Appendix A – Regulatory Communications

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED
NOV 16 2020

DHR Use Only	
R&C #	12242
Log In Date	11/16/20
Response Date	12/2/20
Sent Date	12/3/20

Request for Project Review by the New Hampshire Division of Historical Resources

☒ This is a new submittal
☐ This is additional information relating to DHR Review & Compliance (R&C) #:

GENERAL PROJECT INFORMATION

Project Title Loop Road, VA Project 608-20-101

Project Location VA Medical Center

City/Town Manchester Tax Map 896 Lot # 3

NH State Plane - Feet Geographic Coordinates: Easting 1044587 Northing 186849
(See RPR Instructions and R&C FAQs for guidance.)

Lead Federal Agency and Contact *(if applicable)* Department of Veterans Affairs
(Agency providing funds, licenses, or permits)
Permit Type and Permit or Job Reference #

State Agency and Contact *(if applicable)*

Permit Type and Permit or Job Reference #

APPLICANT INFORMATION

Applicant Name Keith Lacasse

Mailing Address 718 Smyth Road Phone Number 603-624-4366

City Manchester State NH Zip 03104 Email keith.lacasse@va.gov

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company Amanda Furtado

Mailing Address 718 Smyth Road Phone Number 6036244366 (6241)

City NH State NH Zip 03104 Email amanda.furtado@va.gov

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. *Please refer to the Request for Project Review Instructions for direction on completing this form.* Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at marika.labash@dncr.nh.gov or 603.271.3558.

FEBRUARY 4, 2016

PHASE IA ARCHEOLOGICAL ASSESSMENT OF THE MANCHESTER VETERANS AFFAIRS MEDICAL CENTER (VAMC), MANCHESTER, NEW HAMPSHIRE

PREPARED FOR:

VETERANS INTEGRATED SERVICE NETWORK 1
1 VA CENTER
AUGUSTA, MAINE 04330

R. CHRISTOPHER GOODWIN & ASSOCIATES, INC.
241 EAST FOURTH STREET, SUITE 100 ▪ FREDERICK, MD 21701

PHASE IA ARCHEOLOGICAL ASSESSMENT OF THE MANCHESTER VETERANS AFFAIRS MEDICAL CENTER (VAMC), MANCHESTER, NEW HAMPSHIRE

Ann B. Markell, Ph.D.
Principal Investigator

by

Ann B. Markell, Ph.D. and Martha R. Williams, M.A., M.Ed.

R. Christopher Goodwin & Associates, Inc.
241 E. Fourth Street, Suite 100
Frederick, Maryland 21701

February 2016

for

Veterans Integrated Service Network 1
1 VA Center
Augusta, Maine 04330

Abstract

This report has provided an assessment of archeological potential at the Manchester, New Hampshire Veterans Affairs Medical Center (VAMC) located at 718 Smyth Road. This assessment has been completed as part of a baseline archeological study for the facility in order to identify archeological resources that might be present, and to provide information essential to the VAMC's future planning. This archeological study incorporates the results of background research to provide a working context for potential pre-contact and historic period land-use within the 32-acre Manchester facility and the immediate vicinity. Research included a review of historic cartographic resources and historic aerial photographs to identify changes in land-use over time as well as to provide information on current conditions and ground disturbance. Additionally, historic plans and photographs provided by the VAMC were used to assess the extent of ground disturbance during grading, filling, and construction of the facility in 1948 – 1950. Site files and other information was accessed at the New Hampshire Division of Historic Resources (NHDHR) in April 2015, and a brief reconnaissance of the facility was undertaken in May 2015 to assess the current conditions at the facility.

Although the campus is in an area that initially would have possessed a relatively high potential for occupation and use during the Early Archaic through Contact periods, there is no archeological evidence for sites within the facility. Review of historic maps and data indicate that the project area remained undeveloped until 1888, when Governor Smyth built the Smyth Tower on the land as a retreat; that structure now is listed on the NRHP. No additional historic development occurred within the project area until 1948, when construction of the VAMC was started. In 2011, the Manchester VAMC complex was determined eligible for listing in both the state register and the NRHP (Casella and Bowers 2010)

Review of the documents related to construction of the VAMC indicated that construction has involved extensive disturbance to the natural soil stratigraphy from grading, filling, utility installation, and building and other infrastructure construction. The scope of disturbance and infrastructure development is such that it is unlikely that any stratigraphically intact archeological remains pre-dating the construction of the VAMC facility are present. Based on the results of this assessment, and assuming no planned impacts to the National Register-listed Smyth Tower, no further archeological work is recommended at the Manchester VAMC.

Table of Contents

Abstract ii

List of Figures iv

List of Tables vi

I. Introduction 1

Project Location 1
Research Objectives and Methods 1
Organization of the Report 5

II. Environmental and Cultural Setting 6

Environmental Setting 6
Physiography 6
Soils 6
Hydrology 6
Previous Cultural Resources Investigations 7
Previously Recorded Archeological Sites 7
Previously Recorded National Register Built Resources 7
Cultural Setting 7
Prehistoric Cultural Sequence 7
Paleo-Indian period (11,000-9,000 BP) 7
Archaic Period (9,000 – 3,000 BP) 10
Woodland (Ceramic) Period (3,000 BP – 450 BP) 11
Contact Period 11
Euroamerican Historic Cultural Sequence 11
Exploration and Settlement 11
Industry/Transportation/Commerce 12
Site Specific Context 12

III. Current Conditions and Cultural Resources Potential 17

Current Conditions and Campus Development 17
Archeological Potential 17
Disturbance Assessment 19

IV. Summary and Recommendations 23

Summary and Recommendations 23

References 24

Resumes of Key Project Personnel . . . . . **Appendix I**

List of Figures

Figure 1.1. Map of New Hampshire showing the location of the Manchester Veterans Affairs Medical Center (VAMC) in Hillsborough County. 2

Figure 1.2. Aerial view of the Manchester VAMC. 3

Figure 1.3. Excerpt from the Manchester North (1981) USGS 7.5' quadrangle, showing the location and boundaries of the Manchester VAMC. 4

Figure 1.4 Plan of the Manchester VAMC, showing buildings, infrastructure, landscaping, and topography. This plan was completed prior to the most recent construction in 2015. Plan courtesy of the Manchester VAMC. 5

Figure 2.2 Photograph of the Manchester VAMC facility. View to the north. (Photograph by RCGA). 9

Figure 2.1 Photograph of Smyth Tower in 2015. View is to the north. (Photograph by RCGA). . .9

Figure 2.3. Excerpt from J. Chace's 1858 Map of Hillsborough County, New Hampshire, showing general location of the VAMC project area (Image courtesy New Hampshire Historical Society. 13

Figure 2.4. Excerpt from 1892 map of the City and Town of Manchester, NH (Image provided by New Hampshire State Historic Preservation Office). 14

Figure 2.5. Excerpt from 1921 US Geological Survey Suncook, New Hampshire, 15-minute topographic quadrangle, showing location of the project area (Image: mytopo.com) 15

Figure 2.6 The original configuration of the Manchester VA Hospital in 1948 (from Casella and Bowers 2010) 16

Figure 3.1 Aerial view of the Manchester VAMC. (Courtesy Google Earth 2016). 18

Figure 3.2 View of the eastern boundary of the Manchester VAMC, showing the relatively steep slope. (Courtesy Google Earth 2015) 18

Figure 3.3 Circa 1948 grading plan for the Manchester VAMC facility. (Courtesy Manchester VAMC) 20

Figure 3.4 Photograph of utility installation near VAMC hospital. View to the northeast. (Photograph by RCGA) 21

Figure 3.5 Photograph of landscaped area with planted trees in southwestern corner of the Manchester VAMC. View is to the south (Photograph by RCGA) 21

Figure 3.6 View of pump house in the southwestern corner of the Manchester VAMC, taken from Smyth Road. View is to the north. Courtesy of Google Earth 2015. 22

List of Tables

Table 2.1 Cultural Resources within 1.5 miles of the Manchester VA Medical Center, Manchester, New Hampshire. 8

Chapter I

Introduction

This report provides an assessment of archeological potential at the Manchester, New Hampshire Veterans Affairs Medical Center (VAMC) located at 718 Smyth Road (Figures 1.1 and 1.2). This assessment has been completed as part of a baseline archeological study for the facility in order to identify archeological resources that might be present, and to provide information essential to the VAMC's future planning. These investigations are not required for any undertakings that are planned at the time of this writing, but are intended to provide baseline information to the VA campus that will support facility management and future project planning. This study is part of a larger effort being conducted at the Veterans Integrated Service Network (VISN) located in New England (VISN 1). Facilities also under archeological study are in Providence, Rhode Island; Newington and West Haven, Connecticut; White River Junction, Vermont; and five campuses in Massachusetts. The study is being completed under contract to VISN 1, and in addition to the archeological assessments, includes survey of medical facility interiors and monuments.

This archeological study incorporates the results of background research to provide a working context for pre-contact and historic period land-use within the Manchester facility and the immediate vicinity. Also included is a review of historic cartographic resources and historic aerial photographs that was intended to identify changes in land-use over time as well as to provide information on current conditions and ground disturbance. An assessment of archeological potential is included in this report. Based on the results of this assessment, and assuming no planned impacts to the National Register listed Smyth Tower, no further archeological work has been recommended at the Manchester VAMC.

Project Location

The Manchester VAMC is located at 718 Smyth Road in the City of Manchester, Hillsborough County, New Hampshire. It is a campus comprising 32.3 acres, bounded on the southeast by Smyth Road, on the north by residential properties along Holmes Drive and Patricia Lane, and on the southwest by residential lots that front Hillhaven Road. The main building complex is located at the center of the triangular-shaped property, and is surrounded by a series of support structures, parking lots and landscaped grounds (Figure 1.3). The initial construction of the VAMC facility was in 1948-1950, on property initially owned by Frederick Smyth, governor of New Hampshire from 1865 to 1867. That property included the Smyth Tower, built by Governor Smyth in 1888 as a replica of a Scottish lookout tower, and intended as a private retreat. The Smyth Tower and 11 acres surrounding it were donated in 1939 to the City of Manchester by Governor Smyth's widow; after the end of WWII, she donated the land for the VAMC to the federal government. A number of buildings have been added to the campus since the original construction in 1948 – 1950, with major construction in 1975, 1979, and 1988 (Figure 1.4). The Manchester VAMC property includes two NRHP-listed or eligible historic properties. The Smyth Tower was listed in the NRHP in 1978. In 2011, the Manchester VAMC complex itself was determined eligible for listing in both the state and National Registers (Casella and Bowers 2010); however, as of May 2015, the complex had not been entered into the online National Register database (NPS 2015).

Research Objectives and Methods

Background research conducted for this project included on-site review of the archeological and architectural site files and relevant archeological reports maintained at the New

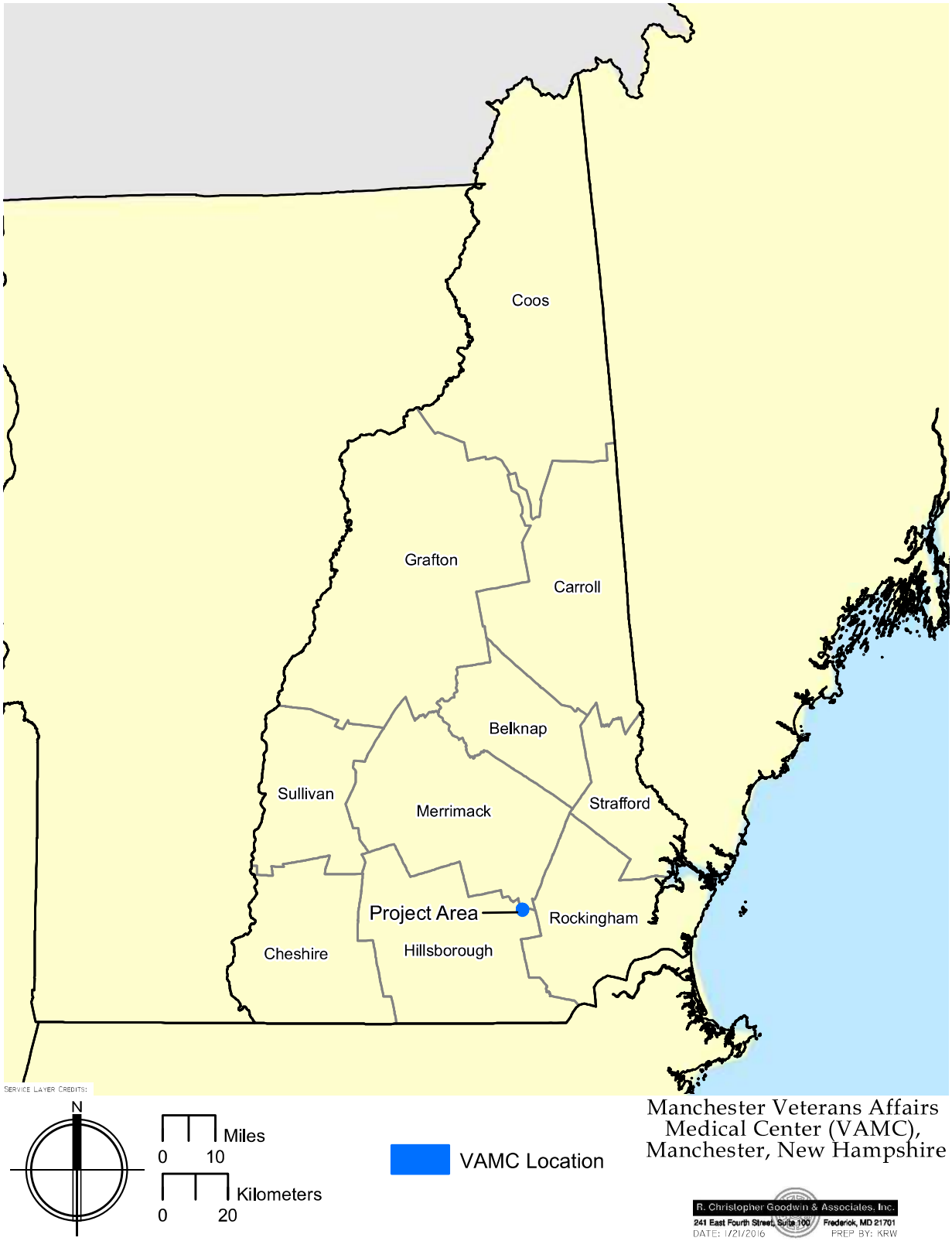

Figure 1.1. Map of New Hampshire showing the location of the Manchester Veterans Affairs Medical Center (VAMC) in Hillsborough County.

Figure 1.2. Aerial view of the Manchester VAMC.

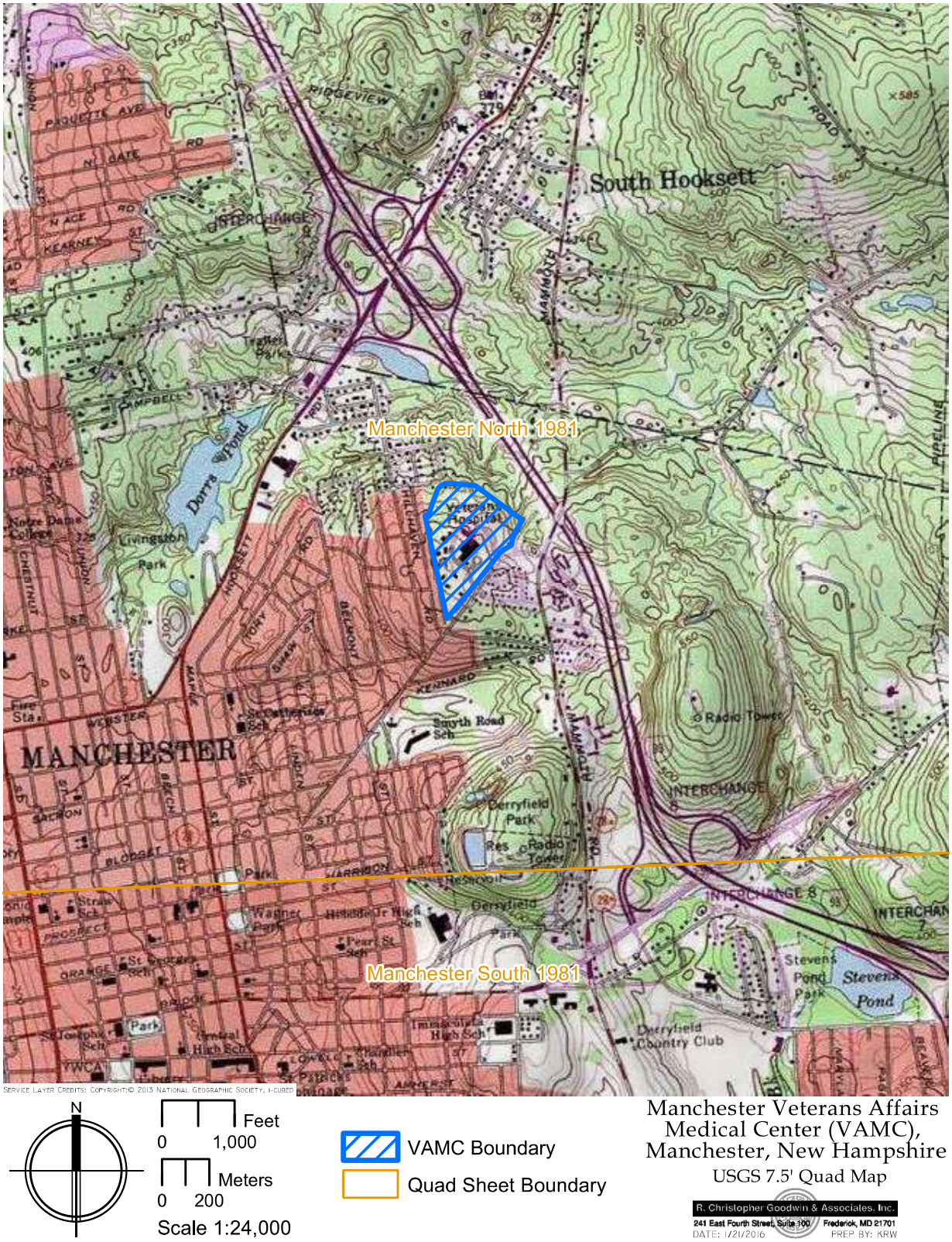

Figure 1.3. Excerpt from the Manchester North (1981) USGS 7.5' quadrangle, showing the location and boundaries of the Manchester VAMC.

Figure 1.4 **Plan of the Manchester VAMC, showing buildings, infrastructure, landscaping, and topography. This plan was completed prior to the most recent construction in 2015. Plan courtesy of the Manchester VAMC.**

Hampshire State Historic Preservation Office in Concord. Site file information on built resources was augmented by referring to the NRHP research database maintained by the National Park Service and to the NRHP nomination form for the VAMC facility. Background material used to formulate the prehistoric and historic contexts for the report was obtained from a variety of online sources, as well as from sources contained in Goodwin & Associates, Inc.'s extensive in-house reference library. A site visit and brief reconnaissance to assess current conditions at the VAMC was undertaken in June 2015.

Organization of the Report

Chapter I of the report is this introduction to the project. Chapter II presents information on previous investigations in the vicinity of the project area, as well as relevant summaries of the natural and cultural settings in the region. Chapter III is a review of current conditions and topographic changes and disturbances, using historic maps and aerial photographs. Included is an assessment of potential for depositional integrity and intact cultural deposits within the VAMC campus. Chapter IV provides a summary of the study results and recommendations. Appendix I contains resumes of key project personnel.

Chapter II

Environmental and Cultural Setting

Environmental Setting

Physiography

The Manchester VAMC campus is located within the Seaboard Lowlands section of the New England physiographic province (Flanagan et al. 1999) in New Hampshire. The elevation at the facility ranges from 422 ft above mean sea level (amsl) at the northern boundary of the campus to approximately 472 ft amsl at the base of the Smyth Tower. The campus occupies a hilltop in an area of rolling topography in the northeastern section of Manchester. It is located approximately 1.5 miles east of the Merrimack River, and approximately 2.5 miles north of the confluence of the Merrimack and the Piscataquog Rivers; it is 0.5 miles east of Dorr's Pond.

The area of the Merrimack River valley where the facility is located was inundated during the retreat of the Late Wisconsin glaciation, beginning between 15,000 and 17,000 years ago (Flanagan et al. 1999:8); glacial melt was complete by about 12,000 years ago (Bond and Handler 1981). Historically farmland, the VAMC campus currently is located in a semi-urban setting, surrounded by residential development, and with one major interstate highway (I-93) less than a mile from its easternmost corner.

Soils

Much of the information on soils was accessed through the USDA Natural Resources Conservation Service (NRCS) Soil Survey and Geographic Database (SSURGO). The soils at the VAMC were formed in glacial deposits which were deposited either as till or as sand and gravel terraces along streams and drainages. These soils are underlain by metamorphic and igneous rocks of the Littleton Formation in the uplands and by the mostly schist, phyllite, and granite of the Merrimack Group in the Seaboard Lowlands (Bond and Handler 1981:2). Within the VAMC campus, the soils primarily are associated with the Canton-Urban Land (CoC) complex which comprised approximately 91.7 per cent of the soils within the facility, occupying most of the central and southern portions of the property. A small area (n=1.3 per cent) of Canton stony fine sandy loam (CmB) is present in the extreme eastern edge of the parcel, as is a narrow band of Canton very stony fine sandy loam (CnC) that is mapped for the northeastern and northwestern edges of the property; that soil comprises 7 per cent of the soils at the facility.

Hydrology

The Manchester VAMC is within the Merrimack River Drainage. The Merrimack River originates to the north, and flows southward through the center of Hillsborough County, eventually turning northeastward and emptying into the Atlantic Ocean. The VAMC campus is located approximately 1.5 miles (2.4 km) from the Merrimack River which flows west of the site. An unnamed drainage originates northeast of the property and passes to the north, feeding both Dorr's and Stevens ponds, and drains into the Merrimack River to the west of the VAMC site. The Amoskeag Falls are located west of the VAMC Campus, and have been the focus of historic and prehistoric activity in the Manchester area (Dincauze 1976). The Manchester area includes several lakes and ponds. One of the largest lakes, Massabesic Lake is located 2.80 miles (4.50 km) southeast of the VAMC site; two ponds (Dorr's Pond and Stevens Pond) are located less than one mile north and west of the VAMC campus. The lakes, in particular Massabesic Lake, also have been a focal point for prehistoric activity (Tumelaire et al. 2012).

Previous Cultural Resources Investigations

The archeological site files and reports at the State Historic Preservation Office in Concord confirm that no archeological sites have been identified and no archeological surveys have been conducted within the boundaries of the Manchester VAMC complex. Following is a brief review of sites within a 1.5 mile radius of the VAMC.

Previously Recorded Archeological Sites

A review of archeological site flies at the NHSHPO in Concord, indicated that six sites lie within 1.5 miles of the VAMC property (Table 2.1). All are located within or immediately adjacent to the floodplain of the Merrimack River, and relate most closely to the state's historic context theme *#1106: Native American Indian Riverine Adaptation/exploitation (*NHDHR 2006: j-4). The river's floodplain has been subjected not only to repeated and intensive industrial and transportation-related development, but also to early avocational archeological surveys, particularly those conducted by Berry in the 1940s (Kenyon 1985). Many archeological and analytical studies subsequently have been conducted in the area, particularly those related to the Neville (27-HB-0077), Neville II (27-HB-0365), and Smyth (27-HB-0076) sites (e.g. Dincauze 1976; Foster et al.1980; Boisvert 2005). These studies have provided significant insights into the prehistory of northern New England and have linked the prehistoric cultures of this area to those found in regions further south and west.

Previously Recorded National Register Built Resources

Examination of the online data base for the National Register of Historic Places suggests that most listed resources are located within the downtown core of the City of Manchester. Particular emphasis has been given to structures and buildings that are tied to the city's industrial history. For example, five districts of worker/tenement housing erected by the Amoskeag Manufacturing Company between 1845 and 1916 were combined into the Amoskeag Manufacturing Company Housing Thematic Group, and were listed in the National Register of Historic Places (NRHP) in 1982 (National Park Service [NPS] 2015). Other manufacturing complexes, such as the Hoyt Shoe Factory (Hengen 1985), have been listed separately

The Manchester VAMC property encompasses two NRHP-listed or eligible historic properties (Table 2.1). The Smyth Tower is a three-story granite and stone landmark, 40 ft high and 24 ft in diameter, that was built in 1888 by Frederick Smyth, the former mayor of Manchester and later governor of New Hampshire (Brown 1972) (Figure 2.1). The structure was listed in the NRHP in 1978. In 2011, the Manchester VAMC complex itself (Figure 2.2) was determined eligible for listing in both the state and National Registers (Casella and Bowers 2010); however, as of May 2015, the complex had not been entered into the online National Register database (NPS 2015).

Cultural Setting

Prehistoric Cultural Sequence

The prehistoric chronology developed for northern New England, in common with most prehistoric chronologies developed for the Eastern United States, follows a tripartite sequence of Paleo-Indian, Archaic and Woodland, but also includes the Contact Period as a separate temporal unit. Within each of these four units are a number of local and regional phases, complexes and traditions (Davis et al. 1997:27).

Paleo-Indian period (11,000-9,000 BP)

As Pleistocene-era glaciers slowly retreated from across northern New England, isostatic rebound initially exposed new areas of coastal land. By circa 11,500 BP, these coastal areas began to develop open coniferous woodlands, whose principal tree species included spruce, balsam, birch and poplar. Marsh environments also presented particularly attractive settlement niches, due to diversity of resources there. Such environments would have attracted game animals, which in turn would have drawn human populations. Although Paleo-Indian peoples often have been characterized as 'big game hunters' who may have tracked larger species such as caribou, they also exploited smaller species such as beaver and arctic fox (Davis et al. 1997:28-29).

The most commonly recognized Paleo-Indian diagnostic artifact, the classic fluted point,

Table 2.1 Cultural Resources within 1.5 miles of the Manchester VA Medical Center, Manchester, New Hampshire

Site Number	Site Name	Chronology	Function	Comments/Summary
			Archeological Sites	
27 HB0076	Smyth Site	Prehistoric: Paleo; Middle to Late Archaic; Early to Late Woodland	Prehistoric: Fishing station, Habitation/ Village, Workshop, Cemetery	Within Merrimack River drainage, floodplain and adjacent terraces. East bank of river at Amoskeag Falls. Artifact collection includes bifaces, unifacial tools, Prehistoric ceramics, beads (bone, shell, clay and copper), brass bird effigy, steatite bowl fragments, ground slate tools, plummet, hammerstones, cores, drills. Site measures approx 360 m^2. Subsequently destroyed by construction of approach ramp. Historic site association with residence of former Governor Smyth, but no historic materials found or collected. Site now destroyed
27 HB0077	Neville Site	Prehistoric: Middle to Late Archaic; Early to Late Woodland	Prehistoric: Major Village	Site destroyed by construction of Amoskeag bridge. Site was contiguous to the Smyth Site, and part of larger complex that included many other sites along the Amoskeag River at the falls. This complex was used recurrently by many unidentified groups through the Late Woodland period.
27HB0080	Amoskeag East Bank-Berry #15	Prehistoric: Middle Archaic, undetermined Woodland	Prehistoric: Open habitation	Surveyed in 1933. Artifacts located at Manchester Historical Association. Junction of Ray brook tributary and Merrimack River. Site collection includes 170 pottery sherds (undecorated, decorated, and spalls); 1 stemmed point, non-diagnostic point fragments, a drill, flakes and a ground stone pendant or gorget.
27HB0085	North River Road (NH 38-42)	Prehistoric: Middle Archaic, undetermined Woodland	Prehistoric: Open habitation	Artifacts located at Manchester Historical Association. Collection includes lithic debitage, ceramic fragments, bifacial tool. Site now destroyed. Site investigated during construction; 23 STs dug at 5m intervals. Decorated ceramics suggest Middle Woodland period. Some historic materials present, reflective of domestic occupation.
27HB229	Manchester Armory Native American Indian Site	Prehistoric: Early Woodland Historic: post 1938	Prehistoric: camp site; Historic: Govt installation	Shovel tests and test unit excavations used to investigate. Principal context: Native American Indian riverine adaptation/exploitation. Majority of material comprised lithic quartz debitage; one fragment of Vinette also found. A hearth feature also was found. Probably linked to the Neville and Smyth sites upstream. Deeply buried site with intact material below surface disturbance and fill episodes.
27HB362	Neville II (NH 38-106)	Prehistoric: Middle to Late Archaic; Middle to Late Woodland; Historic: 1600-1650 est	Prehistoric: Fishing station and habitation site Historic: domestic	Shovel testing and block excavation undertaken by NHDCR in 2005. Protohistoric occupation documented by presence of trade beads commingled with Contact period incised ceramics. Site has been assessed as significant, as representing multi-component sites surrounding Amoskeag Falls. Prehistoric assemblage comprised largely of debitage (quartz, hornfels, rhyolite, chert, quartzite), with smaller amounts of various tools, cores, bifaces, etc. Historic material also includes coal/clinker. Historic ceramics include creamware, whiteware, stoneware, porcelain as well as glass.
			Standing Structures	
	Smyth Tower	1877	Domestic/	Part of Governor Smyth's summer house complex outside of town. Listed in National Register 1977.
	VA Hospital, Manchester	1948-1988	Institutional	Original block constructed between 1948 and 1950, with subsequent facilities added. Main building is 8-story brick clad structure with limestone belt courses. James A Ritchie & Associates architects utilized Modern Movement principles for design. Fuller Construction was building contractor. Landscape design by Shurcliff and Shurcliff, landscape architects. All firms from Boston. Determined individually eligible (2011) for listing in State and National Registers under Criteria A and C.

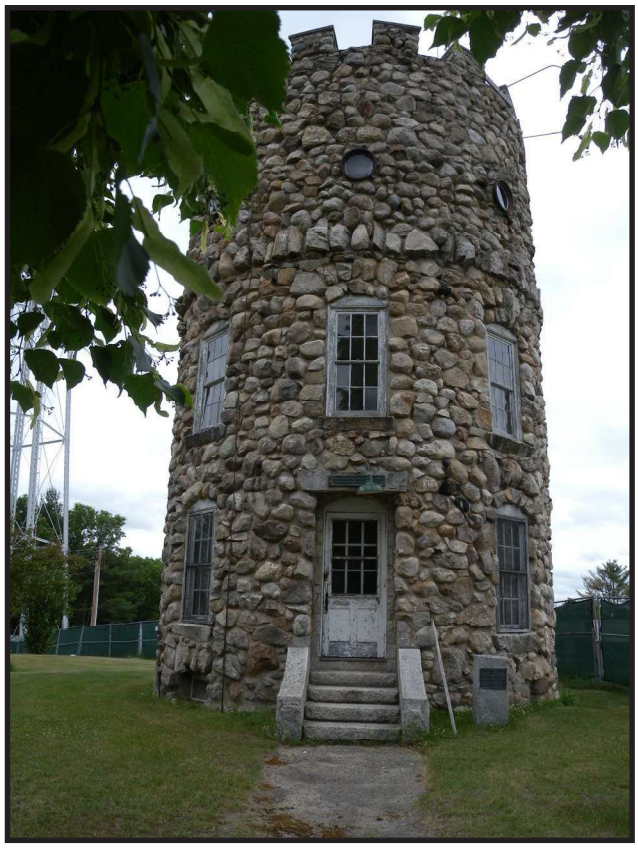

Figure 2.1 Photograph of Smyth Tower in 2015. View is to the north. (Photograph by RCGA).

Figure 2.2 Photograph of the Manchester VAMC facility. View to the north. (Photograph by RCGA).

has been found on sites as far north as Debert in Nova Scotia. Several such points were recovered from the Smyth and Neville sites in Manchester (Foster et al. 1980:61; Dincauze 1976:118); however, Dincauze argued that their presence did not indicate primary occupation of the Manchester area during the Paleo-Indian period, but rather that they had been "imported" at a later time from other sites in the region (Dincauze (1976:118).

In Northern New England, a late Paleo-Indian horizon interpreted as transitional to the Early Archaic period, has been noted. Coinciding with the amelioration of climatic conditions ca. 10,000 BP, this horizon is notable for the appearance of parallel-flaked lanceolate bifaces. During this period, a small shift has been noted in settlement patterns from the well-drained sandy landforms favored by the fluted point makers to sites located closer to rivers or lakes (Davis et al. 1997:30-31).

Archaic Period (9,000 – 3,000 BP)

During the Archaic Period, which spanned nearly six millennia, continued climate moderation and environmental changes resulted in the adoption of more focused seasonal foraging and subsistence strategies, and with that, development of new toolkits. Technologically distinct tool types serve as diagnostic markers for the three sub-periods of the Archaic.

Early Archaic (9,000 – 8,000 BP) sites in Northern New England most often tend to cluster around rivers and lake shores, suggesting that aquatic resources became an increasingly significant component of the regional subsistence strategy. The area around Manchester encompassed both riverine and lacustrine ecotones whose resources attracted prehistoric peoples throughout the Archaic Period. Dincauze (1976) postulated that the Amoskeag Falls on the Merrimack River at present-day Manchester emerged after approximately 8,000 B. P. as a significant settlement locus that was tied to spring fish runs.

Some components of the Early Archaic artifact assemblages—most particularly the bifurcate points--have suggested cultural ties with sites and groups recognized further south and west (Davis et al. 1997:35). According to Robinson (1992, quoted in Wheeler and Tumelaire 2011:11), the Early Archaic in northern New England also embraced "a flaked stone industry dominated by core and uniface technology and by the early development of a diverse assemblage of ground stone tools, including full-channeled gouges, adzes, and ground stone rods." Collectively, some have grouped this suite of technologies into a "Gulf of Maine" tradition, which geographically includes the Merrimack watershed (Robinson 1992; Wheeler and Tumelaire 2011).

Subsistence strategies and settlement patterns during the Middle Archaic (8,000 – 6,000 BP) in northern New England appear to be a continuation of those that emerged during the Early Archaic, with perhaps an even greater reliance on aquatic resources. The falls of the Merrimack River at Manchester were occupied most consistently and intensively during this period (Dincauze 1976:119). Approximately four km east of Manchester around the northern end of Lake Massabesic, a cluster of Middle and Late Archaic sites reflects prolonged or recurrent use of lacustrine environments as well (Tumelaire et al. 2012). Two complexes, identified technologically as Neville and Stark after the dominant projectile points, prevailed through the Middle Archaic (Davis et al 1997:36). In addition to those diagnostic points, Middle Archaic tool assemblages include wedge-shaped unhafted flake knives, atlatl weights, full grooved axes, cobble hammers, and heavily flaked choppers, as well as ulus, plummets and gouges used for woodworking (Snow 1980:183-184; Tumelaire et al. 2012:6).

The Late Archaic period (6,000 – 3,000 BP) is marked by a proliferation in the numbers of sites, ostensibly reflecting an increasing population and/or more successful adaptation to the evolving environment (Davis et al. 1997:37). Three distinctive cultural traditions are recognized for this period. The earliest of these, the Laurentian, is thought to have originated to the west in New York and Vermont; diagnostic projectile points include Brewerton, Otter Creek, Normanskill, and Vosburg types. The Small Stemmed Point Tradition (Squibnocket, Small Stemmed, and Rossville projectile points) apparently was primarily a coastal phenomenon; sites of this tradition reflect exploitation of a highly diverse subsistence base that included both large terrestrial species and marine resources. The Susquehanna

Tradition appeared in New Hampshire around 3,900 BP; stylistically its artifacts are linked to cultures that are more commonly associated with the Mid-Atlantic states. The Susquehanna tradition is marked by the adoption of a new stone tool technology based on large stemmed bifaces known as broadspears (Davis et al 1997:37-38). Diagnostics from all three Late Archaic traditions have been recovered at the Smyth Site in Manchester (Foster et al. 1980:62).

Woodland (Ceramic) Period (3,000 BP – 450 BP)

The Archaic-based subsistence model of seasonal foraging gradually became more generalized during this time, and it ultimately was supplemented by the adoption of corn-beans-squash horticulture, although the timing of this development is open to debate (Tumelaire et al. 2012:9). General adoption of horticulture likely also led to a more sedentary lifestyle, perhaps centered on villages. Although intertribal warfare may have prompted the construction of palisades around villages, Foster et al. (1980:64) suggest that such defensive measures probably were a reaction to European incursions.

The tri-partite temporal classification applied to Woodland Period sites is based primarily on analysis of changing ceramic vessel forms, temper types, and decorative techniques. Crushed-rock tempered, cord-marked Vinette I ceramics, together with side-notched Meadowwood and Steubenville projectile points, are the diagnostic artifacts of the Early Woodland period in New England, a period during which the resident population seems to have declined (Foster et al. 1980:63). Temporally diagnostic artifacts of the Middle Woodland period (2,000-1,000 BP) include Jacks Reef points and dentate-stamped and cord-wrapped stick impressed pottery that first was identified by Ritchie in New York (Foster et al. 1980:63-64; Wheeler and Tumelaire 2011:13). Late Woodland ceramics, often described as "Iroquois-like" with incised decorations and castellated rim designs, most frequently are found in association with triangular Levanna and Madison points (Davis et al. 1997:39-40).

In the Manchester area, the multi-component Smyth site may represent a major Late Woodland village site, possibly the permanent residence of the Pennacook leader, Passaconaway (Blood 1948:20). According to Stinson et al. (1999:9), the Late Woodland components at the Smyth Site reflected nearly year-round occupation during spring, summer and fall. Eight Late Woodland period burials also were reported at this site.

Contact Period

By the time of contact with Europeans, the Algonkian-speaking tribes of northern New England had formed a loose political alliance known as the Pennacook Confederation, whose principal village was located near Concord (Davis et al 1997:40). European trade goods such as sheet metal and glass beads are diagnostic indicators for sites of this period; some have been reworked into more traditional types of implements (Tumelaire et al. 2012:9). As the seventeenth century wore on, the combined effects of the fur trade, disease, warfare, and European interference with traditional subsistence patterns contributed to a decline in aboriginal populations throughout New England (Foster et al. 1980:65).

The first documented encounters between Europeans and the native populations of the Merrimack River Valley occurred when surveyors from the Massachusetts Bay colony ascended the river in 1638. The local tribes around Manchester evidently managed to retain legal control of their lands until ca. 1685, and an active Indian community remained in the area until the early years of the eighteenth century (Tumelaire et al. 2012:13-15).

Euroamerican Historic Cultural Sequence

New Hampshire's State Historic Preservation Plan for 2006-2010 (NHDHR 2006) develops an extensive list of historic contexts and sub-themes. The history of the Manchester area relates most directly to sub-themes listed under four contexts: Exploration and Settlement; Industry; Transportation; and Commerce, Community Planning, Cultural Landscapes.

Exploration and Settlement

The first patents and land grants in the Manchester area were awarded in the mid-eighteenth century, and as settlers moved in, they formed

several early communities, including Tyngstown, Londonderry, and Old Harrytown. What is now Manchester initially was incorporated in 1751 as Derryfield. There was a considerable amount of controversy over conflicting claims and grant boundaries, so much so that the area became known colloquially as "the debatable ground." The ethnic composition of the area's population at that time was primarily English and Scotch-Irish (Blood 1948:31, 37).

Industry/Transportation/Commerce

The industrial potential of the Amoskeag region, particularly the power source presented by the falls, first developed in the late eighteenth century when a sawmill was sited at Amoskeag just before the Revolution (Stinson et al. 1999:17, 20). By 1810, optimistic entrepreneur Samuel Blodgett had re-named the eighteenth century town of Derryfield after one of England's most thriving industrial centers: Manchester (Blood 1948:94).

The Manchester region's first major industrial complex was the Amoskeag Cotton and Wool Manufactory, which opened in 1810 on the west bank of the river. The enterprise was especially profitable during the War of 1812, when foreign textile imports were interrupted; however, it suffered financial reverses after the war, and eventually was acquired in 1825 a group of Boston investors associated with Samuel Slater (Blood 1948:96; Stinson et al. 1999:21). By the mid-nineteenth century, the Manchester region had become home to wide range of industrial enterprises, including a gas works, a paper mill, an edge tool factory, a locomotive works and foundry, a wall paper manufacturing concern, and several textile manufacturing companies (Stinson et. al. 1999:20-21). Industrial complexes lined both banks of the Merrimack River, and the towns of Amoskeag and Manchester saw significant growth. The work force, composed primarily of Irish immigrants, was housed in tenements built by the companies that employed them (NPS 2015).

Transportation developments played a key role in propelling the Manchester region into industrial prominence. In 1807/1808, Samuel Blodgett enhanced the commercial and industrial potential of the area by constructing a skirting canal on the east bank of the Merrimack to by-pass the obstacle to navigation. This waterway functioned until approximately 1840, although it subsequently was improved by outside investors associated with the Amoskeag Manufacturing Company (Blood 1948:82-92, 102; Stinson et al. 1999: 20). Rail service reached Manchester in 1835, as part of a route that ran from Concord to Nashua; local service commenced in 1842. The line later was absorbed into the Boston and Maine system (Stinson et al 1999:18).

The Civil War, which was supported enthusiastically by the region's population, brought additional prosperity to Manchester, as factories converted to wartime support, including the manufacture of flags, Springfield rifles and other firearms. After the war, shoe manufacturing joined the list of key industries that kept Manchester humming and its population growing with an influx of new immigrants, including French Canadians, Germans, Swedes, and in the 1890s, Greeks (Blood 1948:250, 288). Although declining profits in the early twentieth century led to wage and hour reductions and workers' protests (Stinson 1999:23), Manchester's generally prosperous economy lasted until the Great Depression. The Depression, among other effects, led to a declaration of bankruptcy and reorganization of the Amoskeag Manufacturing Company (Blood 1948:257; Hengen 1985:8-2). Further decline continued through the 1970s, and textile manufacturing, once the mainstay of Manchester's economy, ceased completely during that decade (Stinson 1999:23).

<u>Site Specific Context</u>

Virtually all of the developments detailed in the prehistoric and historic contexts above were centered largely along the Merrimack River, particularly around the Amoskeag Falls. Until Governor Smyth elected to construct his tower in 1888, it appears that the tract of land encompassed within the Manchester VAMC campus project area was vacant. J. Chace's 1858 map of Hillsborough County (Figure 2.3) indicates that two of the major thoroughfares that presently bracket the VA complex, historically Mammoth Road and Hookset Road, were in place by that

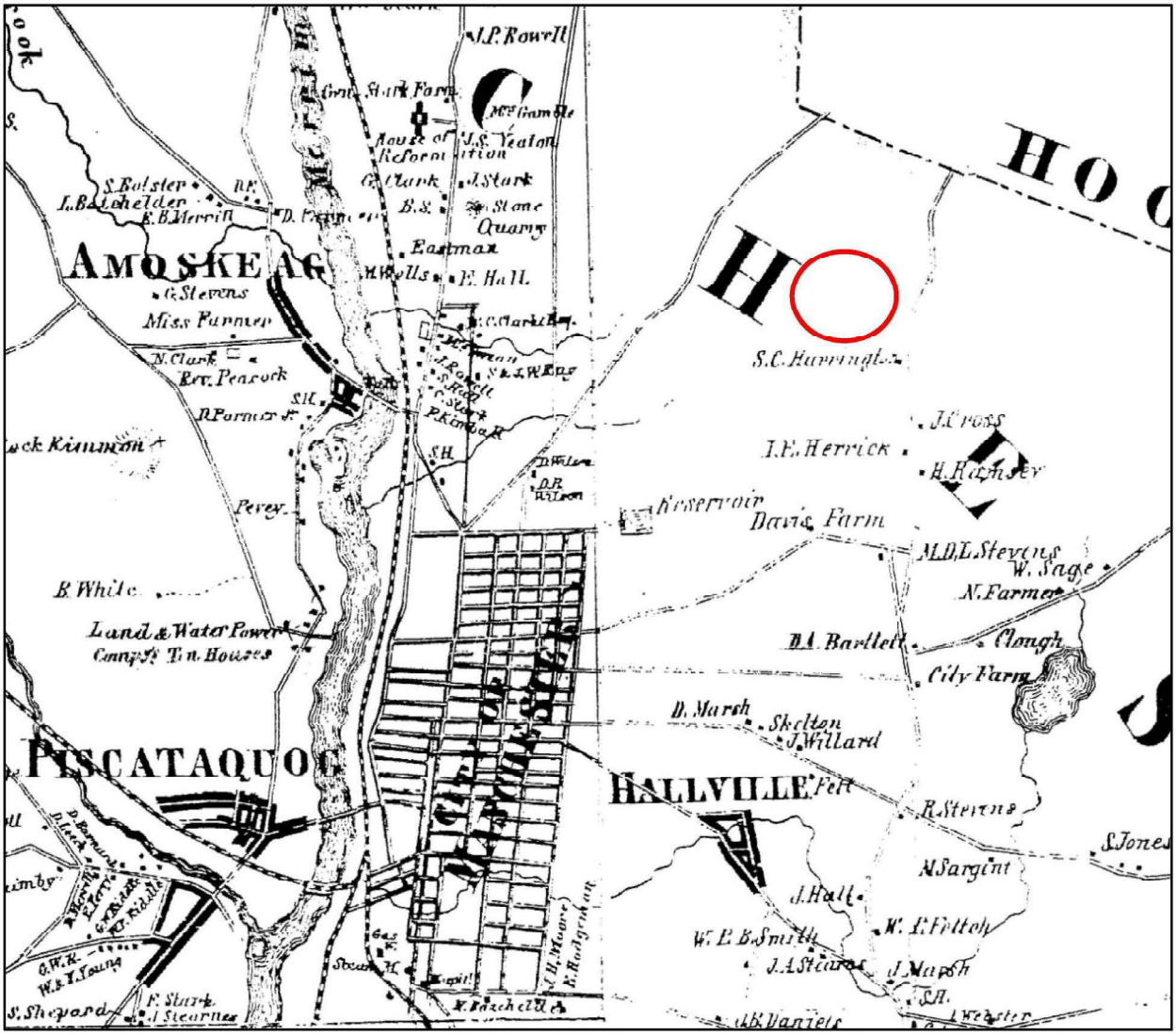

Figure 2.3. Excerpt from J. Chace's 1858 Map of Hillsborough County, New Hampshire, showing general location of the VAMC project area (Image courtesy New Hampshire Historical Society.

date. The landowner whose property was closest to the present project area at that time was S. C. Harrington. The 1860 Federal census for Hillsborough County lists a Samuel Harrington as a 43-year-old farmer, originally from New York, whose real estate holdings were valued at $1,000 (Ancestry.com 2015).

The property still was mapped as vacant in both 1892 and 1921 (Figures 2.4 and 2.5); apparently Governor Smyth's tower was not included on any post-1888 topographic maps of the area. With the exception of the Smyth Tower, the VA Hospital complex, constructed in 1948 (Figure 2.6), appears to have been the only construction episode on the site. According to Casella and Bowers' (2010:11), the initial construction was accompanied by "substantial" alteration of the original landform; in fact, removal of "a great deal of ledge" (bedrock) incurred additional construction expenses of $100,000.

Additional construction at the VAMC facility has continued since the completion of the initial campus in 1950. In 1977 and 1978, expansion of the campus included the addition of a Nursing Home Care unit and an Ambulatory Care unit. Additional expansion into existing space continued through the 1980s and included ancillary and support facilities, parking lots, and landscaped grounds (Casella and Bowers 2010).

Figure 2.4. Excerpt from 1892 map of the City and Town of Manchester, NH (Image provided by New Hampshire State Historic Preservation Office)

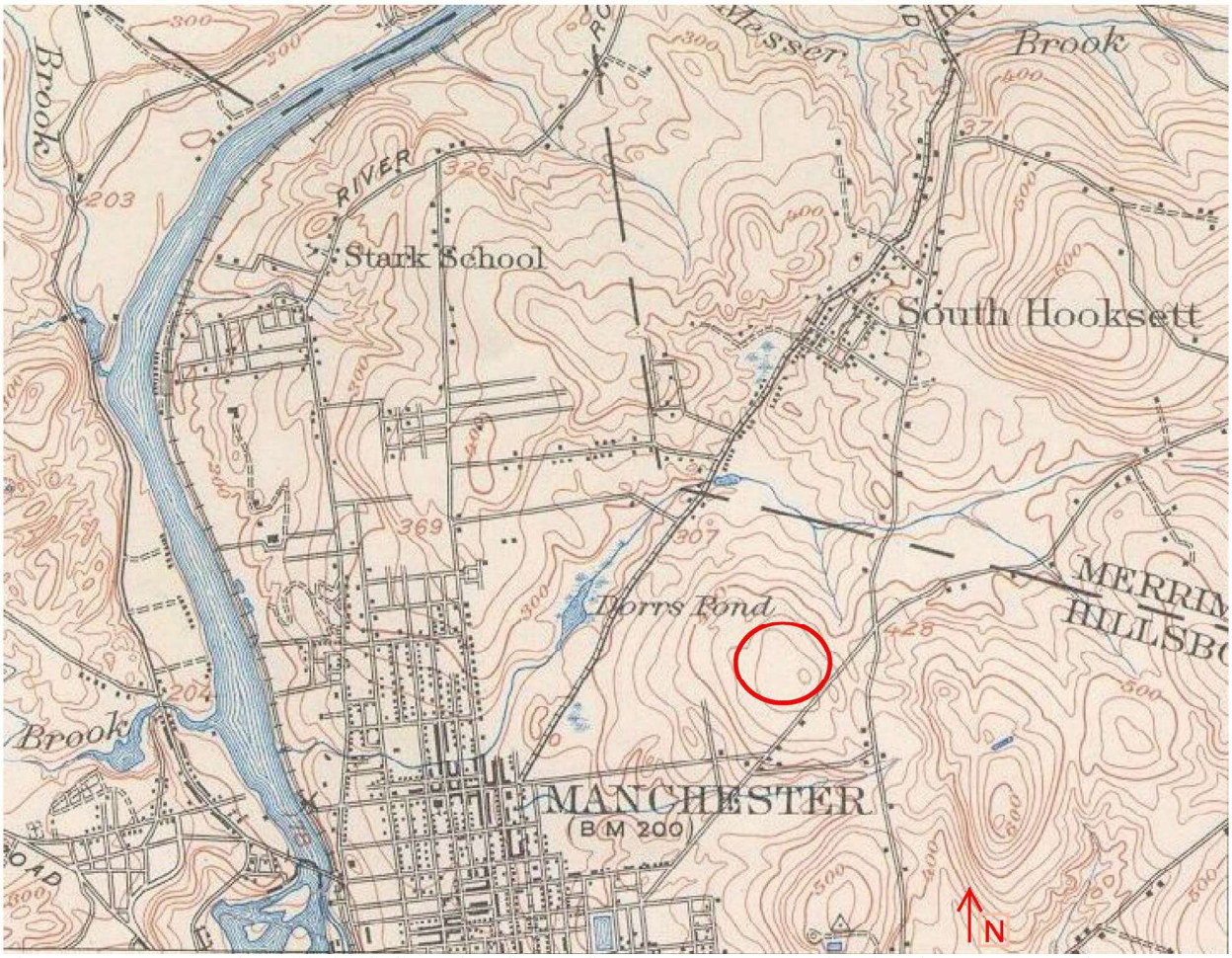

Figure 2.5. Excerpt from 1921 US Geological Survey Suncook, New Hampshire, 15-minute topographic quadrangle, showing location of the project area (Image: mytopo.com)

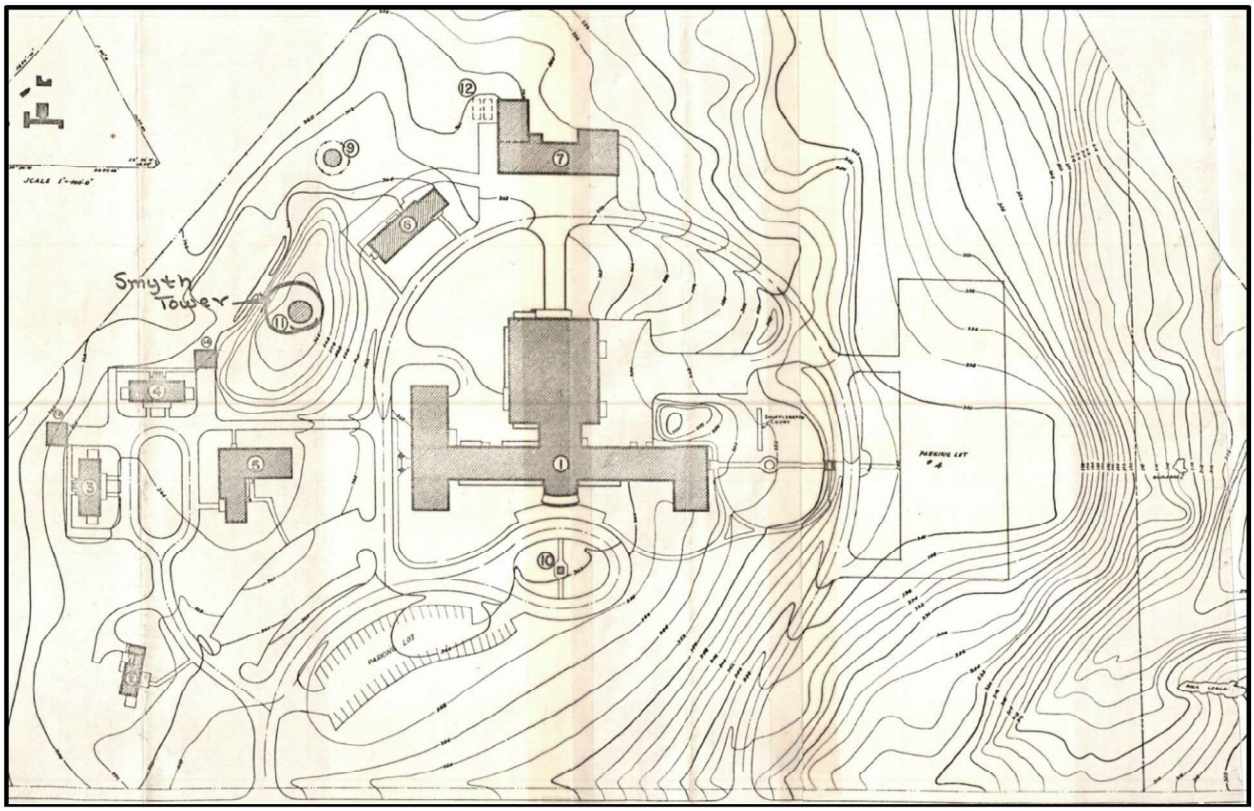

Figure 2.6 The original configuration of the Manchester VA Hospital in 1948 (from Casella and Bowers 2010)

Chapter III

Current Conditions and Cultural Resources Potential

This chapter provides a summary of the developmental history of the Manchester VAMC facility and describes the current conditions on the VAMC campus. Based on a review of these factors, as well as on a review of aerial photographs and historic maps, and on grading and construction plans provided by the VAMC, this chapter provides an assessment of the potential for intact cultural resources within the Manchester VAMC campus.

Current Conditions and Campus Development

The Manchester VAMC has a campus of approximately 32.3 acres in Hillsborough County, New Hampshire. Located at 718 Smyth Road in the City of Manchester, it is bounded on the southeast by Smyth Road, on the north by residential properties along Holmes Drive and Patricia Lane, and on the southwest by residential lots that front Hillhaven Road. The main building complex is located at the center of the roughly triangular property, and is surrounded by a series of support structures, parking lots and landscaped grounds (Figure 3.1). Like the Smyth Tower and its 11 surrounding acres, the property for the Manchester VAMC had been owned by Marion Smyth, widow of the former Governor Frederick Smyth. All of the land now occupied by the VAMC was donated by Marion Smyth to Manchester and the Federal government. Initial construction of the VAMC facility began in 1948, and the facility officially was opened in 1950. A number of buildings have been added to the campus since that date, with major construction in 1975, 1979, and 1988. Originally comprising only thirteen buildings (including the Smyth Tower), the current complex consists of more than 26 buildings and structures. Additional new facilities recently were completed in 2015. The only structure on the campus that pre-dates the original VA facility is the Smyth Tower, constructed in 1888, and listed on the National Register of Historic Places.

The majority of the facility is developed, with the exception of some areas along the northeastern, northwestern, and southwestern boundaries. Development in those areas has been impeded by relatively steep slopes (Figure 3.2), and by the installation of water utilities in the southwestern corner. Current conditions, including the extent of land modification and infrastructure development, were assessed during a brief reconnaissance of the facility in June 2015.

Archeological Potential

The location of the VAMC campus in an area of rolling hills east of the Merrimack River near the Amoskeag Falls, suggests potential for use by people taking advantage of the abundant resources at the Falls or around Lake Massabesic during the Early Archaic through the Contact periods. Although no sites have been recorded within or in the immediate vicinity of the Manchester VAMC facility, a number of previously identified archeological sites in the broader area reflect both historic and Native American activity around the Amoskeag Falls and to the east, around the northern end of Lake Massabesic. In that area, a cluster of Middle and Late Archaic sites reflects prolonged or recurrent use of lacustrine resources (Tumelaire et al. 2012). The Amoskeag Falls have been the focus of historic and prehistoric activity in the Manchester area, with temporally diagnostic evidence of Native American activity near the falls from the Early Archaic through the Woodland periods and into the seventeenth century. These sites include the Neville (27HB0077), Neville II (27HB0365), and

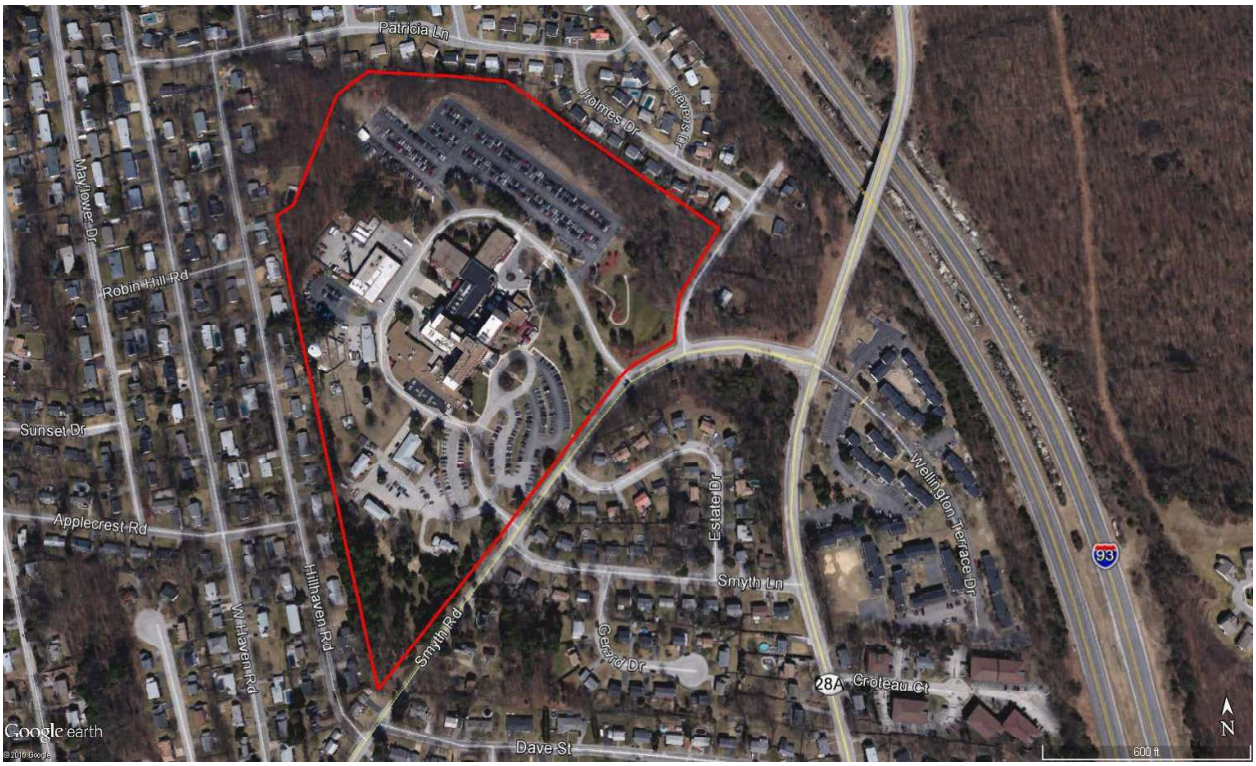

Figure 3.1 Aerial view of the Manchester VAMC. (Courtesy Google Earth 2016)

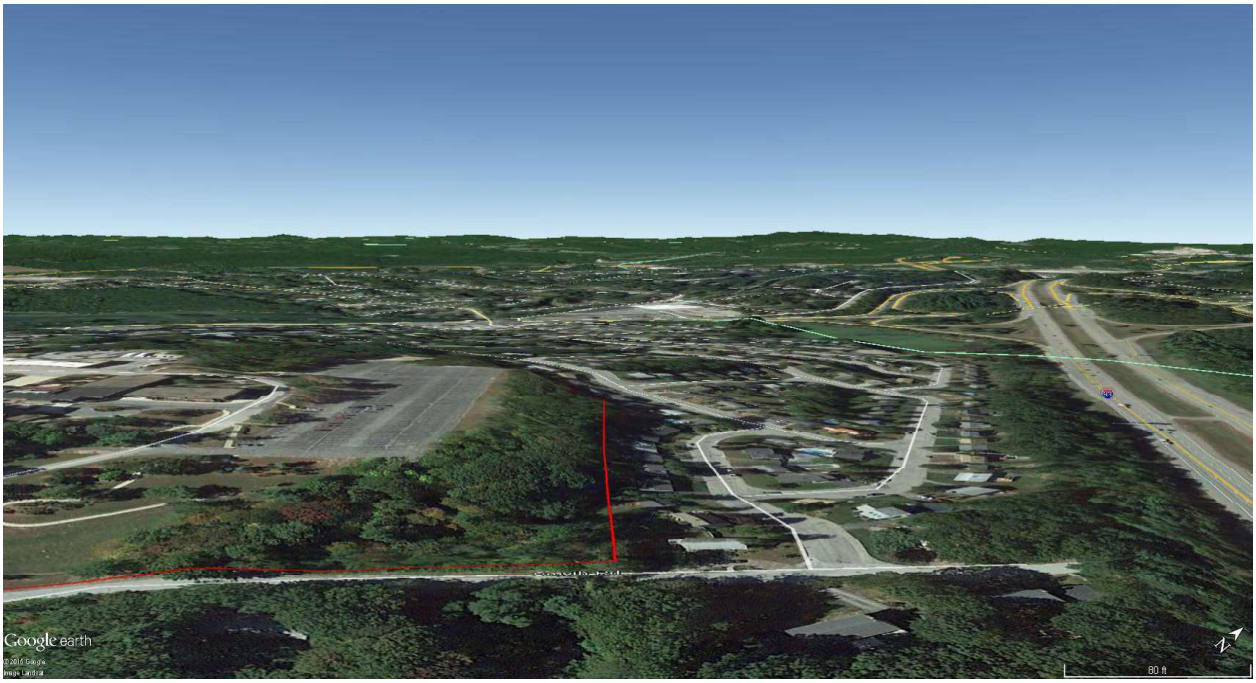

Figure 3.2 View of the eastern boundary of the Manchester VAMC, showing the relatively steep slope. (Courtesy Google Earth 2015)

Smyth (27HB0076) sites. The multi-component Smyth site, located near the Amoskeag Falls to the west of the VAMC Campus, may represent a major Late Woodland village site, possibly the residence of the Pennacook leader, Passaconaway (Blood 1948:20). The first documented interaction between Europeans and the native populations of the Merrimack River Valley occurred when surveyors from the Massachusetts Bay colony ascended the river in 1638. The local tribes around Manchester evidently managed to retain legal control of their lands until circa 1685, and an active tribal community remained in the area until the early years of the eighteenth century (Tumelaire et al. 2011:13-15).

The potential for post-Contact period use of the project area was not significant until relatively recently. The Manchester VAMC area was mapped as open land through most of the 19th century, and into the early 20th century. Until Governor Smyth elected to construct his stone tower in 1888, it appears that the tract of land encompassed within the Manchester VAMC campus project area remained open; the land may have remained wooded, or may have been used as agricultural fields or pasture. J. Chace's 1858 map of Hillsborough County (see Figure 2.3) indicates that the closest landowner was S. C. Harrington, a 43-year-old farmer, originally from New York, whose real estate holdings were valued at $1,000 (1860 U.S. Federal Census accessed in Ancestry.com 2015). Even after Governor Smyth built his tower, the land was mapped as vacant; no structures were shown on period maps.

Although Manchester became a center for industry and manufacturing early in the 19th century, most urban development was centered on the Amoskeag Falls and the Merrimack River. Dense development for the city of Manchester focused along the river, and the immediate environs of the VAMC remained relatively undeveloped until the 20th century. Most of the houses in the immediate vicinity were not built until the mid-twentieth century. The earliest development in the immediate area included several homes built along Webster Street and Mammoth Road by approximately 1892 (See Figure 2.4). In the late 19th century, the project area itself was part of the property owned by former New Hampshire governor Frederick Smyth. The rural nature of the area remained unchanged into the 20th century. In 1939 Marion Smyth donated the Smyth Tower and the surrounding land to the City of Manchester, and in 1948 construction began for the VAMC facility. After mid-century, development for the City of Manchester extended into the area surrounding the VA facility with the construction of residential neighborhoods.

Disturbance Assessment

Construction of the VAMC hospital began in 1948 and was completed in 1950. The grading plan (Figure 3.3), finalized in 1950, indicated extensive revision of the original landscape over most of the VAMC acreage. The grading plan indicated that even the slope of the small area surrounding Smyth Tower has been modified. In the footprint of the main hospital, as much as six feet of the top of the knoll were removed to level the grade; in many areas, contours were changed, and in the central portion of the campus, topsoil was added to the graded and contoured areas. Water, sewage, heating and other utilities were installed throughout the campus (Figure 3.4). The only area not heavily modified by grading and/or not affected by relatively steep slope was the southwestern corner at the intersection of Smyth and Hillhaven Roads. However, that small, sloping triangular area contains a pump house and water utility lines that cross towards the main hospital block. The grading plan and later facility plans also indicated extensive landscaping in the southwestern corner (Figures 3.5 and 3.6). Recorded soils also are indicative of the extensive and continuing development at the facility. Within the VAMC campus, the soils primarily are associated with the Canton-Urban Land (CoC) complex which comprises approximately 91.7 per cent of the soils within the facility, occupying most of the central and southern portions of the property. Within that soil complex, Urban Lands comprise approximately 35 per cent, while the Canton soils make up about 50 per cent of the total.

Thirteen buildings on the campus date from the original period of construction (including the Smyth Tower). Since that date there have been modifications to the property, including the addition of another 13 buildings. Two later twentieth

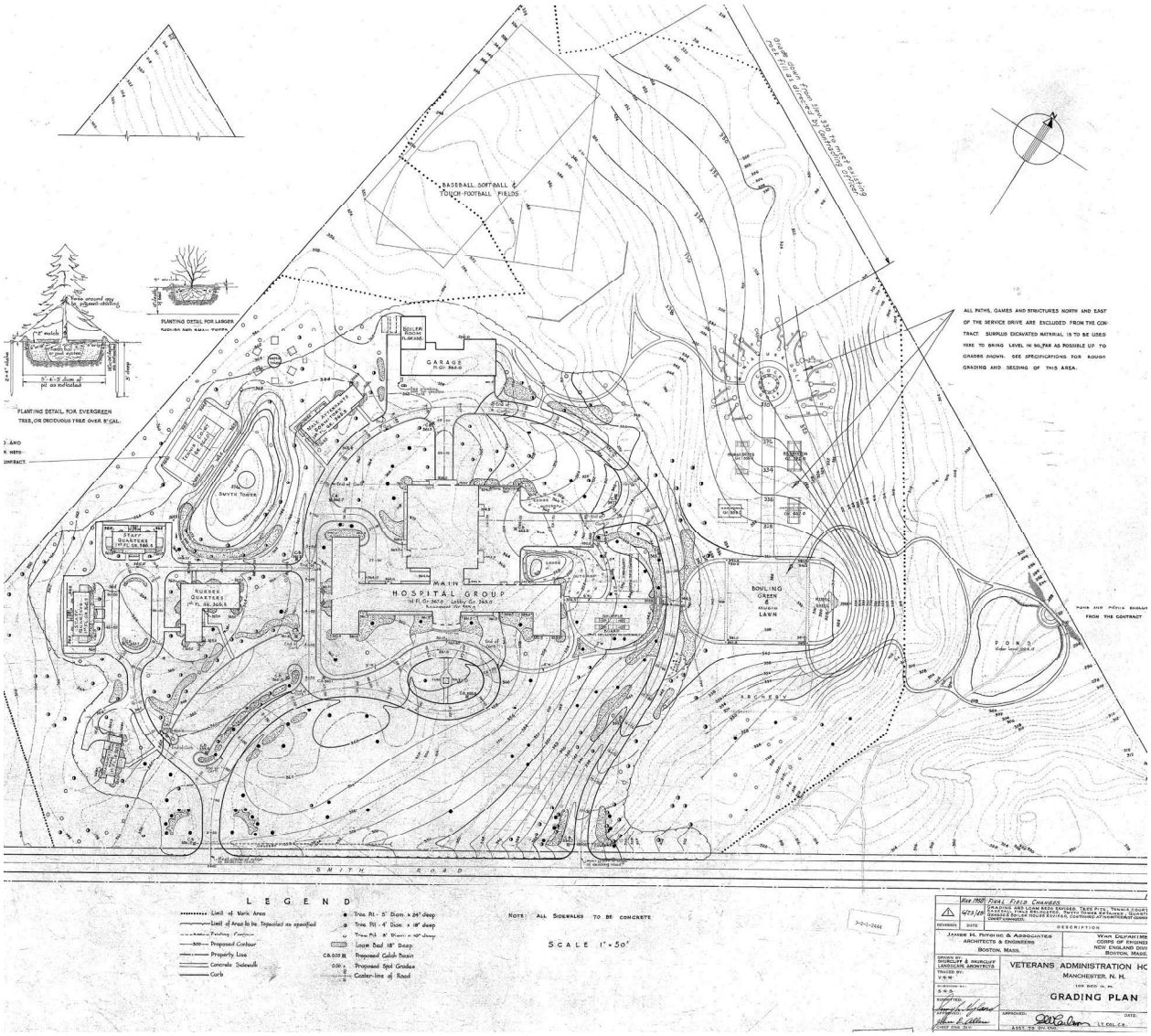

Figure 3.3 Circa 1948 grading plan for the Manchester VAMC facility. (Courtesy Manchester VAMC)

Figure 3.4 Photograph of utility installation near VAMC hospital. View to the northeast. (Photograph by RCGA)

Figure 3.5 Photograph of landscaped area with planted trees in southwestern corner of the Manchester VAMC. View is to the south (Photograph by RCGA)