



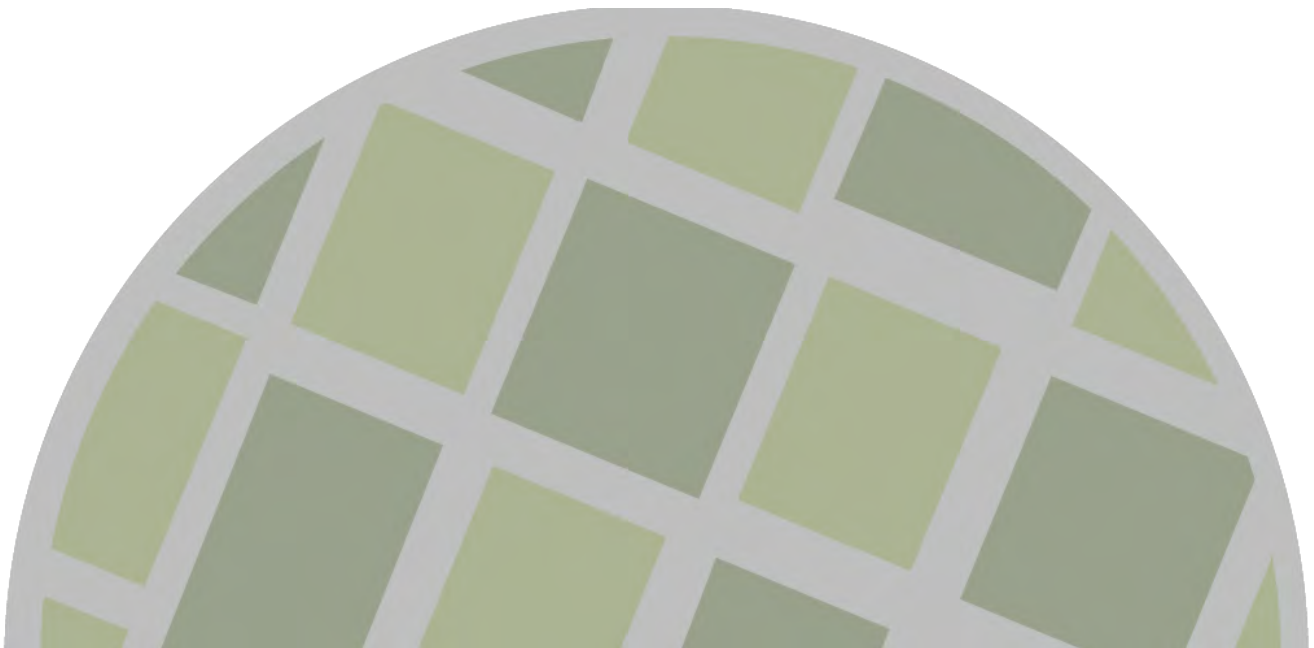
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PHASE I ARCHAEOLOGICAL INVESTIGATION FOR THE BRIDGE SQUARE – RIVERSIDE PARK RENOVATION PROJECT

Northfield, Rice County, Minnesota

October 2023



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SHPO File No. 2022-1266

106 Group Project No. 3110

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MANAGEMENT SUMMARY

Between January and October of 2023, 106 Group conducted a Phase I archaeological investigation for the Bridge Square – Riverside Park Renovation project (Project) located in Northfield, Rice County, Minnesota. The City of Northfield is planning the renovation of Bridge Square within the downtown Northfield, Riverside, and Bridge Square Parks and adjacent streets. Bridge Square and Riverside Park (RC-NFC-400) are listed in the National Register of Historic Places (NRHP) as contributing sites to the NRHP-listed and the locally designated Northfield Commercial Historic District (RC-NFC-263) (District). Because the Project is within City-owned land, it must comply with applicable state mandates governing cultural resources such as the Minnesota Field Archaeology Act (M.S. 138.31), Minnesota Historic Sites Act (M.S. 138.661), and Minnesota Private Cemeteries Act (M.S. 308.07). If the Project anticipates federal involvement or funding, it must comply with Section 106 of the National Historic Preservation Act, as amended.

The Project area is located in Section 1 of Township 111 North, Range 20 East, and Section 6 of Township 111 North, Range 19 East, along the east bank of the Cannon River, bounded by the Water Street South Bridge, the 5th Street East Bridge, and Water Street South and Division Streets. An appropriate area of study area for archaeology (study area) for the Project includes all areas of proposed construction activities or other potential ground disturbing activities associated with construction. The study area includes approximately 2.44 acres (1 hectare [ha]) within the Prairie Lakes East archaeological region.

The primary objective of the Phase I archaeological survey was to identify whether the area to be affected by the proposed Project contains any intact archaeological resources, and, if so, whether those resources are potentially eligible for listing in the NRHP. The Phase I archaeological investigation included an archaeological literature review at the Minnesota Office of the State Archaeologist (OSA) and the Minnesota State Historic Preservation Office (SHPO), historical map and aerial photograph research, an assessment of archaeological potential, and a Phase I archaeological field survey to identify any archaeological sites within the study area.

All archaeological work was conducted in accordance with SHPO and OSA standards. Kathryn Hunt, M.Sc., RPA, served as principal investigator, and fieldwork was conducted under OSA Phase I archaeological survey license 23-060.

The archaeological literature review identified one previously reported archaeological site that overlaps with the western portion of the study area (21RCav) and identified areas of elevated archaeological potential within the study area. Field survey, consisting of visual assessment, shovel testing, and small (1 meter by 50 centimeter) excavation units, was conducted for areas of moderate to high archaeological potential. Other portions of the study area that were assessed as possessing low archaeological potential were also tested to confirm assessment results.

As a result of the Phase I archaeological field survey for the Bridge Square – Riverside Park Renovation Project, one post-contact archaeological site was identified (21RC0076). Site 21RC0076 contains both intact and disturbed material evidence of the 1856 surface of Mill Square and disturbed architectural remnants of a foundation wall near and within the historical footprint of John North's 1856 Grist Mill.

Based on the intact evidence of the 1856 surface of Mill Square identified during Phase I excavations, Site 21RC0076 may be potentially eligible for listing in the NRHP as a contributing site to the NRHP-listed Northfield Commercial Historical District. Therefore, 106 Group recommends that impacts to the intact portions of the 1856 surface of Mill Square site should be avoided during construction. The portion of Site 21RC0076 that is associated with the 1856 surface of Mill Square is intact at or below 65 cm (2.1 ft.) below surface. Current Project plans provided by the City of Northfield describe that no more than 46 cm (1.5 ft.) of soil is to be removed in areas in which the Mill Square surface was identified. If it is feasible, 106 Group recommends that utility installations or other excavations that may disturb soils deeper than 65 cm be placed within existing utility trenches to avoid impacting the site.

Based on the results of Phase I archaeological survey, soils within the portion of Site 21RC0076 that are associated with remnants of a foundation wall near and within the footprint of the 1856 Grist Mill exhibited disturbance, and architectural elements potentially associated with the mill, did not appear intact.

106 Group recommends that archaeological construction monitoring be conducted within Site 21RC0076 for the Project as currently planned (Figure 7). The paved areas within the southern portion of the study area (south of and adjacent to, Site 21RC0076 and Bridge Square) could not be shovel tested during the Phase I field survey due to the surfaces being impenetrable to shovels. Based on their proximity to resources identified as components of Site 21RC0076 during the Phase I survey, 106 Group recommends archaeological construction monitoring be conducted within these paved areas as well for a total of 1.46 acres (0.59 ha).

Extensively disturbed soils were observed in the remainder of the study area. Post-contact (modern and historical) materials were recovered from these portions of the study area. 106 Group recommends no further archaeological work in the remainder of the study area (0.97 acres [0.39 ha]).

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1.0 INTRODUCTION

Between January and October of 2023, 106 Group conducted a Phase I archaeological investigation for the Bridge Square – Riverside Park Renovation project (Project) located in Northfield, Rice County, Minnesota (Table 1, Figure 1). The City of Northfield is planning the renovation of Bridge Square within the downtown Northfield, Riverside, and Bridge Square Parks and adjacent streets (Figure 1). Bridge Square and Riverside Park (RC-NFC-400) are listed in the National Register of Historic Places (NRHP) as contributing sites to the NRHP-listed and the locally designated Northfield Commercial Historic District (RC-NFC-263) (District). Because funding for the design of this Project is provided through the City of Northfield, the Project must comply with applicable state mandates governing cultural resources such as the Minnesota Field Archaeology Act (M.S. 138.31), Minnesota Historic Sites Act (M.S. 138.661), and Minnesota Private Cemeteries Act (M.S. 308.07). If the Project anticipates federal involvement or funding, it must comply with Section 106 of the National Historic Preservation Act, as amended.

The Project area is located along the east bank of the Cannon River, bounded by the Water Street South Bridge, the 5th Street East Bridge, and Water Street South and Division Streets (Figure 1). An appropriate study area for archaeology (study area) includes all areas of proposed Project construction activities or other potential ground disturbing activities associated with Project construction. The study area includes approximately 2.44 acres (1 hectare [ha]) within the Prairie Lakes East archaeological region.

Table 1. Legal Description of Sections Included in the Study Area

County	Township	Range	Section
Rice	111 N	20 W	1
		19 W	6

The primary objective of the Phase I archaeological survey was to identify whether the area to be affected by the proposed Project contains any intact archaeological resources, and if so, whether those resources are potentially eligible for listing in the NRHP. The Phase I archaeological investigation included an archaeological literature review at the Minnesota Office of the State Archaeologist (OSA) and the Minnesota State Historic Preservation Office (SHPO), an assessment of archaeological potential, and archaeological field survey to identify any archaeological sites within the study area.

The archaeological literature review consisted of a review of documentation of previously identified archaeological sites within the study area and within one mile (1.6 kilometers [km]) of the study area, and of surveys previously conducted within the study area. Historical maps and aerial photographs were also reviewed to aid in the archaeological investigation. The archaeological assessment identified whether the study area has the potential to contain archaeological resources that may be individually eligible for listing in the NRHP or may be considered contributing to the NRHP-listed District. The Phase I archaeological field survey employed visual assessment, shovel testing, and the excavation of a small (1 meter [m] by 50 centimeter [cm]) units.

The following report describes methodology, literature review results, archaeological assessment results, field survey results, and recommendations for the Bridge Square – Riverside Park Renovation project. Kathryn Hunt, M.Sc., RPA, served as principal investigator, and fieldwork was conducted under OSA Phase I archaeological license number 23-060. Appendix A contains the archaeological site form, and Appendix B contains a list of project personnel.

2.0 OBJECTIVES

The primary objective of the literature review was to identify whether there are any known archaeological sites within the study area and to identify whether any portion of the study area may have been previously surveyed. The primary objective of the archaeological assessment was to assess whether any portions of the study area have the potential to contain unknown archaeological resources that may be potentially eligible for listing in the NRHP. The primary objective of the Phase I archaeological survey was to identify whether the study area contains any intact archaeological resources and, if so, whether those resources are potentially eligible for listing in the NRHP. Architectural history resources were not reviewed as a part of this literature search and assessment. All work was conducted in accordance with the SHPO *Manual for Archaeological Projects in Minnesota* (SHPO 2005), *The State Archaeologist's Manual for Archaeological Projects in Minnesota* (OSA 2011), and *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 Federal Register 44716-44740] (National Park Service [NPS] 1983).

3.0 METHODS

3.1 Literature Review

In January, 2023, a literature review, including remote research at SHPO and the OSA, was completed for the Project to obtain information regarding previously identified archaeological sites within the study area¹. Information was gathered on archaeological sites within a one-mile (1.6 km) radius of the study area in order to provide a broader context and to provide a basis to assess the general potential for archaeological sites in the vicinity of the study area. Reports of previous archaeological investigations were also reviewed to determine if any portion of the study area had been previously surveyed and, therefore, would not require further investigation. In addition, multiple documentary sources were consulted, including United States Geological Survey (USGS) topographic quadrangles, historical plat maps, historical images, and aerial photographs, in order to identify portions of the study area that possess a higher potential for containing intact significant archaeological sites.

3.2 Archaeological Assessment

3.2.1 Desktop Assessment

The desktop assessment of archaeological potential was informed by the results of the literature review. Areas generally assessed as having a greater probability to contain intact archaeological sites potentially eligible for listing in the NRHP included undisturbed portions of the study area that are:

- located within 152 m (500 feet [ft.]) of an existing or former water source of 40 acres (19 ha) or greater in extent, or within 152 m (500 ft.) of a former or existing perennial stream;
- located on topographically prominent landscape features;
- located within 91 m (300 ft.) of a previously reported site; or
- located within 91 m (300 ft.) of a former or existing historical structure or feature (such as a building foundation or cellar depression).

Areas assessed as having a relatively low potential for containing intact archaeological resources potentially eligible for listing in the NRHP included inundated areas, former or existing wetland areas, poorly drained areas, areas with slope of 20 degrees or greater, and areas of extensive disturbance.

3.2.2 Visual Assessment

Visual assessment of the entire study area was conducted on May 9, 2023. Visual assessment was employed to confirm and refine the results of the desktop assessment of archaeological potential, to identify areas of disturbance, and to ascertain whether above-ground features, such as earthworks or abandoned structural foundations, were present in the study area.

¹ For background research regarding known archaeological sites and previously conducted archaeological investigations, we rely primarily on the information on file at SHPO and OSA. The 106 Group cannot guarantee the accuracy and reliability of the data provided.

Portions of the study area that were assessed as possessing moderate to high potential to contain archaeological resources were subjected to Phase I archaeological field survey.

3.3 Field Survey

Because no portions of the study area exhibited greater than 25 percent visibility, the Phase I field survey consisted of shovel testing and did not include pedestrian survey. Shovel tests were excavated at intervals of no greater than 15 m (50 ft.) in areas identified during the assessment as possessing moderate to high potential to contain intact archaeological resources and where less than 25 percent of the soil surface was visible. In order to confirm assessment results, shovel tests were also placed at intervals of 30–45 m (98–147 ft.) within areas assessed as possessing low potential to contain archaeological resources potentially eligible for listing in the NRHP.

Shovel tests consisted of small, circular excavations, measuring approximately 35–45 cm (14–18 in.) in diameter. In addition to shovels, a dig bar was used to excavate compact soils, and a bucket auger was used to excavate soils deeper than approximately 1 m (3 ft.), as soil conditions allowed. All excavated soil matrices were passed through 1/4-inch hardware mesh to ensure the consistent recovery of artifacts. Shovel tests were excavated down to the level of archaeologically sterile subsoil or until an impasse was reached to a maximum depth of 1.16 m (3.8 ft.) below the surface. When soil conditions allowed, a bucket auger was placed at the base of shovel tests and excavated to a maximum depth of 1.95 m (6.4 ft.) to test deeply buried soils.

Investigation units included the placement of two 1 m x 50 cm rectangular excavation units (XUs) within Site 21RC0076. The units were placed in the portions of the site most likely to provide the maximum amount of information. These locations were selected based on where shovel testing results indicated artifact densities, and where those diversities were highest. Excavation units and features were excavated using shovels and trowels, following natural soil stratigraphy. When natural strata were not able to be identified, units and features were excavated using arbitrary 5 or 10 cm levels. Excavation was terminated either after a total of 20 cm of sterile soils, or the maximum depth permitted by the Occupational Safety and Health Administration (OSHA) was reached.

All soils from XUs were dry-screened through 1/4-inch mesh. Soil profiles were described using United States Department of Agriculture soil terminology, including Munsell color, texture, and horizons. Additional geological descriptions and comments were incorporated when appropriate. Upon completion of an XU, photographs of the horizontal plan-view and two or more vertical profiles were taken. Additionally, two adjacent vertical profiles were recorded in a technical drawing, which included data such as soil textures, depths, inclusions, color, and the nature of transitions between strata.

Survey data were recorded through standardized forms and the field director's daily log. Typical recorded information includes shovel test locations and methods of testing; the numbers, types, and locations of recovered archaeological materials; the depth of shovel tests and the thickness of excavated soil layers; soil textures and inclusions (both natural and archaeological); and soil color according to Munsell color

charts. Location data was recorded with Global Positioning System (GPS) readings logged on a Trimble R1 Global Navigation Satellite System (GNSS) receiver, with submeter accuracy.

4.0 RESULTS

4.1 Literature Review

4.1.1 Previously Identified Resources

Research indicates that no previous archaeological surveys have been conducted within the study area. No archaeological sites have been recorded (field confirmed), and one site has been reported (not field confirmed) within the study area (Site 21RCav) prior to this investigation (Figure 1). No sites have been recorded or reported within one mile of the study area.

Site 21RCav (Northfield Grist Site) encompasses the entirety of Section 1, Township 111 North, Range 20 West (Figure 1). OSA records indicate that the northeast corner of the site overlaps with the eastern portion of the study area, but records do not provide any additional information about the site's function, description, or precise location. Site 21RCav was most likely recorded on the basis of historical documentation, and the site form does not indicate that any archaeological features or resources have been documented within the site boundaries.

4.1.2 Environmental History Overview

The study area is located west of and adjacent to the Cannon River, which was formed from glacial movement during the Pleistocene, approximately 11,000-12,000 years ago. Ecologically, the study area is located within the Eastern Broadleaf Forest province, Minnesota and Northeast Iowa Morainal section, and the Oak Savanna subsection. This area is generally characterized by deciduous forest, woodland, and prairie (Minnesota Department of Natural Resources [MnDNR] 2023). Prior to European settlement, the primary vegetation within these subsections consisted of oak-dominated savanna and maple basswood forests (MnDNR 2023). The western edge of the study area adjacent to the Cannon River is within the Federal Emergency Management Agency (FEMA) 100-year floodplain, and according to data from the National Oceanic and Atmospheric Association (NOAA), the Cannon River floods most years (City of Northfield 2023; NOAA 2023).

According to the Natural Resources Conservation Service (NRCS), soils within the study area and between the ground surface and 2 m (6.7 ft.) in depth are Urban land-Estherville complex sandy loams and sands (NRCS 2023). NRCS does not have data regarding soils at deeper depths. NRCS describes the Urban land-Estherville complex as being somewhat excessively drained and within very little slope (1-6 percent) (NRCS 2023).

4.1.3 Historical Research

Prior to the Treaty of Traverse des Sioux in 1851, Rice County was home to the Wahpekute band of Dakota (Hess 2019a). The Cannon River provided transportation for the band and access to an abundance of resources (Brindle et al. 2021). The earliest available maps that depict the study area are Bureau of Land Management General Land Office (BLM GLO) plat maps from 1854 and 1855 (BLM GLO 1854, 1855). These maps show the Cannon River meandering more acutely than it does today, but within the

same general location and also west of a river bluff slope (BLM GLO 1854, 1855). No historical development is shown within the study area on the 1854 and 1855 BLM GLO maps.

John W. North founded the city of Northfield in 1855, and he built mills on either side of the Cannon River and a dam to power the mills (Hess 2019a, Zellie 2016). North surveyed and planned the town, as is shown on an 1855 survey map, which depicts platted city blocks within the study area (Iddings 1855). While these blocks were platted, historical maps from 1855 show no structures within the study area. However, based on historical documentation, the northern portion of the study area served as a hay and wood market, a loading area, and a watering area for horses in the latter half of the nineteenth century and into the twentieth century (Zellie 2016). The northern portion of the study area became a center of commerce with retail spaces, apartments, offices, manufacturing shops, banks and other common services built around its perimeter near the Cannon River (Zellie 1988, 2016). This area was known as Mill Square, and later, Bridge Square.² According to the Northfield History Podcast, a program developed by the Northfield Historical Society (NHS), a two-story building existed in the middle of the square at one point (NHS 2010). However, no building is documented in historical maps or historical accounts reviewed.

Although written historical documentation indicates that the development of the mills and dam occurred within the study area as early as 1854, the earliest available image that depicts this development is from circa 1870, and the earliest available map that depicts this development from 1884 (NHS c. 1870; Sanborn Fire Insurance [Sanborn] 1884). The image and map depict the iron bridge in the location of the current Water Street bridge; the now non-extant grist mill and mill office built by North in 1856; an undeveloped area east of the Cannon River extending south along the riverbank and bordered by structures for businesses and shops (now known as Bridge Square and Riverside Park); and two small structures within the southern end of the study area (NHS c. 1870; Sanborn 1884).

Bridge Square

According to early Sanborn Fire Insurance maps and historical images, the grist mill and mill office built by North were located within the study area, on the western edge of what is now known as Bridge Square, which is along the Cannon River's eastern bluff and shoreline. The grist mill sat south of the foot bridge (the current location of Water Street South bridge), and just east of Mill Dam (now known as Ames Mill Dam or Northfield Dam). Historical images show a retaining wall along the eastern bank of the river, adjacent to the grist mill and extending north and south along the shoreline (Northwest Publishing Co. c.1900) (Figure 2). A machine shop is shown attached to the southwestern corner of the mill on 1884 Sanborn maps (Sanborn 1884). Sanborn maps from 1889 depict another retaining wall east of the grist mill and a platform connecting the wall and the grist mill for wagons to pass under and access the mill (Sanborn 1889). Historical images from circa 1900 depict the grist mill and mill office sitting on a low terrace east of and adjacent to the Cannon River (Northwest Publishing Co. c.1900) (Figure 2). The historical images show the two retaining walls enclosing the grist mill and mill office and connecting with

² For the purposes of this report, "Mill Square" will be used when referencing the historical square, "Bridge Square" will be used when referencing the wider central area that occupies the northern half of the study area, and "Bridge Square Park" will be used when specifically referencing the modern-day park in the center of Bridge Square.

the foot bridge to the north (now the Water Street South bridge), ultimately separating the lower river terrace and the grist mill from Mill Square (Northwest Publishing Co. c.1900; NHS 2010). The latest map accessed that depicts the grist mill and mill office is from 1915 (Foote 1915). Maps from 1922 and later no longer depict the mill or office, suggesting they were demolished between those periods (Sanborn 1922).

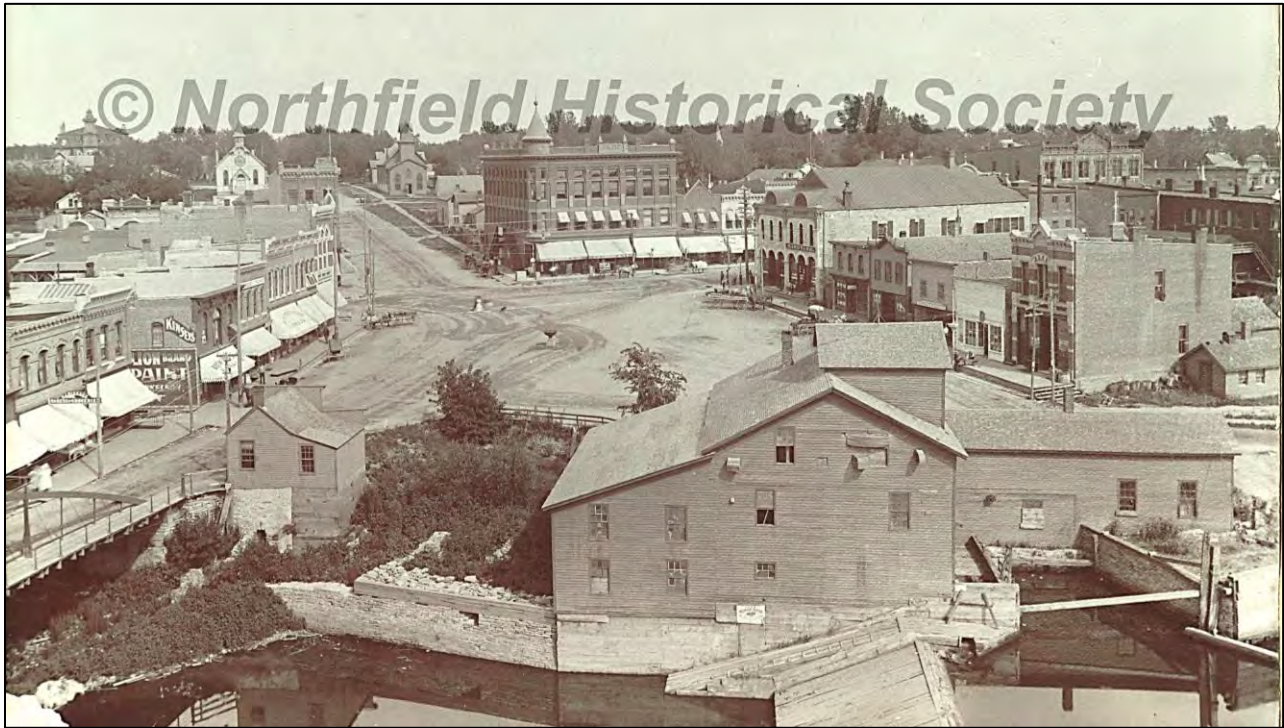


Figure 2. Circa 1900 Image of the Mill Office (left foreground), Mill Square (background), and Grist Mill (right foreground), taken from the Western Side of the Cannon River (NHS c. 2010). Facing Southeast.

1884 maps depict Mill Square as a large open space surrounded by buildings (Sanborn 1884). According to the NRHP nomination form for Bridge Square, the original surface of the square was unpaved, had uneven grades, and sat about three feet below the current elevation (Zellie 2016).

In the late 1880s, a fountain for horses was installed in the center of the square (NHS 2010; Zellie 2016). Historical images from the 1880s show the unpaved surface of the square sloping down to the river, reportedly to allow for drainage (NHS 2010). This unpaved square regularly became muddy, and in the 1890s the surfaces were hardened by laying down rock, dirt, and oil and watered occasionally to control the dust (NHS 2010). Boardwalks were added around the square to make businesses more accessible (NHS 2010). In the early twentieth century, the city turned the square into a park; contracted to pave the square with creosote blocks; installed a sanitary sewer under Water Street; and removed the horse fountain (Zellie 2016; Zellie and Lucas 2016; NHS 2010; Sanborn 1922). In 1921, a Civil War monument was dedicated and installed in the center of Bridge Square (Zellie and Lucas 2016). Historical aerials from 1938 show a teardrop-shaped park around the Civil War monument and a grass parkland along the river and on the western edge of Bridge Square, both divided by Water Street, which extended northeast-

southwest through the study area (UMN 1938). By 1979, historical aerials depict further development of the square, including a larger square-shaped park in place of the formerly teardrop-shaped park, as well as paved walkways, plazas, seating, and circular planters (National Environmental Title Research [NETR] 1979). A circular fountain and sculpture designed by Raymond I. Jacobson was installed within Bridge Square in 1980, west of the Civil War memorial (Zellie and Lucas 2016).

Riverside Park

Southwest of Bridge Square along the eastern bank of the Cannon River is the current location of Riverside Park, which is located within the study area (Figure 1). The earliest map accessed that shows development within this area of the study area is a Sanborn Fire Insurance map from 1884, which depicts two small structures at southern end of the study area near the Cannon River labelled “windmill pump” and “tank on trestle” (Sanborn 1884). In 1910 these structures are no longer depicted, but another small structure in the same area is shown, labelled “scale house,” which is visible on maps and aerials until 1957 (Sanborn 1910, 1922; UMN 1938, 1951; NETR 1957). The first official depiction of Riverside Park is shown on a 1915 plat map, which includes the outline of the park extending the full length of the Cannon River between the footbridge (Water Street bridge) and the 5th Street East bridge, encompassing the grist mill and mill office buildings (Foote 1915). Aerial imagery from as early as 1938 depicts Riverside Park as grass parkland with paved walkways located between the Cannon River and Water Street (UMN 1938, 1951, 1964; NETR 1957). By 1979, aerial images show a paved parking lot within the southeastern quadrant of the park, which is still present today (NETR 1979, 1984).

Bridge Square (RC-NFC-400), which includes the northern portion of Riverside Park, was determined eligible for listing in the NRHP as a contributing historic property to the NRHP-listed Northfield Commercial Historic District in 2016 (Zellie and Lucas 2016).

4.2 Archaeological Assessment

This assessment addresses the potential for the study area to contain unknown archaeological resources that are potentially eligible for listing in the NRHP or contributing to the NRHP-listed District.

4.2.1 Desktop Assessment

The entirety of the study area is located within 91 m (300 ft.) of the Cannon River. The boundaries of one reported archaeological site (21RCav) are located within 91 m (300 ft.) of, or overlap with the study area; however, little is known about this site, including its function and precise location. The northern half of the study area is located within the NRHP-listed District, and the entirety of the study area is located within 91 m (300 ft.) of former and existing historical structures. These characteristics are indicators of an increased potential for precontact and post-contact archaeological resources and are discussed in further detail below.

The study area is located directly east of, adjacent to, and approximately 3–6 m (10–20 ft.) above the Cannon River, a perennial water source of great importance to precontact indigenous communities in the region. Proximity to perennial water and areas of topographical prominence are indicators of an increased potential for precontact archaeological resources. Due to annual flooding of the river, natural erosion factors, and the historical urban development of the riverbank, it is unlikely that intact precontact archaeological resources are present directly along the riverbank within the study area (City of Northfield 2023; NOAA 2023). These areas have been assessed as possessing low potential to contain archaeological resources that are potentially eligible for listing in the NRHP (Figure 3).

The Cannon River was also of great importance to post-contact settlers of the region, and its location adjacent to the study area is an indicator of increased post-contact archaeological potential. The entirety of the study area is located within 91 m (300 ft.) of former and existing historical structures. Proximity to extant or non-extant historical structures is an indicator of increased potential for post-contact archaeological resources that may be eligible for the NRHP to exist within the study area.

The non-extant grist mill and mill office were built along the east bank of the Cannon River within the study area in the mid-1800s during the founding of the City of Northfield. The grist mill and mill office were built by the City's founder, John North, concurrently with and complementary to the mill on the north side of the river (now known as Ames Mill), as well as the mill dam (now known as Ames Mill Dam or Northfield Dam). Based on historical images, the grist mill and mill office were built on a river terrace that sat lower than the historical surface of Mill Square and consisted of several structural levels that extended above the historical surface of Mill Square (NHS 2010) (Figure 2). Both the grist mill and mill office were demolished sometime between 1915 and 1922 (Foote 1915, Sanborn 1922). That area was eventually filled to be level with Mill Square (USGS 1960). It is possible that remnants of the non-extant grist mill, mill office, and associated retaining walls may exist beneath the northern portion of Riverside Park and western portion of Bridge Square. The grist mill and mill office are associated with the City's founding, John North, the NRHP-listed Ames Mill, the NRHP-listed Northfield Dam, the NRHP-listed Northfield Commercial Historic District's period of significance (1856-1945), and NRHP-eligible Bridge Square. Considering these associations, intact remnants of the buildings could be eligible

for listing in the NRHP under Criterion A (association with significant events), Criterion B (association with significant persons), and Criterion D (potential to yield information important to history). Based on these factors, this portion of the study area is assessed as possessing moderate to high potential to contain post-contact resources that are eligible for listing in the NRHP or contributing to the NRHP-listed District (Figure 3).

Development within the study area includes the construction and reconstruction of the Ames Mill dam and Water Street bridge, construction and demolition of the historical mill office and grist mill structures, horse and cart traffic, installation of an early retaining wall, utility infrastructure, repeated grading and paving of Bridge Square and adjacent roadways, and various redesigns of Bridge Square and Riverside Park. Although historical development with the study area likely disturbed some archaeological resources from earlier periods that may have been present, it also likely resulted in the deposition or preservation of historical archaeological resources, including potential remnants of the grist mill or historical surface of Mill Square.

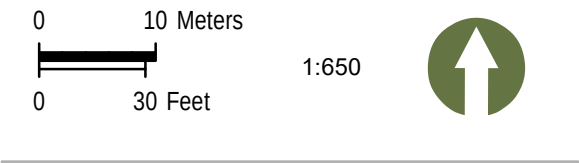
The historical surface of Mill Square was prone to flooding, so it sloped slightly at an unknown grade downhill towards the river (east to west) (Zellie 2016). Mill Square went through several periods of reconstruction in the nineteenth and twentieth centuries that involved grading, fill, paving blocks, pavement, and landscaping, culminating in its current elevation, which is reportedly 1 m (3 ft.) higher than its historical surface (Zellie 2016). For this reason, it is unlikely that intact post-contact archaeological resources exist within shallower soils in the Bridge Square Park area. Based on this understanding, Bridge Square Park was assessed during the desktop assessment as possessing low potential to contain intact archaeological resources eligible for listing in the NRHP. However, because it is possible that intact post-contact resources may have been preserved in deeper soils, Phase I shovel testing and bucket-auguring were employed to confirm the level of disturbance in Bridge Square Park. Shovel testing in Bridge Square Park identified the historical surface of Mill Square, therefore the archaeological potential of that area was reassessed as possessing moderate to high potential to contain intact archaeological resources below the vertical extent of disturbance (see Section 4.3.1 below).

Because the elevation of the historical surface of Mill Square is reported to be 1 m (3 ft.) lower than the current elevation of Bridge Square, it is possible that various periods of development did not result in the disturbance of soils that may be preserved within or beneath the historical surface. However, utilities that are traditionally installed within deep soils (e.g. water lines, sanitary sewers, and storm sewers), likely caused considerable disturbance to soils at deeper elevations. Based on recent utility data provided by Bolton and Menk, the locations of these deeply buried utilities are known and areas where such utilities are present have been assessed as possessing low potential to contain archaeological resources that may be eligible for listing in the NRHP (Figure 3). The remaining portions of the study area are assessed as possessing moderate to high potential for archaeological resources that may be eligible for listing in the NRHP.



**Bridge Square -
Riverside Park Renovation
Phase I Archaeological
Investigation**
Northfield, Rice County, Minnesota

- Study Area
- Low Potential for Intact Archaeological Resources
- Moderate-to-High Potential for Intact Archaeological Resources
- Moderate-to-High Potential for Intact Archaeological Resources Below Vertical Extent of Disturbance



Archaeological Assessment Results

Figure 3

4.2.2 Visual Assessment

Visual assessment was conducted throughout the entire study area. This assessment identified several areas characterized by signs of previous disturbance, including marked electric lines, fiber-optic cables, and paved areas. These would indicate reduced potential for intact archaeological materials, features, or sites to exist in shallow soils, but not necessarily deeper soils. Many of these areas are assessed to contain moderate to high potential to contain deeply buried archaeological resources and were included in subsurface investigations.

The visual assessment also identified several areas marked for deeply buried utilities, including storm sewer and water mains, which indicate reduced potential for those soils to contain intact archaeological resources. These areas are considered to possess low potential to contain intact archaeological resources and were omitted from further investigation (Figure 3).

4.2.3 Assessment Summary

Portions of the study area assessed as possessing low potential to contain archaeological resources that may be eligible for listing in the NRHP due to extensive disturbance include the portions of the study area along the bank of the Cannon River that have a history of flooding or are inundated in the river, portions of the study area that have been extensively disturbed by various periods of Water Street South and Water Street South bridge reconstruction, and portions of the study area where utilities have been installed within deep soils. Although periods of historical development within other portions of the study area likely resulted in pockets of disturbance, deeper layers of intact soils may be present below the historical surface of the study area. Due to the proximity of the study area to the Cannon River, to archaeological site 21RCav, and to known historical structures, these areas are assessed as possessing moderate to high potential to contain archaeological resources within or below the historical surface of Bridge Square that may be eligible for listing in the NRHP (Figure 3).

4.3 Field Survey

Phase I field survey methods were employed by 106 Group personnel throughout the study area on May 9-10, 2023, and October 2-4, 2023. Because no portions of the study area exhibited greater than 25 percent visibility, the Phase I field survey consisted of shovel testing and did not include pedestrian survey. All portions of the study area assessed in the desktop and visual assessments as possessing moderate to high potential to contain intact archaeological resources were subjected to shovel testing at 15-m (49-ft.) intervals. In order to field-confirm desktop assessment results, areas initially assessed as possessing low potential to contain intact archaeological resources were subjected to 30- to 45-m (98- to 147-ft.) interval shovel testing (Figure 4).

There were a considerable range of soil profiles throughout the study area characterized by different soil types, colors, and compactness. This reflects recent and historical land modification in different portions of the study area. A total of 23 shovel tests (some with the aid of bucket augers) were excavated within the study area to a maximum depth of 195 centimeters below surface (cmbs) (Figure 4).

Five shovel tests were excavated in areas assessed during the desktop assessment as possessing low archaeological potential to test the desktop assessment results, and 18 shovel tests were excavated in areas assessed as possessing moderate to high archaeological potential. One shovel test (ST 8) excavated to test the desktop assessment of low potential areas was placed in the floodplain. This shovel test yielded evidence of recent erosion control efforts and confirmed disturbance in this area. The other four shovel tests (ST 1, ST 5, ST 6, ST 13) excavated in low potential areas were placed within Bridge Square Park to confirm the level of disturbance from various periods of development, and to identify whether there were intact soils beneath this disturbance. Two of these tests (ST 1 and ST 13) identified a limestone surface.

Three shovel tests, which were excavated south of Bridge Square in Riverside Park, reached a maximum depth of 195 cmbs and yielded evidence of extensively disturbed soil profiles. Additionally, one shovel test was located in the northwestern corner of the study area near the Water Street South Bridge and yielded evidence of disturbed soil profiles, likely due to bridge reconstruction and development.

Two shovel tests excavated within Bridge Square (ST 5, ST 6) yielded evidence of disturbed soils throughout the entire soil column (76 cmbs). Six shovel tests (ST 1, ST 13, ST 200, ST 201, ST 202, and ST 203) yielded evidence of recent disturbance in the upper layers followed by compact historical fill, which contained historical materials and a densely packed limestone cobble layer likely representative of the 1856 surface of Mill Square. Two shovel tests (ST 4 and ST 12) were placed outside of the modern Bridge Square Park, but within the 1856 footprint of Mill Square (ST 4 and ST 12), yielded similar profiles to ST 1 and ST 13 and matched the characteristics of the probable historical surface of the 1856 Mill Square. See Section 4.3.1 for details. The remaining shovel tests (ST 204, ST 205, ST 205B, ST 206, ST 207, and ST 208) were placed near ST 2 and ST 4, which had identified a possible limestone foundation wall near the Cannon River.



**Bridge Square -
Riverside Park Renovation
Phase I Archaeological
Investigation**
Northfield, Rice County, Minnesota

- Study Area
- Newly Identified Site
- Positive Shovel Test
- Negative Shovel Test
- Excavation Unit
- Estimated Location of the 1856 Grist Mill Footprint

0 10 Meters
0 30 Feet

1:650



Phase I Field Survey Results

Figure 4

4.3.1 Site 21RC0076

Due to the presence of post-contact architectural materials, artifacts within historical fill, evidence of historical demolition debris, the identification of historical surface components of the 1856 Mill Square, and a post-contact architectural limestone and mortar feature in the location of John North's non-extant 1856-c.1922 grist mill, the northern half of the study area constitute a new post-contact archaeological site (21RC0076) (Figure 4, Table 2). The boundaries of the site are estimated based on historical documentation of the footprint of the 1856-c.1922 grist mill, and the historical footprint of Mill Square. The boundaries of Site 21RC0076 encompass these two historical footprints, although based on utility information and the results of shovel testing and excavation units, there are horizontal and vertical pockets of both disturbed and intact soils within the boundaries of the site.

Table 2. Phase I Archaeological Field Survey Shovel Testing Results

Site	Shovel Test	Depth of Artifact Recovery (approx. cmbs)	Count	Description
21RC0076	1	0-60	8	Square nails (2); brick sample (4), slag sample (1), limestone sample (1)
		0-90	21	Nails (7; 1 square nail), glass shards (9), post-contact ceramic body sherds (2), brick sample (2), slag sample (1)
		95	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	2	57 (in ST wall)	3	Faunal bone fragments (3)
		140-150	4	Metal wire (1); coal ash sample (2), glass fragment (1)
21RC0076	3	0-40	4	Square nail (1); unidentified metal (3)
		0-90	20	Nails (9; 5 square nails); unidentified metal (2), glass shards (9)
		91	-	Possible architectural feature: Intact and level limestone block with mortar
21RC0076	4	0-54	5	Nail (1), post-contact ceramic body sherd (1), faunal bone (3)
		55-65	1	Metal rod (1)
		0-68	22	Nails (8; 3 square nails, 1 pin nail), metal wire fragments (8), unidentified metal (5), post-contact ceramic body sherd (1)
		70 (in ST wall)	1	S-shaped wrench (1)
		0-85	56	Nails (21; 1 square nail), metal wire fragments (5), unidentified metal (18), bolts (4), historical concrete sample (1), glass shards (6), post-contact ceramic base sherd (1)

Site	Shovel Test	Depth of Artifact Recovery (approx. cmbs)	Count	Description
		0-113	13	Nails (6; 2 square nails), metal wire fragment (1), bolts (2), foil (1), unidentified metal (1), bullet casing (1), glass bottle neck shard (1)
		113	-	Historical surface component: Densely packed limestone cobble layer
-	5	0-50	2	Tin cigarette filter/holder (1), Square nail (1)
-	6	0-76	-	Disturbed: utility trench
-	7	0-43	-	Disturbed: plastic, modern trash
-	8	0-50	-	Disturbed: modern concrete impasse
-	9	0-116	-	Disturbed: plastic and other modern materials mixed with historical materials
-	10	0-195	-	Disturbed: plastic and other modern materials mixed with historical materials
-	11	0-117	-	Disturbed: plastic and other modern materials mixed with historical materials
		100-140	11	Ceramic drain tile fragment (2), coal/slag sample (2), brick sample (7)
21RC0076	12	0-98	3	Nails (2), Metal wire fragment (1)
		98	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	13	0-60	2	Nail (1), glass shard (1)
		0-82	4	Nails (4)
		82	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	200	85	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	201	0-40		Disturbed: modern materials mixed with historic materials
		40-60	5	Post-contact ceramic body sherd (1), brick fragment (1), clear flat glass (2), square nail (1)
		60-80	8	Square nail (3), common nail (3), clear flat glass (2)
		80-95	1	Historical surface component: Densely packed limestone cobble layer
21RC0076	202	0-100	17	Clear flat glass (13), metal fragment (1), metal buckle (1), curved clear glass (1), olive curved glass (1)
		80	-	Historical surface component: Densely packed limestone cobble layer

Site	Shovel Test	Depth of Artifact Recovery (approx. cmbs)	Count	Description
21RC0076	203	60-100	20	Metal fragment (2), common nail (10), clear flat glass (4), brick fragment (2), concrete fragment (1), post-contact ceramic body sherd (1)
		~75	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	204	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	205B	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	205	0-80	5	Cement fragment (1), slag (1), limestone sample (1), brick fragment (1), common nail (1)
		0-100	8	Cement fragment (1), brick fragment (1), slag (1), metal bottle cap (3), metal fragment (1), limestone fragment (1)
21RC0076	206	50-100	16	Metal bottle cap (2), common nail (1), slag (3), clear flat glass (2), brick fragment (3), concrete fragment (4), limestone fragment (1)
		~70	-	Possible architectural feature: Intact and level limestone block with mortar
21RC0076	207	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	208	70-100	5	Clear flat glass (2), slag (2), bivalve shell sample (1)
		~70	-	Possible architectural feature: Intact and level limestone block with mortar

Note: artifacts collected from disturbed layers are not documented here and will not be curated.

1856 Surface of Mill Square

Six shovel tests within Site 21RC0076 show evidence of the historical surface of the 1856 Mill Square (ST 1, ST 13, ST 200, ST 201, ST 202, and ST 203). The profiles of all of these tests consisted of a very dark brown (10YR 2/2) silty loam topsoil until approximately 25 cmbs followed by a brown (10YR 3/3) sandy silt containing modern trash until approximately 37-46 cmbs. This layer of disturbance was followed by a very compact grayish-brown (10YR 3/2) fine silty sand layer with fine limestone gravel inclusions, generalized historical artifacts (e.g. square nails, historical ceramic and glass fragments), and larger limestone pieces until approximately 80-90 cmbs, at which point a layer of densely packed large limestone cobbles within compact very dark grayish-brown (10YR 3/2) silty sands were observed. The densely packed limestone was impenetrable by shovel, dig bar, or bucket auger, thereby preventing further excavation during shovel test excavations.

Two other shovel tests within Site 21RC0076 also yielded evidence of the historical surface of the 1856 Mill Square (ST 4, ST 12). ST 4 was excavated near the eastern wall of non-extant 1856 grist mill's

estimated footprint, to a maximum depth of 113 cmbs. The soil profile of ST 4 consisted of very dark brown (10YR 2/2) silty loam topsoil until approximately 37 cmbs, followed by a dark grayish-brown (10YR 3/2) silty sand lens containing limestone gravel, faunal bone, and a post-contact ceramic sherd until approximately 41 cmbs. This layer was followed by very compact dark gray (10YR 3/1) silty sands containing limestone gravel, large limestone pieces, a corroded metal rod, post-contact ceramic sherds, glass, and an S-shaped wrench until approximately 113 cmbs, at which point a dense layer of limestone cobbles was identified and the shovel test was concluded.

ST 12 was excavated east of the 1856 grist mill's estimated footprint, near the estimated location of its retaining wall and to a maximum depth of approximately 98 cmbs. The soil profile of ST 12 consisted of very dark gray (10YR 3/1) silty loam topsoil to approximately 68 cmbs, followed by very compact dark brown (10YR 3/3) sandy silt containing limestone gravel, large uniformly thick limestone pieces, metal debris, and nails until approximately 98 cmbs, at which point a dense layer of limestone cobbles was identified and the shovel test was concluded.

Excavation Unit 1 (XU 1) was placed near ST 13 and ST 200 (Figure 5, Table 3). This unit measured 1 m by 50 cm and was excavated in 10 cm levels in historical fill layers and switched to 5 cm levels once the compact limestone layer was encountered. Soils in XU 1 included a topsoil layer (dark grayish-brown 10YR 3/2 sandy loam) that extended to approximately 20 cmbs, which was atop a very thin (less than 5 cm thick) layer of dark yellowish-brown (10YR 3/4) sandy loam with gravel. This gravel layer was atop a compact and gravelly layer of dark brown (10YR 3/3) sandy loam, extending to approximately 50 cmbs. This gravelly layer included mixed modern and historical artifacts and exhibited signs of disturbance due to the uneven mottling of soils. Beneath the gravelly layer was a layer of disintegrating concrete and mortar with hardly any soil content. Concrete pieces in this layer were not organized or intact, and modern materials were recovered from this layer. Modern materials were not recovered below the concrete layer. Beneath the concrete and mortar, beginning at approximately 65 cmbs, was a layer of brownish-yellow (10YR 6/3) very compact sand, which featured large limestone pieces that appeared to be organized and layered. Some stones appear to have mortar between them, though this mortar was friable, and due to the stony and compact nature of the layer, it was broken as it was removed. The limestone pieces fully covered the base of the unit at approximately 75 cmbs and continued until near the base of the excavation. Soils transitioned from brownish-yellow (10YR 6/3) sands to yellowish-brown (10YR 5/4) and dark yellowish-brown (10YR 4/6) mottled loamy sand at 90 cmbs, and a final layer of dark brown dark brown (10YR 3/3) sandy loam began at approximately 115 cmbs. Excavation was terminated at 120 cmbs to comply with OSHA safety standards.

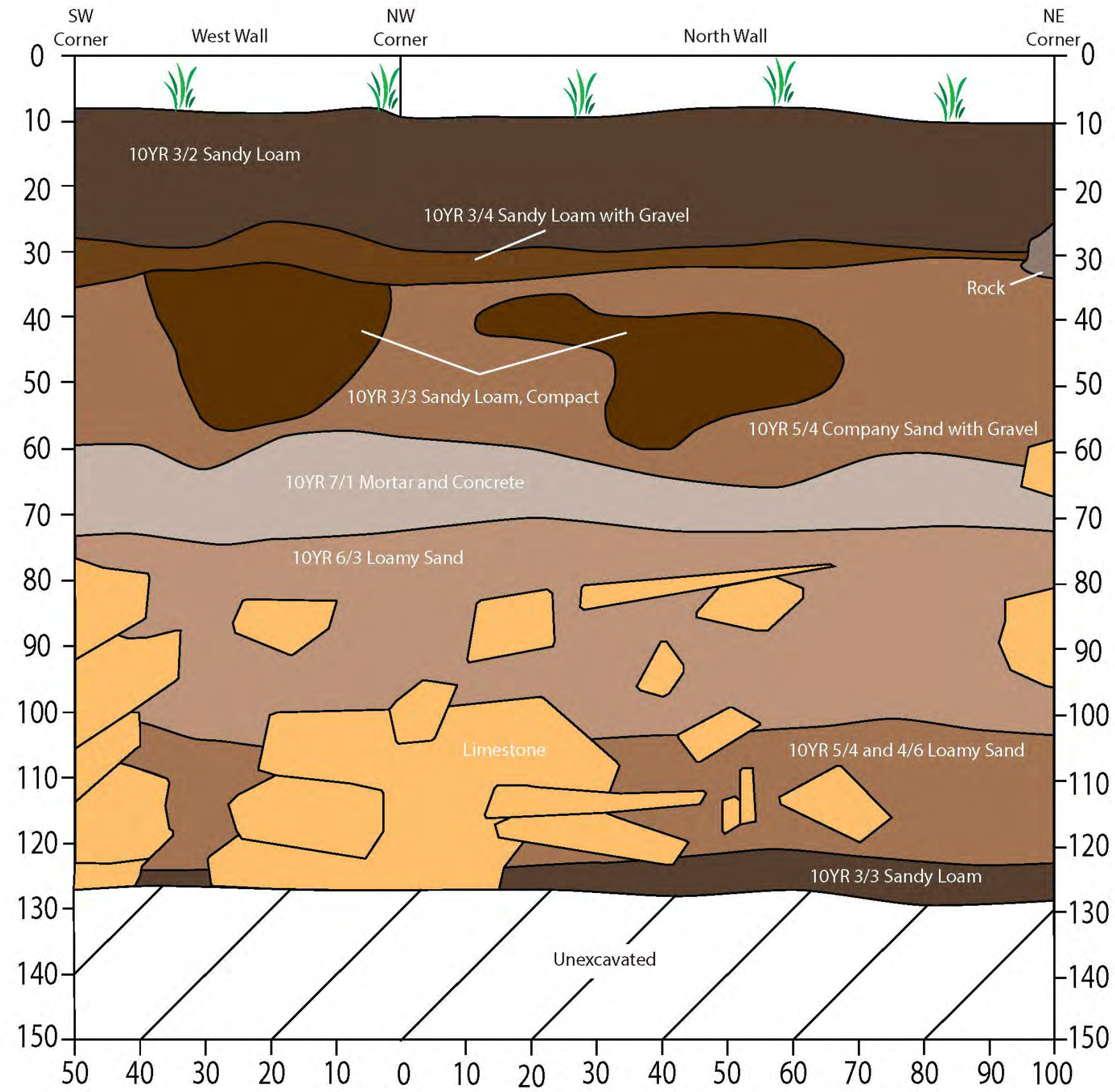
Artifacts collected from XU 1 include a mixture of historical materials, including square nails, common nails, whiteware, porcelain, flat clear glass, curved glass (clear, olive, and purple), cut animal bone, slag, brick, concrete, and limestone, as well as some modern materials (plastics such as PVC pipe fragments). The densely packed limestone layer (the historical surface of Mill Square) was first observed in Level 8 (73-75 cmbs) and continued throughout the remainder of the unit. The densest layer of artifacts was just beneath the first observation of the Mill Square surface, and primarily included glass fragments, nails (both square and common), and ceramic sherds. Colored glass, including olive and purple, was observed

in Levels 7, 9, and 10 (62-82.4 cmbs). Olive glass typically has numerous varieties (yellow olive, olive yellow, forest green, emerald olive, pea green, et cetera). It appears that the olive glass recovered from XU 1 is forest green or olive green. These types were typically manufactured in the first half of the 1800s, though were still produced into the 20th century (Society for Historical Archaeology 2023). Reference materials note that purple glass was often reddish in hue, unlike the glass fragments collected from XU 1 (which were a light amethyst). This softer purple color is likely the result of colorless glass reacting with sunlight (Society for Historical Archaeology 2023).

Table 3. Site 21RC0076 XU 1 Results

Level	Avg. Depth (cmbs)	Ceramic	Glass	Metal	Faunal Remains	Slag	Building Materials	Modern Materials	Total
1	4.6-14	-	4	2	-	-	1	3	10
2	14-24	2	-	5	-	-	13	1	21
3	24-34	1	2	9	-	-	14	-	26
4	34-44	2	-	1	-	2	4	-	9
5	44-55	1	7	7	-	-	3	1	19
6	55-62	-	-	-	4	-	2	-	6
7	62-73	3	6	3	-	-	9	-	21
8*	73-75	-	2	-	-	-	-	-	2
9*	75-78	6	41	7	2	-	-	-	56
10*	78-82.4	7	46	10	1	1	-	-	65
11*	82.4-88	2	15	6	3	2	3	-	31
12*	88-91	-	1	7	-	1	4	-	13
13*	91-94.3	-	8	11	1	-	-	-	20
14*	94.3-97	-	-	-	-	-	-	-	0
15*	97-103	-	-	-	-	-	-	-	0
16*	103-113	-	-	1	-	-	-	-	1
17*	113-118	1	-	4	-	-	-	-	5
Wall Clean	-	-	-	9	-	1	1	-	11
Total	-	25	132	82	11	7	54	5	316

*dense limestone present, but not collected



21RC0076 XU1
West and North Wall Profile

Figure 5

Based on the compact soil layer with limestone cobbles and gravel inclusions observed directly above the densely packed limestone cobble layer within these shovel tests and XU 1, it is likely that these layers represent the 1856 surface of Mill Square. Based on historical documentation, the 1856 surface of Mill Square was maintained regularly by laying down rock, dirt, water, and oil on the surface to manage mud and dust (NHS 2010). The thick deposit of layered and organized limestone pieces in XU 1 supports this documentation. In the process, it is likely that objects dropped in the Square, such as nails, would be captured within those layers over time. Although no historical record citing the composition of the Square's surface was observed or reviewed for this investigation, limestone cobbles may have provided a sturdy base layer.

Historical images suggest that when the 1856 grist mill was demolished sometime between 1915 and 1922, the historical surface of Mill Square was extended to the riverfront (Foote 1915, 1922; Zellie and Lucas 1925). Therefore, although ST 4 is located within the grist mill's footprint, or at least its retaining wall's footprint, it may also contain surface components of Mill Square's reconstructed historical surface after the demolition of the 1856-c.1922 grist mill. Based on the results of the shovel tests and XU 1, the historic surface of Mill Square was encountered no higher than 65 cmbs, and soils above the limestone surface component of the site featured a mixture of modern and historical materials, as well as evidence of disturbance.

1856-c.1922 Grist Mill

Eight shovel tests were excavated within or near the estimated historical footprint of John North's 1856-c.1922 grist mill (ST 2, ST 3, ST 204, ST 205, ST205B, ST 206, ST 207, and ST 208). Of these, S T ST 204, ST 207, and ST 205B exhibited evidence of disturbance. ST 204 and ST 207 were disturbed throughout the entirety of the soil column (100 cmbs), and ST 205B exhibited an ash layer between 75 and 100 cmbs which included intermingled modern and historical materials; evidence of disturbance. Additionally, in ST 205, soils appeared intact, but no evidence of the grist mill foundation or Mill Square surface was present.

ST 2 was excavated to a maximum depth of approximately 160 cmbs. The soil profile of ST 2 consisted of very dark brown (10YR 2/2) loamy topsoil to approximately 25 cmbs, followed by dark yellowish-brown (10YR 3/4) coarse sands containing limestone gravel until approximately 56 cmbs; yellowish-brown (10YR 5/6) sandy clay containing faunal bone, charcoal, and ash until approximately 76 cmbs; yellowish-brown (10YR 5/8) clay containing limestone gravel until approximately 140 cmbs; very dark brown (10YR 2/2) loam containing historical wire, glass, and slag until approximately 145 cmbs; and brownish-yellow (10YR 6/6) clay sands mottled with very dark brown (10YR 2/2) silty sand and containing organic inclusions typical of wetland soils until approximately 160 cmbs, at which point very dark gray (10YR 3/1) wet silt with organic inclusions were identified and the shovel test was concluded due to reaching the maximum depth of the bucket auger.

ST 3 was excavated near the southwestern corner of the 1856 grist mill's estimated footprint to a maximum depth of 91 cmbs. The soil profile of ST 3 consisted of very dark gray (10YR 3/1) silty loam topsoil until approximately 21 cmbs, followed by yellowish-brown (10YR 5/6) clay sands until

approximately 32 cmbs; very dark grayish-brown (10YR 3/2) coarse loose sand containing square nails, slag, coal, and historical concrete until approximately 48 cmbs; dark yellowish-brown (10YR 4/6) coarse sands containing slag, coal, and historical concrete until approximately 58 cmbs; mottled white (10YR 8/1), yellow (10YR 7/6 and 7/8), and very dark gray (10YR 3/1) fine sands until approximately 69 cmbs; dark yellowish-brown (10YR 4/4) sands containing coal, slag, historical concrete, glass, and square nails; dark yellowish-brown (10YR 4/4) sand and large limestone cobbles containing square nails, coal, slag, and historical concrete until approximately 91 cmbs, at which point the shovel test was concluded upon identifying a possible architectural wall feature. The feature consisted of a flat limestone piece and adjacent mortar. The surface of the limestone piece was observed at 91cmbs north of and adjacent to the mortar. Only one side of the limestone piece was not obscured by the walls of the shovel test. That side is aligned east-west, appeared to be slightly curved, and extended into the soil column, so no edges were observed. Finely degraded mortar was observed directly adjacent to the visible side, and level with the surface of the limestone piece. Another limestone piece was observed at the base of the shovel test on the south side of the mortar. The southern limestone piece is not level, extending between 80-91 cmbs. The limestone was identified directly below a density of historical architectural debris.

ST 206 and ST 208 contained similar soil profiles, consisting of a very dark brown (10YR 2/2) silty loam with gravel top layer until approximately 30-40 cmbs, followed by a yellowish-brown (10YR 5/4) layer of sand, which was atop a final layer of mottled very dark brown (10YR 2/2) and yellowish-brown (10YR 5/4) silty loam. Modern materials (such as plastics and Styrofoam) were observed in the upper soil layer, and limestone cobbles were observed in the soil layer immediately below. The final soil layer exhibited larger pieces of limestone, including some that appeared to be flat or organized (though due to the nature of excavating within a shovel test, it was not possible to confirm their orientation). Historical debris including slag, flat glass, metal fragments, and some mortar were observed in the soils in which the large limestone blocks were encountered.

XU 2 was placed near ST 3 and ST 206 (Figure 6, Table 4). This unit measured 100 x 50 cm and was excavated in 10 cm levels. Excavation was planned to switch to 5 cm layers upon encountering organized limestone pieces or other evidence of a possible mill wall, but none were encountered. Soils in XU 2 include a very dark brown (10YR 2/2) silty loam topsoil extending to approximately 13 cmbs, which was atop a thin layer of mottled dark brown (10YR 3/3) and very dark brown (10YR 2/2) silty loam. This thin layer gave way to a compact layer with a very high amount of gravel inclusions at approximately 25 cmbs and extended to approximately 40 cmbs, at which point a very dark gray 10YR 3/1 and 2/1 layer of silty loam (which also had a high amount of gravel) was the dominant soil matrix until 50 cmbs. Between 50 and 60 cmbs, a similarly dark (yet lacking the gravel) black (10YR 2/1) and very dark gray (10YR 2/2) silty loam layer was present before giving way to a gray (10YR 6/1), dark brown (10YR 3/3), and black (10YR 2/1) mottled sandy loam which again featured gravel. This layer ended approximately 70 cmbs and was atop a layer of dark grayish-brown (10YR 4/2) loam until approximately 85 cmbs. In this loam layer, beneath the gravelly layers, a single limestone block was present in the eastern half of the unit. This block was approximately 20 cm thick, 30 cm long, and 35 cm wide. This block had no signs of mortar, nor were any other limestone blocks or large pieces present. The block was had square corners, suggesting it was cut. At approximately 85cmbs, the final soil layer of very dark grayish-brown (10YR

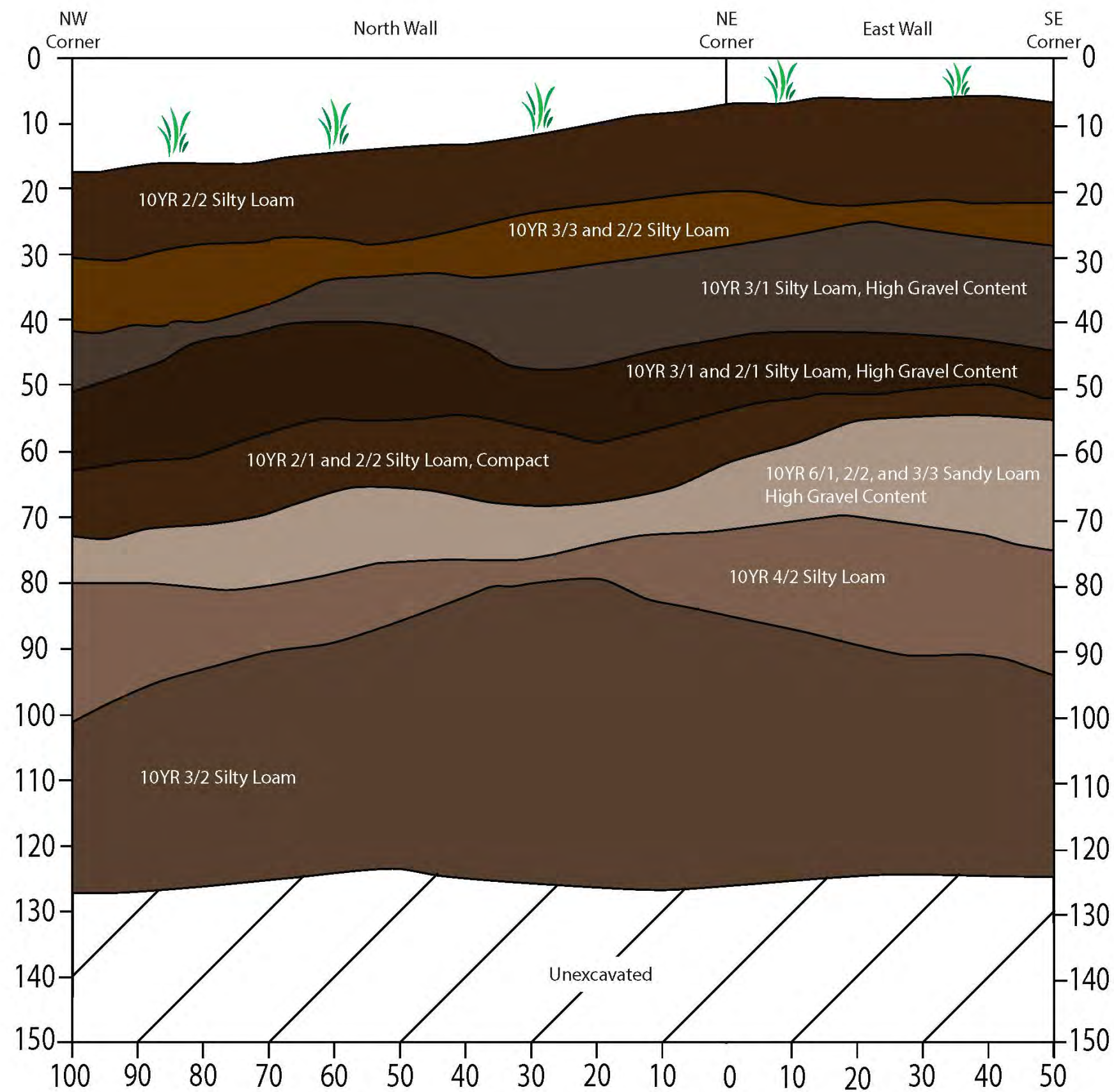
3/2) silty loam was present until the unit was terminated. Excavated was terminated approximately 120 cmbs due to safety. The bottom two soil layers of this unit contained historical artifacts including nails, glass, brick fragments, and a large amount of slag.

No diagnostic artifacts were recovered from XU 2. Slag represented the majority of artifacts collected from XU 2 and was found throughout the unit but clustered more in the middle and lower levels. Concrete fragments were recovered as deeply as Level 11 (111-121 cmbs), and a mixture of common and square nails were recovered throughout the unit. No evidence of the possible architectural feature identified in nearby shovel tests was observed, and the single limestone block was first observed in Level 7 (70-80 cmbs) and removed in Level 9 (90.4-100 cmbs) (the levels with the highest amount of slag). The soil mottling and high gravel content in soils observed as deeply as 70 cmbs indicates disturbance throughout the upper half of the unit.

Table 4. Site 21RC0076 XU 2 Results

Level	Avg. Depth (cmbs)	Ceramic	Glass	Metal	Faunal Remains	Slag	Leather	Building Materials	Modern Materials	Total
1	17-23.4	-	1	2	-	-	-	1	5	9
2	23.4-30	-	1	1	-	-	-	1	4	7
3	30-39.4	-	-	-	-	-	-	-	-	0
4	39.4-50	-	2	1	-	-	-	1	-	4
5	50-60	-	5	4	-	6	-	23	-	38
6	60-70	-	8	3	-	6	-	3	-	20
7	70-80	-	23	3	-	208	-	27	-	261
8	80-90.4	-	3	13	-	17	-	2	-	35
9	90.4-100	5	9	2	-	172	1	-	-	189
10	100-111	-	14	1	1	52	-	-	-	68
11	111-121	1	14	7	-	18	-	3	-	43
12	121-130	2	6	7	-	10	-	2	-	27
Wall Clean	-	-	4	3	-	16	-	3	-	26
Total	-	8	90	47	1	505	1	66	9	727

**Bridge Square -
Riverside Park Renovation
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Northfield, Rice County, Minnesota



21RC0076 XU2
North and East Wall Profile

Figure 6

Between the shovel tests and XU 2 placed near the location of the grist mill, evidence of an intact foundation was observed only in ST 3, ST 206, and ST 208 and disturbance throughout the entire soil column was observed in ST 204, ST 205B, and ST 207. XU 2 observed no signs of an intact architectural feature, though a single limestone block was observed in soils along with historical debris. Of tests in which the possible mill foundation was observed, this feature was observed no higher than 75 cmbs.

Preliminary NRHP Eligibility Assessment

Site 21RC0076 is located within the Northfield Commercial Historic District, which is listed in the NRHP for its significance under Criterion A in the areas of settlement, industry, and commerce and under Criterion C in the area of architecture. Components of Site 21RC0076 are located in Riverside Park and Bridge Square Park, which are also listed in the NRHP as contributing sites to the District under the same criteria.

Site 21RC0076 consists of intact evidence of the 1856 surface of Mill Square and architectural remnants of a structure located in or near footprint of the 1856-c.1922 grist mill. The architectural remnants related to the 1856-c.1922 grist mill did not appear intact, and soils in the nearby historic footprint of the mill appeared disturbed, during Phase I archaeological survey. Components of the site related to Mill Square (the limestone surface) appeared intact, and soils did not appear disturbed apart from small pockets of disturbance. Mill Square was the center of commerce and industry during the earliest years of Northfield's founding and continues to be a center of gathering and commerce today as Bridge Square. Based on this understanding, Site 21RC0076 could have the potential to be eligible for listing in the NRHP as a contributing site to the District for its significance under Criterion A in the same areas as the District. Not much is known about the construction of the grist mill, or the original surface of Mill Square, therefore Site 21RC0076 may have the potential to yield information important to history, and thus may also be eligible for the NRHP under Criterion D.

5.0 RECOMMENDATIONS

As a result of the Phase I archaeological field survey for the Bridge Square – Riverside Park Renovation Project, one post-contact archaeological site was identified (21RC0076). Site 21RC0076 contains both intact and disturbed material evidence of the 1856 surface of Mill Square and disturbed architectural remnants of a foundation wall near and within the historical footprint of John North's 1856 Grist Mill.

Based on the intact evidence of the 1856 surface of Mill Square identified during Phase I excavations, Site 21RC0076 may be potentially eligible for listing in the NRHP as a contributing site to the NRHP-listed Northfield Commercial Historical District. Therefore, 106 Group recommends that impacts to the intact portions of the 1856 surface of Mill Square site should be avoided during construction. The portion of Site 21RC0076 that is associated with the 1856 surface of Mill Square is intact at or below 65 cm (2.1 ft.) below surface. Current Project plans provided by the City of Northfield describe that no more than 46 cm (1.5 ft.) of soil is to be removed in areas in which the Mill Square surface was identified. If it is feasible, 106 Group recommends that utility installations or other excavations that may disturb soils deeper than 65 cmbs be placed within existing utility trenches to avoid impacting the site.

Based on the results of Phase I archaeological survey, soils within the portion of Site 21RC0076 that are associated with remnants of a foundation wall near and within the footprint of the 1856 Grist Mill exhibited disturbance, and architectural elements potentially associated with the mill, did not appear intact.

106 Group recommends that archaeological construction monitoring be conducted within Site 21RC0076 for the Project as currently planned (Figure 7). The paved areas within the southern portion of the study area (south of and adjacent to, Site 21RC0076 and Bridge Square) could not be shovel tested during the Phase I field survey due to the surfaces being impenetrable to shovels. Based on their proximity to resources identified as components of Site 21RC0076 during the Phase I survey, 106 Group recommends archaeological construction monitoring be conducted within these paved areas as well for a total of 1.46 acres (0.59 ha) (Figure 7).

Extensively disturbed soils were observed in the remainder of the study area. Post-contact (modern and historical) materials were recovered from these portions of the study area. 106 Group recommends no further archaeological work in the remainder of the study area (0.97 acres [0.39 ha]) (Figure 7).



**Bridge Square -
Riverside Park Renovation
Phase I Archaeological
Investigation**
Northfield, Rice County, Minnesota

- Study Area
- Newly Identified Site
- Construction Monitoring Recommended
- No Further Archaeological Work Recommended

0 10 Meters
0 30 Feet

1:650



Recommendations

Figure 7

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APPENDIX A: 21RC0076 OSA SITE FORM

MINNESOTA ARCHAEOLOGICAL SITE FORM

OFFICE OF THE STATE ARCHAEOLOGIST
Fort Snelling History Center, St. Paul, MN 55111 (612) 725-2729

SITE #: 21RC0076
(OSA assigns if New Site)

Site Name:

Agency/Field #:

☐ New Site ☒ Site Update

OSA License #: 22-060

SHPO RC #:

Type of Fieldwork: ☒ Reconnaissance/Phase I
☐ Evaluation/Phase II
☐ Excavation/Phase III

Date(s) of This Fieldwork: 10/2-10/4/2023

NRHP Status: ☐ Listed ☐ Determined Eligible ☐ CEF(106) ☐ CNEF(106) ☒ Undetermined

LOCATIONAL INFORMATION

County: Rice County

City/Twp. Name: City of Northfield, MN

SHPO Sub-Region: Prairie Lakes East

USGS 7.5' Quadrangle Map (name and year): Northfield, MN 2022

Township: 111 N	Range: 20 E	Section: 1	¼ Sections (at least 2): NENE
Township: 111 N	Range: 19 E	Section: 6	¼ Sections (at least 2): NWNW
Township:	Range:	Section:	¼ Sections (at least 2):

UTM Coordinates: (less than 10 acres use center; over 10 acres define polygon around site; draw points on USGS)

Zone: UTM 15 Datum: 1927 ☒ 1983 Method: USGS Map ☒ GPS ☐ Other

Point 1: Easting 487181.335078 Northing 4922574.65029

Point 2: Easting 487161.96926 Northing 4922544.45604

Point 3: Easting 487208.057616 Northing 4922572.76016

Point 4: Easting 487247.872706 Northing 4922551.67312

Point 5: Easting 487248.896228 Northing 4922527.41526

Point 6: Easting 487186.99477 Northing 4922527.69774

SITE CHARACTERISTICS

Acres: 0.76 Site Dimensions: N-S 80m E-W 46m Maximum Cultural Depth (if known) unknown

Site Description (✓all that apply, but only one check per line):

☐ single artifact ☐ lithic scatter ☒ artifact scatter
☐ burial mound (number of mounds) ☐ non-mound lone grave ☐ non-mound cemetery
☐ petroglyph ☐ pictograph ☐ petroform
☐ surface features (list below)

☒ other: intact 1856 historical surface of Mill Square; disturbed post-contact architectural feature (est. 1856-c.1922 Grist Mill)

Surface Features (✓all that apply): ☐ earthwork ☐ pit/depression ☐ foundation/ruin ☐ other:

Inferred Site Function (✓all that apply): ☐ habitation ☐ mortuary ☐ farm ☒ industrial ☐ transportation
☒ Other (list): community center ☐ unknown

Current Land Use (list approximate % for all that apply):

☐ cultivated ☐ fallow ☒ commercial ☒ recreational ☐ industrial ☐ residential
☐ woodland ☐ grassland ☐ water-covered ☐ other:

Surface Visibility (list approximate % for all that apply):

☐ excellent ☐ good ☐ fair ☒ poor/none

Degree of Disturbance (list approximate % for all that apply or ✓ unassessed):

☐ minimal ☒ 50% moderate ☐ heavy ☐ completely destroyed ☐ unassessed

Current Threats to Site: (✓all that apply or ✓ none known)

☐ erosion ☒ development ☐ agricultural ☐ other: ☐ none known

SITE #: 21RC0076

Site Name:

Agency/Field #:

CULTURAL/TEMPORAL AFFILIATION(list all that apply by level of certainty: 1 = confirmed; 2 = probable or √ "not determined"):

Period: ☐ not determined ☐ Contact (1650-1837)
 ☐ Precontact (9500 BC - 1650 AD) ☒ Post-Contact (1837-1945)

Precontact Context: (list all that apply by level of certainty; if unable to discern specific context, √ here ☐)

Paleoindian Tradition ☐ not determined ☐ Folsom ☐ Lanceolate Point/Plano
 ☐ Clovis ☐ Eastern Fluted ☐ other:

Archaic Tradition ☐ not determined ☐ Prairie ☐ Riverine
 ☐ Shield ☐ Lake-Forest ☐ other:

Woodland Tradition ☐ not determined ☐ Fox Lake ☐ Laurel
 ☐ SE Mn Early ☐ C Mn Transitional ☐ Lake Benton
 ☐ Brainerd ☐ Blackduck-Kathio ☐ Psinomani/Sandy Lake
 ☐ Havana-Related ☐ SE Mn Late ☐ Rainy River Late
 ☐ other:

Plains Village Tradition ☐ not determined ☐ Cambria ☐ Great Oasis ☐ Big Stone
 ☐ other: _____

Mississippian Tradition ☐ not determined ☐ Silvernale ☐ other:

Oneota Tradition ☐ not determined ☐ Blue Earth ☐ Orr ☐ other:

Contact Context: (list all that apply by level of certainty; if unable to discern specific context, √ here ☐)

American Indian ☐ not determined ☐ Dakota ☐ Ojibwe ☐ other: _____

Euro-American ☐ not determined ☐ British ☐ other:
 ☐ French ☐ Initial US

Post-Contact Context: (list all that apply by level of certainty; if unable to discern specific context, √ here ☐)

☐ Indian Communities & Reservations (1837-1934) ☐ St. Croix Triangle Lumbering (1830s-1900s)
☒ Early Agriculture & River Settlement (1840-1870) ☐ Railroads & Agricultural Development (1870-1940)
☐ Northern MN Lumbering (1870-1930s) ☐ Iron Ore Industry (1880s-1945)
☐ Tourism & Recreation (1870-1945) ☐ Urban Centers (1870-1940)

Approximate Post-Contact Occupation/Site Formation Date(s): 1856**Context Assignment/Dating Methods** (√ all that apply):

☒ artifact type/style ☐ feature type ☐ radiometric ☐ relative stratigraphy ☐ geomorphology

☐ historic accounts (list) _____

☒ historic maps (list) Sanborn 1884, 1889, 1894, 1900, 1910, 1922; Northfield Historical Society 1905-1910 plat map; Northfield Historical Society 1900 "Plat of Bridgewater"; BLM GLO 1854;

☐ other(s) (specify): _____

(For radiometric dates, attach photocopies of laboratory sheets if available.)

MATERIALS PRESENT (√ all that apply):**Basic Artifact Categories**Ceramics

☐ Aboriginal
☒ Euro-American

Lithics

☐ projectile points
☐ other chipped stone tools
☐ debitage
☐ ground/pecked stone
☐ FCR
☐ aboriginal copper

Biological Remains

☒ animal
☐ human
☐ unidentified bone
☐ seeds/nuts
☒ charcoal
☐ wood

Historic Materials

☒ glass
☒ metal
☒ brick
☒ other: limestone and mortar architectural materials

SITE #: 21RC0076

Site Name:

Agency/Field #:

Major Exotic Materials (√all that apply):

☐ catlinite ☐ native copper ☐ Hixton orthoquartzite
☐ Knife River Flint ☐ obsidian ☐ other:

Diagnostic Artifacts:

Ceramics: Prehistoric Types/Wares/Temper

Historic

Prehistoric Lithics:

Glass:

Metal:

Other:

ENVIRONMENTAL DATA **Current Topographic Setting** (√all that apply):Away from Water☐ general upland☐ terrace edge☐ hilltop☐ glacial beach ridge☐ rock outcrop☐ other: _____Riverine☐ fan☒ terrace/bluff top☐ stream-stream junction☐ bluff-base☐ cave/rockshelter☒ floodplain☐ other: _____Lacustrine☐ inlet/outlet☐ peninsula☐ island☐ isthmus☐ general shoreline☐ bog/slough/lake bottom☐ other: _____

Topographic Feature Name from USGS Map: _____

OWNERSHIP INFORMATION

Source and Date of Ownership Information (e.g., plat map, county recorder's office, personal communication, etc.):

Rice County, County Assessor's Office

Ownership Type (list approximate % for all that apply; if unknown √here ☐):☐ Federal☐ State☒ Local (public)☐ Tribal☐ Private

Land Owner (name and address if known): NORTHFIELD CITY, 801 WASHINGTON ST, NORTHFIELD MN 55057

CURRENT INVESTIGATION INFORMATIONMethods/Techniques Employed (√all that apply):☐ informant report☐ small diameter soil coring (≈ 1" diameter)☐ surface survey☒ shovel testing☐ formal test units☐ mechanical testingmax. test depth 195cmbs☐ geomorphological survey (specify): _____☐ geophysical survey (specify): _____☒ other: bucket augers

Informant Name and Address (if known):

Known Collectors/Collections:

Artifact Repository (name and accession numbers or repository agreement number): MNHS repository agreement #1032

Most Recent Survey Report – Title, Author, Date: Phase I Archaeological Investigation for the Bridge Square Renovation Project, Kate Hunt and Tyler Lund-Kyrola, October 2023 pending

Major Previous Bibliographic Reference(s) to Site:

Principal Investigator (name and affiliation): Kathryn Hunt, MSc, RPA – 106 Group

Form Completed By (name and date): Tyler Lund-Kyrola, October 24, 2023

SITE #: 21RC0076

Site Name:

Agency/Field #:

ADDITIONAL INFORMATION (*Reason for Update or Survey, Location, Site Characteristics, Materials Present, Setting, Archaeological Methods, etc.; attach extra sheets as needed.*)

In October 2023, 106 Group conducted additional Phase I archaeological investigations for the Bridge Square – Riverside Park Renovation project located in the city of Northfield, Rice County, Minnesota. The City of Northfield is planning the renovation of Bridge Square within the downtown Northfield Riverside Park. Bridge Square and Riverside Park (RC-NFC-400) are listed in the National Register of Historic Places (NRHP) as contributing sites to the NRHP-listed and locally-designated Northfield Commercial Historic District (RC-NFC-263) (District).

The boundaries of the site were previously estimated based on historical documentation of the footprint of the 1856-c1922 grist mill, the historical footprint of Mill Square, and Phase I shovel testing in May 2023. The boundaries of FS-1 encompass these two historical footprints, although based on utility information and the results of shovel testing, there are horizontal and vertical pockets of both disturbed and intact soils within the boundaries of the site. Additional testing in October 2023 included additional shovel testing, and two 100 x 50 cm excavation units.

1856 Surface of Mill Square

In May 2023, four shovel tests yielded evidence of the historical surface of the 1856 Mill Square (ST 1, ST 4, ST 12, ST 13). In October 2023, an additional four shovel tests (ST 200, 201, 202, and 203) also yielded evidence of the historical square surface. The typical profile of these shovel tests consisted of topsoil and disturbed layers until reaching a layer of very compact greyish-brown (10YR 3/2) fine silty sand layer with fine limestone gravel inclusions, historical artifacts (e.g. square nails, historical ceramics, glass fragments), historical materials associated with building and demolition (brick fragments, historical concrete, coal/slag, and larger limestone pieces). The depth of the surface of this layer was typically encountered around 70cmbs. At these depths, a layer of densely-packed large limestone cobbles within compact greyish-brown (10YR 3/2) silty sands were observed. The densely packed limestone was impenetrable by shovel, dig bar, or bucket auger, thereby preventing further excavation using shovel testing methods.

One 100 x 50 cm excavation unit (XU 1) was placed within 21RC0076 near shovel tests in which the Mill Square surface was observed. Soils in XU 1 included a top soil layer (10YR 3/2 sandy loam) that extended to approximately 20 cmbs, which was atop a very thin (less than 5cm thick) layer of 10YR 3/4 sandy loam with gravel. This gravel layer was atop a compact and gravelly layer of 10YR 3/3 sandy loam, extending to approximately 50 cmbs. This gravelly layer included mixed modern and historical artifacts, and exhibited signs of disturbance due to the uneven mottling of soils. Beneath the gravelly layer was a layer of disintegrating concrete and mortar with hardly any soil content. Concrete pieces in this layer were not organized or intact, and modern materials were recovered from this layer. Modern materials were not recovered below the concrete layer. Beneath the concrete and mortar, beginning at approximately 65 cmbs, was a layer of light brown 10YR 6/3 very compact sand, which featured large limestone pieces that appeared to be organized and layered. Some stones appear to have mortar between them, though this mortar was very crumbly and due to the stony and compact nature of the layer was broken as it was removed. The limestone pieces fully covered the base of the unit at approximately 75 cmbs, and continued until nearly the end of excavation. Soils transitioned from 10YR 6/3 sands to 10YR 5/4 and 4/6 mottled loamy sand at 90cmbs, and a final layer of dark brown 10YR 3/3 sandy loam began at approximately 115 cmbs. Excavation was terminated at 120 cmbs due to safety.

Artifacts collected from XU 1 include a mixture of historical materials, including cut nails, wire nails, whiteware, porcelain, flat clear glass, curved glass (clear, olive, and purple), cut animal bone, slag, brick, concrete, and limestone, as well as some modern materials (plastics such as PVC pipe fragments). The densely packed limestone layer (the historical surface of Mill Square) was first observed in Level 8, and continued throughout the remainder of the unit. The densest layer of artifacts was just beneath the first observation of the Mill Square surface, and primarily included glass fragments, nails (both cut and wire), and ceramic sherds. Colored glass, including olive and purple, was observed in Levels 7, 9, and 10. Olive glass typically has numerous varieties (yellow olive, olive yellow, forest green, emerald olive, pea green, et cetera); it appears that the olive glass recovered from XU 1 is forest green or olive green. These types were typically manufactured in the first half of the 1800s, though were still produced into the 20th century. Reference materials note that purple glass was often reddish in hue, unlike the glass fragments collected from XU 1 (which were a light amethyst). This softer purple color is likely the result of colorless glass reacting with sunlight.

SITE #: 21RC0076

Site Name:

Agency/Field #:

1856-c.1922 Grist Mill

In May 2023, two shovel tests were excavated within or near the estimated historical footprint of John North's 1856-c.1922 grist mill (ST 2, ST 3). In October 2023, an additional six shovel tests (ST 204, 205, 205B, 206, 207, and 208) were placed in this area. ST 204 and 207 were disturbed throughout the entirety of the soil column (100 cmbs), and ST 205B exhibited an ash layer between 75 and 100cmbs which included intermingled modern and historical materials, evidence of disturbance. Additionally, in ST 205 soils appeared intact but no evidence of the grist mill foundation or Mill Square surface was present.

ST 206 and 208 consisted of a very dark brown (10YR 2/2) silty loam with gravel top layer until approximately 30-40 cmbs, followed by a lighter 10YR 5/4 layer of sand, which was atop a final layer of mottled 10YR 2/2 and 5/4 silty loam. Modern materials (such as plastics and Styrofoam) were observed in the upper soil layer, and limestone cobbles were observed in the second soil layer. The final soil layer exhibited larger pieces of limestone, including some that appeared to be flat or organized (though due to the nature of excavating within a shovel test, it was not possible to confirm their orientation). Historical debris including slag, flat glass, metal fragments, and some mortar were observed in the soils in which the large limestone blocks were encountered.

One 100 x 50 cm excavation unit (XU 2) was placed in 21RC0076 near shovel tests in which the possible foundation wall was identified. Excavation was planned to switch to 5 cm layers upon encountering organized limestone pieces or other evidence of a possible mill wall, but none were encountered. Soils in XU 2 include a very dark brown 10YR 2/2 silty loam top soil extending to approximately 13 cmbs, which was atop a thin layer of mottled 10YR 3/3 and 2/2 silty loam. This thin layer gave way to a compact layer with a very high amount of gravel inclusions at approximately 25 cmbs and extended to approximately 40cmbs, at which point a darker 10YR 3/1 and 2/1 layer of silty loam (which also had a high amount of gravel) was the dominant soil matrix until 50 cmbs. Between 50 cmbs and 60cmbs, a similarly dark (yet lacking the gravel) 10YR 2/1 and 2/2 silty loam layer was present before giving way to a very light 10YR 6/1, 3/3, and 2/1 mottled sandy loam which again featured gravel. This layer ended approximately 70 cmbs and was atop a layer of 10YR 4/2 loam until approximately 85 cmbs. In this loam layer, beneath the gravelly layers, a single limestone block was present in the eastern half of the unit. This block was approximately 20cm thick, 30cm long, and 35 cm wide. This block had no signs of mortar, nor were any other limestone blocks or large pieces present. At approximately 85cmbs, the final soil layer of 10YR 3/2 silty loam was present until the unit was terminated. Excavated was terminated approximately 120 cmbs due to safety. The bottom two soil layers of this unit contained historical artifacts including nails, glass, and brick fragments, and also a large amount of slag.

No diagnostic artifacts were recovered from XU 2. Slag represented the majority of artifacts collected from XU 2, and was found throughout the unit but clustered in the middle and lower levels. Concrete fragments were recovered as deeply as Level 11, and a mixture of wire and cut nails were recovered throughout the unit. No evidence of the possible architectural feature identified in nearby shovel tests was observed, and the single limestone block was first observed in Level 7 and removed in Level 9 (the levels with the highest amount of slag). The soil mottling and high gravel content in soils observed as deeply as 70cmbs indicates disturbance throughout the upper half of the unit.

Preliminary NRHP Eligibility Discussion

Site 21RC0076 is located within the Northfield Commercial Historic District, which is listed in the NRHP for its significance under Criterion A in the areas of settlement, industry, and commerce and under Criterion C in the area of architecture. Components of Site 21RC0076 are located in Riverside Park and Bridge Square Park, which are also listed in the NRHP as contributing sites to the District under the same criteria.

Site 21RC0076 consists of intact evidence of the 1856 surface of Mill Square and architectural remnants of a structure located in or near footprint of the 1856-c.1922 grist mill. The architectural remnants related to the 1856-c.1922 grist mill did not appear intact, and soils in the nearby historic footprint of the mill appeared disturbed, during Phase I archaeological survey. Components of the site related to Mill Square (the limestone surface) appeared intact, and soils did not appear disturbed apart from small pockets of disturbance. Mill Square was the center of commerce and industry during the earliest years of Northfield's founding and continues to be a center of gathering and commerce today as Bridge Square. Based on this understanding, Site 21RC0076 could have the potential to be eligible for listing in the NRHP as a contributing site to the District for its significance under Criterion A in the same areas as the District. Not much is known about the construction of the grist mill, or the original surface of Mill Square, therefore Site 21RC0076 may have the potential to yield information important to history, and thus may also be eligible for the NRHP under Criterion D.

SITE #: 21RC0076

Site Name:

Agency/Field #:

Site 21RC0076 XU 1 Results

Level	Ceramic	Glass	Metal	Faunal Remains	Slag	Building Materials	Modern Materials	Total
1	-	4	2	-	-	1	3	10
2	2	-	5	-	-	13	1	21
3	1	2	9	-	-	14	-	26
4	2	-	1	-	2	4	-	9
5	1	7	7	-	-	3	1	19
6	-	-	-	4	-	2	-	6
7	3	6	3	-	-	9	-	21
8*	-	2	-	-	-	-	-	2
9*	6	41	7	2	-	-	-	56
10*	7	46	10	1	1	-	-	65
11*	2	15	6	3	2	3	-	31
12*	-	1	7	-	1	4	-	13
13*	-	8	11	1	-	-	-	20
14*	-	-	-	-	-	-	-	0
15*	-	-	-	-	-	-	-	0
16*	-	-	1	-	-	-	-	1
17*	1	-	4	-	-	-	-	5
Wall Clean	-	-	9	-	1	1	-	11
Total	25	132	82	11	7	54	5	316

*Dense Limestone Present, Not Collected

Site 21RC0076 XU 2 Results

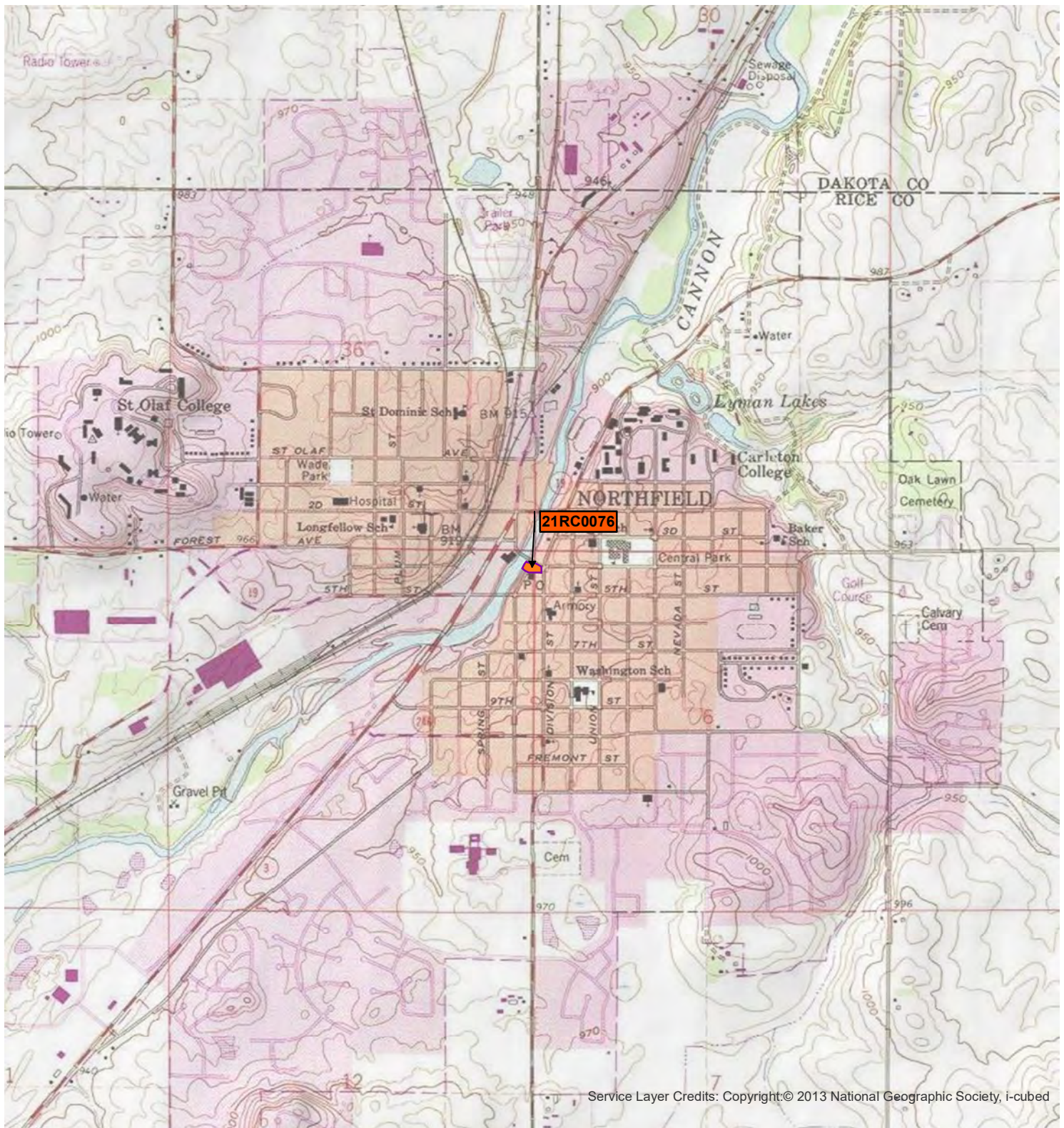
Level	Ceramic	Glass	Metal	Faunal Remains	Slag	Leather	Building Materials	Modern Materials	Total
1	-	1	2	-	-	-	1	5	9
2	-	1	1	-	-	-	1	4	7
3	-	-	-	-	-	-	-	-	0
4	-	2	1	-	-	-	1	-	4
5	-	5	4	-	6	-	23	-	38
6	-	8	3	-	6	-	3	-	20
7	-	23	3	-	208	-	27	-	261
8	-	3	13	-	17	-	2	-	35
9	5	9	2	-	172	1	-	-	189
10	-	14	1	1	52	-	-	-	68
11	1	14	7	-	18	-	3	-	43
12	2	6	7	-	10	-	2	-	27
Wall Clean	-	4	3	-	16	-	3	-	26
Total	8	90	47	1	505	1	66	9	727

Phase I Archaeological Field Survey Shovel Testing Results

Site	Shovel Test	Depth of Artifact Recovery (approx. cmbs)	Count	Description
21RC0076	1	0-60	8	Square nails (2); brick sample (4), slag sample (1), limestone sample (1)
		0-90	21	Nails (7; 1 square nail), glass shards (9), post-contact ceramic body sherds (2), brick sample (2), slag sample (1)
		95	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	2	57 (in ST wall)	3	Faunal bone fragments (3)
		140-150	4	Metal wire (1); coal ash sample (2), glass fragment (1)
21RC0076	3	0-40	4	Square nail (1); unidentified metal (3)
		0-90	20	Nails (9; 5 square nails); unidentified metal (2), glass shards (9)
		91	-	Possible architectural feature: Intact and level limestone block with mortar
21RC0076	4	0-54	5	Nail (1), post-contact ceramic body sherd (1), faunal bone (3)
		55-65	1	Metal rod (1)
		0-68	22	Nails (8; 3 square nails, 1 pin nail), metal wire fragments (8), unidentified metal (5), post-contact ceramic body sherd (1)
		70 (in ST wall)	1	S-shaped wrench (1)
		0-85	56	Nails (21; 1 square nail), metal wire fragments (5), unidentified metal (18), bolts (4), historical concrete sample (1), glass shards (6), post-contact ceramic base sherd (1)
		0-113	13	Nails (6; 2 square nails), metal wire fragment (1), bolts (2), foil (1), unidentified metal (1), bullet casing (1), glass bottle neck shard (1)
		113	-	Historical surface component: Densely packed limestone cobble layer
-	5	0-50	2	Tin cigarette filter/holder (1), Square nail (1)
-	6	0-76	-	Disturbed: utility trench
-	7	0-43	-	Disturbed: plastic, modern trash
-	8	0-50	-	Disturbed: modern concrete impasse
-	9	0-116	-	Disturbed: plastic and other modern materials mixed with historical materials
-	10	0-195	-	Disturbed: plastic and other modern materials mixed with historical materials
-	11	0-117	-	Disturbed: plastic and other modern materials mixed with historical materials
		100-140	11	Ceramic drintile fragment (2), coal/slag sample (2), brick sample (7)

Site	Shovel Test	Depth of Artifact Recovery (approx. cmbs)	Count	Description
21RC0076	12	0-98	3	Nails (2), Metal wire fragment (1)
		98	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	13	0-60	2	Nail (1), glass shard (1)
		0-82	4	Nails (4)
		82	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	200	85	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	201	0-40		Disturbed: modern materials mixed with historic materials
		40-60	5	Post-contact ceramic body sherd (1), brick fragment (1), clear flat glass (2), cut nail (1)
		60-80	8	Cut nail (3), wire nail (3), clear flat glass (2)
		80-95	1	Historical surface component: Densely packed limestone cobble layer
21RC0076	202	0-100	17	Clear flat glass (13), metal fragment (1), metal buckle (1), curved clear glass (1), olive curved glass (1)
		80	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	203	60-100	20	Metal fragment (2), wire nail (10), clear flat glass (4), brick fragment (2), concrete fragment (1), post-contact ceramic body sherd (1)
		~75	-	Historical surface component: Densely packed limestone cobble layer
21RC0076	204	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	205B	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	205	0-80	5	Cement fragment (1), slag (1), limestone sample (1), brick fragment (1), wire nail (1)
		0-100	8	Cement fragment (1), brick fragment (1), slag (1), metal bottle cap (3), metal fragment (1), limestone fragment (1)
21RC0076	206	50-100	16	Metal bottle cap (2), wire nail (1), slag (3), clear flat glass (2), brick fragment (3), concrete fragment (4), limestone fragment (1)
		~70	-	Possible architectural feature: Intact and level limestone block with mortar
21RC0076	207	0-100	-	Disturbed: modern materials mixed with historic materials
21RC0076	208	70-100	5	Clear flat glass (2), slag (2), bivalve shell sample (1)
		~70	-	Possible architectural feature: Intact and level limestone block with mortar

Note: artifacts collected from disturbed layers are not documented here, and will not be curated.



Source: 106 Group

Map Produced by 106 Group 10/26/2023

Bridge Square Renovation Project

Northfield, Rice County, Minnesota

Site 21RC0076 Location: Bridge Square

Site Boundary

0 475 Meters
0 1,100 Feet

1:24,000



Figure 1



Source: 106 Group; MnDOT

Map Produced by 106 Group 10/26/2023

Bridge Square Renovation Project

Northfield, Rice County, Minnesota

Site 21RC0076 Detail: Bridge Square

0 10 Meters
0 40 Feet

1:900



- Site Boundary
- Est. Location of the 1854-c1922 Grist Mill
- + Positive Shovel Test
- × Negative Shovel Test
- Excavation Unit

Figure 2

APPENDIX B: PROJECT PERSONNEL

LIST OF PERSONNEL

Project Manager

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