltered by an overhanging porch on the campground end.

Boat launch, 1975, Photos 21-22

The boat launch is west of the beach where the paved park road ends and Lake Loop Trail begins. A concrete launch slopes into the water. Trailer parking is parallel to the road. The nearby shoreline has a seasonal dock for canoes and kayaks.

Dead River Site 1 Dam, 1969-70, Photos 3-4, 24-30

The dam at the east end of the lake is a 2,760-foot-long, 46.5-foot-high earthen embankment with uncontrolled spillways. The 100-foot-wide auxiliary spillway crest is set approximately 9 feet below the crest of the embankment. Reservoir flow is discharged through the principal spillway until the pool level reaches the auxiliary spillway crest. The auxiliary spillway is an open channel vegetated area. The pond drainpipe conduit is controlled by a gate in the reinforced concrete riser intake structure. The principal spillway outlet conduit is a 42-inch diameter pre-stressed concrete pipe, approximately 205 feet long and supported by a concrete cradle. The west end of the lake is formed by a 1,685-foot-long dike or levee (Gannett Fleming 2016). The dam has grassy slopes on both sides and a dirt trail across the top.

Campground, 1977/2012, Photos 3-4, 31-41

The campground is accessed from Jericho Lake Road opposite the visitor center. The layout of paths is similar to the 1970s plan. Jericho Lake Road built ca. 1975, curves around the campground on three sides. The emergency spillway and dam are to the south. The gravel roads and parking spaces were rebuilt in 2012. There are twenty sites including cabins, two shelters, nine RV sites and four tent sites. Each has a new picnic table and fire ring.

Jericho Mountain State Park (BER0084)

Cabins, 2012, Photos 33, 34, 38

Five identical cabins are visible on a 2013 aerial on sites 3, 4, 7, 8 and 9. The one-room buildings have gable roofs extending to shelter a front porch. The walls are log siding, stained dark brown, with green trim. The roofs are green standing seam metal.

Shelters, 2014, Photos 32. 37

The two Adirondack type shelters have exposed framing and overhanging roofs clad in wood shingles. The walls are T-111 stained dark brown.

Event Grounds, 2010, Photos 42-44

A flat area below the dam emergency spillway was cleared of trees and leveled into an event site with a central mud pit in 2010. It was expanded to the east in 2012. The grass and dirt area has lights and electrical boxes for vendors. Access is from Jericho Lake Road via the original dam access road.

Trailside buildings, 2010, 2012

The outlying areas of the park were not surveyed or photographed. There are two remote pit toilets built in 2009 or 2010. Remote picnic shelters, built ca. 2010, are located on Buford's Way and the Scenic View Trail. There is also a warming hut, built ca. 2012.

Camps/Cabins, ca. 1970

There are two remote cabins within the park, which were built independently and unrelated to the state park context. The Caron Camp, now owned by the State, was formerly privately owned and originally accessed from the WMNF side via the Kilkenny Loop Road. The Godfrey Dam Road, now the Caron Loop was extended later. Historic aerials suggest the building was built at that time, in the late 1960s-ca. 1970 (NETROnline). There is also a ca. 1970 cabin on a privately owned parcel on the Camp Loop Road.

# **Comparative Evaluation**

The Great North Woods Region has nothing comparable to this early 2000s state park with off road vehicle facilities. The Jericho Lake Park area created by the City of Berlin in the 1970s has features common to other state parks, with parking, picnic area, sand beach, picnic shelter and a bathhouse. Older state parks in the region include Milan Hill State Park, a Civilian Conservation Corps (CCC) era park including a fire tower and picnic area opened in 1939, with added campground. Moose Brook State Park south of Berlin, in Gorham, was built by the CCC in the 1930s and opened in 1936 as one of the first supervised camping areas in the state. Forest Lake State Park in Dalton was also built by the CCC. More recent parks are Coleman State Park, established in 1956 when the state purchased a private family camp complex in Stewartstown. Lake Francis State Park in Pittsburg dates to 1976 and the campground opened ca. 1981.

Dead River Dam No. 1 is typical of flood control dams designed by the Soil Conservation Service, now NRCS. The Dead River project was one of the smaller flood control projects in New Hampshire. There were eighteen total, including Baboosic Brook, Souhegan River, Baker River, Gale River, Bear Camp River, Upper Ammonoosuc and more. The Baker River Watershed has seven dams built in the 1960s-70s. The Souhegan Watershed project consists of twelve dams built 1964-76. Smaller individual dam projects like Jericho Lake include Oliverian Pond in East Haverhill and Basin Brook in Chatham. Gunnison Lake in Goshen is 60-acres with a recreational area completed in 1983 in the Sugar River Watershed.

Jericho Mountain State Park (BER0084)

# 22. Statement of Significance

There has been no previous architectural survey within the state park. Properties along West Milan Road-NH 110 northwest of the park entrance were surveyed in 2004, but none were found eligible for the National Register.

Jericho Lake Park within Jericho Mountain State Park was developed as a municipal park nearly fifty years ago. At the time of survey, it is not fifty years old and does not have exceptional significance. Integrity for the 1975 picnic area and beach and the 1977 campground has been changed by construction of new buildings and reconstruction of roads and paths, so it no longer fully conveys the 1970s historic associations. The park does not represent the achievements of a historically important individual. The original landscape design of the recreation area completed in 1975 is of interest for the overall layout of the beach, picnic area and boat launch, but many components have been added or replaced in recent years. The Dead River Dam No. 1 that formed Jericho Lake was completed just over fifty years ago in 1970. This was one of many such projects carried out in the 1960s-70s period, some of which were systems of multiple dams. The dam is typical but not significant individually for its engineering.

# 23. Periods(s) of Significance

N/A

# 24. Statement of Integrity

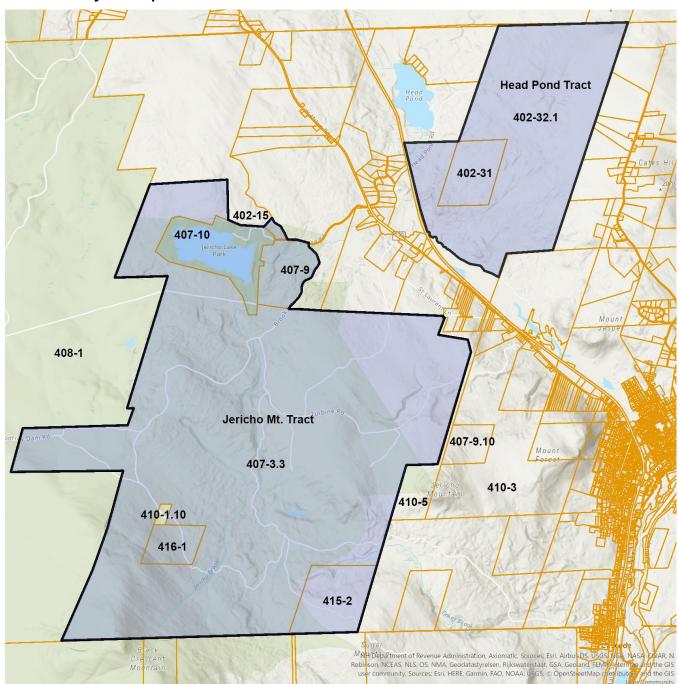
Jericho Mountain State Park was developed in the early 2000s around a 1970s park and timberland. The lakefront municipal park dates to ca. 1975. The lake with dam, beach and picnic area retain integrity of location and setting from that period, as do the access road and boat launch. Design is evident in the placement of picnic area, playground, parking and swimming. The new visitor center changed the park entrance patterns and operations. The bathhouse and campground were rebuilt. The setting of the lake is wooded hills. A new trail system was created since 2006. The original associations of City of Berlin with the beach area are no longer evident within the larger park. The dam, lake and dike retain integrity of design, workmanship and materials from 1969-70.

### 25. Boundary Justification

The inventoried resource is the entire Jericho Mountain State Park established 2006-07, but the field-survey area was confined to the former Jericho Lake Park recreation area built nearly fifty years ago and the dam built in 1970. That 293-acre parcel encompassing Jericho Lake and its perimeter is tax parcel 407-10. This is the same land acquired by the City of Berlin in 1968 and transferred to the State of NH in 2007. The large main Jericho Mountain State Park parcel is 407-3.3 bought by the State in 2006. Parcel 416-1 is a landlocked parcel in the middle, once WMNF land, owned by the State since 2014. In the middle of the park, a small parcel has a privately owned cabin built ca. 1970 on Camp Loop Road (410-1.10). The eastern edge of the park was expanded in 2012, but Berlin tax maps have not been updated. A portion of parcel 407-9 east of the lake on the south side of Jericho Lake Road and part of 402-15 north of the road are now owned by the State. The Head Pond Tract of Jericho Mountain State Park, on the northeastern side of the highway, is comprised of parcel 402-32.1, 1505 acres and 402-31, 164 acres, purchased by the State in 2006. Adjacent parcels to the north and east are owned by a timber company and recently logged. The wind power company is to the east on 410-

- 5. Some of the wind turbines are on land that is now a privately owned ATV park (407-9.10 and 410-
- 3). The WMNF (408-1) borders Jericho Mountain State Park on the west.

# 26. Boundary Description



Jericho Mountain State Park (BER0084)

# 27. Bibliography and/or References

Berlin, NH Annual City Report, variously named (https://archive.org/).

Berlin and Coos County Historical Society – Jericho Mountain State Park clippings binder.

Casella, Richard M.

2001 "Atlantic and St. Lawrence Railroad Historic District Area Form," on file at NHDHR.

Coos County Registry of Deeds.

Crawford, Dan

2012 "Improvements Made at Jericho Mountain State Park"

http://www.upstatenh.com/LocalNews/JerichoMountainParkReceivesImprovements.html

Gannett Fleming, Inc.

2016 "Dead River Site 1 Dam Rehabilitation Assessment Report." Prepared for NHDES.

Herrick, Shawn C.

2011 "Modeling least-impact ATV trails in Berlin, NH with established fine-grained evaluation criteria (RSA 215-A: 43)," University of New Hampshire Maters Theses and Capstones, https://scholars.unh.edu/cgi/viewcontent.cgi?article=1684&context=thesis.

Horizons Engineering, PLLC

2007 "Jericho Mountain State Park Riding Area Master Trail Development Plan." Prepared for NH Division of Parks and Recreation Bureau of Trails

Mausolf, Lisa

2019 "New Hampshire State Parks Mid-Century Modern (1945-1975) Historic Context Study." Prepared for New Hampshire Department of Natural and Cultural Resources.

New Hampshire Department of Environmental Services Dam Bureau files, Concord, NH.

New Hampshire Division of Parks and Recreation files, Concord, NH.

New Hampshire State Parks website, https://www.nhstateparks.org/visit/state-parks/jericho-mountain-state-park.

Driemeyer, Laura and Reagan Ruedig, Preservation Company

2019 Baker River Dam Site 8 Inventory Form DOR0004, on file at NHDHR, Concord, NH.

**United States Congress** 

1966 *Hearings, Reports and Prints of the House Committee on Agriculture*. U.S. Government Printing Office, Washington, DC.

USDA Natural Resources Conservation Service

2021 "Honoring 86 Years of NRCS – A Brief History,"

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/about/history/?cid=nrcs143 021392.

# New Hampshire Division of Historical Resources last update 06.2015

Page 14 of 51

AREA FORM

Jericho Mountain State Park (BER0084)

Wight, D.B.

1967 The Androscoggin River Valley: Gateway to the White Mountains. Charles E. Tuttle Company

Woodlot Alternatives, Inc.

2003 "A Plan for Developing New Hampshire's Statewide Trail System for ATVs and Trail Bikes 2004-2008," prepared for State of New Hampshire Department of Resources and Economic Development.

28. Surve	yor's Evaluatio	on				
NR listed: Integrity:	district individuals within district yes no	□ NR □ □ □ □ □	eligible: district not eligible more info needed	NR Criteria:	A B C D	
If this Are	a Form is for a l		# of contributing reso # of noncontributing			

Jericho Mountain State Park (BER0084)

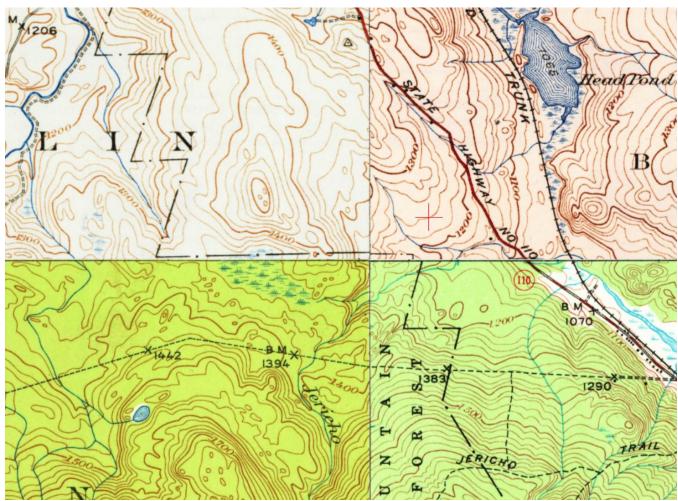
# **Historic Images**



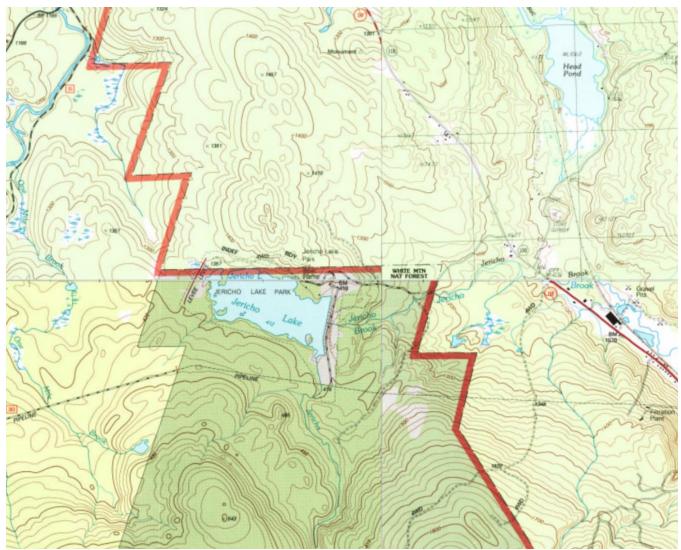
Old bathhouse built ca. 1975, replaced 2016 (NH Division of Parks and Recreation)

Jericho Mountain State Park (BER0084)

# **Historic Maps**

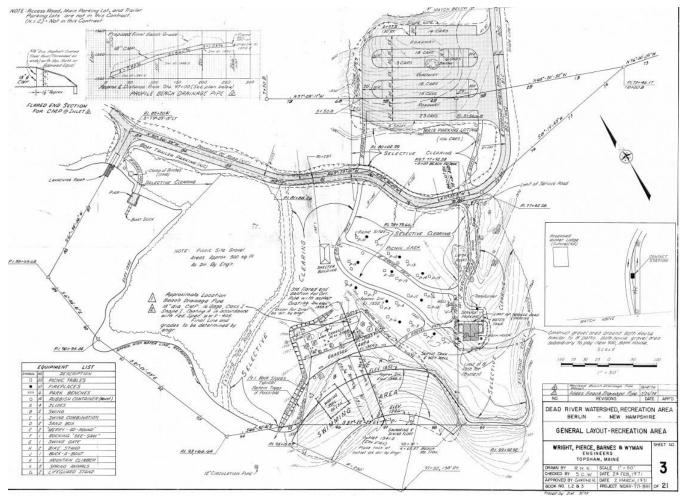


1930's USGS maps showing wooded wetland that became Jericho Lake (clockwise from top left: 1934 Percy, NH quadrangle; 1934 Milan, NH quadrangle; 1937 Gorham, NH quadrangle; 1935 Mt. Washington, NH quadrangle)



1988 and 1995 USGS maps showing Jericho Lake and the park (clockwise from top left: 1995 West Milan, NH quadrangle; 1988 Milan, NH quadrangle; 1995 Berlin, NH quadrangle; 1995 Mount Crescent, NH quadrangle)

# Jericho Mountain State Park (BER0084)



1971 Plan for Recreation Area (NH Division of Parks and Recreation)



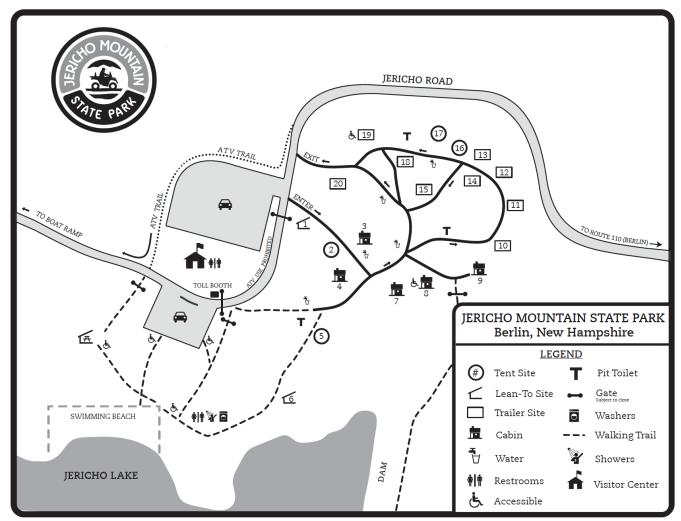
1993 Satellite view shows Jericho Lake Park beach, parking lots and campground under City of Berlin ownership (Google Earth)



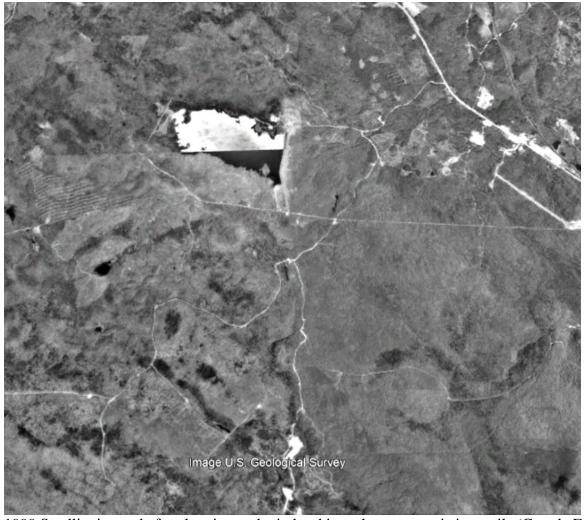
2009 satellite view before construction of visitor center, event area and reconstruction of campground (Google Earth)



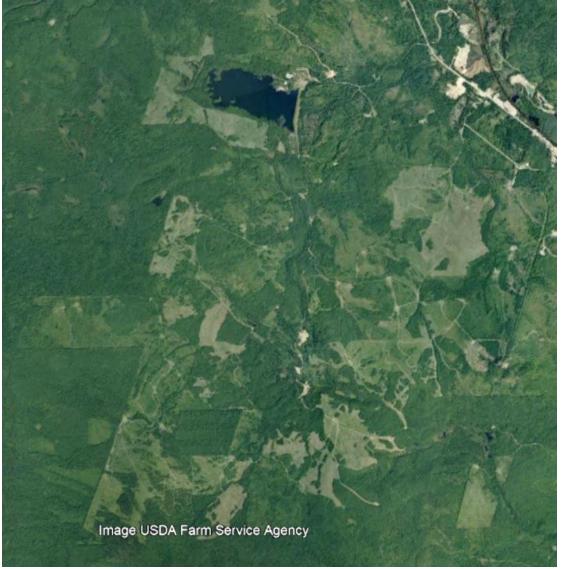
2013 satellite view showing new visitor center, event area and rebuilt campground (Google Earth)



Jericho Mountain State Park Day Use Area and Campground map (NH Division of Parks and Recreation)



1999 Satellite image before logging and wind turbines shows pre-existing trails (Google Earth)

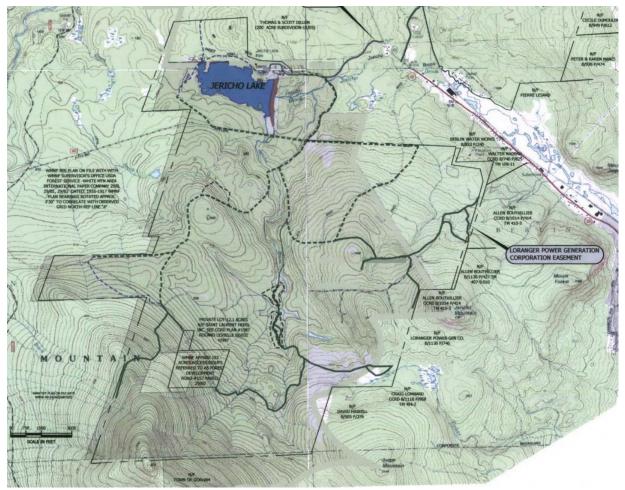


2009 satellite image shows logging in the newly purchased State Park (Google earth)

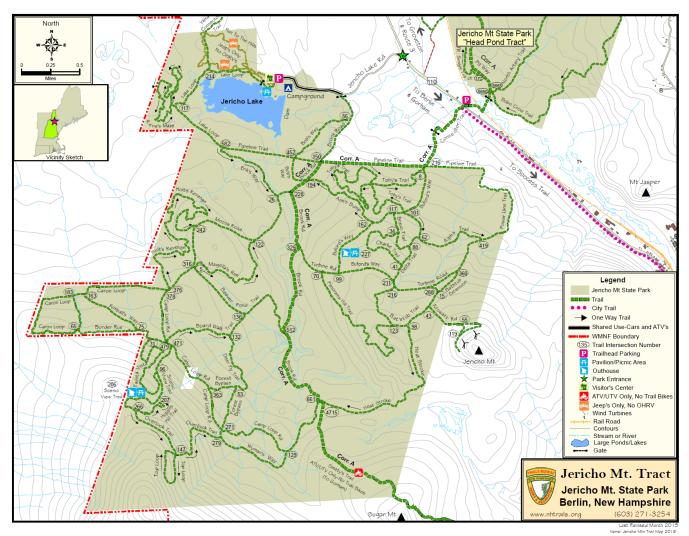


2018 satellite view shows State Park trails and wind turbines (Google Earth)

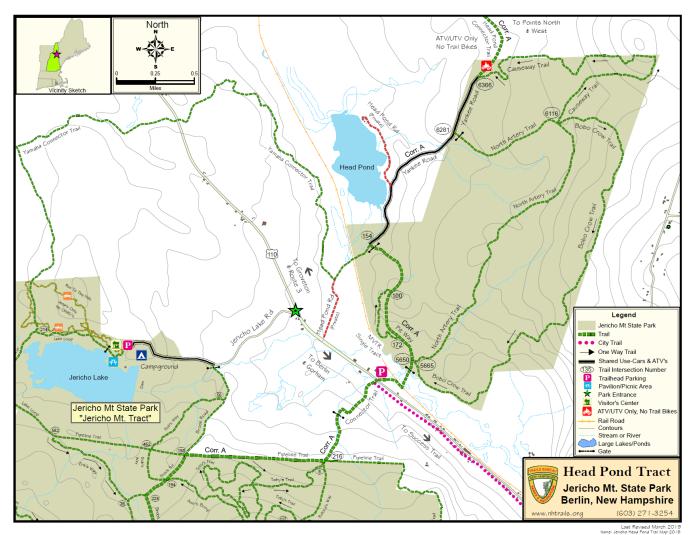
# Jericho Mountain State Park (BER0084)



2007 existing trails (Horizons Engineering 2007 for NH Bureau of Trails)



Jericho Mountain State Park, Jericho Mountain Tract trail map, updated 2019 (NH Bureau of Trails)



Jericho Mountain State Park, Head Pond Tract trail map, updated 2019 (NH Bureau of Trails)

#### **Digital Photography Statement**

I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they conform to the standards set forth in the NHDHR Photo Policy. These photos were printed using the following: Dell H625 printer on archival paper. The digital files are housed with Preservation Company in Kensington, NH.

Lynne Emerson Monroe, Preservation Company

#### **Photo Keys**



Photo Key 1 showing locations of Photos 1, 28, and 29, and area of Photo Key 2 (Google Earth)

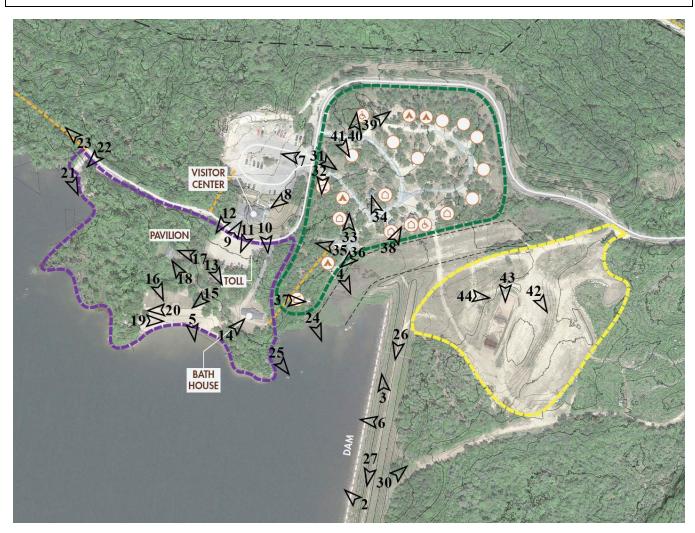


Photo Key 2 (map courtesy of SE Group)

**AREA FORM** Jericho Mountain State Park (BER0084)

### **Current Photographs**

Date taken: May 2022

Overview



Photo 1) Jericho Mountain State Park entrance on NH 110 Reference (file name): PIC\_2573



Photo 2) Jericho Mountain State Park beach Reference (file name): PIC\_2645

Direction: W

Jericho Mountain State Park (BER0084)



Photo 3) Campground shoreline viewed from top of dam Reference (file name): PIC\_2648



Photo 4) Dam from campground, showing emergency spillway area between Reference (file name): PIC\_2628

Direction: S



Photo 5) Looking south from beach toward park land extending up the Crescent Range Reference (file name): PIC\_2594





Photo 6) Jericho Lake, looking west from the dam toward the Pilot Range Reference (file name): PIC\_2638

Direction: W

## Jericho Mountain State Park (BER0084)

### **Visitor Center**



Photo 7) Upper parking lot and kiosks Reference (file name): PIC\_2661



Photo 8) Robert A. Danderson Visitor Center built ca. 2011 Reference (file name): PIC\_2664

Direction: W

# Jericho Mountain State Park (BER0084)



Photo 9) Visitor Center from beach parking lot Reference (file name): PIC\_2579

Day Use Area



Photo 10) Toll booth (ca. 2011) and beach parking lot, looking toward bathhouse Reference (file name): PIC\_2671

Direction: SSE



Photo 11) Parking lot, looking toward picnic area and beach

Direction: SSW

Reference (file name): PIC\_2669



Photo 12) Parking lot looking toward picnic shelter, road to boat launch at right Reference (file name): PIC\_2670



Photo 13) Picnic area and paths, looking toward bathhouse Reference (file name): PIC\_2582

Direction: SE



Photo 14) Bathhouse, built ca. 2016 Reference (file name): PIC\_2608



Photo 15) Picnic area looking toward beach with playground at right Reference (file name): PIC\_2580



Photo 16) Playground equipment and beach Reference (file name): PIC\_2590



Photo 17) Picnic shelter, ca. 1975 Reference (file name): PIC\_2586

# Jericho Mountain State Park (BER0084)



Photo 18) Picnic shelter Reference (file name): PIC\_2588



Photo 19) Beach looking toward playground and picnic area Reference (file name): PIC\_2599

Direction: E

# Jericho Mountain State Park (BER0084)



Photo 20) West end of beach Reference (file name): PIC\_2589



Photo 21) Shoreline between beach and boat launch Reference (file name): PIC\_2577

Direction: S



Photo 22) Boat launch Reference (file name): PIC\_2574



Photo 23) Gate at Lake Loop trail Reference (file name): PIC\_2575

Direction: NW

Jericho Mountain State Park (BER0084)

### **AREA FORM**

### Jericho Lake Dam – Dead River Dam 1



Photo 24) Dam, built 1969-70 Reference (file name): PIC\_2613



Photo 25) Dam, looking toward trail network on lower slopes of Jericho Mountain Reference (file name): PIC\_2593

Jericho Mountain State Park (BER0084)



Photo 26) Dam fence and gate Reference (file name): PIC\_2633





Photo 27) Dam, looking across the lake toward the trail network Reference (file name): PIC\_2637

Direction: S

# Jericho Mountain State Park (BER0084)



Photo 28) Dam drop inlet spillway gate Reference (file name): PIC\_2640



Photo 29) Dam outlet and Jericho Brook Reference (file name): PIC\_2639

Direction: SE

# Jericho Mountain State Park (BER0084)



Photo 30) Former dam access road from top of dam Reference (file name): PIC\_2650

## Campground



Photo 31) Campground driveway Reference (file name): PIC\_2662



Photo 32) Site 1 shelter, ca. 2014 Reference (file name): PIC\_2663

Direction: S

Direction: SE

# Jericho Mountain State Park (BER0084)



Photo 33) Site 3 cabin, ca. 2012 Reference (file name): PIC\_2622



Photo 34) Site 4 cabin, ca. 2012 Reference (file name): PIC\_2620 Direction: NW

Direction: N

# Jericho Mountain State Park (BER0084)



Photo 35) Pit toilet, ca. 2013 Reference (file name): PIC\_2617



Photo 36) Site 5 with dam at left Reference (file name): PIC\_2618



Photo 37) Site 6 with shelter, ca. 2014 Reference (file name): PIC\_2611





Photo 38) Cabins 7, 8, 9, built ca. 2012 Reference (file name): PIC\_2626

Direction: NE

## **AREA FORM**

# Jericho Mountain State Park (BER0084)



Photo 39) Pit toilet, ca. 2013 Reference (file name): PIC\_2657



Photo 40) Site 19 with access road in back Reference (file name): PIC\_2658



Photo 41) Site 20 with cabins in back Reference (file name): PIC\_2660

#### **Event Grounds**



Photo 42) Event grounds looking toward Jericho Mountain Reference (file name): PIC\_2653

Direction: SE

Direction: SE



Photo 43) Mud pit area, installed ca. 2010 Reference (file name): PIC\_2652



Photo 44) Event grounds, looking toward Mahoosuc Range on far side of Berlin Reference (file name): PIC\_2654

Direction: S

Direction: E

#### AREA FORM Mollidgewock State Park (ERR0008)

#### d1. Type of Area Form

Town-wide:

Historic District:

- 2. Name of area: Mollidgewock State Park
- 3. Location: <u>NH Route 16/ Berlin Road on the Androscoggin River</u>
- 4. City or town: Errol
- 5. County: Coos
- 6. USGS quadrangle name(s): <u>Teakettle</u> <u>Ridge, NH</u>
- 7. Dataset: <u>SP Feet, NAD83</u>
- 8. SP Feet: (see sketch map)

  X 1119324.970534
- X 1117385.943678
  Y 817806.618541
- X 1119296.125044 Y 817285.279985

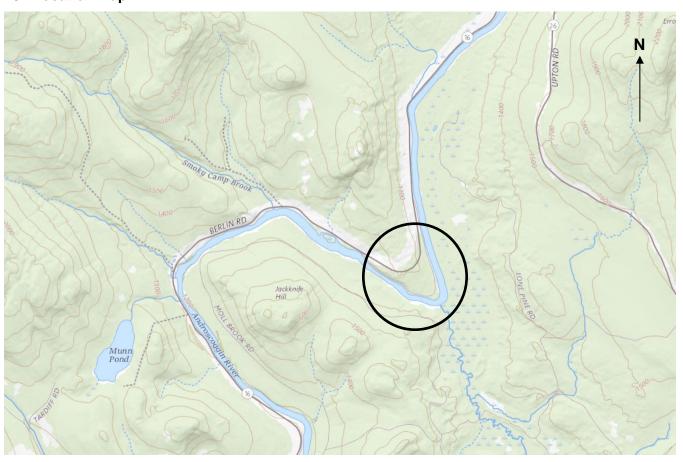
9. Inventory numbers in this area:

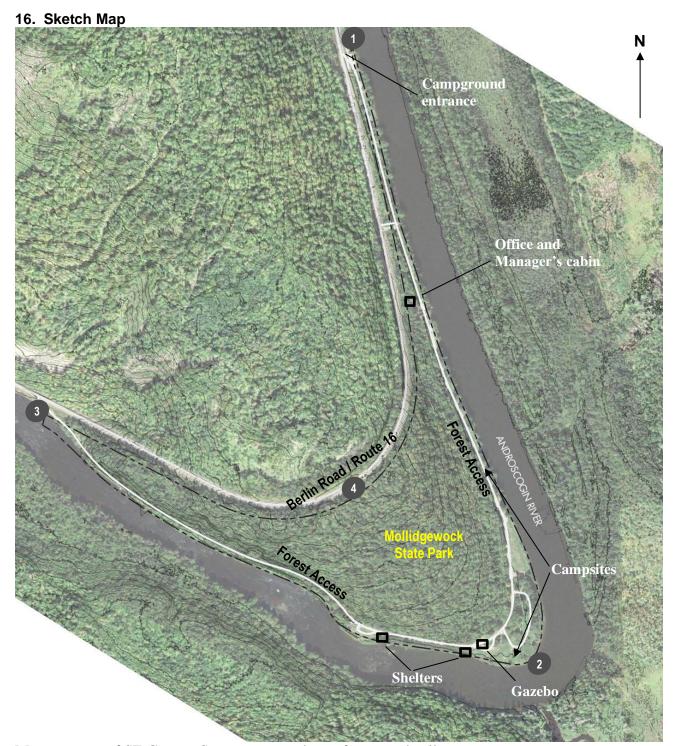
N/A

- 10. Setting: Riverfront campsites in wooded mountainous area, adjacent to state highway
- 11. Acreage: <u>46.5 acres</u>
- 12. Preparer(s): <u>Lynne Monroe, Kari Laprey,</u>
  <u>Reagan Ruedig</u>
- 13. Organization: <u>Preservation Company</u>
- 14. Date(s) of field survey: April 2022

AREA FORM Mollidgewock State Park (ERR0008)

## 15. Location Map





Map courtesy of SE Group. See campground map for more details.

Mollidgewock State Park (ERR0008)

#### 17. Methods and Purpose

This NHDHR area form for Mollidgewock State Park was completed for New Hampshire Division of Parks and Recreation in 2022, to document the development of the park and evaluate its eligibility for the National Register of Historic Places. Established ca. 1972, the campground is now fifty years old. It was privately-operated, on land leased from the timber companies, until it became a state park in 1994.

Fieldwork was conducted in the spring of 2022. Research sources included the Division of Parks and Recreation files, oral history, deeds, newspaper articles from the Berlin and Coos County Historical Society, historic topographic maps and aerial photos.

#### 18. Geographical Context

Mollidgewock State Park is located on NH Route 16 and the Androscoggin River in the town of Errol. It is about twenty-eight miles north of the city of Berlin, in the New Hampshire Great North Woods Region, the northern tip of the state, between the White Mountains and Canada. The border of Maine and the Rangeley Lakes Region lies about five miles to the east. Errol Village is about three miles north of Mollidgewock State Park, near the junction of Routes 16 and 26, and the confluence of the Androscoggin and Clear Stream rivers. NH Route 16 is the route through the White Mountains and up the Androscoggin River to its source in Maine. NH Route 26 is a southeast-northwest route between the coast and Dixville Notch, the passage to the Upper Connecticut River Valley.

Much of the eastern half of Errol is encompassed by the Lake Umbagog National Wildlife Refuge on the lake that straddles the Maine-New Hampshire border. The Androscoggin River begins where the Magalloway River joins the outflow of Lake Umbagog. It flows southerly in a winding course through Errol, Cambridge, Dummer, Milan, and Berlin, turning east toward Maine in Gorham. The Errol Dam, upriver from the town center, was built in the nineteenth century to control the water flow downriver.

NH Route 16-Berlin Road follows the western side of the valley through unoccupied forest. NH Route 16 is a two-lane road wooded on both sides except when closest to the riverbank. The highway roughly parallels the river along the flat river terrace at the base of the steep wooded hillside. NH Route 16 is a north-south road overall. It bends east-west and turns south again with the course of the river. Mollidgewock State Park occupies a peninsula at a sharp bend in the river. The park is a crescent-shaped parcel between the highway and the river. NH 16 curves around the hillside, at an elevation of about 1,300' above sea level. The wooded park land slopes down to the flat open campground at an elevation of 1,224'. The campground road on the narrow shelf of flat land at the base of the hillside is the original highway that was bypassed in the 1930s. The entrance is at the northeast corner of the park, while a back entrance at the northwest corner is closed off.

The campsites are near the river, along the northeast and southeast edges of the parcel. Much of the campground is open land, affording views across the river valley. The river is roughly 200'-300' wide here. Directly opposite the southern point of the campground is the confluence of Mollidgewock Brook, a 12.6-mile-long stream that flows westerly and north into the Androscoggin. Alternately spelled Molnichwock, the name means "very deep place" or possibly "ravine" (Huden 1963:120; Walling 1861). Below the confluence is a deep spot on the river and then a stretch of rapids. Southwest of the park, the river and road bend around Jackknife Hill, which is the northern end of Rattlesnake Ridge. Upriver from the confluence, the riverbank opposite the campground is a flat, wooded wetland. The hills are covered with northern typical hardwood spruce and fir forest. The Androscoggin River and the length of highway between Errol and Dummer are the Thirteen Mile

Mollidgewock State Park (ERR0008)

Woods Scenic Area, established in 1972. The land surrounding Mollidgewock State Park is the Thirteen Mile Woods Community Forest, land acquired in 2005 by a federal, state, and local partnership to conserve working forest along the Androscoggin.

#### 19. Historical Background

#### Pre-history and Errol Settlement

The valley of the Androscoggin River was used as a travel corridor by Native Americans. The region offered excellent fishing, trapping and hunting. Berlin was the location of a quarry for Rhyolite used for making stone tools. Archaeological testing indicates that a camp site was located on the flat plain above the riverbank were Mollidgewock State Park is now. A State Conservation and Rescue Archaeology Program (SCRAP) project in 2020 found a sparse scatter of Native American artifacts and a hearth feature. Radiocarbon dating suggests Native Americans continued traditional activities in northern New Hampshire well into the eighteenth century.

Northern New Hampshire saw no permanent Euro-American settlement until the end of the eighteenth century. The first towns were established in the 1770s, but the settlers didn't arrive to take up logging and farming until the early 1800s. Erroll was settled around the time that today's NH Route 26 was built ca. 1804 as the route between the coast at Portland, Maine, and the Upper Connecticut River Valley. The town center developed where the best farmland was located on the Clear Stream River intervale (Walling 1861). This was the only road through town. There was no improved road up the Androscoggin north of Dummer until the late nineteenth century. The wooded hills provided lumber for construction and sawmills operated locally.

#### Lumbering and Log Drives, Berlin Mills/Brown Company, 1852-1932

Timber harvesting increased after the Grand Trunk Railway was built through Berlin in the early 1850s allowing for transportation of forest products to coastal markets. Sawmills were built in Berlin and elsewhere on the Androscoggin. The river was used to float the logs downriver to the sawmills in Berlin and Gorham, and as far away as Lewiston, Maine. A group of investors from Maine founded the Androscoggin Improvement Corporation to construct dams on the Rangeley Lakes and upper Androscoggin to control water flow for the log drives. Each dam had a log sluice to allow passage. The Errol Dam was built in 1852 and rebuilt in 1887 after a flood.

The Berlin Mills lumber company, later the Brown Company, was established in the 1860s and entered the wood pulp and paper business in the 1870s-80s. The mills in Berlin and Gorham creating demand for soft wood like spruce. The paper companies bought up large tracts of land throughout the region. Errol was a staging point for logging and log drives. Berlin Road along the river though Errol, now NH Route 16, was completed in the 1880s where there had likely been some sort of path on the flat terrace all along (Hurd 1892; Bowers 1992). Hundreds of men, many of them French-Canadian, worked in the woods during the winter months, living in company logging camps. Logs were hauled to the riverbank by teams of horses and later by trucks and tractors and put into the river for spring log drives. Logs were moved down the river in sections and a series of temporary camps were set up along the river. The first stretch was Errol to Jackknife Hill in 13 Mile Woods (Wight 1967:441). Recreational activities, including hunting and fishing, began in late nineteenth century, bringing tourists to stay in lodges and camps on the lakes and ponds. Lumber companies leased heir land for sporting camps, and local residents served as guides. The Brown Company became the largest business, with thousands of employees, three factory complexes, and 4,250,000 acres of timberland.

Mollidgewock State Park (ERR0008)

#### 1932-1972 Brown Company

NH Route 16 was the East Side Road improved by the State as one of three north-south trunk line highways in the early twentieth century. In 1932, the highway was rebuilt through Errol. The old road along the riverbank was discontinued. The new highway was farther uphill and smoothed the jackknife curve (see 1930 USGS map). The old right-of-way that became the campground road was deeded by the State to the Brown Company (Deed 550:145), owner of all the surrounding land on both sides of the river.

The Brown Company operated a fleet of trucks, cranes, and other heavy equipment. Logs were trucked from the woods to water landings on the river (Wight 1967). The Mollidgewock campground site may have been such a landing. It was identified as Mollidgewock Landing on a plan from 1965 when paths led down to the "beach" on the point (NH Division of Parks and Recreation files). Historic Brown Company photographs from January 1955 show the "pine landing at Mollidgewock" (Brown Company Collection). USGS maps and aerial photos show open land along the old road and worn areas along the riverbank on the southwest side of the point (NETROnline). The last log drive on the Androscoggin in Errol was in the early 1960s. Larger trucks and improved highways made truck transport more economical (Hudson 2020). The Brown Company sold to Gulf and Western in 1968, after which the mills and timberlands went through a series of owners and land and assets were gradually sold off.

Recreational activities on the Androscoggin River, including fishing, canoeing and kayaking, increased after the last log drives in the 1960s. Sections of old road and flat landing places along the river provided informal water access. The State of New Hampshire established a roadside picnic area about two miles downriver from Mollidgewock State Park on land leased from the timber companies at a popular fishing and canoe launching spot in 1958. To preserve the quality of the river and the state highway through this forested landscape, the Thirteen Mile Woods Scenic Area was established in 1972. An easement from the lumber company landowners to the NH Department of Public Works and Highways gave the State authority to regulate land-use and development in an 11.4-mile-long corridor, from the river to a line 125' feet west of, and parallel to, NH 16.

### Mollidgewock Campground, ca. 1972-1994

The riverbank had long been popular for informal overnight camping, which was difficult for the paper company landowners to regulate. Furthermore, the 1972 scenic easement restricted camping except in authorized areas. To address the issue, Errol resident Edward "Moose" Damp took on the job of managing the sites and creating a fee for use campground under a series of lease agreements with the timber companies and the State of New Hampshire (Cote 2022; NH Division of Parks and Recreation files).

Edward Damp (1921-2009), who was from Pennsylvania, first came to New Hampshire while hiking the Appalachian Trail as a young man. He worked for the Appalachian Mountain Club (AMC) out of Pinkham Notch in 1941-43. During WWII, he served in the Army Air Corp's 401st Bomb Group of the 8th Airforce as a navigator. He and his wife Jean Newton, who met in the White Mountains, settled in her native Rhode Island after the war, and he worked as an airline navigator for TWA. Moose Damp was an avid skier, hiker, bike rider and swimmer. In 1961, they moved to North Conway with their children and opened a German restaurant on West Side Road (Old Hut Croo 2009). He also operated Moose Campground, which was advertised through the AMC, and had primitive sites along the Saco River at the end of what is now called Justamere Road.

Ed and Jean Damp moved north to Errol in 1973 or 73. They purchased the Umbagog Restaurant in Errol village (Deed A5312), which he operated until about 1975 (Cote 2022). The campground

Mollidgewock State Park (ERR0008)

became his primary focus after that. The date of the original lease has not been identified. Damp reported that he had operated the campground for twenty-two years when it was transferred to the State of NH in 1994, which would suggest he started immediately on his arrival in town. He used the pre-existing road and flat open land with minimal development. He built wooden picnic tables and made the original metal fire rings himself. There were about forty campsites, six outhouses relocated at various times, and two water pumps.

In 1975 or 76, Damp purchased two small log cabins and moved them to the site as the campground office and living quarters, for which he installed a well and septic tank (NH Division of Parks and Recreation files). The log cabins came from Log Haven Campground in Millsfield, which is northwest of Errol toward Dixville Notch on Route 26. They were part of a tourist cabin court on a circular driveway in front of a larger main cabin which is still standing north of the campground. Log Haven Restaurant was built around 1990. The original owners of Log Haven were Harold Theron "Ted" Baxter (1896-1982) and his wife Roberta. They moved to Millsfield in the 1930s, from Massachusetts where he had worked as an auto mechanic (U.S. Census 1930, 1940). The log cabins and rustic furnishings were all built by a friend who was a Native American (Cote 2022). The campground was developed later. Guy and Pauline Cote bought Log Haven campground and cabins in the early 1970s. A few years later, after Pauline started the Errol Restaurant in the village in 1974, they decided to give up the cabins. The furniture was auctioned, and the buildings were sold and relocated nearby and elsewhere in 1975 or 76 (Cote 2022).

The Damps lived just over the border in Magalloway Plantation, Maine, where they had a cabin (Cote 2022). The later timber company leases between Damp and the James River Corporation, which acquired the Brown Company assets, Pingree Associates and Henry S. Coe, included management of additional remote campsites elsewhere on the river, where camping had been taking place informally. The sites established by surveys in 1976 and 1978 included Round Pond, Sucker Brook, Jordan Brook, Mollidgewock Brook, Bog Brook, Magalloway, Mile Meadow, and Munn Pond. The business was known as Thirteen Mile Woods Campgrounds. It was open from May to October or November. It was popular with anglers, hunters, and canoeists. Damp paid ten percent of the gross receipts to the lumber company. Camping was on a first come first served bases, but reservations could be made by phone (NH Division of Parks and Recreation files).

The Damps bought back the Umbagog Restaurant through a foreclosure in the fall of 1979 and owned it a year or two with partners Luc and Louise Cote, who went on to establish the outdoor gear business, LL Cote. After Jean Damp fell ill and died early in 1982, Edward Damp sold his Magalloway cabin and moved year round to the campground (Cote 2022). He built an addition on the living quarters. In 1990, he married Giselle "Kitty" Sauvageau, a widow from Milan and Berlin. They lived in Errol but began wintering in Florida and then moved to Sarasota. Planning for the State to take over the campground began in the early 1990s (NH Division of Parks and Recreation files).

A picnic shelter was erected in the campground ca. 1992 by the New Hampshire Timberland Owners Association (NHTOA). It is a memorial to Kendall S. Norcott (1922-1986) who worked as chief forester for the Brown Company for many years and was NHTOA president and the first executive director, hired in 1970. The pulp and paper mills in Berlin remained in business through the twentieth century.

#### Mollidgewock State Park, 1994-present

North Country recreation increased during the late twentieth century with the growing popularity of off-road vehicles, back country camping, canoeing, and kayaking. The 1990s were a period of land conservation in the North County. In 1995, the Umbagog National Wildlife Refuge was established

Mollidgewock State Park (ERR0008)

by a deed to U.S. Fish and Wildlife by the James River Corporation. Later in the 1990s, the State of NH took over the adjoining Umbagog Lake campground and cabins, which had been privately developed since the 1940s.

The State purchased Mollidgewock Campground in 1994 using a federal grant from the Land and Water Conservation Fund. The New Hampshire Department of Resources and Economic Development received 46.5 acres of land from the John Hancock Life Insurance Company, which had recently acquired the James River Corporation property (Deed 834:884). The Damps transferred their right in the campground business and related personal property (Deed 834:733; Deed 834:735). The other Thirteen Mile Woods remote camp sites managed by Edward Damp were discontinued when the State took over and the leases for those locations were not renewed. Some are now within the Umbagog National Wildlife Refuge. The State maintains two remote campsites, known as Osprey and Moose Crossing, south of the campground on NH Route 16 near Seven Islands Bridge. Some of the former remote sites are evident as gravel pull-offs along the highway on flat land along the riverbank without signage or structures.

The State of NH has operated Mollidgewock State Park for twenty-seven years as of 2022. The pit toilets and water faucets were replaced at various times, and some relocated. Two shelters and two tent platforms were built in the 2010s. The living quarters were used only occasionally as overnight housing for employees. In 2020, the office was moved into a temporary trailer. The cabins are presently used for storage and firewood sales. All picnic tables and fire rings were recently replaced.

## 20. Applicable NHDHR Historic Context(s)

- 404. Logging, lumbering and sawmills, 1620-present.
- 608. Outdoor recreation in New Hampshire.
- 1102. State government, 1680-present.

#### 21. Architectural Description and Comparative Evaluation

Mollidgewock State Park is a riverfront park with a campground and water access. It is located between NH Route 16 and the Androscoggin River, where a sharp bend in the river forms a point of land. Much of the 46.5 acres is wooded and sloping, with flat open land on the river terrace. The campground has 42 sites, including two modern lean-to shelters and two tent platforms. Two associated "remote sites" are farther downstream on a separate property. The park road parallels the river forming a semi-elliptical loop road. It was the original route of the highway until the 1930s, when NH Route16 was relocated uphill. Both roads follow the topography in a sharp bend. The resulting tract of land is a near parabola-shaped parcel. The distance between the highway and the riverbank is roughly a third of a mile at the point in the river which is the widest part of the park. The park narrows to a point at either end where the gravel roads and highway merge.

The park entrance is at the northern end of the park, in its northeast corner, where the park road and highway diverge. The entrance driveway is a broad gravel pull-off near the river's edge. The wooden state park sign is typical. A timber post supports the wooden sign on wrought iron hardware (Photo 1). A secondary, unsigned road cuts through the 75' or so between the highway and park road, about 0.2 miles south of the main entrance. The administrative buildings, which are about 0.3 miles south of the entrance, include two small log cabins and a modern mobile unit, a storage building and a

Mollidgewock State Park (ERR0008)

temporary pit toilet (Photos 3-12). There are gravel parking spaces to the north and south. East of the road, wooden steps down the riverbank access a movable wooden dock for launching of cartop boats (Photo 13).

The gravel park road parallels the riverbank (Photo 2). From the entrance, the road runs generally north-south, slightly northwest-southeast, about 0.7 miles to the point, where it turns northwest. The road is roughly 1.25 miles long overall, the last third mile being closed to traffic. The campsites are primarily on the river side of the road. The sites are spread out along the riverbank or grouped on small loop roads. Some are wooded and some are closely spaced in open fields. The four pit toilets, six water faucets, and several campsites are spread out along the uphill side of the campground road at the base of the wooded slope. Split rail fencing is used at various points. A picnic shelter overlooks the river (Photos 30-31). A small natural sand beach on the southwest side of the point is used for swimming. Cartop boats are launched at various points. A back entrance at the southwest end of the park road loop is blocked off with boulders and overgrown (Photos 37-38).

Individual buildings and sites are described below.

### Office, ca. 1935, moved ca. 1975, Photos 3-6

Two log cabins were moved to the site in the mid-1970s from Log Haven Campground, which is located northwest of Errol on NH Route 26 (Cote 2022). They stand side by side with gable ends close to the road. The roofs extend to shelter full front porches. Both buildings are approximately 12' x 10' plus the front porches and additions. The walls are true log construction, of the log and corner post type. They are built of rough-hewn logs tenoned into round corner posts. The sills are horizontal log beams running front to back. They rest on a combination of concrete blocks, stones, and timber posts. The roofs are asphalt. The log plates run back to front and extend to support the porch roof. The gable roofs have log rafters exposed on the underside. The round log porch posts have diagonal stick knee braces. The front gable ends are filled with horizontal logs.

The office is the smaller building, approximately 15' feet deep overall including the porch and a small back extension. The front porch has original log and stick railing in a kingpost truss shape. One small window in the north wall has original 4-pane sash. Other windows are late twentieth century 1/1 units. The small shed-roofed extension on the back of the office cabin has rough log slab walls.

#### Manager's Cabin, ca. 1935, moved ca. 1975, Photo 3, 7-10

The larger cabin was used as living quarters in the 1970s-90s. The front porch is the same as the office, but the railings were removed. The wood is brown with some green trim. The cabin was enlarged with a wing built to one side in the late 1970s or early 80s. A back extension dates to ca. 1990. The additions have tongue and groove log slab siding and flat corner boards. A door on the north elevation is clad in the same material. All windows are 1/1 late twentieth century units. The wooden board and batten front door is painted green. The aluminum storm door is brown.

#### Storage shed, ca. 1975, Photo 11

A shed stands behind the cabins at the base of the wooded hillside. It has an asymmetrical gable roof, clad in asphalt shingles. The back of the roof extends to shelter an open porch for storage. The walls and two doors on the front are board and batten siding, stained dark brown.

### Mobile unit, ca. 2020, Photo 12

North of the office is a temporary leased mobile office unit, a metal structure on concrete blocks.

#### Temporary Pit toilet, ca. 2020, Photo 14

A new pit toilet south of the office buildings is temporary while the office is closed. It has T-111 walls and translucent corrugated shed roof.

Mollidgewock State Park (ERR0008)

### Pit toilets, ca. 1995, Photos 17, 24, 34

The campground has four pit toilets spread out along the northern side of the campground road. All are small one-story, 1x1 bay structures with tall vent stacks. Two similar buildings built by the State ca. 1995, have shed roofs with triangular screens at the top of the side walls. The siding is T-111, stained brown and the metal doors are painted green. One has translucent corrugated roofing and the other has new metal roofing. The northernmost toilet, also dated ca. 1995, has a gable roof sheathed in asphalt. The siding is T-111 and the side walls have rectangular screened vents.

### Pit toilet, ca. 2018, Photo 22

A new, slightly larger accessible toilet building dates to ca. 2018. The walls are wood slab siding, stained dark brown with green trim. The asymmetrical gable roof extends to shelter a front porch on square posts. The roof is asphalt shingled.

### Pump house, ca. 1995, Photo 18

The pump house is a small building like the pit toilets, with gable roof and T-111 siding stained dark brown. Water spigots on wooden posts are located on the west and north side of the campground road. One has a drinking fountain mounted on it.

#### Picnic Shelter, ca. 1992, Photos 30-31

The Kendall Norcott Memorial Pavilion is sited in the open field on the point in the middle of the campground. The open shelter has a gable roof, square posts with knee braces and a railing of crossed boards. It is raised off the ground on concrete footings and has steps on both sides.

### Campsites, ca. 1972, Photos 15-16, 20-21, 23, 25-30, 35-36

The campsites are closely spaced along the riverfront side of the road. Site numbers are marked by small wooden signs on posts. All campsites have new Pilot Rock brand metal pipe picnic tables with wooden tops and benches, and new metal fire rings.

The northern campsites, 1-11, are in a narrow stretch of flat land between the road and the riverbank (Photos 15-16, 20-21). The sites are evenly placed along the road and shaded by a mix of individual trees and small clusters. The sites are grassy with some worn dirt areas, closely spaced with little separation. Site 7A is the only inland site, set at the base of the wooded hillside with a new tent platform.

The riverbank becomes less steep going south. It is vegetated with shrubs and trees. Sites 12-18 (Photo 23) are in an open field about a quarter mile south of the office where the river terrace begins to widen. Parking is along the road in parallel spaces separated from the sites by a split rail fence. The configuration was changed ca. 2012 when driveways across the grass to each site were eliminated.

A circular loop road off the main park road connects sites on the point. The outer sites on the northern end, 19-20 (Photo 25) are wooded with views through to the water. Sites 26-27 are in semi-open land on the east side of point (Photo 28). Inside the loop, Sites 21, 22, 24, 25 and 28 are shaded, including by mature trees along the old road (Photos 26-27).

The southwest side of the peninsula is flat open land. A small natural sandy beach is located on the low riverbank opposite where Mollidgewock Brook enters. Sites 30-33 are in a wide open flat grassy area cleared to the river (Photos 28-30). A dirt driveway encircles the picnic pavilion where historic aerials show there has long been a track (NETROnline). Sites 34 and 36 have shelters. The farthest campsite loop with sites 37-40 is on the open riverbank overlooking the rapids. This shows as a worn area used for river access on historic aerials (Photo 35). Sites 35 and 41 are on the inland side of the road at the edge of the woods. Site 42 the outermost site. It is a walk-in site on the wooded riverbank.

Mollidgewock State Park (ERR0008)

Recent improvements are a tent platform a boardwalk across a low area and a simple log fence nailed to the trees on the riverbank (Photo 36).

Lean-to Shelters, ca. 2014, Photos 32-33

Campsites 34 and 36 have modern Adirondack type shelters, three sided with an open front. The roofs are asphalt shingled and the walls are vertical boards, stained dark brown.

#### **Comparative Evaluation**

There are many private campgrounds and several state parks, as well as tourist cabins, in the Great North Woods region. The most closely comparable may be Umbagog Lake State Park in Cambridge. It is a campground with cabins, determined eligible for the National Register in 2008 as an intact post-WWII period tourist campground. It was developed in the 1940s as a tourist camp with cabins, a private business on leased lumber company land. The campground was expanded in 1970s. The State took over management in 1998 and Umbagog Lake State Park was established in 1999. One of the buildings is a log cabin identical to those at Mollidgewock (Hengen 2008), and like them, it was probably moved there from Log Haven Campground in the mid-1970s.

Several other Log Haven cabins were moved onto private properties in the area (Cote 2022), but none are visible from the public highway. Log Haven Campground on NH Route 26 is a large campground with several modern cabins. It originated as a cabin court and the campground was added in the 1960s-70s. The ca. 1990 Log Haven Restaurant in front is a log themed building with exposed log timbers, but not log construction. A log-sided house next-door was formerly associated with the property and dates to the 1930s but was remodeled. It is set back from the road and the tourist cabins were in front (Cote 2022).

Elsewhere in the area, there are early twentieth century rental cabins at the Aker's Pond Inn (Hengen 2008). Great North Woods Getaway on NH Route 26 is a group of new cabins. Campgrounds are located in Milan Hill State Park off NH Route 110B, roughly fifteen miles south of Mollidgewock. It is a Civilian Conservation Corps-era park, with a fire tower and picnic area built in the 1930s. Moose Brook State Park in Gorham is also a CCC park, which opened in 1936 with one of the first supervised camping areas in the state, swimming beaches and picnic area. To the north, roughly sixteen miles from Mollidgewock, Coleman State Park was established in 1956 when the state purchased a private family camp complex in Stewartstown. It has twenty-five campsites and lodge buildings on Little Diamond Pond. Lake Francis State Park in Pittsburg dates to 1976, and the 45-site campground opened ca. 1981. The campground in Jericho Mountain State Park built by the City of Berlin in 1977 was rebuilt in 2012. Many commercial campgrounds were established throughout the state with the popularity of car camping in the 1960s-70s period. Cedar Pond Campground, south of Errol off NH Route 110A in Milan developed in the 1960s-70s. The Clear Stream Campground in Errol's town center dates to the 1980s-90s and has 22 sites along the river. Northern Waters Outfitters has a small campground on the Androscoggin River at the edge of Errol village. New campgrounds in the region are Jericho Gateway Campground on NH Route 110 in Berlin and Percy Lodge and Campground in Stark.

#### 22. Statement of Significance

Mollidgewock State Park is a relatively recent addition to the State Park system. The campground is of interest for its origins in the early 1970s but most of its buildings and features are less than fifty years old. The site was developed over a period of years in the 1970s-80s, and additional changes were made by the State in the 1990s. As a property created within the past fifty years, it is not of

Mollidgewock State Park (ERR0008)

exceptional importance for its historic associations with outdoor recreation. The individuals associated with the campground did not rise to the level of importance to make it eligible under Criterion B. Mollidgewock State Park is not significant under Criterion C as an example of campground or park layout. It does not represent a particular period of construction and is not a designed landscape. The two log cabins are of interest for their early twentieth century construction. However, as moved buildings, they no longer have integrity for their original use, and individually, the structures do not have significance for their architecture or construction. The land may have significance under Criterion D for information potential. Previous testing has confirmed a site with high archaeological sensitivity and there has been limited disturbance by the surficial campsites.

#### 23. Periods(s) of Significance

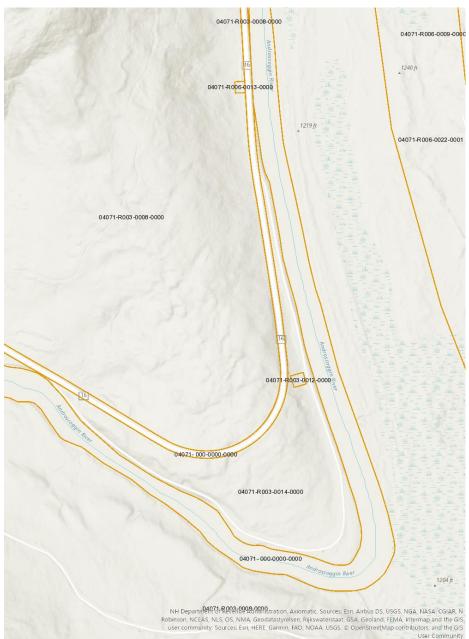
N/A

#### 24. Statement of Integrity

Mollidgewock State Park campground developed over time, not according to a plan or design. Its layout has not been altered since the site was taken over by the State in 1994, except for the closure of the southern entrance. However, all building and structures have been on the site less than fifty years. The property retains a distinctive location and setting on an old road and open land near the riverbank. The use of the property prior to the campground has not been confirmed. Integrity of association dates to ca. 1972 when the campground was established fifty years ago, but the site evolved during the 1970s with the addition of facilities like the log office and cabin moved here ca. 1975. The two log cabins are the only buildings or structure over fifty years old on the property. They do not have integrity for their origins as tourist accommodations before they were moved in the mid-1970s. The cabins have been enlarged, but retain original design, materials, and workmanship. The layout of campsites is essentially unchanged, but all tables, fireplaces, fencing and other structures have been replaced since the State acquired the campground in the 1990s. Pit toilets were all replaced, some relocated and running water faucets added. Originally there were six outhouses and two water points with hand pumps. Tent platforms and shelters are newly built.

### 25. Boundary Justification

The surveyed resource is the 46.5-acre state park parcel purchased by the State in 1994. The surrounding land, formerly owned by the timber companies, is now the Thirteen Mile Woods Community Forest, established in 2005. The tax parcels are R3-14 and R3-12, the latter with the office and cabin on it. The property boundary is illustrated by the NH Granit mapping system with tax parcels.



### 26. Boundary Description

Mollidgewock State Park (ERR0008)

#### 27. Bibliography and/or References

Bowers, Martha

"Errol Townwide Area Form," on file at NHDHR.

Coos County Registry of Deeds.

Doperalski, Mark

"Archaeology at Mollidgewock State Park," April 20, 2021 presentation to New Hampshire Archaeological Society.

"Edward 'Moose' Damp," obituary *Conway Daily Sun*, 03.12.2009, https://www.conwaydailysun.com/berlin\_sun/.

"Edward 'Moose' Damp," obituary Old *Hutcroo Association* newsletter, July 21, 2009, https://www.ohcroo.com/category/obituaries/page/10/.

Hengen, Elizabeth

2008 "Umbagog Lake Park Historic District," on file at New Hampshire Division of Historical Resources.

Huden, John C.

1963 *Indian Place Names of New England*. Museum of the American Indian Heye Foundation.

Hudson, Marshall

"A Glimpse at NH's Logging History: Pieces of NH's logging past still remain today," *New Hampshire Magazine*, June 18, 2020.

Jones, Page Helm

1975 Evolution of a Valley: The Androscoggin Story. Canaan, NH: Phoenix Publishing Co.

Mausolf, Lisa

New Hampshire State Parks Mid-Century Modern (1945-1975) Historic Context Study. Prepared for the New Hampshire Department of Natural and Cultural Resources.

Merrill, Georgia Drew

1888 History of Coos County, New Hampshire. Boston: W.A. Fergusson & Co.

New Hampshire Division of Parks and Recreation files, Concord, NH.

New Hampshire State Parks website, https://www.nhstateparks.org/visit/state-parks/mollidgewock-state-park.

U.S. Bureau of the Census, Population Census, 1790-1940. https://www.ancestry.com/search/categories/usfedcen/.

U.S. City Directories, 1822-1995, https://www.ancestry.com/search/collections/2469/.

Mollidgewock State Park (ERR0008)

Wight, D.B.
1967 The Androscoggin River Valley: Gateway to the White Mountains. Charles E. Tuttle
Company.
Historic Maps
Hurd, D.H.  1892 Town and City Atlas of the State of New Hampshire. Boston: D.H. Hurd & Co.
NETRonline 1955, 1999 Historic Aerials, https://historicaerials.com/viewer.
NH State Highway Department 1932 East Side Road, #50906. NHDOT project viewer.
USGS 1930 Errol, NH-ME quadrangle, http://docs.unh.edu/NH/errl30sw.jpg.
USGS 1930 <i>Milan, NH-ME</i> quadrangle, http://docs.unh.edu/NH/miln30ne.jpg.
USGS 1988, 2000 <i>Teakettle Ridge, NH</i> quadrangle, https://ngmdb.usgs.gov/topoview/.
Walling, H.F. 1861 <i>Coos Co., New Hampshire</i> . New York: Smith, Mason and Company.
Historic Photographs

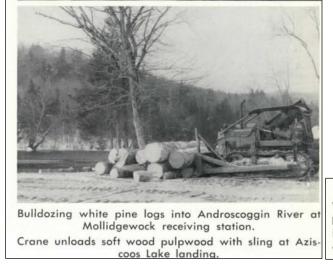
Brown Company Collection, Plymouth State University Digital Collections, http://digitalcollections.plymouth.edu/digital/collection/p15828coll3.

## **Interviews**

Luc Cote, Errol, NH, May 2022.

28. Surveyor's Evaluation								
NR listed:	district individuals within district yes no	_	eligible: district not eligible more info needed		NR Criteria:	A B C D E		
If this Area Form is for a Historic District: # of contributing resources: # of noncontributing resources:								

### **Historic Images**



The pine logs are trucked directly to the sawmills or to water receiving stations on the Androscoggin River. The pine pulpwood is trucked in long lengths to landings where it is cut into the usual four-foot bolts. In all, there are two water landings and one pulpwood storage area.

Historic photos identified as Mollidgewock landing and Mollidgewock receiving station could depict this location (*The Brown Bulletin* January 1955).

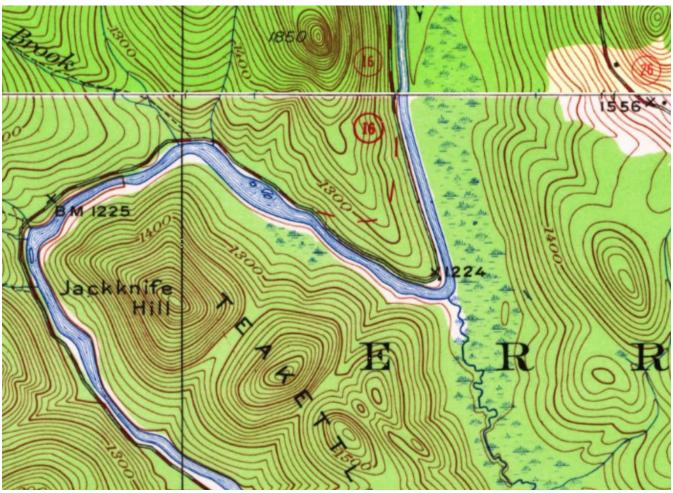


Same photo labeled Pine Landing at Mollidgewock -13 Mile Woods, January 1955 (Brown Company Collection)

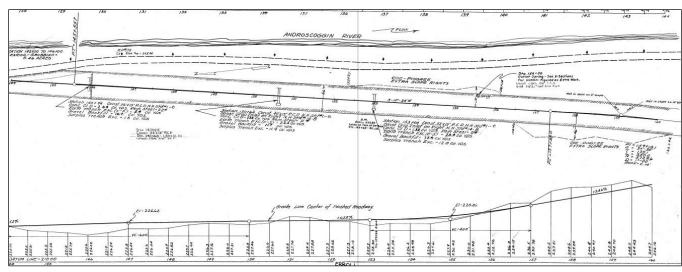


Photo labeled Pine Landing at Mollidgewock – 13 Mile Woods, January 1955 (Brown Company Collection)

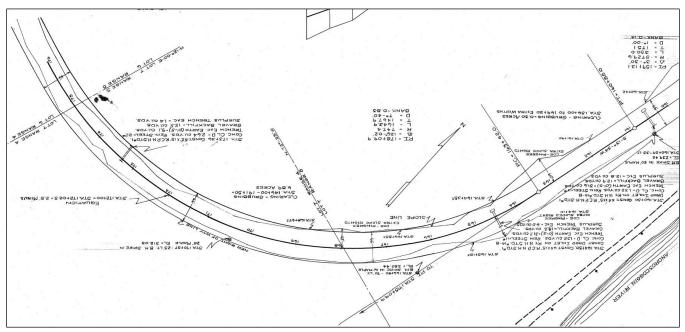
### **Historic Maps**



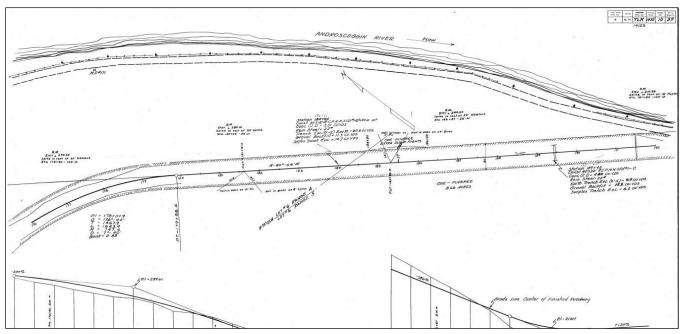
1930 USGS map shows original highway (now the campground road) and new Route 16 to be built in dashed red line (Errol, NH quadrangle above, Milan, NH quadrangle below)



1932 plan shows new highway and northern end of old road, now the campground road with electric and telephone poles alongside it (NHDOT)



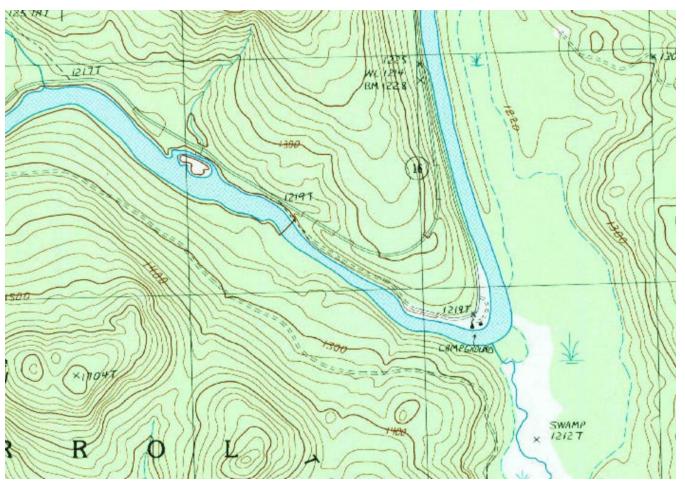
1932 plan showing the new highway that became the northern edge of the State Park parcel (NHDOT)



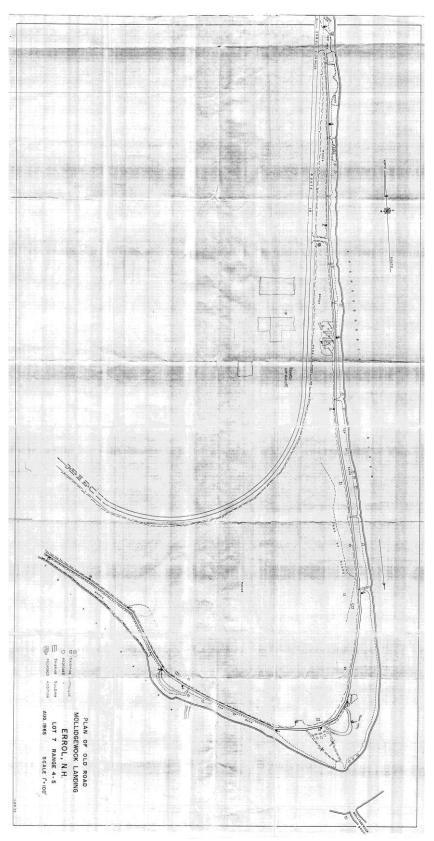
1932 plan shows new highway and old highway, now southern end of the campground road (NHDOT)



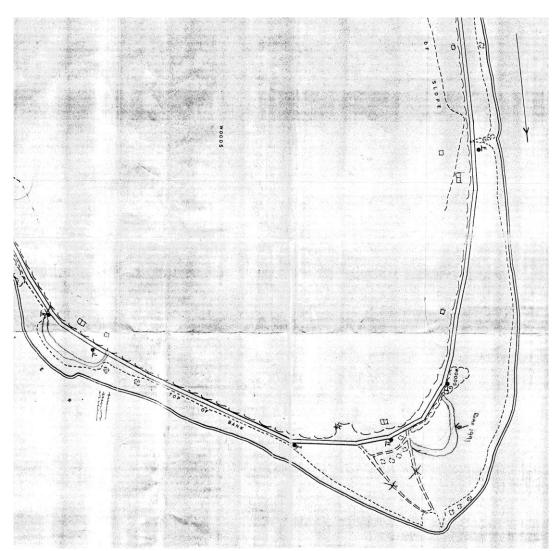
1955 historic aerial shows cleared land along old roadway (www.historicaerials.com)



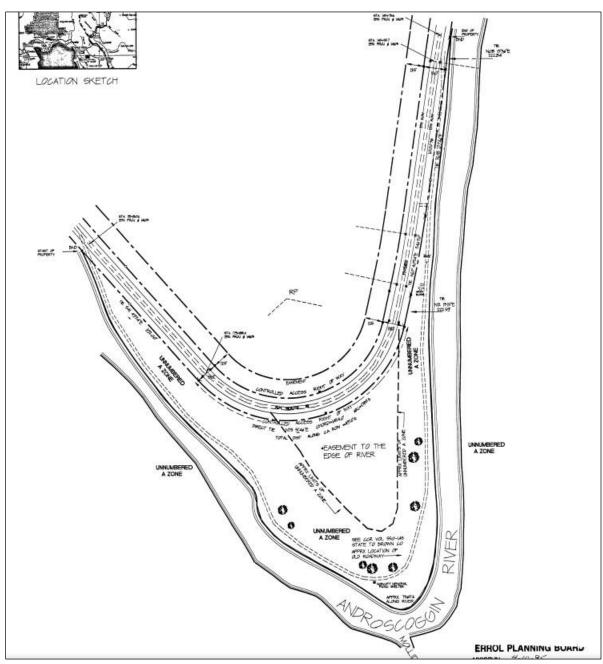
1988 USGS map (Teakettle Ridge Quadrangle) shows the campground before it was a state park.



1991 sketch of campground on 1965 "Plan of Old Road Mollidgewock Landing, Errol, NH" (New Hampshire Division of Parks and Recreation)



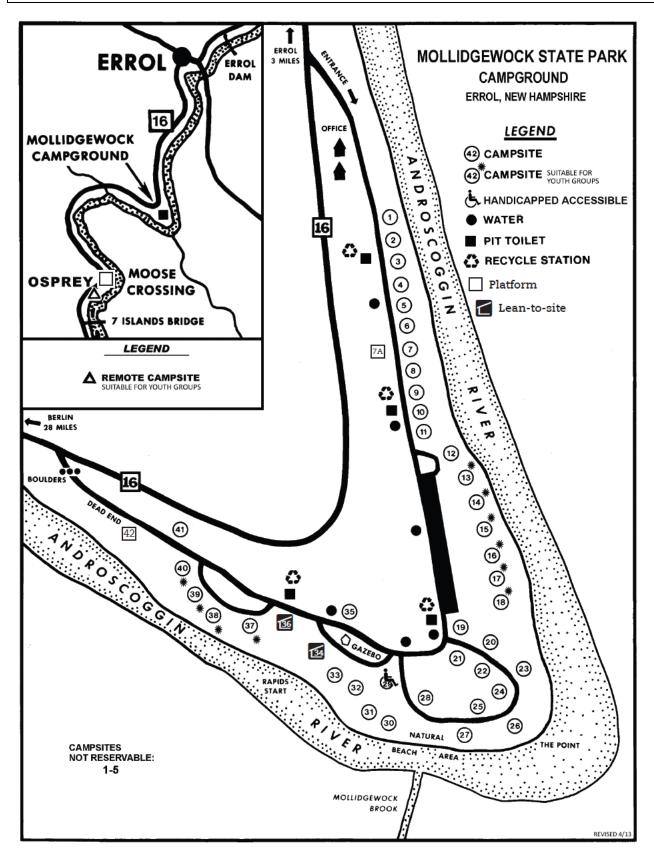
Detail of 1991 sketch of campground on 1965 plan shows preexisting roads to the "beach" area on the point, added campsite loops, and outhouse locations drawn on by Edward Damp (New Hampshire Division of Parks and Recreation)



1995 Plan (Coos County Registry of Deeds 787A)



1999 satellite image shows campground shortly after acquisition by the State of NH (Google Earth)



Mollidgewock State Park (ERR0008)

## **Digital Photography Statement**

I, the undersigned, confirm that the photos in this inventory form have not been digitally manipulated and that they conform to the standards set forth in the NHDHR Photo Policy. These photos were printed using the following: Dell H625 printer on archival paper. The digital files are housed with Preservation Company in Kensington, NH.

Lynne Emerson Monroe, Preservation Company

# **Photo Keys**

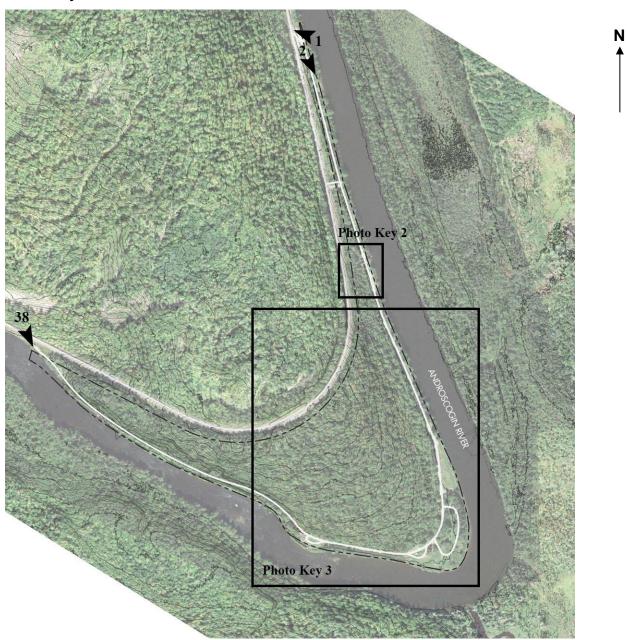


Photo Key 1: Photos 1, 2, 38

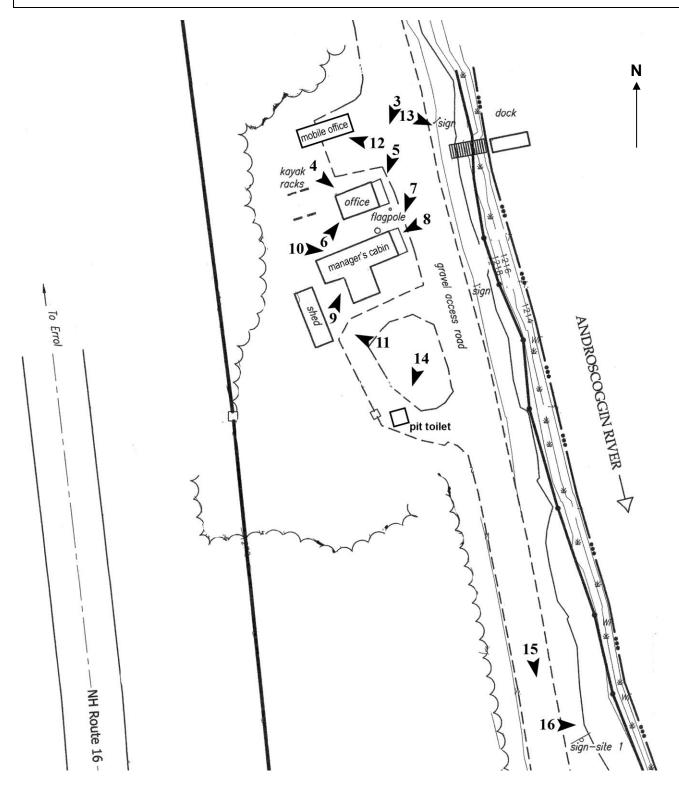


Photo Key 2: Photos 3-16

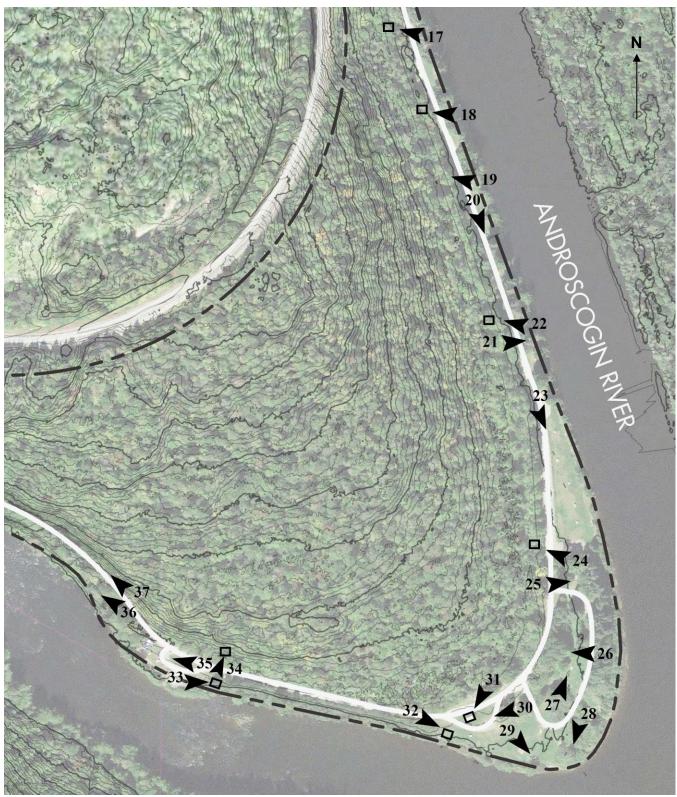


Photo Key 3: Photos 17-37

## **Current Photographs**

Date taken: <u>05.05.2022</u>



Photo 1) Park entrance on NH Route 16 Reference (file name): PIC\_2516



Photo 2) Park road entrance at NH Route 16 Reference (file name): PIC\_2517

Direction: S



Photo 3) Cabins – office at right and manager's cabin left, built ca. 1935, moved ca. 1975 Direction: SW Reference (file name): PIC\_2511



Photo 4) Office cabin north and rear elevations Reference (file name): PIC\_2504

Direction: SE



Photo 5) Office cabin porch detail Reference (file name): PIC\_2507

Direction: SW



Photo 6) Office cabin rear elevation Reference (file name): PIC\_2501



Photo 7) Manager's cabin front and north elevation Reference (file name): PIC\_2491

Direction: SW



Photo 8) Manager's cabin porch detail Reference (file name): PIC\_2498



Photo 9) Manager's Cabin from rear, ca. 1990 side addition at right Reference (file name): PIC\_2485

Direction: NE



Photo 10) Manager's cabin north elevation showing 1970s back addition Reference (file name): PIC\_2490



Photo 11) Shed, ca. 1975 Reference (file name): PIC\_2483

Direction: NW

Direction: SE



Photo 12) Mobile office unit ca. 2020 Reference (file name): PIC\_2509



Photo 13) Stairs to river landing Reference (file name): PIC\_2510

Direction: SE



Photo 14) Temporary pit toilet ca. 2020 Reference (file name): PIC\_2482



Photo 15) Campground road, Site 1 at left Reference (file name): PIC\_2515

Direction: S

Mollidgewock State Park (ERR0008)



Photo 16) Site 1 with typical new picnic table and fire ring Reference (file name): PIC\_2420



Photo 17) Pit toilet opposite Site 3, ca. 1995 Reference (file name): PIC\_2479

Direction: E

Direction: NW



Photo 18) Pump house, ca. 1995 Reference (file name): PIC\_2478



Photo 19) Water faucet with Site 7A in back Reference (file name): PIC\_2476



Photo 20) Sites 7-8 looking south (downriver) on campground road Reference (file name): PIC\_2425



Photo 21) Site 10 Reference (file name): PIC\_2427 Direction: SE



Photo 22) Water faucet and pit toilet opposite sites 9-11, ca. 2018 Reference (file name): PIC\_2475





Photo 23) Sites 13-18 looking downriver, south on campground road Reference (file name): PIC\_2431

## **AREA FORM**



Photo 24) Pit toilet opposite Site 19, ca. 1995 Reference (file name): PIC\_2474



Photo 25) Site 20 Reference (file name): PIC\_2434



Photo 26) Sites 24-25 with campground road right rear Reference (file name): PIC\_2437



Photo 27) Site 28, campground road at left Reference (file name): PIC\_2442

Direction: NE



Photo 28) Site 27 on the point, looking toward Mollidgewock Brook confluence Reference (file name): PIC\_2439



Photo 29) Sites 30-33 looking upriver toward Mollidgewock Brook confluence Reference (file name): PIC\_2445

Direction: SE

Direction: SW

Direction: W

## **A**REA **F**ORM

Mollidgewock State Park (ERR0008)



Photo 30) Sites 32-33, Site 34 shelter, and gazebo Reference (file name): PIC\_2441



Photo 31) Kendall Norcott Memorial gazebo/pavilion, ca. 1992 Reference (file name): PIC\_2444

## **A**REA FORM

Mollidgewock State Park (ERR0008)



Photo 32) Shelter site 34, ca. 2014 Reference (file name): PIC\_2446



Photo 33) Shelter site 36, ca. 2014 Reference (file name): PIC\_2449



Photo 34) Pit toilet opposite Site 36, ca. 1995 Reference (file name): PIC\_2463



Direction: NW



Photo 35) Sites 37-40 Reference (file name): PIC\_2450

## **A**REA FORM



Photo 36) Site 42 Reference (file name): PIC\_2455



Photo 37) Southern end of old campground road discontinued Reference (file name): PIC\_2460

**A**REA **F**ORM

Mollidgewock State Park (ERR0008)



Photo 38) Southern end of old campground road at NH Route 16 Reference (file name): PIC\_2523



Phase IA Archaeological Sensitivity Assessment, Mollidgewock State Campground Expansion Project, Errol, New Hampshire

Report Prepared for the SE Group

By Robert G. Goodby, Ph.D.

August 2022

This Report Contains Confidential Information. Not for Public Distribution.



#### Abstract

Monadnock Archaeological Consulting, LLC conducted a Phase IA Archaeological Sensitivity Assessment for the Proposed Mollidgewock State Park Campground Expansion project in Errol, New Hampshire. There is a previously documented archaeological site (27CO0162) in the campground, and a combined Phase IB Intensive Archaeological Investigation and Phase II Determination of Eligibility Study is recommended for this site prior to proposed construction.

## Table of Contents

Abstract	ii
Table of Contents.	iii
List of Figures.	iii
List of Plates	iii
Chapter 1. Introduction and Methodology	1
Chapter 2. Project Area Setting and Environmental Context	4
Chapter 3. Native American Archaeological Context	13
Chapter 4. Historic Archaeological Context.	.17
Chapter 5. Recommendations and Conclusions.	19
References Cited.	.20
List of Figures	
Figure 1-1 Project Area on USGS Teakettle Ridge Quadrangle (1:24,000).  Figure 1-2 Project Plans.  Figure 3-1 2020 SCRAP Excavation Plan, 27CO0162.  Figure 3-2 27CO0162 Excavation Plan Detail Showing Site Boundaries.  Figure 3-3 Chert Biface (Top) and Hearth Feature (Bottom) from 27CO0162.  Figure 4-1 Project Area Vicinity on 1861 Map of Coos County  Figure 4-2 Project Area on 1892 Map of Erroll.  Figure 4-3 Project Area on 1930 Milan Quadrangle	2 14 15 16 .17
List of Plates	
Plate 2-1 View Southeast of the Western Entrance to Park	5 6 6 7 8 8 9
Plate 2-14 Profile Auger #3	

### Chapter 1 - Introduction and Methodology

Monadnock Archaeological Consulting, LLC conducted a Phase IA Archaeological Sensitivity Assessment for the proposed Mollidgewock State Park Campground Expansion Project in Errol, Coos County, New Hampshire (Figures 1-1, 1-2).

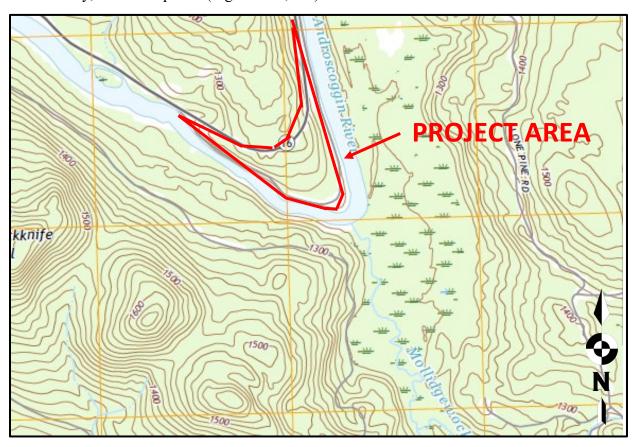


Figure 1-1: Project Area on USGS Teakettle Ridge Quadrangle (1:24,000)

This study followed guidelines for archaeological surveys established by the New Hampshire Division of Historical Resources (NHDHR) and was authorized under Section 106 of the Historic Preservation Act of 1966 (P.L. 89-665), as amended, and as implemented by regulations of the Advisory Council on Historic Preservation (36 CFR Part 800). Robert G. Goodby, Ph.D. served as Principal Investigator and Brian Deshler served as Project Archaeologist.

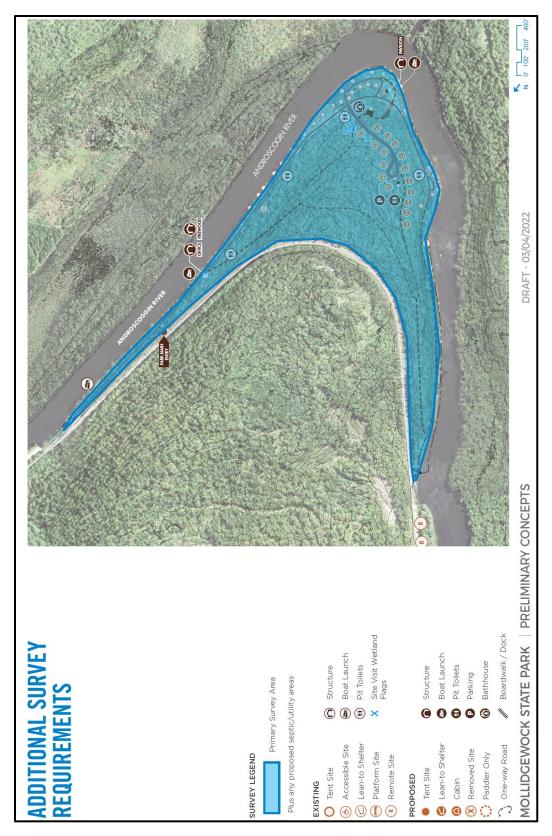


Figure 1-2: Project Plans

This archaeological assessment included background research, visual inspection of the project area, and preparation of this letter report. Background research included review of previous archaeological studies in the Androscoggin River drainage (Baker 1989; Boisvert 1992; Chan and Goodby 2009; Goodby 2005, 2007; Paquin and Petersen 1988; Petersen and Boushehri 1988; Rinehart and Chadderdon 2005), archaeological site files, historic maps (Figures 4-1, 4-2, 4-3), and soil survey data. Visual inspection of the project area was conducted on May 8, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs and the excavation of selective shovel probes to assess underlying soils (Plates 2-1 through 2-15). Brian Deshler served as Project Archaeologist and Robert G. Goodby, Ph.D. served as Principal Investigator.

## Chapter 2-Project Area Setting and Environmental Context

The project area (Figures 1-1, 1-2) consists of a crescent-shaped parcel of land on the tip of a peninsula bordered by NH Rt. 16 on the north and the Androscoggin River on the south, west and east in the town of Errol, New Hampshire. An area of wetlands surrounding the confluence of the Androscoggin River and Mollidgewock Brook is directly south of the project area. The project area is the setting of the existing Mollidgewock State Park Campground, and much of the land along the river is taken up by campsites (Figure 1-2, Plates 2-1, 2-2, 2-3). Beyond the relatively level terrain along the river (Plates 2-3, 2-4), the land slopes upward to the north, and becomes increasingly uneven and wet (Plates 2-5 through 2-11). Underlying soils are classified



Plate 2-1: View Southeast of the Western Entrance to Park

as Peru Sandy Loam (0-8 and 8-15% slope), a moderately well-drained till soil, and Lovewell Very Fine Sandy Loam (0-3% slope), a frequently flooded, moderately well-drained alluvium. Modern disturbances to the project area include preparation and possible limited filling of individual campsites and camp roadways (Plates 2-1, 2-2, 2-3) and the construction of pit toilets, water pumps, and the campground gazebo.

Soil cores indicated that the eastern portion of the project area has an intact soil profile (Plates 2-12, 2-13) consisting of a dark greyish brown (10YR 4/2) sandy silt extending between 6cm and 10 cm below surface, a subsoil stratum of yellow-brown (10YR 5/6) silt extending to 14 cm below surface, and a second subsoil stratum of light olive brown (2.5Y 5/4) silt. There is no indication of a historic plowzone. In the southern portion of the project area, soil cores (Plates



Plate 2-2: View North of Eastern Wing Showing Main Entrance to Park



Plate 2-3: View South of Camp Road and Campsites by River on Eastern Perimeter of Park



Plate 2-4: View East-Southeast of Southern Tip of Project Area and Location of Site 27CO0162



Plate 2-5: View Southeast of the Western Wing of the Park Showing Wetland



Plate 2-6: Northern Perimeter of the Park, View South Showing Sloping Terrain along Rt.16



Plate 2-7: View Southeast of Hummocky, Wet Terrain, North-Central Portion of the Project Area



Plate 2-8: View West of Base of Slope and Inland Side of Camp Road, Eastern Perimeter of Park



Plate 2-9: Wetland at Base of Slope, Inland Side of Camp Road, Southeastern Portion of Park, View Northwest



Plate 2-10: Wetland at Base of Slope, Inland Side of Camp Road, Southwestern Portion of Park, View Northeast



Plate 2-11: View North of Western Perimeter with Wetland at Base of Slope, Inland Side of Camp Road



Plate 2-12: Profile Auger #1, Northeastern Perimeter of Project Area



Plate 2-13: Profile Auger #2, Eastern Perimeter of Project Area



Plate 2-14: Profile Auger #3, Southern Tip of Project Area Showing Mottled Soils



Plate 2-15: Profile Auger #4, Southwestern Edge of Project Area Showing Mottled Soils

2-14, 2-15) revealed mottled soils consisting of dark greyish brown (10YR 4/2) sandy silt, brown (10YR 4/3) sandy silt, and yellow-brown (10YR 5/6) silt extending between 20cm and 25 cm below surface. This was underlain by a subsoil stratum of light olive brown (2.5Y 5/4) silt. The mottling of the upper strata suggests disturbance, likely related to the creation and use of the existing campground.

## Chapter 3- Native American Archaeological Context

The Androscoggin River drainage is known to have been a focus of Native American settlement for some 12,000 years (Chan and Goodby 2009; Goodby 2005, 2007). Despite the limited nature of systematic archaeological surveys in this area, available data conclusively demonstrate the rich archaeological record associated with all portions of this drainage and suggest sites from all time periods and cultural traditions of prehistory may be found on a variety of landforms associated with the Androscoggin, its tributaries, and associated upland regions.

A handful of Native American sites are known from the upper reaches of the Androscoggin drainage between its headwaters and its confluence with the Moose River. The Mount Jasper quarry, located in Berlin approximately 17 miles south of the project area, is by far the best known of these. The distinctive flow-banded rhyolite from this quarry has been found distributed throughout New England during the Paleoindian period and throughout the interior portions of northern New England in the subsequent Archaic and Woodland periods (Boisvert 1992, 1999).

Archaeological surveys in the Androscoggin drainage have resulted in the discovery of dozens of pre-Contact Native American sites. In Berlin, an archaeological survey located four Native American sites along the east banks of the Androscoggin from which rhyolite flakes and early Late Woodland pottery (c. 1100-800 B.P.) were recovered (Paquin and Petersen 1988; Petersen and Boushehri 1988). A second survey, conducted along the route of a proposed electric corridor extending from the lower Androscoggin to its headwaters, resulted in the discovery of 41 precontact Native American sites; 22 of these were "situated on terraces overlooking brooks which drain upland areas into the Androscoggin River" and an additional 10 sites were discovered in "general upland settings away from a recognizable source of water" (Baker 1989). A recent survey for proposed federal correctional facility locations resulted in the discovery of a number of small lithic reduction sites in Berlin, including site 27CO67, a scatter of approximately two dozen flakes in an upland setting 3000 feet west of Head Pond (Rinehart and Chadderdon 2005).

In 2020, limited archaeological survey under the direction of New Hampshire State Archaeologist Mark Doperalski (2020) resulted in the identification of a low-density Native American site, 27CO0162, in the southern tip of the project area. A sparse scatter of lithic debitage was distributed along the southern tip and western edge of the project area, with the most interesting find being a hearth feature with fire-altered stone and soil, burned bone, and a roughly formed, non-diagnostic biface manufactured from grey chert (Figures 3-1, 3-2, 3-3). Further research on this site, including expanded shovel testing to confirm site boundaries and identify artifact concentrations, is recommended prior to the expansion of the campground.

The remainder of the project area, because of its sloping, rocky, and poorly drained terrain, is not considered sensitive for Native American archaeological sites.

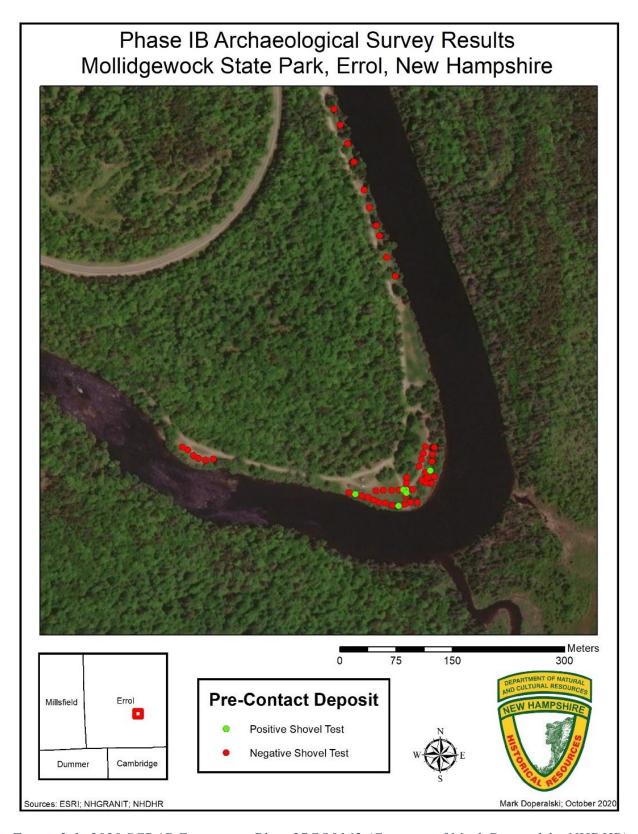


Figure 3-1: 2020 SCRAP Excavation Plan, 27CO0162 (Courtesy of Mark Doperalski, NHDHR)

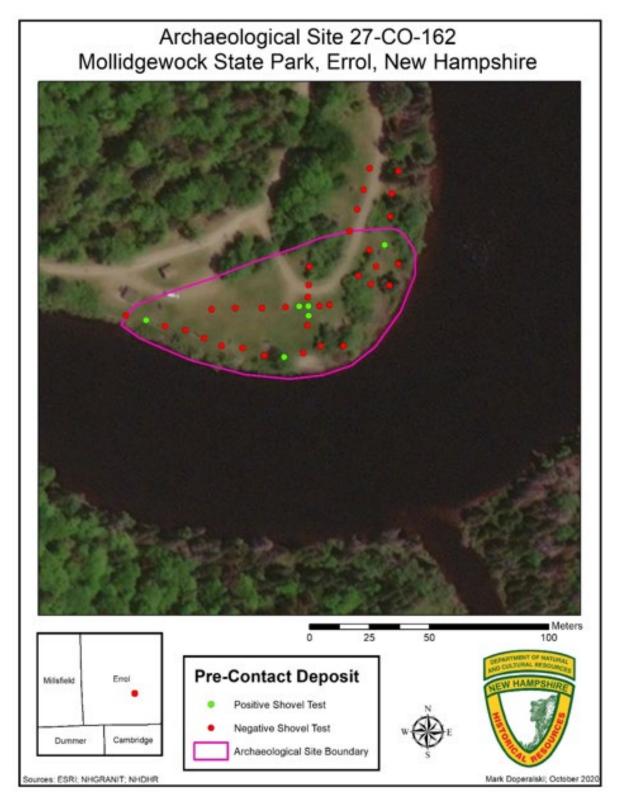


Figure 3-2: 27CO0162 Excavation Plan Detail Showing Site Boundaries (Courtesy of Mark Doperalski, NHDHR)

# Feature 1

- Biface
- FCR
- Charcoal
- Bone
- Fired Soils





Figure 3-3: Chert Biface (Top) and Hearth Feature (Bottom) from 27CO0162 (Courtesy of Mark Doperalski, NHDHR)

## Chapter 4— Historic Archaeological Context

The town of Errol has remained sparsely populated since its first settlement in 1806. The town has never had more than a few hundred inhabitants, and the town's economy has been based on agriculture and timber production. The two major roads through town, Rt. 16 and Rt. 26, were constructed in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, respectively, to provide access to Conway, New Hampshire, and Portland, Maine. Historic maps (Figures 4-1, 4-2, 4-3) do not depict any structures in the project area. The existing campground was established in 1972, and Mollidgewock State Park was created in 1994. No historic features were observed during the visual inspection, and significant historic archaeological sites are not expected to occur here.

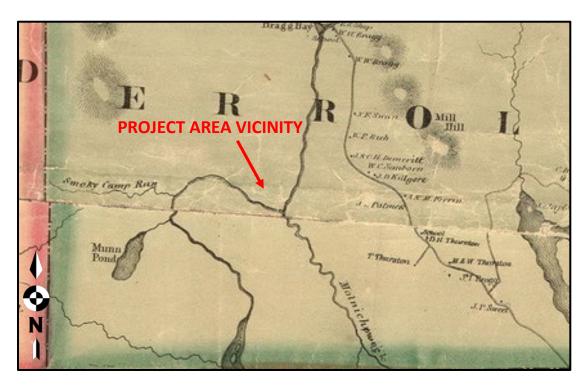


Figure 4-1: Project Area Vicinity on 1861 Map of Coos County (Walling 1861; 1" = 8,000')

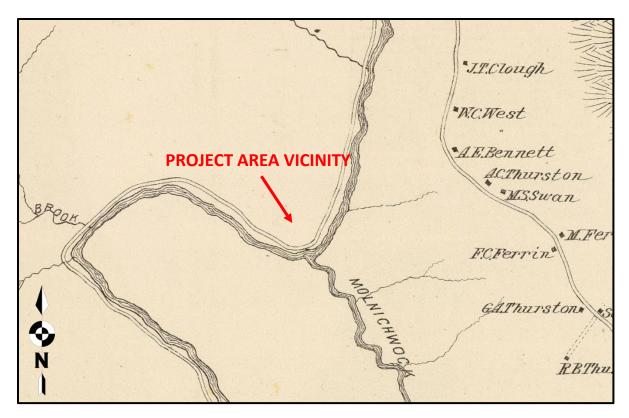


Figure 4-2: Project Area on 1892 Map of Errol (Hurd 1892; 1" = 4,800')

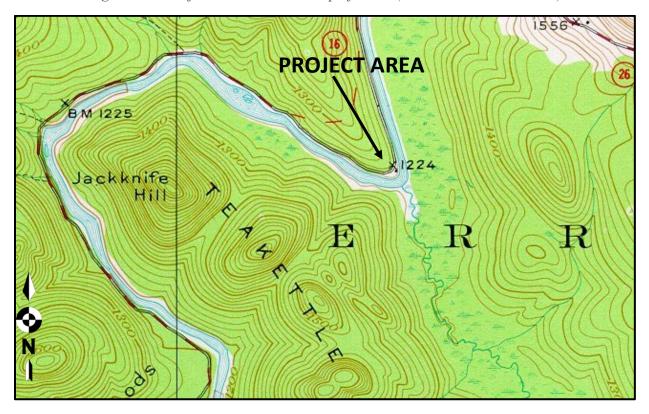


Figure 4-3: Project Area on 1930 Milan Quadrangle (1:62,500)

## Chapter 5– Recommendations and Conclusions

A Phase IA Archaeological Sensitivity Assessment was completed for the proposed Mollidgewock State Park Campground expansion project in Errol, New Hampshire. This study identified a previously recorded Native American archaeological site (27CO0162) in the southern portion of the project area. An expanded Phase IB Intensive Archaeological Investigation and Phase II Determination of Eligibility study is recommended for this site to gather additional data on its age, nature, integrity, and spatial extent. This will include the excavation of a maximum of twenty additional shovel test pits to complete testing in the well-drained portions of the project area not addressed by the earlier NHDHR survey, and to close any gaps in the portion of the project area that was included in the survey. It would also include the excavation of a maximum of eight one-meter square excavation units placed judgmentally around the previous identified feature or other areas of potential features or artifact concentrations, as well as provisions for a maximum of two radiocarbon dates and analysis of calcined bone by a qualified zooarchaeologist. This study would also provide a determination of the eligibility of site 27CO0162 for listing on the National Register of Historic Places.

The remainder of the project area, because of its sloping, rocky, and poorly drained terrain, is not considered sensitive for Native American archaeological sites, and no further study is recommended.

#### References Cited

#### Baker, Thomas

1989 "Phase I Archaeological Investigations Conducted Along the Proposed CMP Transmission Tie to the Hydro-Quebec Corridor." *Maine Archaeological Society Bulletin* 29(1):13-20.

#### Boisvert, Richard

- 1992 "The Mount Jasper Lithic Source, Berlin, New Hampshire: National Register of Historic Places Nomination and Commentary." *Archaeology of Eastern North America* 20:151-166.
- 1999 "Paleoindian Occupation of the White Mountains, New Hampshire." *Geographie physique et Quaternaire* 53(1):159-174.

#### Chan, Alexandra and Robert Goodby

2009 Phase IA Archaeological Sensitivity Assessment, NH Rt. 110, Berlin, New Hampshire, X-A000(054), 12958B. Stoddard, NH: Monadnock Archaeological Consulting LLC.

#### Doperalski, Mark

2020 "Excavations at Mollidgewock State Park." The New Hampshire Archeological Society Newsletter 36(2):2.

#### Goodby, Robert

- 2005 Phase IA Archaeological Sensitivity Assessment for the Proposed Industrial Park, East Milan Road, Berlin, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting LLC.
- 2007 Phase IA Archaeological Sensitivity Assessment for the Proposed Jericho Mountain State Park Riding Area, Berlin, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting LLC.

#### Hurd, D.H.

1892 Town and City Atlas of the State of New Hampshire. D.H. Hurd, Publisher.

#### Paquin, Charles and James Petersen

1988 An Archaeological Phase I Survey of the Pulsifer Rips Project (FERC NO. 9404), Coos County, New Hampshire. Farmington, ME: Archaeology Research Center.

#### Petersen, James and D. Boushehri

1988 Archaeological Phase II Survey and Testing of the Cascade Project (FERC No. 2327), Coos County, New Hampshire. Farmington, ME: Archaeology Research Center.

## Rinehart, Charles and Thomas Chadderdon

2005 Phase IB Archaeological Survey at Three Proposed Federal Correctional Facility Tracts, Coos County, New Hampshire. Washington, D.C.: Louis Berger Inc. .

## Walling, H.F.

1861 *Topographical Map of Coos County, New Hampshire*. New York: Smith and Mason.



144 GREENWOOD ROAD • DUBLIN, NH 03464 • 603-563-8123
WWW.MONADARCH.COM

#### This Report Contains Confidential Information. Not for Public Distribution.

May 27, 2022

Mr. Adam Portz SE Group 31 Church Street, Suite 200 Burlington, VT 05401

Dear Mr. Portz:

This letter report summarizes the results of the recently completed Phase IA Archaeological Sensitivity Assessment for the proposed Mollidgewock State Park Campground expansion project in Errol, New Hampshire (Figures 1-3). This study followed guidelines for archaeological surveys established by the New Hampshire Division of Historical Resources (NHDHR) and was authorized under Section 106 of the Historic Preservation Act of 1966 (P.L. 89-665), as amended, and as implemented by regulations of the Advisory Council on Historic Preservation (36 CFR Part 800).

#### Methodology

This archaeological assessment included background research, visual inspection of the project area, and preparation of this letter report. Background research included review of previous archaeological studies in the Androscoggin River drainage (Baker 1989; Boisvert 1992; Chan and Goodby 2009; Goodby 2005, 2007; Paquin and Petersen 1988; Petersen and Boushehri 1988; Rinehart and Chadderdon 2005), archaeological site files, historic maps (Figures 4-7), and soil survey data. Visual inspection of the project area was conducted on May 8, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs and the excavation of selective shovel probes to assess underlying soils (Plates 1-15). Brian Deshler served as Project Archaeologist and Robert Goodby, Ph.D. served as Principal Investigator.

#### **Site Setting**

The project area (Figures 1-3) consists of a crescent-shaped parcel of land on the tip of a peninsula bordered by NH Rt. 16 on the north and the Androscoggin river on the south, west and east in the town of Erroll, New Hampshire. It is the setting of the existing Mollidgewock State Park Campground, and much of the land along the river is taken up by campsites. Beyond the

relatively level terrain along the river (Plates 6, 12), the land slopes upward to the north, and becomes increasingly uneven and wet (Plates 2-4, 7, 9, 11, 15). Underlying soils are classified as Peru Sandy Loam (0-8 and 8-15% slope), a moderately well-drained till soil, and Lovewell Very Fine Sandy Loam (0-3% slope), a frequently flooded, moderately well-drained alluvium. Modern disturbances to the project area include preparation and possible limited filling of individual campsites and camp roadways (Plates 1, 5, 6) and the construction of pit toilets, water pumps, and the campground gazebo.

Soil cores (Figure 4) indicated that the eastern portion of the project area has an intact soil profile (Plates 8, 10) consisting of a dark greyish brown (10YR 4/2) sandy silt extending between 6cm and 10 cm below surface, a subsoil stratum of yellow-brown (10YR 5/6) silt extending to 14 cm below surface, and a second subsoil stratum of light olive brown (2.5Y 5/4) silt. There is no indication of a historic plowzone. In the southern portion of the project area, soil cores (Plates 13, 14) revealed mottled soils consisting of dark greyish brown (10YR 4/2) sandy silt, brown (10YR 4/3) sandy silt, and yellow-brown (10YR 5/6) silt extending between 20cm and 25 cm below surface. This was underlain by a subsoil stratum of light olive brown (2.5Y 5/4) silt. The mottling of the upper strata suggests disturbance, likely related to the creation and use of the existing campground.

#### **Results**

#### Pre-Contact Native American

The Androscoggin River drainage is known to have been a focus of Native American settlement for some 12,000 years (Chan and Goodby 2009; Goodby 2005, 2007). Despite the limited nature of systematic archaeological surveys in this area, available data conclusively demonstrate the rich archaeological record associated with all portions of this drainage and suggest sites from all time periods and cultural traditions of prehistory may be found on a variety of landforms associated with the Androscoggin, its tributaries, and associated upland regions.

A handful of Native American sites are known from the upper reaches of the Androscoggin drainage between its headwaters and its confluence with the Moose River. The Mount Jasper quarry, located in Berlin approximately 17 miles south of the project area, is by far the best known of these. The distinctive flow-banded rhyolite from this quarry has been found distributed throughout New England during the Paleoindian period and throughout the interior portions of northern New England in the subsequent Archaic and Woodland periods (Boisvert 1992, 1999).

Archaeological surveys in the Androscoggin drainage have resulted in the discovery of dozens of pre-Contact Native American sites. In Berlin, an archaeological survey located four Native American sites along the east banks of the Androscoggin from which rhyolite flakes and early Late Woodland pottery (c. 1100-800 B.P.) were recovered (Paquin and Petersen 1988; Petersen and Boushehri 1988). A second survey, conducted along the route of a proposed electric corridor extending from the lower Androscoggin to its headwaters, resulted in the discovery of 41 precontact Native American sites; 22 of these were "situated on terraces overlooking brooks which drain upland areas into the Androscoggin River" and an additional 10 sites were discovered in "general upland settings away from a recognizable source of water" (Baker 1989). A recent

survey for proposed federal correctional facility locations resulted in the discovery of a number of small lithic reduction sites in Berlin, including site 27CO67, a scatter of approximately two dozen flakes in an upland setting 3000 feet west of Head Pond (Rinehart and Chadderdon 2005).

In sum, archaeological research on the Androscoggin and its tributaries has documented a long and complex archaeological record, with sites located in a wide variety of alluvial and upland settings. In 2020, limited archaeological survey under the direction of New Hampshire State Archaeologist Mark Doperalski (2020) resulted in the identification of a low-density Native American site, 27CO0162, in the southern tip of the project area. A sparse scatter of lithic debitage was distributed along the southern tip and western edge of the project area, with the most interesting find being a hearth feature with fire-altered stone and soil, burned bone, and a roughly formed, non-diagnostic biface manufactured from grey chert (Figures 8-10). Further research on this site, including expanded shovel testing to confirm site boundaries and identify artifact concentrations, is recommended prior to the expansion of the campground.

#### **Historic Archaeological Context**

The town of Erroll has remained sparsely populated since its first settlement in 1806. The town has never had more than a few hundred inhabitants, and the town's economy has been based on agriculture and timber production. The two major roads through town, Rt. 16 and Rt. 26, were constructed in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries, respectively, to provide access to Conway, New Hampshire, and Portland, Maine. Historic maps (Figures 4-6) do not depict any structures in the project area. The existing campground was established in 1972, and Mollidgewock State Park was created in 1994. No historic features were observed during the visual inspection, and significant historic archaeological sites are not expected to occur here.

#### **Summary and Recommendations**

A Phase IA Archaeological Sensitivity Assessment was completed for the proposed Mollidgewock State Park Campground expansion project in Errol, New Hampshire. This study identified a previously recorded Native American archaeological site (27CO0162) in the southern portion of the project area. A combined Phase IB Intensive Archaeological Investigation is recommended for this site to gather additional data on its age, nature, integrity, and spatial extent.

Please let us know if you have any questions about these conclusions or recommendations, or if you would like us to prepare a proposal for the additional recommended study.

Sincerely,

Robert G. Goodby, Ph.D. Principal Investigator

#### **References Cited**

## Baker, Thomas

1989 "Phase I Archaeological Investigations Conducted Along the Proposed CMP Transmission Tie to the Hydro-Quebec Corridor." *Maine Archaeological Society Bulletin* 29(1):13-20.

## Boisvert, Richard

- 1992 "The Mount Jasper Lithic Source, Berlin, New Hampshire: National Register of Historic Places Nomination and Commentary." *Archaeology of Eastern North America* 20:151-166.
- 1999 "Paleoindian Occupation of the White Mountains, New Hampshire." *Geographie physique et Quaternaire* 53(1):159-174.

## Chan, Alexandra and Robert Goodby

2009 Phase IA Archaeological Sensitivity Assessment, NH Rt. 110, Berlin, New Hampshire, X-A000(054), 12958B. Stoddard, NH: Monadnock Archaeological Consulting LLC.

# Doperalski, Mark

2020 "Excavations at Mollidgewock State Park." The New Hampshire Archeological Society Newsletter 36(2):2.

# Goodby, Robert

- 2005 Phase IA Archaeological Sensitivity Assessment for the Proposed Industrial Park, East Milan Road, Berlin, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting LLC.
- 2007 Phase IA Archaeological Sensitivity Assessment for the Proposed Jericho Mountain State Park Riding Area, Berlin, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting LLC.

## Hurd, D.H.

1892 Town and City Atlas of the State of New Hampshire. D.H. Hurd, Publisher.

#### Paquin, Charles and James Petersen

1988 An Archaeological Phase I Survey of the Pulsifer Rips Project (FERC NO. 9404), Coos County, New Hampshire. Farmington, ME: Archaeology Research Center.

## Petersen, James and D. Boushehri

1988 Archaeological Phase II Survey and Testing of the Cascade Project (FERC No. 2327), Coos County, New Hampshire. Farmington, ME: Archaeology Research Center.

# Rinehart, Charles and Thomas Chadderdon

2005 Phase IB Archaeological Survey at Three Proposed Federal Correctional Facility Tracts, Coos County, New Hampshire. Washington, D.C.: Louis Berger Inc. .

# Walling, H.F.

1861 Topographical Map of Coos County, New Hampshire. New York: Smith and Mason.

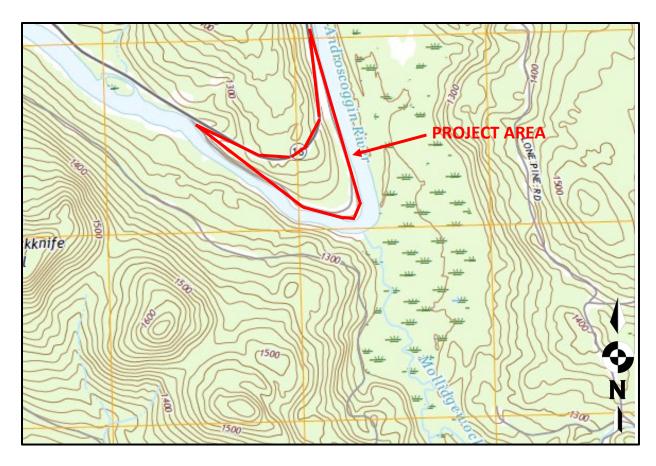


Figure 1. Project Area on USGS Teakettle Ridge Quadrangle (1:24,000)



Figure 2. Project Area on Aerial Photograph

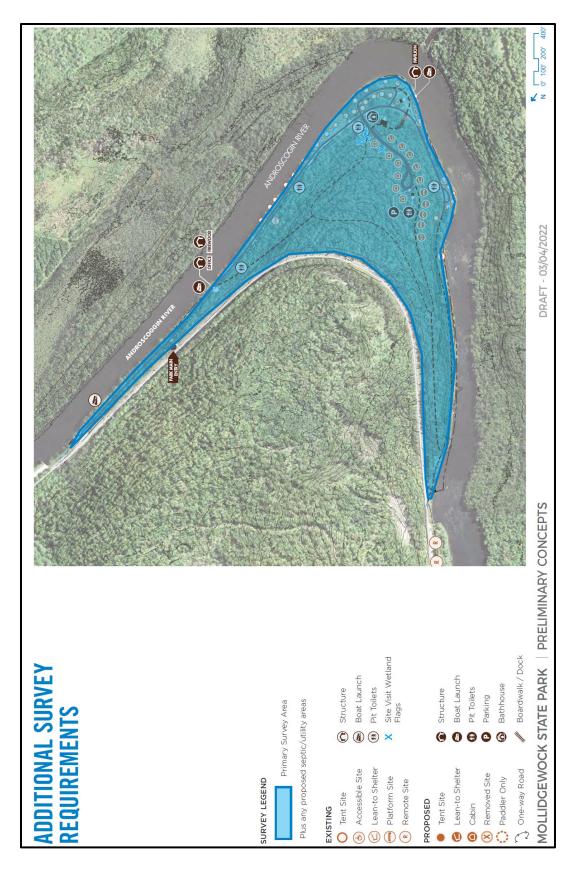


Figure 3. Project Plans

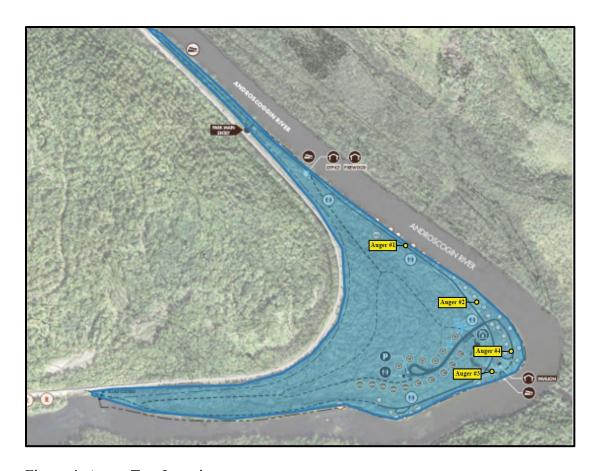


Figure 4. Auger Test Locations

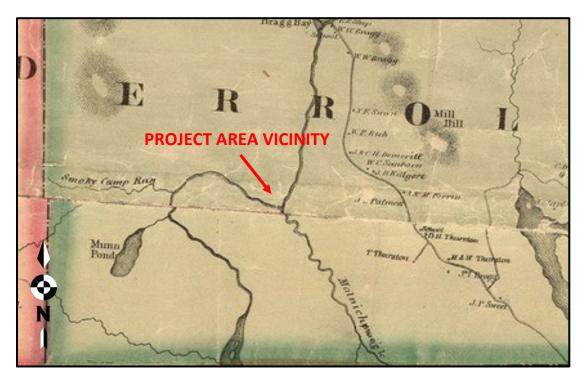


Figure 5. Project Area Vicinity on 1861 Map of Coos County (Walling 1861; 1" = 8,000')

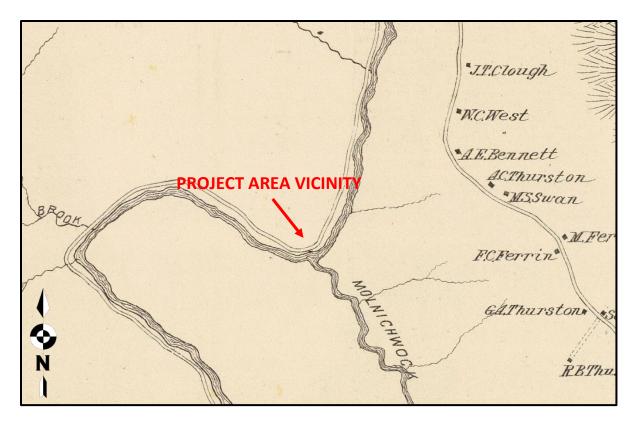


Figure 6. Project Area on 1982 Map of Erroll (Hurd 1892; 1" = 4,800')

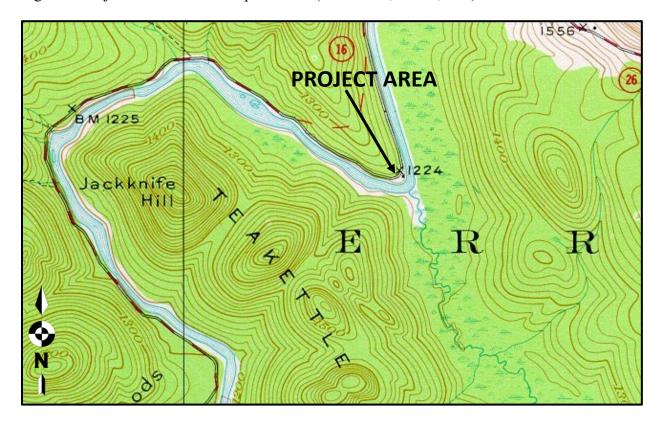


Figure 7. Project Area on 1930 Milan Quadrangle (1:62,500)

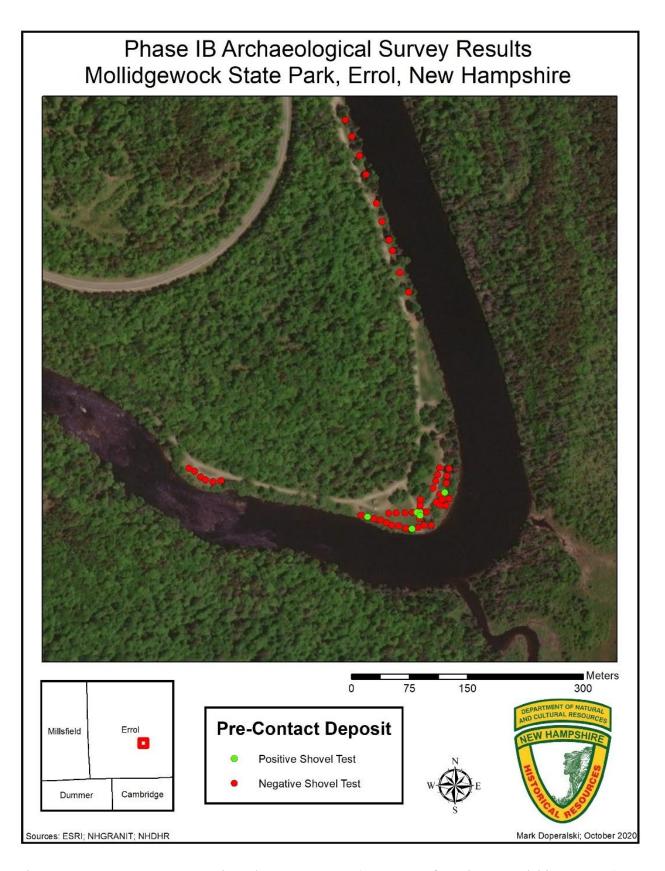


Figure 8. 2020 SCRAP Excavation Plan, 27CO0162 (Courtesy of Mark Doperalski, NHDHR)

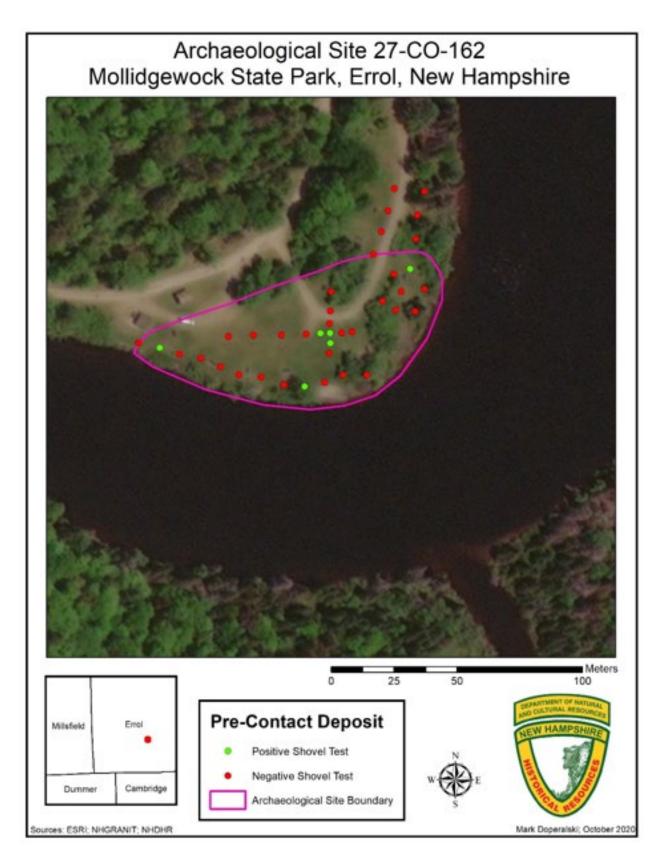


Figure 9. 27CO0162 Excavation Plan Detail (Courtesy of Mark Doperalski, NHDHR)

# Feature 1

- Biface
- FCR
- Charcoal
- Bone
- Fired Soils





Figure 10. Chert Biface (Top) and Hearth Feature (Bottom) from 27CO0162 (Courtesy of Mark Doperalski, NHDHR)



Plate 1. View Southeast of the Western Entrance to Park



Plate 2. View Southeast of the Western Wing of the Park Showing Wetland



Plate 3. View South of the Northern Perimeter of the Park Showing Sloping Terrain along Rt.16



Plate 4. View Southeast of Hummocky, Wet Terrain in North-Central Portion of the Project Area



Plate 5. View North of Eastern Wing Showing Main Entrance to Park



Plate 6. View South of Camp Road and Campsites by River on Eastern Perimeter of Park



Plate 7. View West of Base of Slope and Inland Side of Camp Road, Eastern Perimeter of Park

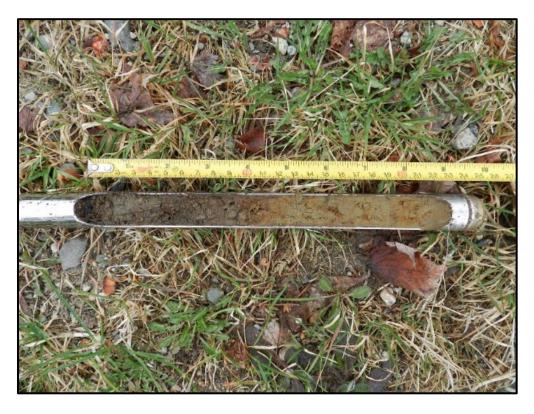


Plate 8. Profile Auger #1



Plate 9. Wetland at Base of Slope, Inland Side of Camp Road, Southeastern Portion of Park, View Northwest



Plate 10. Profile Auger #2



Plate 11. Wetland at Base of Slope, Inland Side of Camp Road, Southwestern Portion of Park, View Northeast



Plate 12. View East-Southeast of Southern Tip of Project Area and Location of Site 27CO0162



Plate 13. Profile Auger #3 Showing Mottled Soils



Plate 14. Profile Auger #4 Showing Mottled Soils



Plate 15. View North of Western Perimeter with Wetland at Base of Slope and Inland Side of Camp Road

# NH Division of Historical Resources

# Bibliography Form and Short Report

# THIS REPORT CONTAINS CONFIDENTIAL INFORMATION NOT FOR PUBLIC DISTRIBUTION

Complete this form for ALL archaeological reports submitted to the DHR. Refer to the manual for guidance at: http://www.nh.gov/nhdhr/archaeology\_forms\_manuals.htm

This form is being used for: • Short Report *AND* Bibliography Form

O Bibliography Form Only

Short Report AND Bibliography Form original hard copy must be mailed to the address below. In addition, submit an electronic version of the report (including attachments) to: tanya.krajcik@nh.gov.

Bibliography Form Only may be submitted electronically to: tanya.krajcik@nh.gov; Or a hard copy, accompanied with a CD of the form, may be mailed to the address below.

> NH Division of Historical Resources Attn: Review & Compliance 19 Pillsbury Street Concord, NH 03301-3570

DHR Review #: Report Type: Phase IA Short Report Report Date: 2022-05-29

Author's Last Name: Labbe

Author's First Name: Matthew

Additional Authors: Robert Goodby

Monadnock Archaeological Consulting, LLC Source Institution:

Title: Phase IA Archaeological Sensitivity Assessment, Bear Brook State Park Bear Hill Pond Campground Expansion Project,

Allenstown, New Hampshire

Lead Federal or State Agency: NH State Parks

Abstract: Phase IA Archaeological Sensitivity Assessment was completed for the proposed Bear Brook State Park Bear Hill

Pond Campground Expansion Project in Allenstown, New Hampshire. The project area is situated on extremely rocky terrain. No archaeological sites or areas of archaeological sensitivity were identified, and no further study is

recommended.

**Investigation Type: Phase IA** Excavated: No Sites Found: No

Comments:

Enter the geographical coordinates for the project area below (NH State Plane - feet). NH State Plane coordinates can be found on the GRANIT website at: http://granitview.unh.edu.

> Easting: 1065169 Northing: 223505

Area Surveyed (Acres): 20 Date Survey Completed: 2022-05-20

No. of Pages: 12 No. of Maps: 7 No. of Figures: 11

**Location & Site Numbers:** 

City/Town	Site Number
-----------	-------------

	City/Town	Site Number
+		

#### STOP here if this is a Bibliography Form only

If this form is being used as a Short Report (a substitute for a Phase IA report where the investigation did not result in the identification of any archaeological sites or areas of archaeological sensitivity within the project area) please include the following information for DHR review.

#### Description of methodology employed:

Phase IA Archaeological Sensitivity Assessment included background research and visual inspection of the project area. Background research included a review of previous archaeological studies in the vicinity of Bear Brook State Park, archaeological site files maintained by the NHDHR, the National Register of Historic Places Nomination Form for the Bear Hill Pond Campground, historic maps (Figures 4-7), and soil survey data. Visual inspection of the project area was conducted on May 20, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs (Plates 1-10) and assessment of underlying soils using a 1" diameter hand-held auger. Robert Goodby, Ph.D. and Matthew Labbe, M.A. served as Co-Principal Investigators.

#### Explanation of why the project area was determined not archaeologically sensitive:

The project area (Figures 1-3) consists of an approximately 20-acre parcel surrounding the existing Bear Hill Pond Campground on the east side of Bear Hill Pond, part of Bear Brook State Park, in Allenstown, New Hampshire. Bear Hill Pond is drained by Boat Meadow Brook, a small tributary of the Suncook River. The project area is dominated by rocky terrain, including boulders and rock outcrops (Plates 1, 3-6). Underlying soils are classified as Chatfield-Montauk-Hollis Complex (0-8%, 8-15% slope, very rocky), a well-drained till soil, but soil development was limited in much of the project area. Despite this classification, areas of poorly drained extremely rocky soil were noted during the visual inspection. The campground has also undergone extensive historic and modern disturbance (Plates 1-3, 7-10). Between the shallow, rocky soils and historic and modern disturbance, there were few portions of the project area where intact soils were encountered.

There are no previously recorded archaeological sites in or near the project area. Because of the shallow, disturbed soils, intact Native American archaeological sites are not expected to occur here.

The project area was first developed as a camp for the Civilian Conservation Corps (CCC) in 1936, and the camp was surveyed and recorded as the Bear Hill Pond Camp Historic District in 2012 (Laprey, Monroe, and Hooper 2012). The State Park itself, along with the CCC base camp elsewhere in the park were listed on the National Register of Historic Places in 1992. The survey was intended to assess impacts to several proposed parking areas (Plate 1).

Apart from the initial construction of an earthen dam at the south end of the pond in 1885, there is no evidence that the project area was developed before the 20<sup>th</sup> century. Neither the 1858, 1892, or 1921 maps show any residences, businesses, or roads in the immediate vicinity of the pond (Figures 4-6). Bear Brook State Park was created under the direction of the National Park Service in 1935 as a Recreational Demonstration Area, intended to convert "sub-marginal" land near urban areas for recreational purposes. As such, it is not surprising that the campground area is exceptionally rocky and had not been previously used for farmland.

The CCC camp on Bear Hill Pond was built in 1936 and occupied by that organization until 1942. It includes 61 buildings and structures, along with the dam at the southern outlet of the pond. This dam replaced an earthen dam constructed in 1885 that was first used to expand the pond for use as a drinking water source for Suncook. It was the principal water source for that town until 1916. The CCC replacement dam was used to enlarge the pond further, and the dam was reconstructed entirely around 1994, eliminating much of its historic character. Water lines, pumps, and spigots elsewhere in the camp were updated around the same time.

The camp is built in a hilly area east of the pond. The various administrative and infrastructure buildings sit the farthest east, while the four groups of cabins sit closer to the pond and are connected by foot paths through the woods. All the buildings face the pond but are otherwise randomly arranged. Of the 62 buildings and structures on site, only 10 are modern.

None of the roads in the project area are paved but are constructed with extremely compact gravel. The buildings are constructed in the "Park Service Rustic" style typical of the early 20<sup>th</sup> century, which includes features like log-built structures, rough woodwork, exposed timber, overhanging roofs, stone foundations, and stone chimneys. Where paint is used, it is typically brown to allow the facility to blend into the environment better. Most of the camps built in this style had full sewer,

water, and electrical infrastructure.

The camp opened officially in the summer of 1937 for week-long programs by organizations such as 4-H, the Girl Scouts, and the YMCA. Later, after its transfer to the Cooperative Extension Service in 1943, it was used almost exclusively by 4-H, but was also used as a rest camp for World War II soldiers during the off season. At its peak, the camp could accommodate 80 overnight campers and 40 day campers. The camp officially closed in 2008, remaining largely unaltered during its lifetime. It is currently managed by the state. The site was one of 28 different CCC camps in New Hampshire but is the only one to remain intact.

Today the project area is mostly forested, in stark contrast to its appearance in the 1930s when it was estimated that 60% of the park was deforested or only starting to fill in with saplings following the cessation of farming and logging activities as well as a large forest fire in 1914. Undergrowth is limited within the developed portions of the project area, but the untended areas have quite dense growth. The site is accessed by Bear Hill Road, which has been leveled and graded with gravel. The natural landscape is still visible, however, as segments of ledge are visible in the road where it enters the camp. Along most of the gravel roads, there is clear evidence that the shoulders have been repeatedly disturbed to control the drainage (Plates 2, 3).

The entire site is extremely rocky, both due to buried ledge and the glacial erratic boulders on the surface (Plates 4, 5). These rocky areas extended into the used space between the buildings, (Plate 6). The only evidence of rock clearing is in the field on the east end of the site which has large rock piles around its perimeter (Plates 7, 8).

Rocky land with poor soil like this area is susceptible to harder, deeper winter frosts that can displace stone and damage archaeological features. In all the utilized camp areas, soil accretion is almost non-existent because of eight decades of regular landscaping and other human activity. As a result, it would be difficult for sheet middens of artifacts to form on the site since there was little soil to bury the artifacts. Several areas outside the main camp are quite wet because of drainage from the camp area and the rocky, poorly drained soil. In addition, the naturally undulating landscape meant that substantial leveling and fill was necessary to accommodate some of the buildings. These areas appear as steep drop-offs behind the buildings (Plates 9, 10). Although such artificial landscapes might contain 20<sup>th</sup> century artifacts related to the campground, they would have obscured any earlier sites.

One of the biggest questions is how valuable archaeological excavation would be to analyzing this site. As there was very limited historical use of the area before to the construction of the camp, it is unlikely that excavation would reveal anything prior to this time.

While archaeology might theoretically reveal information related to the CCC camp itself, the lack of soil accretion along with the generally rocky soils indicate excavation would be difficult or impossible. There were few areas around the buildings that the soil probe was even able to penetrate. Soils that were observed were a thin, disturbed dark yellowish brown (10YR 4/4) medium sand with a high gravel content. Additionally, as the CCC was a Federal program that is well documented and thoroughly studied by historians, there is little that archaeology would reveal about the site that could not be found in historic documentation. As a result, no further archaeological study is recommended.

#### **Reference Cited**

Laprey, Kari, Lynne Monroe, and Carol Hooper 2012 *Determination of Eligibility Form for Bear Hill Pond Camp Historic District*. Kensington, NH: The Preservation Company.

<u> </u>	GS map (photocopied or computer-generated) indicating the defined nclude GIS shapefiles of the survey area as well.
Attach* sketches, test pit location maps, help the DHR understand the reason for	field records, and any other applicable maps or images that would the recommendations.
DHR Records check completed on:	2022-04-20

<sup>\*</sup>Adobe Acrobat Pro users: Attachments can be merged with this PDF or attached by using the attachment function Adobe Acrobat Reader users: Include attachments in a separate PDF for electronic submittal

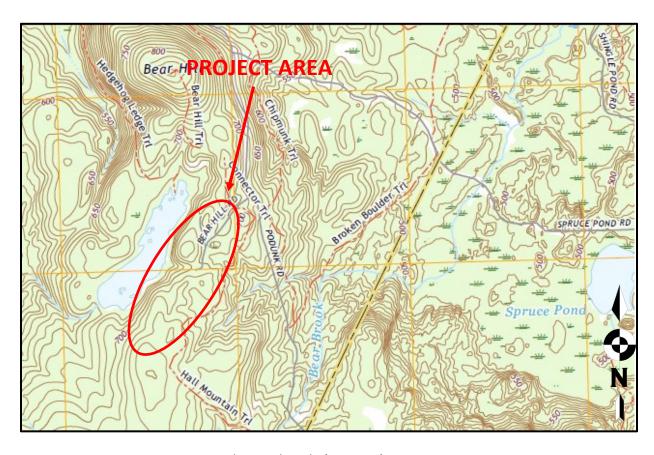


Figure 1. Project Area on USGS Candia Quadrangle (1:24,000)

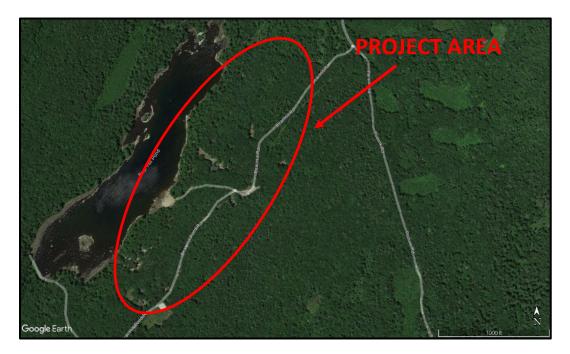


Figure 2. Project Area on Aerial Photograph

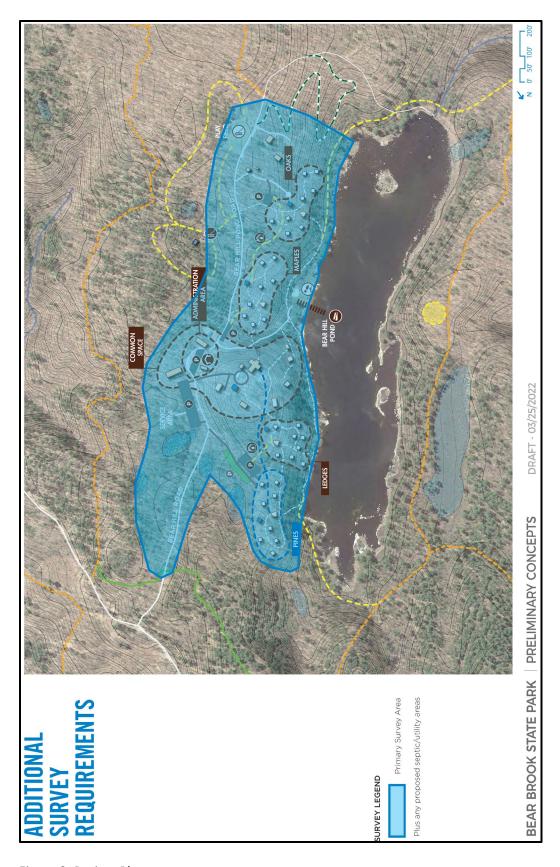


Figure 3. Project Plans

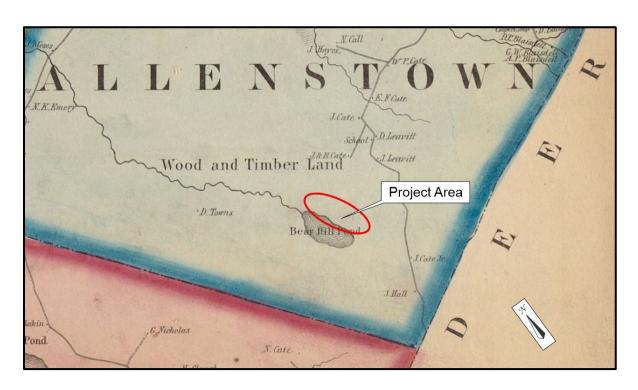


Figure 4. Project Area Vicinity on 1858 Map of Allenstown (Walling 1858; Scale 1:46,500)

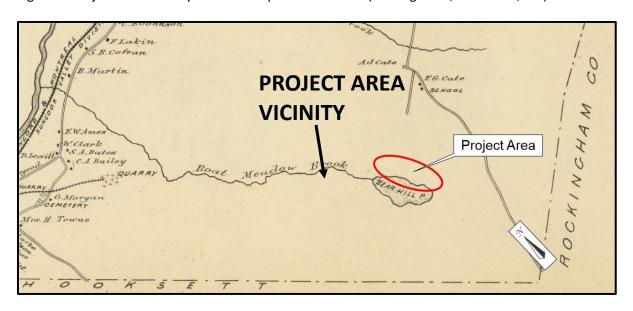


Figure 5. Project Area on 1982 Map of Allenstown (Hurd 1892; 1" = 1500')

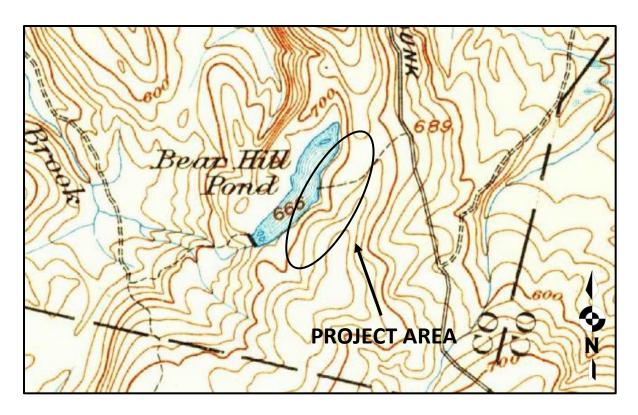


Figure 6. Project Area on 1921 USGS Suncook Quadrangle (1:62,500)

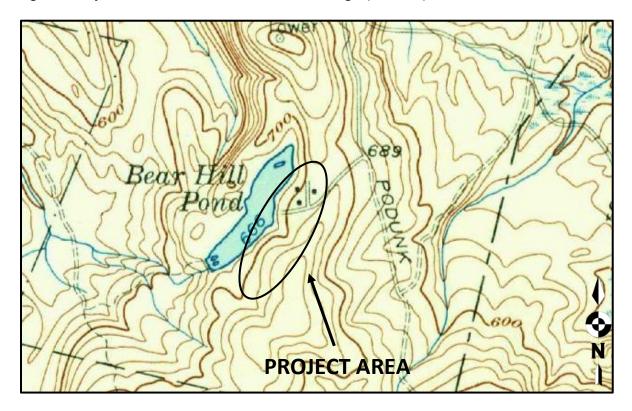


Figure 7. Project Area on 1957 USGS Suncook Quadrangle (1:62,500)



Plate 1. View Southwest of Proposed Parking Areas Showing Scraped, Rocky Terrain



Plate 2. Disturbed Area along Bear Hill Pond Road, View North-Northeast



Plate 3. Disturbed Rocky Terrain behind the Sheds near the Proposed Parking Area, View East



Plate 4. Exposed Ledge near Bear Hill Pond Road, View East

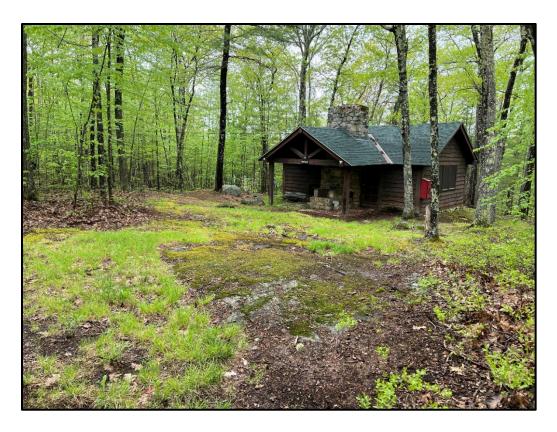


Plate 5. Exposed Ledge in "The Maples" Cabin Group, View West-Southwest

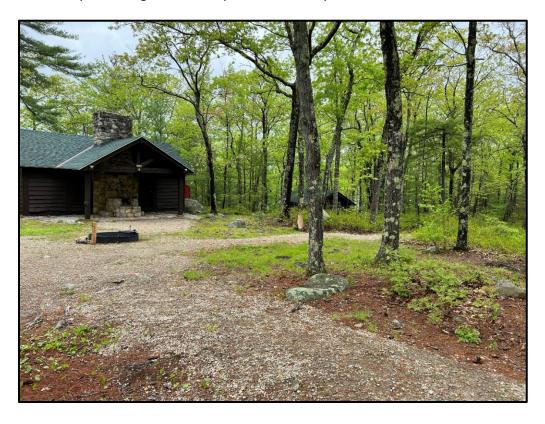


Plate 6. Wooded, Rocky Terrain by Common Use Areas near "The Oaks" Cabin Group, View Northwest



Plate 7. View Southeast of the Cleared Field and Gravel Roads Showing Surficial Disturbance



Plate 8. View East of Rock Clearing Piles Southeast of the Field



Plate 9. View East of Artificial Landscape behind Building 23. The drop-off occurs inside the tree line.



Plate 10. View West of the Artificial Landform Overlooking Bear Hill Pond



144 GREENWOOD ROAD • DUBLIN, NH 03464 • 603-563-8123
WWW.MONADARCH.COM

# This Report Contains Confidential Information. Not for Public Distribution.

May 28, 2022

Mr. Adam Portz SE Group 31 Church Street, Suite 200 Burlington, VT 05401

Dear Mr. Portz:

This letter report summarizes the results of the recently completed Phase IA Archaeological Sensitivity Assessment for the proposed expansion of the Catamount Pond Campground in Bear Brook State Park Campground in Allenstown, New Hampshire (Figures 1-4). This study followed guidelines for archaeological surveys established by the New Hampshire Division of Historical Resources (NHDHR) and was authorized under Section 106 of the Historic Preservation Act of 1966 (P.L. 89-665), as amended, and as implemented by regulations of the Advisory Council on Historic Preservation (36 CFR Part 800).

#### Methodology

This archaeological assessment included background research, visual inspection of the project area, and preparation of this letter report. Background research included review of previous archaeological studies in the Suncook River drainage (Borstel et al. 2002; Chan et al. 2011; Goodby 2010; Goodby and Deshler 2018; Hannum and Wheeler 2003), archaeological site files, historic maps (Figures 5-8), and soil survey data. Visual inspection of the project area was conducted on May 4, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs and the excavation of selective shovel probes to assess underlying soils (Figure 4; Plates 1-13). Brian Deshler served as Project Archaeologist and Robert Goodby, Ph.D. served as Principal Investigator.

#### **Site Setting**

The project area (Figures 1-4) consists of a parcel of land approximately 11 acres in size encompassing an existing camping area in Bear Brook State Park in Allenstown, New Hampshire. It is bounded on the west by Catamount Pond and Bear Brook, and on the north by Little Bear Brook. These drainages are part of the Suncook River drainage, a significant tributary of the Merrimack River. Underlying soils are classified as Windsor Loamy Sand (3-8%)

slope), an excessively drained outwash soil. The project area is covered with recent secondary growth forest, and the terrain is generally sloping and/or uneven (Plates 1, 4, 7, 10, 11, 13) except for two areas of level terrain north and west of the existing campground (Figure 4; Plates 5, 8). Modern disturbances include a cleared and scraped area in the center of the project area, areas of trail clearing, and a number of water spigots fed by underground piping that are part of the existing campground (Plates 2, 3, 12).

#### **Results**

#### Pre-Contact Native American Context

The Merrimack River drainage is known for the intensity of its occupation by Native Americans. Sites ranging from the Paleoindian period (c. 13,000-10,000 B.P.) to the Late Woodland (c.1100-400 B.P.) are known from its banks and tributaries from the mouth of the Merrimack River in Salisbury, Massachusetts to New Hampshire's Lakes Region (Bunker 1994; Dincauze 1976; Goodby 2004). The only systematic study of Native America settlement in the Merrimack drainage found that sites tend to be within 1000 meters of rivers on terraces and deltas composed of well-drained soils. Sites also tend to be associated with waterfalls and rapids and tend not to be more than 30 meters above the river in elevation (Kenyon and McDowell 1983).

While some areas of the Merrimack watershed have been the focus of extensive archaeological research over many decades, relatively little work has been done on the Suncook or its tributaries (Chan, Hutchins, and Goodby 2011). Despite this, there are currently 22 Native American sites recorded in the Suncook drainage, suggesting it was intensively occupied during the pre-Contact period. Many of these sites were recorded by early avocational archaeologists (Colby 1975, Berry 1937), and are clustered in the area near the confluence of the Suncook and Merrimack Rivers, approximately 4.6 miles southwest of the project area. Unfortunately, little information is available in the site files about what was found at these sites. This concentration of Native American sites on a level terrace close to a major river confluence is consistent with known patterns of Native American site distribution detailed by Kenyon and McDowell (1983), which also noted a tendency for sites to appear on level, well-drained landforms adjacent to significant surface water features.

There are no previously recorded sites in or near the project area. The closest previously recorded site, 27MR0424 (the Suncook A Site) is approximately 5,000 feet to the northwest, at the confluence of Bear Brook and the Suncook River. Two portions of the project area (Figure 4) were identified as having sensitivity for Native American archaeological sites, based on their setting on a level, sandy, undisturbed landform adjacent to Bear Brook and Catamount Pond. Sensitive Area #1 (Figure 4, Plate 5) is situated on a high sandy terrace along the southeastern bowl-shaped bank of Catamount Pond. The area extends north of a small drainage swale in the shoreline and terminates at a larger drainage swale (Plate 7) just south of the small peninsula which extends outside of the northwest survey area. Sensitive Area #2 (Figure 4, Plate 8) is situated on a high sandy terrace along the southern bank of the long eastern arm of Catamount Pond which leads to Little Bear Brook. Soil cores taken in these areas (Figure 4, Plates 6, 9) confirmed the presence of sandy, well-drained soil, revealing a thin, unplowed A horizon of dark

greyish brown (10YR 4/2) to very dark greyish brown (10YR 3/2) loamy sand extending to 9cm below surface, underlain by a subsoil stratum of dark yellowish brown (10YR 4/6) medium sand.

# Historic Archaeological Context

The Euroamerican history of Allenstown dates to the early 18<sup>th</sup> century when a petition was granted for a tract of land, at first called Suncook Plantation, that would eventually become the towns of Allenstown, Hookset, and Bow, although Allenstown was not incorporated as a separate town until 1831. The land was divided into lots in 1730, and it was decided that Lot Number One, because of its excellent situation on the river, ought to be given to any person who would agree to build at least a saw and a grist mill to enable people to settle and develop the town (Mann 1985:1). That person was John Cochran (sometimes spelled Coffrin or Cofran), who built Suncook's first mills, and began what would eventually come to characterize the town and its economy – the milling industry. This industrial center is approximately four miles southwest of the project area.

Suncook was incorporated into the town of Pembroke in 1759, and Lot Number One underwent a series of divisions, sales, and inheritances over the course of the next 150 years. While the town was still largely agrarian in the 18<sup>th</sup> century, focusing on sheep and subsistence farming, by the 19<sup>th</sup> century the economy was making a marked shift toward industry. At first it was saw and grist mills that dominated the milling landscape, but by circa 1810, the "concentration of production shifted...from flour and wood to paper" (Mann 1985:3). Many mills were converted from their original purpose to paper production.

By the time of the Civil War, the focus had changed again, from paper to textile production, especially cotton. The textile industry ushered in Pembroke and Allenstown's most prosperous era. Alongside paper and cotton mills were numerous brickyards, and with the coming of the railroad in the 1850s, Pembroke's transition from an agrarian to an industrial economy was nearly complete. The importance of Suncook Village as the "hub" of the town's economic as well as social and cultural activities grew substantially in the late 19<sup>th</sup> century (Mann 1985:4). By the time of the Civil War, Mann states, mills "crowded" (1985:5) the banks of the Suncook River, as did housing for the millworkers, and shops, taverns, and hotels to serve the growing population. The years following the Civil War were a time of exponential growth. Webster Mills was incorporated in 1862, and China Mills, on the Allenstown side of the river in 1867. These were huge corporations with capacity to employ 1500 workers, and they turned Suncook Village into a busy commercial and industrial center.

As in many mill towns in New England, labor was largely imported. In Pembroke and Allenstown, the labor was overwhelmingly French Canadian. The French had long been employed in the brickyards, but with the growth of the mills and poor employment opportunities continuing in Canada at that time, they quickly came to meet the labor demands of the mills as well, which profoundly changed the cultural landscape of Suncook Village in the last decades of the 19<sup>th</sup> century and built a chasm between it and the rural surrounding town of Pembroke, which remained Protestant and English-speaking. By 1885, in fact, says Mann, no English was spoken in the Village at all (1985:6). French shop owners, French saloons, French barbers and bakers, and French-speaking schools all serviced the immigrant community.

The Great Depression of the 1930s, however, affected Suncook Village's prosperity profoundly. The mills began to fail, and many sold out to Textron Manufacturing Company, which had bought up many of New England's failing textile mills and begun to make parachute cloth in Suncook Village (Mann 1985:8). With work drying up, so too did the population, and by the end of the Second World War, few French Canadians remained, and the industrial area of Pembroke and Allenstown area entered a long period of decay and economic decline.

The project area is situated in a sparsely settled portion of Allenstown well removed from its industrial center. Historic maps (Figures 5-8) show only one building in the vicinity, the National Register-listed Allenstown Meeting house, approximately 400 feet east of the project area on the north side of Deerfield Road. This is also a recorded archaeological site (27MR0337), as excavations there in 2005 by the NHDHR SCRAP program recovered a light scatter of nails, pipe fragments, and window glass.

No historic features were noted during the visual inspection of the project area, and significant historic sites are not expected to occur here.

# **Summary and Recommendations**

A Phase IA Archaeological Sensitivity Assessment was completed for the proposed Catamount Pond Campground Expansion project in Bear Brook State Park in Allenstown, New Hampshire. Two portions of the project area exhibited sensitivity for Native American archaeological sites. A Phase IB Intensive Archaeological Investigation, including excavation of 50cm square shovel test pits, is recommended for both of these areas to assess the presence of Native American sites.

Please let us know if you have any questions about these conclusions or recommendations, or if you would like us to prepare a proposal for the additional recommended study.

Sincerely,

Robert G. Goodby, Ph.D. Principal Investigator

#### **References Cited**

# Berry, Clyde

1937 Record of Indian Implements. Manuscript on File, Manchester Historic Association.

# Borstel, Christopher, Robert Jacoby, and Tracy Neumann

2002 Phase IB Archaeological Survey, Allenstown-Pembroke BRO-X-017-1(20, 12361 Project. Albany, NY: Louis Berger and Associates.

## Bunker, Victoria

1994 "New Hampshire's Prehistoric Settlement and Culture Chronology." *The New Hampshire Archeologist* 33/34:20-28.

## Chan, Alexandra, Karen Hutchins, and Robert Goodby

2011 Phase IA Archaeological Sensitivity Assessment, Proposed West Buck Street Dam Removal, Pembroke and Allenstown, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting, LLC.

#### Colby, Solon

1975 Colby's Indian History. Center Conway, N.H.: Walker's Pond Press.

#### Dincauze, Dena

1976 The Neville Site: 8000 Years at Amoskeag. Cambridge, MA: Peabody Museum.

# Goodby, Robert

- 2004 Phase II Intensive Archeological Study, Manchester-Bedford-Londonderry Project, 11512. Alton, NH: Victoria Bunker, Inc.
- 2010 Phase IB Intensive Archaeological Investigation, 720 Riverwood Drive, Pembroke, New Hampshire. Stoddard, NH: Monadnock Archaeological Consulting, LLC.

#### Goodby, Robert and Brian Deshler

2018 Phase IA Archaeological Sensitivity Assessment and Phase IB Intensive Archaeological Investigation, Allenstown Pump Station Project, Allenstown, New Hampshire. Dublin, NH: Monadnock Archaeological Consulting, LLC.

#### Hannum, Michelle and Kathleen Wheeler

2003 Phase IA Archaeological Sensitivity Assessment of Chickering Meadow Condominium Subdivision, Dearborn Rd, Pembroke (Merrimack County), New Hampshire. Portsmouth, NH: Independent Archaeological Consulting, LLC.

# Hurd, D. Hamilton

1892 *Town and City Atlas of the State of New Hampshire*. Boston, MA: D.H. Hurd and Co.

# Kenyon, Victoria and Patricia McDowell

1983 "Environmental Setting of Merrimack River Valley Prehistoric Sites." *Man in the Northeast* 25:7-23.

## Mann, Jennifer K.

1985 *Building Pembroke: The Evolution of a Landscape*. Washington, DC: National Trust for Historic Preservation.

# Walling, H.F.

1858 Topographical Map of Merrimack County, New Hampshire from Actual Surveys. New York: Smith, Mason and Company.

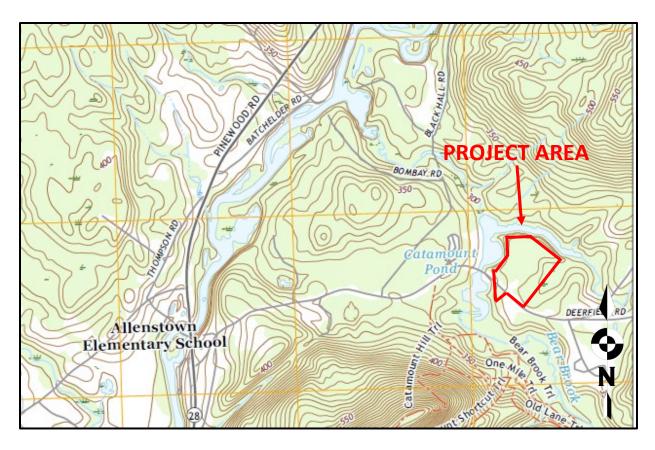


Figure 1. Project Area on USGS Suncook Quadrangle (1:24,000)



Figure 2. Project Area on Aerial Photograph

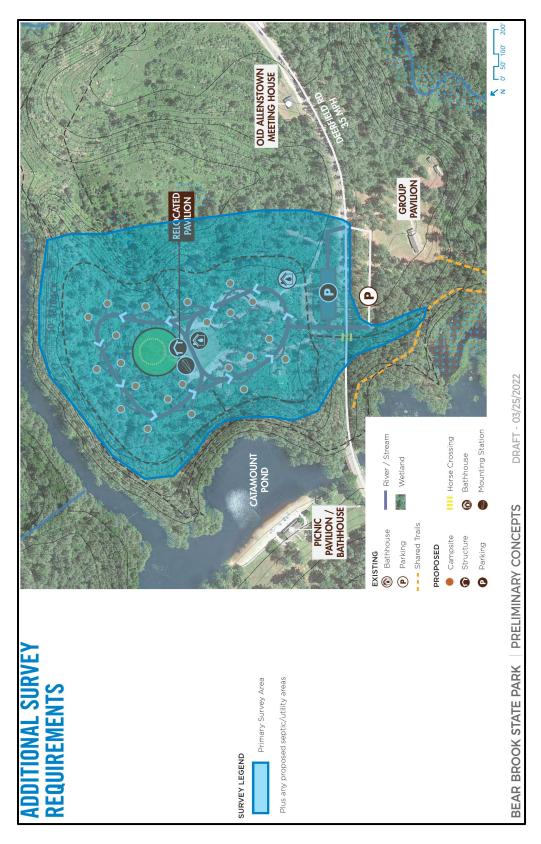


Figure 3. Project Plans

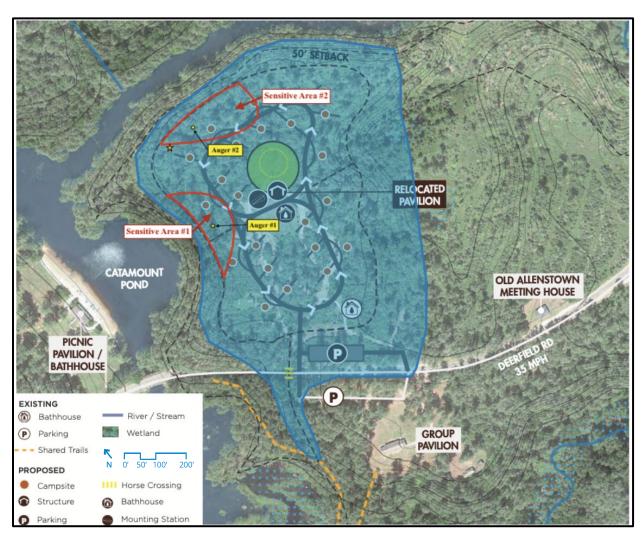


Figure 4. Auger Test Locations and Areas of Archaeological Sensitivity

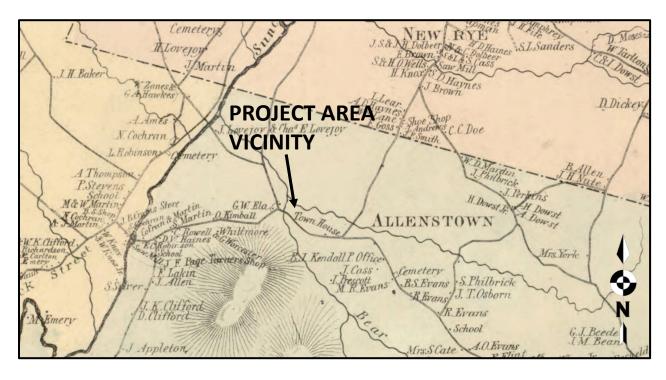


Figure 5. Project Area Vicinity on 1858 Map of Merrimack County (Walling 1861; 1" = 1900')

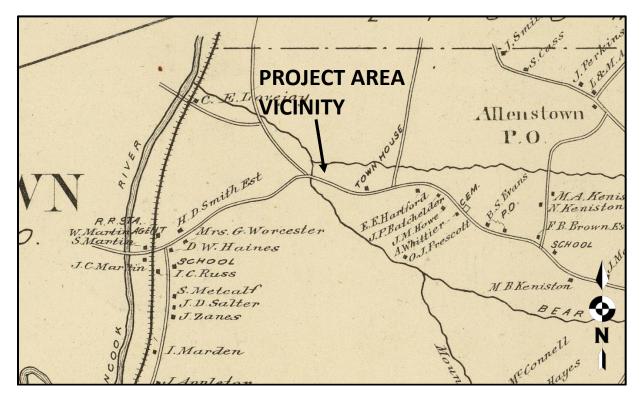


Figure 6. Project Area on 1982 Map of Allenstown (Hurd 1892; 1" = 1500')

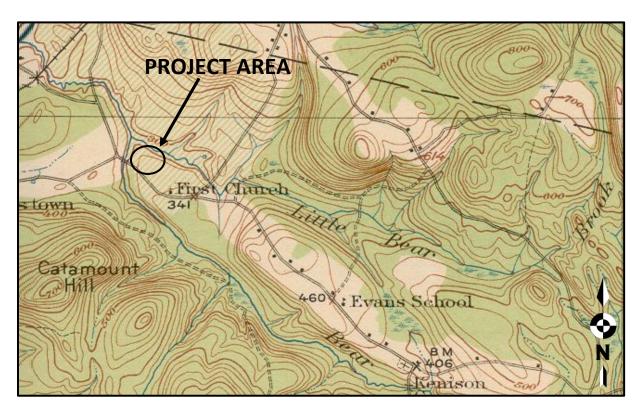


Figure 7. Project Area on 1921 USGS Suncook Quadrangle (1:62,500)

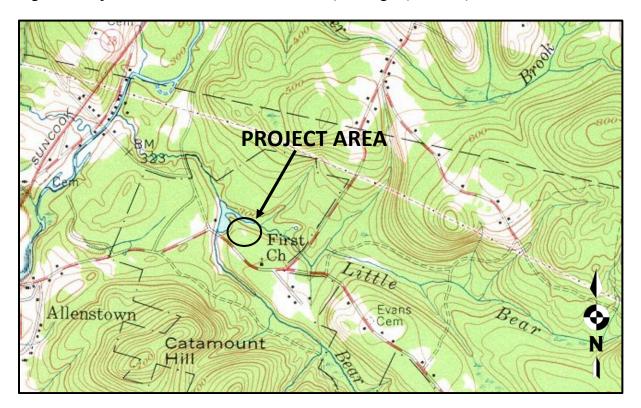


Figure 8. Project Area on 1957 USGS Suncook Quadrangle (1:62,500)



Plate 1. View North-Northeast of Moderately Sloping Uneven Terrain South of Deerfield Road



Plate 2. One of Several Well Spigots Distributed across the Project Area



Plate 3. View North-Northeast of Trail Clearing in Southern Portion of Project Area North of Deerfield Road



Plate 4. View Southwest of Sloping Terrain in Southwestern Portion of Project Area



Plate 5. Archaeologically Sensitive Area #1 and Location of Auger #1, View North



Plate 6. Profile of Auger #1 Showing Sandy, Well-Drained Soil



Plate 7. View East-Northeast of Swale North of Sensitive Area #1



Plate 8. Sensitive Area #2 and Location of Auger #2, View East



Plate 9. Profile of Auger #2 Showing Sandy, Well-Drained Soil



Plate 10. Sloping Terrain in Northeast Perimeter of Project Area, View Northwest



Plate 11. View South-Southwest of Sloping Terrain in Eastern Portion of Project Area



Plate 12. View Southeast of Disturbed Clearing in Center of Project Area



Plate 13. View Northeast of Uneven Terrain in Southeastern Portion of Project Area

# NH Division of Historical Resources

## Bibliography Form and Short Report

## THIS REPORT CONTAINS CONFIDENTIAL INFORMATION NOT FOR PUBLIC DISTRIBUTION

Complete this form for ALL archaeological reports submitted to the DHR. Refer to the manual for guidance at: http://www.nh.gov/nhdhr/archaeology\_forms\_manuals.htm

This form is being used for: • Short Report *AND* Bibliography Form

O Bibliography Form Only

Short Report AND Bibliography Form original hard copy must be mailed to the address below. In addition, submit an electronic version of the report (including attachments) to: tanya.krajcik@nh.gov.

Bibliography Form Only may be submitted electronically to: tanya.krajcik@nh.gov; Or a hard copy, accompanied with a CD of the form, may be mailed to the address below.

> NH Division of Historical Resources Attn: Review & Compliance 19 Pillsbury Street Concord, NH 03301-3570

DHR Review #: Report Type: Phase IA Short Report Report Date: 2022-05-27

Author's Last Name: Goodby Author's First Name: Robert

Additional Authors: Brian Deshler

Source Institution: Monadnock Archaeological Consulting, LLC

Title: Phase IA Archaeological Sensitivity Assessment, Pawtuckaway State Park Campground Expansion Project, Nottingham,

**New Hampshire** 

Lead Federal or State Agency: NH State Parks

Abstract: Phase IA Archaeological Sensitivity Assessment was completed for the proposed Pawtuckaway State Park

Campground Expansion Project in Nottingham, New Hampshire. The project area is situated on rocky, uneven, and poorly drained terrain. No archaeological sites or areas of archaeological sensitivity were identified, and no further

study is recommended.

**Investigation Type: Phase IA** Excavated: No Sites Found: No

Comments:

Enter the geographical coordinates for the project area below (NH State Plane - feet). NH State Plane coordinates can be found on the GRANIT website at: http://granitview.unh.edu.

> Easting: 1123291 Northing: 214620

Area Surveyed (Acres): 45 Date Survey Completed: 2022-04-27

No. of Pages: 15 No. of Maps: 6 No. of Figures: 16

**Location & Site Numbers:** 

City/Town	Site Number
-----------	-------------

	City/Town	Site Number
+		

### STOP here if this is a Bibliography Form only

If this form is being used as a Short Report (a substitute for a Phase IA report where the investigation did not result in the identification of any archaeological sites or areas of archaeological sensitivity within the project area) please include the following information for DHR review.

#### Description of methodology employed:

Phase IA Archaeological Sensitivity Assessment included background research and visual inspection of the project area. Background research included a review of previous archaeological studies in the Pawtuckaway Lake region, archaeological site files maintained by the NHDHR, historic maps (Figures 4-7), and soil survey data. Visual inspection of the project area was conducted on April 27, 2022, and included observation of prevailing terrain and conditions, taking of representative photographs (Plates 1-15) and assessment of underlying soils using a 1" diameter hand-held auger. Robert Goodby, Ph.D. served as Principal Investigator and Brian Deshler served as Project Archaeologist.

### Explanation of why the project area was determined not archaeologically sensitive:

The project area consists of five locations within the existing Pawtuckaway State Park in Nottingham, New Hampshire (Figures 1-3). For the purposes of this study, they were designated survey areas 1-5 (Figure 3). All are on the shores of Pawtuckaway Lake, on terrain that is almost uniformly rocky, ranges from uneven to sloping, and has areas of poorly drained soil (Plates 1-15). Small boulders and glacial erratics were encountered across the project area. Underlying soils are classified as Canton Fine Sandy Loam (0-8% slope, very stony) and Canton Gravely Fine Sandy Loam (8-15% slope, extremely bouldery). Both are well-drained till soils, but despite this description, areas of poorly drained terrain were encountered in numerous locations in the project area (Plates 4, 5, 8).

Pawtuckaway Lake is within the Lamprey River drainage, one of the larger river drainages in southeastern New Hampshire that empties into Great Bay. The current configuration of Pawtuckaway Lake is entirely artificial. At the beginning of European settlement in the early 1700s, the area of the modern lake was a patchwork of rocky knolls and wetlands drained by the North River and the Pawtuckaway River. The construction of a sawmill and dam in 1729 created Pawtuckaway Pond, and a second sawmill constructed in 1732 created Dolloff Pond. These sawmill sites were located well to the north and south of the project area, respectively. Additional dams were constructed in 1836, part of an effort to harness the waterpower of the Lamprey River to power the growing mills of Newmarket. These dams raised the level of both ponds, with the result that they formed a single body of water now known as Pawtuckaway Lake. The dams were converted to use for hydropower in the 1920s, and in 1956 were taken over by the state of New Hampshire which manages them to regulate the water level of the lake (Pineo, Miller and Adams 2022).

Pawtuckaway State Park has been determined to be eligible for listing on the national Register of Historic Places under criterion A, C, and D, the last of which includes known historic archaeological resources located throughout the park and the potential for Native American archaeological sites (Pineo, Miller, and Adams 2022. However, there are no previously recorded Native American archaeological sites within the park boundaries, and because the rocky, poorly drained, uneven terrain, and the fact that the lake did not exist in the pre-Contact period, the project area would not have been attractive for Native American settlement. While there are important historic archaeological resources elsewhere in Pawtuckaway State Park, none of the contributing elements to the determination of National Register Eligibility are within the project area. Historic maps (Figures 4-7) do not depict any structures in the project area until the mid-20<sup>th</sup> century, and no historic features were identified during the visual inspection. As a result, significant historic archaeological resources are not expected to occur here.

No further study is recommended.

project boundary location. If available, include GIS shapefiles of the survey area as well.
Attach* sketches, test pit location maps, field records, and any other applicable maps or images that would help the DHR understand the reason for the recommendations.

*Adobe Acrobat Pro users: Attachments can be merged with this PDF or attached by using the attached Adobe Acrobat Reader users: Include attachments in a separate PDF for electronic submittal	chment function
	Revised February 2017

2022-04-20

DHR Records check completed on:

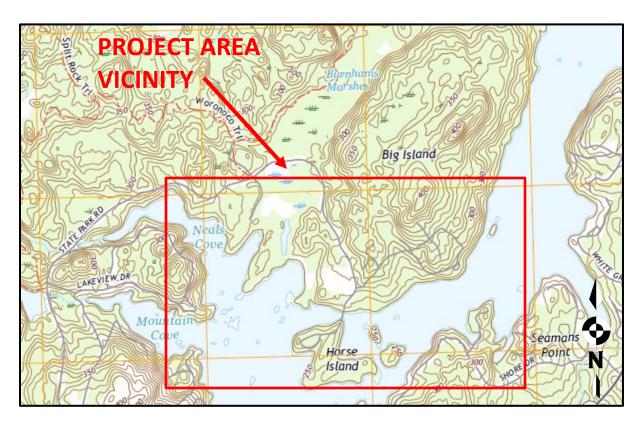


Figure 1. Project Area Vicinity on USGS Mount Pawtuckaway Quadrangle (1:24,000)



Figure 2. Project Vicinity (in Red) on Aerial Photograph

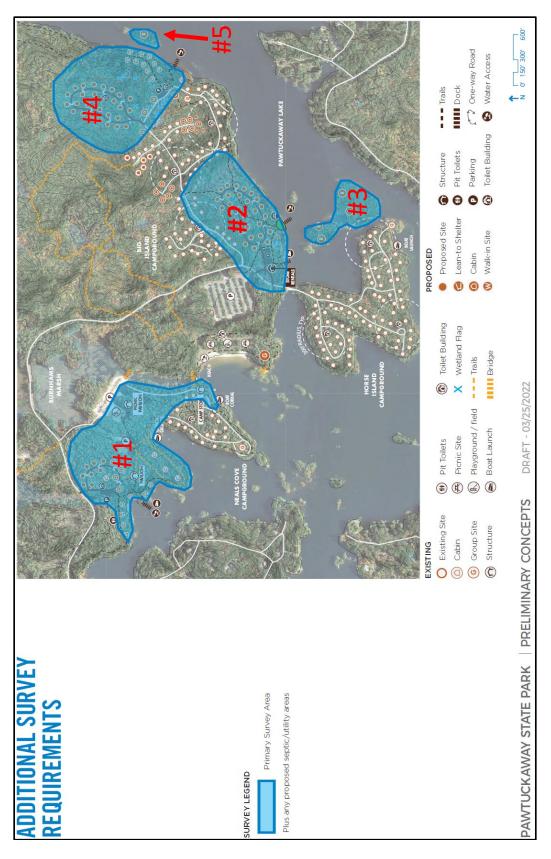


Figure 3. Project Plans with Survey Area Numbers (In Red)

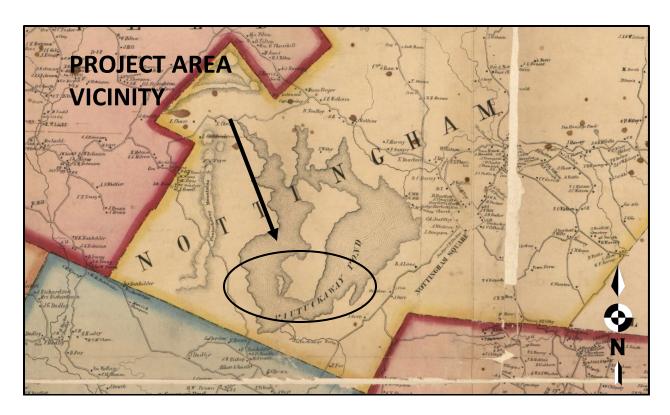


Figure 4. Project Area on 1857 Rockingham County Map (Chace 1857; Scale: 1" = 7,700')

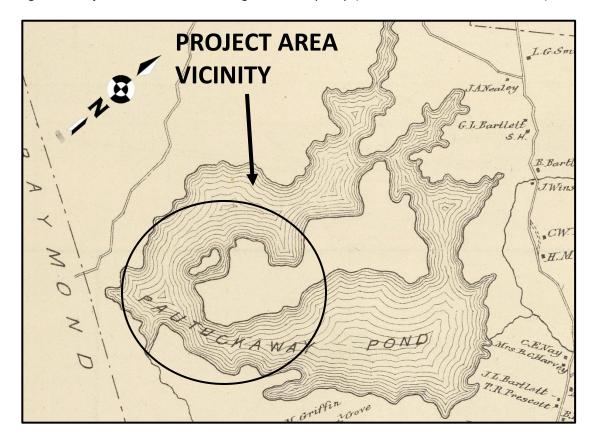


Figure 5. Project Area on the 1892 Map of Nottingham (Hurd 1892; Scale: 1"= 3400')

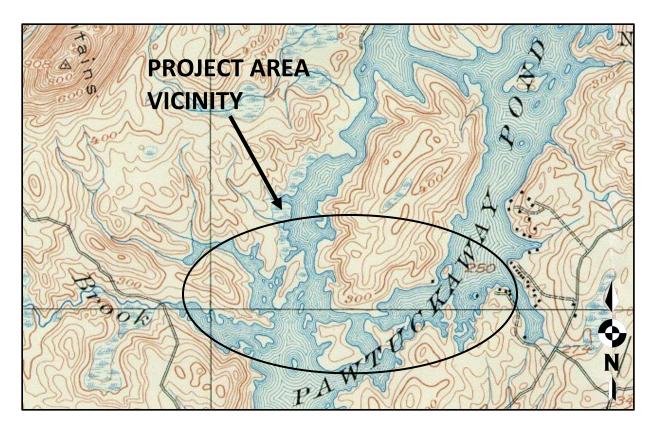


Figure 6. Project Area Vicinity on 1919 USGS Pawtuckaway Quadrangle (1:62,500)

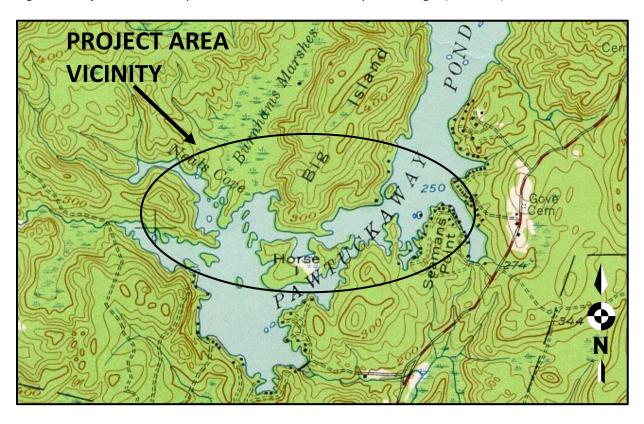


Figure 7. Project Area Vicinity on 1957 USGS Pawtuckaway Quadrangle (1:62,500)



Plate 1. Southwestern Portion of Survey Area 1, View Northwest of Rocky Sloping Terrain

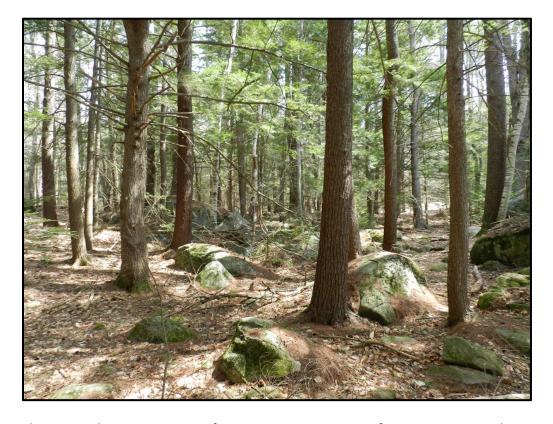


Plate 2. Northwestern Portion of Survey Area 1, View East of Uneven Terrain and Large Boulders



Plate 3. Northern Portion of Survey Area 1, View North-Northwest of Sloping Terrain with Boulders



Plate 4. Eastern Portion of Survey Area 1, View South Showing Uneven Terrain and Standing Water



Plate 5. Southwestern Portion of Survey Area 2, View East-Northeast of Uneven, Rocky Terrain and Standing Water



Plate 6. West-Center of Survey Area 2, View Northwest Showing Uneven, Rocky Terrain



Plate 7. Southeastern Portion of Survey Area 2, View East-Southeast of Rocky, Sloping Terrain



Plate 8. Eastern Portion of Survey Area 2, View Southeast Showing Rocky, Poorly Drained Terrain



Plate 9. Northern Portion of Survey Area 2, View Southwest of Rocky, Sloping Terrain



Plate 10. Survey Area 3, View South-Southwest Showing Rocky, Sloping Terrain



Plate 11. Southern Portion of Survey Area 4, View North Showing Rocky, Sloping Terrain



Plate 12. Northeastern Portion of Survey Area 4, View Northeast of Rocky, Sloping Terrain



Plate 13. Center of Survey Area 4, View Southwest Showing Rocky, Sloping Terrain



Plate 14. Western Portion of Survey Area 4, View North-Northeast Showing Rocky, Sloping Terrain

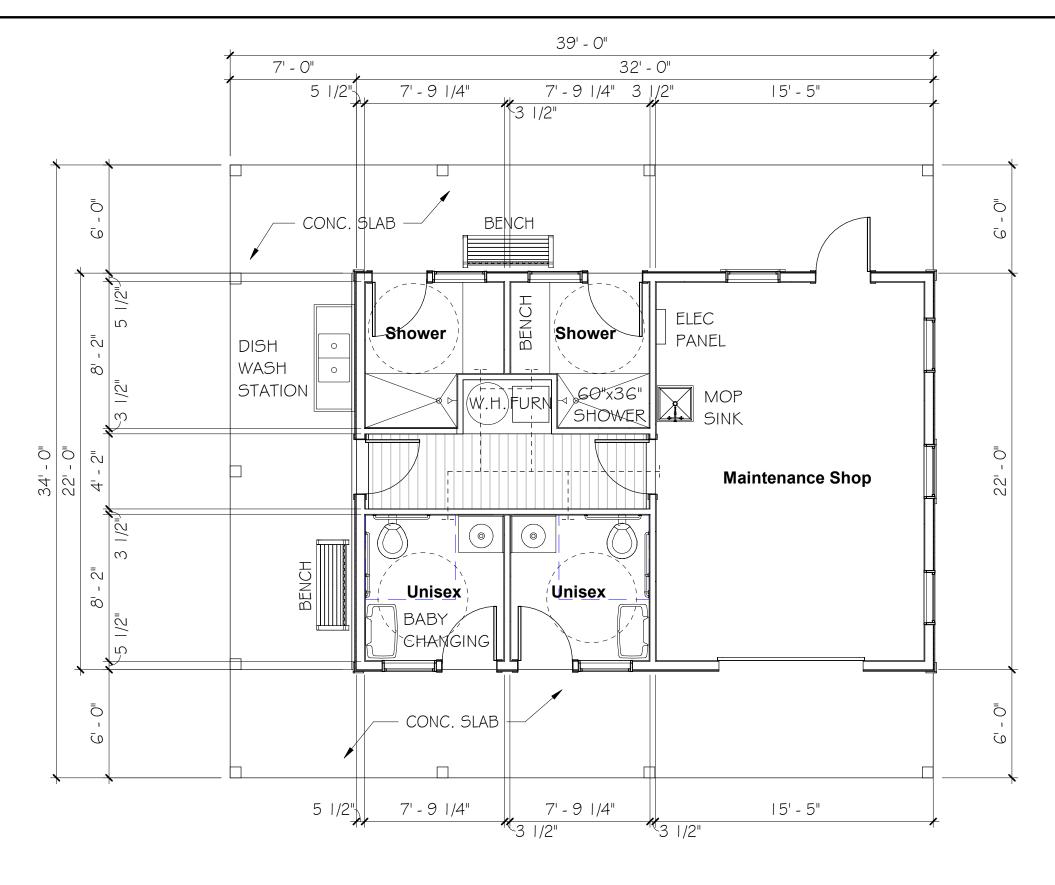


Plate 15. Survey Area 5, View Northeast Showing Rocky, Sloping Terrain

> need

- > JERICHO BATHHOUSE & MAINTENANCE BUILDING
- > JERICHO CABIN
- > MOLLIDGEWOCK OFFICE STORE BATHHOUSE
- > MOLLIDGEWOCK WOOD SHED PLAN AND ELEVATIONS
- > BEAR BROOK BEAR HILL STAFF APARTMENTS FLOOR PLAN
- > BEAR BROOK CATAMOUNT EXISTING SMALL TOILET BUILDING
- > PAWTUCKAWAY BATHHOUSE

08/17/2022



ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

704 sq. ft. x Estimated Winterized Cost \$750/sq. ft. = \$528,600

MAIN LEVEL 100' - 0"

NORTH ELEVATION
Scale: 1/8" = 1'-0"





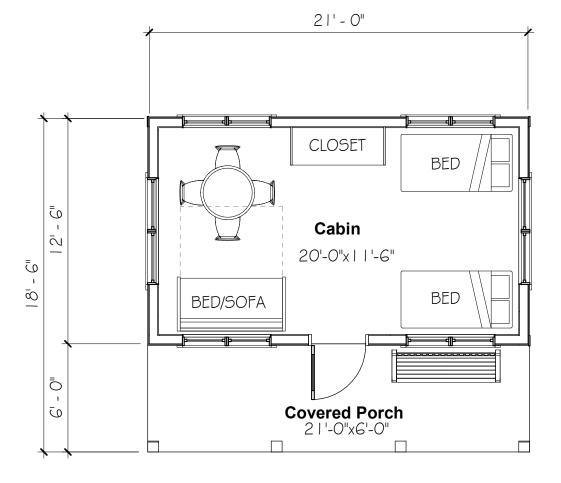
South Elevation
Scale: 1/8" = 1'-0"



**WEST ELEVATION**Scale: 1/8" = 1'-0"



JERICHO CABIN



ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

MAIN LEVEL 100' - 0"

NORTH ELEVATION
Scale: 1/8" = 1'-0"



EAST ELEVATION
Scale: 1/8" = 1'-0"

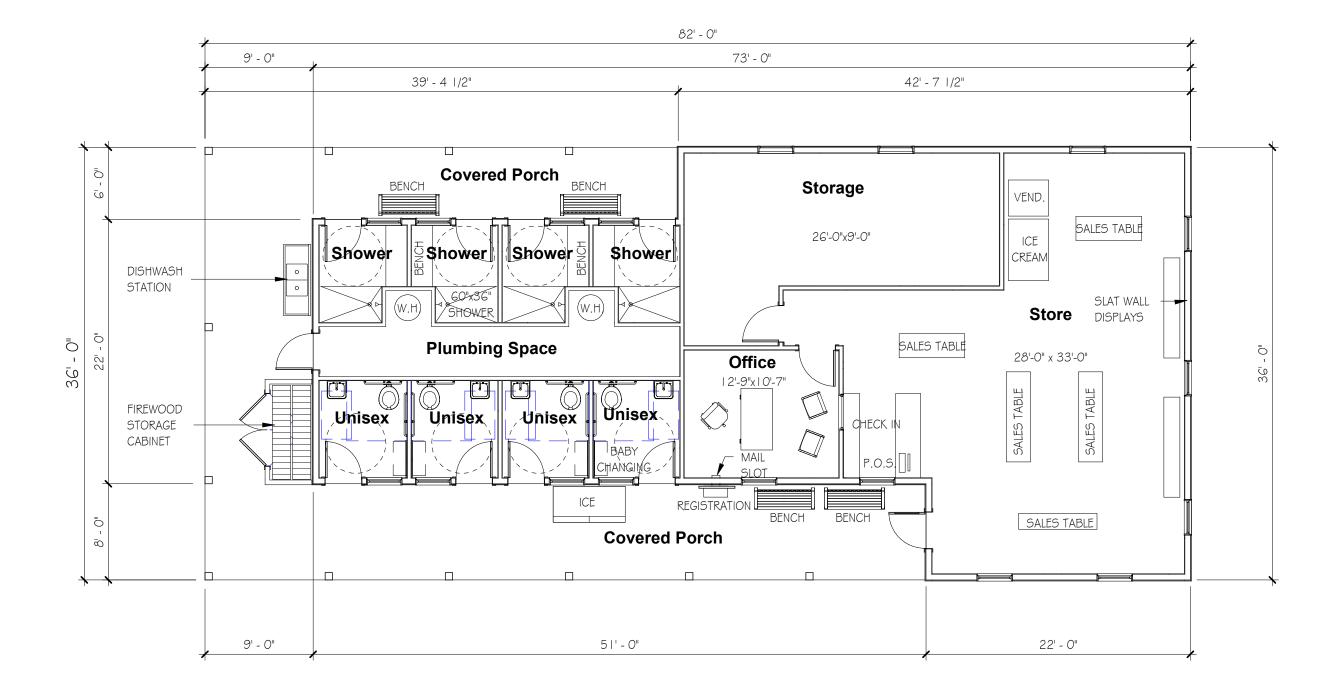


SOUTH ELEVATION
Scale: 1/8" = 1'-0"



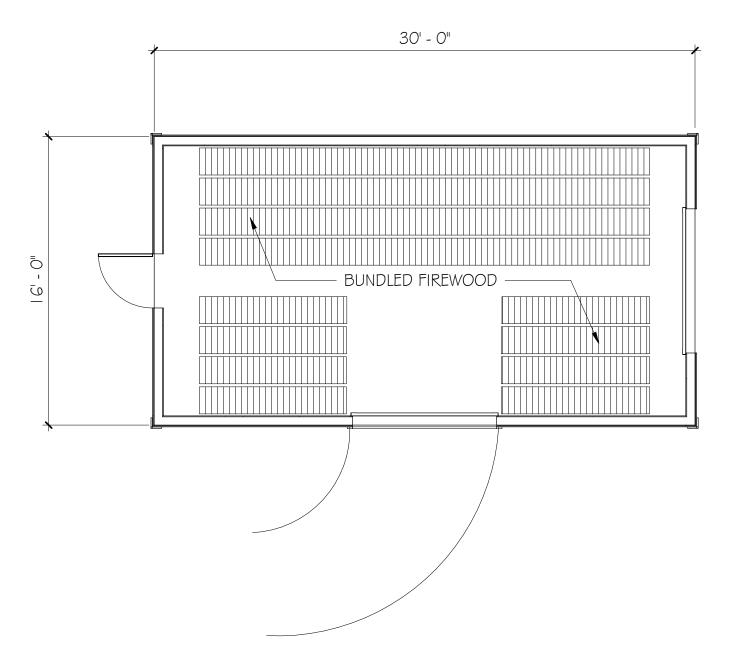
WEST ELEVATION
Scale: 1/8" = 1'-0"





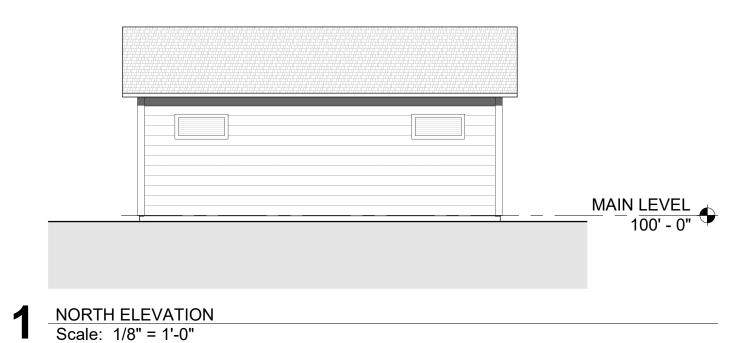
67 | SQ.FT. BATHHOUSE \$ 1,366 SQ.FT. OFFICE \$ STORE, PLUS COVERED PORCH = TOTAL 2,952 GROSS SQ. FT.

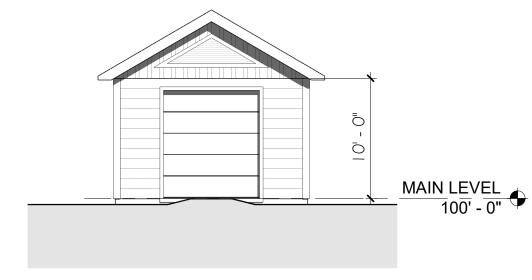
08/17/2022



ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

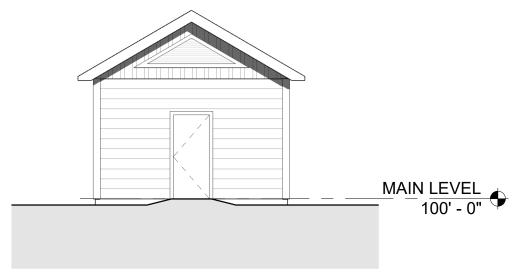
08/17/2022





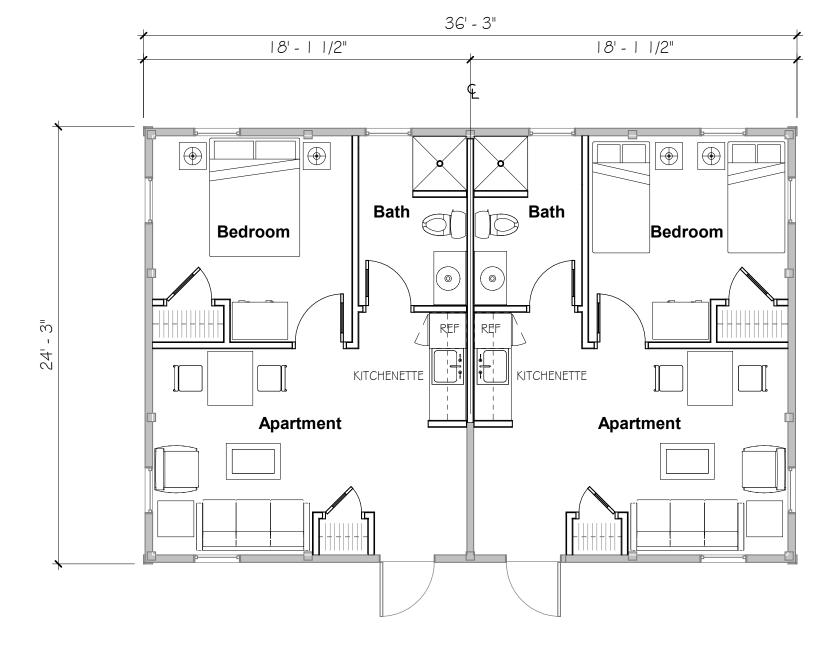
2 EAST ELEVATION
Scale: 1/8" = 1'-0"



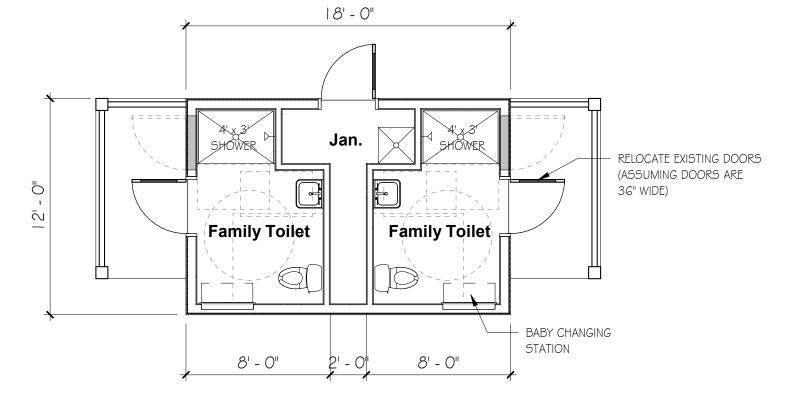


WEST ELEVATION
Scale: 1/8" = 1'-0"

Former 4H Toilet Building Bear Hill Future Construction

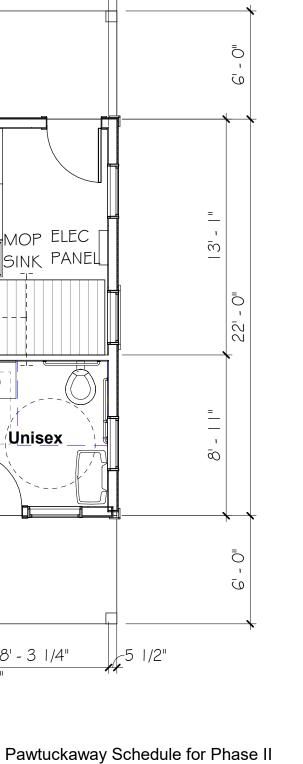


## ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

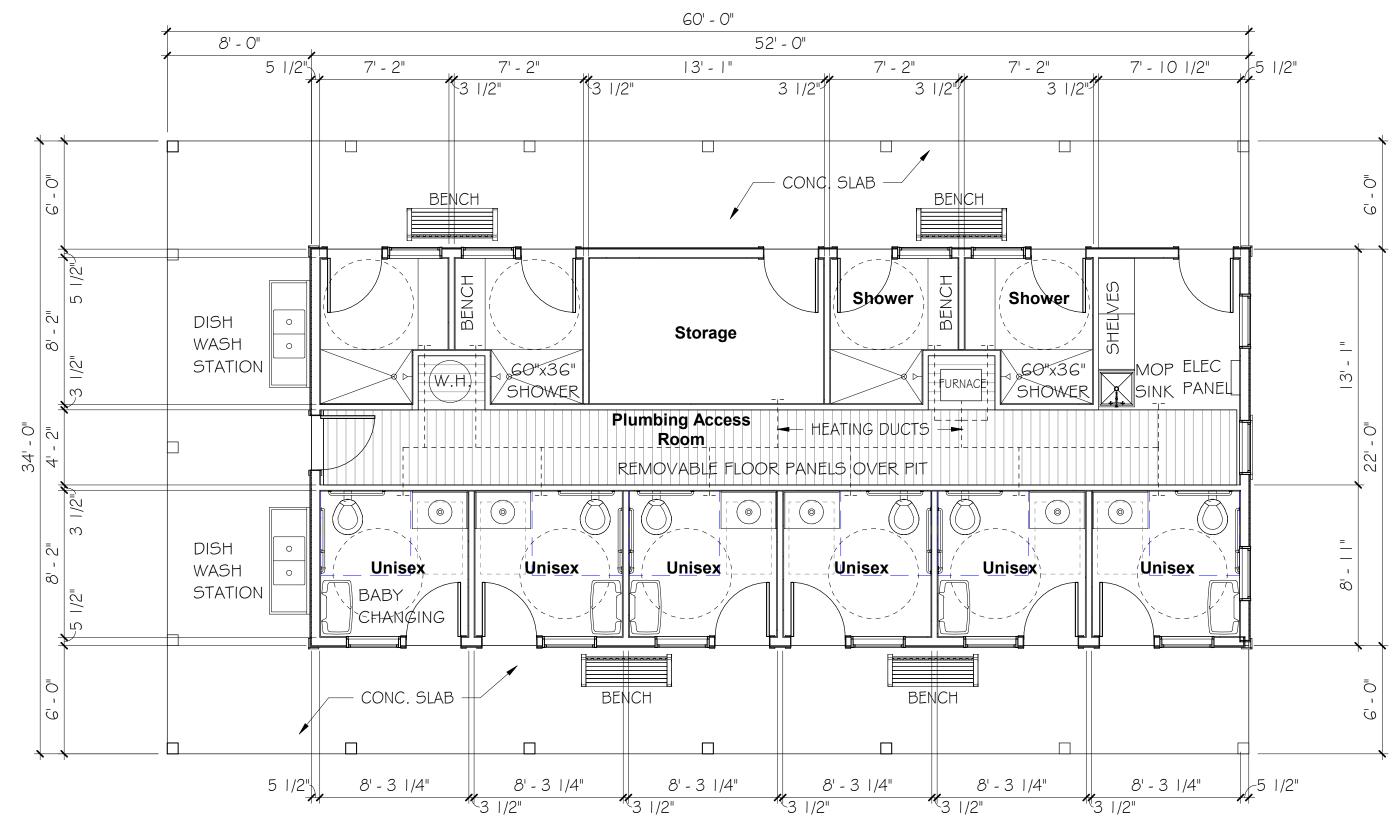


# ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

08/17/2022



Crawford Notch Future Construction



# ESTIMATED 2022 COSTS - Expect 7% to 10% Yearly Inflation

1144 sq. ft. x Estimated Seasonal Cost \$620/sq. ft. = \$709,280

1144 sq. ft. x Estimated Winterized Cost \$900/sq. ft. = \$1,029,600



NORTH ELEVATION
Scale: 1/8" = 1'-0"

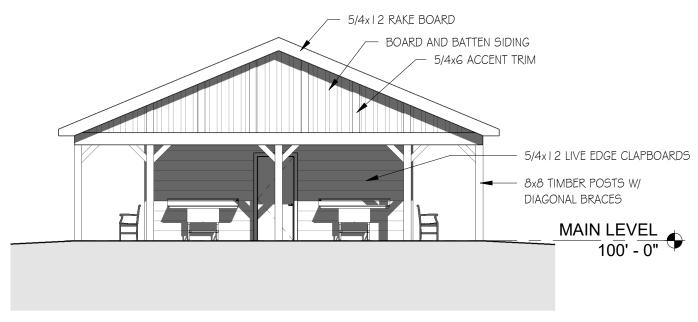


**2** EAST ELEVATION Scale: 1/8" = 1'-0"





Scale: 1/8" = 1'-0"



WEST ELEVATION
Scale: 1/8" = 1'-0"

Bathhouse

- > CRAWFORD NOTCH CAMPGROUND EXPANSION OPTIONS
- > JERICHO CAMPGROUND EXPANSION OPTIONS
- > MOLLIDGEWOCK CAMPGROUND EXPANSION OPTIONS
- > BEAR BOOK BEAR HILL CAMPGROUND EXPANSION OPTIONS
- > BEAR BROOK CATAMOUNT POND CAMPGROUND EXPANSION OPTIONS
- > PAWTUCKAWAY CAMPGROUND EXPANSION OPTIONS

Y:\21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Jericho\21889 CONCEPT\_JERICHO-02.dwg, 6/29/2022 8:52:28 AM, CWaterman, DWG T

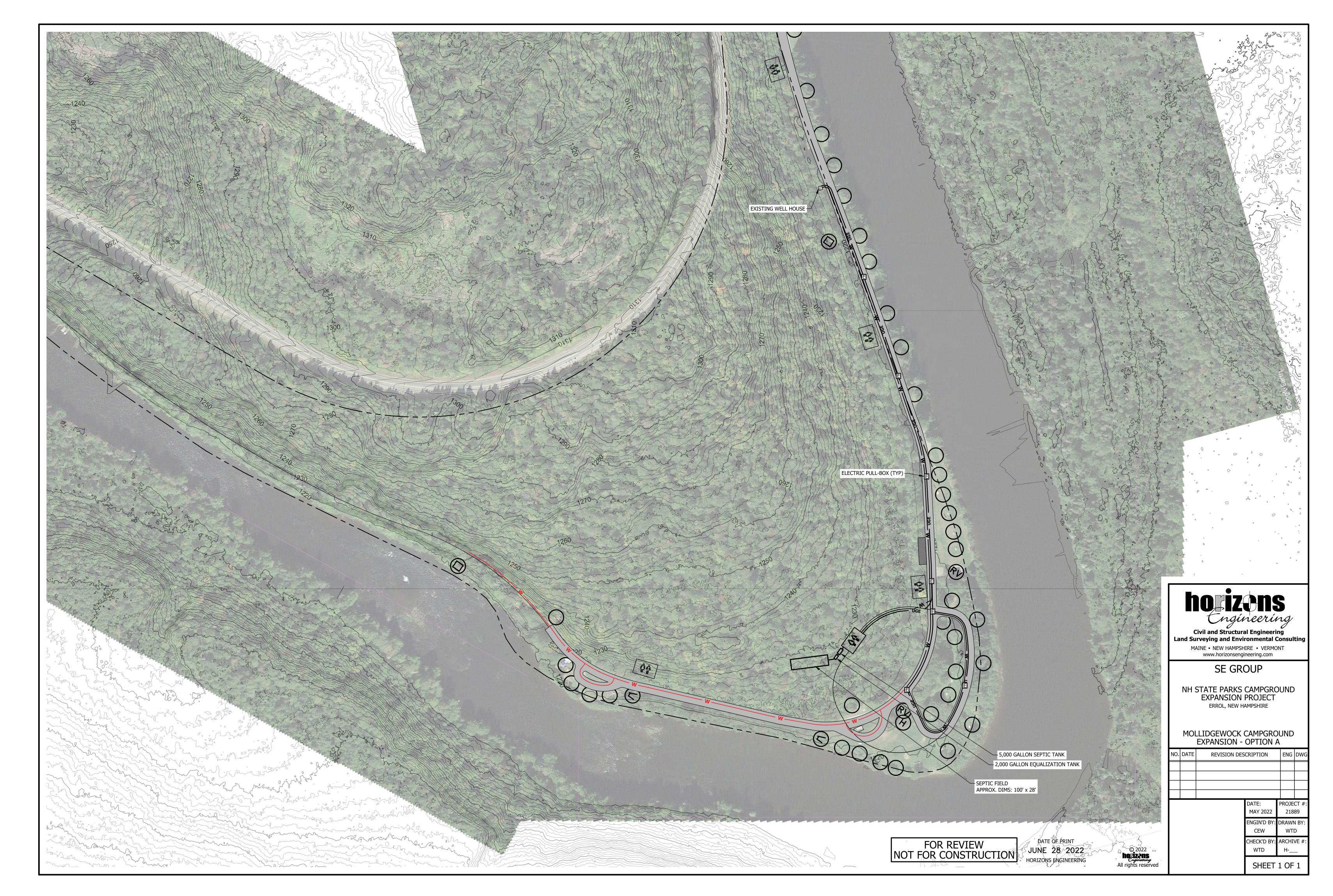
Y:\21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Jericho\21889 CONCEPT\_JERICHO-02.dwg, 6/29/2022 8:52:33 AM, CWaterman, DWG T

NH STATE PARKS CAMPGROUND EXPANSION PROJECT
BERLIN, NEW HAMPSHIRE

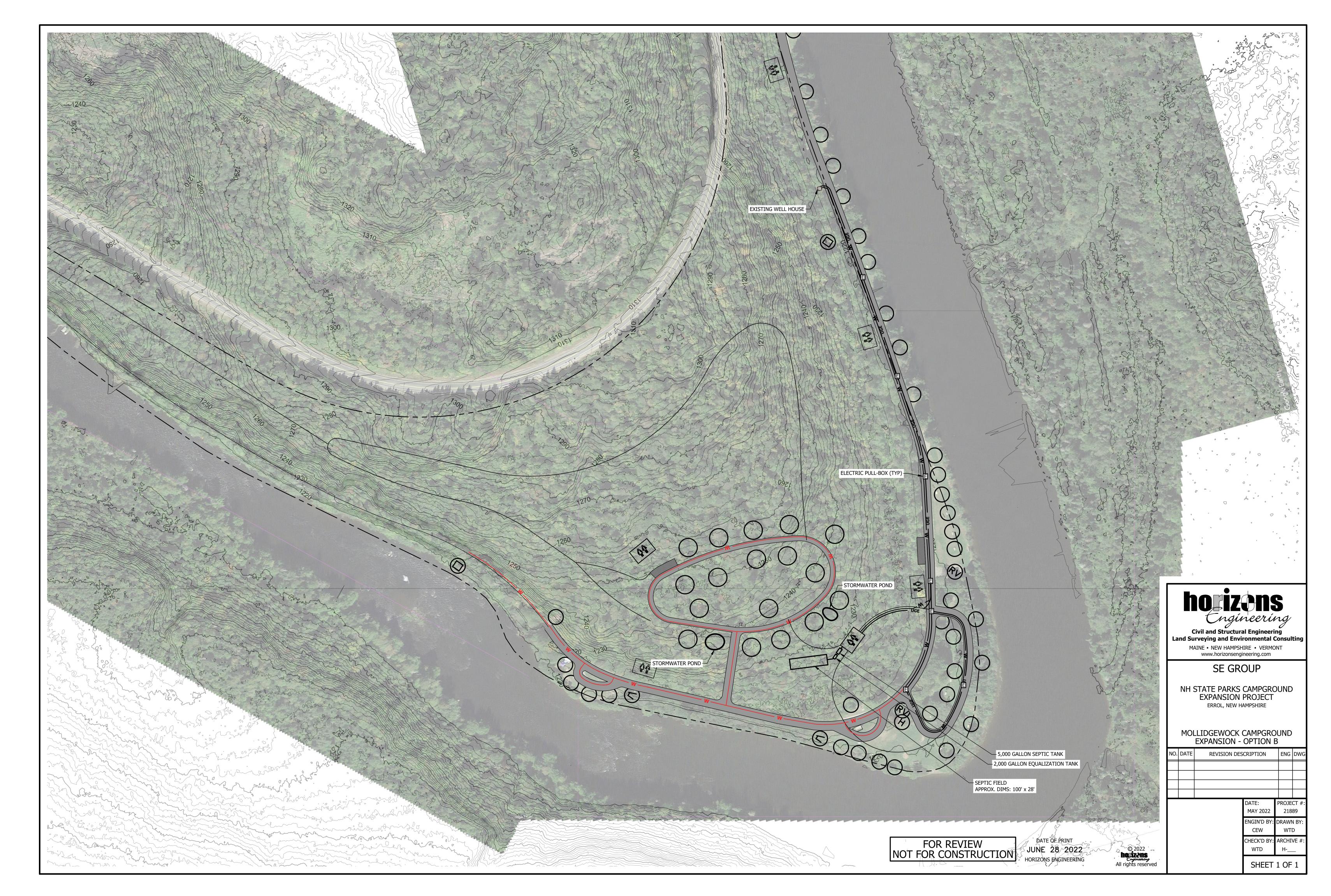
# JERICHO CAMPGROUND EXPANSION OPTION B

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

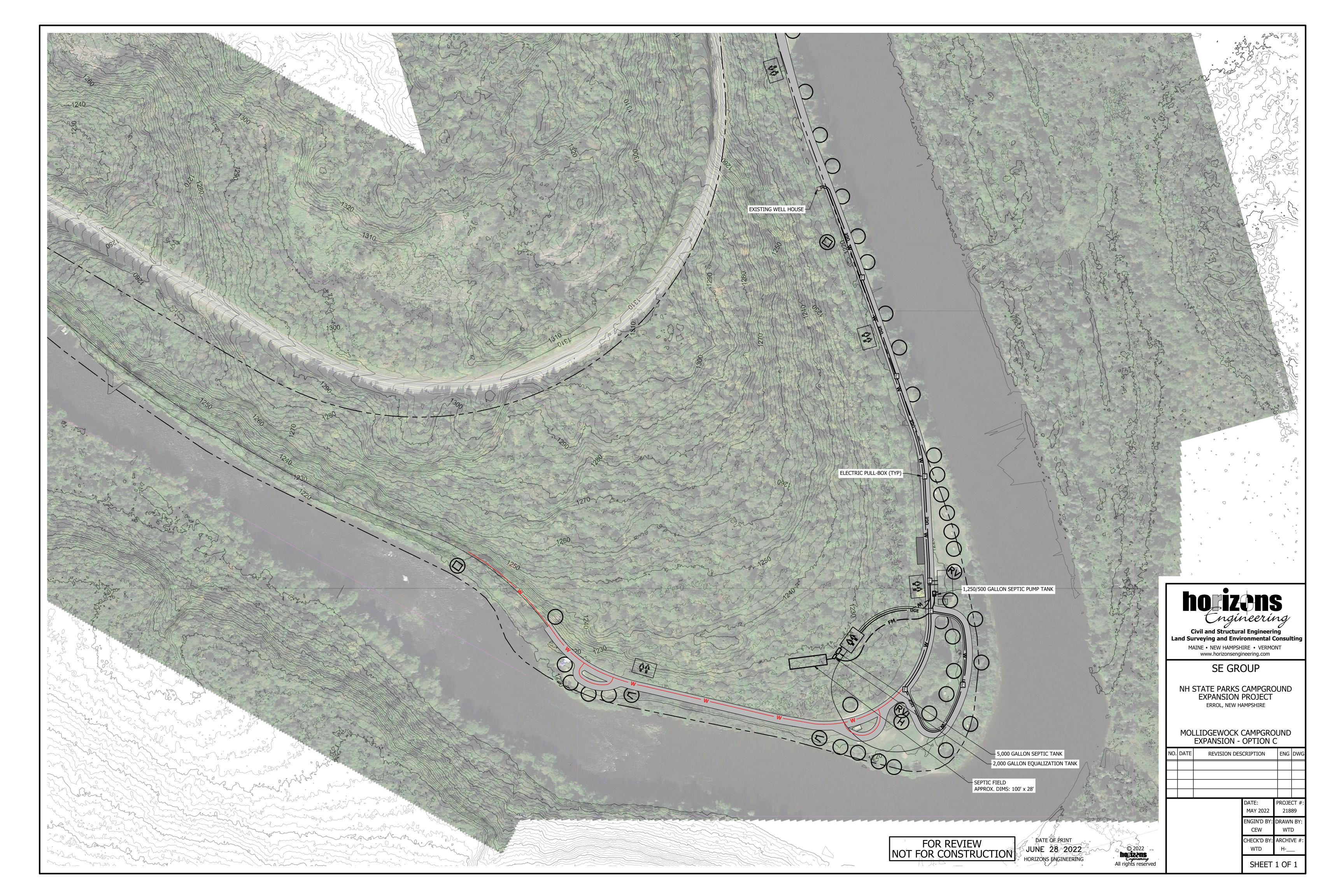
MAY 2022 CEW CHECK'D BY: ARCHIVE # WTD



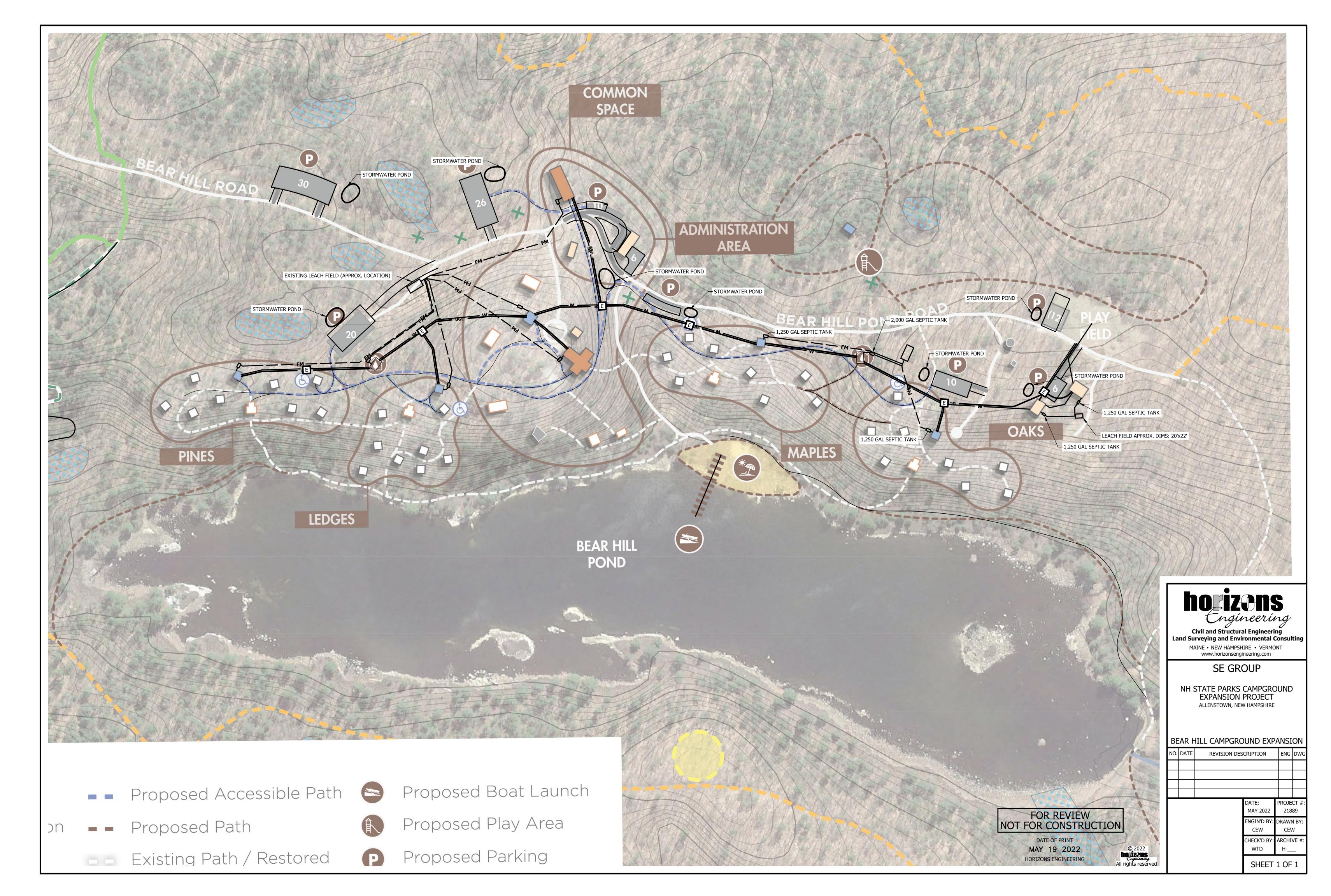
1889 SE Group - NH State Parks\DWGS\Concepts\Concept - Mollidgewock\21889 CONCEPT\_MOLLIDGEWOCK-02.dwg, 6/28/2022 9:13:40 PM, CWaterman, DWG To PDF.p



21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Mollidgewock\21889 CONCEPT\_MOLLIDGEWOCK-02.dwg, 6/28/2022 9:13:56 PM, CWaterman, DWG To PD



:\21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Mollidgewock\21889 CONCEPT\_MOLLIDGEWOCK-02.dwg, 6/28/2022 9:14:13 PM, CWaterman, DWG To P



State Parks\DWGS\Concepts\Concept - Bear Hil\\21889 CONCEPT\_BEAR HILL-01.dwg, 5/19/2022 1:38:15 PM, CWaterman, DWG To

Y:\21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Catamount Pond\21889 CONCEPT\_CATAMOUNT POND-01.dwg, 5/19/2022 1:41:09 PM, CWaterman, DWG To PDF.pc3

Y:\21889 SE Group - NH State Parks\DWGS\Concepts\Concept - Pawtuckaway\21889 CONCEPT\_PAWTUCKAWAY-01.dwg, 5/19/2022 1:40:14 PM, CWate

- > CRAWFORD NOTCH PRELIMINARY OPINION OF COST
- > JERICHO MOUNTAIN PRELIMINARY OPINION OF COST
- > MOLLIDGEWOCK PRELIMINARY OPINION OF COST
- > BEAR BROOK BEAR HILL PRELIMINARY OPINION OF COST
- > BEAR BROOK CATAMOUNT PRELIMINARY OPINION OF COST
- > PAWTUCKAWAY PRELIMINARY OPINION OF COST
- > DRY RIVER PRELIMINARY OPINION OF COST

GENERAL IMPROVEMENTS - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Donalitica (Funcios Control					
Demolition/Erosion Control	_				
Clearing and grubbing, wooded site	0	sf	\$0.80		\$0
EPSC Measures	0	ls	\$10,000.00		\$0
Total Demolition/EPSC					\$0
Earthwork					
Cut/Fill	0	Is	\$0.00		\$0
Culverts	0	ea	\$3,000.00		\$0
Total Earthwork	1	-	40,000.00		\$0
Vehicular Access Improvements					
Alternate ATV Trail	625	If	\$150.00		\$93,750
ATV parking	6000	sf	\$6.94		\$41,667
Vehicular Access Gate	0	ea	\$3,000.00		\$0
Total Vehicular Access Improvements					\$135,417
Utilities/ Infrastructure					
Electrical/ Telecom Services	0	ls	\$0.00		\$0
Domestic Water	0	ls	\$0.00		\$0
Stormwater Treatment	0	ls	\$0.00		\$0
Total Utilities/ Infrastructure					\$0
Misc. Site Improvements					
		If			\$0
Total Site Improvements					\$0
Constant Language Control Control Control	1			Г	\$135,417
General Improvements Costs - Sub Tot	aı				\$135,417

EXISTING CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
	•		•		•
Demolition/Erosion Control			1		1
Clearing and grubbing, wooded site	0	sf	\$0.80		\$0
Decommission Ex. Campsite	0	ea	\$2,000.00		\$0
EPSC Measures	0	ls	\$5,000.00		\$0
Total Demolition/EPSC					\$0
Earthwork					
Cut/Fill	0	ls	\$0.00		\$0
Culverts	0	ea	\$3,000.00		\$0
Total Earthwork	•	•	•		\$0
Vehicular Access Improvements					
Campground Road (2-way, gravel)	0	lf	\$0.00		\$0
Campground Road (1-way, gravel)	0	If	\$0.00		\$0
Asphalt Road (Sanitary Dump Station)	0	If	\$0.00		\$0
Parking Area (gravel)	0	ea	\$0.00		\$0
Vehicular Access Gate	0	ea	\$3,000.00		\$0
Total Vehicular Access Improvements					\$0
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	ls	\$41,110.00		\$41,110
Domestic Water	0	ls	\$0.00		\$41,110
Water Spigots	0	ea	\$0.00		\$0
Septic Tank + Leach fields	0	Is	\$0.00		\$0
Stormwater Treatment	0	Is	\$0.00		\$0
Total Utilities/ Infrastructure	Ü		ψ0.00		\$41,110
Campsite Improvements		ı	1		•
New Standard Sites	3	ea	\$4,500.00		\$13,500
New Shelter Site (Single)	2	ea	\$42,900.00		\$85,800
New Shelter Site (Double)	1	ea	\$83,550.00		\$83,550
Total Campsite Improvements					\$182,850
Misc. Building Improvements					
	0	ea	\$120.00		\$0
	0	ea	\$200.00		\$0
Total Misc. Building Improvements	1		l		\$0
Mica Cita Immercana					
Misc. Site Improvements		16	#CF 00		00.050
5' wide Accessible Path Total Site Improvements	50	If	\$65.00		\$3,250 \$3,250
Total Site Improvements					\$3,250
Existing Campground Cos	ts - Sub Total				\$227,210
			•		

JERICHO BROOK CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	4	acre	\$15,000.00		\$53,364
-	0	allow	\$15,000.00		\$0
Demo existing structures	0	sf	\$0.80		\$0
EPSC Measures	1	Is	\$10,000.00		\$10,000
Total Demolition/EPSC					\$63,364
Earthwork					
Cut/Fill - for JBA terracing	14000	су	\$18.00		\$252,000
Culverts	300	If	\$100.00		\$30,000
Total Earthwork					\$282,000
Vehicular Access Improvements					
Campground Road (2-way, gravel)	1091	If	\$206.30		\$225,069
Campground Road (1-way, gravel)	3555	If	\$118.33		\$420,675
Asphalt Road (Sanitary Dump Station)	60	If	\$266.50		\$15,990
Parking Area (gravel)	4680	sf	\$6.94		\$32,500
Vehicular Access Gate	1	ea	\$3,000.00		\$3,000
Total Vehicular Access Improvements	-		ψ0,000.00		\$697,234
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	ls	\$224,100.00		\$224,100
Domestic Water System	1	ls	\$451,750.00		\$451,750
Wastewater System	1	ls	\$534,760.00		\$534,760
Sanitary Dump Station	1	ls	\$10,000.00		\$10,000
Stormwater Treatment	5	ea	\$20,000.00		\$100,000
Water Spigot Total Utilities/ Infrastructure	3	ea	\$1,500.00		\$4,500 \$1,320,610
					T.,,322,515
Campsite Improvements					
New Standard Sites	5	ea	\$4,500.00		\$22,500
New Shelter Site	5	ea	\$42,900.00		\$214,500
New Premium w/s/e Site (Pull-Through)	9	ea	\$13,925.00		\$125,325
New Premium w/s/e Site (Back-In)	23	ea	\$13,225.00		\$304,175
Total Campsite Improvements					\$666,500
Misc. Building Improvements					
New Firewood and Maintenance Building	1	ea	\$240,000.00		\$240,000
New Pit Toilet	2	ea	\$40,000.00		\$80,000
Total Misc. Building Improvements			<b>4</b> 10,000		\$320,000
Misc. Site Improvements					
5' wide Accessible Path	1400	If .	\$65.00		\$91,000
Landscaping- Top Soil- 4" Deep	900	су	\$70.00		\$63,000
Landscaping- Trees - Deciduous 3" cal.	12	ea Is	\$750.00		\$9,000
Community Fire Pit	1 2000	ls sf	\$2,000.00		\$2,000
Storne Dust Paving Stormwater plantings (seed)	2000 8750	sf	\$7.00 \$0.75		\$14,000 \$6,563
Signage	8/50	ea	\$0.75		\$6,563
Total Site Improvements	4		φ200.00		\$186,363
Jericho Brook Campground C	Costs - Sub Total				\$3,536,071

The Market Size with Perform   1	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
The Part				•		
Test State						
Control   100						
Company   1900						
\$1,000   \$2,000   \$2,000   \$1,000   \$2,000   \$1,000   \$2,000   \$1,000   \$	Clearing and Grubbing	2000	sf	\$0.75		\$1,500
Secondar Size with Parlatons		1	ea	\$200.00		\$200
For big	Total Standard Site					\$4,500
For big	Standard Site with Platform					
Section   1988   1		1	ea	\$500.00		\$500
Processing Controlled   1						
East Survive						
Table						
Table						\$3,000
Enter light   1	Total Standard Site with Platform					\$7,500
Enter light   1						
Foot Total		1 1	ea	\$500.00		\$500
Clearing per Globatery	Picnic Table					\$800
Test Number						\$0
\$1,500   \$2,000   \$1,500   \$2,000   \$						
Ten larg		1	ea	\$200.00		
February     1				•		•
Section   1						
Second   S						\$500
Standard and Ondology						
Test Name						
Select Site (Single)	Site Marker	1		\$200.00		\$200
Park Bing		1	ea	\$3,000.00		\$3,000
Face Notes    3   42   5500.00   5	Total Group Site					\$9,750
Face Notes    3   42   5500.00   5	Shelter Site (Single)					
Section   Sect		1	ea	\$500.00		\$500
Clearing and Grosberg   2000   st   50.75   51.500   50.000   50				\$800.00		\$800
Test Marker						\$1,500
Select   S						
Select Stee (Single)   Selection   Selec		_				
Fire Ring				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$42,900
Fire Ring						
First Table		1 . 1		4500.00		
Set Grading		_				
Clearing and Grobbing   3,000 st   80,075   82,026     Size Marker						
Selectic		_				\$2,625
Total Shelter Site (Double)						\$200
Cabin		2	ea	\$38,400.00		
Fire Ring	Total Stete Stet (Bouble)					ψ00,000
First rable	Cabin					
Ste Grading		_				\$500
Clearing and Grubbing   2000   sf   90.75   \$1.500.00   \$20.000						
Ste Marker						
Electricity Hookups						\$200
Total Cabin   S99,050   S90,050						\$92,050
Improved Site with Water/Electricty		1	ea	\$2,500.00		
Fire Ring						ψυσ,υυυ
Fire Ring	Improved Site with Water/Electricty					
Ste Grading	Fire Ring					\$500
Clearing and Grubbing						
Site Marker						
Electricity Hockups						\$1,800
Premium Site with W/S/E (pull-through)	Electricity Hookups	1	ea	\$2,500.00		\$2,500
Premium Site with W/S/E (pull-through)		1	ea	\$1,500.00		\$1,500
Fire Ring	Total improved Site W/e					\$9,100
Fire Ring	Premium Site with W/S/E (pull-through)					
Site Grading	Fire Ring	1		\$500.00		\$500
Clearing and Grubbing   2850   sf   \$0.75   \$2.138						\$800
Gravel Surface						\$2,138 \$2,138
Site Marker						
Electricity Hookups						\$200
Premium W/s/e (pull-through)   \$13,925		1		\$2,500.00		\$2,500
Premium Site with W/S/E (back-in)         1         ea         \$500.00         \$500           Fire Ring         1         ea         \$800.00         \$800           Picnic Table         1         ea         \$800.00         \$800           Site Garding         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lf         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.00         \$2,500           Water/Sever Hookups         1         ea         \$2,500.00         \$2,500		1	ea	\$2,500.00		\$2,500 \$13,925
Fire Ring         1         ea         \$500.00         \$500           Pricnic Table         1         ea         \$800.00         \$800           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lf         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.0         \$2,500           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500	Total Fremium w/s/e (punctinough)					ψ10,920
Fire Ring         1         ea         \$500.00         \$500           Pricnic Table         1         ea         \$800.00         \$800           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lf         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.0         \$2,500           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500	Premium Site with W/S/E (back-in)					
Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lf         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200.00           Electricity Hookups         1         ea         \$2,500.00         \$2,500.00           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500.00	Fire Ring					\$500
Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lf         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.00         \$2,500           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500.00						\$800
Gravel Surface         70         If         \$35.00         \$2,450           Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.00         \$2,200           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500						
Site Marker         1         ea         \$200.00         \$200           Electricity Hookups         1         ea         \$2,500.00         \$2,500           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500		_				\$2,130
Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500						\$200
						\$2,500
\$10,220		1	ea	\$2,500.00		
						ψ10,220

OVERALL SUMMARY - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Overall Park Summmary					
General Improvements Subtotal					\$135,417
Existing Campground Subtotal					\$227,210
Jericho Brook Area Subtotal					\$3,536,071
Total Improvements	•				\$3,898,698
Jericho Mountain State Park Costs - Sub Total					\$3,898,698
Costs - 35% Markups / Contingency	,				\$1,364,544
Total Costs - Jericho Mountain State Park					\$5,263,242

### General Notes:

Preliminary costs for planning purposes only

Based on current market conditions (no annual escalation rate applied)

All costs include the following mark-ups/contingency

- a) 8.5% General Conditions (including liability)
- b) 15% estimating contingency
- c) 10% GC mark-up
- d) 1.5% bond

### MOLLIDGEWOCK

NEW LOOP - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	1	acre	\$15,000.00		\$14,862
-	0	sf	\$2.00		\$(
Demo existing structures	0	sf	\$0.80		\$0
EPSC Measures	1	ls	\$5,000.00		\$5,000
Total Demolition/EPSC	<u> </u>		ψ0,000.00		\$19,862
Earthwork					
Cut/Fill - not road related	0	су	\$0.00		\$1
Culverts	80	If	\$100.00		\$8,00
Total Earthwork					\$8,00
Vehicular Access Improvements					
Campground Road (2-way, gravel)	188	If	\$206.30		620.70
		If	\$206.30		\$38,78
Campground Road (1-way, gravel)  Asphalt Road (Sanitary Dump Station)	1188	If	\$118.33 \$266.50		\$140,580
		sf			\$1
Parking Area (gravel)	0		\$6.94		\$1
Vehicular Access Gate	0	ea	\$3,000.00		\$0
Total Vehicular Access Improvements					\$179,364
Utilities/ Infrastructure					
Electrical/ Telecom Services	0	ls	\$0.00		\$I
Domestic Water System	1	ls	\$294,550.00		\$294,55
Wastewater System	0	ls	\$0.00		\$294,55
Sanitary Dump Station	0	ls	\$0.00		\$
Stormwater Treatment	2	ea	\$20,000.00		\$40,000
Water Spigot	12	ea	\$1,500.00		\$18,000
Total Utilities/ Infrastructure	12	Co	\$1,000.00		\$352,550
Campsite Improvements					
New Standard Sites	15	ea	\$4,500.00		\$67,50
New Standard Sites w/ Platforms	0	ea	\$7,500.00		\$1
New Shelter Site	6	ea	\$42,900.00		\$257,40
Relocated/renovated Cabin (site improvements only)	2	ea	\$42,900.00		\$85,800
New Premium w/s/e Site (Back-In)	0	ea	\$13,225.00		\$0
Total Campsite Improvements					\$410,700
Misc. Building Improvements					
Renovate and Relocate Existing Cabins (300sf Each)	600	sf	\$325.00		\$195,000
Bathhouse	1	ea	\$709,280.00		\$709,280
New Pit Toilet	1	ea	\$40,000.00		
Total Misc. Building Improvements	1	Ea	\$40,000.00		\$40,000 \$944,280
Misc. Site Improvements					
5' wide Accessible Path	2140	lf	\$65.00		\$139,10
Boardwalk with Curb	400	lf	\$400.00		\$160,000
Landscaping	0	ls	\$0.00		\$
Stormwater plantings (seed)	2400	sf	\$0.75		\$1,800
Signage	1	ea	\$200.00		\$20
Total Site Improvements					\$301,100
Mollidgewock New Lo	on Costs Sub Total	1	1 1		\$2,215,856
Mollidgework New Lo	on costs - Nin Lotali				

## MOLLIDGEWOCK

GENERAL IMPROVEMENTS - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
	•				
Demolition/Erosion Control					
Demo old asphalt road	23600	sf	\$2.00		\$47,200
EPSC Measures	0	ls	\$10,000.00		\$0
Total Demolition/EPSC	•	•	,		\$47,200
Earthwork					
Cut/Fill	0	ls	\$0.00		
Culverts	0	ea			\$0 \$0
Total Earthwork		еа	\$3,000.00		\$0
					***
Vehicular Access Improvements					
Alternate ATV Trail	0	lf	\$150.00		\$0
ATV parking	0	sf	\$5.00		\$0
Vehicular Access Gate	0	ea	\$3,000.00		\$0
Total Vehicular Access Improvements					\$0
Utilities/ Infrastructure					
Electrical/ Telecom Services	0	ls	\$0.00		\$0
Domestic Water	0	ls	\$0.00		\$0
Stormwater Treatment	0	ls	\$0.00		\$0
Total Utilities/ Infrastructure					\$0
Misc. Site Improvements					
Stormwater plantings (seed)	0	ls	\$6,000.00		\$0
8' gravel topper over old road base	2360	If	\$8.00		\$18,880
Landscaping	0	ls	\$20,000.00		\$0
Total Site Improvements	•		•		\$18,880
				-	400.000
General Improvements Costs - Sub T	otal				\$66,080

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	5	acre	\$15,000.00		\$77,23
-	0	sf	\$2.00		ψ//,28
Remove existing trailer	1	ls	\$1,000.00		\$1,00
EPSC Measures	1	ls	\$10,000.00		\$10,00
Total Demolition/EPSC			ψ10,000.00		\$88,23
Earthwork					
Cut/Fill - not road related	0	су	\$0.00		S
Culverts	320	If	\$100.00		\$32,00
Total Earthwork					\$32,00
Vehicular Access Improvements					
Campground Road (2-way, gravel improvement with 6" hardpack)	5535	If	\$22.41		\$124,02
Campground Road (1-way, gravel)	0	If	\$118.33		şş
Asphalt (Road Entrance Apron)	60	If	\$266.50		\$15,99
Parking Area (gravel)	2892	sf	\$6.94		\$20,08
Vehicular Access Gate	2	ea	\$3,000.00		\$6,00
Total Vehicular Access Improvements	<u> </u>				\$166,09
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	Is	\$146,760.00		\$146,76
Domestic Water System	1	ls	\$90,000.00		\$90,00
Wastewater System	1	ls	\$556,960.00		\$556,96
Sanitary Dump Station	1	ls	\$10,000.00		\$10,00
Stormwater Treatment	1	ea	\$20,000.00		\$20,00
Water Spigot	6	ea	\$1,500.00		\$9,00
Total Utilities/ Infrastructure					\$823,720
Campsite Improvements					
New Standard Sites	0	ea	\$4,500.00		\$
New Standard Sites w/ Platforms	0	ea	\$7,500.00		\$
New Shelter Site	0	ea	\$42,900.00		\$
Converted Improved Site w/e	15	ea	\$4,000.00		\$60,00
New Premium w/s/e Site (Pull-Through)	0	ea	\$13,925.00		\$
New Premium w/s/e Site (Back-In)	0	ea	\$13,225.00		\$
Total Campsite Improvements					\$60,00
Misc. Building Improvements					
New Campground Store	1	ea	\$520,000.00		\$520,00
New Firewood Storage and Maintenance Shop Building	1	ea	\$240,000.00		\$240,00
Total Misc. Building Improvements					\$760,00
Misc. Site Improvements	1				
5' wide Accessible Path	300	lf .	\$65.00		\$19,50
Flagstone Patio	512	sf .	\$30.00		\$15,36
Boat Launch Dock	1	Is	\$15,000.00		\$15,00
Stabalized Shoreline Relocate Pavilion	1	ls Is	\$10,000.00		\$10,00
	1	ls sf	\$5,000.00		\$5,00
Lawn	0		\$0.00		\$45.00
Landscaping Community Fire Dit	1	ls Is	\$15,000.00		\$15,00
Community Fire Pit Boat Racks	1	IS Is	\$500.00		\$50
	4	ea	\$5,000.00 \$200.00		\$5,00
Signage Total Site Improvements	4	ea	\$200.0U		\$80 \$86,16
					φου, 10
Mollidgewock Primary Improvements Co	nete - Sub Total	1	1		\$2,016,21
wollingework Primary improvements Co	Jaca - Jun I Otal	1	I	l .	ψ∠,∪ 1∪,∠ l

Control   Cont	CANNI STETTI OLOGI CONNI ONENTS COST BREAKDOWN					
Triangle	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Triangle	Standard Site					
Description   1		1	ea	\$500.00	1	\$500
Comparison	Picnic Table	1	ea			
Section   Sect						
Section   Sect						
Section		1 1	ea	\$200.00		
The series   1	Total Standard Sice			<u> </u>		7.,
Teacher	Standard Site with Platform					
Section   1000   1   1007   1100		1				
Concept of minder   200						
Compared   1						
Section   1						
Transmission   Tran						
Fire Part	Total Standard Site with Platform					
Fire Part						
Contracted   1		1			-	
Section   100						
Standard   10						
Section						
Compagned			ea			
Fire Name	Total Standard Site (Remote)					\$2,850
Fire Name						
Total Control		T			<u> </u>	
Section   Sect						
Some part political part   Some part political part part political part part part part part part part part					ł	
1					1	
Packet   1						
Senter Stee   Single			ea			\$3,000
Part	Total Group Site					\$9,750
Part	Challes (the (Challe)					
Month   1		1	92	\$500.00	T	6500
Section   Sect					-	
Source   S						
Section   Sect						
\$42,900   \$500						
Shelter Site (Double)  **PR Ring**  ****  ****  ****  ****  ***  ***		1	ea	\$38,400.00		
Para Bridge   1	Total Shelter Site (Single)					\$42,900
Para Bridge   1	Shalter Site (Double)					
Section   1		1 1	ea	\$500.00	1	\$500
Sea Grandre		1				
See Marker     1		3500				\$2,625
Special Content						
September   Sept						
Cabin		2	ea	\$38,400.00		
Fire Bing	Total Steele Stee (Sousie)			<u> </u>	<u> </u>	ψου,ουυ
Pacific Table	Cabin					
Sime Granding		1	ea			\$500
Clearing and direbbing						
1   ea   \$200.00   \$200.						
Cabin						
S99,050   Improved Site with Water and Electricity   Fire Ring		1	ea			
Improved Site with Water and Electricty		1	ea	\$2,500.00		
Fine Ring	Total Cabin					\$99,050
Fine Ring						
Perei Cable		Ι.	- 03	8500.00	1	6500
See Grading					1	
Ceaning and Grubbing   2400   sf   \$0.75   \$1.800   \$2.000   \$2.500   \$2.						
Descriptive Hookups	Clearing and Grubbing					
Total Improved Site with W/S/E (pull-through)   S1,500   S1,500   S9,100						
Premium Site with W/S/E (pull-through)						
Premium Site with W/S/E (pull-through)		1	ea	\$1,5UU.00		
Fire Bing						ψ0,100
Fire Bing	Premium Site with W/S/E (pull-through)					
Pacific Table		1	ea	\$500.00		\$500
Cearing and Grubbing   2850   sf   \$0.75   \$2.138	Picnic Table	1	ea	\$800.00		\$800
Graved Surface         90         If         \$35.00         \$3.150           Size Marker         1         ea         \$200.00         \$200           Betkrickly Hookups         1         ea         \$2,000.00         \$2,500           Water/Sewer Hookups         1         ea         \$2,500.00         \$2,500           Total Premium W/s/e (pull-through)         \$13,925         \$13,925           Premium Site with W/s/E (back-in)           Prenit Table         1         ea         \$500.00         \$800           Site Grading         2850         sf         \$0.75         \$2,138           Gravel Surface         70         if         \$35.00         \$2,400           Site Marker Workups         1         ea         \$200.00         \$2,400           She Marker Workups         1         ea         \$2,000.00         \$2,500           Water/Sewer Hookups         1         ea         \$2,000.00         \$2,500           Total Premium W/s/e (back-in)         \$1         ea         \$2,000.00         \$2,500						
See Marker						
Electricity Hookups					+	
Water/Sewer Hookups   1   ea   \$2,500 00   \$2,500						
Premium Site with W/S/E (back-in)		_				\$2,500
Fire Bring         1         ea         \$500,00         \$500           Picnic Table         1         ea         \$800,00         \$800           Six Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lif         \$35,00         \$2,450           Six Marker         1         ea         \$2,000         \$200           Electricity Hookups         1         ea         \$2,500,00         \$2,500           Water/Sewer Hookups         1         ea         \$2,500,00         \$2,500           Total Premium w/s/e (back-in)         \$1,200         \$2,500         \$1,32,25           Converted Improved Site with Water and Electricty           Electricity Hookups         1         ea         \$2,500         \$2,500           Water Hookups         1         ea         \$2,500         \$2,500	Total Premium w/s/e (pull-through)					\$13,925
Fire Bring         1         ea         \$500,00         \$500           Picnic Table         1         ea         \$800,00         \$800           Six Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         70         lif         \$35,00         \$2,450           Six Marker         1         ea         \$2,000         \$200           Electricity Hookups         1         ea         \$2,500,00         \$2,500           Water/Sewer Hookups         1         ea         \$2,500,00         \$2,500           Total Premium w/s/e (back-in)         \$1,200         \$2,500         \$1,32,25           Converted Improved Site with Water and Electricty           Electricity Hookups         1         ea         \$2,500         \$2,500           Water Hookups         1         ea         \$2,500         \$2,500						
Pecilic Table				00000		A
See Grading   2850   sf   \$0.75   \$2.188     Clearing and Grubbing   2850   sf   \$0.75   \$2.188     Clearing and Grubbing   2850   sf   \$0.75   \$2.188     See Marker   2850   sf   \$0.75   \$2.188     See Marker   1   \$35.00   \$2.450     Size Marker   1   ea   \$2.00.00   \$2.00     See Marker   1   ea   \$2.00.00   \$2.00     See Marker   1   ea   \$2.00.00   \$2.500     Water/Sewer Hookups   1   ea   \$2.00.00   \$2.500     See Marker   1   ea   \$2.00.00   \$2.000     See Marker   1   ea   \$2.00.00   \$2.000     See Marker   1   ea   \$2.00.00   \$2.000     See Marker   1   ea   \$2.00.00     See Marker   1						
Clearing and Grubbing   2850   sf   \$0.75   \$2.136					-	
Graved Surface         70         If         \$35,00         \$2,450           Site Marker         1         ea         \$200,00         \$200           Exercifyl Hookups         1         ea         \$2,500         \$2,500           Water (Sewer Hookups         1         ea         \$2,500         \$2,500           Total Premium w/s/e (back in)         \$1         ea         \$2,500         \$13,225           Converted Improved Site with Water and Electricty           Exercisely Hookups         1         ea         \$2,500         \$2,500           Water Hookups         1         ea         \$1,500,00         \$3,500           Water Hookups         1         ea         \$1,500,00         \$1,500						
Electricity Hookups	Gravel Surface	70		\$35.00		\$2,450
Water Sewer Hookups   1   ea   \$2,500.00   \$2,500     Total Premium w/s/e (back-in)   \$13,225						
Total Premium w/s/e (back-in)   \$13,225						
Converted Improved Site with Water and Electricty   Electricity Hookups		1 1	ea	\$2,500.00		
Electricity Hookups         1         ea         \$2,500.00         \$2,500           Water Hookups         1         ea         \$1,500.00         \$1,500						ψ. υ, Σ. Σ. Ο
Electricity Hookups         1         ea         \$2,500.00         \$2,500           Water Hookups         1         ea         \$1,500.00         \$1,500	Converted Improved Site with Water and Electricty					
	Electricity Hookups	1				
Total Improved Site w/e \$4,000		1	ea	\$1,500.00		
	Total Improved Site w/e					\$4,000

## MOLLIDGEWOCK

OVERALL SUMMARY - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Overall Park Summmary					
General Improvements Subtotal					\$66,080
New Loop Only					\$2,215,856
Primary Improvements					\$2,016,214
Total Improvements	•				\$4,298,150
MOLLIDGEWOCK Costs - Sub Total					\$4,298,150
Costs - 35% Markups / Contingency	,				\$1,504,352
Total Costs - MOLLIDGEWOCK					\$5,802,502

### General Notes:

Preliminary costs for planning purposes only

Based on current market conditions (no annual escalation rate applied)

All costs include the following mark-ups/contingency

- a) 8.5% General Conditions (including liability)
- b) 15% estimating contingency c) 10% GC mark-up
- d) 1.5% bond

BEAR HILL CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	2	acre	\$15,000.00		¢20.050
Demo existing structures	0	sf	\$13,000.00		\$30,950 \$0
EPSC Measures	1	ls	\$15,000.00		\$15,000
Total Demolition/EPSC	1	13	\$13,000.00		\$45,950
Total Belliolition, El Se					ψ40,000
Earthwork					
Cut/Fill - not road or site related	0	су	\$0.00		\$0
Culverts	180	lf	\$100.00		\$18,000
Total Earthwork					\$18,000
Vehicular Access Improvements					
Campground Road (2-way, gravel)	1150	If	\$206.30		\$237,241
Campground Road (1-way, gravel)	0	If	\$118.33		\$0
Asphalt Road (apron at road)	0	If	\$266.50		\$0
Parking Area (gravel)	43880	sf	\$6.94		\$304,722
Vehicular Access Gate	1	ea	\$3,000.00		\$3,000
Total Vehicular Access Improvements	_		ψ0,000.00		\$544,963
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	ls	\$192,000.00		\$192,000
Domestic Water System	1	ls	\$300,700.00		\$300,700
Wastewater System	1	ls	\$470,080.00		\$470,080
Sanitary Dump Station	1	ls	\$10,000.00		\$10,000
Stormwater Treatment	8	ea	\$20,000.00		\$160,000
Water Spigots - assumed to be included at each site	0	ea	\$1,500.00		\$0
Total Utilities/ Infrastructure					\$1,132,780
Misc. Building Improvements	<b>I</b>				
Cabin Clusters	4	ea	\$242,312.50		\$969,250
Common Space	1	ea	\$1,857,885.00		\$1,857,885
Administration Area	1	ea	\$114,300.00		\$114,300
Staff Housing	1	ea	\$604,800.00		\$604,800 \$3,546,235
Total Misc. Building Improvements					\$3,546,235
Misc. Site Improvements					
5' wide Accessible Path	4394	If	\$65.00		\$285,617
Path Restoration	6426	If	\$5.00		\$32,132
Stormwater plantings (seed)	12000	sf	\$0.75		\$9,000
Signage	9	ea	\$200.00		\$1,800
Landscaping	1	ls	\$5,000.00		\$5,000
Beach Restoration	1	ls	\$15,000.00		\$15,000
Total Site Improvements					\$348,548
Miss Postoation Improvements					
Misc. Recreation Improvements  MTB Flow Trail	2356	If	\$30.00		\$70,686
New shared use path	6209	If	\$10.00		\$62,091
Dock -larger seasonal assumed	1	ea	\$50,000.00		\$50,000
Total Site Improvements					\$182,777
					ΦE 040 050
BEAR HILL CAMPGROUND AREA- Sub Total					\$5,819,253
Costs - 35% Markups / Contingency					\$2,036,739
Total Costs - BEAR HILL CAMPGROUND					\$7,855,992
General Notes:	]				
Preliminary costs for planning purposes only					
Based on current market conditions (no annual escalation rate applied)					
All costs include the following mark-ups/contingency					
a) 8.5% General Conditions (including liability)	Ī				

- a) 8.5% General Conditions (including liability)
- b) 15% estimating contingency
- c) 10% GC mark-up
- d) 1.5% bond

DESCRIPTION  Standard Site	QUANTITY	UNIT	UNIT PRICE	NOTES TOTAL
Standard Site	QUANTITY	ONII	UNIT PRICE	NOTES TOTAL
Fire Ring	1	ea	\$500.00	\$500
Picnic Table  Site Crading	1 2000	ea	\$800.00	\$800
Site Grading Clearing and Grubbing	2000	sf sf	\$0.75 \$0.75	\$1,500 \$1,500
Site Marker	1	ea	\$200.00	\$200
Total Standard Site	<u> </u>		1 .	\$4,500
			•	
Standard Site with Platform				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table Site Grading	2000	ea sf	\$800.00 \$0.75	\$800 \$1,500
Clearing and Grubbing	2000	sf	\$0.75	\$1,500
Site Marker	1	ea	\$200.00	\$200
Platform	1	ea	\$3,000.00	\$3,000
Total Standard Site with Platform				\$7,500
Chandard Cita (Damata)				
Standard Site (Remote) Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	900	sf	\$0.75	\$675
Clearing and Grubbing	900	sf	\$0.75	\$675
Site Marker	1	ea	\$200.00	\$200
Total Standard Site (Remote)				\$2,850
Group Sito				
Group Site Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	3500	sf	\$0.75	\$2,625
Clearing and Grubbing	3500	sf	\$0.75	\$2,625
Site Marker	1	ea	\$200.00	\$200
Platform Table Course Site	1 1	ea	\$3,000.00	\$3,000 \$9,750
Total Group Site				\$9,750
Shelter Site (Single)				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	2000	sf	\$0.75	\$1,500
Clearing and Grubbing	2000	sf	\$0.75	\$1,500
Site Marker Shelter	1 1	ea	\$200.00 \$38,400.00	\$200
Total Shelter Site (Single)	1 1	ea	φ30,400.00	\$38,400 \$42,900
Shelter Site (Double)				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	3500	sf	\$800.00 \$0.75	\$800 \$2,625
Site Grading Clearing and Grubbing	3500 3500	sf sf	\$800.00 \$0.75 \$0.75	\$800 \$2,625 \$2,625
Site Grading	3500	sf	\$800.00 \$0.75	\$800 \$2,625
Site Grading Clearing and Grubbing Site Marker	3500 3500 1	sf sf ea	\$800.00 \$0.75 \$0.75 \$200.00	\$800 \$2,625 \$2,625 \$200
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)	3500 3500 1	sf sf ea	\$800.00 \$0.75 \$0.75 \$200.00	\$800 \$2,625 \$2,625 \$200 \$76,800
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin	3500 3500 1 2	sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring	3500 3500 1 2	sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table	3500 3500 1 2	sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table	3500 3500 1 2	sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing	3500 3500 1 2	sf sf ea ea ea ea sf	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin	3500 3500 1 2 2	sf sf ea ea ea sf sf	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups	3500 3500 1 2 2 1 1 1 2000 2000 2000	sf sf ea ea ea sf sf ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups	3500 3500 1 2 2 1 2 1 2000 2000 1 1	ea ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin	3500 3500 1 2 2 1 2 1 2000 2000 1 1	ea ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty	3500 3500 1 2 2 1 2 1 2000 2000 1 1	ea ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring	3500 3500 1 2 1 2 1 1 2000 2000 1 1 1	sf sf ea ea ea ea sf sf ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$500 \$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading	3500 3500 1 2 1 1 2000 2000 2000 1 1 1 1	sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$1,500 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Clearing and Grubbing Total Cabin	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400	ea ea ea ea ea sf sf sf sf sf sf sf sf sf sf sf sf sf	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$0.75	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$1,500 \$2,500 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker	3500 3500 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$0.75 \$0.75 \$200.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$1,800
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$1,800 \$200
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups  Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups  Site Hookups  Site Grading Clearing And Grubbing Site Grading Clearing And Grubbing Site Marker Electricity Hookups Water Hookups	3500 3500 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$0.75 \$0.75 \$200.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$1,800
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups  Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups  Clearing and Grubbing Site Marker Electricity Hookups Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$2,500 \$2,500 \$99,050 \$500 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water All Electricity Site Marker Electricity Hookups Water Hookups Total Improved Site w/e	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$2,500 \$2,500 \$99,050 \$500 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water And Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 2400 2400 2400 1	ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,800 \$2,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Water Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table	3500 3500 1 1 2 1 1 2000 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$0.75 \$0.75 \$0.75 \$0.75 \$1.75 \$0.75 \$1.75	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$800 \$1,500 \$1,500 \$2,500 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Fire Ring Fire Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$200.00 \$38,400.00 \$38,400.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$0.75 \$1,500.00 \$2,500.00 \$1,500.00 \$1,500.00 \$1,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$2,
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing	3500 3500 1 1 2  1 1 2  1 1 2000 2000 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$38,400.00 \$500.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$1,500.00 \$800.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Shelter Total Shelter Site (Double)  Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Lable Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading	3500 3500 1 1 2 1 1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$200.00 \$38,400.00 \$38,400.00 \$800.00 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$0.75 \$1,500.00 \$2,500.00 \$1,500.00 \$1,500.00 \$1,500.00	\$800 \$2,625 \$2,625 \$200 \$76,800 \$83,550 \$83,550 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$2,

Water/Sewer Hookups	1	ea	\$2,500.00	\$2,500
Total Premium w/s/e (pull-through)				\$13,925

Premium Site with W/S/E (back-in)				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	2850	sf	\$0.75	\$2,138
Clearing and Grubbing	2850	sf	\$0.75	\$2,138
Gravel Surface	60	lf	\$35.00	\$2,100
Site Marker	1	ea	\$200.00	\$200
Electricity Hookups	1	ea	\$2,500.00	\$2,500
Water/Sewer Hookups	1	ea	\$2,500.00	\$2,500
Total Premium w/s/e (back-in)	\$12,875			

Shelter Site (walk-in)				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	900	sf	\$0.75	\$675
Clearing and Grubbing	900	sf	\$0.75	\$675
Site Marker	1	ea	\$200.00	\$200
Shelter	1	ea	\$38,400.00	\$38,400
Total Shelter Site (Double)	\$41,250			

**Total Staff Housing** 

BEAR HILL CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	RENOVATION NOTES	RE-USE OPTIONS	QUANTITY	SI7F	UNIT	REN	NOITAVO	UNIT PRICE	TOTAL
DESCRIPTION	RENOVATION NOTES	INE OSE OF FIONS	QOANTITI	SIZE	OWN	COST	Γ/SF	OWNTRICE	TOTAL
Cabin Clusters									
Cabin	Upgrade as required	Lodging	6	260	sf	\$	75.00	\$19,500.00	\$117,000
Counselor Cabin	Upgrade as required	Lodging	2	168	sf	\$	75.00	\$12,600.00	\$25,20
Wash House	Upgrade building and toilet room	Bathhouse	1	223	150 sf	\$	100.00	\$22,312.50	\$22,313
Unit Lodge	Upgrade interior/exterior	Potential Lodging/Recreation	1	728	sf	\$	100.00	\$72,800.00	\$72,800
ADA Upgrades	Accessible entry grades or ramps		1	-	-		-	\$5,000.00	\$5,000
Subtotal per Cluster			11						\$242,313
Common Space									
Scannel Hall	New matching exterior siding and windows	Administration/Store/Meeting	1	2002	sf	\$	75.00	\$150,150.00	\$150,150
Help's Quarters	Upgrade as necessary	Potential Lodging	1	600	sf	\$	175.00	\$105,000.00	\$105,000
Central Wash House	Install new toilets/shower	Bathhouse upgrade	1	234	sf	\$	500.00	\$116,875.00	\$116,875
Infirmary	Convert to lodging	Group lodging	1	812	sf	\$	175.00	\$142,100.00	\$142,100
Ice House/Storage		New use undetermined	1	300	sf	\$	45.00	\$13,500.00	\$13,500
Dining Hall	Upgrade interior/exterior	Multipurpose/Dining	1	2363	sf	\$	110.00	\$259,930.00	\$259,930
Staff Quarters	Upgrade interior/exterior	Housekeeping Lodges	1	732	sf	\$	400.00	\$292,875.00	\$292,875
		2 toilet, 2 showers, washing machine, dryer, and dishwashing						<b>#254 C40 00</b>	
New Bathhouse	New Construction	station	2	572	SF	\$	620.00	\$354,640.00	\$709,280
Craft Cabin	Upgradeinterior/exterior	Potential Lodges	1	513	sf	\$	75.00	\$38,475.00	\$38,475
Nature Lodge	Upgrade & maintain as Education Center	Continue as exhibit space	1	396	sf	\$	75.00	\$29,700.00	\$29,700
Total Common Space	•		9						\$1,857,885
Administration Area									
Administration Building	Upgrade office	Continue as office	1	674	sf	\$	75.00	\$50,550.00	\$50,550
Maintenance Garage	Upgrade as maintenance/wood storage	Continue as maintenance	1	1275	sf	\$	50.00	\$63,750.00	\$63,750
Total Administration Area			2						\$114,300
Staff Housing									
Picnic Pavilion Unit Conversion		Convert to 2 staff apartments/four season	1	864	sf	\$	350.00	\$302,400.00	\$302,400
Shower Building Unit Conversion		Convert to 2 staff apartments/four season	1	864	sf	\$	350.00	\$302,400.00	\$302,400
- · · · · · · · · · · · · · · · · · · ·									

\$604,800

CATAMOUNT POND CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	4	acre	\$15,000.00		\$60,450
Demo existing structures	0	sf	\$0.80		\$0
EPSC Measures	1	ls	\$10,000.00		\$10,000
Total Demolition/EPSC		-			\$70,450
Earthwork					
Cut/Fill - not road or site related	0	су	\$0.00		\$0
Culverts	200	lf	\$100.00		\$20,000
Total Earthwork					\$20,000
Vehicular Access Improvements					
Campground Road (2-way, gravel)	934	lf	\$206.30		\$192,681
Campground Road (1-way, gravel)	4457	If	\$118.33		\$527,412
Asphalt Road (apron at road)	60	If	\$266.50		\$15,990
Parking Area (gravel)	4478	sf	\$6.94		\$31,097
Vehicular Access Gate	1	ea	\$3,000.00		\$3,000
Total Vehicular Access Improvements		•	•		\$770,180
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	ls	\$220,620.00		\$220,620
Domestic Water System	1	ls	\$120,700.00		\$120,700
Wastewater System	1	ls	\$92,000.00		\$92,000
Sanitary Dump Station	0	ls	\$10,000.00		\$0
Stormwater Treatment	4	ea	\$20,000.00		\$80,000
Water Spigots - assumed to be included with each site	0	ea	\$1,500.00		\$0
Total Utilities/ Infrastructure					\$513,320
Commoite Immunoscente					
Campsite Improvements  New Improved Equestrian Site with W/E (back-in)	14	ea	\$13,420.00		\$187,880
New Improved Equestrian Site with W/E (pull-through)	8	ea	\$17,190.00		
	•	Ca	\$17,190.00		\$137,520 \$325,400
Total Campsite Improvements					Ψ323,400
naine Duilding Income and					
Misc. Building Improvements  New Firewood Storage Building	1 0		T #70,000,00		<b>#70.000</b>
	0	ea	\$72,000.00		\$72,000
New Bath House  Toilet Building Renovation	1	ea	\$354,640.00 \$91,000.00		\$354,640
Pavilion Renovation	1	ea	\$4,800.00		\$91,000 \$4,800
Total Misc. Building Improvements	1	Ed	φ4,000.00		\$4,800 \$522,440
Total Misc. Building improvements					Ψ022,110
Misc. Site Improvements					
New Loop Trail	4097	If	\$45.00		\$184,352
Cleared Area Rehabilitation -Topsoil and Re-Seed	35827	sf	\$1.50		\$53,741
Lawn	3600	sf	\$0.50		\$1,800
Stormwater plantings (seed)	6346	sf	\$0.75		\$4,760
Landscaping	1	ls	\$25,000.00		\$25,000
Signage	5	ea	\$200.00		\$1,000
Total Site Improvements	1		1		\$270,652
					· ·
CATAMOUNT CAMPGROUND Costs - Sub Tota	I				\$2,492,441
Costs - 35% Markups / Contingency			1		\$872,355
Total Costs - CATAMOUNT CAMPGROUND	<u> </u>		1		\$3,364,796

## **General Notes:**

Preliminary costs for planning purposes only

Based on current market conditions (no annual escalation rate applied)

All costs include the following mark-ups/contingency

a) 8.5% General Conditions (including liability)

b) 15% estimating contingency

c) 10% GC mark-up d) 1.5% bond

	QUANTITY	UNIT	UNIT PRICE	NOTES TOTAL
Standard Site				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table Site Grading	2000	ea sf	\$800.00 \$0.75	\$800
Clearing and Grubbing	2000	sf	\$0.75	\$1,500 \$1,500
Site Marker  Total Standard Site	1	ea	\$200.00	\$200 \$4,500
Total Standard Site				φ <del>4</del> ,500
Standard Site with Platform			4500.00	4700
Fire Ring Picnic Table	1	ea	\$500.00 \$800.00	\$500 \$800
Site Grading	2000	sf	\$0.75	\$1,500
Clearing and Grubbing Site Marker	2000	sf ea	\$0.75 \$200.00	\$1,500 \$200
Platform	1	ea	\$3,000.00	\$3,000
Total Standard Site with Platform				\$7,500
Standard Site (Remote)				
Fire Ring Picnic Table	1	ea ea	\$500.00 \$800.00	\$500 \$800
Site Grading	900	sf	\$0.75	\$675
Clearing and Grubbing Site Marker	900	sf ea	\$0.75 \$200.00	\$675 \$200
Total Standard Site (Remote)	1	Cu	Ψ200.00	\$2,850
Crown Site				
Group Site Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading Clearing and Grubbing	3500 3500	sf sf	\$0.75 \$0.75	\$2,625 \$2,625
Site Marker	1	ea	\$200.00	\$200
Platform  Total Group Site	1	ea	\$3,000.00	\$3,000 \$9,750
				<b>43,730</b>
Shelter Site (Single) Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$500 \$800
Site Grading Clearing and Grubbing	2000	sf	\$0.75	\$1,500
Site Marker	2000	sf ea	\$0.75 \$200.00	\$1,500 \$200
Shelter	1	ea	\$38,400.00	\$38,400
Total Shelter Site (Single)				\$42,900
Shelter Site (Double)				
Fire Ring Picnic Table	1	ea	\$500.00 \$800.00	\$500 \$800
Site Grading	3500	sf	\$0.75	\$2,625
Clearing and Grubbing	3500	sf	\$0.75	\$2,625
Site Marker Shelter	2	ea	\$200.00 \$38,400.00	\$200 \$76,800
Total Shelter Site (Double)				\$83,550
Cabin				
Fire Ring	1	22		
Disarte Table	1	ea	\$500.00	\$500
Picnic Table Site Grading	1 2000	ea ea sf	\$800.00	\$800
Site Grading Clearing and Grubbing	1	ea sf sf	\$800.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500
Site Grading Clearing and Grubbing Site Marker	1 2000 2000 1	ea sf sf ea	\$800.00 \$0.75 \$0.75 \$200.00	\$800 \$1,500 \$1,500 \$200
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups	1 2000 2000	ea sf sf	\$800.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin	1 2000 2000 1 1	ea sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups	1 2000 2000 1 1	ea sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring	1 2000 2000 1 1 1	ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty	1 2000 2000 1 1 1	ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing	1 2000 2000 1 1 1 1 1 2400 2400	ea sf sf sf ea ea ea ea sa sf sf sf sf sf sf sf sf sf sf	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker	1 2000 2000 1 1 1 1 1 2400	ea sf sf sf ea ea ea ea ea sf	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$200
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups	1 2000 2000 1 1 1 1 1 1 2400 2400 1 1	ea sf sf sf ea ea ea ea sf sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups	1 2000 2000 1 1 1 1 2400 2400 1 1 1	ea sf sf sf ea ea ea ea sa sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e	1 2000 2000 1 1 1 1 2400 2400 1 1 1	ea sf sf sf ea ea ea ea sa sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring	1 2000 2000 1 1 1 1 1 2400 2400 1 1 1	ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e	1 2000 2000 1 1 1 1 2400 2400 1 1 1	ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Clearing and Grubbing Clearing and Grubbing Clearing Alexandria Clea	1 2000 2000 1 1 1 1 1 1 1 1 1 1 2850 2850	ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00 \$500.00 \$500.00 \$500.00 \$0.75 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$1,500 \$9,100
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 2850	ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$800.00 \$1,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$2,500 \$1,500 \$9,100
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e	1 2000 2000 1 1 1 1 2850 2850 90 1 1 1	ea sf sf sf ea ea ea ea ea ea ea ea sf sf sf ea ea ea ea ea f sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$2,500.00 \$1,500.00 \$500.00 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$1,500 \$1,500 \$2,138 \$2,138 \$2,138 \$2,138 \$3,150 \$200 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 2850 2850 90 1 1	ea sf sf sf ea ea ea ea ea ea ea ea sf sf sf ea ea ea ea f sf sf ea ea ea f sf sf ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$800.00 \$1,500.00 \$3500.00 \$3500.00 \$3500.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,500 \$1,500 \$2,500 \$1,500 \$2,138 \$2,138 \$2,138 \$2,138
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e	1 2000 2000 1 1 1 1 2850 2850 90 1 1 1	ea sf sf sf ea ea ea ea ea ea ea ea sf sf sf ea ea ea ea ea f sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$2,500.00 \$1,500.00 \$500.00 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,500 \$1,500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Premium Site with W/S/E (back-in)	1 2000 2000 1 1 1 1 1 1 2400 2400 1 1 1 1 1 2850 2850 90 1 1 1 1 1	ea sf sf sf ea ea ea ea ea ea ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$35.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through)  Premium Site with W/S/E (back-in) Fire Ring Picnic Table	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf sf ea ea ea ea sf sf sf lf ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$3,150 \$200 \$2,500 \$13,925
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Plicnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Plicnic Table Site Grading Clearing and Grubbing Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through)  Premium Site with W/S/E (back-in) Fire Ring Picnic Table	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$3500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through)  Premium Site with W/S/E (back-in) Fire Ring Picnic Table	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf sf ea ea ea ea sf sf sf lf ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$1,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$3,150 \$200 \$2,500 \$13,925
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing sand Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$800.00 \$35.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,138 \$2,13
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf sf ea ea ea ea sf sf lf ea ea ea sf sf sf lf	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$0.75 \$0.75 \$20.00 \$2,500.00 \$1,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$3,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,138 \$2,100 \$2,20
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/s/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/s/E (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups  Premium Site with W/s/E (back-in) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Electricity Hookups	1 2000 2000 1 1 1 1 1 2850 2850 90 1 1 1 1 2850 2850 60 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$350.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Plcnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Plcnic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Plcnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Plcnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium site with W/S/E (back-in) Fire Ring Plcnic Table Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (back-in)	1 2000 2000 1 1 1 1 1 2850 2850 90 1 1 1 1 2850 2850 60 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$350.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Plicinic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Plicinic Table Site Grading Clearing and Grubbing Site Water Electricity Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Plicinic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (back-in) Fire Ring Fire Ring Foreign Water/Sewer Hookups Total Premium w/s/e (back-in) Fire Ring	1 2000 2000 1 1 1 1 1 2850 2850 60 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$350.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$1,500 \$92,050 \$92,050 \$2,500 \$99,050 \$800 \$1,800 \$1,800 \$2,500 \$1,500 \$9,100 \$9,100 \$500 \$2,138 \$2,138 \$2,138 \$3,150 \$200 \$2,500 \$13,925 \$500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Crearing and Grubbing Site Warker  Fremium Site with W/S/E (pull-through) Fire Ring Picnic Table Site Grading Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Crearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Picnic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Total Premium w/s/e (back-in) Fire Ring Picnic Table Site Marker Electricity Hookups Total Premium w/s/e (back-in) Shelter Site (walk-in) Fire Ring Picnic Table	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$35.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500 \$1,500 \$9,100 \$9,100 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138
Size Grading Clearing and Grubbing Sixe Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Five Ring Prinic Table Sixe Grading Clearing and Grubbing Sixe Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Five Ring Prinic Table Sixe Grading Clearing and Grubbing Sixe Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Five Ring Prinic Table Sixe Grading Clearing and Grubbing Gravel Surface Sixe Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Five Ring Prinic Table Sixe Grading Clearing and Grubbing Sixe Grading Clearing and Grubbing Clearing and Grubbing Total Premium w/s/e (back-in) Five Ring Prinic Table Sixe Grading Clearing and Grubbing Clearing and Grubbing Total Premium w/s/e (back-in) Five Ring Prinic Table Sixe Grading Clearing and Grubbing Gravel Surface Sixe Marker Electricity Hookups Total Premium w/s/e (back-in) Five Ring Prinic Table Sixe Grading Clearing and Grubbing	1 2000 2000 1 1 1 1 1 2850 2850 60 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$800.00 \$0.75 \$200.00 \$1,500.00 \$1,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00	\$1,500 \$1,500 \$200 \$92,050 \$92,050 \$2,500 \$99,050 \$899,050 \$800 \$1,800 \$1,800 \$1,800 \$2,500 \$1,500 \$99,100 \$9,100 \$500 \$800 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$13,925 \$500 \$2,500
Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Princi Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Princi Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Princi Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Fire Ring Princi Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (back-in) Fire Ring Picnic Table Site Marker Electricity Hookups Water/Sewer Hookups Total Premium w/s/e (back-in) Fire Ring Picnic Table Site Grading Total Premium w/s/e (back-in)	1 2000 2000 1 1 1 1 1 1 2850 2850 2850 60 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$800.00 \$800.00 \$1,500.00 \$1,500.00 \$2,500.00	\$800 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$99,050 \$99,050 \$1,800 \$1,800 \$1,800 \$2,500 \$2,500 \$1,500 \$9,100 \$9,100 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,138 \$2,500 \$2

reduced grading cost - easy flat site

Improved Equestrian Site with W/E (back-in)				
Fire Ring	1	ea	\$500.00	\$50
Picnic Table	1	ea	\$800.00	\$80
Site Grading	3500	sf	\$0.25	\$8
Clearing and Grubbing	3500	sf	\$0.75	\$2,62
Gravel Surface	60	If	\$35.00	\$2,10
Site Marker	1	ea	\$200.00	\$20
Horse Corral	1	ea	\$1,320.00	\$1,33
Electricity Hookups	1	ea	\$2,500.00	\$2,50
Water Hookups	1	ea	\$2,500.00	\$2,50
Total Premium w/s/e (back-in)	•			\$13,42

Improved Equestrian Site with W/E (pull-through)				
Fire Ring	1	ea	\$500.00	\$500
Picnic Table	1	ea	\$800.00	\$800
Site Grading	4900	sf	\$0.25	\$1,225
Clearing and Grubbing	4900	sf	\$0.75	\$3,675
Gravel Surface	90	If	\$35.00	\$3,150
Site Marker	1	ea	\$200.00	\$200
Horse Corral	1	ea	\$2,640.00	\$2,640
Electricity Hookups	1	ea	\$2,500.00	\$2,500
Water Hookups	1	ea	\$2,500.00	\$2,500
Total Premium w/s/e (back-in)	\$17,190			

CATAMOUNT POND CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	NOTES	RE-USE DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>Building Costs</b>						
New Bath House	New Construction	2 toilets, 2 showers, 2 washers, 2 dryers and dishwashing station	572	sf	\$620.00	\$354,640
Existing Toilets	Upgrade structure as required.	Add 2 family toilets	280	sf	\$325.00	\$91,000
Pavilion	Upgrade structure and roof as required.	No change.	320	sf	\$15.00	\$4,800

## PAWTUCKAWAY CAMPGROUND

NEW AREA - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site - roads only	2	acre	\$15,000.00		\$24,804
Demo existing structures	0	sf	\$0.80		\$0
EPSC Measures	1	ls	\$15,000.00		\$15,000
Total Demolition/EPSC	-	1	ψ.ο,οσσ.σσ		\$39,804
Earthwork					
Cut/Fill - not road or site related	0	су	\$0.00		\$0
Culverts	450	lf	\$100.00		\$45,000
Total Earthwork					\$45,000
Vahioulay Access Improvements					
Vehicular Access Improvements Campground Road (2-way, gravel)	273	lf If	\$206.30		ФЕС 240
Campground Road (1-way, gravel)  Campground Road (1-way, gravel)		lf	\$200.30		\$56,319
Asphalt Road (apron at road)	2037	If	\$266.50		\$241,045
Parking Area (gravel)	60 0	sf	\$6.94		\$15,990
Vehicular Access Gate			-		\$0
	1	ea	\$3,000.00		\$3,000
Total Vehicular Access Improvements					\$316,354
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	ls	\$149,880.00		\$149,880
Domestic Water System	1	ls	\$293,350.00		\$293,350
Wastewater System	1	ls	\$134,400.00		\$134,400
Sanitary Dump Station	1	ls	\$10,000.00		\$10,000
Stormwater Treatment	3	ea	\$20,000.00		\$60,000
Water Spigots - assumed to be included at each site	0	ea	\$1,500.00		\$0
Total Utilities/ Infrastructure		1			\$647,630
Campsite Improvements	1	1			
New Standard Sites	0	ea	\$4,500.00		\$0
New Improved Sites (W/E)	35	ea	\$9,100.00		\$318,500
Total Campsite Improvements					\$318,500
Misc. Building Improvements  New Visitor Center (Store/Office)	1	0.0	\$853,000.00		<b>#052.000</b>
New Bathhouse	1	ea			\$853,000
New Firewood Storage Building	1	ea	\$709,280.00 \$72,000.00		\$709,280
New Pavilion	1	ea	\$60,000.00		\$72,000
Total Misc. Building Improvements	1	ea	\$60,000.00		\$60,000 \$1,694,280
Total Misc. Building improvements					Ψ1,004,200
Misc. Site Improvements					
5' wide New Accessible Path	1392	lf	\$65.00		\$90,480
Landscaping	1	ls	\$10,000.00		\$10,000
Stormwater plantings (seed)	7200	sf	\$0.75		\$5,400
Signage	4	ea	\$200.00		\$800
Boat Racks	1	ls	\$5,000.00		\$5,000
Dock - 6'x40' seasonal assumed	1	ea	\$25,000.00		\$25,000
Total Site Improvements	•	•	•		\$136,680
				-	Φ0 100 0 10
Pawtuckaway - New Area Costs - Sub Total					\$3,198,248
Costs - 35% Markups / Contingency					\$1,119,387 \$4,347,634
Total Costs - PAWTUCKAWAY CAMPGROUND					\$4,317,634

## General Notes:

Preliminary costs for planning purposes only

Based on current market conditions (no annual escalation rate applied)
All costs include the following mark-ups/contingency

- a) 8.5% General Conditions (including liability)
- b) 15% estimating contingency
- c) 10% GC mark-up
- d) 1.5% bond

Section	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES TOTAL
		Į do m	-	[3	
Francisco   1   m. 1960.00   9	Standard Site			#F00.00	4-6-5
Marchander   1900   2					
Control of Standard	Site Grading				
Section   Sect			sf		
Second   S	Site Marker	1	ea	\$200.00	\$200
Fine Standard Standar	Total Standard Site				\$4,500
No. 1   1	Standard Site with Platform				
Section   100	Fire Ring				\$500
Commany of Commany					
1   N   50300   5000					
\$1,750   \$2,000   \$1,000   \$	Site Marker	<u> </u>			
Section   Sect	Platform	1	ea	\$3,000.00	\$3,000
The stop	Total Standard Site with Platform				\$7,500
The stop	Standard Site (Remote)				
Section   Sect	Fire Ring	1	ea	\$500.00	\$500
Section of Notifice	Picnic Table	1	ea	\$800.00	
1	Site Grading				
Topis Sample					
Fire Prop   1	Total Standard Site (Remote)		l ea	φ200.00	\$2,850 \$2,850
The Bulg	·				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Proce Process   1   0   0   \$800.00   \$500   \$500   \$10.75   \$2,025   \$2,025   \$2,000.00   \$10.75   \$2,025   \$2,000.00   \$10.75   \$2,025   \$2,000.00   \$2,000   \$2,	Group Site	,			
See Foreign	Fire Ring				\$500
Chaming and Grobbing   1.0					
1   64   \$20,000   \$30,0					
Shelter Site (Single)	Site Marker		ea		\$200
Shelter Site (Single)	Platform	1	ea	\$3,000.00	\$3,000
Fire Fire Fire Fire Fire Fire Fire Fire	Total Group Site				\$9,750
Fire Fire Fire Fire Fire Fire Fire Fire	Shelter Site (Single)				
	Fire Ring	1	ea	\$500.00	\$500
Clearing and Groubing   2000   sf   \$0.75   \$0.1,000   \$0.500	Picnic Table	1	ea	\$800.00	\$800
1					
Shelter   Shel					
\$42,900   \$42,					
1   en   \$500.00   \$5	Total Shelter Site (Single)	<b>I</b>	l		\$42,900
1   en   \$500.00   \$5	Challes Cha (Daubla)				
Picinic Table		1	ea	\$500.00	\$500
Search and Grubbing   Search	Picnic Table				\$800
1	Site Grading	3500	sf	\$0.75	\$2,625
Shelter					\$2,625
\$83,550   \$83,					
Fire Ring	Total Shelter Site (Double)		Ea	\$30,400.00	\$83,550
Fire Ring				<u>'</u>	
Picnic Table	Cabin			T	
Site Grading					
Clearing and Grubbing   2000   sf   \$0.75   \$1,500   \$1,500   \$2,000   \$2					
Cabin       1       ea       \$92,050.00       \$92,050         Electricity Hookups       1       ea       \$2,500.00       \$2,500         Total Cabin       \$99,050         Improved Site with Water and Electricty         Fire Ring       1       ea       \$500.00       \$500         Picnic Table       1       ea       \$800.00       \$800         Site Grading       2400       sf       \$0.75       \$11,800         Site Marker       1       ea       \$200.00       \$200         Electricity Hookups       1       ea       \$200.00       \$200         Site Marker       1       ea       \$2,500.00       \$2,500         Total Improved Site w/e       1       ea       \$2,500.00       \$3,500         Premium Site with W/S/E (pull-through)         Fire Ring       1       ea       \$500.00       \$500         Picnic Table       1       ea       \$600.00       \$600         Site Grading       2850       sf       \$0.75       \$2,138         Clearing and Grubbing       1       ea       \$600.00       \$2,138         Clearing and Grubbing       2850       sf       \$0.75					\$1,500
1   ea   \$2,500.00   \$2,500	Site Marker	1	ea	\$200.00	\$200
Total Cabin   S99,050	Cabin				\$92,050
Improved Site with Water and Electricty		1	ea	\$2,500.00	
Fire Ring       1       ea       \$500.00       \$500         Picnic Table       1       ea       \$800.00       \$800         Site Grading       2400       sf       \$0.75       \$1,800         Clearing and Grubbing       2400       sf       \$0.75       \$1,800         Site Marker       1       ea       \$200.00       \$2,500         Electricity Hookups       1       ea       \$2,500.00       \$2,500         Water Hookups       1       ea       \$1,500.00       \$1,500         Total Improved Site w/e       \$9,100       \$1,500       \$1,500         Premium Site with W/s/E (pull-through)       \$9,100       \$500       \$500         Picnic Table       1       ea       \$500.00       \$500         Site Grading       2850       sf       \$0.75       \$2,138         Clearing and Grubbing       2850       sf       \$0.75       \$2,138         Gravel Surface       90       lf       \$35.00       \$3,150         Site Marker       1       ea       \$200.00       \$3,150	Total Capill				400,000
Picnic Table	Improved Site with Water and Electricty				
Site Grading       2400       sf       \$0.75       \$1,800         Clearing and Grubbing       2400       sf       \$0.75       \$1,800         Site Marker       1       ea       \$200.00       \$200         Electricity Hookups       1       ea       \$2,500.00       \$2,500         Water Hookups       1       ea       \$1,500.00       \$1,500         Total Improved Site w/e     Premium Site with W/S/E (pull-through)  Fire Ring  Site Grading  1       ea       \$500.00       \$500         Picnic Table       1       ea       \$800.00       \$800         Site Grading       2850       sf       \$0.75       \$2,138         Clearing and Grubbing       2850       sf       \$0.75       \$2,138         Gravel Surface       90       lf       \$35.00       \$3,150         Site Marker       1       ea       \$200.00       \$3,150	Fire Ring				\$500
Clearing and Grubbing   2400   sf   \$0.75   \$1,800   \$20					
Site Marker       1       ea       \$200.00       \$200         Electricity Hookups       1       ea       \$2,500.00       \$2,500         Water Hookups       1       ea       \$1,500.00       \$1,500         Total Improved Site w/e         Premium Site with W/S/E (pull-through)         Fire Ring       1       ea       \$500.00       \$500         Picnic Table       1       ea       \$800.00       \$800         Site Grading       2850       sf       \$0.75       \$2,138         Clearing and Grubbing       2850       sf       \$0.75       \$2,138         Gravel Surface       90       lf       \$35.00       \$3,150         Site Marker       1       ea       \$200.00       \$200					
Electricity Hookups	Site Marker				
Total Improved Site w/e         \$9,100           Premium Site with W/S/E (pull-through)           Fire Ring         1         ea         \$500.00         \$500           Picnic Table         1         ea         \$800.00         \$800           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         lf         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200	Electricity Hookups	1			\$2,500
Premium Site with W/S/E (pull-through)           Fire Ring         1         ea         \$500.00         \$500           Picnic Table         1         ea         \$800.00         \$800           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         If         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200	Water Hookups Total Improved Site w/e	1	ea	\$1,500.00	\$1,500 \$9,100
Fire Ring         1         ea         \$500.00         \$500.00           Picnic Table         1         ea         \$800.00         \$800.00           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         If         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200.00	Total improved Site w/e				\$9,100
Fire Ring         1         ea         \$500.00         \$500.00           Picnic Table         1         ea         \$800.00         \$800.00           Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         If         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200.00	Premium Site with W/S/E (pull-through)				
Site Grading         2850         sf         \$0.75         \$2,138           Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         lf         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200	Fire Ring	1			\$500
Clearing and Grubbing         2850         sf         \$0.75         \$2,138           Gravel Surface         90         If         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200	Picnic Table				\$800
Gravel Surface         90         If         \$35.00         \$3,150           Site Marker         1         ea         \$200.00         \$200					
Site Marker         1         ea         \$200.00         \$200	Gravel Surface				
Electricity Hookups 1 ea \$2,500.00 \$2,500	Site Marker				\$200
	Electricity Hookups	1	ea	\$2,500.00	\$2,500

Water/Sewer Hookups	1	ea	\$2,500.00	\$2,500
Total Premium w/s/e (pull-through)				\$13,925

Premium Site with W/S/E (back-in)							
Fire Ring	1	ea	\$500.00		\$500		
Picnic Table	1	ea	\$800.00		\$800		
Site Grading	2850	sf	\$0.75		\$2,138		
Clearing and Grubbing	2850	sf	\$0.75		\$2,138		
Gravel Surface	60	lf	\$35.00		\$2,100		
Site Marker	1	ea	\$200.00		\$200		
Electricity Hookups	1	ea	\$2,500.00		\$2,500		
Water/Sewer Hookups	1	ea	\$2,500.00		\$2,500		
Total Premium w/s/e (back-in)					\$12,875		

Shelter Site (walk-in)							
Fire Ring	1	ea	\$500.00		\$500		
Picnic Table	1	ea	\$800.00		\$800		
Site Grading	900	sf	\$0.75		\$675		
Clearing and Grubbing	900	sf	\$0.75		\$675		
Site Marker	1	ea	\$200.00		\$200		
Shelter	1	ea	\$38,400.00		\$38,400		
Total Shelter Site (Double)	Total Shelter Site (Double)						

## PAWTUCKAWAY STATE PARK

CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	NOTES	RE-USE DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
<b>Building Costs</b>						
Visitor Center	New Construction	Office/Toilets/Store/Laundry	1706	sf	\$500.00	\$853,000
Bath House	New Construction	6 Toilets & 4 Showers	1144	sf	\$620.00	\$709,280

GENERAL IMPROVEMENTS - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control					
Clearing and grubbing, wooded site	1.59	acre	\$15,000.00		\$23,87
EPSC Measures	1	ls	\$5,000.00		\$5,000
Total Demolition/EPSC					\$28,87
Earthwork					
Cut/Fill	0	ls	\$0.00		\$0
Culverts	300	lf	\$100.00		\$30,000
Total Earthwork					\$30,000
Vehicular Access Improvements					
veniculai Access improvements	3467	If	\$42.59		\$147,669
	0	sf	\$5.00		\$(
Vehicular Access Gate	0	ea	\$3,000.00	*DuraGate DGT-BR Steel Barrier 16'	\$(
Total Vehicular Access Improvements		•	•		\$147,669
Utilities/ Infrastructure				<u>,                                      </u>	
Electrical/ Telecom Services	0	ls	\$0.00		\$0
Domestic Water	0	ls	\$0.00		\$0
Stormwater Treatment	0	ls	\$0.00		\$(
Total Utilities/ Infrastructure					\$0
Misc. Site Improvements					
5' wide Accessible Path - Recreation Path	3300	lf	\$65.00		\$214,500
8' wide Multi-Use Path (paved)	3500	If	\$100.00		\$350,000
Landscaping	0	ls	\$20,000.00		\$(
Total Site Improvements		•	•		\$564,500
Consent Improvements Control Colt Tabel		ı	1	T	\$771,046
General Improvements Costs - Sub Total					φιι1,040

EXISTING CAMPGROUND - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Demolition/Erosion Control		1	T		
Clearing and grubbing, wooded site	0	ac	\$15,000.00		\$0
Decommission Ex. Campsite	4	ea	\$2,000.00		\$8,000
EPSC Measures	0	ls	\$5,000.00		\$0
Total Demolition/EPSC					\$8,000
Earthwork					
Cut/Fill	0	ls	\$0.00		\$0
Culverts	0	ea	\$3,000.00		\$0
Total Earthwork	0	cu	ψ0,000.00		\$0
					<u> </u>
Vehicular Access Improvements					
Existing Campground Road Improvement	2650	If	\$22.41		\$59,380
Campground Road (1-way, gravel)	0	If	\$0.00		\$0
Asphalt Road (Sanitary Dump Station)	0	If	\$0.00		\$0
Parking Area (gravel)	0	ea	\$0.00		\$0
Vehicular Access Gate	0	ea	\$3,000.00		\$0
Total Vehicular Access Improvements	•		· ·		\$59,380
					•
Utilities/ Infrastructure					
Electrical/ Telecom Services	1	Is	\$0.00		\$0
Domestic Water	0	Is	\$0.00		\$0
Water Spigots	0	ea	\$0.00		\$0
Septic Tank + Leach fields	0	ls	\$0.00		\$0
Stormwater Treatment	0	Is	\$0.00		\$0
Total Utilities/ Infrastructure					\$0
Campsite Improvements					
New Standard Sites	0	ea			\$0
New Shelter Site (Single)	0	ea			\$0
New Shelter Site (Double)	0	ea			\$0
Total Campsite Improvements	<u> </u>	•			\$0
Misc. Building Improvements			1		<u> </u>
Renovate Existing Bathhouse	1	ea	\$504,000.00		\$504,000
New Pit Toilets	4	ea	\$40,000.00		\$160,000
Total Misc. Building Improvements					\$664,000
Mice Cite Impresserante					
Misc. Site Improvements					-
			+		\$0
		<del>                                     </del>	1		\$0 \$0
		<del>                                     </del>	1		
		-	1		\$0
Total Site Improvements					\$0 \$0
Total Site improvements					\$0
Dry River Existing Campground	Costs - Sub Total				\$731,380
Di y raver Existing Campground		1	1		Ψ/ 01,300

NEW AREA - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL			
Demolition/Erosion Control								
Clearing and grubbing, wooded site - roads only	7	acre	\$15,000.00		\$100,238			
Dump Area Cleanup	1	allow	\$15,000.00		\$15,000			
Demo existing structures	0	sf	\$0.80		\$13,000			
EPSC Measures	1	ls	\$10,000.00		\$10,000			
Total Demolition/EPSC			ψ10,000.00		\$125,238			
					, ,, ,,			
Earthwork								
Cut/Fill - not road or site related	0	су	\$0.00		\$0			
Culverts	0	If	\$100.00		\$0			
Total Earthwork	•	•	•		\$0			
Vehicular Access Improvements								
Campground Road (2-way, gravel)	2219	If	\$206.30		\$457,771			
Campground Road (1-way, gravel)	6195	If	\$118.33		\$733,075			
Asphalt Road (apron at road)	60	If	\$266.50		\$15,990			
Parking Area (gravel)	16482	sf	\$6.94		\$114,458			
Vehicular Access Gate	1	ea	\$3,000.00		\$3,000			
Total Vehicular Access Improvements					\$1,324,295			
Utilities/ Infrastructure								
Electrical/ Telecom Services	1	ls	\$317,820.00		\$317,820			
Domestic Water System	1	ls	\$761,700.00		\$761,700			
Wastewater System	1	ls	\$305,200.00		\$305,200			
Sanitary Dump Station	1	ls	\$10,000.00		\$10,000			
Stormwater Treatment	5	ea	\$20,000.00		\$100,000			
Water Spigots	17	ea	\$1,500.00		\$25,500 \$1,494,720			
Total Utilities/ Infrastructure					\$1,494,720			
Campsite Improvements								
New Standard Sites	49	ea	\$4,500.00		\$220,500			
New Shelter Site (Single)	11	ea	\$42,900.00		\$471,900			
New Shelter Site (Double)	5	ea	\$83,550.00		\$417,750			
New Shelter Site (Walk-In)	5	ea	\$41,250.00		\$206,250			
New Improved Sites (W/E)	15	ea	\$9,100.00		\$136,500			
Total Campsite Improvements		1			\$1,452,900			
Misc. Building Improvements								
New Camp Office and Store	1	ea	\$520,000.00		\$520,000			
New Firewood Storage Building	1	ea	\$72,000.00		\$72,000			
New Bathhouse	3	ea	\$709,280.00		\$2,127,840			
New Picnic Pavilion	1	ea	\$85,000.00		\$85,000			
Total Misc. Building Improvements					\$2,804,840			
Misc. Site Improvements								
5' wide Accessible Path - Expansion Area	4175	If	\$65.00		\$271,375			
Flagstone Patio	512	sf	\$30.00		\$15,360			
Lawn	34000	sf	\$0.50		\$17,000			
Viewing Deck	400	sf	\$185.00		\$74,000			
Stormwater plantings (seed)	15000	sf	\$0.75		\$11,250			
Signage	10	ea	\$200.00		\$2,000			
Total Site Improvements					\$390,985			
<b></b>								
Dry River - New Area Costs - S	ub Total				\$7,592,978			

Section	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES TOTAL
Series	SESCULTION.	QOANTITI	Oili	ONIT FRICE	HOTES
のではない					
Serge   1960					
Marchand Stands Parlamen		2000	sf	\$0.75	
Section		1	ea	\$200.00	
The part   1	Total Standard Site				\$4,500
The part   1	Standard Site with Platform				
Second   1988	Fire Ring	1	ea		\$500
State   1968   1969					
Second   1					
Section					
Section	Platform				\$3,000
Process	Total Standard Site with Platform				\$7,50
Process	Shouland City (Domoto)				
Secondary		1	ea	\$500.00	\$500
Sector					
Section   1   0   0   0   0   0   0   0   0   0					
\$2,000   \$					
Tree State State Clauses  The State Clauses  The State State Clauses  The State State Clauses  T		1	ea	\$200.00	
Prop     1   0   0   0   0   0   0   0   0	Total stational site (Helitote)				\$2,000
Prop     1   0   0   0   0   0   0   0   0	Group Site				
Section   Sect	Fire Ring				
Servery and coloning   5000   11   5075   5225   52					
Set Name					
Section					
Section   Sect	Platform				\$3,000
Tex Programme	Total Group Site				\$9,750
Tex Programme					
Section   1		1	PA	\$500.00	9500
Sectionary and Combing   2000					
Case of processing   2000	Site Grading		sf		
1   en   \$38.000   \$38.0	Clearing and Grubbing	2000	sf	\$0.75	\$1,500
Select State (Couple)					
Select   Gouble		1	ea	\$38,400.00	
Fire None	(ample)				ψ42,500
Fire None	Shelter Site (Double)				
See Garling	Fire Ring				
Sample of Anchology   Sample of Sa					
Sta Marker     1					
Shaker					
Park   Park	Shelter				\$76,800
Fire Room	Total Shelter Site (Double)				\$83,550
Fire Room					
Pauci Labe	Cabin				
See Granding		1	ea	\$500.00	¢snr
See Marker	Fire Ring		ea		
Section   Sect	Fire Ring Picnic Table Site Grading	1 2000	ea sf	\$800.00 \$0.75	\$800 \$1,500
Bectrick (Hookups   1   63   \$2,000   \$2,200   \$3,200   \$3,200   \$3,200   \$3,200   \$3,200   \$3,200   \$3,200   \$3,000	Fire Ring Picnic Table Site Grading Clearing and Grubbing	1 2000 2000	ea sf sf	\$800.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500
September   Sept	Fire Ring Picnic Table State Grading Clearing and Grubbing She Marker	1 2000 2000 1	ea sf sf ea	\$800.00 \$0.75 \$0.75 \$200.00	\$800 \$1,500 \$1,500 \$200
Fire Ring	Fire Ring Picnic Table Site Grading Clearing and Grubbing Ste Marker Cabin	1 2000 2000 1 1	ea sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$1,500 \$1,500 \$200 \$92,050
Fire Ring	Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups	1 2000 2000 1 1	ea sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$1,500 \$1,500 \$2,050 \$2,050 \$2,500
Picker Table	Fire Ring Picnic Table Sixe Grading Clearing and Grubbing Sixe Marker Cabin Electricity Hookups Total Cabin	1 2000 2000 1 1	ea sf sf ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00	\$800 \$1,500 \$1,500 \$2,050 \$2,050 \$2,500
Ste Granding	Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty	1 2000 2000 1 1 1	ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050
Clearing and Grubbing   2400	Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin Improved Site with Water and Electricty Fire Ring	1 2000 2000 1 1 1	ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,250 \$99,050
Electricity Hookups	Fire Ring Picnic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Picnic Table	1 2000 2000 1 1 1 1	ea sf sf ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92,050.00 \$2,500.00 \$500.00 \$800.00	\$800 \$1,5
Mater Horkups	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing	1 2000 2000 1 1 1 1 1	ea sf sf sf ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$500.00 \$600.00 \$0.75 \$0.75	\$800 \$1,500 \$1,500 \$200 \$92,050 \$2,500 \$99,050 \$500 \$500 \$500 \$500 \$500 \$500 \$500
Premium Site with W/S/E (pull-through)	Fire Ring Prenic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker  Site Grading Clearing and Grubbing	1 2000 2000 1 1 1 1 1 1 2400 2400 1	ea sf sf ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2,500.00 \$500.00 \$500.00 \$0.75 \$0.75 \$200.00	\$800 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500 \$1,800 \$1,800 \$2,500 \$2,500 \$1,800 \$1,800 \$2,500 \$1,5
Premium Site with W/S/E (pull-through)   Fire Ring	Fise Ring Penic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Electricity Hookups	1 2000 2000 1 1 1 1 1 1 1 2400 2400 1 1	ea st st st ea ea ea st st st st ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$200.00 \$92.050.00 \$2,500.00 \$800.00 \$600.00 \$0.75 \$0.75 \$0.75	\$900 \$1,500 \$200 \$2,500 \$2,500 \$2,500 \$9,050 \$3,000 \$1,000 \$1,000 \$2,000
Fire Ring	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Site Marker Learning and Grubbing Water Hookups	1 2000 2000 1 1 1 1 1 1 1 2400 2400 1 1	ea st st st ea ea ea st st st st ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$200.00 \$92.050.00 \$2,500.00 \$800.00 \$600.00 \$0.75 \$0.75 \$0.75	\$8000 \$1,5000 \$2000 \$2,2500 \$2,5000 \$99,050 \$5000 \$1,800 \$1,800 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250
Penic Table	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Site Marker Learning and Grubbing Water Hookups	1 2000 2000 1 1 1 1 1 1 1 2400 2400 1 1	ea st st st ea ea ea st st st st ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$200.00 \$92.050.00 \$2,500.00 \$800.00 \$600.00 \$0.75 \$0.75 \$0.75	\$8000 \$1,5000 \$2000 \$2,2500 \$2,5000 \$99,050 \$5000 \$1,800 \$1,800 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250
Ste Carding	Fire Ring Prenic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Fire Ring Electricity Fire Ring Electricity Fire Ring Electricity Fire Ring Fire Ring Electricity Fire Ring	1 2000 2000 1 1 1 1 1 1 1 2400 2400 1 1	ea st st st ea ea ea st st st st ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.500.00 \$2,500.00 \$2,500.00 \$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00	\$8000 \$1,5000 \$2000 \$2,2500 \$2,5000 \$99,050 \$5000 \$1,800 \$1,800 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250 \$2,250
Clearing and Grubbing	Fise Ring Penici Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Penici Table Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Improved Site with Water and Electricty Fise Ring Total Improved Site with Water and Electricty Trace Ring Total Improved Site with Water And Electricity Trace Ring Total Improved Site with Water Ring Total Improved Site w/e	1 2000 2000 1 1 1 1 1 2400 2400 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$92,550.00 \$2,500.00 \$800.00 \$800.00 \$0.75 \$0.75 \$0.75 \$2.00.00 \$1,500.00	\$800 \$1,500 \$200 \$2,500 \$2,500 \$2,500 \$9,050 \$3,000 \$1,800 \$1,800 \$1,500 \$9,100 \$1,500 \$1,500 \$1,500 \$1,500 \$1,500
Gravel Surface 90 If \$35.00 \$3.155 Size Marker 11 ea \$20.00 \$200 Electricity Hookups 11 ea \$200.00 \$200 Mater/Sever Hookups 11 ea \$2,500.00 \$2.205 Mater/Sever Hookups 11 ea \$2,500.00 \$2.205 Total Premium w/s/e (pull-through)  Premium Site with W/s/E (back-in) Fire Ring 11 ea \$500.00 \$300 Size Grading 61 ea \$500.00 \$300 Size Grading 12 ea \$500.00 \$300 Size Grading 62 ea \$500.00 \$300 Size Grading 63 ea \$500.00 \$300 Size Grading 64 ea \$500.00 \$300 Size Grading 65 ea \$500.00 \$300 Size Marker 65 ea \$50	Fire Ring Penici Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site With Water And Electricty Fire Ring Penici Table Site Grading Clearing and Grubbing Site Water Electricity Hookups Total Cabin  Description	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$2.500.00 \$50.75 \$200.00 \$2.500.00 \$1.500.00 \$1.500.00	\$800 \$1,5
Size Marker   1	Fise Ring Picnic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Picnic Table Site Grading Clearing and Grubbing Site Water Site Water Site Water Site Water Site Water Site Water Site Water Site Water Site Water Site Water Site Grading Site Water	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$99,050 \$3,800 \$1,800 \$2,500 \$2,500 \$3,1,800 \$2,500 \$2,500 \$3,1,800 \$2,500 \$3,1,800 \$2,500 \$2,500 \$3,1,800 \$2,500 \$3,1,800 \$2,500 \$3,1,800 \$3,1,800 \$4
Electricity Hookups	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Indroved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Total Indroved Site with Permium Site with W/S/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Site Site Site Site Site Site Site Site	1 2000 1 1 1 1 1 1 2400 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.05 \$50.00 \$30.05 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$2,500 \$3,000 \$1,800 \$1,800 \$2,000 \$1,500 \$1,500 \$2,000 \$1,500 \$2,0
\$13,925   \$13,	Fire Ring Penici Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penici Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Penici Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Fire Ring Penici Table Site Grading Clearing and Grubbing Site Site Water Site Water Hookups Total Improved Site with Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 2850 90	ea sf sf ea ea ea ea ea ea sf sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$500.00 \$500.00 \$500.00 \$1.500.00 \$1.500.00 \$500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$3.500.00 \$3.500.00 \$3.500.00 \$3.500.00 \$3.500.00 \$3.500.00 \$3.500.00	\$800 \$1,5
Premium Site with W/S/E (back-in)  Fire Ring  1 ea \$500.00 \$500  PCrict Table  1 ea \$800.00 \$800  Stee Grading  2850 sf \$0.75 \$2.138  Clearing and Grubbing  2850 sf \$0.75 \$2.138  Gravel Surface  60 lf \$35.00 \$2.100  Stee Marker  1 ea \$200.00 \$200  Escricity, Hookups  1 ea \$2.500.00 \$2.000  Escricity, Hookups  1 ea \$2.500.00 \$2.500  Stee Fire Fire Ring  1 ea \$2.500.00 \$2.500  Stee Fire Ring  1 ea \$2.500.00 \$5.000  Stee Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring  Stee Ring  1 ea \$500.00 \$5.000  Stee Ring	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Penic Table Site Warker Site Marker Site Water Hookups Site Water Hookups Site Water Hookups Site Water MyS/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Gravel Surface Site Site Site Site Site Site Site Site	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 2850 90 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$5.500.00 \$0.75 \$200.00 \$1.500.00 \$1.500.00 \$1.500.00 \$3.75 \$2.500.00 \$2.500.00 \$3.75 \$2.500.00 \$3.75	\$800 \$1,500 \$200 \$2,500 \$9,056 \$9,056 \$9,056 \$1,800 \$1,800 \$2,000 \$1,500 \$9,100 \$2,200 \$2,200 \$2,300 \$2,131
Fire Ring	Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Labin Fise Ring Peznic Table Fise Ring Peznic Table Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Grading Clearing and Grubbing Site with W/S/E (pull-through) Fise Ring Fise Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Fise Grading Clearing and Grubbing Site Warker Fise Ring Fise Grading Clearing and Grubbing Site Warker Fise Ring Fise Fise Ring Fise Fise Grading Clearing and Grubbing Site Warker Fise Fise Fise Ring Fise Fise Fise Fise Fise Fise Fise Fise	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 2850 90 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$5.500.00 \$0.75 \$200.00 \$1.500.00 \$1.500.00 \$1.500.00 \$3.75 \$2.500.00 \$2.500.00 \$3.75 \$2.500.00 \$3.75	\$800 \$1,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$3,5
Fire Ring	Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Labin Fise Ring Peznic Table Fise Ring Peznic Table Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Ring Fise Grading Clearing and Grubbing Site with W/S/E (pull-through) Fise Ring Fise Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Fise Grading Clearing and Grubbing Site Warker Fise Ring Fise Grading Clearing and Grubbing Site Warker Fise Ring Fise Fise Ring Fise Fise Grading Clearing and Grubbing Site Warker Fise Fise Fise Ring Fise Fise Fise Fise Fise Fise Fise Fise	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 2850 90 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$5.500.00 \$0.75 \$200.00 \$1.500.00 \$1.500.00 \$1.500.00 \$3.75 \$2.500.00 \$2.500.00 \$3.75 \$2.500.00 \$3.75	\$800 \$1,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$3,5
Picnic Table	Fire Ring Prenic Table Site Grading Clearing and Grubbing Site With Water And Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups University Hookups Site Water Site Marker Site With W/S/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Site Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Site Marker Marker Hookups Marter/Sweer Hookups Total Premium w/s/e (pull-through)	1 2000 2000 1 1 1 1 1 1 1 1 1 1 1 1 2850 90 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$92.050.00 \$2.500.00 \$5.500.00 \$0.75 \$200.00 \$1.500.00 \$1.500.00 \$1.500.00 \$3.75 \$2.500.00 \$2.500.00 \$3.75 \$2.500.00 \$3.75	\$800 \$1,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$3,5
Clearing and Grubbing   2850   sf   \$0.75   \$2.138	Fire Ring Pronic Table Site Grading Clearing and Grubbing Site Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Pracii Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Pracii Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site wife Premium Site with W/S/E (pull-through) Fire Ring Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Water Hookups Water Hookups Total Electricity Hookups Water Hookups The Ring Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sevent Hookups Water/Sevent Hookups Total Premium W/S/E (pull-through) Premium Site with W/S/E (back-in) Fire Ring	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75 \$0.75	\$800 \$1,500 \$200 \$2,500 \$2,500 \$9,050 \$1,800 \$1,800 \$1,800 \$1,800 \$1,500 \$2,200 \$1,500 \$2,200 \$1,500 \$2,200 \$2,200 \$3,100 \$3,100 \$2,200 \$3,100 \$4,000 \$6,000 \$4,000 \$6,000 \$4,000
Grave Surface   60	Fire Ring Penici Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Cabin Enterticity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penici Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site wyle  Premium Site with W/S/E (pull-through) Fire Ring Electricity Hookups Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Site Marker Electricity Hookups Site Site Willed Site Grading Clearing and Grubbing Site Site Willed Site Grading Clearing and Grubbing Site Site Marker Electricity Hookups Water/Sewer Hookups Water/Sewer Hookups Total Premium w/s/e (pull-through) Premium Site with W/S/E (back-in) Fire Ring Penicur Table  Premium Site with W/S/E (back-in) Fire Ring Penicur Site With W/S/E (back-in) Fire Ring	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea sf sf ea ea ea ea ea ea ea ea ea ea ea ea ea	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$3.500.00 \$2.500.00 \$3.500.00 \$2.500.00 \$3.500.00 \$2.500.00	\$800 \$1,500 \$1,500 \$2,00 \$2,500 \$2,500 \$2,500 \$2,500 \$2,500 \$3,10
Stee Marker	Fise Ring Pencit Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Pricin: Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Premium Site with W/S/E (pull-through) Fire Ring Gravet Surface Site Marker Electricity Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Fir	1 2000 1 1 1 1 1 2850 90 1 1 1 1 1 1 1 2850	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$30,055 \$2,500.00 \$30,055 \$30,055 \$30,055 \$30,055 \$30,055 \$30,055 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$30,000 \$30,055 \$300.000 \$30,055 \$300.000 \$30,055 \$300.000 \$30,055 \$300.000 \$30,055 \$300.000 \$30,055 \$300.000 \$300.000	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$90,050 \$90,050 \$1,800 \$1,800 \$1,800 \$1,800 \$1,800 \$2,000 \$1,500 \$2,000 \$1,500 \$2,000 \$1,500 \$3,100 \$3
Electricity Hookups	Fire Ring Pencir Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Cabin  Improved Site with Water and Electricty Fire Ring Pencir Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Place Site With Water and Electricty Fire Ring Pencir Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Pencir Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Total Pencir Table Site Grading Clearing and Grubbing Site With W/S/E (pull-through) Fire Ring Pencir Table Site Grading Clearing and Grubbing Total Premium Wide (pull-through) Water/Sewer Hookups Total Premium Wide (pull-through) Premium Site with W/S/E (back-in) Fire Ring Pencir Table Site Grading Clearing and Grubbing Clearing and Grubbing Total Premium Wide (pull-through)	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$200.00 \$2.500.00 \$50.75 \$200.00 \$2.500.00 \$2.500.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$35.00 \$30.75 \$35.00 \$30.75 \$35.00 \$30.75	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$2,500 \$39,050 \$39,050 \$1,800 \$1,800 \$2,200 \$2,500 \$3,1,500 \$3,1,500 \$2,131 \$2,131 \$2,131 \$3,151 \$2,131 \$3,151 \$2,131 \$3,15
Step   Step	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin Improved Site with Water and Electricty Fire Ring Renci Table Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Warker Electricity Hookups Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Site Water Electricity Hookups Total Improved Site with Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Total Penilum wis/e (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Total Premium wis/e (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Total Premium wis/e (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Total Premium wis/e (pull-through) Fremium Site with W/S/E (back-in) Fire Ring Fi	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$200.00 \$5.75 \$200.00 \$2.500.00 \$2.500.00 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75 \$30.00 \$40.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00 \$500.00	\$800 \$1,500 \$2,000 \$2,500 \$2,500 \$3,000 \$3,000 \$3,000 \$1,800 \$1,800 \$2,200 \$1,800 \$1,800 \$2,200 \$1,500 \$3,1
Shelter Site (walk-in)	Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Pemium Site with W/S/E (back-in) Fise Ring Peznic Table Site Grading Clearing and Grubbing Site Warker Site W	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$200.00 \$2.500.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$200.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75	\$800 \$1,500 \$2,000 \$2,500 \$9,055 \$9,055 \$9,055 \$9,055 \$1,800 \$1,800 \$2,000 \$2,000 \$2,000 \$2,000 \$2,130 \$3,150 \$3,150 \$2,131 \$2,1
Fire Ring         1         ea         \$500.00         \$500           Picnic Table         1         ea         \$800.00         \$800           Site Grading         900         sf         \$0.75         \$676           Clearing and Grubbing         900         sf         \$0.75         \$676           Site Marker         1         ea         \$200.00         \$200           Shelter         1         ea         \$34,00.00         \$38,400.00	Fise Ring Penic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Penic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site with W/s/E (pull-through) Fire Ring Penic Table Site Marker Electricity Hookups Water Hookups Gravel Site With W/s/E (pull-through) Fire Ring Fenic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site w/e	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$0.75	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$9,055 \$9,055 \$9,055 \$1,800 \$1,800 \$2,000 \$1,500 \$2,000 \$3,100 \$2,000 \$3,1
Fire Ring         1         ea         \$500.00         \$500           Picnic Table         1         ea         \$800.00         \$800           Site Grading         900         sf         \$0.75         \$676           Clearing and Grubbing         900         sf         \$0.75         \$676           Site Marker         1         ea         \$200.00         \$200           Shelter         1         ea         \$34,00.00         \$38,400.00	Fise Ring Pennic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Marker Cabin  Enterticity Hookups Total Cabin  Improved Site with Water and Electricty Fise Ring Pennic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Water Electricity Hookups Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fise Ring Electricity Hookups Water Hookups Site Grading Clearing and Grubbing Site Grading Site Water Site	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$0.75	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$9,055 \$9,055 \$9,055 \$1,800 \$1,800 \$2,000 \$1,500 \$2,000 \$3,100 \$2,000 \$3,1
Picnic Table         1         ea         \$800.00         \$80           Ste Grading         900         sf         \$0.75         \$67           Clearing and Grubbing         900         sf         \$0.75         \$67           Size Marker         1         ea         \$200.00         \$200           Shefter         1         ea         \$38,400.00         \$38,840	Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Warker Electricity Hookups Total Improved Site with Water and Electricty Fire Ring Pencit Table Fire Ring Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Pencit Table Site Grading Clearing and Grubbing Site with W/S/E (pull-through) Fire Ring Pencit Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Total Premium Wis/e (pull-through) Fire Ring Pencit Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Site Water Hookups Total Premium Wis/e (pull-through) Fire Ring Pencit Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Site Water Sewer Hookups Total Premium Wis/e (back-in) Fire Ring Pencit Table Site Carding Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium W/s/e (back-in)	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$0.75	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$9,055 \$9,055 \$9,055 \$1,800 \$1,800 \$2,000 \$1,500 \$2,000 \$3,100 \$2,000 \$3,1
Clearing and Grubbing         900         sf         \$0.75         \$675           Size Marker         1         ea         \$200.00         \$200           Sheter         1         ea         \$38,400.00         \$38,400.00	Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Kin Marker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Water Electricity Hookups Total Improved Site with Water Hookups Total Improved Site with Fire Ring Pencit Table Site Grading Clearing and Grubbing Site Water Electricity Hookups Water Hookups Site Site Water Fire Ring Fire R	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$9,056 \$9,056 \$3,000 \$1,000 \$2,000 \$2,000 \$1,500 \$3,1,500 \$3,1,500 \$2,2,500 \$3,1,500 \$2,2,500 \$2
Site Marker         1         ea         \$200.00         \$200           Shelter         1         ea         \$38,400.00         \$38,400	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Warker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Site Water Hookups Total Improved Site w/e  Premium Site with W/S/E (pull-through) Fire Ring Gravel Surface Site Warker Electricity Hookups User Hookups Total Premium w/s/e (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Gravel Surface Site Warker Site Warker Site Warker Site Warker Site Warker Site Warker Site Warker Site Warker Site Warker Site Warker Site Grading Clearing and Grubbing Gravel Surface Site Grading Clearing and Grubbing Total Premium w/s/e (pull-through)  Premium Site with W/S/E (back-in) Fire Ring Penic Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Site Warker Site W	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00	\$800 \$1,500 \$2,000 \$2,500 \$2,500 \$2,500 \$3,000 \$1,800 \$1,800 \$1,800 \$1,800 \$1,5
Shelter 1 ea \$38,400.00 \$38,400	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Kharker Cabin Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site w/e  Premium Site with W/s/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Total Improved Site w/e  Premium Site with W/s/E (pull-through) Fire Ring Fire Ring Fire Table Site Grading Clearing and Grubbing Total Premium w/s/e (pull-through) Fire Ring Fi	1 1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$3.75 \$200.00 \$2.500.00 \$3.75 \$200.00 \$3.75 \$3.75 \$3.00 \$3.75 \$3.00 \$3.75 \$3.50 \$3.75 \$3.50 \$3.75 \$3.50	\$800 \$1,500 \$2,000 \$2,200 \$2,500 \$90,051 \$90,051 \$1,900 \$1,900 \$2,250 \$1,500 \$2,250 \$1,500 \$2,250 \$1,500 \$2,250 \$1,500 \$2,250 \$2
	Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Cabin  Electricity Hookups Total Cabin  Improved Site with Water and Electricty Fire Ring Penic Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Water Hookups Total Improved Site wy Water Hookups Total Improved Site wy Premium Site with W/s/E (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Site Grading Clearing and Grubbing Grawal Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium W/s/e (pull-through) Fire Ring Penic Table Site Grading Clearing and Grubbing Grawal Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium W/s/e (pull-through)  Premium Site with W/s/E (back-in) Fire Ring Penic Table Site Grading Clearing and Grubbing Grawal Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium W/s/e (back-in)  Shelter Site (walk-in) Fire Ring Penic Table Site Clearing and Grubbing Grawal Surface Site Marker Electricity Hookups Water/Sewer Hookups Total Premium W/s/e (back-in)	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$200.00 \$2,500.00 \$2,500.00 \$30,75 \$200.00 \$2,500.00 \$30,75 \$0.75	\$800 \$1,500 \$2,000 \$2,500 \$2,500 \$3,000 \$3,000 \$3,000 \$1,800 \$1,800 \$1,800 \$1,800 \$1,800 \$1,900 \$1,500 \$1,500 \$2,500 \$1,500 \$2,500 \$3,150 \$2,500 \$2,5
	Fire Ring Pencin Table Site Grading Clearing and Grubbing Site With Water and Electricty Fire Ring Pencin Table Site Grading Clearing and Grubbing Site with Water and Electricty Fire Ring Pencin Table Site Grading Clearing and Grubbing Site Marker Electricity Hookups Total Improved Site with Water Hookups Total Improved Site with Water Hookups Site Grading Clearing and Grubbing Site Water Pencin Table Site Grading Clearing and Grubbing Site Water Hookups Water Hookups Total Improved Site with W/S/E (pull-through) Fire Ring Pencin Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Betcricity Hookups Water/Sewer Hookups Total Premium Site with W/S/E (back-in) Fire Ring Pencin Table Site Water Hookups Total Premium Site with W/S/E (back-in) Fire Ring Pencin Table Site Water Site Site (walk-in) Fire Ring Pencin Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Electricity Hookups Total Premium w/s/e (back-in) Fire Ring Pencin Table Site Grading Clearing and Grubbing Gravel Surface Site Marker Site Cwalk-in) Fire Ring Pencin Table Site Crading Clearing and Grubbing Gravel Surface Site Marker Site Cwalk-in) Fire Ring Pencin Table Site Cwalk-in	1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ea ea ea ea ea ea ea ea ea ea ea ea ea e	\$800.00 \$0.75 \$0.75 \$200.00 \$2.500.00 \$2.500.00 \$2.500.00 \$30.75 \$200.00 \$2.500.00 \$30.75 \$30.75 \$30.75 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.00 \$30.75 \$30.75 \$30.75 \$30.75 \$30.75	\$800 \$1,500 \$2,000 \$2,000 \$2,500 \$9,055 \$9,055 \$9,055 \$1,800 \$1,800 \$2,250 \$1,500 \$2,250 \$3,150 \$3,100 \$2,250 \$3,150 \$3,100 \$2,250 \$3,150 \$3,150 \$2,2

OVERALL SUMMARY - PRELIMINARY OPINION OF COST

DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	NOTES	TOTAL
Overall Park Summmary					
General Improvements Subtotal					\$771,046
Existing Campground Subtotal					\$731,380
New Area Subtotal					\$7,592,978
Total Improvements					\$9,095,404
DRY RIVER CAMPGROUND Costs - Sub Total					\$9,095,404
Costs - 35% Markups / Contingency					\$3,183,391
Total Costs - DRY RIVER CAMPGROUND					\$12,278,795

### General Notes:

Preliminary costs for planning purposes only

Based on current market conditions (no annual escalation rate applied)

All costs include the following mark-ups/contingency

- a) 8.5% General Conditions (including liability)
- b) 15% estimating contingency
- c) 10% GC mark-up d) 1.5% bond