

MHC Reconnaissance Survey Town Report

PLYMOUTH

Report Date: 1981

Associated Regional Report: Southeast Massachusetts

Reconnaissance Survey Town Reports, produced for MHC's Statewide Reconnaissance Survey between 1979 and 1987, introduce the historical development of each of the Commonwealth's municipalities. Each report begins with an historic overview, a description of topography, and political boundaries. For the purposes of the survey, the historic period has been subdivided into seven periods: Contact (1500–1620), Plantation (1620–1675), Colonial (1675–1775), Federal (1775–1830), Early Industrial (1830–1870), Late Industrial (1870–1915), and Early Modern (1915–1940/55). Each report concludes with survey observations that evaluate the town's existing historic properties inventory and highlight significant historic buildings, settlement patterns, and present threats to these resources. A bibliography lists key secondary resources.

Town reports are designed for use together with a series of town maps that demarcate settlement patterns, transportation corridors and industrial sites for each historic period. These maps are in the form of color-coded, polyester overlays to the USGS topographic base map for each town on file and available for consultation at MHC. For further information on the organization and preparation of town reports, readers should contact MHC.

Users should keep in mind that these reports are now two decades or more old. The information they contain, including assessments of existing knowledge, planning recommendations, understanding of local development, and bibliographic references all date to the time they were written. In some cases, information on certain topics was not completed. No attempt has been made to update this information.

Electronic text was not available for digital capture, and as a result most of the reports have been scanned as PDF files. While all have been processed with optical character recognition, there will inevitably be some character recognition errors.

The activity that is the subject of the MHC Reconnaissance Survey Town Report has been financed in part with Federal funds from the National Park Service, U.S. Department of the Interior. However, the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior. This program receives Federal financial assistance for identification and protection of historic properties. Under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and the Age Discrimination Act of 1975, as amended, the U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, disability or age in its federally assisted programs. If you believe you have been discriminated against in any program, activity or facility as described above, or if you desire further information please write to: Office of Equal Opportunity, National Park Service, 1849 C Street, N.W., Washington, D.C., 20240.



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MHC RECONNAISSANCE SURVEY REPORT

DATE: 5/11/2017

Community: Plymouth

I TOPOGRAPHY

Located on Coastal Lowlands on Plymouth Bay and on Cape Cod Bay. Plymouth Harbor shallow with shifting sand bars. Complex topographical relief along the coast. Sandy and gravelly soils with underlying glacial till. Extensive pond system throughout the town. Drainage via Town Brook and Eel River in the north. Agawam River and Beaverdam and Indian Brooks in the south.

II POLITICAL BOUNDARIES

The town of Plymouth was founded in 1620, it was never incorporated. Part established as Plympton in 1707, North Precinct established as Kingston in 1726. Plantation of Agawam included in Wareham in 1739. Part ceded to Wareham in 1827.

III HISTORIC OVERVIEW

Plymouth is the oldest town in Massachusetts; it is the location of the first settlement in the Commonwealth. Plymouth is the seat of Plymouth County and served as the governmental center of Plymouth County until its merger with the Massachusetts Bay Colony in 1695. Mid 18th century settlement nodes were established at Plymouth center, Manomet Ponds, and Eel River (Chiltonville). Late 18th and early 19th century industrial development at Chiltonville and North Plymouth provided impetus for the growth of settlement at these areas. The principle economic activities were fishing, whaling, also mills (grist, rolling, etc.) on Town Brook westward to Billington Sea, at Chiltonville (Eel River), which were centers of 18th century industrial development. Gradual movement of residential settlement southward

along Sandwich Street to Chiltonville. Prior to construction of Old Colony Railroad principle connection with the rest of the Commonwealth were the packet boats which ran regularly between Boston and Plymouth. Appears to have been little dependence on the Bay Path (Massachusetts Path) for communication although a regular stage run between Boston and Plymouth was in operation early on. Construction of Pilgrim Hall in 1824, by Pilgrim Society - early museum devoted to Pilgrim possessions begins physical recognition of historic role of the town. Top half of forefathers' rock (Plymouth Rock) moved to front of Pilgrim Hall in 1834. Economy of the town during this period (early - mid 19th century) dependent on fishing and various mills and ropewalks as well as some trade. Settlement remains along coastal areas, although there was some development at Darby, impetus presumably provided by the railroad. Summer resort development on Plymouth beach established mid-late 19th century - destroyed by the storm of '98. Portugese community well established in North Plymouth in 1880. According to some sources Italian and Portugese took over abandoned farms, others indicate they worked for Plymouth Cordage. Indications that Portugese were from Provincetown and New Bedford and originally from Cape Verde. Late 19th and early 20th century development continues at industrial node at North Plymouth, resort node established in 1889. Cranberry growers begin to have impact by turn of the century. Tercentenary in 1920 major impetus in adaptation of waterfront from commercial to tourist usage with demolition of wharves, placement of Plymouth Rock in tidal area, and creation of waterfront park.

It appears that the banks of Town Brook from Bridge at Sandwich St. landscaped to Park at this time. Waterfront south of Town Brook retains some wharf development. Post World War II development spurred by construction of Southeast expressway. Substantial new development at Manomet and southward along coast and interior. Miles Standish State Forest and Plymouth Town Forest have protected large portions of the interior from the residential development which has made Plymouth the fastest growing town in the Commonwealth during the past 15 years.

IV CONTACT PERIOD (1500 - 1620)

A) Transporation Routes:

Located on Plymouth Bay with focus of regional corridors from Cape Cod, Buzzards Bay, and interior ponds. Primary trail north to Pembroke Ponds and Jones River apparently documented as Court Street (Route 3A) from Plymouth center (Davis, 1883, p.156). Main trail west to Nemasket (Middleborough) follows axis of Summer St./Hurd (Davis, 1884, p.78) along Town Brook with branching of routes around Billington Sea likely as Plympton Road with original trail apparently intact around Narragansett Ride (Narragansett Pond) and Furnance Road past Ellis Pond. Main route south to Great South Pond and Carver ponds from ford at Town Brook documented as South Pond Road (Hurd - Davis - 1884, p. 135). Several routes probable south to Buzzards Bay and Cape Cod from low tide ford at Town Brook (Hurd, 1884, p. 135) including Long Pond Rd. to Great Herring Pond, with branch south to Big Sandy Pond likely as Duck Pond-White Island Pond Roads, Sandwich Street, Old Sandwich Road to Savery

Pond in Ellisville, and south to Cape Cod as Ellisville Road with probable loop to Manomet coast from Eel River as River Street (Route 3A) over Pine Hills to Fresh Pond and south to Savery Pond (Ellisville) along Shallow Pond-Indian River road (unmarked) including likely branches to Manmoet Heights fishing areas along Brook St. South Plymouth district possibly retains several trail remnants in complex network of surviving paths around Miles Standish State Forest. Precise trail location in Plymouth town center is still open to question.

B) Settlement Pattern:

No reported contact period native sites. Nine sites with Woodland late Woodland components recorded (MHC survey). Coastal focus, seven sites located on or within short distance of Plymouth shore. Concentrated on northern bank of Town Brook/Arms House Pond, Eel River, Bartlett Pond), Billington Sea were habitation/planting grounds noted by early 17th century explorers. Coastal proximity provides access to varied marine resource base, prime planting grounds, transportation routes. Two inland woodland/historic sites situated on northern shore Bloody Pond, western shore Great Herring Pond. Latter site is prehistoric/Christian cemetery. Three unidentified native, burial sites vicinity of Plymouth Country Club, midway between No Bottom Pond and County Farm. Pring after visiting the Plymouth area in 1603 estimated there were approximately 200 native residents (probably only entailed coastal population since he undertook little interior investigation).

C) Subsistence Pattern:

Extensive woodlands, freshwater, marine resources capable of supporting substantial native population. Undertook seasonal horticulture, fishing, hunting, collecting. Early 17th century explorers

and settlers reported abandoned native planting grounds concentrated along Plymouth shore, Town Brook, Eel River, Watson's Hill. Rocky, sandy interior probably discouraged interior horticulture. Crops included dorn, pumpkins, cucumbers, tobacco. Large quantities fresh-water fish available in numerous coastal and inland streams and ponds. Native offshore fishing (Plymouth Harbor, Plymouth Bay) noted by Champlain in 1605. Plymouth shore, tidal flats rich sources of shellfish and water fowl. Interior woodlands excellent habitat for large game. High probability European-Indian trade predating early 17th century European-Indian trade predating early 17th century European-Indian intercourse due to extensive coast, protected harbor.

D) Observations:

Probable major native settlement area (southeastern Massachusetts due to environmental diversity, coastal accessibility. Settlement concentrated on Plymouth coast, shores of major water sources (i.e., Town Brook, Eel River, Billington Sea, Great South Pond, Long and Halfway Ponds, Little and Great Herring Ponds). Heavy coastal development (17th-20th century), shore erosion particularly area from North Plymouth to Eel River, minimizes chances of surviving native contact sites. Likely inland contact period sites remain due to minimal interior development.

V. FIRST SETTLEMENT PERIOD (1620-1676)

A) Transportation Routes:

Native trails improved as regional highways with Massachusetts Bay path as Main-Court St. (Route 3A), Middleborough path as Summer St. and Sandwich (Cape Cod) as Old Sandwich Road. Original New Plymouth town plan includes Leyden Street (1620) as "the Great

Street" (Davis, 1883, p. 156) across the coastal Native path around Coles Hill. Town River ford improved with swing bridge (1666) (Davis, 1884, p. 158). Other town streets laid out during 17th century include Market, Summer, Spring and Samoset Sts., although complete sequence remains unclear.

B) Population:

No native population figures, although believed 1616-1619 epidemic virtually wiped out Plymouth natives. White population well documented. Initial settlement (1620) 102 residents, 51 died first winter (starvation, disease, exposure). 1621 - 34 arrivals (London), 1623 - 84 arrivals. 1624 - 180 residents, 32 dwellings. 1634 - 20 deaths (epidemic). 1640 150 residents. Population loss due to emigration, establishment of new settlements (e.g., Duxbury, Eastham, Marshfield, Scituate), better farmland. Original settlers primarily from Lincolnshire, Nottinghamshire, Yorkshire.

C) Settlement Pattern:

Minimal native presence, first settlers reported abandoned planting grounds, settlement area, unburied dead on Plymouth coast. Surviving native population probably congregated around major inland freshwater sources (i.e., Billington Sea, Great South Pond, Boot Pond, Little Long Pond, Long Pond, Halfway Pond) with English arrival, displacement from coastal settlement sites. Major native settlement southwest (Assawompset, Long, Great Quittucas Ponds - Wampanoag?), South (Cape Cod-Nauset) of Plymouth. Clark's Island reputedly temporarily occupied by first settlers prior to Plymouth settlement (Thacher 1972: 153). First settlement on Leyden Street, concentrated for defensive purposes-surrounded by wooden stockade. First permanent house (1621) situated

on north side of Leyden St. just above Carver/Leyden St. junction. Town Squate (Church, Spring, Old Town House, Market Sts.) and Burial Hill civic/military center. Fort/meetinghouse erected c. 1621 on southeast corner of Burial Hill (1640+town burying ground). Replaced by c. 1638 meetinghouse Town Sq. c. 1670 Court House built on approximate site of extant 1749 Court House (addition to "Country House"). Cole's Hill burial site of first winter's dead. Early expansion (1620s) of primary node along Court/Main St., Town Brook, Establishment of secondary settlement node on Eel River - Richard Sparrow House (c. 1640), Summer St.; Jabez Howland House (c. 1666), corner Sandwich/Summer Sts. Primary settlement area throughout period-site of Plymouth's best crop, grazing land, marine resources, shipping harbor, protection from inland natives. 1640+ dispersed inland settlement, particularly along Middleboro Rd., Jones River (Kingston, Plympton), South Meadow Brook (Carver) - extensive meadowlands. Limited expansion due to hilliness, poor soil of interior. Fear of indian attack.

D) Economic Base:

Continued native focus on seasonal subsistence rounds - fishing, hunting, collecting. Concentration of English settlement on coast, however, disrupts native harvesting of marine resources (i.e., shellfish, fish, water fowl), utilization of planting grounds. Probably results in increased inland orientation - freshwater ponds, streams, woodland resources. Little, if any, horticulture because of poor quality of interior soil. Increased importance of Anglo-Indian trade - growing English fur market, decreased native self sufficiency.

Fishing, Anglo-Indian fur trade, timbering, export/import trade established early as primary English commercial activities. Interior

ponds, streams rich sources fish. Shellfish collection on tidal flats, offshore fishing in Plymouth Harbor, Massachusetts and Cape Cod Bays. Fur trading posts established in Manomet (Borne, 1627), Hartford, Conn. (1633), Penobscot () and Kennebec Rivers (1620s) (1638) Post-1638 fur trade decline with development of Mass Bay, French capture of Penobscot post, economic difficulties of Kennebec post. Early export/import trade (1620's) with England - fish, fur, timber for manufactured goods, livestock. Post-1630 focus on Mass Bay-raw materials for manufactured goods. Limited agriculture - Plymouth coast, banks of Town Brook, Eel River. Commerical/industrial district confined to town center. S. Deane ponding mill (corn, 1632) corner of Spring Lane/Summer St., Jenney grist mill (c. 1636) immediately south of Deane mill. Fulling mill (1672) on northern bank of Town Bank slightly east of Town Brook. Brick production (beginning c. 1643) on land just below Pilgrim Hall. Salt and smallscale ship production on Clark's Island (1641).

E. Architecture:

Although no structures of the First Settlement period are known to survive, structures of the earliest settlement at Plymouth have been investigated by archaeologists and some evidence is posited for post-hole houses; these were shortly replaced by modest cottages with end-wall chimneys of clay and wood, with chimneys of brick presumably appearing in the 1630s. Half-plan cottages probably remained the standard through the end of the First Settlement period. The Sparrow House (c. 1640), air end chimney, two-story house on Summer Street is the earliest known house standing in town.

The first meetinghouse was constructed in 1622 and combined ecclesiastical, civic and military functions.

E) Observations:

Highly nucleated community, limited primarily to Plymouth coast. Town center served as multi-purpose (residential, commercial, industrial, civic) district. Community initially highly dependent on England, outlying communities, natives for food, manufactured products, livestock. Relatively self sufficient by 1630. Community development, however, overshadowed and stifled and by rapidly expanding Boston.

VI COLONIAL PERIOD (1676-1776)

A) Transportation Routes:

Highways remain from 17th century with addition of streets in town center as Water, Middle and portions of Court St. during early 18th century (Davis, 1884, p. 156-58). Regional highways maintained from First Period with improvement of local roads to Halfway Pond area including Mast Rd. to Halfway Pond, Bourne Rd to Big Sandy Pond Halfway Pond Road to Long Pond and Beaver Dam Rd/White Horse Rd. to Manomet meeting house (1727) around Pine Hills. Other roads include South and Middleborough Rds from Summer St. axis.

B) Population:

Small native population, no figures available. Rapid growth of white population. 1676 - 600 residents, sheltered population of Middleboro, other surrounding communities during King Philip's War. By 1698, 40% population increase to 1000 residents. 1765 - 2177 residents, 1776 - 2655 residents. Influx of small Arcadian population in late 1750's.

C) Settlement Pattern:

Native settlement area unclear, probably continued focus on interior - freshwater ponds, streams. As late as c. 1832 native residents on shores of Great Herring Pond (Thacher 1832: 321). Conflicting reports on King Philip's War damage - one source claims the destruction of 1 home (Wm. Clark Garrison House), 11 deaths on Eel River (Thacher 1972: 387). Second source reports the loss of 18 homes, 7 barns (Baylies 1866: 122). Apparently minimal impact on community's post-war growth. Infill and expansion of town center along and west of Court/Main/Sandwich Sts. and Town Brook. Town Sq. remains civic/religious/military center. New church erected in 1683 at the head of Town Sq. (vicinity of present First Church), larger structure replaced this church in 1744/5. New county courthouse built on site of previous courthouse in 1749 (Old Town House St.). Burial Hill site of 1676 pallisaded fortification (100' sq.), 1744 defensive earthenworks. Late 17th, early 18th settlement expansion north, west, south of Plymouth center with elimination of Indian threat, desire for suitable farmland. 1695 establishment of West Precinct (Plympton, settlement focus junction of Palmer/Main Sts. 1717 establishment of Jones River Parish (Kingston), primary settlement node contained within Green, Summer, Main Sts. Secondary settlement node junction of Manomet/White Horse Rds. (Plymouth) in early 18th century-meetinghouse built c. 1738.

D) Economic Base:

Native economic activities unclear due to scarcity of documentation. Probably increasingly sedentary lifestyle as available native lands continue to shrink in size. Turn to non-traditional occupations - servants or laborers in white households, whaling, commercial crafts production.

Continued English emphasis on marine based economic activities. Expansion of offshore fishing fleet - 1774, 75 vessels averaging 45-50 tons/vessel. Limited whaling. Probable continuation of shellfish industry, unsuccessful (1711) attempt to establish an oyster bed in Plymouth Harbor. Maintenance of export/import trade - pre-Revolution trade with the Carolinas, Virginia, Jamaica, Martinique, Guadalupe, Mediterranean, England. Probably New England coasting trade (i.e., Boston, outlying Bay communities). Development of wharf complex immediately to the north of the Town Brook in late 17th, 1st half of 18th century to accomodate shipping. First documented wharf (1698) at foot of Cole's Hill. Timbering continued as major activity - harvest interior woodlands, extraction of pine pitch from trees in town common, Jones and Blackwater Rivers, Duxbury bounds in early 18th century. Agricultural emphasis on livestock production - cattle kept on Clark's Island in late 17th century. Industry remains secondary activity, confined to town center. Fulling and Jenney grist mills (see preceding period) continue to operate in late 17th, 18th century. Establishment of "leather mill" prior to 1777 on Town Brook. Two blacksmith shops adjacent to 1670 courthouse, corner of Leyden/Main Sts. in early 18th century (possibly c. 1660's establishment).

E) Architecture:

Residential: The earliest known houses surviving in Plymouth are Late First Period end-chimney, half-plan cottages dating from the 1670s and '80s, a group of which stand on Sandwich Street at Jabex Corner south of the town center. By the turn of the 17th century three-quarter plan and center-chimney cottages with full five-bay facades were being constructed. At least one three-quarter plan two-story house with an end-wall overhang and pilastered chimney is known

to survive on Sandwich Street. Gambrel-roofed center-chimney two-story houses are known as early as the 1730s, but the more modest remained the most prevalent house form of the 18th century with full five-bay cottages and half-plan, end chimney cottages built in almost equal numbers. Although fewer of these have survived, three-quarter plan (four-bay) cottages provided an intermediate alternative. Most Colonial period cottages are dispersed from the town center along Sandwich and Court Streets. In addition to the cottages, at least a half-dozen more ambitious two-story houses with double interior end chimneys were built at the town center, along Leyden and Summer Streets with a similar number of two-story, center-chimney houses surviving across the town. Also surviving at the town center are several sidehall-plan two-story houses with end-wall chimneys. These appear to date from the mid-18th century indicate in their urban, sidehall plan the densely settled character of the town center in the Colonial Period.

Institutional: Meetinghouses of the First Parish were constructed in 1683 and 1744; the 1683 meetinghouse was roughly square (45' x 40' x 16'), had a cupola and bell and was unceiled on the interior in what was described as a "Gothic" roof (Davis: 1883). This was replaced in 1744; both were located on the original meetinghouse site at the summit of Leyden Street. In 1731, a second parish was established at Monomet Ponds and a meetinghouse constructed at the intersection of White Horse Road and Route 3A. Schools were kept at Plymouth from 1635 on, with the first free public school endowed in 1672, but a schoolhouse was not built until 1705; this stood south of the First Parish meetinghouse on Leyden Street. In 1747, three more schools were constructed, at the Center, at Eel River and at Monomet

Ponds. In 1765, a Grammar School was built north of the First Parish at the center. A fire department was established in Plymouth in 1727 with five fire wards organized in 1752. The only institutional structure known to survive from the colonial period is the Plymouth County Courthouse (1747), a simply-detailed two-story, gable-roofed structure, three bays' wide by five bay's long with a center entrance, located on street.

F. Observations:

Community settlement and economic development continues to occur primarily on coast, on ar adjacent to town center. Rugged, rocky interior discourages extensive interior settlement. Inland settlement focused on less forbidding land south and west of present Plymouth. Despite expansion of marine and livestock activities, Plymouth is increasingly overshadowed by rapidly growing Boston. Culminates with elimination of Plymouth Colony and Plymouth's annexation as part of the province of Massachusetts in 1692.

VII FEDERAL PERIOD (1776-1830)

A) Transportation Routes:

Continued expansion of urban street grid in Plymouth center with High St (1798) and rebuilding of bridges over Town Brook (Davis, 1884, p. 158). No apparent improvement of regional routes through area.

B) Population (1775-1830)

Indication of slow steady population growth with some out-migration during this period. Universalist Society formed in Plymouth town center 1822, Christian Society Church 1827, Baptist Church on Spring St. 1822, Robinson Church 1822, Third Congregational Church (Church of the Pilgrimage) 1801. Fourth Congretational Church at Eel River (Chiltonville) organized 1814.

C) Settlement (1775-1830):

Indications of farming settlements at Cedarville, Ellisville, Vallerville and Wellingsley as well as mixed farming and industrial activity at Manomet, Chiltonville and at Plymouth Center. Establishment of Plymouth Cordage Co. at North Plymouth marks beginning of growth of that area. Small black community (4 families) established on Pertingway's (now Plympton Rd) near Kingston border with grant to returning Revolutionary war veterans.

D) Economic Base:

In the Federal and Early Industrial periods, Plymouth became a major industrial center employing nearly 300 people in land-based manufactures --- nails, cotton, and cordage --- in addition to an already thriving commerce in shipbuilding and fisheries. Much of this activity owed its inception to the Embargo and the War of 1812, though Nathaniel Russell's entrance into nail manufacture pre-dates the trade restrictions. Russell, key to much of the Federal and Early Industrial development, constructed two furnaces (including one for converting bar iron to blister steel) on Town Brook in 1807 and extensive nail works, based on the machinery of an East Bridgewater man, Samuel Rogers. In 1827 the company expanded with a large and "modern" rolling mill on Russell Millpond. By 1832 the company had an annual product of over \$212,000 and employed 60 men.

In the rush to textile manufacture initiated by the Embargo, Russell also incorporated the Plymouth Cotton Co., 1809, which, in 1813, after a fire the preceeding year, constructed a brick mill -- probably the one yet standing on Town Brook. The Company was followed in 1813 by incorporation of the Plymouth Woolen and Cotton Factory Co., which built a mill on Eel

By the end of the period, two other small mills had also been constructed, and total employment in textile manufacture amounted to over 100 men and women.

Also by 1815, Ames had begun manufacturing shovels at a Town Brook Site though he subsequently moved to Easton.

The largest employer at the end of the Federal period were the rope-walks, which by 1832 employed 110 men. Earliest 19th century firm, built along Town Brook by Robbins Cordage Co., 1817. Second, Plymouth Cordage, built 1824 by Bourne Spooner with incentive of 1824 protective tariff.

One of the region's earliest water systems, Plymouth Aqueduct Co., incorporated 1797 by Nathaniel Russell, Joshua Thomas, et al., contemporaneous with Boston's Jamaica Plain Aqueduct (and said to have been designed by the same Caleb Leach), supplied water from Billington Sea to small group of subscribers north of Town Brook.

E. Architecture:

Residential: Cottages continued to be the predominant house form of the period with many well-preserved examples surviving, especially in out-lying areas such as Ellisville and Chiltonville and away from the town center on Court, Summer, Sandwich, Streets. Center-chimney cottages were built through the turn of the century, as were the smaller and more modest three-quarter and half-plan cottages, but cottages with double interior end chimneys were also constructed in some numbers along with at least a few double cottages. Concentrations of sidehall-plan double cottages as well as story-and-a-half, sidehall-land rowhouse workers' cottages of up to a half-dozen units were built at North Plymouth for workers in the cordage industry established therein the period. At the center of town, at least one outstanding, highstyle brick Federal house, three stories tall with an octagonal cupola, elliptical portico and splayed lintels with

keystones, was built, in 1803. This house was an exception, however, other houses of the period being more modest hip or gable-roofed end-chimney types. Brick end-wall chimney, sidehall houses were built at the town center as late as 1788, reflecting the continued density of settlement there.

Institutional: Several important institutional structures were built in the Federal period, including Pilgrim Hall (Alexander Parris, 1824), a two-story, granite Greek Revival building with a monumental Doric portico, one of the country's earliest museums. Other institutional buildings of the period are the second Plymouth County Courthouse (1820), a two-story, hip-roofed brick building with a cupola and double entrances, successively remodelled with Italianate (1857) and Colonial Revival (1881) detailing; and the Second Church of Plymouth (1923), at Manomet a two-story, gable-roofed church with an open octagonal belfry. Schools were established at Halfway and South Ponds in 1798. Plymouth emerges as an innovation center in the Federal period with a girls' Grammar School established in 1793 and a High School founded as early as 1826.

Industrial: Educational innovation in Federal period Plymouth is paralleled by progressive engineering in the same period as a Water Works was constructed in 1796 from Town Brook with reservoirs built in 1829 at Town and North Squares. The only known extant industrial structure of the period is the Plymouth Cotton Company mill (1803) on South Pond Road; a two-story, six-bay brick structure originally topped with a gabled clerestory, the mill is currently in severely-deteriorated condition.

VIII EARLY INDUSTRIAL PERIOD (1830-1870)

A. Transportation Routes:

Further expansion of urban street grid in Plymouth center with parallel set of Standish and Allerton Sts along primary coastal highway (Route 3A).

Railroad to Boston financed from Plymouth as Old Colony (1845) with route north from town center along shore of Plymouth Bay (Harlow, 1946, pp. 215-17).

B) Population (1830-1870)

Steady increase in population (4758 in 1830 to 6238 in 1870). Methodist Episcopal Society organized 1842 in town center. African Methodist Society organized 1866 near Plymouth Mills. Large influx of foreign born evident from 1855 census, primarily Irish, German and Canadian. Robinson Congregational Church split from 3rd Congregational 1830. Christian Society Church at Chiltonville 1840. Christ's Church on Russell St. 1844.

C) Settlement (1830-1870)

Continued residential growth at existing settlement nodes along coast particularly at Manomet. Within Plymouth center growth occurred on the south side of the original Pilgrim town, that which occurs near the shore primarily workingman's housing, hills reserved for mercantile housing. Continuation of growth at North Plymouth. Black settlement (New Guinea) on Middleboro road near Kingston. Expansion of settlement at Darby (West Plymouth).

D) Economic Base:

Maturing of nail and iron industries responsible for, and characterized by, a developing class of mechanics skilled in machine manufacture. This group included two nail machine inventors, Joseph Lucas and David Bradford, and in 1837, Oliver Edes, an inventor from Needham, whose rivet machine is said to have "revolutionized" the rivet business, with a product hitherto imported largely imported from Europe. Edes went on to specialize in zinc manufacture, setting up on Forge Pond one of the earliest zinc rolling

mills c. 1950, while former partner, Ferris, established Plymouth Mills, a key producer of tacks, nails, and rivets on a series of adjacent Town Brook sites.

By 1845 there were five cotton mills (though doing little business that year), much of the product evidently going into cotton sail duck. Five cordage works produced over \$200,000 worth of rope and twine, much of it probably the new manila rope. Though shipbuilding itself declined, 1845 saw the peak census year for cod and mackerel fishing, whose ships numbered 55, with 465 hands; 5 ships and 107 men were also employed in whaling.

The arrival of the Old Colony Railroad the same year gave a new boost to several local product lines, including boot and shoe production, probably initiated on a small scale in the Colonial period. Between 1845 and '55, the number of shoemakers jumped from 20 to 442 with an annual product in the latter year worth \$155,000. The census taker added that in addition there were "large quantities of shop work taken from clothing establishments in Boston and made up in this town." The manufacture of neck stocks alone employed 245 people.

By 1855 the town had begun both a gasworks and a new water municipal water system. Consulting engineer for the latter was William S. Whitwell, one of the chief engineers of Boston's Cochituate system.

Manufacture of textiles and tacks both given visible boost by Civil War needs. Plymouth Woolen mill (steam), erected 1863, became a substantial attraction for immigrant labor to the central business district, while Samuel Loring built his Plymouth Tack and Rivet Works on the former Robbins Cordage site along Town Brook.

E) Architecture

Residential: Comparatively few large or ambitiously-detailed Greek Revival and Italianate houses are known for the period; most of the two-story houses constructed are modes in character and date from the 1850's and '60s. These are concentrated in the northern half of Plymouth around the town center along Court and Samoset Streets. In addition to these houses, a number of one-and-a-half story cottages were also constructed. While sidehall-plan Greek Revival cottages were built across the town, they are most common in outlying areas; at the town center and at North Plymouth especially, center-entrance Greek Revival cottages, most of them with distinctive steeply-pitched paired or central wall dormers providing additional space on the half-story, were built in some numbers. Many of these incorporate Italianate detailing, suggesting the type remained popular through the end of the period. Story-and-a-half, gable-roofed workers' row housing and double cottages continued to be built at North Plymouth for cordage workers and were jointed by two-story single and double vernacular Italianate workers' houses. Other clusters of modest Greek Revival/Italianate houses stand at Boot Pond Road and at Ellisville: a pair of well-detailed Greek Revival structures, a two-story house with an adjacent cottage (with frieze windows retaining cast-iron grilles) stands on Sandwich Road north of Ellisville.

Institutional: Surviving institutional structures of the period include the Church of the Pilgrimage (Third Church), a two-story Greek Revival church of 1840 with a pedimented end gable updated in 1898 by J.E. Chandler with a projecting belfry tower and octagonal cupola in the Colonial Revival style and a one-story gable-roofed school c. 1850) on Long Pond Road with round-head windows in the Italianate style. In 1836, a girl's High School was founded. In 1831, the fourth church building of the First Parish was

constructed; other churches were established in the period including Baptist, Methodist, Episcopal and African Methodist congregations.

IX LATE INDUSTRIAL PERIOD (1870-1915)

A) Transportation Routes:

Expansion of railroad network with belated route to Middleborough 1892 from North Plymouth junction to Darby Pond (now abandoned). Street-car line from Plymouth center to North Plymouth and Kingston (1889) on Court Street extended to Manomet Beach east on Warren-Avenue and Rocky Hill along coast. Rds (1893) (Cummings, 1959 p. 3). Further extensions south along coast to Ellisville and Sagamore operated briefly during early 1900s along/Route 3A (Cummings, 1959, p. 12). Coastal road from Plymouth to Manomet and Ellisville (Warren-Rocky Hill - Route 3A) apparently improved during period).

B) Population (1870-1915)

Population doubles during this period. Catholic Church built on Court St. 1874. Foreign born population increases from 1022 to 1885 to 4065 in 1915. Composition goes from majority Irish, Canadian, German to majority Italian, Portugese. Evidence of Mormom Church on Standish Street 1903. Zion Evangelist Lutheran Church at North Plymouth at turn of century. First Church of Christ Scientist at Plymouth Center also turn of century.

C) Settlement (1870-1915)

Growth in North Plymouth spurred by construction of company housing by Plymouth Cordage at turn of the century. Expansion of development of White Horse Beach and area around Manomet. Other resort development at Pondville. Some development at Raymond.

LATE INDUSTRIAL PERIOD

D. Economic Base:

Period characterized by expansion of existing plants with steam capacity (Robinson Iron; Samoset Mills) or with the construction of new or relocated plants near the rail line (Edes Mfg., ~~Emery~~ shoe factory). New products included popular patent bedstead joint (1870, which lost its popularity when the wooden bedstead was replaced by iron, c. 1910) and a new copper wire extrusion process for small gauges (1885).

Movement in 1890's toward trusts felt in different ways by several Plymouth firms. Consolidation of tack industry into Atlas Tack forced the closure of Plymouth Mills. Plymouth Cordage's escape from a rope-making combine was in large part responsible for its continued existence when the larger group collapsed. Plymouth Woolen, taken over by American Woolen Co., as their Puritan Mills branch, experienced considerable plant expansion. The same period, one of "wonderful growth and increase: wrote the local newspaper in a 1905 souvenir issue, also witnessed the establishment of two large worsted manufacturers -- Standish Worsted (1893) and Geo. Mabbett & Sons (1901, formed by the Standish founder). Plymouth Cordage shared in the community wealth: by 1911 40 percent of its output was being absorbed by the American and Canadian wheat belts whose wheat binding machines ran on nothing so well as twine from the Plymouth works. The company experienced plant expansions in 1899 and again in 1907.

E. Architecture

Residential: Well-detailed Stick Style, Queen Anne and Colonial Revival houses, two to two-and-a-half stories in height, were built through the period around the town center, particularly along Court and Samoset Streets and on the slopes southwest of Court Street; these form modest but substantial suburban neighborhoods of some architectural pretention. Larger and more ambitious Colonial Revival and Queen Anne houses were built along Court Street between North Plymouth and Plymouth Center overlooking the Harbor. Modest and compact summer resorts began to appear at Monomet, White Horse Beach and Priscilla Beach; one to two-story cottages were constructed in some numbers, particularly after the turn of the century, with simply-detailed Craftsman and Colonial Revival bungalow/cottages predominating. A few earlier Stick Sytle and Queen Anne cottages, most stripped of their original detailing, survive in these locations. There was little to no construction in the interior regions of the town, but some simple suburban and vernacular workers' housing was constructed south of the town center along Long and South Pond Roads. Multiple-family dwellings, most two-family and double houses in the Queen Anne and Colonial Revival sytles continued to be built at North Plymouth and Cordage.

Institutional: The most significant institutional structure constructed during the period is the First Parish's fifth church (1899, Hartwell, Richardson and Driver), a granite and sandstone Richardsonian Romanesque building with an offset tower. Other institutional buildings include the National Guard Armory (1906), a two-story brick building with a heavy corbel table, and the Federal Building (Post Office; 1914, Oscar Venderoth), a well-detailed Georgian Revival building with a colonnaded facade and cupola. Other well-detailed masonry Beaud-arp Colonial,

Colonial, Georgian and Renaissance Revival civic buildings, including the Probate Building (1904) Town Hall, Police Station and High School stand at the town center. Most of these date after 1900.

Commercial: A number of imposing and well-finished Georgian and Colonial Revival commercial buildings of masonry construction were built at the town center along Court Street after 1900; several stand two - and three stories and incorporate such details as Flemish bond and recessed arches. In general, these more ambitious commercial blocks, of which there are perhaps a half dozen, reflect the self-conscious awareness of the town's historical role in their historicist and, for the region, elaborate architecture. Also built at the town center were a number of low, one-story masonry and concrete storefront blocks.

Industrial: The largest and most important industrial complex of the period is the Plymouth Cordage factory at North Plymouth. In addition to some ten to twenty three, four and five story utilitarian brick manufacturing and storage buildings, most with articulated pier and spandrel construction and window bays with segmental arches, at least a few specialized buildings of greater architectural pretention were constructed. The best of these is the company Library, a well-detailed, one-story, frame Colonial Revival building, c. 1905.

X. EARLY MODERN PERIOD (1915-1940)

A. Transportation Routes:

Trolley lines abandoned in 1920's. Improvement of regional highways as autoroutes with original Route 3 (now 3A) north to Boston from Plymouth center, Route 44 (Middleborough Rd) with new location to Court St. and original Route 3 (Now 3A) south to Manomet, Ellisville and Cape Cod with some realaction along coast highway. Plymouth - Carver airport established during 1930's on South Road with original hanger intact.

B. Population (1915-1940):

Population relatively stable during this period. Foreign born total drops to 3172 majority Italian, Portugese and Cape Verdean. Post World War II growth steady until late 60's when boom occurs. Catholic Chapel on White Horse Beach 1932 (summer services only.)

C. Settlement (1915-1940):

Continued company development induced residential growth at North Plymouth until 1920, and at existing settlement nodes. Growth slowed somewhat by depression. Post World War II development occurs along shore and in southeastern portion of town particularly Manomet.

D. Economic Base:

Declining value of water priviledges together with the general movement west of iron-related industry had brought about closure of most of Plymouth's iron works by 1906. And while the woolen and worsted companies were actively employed during WW I producing war goods, like the rest of the industry, they found conversion to peacetime production difficult. In addition, many of the waterfront activities and wharves, removed by the Pilgrim Tercentenary in 1920, effectively converted a previously maritime and industrial economy to one largely based on tourism.

Poultry raising, dairy farming, and fancy stock breeding, begun in preceeding period, flourished. Cranberry growers by 1915 numbered 29.

E. Architecture

Residential construction in the 1920's was confined to infill housing at the town center. There, Dutch Colonial and Colonial Revival suburban houses were built in some numbers along with a number of simpler one and two family Craftsman and Colonial Revival houses. New construction of a

more modest nature took place at the beachside resorts in the southern half of town, with small, one and one-and-a-half story cottages with simple Craftsman detailing built in some numbers. Institutional construction probably limited to a few Colonial or Georgian Revival schools; also, Plymouth Tercentenary-related construction of monuments etc., such as neoclassical temple at Plymouth Rock. Commercial architecture consisting primarily of one-and two-story masonry store blocks at North Plymouth and Plymouth.

XI SURVEY OBSERVATIONS

Existing survey is well-documented and covers range of 17th, 18th- and early 19th-century residential architecture across town as well as institutional and civic buildings at town center. Further survey should include later 19th and 20th century residential construction as well as institutional buildings away from the town center (i.e., Long Pond Road school, c. 2850) and commercial and industrial buildings throughout the town.

Industrial: Relatively little remains in Plymouth of her 19th century industries. Included in the town survey is the brick cotton mill on Billington Road (#I-I48), an unusual survivor, though its ruinous condition makes its continuous existence dubious. The Plymouth Cotton Co. built a mill here about 1809. This mill burned in 1812, and it seems probable that the replacement, a brick mill 36 x 92 built in 1813 according to Thacher, is in large part the building there now. It is not known how extensive was a later fire in 1843. Bryant Tolles, in his 1970 survey, thought that the mill "very likely dates from before 1815 (and) could be the earliest extant textile mill in the state" (his emphasis).

Chief omission from the survey is the Plymouth Cordage Co. Plant, whose principal mill dates from 1885. An NR nomination should be prepared for this factory, which had a national reputation and a long and well documented history. Other industrial structures within Plymouth include the Edes Mfg. Co. buildings on Lothrop Street and the brick picker house of the Plymouth Woolen & Cotton Co. (Sandwich Road at Eel River) a small 1-story 1890's brick building now a residence. The Plymouth Water Works pumping station on Lout Pond (1856?) and Duxbury Pier Light ("Bug Light", 1871) should also be further studied and inventoried; Plymouth's other light, the Gurnet Light, has already received NR listing (3/8/77).

DEVELOPMENT PRESSURES:

Most obvious pressures of growth evident along Route 3A (Court St) through North Plymouth with expansive commercial development that has overwhelmed historic fabric. Original Plymouth town center has been extensively renewed around Town Brook area and suffers from congestion of tourist economy along Plymouth Rock shoreline. Primary axis of development in South Pond area is Route 3 (Boston-Cape Cod) corridor with intense residential activity around major ponds and focus of industrial growth at new Plymouth High School (Long Pond Road). Manomet and Ellisville coastal areas suffer from severe storm damage on occasion, especially at White Horse Beach. Pilgrim Power nuclear station at Warren Cove poses obvious threats to entire Plymouth area, although immediate development continues in immediate vicinity, notably around junction of Route 3A bypass and Plymouth Plantation.

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