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STORAGE

Archeological Impact Assessment

Saratoga Monument

Schuylerville, New York

Saratoga National Historical Park

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I. INTRODUCTION

On July 28 and 29, 1980, subsurface archeological testing was performed within the limits of a proposed parking area and paved walkway at the Saratoga Monument, Schuylerville, New York (fig. 1). The testing was undertaken as part of the 106 compliance procedures initiated after Saratoga National Historical Park had filed Form XXX (Assessment of Effect on Cultural Resources) with the Division of Cultural Resources, North Atlantic Regional Office, Boston, Mass.

Specifications for the five-car parking lot and its associated access drive which will extend from Burgoyne Street along the eastern boundary calls for the removal of top soil not exceeding a depth of 6" below grade. A 3" thick layer of #2 crushed stone will comprise the base upon which 2-3" of crushed stone and stone dust will be added for a compact surface. The prepared access roadway will be no greater than 10' wide. Additionally, a 250' path will be added between the visitor restrooms and the monument. Ground disturbance for this path will involve the removal of approximately 4" of topsoil, and 3" of crushed stone will be capped with a 1½" layer of asphalt.

II. PREHISTORY

The Hudson River Valley has long been the focus of archeological activities and today its prehistory and occupational sequence is one of the most extensively documented and understood regions in the Northeast. Schuylerville at the location of the confluence of Fish Creek and the Hudson River plays an important role in this understanding. Of the 99 prehistoric sites recorded by Funk in 1970, 16 occur along the Fish Creek which drains Saratoga Lake into the Hudson (fig. 2). Two sites in Schuylerville, the Schuyler Mansion site and the Evergreen site, are in the immediate vicinity of the Saratoga Monument. The Schuyler Mansion site, located south and directly below the heights on which the monument was built, is situated adjacent

Fish Creek just upstream from its confluence with the Hudson and has yielded evidence of Middle Archaic occupation. At the Evergreen site located further upstream, a Laurentian Archaic Component was identified (Funk 1976:27-28).

Though no Paleo occurrences have been identified in this limited geographical area, the numerous sites along Fish Creek attest to considerable Archaic occupation, with occupation and/or exploitation of available subsistence resources occurring continuously through Late Woodland times.

The seasonally abundant andromodous fish were probably a valuable subsistence resource for the hunter-gatherers of the Archaic period who may have assembled here in considerable numbers during the spawning runs. This seasonally abundant resource combined with the fertile flood plain of the Hudson River would have been a particularly attractive area for Woodland period cultivators.

The existing archeological record briefly outlined above clearly identifies the location of the Saratoga Monument as being potentially sensitive for evidence of prehistoric occupation.

¹Funk, R. E. 1976 Recent Contributions to Hudson Valley Prehistory, Memoir 22 New York State Museum. University of the State of New York, State Education Dept., Albany, New York.

III. HISTORIC SIGNIFICANCE

The Saratoga Monument is located within an area which formerly had been a large British fortification. After being defeated at the second battle of Saratoga, General Burgoyne had his army of regular Crown troops and German mercenaries retreat to a hill which rises about 250' above the Hudson River formerly known as the "heights of Saratoga" (fig. 3, 4). Burgoyne's army was greatly reduced in size by battle and the tactical decision to split the British force, leaving only three regiments on the heights while the remainder crossed the Hudson. The contingent fortified on the heights also suffered from low morale and an increasing number of ~~dis~~ertions. Taking up a position in fortifications which the British had previously established, Burgoyne was to make a final, if not desperate, attempt to avert total defeat. However, between October 10th through Oct. 17, 1777, the remnants of Burgoyne's Army was methodically surrounded by General Gates and supporting forces culminating in Burgoyne's surrender of 3998 troops to the Continental Army.

IV. STRUCTURAL HISTORY OF MONUMENT

The Saratoga Monument was originally conceived on October 17, 1856, the 79th anniversary of the surrender. In 1859 a site reputed to be adjacent the western line of Burgoyne's camp was selected for the construction of the monument. Brandon's secondary map of the area (1901) shows the juxtaposition of the monument and the British encampment (fig. 4).

Speaking at the Centennial Celebration in 1877, monument architect J.C. Markum noted that the monument had a concrete foundation 38' square and 8' thick. The granite of the cornerstone and the plinth of the base were of Cape Ann Granite. The granite was shipped from Massachusetts in a roughly hewn condition with the Champlain Canal being used for the final stretch of the journey. The stone was

then set without further fitting or cutting.¹

The extingencies of funding prolonged construction until 1883 when it achieved its maximum height of 154'. On October 18, 1912, the monument was officially dedicated and presented to the state of New York. In 1980 the Saratoga Monument was incorporated into the National Park System.

V. FIELD METHODS

A total of 30 shovel test pits were excavated and screened with the able assistance of William Dixon, maintenance laborer, Saratoga National Historical Park. Prior to testing, the two areas of proposed development had been delineated with wooden stakes by maintenance staff of Saratoga National Historical Park.

It should be noted that between the time of project conceptualization and the actual on-ground layout, several changes in location and design had occurred. The original project map submitted with the Form XXX indicated that the pathway from the monument would be aligned on the east side of the restrooms. The area delineated and tested was in fact approximately 8-10' west, aligned on the west side of the restrooms running adjacent the exposed bank on the westernmost side of the property (fig. 5). Secondly, the original map (scale 1" = 50') reveals that the access roadway was approximately 130' long by 15' wide and entered a parking lot projected at 65' x 35' with a 25' turnaround at its southern end. The area staked and sampled included an access roadway 164' x 15' entering a parking facility measuring approximately 100' x 40' with a 26' turnaround. The enlarged parking area in fact roughly corresponds to that including the "possible expanded parking" (fig. 5).

¹W.L. Stone 1878, Memoir of the Centennial Celebration of Burgoyne's Surrender. Munsell Press Albany, p.63, quoted in Qualey, D.J. 1979. A Preliminary Report for Interpretation at Saratoga Monument (Draft), Saratoga N.H.P.

A. Parking Lot and Access Drive

The original sampling design was based on a 15' linear interval directly in the center of the accessway and pathway, while a systematic 15' grid pattern would be used to test the parking lot area. The eleven test pits sampled within the proposed access roadway revealed the existence of a former gravel road bed several inches below grade. Accordingly, the sampling interval was modified within the parking area in order to more intensely sample that area which had previously not been disturbed or existed within this former roadbed. The sampling pattern which resulted did not follow a rigid design as tests were placed randomly 10 and 20 feet apart. Three tests were excavated along the projected course of the former road to verify its presence or absence. The somewhat unorthodox sampling within this area nevertheless provided thorough and adequate subsurface testing. Eleven test pits were sampled within the proposed parking lot, totaling 22 tests for the parking lot and access driveway (fig. 5).

B. Pathway

Given the 250' length of the path between the restrooms and monument, between 16 and 17 test pits at a 15-foot interval was originally planned. This strategy was altered when it became apparent that a former gravel roadway also existed on the western side of the site. Further, an exposed steep bank on this side of the property revealed that as much as 3' of earth had been removed during some former grading activity. This excavated cut was probably undertaken in conjunction with the construction of the road. The interval was therefore increased to 40' and maintained as each test continued to reveal the buried roadway. In such a fashion, seven tests were excavated along the proposed pathway and an additional test was performed at the midway point on the north side of the restroom building (fig. 5).

RESULTS OF SUBSURFACE TESTINGA. Parking Lot and Access Driveway

The eleven tests sampled within the access driveway revealed a nearly identical subsurface profile. Existing below a topsoil layer which averaged between 1-3½" below grade was a highly compacted deposit of small rounded flat pebbles in a light brown/gray sandy matrix. This pebble layer was between 5½ and 7' thick. Below this the soil texture and color changed to a reddish-brown fine sandy soil with quantities of stone decreasing with depth, at the same time increasing in size with depth. This layer, like that above, was highly compact and difficult to excavate in the confines of a small shovel test. At a depth of between 10" and 12" below grade the soil changed dramatically into a soft, fine sandy/silt subsoil, virtually void of any stone.

Only one artifact, a corroded wire cut nail, was encountered within these eleven test pits.

The consistent nature and internal characteristics of these layers suggested that a former gravel roadway or path had existed along the eastern boundary of the property having been laid on the level ground below the slope at the base of the monument. The stone which was partially sorted by size had been laid down in two layers over the natural soft sandy glacial till which geologically characterizes the hill on which the monument was built. This stone was derived from a natural deposit, probably a local sand and gravel deposit laid down by the melt waters of the receding glaciers. At some time in the past, during the stewardship of the state, this roadway was abandoned and covered over with topsoil which was subsequently graded and landscaped. Supporting evidence comes from two sources: an existing surface feature and personal communications. Extending from the east side of the monument a concrete walkway simply terminates 130' from the base of the obelisk. Taken in context, it is apparent that this

walk is a vestigial structure, having once served as a walk from the former road which it abuts. Corroborating this interpretation, Mrs. Francis Ostrander¹ noted that a former gravel driveway had existed on the eastern side of the monument property running on level ground below the sloping base of the monument. This feature was filled and graded over some time in the early 1960s when the State Education Department turned the property over to the Park and Recreation Department.

Sampling design within the proposed parking lot was altered to provide more intensive coverage west of and beyond this ~~former roadbed~~ in potentially undisturbed areas. These test pits (12, 13, 15, 16, 18 and 19) were identical to one another, revealing a single, homogeneous layer of light brown soft sandy silt containing only an occasional rounded pebble. This soil type represents a variety of glacial drift and appears to be ~~undisturbed~~ below the existing grade. Only one artifact, a small undiagnostic fragment of pearleware, was located in test pit 13 at a depth of 7" below grade.

Test pit 21 was intuitively located to investigate a small mound which was barely discernable near the end of the parking lot turnaround.² From the surface to 8" below grade a gray/brown fine, sandy soil, similar to that existing over the former road, overlay the homogeneous light brown, soft, sandy silt typical of the tests sampled beyond the roadbed. The slight mound appears to be the remnants of a pile of topsoil which was used to cover the former roadbed.

¹Mrs. Francis Ostrander, who lives across Burgoyne Street from the monument, is a life-long resident of Schuylerville. Upon inquiry she offered these comments to Superintendent Glen Gray.

²T.P.21 located 13' SSW and 3' WSW of T.P.20

Test pit 22 was located at the end of the turnaround area in direct line with the transect which consistently identified the roadbed. However, the subsoils were homogenous light brown fine, soft, sandy silt of glacial origin. Two unscreened shovel tests were then sampled in the sumac bed at the edge of the property. Both revealed the typical gravel of the former roadbed suggesting that it had made a slight easterly curve at this point. However, the actual configuration of the roadbed at this point is unknown as it was beyond the limits of the investigation.

B. Path

The presence of a former gravel roadway or path was consistently identified by the seven test pits excavated between the monument and the restrooms. Testing revealed the existence of a 2-3" thick, gray/brown, fine, sandy topsoil layer overlying a highly compact layer of unsorted small smooth pebbles. The gravel layer varied from 3 to 6 inches in thickness along the 250' distance. The topsoil and the nature of the gravel bed suggest a condition and activity similar if not equivalent with that which was found to exist along the east side of the site.

The eighth test undertaken in association with the proposed path was located approximately 7' east of the linear which identified the road/path. This test proved to be identical in all respects to the other tests sampled off the former gravel roadbeds, revealing light brown, fine, soft, sandy silt. No artifacts were recovered during the testing of this area.

VII. INTERPRETATION

There are at least two interpretations which may be posited to explain the subsurface conditions identified during this limited testing program.

Formerly there existed two gravel drive or walkways on the property of the Saratoga Monument. These may have been constructed as part of the original design of the

monument and development of the site or added years later. At some time in the past, possibly in the early 1960s as suggested by Mrs. Osterlander, the Department of State Parks and Recreation chose to eliminate these features by introducing several inches of sandy topsoil and landscaping over them.

The second interpretation is much more conjectural as it goes beyond the factual knowledge gained by subsurface testing by making deductions from existing surface conditions on the grounds of the property.

The entire western edge of the property is lined with a row of large maple trees. These trees are located on the top of the bank which exists along most of this side of the property (fig. 6). One large, live maple also exists on the east edge of the archeologically identified road between the monument and the restrooms. Between this maple and the restrooms a tree stump also exists adjacent the former roadway. Beyond the restrooms, running in a direct line with the live maple and stump, are several other tree stumps and depressions (betraying completely removed stumps). Several trees and stumps also exist near the southern end southwest corner of the property. The existence of these trees and tree stumps directly in line with one another suggest that a single tree-lined gravel roadway once looped around the entire property of the monument (fig. 6). Many of the trees have died through the years and the entire loop was covered with topsoil and graded into the general contour of the landscape.

VIII. CONCLUSIONS AND RECOMMENDATIONS

The proposed parking lot, its access drive and path, will have no impact on pre-historic or pre-mid-19th-century historic cultural resources, particularly those associated with General Burgoyne's encampment or the events which the monument commemorates. The 19th- and 20th-century development associated with the construction

of the monument itself and residential growth has caused incalculable and irreversible damage to potential archeological resources on the grounds of the Saratoga Monument.

However, archeological testing has indicated that a gravel road or roads of an as yet undetermined temporal association or significance will be at least partially impacted. At this juncture we have very little ^{knowledge}/concerning the potential architectural significance of the Saratoga Monument. The engineering, technical and architectural integrity and potential importance of the Saratoga Monument have not as yet been professionally assessed. Further, to what degree were the grounds and landscaping--the historic scene of the monument--integral components of the completed structure?

Recent site development work performed at Bunker Hill Monument, Boston National Historical Park, has provided a potentially poignant lesson to the management of monument structures. As more detailed data was assembled the significance of the Bunker Hill Monument has become appreciably expanded. The monument itself, as a structural entity and result of 19th-century engineering and technological achievement has become recognized, adding another dimension to the interpretation of the resource.

In this light, the author recommends that further research be undertaken so that conclusive and definitive statements can be offered concerning the historical significance of the Saratoga Monument and its associated grounds.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

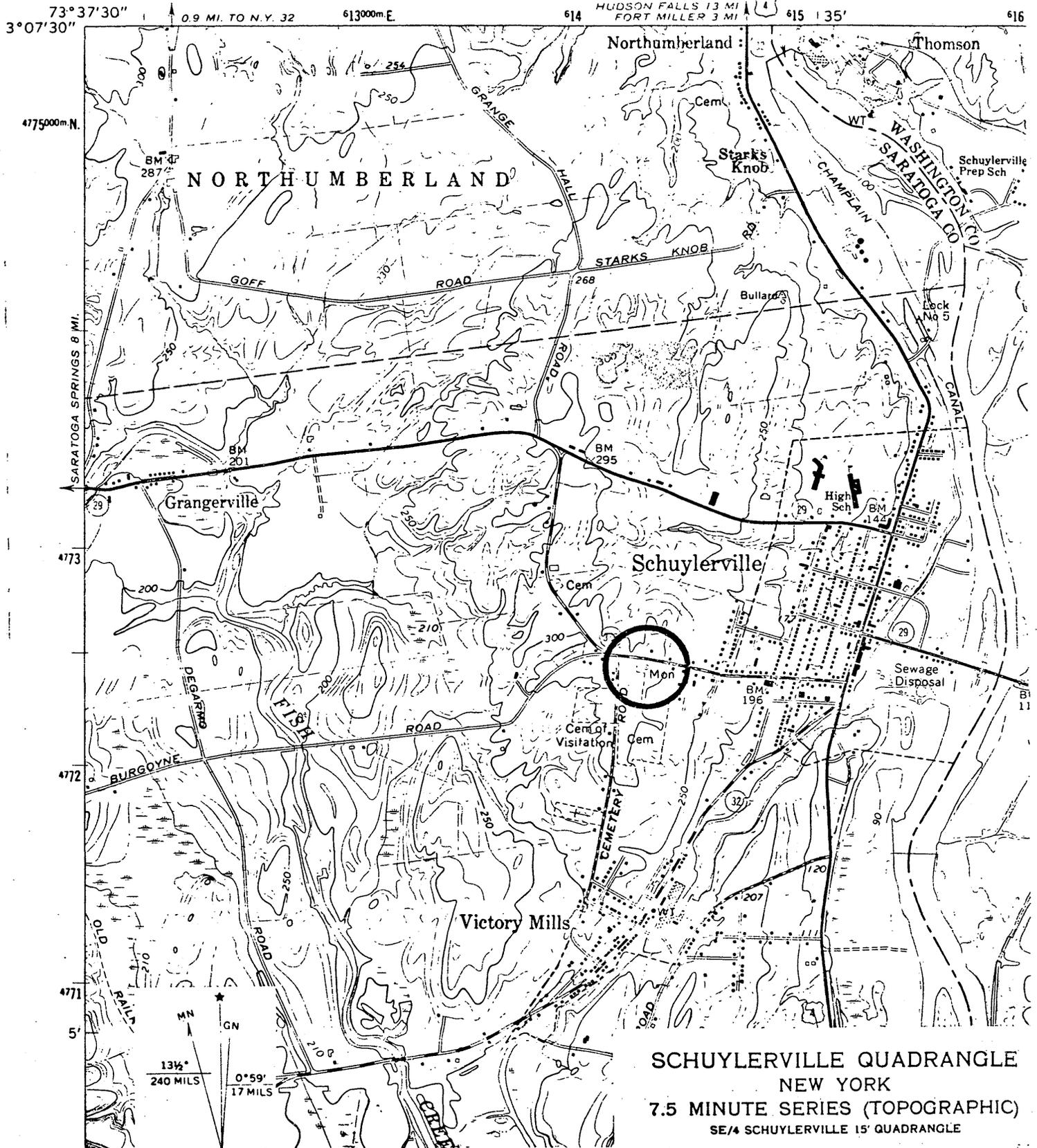
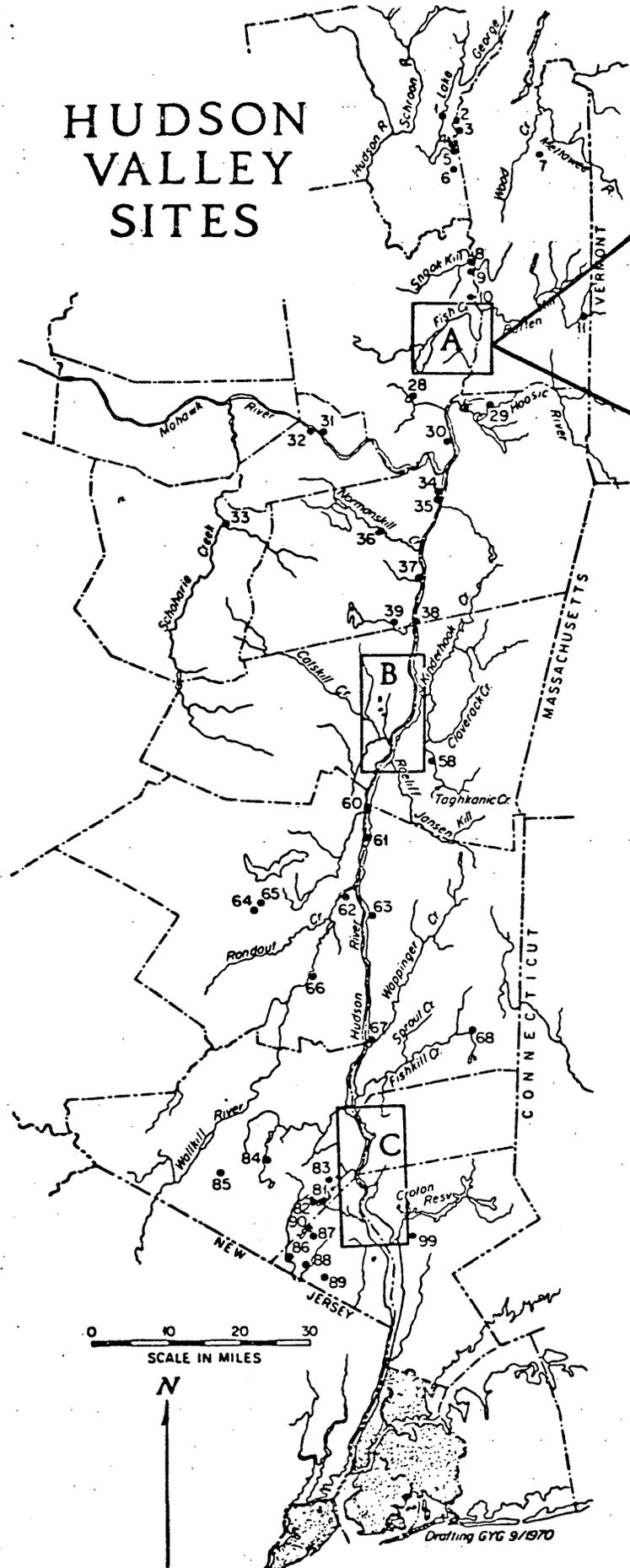


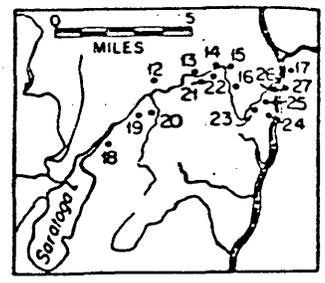
Figure 1 - Site Location Map

HUDSON VALLEY SITES

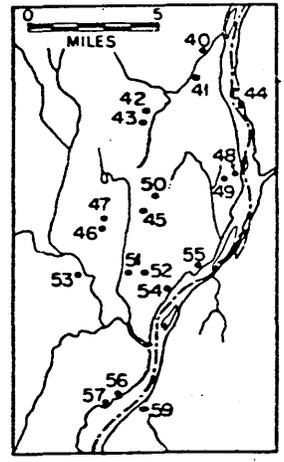


- 1 Finley
 - 2 Knapp
 - 3 Seelye
 - 4 Knox
 - 5 Weinman
 - 6 Pickle Hill
 - 7 Parrish
 - 8 Snook Kill
 - 9 Henderson
 - 10 Harris
 - 11 Oatman
 - 12 Milligan Hill
 - 13 Szekely
 - 14 Bullard
 - 15 Wood
 - 16 Haskins
 - 17 Barton
 - 18 Fitch
 - 19 Hughes
 - 20 Sucker Brook
 - 21 Mezera
 - 22 Lewandowski
 - 23 Evergreen
 - 24 Germain
 - 25 Gannon
 - 26 Schuyler Mansion
 - 27 Coffin
 - 28 Hennessy
 - 29 Weir
 - 30 River
 - 31 Bent
 - 32 Turnbull
 - 33 Westheimer
 - 34 Menands Bridge
 - 35 Dennis
 - 36 Welling
 - 37 Cedar Hill
 - 38 Barren Island
 - 39 Fish Club Cave
 - 40 Young
 - 41 Himmer Rockshelter
 - 42 Zimmermann Rockshelter
 - 43 Bronck House Rockshelter
 - 44 Little Nutten Hook
 - 45 Dead Sheep
 - 46 Hound Dog Rockshelter
 - 47 Moonshine Rockshelter
 - 48 Tufano
 - 49 Petalas
 - 50 Kings Road
 - 51 West Athens Hill
 - 52 Railroad
 - 53 Vedder
 - 54 Rip Van Winkle
 - 55 Black Rock
 - 56 Lotus Point
 - 57 Van Orden
 - 58 Cloverack Rockshelter
 - 59 Ford
 - 60 Rocky Point
 - 61 South Cruger Island
 - 62 Hurley
 - 63 Shagabak
 - 64 Roadside Rockshelter
 - 65 Samsenville Rockshelter
 - 66 Rural Cemetery
 - 67 Bowdoin Farm Rockshelter
 - 68 Sylvan Lake Rockshelter
 - 69 Bannerman
 - 70 Nicoll Farm
 - 71 O'Rourke
 - 72 Fisherman's Rockhouse
 - 73 Riverbank Rockshelter
 - 74 Denniston
 - 75 Bear Mountain Railroad Station Rockshelter
 - 76 Doodletown Rockhouse
 - 77 Iona Island Ridge Rockshelter
 - 78 Navy Rockshelter
 - 79 Dunderberg
 - 80 Stony Point Rockhouse
 - 81 Tiorati Rockshelter
 - 82 Cohasset Rockshelter
 - 83 Sheep Shelter Rockshelter
 - 84 Greycourt Rockshelter
 - 85 Dutchess Quarry Cave
 - 86 Ramapo Rockshelter
 - 87 Breakneck Rockshelter
 - 88 Suffern Rockshelter
 - 89 Quarry Glen Rockshelter
 - 90 White Rabbit Rockshelter
 - 91 Wolcott
 - 92 Doagan Point
 - 93 Farham Ridge
 - 94 Kettle Rock Point
 - 95 Cron 1 B 3
 - 96 Van Cortlandt
 - 97 Crawbuckie 1-7
 - 98 Winterich
 - 99 Hanolak
- New York City

A Detail of Sites 12-27



B Detail of Sites 40-57 & 59



C Detail of Sites 69-80, 91-98

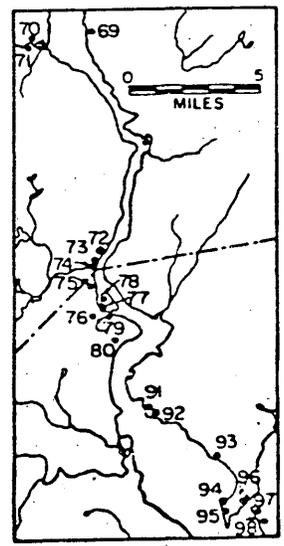


Figure 2. Locations of archeological sites in the Hudson Valley. (Funk 1976)
 Detail of sites 12-27 illustrate sites in and around Schuylerville.

PLAN OF THE POSITION which the ARMY under L^T GEN^L BURGOINE took at SARATOGA

on the 10th of September 1777. and in which it remained till THE CONVENTION was signed.

Engraved by W^m Faden.

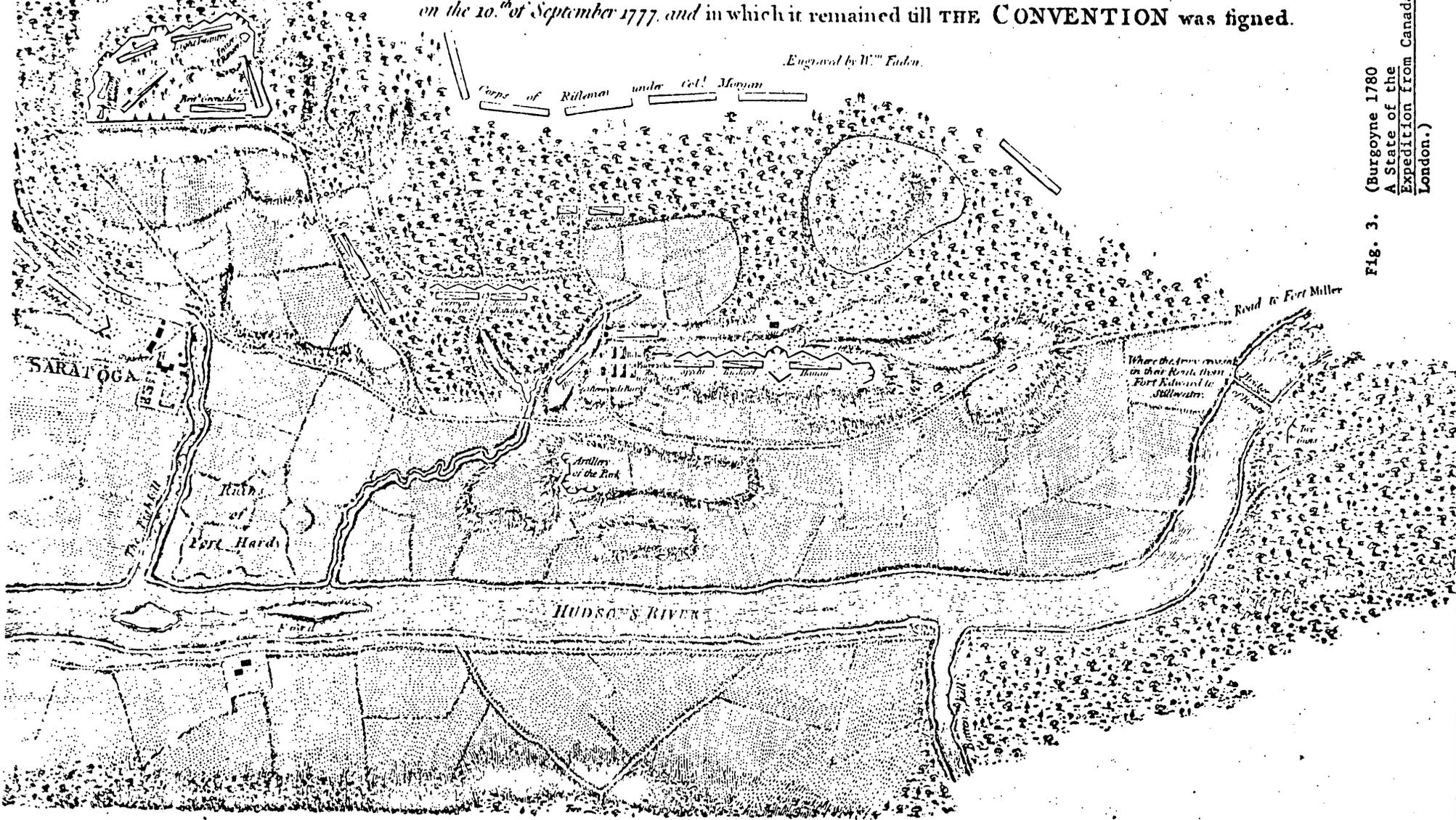


Fig. 3. (Burgoyne 1780
A State of the
Expedition from Canada,
London.)

HISTORICAL MAP
 OF
 OLD SARATOGA,
 (SCHUYLVILLE)
 DRAWN BY
 JOHN H. BRANDOW,
 From U. S. Geological Survey Map, Compared with
 Burgoyne's Military Map.

----- Roads Discarded.
 - - - - - Old Roads Still in Use.
 _____ Modern Roads.

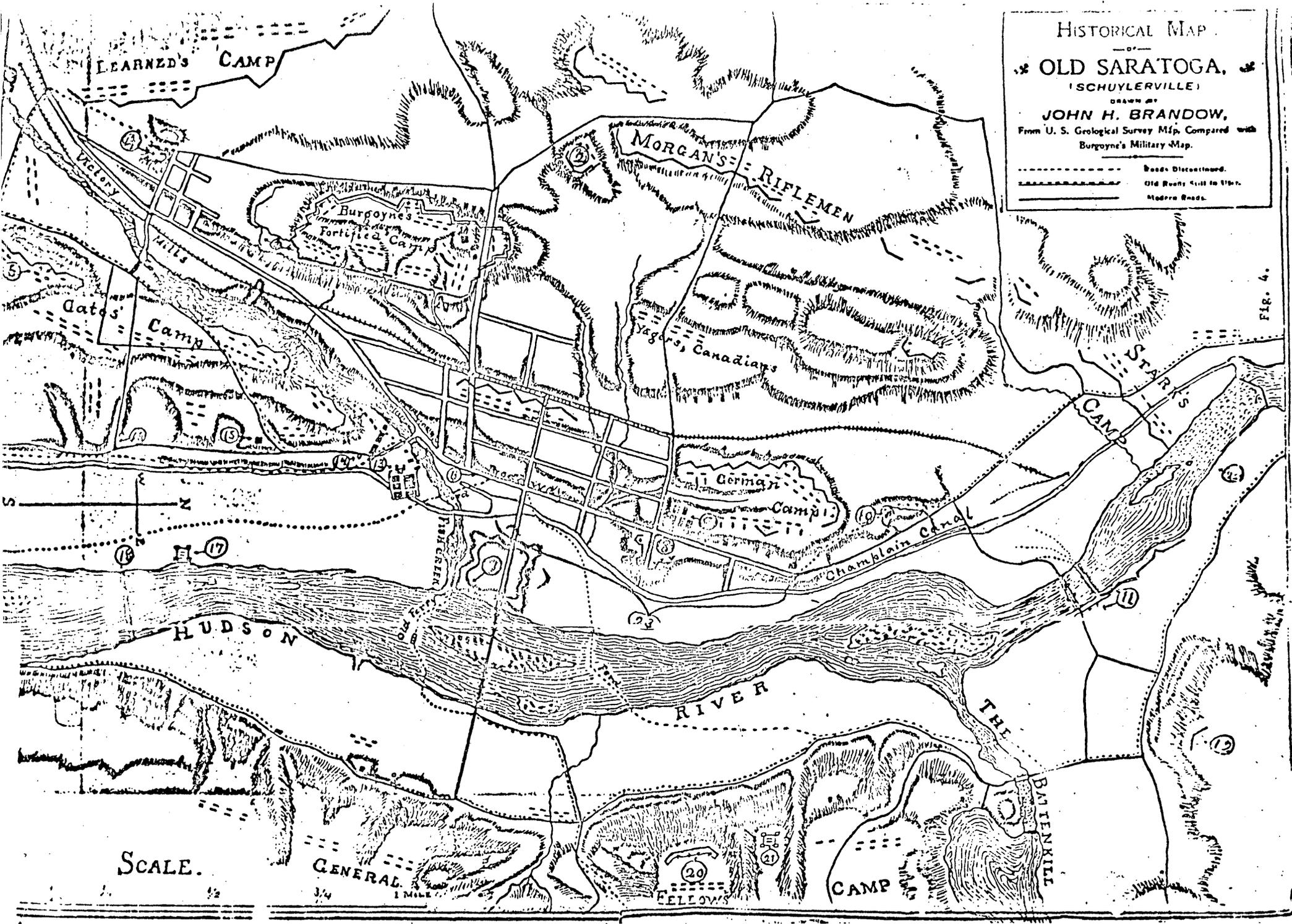


Fig. 4.

SCALE.

GENERAL'S
 CAMP
 1 MILE

FELLOW'S
 CAMP

CAMP

THE
 BATTENKILL

BURGOYNE STREET

Street Down
Set 1" iron pipe
N63°41'15"W
204.18'
(206' deed)
Over

Existing Driveway to be obliterated.

N

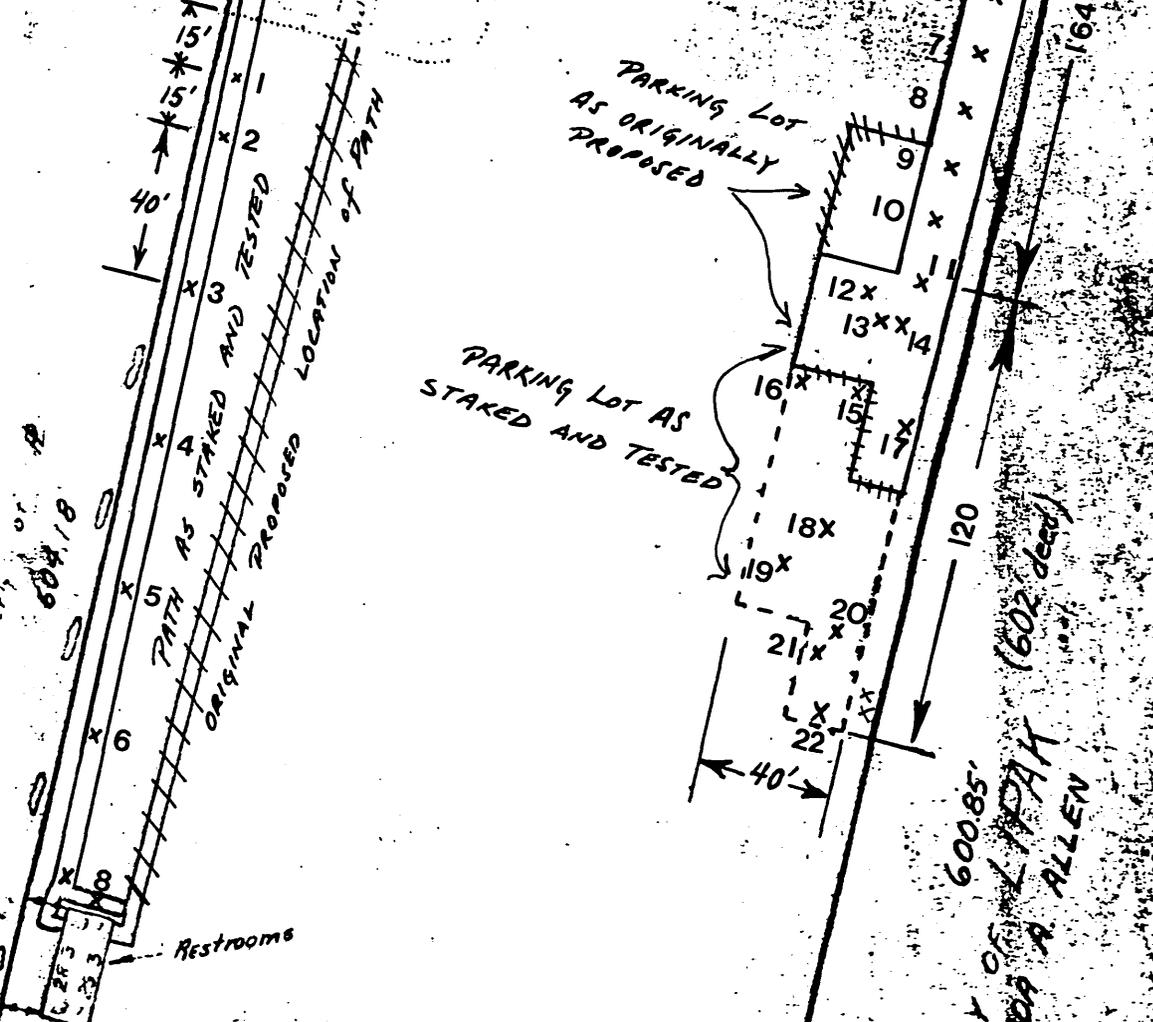
LANDS OF PROSPECT HILL CEMETERY

S 23° 55' 45" W
600.85'



PARKING LOT AS ORIGINALLY PROPOSED

PARKING LOT AS STAKED AND TESTED



LANDS ACQUIRED BY LIPPA (602' deed)
FORMERLY OWNED BY A. ALLEN

Figure 5. Location of test pits within staked areas. Note difference between original design.

Scale 1" = 20'

564° 37' 15" E
204.00'
LANDS OF PROSPECT
(206' deed)

Found 1" iron pipe

BURGOYNE STREET

Street down

STREET

$N63^{\circ}41'15''W$

Pavement

204.18'

(206' deed)

Over

Set 1" iron pipe

Existing driveway to be obliterated.

Driveway

Walk

Cattle Man

Walk

Abandoned driveway west of property line

LANDS OF PROSPECT HILL CEMETERY

(610' deed)

IDENTIFIED GRAVEL WAY

MAPLE

EXISTING STUMP

EXISTING STUMP

EXISTING STUMP

IDENTIFIED GRAVEL WAY

LANDS APPURTENANT TO LIPAN FORMERLY OWNED BY ALLEN

Figure 6. Known and potential location of gravel way.

EXISTING STUMP

MAPLE

EXISTING TREES

EXISTING STUMP

CONTINUATION OF GRAVEL WAY

$S64^{\circ}37'15''E$

204.00'

LANDS OF PROSPECT

(206' deed)

$S42^{\circ}33'45''E$

SCALE 1" = 50'