

System of Fortifications. Only partially completed, in 1869 the United States constructed a lighthouse over the fort's remaining bastion. During World Wars I and II, the United States Navy used the island to store munitions and the lighthouse remained operational until 1970. Today, the island is managed by the Rose Island Lighthouse Foundation, which is working to restore the lighthouse and associated structures.

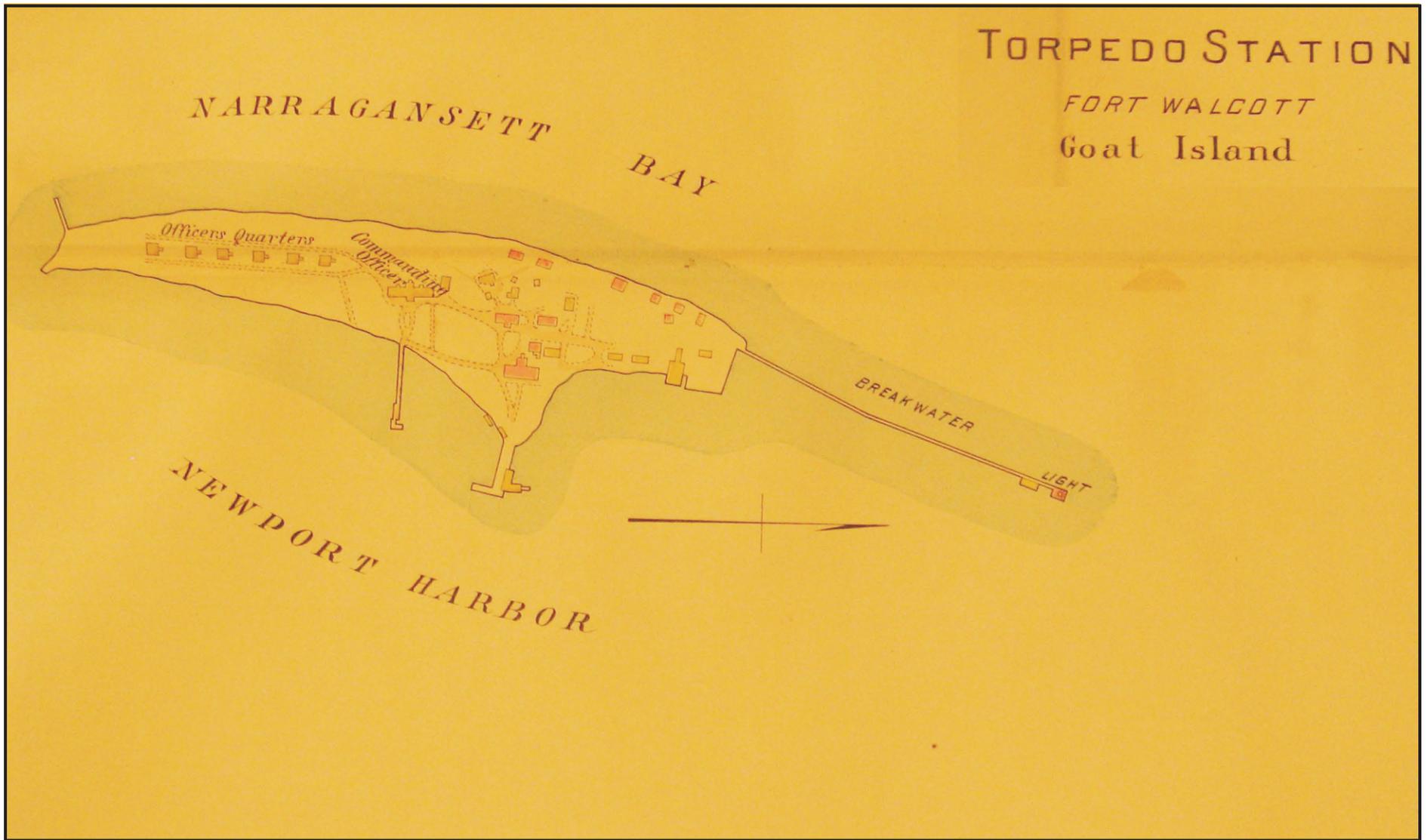
3.2.4 Goat Island

Goat Island is located immediately to the west of the Easton's Point neighborhood of Newport. It is connected to the mainland by a bridge. Native Americans named the island Nomssmuc and sold it to local settlers two decades after their first move to Newport (Denison 1879). The island probably was used as a goat pasture prior to 1703 when colonists built a defensive earthen battery during the War for Spanish Succession. In 1723, twenty-six men, hanged for piracy, were purportedly buried there. In 1738, Newporters built a stone fort on the island that changed names several times over the years, the last name being Fort Wolcott. In 1824 they erected a lighthouse on Goat Island, which was later moved to Prudence Island to the north. A second lighthouse was built in 1842 and the 1870 Everts & Richards overview of Newport reveals the location of the light at the end of a long breakwater on the northern edge of the island (Figure 7).

In 1869, the U.S. Naval Torpedo Station was established to develop torpedoes and torpedo equipment, as well as explosives and electrical equipment (Sminkey 2009). At that time a number of officers' quarters were located on the island, as well as the commanding officer's residence and numerous supporting structures. Some of these can be interpreted as gun mounts, based on their strategic wharf position (Figure 7). Numerous pathways linked these structures and encircled open spaces, suggesting the location of parade grounds. In the early years of the twentieth century, the Torpedo Station was reorganized and principal manufacturing transferred to Maryland. In 1906, the Navy replaced the Torpedo Station with the Naval Torpedo Factory and erected a number of buildings and living quarters on the island during World War I (Sminkey 2009). Both women and men worked at the facility, which was later expanded to meet new demands during World War II. Additional, supporting storage facilities were located on Gould Island, located to the north of the Newport Pell Bridge. The station on Goat Island was closed finally in 1951. Today, the island contains a restaurant, hotel, event center, and condominium development.

3.2.5 Middletown

Originally known as "The Woods", Middletown is a small community bordered on the south by Newport, on the north by Portsmouth, on the west by Narragansett Bay, and on the east by the Sakonnet River (Figure 1). Notable topographical features include Purgatory Chasm located near Tuckerman Avenue and Hanging Rock, near Second Beach. Middletown covers an area of about 12.5 square miles, comprised of undulating terrain covered by rich loamy soils that support crop production and commercial vineyards. The quality of the soil and the moderate climate allowed early colonists to grow hay, corn, potatoes, and barley in fields cleared of earlier oak and walnut stands (Bayles 1888:752). In 1639, residents rallied for independence from Newport because their population was small and paid an inequitable amount of taxes. In June 1743, the Newport General Assembly agreed, and separated the



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D.G. Beers 1870 *Atlas of the State of Rhode Island*, Goat Island

towns along a straight line running from Coddington Cove on the west to Easton's Bay on the east. All land to the south and west was granted to Newport, with remaining land on the north and east incorporated under the new name, Middletown. The first town meeting was held in August 1743, at which time residents elected deputies to the General Assembly and appointed numerous town officials. In November of the same year they voted to initiate the first town tax.

Early residents served in the French and Indian Wars, but few events disturbed the tranquil setting. Middletown benefited from Newport's mercantile strength and local farmers found a dependable market for their produce. Middletown boasted a school by 1702 and a ferry service at the end of Green Avenue. On Wyatt Road, a windmill ground local grain into flour and a small water-powered gristmill stood by Bailey's Brook, near Two Mile Corner. As trade and tax disagreements with England began, Middletown opposed the purchase of East India Company tea and adopted a formal resolution to "unite with our American Brethren ... in all their just rights and privileges," and rejected the British efforts to raise taxes within the colonies (Arnold 1876:29). As difficulties with England continued, Middletown elected committees of correspondence and inspection to regulate trade and report on British continental activities. British troops and merchant Hessians landed on Aquidneck Island in 1776 and established a defensive line terminating at Bliss Hill with redoubts, batteries, counter batteries, and forts along a line in Middletown. Fort Fanning stood near the junction of West Main Road at Two Mile Corner and Card's Redoubt stood off Boulevard Street.

The British occupied Aquidneck Island until 1779, after which time they abandoned Newport and surrounding towns, leaving many of them virtually destroyed. After the Revolutionary War, Middletown experienced quiet growth and relative peace until military action resumed during the War of 1812. At that time, Middletown joined in the defense against the vessel *Nimrod*, a large British ship that sailed into the East Passage as it chased a Swedish trading vessel. Despite such actions, Rhode Island continued to trade with the British whenever possible, and New England communities sold grain to the British (Gruver 1976), perhaps indicating the relative power of economics over ideology. At the conclusion of that war there was little to trouble Middletown residents except occasional boundary disputes between residents and discussions about redrawing town lines.

Rhode Island's economy turned to industrialization during the nineteenth century. Powered by large rivers emptying into Narragansett Bay, the state had ample waterpower to support industrial growth, except for Aquidneck Island, which lacked powerful rivers and streams. Although it did not participate in the economic spurt that accompanied industrialization, Middletown experienced residential spillover from Newport as fine summer houses were built along Easton's beach and adjacent coastal locations. Notable among them was the home of Edwin Booth, an English-style Gothic Chapel, and summer estates aligned toward the Sakonnet River. Summer and three-season residents supported the growth of public institutions such as schools, libraries, and public buildings (including the 1885 Town Hall) and generated wealth through support services like grocery stores, gas stations, utilities, banks, and schools. One of the most notable buildings was St. George's School, established

in 1896 by John Byron Dimon. The D.G. Beers overview of Middletown (1870) depicts homes and public buildings aligned primarily to the major roads, and partitioned into five school districts (Figure 8).

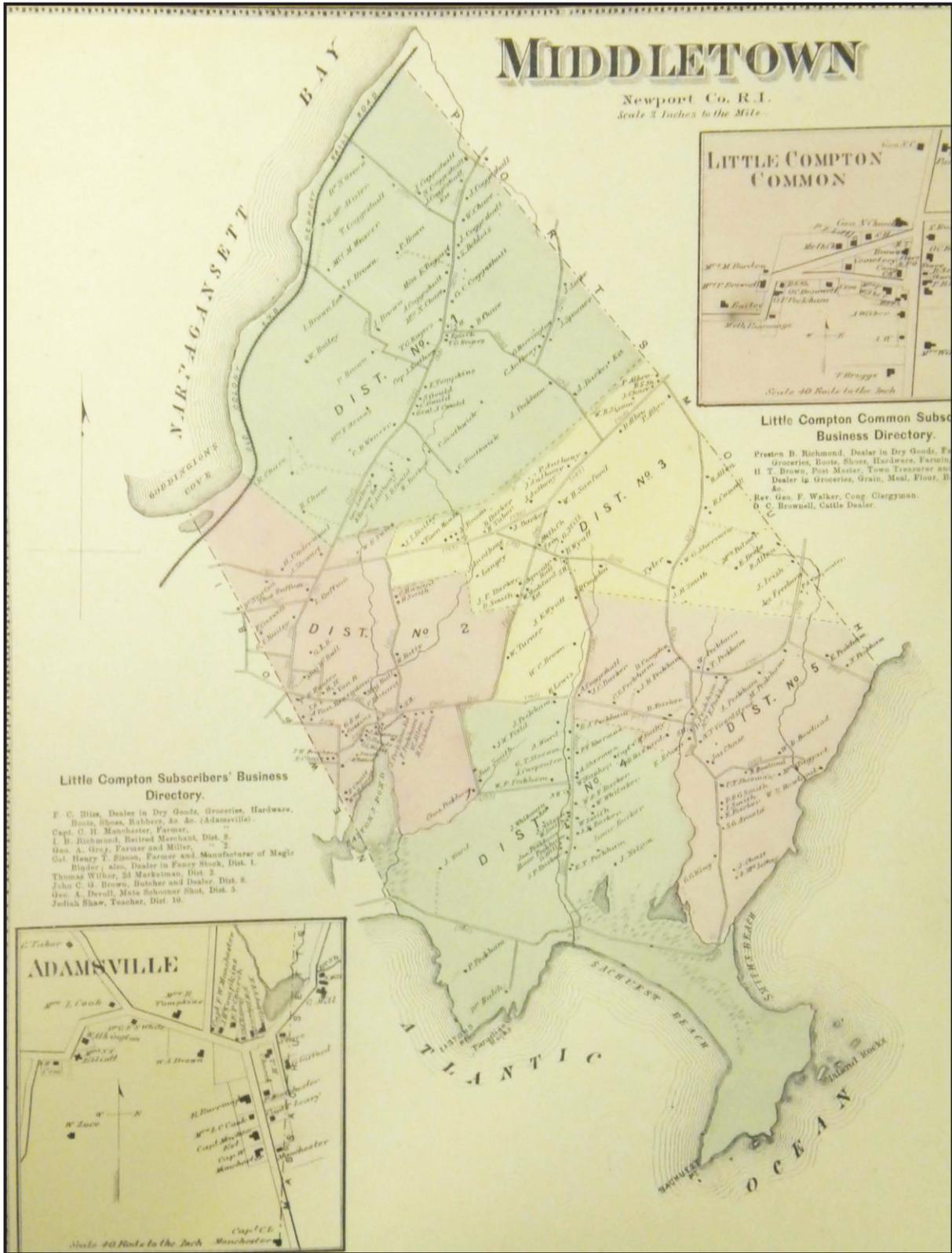
By the end of the nineteenth century, Middletown had become densely populated, particularly around Easton's Point. The Newport Water Works managed large facilities close to the water, and a Charity Farm was located just off Easton's Pond. The New York, New Haven, and Hartford Railroad operated a line through Middletown, with a stop at Middletown Station north of Green Lane (Everts & Richards 1895; Figure 9). During the twentieth century, Middletown maintained its attractive character as a summer colony, but also grew as a consequence of military activity. By 1929, the Mount Hope Bridge had been constructed and connected Portsmouth to the mainland, facilitating access from eastern Rhode Island and Massachusetts. During World War II, the Navy controlled much of Narragansett Bay and their presence fostered residential growth throughout the island. Servicemen and their families created employment opportunities in public and support services, including banks, shopping centers, restaurants, and grocery stores, supplemented by increased summer tourism that utilized local motels, hotels, and gas stations. Between 1940 and 1950, Middletown's population was 7,382 and by 1960 had reached 12,675. Since World War II, Middletown's agricultural character has diminished considerably. Many farmlands were destroyed during residential construction, and horticultural activities today are limited to plant nurseries and vineyards.

3.2.6 Portsmouth

The Town of Portsmouth is located in lower Narragansett Bay, about 20 miles southeast of Providence and 4 miles north of Newport. The town occupies an area of about 23.3 square miles on the northern portion of Aquidneck Island and is surrounded by Narragansett Bay on the west, Mount Hope Bay on the north, the Sakonnet River on the east, and Middletown on the south. Adjacent Prudence, Patience, Hog, Hope, Desire, Dyer, and Gould islands, some of which are uninhabited, are all formally incorporated within the town (Figure 1).

John Clarke, William Coddington, and their families established Portsmouth in 1638, after an initial stop in Providence. Clarke and Coddington purchased Aquidneck Island from the local Narragansett sachems for forty fathoms (240 feet of wampum [shell beads]), 10 coats, and 20 hoes and demanded that the Native Americans leave the island before the following winter. Soon after their arrival, Coddington, Clarke, Coggeshall, and Hutchinson created the Portsmouth Compact, similar to the Mayflower Compact, signed by men whose names now represent early island settler families (Garman 1978).

The settlers held their first town meeting in May 1638, and focused their community at the northwest portion of the town near Founder's Brook. Soon after its founding, Anne Hutchinson moved to the area with her large family. Following a power struggle with Hutchinson and her followers, Easton, Coddington, and Clarke eventually moved south, where they established the settlement of Newport. This resulted in relatively large settlements at either end of the island with Middletown in the center. Portsmouth officially was incorporated in 1640 and was focused near the spring at Founder's Brook. There,



D.G. Beers 1870 *Atlas of the State of Rhode Island*, Middletown



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Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*, Middletown Detail

colonists established 3-acre house lots surrounded by grazing land. The Newport Path followed portions of today's East and West Main Roads, and provided the initial transportation artery through the town. Across the narrow neck of land near Mount Hope Bay, settlers built a fence to restrain cattle in a common pasture. Today, the area is known as Common Fence Point. Early settlers raised cattle, sheep, and horses, some of which fed on Hog, Patience, and Prudence islands.

In 1642, James Sands erected a saw mill on the small Mill River and Lawton Valley supported several water- and windmills. In 1668, Caleb Briggs built a windmill on his land, which became known as Windmill Hill. A ferry, eventually known as Howland's Ferry, connected early settlers to Tiverton across the Sakonnet River. A second ferry (1680) connected Portsmouth to Bristol across Mount Hope Bay, at which a tavern and wharf were erected. In 1657, the settlers partitioned communal grazing lands and gave 300 acres of pastureland to each of the freemen. A crown-authorized charter was obtained in 1663 and regulated government until the Rhode Island Constitution was adopted in 1843. In 1664, Patience and Hog Island were annexed to Portsmouth, and Prudence Island was added in 1647.

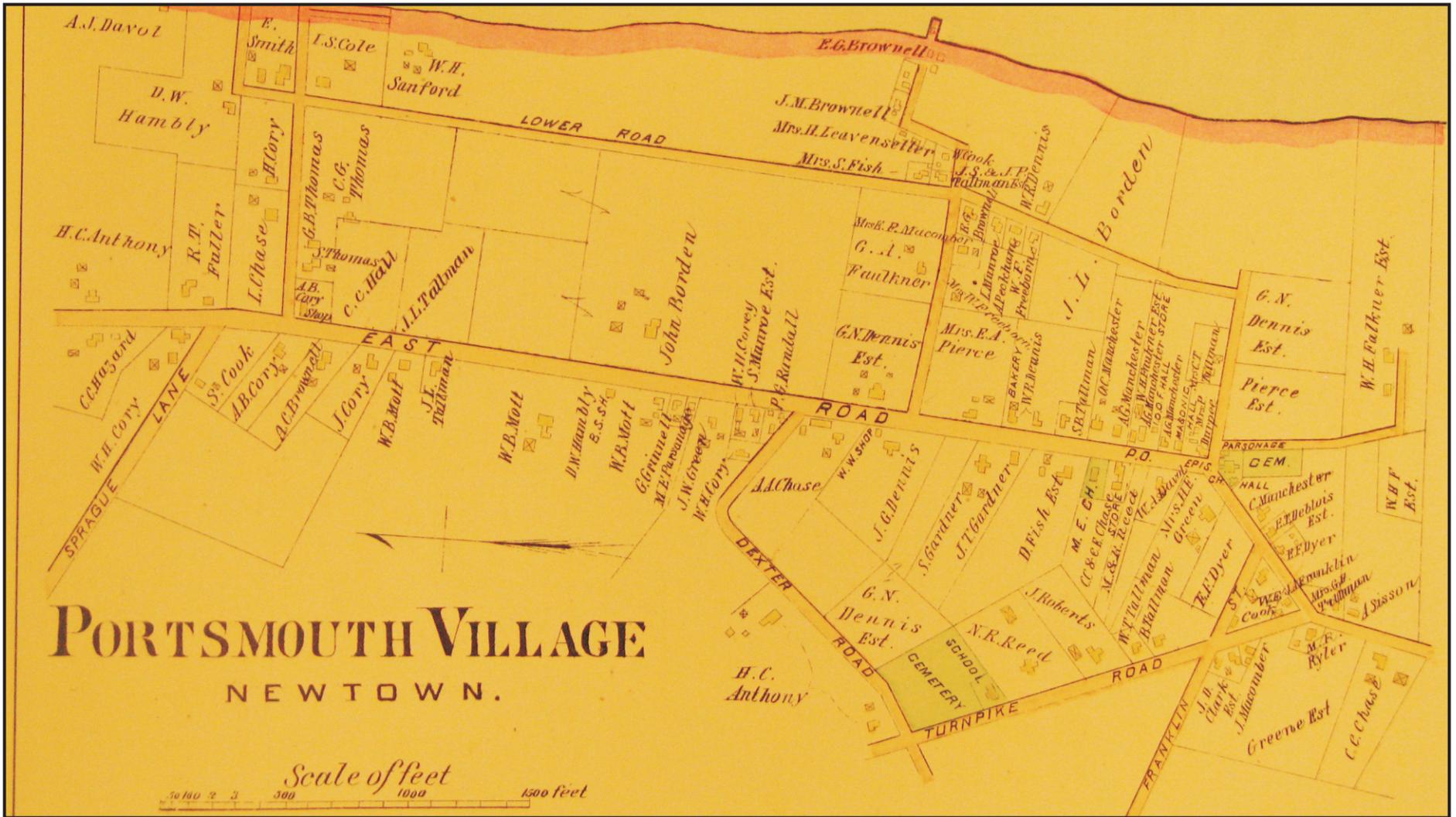
There are no reported battles or skirmishes relating to King Philip's War (1675–1676) although townspeople were forewarned against "keeping" Indians (Garman 1978). The first Quaker Meetinghouse was an old homestead purchased in 1692 on the south side of Hedley Street near West Main Road. Portsmouth's first schoolhouse was built in 1716 on the grounds of today's Portsmouth Historical Society. By 1722, the town could boast schoolhouses on East Main Road just south of Park Avenue and on West Main Road at Hedley Street; the latter burned down during the Revolutionary War. Because the Town Pond began silting up in 1728, a new center developed to the southeast, named Newtown, after which the community's original center was abandoned. Portsmouth lost none of its land to Middletown when that town was set off from Newport in 1743. Whereas Newport grew through seaborne trade, Portsmouth and Middletown remained agricultural, because they lacked deep harbors. During the American Revolution, the population of Portsmouth decreased by about 10 percent as residents sought refuge off the island. On May 4, 1776, the Rhode Island General Assembly severed all allegiance to King George III and the Portsmouth Minutemen were called up to serve as the first regiment of Rhode Island. The British soon occupied the island, and established batteries at Bristol Ferry and Howland Ferry, with additional redoubts possibly located at Town Pond, Butts Hill, and Sandy Point, from where they controlled access on and off the island (Garman 1978).

On July 9, 1777, Colonial William Barton and 40 colonial militiamen captured British General Richard Prescott at his headquarters in southern Portsmouth. By August 1778, the colonists were ready to respond under general John Sullivan and Nathanael Green. The British advanced along today's East and West Main Roads and a short skirmish occurred at Union Street. The colonial militia then took up a defensive position on Butt's Hill and the Battle of Rhode Island began. The battle was a military stalemate, but numerous British soldiers and their Hessian supporters died during the engagement. The American side,

comprised of Rhode Island's African American First Regiment, lost fewer than 500 troops. This was the only battle fought in Rhode Island and the largest Revolutionary campaign in New England. General Lafayette called it "the best fought action of the war" and may well have probably contributed to the British evacuation of Rhode Island. By the time the British and their Hessian supporters had left, half the island's houses had been burned, all public works had been destroyed, almost no trees were left standing, and the entire countryside was devastated (Devin and Simpson 1997).

Following the Revolution, Portsmouth gradually returned to normal, with prosperity and growth evident in the structures and services that developed at the end of the eighteenth century. In 1784, for example, the Society of Friends established a school under Isaac Lawton and in 1795, a toll bridge connected the Howland's Ferry area to Tiverton. A series of storms destroyed the first bridge as well as replacements prior to construction of the current Sakonnet River Bridge (1956). Early in the eighteenth century, geologists discovered coal near the Bristol Ferry location, and in 1809, a group of entrepreneurs incorporated the Rhode Island Coal Company. The quality of the Portsmouth coal was poor, however, and a series of companies opened and closed without achieving much success. In 1810, Boyd's Corn Mill began operations on the south side of Mill Lane near West Main Road. A second early mill was located on Lehigh Hill, a third in Lawton's Valley, and a fourth, Clarke's Mill, located in "the Glen". In 1824, Charity Beach Road (today's Park Avenue) was laid out from East Main Road to the Stone Bridge. In 1865, the Old Colony and Newport Railroad connected Fall River to Newport, via a track across the Sakonnet River. In 1898, this was replaced by a cantilevered iron span bridge that remained in operation until about 1937. In 1898, an electric trolley connected Newport and Fall River, facilitating the development of Portsmouth's Island Park as an amusement center for summer visitors. The Taunton Copper Company (1866) operated for a short time and experienced greater success than coal mining efforts. The copper works comprised an entire industrial complex with blast furnaces, kilns, engine houses, tenements, a store, school house, powder magazine, workshops, barns, offices, and a rail depot. The Narragansett Oil and Guano Company (1861) represented a late nineteenth century industrial venture on the east side of Common Fence Point. The D.G. Beers 1870 map of Portsmouth indicates modest development nodes at Portsmouth/Newtown, South Portsmouth, and Portsmouth Grove, identified on the map because they contained post offices, and a train station (Figure 10).

During the nineteenth century, new settlers established a number of religious institutions in Portsmouth (Garman 1978). These included Russell Warren's St. Paul's Episcopal Church (1833–1834), and St. Mary's Roman Catholic Church (1840s), possibly designed by Richard Upjohn. Also constructed during this period were the Masonic Lodge (1861) across from St. Paul's and the Lovell General Hospital (1852) at Portsmouth Grove. In 1864, the Newport to Fall River portion of the Old Colony Railroad (later the New York, New Haven and Hartford line) was chartered and provided freight shipping and passenger service until the 1930s. Everts & Richards' 1895 map of Portsmouth Village/Newtown indicates a number of public institutions, including the Odd Fellows and Masonic halls, as well as several churches, a post office, and a cemetery (Figure 11). Trolleys were introduced in the 1890s and the Fall River Line of steamships developed at the same time. Towards the end of the century, Portsmouth



Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*, Portsmouth Detail

began to modernize and construct new public buildings, mass transit, telephone service, home mail delivery, and electric service. Portsmouth residents built a new Town Hall in 1895 and a public library in 1898. Late in the century, the Newport Water Works erected a dam at Lawton's Valley, at which time part of West Main Road was relocated. Also in the late nineteenth century, Portsmouth became a favorite spot for gentlemen's farms, in the tradition of the English country seat, with manorial or country homes, stables, horses, and show animals (Garman 2003). Examples include the Amos Smith Farm designed by Richard Upjohn and Hall Manor, now the Portsmouth Priory.

During the twentieth century, Portsmouth witnessed new residential construction, supported by shops, banks, and public buildings. The new Sakonnet River Bridge eased movement between Portsmouth and Tiverton and facilitated access to Aquidneck Island from the northeast. Since the 1960s, commercial development has increased and is located along the major thoroughfares. Portsmouth residents have attempted to protect their historical resources through the Green Acres program.

3.2.7 Prudence Island

Prudence Island lies off the west coast of Portsmouth and covers an area of about 664 acres. Known to local Narragansetts as Chibachuwesa, the island's salt marshes and shallow coves might have provided them with seasonal foods. The Narragansetts purportedly gave the island to John Oldham in 1634, but it remained unsettled and reverted to them on his death in 1636. In 1637, the island was granted to Roger Williams and John Winthrop, who renamed it Prudence Island. It was incorporated within Portsmouth in 1647 and like that town, early settlers were devoted to agriculture. During the early years of the Revolution, residents abandoned the island, losing their homes and windmill to the British forces. Few former residents returned to Prudence after the war, at which time the island was used more for grazing than for crop production. During the nineteenth century, Prudence Island experienced summer home development, which necessitated supporting facilities such as a wharf, hotel, and steamboat service. Some residents remained year-round, necessitating construction of a school and a church. The Prudence Island School District was the seventh of the eight Portsmouth districts. The United States Government established Sandy Point Lighthouse in 1852 and the Hog Island Shoals Lighthouse in 1901. In the late nineteenth century, the Rhode Island Yacht Club owned a small site at Gull Point, and Bristol shipbuilder F.C. Herreshoff built a large estate in the middle of the island (Figure 12). Providence Park was established near the Steam Boat Wharf and included a small casino that provided entertainment for summer visitors. Today, few people live on the island year-round, but summer visitors, bikers, and hikers often take the ferry from Bristol to enjoy the island's tranquility.

3.2.8 Gould Island

Gould Island, also under the jurisdiction of Portsmouth, but closer to Jamestown, covers an area of about 55 acres and is located east of Conanicut Island about 1 mile from the coast. Like many of the islands in Narragansett Bay, Native Americans might have utilized the natural resources of Gould Island during their seasonal rounds. They named the island Aquopimokuk and sold it to Thomas Gould in 1657 (Snyder 2009). The British used



Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*,
Prudence Island Detail

many of the Narragansett Bay islands to try to prevent maritime commerce during the Revolution, and they constructed the Owl's Nest Fort there in 1778. After the war, the land was confiscated from its Loyalist owner, Joseph Wanton, Jr. Between 1800 and 1850, the island had several successive owners and in 1909 was purchased by Richard L. Howell, probably the first owner of the island's McKim, Meade, and White designed mansion. In 1919, the United States Navy acquired Gould Island and constructed an airbase with hangars and a seaplane landing site (Snyder 2009). The McKim, Mead, and White structure was converted into barracks and the Navy built several ancillary structures to create a small naval compound. Most of the naval buildings have been razed, but those few still standing are considered historical resources and today the island contains a wildlife refuge maintained by the Rhode Island Audubon Society and a small plot administered by the United States Navy (Snyder 2009).

3.2.9 Dyer Island

Uninhabited Dyer Island is located between Prudence and Aquidneck islands. The island was never occupied although it might have been used for seasonal resources by ancient Native Americans or as grazing land for early American settlers' livestock (Beers 1870; Narragansett Bay: A Friend's Perspective 2009).

3.2.10 Jamestown

Jamestown is located on Conanicut Island, surrounded by the west and east passages of Narragansett Bay (Figure 1). Conanicut Island measures about 7 miles long and 3 miles wide, and overlooks Dutch Island to the southwest. At its highest point, Conanicut Island is about 130 feet above sea level. It enjoys a relatively mild climate, with fertile soil supporting agriculture and animal-raising. Bedrock exposures are rare, except at the southernmost part of the island where wave action has exposed shale, sandstone, and basaltic dikes.

According to oral traditions, the great sachem Canonicus maintained a summer settlement near today's Canonicus Spring (Simmons 1970). The Italian explorer Giovanni da Verrazano skirted the area as he sailed around Narragansett Bay in 1524. Rhode Island's Roger Williams and Henry Vane purportedly purchased grazing rights to Conanicut Island in 1637, although the transaction later was disputed. In 1657, the sachem Cashasaquont deeded Conanicut Island to William Coddington, Benedict Arnold, and others. Between 1657 and 1679, there was little or no non-Native occupation and in 1679, Jamestown residents voted to prohibit wigwams from the island (Simmons 1970). The largest land owners then were Benedict Arnold, William Brenton, R. Smith, R. Carr, Willing Coddington, and Caleb Carr.

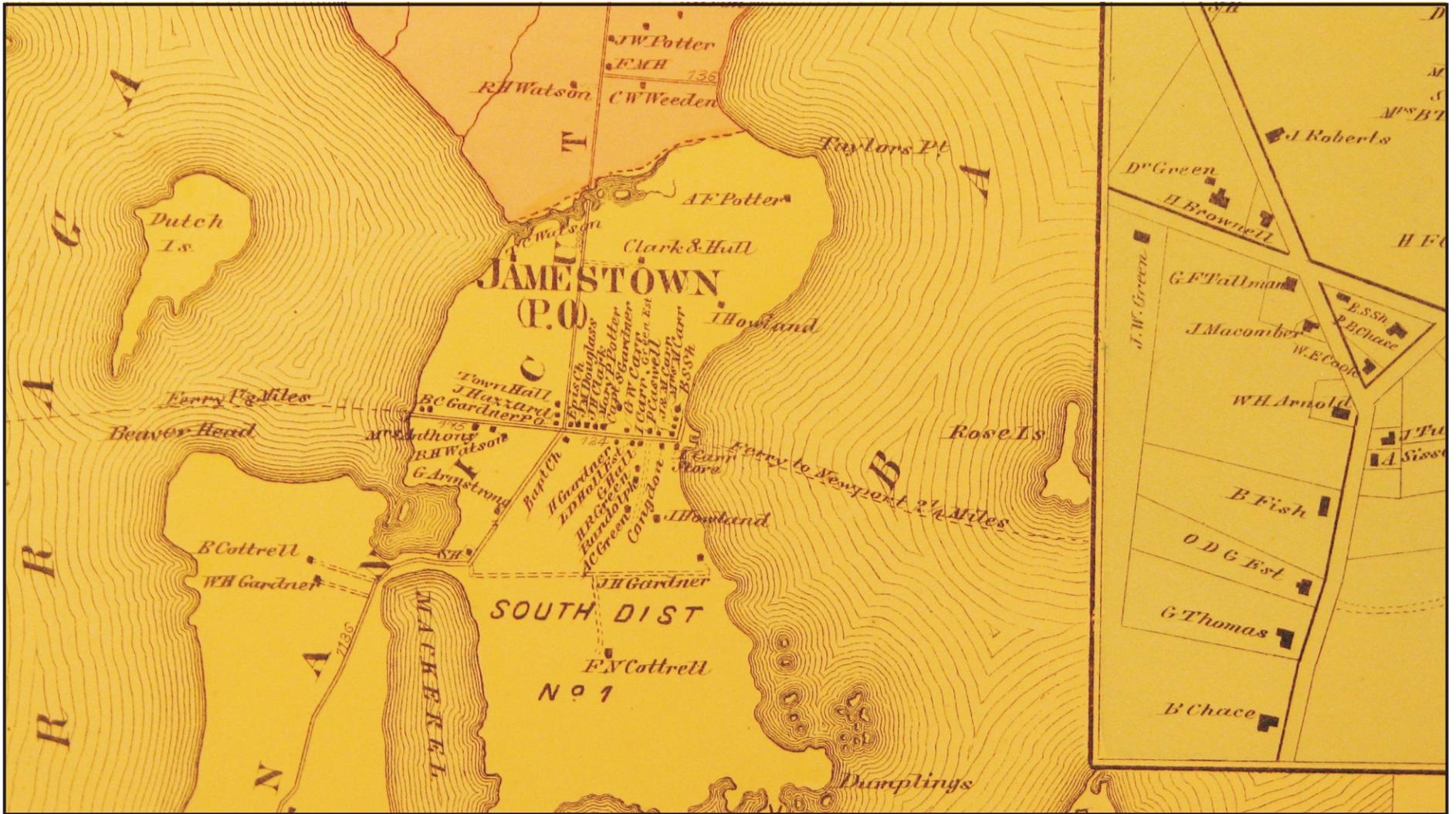
Jamestown was incorporated as a town in 1678, named after England's prince, later King James II. The island's European settlers were farmers who raised cattle and sheep and produced meat and dairy products for sale to the communities around the bay as well as to the West Indies. Jamestown farms, like others in southern Rhode Island, probably thrived through the work of African slaves. Their principal crop was corn, which they ground into grain through wind-powered mills. Early settlers traveled between Jamestown, Newport, and Narragansett County by ferry, which promoted settlements around the ferry landings at both ends of today's Ferry Road. In 1709, Conanicut Island was surveyed and town lots were laid

out. Islanders built their first burial ground and meetinghouse on today's Eldred Avenue. By 1712, Jamestown residents had established a watch house at Beavertail (1705, replaced 1739–1740), followed some time later by a lighthouse (1749).

As war with England loomed, the colonial militia created a defensive structure near Dumpling Rock, taken over by the British during their occupation of Newport. During the American Revolution, British forces attacked the island, forcing residents to abandon their farms for the safety of the mainland. In 1775, 200 troops landed at East Ferry and marched to West Ferry, burning everything in their path. A skirmish at the intersection of Narragansett Avenue and North Main Road-Southwest Avenue resulted in British casualties and one death. Between 1776 and 1779, the British established a command center and took up a strategic location at Beavertail. When they abandoned the island and evacuated their central headquarters in Newport, the British blew up all colonial military installations as well as the Jamestown lighthouse.

Settlement gradually returned at the end of the War and Jamestown enjoyed relative quiet and prosperity for decades. Island Quakers built a new meetinghouse (1786) at North Main Road and Weeden Lane, and erected a new windmill (1787) and miller's house nearby on North Main Road. During the late eighteenth and early nineteenth centuries, the remainder of Rhode Island experienced industrialization and urban growth, but, like Newport, Portsmouth, and Middletown, Jamestown lacked powerful rivers to provide energy for mills. Like those towns, Jamestown was unable to generate large-scale industrial production, so it retained its agricultural base. Ferries continued to provide access between neighboring settlements in Newport and facilitated seasonal visitors and travelers. The Beavertail Lighthouse was rebuilt in 1856 and several schools were constructed. Isaac Carr erected a store in 1829 and the first post office was established in 1844. On the eastern side of the island, East Ferry grew into a commercial center focused around hotels, boarding houses, a town hall, churches, taverns, and stores. The majority of the island's residents managed farms, raised sheep and cows, and cultivated hay meadows for animal feed. During the nineteenth century, Jamestown residents produced wool and mutton from their sheep herds, and manufactured cheese from their dairy cattle. A somewhat smaller number of farmers raised hogs, primarily for local consumption. By the middle of the century Jamestown boasted 45 farms, some of which produced Irish potatoes, but most concentrated on Indian corn. The 1870 D.G. Beers Map of Jamestown reveals residential and commercial development, as well as operating ferry lines (Figure 13). In 1873, a steam ferry connected Jamestown to Newport, beginning the era of summer tourism that lasted through the twentieth century. Late nineteenth century maps indicate the steam ferry location south of Taylor's Point, and the Jamestown Yacht Club nearby (Everts & Richards 1895; Figure 14).

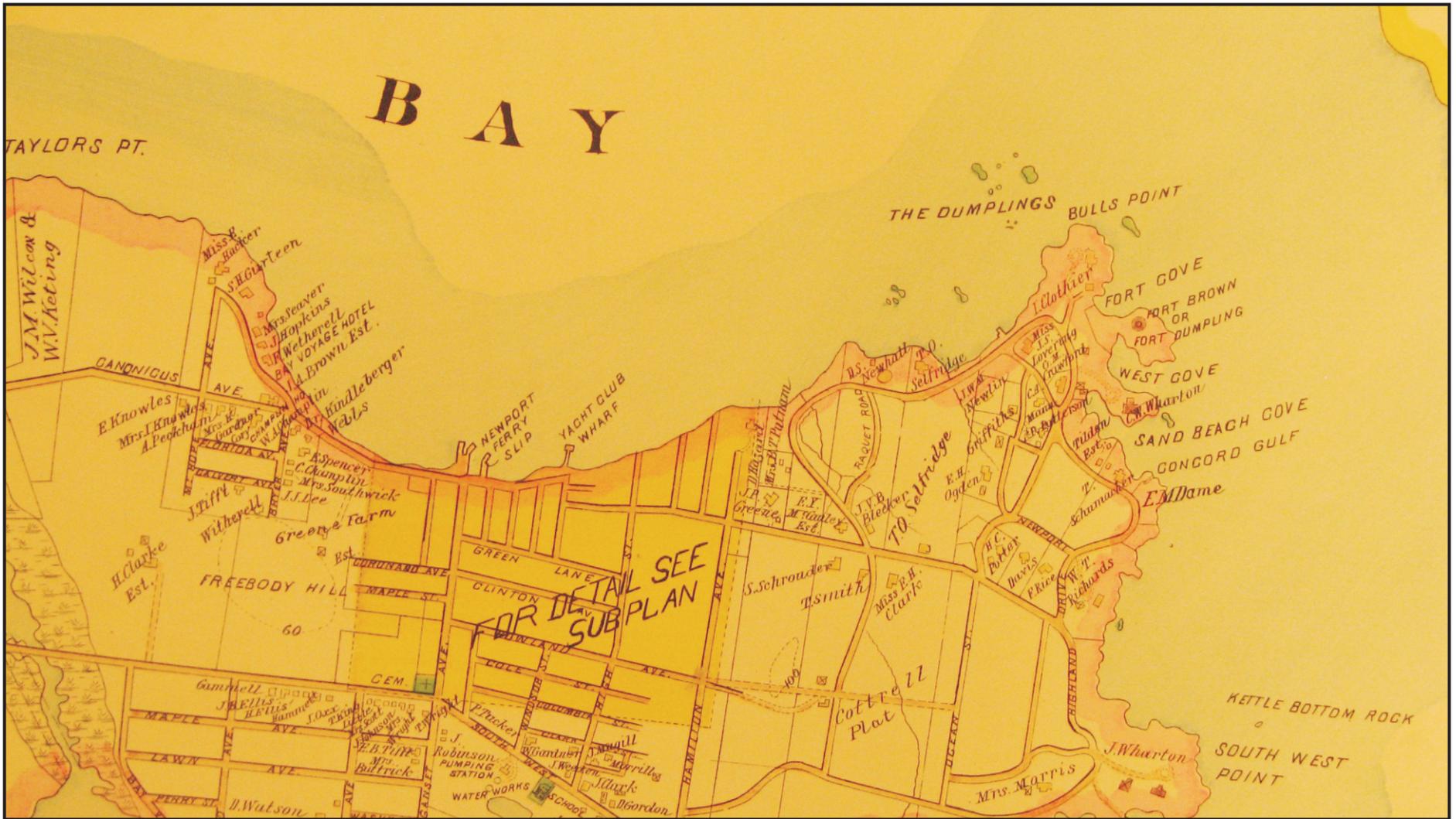
Island growth leveled off late in the nineteenth century, although recreational activities continued to provide economic stimulus, such as seaside beaches and bathing pavilions, as well as fishing and boating facilities. Conanicut children attended local schools and residents worshipped at the church of their choice. Public institutions included a small theatre, as well



D.G. Beers 1870 *Atlas of the State of Rhode Island*, Jamestown South District

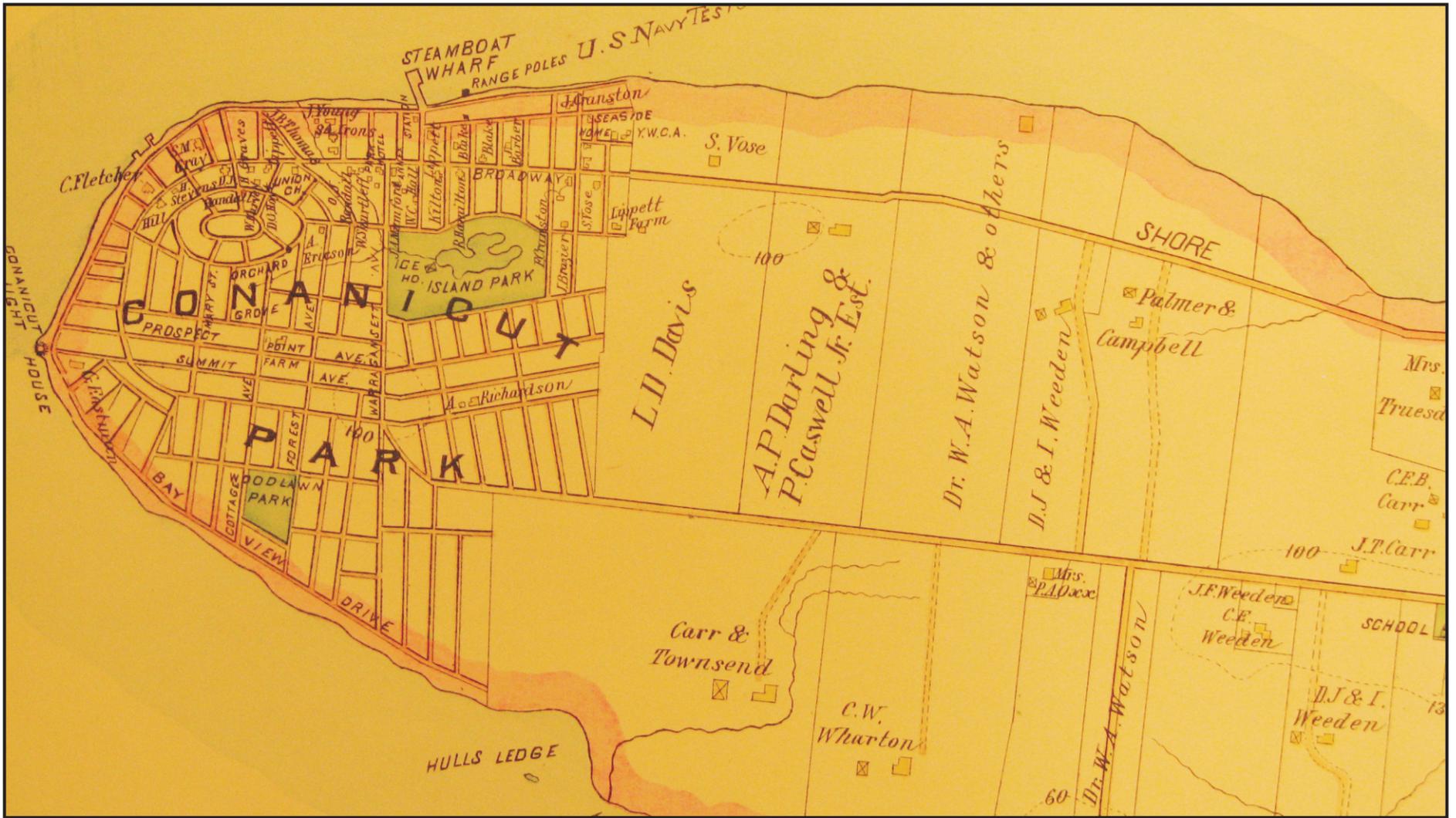
as the Jamestown Grange and a fire station. Several military installations developed along the island's cliffs, replacing those of the Revolutionary War. The more prominent structure was Fort Dumpling, where the United States Government had built a stone tower in 1800 (Everts & Richards 1895; Figure 15). That fort was enlarged in 1898 and poured concrete gun emplacements were concealed in the hillside. In 1900, the fort was renamed Fort Wetherill, after a Spanish-American War hero. As the nineteenth century closed, the island experienced rapid growth. The East Ferry landing evolved into a village through construction of hotels and boarding houses, and wealthy visitors built large mansions along the coastal roads. Ferry access prompted residence construction, including developments at the East Ferry land, the Howland Plat, the Gardner Farm Plat, and Ferry Meadow, as well as Ocean Highlands and the Bay View plat. Jamestown's earliest summer colony, Conanicut Park, was created at the northern tip of the land near the steamboat landing and hotel site (Everts & Richards 1895; Figure 16). Development around the ferry landings produced three concentrated settlement nodes: Conanicut Park on the north, Ferry Meadow on the east, and Ocean Highlands in the south. Jamestown Village grew up along Narragansett Avenue and, in 1883, residents constructed a new Town Hall. The end of the century also saw development of religious institutions along Narragansett Avenue, including St. Matthew's Church (1880), a new Baptist church (1891), and a Roman Catholic Church on Clinton Avenue. At the end of the century, residents transformed a former school into the Jamestown Public Library in Jamestown Village.

During the twentieth century, growth resumed within Jamestown Village along Narragansett Avenue and adjacent streets. Some additional growth occurred in the residential developments, but new activities focused on sports and recreation, such as the Conanicut Golf Club and links (1902). New defensive fortifications were constructed on the island, with Fort Wetherill enlarged between 1904 and 1907. Fort Getty was established at the northwest corner of Beaver Neck (1901) and Fort Greble provided support from nearby Dutch Island, to the west. In 1940, the first bridge to connect Jamestown to the mainland on the west was constructed, further increasing access to the island for summer vacationers. Tennis courts, a bathing pavilion, yacht club, and casino provided additional attractions for summer visitors. During World War II, a series of gun batteries was erected at strategic island areas, including the southern end of Beaver Neck, the Harbor Entrance Command Post (1944), and the U.S. Navy Radio Facility. Following the war, a wave of people moved to Jamestown, creating a new residential development at Jamestown Shores. New institutions included St. Mary Church (1960), St. Mathew's Episcopal Church (1968), and the 1971 Jamestown Philomenian Library on North Main Road with the Sydney Wright Memorial Museum of Native American artifacts (1972). In 1969, the Newport or Pell Bridge was completed and, together with the 1992 Jamestown-Verrazano Bridge, created a highway across the island. Today, Conanicut is a notable beauty spot, enjoyed by summer tourists, weekend visitors, and commuters who work in adjacent cities and towns.



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Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*,
Jamestown Southern End Detail



Everts & Richards 1895 *New Topographical Atlas of Southern Rhode Island*,
 Jamestown Conanicut Park Detail

3.3 Archaeological Overview

3.3.1 Paleo-Indian 12,000–9000 B.P.

We know very little about the Paleo-Indian occupation of New England, but the large, Bull Brook Site in the Ipswich River drainage (Byers 1954), and numerous smaller sites, attest to a Paleo-Indian presence in New England shortly after the final cold spell of the Younger Dryas. Large sites such as Bull Brook are few, and probably represent either repeated visits to the same site over time, or pioneering base camps from which smaller groups dispersed to colonize the surrounding area (Dincauze 1993). Environmental reconstructions indicate that a boreal parkland forest, containing a temperate hardwood component, began to overspread southern New England (McWeeney 1999; Newby et al. 2005). The human population must have been small, mobile, and adapted to a generalist subsistence strategy (Curran and Dincauze 1977). Human groups probably entered New England from the northwest after skirting the Hudson Trench (Dineen 1996) and staying south of the Great Lakes. Typologically, Paleo-Indian point styles have been fit into a chronological order of Early (represented by Gainey/Bull Brook points); Middle (represented by Barnes/Neponset points); and Late (represented by Holcombe or Eden-like points). More than one style may appear at a specific site, and there is often a great deal of attribute overlap. To date, no true Clovis Culture with its Big Game Hunting connotations has been identified in New England.

3.3.2 Archaic 9000–3000 B.P.

The Archaic Period represents human adaptations to an ameliorating climate and the establishment of forest environments across New England. Many parts of New England could have contained established Early Archaic foraging groups as early as the 9th millennium B.P., and the abundance of bifurcated-base points within southern New England verifies this did happen (Dincauze and Mulholland 1974). Pollen diagrams after 8000 B.P. indicate a warming, moist environment in which resident Middle Archaic foragers undoubtedly established seasonal rounds that included sites along the falls of rivers, lakes and ponds, small streams, and upland task sites. Characteristic Middle Archaic projectile points, such as Stark, Neville, and Merrimack, first were defined for New England at the Neville Site at Manchester, New Hampshire, on the Merrimack River (Dincauze 1976). Late Archaic artifacts, dating between 6000 and 3000 B.P., are common in assemblages throughout New England. Brewerton, Small-Stemmed Quartz Point, and Susquehanna Tradition manifestations are well represented in the archaeological literature. Late Archaic components appear in a wide range of sizes and locations, and represent a wide number of activities from food and resource procurement to mortuary practices. The overspreading of modern forests throughout New England supported larger human populations than possible in previous times (Snow 1980).

3.3.3 Woodland 3000–500 B.P.

The Woodland Period in New England begins approximately 3000 years ago with the introduction and wide adoption of Vinette I pottery. Characteristic projectile point types are Adena, Lagoon, and Meadowood. Widespread trade and communication is reflected in an artifact inventory that includes trapezoidal gorgets, ovate cache blades, bird stones, boat

stones, bar amulets, and tubular pipes. Blocked-end tubular pipes, copper, and shell ornaments have been identified in Adena-related Middlesex burial complexes throughout the Northeast and augment these generalizations about Early Woodland times (Dincauze 1974:51). The Middle Woodland begins approximately 1800 years ago with the evolution of Point Peninsula style pottery decorated by various stamping and corded stick impression techniques (Kenyon 1983; Luedtke 1986). Ancient Native Americans adopted the elbow pipe at this time and created Green, Fox Creek, and Jack's Reef varieties of projectile points. Despite clear evidence of continuity, the succeeding Middle Woodland remains poorly documented in New England.

Approximately 1000 years ago the Late Woodland saw the appearance of Owasco-like ceramics decorated with cord marking, dentate stamping, and other designs applied to shoulders, rims, and inner rim vessel areas. This was followed by collared and castellated smooth-bodied ceramics decorated by incision and notching. Projectile point styles are dominated by the Levanna Triangle in a wide range of sizes.

Woodland subsistence patterns show a general shift toward the incorporation of horticulture into an already bountiful hunting and gathering economy, so that after A.D. 1000 and clearly by A.D. 1500, maize, beans, and squash are common in the archaeological record. The degree to which prehistoric groups became dependent upon horticulture, however, is unclear as foraging continued to be an important part of the economy. In parts of northern New England, horticulture may never have been adopted. Archaeologists have inferred steady population growth throughout the Late Woodland Period due to clear increases in artifact frequencies and site sizes, but attempts to demonstrate nucleated village settlement have proven inconclusive.

By the Terminal Woodland, Native American use of New England landscapes continued their common pattern of adjustment to seasonal peaks in the abundance and availability of food and raw material resources found in specific environments. Groups appear to have aggregated in the lowlands along rivers, near falls and riffles where anadromous fish could be taken during the spring. The lowlands and larger swamps also offered the ability to hunt birds and waterfowl during seasonal migrations. These food resources probably were established by the Middle Holocene and continued to be important economic resources into historical times. Once horticulture had been widely adopted, the lowlands provided important farming opportunities. Hunting and gathering required more dispersed, habitat-specific activities and represent steady, recurrent utilization of both lowland and upland environments.

3.3.4 Previous Cultural Resource Studies

Ancient Native American Archaeological Sites

Evidence of Native American sites within ~0.25 mile of the proposed locations for the wind turbines comes from a number of cultural resources management surveys conducted since the 1970s. Native Americans had settled on Conanicut Island for thousands of years prior to colonial exploration or settlement. Important evidence of their presence was discovered at

the West Ferry Site, where archaeologists excavated a burial ground with two discrete cultural affiliations (Simmons 1970). The earliest was dated to the Archaic Period (probably the Transitional Archaic), and the latest to the Contact Period (Simmons 1970). The archaeological evidence thus suggests that the island was occupied for relatively long periods at least by 3500 years ago. Earlier occupation might have been possible as the last glacier retreated, and some archaeologists suggest that Native Americans were on the island by 12,000 years ago. While informative, the West Ferry Site is located outside the APE.

Prior to European settlement of Aquidneck Island, Native Americans had cleared large tracts of land for agriculture. Other sites can be assumed, if this assessment is correct. To date, sub-surface explorations are relatively limited, other than the Dennis-Tallman Site at East Main Road and Turnpike Avenue (RI-1586). Previous researchers have identified several archaeologically sensitive areas within the Newport Naval Complex, some dating to the ancient Native American period and others dating to the period after contact with Euro American explorers and settlers. During their survey of the Naval Complex, archaeologists identified five areas that are sensitive for ancient Native American sites, each of which is within the currently proposed viewshed area. They are:

- (1) P(prehistoric)-1 Midway: on well-drained, moderately-gently sloping to level ground adjacent to Cowl Brook and within 600 feet of Narragansett Bay;
- (2) P-2 Midway: the Burma Road I Site RI-942.1, an isolated surface find consisting of two flakes (Public Archaeology Facility 1992 in Louis Berger & Associates, Inc. 1998:38);
- (3) P-3 Melville South: on well-drained, relatively level, undisturbed ground near Norman Brook and within 600 feet of Narragansett Bay;
- (4) P-4 Melville South: Site RI-942.2, a low-density lithic scatter that has been recorded but whose eligibility for inclusion in the NRHP is unknown (Public Archaeology Facility 1992 in Louis Berger & Associates, Inc. 1998);
- (5) P-5 Melville South: on well-drained, relatively level, undisturbed ground, near Lawton Brook and within 600 feet of Narragansett Bay.

The Berger archaeologists also noted that the Defense Highway (Burma Road) through Middletown traverses ground that might be sensitive for Native American burials. Archaeologists made that determination on the basis of nineteenth-century reports of burials exposed during construction of the Old Colony and Newport Railroad, paralleling the roadway. Mapping from their report showing the location of these prehistoric sites is shown in Figure 17.

Prior to the Louis Berger Company's work, a number of archaeological consultants also had recorded ancient Native American sites within the Newport Naval Facility, along the western

shore of Aquidneck Island, and on the Defense Highway. These include studies by the Public Archaeology Facility (PAF 1992), and the Public Archaeology Survey Team, Inc. (PAST 1990, 1991).

Euro American Archaeological Sites

Those archaeological sites that date to the historical period, (after contact had been established between Native Americans and Europeans) include:

- (1) H(historic)-1: Coasters Harbor Island, where Revolutionary War-era batteries might remain at the center of the island;
- (2) H-2: Coasters Harbor Island, where early- to mid-nineteenth-century deposits are associated with the Newport Asylum for the Poor near Founders' Hall;
- (3) H-3: Coasters Harbor Island, where an eighteenth- to nineteenth-century cemetery might be located at the intersection of Luce Avenue and Perry Road;
- (4) H-4: Coddington Point, where deposits associated with a late-nineteenth century domestic residence are likely at the intersection of Meyerkord Avenue and Whipple Street;
- (5) H-5: Coddington Cove, where archaeological deposits associated with the eighteenth- to nineteenth-century Taylor-Chase-Smith House might remain near some of the Naval Quarters;
- (6) H-6: Melville North, where deposits associated with an eighteenth-century house site might remain near the intersection of West Main Road and Stringham Avenue; and
- (7) H-7: Melville North, where an eighteenth-century house could be located within 600 feet of the intersection of West Main Road and Bradford Avenue, near Naval Quarters A.

Archaeologists also noted that the waters around Narragansett Bay could be sensitive for submerged resources (shipwrecks) dating from the Revolutionary War to the recent past. These sites could have been impacted by dredging activities around the Newport Naval Complex. Bearing that in mind, archaeologists suggested that the following locations might be sensitive for archaeological deposits:

- (1) Between Coddington Cove breakwater south to the still water basin;
- (2) From the southern edge of the turning basin, south to Coddington Point, and west to the 30-foot depth contour; and

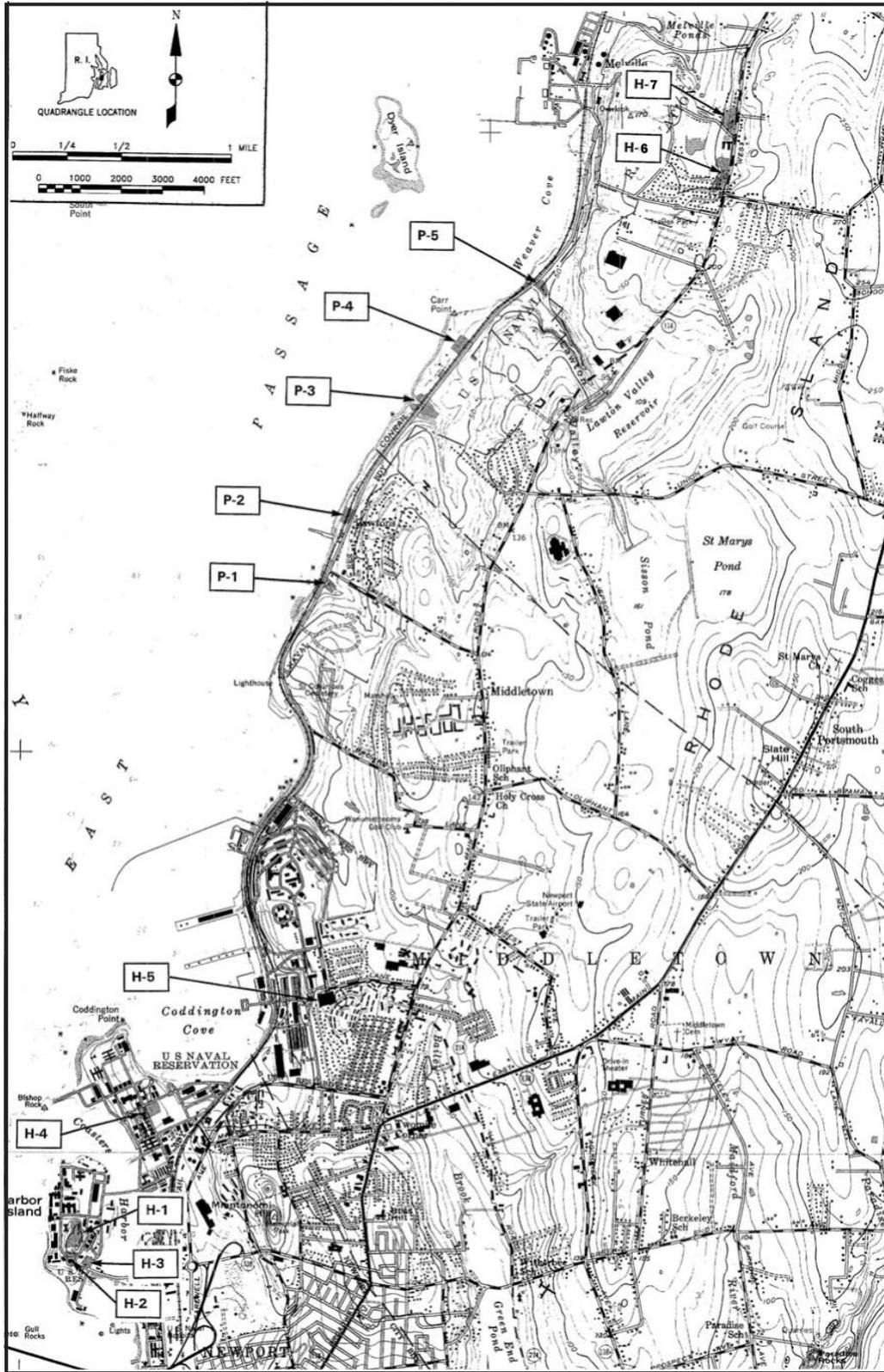
- (3) Along the front of the shoreline bulkhead, for a distance of about 25 feet from the shore.

Each of these resources is located within the proposed viewshed area.

Mapping from the Berger report showing the location of these historical sites is shown in Figure 17. Prior to Berger's Cultural Resource Survey of the Newport Naval Complex (1998), a number of cultural resource management firms evaluated the lands along Aquidneck Island, and identified a number of sites during their work (Bowen 1978; Brown 1978; Public Archaeology Facility 1992; Public Archaeology Survey Team 1990; Van Couyghen and Leveillee 1988). That research produced evidence of 11 sites within or in close proximity to the complex.

3.4 Architecture

Within the project APE, the built environment includes resources that were constructed from the early eighteenth century through the mid-twentieth century. A variety of vernacular architectural resource types and styles are extant, including folk Victorian, Gothic Revival, Greek Revival, Italianate, and Colonial Revival. Constructed at different periods in the history of settlement and development in the project APE, these types were designed to meet different needs over time. They also share continuity in many ways. For example, most were constructed of locally available building materials, including timber, stone, and some brick, by area residents who utilized traditional and vernacular building techniques. After the turn of the twentieth century, however, use of machine-milled materials became increasingly common, and many such treatments were applied both to newly erected, as well as older buildings. As a result of these forces, in many places in the project APE, the built environment demonstrates an overall cohesion that is illustrative of the area's historical patterns of development and technological change over time.



Previously Identified Archaeological Sites

4.0 RESULTS OF INVESTIGATIONS

Gray & Pape has conducted a reconnaissance-level architectural survey consisting of a literature review, background research, and a preliminary survey of historical architectural resources 50 years or older within the project area. The project area encompasses all land area located within a 1.5-mile radius of each proposed location of a wind turbine and was expanded during consultation with the RIHPHC to extend beyond the southeast corner of lower Newport Harbor and westward to include the entire eastern edge of Conanicut Island approximately to the location of North Main Road along the center spine of the island.

4.1 Historical Architectural Resources

4.1.1 Previous Investigations

The last major architectural reconnaissance survey conducted in Newport County was in 1979. Eleven previously listed Historic Districts are located in the APE, and 10 others have been identified as potentially eligible for inclusion in the NRHP (Appendix B). While no comprehensive town-wide historical inventory surveys have been conducted within the project APE, the creation of local Historic Districts in each of the communities indicates that there is at least an awareness of the density of architectural resources within the communities. It was determined also that previously identified resources and districts would not need to be resurveyed unless they had been drastically altered.

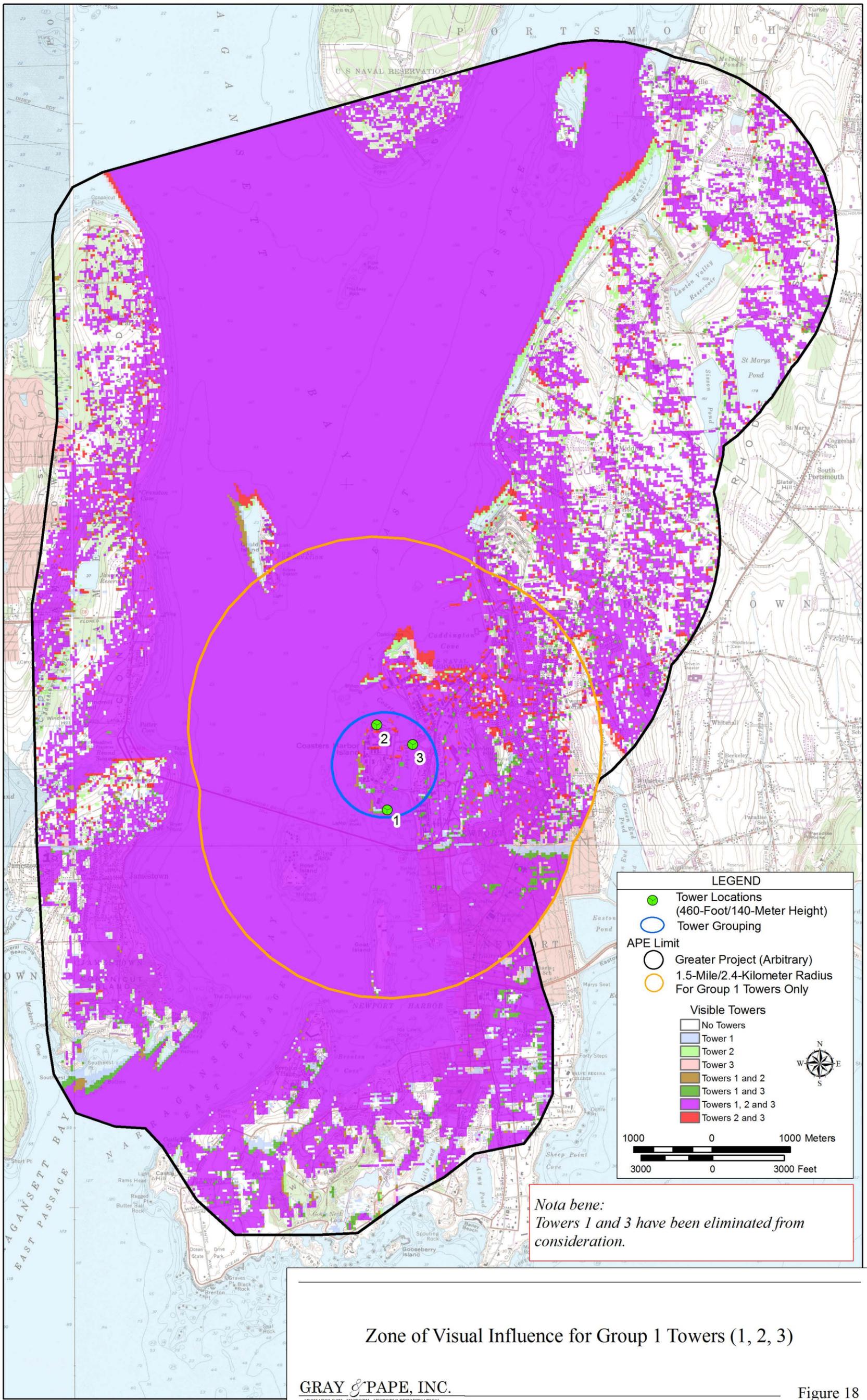
4.1.2 Current Investigation

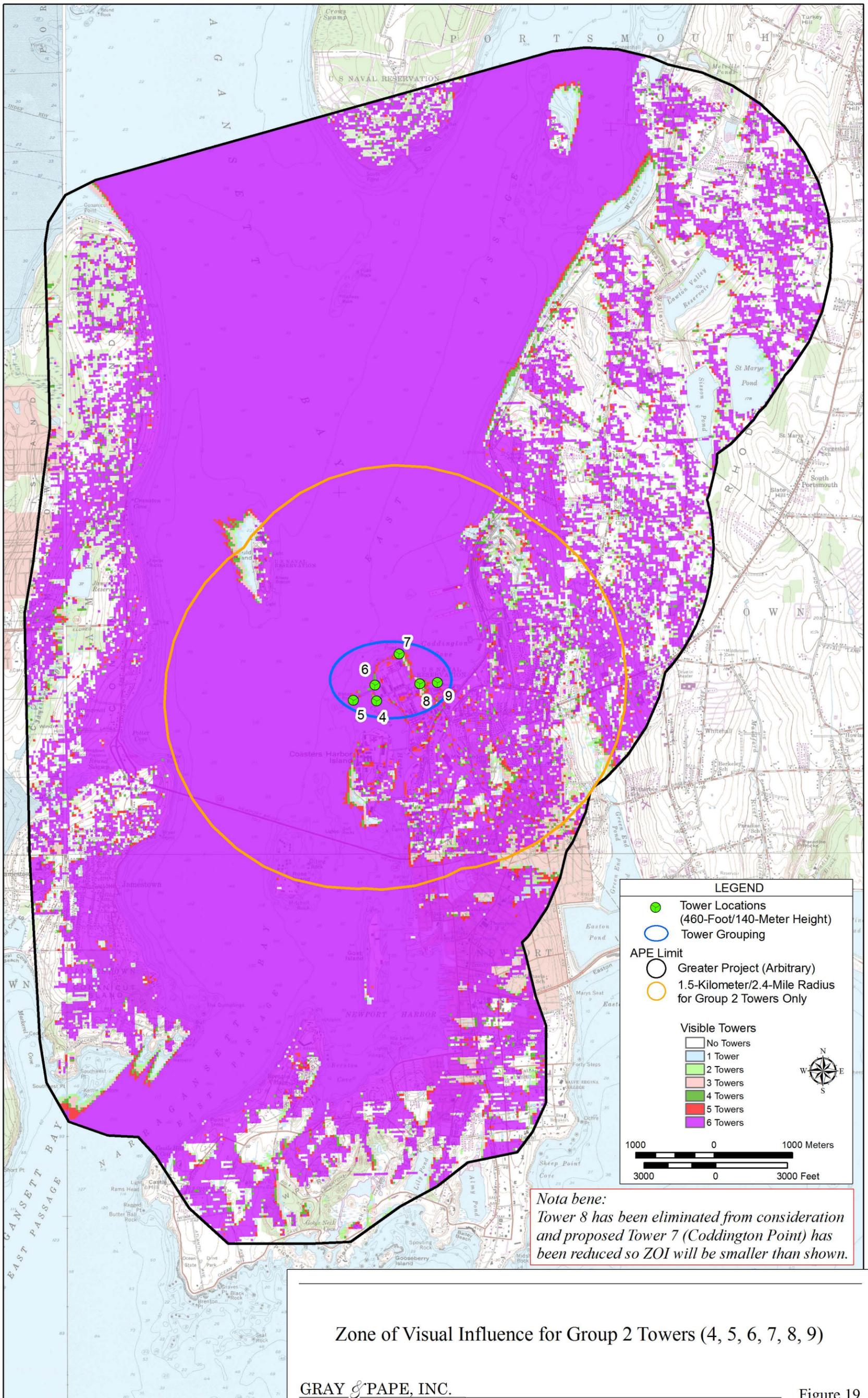
The proposed sites for the potential wind towers were arranged into nine groups: Towers 1–3 are located on Coaster’s Harbor Island and were assigned as Group 1; Towers 4–9 are located at Coddington Point at the northern end of the Navy base and were assigned as Group 2; Tower 10 is located on Navy property just southwest of the Gate 17 entrance and was assigned as Group 3; Group 4 is a single tower (Tower 11) located on Gould Island; Group 5 is a single tower (Tower 12) located at McAllister Point adjacent to Burma Road; Towers 13 and 14 are located just south of Green Lane in Middletown and were assigned as Group 6; Towers 15–18 are located northwest of Mailcoach Lane in Portsmouth and were assigned as Group 7; and Towers 19–20 are located adjacent to Carr Point and immediately southwest of the Raytheon property in Portsmouth. They were assigned as Group 8. Towers 21 and 22 are located at the northern edge of the NUWC property and were assigned as Group 9*.

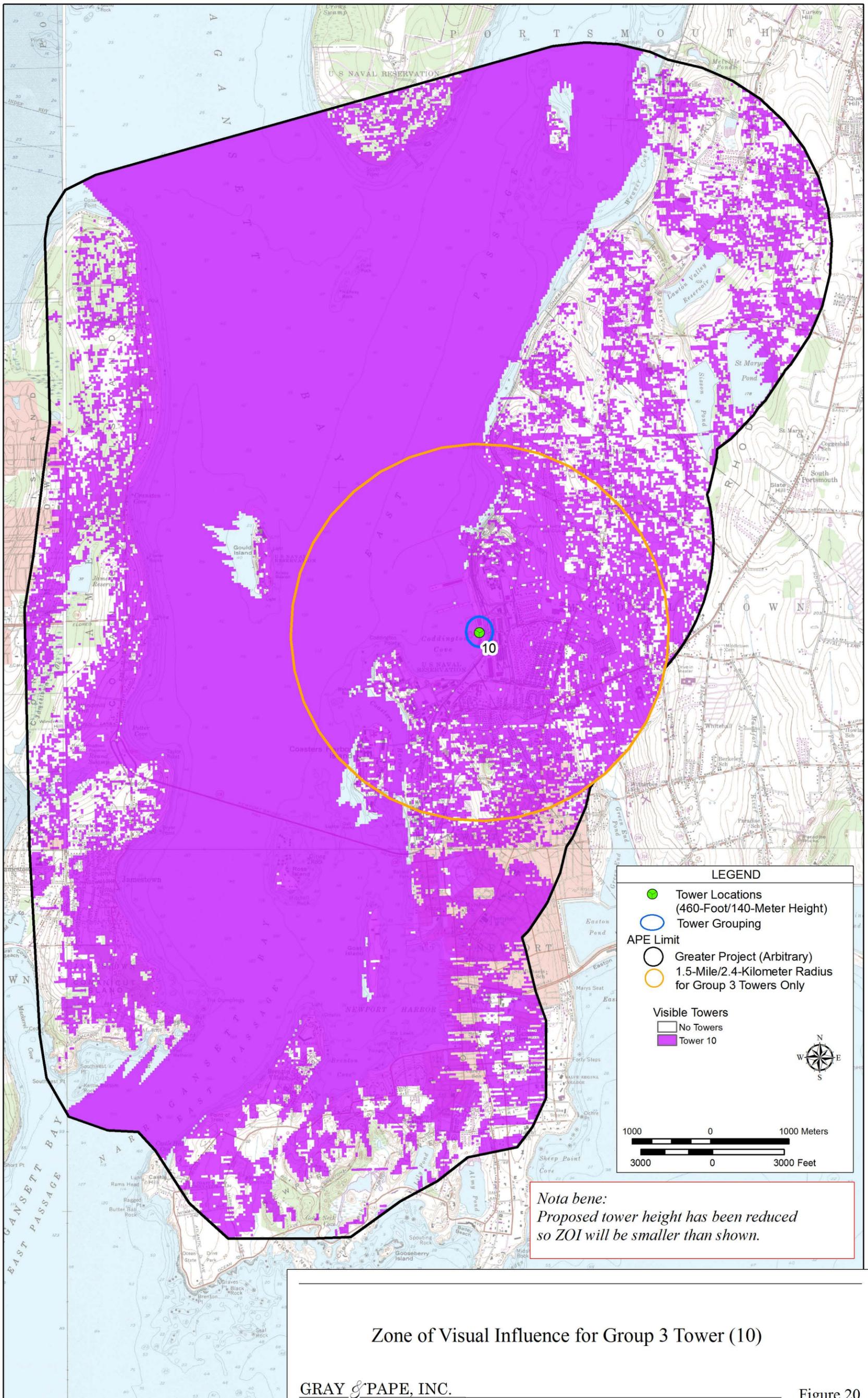
Gray & Pape used WindPro computer modeling programs to develop a set of maps showing the Zone of Visual Influence (ZVI) for each of the nine groupings of wind towers. These maps (Figures 18–26) combine GIS information on the topography of the APE with the proposed wind tower height to generate color-coded graphic information showing the number of towers that would be visible throughout the APE for each grouping.

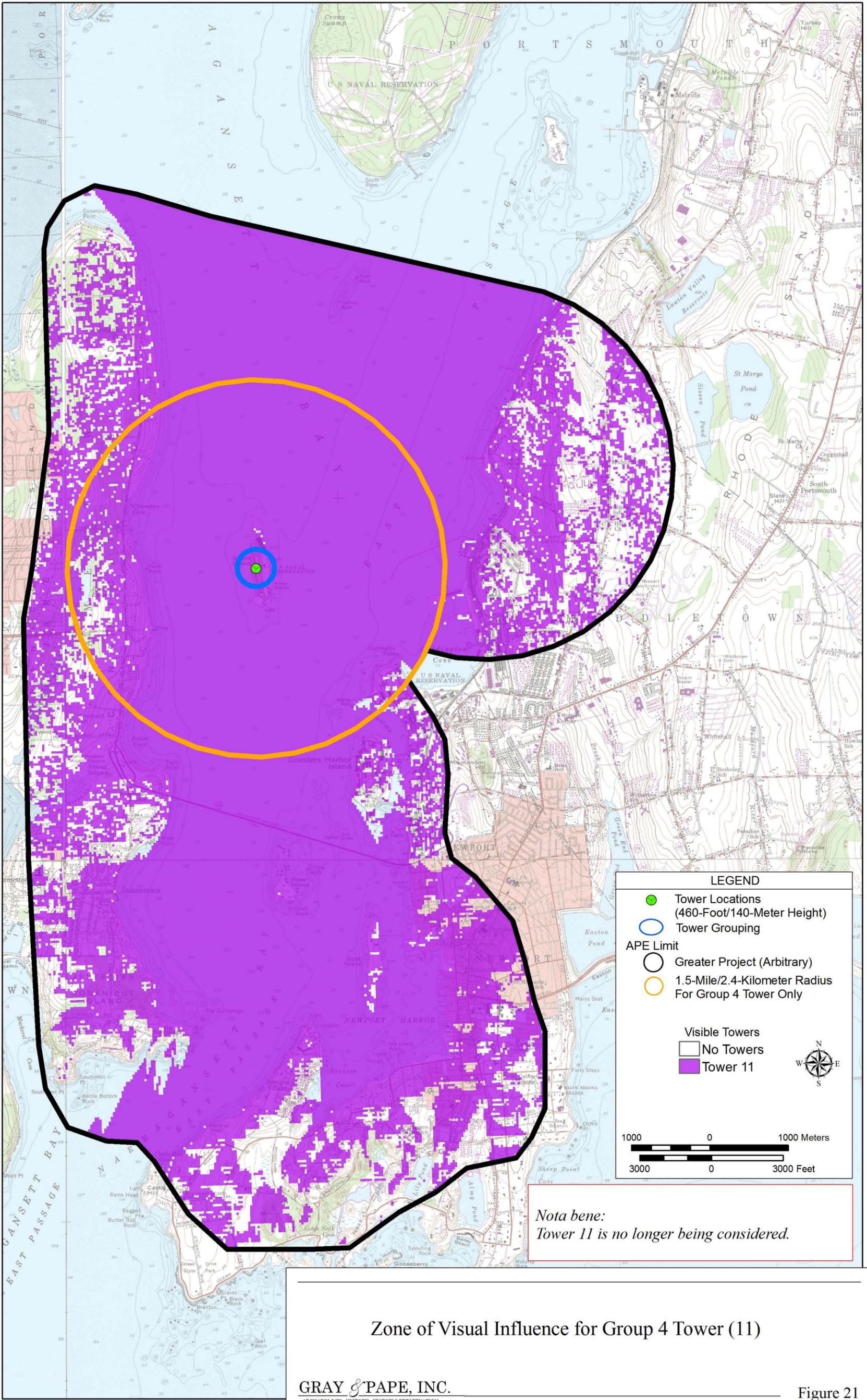
Following the first APE of 1.5 miles, initial windshield-type survey revealed approximately 18 historical structures in Jamestown, 39 historical structures in Portsmouth, and 269 historical structures in Middletown. Preliminary survey in the northern end of Newport identified 861 historical structures. It was estimated that the remaining structures within the APE would total over 3000.

* *Nota bene: per the revised scope of the project, Towers 1, 3, 8, 11, 12, 13, 15, 17, 19, and 22 have been eliminated from consideration as proposed turbine locations. Further clarification is given in revised Chapter 5.*

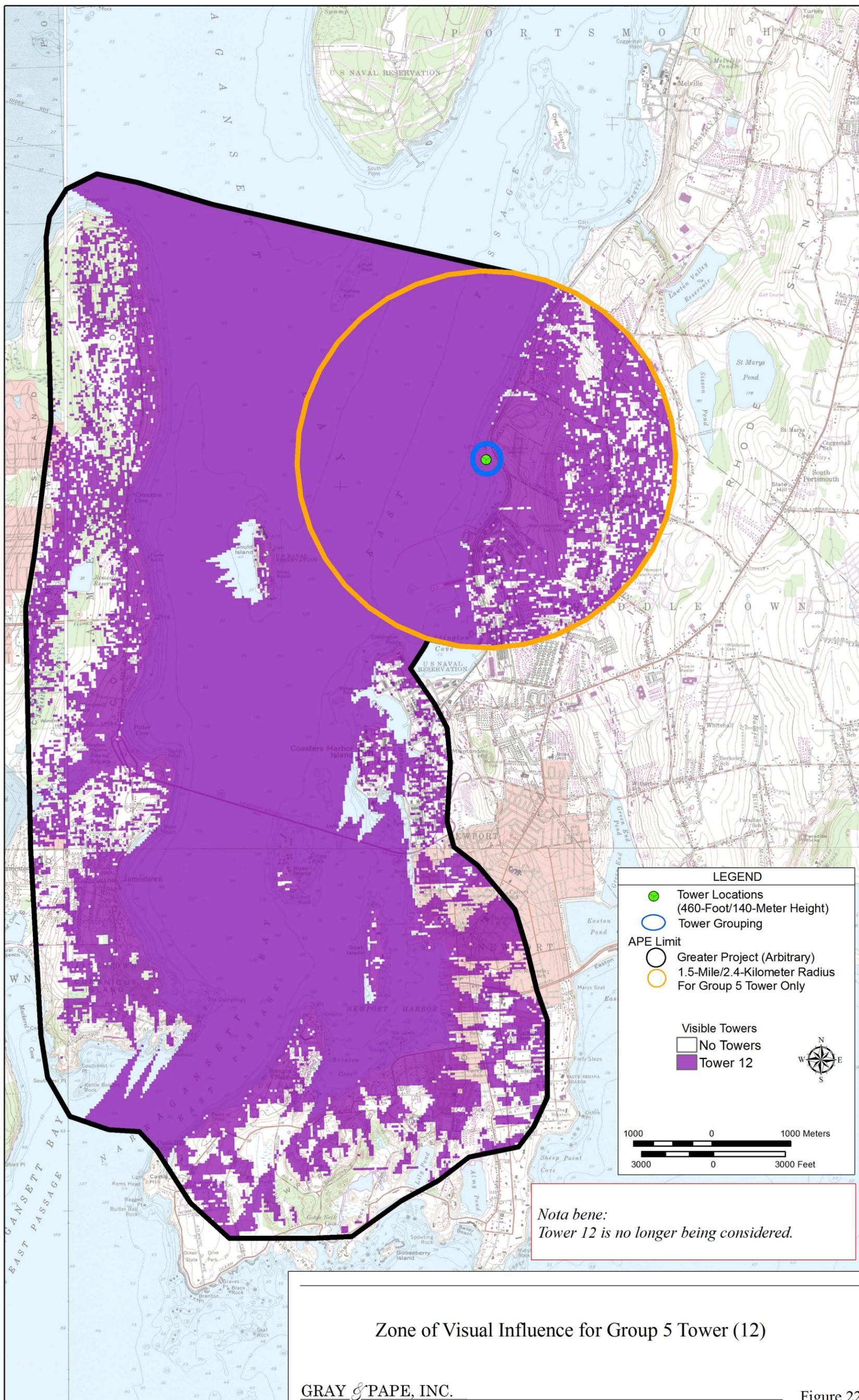


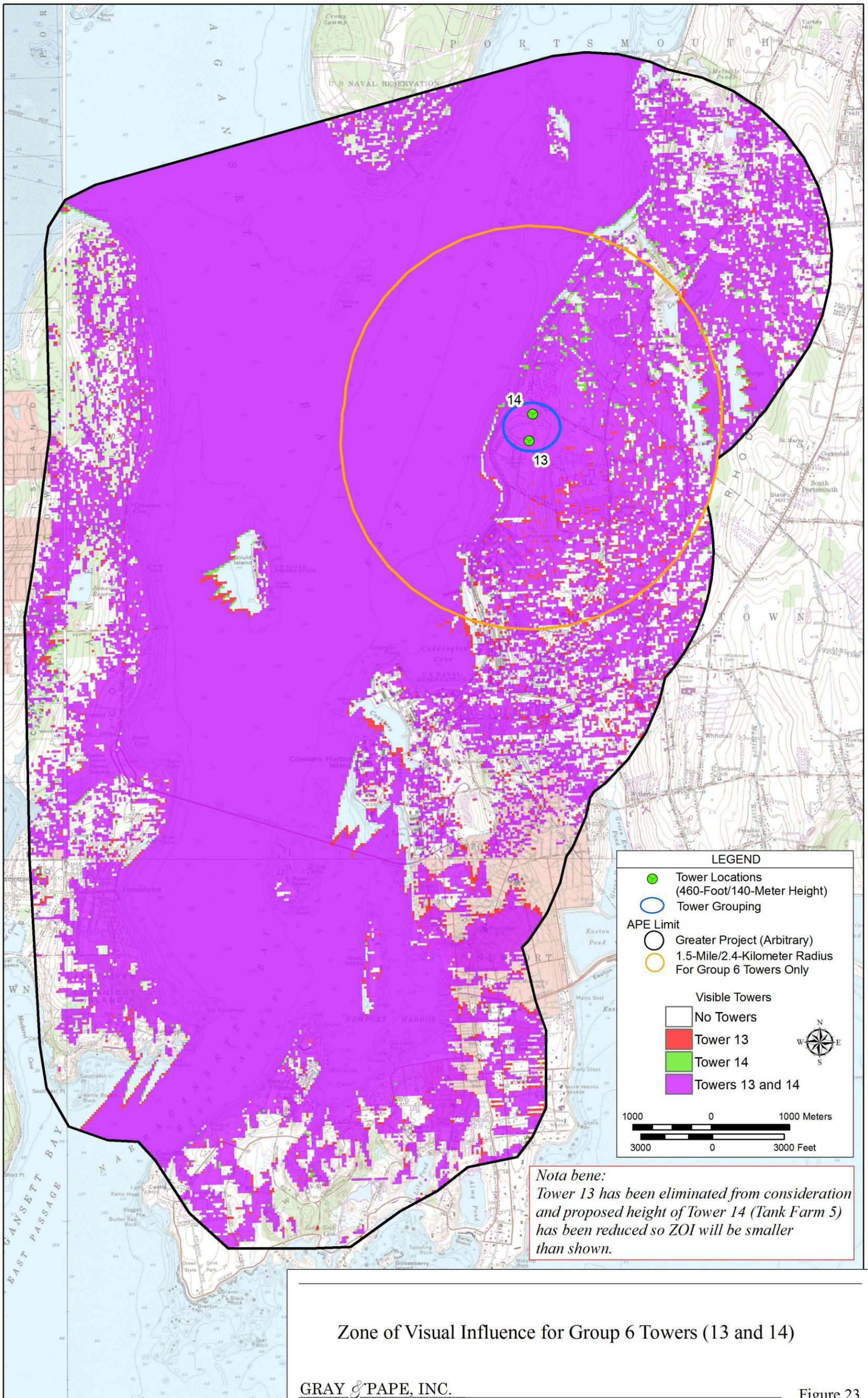


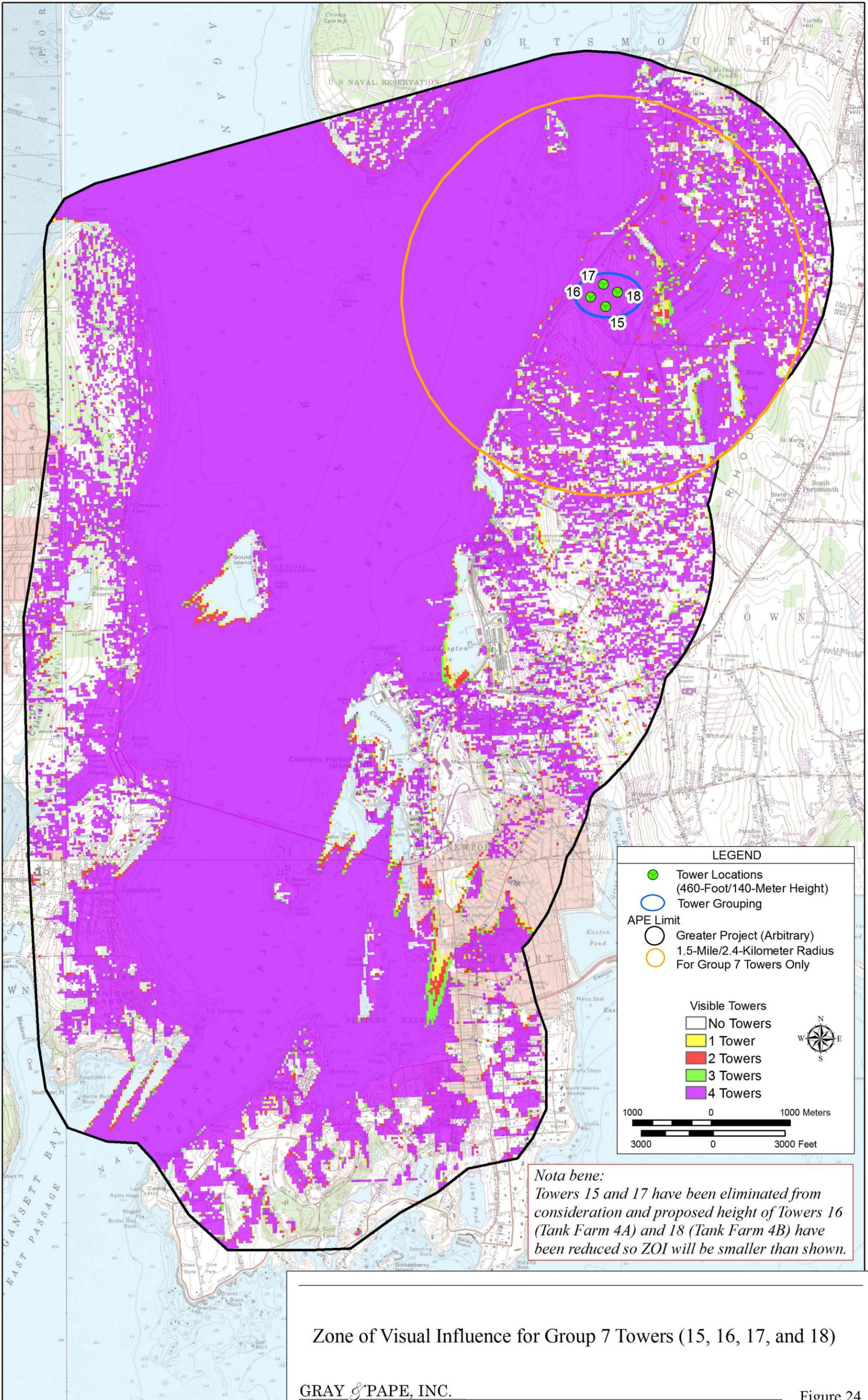


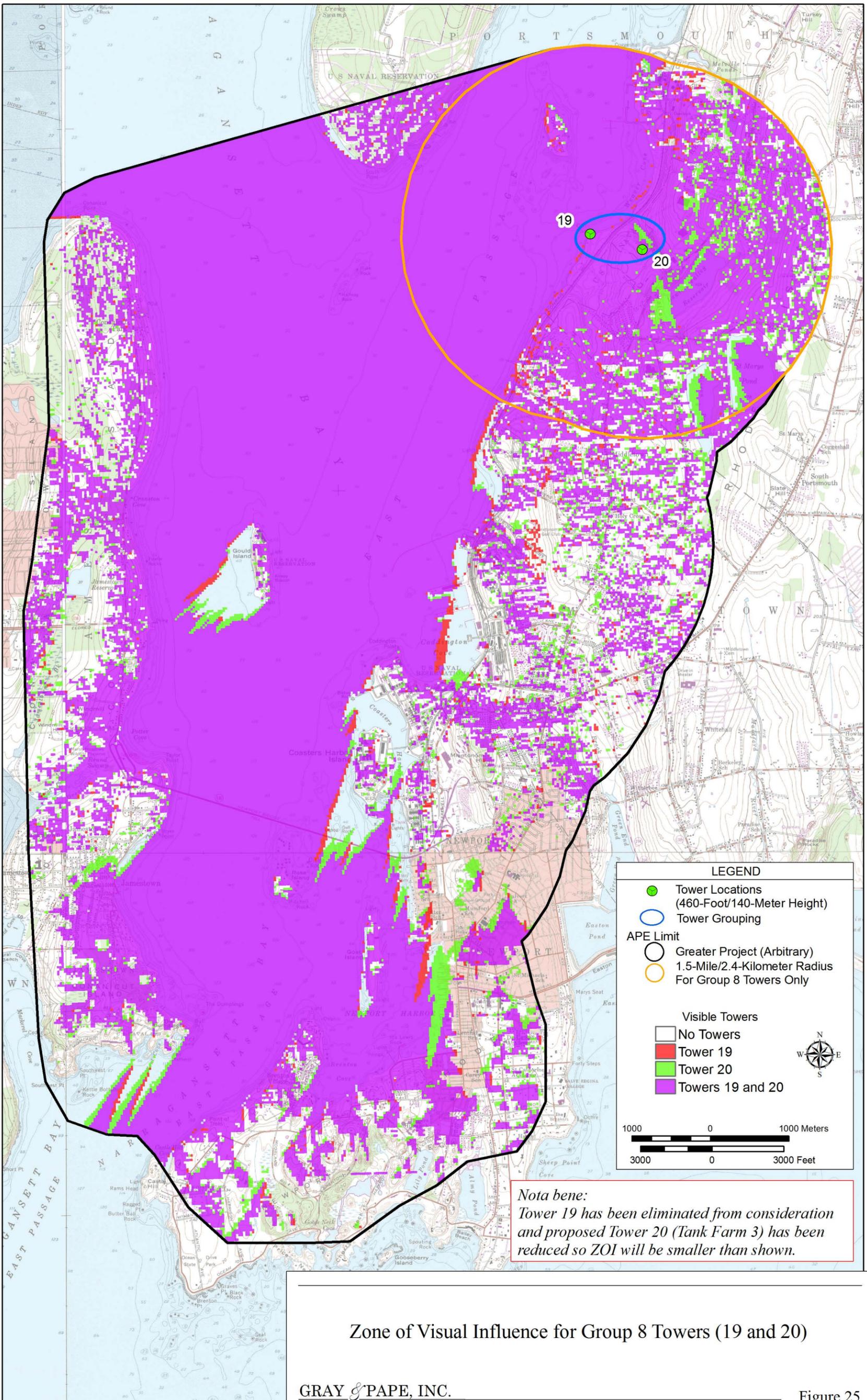


Zone of Visual Influence for Group 4 Tower (11)



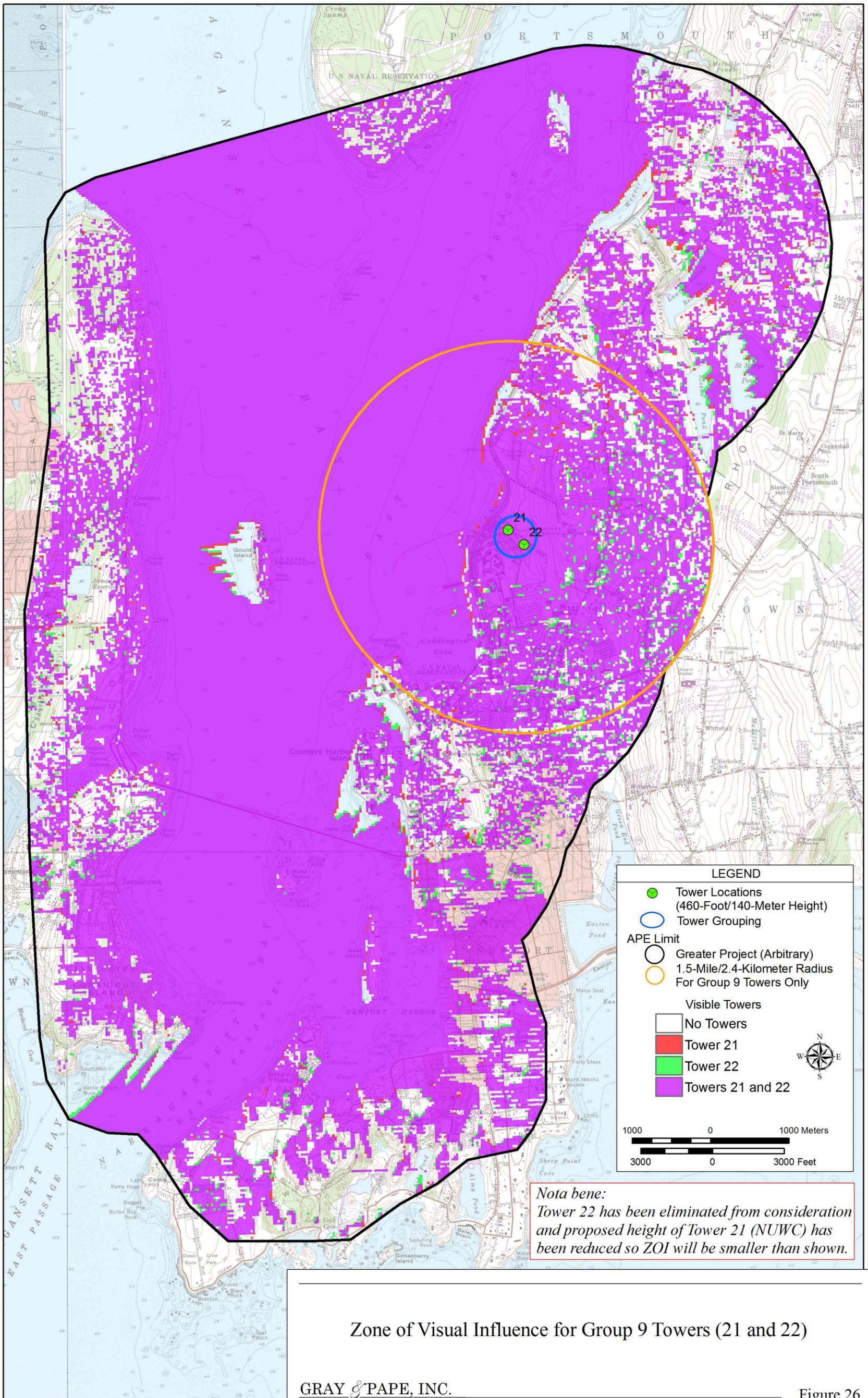






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Zone of Visual Influence for Group 8 Towers (19 and 20)



With such a large quantity of historical resources, it was determined that individual documentation of each historical resource would be well outside the scope of this project and unfeasible. Through consultation with the RIHPHC and review of ZVI maps prepared by Gray & Pape, it was determined that some or all of the proposed wind towers would be visible from all locations in the 1.5-mile APE. It was suggested by the RIHPHC that the APE be expanded to include land beyond the southeastern corner of lower Newport Harbor and then westward to include the entire eastern shore of Conanicut Island (Jamestown) and as far inland as North Main Street. While none of the proposed wind turbine locations would actually be located in Jamestown, the topography and location of the island would afford most of Jamestown views of all the proposed tower locations.

The RIHPHC recommended that the best approach for this type of proposed project would be to forgo a large-scale inventory and move toward assessment of visual effects of the wind towers. Much of this could be determined through visual photographic simulation of the towers in place as seen from various locations within the APE. Emphasis was put on determining views from historically significant locations and those frequently populated by visitors and year-round citizens. Locations selected were:

- Newport: Fort Adams National Historic Landmark District
- Newport: Fort Adams- Eisenhower House
- Newport: Bellevue Avenue Casino
- Newport: Cliffwalk adjacent to the Breakers mansion
- Newport: Cliffwalk at Memorial Boulevard
- Newport: Touro Street/Bellevue Avenue intersection
- Newport: Washington Square from Colony House
- Newport: Island Cemetery/Common Burying Ground
- Newport: Washington Street view from Battery Park
- Newport: Bowen's Wharf
- Newport: America's Cup Avenue
- Newport: Ida Lewis Yacht Club
- Middletown: Adjacent to Navy Base Gate 17
- Middletown: Proposed historic agricultural district at Green Lane and West Main Road
- Portsmouth: Melville Pier (remains of WWII Navy installation)
- Portsmouth: Prudence Island: view from Farnham Farm (National Register property)
- Jamestown: Adjacent to the Pell Bridge toll plaza
- Jamestown: Windmill Hill Historic District
- Jamestown: Downtown Harbor
- Jamestown: Fort Wetherill National Historic District
- Jamestown: Conanicut Park Historic District along East Shore Road
- Jamestown: Conanicut Island Light
- Narragansett Bay: Between Fort Wetherill and Rose Island

4.2 Archaeological Field Investigations

Previous archaeological investigations had identified 12 historic and prehistoric sites that yielded or were likely to yield artifacts pertaining to previous human habitation and activities (Louis Berger & Associates, Inc. 1998; Department of the Navy 2007). As part of their agreement with Tetra Tech, Gray & Pape archaeologists conducted a walkover survey of these locations to assess their continuing potential to reveal historical and prehistoric information. The results of the walkover survey are detailed below.

4.2.1 Historic Area 1

Historic Area 1 (H1) is located close to the center of Coasters Harbor Island near or at the island's highest point. Based upon its elevated location and expansive viewshed this area is a potential location for a Revolutionary War battery or fortification. This area was observed to be heavily modified by historical military use by a parking area surrounded by exposed soils indicative of modification by heavy machinery. Given these observations at H1, it is likely that, if a Revolutionary War site is present within the area, both its original setting and archaeological integrity have been dramatically altered, making it unlikely that a site with NRHP eligibility remains in the H1 area.

4.2.2 Historic Areas 2 and 3

Historic Areas 2 (H2) and 3 (H3) are located on the southern half of Coasters Harbor Island approximately 164–246 feet northeast of Founders Hall (Plate D1; Plate D2). Founders Hall was originally the site of the Newport Asylum for the Poor and historical documents indicate that asylum patients were buried on the island in the vicinity of the hall. The H2 area, composed of the back and side yard of the Quarters AA, is a possible area of internment or location for outbuildings or gardening activities connected with the asylum. The landform in this area slopes down at 30–40 degrees for 16–22 yards before becoming level, leading to H3, which encompasses the level ground and tennis courts to the east of H2, north of Luce Avenue, and west of Perry Road. The landform in the H2 area is level for 16–38 yards, becoming wider moving northward, and west of the break in the slope described above. Vegetation consisted of landscaped hedges and a row of trees that form the border of the Quarters AA back and side yards. It appears that, other than Quarters AA itself, disturbance to the sediments in this area has been limited to surficial landscaping, including the importation of soil, which has produced undulations around the hedges and tree row.

This elevated, well-drained, terrace segment would have been an attractive burial ground, outbuilding locations, or gardens due to its proximity to the asylum, a location that did not interfere with island access roads, and because it had a deep soil profile. The H3 area had been previously identified by Louis Berger & Associates, Inc., as a likely location for the Asylum cemetery. Because burials are located well below surface and their headstones may be present under a thin layer of navy landscaping fill (see section 3.2.2) these deposits could be present at either H2 or H3. In spite of the presence of tennis courts at H3, interred remains with their headstones could remain largely undisturbed. In addition, the proximity of H2 to the asylum building on an elevated, well-drained landform would have provided an attractive location for an asylum outbuilding or activity area, such as a garden. If archaeological