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## Appendix "A" - Cultural and Natural History

### Statewide Contexts

According to the most recent *Preservation Plan*,<sup>1</sup> approximately 50,000 historic structures and 15,000 archaeological sites have been identified in Minnesota. Only 6,500 of these individual properties are listed on the National Register of Historic Places (NRHP), although they are distributed among all of the State's counties.

To evaluate the significance of the historic resources across the State, the State Historic Preservation Office (SHPO) created a three-tiered framework of historic contexts. These contexts are defined by time period, theme, and geographical area:

- Broad statewide patterns encompassing three periods: Pre-Contact (9500 B.C. - A.D. 1650), Contact (A.D. 1650 - 1837) and Post-Contact (A.D. 1837 - 1945).
- Specific themes, identified as needed, to evaluate properties best understood in a framework smaller than statewide patterns.
- Contexts developed by a particular city or other local area for use in local planning.

Within the *Pre-Contact Period* (9,500 B.C. - A.D. 1650) archaeologists recognize specific historic contexts (e.g., Paleoindian Tradition, Archaic Tradition, Woodland Tradition, Late Prehistoric Period, Mississippian Tradition, and Oneota Tradition). The *Contact Period* (A.D. 1650 - 1837) is associated with various American Indian contexts (e.g., Eastern Dakota and Ojibwe) and Euro-American contexts (e.g., French, British, and Initial United States Presence) since this is the timeframe in which first Europeans then later Euro-Americans interacted with local American Indians. Examples of *Post-Contact Period* contexts that are relevant to the MWW campuses: (1) Reservations & the Indian Community (1830s-1930s), (2) St. Croix Triangle Lumbering (1830s-1900s), (3) Early Agriculture & River Settlement (1840-1870), (4) Railroads & Agricultural Development (1870-1940), and (5) Urban Centers (1870-1940).

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<sup>1</sup> *Working Together: A Preservation Plan for Minnesota's Historic Properties, 2000-2005*. Accessed online at <http://www.mnhs.org/preserve/shpo/MSPpv1.pdf>

Statewide historic contexts have been further subdivided into a variety of *thematic contexts*. For example, some thematic contexts that may be relevant to the MWW campuses include (1) lithic scatters, (2) earthworks, (3) Red River trails (1835-1871), (4) military roads (1850-1875), (5) quarries and mines, and (6) geographic features of cultural significance. The following section examines detailed information about the development of the natural and cultural landscapes through the Contact Period. Expected archaeological site types are also mentioned in this discussion.

### American Indian Cultural & Natural History

The cultural sequence in Minnesota begins with the *Paleoindian* and *Early Archaic* periods (ca. 10,000 – 3,000 B.C.). As glaciers receded from the Upper Midwest, migratory groups of people settled throughout the areas of open woodlands and succeeding grasslands, hunting native herding animals, such as bison and mastodon, and likely exploiting available small game, fish and plant resources as well (Shane 1989). Throughout much of this early timeframe, the climate was becoming successively warmer and drier than during the glacial period. In addition to distinctive projectile points, the tool kits included large, bifacially flaked knives, simple choppers, and large scrapers (Harrison *et al.* 1995; Florin 1996; Higginbottom 1996). The settlement pattern is poorly understood for these groups of people, but it is largely accepted that they followed a mobile nomadic lifestyle. Expected site types include isolated and communal animal kill sites, short-term habitations, base camps, burials, quarries, lithic workshops, rockshelters, petroglyph (rock art) sites, and specialized processing sites (Clouse 1985). No Paleoindian or Early Archaic sites are known in the Lake Elmo Park Reserve.

Characteristic of the *Middle-Late Archaic* periods (ca. 3,000 - 800 B.C.) was a continued reliance on large game (i.e., bison to the west, and deer, elk, and moose to the east) and increasingly diversified technologies associated with hunting, trapping, fishing, foraging, woodworking, and plant processing. This diversification reflects more highly regionalized adaptations to local environmental conditions as climatic trends shifted to cooler and wetter conditions, a pattern that continues today. Chipped-stone tools, such as stemmed and notched projectile points, dominated the tool kits, but the use of pecked- and ground-stone tools also became widespread. The use of copper implements is apparent late in this span of time (Bleed 1969; Gibbon 1998). Evidence for the exploitation of diverse floral and faunal resources suggests a seasonal round type of subsistence-settlement system, with habitation areas often located along the margins of lakes and major rivers. Expected site types are lithic workshops, quarries, plant-gathering sites, fishing sites, petroglyphs, specialized processing sites, permanent villages, hunting campsites, rockshelters, communal hunting sites, and burials (Clouse 1985). No Middle-Late Archaic sites have been recorded in the Lake Elmo Park Reserve.

The *Woodland Period* (ca. 800 B.C. - A.D. 1630) in the region may have been associated with incipient plant domestication, but hunting with intensive wild rice gathering provided for the bulk of subsistence

needs. Settlement patterns resembled those appearing previously, with particularly intense occupation of stream and lake junctions late in the period. The production of ceramic items is an especially significant technological innovation of the Woodland Period. Ceramic types commonly found in the region include Malmo, Howard Lake, Brainerd, St. Croix, Onamia, Black Duck, Clam River, and Sandy Lake (Anfinson 1979). Mound construction associated with mortuary activity also developed during this period, and this region possesses the highest concentration of mound sites in the State (Winchell 1911; Wilford *et al.* 1969). Expected site types include quarries, lithic workshops, clay-extraction sites, ceramic manufacturing sites, hunting camps, permanent villages, specialized processing sites, plant-gathering sites, fishing sites, rockshelters, petroglyph sites, burials, and possibly even horticultural fields (Clouse 1985). No Woodland sites have been recorded at the Lake Elmo Park Reserve, although sites 21WA0057 & 21WA0058 at Eagle Point Lake are thought to be late prehistoric or early protohistoric in age (see descriptions below).

Evidence of what Clouse (1985) calls "Southern Minnesota Upper Mississippian (Oneota)" and what Dobbs & Anfinson (1989) simply refer to as *Oneota* (ca. A.D. 1000-1300) has been reported for the region, with the largest reported sites along the margins of major river valleys or other water bodies (Gibbon 1973, 1982). In this region these cultures appear to have been characterized by a blended subsistence strategy based on simple agriculture, gathering, and bison hunting. Possible site types include semi-permanent villages, permanent and possibly fortified villages and outlying farmsteads, horticultural fields, quarries, lithic workshops, clay-extraction sites, ceramic manufacturing sites, hunting camps, specialized processing sites, plant-gathering sites, fishing sites, rockshelters, petroglyph sites, and burials (Clouse 1985; Dobbs & Anfinson 1989). No Oneota sites are known in the Lake Elmo Park Reserve.

Early in the Historic Period (ca. A.D. 1630) the western portions of this region were occupied by Yankton Dakota, while Eastern Dakota occupied the east (Wedel 1974). One Eastern Dakota property type for the Contact Period is the large, semi-permanent village (Dobbs 1989). Additional property types for the Eastern Dakota in the Contact Period may be recognized through extrapolation backward in time from those recorded in the mid-1800s (*Post-Contact Period*, see below). They include summer residential and logistical base camps, winter camps, wild ricing camps, maple sugaring camps, muskrat procurement sites, cranberry camps, deer-hunting base camps, deer cache sites and deer kill sites, and scaffold burial sites (Dobbs 1989). No Contact Period Dakota sites have been recorded in the Lake Elmo Park Reserve, although sites 21WA0057 & 21WA0058 at Eagle Point Lake are thought to be late prehistoric or early protohistoric in age (see descriptions below).

Written descriptions of the Ojibwe as Upper Great Lakes inhabitants date as far back as A.D. 1640. During the 18<sup>th</sup> century there was a major geographical expansion of Ojibwe populations, possibly as a

result of sociopolitical pressures exerted on them by the westward expansion of Europeans from the East Coast. Anfinson (2003:57) says "the impact of French trade on intertribal relations and tribal migrations exceeded the French presence and would increase the Dakota's use of the MNRRRA corridor." Wars between the Ojibwe and Dakota lasted from the 1730s until 1854, and Ojibwe peoples finally displaced the Dakota southward and westward by the early 1900s. Based on ethnohistoric records several property types have been suggested: seasonal villages, small wintering camps, maple sugaring camps, wild ricing camps, fishing stations, cemeteries and other religious and sacred places, and battle sites (Dobbs 1989). No Ojibwe sites of the Contact Period have been recorded in the Lake Elmo Park Reserve, although sites 21WA0057 & 21WA0058 at Eagle Point Lake are thought to be late prehistoric or early protohistoric in age (see descriptions below).

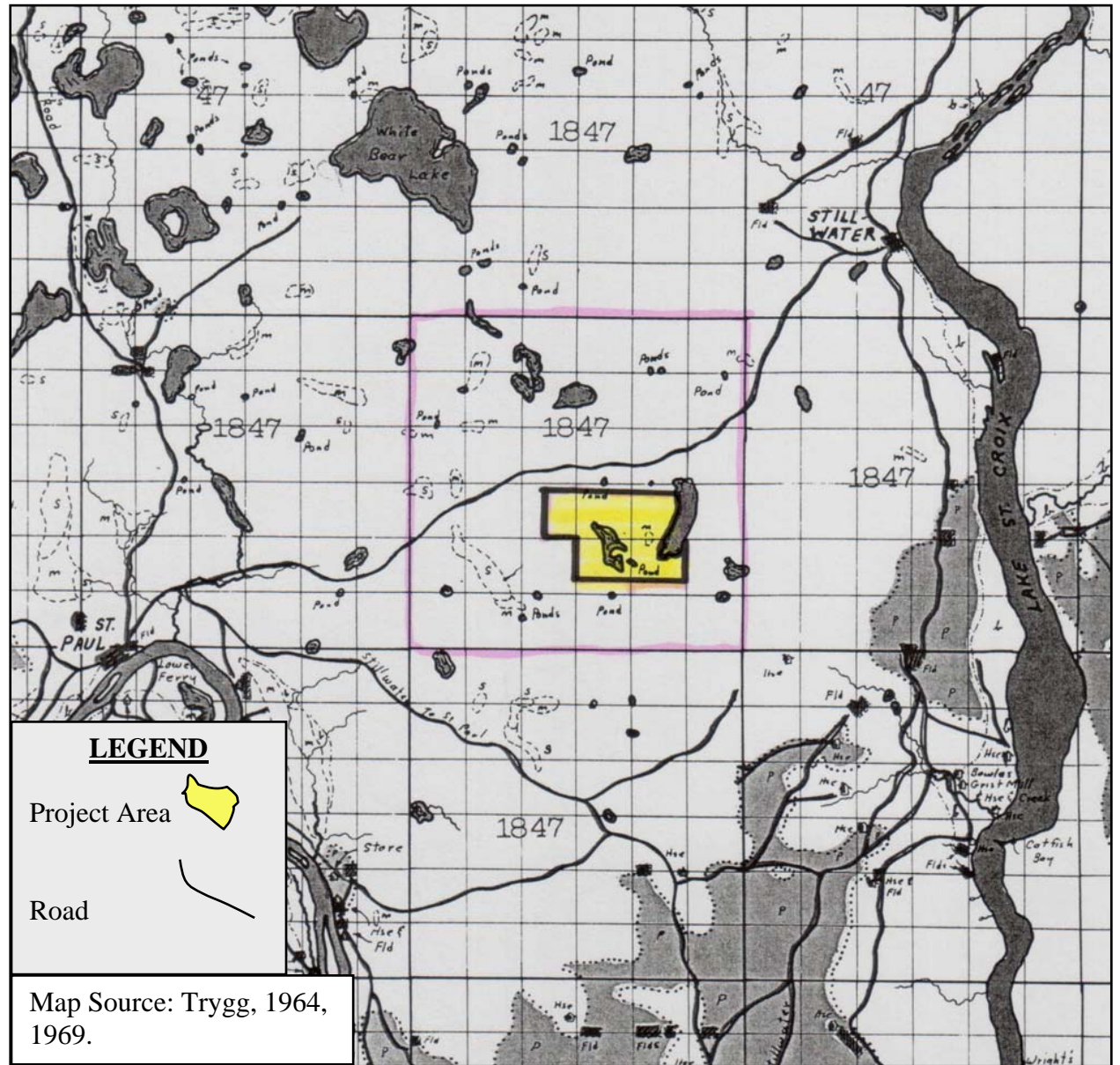
### Natural History

The Lake Elmo Park Reserve falls within the archaeological zone that Anfinson (1990) calls "Region 4: Central Deciduous Lakes" on the basis of its topography and primary natural vegetation. The topography of this region is a patchwork of glacial deposits - moraines, till plains, and outwash plains. Numerous lakes, some over 100 feet deep, are located in Region 4.

These lakes are remnants of melted ice blocks left behind as the Laurentide icesheet and its associated lobes and sublobes retreated northward at the end of the last Ice Age (Wisconsinan). The larger precursors of today's lakes are called "glacial lakes" (e.g., Glacial Lake Agassiz and Glacial Lake Duluth). Likewise the broader precursors of today's rivers are called "glacial rivers" (e.g., Glacial River Warren). The Mississippi River now flows through the eastern and central parts Anfinson's Region 4; the St. Croix River is the region's eastern boundary. In early historic times, the vegetation in the southern and western parts of Region 4 was dominated by Big Woods with numerous, large patches of prairie and oak woodlands.

The U.S. General Land Office (GLO) first surveyed Oakdale Township in 1847. At this time the only cultural resource depicted on Trygg's (1969) map in the St. Paul-to-Stillwater Road, which is just north of the northernmost Park Reserve boundary (Figure A.1). Vegetation encountered by the GLO surveyors was classified by Marschner (1930) as "Oak Openings & Barrens," "Prairie," and "Wet Prairies, Marshes & Sloughs."

Figure A.1 – 1847 GLO Survey Map of Project Area



### Euro-American History

According to Dobbs (1989:62), the first century of European presence in Minnesota is often referred to as the "French Regime." The French presence began in the early 1600s with explorers, clergymen, and fur traders (Birk 1991); the "regime" ended in 1763 when the British took control of Canada. Property types associated with the French include permanent fortifications, temporary yet fortified outposts, accommodations for Frenchmen in Indian villages, special activity areas (e.g., transient encampments, seasonal fishing or hunting camps, kill sites, portages, battlegrounds, mines, burials, etc.), and canoe accident sites or other places where lost or discarded items might have been deposited. The French explorer LeSeuer was in the general area in 1695 but civilian settlement was sparse until the 1840s. No French sites of the Contact Period have been recorded in the Lake Elmo Park Reserve.

From 1762 until the Louisiana Purchase by the United States in 1803, the Mississippi River was the focal point of territorial flip-flops among France, Spain, and Britain. This time period not only marked shifting and often violent relationships among American Indian groups (see Dakota and Ojibwe, above) but it also involved shifting allegiances between American Indian groups and the various European nations staking claims throughout North America. Dobbs (1989) suggests that wintering posts and small posts are likely property types to have been inhabited by British traders. No British sites of the Contact Period have been recorded in the Lake Elmo Park Reserve.

Shortly after the Louisiana Purchase the Initial United States Presence began in Minnesota with Zebulon Pike's visit to Minnesota (1804-05). Major Stephen Long first arrived in 1817; Camp Coldwater was founded in 1819 near the confluence of the Mississippi and Minnesota rivers and construction of Fort Snelling began in the early 1820s. A variety of property types related to domestic, military, economic (trading), agricultural, and religious functions - is possible for this historic context. However, no Initial U.S. sites have been recorded in the Lake Elmo Park Reserve.

Euro-American settlement in the region began with the establishment of Ft. Snelling at the confluence of the Minnesota River and Mississippi River. Commercial centers formed first around the water-powered mills of St. Anthony Falls and the northernmost navigable reaches of the Mississippi River (Anfinson 1989). The region saw the development of agricultural communities in the west and lumbering centers in the east during the mid- to late-1800s. Steamboat traffic grew quickly after 1823 (Anfinson 2003).

In 1825 a treaty was signed at Prairie du Chien, Wisconsin. Among other things, this treaty effectively separated Minnesota's two major American Indian groups into Ojibwe territory in the north and Dakota territory in the south. Through a subsequent series of treaties between 1837 and 1889, American Indians ceded most of their lands to the U.S. Government. These actions led to the period of *Reservations and the Indian Community (1830s-1930s)*. Ojibwe reservations in Minnesota include Fond du Lac, Grand

Portage, Leech Lake, Mille Lacs, Nett Lake (Bois Forte), Red Lake, and White Earth. Following the U.S.-Dakota War of 1862, the Dakota were driven from Minnesota. However, many Dakota returned to Minnesota in the late 19<sup>th</sup> century, settling in the communities of Lower Sioux, Upper Sioux, Prairie Island, and Shakopee Mdewakanton. Examples of property types associated with this historic context are ceremonial and religious sites, reservations, U.S.-Dakota battle sites, missions, churches, missionary residences, mission schools, Government schools, Indian community centers (particularly in urban areas), representative housing types, commercial establishments, sites associated with Federal Indian policy, sites associated with continued traditional land uses (State Historic Preservation Office 1985). None of these property types have been recorded previously for in Lake Elmo Park Reserve.

Concurrent with the move to reservations and associated battles and other activities, the new American settlers of the region began to significantly alter the natural landscape to support a variety of growing socioeconomic demands. The white pine forests, many on lands ceded by the Dakota and Ojibwe in 1837, were key to the development of the region (State Historic Preservation Office 1985). Entrepreneurs from New England who had already over-forested that region developed a lumbering economy based on cutting wood in the winter and transporting the timber logs down the St. Croix, Rum, and Mississippi rivers in the spring to boom sites (State Historic Preservation Office 1985). The logs were milled at sawmills along the rivers – several of these sites served as the centers of townsite development (e.g., Stillwater and Anoka). Milled lumber was shipped down the Mississippi River to Iowa, Illinois, Missouri, and other destinations. These activities are subsumed within the historic context entitled, *St. Croix Triangle Lumbering (1830s-1900s)*. Some primary property types associated with this historic context include lumber mill sites, housing for loggers, logging dam sites, boom sites, farm camps, townsites and associated structures (e.g., residences, commercial buildings, churches, public buildings). None of these property types have been recorded in Lake Elmo Park Reserve.

The opening of Minnesota lands by the Federal and Territorial governments created additional opportunities for immigrants. Settlement initially occurred largely along waterways, including the Mississippi River and its tributaries. The earliest settlements began in Washington County in the 1840s and then "spread, fan-like, westward" (State Historic Preservation Office 1985). Lake Elmo and other towns like it were established during this period of *Early Agriculture and River Settlement (1840s-1870s)*. Many of the towns became centers for processing crops, such as flour and sorghum mills and breweries. These were typically small operations that catered to a local market. Examples of property types associated with this historic context include farmstead structures (residences and outbuildings), non-farmstead rural structures (churches), river townsite structures (residences, churches, commercial buildings, public buildings, industrial buildings), agricultural processing and storage facilities (mills, breweries, warehouses), and structures associated with river transport.

It is logical, therefore, that the next statewide historic context that applies to the development within the present boundaries of Lake Elmo Park Reserve is *Agricultural Development and Railroad Construction (1870s-1920s)*. Minnesota's first train traveled from St. Paul to St. Anthony in June 1862, and the St. Paul & Pacific Railroad reached Fridley in December 1863. "Railroads quickly undermined the [Mississippi] river's importance for transportation..." (Anfinson 2003:157). In less than a decade, railroad construction criss-crossed the State in earnest.

According to the State Historic Preservation Office (1985), primary features were the network of railroads and the large-scale production, first of wheat and later of a variety of farm products from diversified farming operations. The typical production unit began as the family farm, developed both by European immigrants and American-born settlers.

Towns were platted by railroad companies or individual entrepreneurs (or a combination) along rail lines to serve as shipping points for agricultural products and as supply-and-service centers. Industries related to the processing of agricultural products developed regionally. Two of the State's most important industrial centers were the flour milling district at St. Anthony Falls in Minneapolis (just downstream from the Fridley Campus) and the meat-packing operations in South St. Paul (State Historic Preservation Office 1985). First railroads, then later trucks, connected local markets with grain elevators and exchanges, processing facilities and warehouses, etc. in the Twin Cities and other large regional centers. Examples of property types associated with this historic context include farmsteads (subsistence level, diversified family farm, and bonanza), non-farmstead rural structures (churches, schools, town halls, etc.), railroad structures (freight and passenger depots, shops and section houses), townsite buildings (residences, commercial buildings, churches, schools, other public buildings), and agricultural facilities for processing, supply, and storage (creameries, breweries, warehouses, grain elevators, terminal elevators, packing and canning facilities, linseed oil and cheese factories, implement and supply dealers and factories, grain exchanges, flour mills). The St. Paul, Minneapolis & Omaha Railway is depicted on a plat map from Andreas (1874) along the north boundary of Lake Elmo Park Reserve (Figure A.2).

The period defined by the statewide historic context of *Urban Centers (1870-1940)* saw a mixed pattern of residential development away from the downtown centers of St. Paul and Minneapolis (Nunnally in Anfinson 2003:173). As urbanization expanded throughout the 20<sup>th</sup> century, freight railways were dedicated to moving products great distances while streetcars moved people throughout the Twin Cities metropolitan area. Finally, automobiles increasingly defined the urban and suburban landscape after World War II (Nunnally in Anfinson 2003). Expected property types for this historic context include resources related to domestic, commercial, industrial, religious, education, government, and transportation functions (e.g., houses, apartment buildings, shops, processing and manufacturing sites, churches,

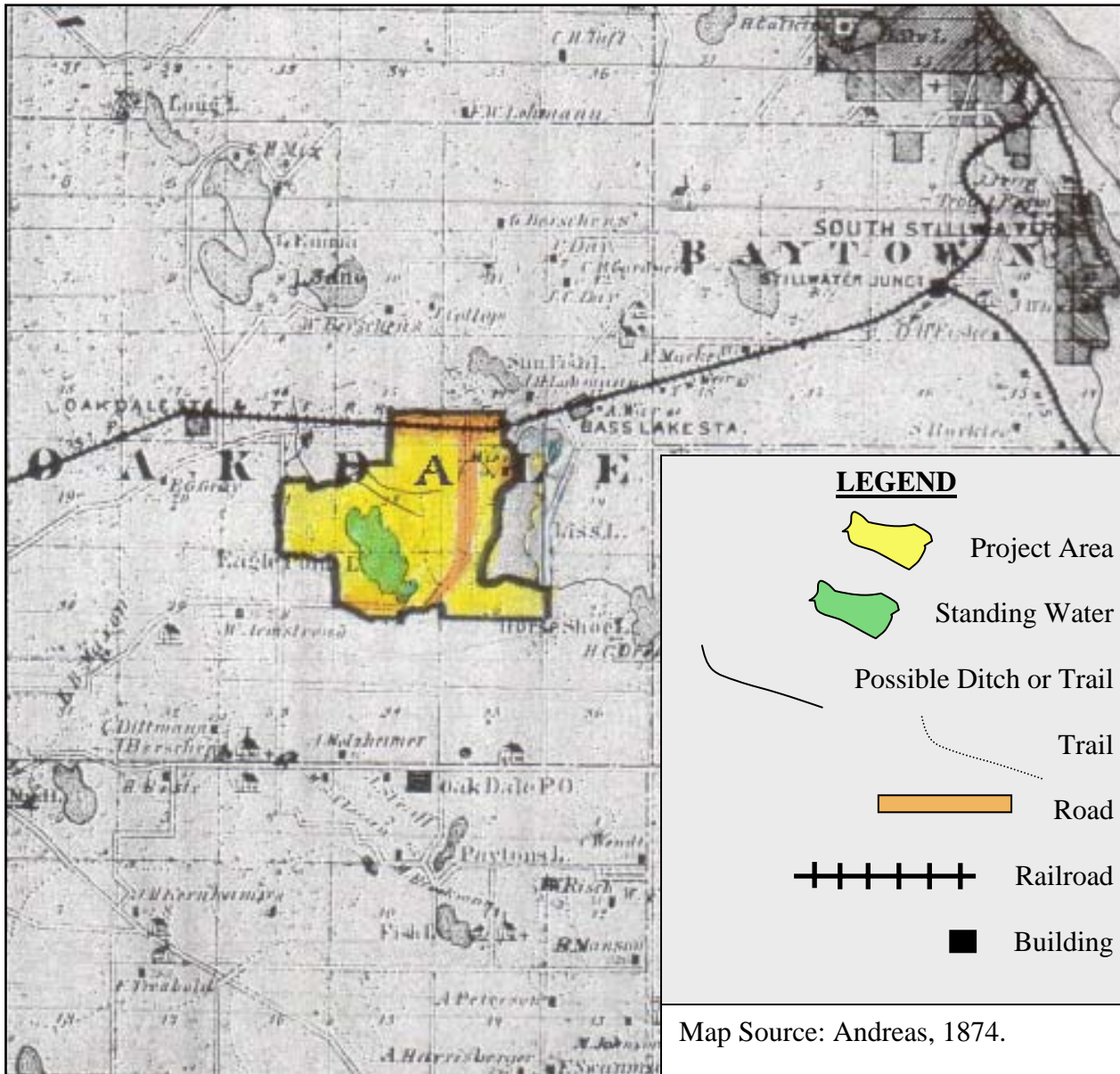


Figure A.2 – Andreas (1874) Map of Project Area

schools, libraries, city and town halls, other public buildings, freight and passenger depots, shops and section houses, gasoline stations, airports, and other infrastructure). Many of these property types are evident as standing structures in Lake Elmo today, although archaeological features related to former structures are also possible in the Park Reserve.