

Town of Walpole

Route 1A Industrial Park/Main Street

Feasibility Study

August 2011



 **BSC GROUP**

in association with

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Chapter 1: Site Overview

The project area (the “Site” or “Study Area”) is located along Main Street/Route 1A adjacent to the Great Cedar Swamp in Walpole, Massachusetts. The Site straddles Route 1A and consists of +/-50 separate parcels with a combined area of +/-229 acres. The Study Area includes the Route 1A Industrial Park and nearby parcels situated on Main Street. The 150-acre portion on the east side of Route 1A (predominantly the Industrial Park) is referred to herein as “Area A” while the 79-acre portion on the west side of Main Street is referred to as “Area B” (see *Figure 1-1: Site Locus* and *Figure 1-2: Aerial Overview*).

1.1. Site Features

Land Use

Area A includes the Route 1A Industrial Park (Industrial and Production Roads), and is zoned Industrial (IND). Development in Area A has occurred incrementally over the years with larger parcels near the entrance utilized first, followed by separate subdivision developments of the interior sections of Industrial and Production Roads. *Figure 1-3: Land Use* presents land use information on and around the Site. Types of businesses within the Industrial Park include trucking/transportation, warehouse and light industrial uses. Some undeveloped parcels have been disturbed by earthmoving activities.

Overhead utility lines bisect Production Road, traveling roughly in a southeast to northwest direction; an underground Algonquin Gas pipeline sits to the north and also crosses Production Road. A former railroad bed also bisects the Site, roughly parallel to Main Street in a southwest to northeasterly manner. Adjacent land uses include single-family residential to the north (Shoreview Lane and Harvard Street); Great Cedar Swamp to the south; a CSX-owned freight-only railroad line used by the MBTA for special events at Gillette Stadium, utility easement; and Cedar Hill/Cedar Swamp to the east; and Area B to the west. Aerial maps indicate areas of earth disturbance and industrial activity to the northeast.

Figure 1-1: Site Locus

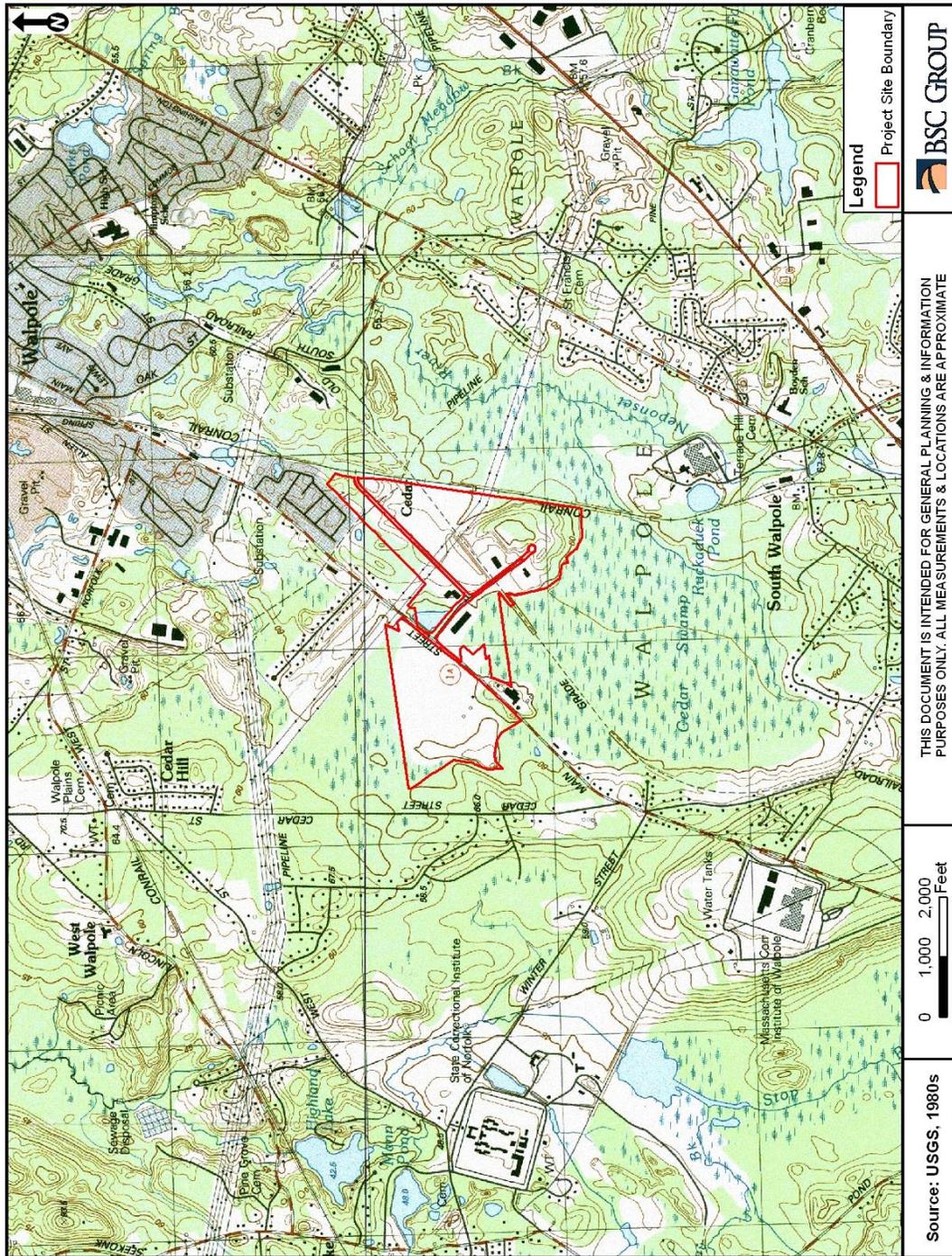


Figure 1-2: Aerial Overview

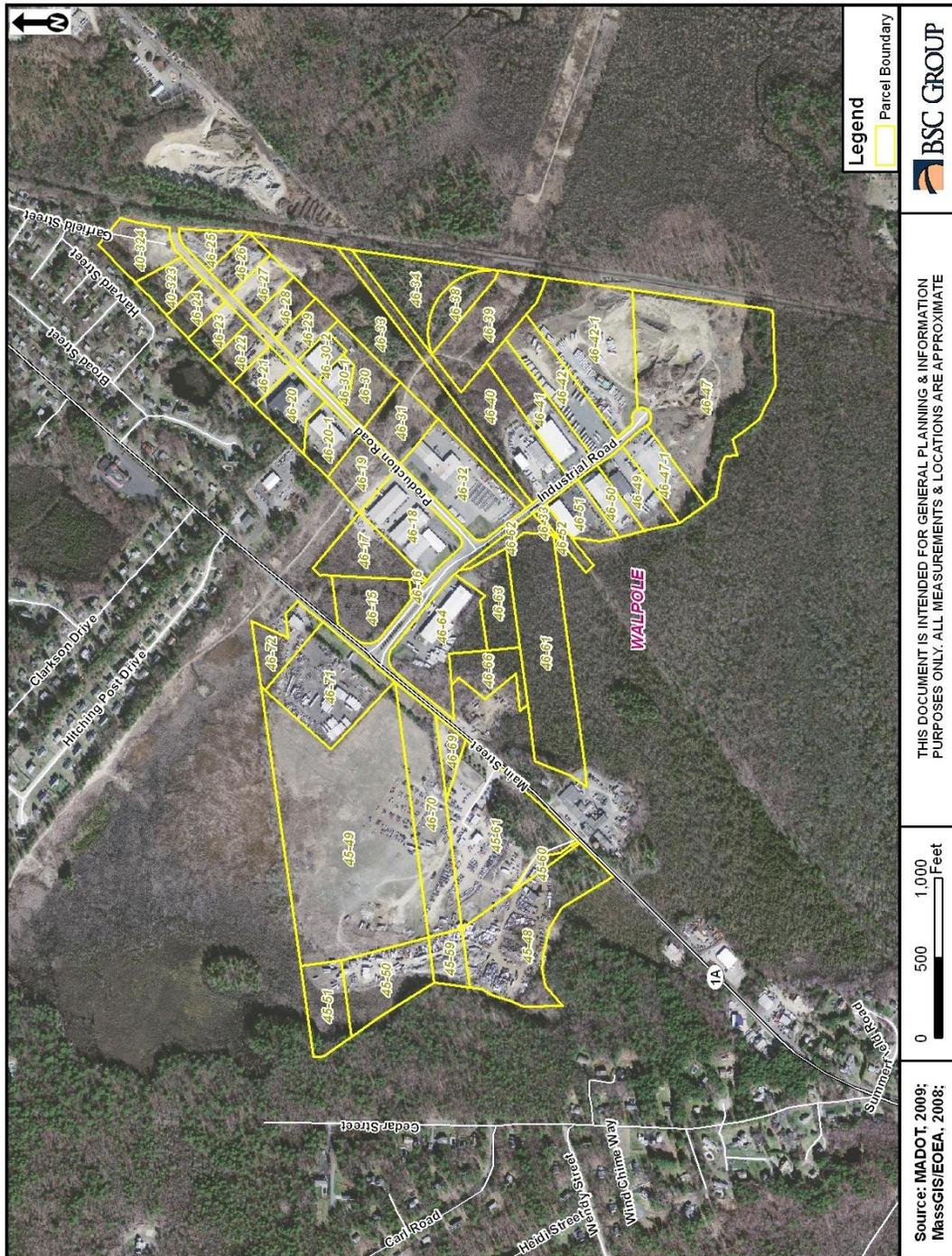
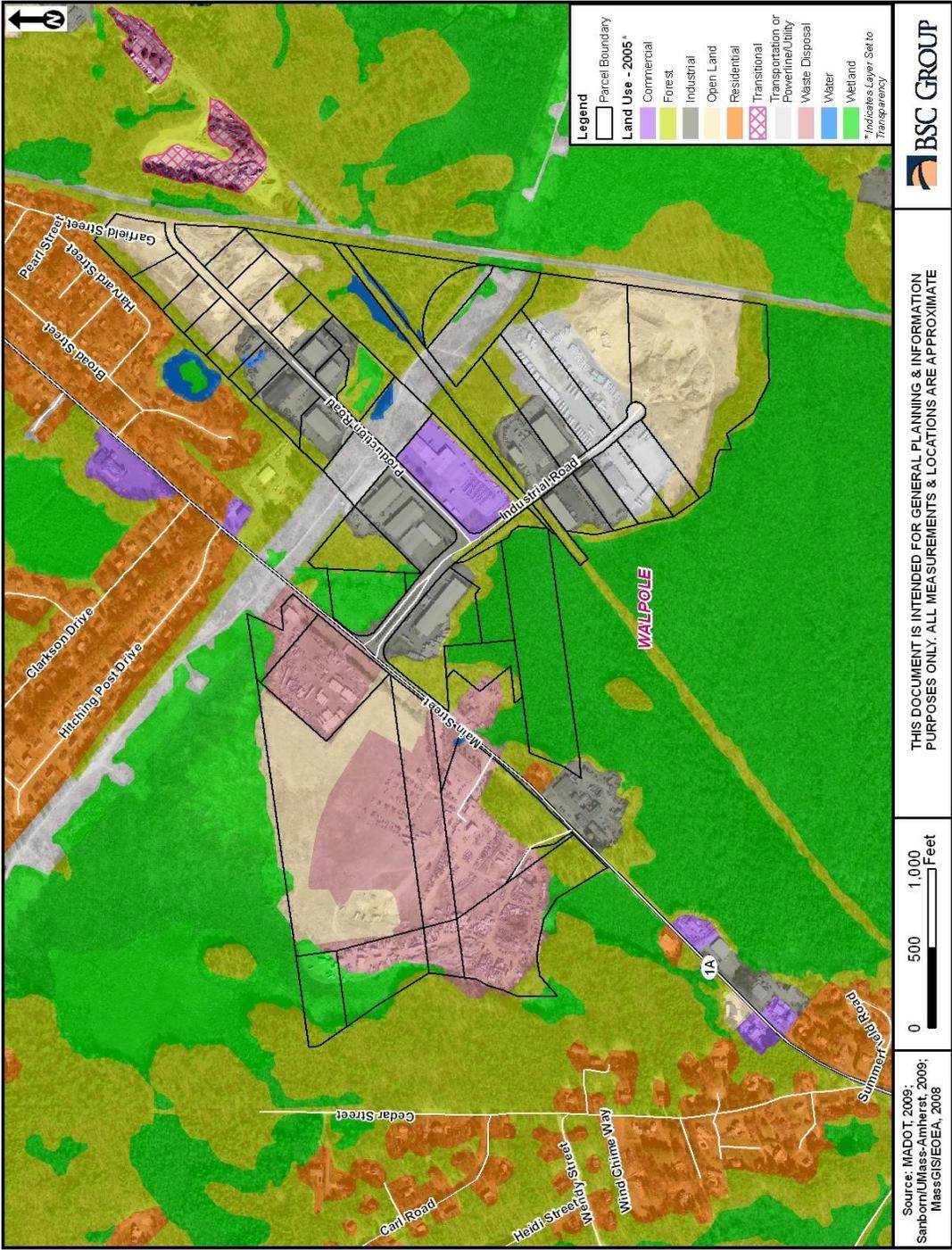


Figure 1-3: Land Use



Area B: Recycling And Auto Repair Activities - Area B is situated on the west side of Route 1A. With few structures, Area B is less intensively developed than Area A, but most of the Site appears to be cleared and disturbed. Area B is primarily zoned Limited Manufacturing (LM), but the rear portion is zoned Rural. Area B businesses are focused on automobile repair, auto salvage and scrap recycling. Historically, portions of Area B were used as a landfill for municipal waste and demolition debris. The northwest corner of Area B is wetland. To the northeast lies the utility easement discussed in Area A and the single-family residential areas on Hitching Post Drive. Forested area is situated to the west and southwest, beyond which is residential development along Cedar Street. Cedar Swamp extends beneath Route 1A immediately south of Area B.

Topography

As shown on *Figure 1-4: Site Contours*, Area A is gently sloped, with the lowest point (el. 196 above mean sea level) located at the intersection of Route 1A and Industrial Road and extending around the perimeter of the Study Area. Industrial Road climbs to about el.216 feet. The undeveloped parcel at the end of Industrial Road contains some man-made earthen mounds ranging from el. 226 to el. 246 feet. Elevations along Production road slope gently upward from approximately el. 206 to el. 226. Area B is fairly flat, with elevations consistently el. 196 across the central and eastern portions, and slightly higher (el. 206) along the western edge. (USGS/MassGIS/EEA)

Geology

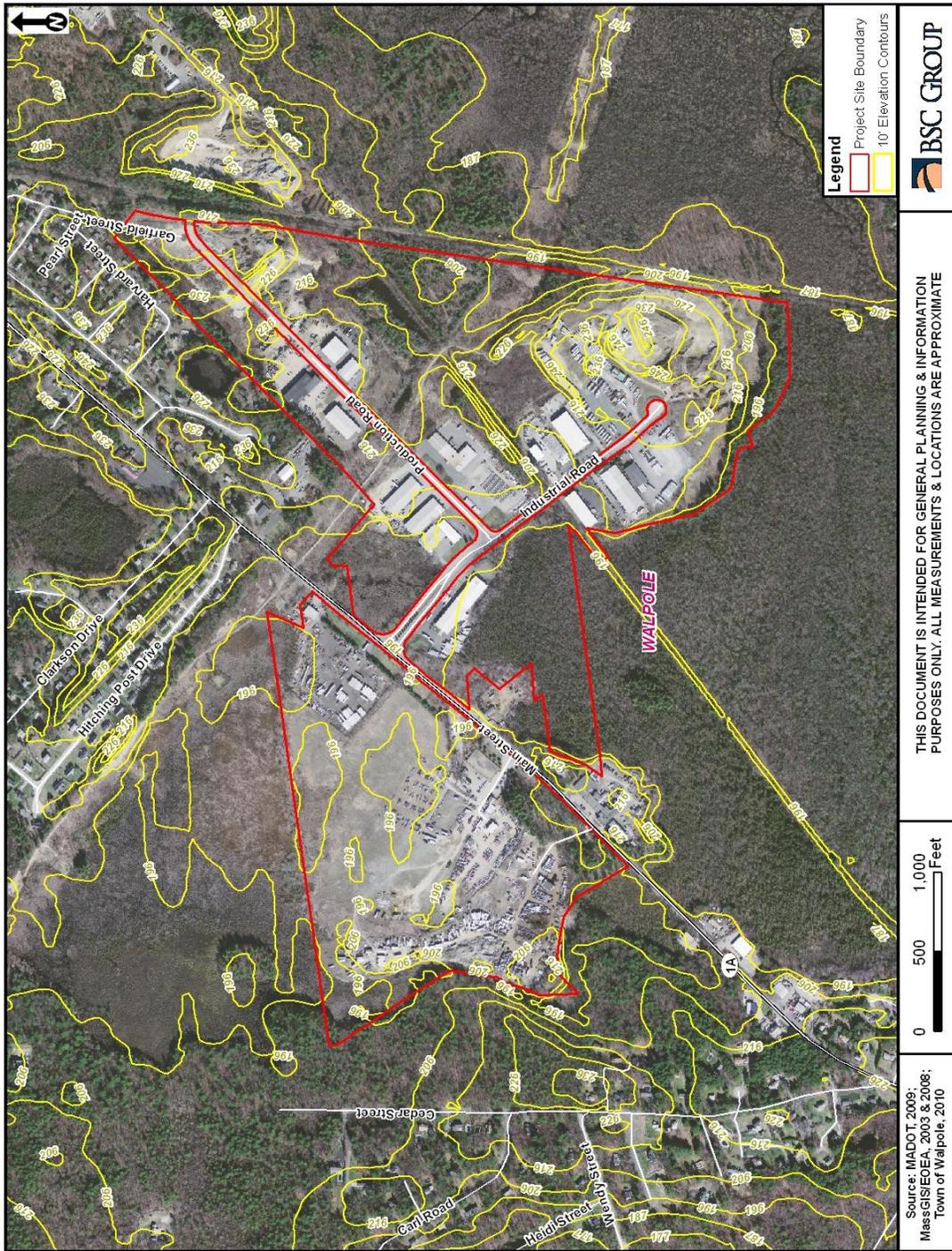
Walpole lies within the Eastern Plateau sub-region of the Lower New England Physiographic Province. This sub-region is characterized by gently rolling hills with low relief and subtle breaks between major landforms (U.S. Department of Agriculture, 1989). The bedrock geology in the project area is the Wamsutta Formation (red to pink conglomerate, greywacke sandstone shale with areas of Rhyolite). The surficial geology of this section of Walpole is sand and gravel.

Soils

Soil information is based on available information from the Soil Survey of Norfolk County published by the U.S. Department of Agriculture Soil Conservation Service (SCS) and MassGIS. As presented in *Figure 1-5: Soil Conditions*, the Study Area contains a wide range of major soil classifications. *Table 1-1* lists the soil classifications and notes general constraints for development and septic. On-site soil testing is necessary to fully understand potential Site limitations.

Area A is primarily comprised of three soil categories: Urban land; Pits, sand and gravel; and Paxton fine sandy loam, 3-8% slopes. Urban land consists of areas where 75 percent or more of the land is covered with impervious surfaces. The Pits, sand and gravel area consists of excavations in areas of gravelly and sandy material. Paxton fine sandy loam with 3 to 8 percent slopes is generally deep, gently sloping, well drained soil on the top of upland hills.

Figure 1-4: Site Contours



Area B is predominately Udorthents, sandy, which consists of nearly level to steep areas where the original soils have been removed. Historic USGS maps indicate that the area was originally wetland. The west side of Area B is comprised of Udorthents, refuse substratus, indicating past use for refuse disposal. In general, the area may have been constructed of alternating layers, several inches to several feet thick, of refuse and soil material, with the latter possibly obtained from the portion of Area B discussed above. As noted, on-site soil testing is necessary to understand potential development limitations.

Table 1-1: Site Soil Classifications

Area	Soil Unit	Soil Type Description	Soil Type Constraints – Development and Septic
A	602 UR	Urban Land, 0-15% slopes	Site-specific constraints for development and septic based on underlying soil materials
A	600 Ps	Pits, sand and gravel	Site-specific constraints for development and septic based on site conditions
A	305B PaB	Paxton fine sandy loam, 3-8% slopes	Moderate limitations for development (wetness) and severe for septic (perks slowly)
A	420D CcD	Canton fine sandy loam, 15-35% slopes	Severe limitations for development (slope) and septic (slope; large stones)
A	310B WrB	Woodbridge fine sandy loam, 3-8% slopes	Moderate to severe limitations for development (wetness) and severe for septic (perks slowly)
A	245C HfC	Hinckley sandy loam, 8-15% slopes	Moderate to severe limitations for development (slope) and severe for septic (poor filter)
A	307B PbB	Paxton fine sandy loam, 3-8% slopes, extremely stony	Moderate limitations for development (wetness) and severe for septic (perks slowly)
A	52 Fm	Freetown Muck, 0-1% slopes	Severe limitations for development and septic (wetness)
A	255C WnC	Windsor loamy sand, 8-15% slopes	Moderate to severe limitations for development (slope) and severe for septic (poor filter)
B	653 Ua	Udorthents, sandy	Site-specific constraints for development and septic based on site conditions
B	652 Uf	Udorthents, refuse substratum	Site-specific constraints for development and septic based on site conditions
B	104C HrC	Hollis Rock outcrop-Charlton complex, 3-15% slope	Severe limitations for development and septic (depth to rock)
B	52 Fm	Freetown Muck, 0-1% slopes	Severe limitations for development and septic (wetness)
B	71B RgB	Ridgebury fine sandy loam, 2-8% slopes, extremely stony	Severe limitations for development (wetness) and septic (perks slowly and wetness)

1.2. Environmental

Wetland Resource Areas

Area A: Based on Mass GIS data, wetland resource areas associated with Great Cedar Swamp surround all but the northeastern boundary of the Site, with some wetlands extending onto the Site's periphery. Wetland resource areas on and around the Study Area are presented in *Figure 1-6*, and were also noted in *Figure 1-3: Land Use*. Available information indicates that the wetlands in the northern section of Area A are non-forested wetlands, while the southern section contains forested wetlands.

Area B: Current wetland resources consisting of a mix of forested and non-forested wetlands associated with Cedar Swamp occur along the perimeter, except along Route 1A. These wetland boundaries have not been field verified for this study. A 1946 USGS map indicates that Area B was once entirely wetland. *Figure 1-7: Historic Wetlands* depicts the historic map superimposed over a current aerial view. These wetlands have been filled over the years, at least in part when Area B was utilized for municipal waste and disposal of demolition debris materials generated during Boston's urban renewal in the 1960's. This conclusion is consistent with the odorous soil classification discussed previously, as well as the Massachusetts Department of Environmental Protection (MassDEP) classification of this area as an unlined and uncapped landfill (source: MassDEP Bureau of Waste Prevention Solid Waste Program, list of Inactive & Closed Landfills & Dumping Grounds, May 2011, <http://www.mass.gov/dep/recycle/inactlf.pdf>).

Study Area: There are no Certified Vernal Pools (CVPs) mapped on the Site. As shown in *Figure 1-6*, MassGIS notes the presence of five Potential Vernal Pools (PVPs): one is just north of the Study Area; three are located on the south side of the northeast end of Production Road; and one is located on or near the former railroad bed that runs through the Site.

Walpole enacted a Wetlands Protection Bylaw in 2004 which stipulates a 25-foot No Alteration Zone of vegetative buffer, although an applicant may request a variation if they can show how resources will otherwise be protected in accordance with the Bylaw. The Bylaw defines "protected resource areas" as follows:

Any bank, freshwater wetland, marsh, wet meadow, bog, swamp, stream, river, pond, lake, vernal pool (as defined by NHESP), or any land bordering thereon, or any land subject to flooding or inundation. Bordering in this context shall mean either (a) 100 feet horizontally lateral from any of the foregoing areas; or (b) 100 feet lateral from the water elevation of the 100 year storm, whichever is the greater of (a) or (b); and (c) land within 200 feet of the mean annual high-water line of any year round river or stream.

Figure 1-6: Wetland Resource Areas

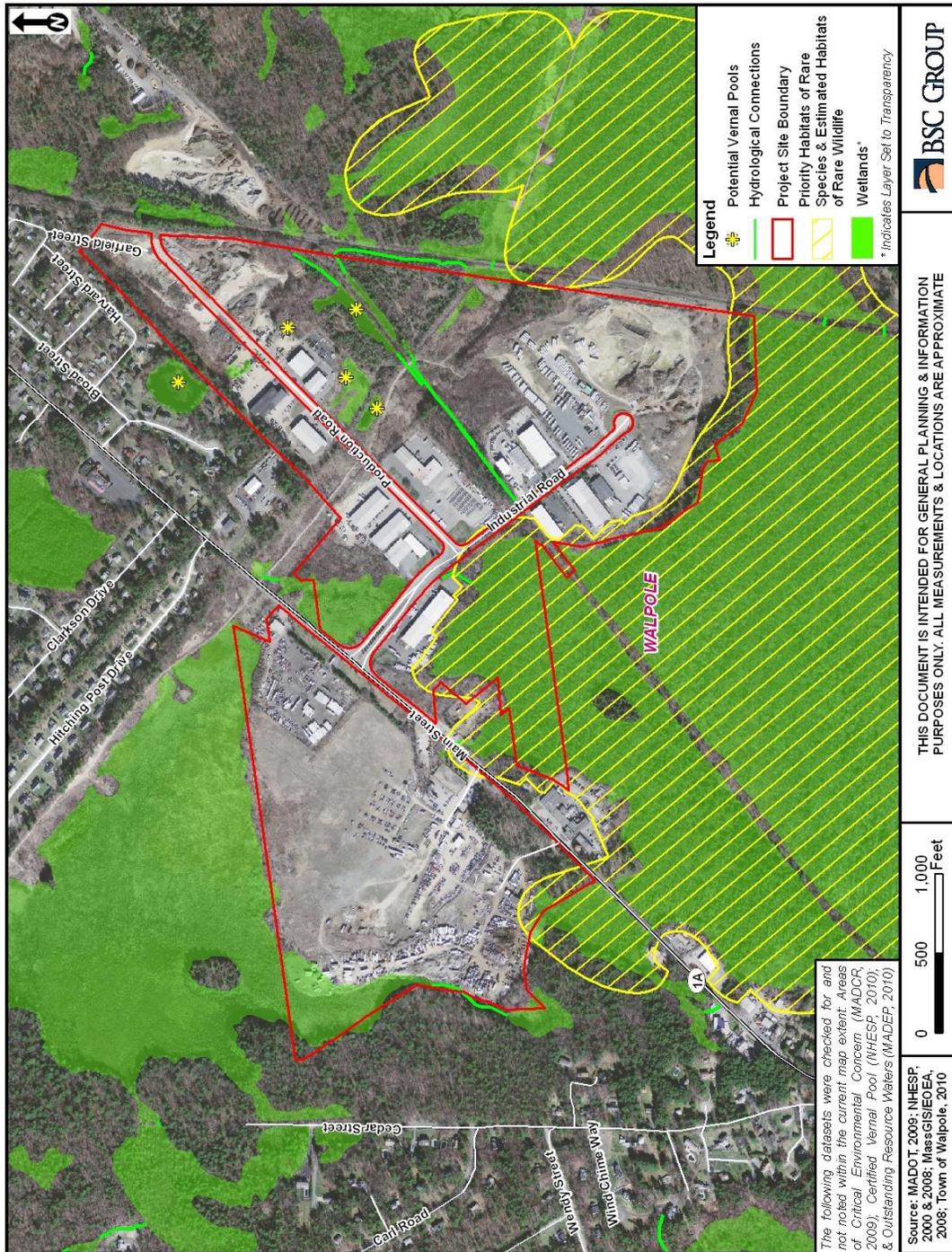
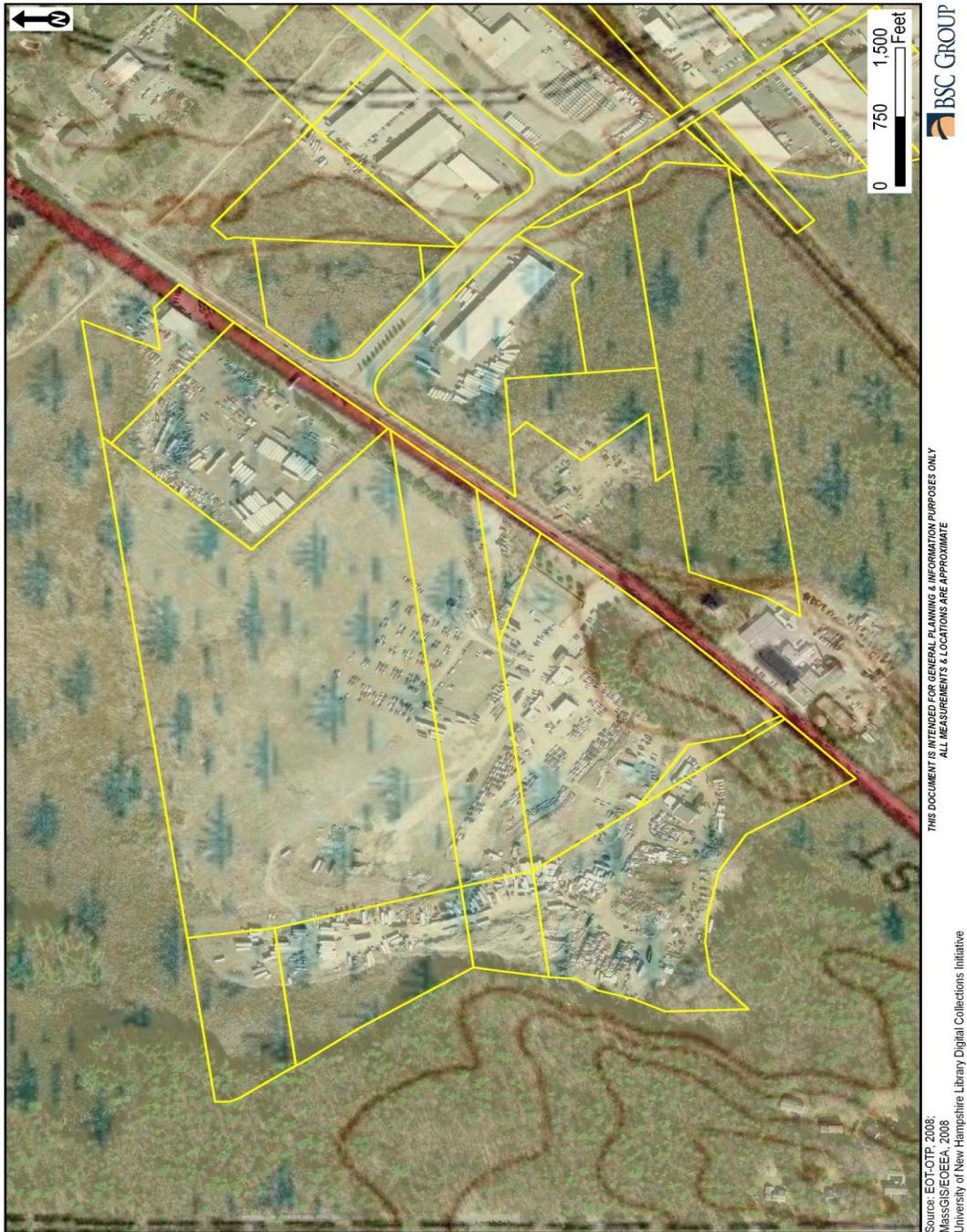


Figure 1-7: Historic Wetlands



If alteration of protected resource areas is unavoidable (including impacts within the 100-foot buffer zone), mitigation is required. The Bylaw recommends replication at a 1:1.5 ratio.

Floodplain

The Federal Emergency Management Administration (FEMA) delineates floodplain areas subject to flooding during storms with a predicted frequency of once every 100 years. As shown on *Figure 1-8: Floodplain Map*, the FEMA flood zones correspond closely with the wetland areas. Overall, the Site is minimally impacted by the FEMA 100-year Floodplain. Within Area A, floodplain extends into the southwest portion of the Site, affecting parcels 46-61, 46-66 and 46-630. There is also a very small floodplain on the southwest corner of parcel 46-47. Within Area B, the floodplain slightly overlaps the northern edge of the Site, affecting portions of parcels 46-72, 46-71, 45-49, 45-51, and 45-50. (Source: FEMA/MassGIS)

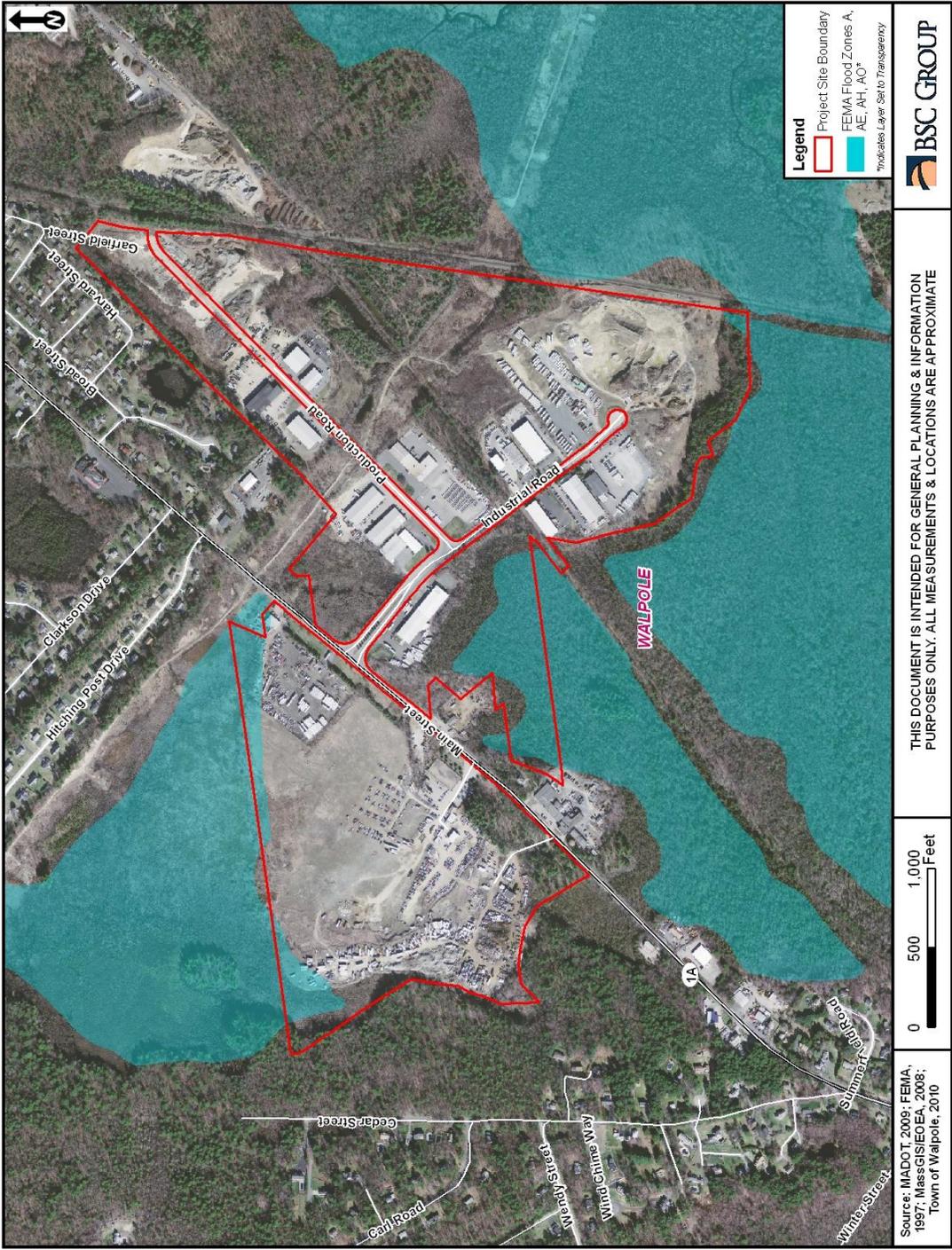
Any land subject to flooding or inundation is a protected resource area under the Walpole Wetlands Protection Bylaw. Further, the Town of Walpole Zoning Bylaw includes a Flood Plain Protection Overlay District, which is consistent with the floodplain boundaries presented herein. This is discussed further in the Zoning section, below.

Water Resources

Surface Water: As shown previously in *Figure 1-6* and *Figure 1-3*, Area A contains four small unnamed surface water bodies situated on parcels 46-33, 46-40, 46-34, 46-31, and 46-21 (note: the existence and condition of these water bodies has not been field-verified). Based on the desktop analysis, these water bodies appear to be primarily associated with drainage and not utilized for recreation or fishing. Area B does not contain surface water bodies. Cedar Swamp and the Neponset River are east of the Site. They are important elements of the town's network of rivers, streams and wetlands; Cedar Swamp is also an important wildlife habitat and migration corridor.

Groundwater: The Site is within the Neponset River Watershed. According to the 2004 Master Plan, Walpole depends completely on groundwater for its drinking water supply, which is obtained from the School Meadow Brook aquifer and the Mine Brook Aquifer, components of the Head of the Neponset River Aquifer. School Meadow Brook aquifer is considered to be completely developed for drinking water wells. The aquifer is susceptible to potential pollution hazards from Route 1. The Mine Brook aquifer is shared with Medfield and has the potential for additional wells.

Figure 1-8: Floodplain Map



Walpole’s complex of aquifers has been recognized by the EPA as a sole source aquifer requiring special protection because of geological conditions which make the aquifers vulnerable to contamination and because there are no viable replacement drinking water sources should the current sources become contaminated. Walpole water quality is currently rated good to excellent.

Walpole’s Zoning Bylaw includes a Water Protection Overlay District, discussed further in the zoning section, below. In addition, MassDEP delineated Zones I and II for the town’s aquifer. The Zone II boundary extends onto the northeast section of Area A (see *Figure 1-6*), overlapping most of Production Road and the southwest tip of Industrial Road.

Natural Heritage and Endangered Species Program

According to the Mass GIS data layer for the Massachusetts Natural Heritage and Endangered Species Program (NHESP), Cedar Swamp contains Priority Habitats of Rare Species and Estimated Habitats of Rare Wildlife. The NHESP area overlaps two segments of the Site: the southwest section of Area A; and a small section of the southwest corner of Area B (see *Figure 1-6*). The NHESP website notes the presence of four special-status species within Walpole, listed below in *Table 1-2*. Because NHESP does not reveal specific information about sensitive species to the general public, consultation is required to identify which of these species are in Cedar Swamp. None of these species are federally-listed.

Table 1-2: NHESP Species in Walpole

Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Observation
Amphibian	<i>Ambystoma laterale</i>	Blue-spotted Salamander	SC	1992
Butterfly/Moth	<i>Callophrys hesseli</i>	Hessel's Hairstreak	SC	1987
Vascular Plant	<i>Ophioglossum pusillum</i>	Adder's-tongue Fern	T	1908
Vascular Plant	<i>Rhododendron maximum</i>	Great Laurel	T	1908

Source: http://www.mass.gov/dfwele/dfw/nhosp/species_info/town_lists/town_w.htm#walpole

The Study Area is not within an Area of Critical Environmental Concern (ACEC) and available mapping does not indicate the presence of CVPs.

Hazardous Materials

A review of MassDEP’s online database indicates that within Area A there is an open case associated with an acetane spill at 18 Industrial Road, as well as a number of closed incidents. Two additional release sites outside of the project area were identified at 1900 Main Street and 2000 Main Street. These locations were shown in *Figure 1-3: Land Use*. MassDEP files indicate that one underground storage tank (USTs) is located at 25 Industrial Road. Two USTs have been removed from that address, and one additional tank has been removed from 1

Production Road (Sources: MassGIS; MassDEP Online Reportable Release Lookup; and UST Query Tool).

Within Area B, MassDEP records do not indicate previous reportable incidents or the presence of underground storage tanks (USTs). However, as noted in the land use, soils and wetlands sections (above), Area B is a former wetland (see *Figure 1-7*) that was utilized as a landfill for municipal waste and disposal of demolition debris portions of which were from the late 1950's until about 1975. According to MassDEP records, the former landfill is unlined and uncapped. This information, viewed in conjunction with current operations for automobile salvage, recycling operations and commercial truck parking, indicates the potential for the presence of hazardous materials and soil contamination.

Area B was part of studies conducted between 1999 and 2003 as part of EPA funded and local Brownfield initiative. The Pilot Project (2003) as part of EPA funded and local Brownfield initiatives report references the proximity of the area to wetland areas that serve as the Town's sole-source drinking water supply. During the course of the 2003 study, a Phase I Preliminary Site Assessment was completed along with a feasibility study for redevelopment as a public golf course and/or golf training facility. However, subsurface testing was not conducted at that time. The study concluded that while the site would be feasible for use as golf course and/or golf training facility, comprehensive environmental site assessment of the area is needed to identify past impacts and remedial requirements.

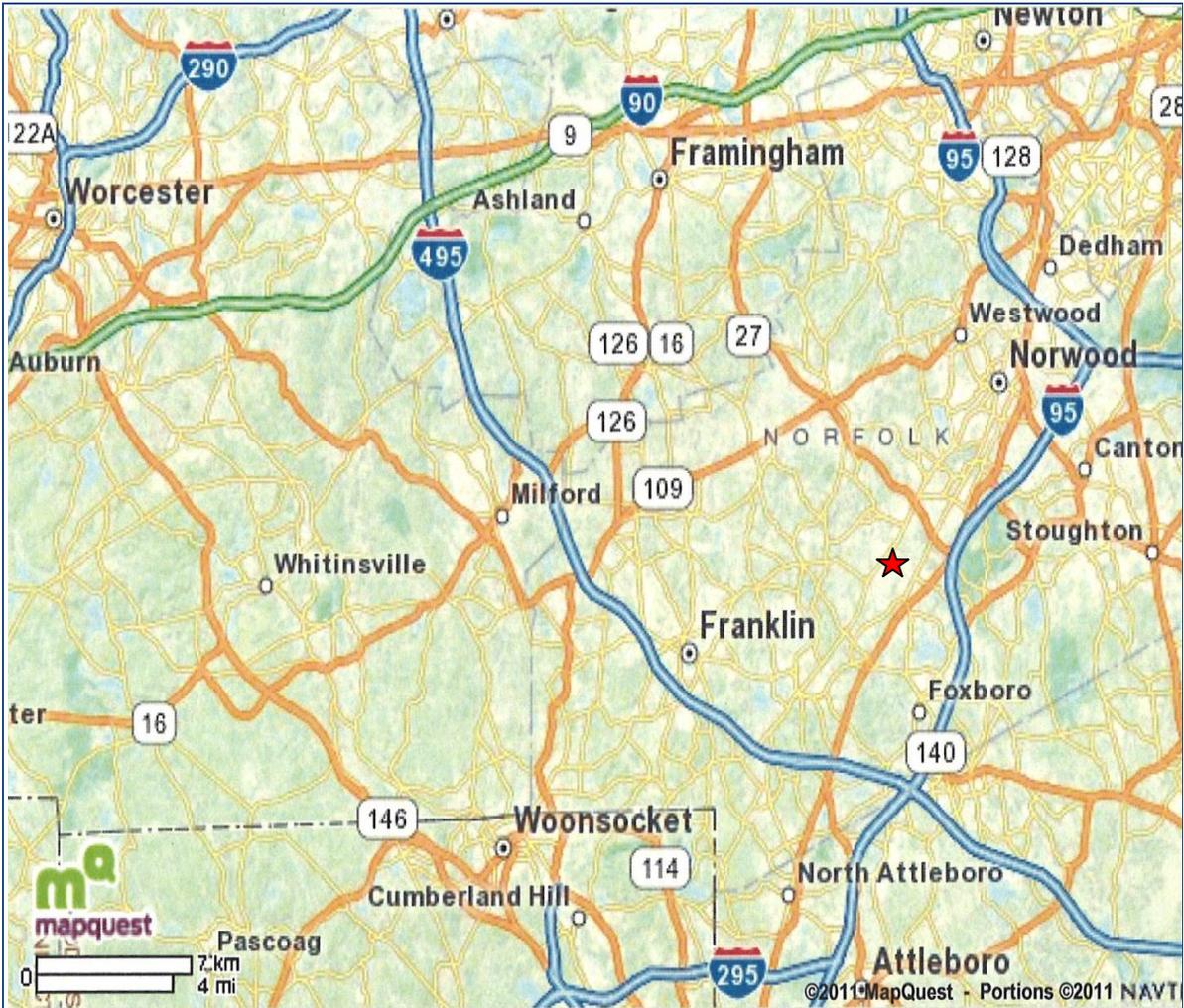
M.G.L. c. 21E states that if a release of hazardous materials is detected on a property, all past and present owners/operators could potentially be held liable for that release by the Commonwealth of Massachusetts. For this reason, it is typical for a bank involved in financing a commercial real estate transaction to request a "21E Site Assessment" to identify whether contaminants are present in soil and groundwater at the time of purchase, thus limiting or negating the bank's liability. The uncertainty of subsurface conditions can be a disincentive for property owners to allow testing or to use bank financing for a property transfer. Redevelopment within Area B is unlikely unless testing and subsequent remediation takes place, but property owners see undertaking such testing as a potential liability risk with significant cost implications.

1.3. Transportation/Access

Figure 1-9: Transportation/Access depicts access routes between the Study Area and the nearest major highways, Routes 1, 95 and 495. Routes 1 and 95 are situated approximately four miles from the Site; the distance to Route 495 is approximately seven and a half miles to the south.

There are no signalized intersections in the vicinity of the Site. Accident data from town records indicate that between January 2005 and December 2009, six accidents occurred in the area. Three of the accidents were located at or near 1701 Main Street; two were at or near 1675 Main Street and one occurred at 1901 Main Street.

Figure 1-9: Transportation/Site Access



Commuter rail stations are located in Walpole (two miles to the north) and Norfolk (three miles to the south). Both are along the MBTA's 11-station Franklin branch. The Site has no public bus service.

As noted above, a CSX-owned freight-only line runs along the east boundary of Area A. This line is called the "Framingham Secondary" and runs between Framingham and Mansfield. The MBTA also uses this branch for special events at Gillette Stadium in Foxborough, and is currently evaluating the feasibility of incorporating it into its permanent commuter rail service to Foxborough. Should this move forward, no new stops between Walpole and Foxborough are anticipated. (Source: Foxborough Commuter Rail Feasibility Study, Final Report). There are no active railroad spurs serving the existing industrial park from this railroad line.

According to the study entitled "Development Options for Portions of the Route 1A Corridor in Walpole and Norfolk" prepared by the Metropolitan Area Planning Council (MAPC) in July 2007, traffic volumes are approximately 11,400 vehicles (total, both directions) at the Norfolk-Walpole border, and approximately 19,200 vehicles near the Norwood border. Almost all of the growth on Route 1A in the future is expected to be due to traffic generated by new local developments. The MAPC does not anticipate traffic problems associated with predicted trip generation and distribution numbers.

Based on field observations, there does not appear to be significant traffic issues with respect to roadway segments or intersections that serve proposed development of the Site. Access points to the Site can be designed to accommodate the turning radius for all vehicle types.

1.4. Utilities

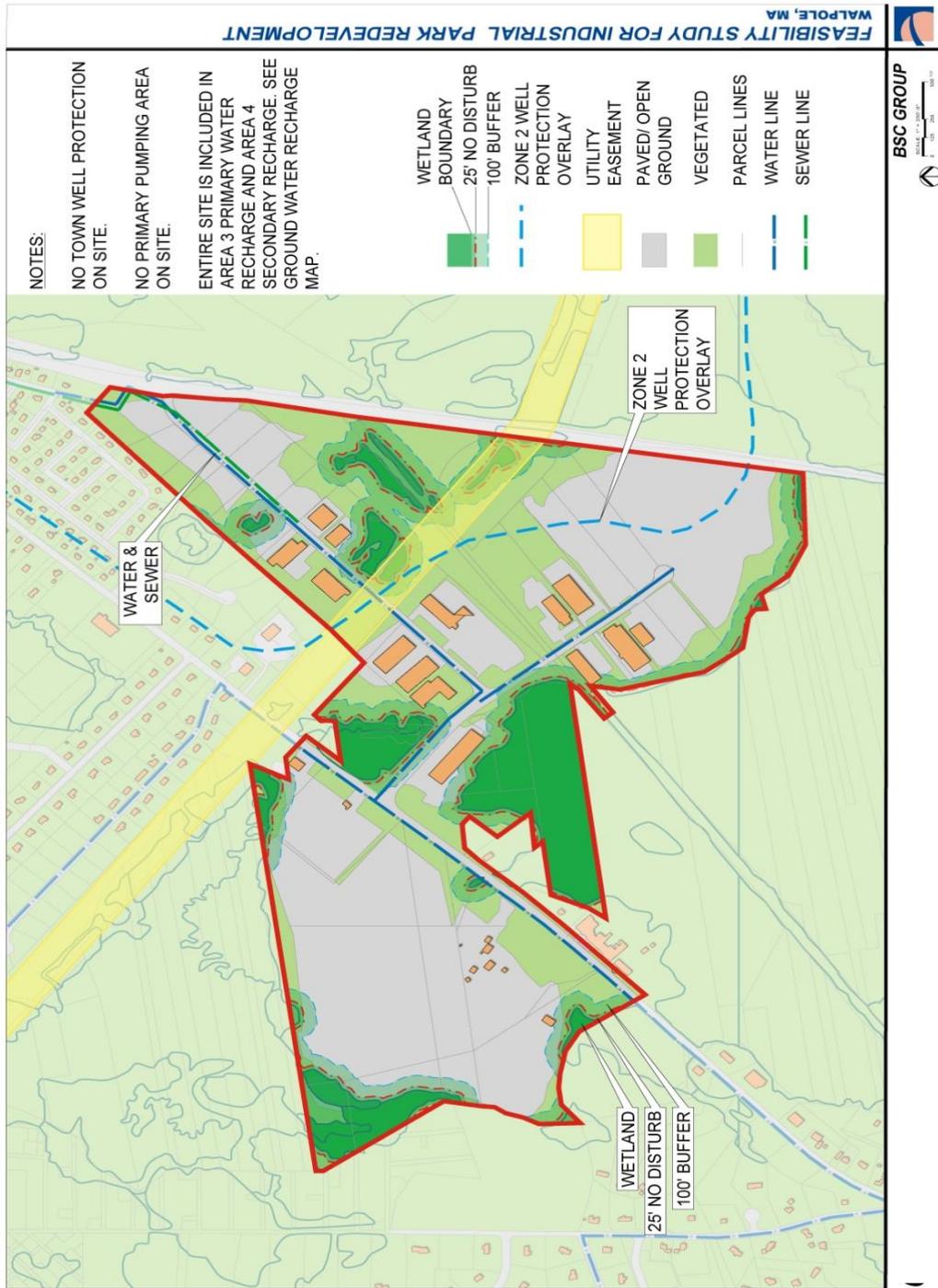
Water

Public water is available to the Site through existing infrastructure. *Figure 1-10: Site Utilities* presents an overview of on-site utilities. MassDEP has extended the current water withdrawal permit, however, town withdrawal levels are close to permitted levels.

Sewer

Walpole is connected to the Massachusetts Water Resources Authority (MWRA) sewer system. Currently, the town's sewer system terminates just north of the Site in front of Raffael's at 1601 Main Street. However, a small (8 inch) sewer line extends into the Industrial Park via the adjacent residential area, serving only the northern end of Production Road. Without sewer service, potential uses in the industrial park are constrained by limitations imposed by the Water Resources Protection Overlay District, as outlined in the Zoning Bylaw. Extending the sewer line to provide service to the remainder of Area A and all of Area B is expected to require a pumping station to maintain four feet of cover between the top of the pipe and surface grades.

Figure 1-10: Site Utilities



Stormwater/Drainage

Stormwater management is considered a critical local issue in Walpole because:

- the town's drinking water supply is a sole source aquifer, thus is dependent on high quality recharge; and
- sewerage areas are connected to the MWRA system, thus flows leave the watershed and eliminate a source of recharge.

In 2007, Walpole enacted a Stormwater Management and Erosion Control (SMEC) Bylaw, as implemented by the Conservation Commission per the SMEC Regulations. The Bylaw applies to any activity that will increase the impervious area of a parcel of land, or any activity resulting in increased stormwater runoff to public ways or property. Such activities are required to submit a Land Disturbance Permit or a Fast Track Permit, unless the proposed activity meets the definition of an Exempt Activity. One exemption is that the activity occurs "in accordance with the terms of an existing Order of Conditions or Determination of Applicability issued by the Commission pursuant to M.G.L. Ch. 131, Section 40, or the Walpole Wetlands Protection Bylaw".

Electric

Electric service to the Town of Walpole is provided by NStar via overhead lines on Main Street.

Gas

Columbia Gas of Massachusetts (formerly Bay State Gas) provides natural gas service to portions of the Town of Walpole.

Voice and Data

Comcast Broadband Cable and Verizon are the providers of high speed internet and voice service in Walpole.

1.5. Zoning

Use Regulations

As noted in the Land Use section, Area A is located in the IND district and Area B is primarily zoned LM with an R (Rural) zoned district in the rear. *Figure 1-11: Site Zoning* provides an overview of zoning on and immediately adjacent to the Study Area. In addition, zoning overlay districts relevant to the Site include the Water Resource Protection Overlay District and a Flood Plain Zoning Overlay District. *Figure 1-12* depicts the Water Protection Overlay District. The Floodplain Overlay District corresponds to the boundaries shown previously in *Figure 1-9*.

The Water Resource Protection Overlay District defines four categories: Area 1 is the 400-foot well radius; Area 2 is identified as a Potential Water Supply; Area 3 is a Primary Recharge Area (buried river stratified drift deposits with less than forty-foot thickness and upgradient of Areas 1 and 2); and Area 4 is a Secondary Recharge Area (upgradient areas consisting of till and other materials which contribute groundwater or surface water drainage to Areas 1, 2 or 3).

Based on available information, most of the Site is within Area 3, with some portions within Area 4. This has direct implications on potential development because the overlay district places limits on certain uses and building lot coverage for uses not connected to public sewer.

The Flood Plain Overlay District is essentially defined by the map entitled, "Flood Insurance Rate Map (FIRM), panel 2502540001-0010" dated November 18, 1988, Zones A, A1-30. The exact boundaries of the District are defined by the one hundred (100) year water surface elevations shown on the FIRM and further defined by the Flood Profiles contained in the Flood Insurance Study, dated November 18, 1988 or as amended.

Essentially, any structures or earth moving activities proposed within this District must obtain a special permit from the Board of Appeals. The parcels affected by the FEMA 100-year Floodplain (thus also by the overlay district) were noted in the Floodplain section presented above.

Figure 1-11: Site Zoning

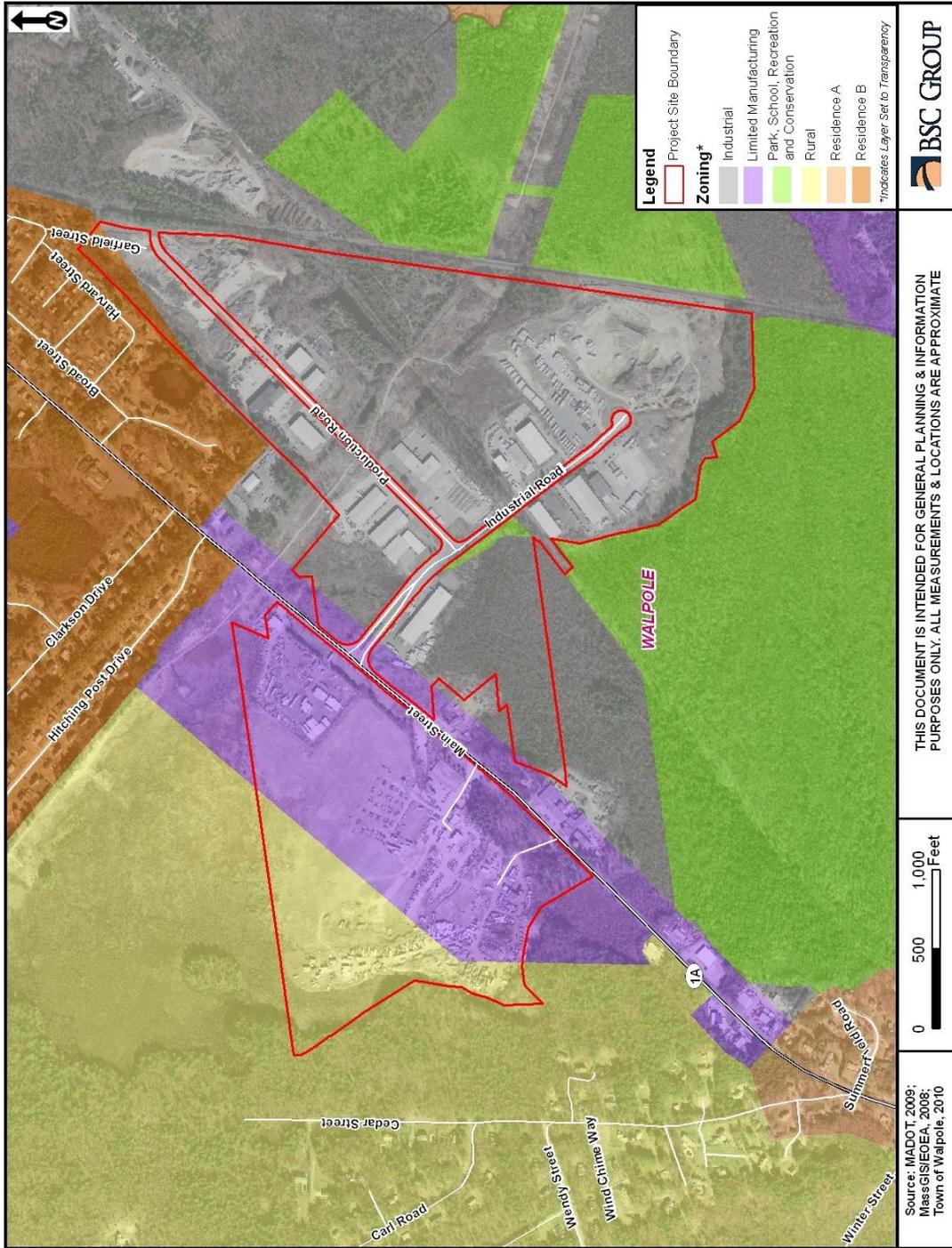
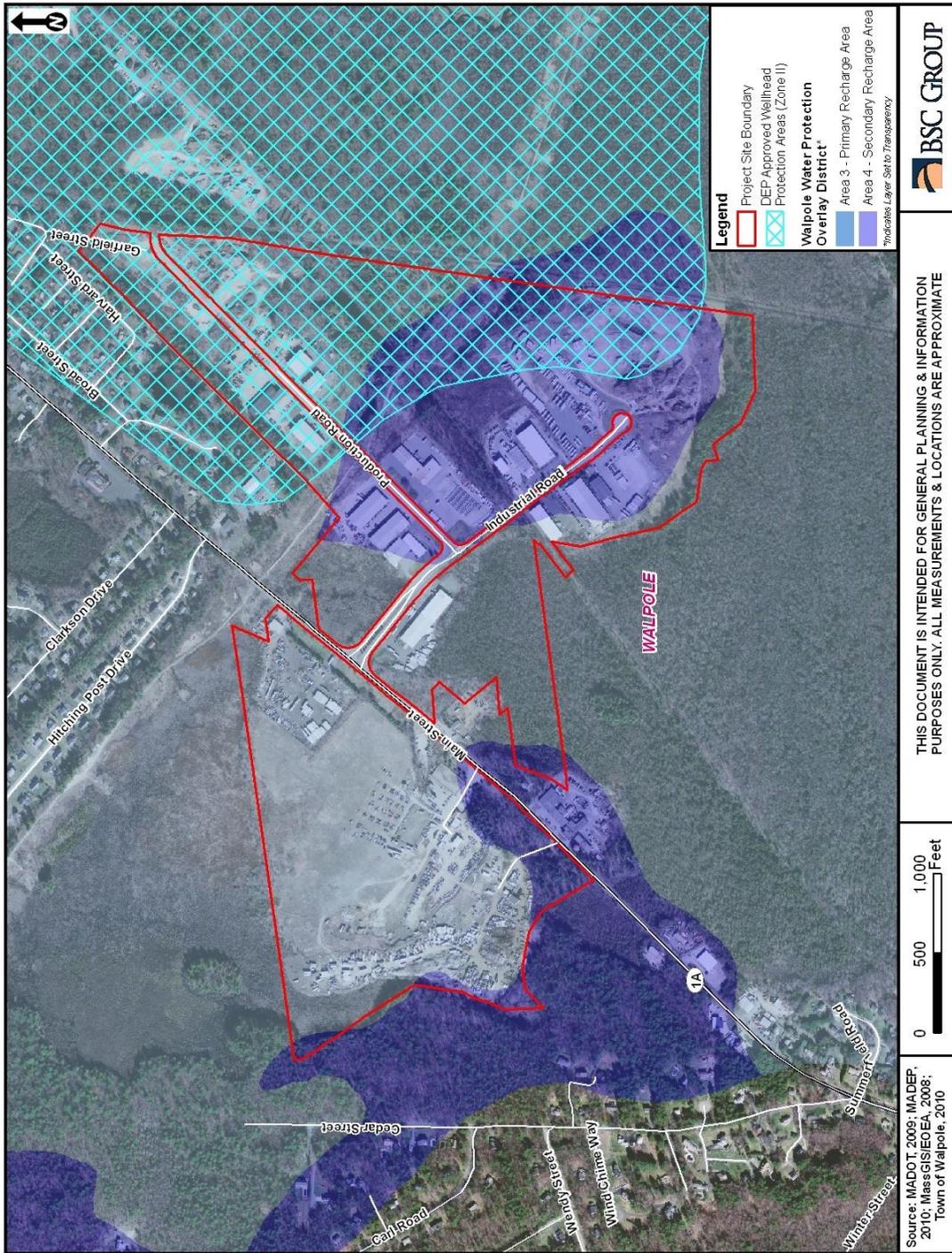


Figure 1-12: Water Resource Protection Overlay District



1.6. Ownership

The Site is made up of 54 separate parcels with 22 different ownership entities. See *Table 1-2* and *Figure 1-13: Parcel Ownership* for additional property ownership information. Most of the Site's developable land is controlled by four ownership entities. In Area A, developable land on Production Road is owned by the DiSangro family and is comprised of 11 remaining lots of the original subdivision. At the end of Industrial Road, there is a vacant 19.77 acre parcel owned by S.M. Lorusso & Sons which is currently used as a contractor's yard. The DiSangro lots are currently served by public sewer but the Lorusso property is not. The south side of Area B is owned by Recycling Walpole LLC and operated as Allied Recycling, Inc., a licensed scrap yard dealing in all ferrous and non-ferrous metals. The north side is owned by Robert J. Potheau and operated as an automobile reclamation business. The property is leased to Recycling Walpole LLC or an affiliate with an option to purchase. Recycling Walpole LLC reportedly hopes to continue to expand the recycling business on the property and is open to discussions regarding redevelopment or reuse of the Potheau property should an opportunity present itself.

1.7. Site Considerations

After reviewing Site characteristics and pertinent data, BSC compiled the Site Considerations Plan (see *Figure 1-14*) depicting the Study Area's salient features and areas suitable for development. Parameters directly impacting development potential include zoning setback requirements, wetland resource areas and associated 100-foot buffer zones. Wetland buffer zones do not preclude development; but any activity within the buffer area is subject to the jurisdiction of the Conservation Commission and must demonstrate there will be no impact to the adjacent wetland area.

Water service to the Site is available via existing nearby mains, and providing water service is not expected to require upgrades to the existing mains due to size and/or condition. Extending sewer service will require a new sewer pump station.

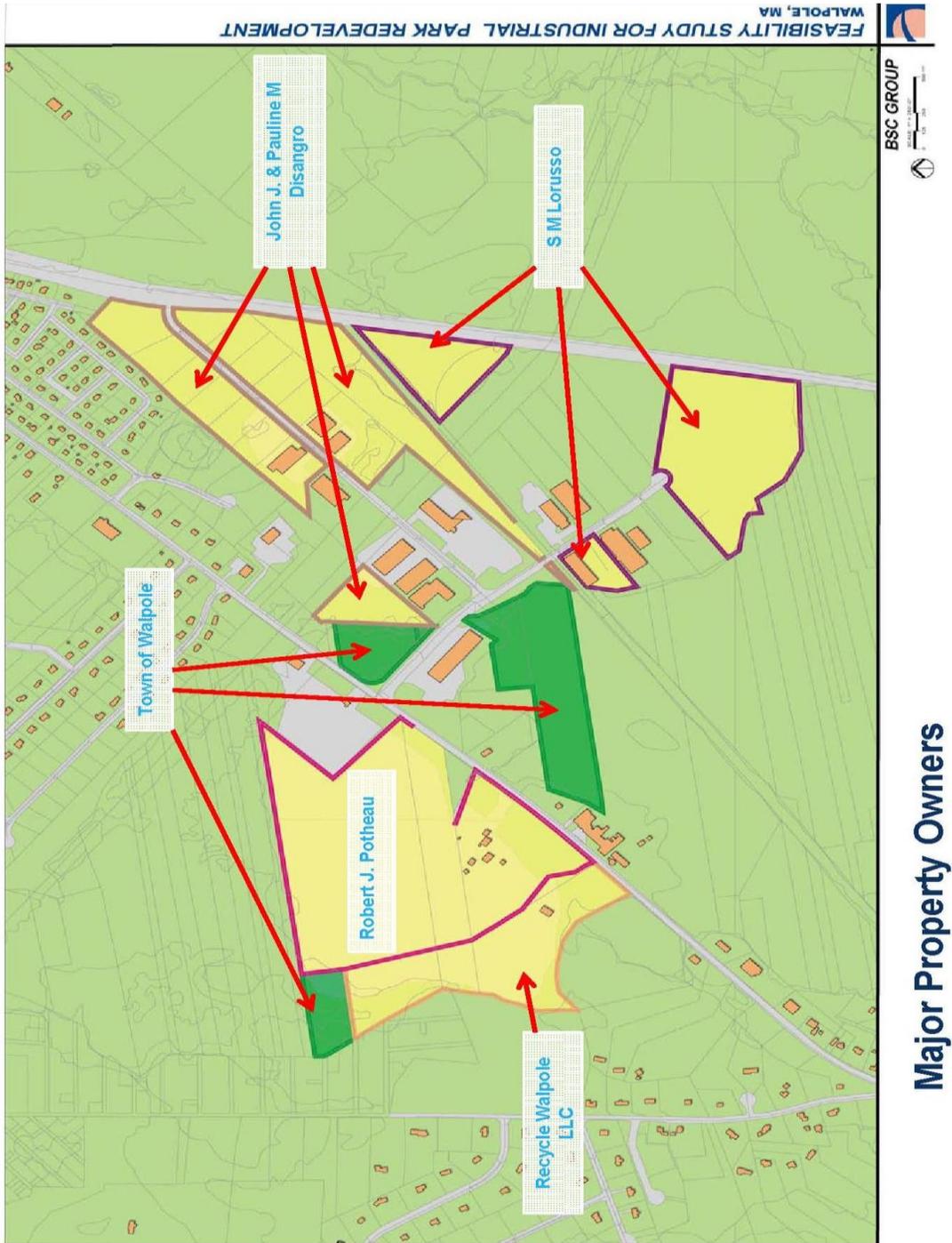
Site owners have been kept informed on the progress of this study and appear willing to consider development.

Table 1-2: Property Information and Ownership

Area	PARCEL ID	ST #	STREET NAME	OWNER 1	LAND USE DESCRIPTION	Zoning	ACRES	
A	46-15	0	MAIN ST	WALPOLE TOWN OF	Selectmen Vac M-00	IND	3.59	
A	46-17	0	INDUSTRIAL RD	DISANGRO JOHN J & PAULINE M	IND LAND UD	IND	3.45	
A	46-16	0	INDUSTRIAL RD	GUISTI VITO TR SHERWOOD REALTY	IND LAND UD	IND	0.16	
A	46-18	4	INDUSTRIAL RD	DISANGRO JOHN J & DISANGRO PA	IND WHSES	IND	4.81	
A	46-19	0	PRODUCTION RD	MONTAUP ELECTRIC CO	ELEC ROW	IND	2.35	
A	46-20-1	76	PRODUCTION RD	76 PRODUCTION RD LLC	FACTORY M-96	IND	2.15	
A	46-20	88	PRODUCTION RD	DISANGRO JOHN T. & PAULINE M.	FACTORY M-96	IND	2.50	
A	46-21	24	PRODUCTION RD		IND LAND PO	IND	1.49	
A	46-22	28	PRODUCTION RD		IND LAND PO	IND	1.50	
A	46-23	32	PRODUCTION RD		IND LAND PO	IND	1.50	
A	46-24	36	PRODUCTION RD		IND LAND PO	IND	1.49	
A	40-323	40	PRODUCTION RD		IND LAND PO	IND	1.78	
A	40-324	44	PRODUCTION RD		IND LAND PO	IND	2.87	
A	46-25	39	PRODUCTION RD		IND LAND PO	IND	1.49	
A	46-26	35	PRODUCTION RD		IND LAND PO	IND	1.57	
A	46-27	31	PRODUCTION RD		IND LAND PO	IND	1.62	
A	46-28	27	PRODUCTION RD		IND LAND PO	IND	1.61	
A	46-29	23	PRODUCTION RD		IND LAND PO	IND	1.64	
A	46-30-2	115	PRODUCTION		IND WHSES	IND	1.06	
A	46-30-1	11	PRODUCTION		SKT PROPERTIES LLC	IND WHSES	IND	0.91
A	46-30	0	PRODUCTION RD		DISANGRO JOHN J & PAULINE M	IND LAND UD	IND	2.79
A	46-31	0	PRODUCTION RD	MONTAUP ELECTRIC CO	ELEC ROW	IND	2.81	
A	46-32	9	PRODUCTION RD	U-HAUL REAL ESTATE COMPANY	AUTO REPR	IND	6.35	
A	46-33	0	INDUSTRIAL RD	DISANGRO JOHN J SR & PAULINE M	IND LAND UD	IND	10.07	
A	46-34	0	INDUSTRIAL RD	LORUSSO S M & SONS INC	RECREATION	IND	4.16	
A	46-40	18	INDUSTRIAL RD	FISH-CALLAHAN CHEMICAL CO INC	FACTORY M-96	IND	7.47	
A	46-39	0	INDUSTRIAL RD	MONTAUP ELECTRIC CO	ELEC ROW	IND	5.36	
A	46-38	0	PRODUCTION RD	LORUSSO S M & SONS INC	RECREATION	IND	2.18	
A	46-42-1	0	INDUSTRIAL RD	JENSTAR OF WALPOLE LLC	IND LAND DV	IND	9.64	
A	46-47	33	INDUSTRIAL RD	LORUSSO S M & SONS INC	IND LAND DV	IND	18.88	
A	46-47-1	0	INDUSTRIAL RD	WEBSTER TRUSTS-DISILVA	IND LAND DV	IND	2.81	
A	46-49	25	INDUSTRIAL RD	DESILVA THOMAS A & DESILVA JA	TRK TERM	IND	2.58	

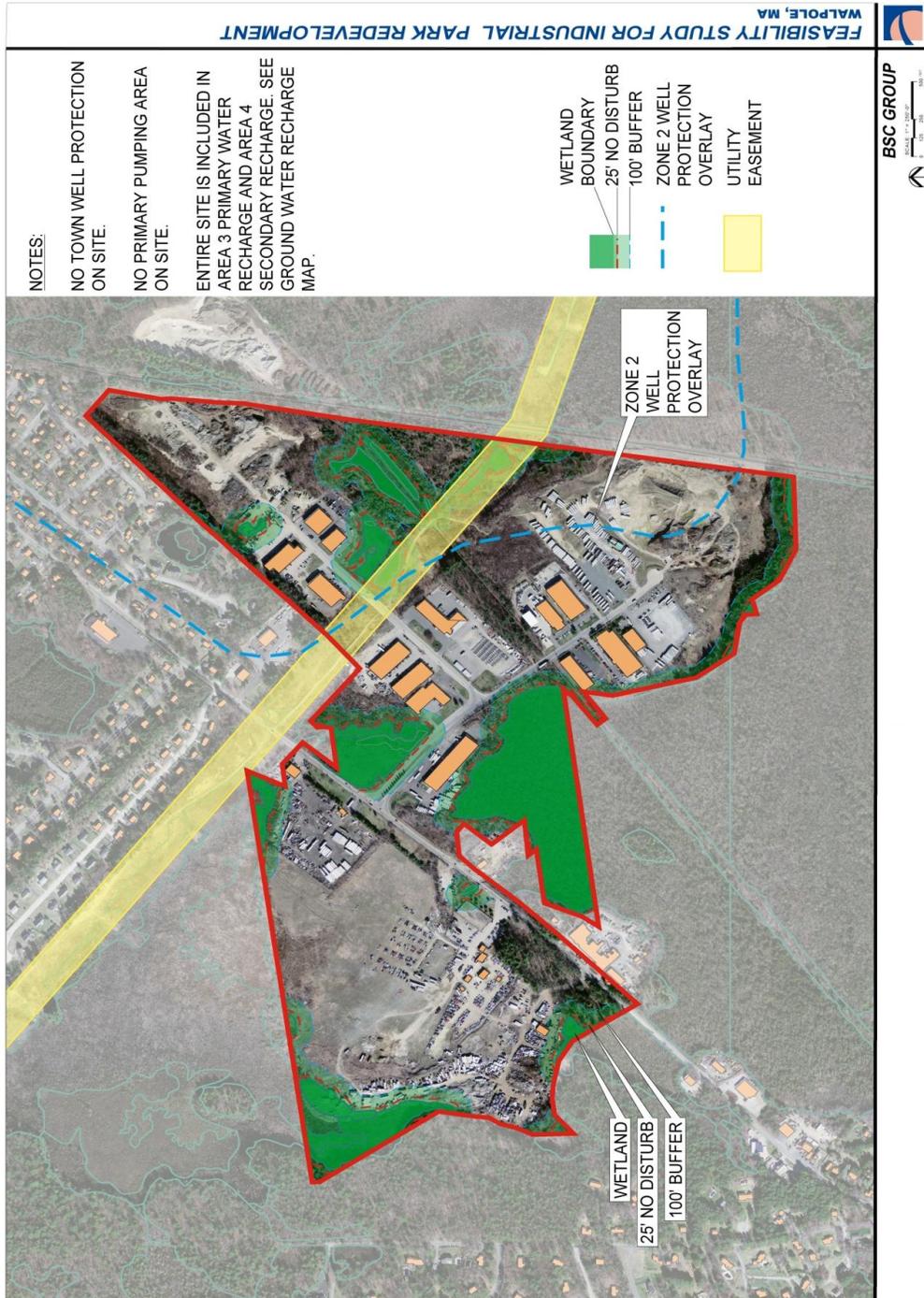
Area	PARCEL ID	ST #	STREET NAME	OWNER 1	LAND USE DESCRIPTION	Zoning	ACRES
A	46-42	28	INDUSTRIAL RD	DONLON DRAPER INC	IND LAND DV	IND	4.29
A	46-41	24	INDUSTRIAL RD	MAJOR RLTY TRUST	IND WHSES	IND	3.96
A	46-50	21	INDUSTRIAL RD	GRAVES SHEILA LLC	IND WHSES	IND	1.67
A	46-51	17	INDUSTRIAL RD	LORUSSO S M & SONS INC	IND WHSES	IND	2.13
A	46-52	0	INDUSTRIAL RD	FISH CHEMICAL & EQUIP INC	IND LAND UD	IND	0.75
A	46-33	0	INDUSTRIAL RD	DISANGRO JOHN J SR & PAULINE M	IND LAND UD	IND	0.13
A	46-62	0	INDUSTRIAL RD	WALPOLE TOWN OF-CC	Conservation Vac M-00	PSRC	0.93
A	46-66	0	MAIN ST	WALPOLE TOWN OF	Selectmen Vac M-00	IND	2.52
A	46-64	3	INDUSTRIAL RD	WALPOLE DUGGAN LLC	IND CONDO M-06	IND	6.46
A	46-63	0	INDUSTRIAL RD	WALPOLE TOWN OF	Selectmen Vac M-00	IND	3.04
A	46-61	0	CEDAR SWAMP	WALPOLE TOWN OF	Selectmen Vac M-00	IND	10.44
SUBTOTAL AREA A							150.96
B	45-51	0	CEDAR SWAMP	WALPOLE TOWN OF-CC	Conservation Vac M-00	R	3.20
B	45-59	0	MAIN ST	RECYCLING WALPOLE LLC	IND LAND UD	R	1.64
B	45-50	0	MAIN ST		Res Land	R	4.94
B	45-60	0	MAIN ST		IND LAND UD	LM	0.54
B	45-48	1901	MAIN ST		IND LAND DV	LM	9.96
B	46-69	0	MAIN ST		CONNOLLY FAMILY TRUST	IND LAND PO	LM
B	45-61	1801	MAIN ST	POTHEAU ROBERT J TR	OTH MTR SS M-94	LM	11.18
B	46-70	0	MAIN ST		IND LAND PO	LM	7.53
B	45-49	0	MAIN ST		IND LAND UD	LM	28.70
B	46-71	1701	MAIN ST	A TOW REALTY TRUST	OTH MTR SS M-96	LM	7.50
B	46-72	1675	MAIN ST	CHRIS SERVICE CENTER INC	AUTO REPR	LM	2.46
SUBTOTAL AREA B							78.70
TOTAL							229.66

Figure 1-13: Parcel Ownership



Major Property Owners

Figure 1-14: Site Considerations Plan



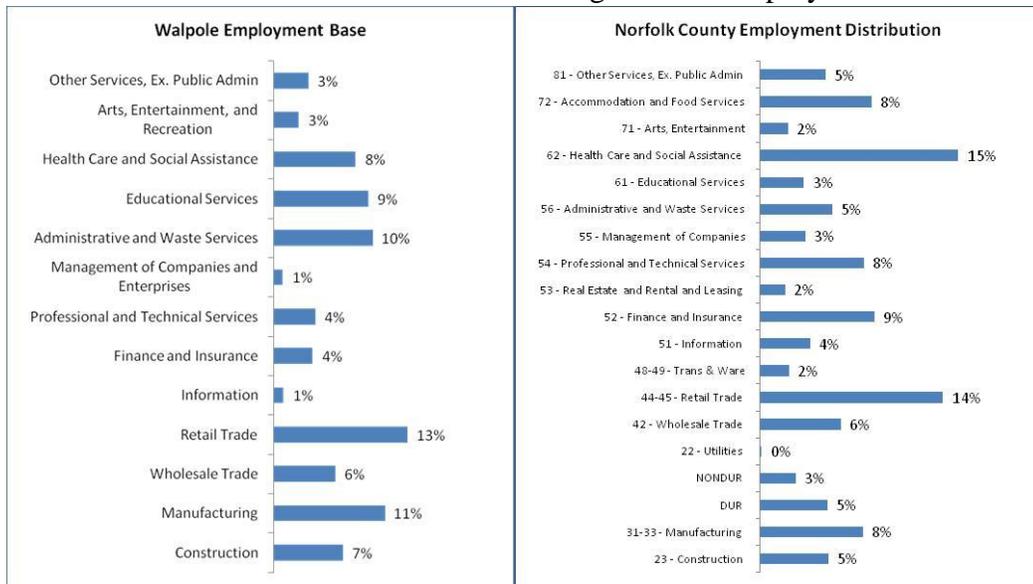


Chapter 2: Market Trends Analysis

2.1 Economic Conditions and Labor Shed

Walpole's 808 businesses employ 10,200 people with major concentrations in manufacturing and industries that don't generate substantial demand for office space – an impact factor in considering diversification of the town's tax base. Walpole's economy is also slightly different than Norfolk county employment. For example, Walpole has substantially fewer jobs as a percentage of overall employment in healthcare and related services but nearly three times the number of jobs as a percentage of employment tied to educational services (*Figure 2-1: Employment Distribution*).

Figure 2-1: Employment Distribution



Several of Massachusetts's leading industries have undergone significant shrinkage in the last decade leading to the opening of large amounts of commercial and industrial space in the region (*Table 2-1*). Industries with the largest employment growth have specialized space needs or are not real estate driven businesses, e.g., hospitals or non-store retailers. Moreover, some of the major sources of employment growth, e.g., higher education and healthcare, are not easily accessible to Walpole because these categories have a limited local presence and do not tend to relocate (*Table 2-2*).

Table 2-1: Employment Sectors Ranked by Number of Employees, 2009

NAICS	Industry	Year		Difference	% change
		2001	2009		
541	Professional and Technical Services	244,148	251,386	7,238	3%
722	Food Services and Drinking Places	201,904	220,142	18,238	9%
622	Hospitals	141,879	176,986	35,107	25%
6221	General Medical and Surgical Hospitals	124,999	155,208	30,209	24%
621	Ambulatory Health Care Services	121,290	146,119	24,829	20%
561	Administrative and Support Services	160,113	140,508	(19,605)	-12%
611	Educational Services	111,914	126,713	14,799	13%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
445	Food and Beverage Stores	92,050	92,523	473	1%
6113	Colleges and Universities	77,433	85,076	7,643	10%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
4451	Grocery Stores	75,440	78,001	2,561	3%
624	Social Assistance	58,582	68,249	9,667	17%
524	Insurance Carriers & Related Activities	64,299	65,365	1,066	2%
334	Computer and Electronic Product Mfg	101,659	63,096	(38,563)	-38%
522	Credit Intermediation & Related Activity	60,492	60,196	(296)	0%
6231	Nursing Care Facilities	57,799	59,266	1,467	3%
5511	Management of Companies and Enterprises	71,925	59,003	(12,922)	-18%
423	Merchant Wholesalers, Durable Goods	73,227	56,030	(17,197)	-23%
5415	Computer Systems Design and Rel Services	60,145	55,245	(4,900)	-8%
6211	Offices of Physicians	45,141	51,969	6,828	15%
5221	Depository Credit Intermediation	50,056	51,605	1,549	3%
5617	Services to Buildings and Dwellings	46,966	49,282	2,316	5%
5613	Employment Services	64,881	47,979	(16,902)	-26%

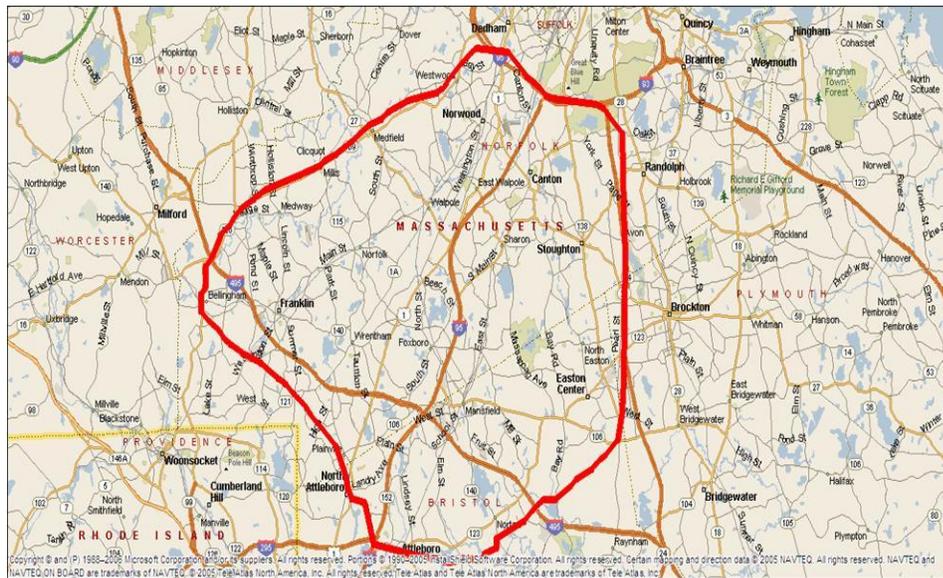
Table 2-2: Employment Growth by Sector, 2001 to 2009

NAICS	Industry	Year		Difference	% change
		2001	2009		
622	Hospitals	141,879	176,986	35,107	25%
6221	General Medical and Surgical Hospitals	124,999	155,208	30,209	24%
621	Ambulatory Health Care Services	121,290	146,119	24,829	20%
722	Food Services and Drinking Places	201,904	220,142	18,238	9%
611	Educational Services	111,914	126,713	14,799	13%
814	Private Households	15,673	29,894	14,221	91%
7221	Full-Service Restaurants	100,160	114,270	14,110	14%
623	Nursing and Residential Care Facilities	87,560	98,728	11,168	13%
5417	Scientific Research and Development Svc	33,319	43,818	10,499	32%
624	Social Assistance	58,582	68,249	9,667	17%
454	Nonstore Retailers	13,376	22,992	9,616	72%
7222	Limited-Service Eating Places	71,333	80,298	8,965	13%
6216	Home Health Care Services	19,104	27,004	7,900	41%
6113	Colleges and Universities	77,433	85,076	7,643	10%
541	Professional and Technical Services	244,148	251,386	7,238	3%
6211	Offices of Physicians	45,141	51,969	6,828	15%
6241	Individual and Family Services	24,127	30,930	6,803	28%
4251	Electronic Markets and Agents/Brokers	21,261	27,502	6,241	29%
6232	Residential Mental Health Facilities	13,318	18,895	5,577	42%
5239	Other Financial Investment Activities	20,510	25,657	5,147	25%
813	Membership Organizations & Associations	33,412	38,466	5,054	15%
4543	Direct Selling Establishments	6,997	11,934	4,937	71%
5191	Other Information Services	1,094	5,850	4,756	435%
6233	Community Care Facility for the Elderly	10,535	15,240	4,705	45%
5313	Activities Related to Real Estate	8,639	13,241	4,602	53%

2.2 The Regional Real Estate Market¹

As depicted in *Figure 2-2*, the competitive market area applied herein focuses on real estate in close proximity to the Route I-95 corridor. Walpole is centrally located along the Route I-95 corridor between Providence and Boston. However, due to the highway network and labor shed the most critical markets to consider are those along Routes I-495 and 128. In practice, Walpole may compete with sites located between Route 2 to the west and Route 24 to the east. However, for purposes of this study the market assessment was narrowed to communities in close proximity to Route I-95 as the most representative.

Figure 2-2: Competitive Market Area



The Route 495 corridor has less office space but substantially more industrial space than the Route 128 corridor. Vacancy rates are higher and rents are also lower along Route 495 (see *Table 2-3*).

This report focuses on the perspective of the potential tenant or buyer, and the understanding of the real estate market on a segmented basis. Any market study conducted today will indicate negative square foot absorption of space. Market analysis and forecasting in current economic conditions are exceptionally difficult. Past trends can't be applied – particularly since credit markets are likely to remain

¹ Notes:

- Any market study conducted today will indicate negative to flat square foot absorption of space.
- Market analysis / forecasting in these economic conditions is exceptionally difficult because:
 - Past trends can't be applied – particularly since credit markets are likely to stay tight for the foreseeable future tempering real estate development; and
 - Employment forecasts suggest a jobless recovery with a lack of clear indications of industry leadership in rehiring.

Table 2-3: Office & Industrial Market Size for Routes 495 and 128

495 West/South	Rt 128 West / South
<ul style="list-style-type: none"> • Office (class A&B) market size: 14 msft <ul style="list-style-type: none"> – Vacancy: 18% – Lease rate \$16-\$21 • Industrial market size: 46 msft <ul style="list-style-type: none"> – Vacancy: 15% – Lease rate \$4.60 – \$5.76 	<ul style="list-style-type: none"> • Office market size: 35msft <ul style="list-style-type: none"> – Vacancy: 14% – Lease rate: \$16-27 • Industrial: 24.6 msft <ul style="list-style-type: none"> – Vacancy: 5.5% – Lease rate: \$5.28-\$7.09

Source: NP analysis of broker reports

tight in the foreseeable future. This situation hinders real estate development. Employment forecasts suggest a jobless recovery with a lack of clear indications of rehiring. Moreover, space demand during most of the last decade was created by smaller companies in tech industries, healthcare businesses, educational services, retail distribution and financial services – many of which have significantly scaled back expansion plans.

When examining an office and industrial real estate market it is important to have a framework for understanding competitive supply. Classifying property conditions allows the market to be sorted into categories that can reveal nuances that are easily overlooked if the market is examined in aggregate. Ninigret Partners breaks down industrial and commercial space into six categories.

- Level 1: Building at move-in quality;
- Level 2: Building needs refurbishment, modifications, or final build-out;
- Level 3: Building in place but requires substantial renovation or code upgrades (mill and older industrial buildings);
- Level 4: Developed “pad ready” site with full site approvals, site plans and infrastructure in place;
- Level 5: Raw land, zoned industrial or office / industrial; and
- Level 6: Raw land not necessarily zoned but designated for future business use.

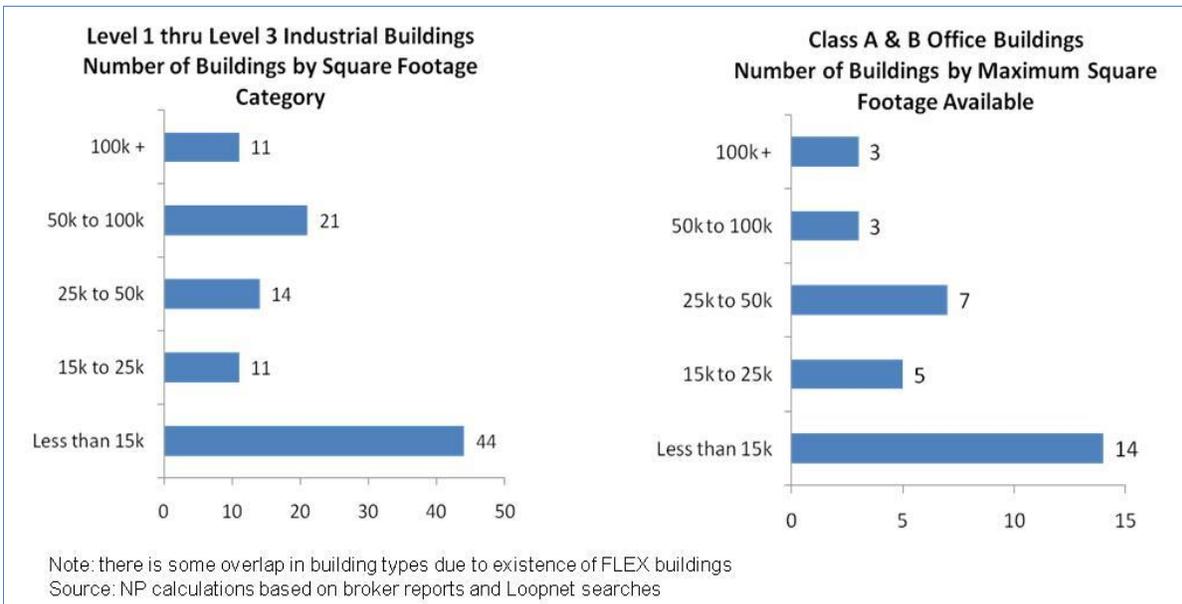
Examples of available product in the area at various stages of market readiness are illustrated in *Figure 2-3: Examples of Market Readiness*.

Across the market area, there is approximately 4.1 million square feet (sf) of available industrial space, and approximately 1 million sf of available office space. See *Figure 2-4: Available Industrial and Office Space*.

Figure 2-3: Examples of Market Readiness



Figure 2-4: Available Office and Industrial Space



It is also important to note the conditions described below.

- Approximately 10 percent of the industrial space consists of one warehouse with nearly 400,000 sf.
- A potential opportunity in the marketplace is for buildings with relatively small footprints in the range of 25,000 sf due to the lack of available building of that size.
- Building owners will accept smaller lease arrangements to generate revenue under current economic conditions, but this will change as the economy improves.
- Much of the market area’s existing available industrial space can easily be converted to office space.

Across the market area, an estimated 387 acres are available for commercial or industrial development. Approximately 179 acres (46 percent) of that land is considered to be at a Level 4 state of readiness (i.e., “pad ready”). Approximately 208 unimproved acres (54 percent) are available between I-90/495 and Franklin at a Level 5 state of readiness. There is also an additional 200 acres of unimproved land for sale in the area that is zoned residential.

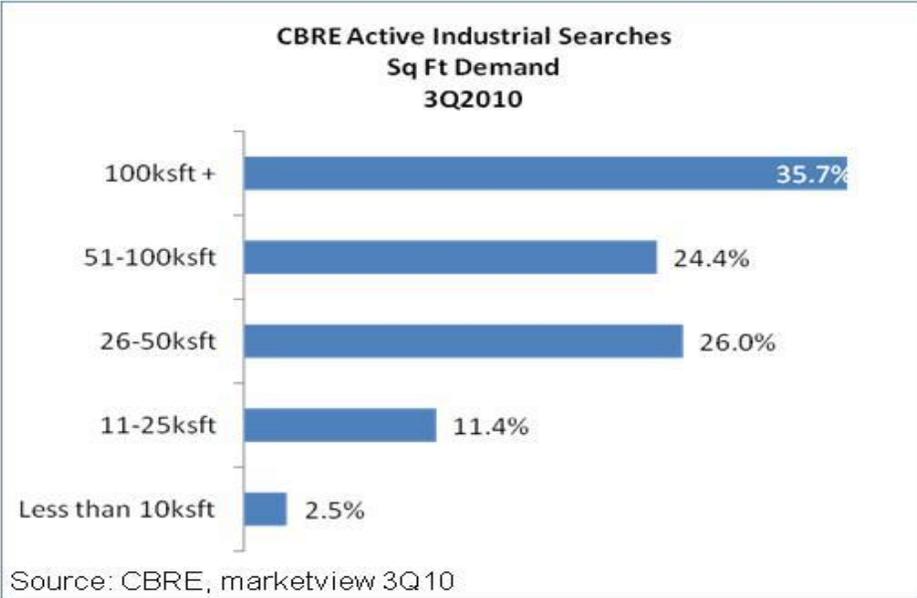
Currently, approximately 56 percent of the acreage in the market area is available for less than \$200,000 per acre. This price reflects the large amount of unimproved land (see *Figure 2-5: Acres Available at Per Acre Price Points*).

Figure 2-5: Acres Available at Per Acre Price Points



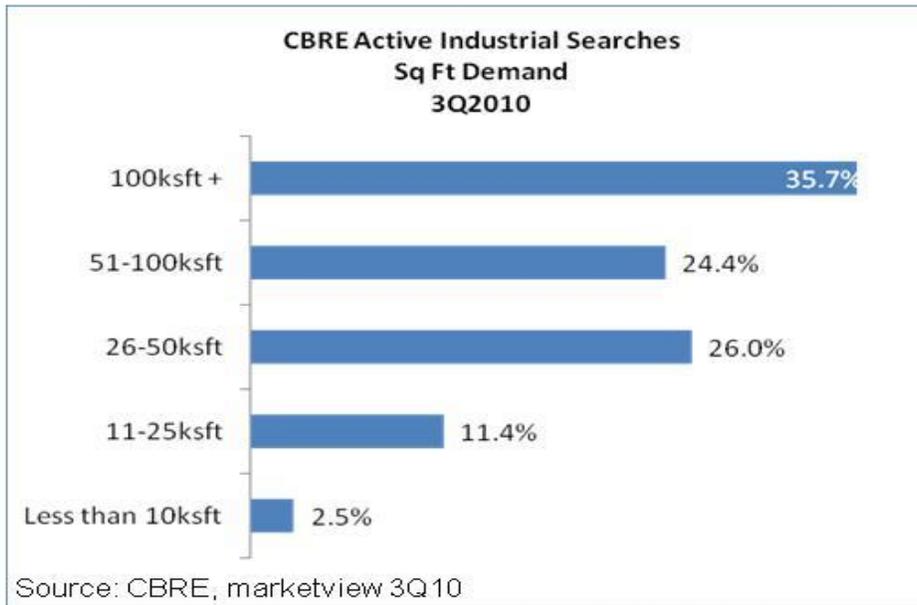
Active searches provide an indication of the type of real estate requirements that are in the marketplace to assist in site planning. CB Richard Ellis market summaries provide an indication of the type of space demand across the larger regional market. Total activity in the market during the third quarter of 2010 represents 9.2 million sf in searches. Based on analysis of various brokerage reports most of this demand does not represent net new demand but lease expirations and consolidations with high likelihood of renewals. About 48 percent of the searches are for space less than 50,000 sf. As shown in *Figure 2-6: Office Market Searches by Industry Type*, the technology and software industry comprise the largest component of searches, distantly followed by finance and insurance.

Figure 2-6: Office Market Searches by Industry Type



Industrial searches reflect the type of space demand across the regional market. As shown in *Figure 2-7: CBRE Active Industrial Searches*, a move to consolidate into larger space is indicated by the high percentage of searches for space in excess of 100,000 sf. The figure indicates that most of the searches (36 percent) seek more than 100,000 sf of space. However, by combining the <10,000 to 50,000 sf categories it becomes apparent that that, overall, 48 percent of the searches are looking for space that is less than 50,000 sf. Based on an analysis of various brokerage reports, most of the 9.2 million sf in searches during third quarter of 2010 represent lease expirations and consolidations rather than net new demand.

Figure 2-7: CBRE Active Industrial Searches



It is important to note that making investment decisions solely on present economic conditions may miss the long-term potential. At the height of Massachusetts' booming economy in 2007, an additional 3.1 million sf of industrial space was in demand over the present 5 million sf, and over 72 percent of that demand was for space less than 50,000 sf. An economic recovery could radically shift the majority of demand away from large spaces back to smaller spaces.

2.3 Industry Reviews

This section presents overviews of industries that may have potential for development in Walpole's Route 1A Industrial Park. The industries are listed below and then each is described in detail.

- Biotech and Life Sciences
- Green Industry/Clean Energy
- Retail & Hotel/Hospitality
- Data Center

Biomedical and Life Sciences

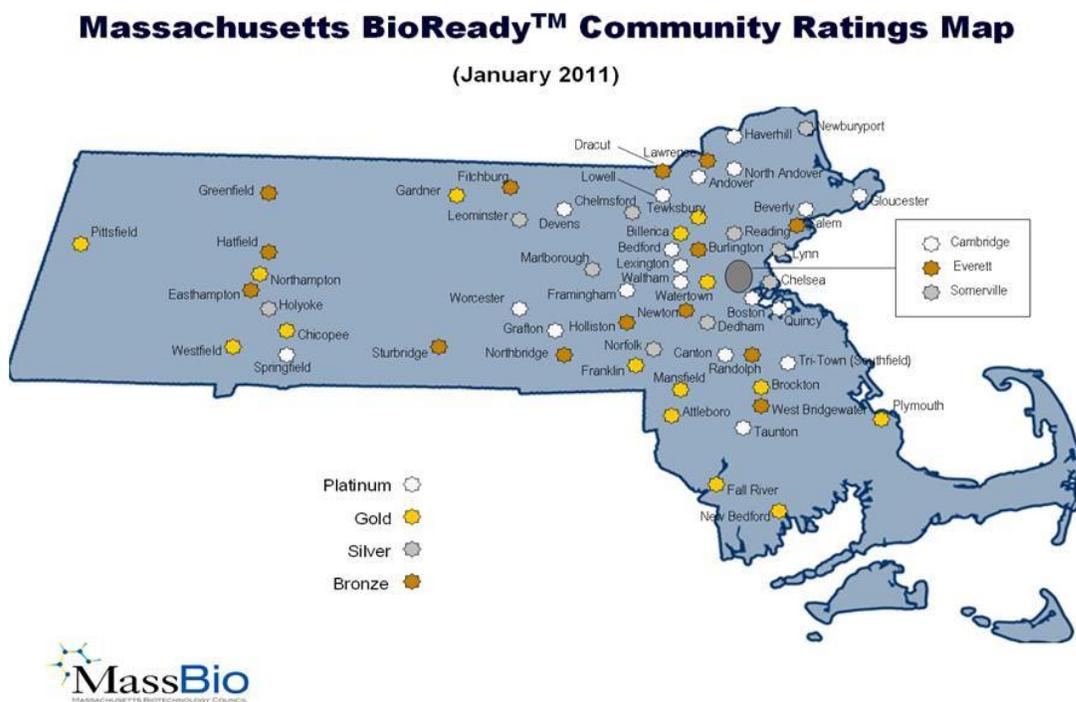
The biomedical/life sciences industry² is an important driver of employment growth in the greater Boston area. Biomedical industry employment in suburban

² Biomedical employment classified as NAICS 3391 Medical supplies and equipment; NAICS 334510 Electromedical apparatus; NAICS 541711 Biotech R&D; NAICS 3254 Bio and Pharm med manufacturing

Boston is nearly 30,000. However, employment in this industry is not spread evenly across suburban Boston. Employment in Middlesex appears to have more than doubled since 2001 from 10,200 to 26,300 in 2009. Since 2007 employment has grown by nearly 1,900 people. In contrast Norfolk county employment has stayed stable during this period fluctuating around 3,600 people since 2001.

Nearly every community in the so-called “BioTriangle” of Boston, Worcester and Providence is interested in pursuing life science-based economic development opportunities. For Walpole, competing for biomedical/life science firms will likely require becoming a “BioReady” community, as designated by MASSBio³. As *Figure 2-8* indicates, nearly every community surrounding Walpole has achieved at least the minimum level of BioReady designation.

Figure 2-8: Massachusetts BioReady Community Ratings Map



Achieving a BioReady designation requires coordinating planning/zoning, development activity and infrastructure availability. *Table 2-4* identifies the criteria for each level of designation by MASSBio.

³ The Massachusetts Biotechnology Council (MassBio) is a not-for-profit organization that represents and provides services and support for the Massachusetts biotechnology industry.

Table 2-4: BioReady Designation Criteria

Rating	Requirements
<i>Bronze</i>	A municipality at this level features municipal water and sewer in commercial and industrial areas, zoning allowing for biotech laboratory and manufacturing uses by special permit, and has identified a local point of contact in to assist biotech projects.
<i>Silver</i>	A municipality meets all Bronze criteria AND allows biotech uses by right, convene Site Plan Review meetings to expedite development projects, and has identified sites for biotech uses in municipal plans or has land sites and/or buildings included in BioSites inventory at www.massachusettsitefinder.com , or is a Growth District, or has identified Priority Development Sites per Chapter 43D.
<i>Gold</i>	A municipality meets Silver criteria plus has sites or buildings pre-permitted for biotechnology use, OR has existing buildings in which biotech laboratory or manufacturing activities are taking place.
<i>Platinum</i>	A municipality meets Gold criteria plus has adopted the National Institutes of Health guidelines on rDNA activity as part of its Board of Health regulations, has a building or buildings that are already permitted for biotech uses and which have 20,000+ square feet available space for biotech uses OR has a shovel-ready pre-permitted land site with completed MEPA review and municipal water and sewer capacity to meet additional demand.

Source: MASSBio

Life science companies require specific types of infrastructure. Accordingly, MASSBio has provided a guide for communities considering pursuing life science industry opportunities. *Table 2-5* provides a summary of the different types of “biobuildings” and their infrastructure requirements, including water and sewer needs. It should be noticed that there is a significant amount of process development work underway to significantly reduce the water consumption of these types of facilities.

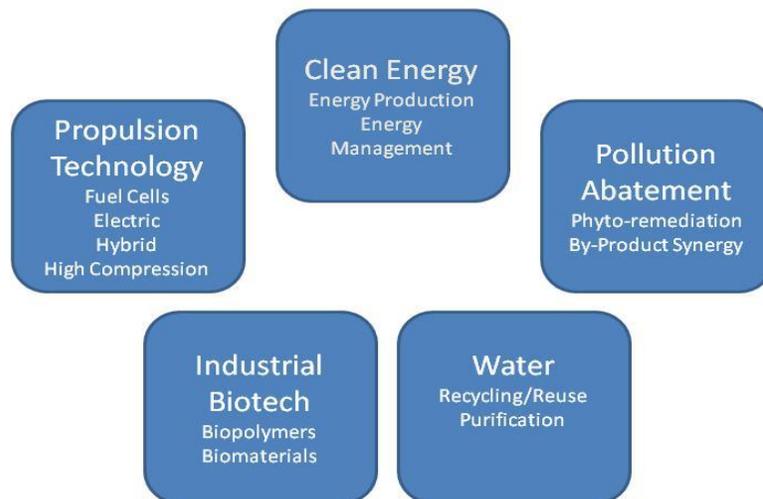
Table 2-5: Infrastructure Requirements of “BioBuildings”

	Footprint	Water Use	Sewer	Natural Gas
Basic Research	10-20ksft minimum with expansion capacity	8-20000 gpd	Some pretreatment, use of neutralization tanks	Required
Process Development	10 to 20ksft minimum Typically able to expand to pilot plant	20000 gpd	Same as above	Required
Pilot Manufacturing	10 to 35ksft	2400 gph per 1000sft	Adequate public sewer capacity. Discharges require kill systems and pH pretreatment	Higher volume than process development
Manufacturing	At least 100ksft	Varies by process but planning model 1.5 million gpd per 100ksft manufacturing Also requires standby water system	Same as pilot with larger scale	High volume
Fill & Finish	20ksft minimum	Much less than manufacturing		Required

Green Industry/Clean Energy

Similar to life sciences “green industry” is the trendy concept being considered for economic development by communities across Massachusetts and the United States. However, defining the industry is difficult. As indicated on *Figure 2-9*, the industry consists of many segments, each with very different building requirements, infrastructure needs and pollution challenges.

Figure 2-9: The Clean Tech Industry Universe



Many of the green industry segments shown in *Figure 2-9* are essentially manufacturing operations, and as such require facilities and create impacts similar to any other manufacturing operation. For example, pollution abatement by-product synergy typically involves recycling operations or product development that reuses waste materials from other operations. While meeting the definition of “green”, these manufacturing uses may be incompatible with abutting residential districts.

Another green industry alternative is clean energy production. According to a 2007 Massachusetts Clean Energy Census undertaken by the Massachusetts Technology Collaborative (MassTech), 556 green companies employ approximately 14,000 statewide. Nearly half of all those employees work in the “energy efficiency” segment of clean industry. For purposes of planning for Rt. 1A, the following are important considerations:

- most of these companies are small with 40 percent having fewer than \$1 million in revenues;
- most companies in the renewable space are less than five years old;
- renewable energy is the fastest growing sector in Massachusetts;
- projections are for 30 percent employment growth in this subsector in the next year; and
- MassTech estimates that clean energy could employ 75,000 people statewide by 2017.

A solar array offers an option for clean energy production that is compatible with abutting residential district. Because the EPA has been aggressive in considering energy production as a viable reuse option, solar power generation may offer a potential reuse option for Area B. The EPA Brownfields Energy Generation Potential database for the region suggests solar power generation may have some potential as an off-grid power source. Although the Direct Normal Irradiance (DNI) level is only moderate there is estimated to be sufficient sun to provide power for non grid uses.

As shown in *Table 2-6: EPA-Designated Potential for Energy Generation*, EPA has determined the reuse potential of a number of Massachusetts sites for energy production.

Although solar energy production may be an attractive use for some of the parcels in project area, there are important considerations before moving forward. *Table 2-7* shows considerations that the New York, NY law firm of Carter, Ledyard & Millburn LLP, suggests are critical to successfully siting a solar facility on a land previously utilized as a landfill.

Table 2-6: EPA-Designated Potential for Energy Generation

Site Name	City	EPA Designated Potential Based on Resource Available				
		Wind Potential	DNI Solar Potential	Non-Grid PV Solar Potential	Biopower Potential	Biorefinery Potential
Leavens Awards Inc.	Attleboro	Poor	Moderate	Good	Outstanding	Outstanding
Walton & Lonsbury	Attleboro	Poor	Moderate	Good	Outstanding	Outstanding
Nu-Style Company, In. (aka Armstrong Property)	Franklin	Poor	Moderate	Good	Outstanding	Outstanding
HATHEWAY & PATTERSON	MANSFIELD	Poor	Moderate	Good	Outstanding	Outstanding
Reliable Electro Plating	Norton	Poor	Moderate	Good	Outstanding	Outstanding
SHPACK LANDFILL	NORTON/ATTLEBORO	Poor	Moderate	Good	Outstanding	Outstanding
NORWOOD PCBS	NORWOOD	Poor	Moderate	Good	Outstanding	Outstanding
Seekonk Mfg	Seekonk	Poor	Moderate	Good	Outstanding	Outstanding
F. B. Rogers	Taunton	Poor	Moderate	Good	Outstanding	Outstanding
Parcel GA	Taunton	Poor	Moderate	Good	Outstanding	Outstanding
Robertson on the River	Taunton	Poor	Moderate	Good	Outstanding	Outstanding
Taunton LF	Taunton	Poor	Moderate	Good	Outstanding	Outstanding
BLACKBURN & UNION PRIVILEGES	WALPOLE	Poor	Moderate	Good	Outstanding	Outstanding
Former Doug's Texaco	Wrentham	Poor	Moderate	Good	Outstanding	Outstanding
The Foot-The Toof	Wrentham	Poor	Moderate	Good	Outstanding	Outstanding

Source: EPA Brownfield Renewable Energy Database

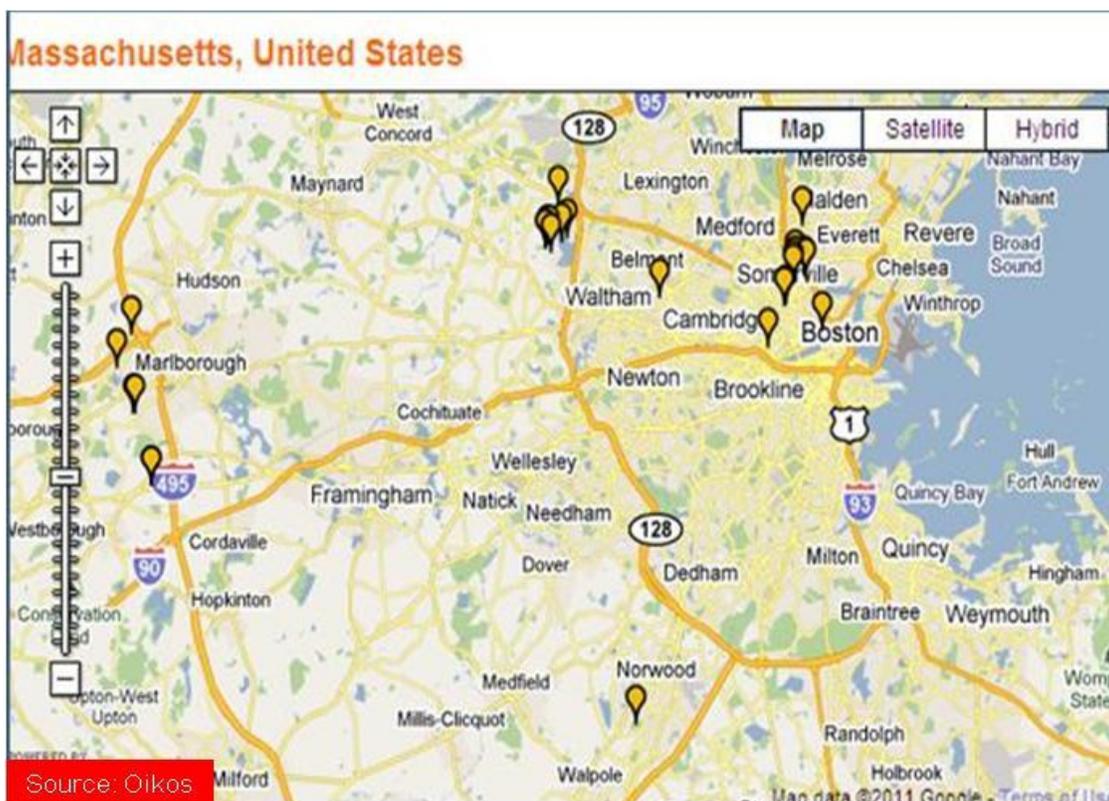
Table 2-7: Critical Considerations for Site a Solar Facility on Former Landfill

<p>Features of an Attractive Landfill Site</p> <ul style="list-style-type: none"> ▪ Closed and capped in accordance with requirements ▪ Contents already settled and able to bear weight of solar arrays sitting on rails ▪ No federal CERCLA obligations or other open compliance items ▪ Large flat, graded, unshadowed areas for maximum sun exposure ▪ Methane extracted ▪ Transmission and interconnection access (likely to exist if there has been methane capture) ▪ No major contamination, leaks, or groundwater intrusion ▪ Receptive site owner, local officials and neighbors <p>Source: Carter, Ledyard and Millburn</p>	<p>Challenges of Landfill Siting</p> <ul style="list-style-type: none"> ▪ Small size of some landfills may require several sites, possibly in several different localities, to achieve economies of scale ▪ Permitting criteria for local and state discretionary approvals, including zoning requirements, are uncertain ▪ Cost of environmental review and discretionary approval process ▪ Careful site evaluation needed to avoid problematic sites and portions of sites ▪ Community concerns ▪ Liability must be allocated between site owner and project developer ▪ Financial assurances needed for project ▪ Compliance record should be clean
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Data Centers / Carrier Hotels

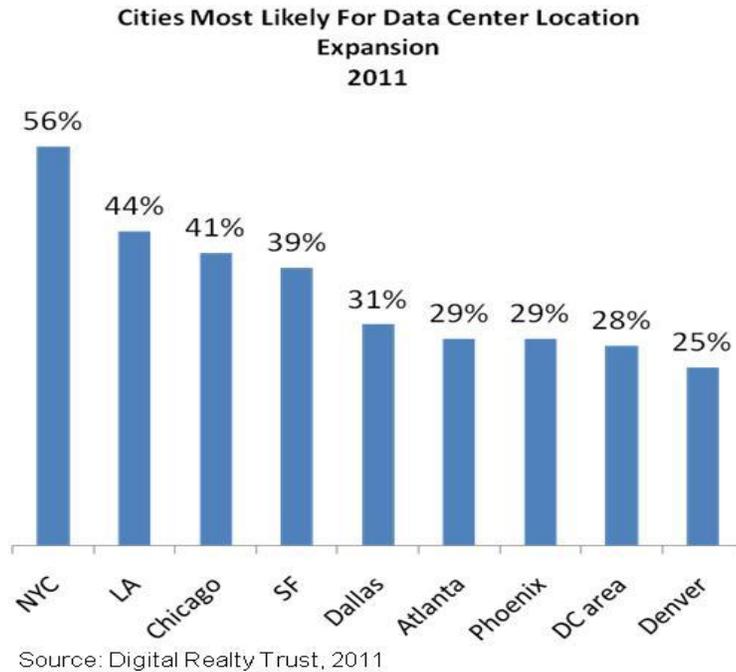
Growth in web applications, digital communication and media technologies is creating an increased need for storage and connection facilities. A critical element to the success of a data center/switch operation or carrier hotel is access to multiple telecom providers. The 22 data centers in eastern Massachusetts are located near major fiber network corridors (see *Figure 2-10*).

Figure 2-10: Data Centers in Eastern Massachusetts



Over the last several years, speculative construction added substantially more capacity than was demanded. In addition changes in compression and storage technology allowed existing footprints to handle the additional growth in data. According to Digital Realty Trust, a real estate investment trust that tracks the data storage and carrier hotel real estate business, data center expansion appears to be restarting. However, based on their survey of potential data customers, Boston is not considered a prime location for expansion (see *Figure 2-11*).

Figure 2-11: Cities Likely to Expand Data Centers



Based on results of the survey, 60 percent of data center companies with definite expansion plans are likely to lease space from existing providers. This means that current locations will have a competitive advantage for leasing expansion space.

Moreover, cloud computing and virtualization could dramatically impact dedicated data center construction. The increasing use of cloud computing models, particularly by web-oriented companies, implies that existing locations with compression and digitization technologies get “locked in” due to existing infrastructure. This reinforces that expansion space is likely to be leased from existing providers rather than create additional data centers with their significant telecommunications, powering and cooling requirements. A countervailing force could be the growth in electronic health records and the data center requirements for those services, but this avenue is still evolving and should be monitored.

Retail and Hospitality

Retail and hospitality type uses were not examined in depth for the following reasons:

- The survey quickly identified a substantial amount of retail capacity in the immediate vicinity.
- Retail capacity represents a full range of retail mix from local retail to chain store discount shopping to branded consumer and luxury retail.
- Close proximity to Patriots Place and the Wrentham Outlets leaves little opportunity in the marketplace for developing a differentiated retail product.
- The Site is not conducive to a major retail development or lifestyle center given its location compared to more attractive options on main thoroughfares.
- The Site is not likely to be attractive to a major chain hotel group given the lack of both visibility from major traffic corridors and proximity to major employment centers.

Summary

Based on the analysis of market activity and the above review of specific industries, the most likely users of the Main Street/Route 1 Industrial Park are light industrial, transportation, equipment rental, construction services or materials, renewable energy, material recycling, flex space, and/or back office uses. For these users, optimal building size is a floor area ranging from 25,000 to 75,000 sf. Having adequate area to accommodate future expansion is also an attractive feature in the competitive marketplace.



Chapter 3: Preliminary Concept Plans

In order to fully understand the Site's physical characteristics, regulatory implications and development potential, BSC prepared two preliminary Concept Plans. This approach allows comparative examination of the carrying capacity of the Site. Through this process, the Town and property owners can review the dynamic interrelationship of Site conditions, regulatory provisions and development objectives, and understand how all factors influence the Site's development potential.

3.1 Key Considerations for Preliminary Concepts

Key considerations for developing Concept Plans include existing conditions, Site development concerns, market conditions and public realm concerns.

Existing Conditions

The Study Area's existing conditions significantly influence planning and prospective uses. For example, Cedar Swamp wetland resource area and a 100 year flood zone surround the Site's perimeter. Interior wetland resource areas within the Site are owned by the Town of Walpole. Therefore, the proposed Concept Plans place structures and parking areas away from, these resource areas and associated buffer zones to avoid potential adverse impacts and permitting obstacles.

While the Site is primarily zoned Industrial and Limited Manufacturing, the Water Resources Overlay Protection District places limits on certain uses and building lot coverage for uses not connected to public sewer. Since most of the Study Area is not served by sewer, the use limitations could inhibit development potential.

Existing conditions for Areas A and B were discussed separately in Chapter 1: Site Overview because they are quite distinct from each other. Area A is already very developed, with two roadways and a number of businesses. Opportunities lie predominantly in maintaining the existing businesses, filling vacancies in built structures, and build-out of the remaining undeveloped parcels such that highest and best use is realized.

Area B is highly disturbed by previous landfill activities, but is predominantly undeveloped and under-utilized. There are significant concerns regarding the potential for hazardous material associated with historic landfill use, but no on-site testing has been undertaken to-date (see Site Development Concerns, below).

Site Development Concerns

Utilities: Area A and Area B have the same access to water, gas, electrical, etc., but sewer is only available to a portion of Area A. However, in order to sewer the remainder of Area A and all of Area B, a new sewer extension and pump station is required.

Two options for extending the sewer service were examined and are shown as *Figures 3-1* and *3-2*. As previously noted in Chapter 1 the extension of sewer service will require the construction of a pumping station and a force main to connect with the existing sewer service area. This is because the Study Area is downgradient of the existing sewer mains. *Figure 3-1* illustrates the provision of sewer to the entire Site with a pumping station located at the intersection of Main Street and Industrial Road, which is central to the proposed service area and would require the construction of a force main on Main Street. *Figure 3-2* depicts the provision of sewer service to the Industrial Park only with a pumping station located at the intersection of Industrial and Production Roads, which is central to the proposed service area and would require the construction of a force main on Production Road. The costs associated with the two sewer extension options are shown on *Tables 3-1* and *3-2*.

The cost differential is \$549,000 of which \$70,000 can be attributed to the size of the pumping station, the bulk of the additional cost is associated with the increased linear footage of sewer line. It should also be noted the cost does not include engineering and design which is estimated at \$35,000.

Figure 3-1: Sewer Service to Entire Site

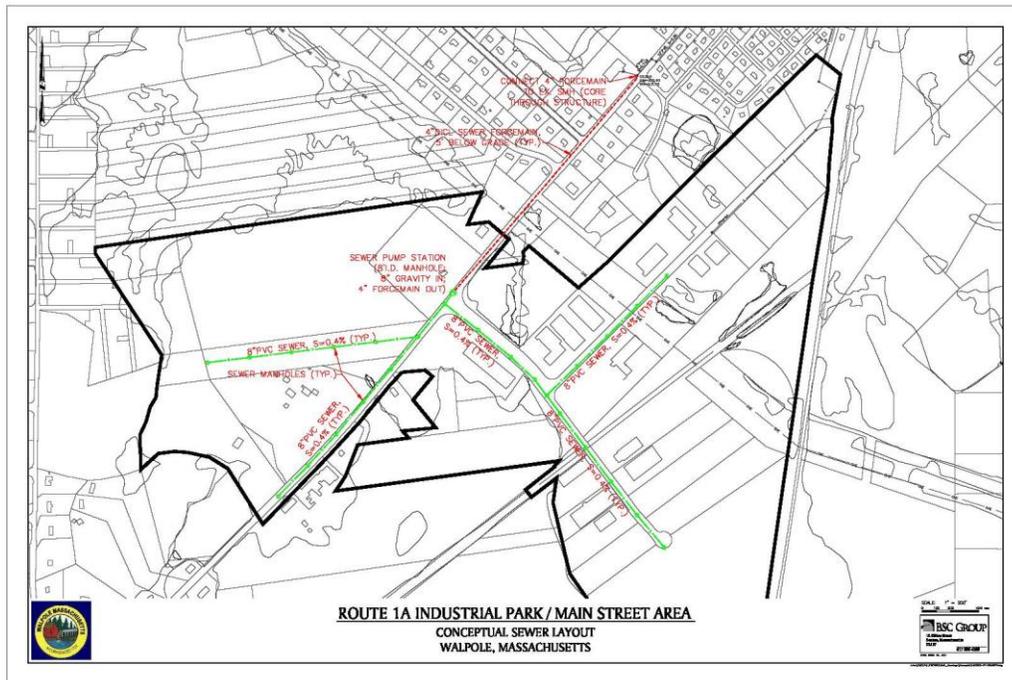


Figure 3-2: Sewer Service to Industrial Park

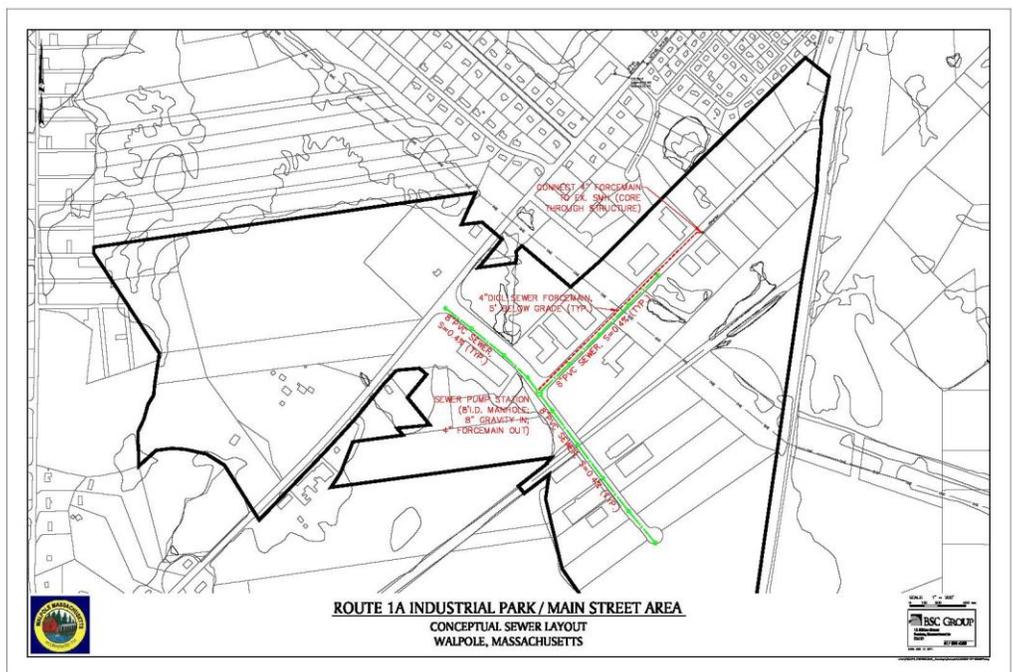


Table 3-1: Cost Summary for Sewer Service to Entire Site

ENGINEER'S OPINION OF COST

Project: Route 1A Industrial Park
 Location: Walpole, Massachusetts
 Subject: Conceptual Sewer Construction



15 Ellens Street
 Boston, MA 02127
 Ph: 617.896.4300 Fx: 617.896.4301

Checked: D. Rinaldi
 Date: 3/28/2011

ENGINEER'S OPINION OF COST

Item No.	Item Description	Quantity	UOM	Unit Cost	Total
1 SELECT DEMOLITION					
1a	Sewerout Pavement	18,040	LF	\$ 2.00	\$ 36,080.00
1b	Remove & Dispose of Pavement	45,100	SF	\$ 1.00	\$ 45,100.00
2 SANITARY SEWER INFRASTRUCTURE IMPROVEMENTS					
2a	8" PVC SDR35 Sewer Pipe - Including Excavation and Backfill	7,000	LF	\$ 100.00	\$ 700,000.00
2b	Precast Sanitary Sewer Manhole - Including Excavation and Backfill	25	EA	\$ 5,000.00	\$ 125,000.00
3 PUMP STATION AND FORCEMAIN					
3a	Packaged Sewer Pump Station - Including Excavation and Backfill	1	EA	\$ 250,000.00	\$ 250,000.00
3b	4" DI/CL Forcemain Pipe - Including Excavation and Backfill	2,020	LF	\$ 110.00	\$ 222,200.00
4 SURFACE REPAIR					
4a	Trench Pavement	1,200	TON	\$ 90.00	\$ 108,000.00
5 POLICE DETAILS					
5a	Allowance for Police Details	800	HRS	\$ 45.00	\$ 36,000.00
6 MOBILIZATION AND DEMOBILIZATION					
6a	Mobilization (3%)	1	LUMP	\$ 45,670.00	\$ 45,670.00
6b	Demobilization (2%)	1	LUMP	\$ 30,450.00	\$ 30,450.00
				Total Construction	1,639,130.00
				10% Contingency	163,913.00
				Say \$	1,804,000.00

Assumptions:

- All sewer/forcemain trenching approximately 5' wide and 5' deep.
- No rock excavation or blasting included.
- Police details based on installation of 100' pipe per day. Slower installations require more police time.
- Trench paving only. Repaving entire streets increases costs.
- Electrical power for pump station is available near proposed location.
- Based on limited available topography, it appears site can flow via gravity sewer to proposed pump station.

Table 3-2: Cost Summary for Sewer Service to Industrial Park

ENGINEER'S OPINION OF COST

Project: Route 1A Industrial Park
 Location: Walpole, Massachusetts
 Subject: Conceptual Sewer Construction



15 Elm Street
 Boston, MA 02127
 Ph: 617.898.4300 Fx: 617.898.4301
 Calc.: D. Rinaldi
 Checked:
 Date: 6/13/2011

ENGINEER'S OPINION OF COST

Item No.	Item Description	Quantity	UOM	Unit Cost	Total
1	SELECT DEMOLITION				
1a	Sawcut Pavement	11,400	LF	\$ 2.00	\$ 22,800.00
1b	Remove & Dispose of Pavement	28,500	SF	\$ 1.00	\$ 28,500.00
2	SANITARY SEWER INFRASTRUCTURE IMPROVEMENTS				
2a	8" PVC SDR35 Sewer Pipe - Including Excavation and Backfill	4,000	LF	\$ 100.00	\$ 400,000.00
2b	Precast Sanitary Sewer Manhole - Including Excavation and Backfill	13	EA	\$ 5,000.00	\$ 65,000.00
3	PUMP STATION AND FORCEMAIN				
3a	Packaged Sewer Pump Station - Including Excavation and Backfill	1	EA	\$ 250,000.00	\$ 250,000.00
3b	4" DICL Foremain Pipe - Including Excavation and Backfill	1,700	LF	\$ 110.00	\$ 187,000.00
4	SURFACE REPAIR				
4a	Trench Pavement	800	TON	\$ 90.00	\$ 72,000.00
5	POLICE DETAILS				
5a	Allowance for Police Details	500	HRS	\$ 45.00	\$ 22,500.00
6	MOBILIZATION AND DEMOBILIZATION				
6a	Mobilization (3%)	1	LUMP	\$ 31,430.00	\$ 31,430.00
6b	Demobilization (2%)	1	LUMP	\$ 20,960.00	\$ 20,960.00

Total Construction 1,140,897.00
 10% Contingency \$ 114,089.70
Say \$ 1,255,000.00

Assumptions:

- All sewer/forcemain trenching approximately 5' wide and 5' deep.
- No rock excavation or blasting included.
- Police details based on installation of 100' pipe per day. Slower installations require more police time.
- Trench paving only. Repaving entire streets increases costs.
- Electrical power for pump station is available near proposed location.
- Based on limited available topography, it appears site can flow via gravity sewer to proposed pump station.



Historic Conditions and Uses: Area B is a former wetland used as a landfill for municipal solid waste and construction debris. According to MassDEP records, the landfill was never capped. There is a lack of documentation with respect to the nature of the specific fill material and no known testing has been performed on this portion of the Site. Therefore, the presence and extent of contaminants are unknown. Under these conditions, the potential remediation requirements and capping costs are difficult to estimate. Under the Massachusetts Contingency Plan no lender will place any debt on such a property unless and until it has obtained environmental clearance through an Environmental Site Assessment. However, there is a disincentive on the part of the owners to perform such testing because if contaminants are discovered the condition must be reported and the current property owner must initiate the requisite remediation actions or impose activity use limitations (AUL's) or some combination thereof.

Ownership: As all of these properties are served by existing roadways, there is no need for parcel assemblage or subdivision of property as a prerequisite for development. This is a benefit of the Site.

The bulk of the developable land is controlled by four ownership entities, as shown in *Figure 3-3*. In Area A, the developable land on Production Road is owned by the DiSangro family and is comprised of 11 remaining lots of the original subdivision. At the end of Industrial Road, there is a vacant 19.77-acre parcel owned by Sam Lorusso and Sons which is currently used as a contractor's yard. The DiSangro lots are served by public sewer, but the Lorusso property is not.

The southern side of Area B is owned by Recycling Walpole LLC and operated as Allied Recycling. The north side of Area B is owned by Robert J. Potheau and operated as an automobile reclamation business. The property has been leased to Recycling Walpole or an affiliate with an option to purchase. According to Recycling Walpole LLC, they wish to continue and expand the recycling business on their present property and would be open to a redevelopment or reuse of the Potheau property should an opportunity present itself.

Market Conditions

The Study Area is currently home to many existing businesses. The first tenant of economic development is to retain and build upon the existing economic base. To that end, the conceptual plans for the Site recognize and accommodate the current and anticipated future needs of existing businesses. No major redevelopment of their properties is proposed. The single exception to this is Hale Trailer, which has obtained Site Plan approval to construct a new operations building.

Based on the Market Analysis prepared by Ninigret Partners, the most likely users of the Main Street/Route 1 Industrial Park are light industrial, transportation, equipment rental, construction services or materials, renewable energy, material recycling, flex space, and/or back office uses. For these users, optimal building size is a floor area ranging from 25,000 to 75,000 sf. Having adequate area to accommodate future expansion is also an attractive feature in the competitive marketplace.

Public Realm Issues

The condition of the public realm in and around the Site has deteriorated over the years and conveys rather an unkempt image for the area. This not only discourages potential businesses from considering this location, but also reflects negatively on the community. The pavement, curbing and sidewalks have reached their useful life. Strategic improvements would enhance the aesthetics of the Site, increasing its marketability.

The possibility of reducing the width of Industrial Road has been discussed. Advantages include increased development area and reduced stormwater flows. A disadvantage is that reducing roadway width will require relocating the existing stormwater drainage system for the first 900 feet of Industrial Road. This action would trigger the MassDEP Stormwater management policies, resulting in increased permitting and overall construction costs.

3.2 Concept Plans

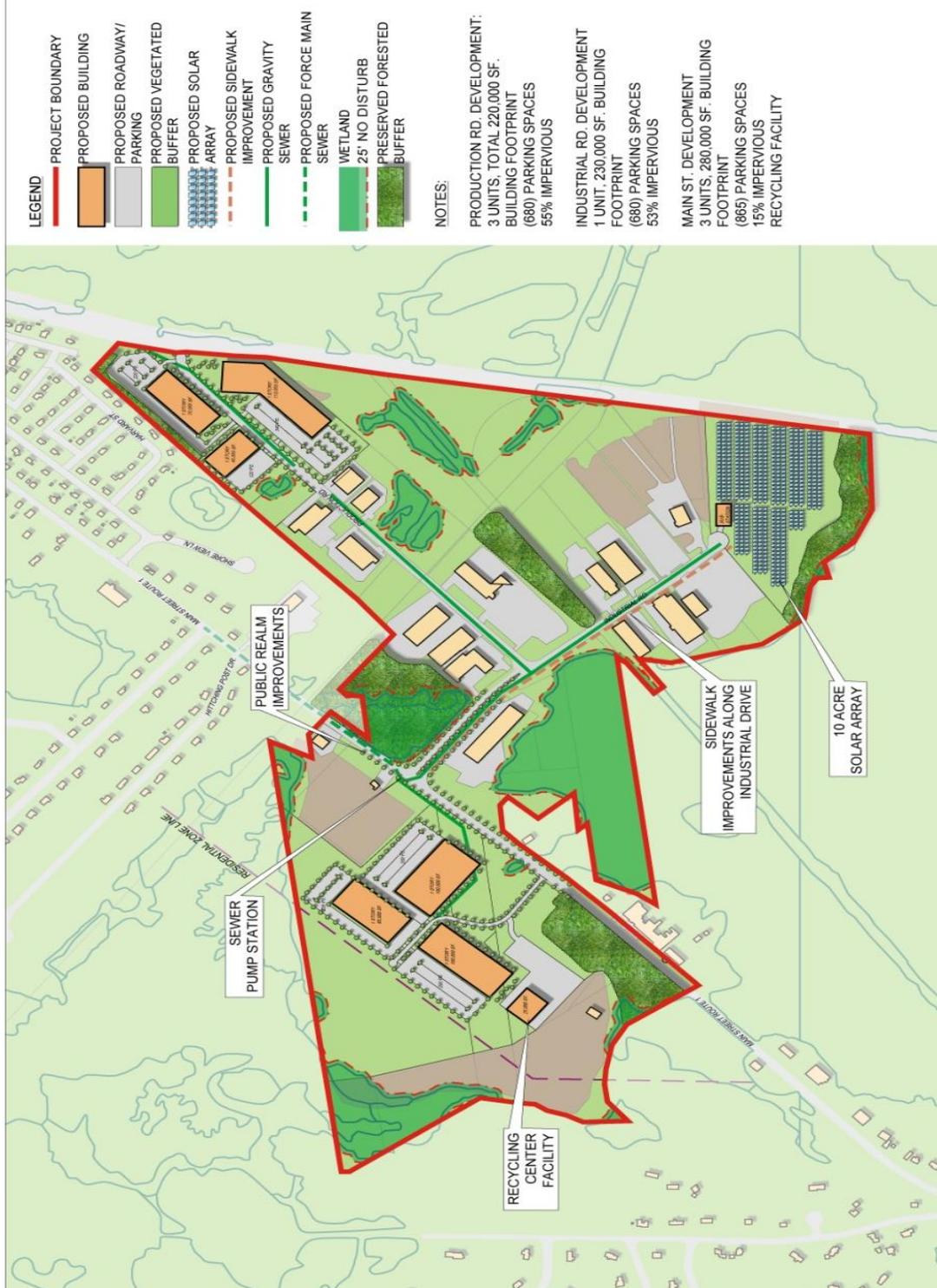
The two development plans, referred to as Concept A and Concept B, examine Site development alternatives that integrate above-described considerations. Concept A incorporates the extension of sewer service to Industrial and Production Roads (see *Figure 3-4*) while Concept B is predicated on sewer being extended to serve the entire Site (see *Figure 3-5*). Both Concept Plans assume a parking ratio of three spaces per 1,000 sf of building footprint. As the required parking ratios in the zoning bylaw vary depending on building use and projected number of employees, this ratio represents a blend of the most likely uses and anticipated employees. Where buildings are proposed it is assumed that public sewer service is available in order to comply with lot coverage requirements.

Both Concept Plans include public realm improvements to enhance curb appeal and make the Site more competitive for prospective businesses. On Main Street, improvements consist of streetscape and street trees. On Industrial Road, improvements include landscaping at the main entrance as well as streetscape and street trees along Industrial Road. Additionally, roadway improvements consisting of new pavement, curbing, and sidewalk are proposed along the entire length of Industrial Road.

Figure 3-4: Concept A



Figure 3-5: Concept B



Concept A

Concept A proposes an extension of the sewer line to serve Industrial and Production Roads only. A new sewer pump station is located at the intersection of Production and Industrial Roads. Wastewater will flow by gravity to the pump station, and then sent via a force main to the existing gravity sewer line on Production Road.

On Production Road, buildings are proposed on ten undeveloped subdivision lots with a combined building area of 200,000 square feet. The 19.77 acre lot at the terminus of Industrial Road contains a 230,000-square foot building with 680 parking spaces. Concept A presumes that Area B will resolve the potential environmental issues through remediation and an Activity and Use Limitation (AUL) (if appropriate) which involves a deed restriction limiting future Site uses that are appropriate to the on-site conditions.

A solar photovoltaic array is proposed on the bulk of the Goldie's property, and a state of the art recycling facility is proposed for the Allied Recycling site. These uses are not significant waste water generators and are compatible with typical AUL's. They represent a move towards the new market economy fostering renewable energy production and materials.

Concept B

In Concept B, the public sewer system is extended to serve the entire Site. A pump station located at the intersection of Main Street and Industrial Road will receive wastewater via gravity before pumping flows through a force main to the existing sewer line on Main Street. On Production Road, the ten approved lots are consolidated into three building sites with a total of 220,000 sf. At the end of Industrial Road, a 1.3 Mwh photovoltaic solar array is proposed as a mid-term use of the property. For purposes of discussion, Concept B assumes that the extent of remediation on Main Street is far less than anticipated, and depicts three buildings totaling 280,000 sf on the Goldie's site and a recycling facility on the Allied Recycling Site. The extension of the sewer line and favorable results of environmental testing are necessary in order for Concept B to become a reality,

3.3 Comparison of Options

As shown in *Table 3-3: Concept Comparison*, Concepts A and B include building area of 430,000 and 500,000 square feet, and 1,355 and 1,545 parking spaces, respectively. Concept A proposes a 3.2 Mwh solar array on Area B, while Concept B depicts a 1.3 Mwh solar array at the end of Industrial Road. Concept B requires comparatively more capital investment primarily due to the larger sewer expansion area and costs associated with remediation and capping the former landfill/fill area to meet MCP standards. Section 4 includes additional discussion of these cost estimates.

Table 3-3: Concept Comparison

Concept A

	Buildings	Building Area(sf)	Parking Spaces	Specialty Use(s)
Production Road	10	200,000	675	
Industrial Road	1	230,000	680	
Main Street/Area B	1	NA	NA	Solar Array (3.2 Mwh)/Recycling Facility
Totals	12	430,000	1,355	

Concept B

	Buildings	Building Area(sf)	Parking Spaces	Specialty Use(s)
Production Road	3	220,000	680	
Industrial Road	NA	NA	NA	Solar Array(1.3 Mwh)
Main Street	3	280,000	865	Recycling Facility
Totals	6	500,000	1,545	



Chapter 4: Preferred Concept

4.1 Key Considerations for the Preferred Concept

Key considerations for developing preliminary concept plans include existing conditions, Site development concerns, market conditions and public realm concerns. These key issues, discussed in Chapter 3, were highlighted in the first of three public forums conducted for this study.

Existing conditions for Areas A and B are quite distinct from each other. Area A is already very developed, with two roadways and a number of existing structures and businesses. Opportunities lie predominantly in maintaining the existing businesses, filling vacancies in built structures, and build-out of the remaining undeveloped parcels such that highest and best use is realized.

In terms of utilities, both areas have the same access to water, gas, electrical, etc., but sewer is only available to a portion of Area A. To sewer the remainder of Area A, as well as Area B, a new sewer extension and pump station is required.

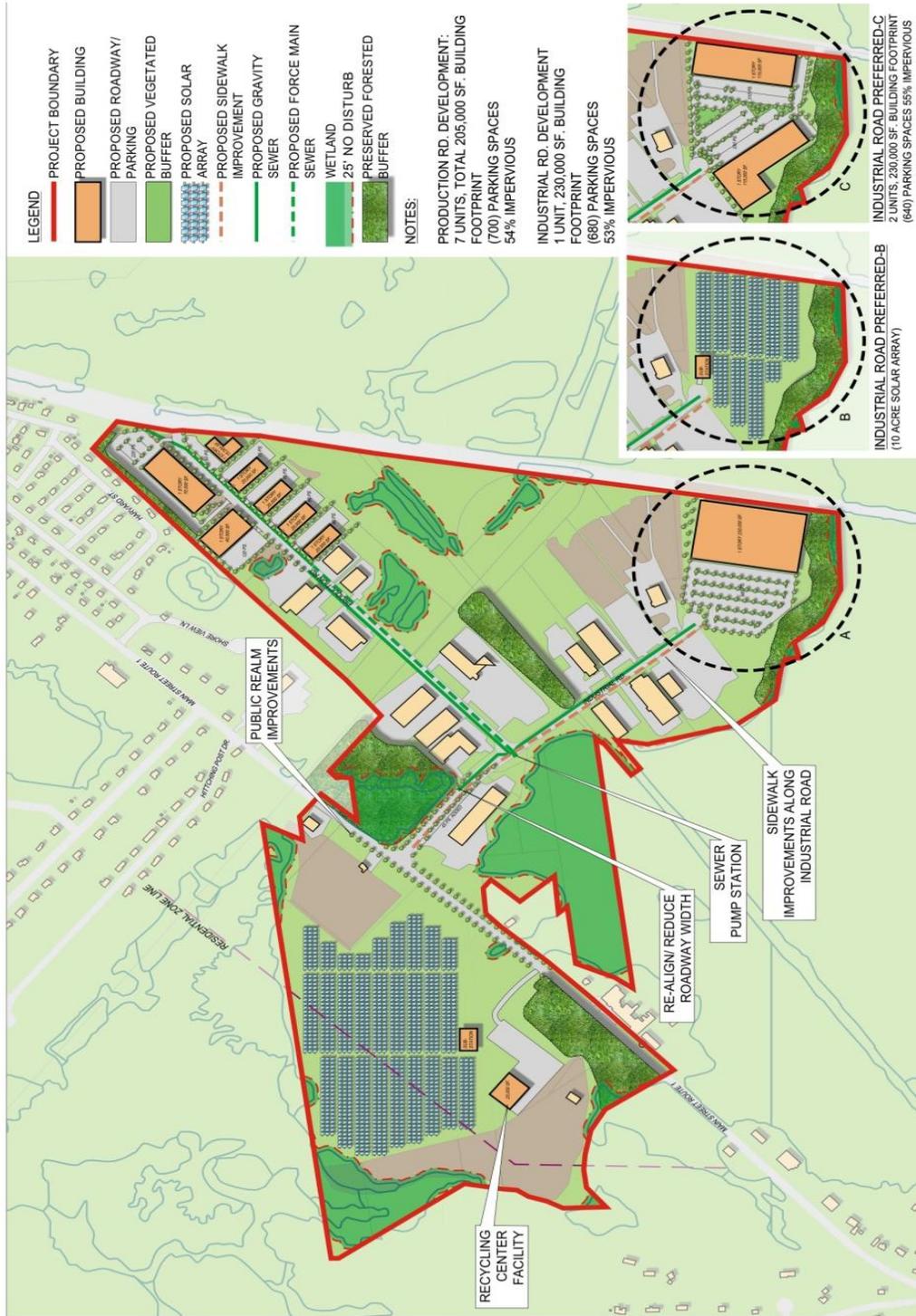
Area B is highly disturbed by previous landfill activities, but is predominantly undeveloped and under-utilized. There are significant concerns regarding the potential for hazardous material associated with historic landfill use, but no on-site testing has been undertaken to-date.

4.2 Preferred Concept Plan

Reviewing the two development Concept Plans in Section 3 provided an opportunity to consider how each plan is influenced by existing conditions, potential impacts and cost implications. While Concepts A and B are similar in terms of building area, they differ with respect to proposed uses, public improvements and presumed environmental remediation requirements. It should be also noted that there is a certain amount of interchangeability in the lot allocations and build-out between the options.

Concept Plans A and B were presented at the second public forum, and comments were carefully considered. As a result of integrating those comments into the design, a modified plan, referred to as the Preferred Concept Plan, was developed and presented at the third Public Forum. *Figure 4-1* presents the Preferred Concept Plan for Site development.

Figure 4-1: Preferred Concept Plan, Options A, B & C



In the Preferred Concept Plan, Area B is developed as proposed in Development Option A, with a solar array on the Goldie’s Site and a recycling facility on the Allied Recycling property. Because these uses will not generate significant wastewater, no sewer extension to Area B is recommended. On Production Road seven new buildings are proposed which reflect the range of large and small building sizes from Concept A and B. There are three potential scenarios for development on the 19.77 acre parcel at end of Industrial Road. These are labeled on the Preferred Concept Plan as Options A, B, and C.

4.3 Preferred Concept Plan Overview

An overview of the Preferred Concept Plan is presented in *Table 4-1*. In all three scenarios, seven new buildings with a combined building area of 205,000 sf will be located on the undeveloped segment of Production Road. In addition, all three scenarios proposed Solar Array 3.2 Mwh & Recycling Facility for Area B.

Table 4-1: Preferred Concept Plan Overview

	Preferred Concept Plan w/Option A	Preferred Concept Plan w/Option B	Preferred Concept Plan w/Option C
Number of Buildings:			
<i>Production Road</i>	7	7	7
<i>Industrial Road</i>	1	NA	2
<i>Main Street (Area B)</i>	NA	NA	NA
TOTAL BUILDINGS	8	7	9
Building Area (sf):			
<i>Production Road</i>	205,000	205,000	205,000
<i>Industrial Road</i>	230,000	NA	230,000
<i>Main Street (Area B)</i>	NA	NA	NA
TOTAL AREA (sf)	435,000	205,000	435,000
Parking Spaces:			
<i>Production Road</i>	700	700	700
<i>Industrial Road</i>	680	NA	640
<i>Main Street (Area B)</i>	NA	NA	NA
TOTAL SPACES	1,380	700	1,340
Specialty Uses:			
<i>Production Road</i>			
<i>Industrial Road</i>		Solar Array 1.3 Mwh	
<i>Main Street (Area B)</i>	Solar Array 3.2 Mwh & Recycling Facility	Solar Array 3.2 Mwh & Recycling Facility	Solar Array 3.2 Mwh & Recycling Facility

As noted above, seven buildings ranging in size are proposed on Production Road. There are three options for the lot located at the end of Industrial Road; Options A and C propose 230,000 sf of building area contained in one or two buildings, respectively. Option B proposes the installation of a 1.3 Mwh solar array facility on the property.

4.4 Sewer Service

The Preferred Concept Plan proposes to extend sewer service to the properties on Industrial and Production Roads, which costs about \$600,000 less than providing sewer service to the entire Site. Placing the pump station on Industrial Road offers advantages over siting the facility on Main Street. If sewer service is extended to Area B, the unsewered adjoining properties and neighborhoods may wish to connect to the system, thus increasing the cost and complexity of the proposed action. Additionally, given the former and current uses and filled nature of Area B, there is a high probability that development potential will be limited due to remediation and capping costs as well as AULs. Hence future development may not generate wastewater in sufficient quantities to justify the cost outlay for the sewer extension.

Although the cost estimates include sewer service for all concepts, if Concept B is implemented, then sewer service may not be necessary. The solar array at the end of Industrial Road will not generate wastewater in quantities that require sewer service. However, while this approach reduces capital costs, there is a significant drawback in that the lack of sewer service in the balance of the Industrial Park would limit the expansion potential for existing businesses.

4.5 Environmental

As previously noted, Area B was previously part of Cedar Swamp and used as a disposal Site for municipal solid waste and construction debris. The presence of contamination is unknown. Under the Massachusetts Contingency Plan (MCP), if contamination is discovered it must be reported and the property owner is responsible for the requisite remediation. This creates a disincentive on the part of the current owners to perform testing. Additionally MassDEP records list the property as a former landfill that has not been capped. Unless and until these issues are resolved no significant change in use is anticipated as no lender will finance any development on the property without a satisfactory environmental assessment and any new development would trigger permitting thresholds that would also require a satisfactory environmental assessment. The environmental uncertainty in Area B decreases the likelihood of new development on Main Street.

4.6 Public Realm

The condition of the Public realm in and around the Study Area has deteriorated over the years and presents a negative image for the area. This discourages potential users in considering this location for their business and reflects negatively on the community. Main Street/Route 1A provides the only access point.

Industrial Road is an accepted town way. The pavement, curbing and sidewalks have reached their useful life. Route 1A, the Industrial Park entrance and Industrial Road could be visually improved by strategic tree and vegetation plantings. Industrial Road should be repaved, with new curbing, improved lighting and sidewalks.

During the planning process of for this study, the issue of reducing the first 900 feet of Industrial Road's ROW and pavement width was raised. The ROW is 100 feet and the pavement width is approximately 74 feet. The width reflects the original intent to extend Industrial Road through Cedar Swamp to connect with Route 1. Current wetland regulations preclude such practices and such a connection cannot be sought. Thus the width of the roadway may be wider than actually necessary.

To bring the roadway to a width more consistent current conditions, abandonment of a portion of the ROW and a reduction of the pavement width was considered. Such a reduction would decrease the amount of paved area and resulting runoff rates, and might also create some additional land that could be added to an existing business. If this option is pursued, the existing storm water drainage system for the first 900 feet of Industrial Road would need to be relocated. The relocation of stormwater structures would trigger MassDEP's stormwater management regulations (as implemented by the Wetlands Protection Act and Clean Water Act) and require additional permitting and drainage changes that would increase the cost of construction.

4.7 Cost Estimates

Table 4-2 presents a detailed summary of the estimated cost to implement the Preferred Concept Plan.

Table 4-2: Preferred Concept Plan Cost Estimates

Item	Unit	Unit Price	Repave Industrial Road as is		Reduce Industrial Road ROW	
			Quantity	Price	Quantity	Price
Design/Eng	ea	10%	1	\$61,898	1	\$100,399
Gravel Base	sy	\$7.00			10,800	\$75,600
3" Road Binder Course	sy	\$11.55			10,800	\$124,740
1.5" Top Coat(road)	sy	\$5.90	34,800	\$205,320	27,600	\$162,840
2" Sidewalk Binder	sy	\$14.00			1,800	\$25,200
1" Top Coat(sidewalk)	sy	\$7.00	3,833	\$26,831	3,833	\$26,831
Bit Curbing	lf	\$5.00	4,800	\$24,000	4,800	\$24,000
Adjust Manhole Rims	ea	\$300.00	8	\$2,400		
Relocate Drainage Structures	ea	\$2,400.00			8	\$19,200
Drainline	lf	\$34.00			1,000	\$34,000
Road Milling	sy	\$7.00	34,800	\$243,600	16,800	\$117,600
Sidewalk Milling	sy	\$7.00	3,833	\$26,833	2,333	\$16,333
Road Demo	sy	\$15.00			19,366	\$290,490
Sidewalk Demo	sy	\$15.00			1,500	\$22,500
Entrance Landscape	ea	\$15,000.00	1	\$15,000	1	\$15,000
Main Street Trees	ea	\$35,000.00	1	\$35,000	1	\$35,000
Industrial Road Trees	ea	\$15,000.00	1	\$15,000	1	\$15,000
Stormwater Management				\$25,000		\$200,000
Street Lighting	ea	\$5,000.00	5	\$25,000.00		\$25,000.00
Subtotal				\$705,883		\$1,329,734
Sewer Extension		\$1,300,000.00	1	\$1,300,000	1	\$1,300,000
Project Management	3%			\$560,176		\$78,892
Contingency	10%			\$200,588		\$262,973
Total				\$2,266,647		\$2,971,599



Chapter 5: Action Plan

5.1 Implementation Considerations

There are a number of factors which need to be considered relative to moving forward with the preferred concept Plan or any redevelopment of the Industrial Park/ Main Street project area. Resolution of these items will require a public private partnership to share the leadership, responsibility and rewards.

5.1.1. Regulatory

There are a number of regulatory issues which affect the implementation of the Preferred Concept Plan. The existing zoning of Industrial in the Industrial Park and Limited Manufacturing and Rural Residential on Main Street does allow a multitude of uses consistent with the future vision of the Concept Plan. However, the existing Water Resource Protection Overlay District imposes development limitations (e.g., in terms of use and lot coverage) on parcels that rely on on-site septic systems. Although solar photovoltaic arrays are a prominent component of the Concept Plan, the Walpole Zoning By-laws currently do not have a provision allowing this type of use. The Town relies on a sole source aquifer for its water which is regulated by MassDEP through a Water Withdrawal permit which sets a ceiling on the amount of water the Town may pump from the aquifer of 3.34 million gallons per day (mgd). MassDEP drafted a proposed new permit with an upper limit of 2.25 mgd. The Town is currently bumping up against the proposed limit. If implemented, the Town would need to consider water conservation efforts and town wide priorities when approving water service to new users.

5.1.2. Environmental

The largest area for future development is located on the Main Street portion of the Study Area (Area B). As previously noted the majority of this area was once part of the Cedar Swamp and has been filled over the years. The nature of the fill is reported to be municipal solid waste and construction debris. According to MassDEP records, the area is classified as a former land fill that has not been capped. More recently the area has been used for auto salvage and metal reclamation uses. Despite being the focus of an EPA-funded study in 2002, there are no records of any environmental assessments of the area. The current businesses exist as pre-existing non conforming uses. Any reuse or redevelopment of the area will require a resolution of the environmental uncertainty which hangs over the property. In other words, the extent of contamination present on the Site needs to be determined in order to initiate remediation actions. However, there is a disincentive on the part of the current owners to perform any testing because the

Massachusetts Contingency Plan (MCP) requires the current owner of property to initiate mitigation measures in the event contamination is found on the property. Redevelopment within Area B is unlikely unless testing and subsequent remediation takes place, but property owners see undertaking such testing as a risk.

5.1.3. Public Realm Improvements

The public realm plays an important role in establishing a context or sense of place that sets the tone for the public and market perception of a business area. The Preferred Conceptual Plan identifies a number of improvements that enhance the public realm for the Study Area. Street tree planting and landscaping improvements are proposed for Route 1A/Main Street. The entrance to the Industrial Park is targeted for streetscape and landscape improvements. Industrial Road, which is an accepted public way and showing signs of age, is recommended for hardscape and landscape improvements along its entire length to improve its appearance and function. Additionally, the Preferred Concept Plan proposes the extension of public sewer to serve the entire Industrial Park area.

5.1.4. Financial

Many of the aforementioned considerations will require significant capital investments. The source and type of funding will need to be identified and pursued be it local, private, state, or federal, or combination thereof. The Cost benefit associated with the proposed capital improvement needs to be identified and considered in the decision making process.

5.2 Financial Impact Assessment

The financial impacts associated with the proposed Concept Plan have been examined in terms of the total cost of improvements and a projection of the new jobs to be created and the anticipated payback period in terms of increased tax revenues.

Table 5-1 summarizes the estimated costs of the proposed improvements outline in the preferred Concept Plan. The major variable is the treatment of Industrial Road and the reduction of the right-of-way and paved travel way or repaving Industrial Road in place. There is a difference of approximately \$700,000 between the two alternatives. It should be noted that the reduction of the ROW may result in additional revenue from a potential sale of surplus land to abutting property owners. However, for purposes of this analysis, this potential revenue has not been included into the financial analysis.

Table 5-1 Estimated Improvement Costs

	Repave Industrial Road	Reduce Industrial Rd ROW
Industrial Road Improvements	\$705,883	\$1,329,734
Sewer Extension	\$1,300,000	\$1,300,000
Project Management (3%)	\$60,176	\$78,892
Contingency (10%)	<u>\$500,588</u>	<u>\$262,973</u>
Total	\$2,266,643	\$2,971,599

Using the parameters outlined in the Preferred Concept Plan Summary in Chapter 4 for the projected build-out, the number of jobs to be created and anticipated property tax revenue has been calculated as shown in *Table 5-2: Financial Impact Assessment*. Compared to Option B, Options A and C result in significantly more building area, more jobs and a shorter pay-back period. Preferred Option B, which projects 205,000 sf of building area, creates half the number of jobs and has twice the length of payback period.

Table 5-2 Financial Impact Assessment

	Industrial Road Option A&C	Industrial Road Option B
Projected Employment ⁽¹⁾	900-970 Jobs	400-455 Jobs
Estimated Increased Property Tax ⁽²⁾	\$400,200	\$188,600
Payback on Investment		
Repave Industrial Rd	5.6 years	12.0 years
Reduce Industrial Rd ROW	7.4 years	15.7 years
Increased Town Operating Costs	Minimal	Minimal

(1) Based on Job density of 450 sf per job

(2) Based on Walpole Park South assessment data of \$0.92 per sf of building area

It should be noted that the financial impact assessment does not include any job or revenue projections for the photovoltaic solar array uses. Property taxation is critical component of the feasibility of solar power facilities. For example a study in Michigan identified the burden on solar generation is 60 times higher than a nuclear power facility on a per KWH basis. This is largely due to the fact that the amount of MWs generated by a solar facility is relatively low compared to its capital cost of construction; therefore, a relatively high property tax level is spread over fewer KWHs produced. This fact exacerbates the already higher cost of solar power with higher property tax costs. This capital cost barrier has been recognized

by the federal government which has created an accelerated depreciation schedule under federal tax laws.

Massachusetts does not currently have an established method for assessing photovoltaic solar arrays, but is considering several approaches. According to Deputy Commissioner of Revenue, Brenda Cameron, the Commonwealth of Massachusetts is working on preparing informational guideline regulations for these uses. As the cost to generate electricity per kilowatt hour is much more expensive than conventional power plants, taxing them the same way would render them economically unfeasible. The state is currently considering a number of alternative assessment measures:

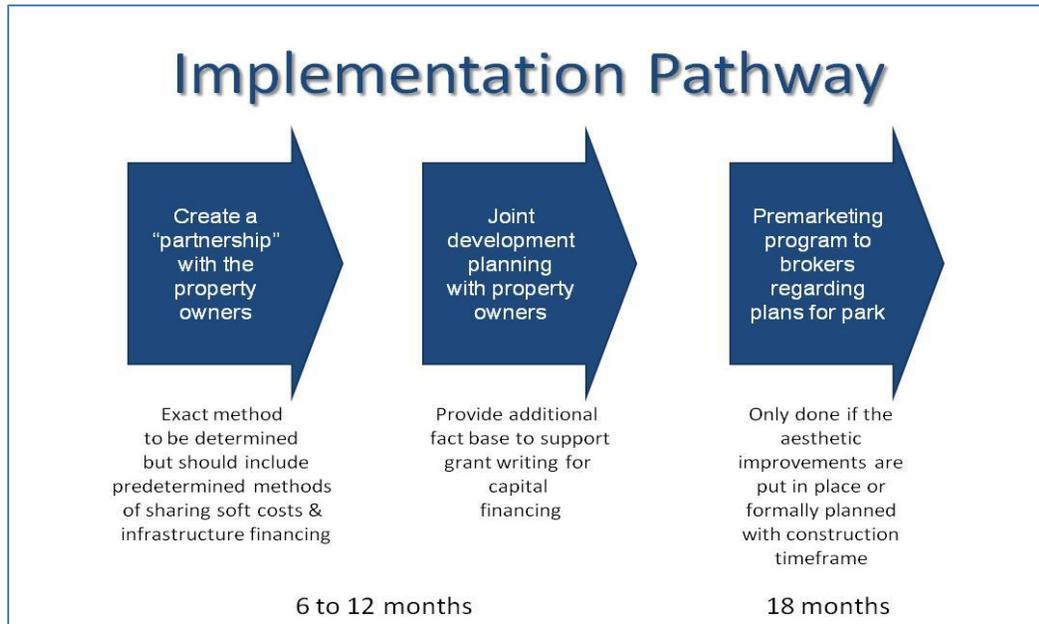
- State Alternative 1: Assessment to be based on the nature of the lease arrangement between the solar operator and the land holder. Property value established by capitalizing the land lease amount.
- State Alternative 2: Assessment to be based on the value of the personal property cost less depreciation.

5.3 Implementation Pathway

The most likely funding sources for the public improvements will place great importance on the “shovel readiness” of the project. In other words, design engineering and permitting should be completed or nearly completed so the project may commence shortly after the funding is awarded. While it represents a small percentage of the overall costs the engineering/design/permitting/ and other soft costs represents a major obstacle to implementation. As there is mutual benefit to be realized by the public and private sector it is recommended a partnership be established among the Town and the property owners to explore cost sharing options for completing the design and engineering tasks necessary to bring the project to “shovel ready” status. *Figure 5-1* outlines the Implementation Pathway and associated time frame.

The remaining critical issue for the development of Area B is the determination of the presence or absence of hazardous material, the uncertainty of which is a barrier for redevelopment. Continuation of the status quo will see the present uses continue as non-conforming uses with little incentive or ability for significant change. Unless the property owners or users are able to provide a satisfactory environmental documentation, financial institutions will not provide financing on the property. Additionally, sale of the property is also limited as no lender will issue a mortgage on the property. Until an environmental assessment is undertaken or contamination migrates to another property which would trigger mandatory environmental assessment, no major changes can be expected in Area B.

Figure 5-1: Implementation Pathway



The Preferred Concept Plan depicts a photovoltaic solar array as a potential use as it represents a use that can co-exist with an environmentally compromised site. However, even this use requires, at a minimum, capping of the portion used as a municipal land fill and resolution of any contamination issues which may be identified as a result of an environmental assessment.

5.4 Funding Sources

There are a number of potential funding sources for underwriting the proposed capital improvements. A common theme of development pathways is the minimum \$150,000 to \$200,000 in capital required to move the project forward. This outlay is needed to prepare engineered plans, perform permitting and seek financing for implementing improvements. As previously discussed both public and private participation may be required. Local, state and federal sources are presented below.

Local Sources

Walpole has recently been faced with tight budget constraints, as is the case for most municipalities. However, there are a number of potential local funding mechanisms worth considering.

Bonding /Betterment Assessments –Part or all of the cost of the proposed extension of sewer service to the Industrial Park may be underwritten with the issuance of a municipal bond which is financed through betterment assessments to all the

property owners who benefit for the service. In Massachusetts, sewer betterments are governed by Chapters 80 and 83 (excluding Sections 1 and 2 of Chapter 80) and are under the jurisdiction of the Department of Revenue.

General Expenditure – The Town may underwrite part of the expenditure through the General Fund. As the General Fund is limited, it is recommended for consideration of upfront design, engineering and other “soft” costs necessary to prepare plans and make the project “shovel ready.”

Tax Increment Finance (TIF) – Locally, the TIF can offer a “TIF agreement,” which would provide an exemption on property taxes on the additional value added to the property. The exemptions can range from 1 to 100 percent added value of property for a period of 5 to 20 years. Such an agreement can be used as an incentive to stimulate private investment and/or contribution towards public improvement costs. The TIF program is tied to job creation and permanent job retention pursuant to Economic Development Incentive Program (EDIIP) requirements.

State Sources

MassWorks - Six state funding programs that have historically underwritten economic development, infrastructure improvements, transportation improvements and job creation have been merged into a single funding program – MassWorks Infrastructure Program (MassWorks). MassWorks provides a one-stop shop for municipalities and other eligible public entities seeking public infrastructure funding to support economic development and job creation. The program represents an administrative consolidation of the six former grant programs listed below:

- Public Works Economic Development (PWED);
- Community Development Action Grant (CDAG);
- Growth Districts Initiative (GDI) Grant Program;
- Massachusetts Opportunity Relocation and Expansion Program (MORE);
- Small Town Rural Assistance Program (STRAP); and
- Transit Oriented Development (TOD) Program.

MassWorks provides public infrastructure grants that support four project types:

- Housing development at density of at least 4 units to the acre (both market and affordable units);
- Transportation improvements to enhance safety in small, rural communities;
- Community revitalization and sustainable development; and
- Economic development and job creation and retention.

The MassWorks Infrastructure Program is administered by the Executive Office of Housing and Economic Development, in cooperation with the Department of

Transportation and Executive Office for Administration & Finance (www.mass.gov/eohed/infrastructure).

The Massachusetts Brownfields Act – This Act established the Brownfields Redevelopment Fund (BRF) to provide low interest loans for Site assessment and cleanup to public and private sector parties. Available funding from the Massachusetts Development Finance Agency (MassDevelopment) includes:

- Environmental Site Assessment funding up to \$100,000;
- Environmental remediation financing up to \$500,000; and
- Remediation and Site Assessment funding up to \$2 million for projects designated as “Priority Projects.” To qualify for this program, the project must be located in an EDA, and the applicant must be eligible person (www.massdevelopment.com).

Federal Sources

Environmental Protection Agency Remediation Support - EPA's Brownfields Program provides direct funding for Brownfields assessment, cleanup, revolving loans, and environmental job training. To facilitate the leveraging of public resources, EPA's Brownfields Program collaborates with other EPA programs, other federal partners, and state agencies to identify and make available resources that can be used for Brownfields activities. In addition to direct Brownfields funding, EPA also provides technical information on Brownfields financing matters (http://www.epa.gov/brownfields/grant_info/index.htm).

Area-Wide Planning Pilot Program - The grant funding and direct assistance (through Agency contract support) will result in an area-wide plan which will inform the assessment, cleanup and reuse of Brownfields properties and promote area-wide revitalization.

- *Assessment Grants* - Assessment grants provide funding for a grant recipient to inventory, characterize, assess, and conduct planning and community involvement related to Brownfields sites.
- *Revolving Loan Fund Grants* - The purpose of Revolving Loan Fund Grants is to enable States, political subdivisions, and Indian tribes to make low interest loans to carryout cleanup activities at Brownfields properties.
- *Cleanup Grants* - Cleanup grants provide funding for a grant recipient to carry out cleanup activities at Brownfields sites.
- *Environmental Workforce Development and Job Training Grants* - Environmental Workforce Development and Job Training Grants are designed to provide funding to eligible entities, including nonprofit organizations, to recruit, train, and place predominantly low-income and minority, unemployed and under-employed residents of solid and hazardous waste-impacted communities with the skills needed to secure

full-time, sustainable employment in the environmental field and in the assessment and cleanup work taking place in their communities.

- Training, Research, and Technical Assistance Grants-Training, Research, and Technical Assistance Grants provide funding to eligible organizations to provide training, research, and technical assistance to facilitate Brownfields revitalization.
- Targeted Brownfields Assessments - The Targeted Brownfields Assessment (TBA) program is designed to help states, tribes, and municipalities—especially those without EPA Brownfields Assessment Pilots/Grants—minimize the uncertainties of contamination often associated with Brownfields.

Other Brownfields Funding Opportunities

- State and Tribal Response Programs - Find background information, state & tribal grant funding guidance, MOUs, MOAs, state Brownfields web sites, and state Voluntary Cleanup Programs (VCP) web sites.
- Sustainability Pilots - Sustainability Pilots are an EPA effort to promote environmental sustainability at local Brownfields projects.



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<http://www.walpole-ma.gov/EDCDocs/Rt1IndParkStudy.html>

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