

Watson Crampton Neighborhood Plan
Township of Woodbridge

Acknowledgments

Watson Crampton Neighborhood Plan

Woodbridge Township

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Introduction

Watson Crampton Neighborhood Plan

Introduction

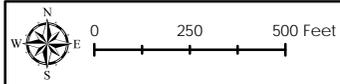
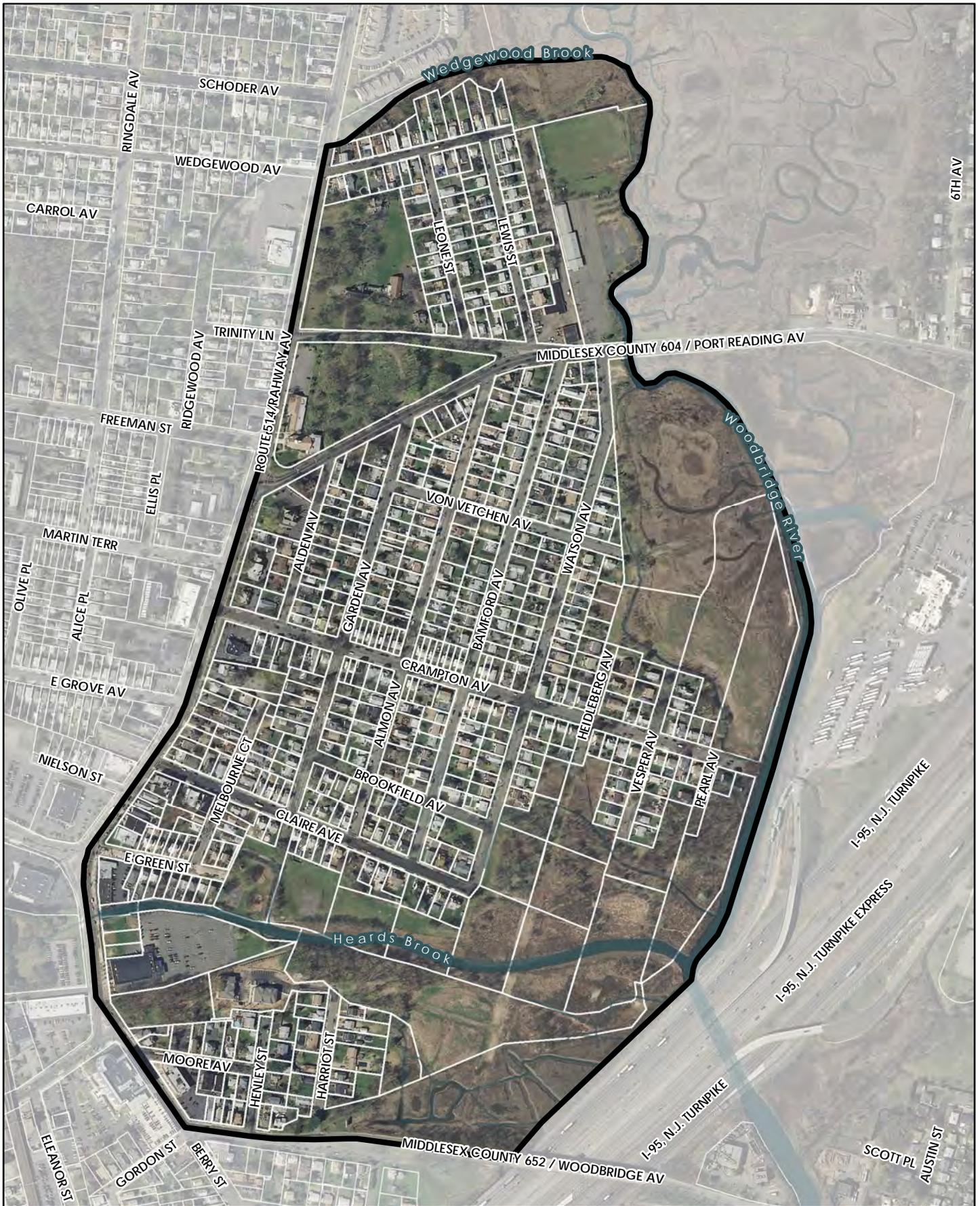
In October 2012, Superstorm Sandy devastated numerous communities and neighborhoods throughout New Jersey. Woodbridge Township's Watson Crampton neighborhood was one such place where flood waters inundated homes and cut off access to the neighborhood's flood prone areas. Woodbridge is taking proactive approaches to help its residents whose lives and homes were affected by Superstorm Sandy. One measure is the preparation of The Watson Crampton Neighborhood Plan. The Watson Crampton neighborhood is shown in the Aerial Map.

The Watson Crampton Neighborhood Plan is intended to serve as a guide for future planning related projects within the neighborhood. This document identifies issues and opportunities within the neighborhood and recommends strategies to implement resiliency tactics that will ensure Watson Crampton's protection from the next devastating flood event. This Plan includes:

- Discussion of the Blue Acres Program and identification of the Watson Crampton properties that have taken advantage of the program
- Identification of the neighborhood's characteristics including its vulnerabilities and opportunities
- Recommendations for strategies intended to preserve and reinforce the existing core residential characteristics while ensuring the residents' health, safety, and general welfare
- A proposed concept plan implementing several of the recommendations
- A time management table with recommendations of implementation strategies

The Watson Crampton Neighborhood Plan has been prepared under the Post Sandy Planning Assistance Grant Program administered by the New Jersey Department of Community Affairs, Office of Local Planning Services. The neighborhood planning process was recommended to be conducted by the Woodbridge Strategic Recovery Planning Report, which was the first step required by the Post Sandy Planning Assistance Grant Program. The overall goal of the Post Sandy Planning Assistance Grant is to support long range planning for redevelopment in communities and counties that sustained damage during Superstorm Sandy. The grant program is intended to provide local municipalities with planning support services to develop community recovery plans that strategically address the issues confronting them. The program's mission also includes providing local governments with tools needed to efficiently manage municipal operations, supplementing the ongoing efforts of the storm-impacted local and county governments to rebuild and revitalize.

In conjunction with the grant program, Woodbridge is participating in the NJDEP Blue Acres Program, an acquisition program that targets the buyout of flood prone structures and the preservation of the floodplain. The Blue Acres Program is a subset of the Green Acres State Land Acquisition (SLA) Program. The buy-out process began in Woodbridge Township in 2014 and is on-going. The Watson Crampton Neighborhood Plan addresses broader Township issues but focuses mainly on the Watson Crampton neighborhood and the immediately adjacent areas.



2012 Aerial

HEYER GRUEL & ASSOCIATES
June 2015

Source: NJGIS, NJDEP, NJDOT



Blue Acres Program

Watson Crampton Neighborhood Plan

Blue Acres Program

According to the New Jersey Department of Environmental Protection, the Blue Acres Program is part of New Jersey's Green Acres Program, which allows for the purchase of flood-prone properties by the State. Through the New Jersey Department of Environmental Protection's Superstorm Sandy Blue Acres Buyout Program, the State of New Jersey has allocated \$300 million in federal disaster recovery funds to give homeowners the option to sell Sandy-damaged homes at pre-storm value in flood-prone areas. The program is designed to give homeowners the ability to choose the best option for their individual situation.

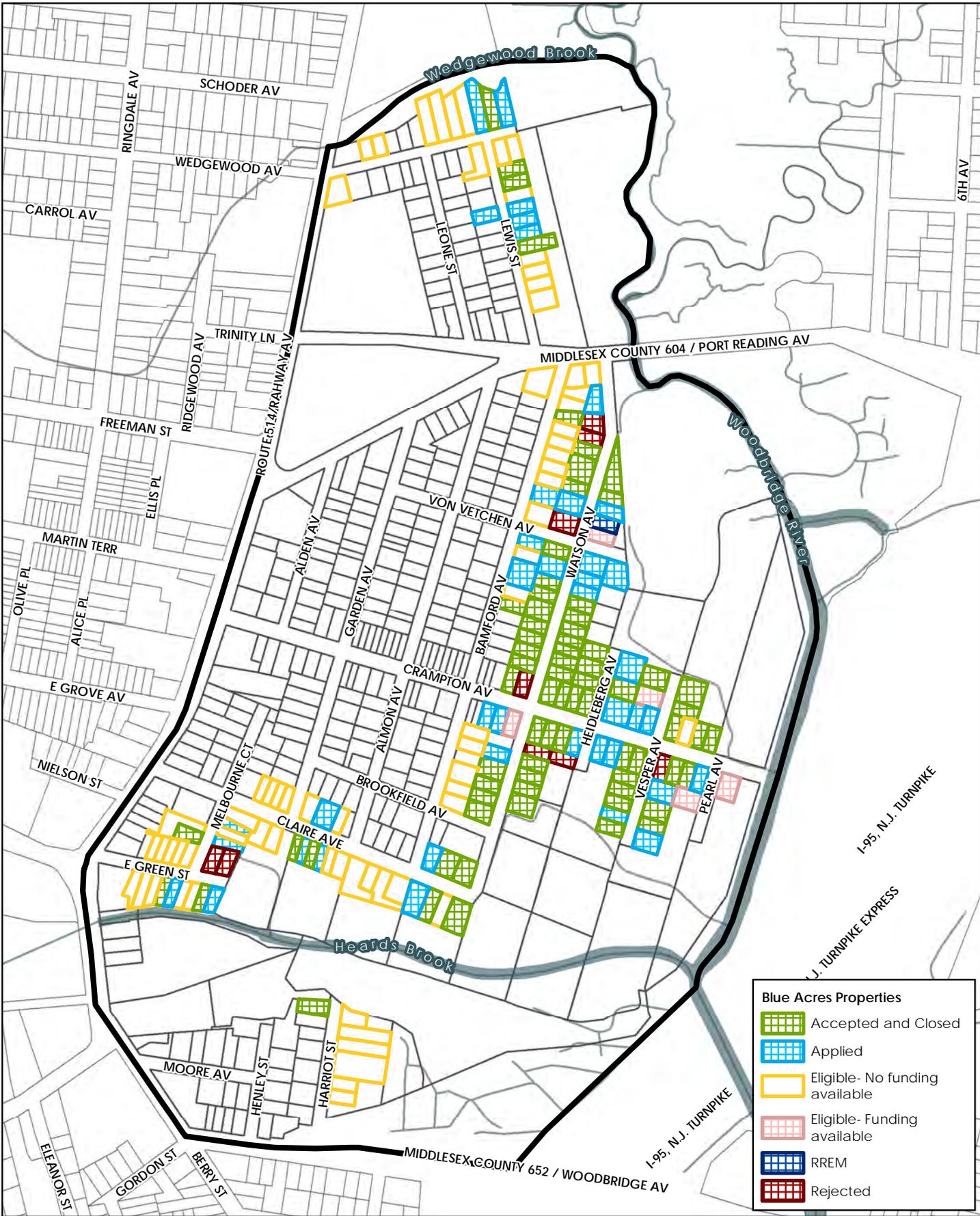
Throughout New Jersey, and in Woodbridge specifically, the State has begun to homes that were flooded during Superstorm Sandy and previous storms events. These homes are in the process of being demolished, and the land will be permanently preserved as public open space, for recreation or conservation. The preserved land will serve as a natural buffer against future storms and floods. The goal of the Blue Acres Program is to reduce the risk of future catastrophic flood damage, and to help families move out of harm's way.

Woodbridge Township was designated a community in need of Blue Acres Program assistance in 2013 and has identified 436 parcels within the Township had experienced repetitive flood damage due to both Superstorm Sandy and other past storm events. Of these 436 eligible properties, 175 applied for a buy-out under the Blue Acres Program. During fall 2014 and winter 2015, the State began to make offers to the applicant homeowners, who in turn can accept

or reject the offer. If a homeowner decides to reject the State's offer, no further State or federal assistance will be offered to that property or homeowner. If a homeowner decides to accept the offer, the homeowner must vacate the property once the sale has closed. The structure will then be demolished and the parcel readied for open space recreational use.

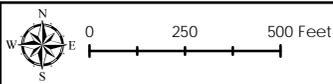
In the Watson Crampton neighborhood there are 195 eligible properties. As of May 29, 2015, 121 properties applied for the buy-out. Of the 121 properties, 72 have accepted the state's offer and closed on their property while nine have rejected the state's offer, and 68 remain eligible with no action taken. There are five properties that have not applied but the State has secured funding for them should they change their minds. One property has been accepted under the Rehabilitation, Reconstruction, Elevation and Mitigation (RREM) program. The Watson Crampton properties eligible under Blue Acres as are shown on the Blue Acres Map.





Blue Acres Properties

-  Accepted and Closed
-  Applied
-  Eligible - No funding available
-  Eligible - Funding available
-  RREM
-  Rejected



Source: NJGIS, NJDEP, NJDOT, Woodbridge 6/11/2015 Blue Acres Data

Blue Acres Properties

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June 2015



Township Characteristics

Watson Crampton Neighborhood Plan

Township Characteristics

Woodbridge Township is a flourishing community whose roots go back to the earliest parts of New Jersey's history. Founded in 1664, Woodbridge Township is the oldest original Township in New Jersey and is named after the Reverend John W. Woodbridge. Many of the roads that exist today in Woodbridge Township were forged in colonial times. As illustrated in the Context Map, Woodbridge Township is located in the northeast corner of Middlesex County at the entrance of both the Raritan River and Arthur Kill. According to the 2010 Census, the Township is the sixth largest municipality in New Jersey with a population of over 99,585. The Township is bordered by Clark Township, the City of Rahway, the City of Linden, and the Borough of Carteret to the north; the Arthur Kill and the City of Perth Amboy to the east; the Raritan River to the south; and Edison Township to the west. There are ten distinct sections of the Township, each with their own unique character and history. Within these sections reside dozens of individual neighborhoods. Although there are separate sections and neighborhoods within Woodbridge, the Township continues to thrive as one community.

HISTORICAL FLOODING IMPACTS & SUPERSTORM SANDY

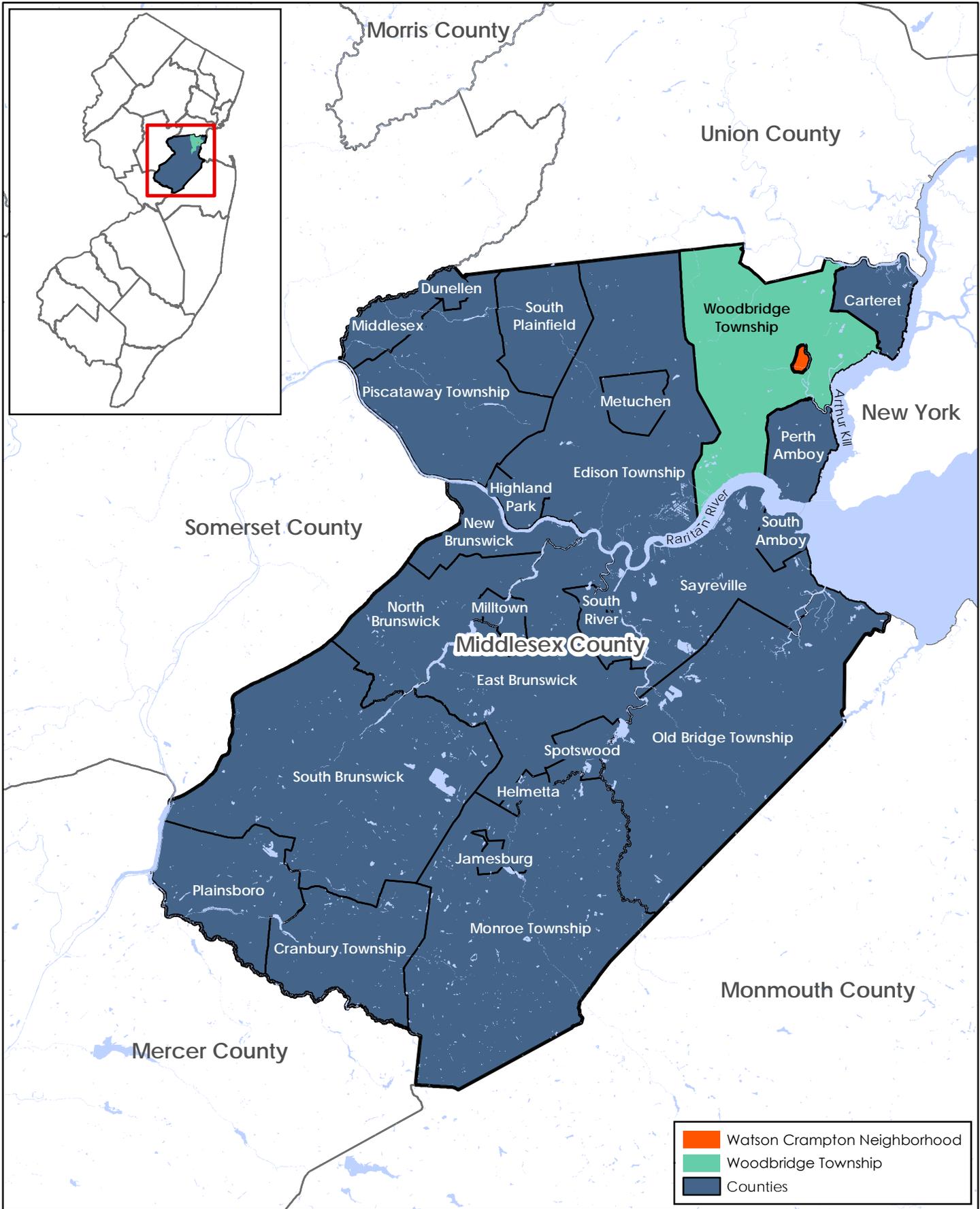
In October of 2012, Superstorm Sandy devastated New Jersey when the storm came on shore creating wide spread power outages, fuel shortages, and damage from high winds and flooding. The Township of Woodbridge suffered substantial flooding and wind damage due to the storm. The storm surge, escalated by a high tide and full moon, inundated flood-prone neighborhoods damaging both lives and properties. Woodbridge Township's location at the mouth of

both the Raritan River and Arthur Kill heightens the potential for flooding and the impacts the Township's residents endure. The Township has a history of flooding in several areas along the Raritan River in the Keasbey section of the Township, along the Woodbridge River in the Woodbridge Proper section, and along the Arthur Kill in both the Sewaren and Port Reading sections.



Heidelberg Ave. in Watson Crampton neighborhood

The Watson Crampton neighborhood of Woodbridge, which is located in the Woodbridge Proper section of the Township, was significantly impacted by Superstorm Sandy. The Woodbridge River, located directly east of the neighborhood flowing south to the Arthur Kill, overflowed its banks. The storm surge, which has been characterized as "a tsunami-like water wall," sent an enormous amount of water into the neighborhood. Many of the lower lying homes along Crampton and Watson Avenues were inundated with surge waters that penetrated and destroyed basements and first level living areas.



Context Map

HEYER GRUEL & ASSOCIATES
June 2015

Source: NJOGIS, NJDEP, NJDOT

In addition to Superstorm Sandy, the Watson Crampton neighborhood was also significantly impacted by Hurricane Irene in 2011, which flooded the neighborhood and damaged homes and properties. Superstorm Sandy and Hurricane Irene were not the first storms to impact the neighborhood. For at least three decades the homeowners in this neighborhood have dealt with minor flooding during summer storms and widespread flooding during Nor'easters and major storm events. As residential neighborhoods continued to develop along the Woodbridge River and the New Jersey Turnpike expanded through the salt marshes, the frequency of flooding escalated.

COMMUNITY PROFILE: WATSON CRAMPTON NEIGHBORHOOD

As shown on the Aerial Map, the 180 acre Watson Crampton neighborhood is located in the Woodbridge Proper section of Woodbridge Township, just outside the Township's Downtown Area. It's home to approximately 1,500 residents and is defined to the west by Rahway Avenue (CR 514), to the south by Woodbridge Road (CR 652), to the east by the Woodbridge River and New Jersey Turnpike, and to the north by Wedgewood Brook.



The New Jersey Turnpike, which helps create the eastern boundary of the neighborhood, began as Route 100, a state road that ran from New Brunswick to the George Washington Bridge. Route 100 expanded and became the New Jersey Turnpike in 1947. The section of the Turnpike that runs through Woodbridge and adjacent to the Watson Crampton neighborhood was expanded from four to six lanes in the 1960s.

According to the historic Sanborn Maps, the land immediately surrounding the Woodbridge River were salt marshes in the 1770s. In the area approximately where the Watson Crampton neighborhood is today there were two churches, First Presbyterian and Trinity Episcopal, and several taverns and mills. By 1850, more businesses and residences appeared along what is now Rahway Avenue, and by 1872 a distinctive road network began to emerge. Street grids are clearly seen throughout Woodbridge Township, including the Watson Crampton neighborhood by the 1950s.

Today, the Watson Crampton neighborhood is predominantly residential with a fully developed core made up of modest, single-family residences. A variety of multi-family residential buildings and commercial businesses are located along Rahway Avenue together with a Berkeley College campus and a daycare facility. There is a small residential area on the south end of the neighborhood that is physically separated from the neighborhood core by Heards Brook (see Existing Land Use Map). The majority of the neighborhood is also located within a 10-15 minute walk from the Downtown, Tanzman Park, and Woodbridge train station, as can be seen on the Public Transportation Map



Barron Arts Center

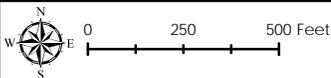
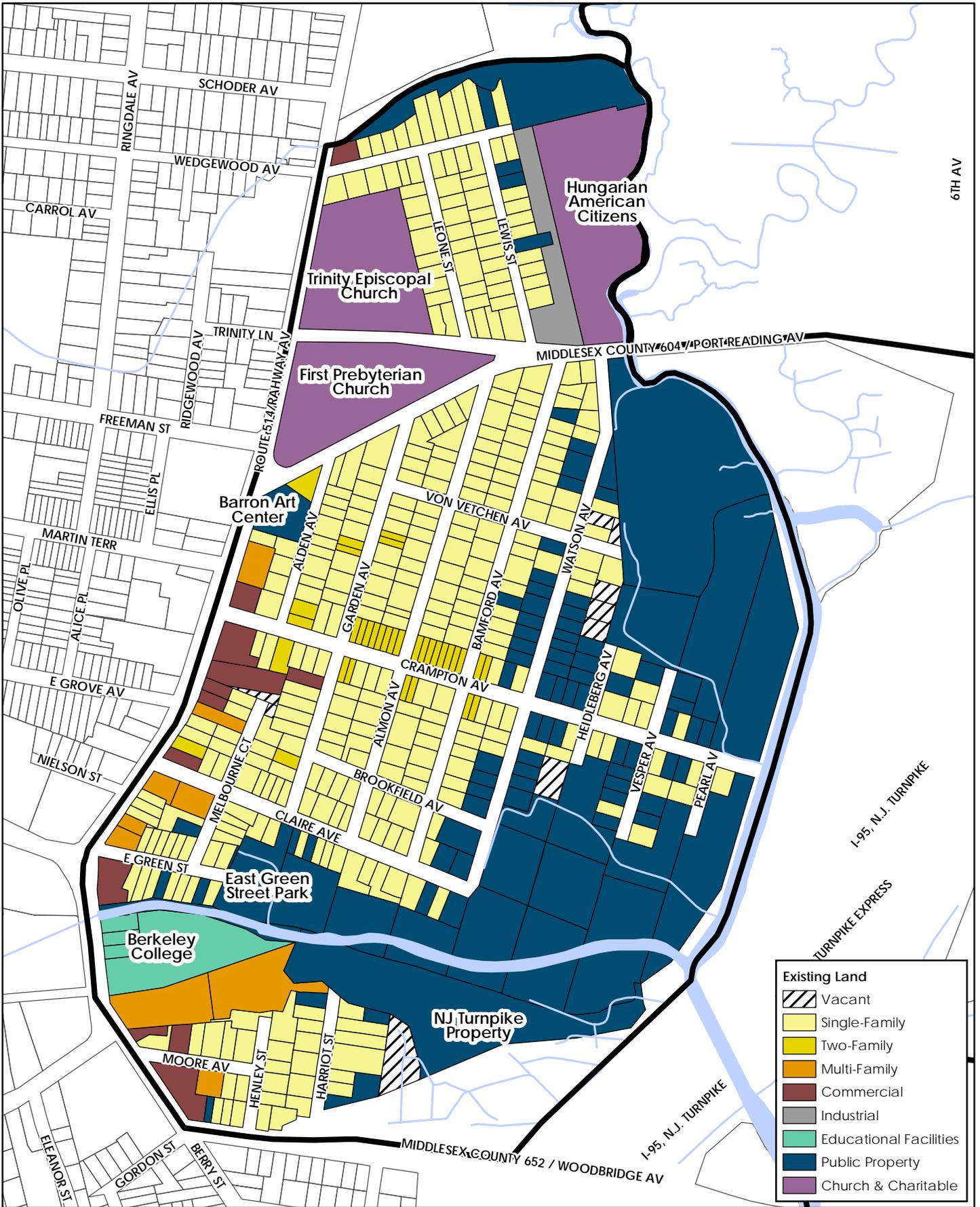
As previously mentioned, Watson Crampton is a historic neighborhood that can trace its beginnings back to colonial times. The neighborhood houses the two oldest churches in Woodbridge. The First Presbyterian Church of Woodbridge and Trinity Episcopal Church and their associated cemeteries are located at the intersection of Port Reading Avenue, Rahway Avenue, and Trinity Lane in the north of Watson Crampton neighborhood. Both churches date back to the late 1600s and are on the National Register of Historic Places. The Barron Arts Center is also situated within the Watson Crampton neighborhood. Built in 1877 in Romanesque Revival style architecture, the Barron Library was the first library in Middlesex County.

The building is now listed on the National Register of Historic Places and serves as an arts center for the community. The Hungarian American Citizen's Club was founded in 1922 and is located on Port Reading Avenue on the northeast edge of the neighborhood adjacent to the Woodbridge River Park.

A significant portion of the neighborhood is public space. There is a large expanse of meadows and wetlands to the east of the core residential neighborhood, alongside the Woodbridge River and Heards Brook. Small streams and tributaries traverse the area as well.

The neighborhood is also home to two public parks, East Green Street Park, located at the termination of East Green Street, and Brookfield Avenue Park on Brookfield Avenue. To the northeast of the Watson Crampton neighborhood is Woodbridge River Park, which is located in the Saints Field neighborhood. The one acre East Green Street Park has a playground as well as a basketball court. Located on the edge of the residential core, this park is a valuable resource to the neighborhood providing a place for local children to play. The park is currently surrounded on three sides by a chain link fence and is in need of maintenance. The only way to access East Green Street Park is at the termination of East Green Street. The Brookfield Avenue Park, roughly 0.4 acres, is also located on the edge of the residential core and is currently an open field with trees along its perimeter.

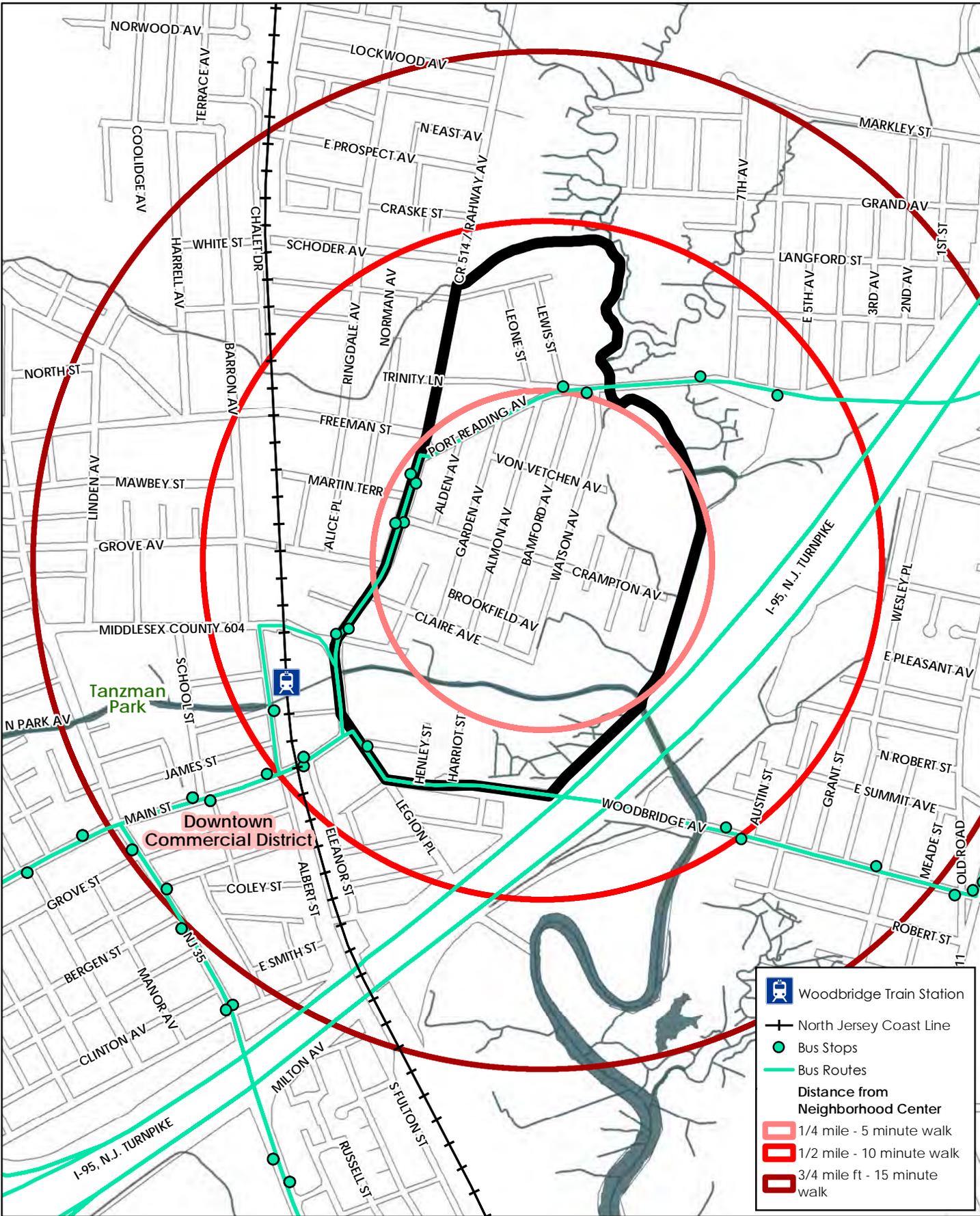




Source: NJGIS, NJDEP, NJDOT, 2014 MOD IV Tax Assessment Data

Existing Land Use

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June 2015



-  Woodbridge Train Station
-  North Jersey Coast Line
-  Bus Stops
-  Bus Routes
- Distance from Neighborhood Center**
-  1/4 mile - 5 minute walk
-  1/2 mile - 10 minute walk
-  3/4 mile ft - 15 minute walk



Distance to Public Transportation and Community Amenities

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Source: NJGIS, NJDEP, NJDOT.

Circulation and Road Networks

The Watson Crampton neighborhood is a relatively self-contained community. This is due in part to the road system and environmental features present within and around the neighborhood. County Roads 652 (Woodbridge Avenue) and 514 (Rahway Avenue) border the neighborhood to the south and west, the Woodbridge River shapes the eastern edge, and the small Wedgewood Brook forms the northern boundary. These boundaries are shown in the Aerial Map.

Because of the major thoroughfares and the natural restrictions of the waterways, Watson Crampton lacks a strong pedestrian connection to neighboring communities and parks. The County Roads do not provide adequate crosswalks for the residents. On Rahway Avenue there are crosswalks at its intersections with East Green Street and Crampton Avenue. The crosswalk at the Crampton Avenue intersection is not ADA compliant, discouraging pedestrians from crossing there. Sections of the neighborhood also remain secluded because of a lack of pedestrian connections. County Road 604 (Port Reading Avenue) intersects the neighborhood and does not provide crosswalks, thus creating a separation within the neighborhood and isolating the northern residents. Heards Brook bisects the neighborhood with no opportunities to cross the waterway. In doing so, the southern region remains separated from the neighborhood core of the Watson Crampton neighborhood.

While the neighborhood is bound by county roadways, the majority of the roads within Watson Crampton are local streets. Sidewalks are present but sporadic



Crosswalk on Rahway Ave. at Crampton Ave.

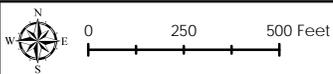
and curbs exist throughout. Due to the self-contained nature of the neighborhood, traffic volume is low and pedestrians can easily walk between houses. The rights-of-way range between 50 feet wide and 60 feet wide providing enough room for street parking in most places. There is also a significant number of paper streets located within Watson Crampton. A paper street is a street that is shown on maps but which has not been improved. These streets were laid out at some point by planners or developers but were never built. In the neighborhood, the paper streets are generally located in the Open Space Conservation/ Public Quasi Public zone in the east. One paper street appears to also be used as a pipeline. The south end of Pearl Avenue is the only street in the Watson Crampton neighborhood that is gravel, see the Roadway Network Map.

Bus Service

Three New Jersey Transit bus lines service the neighborhood. The number 116 bus runs daily from Perth Amboy to Manhattan. Its route goes along Rahway Avenue making stops at East Green Street, Crampton Avenue, and the entrance to Port Reading Avenue. From the Port Reading Avenue stop, the number 116 bus goes directly through the Watson Crampton neighborhood by turning on Port



Roadway Network	
	Gravel
	Paved
	Paper Street



Roadway Network

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Source: NJGIS, NJDEP, NJDOT.

Reading Avenue. This bus makes one more stop within the neighborhood before continuing on to the Saints Field neighborhood. The number 48 bus runs daily from Perth Amboy to Elizabeth. The route follows Woodbridge Avenue and makes a stop at Moore Avenue, providing a public transportation option to the residents in the southern region of the Watson Crampton neighborhood. The number 803 bus is one of the Metropark Loops that runs on weekdays serving Woodbridge and Edison. The 803 route travels on the edge of the Watson Crampton neighborhood, making stops at the Woodbridge train station and continuing down Main Street. This bus could be easily reached by the residents of the neighborhood. These bus routes are shown on the Public Transportation Map.

Environmental Features

The Watson Crampton neighborhood contains significant environmental constraints, particularly along its eastern fringe. As seen in the FEMA Floodplain Map, the 100-year floodplain extends far into the residential area of the neighborhood. The 100-year floodplain, called Zone AE, is determined by the 2014 Preliminary FEMA Flood Insurance Rate Maps (FIRM). Zone AE is identified as a Special Hazard Flood Area by the FIRM and is subject to the 1-percent-annual-chance flood. Properties positioned in Zone AE are considered at high flood risk under the National Flood Insurance Program (NFIP). The Watson Crampton neighborhood also contains areas designated Zone X (shaded), which can also be seen on the FEMA Floodplain Map. Zone X (shaded) areas are subject to a 0.2-percent-annual-chance flood, also known as the 500-year flood. Woodbridge Township is in the process of appealing the 2014 Preliminary FEMA Flood Insurance Rate Maps.

Not surprising, the neighborhood is also constrained by wetlands. As shown in the Wetlands Map, wetlands are present along the Woodbridge River and Heards Brook. They are located in and around many of the residential properties and alongside the streams and tributaries that traverse the neighborhood. Wetlands provide valuable support for communities during flood events. They act like natural sponges as they absorb overflow water from rivers and slow the movement of floodwater.



Black-crowned Night-heron photographed in neighborhood by Steve Byland

Wetlands also provide homes for thousands of diverse species of plants and animals. The Landscape Project is a program under the NJ Division of Fish & Wildlife. Their mission is to provide long-term protection for New Jersey's at risk species and their habitats. The wetlands and meadows located within the Watson Crampton neighborhood include areas

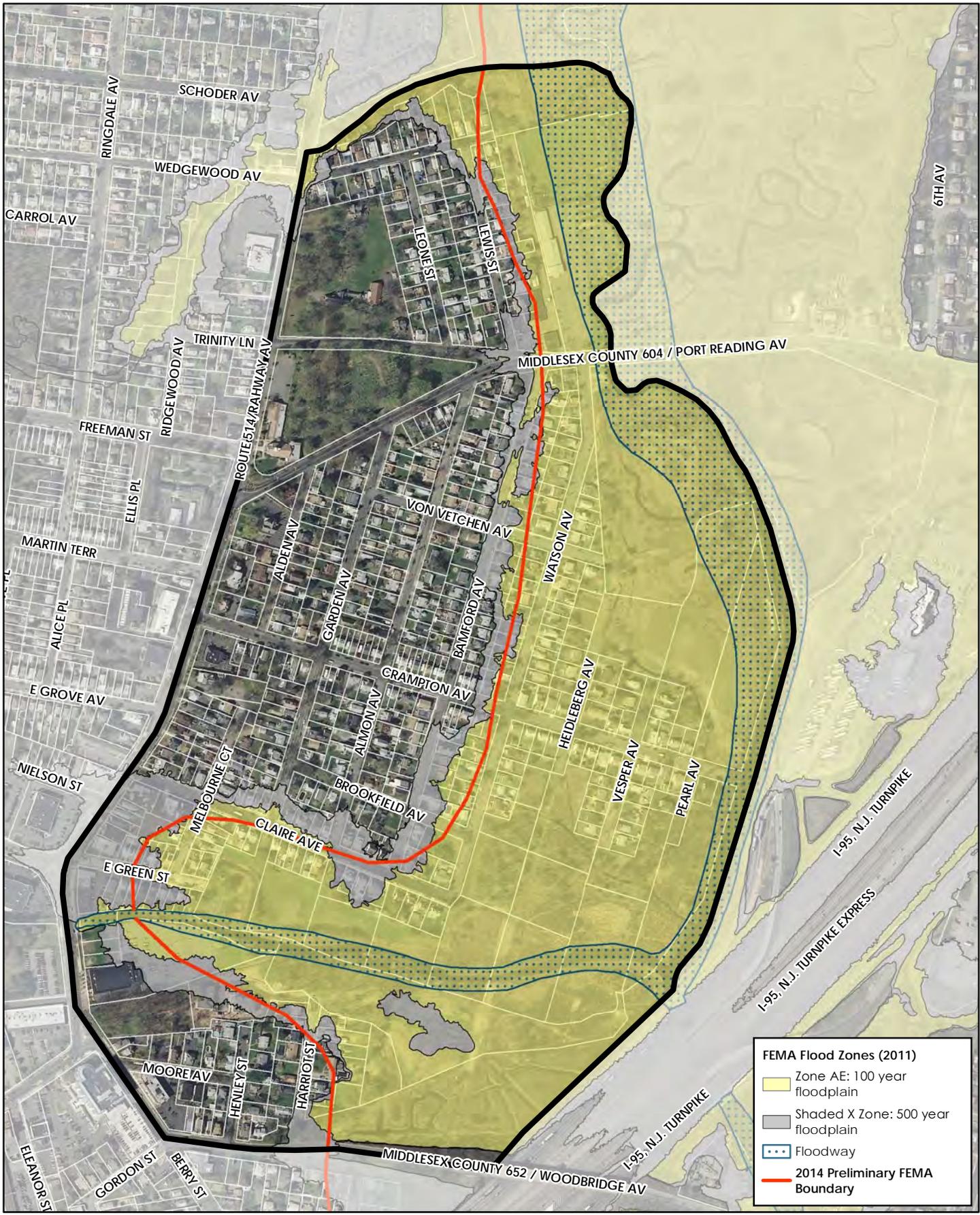
designated under the Landscape Project as Rank 1: Habitat Specific Requirements, and Rank 3: State Threatened. Rank 1 includes areas that meet habitat specific requirements for endangered or threatened species but the presence of such species have yet to be confirmed. Rank 1 areas are good indications of where future wildlife surveys should occur. Rank 3 includes areas containing State threatened species. A State threatened species is an indigenous nongame wildlife species that may become endangered if their habitat begins to deteriorate. In the Watson Crampton neighborhood Black-crowned Night-herons, a State threatened species, as well as Little Blue Herons, a species not yet threatened but considered as a “special concern,” have been spotted, see the Landscape Project Map.



Watson Crampton wildlife

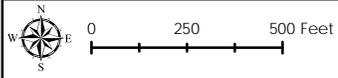


Heards Brook in Watson Crampton neighborhood as seen from its south side



FEMA Flood Zones (2011)

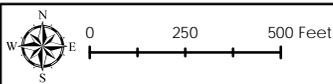
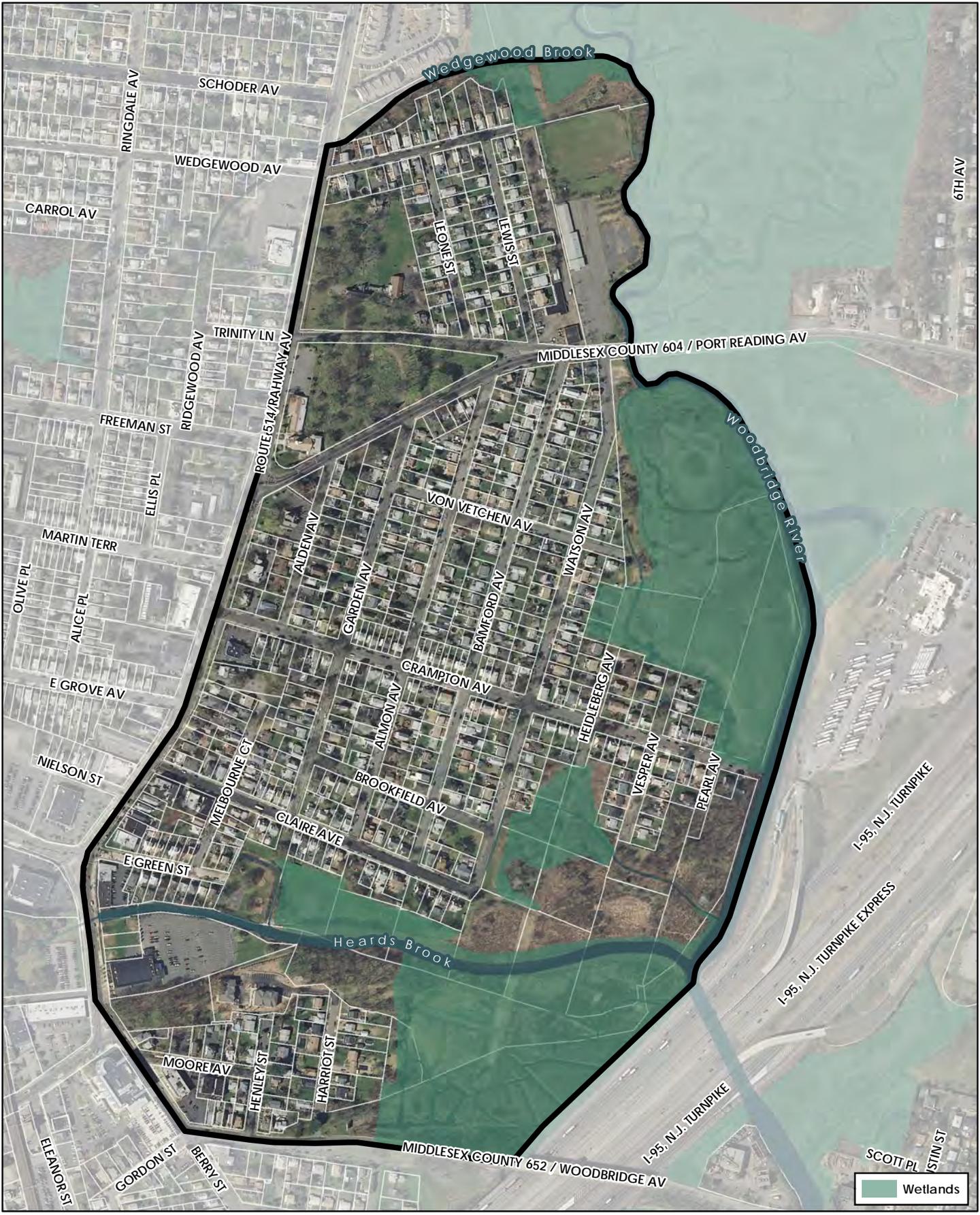
- Zone AE: 100 year floodplain
- Shaded X Zone: 500 year floodplain
- Floodway
- 2014 Preliminary FEMA Boundary



FEMA Floodplains

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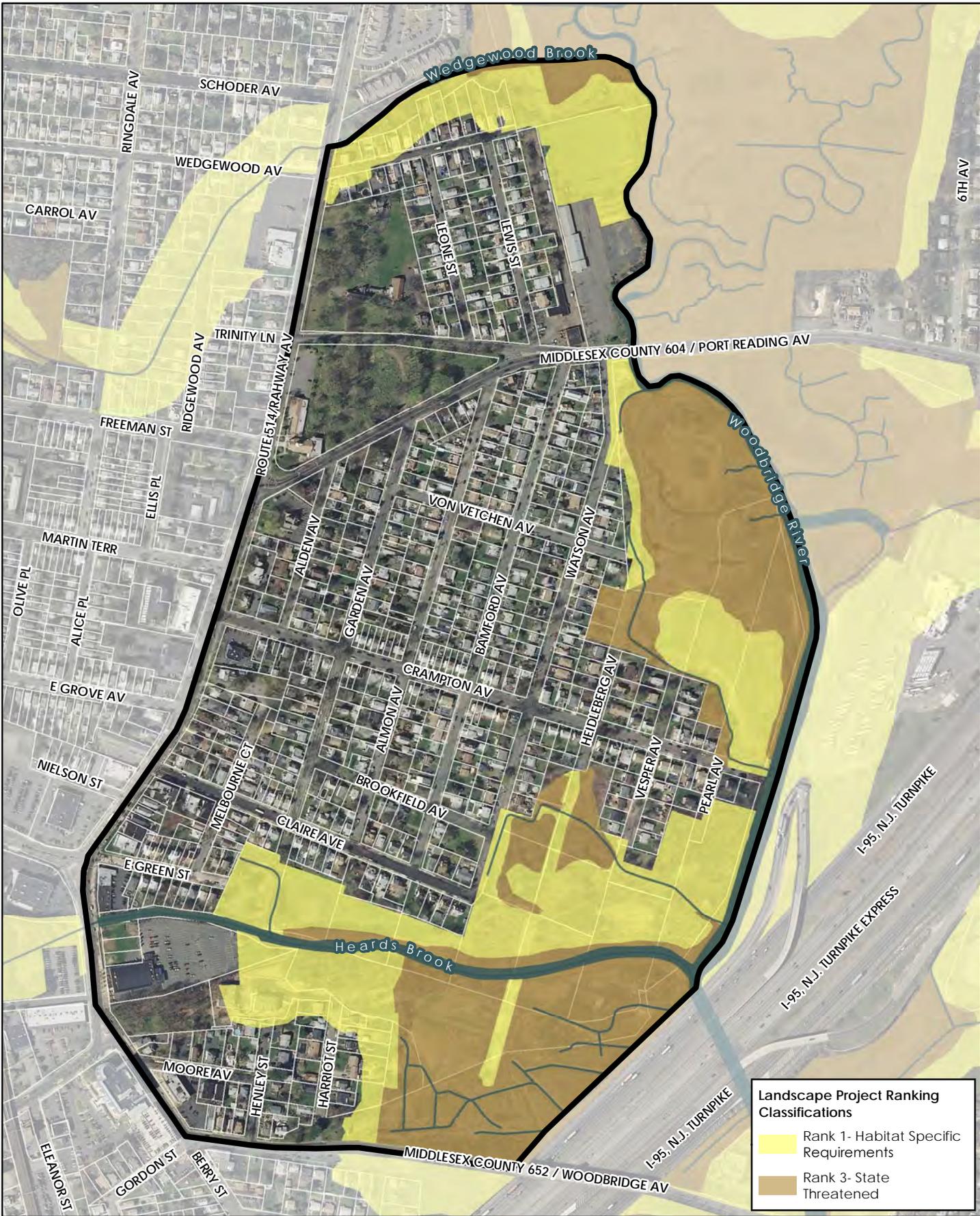
Source: NJOGIS, NJDEP, NJDOT, 2011 FEMA Floodplains, 2014 Preliminary FEMA Boundary



Wetlands

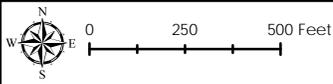
HEYER GRUEL & ASSOCIATES
June 2015

Source: NJGIS, NJDEP, NJDOT.



Landscape Project Ranking Classifications

- Rank 1- Habitat Specific Requirements
- Rank 3- State Threatened



Landscape Project

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June 2015

Source: NJOGIS, NJDEP, NJDOT.

Existing Zoning

As seen on the Existing Zoning Map on the following page, the majority of the Watson Crampton neighborhood is zoned as R-6 High-Density Single-Family Residential. The zone is mainly located in the center and on the north end of the neighborhood. However, there is also a small R-6 zoned lot located in the southeast. The R-6 zone is the most common residential zone within Woodbridge Township. The zone allows for detached single-family homes on a minimum lot of 6,000 square feet with a minimum lot coverage of 25% and a maximum impervious gross coverage of 40%.

There is a small B-2 Central Business District running along Rahway Avenue between Crampton Avenue and Claire Avenue. The B-2 zone is designated to promote retail sales and services that serve a larger population than the average neighborhood. The B-2 zone requires a minimum lot size of 2,500 square feet. The businesses located in the B-2 zone along Rahway Avenue in Watson Crampton include a dentist office, insurance group, and Valley National Bank.

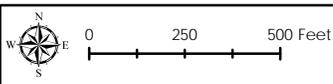
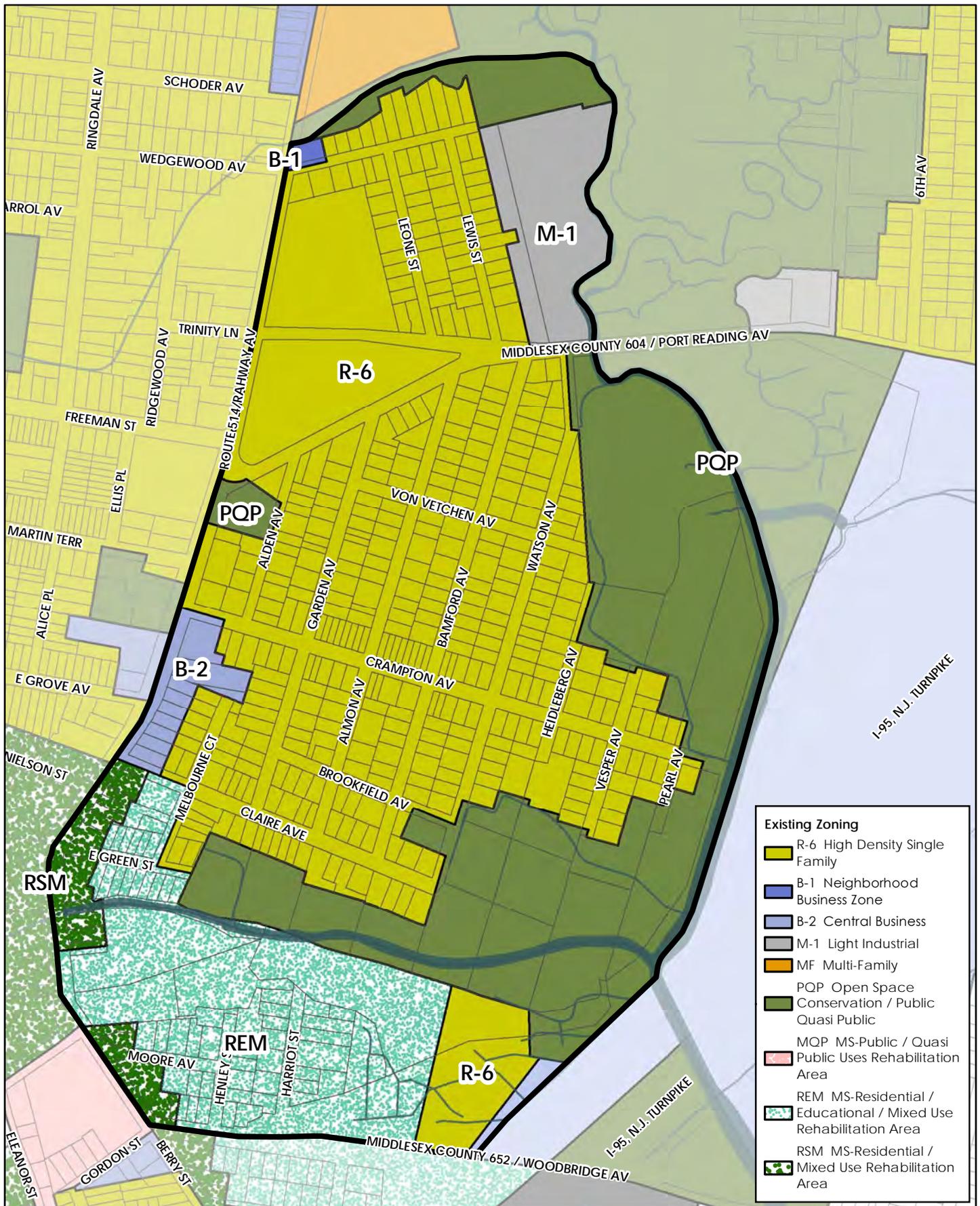
A large Open Space Conservation/Public Quasi Public (PQP) zone is located on the east side of the neighborhood, adjacent to the Woodbridge River. The purpose of the OSC/PQP zone is to protect the character of existing and future open spaces. The zone permits the creation of improved open space, which provides open space for recreational facilities, and unimproved open space, which is intended to preserve open space in its natural state to be used for recreation and conservation purposes. Only woodland trails, footpaths, jogging, and other non-intrusive improvements are intended for unimproved open space.

There is a REM MS Residential/Educational/Mixed Use Rehabilitation Area on the south end of the neighborhood and a RSM MS-Residential/Quasi Public Use Rehabilitation Area on the southwest edge. These rehabilitation areas are part of the 2008 Main Street Rehabilitation & Transit Village Plan. The purpose of the Main Street Rehabilitation Plan is to develop the Main Street area of Woodbridge into a mixed-use neighborhood that provides a range of retail services and housing options. Included in this rehabilitation area are single and multi-family residences, the Berkeley College campus, and The Learning Experience daycare center.



Residences in Rehabilitation Zone

In the northeast area of the neighborhood is a small M-1 Light Industrial zone. The M-1 zone is designated to provide for the development of light industrial uses and to ensure the compatibility of light industrial uses with surrounding development. The M-1 zone allows for development of light manufacturing, fabrication and assembly of metal, paper, and wood products, food industries, general office buildings and warehouses. The M-1 zone in the neighborhood is comprised of the Hungarian American Citizen's Club and a parcel owned by Mocci Industries, LLC.



Existing Zoning

HEYER GRUEL & ASSOCIATES
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Source: NJOGIS, NJDEP, NJDOT,
2014 MOD IV Tax Assessment data

Neighborhood Demographics

Data from the 2010 Census and the American Community Survey (ACS) 2008-2012 show that the majority of the neighborhood is primarily made up of young, white families with a median household income of \$82,017, which is slightly higher than that of the Township. The poverty rate in the neighborhood is low with 2.5% of its residents living below the poverty line. The neighborhood has a population of roughly 1,512 people, representing 1.5% of Woodbridge's total population. There is little vacancy in the Watson Crampton neighborhood with 95.7% of its housing units occupied.

While the majority of the residents own their own homes, the neighborhood also has a significant number of renters. Roughly a quarter of the residences are rented. If a household spends more than 35% of

their income on rent (or mortgage), the household is considered "cost burdened," meaning their housing situation is not affordable. The median gross rent in Watson Crampton is \$1,739. Approximately 27% of the renters are considered to be cost burdened.

The residents of Watson Crampton are employed in a variety of fields. Educational services and health care and social assistance industries make up the largest sector of employment (19.0%) followed by manufacturing (15.7%) and retail trade (12.6%). The majority of Watson Crampton's residents (75.0%) commute to work alone via car, truck or van. Approximately 15% travel by public transportation while 6.8% carpool via car, truck or van. None of the residents walk or bike to work.



East Green Street Playground



Related Planning Documents

Watson Crampton Neighborhood Plan

Related Planning Documents

There are several relevant planning documents that were considered in developing the Watson Crampton Neighborhood Plan. These existing planning documents provide the framework and help set goals addressed by the Watson Crampton Neighborhood Plan.

STRATEGIC RECOVERY PLANNING REPORT, 2014

The Strategic Recovery Planning Report was designed to provide guidance for future planning related projects that may be eligible for grant funding under the Post Sandy Planning Assistance Grant program. The Report does the following:

- Summarizes the Township's vulnerabilities and opportunities
- Identifies approaches for rebuilding post Sandy
- Provides recommendations for municipal actions to promote recovery

The Strategic Recovery Planning Report supplies the background and basis for the Watson Crampton Neighborhood Plan. The Planning Report recommends the development of neighborhood plans for three neighborhoods that were significantly impacted by Superstorm Sandy: Watson Crampton, South Roberts, and Saints Field. The Report encourages the neighborhood plans to integrate the outcome of the Blue Acres acquisitions and develop strategies for the neighborhoods' resiliency, sustainability, and longevity.

The Watson Crampton Neighborhood Plan responds to the information presented in The Strategic Recovery Planning Report and uses the Report as the

basis for its policy recommendations and strategies. The Neighborhood Plan recommends strategies to protect the neighborhood's residents from future flood events and considers the public health, safety, and general welfare of both the neighborhood and surrounding areas.

WOODBIDGE MASTER PLAN, 2009

The Woodbridge Master Plan was adopted in 2009 as a comprehensive vision for the Township. Within the ten elements, the Plan identified issues and goals related to sustainability, resiliency, and alternative energy. These overarching goals include:

- Preserving environmentally sensitive areas within the Township including wetlands, flood plains, water bodies, and areas of significant vegetation.
- Creating a network of recreation areas and permanently preserved open space throughout the Township, as well as preserving natural stream corridors and restricting development in flood hazard areas.
- Preserving existing undeveloped and underdeveloped properties.
- Strengthening and creating non-auto linkages throughout the Township
- Enhancing public access to the waterfront
- Promoting renewable energy

Land use recommendations:

- Prior to the 2009 Master Plan, the entirety of the area adjacent to the Woodbridge River was zoned R-6 high-density single-family residential, including the area that is comprised of wetlands

and meadows. The recommendations laid out in the Master Plan called for a rezoning of all wetlands within the Watson Crampton neighborhood. This recommendation was implemented by the Township and the wetland area is now zoned OSC/PQP Open Space Conservation/Public-Quasi Public, protecting the wetlands from future development.

Recommendations for the Township in regards to sustainability and resiliency including:

- The creation of a greenway network
- The expansion of the use of alternative fuels for municipal vehicles
- Encouragement of the construction of “green” buildings
- The preservation of properties for open space and recreation

The Master Plan also includes specific recommendations for their parks and open space areas including creating opportunities to add parks in the Township's neighborhoods. The Watson Crampton Neighborhood Plan responds to the Township's Master Plan in several ways including the creation of neighborhood parks, the expansion of a greenway network, and preservation of environmentally sensitive areas. The Neighborhood Plan also continues to respond to the land use recommendations by enhancing the preservation of the wetlands through open space acquisition and protection.



Butterfly Garden at Ernest L. Oros Wildlife Preserve

ENVIRONMENTAL SUSTAINABILITY PLAN ELEMENT, 2012

The Green Buildings and Environmental Sustainability Plan Element is intended to supplement the 2009 Master Plan and provide strategies to the Township to achieve their sustainability goals. One of the major goals of the Sustainability Plan Element includes the conservation of the Township's natural resources. To achieve this goal, the Sustainability Plan's objectives include:

- Implement a green space system that connects communities and neighborhoods
- Maintain natural terrain where possible and minimize the destruction of natural systems and habitats
- Create distinct “edges” around communities that contains protected lands
- The Watson Crampton Neighborhood Plan directly relates to all three of these objects and provides recommendations and strategies to achieve each one.

WOODBIDGE STORM WATER MANAGEMENT PLAN, 2005

The Woodbridge Storm Water Management Plan documents the strategy for the Township of Woodbridge to address storm water-related impacts. The standards set forth within the Plan minimize the adverse impact of storm water runoff on water quality and water quantity and the loss of groundwater recharge that provides base flow in receiving water bodies. The plan describes long-term operation and maintenance measures for existing and future storm water facilities.

Goals set forth in the Storm Water Management Plan include:

- Reduce flood damage, including damage to life and property
- Minimize, to the extent practical, any increase in storm water runoff from any new development
- Assure the adequacy of existing and proposed culverts and bridges, and other in-stream structures
- Prevent, to the greatest extent feasible, an increase in nonpoint pollution
- Maintain the integrity of stream channels for their biological functions, as well as for drainage
- Minimize pollutants in storm water runoff from new and existing development
- Protect public safety through the proper design and operation of storm water basins

The Watson Crampton Neighborhood Plan addresses several of the strategies introduced in the Woodbridge Storm Water Management Plan including the reduction of flood damage to the life and property of the residents of Watson Crampton. The Neighborhood Plan also offers strategies to reduce stormwater runoff and maintain the integrity of the stream channels.

MIDDLESEX COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN, ADOPTED 2010

Middlesex County developed a Multi-Jurisdictional Hazard Mitigation Plan to increase awareness that natural hazards, especially flood and wind, have the potential to affect people, physical assets, and operations in Middlesex County. The Plan analyzes the County's risk, sets goals and objectives as it pertains to hazard mitigation, and highlights planned projects by the municipality to prevent and mitigate

the effects of future natural disasters.

The goals and objectives set forth in the 2010 Plan include:

- Pursue opportunities to alleviate the impact of repetitive loss from devastating natural events
- Increase municipal participation in the National Flood Insurance Program Community Rating System
- Maintain and support local regulatory standards including floodplain management and building code enforcement

The Watson Crampton Neighborhood Plan addresses the goals of the Mitigation Plan and endorses strategies to achieve them. The 2010 Middlesex County Multi-Jurisdictional Hazard Mitigation Plan was adopted before Superstorm Sandy and is in the process of being updated. The 2015 draft has not yet been released.

MIDDLESEX COUNTY OPEN SPACE PLAN, 2003

The 2003 Middlesex County Open Space Plan emphasizes the importance of recreation and open space for the public's health and well-being as well as for the betterment of the county as a whole. The Plan outlines strategies for acquiring and providing public open space and recreational areas within Middlesex County. Among the Plan's many goals and objectives include:

- Promoting environmental, agricultural, scenic, historic, cultural, and social opportunities
- Conserving natural resources including plant and animal life, farmland, woodland, streams, and watersheds
- Providing a public system of major parks and

open spaces that forever preserves sufficient land to accommodate a variety of recreational activities, conserve scenic, historic, cultural, and environmental features to enhance the quality of life for residents of Middlesex County

These stated goals are reinforced in the Watson Crampton Neighborhood Plan through the protection of natural resources including wetlands and streams and a public system of park connections



Sign at Barron Arts Center



Woodbridge River at Port Reading Avenue



Neighborhood Plan

Watson Crampton Neighborhood Plan

Neighborhood Plan

Based on the community characteristics and historic quality of the Watson Crampton neighborhood, recommendations have been developed to address the sustainability of the neighborhood. These recommendations respond to the primary goal of increasing the neighborhood's resilience to flooding and protecting its residents from the next major flood event. The Watson Crampton Neighborhood Plan considers the environmental and flooding constraints that exist within the neighborhood and suggests strategies, policies, and actions to be taken as solutions to the issues identified.

GOALS AND OBJECTIVES

The following are key goals and objectives that will drive the development and implementation of the Watson Crampton Neighborhood Plan.

- Establish an open space/conservation area within the neighborhood
 - Utilize the creation of an open space/conservation area to minimize flooding, reinforce lasting environmental protection, and create connections to broader open space networks
 - Create a "buffer zone" to prevent flood waters from reaching residents
- Reinforce the existing neighborhood through resiliency techniques and incentives and upgrading of homes
 - Ensure the protection of the residents from future flood events and strengthen its long-lasting presence in the broader community
- Create a framework for a mix of open space recreation options along the Woodbridge River
 - Provide opportunities such as nature trails along the Woodbridge River
- Provide standards and requirements to improve the neighborhood's resiliency to future storm events
- Encourage homeowners to meet sustainable/green building standards
- Create a circulation pattern that provides adequate access to all existing residential parcels and connections to the Township's surrounding parks and recreation areas
 - Integrate pedestrian friendly streetscapes and wayfinding
 - Coordinate with county officials to create safe pedestrian crossings of county roads
 - Provide walking trails to connect the Watson Crampton neighborhood with surrounding neighborhoods
- Allow for more feasible preservation and flood mitigation mechanisms
 - Change the current zoning standards to encourage preservation and mitigation techniques
 - Implement the National Flood Insurance Program (NFIP) Community Rating System (CRS)

NEIGHBORHOOD BOUNDARIES

Within the Watson Crampton neighborhood, there is a clear separation between the core residential neighborhood and the area that will be reclaimed through the Blue Acres Program for recreation and open space. A “hard edge” was determined, which differentiates the “residential neighborhood area” from the “open space/conservation (acquisition) area.” The “hard edge” is based on a planning and environmental rationale, using the 2014 Preliminary FEMA Flood Insurance Rate Map (FIRM). The concept of the “hard edge” is designed to reinforce the neighborhood core and encourage retreat of residences from areas that have sustained significant damage due to flood events. Because of the damage these areas have withstood in the past, the “hard edge” will reestablish them as natural terrain. In designing the “hard edge” the intent was not to separate individual lots. Thus, in addition to the FEMA FIRM boundary, lot lines and roads were also used to determine the “hard edge’s” location.

Based upon the “hard edge” boundary, the following two distinct areas in the neighborhood were defined as shown on the Neighborhood Boundaries Map:

- Residential Neighborhood
- Open Space/Conservation (OSC)

Both areas have recommended strategies to accomplish the stated key goals of the neighborhood plan.

Residential Neighborhood

The purpose of the Residential Neighborhood is to preserve and reinforce the existing core residential character of the Watson Crampton neighborhood and support long-term resiliency techniques. The area that has been designated as the Residential Neighborhood is, for the most part, not located within the floodplain. These homes and businesses have generally not experienced the historic flood damage sustained by the ones located in the Open Space/Conservation area.



Residences on East Green Street

The Township should consider applying to the National Flood Insurance Program (NFIP) Community Rating System (CRS). The CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. The CRS sets several standards for communities to lower their homeowners flood insurance by enacting flood resiliency ordinances and codes. The Township may enact some of these standards and apply to be in the program to help reduce the insurance rates of homeowners.

Some of the CRS credit points may already have been completed by the Township and many others can be performed by the Township Planning Staff and Planning Consultants. The Township should consult the CRS manual to create strategies and goals for achieving credit points.

Open Space/Conservation (OSC)

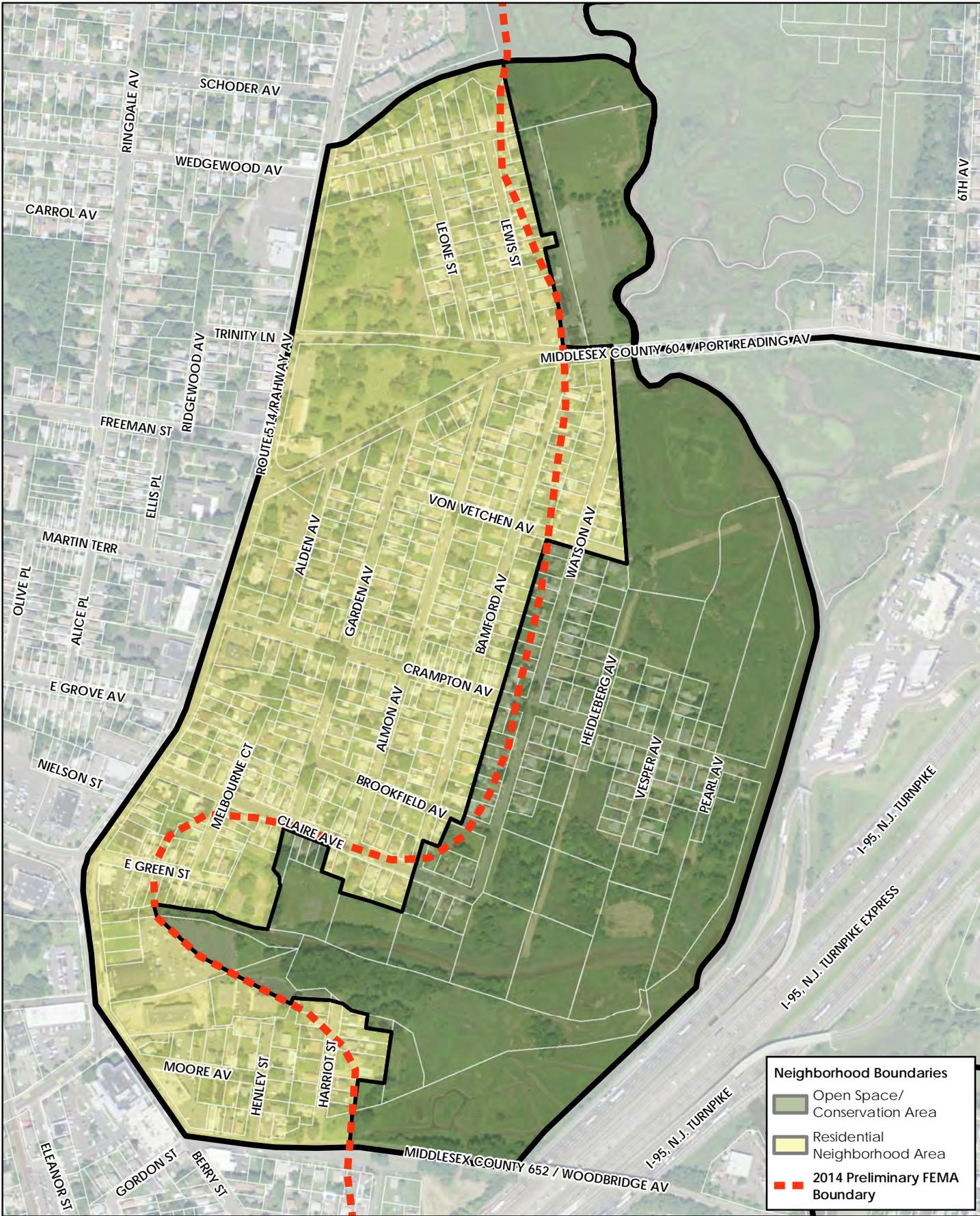
The objective of the Open Space/Conservation zone is to create a safeguard to protect the Residential Neighborhood from future flood events. The OSC zone will be comprised of recreation areas as well as open space. Much of this area will be allowed to return to its natural state. Open space is an effective land use technique for mitigating the adverse effects of floods. The open space will create a buffer between the Woodbridge River to the east and the Residential Neighborhood to the west. The wetlands located within the open space will also aid in lessening the effects of flood events by capturing overflow from the river, preventing it from reaching residential properties. The OSC zone will help minimize the number of properties damaged during flood events. The preservation of properties for open space responds to the goals laid out in the Township's Master Plan.



Woodbridge River as seen from the Open Space/Conservation District

There are several residential properties currently located within the Open Space/Conservation zone, all of which have been identified as eligible under the Blue Acres Program. Some property owners may not take advantage of the Blue Acres Program and will be classified as "hold outs." The "hold out" properties may become isolated, nonconforming lots, which will require variance action to rebuild or modify. Because some of these lots are nonconforming under current zoning, it is recommended that the Township require these property owners to apply for variances if any construction or alterations are to be completed.

The intent of the Open Space/Conservation zone is to help minimize the number of residences within the area in order to reduce the amount of flood damage sustained during any future flood events. This Plan recognizes the need to address the isolated "hold out" lots and addresses the health, safety, and public welfare of these individual property owners as well as the neighborhood as a whole. This Plan recommends that all "hold out" properties in the Open Space/Conservation zone be required to obtain a Certificate of Continued Occupancy (CCO) from the Township at time of sale of the property, change in tenancy or if a variance is applied for. If a CCO is required due to any of the aforementioned reasons, the property owner will also need to elevate their home to meet FEMA standards. As part of the CCO it is also recommended that a certification from the property owner be required. The certification should attest that there has been no water related damage to the electrical and mechanical systems or the structure of the building. In addition, the certification confirms any presence of mold has been remediated and that permits/inspections were obtained for any work.



Source: NJOGIS, NJDEP, NJDOT, FEMA

Neighborhood Boundaries

- Neighborhood Boundaries**
- Open Space/
Conservation Area
 - Residential
Neighborhood Area
 - 2014 Preliminary FEMA
Boundary

HEYER GRUEL & ASSOCIATES
July 2015

It is understood that if a property owner has applied to Blue Acres but has rejected the State's buy-out offer, no future Federal or State assistance will be offered. This situation, which an estimated 20% of Blue Acres applicants in Woodbridge will fall within, allows for limited options if another storm impacts the Township.

Open Space/Conservation (OSC) Recommendations

The following are recommended strategies for the Township to consider for implementation in the Open Space/Conservation zone. These strategies will help fulfill the goals and objectives of this neighborhood plan.

1. Encourage Blue Acres Acquisitions

The Township should continue to encourage homeowners in the neighborhoods who have applied for the Blue Acres buy-out to accept the State offer. Homeowners should be made aware that if they reject the State's offer, no further assistance will be available to them.

The greater proportion of homeowners who accept the State's offer significantly enhances the opportunities the Township can implement in the short term as it relates to open space on the newly acquired land.

2. Enforce FEMA Construction Standards in AE Zones

The current AE zone building regulation requires all new construction and substantial improvements to be built so that the lowest floor is elevated one foot above the base flood elevation. This can be done through elevation on fill, elevation on piles, piers or columns, or elevation on walls or crawlspace.

3. Require Certificate of Continued Occupancy (CCO)

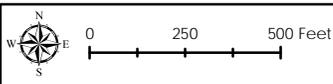
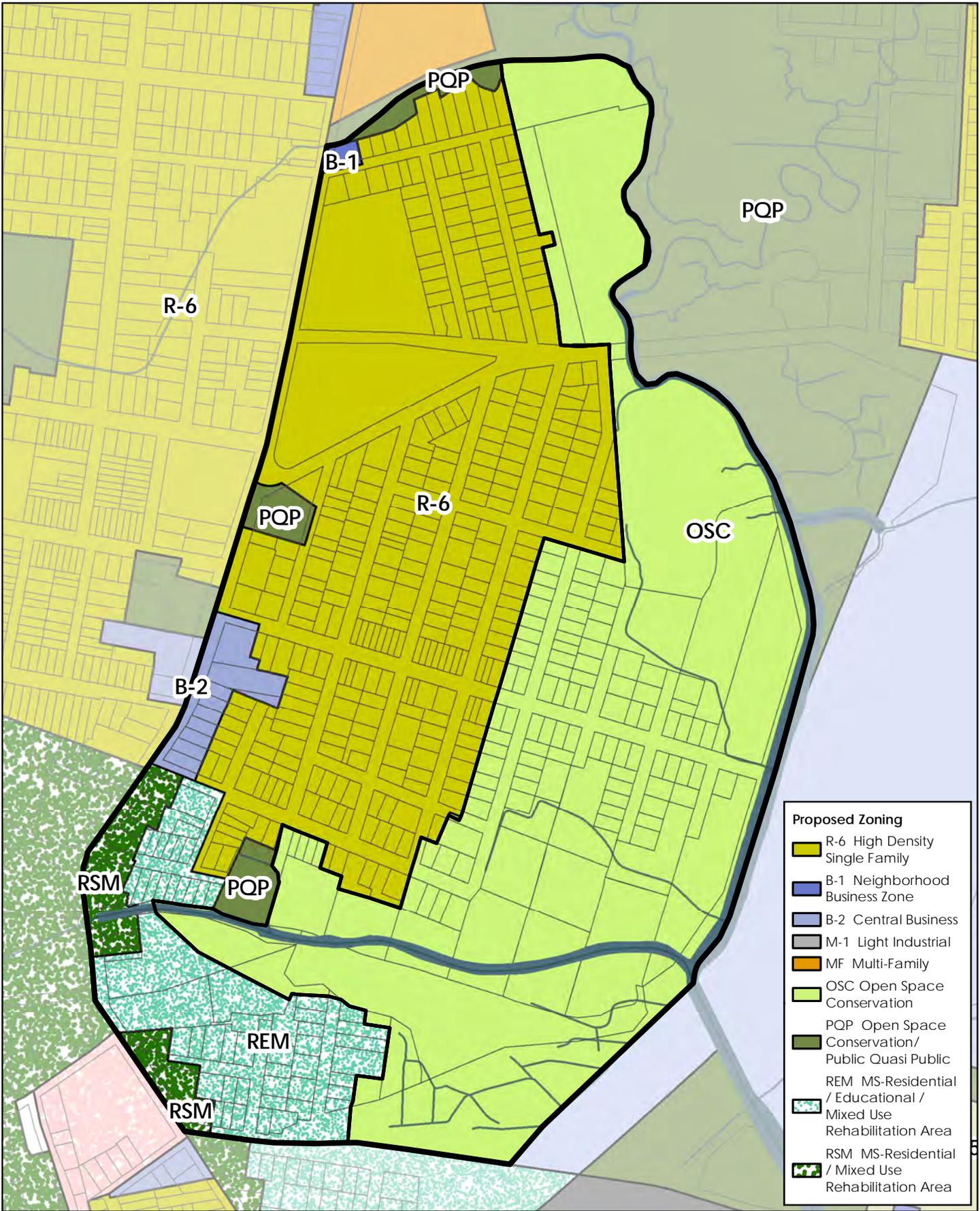
It is recommended that the Township require the property owners within the Open Space/Conservation zone to obtain a CCO at time of sale of the property, change in tenancy, or if a variance is applied for. The CCO will ensure these homes are suitable for occupancy and comply with all applicable codes. The CCO will help protect the public health, safety, and general welfare of those living in the OSC zone.

4. Rezoning

Rezoning allows the Township to revise the zoning within flood prone areas. The Open Space/Conservation zone will include the majority of acquired properties located within the flood hazard area and will ensure that the Township is prepared for future storm events. For those property owners who will remain in the Open Space/Conservation zone, their use that is legally in existence at the time of zoning change may remain subject to the standards of the R-6 zone.

The following are recommended changes to the current zoning standards and can be seen on the Proposed Zoning Map:

- The land located on the east side of the "hard edge" boundary will be rezoned to Open Space/Conservation (OSC). The majority of this area will be unimproved open space. Unimproved open space allows for the land to remain in its natural state and can be used for conservation purposes.
- The Open Space/Conservation zone permits the existing residential structures subject to R-6 zoning standards to remain.



Proposed Zoning

HEYER GRUEL & ASSOCIATES
July 2015

Source: NJOGIS, NJDEP, NJDOT, 2014 MOD IV Tax Assessment data

5. Extend East Green Street Park

The expansion of the East Green Street Park is the only active recreation use recommended for the Open Space/Conservation zone. The park should be extended east and might include a youth soccer field (75'x105'). The chain link fence that surrounds the park on three sides should be removed to provide access to the proposed soccer field. As funds become available, the equipment in the park should be updated to include new playground equipment, tables and benches, and an upgraded basketball court.

DESIGN STANDARDS

While the FEMA building regulations do a great deal to help ensure the safety of those within the floodplain, there are additional actions that can be taken by municipalities and their residents to further the protection from major storm events. Design standards should be reinforced to ensure the residents' safety from future storm damage. The Township should consider the following design standards to be implemented for new construction or if a variance is required within the OSC zone:

- Require anchoring the framing to foundations of new construction and strengthening the foundations of existing homes
- Require valves be placed on the building's sewage line to prevent backflow into basements during storm events
- Require flood vents for foundation walls
 - o Flood vents consist of a vented swinging "door" located within the foundation wall. The swinging door stays closed during normal conditions and rotates open during a flood event. Dual function flood vents can be installed in homes

with crawlspaces or any enclosed space that may require both flood protection and air ventilation.

There are also several actions homeowners can take to ensure the safety of their home and property. The Township should encourage new construction and rehab in the OSC zone to implement the following measures:

- Relocate equipment such as generators, HVAC systems, etc. to above the base flood elevation
- Plant only wind and water-tolerant trees and vegetation
- Install new sidewalks designed to capture stormwater and help prevent runoff
 - o Slope the sidewalks into the planting strip to help absorb rain and reduce flooding



Example of stormwater management strategy for sidewalks



Heards Brook as seen from Rahway Avenue



Newly vacated land in the Open Space/Conservation District



Concept Plan

Watson Crampton Neighborhood Plan

Concept Plan

Based on the recommendations, as well as the Blue Acres Acquisition Program, a concept plan was developed that reinforces the existing core residential neighborhood, recreation, and open space.

Within the Open Space/Conservation zone there are several open space and passive recreation strategies proposed. This area will include:

- Nature trails along Heards Brook, Woodbridge River, and through the meadows
- Restored meadows and wooded areas, which will aid in mitigating the impacts of future floods
- Expanded East Green Street Park to include a youth soccer field to the east and updated equipment and basketball court on the existing playground

The “hard edge,” as described previously in the Neighborhood Boundaries section, will have a buffer into the Open Space/Conservation zone that will be landscaped with native vegetation. This Plan recommends that a variety of native trees and wildflowers be planted in the buffer area to ensure plant survival in the case one species develops a damaging disease. Portions of the buffer may include fencing. Beyond the buffer the meadows and wetlands will be restored and the land will be allowed to return to its natural state. The Township has retained the professional services of the Rutgers Cooperative Extension (RCE) who will prepare a conceptual design proposing improvements and restoration strategies for both the buffer area as well as the properties that have been acquired through the Blue Acres Program. The following are initial

recommendations for the buffer area, referenced from the Native Plant Society of New Jersey. These recommendations will be refined and modified by the RCE. Potential native vegetation to incorporate within the buffer area includes:

- Sweetgum
- River birch
- Swamp white oak
- Arrowleaf violet
- Common goldstar

It should be noted on the Neighborhood Boundaries Map that Brookfield Avenue Park will be located within the Open Space/Conservation zone. As it is on the edge of the zone, the majority of the park will be within the buffer and thus will include the proposed landscaped tree line.

This Plan proposes an infrastructure “retreat” so as to reinforce the goals of the Open Space/Conservation zone. Several of the roads within the OSC zone will be converted to 10' wide driveways. The driveways do not require curbs, sidewalks or parking lanes and will provide access to the “hold out” properties as well as to the nature trails. Crampton Avenue will continue into the Open Space Conservation zone and the right of way will remain the same. Its cartway may be reduced to as little as 18'. Several streets are proposed to be vacated or converted to neighborhood “lanes” including sections of:

- Watson Avenue
- Brookfield Avenue
- Heidelberg Avenue
- Vesper Avenue



Sweetgum



River birch



Arrowleaf violet



Swamp white oak



Common goldstar

REGIONAL OPEN SPACE CONNECTIONS

As previously discussed, the residential area in the southern part of the Watson Crampton neighborhood is physically separated from the core of the neighborhood by Heards Brook. The nature trail is proposed to connect East Green Street Park with the southern residential neighborhood through the construction of a pedestrian bridge across Heards Brook. The pedestrian bridge will allow the residents in the south direct access to the park and the neighborhood core. The nature trails will also connect Watson Crampton neighborhood residents to Woodbridge River Park to the north in the Saints Field neighborhood. The nature trail is proposed to meander through the meadows and wetlands, providing scenic views of the river and flora. The north terminus will connect with a proposed nature trail within the Saints Field neighborhood and existing Woodbridge River Park. To reach Woodbridge River Park and the Saints Field neighborhood, the nature trail will have to cross Port Reading Avenue. An enhanced crosswalk should be installed at this point to ensure the safety of trail-users. The location of the enhanced crosswalk can be seen in the Concept Plan.



Example of a nature trail

The trails that meander through the Open Space/ Conservation zone are designed to provide options for trail goers. One trail keeps close to the water bodies in order to provide scenic views of Heards Brook and the Woodbridge River. The other trail, located west of the waterfront trail, utilizes the path of what appears to be an existing gas line. This stretch of land is already cleared and a trail could easily be placed here. The two trails also connect providing the option for trail-goers to complete a small loop. As can be seen on the Concept Plan Map, there are dedicated access points to the trail from the 10' wide neighborhood driveways.



Example of pedestrian bridge

As seen in the Open Space Connections Maps, there are also considerable wetlands and open space located in the area directly north of the Watson Crampton neighborhood and west of the Saints Field neighborhood. This would be an ideal location to continue the nature trail and further the open space connections within Woodbridge Township.

Nature trails provide both health and educational benefits. The creation of this greenway network, proposed to connect several neighborhoods, also fulfills one of the sustainability goals outlined in the Township's Master Plan and is consistent with the Master Plan's parks and recreation goals.

Nature trail materials to be considered include:

- Crusher fines
 - o Small particles of crushed rock
 - o One of the most common trail materials
- Self-binding gravel or aggregate
 - o Less susceptible to being kicked around
 - o Simple, inexpensive, low maintenance, natural looking
- Mineral soil
 - o Composed mainly of sand, silt, and a small amount of clay
 - o With correct mixture of the three, little compaction and erosion are present
 - o Good internal drainage
- Boardwalk
 - o In the cases where the nature trails must pass over wetlands or tributaries, a boardwalk is the best option. It allows for adequate drainage and has little impact on the ecosystem

A future trail is also proposed to connect with the Ernest L. Oros Wildlife Preserve to the far north in the Avenel section of Woodbridge Township. There are substantial wetlands that connect the Watson Crampton and Saints Field neighborhoods to the Ernest L. Oros Wildlife Preserve and the Butterfly Garden. This connection would enhance the Township's proposed greenway and create more awareness of the benefits of wetland

preservation. This trail needs to be predominantly boardwalk in order to pass over the wetlands safely without harming the ecosystems and species that reside there. The waterway in these wetlands, called Woodbridge Creek, appears large enough for kayaking or canoeing.

As previously noted, there are not adequate pedestrian connections to areas outside of the Watson Crampton neighborhood. The Township should make an effort to coordinate with the County to improve these pedestrian connections and allow pedestrians to safely walk from the Watson Crampton neighborhood to Tanzman Park, the Woodbridge train station, and Downtown Woodbridge.

East Green Street Park is a valuable asset to the Watson Crampton community. This public space provides active recreational opportunities for the neighborhood's youth including playground equipment and a basketball court. As funds become available, the park should be updated with new equipment and upgraded to include benches and tables. This park is also the proposed entrance to



East Green Street Park

one end of the nature trail. The chain link fence that surrounds the park on all sides should be removed to allow access to the east to the proposed youth soccer field. As noted on the Wetlands Map, the location of the proposed soccer field may be located within DEP designated wetlands, and therefore may require a permit from the DEP. There is also an existing concrete slab located in the proposed area. As this slab is an existing disturbance to the area, it is proposed that the soccer field replace the slab and initiate a better use of the space.

Another major connection to consider is the Woodbridge River. A tributary to the Arthur Kill, the Woodbridge River is roughly 5.2 miles long and connects the South Roberts neighborhood, the

Watson Crampton neighborhood, and the Saints Field neighborhood. The river is designated FW2-NT/SE3 within the NJDEP Surface Water Quality Standards (NJAC7:9B), which means included in its designated uses is secondary contact recreation. This designation allows for boating, wading, and rowing. One could enter the river on a canoe and be able to travel between the three neighborhoods. Possible entrances on the Woodbridge River are at the end of Scott Place, behind the Woodbridge Animal Shelter in South Roberts, at Heards Brook by East Green Street Park, at the end of Crampton Avenue in Watson Crampton, and at the end of Wedgewood Ave, behind the soccer fields of the Hungarian American Citizen's Club. A rower also has the opportunity to continue traveling south and reach the Arthur Kill.



Woodbridge River as seen from Woodbridge Avenue

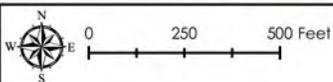
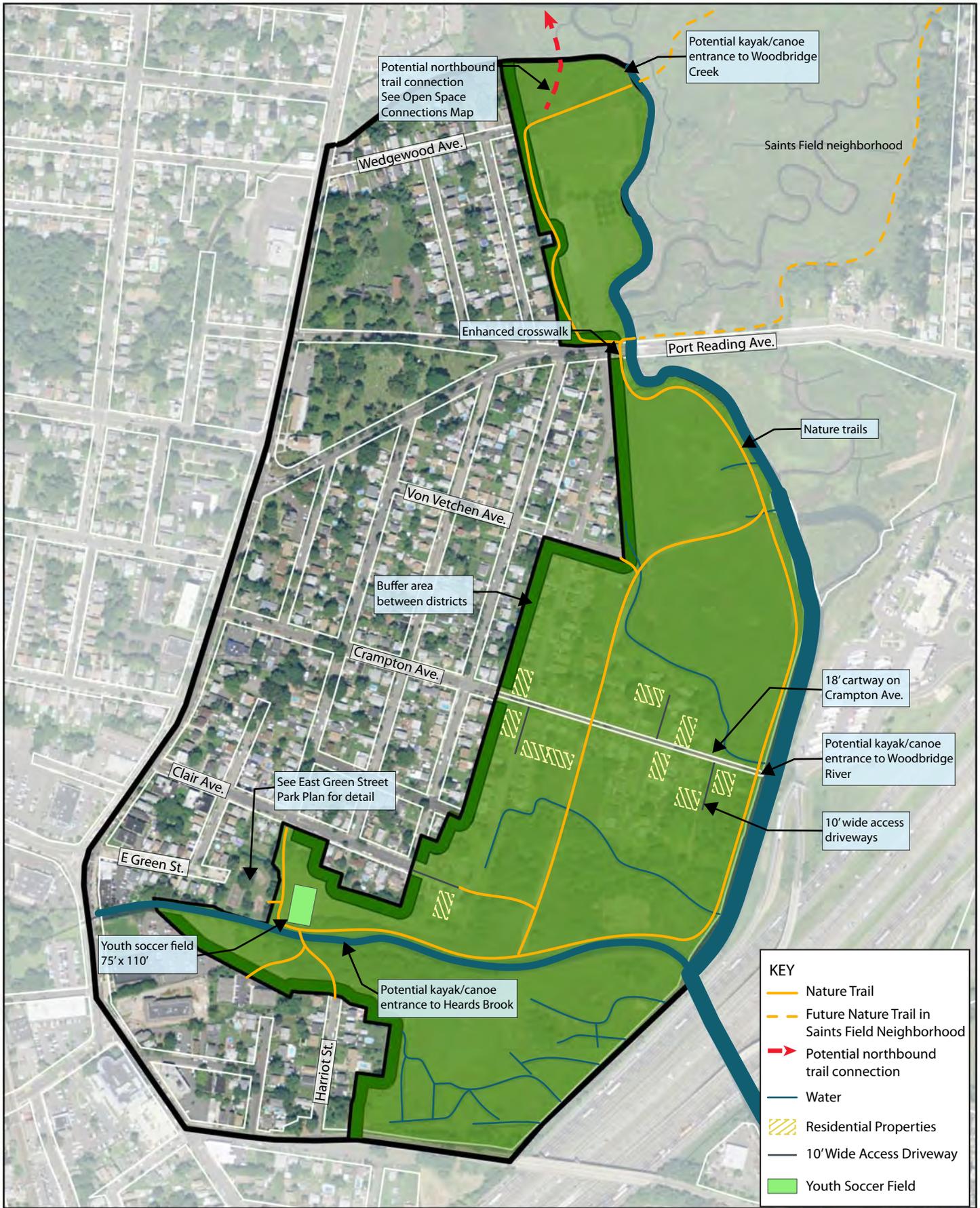
Heards Brook Tributary

The section of Heards Brook that is located within the Watson Crampton neighborhood boundary is daylighted, supporting the habitats of species that reside there as well as providing flood control. The section of Heards Brook that separates East Green Street Park and the Berkeley College campus runs through a concrete channel. This channel acts as a retaining wall for the land on either side and allows Heards Brook to be daylighted. Once the retaining

wall is no longer needed, Heards Brook is allowed to flow in its natural state. The small tributary that surrounds East Green Street Park is also directed through a concrete channel. The Township may consider investigating the feasibility of naturalizing the Heards Brook tributary to allow for more adequate pollutant filtration and improvement of water quality as well as provide a more aesthetically water pleasing element to the East Green Street Park.



Heards Brook tributary surrounding East Green Street Park

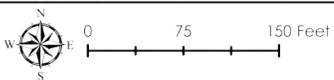


Source: NJOGIS, NJDEP, NJDOT,

Concept Plan

Watson Crampton Neighborhood Plan

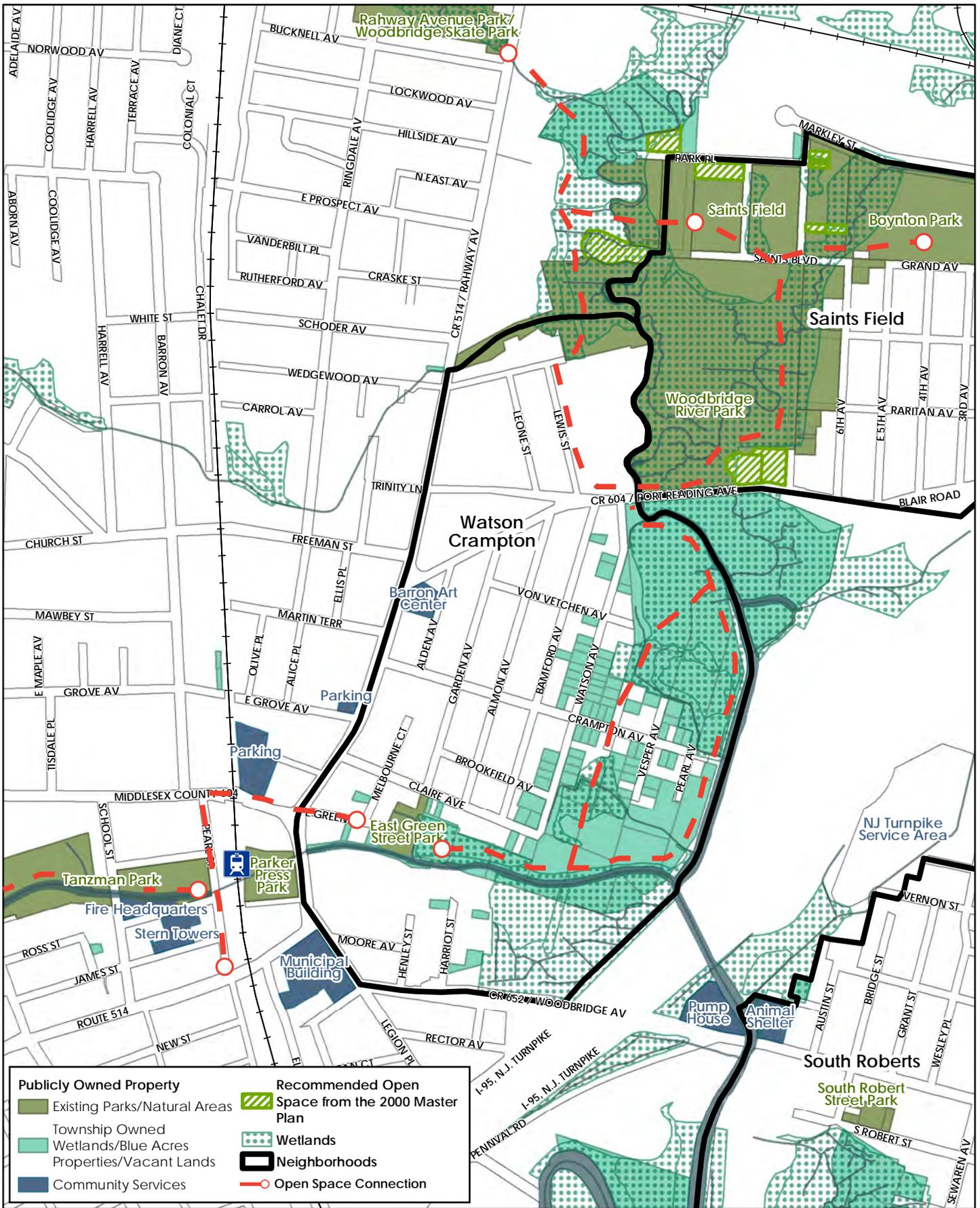
HEYER GRUEL & ASSOCIATES
July 2015



Source: NJOGIS, NJDEP, NJDOT, FEMA, Woodbridge 5/19/2015 Blue Acres Data

Concept Plan - East Green Street Park

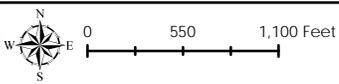
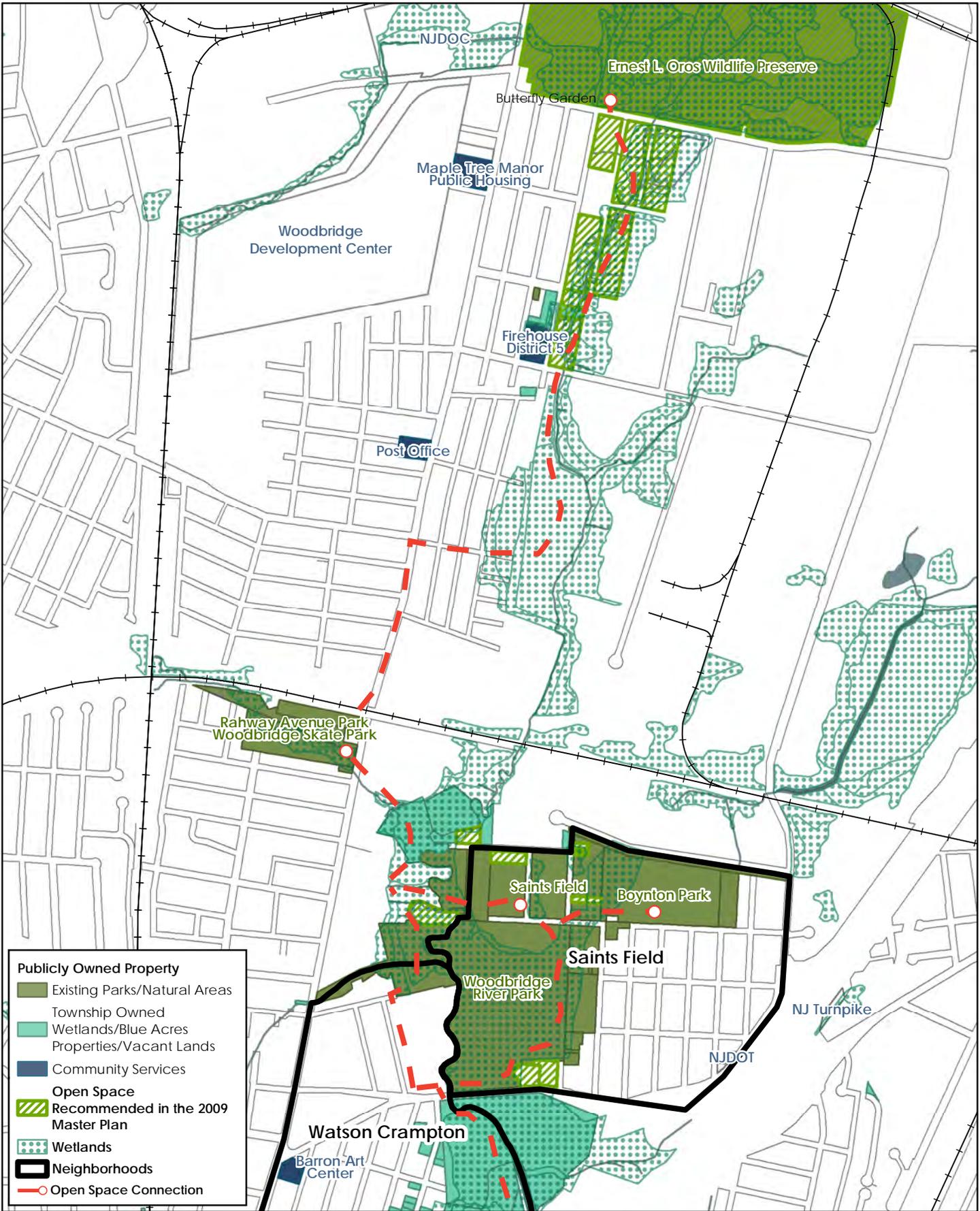
HEYER GRUEL & ASSOCIATES
June 2015



Source: NJOGIS, NJDEP, NJDOT, FEMA, 2014 Tax Assessment Data, 2009 Master Plan

Open Space Connections

HEYER GRUEL & ASSOCIATES
June 2015



Source: NJGIS, NJDEP, NJDOT, FEMA, Woodbridge6/11/2015 Blue Acres Data

Open Space Connections

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June 2015



Implementation Plan

Watson Crampton Neighborhood Plan

Implementation Plan

This section of the Watson Crampton Neighborhood Plan provides the structural framework needed to implement the recommendations discussed in the previous sections.

MASTER PLAN

It is recommended that the Watson Crampton Neighborhood Plan be adopted as an amendment to the Woodbridge Township Master Plan. This action will allow for the Open Space/Conservation zone to be rezoned to better fit its intended use. Adopting this Neighborhood Plan into the Master Plan will also facilitate the implementation of the goals and recommendations.

The Sustainability Element of the Master Plan should also be updated to include resiliency guidelines and standards to better prepare the Township for the next major storm event.

ZONING

Zoning regulations are essential tools used to regulate how land can be used within a community. In the Watson Crampton neighborhood, the recommended changes to the Township's zoning ordinance will support the neighborhood and its residents by protecting them from future storm events. The new zoning regulations help the neighborhood prepare for these storm events by prohibiting new development and regulating alterations and additions within the Open Space/Conservation zone. The recommended zoning changes require the Council to adopt these revisions into the zoning ordinance.

NATURE TRAILS AND OPEN SPACE

Woodbridge Township should consider grant programs for funding the nature trails that are proposed to meander through the Open Space/Conservation zone and connect Watson Crampton to the Saints Field neighborhood to the north. One grant to review is the Recreational Trails Program (RTP), an assistance program run by the Federal Highway Administration. Financial assistance is provided to states for developing and maintaining trail systems.

Much of the wetlands to the far north, represented in the second Open Space Connections Map, are currently not public lands. The Township should explore funding options that would allow them to acquire an easement and fee simple title of the properties in order to preserve the wetlands and install boardwalk trails.

As funds become available, the East Green Street Park should be updated with new equipment, benches, and tables. There are national grant programs that the Township should look to for funding for this project. Let's Play provides numerous grants for communities who are looking to build a new playground or update an existing one.

MANAGEMENT STRATEGIES

Once the Open Space/Conservation zone is allowed to return to its natural state, very little maintenance will be required. The meadows and wetlands will need no maintenance as they will be left to grow on their own. It is proposed that once a year in the spring time the Township holds a "Volunteer Clean-

Up Day” where community members are invited to prepare and clean up the nature trails for the warm weather users.

The proposed buffer will be planted with vegetation that is able to flourish in wet soils. All of the plants recommended in the Concept Plan section of this Neighborhood Plan can survive both in wetland and non-wetland terrains. Once the new trees and vegetation have taken root, this area too will be able to thrive with little maintenance.

As of May 29, 2015 there are eight Blue Acres eligible properties located within the Residential Neighborhood that have accepted the State's offer and closed on their property. This means that if it hasn't happened already, these residences will be demolished and the lot will become open space. The Township may consider granting a maintenance easement to the contiguous homeowners in the R-6 zone subject to State approval.

GENERAL ORDINANCE REVISIONS

Chapter XXII of the Township's General Ordinance, Flood Damage Prevention, has not been updated since prior to Superstorm Sandy and should be re-examined. The General Ordinance ought to be revised to include a Certificate of Continued Occupancy Permit (CCO) for the residential properties will remain in the Open Space/Conservation zone (OSC). Sale of residential property, change in tenancy or if a variance is applied for in in the OSC zone shall require a CCO permit. As part of the CCO, the property owner will be required to raise their home in accordance with FEMA standards.

It is recommended that a certification from the property owners within the OSC zone be required to confirm the electrical and mechanical systems as well as the building's structure are not suffering from water related damage. The certification should additionally confirm no mold is present.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) COMMUNITY RATING SYSTEM (CRS)

The CRS program supports communities who surpass the NFIP standards and recognizes these efforts by reducing the cost of flood insurance premiums. Depending on the amount of involvement by the community, flood insurance rates can be lowered up to 45%. The Township will need to review the CRS Coordinator's Manual to create a strategy and set goals. To receive credit, the Township must submit an application to FEMA, outlining their floodplain management strategies.

Recommended action, program or project	Benefits	Timeframe
Master Plan Adoption	Facilitate the implementation of recommendations	Short term
Zoning Change	By limiting development in the new Open Space zone, the neighborhood will be better protected from future flood events	Short term
General Ordinance Revisions	Ensure the safety of those property owners who remain in the flood zone	Short term
Nature Trails	Provide health and education benefits Fulfill several goals of the Township's Master Plan	Medium-Long term
Trail connections to the Ernest L. Oros Wildlife Preserve	Enhance community connections within Woodbridge Township Fulfill greenway goals set forth in Master Plan	Long term
Participate in the National Flood Insurance Program Community Rating System	Reduce residents' flood insurance rates by up to 45% Improve the Township's floodplain management strategies	Long term



Appendix

Watson Crampton Neighborhood Plan

Appendix

DEMOGRAPHICS

Population (2010)	
Watson Crampton	Woodbridge Township
1,512	99,585
1.5%	100.0%

Housing (2010)		
Housing Units	Watson Crampton	Woodbridge Township
Vacant Housing Unit	4.3%	4.2%
Occupied Housing Unit	95.7%	95.8%
Owner Occupied	73.3%	69.0%
Renter Occupied	22.4%	31.0%

Income (ACS 2008-2012)		
Income	Watson Crampton	Woodbridge Township
Median Household Income	\$82,017	\$80,519
Below Poverty Line	2.5%	7.7%

Family and Non Family Households (2010)		
Households	Watson Crampton	Woodbridge Township
Total Family Households	71.5%	74.4%
Total Non Family Households	28.5%	25.6%

Race (2010)		
Race	Watson Crampton	Woodbridge Township
White	69.4%	59.2%
Black	9.3%	9.9%
Native American	0.0%	0.3%
Asian	6.9%	22.4%
Hawaiian or Pacific Islander	0.0%	0.0%
Other Race	9.1%	5.3%
Two or More Races	5.2%	2.9%

Housing Composition (2010)		
	Watson Crampton	Woodbridge Township
One Person HH	23.8%	21.4%
Two Person	26.8%	26.4%
Three Person	18.9%	20.4%
Four Person	15.3%	17.5%
Five Person	7.9%	7.7%
Six Person	3.8%	3.0%
Seven or More Persons	1.4%	1.7%

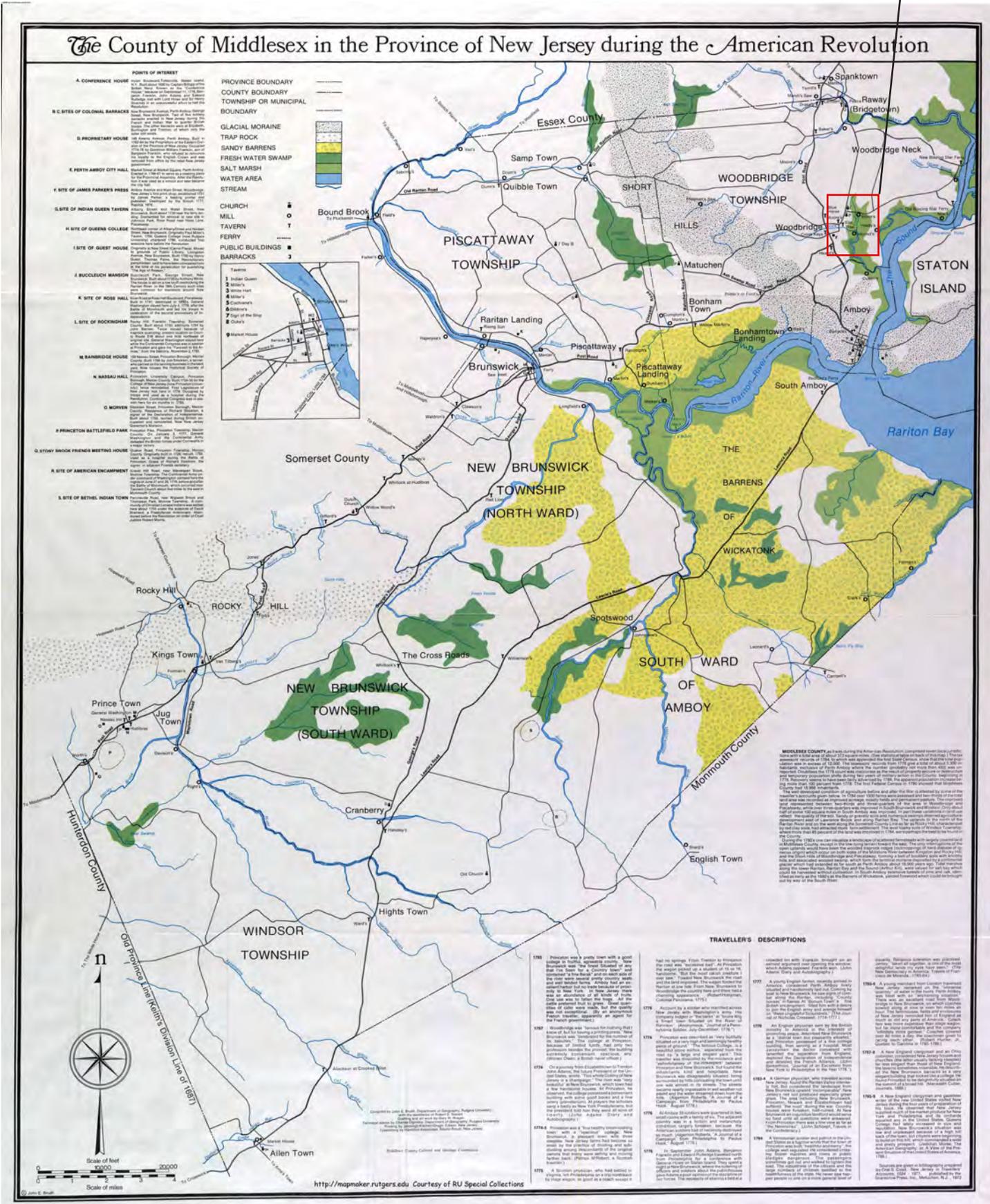
Age Cohort (2010)		
Age Cohort	Watson Crampton	Woodbridge Township
Under 5	5.7%	6.2%
5 to 17	17.5%	15.4%
18 to 24	7.8%	7.9%
25 to 29	6.7%	7.1%
30 to 39	12.9%	15.3%
40 to 49	18.0%	15.5%
50 to 59	13.7%	14.7%
60 to 69	8.2%	8.9%
70 and older	9.6%	9.0%

Gross Rent as a Percentage of Housing Income (ACS 2008-2012)		
Gross Rent as a Percentage of Housing Income	Watson Crampton	Woodbridge Township
Less than 15.0 percent	3.2%	12.8%
15.0 to 19.9 percent	20.2%	22.0%
20.0 to 24.9 percent	19.9%	16.0%
25.0 to 29.9 percent	12.0%	11.4%
30.0 to 34.9 percent	18.0%	7.6%
35.0 percent or more	26.8%	30.3%

HISTORIC SANBORN MAPS

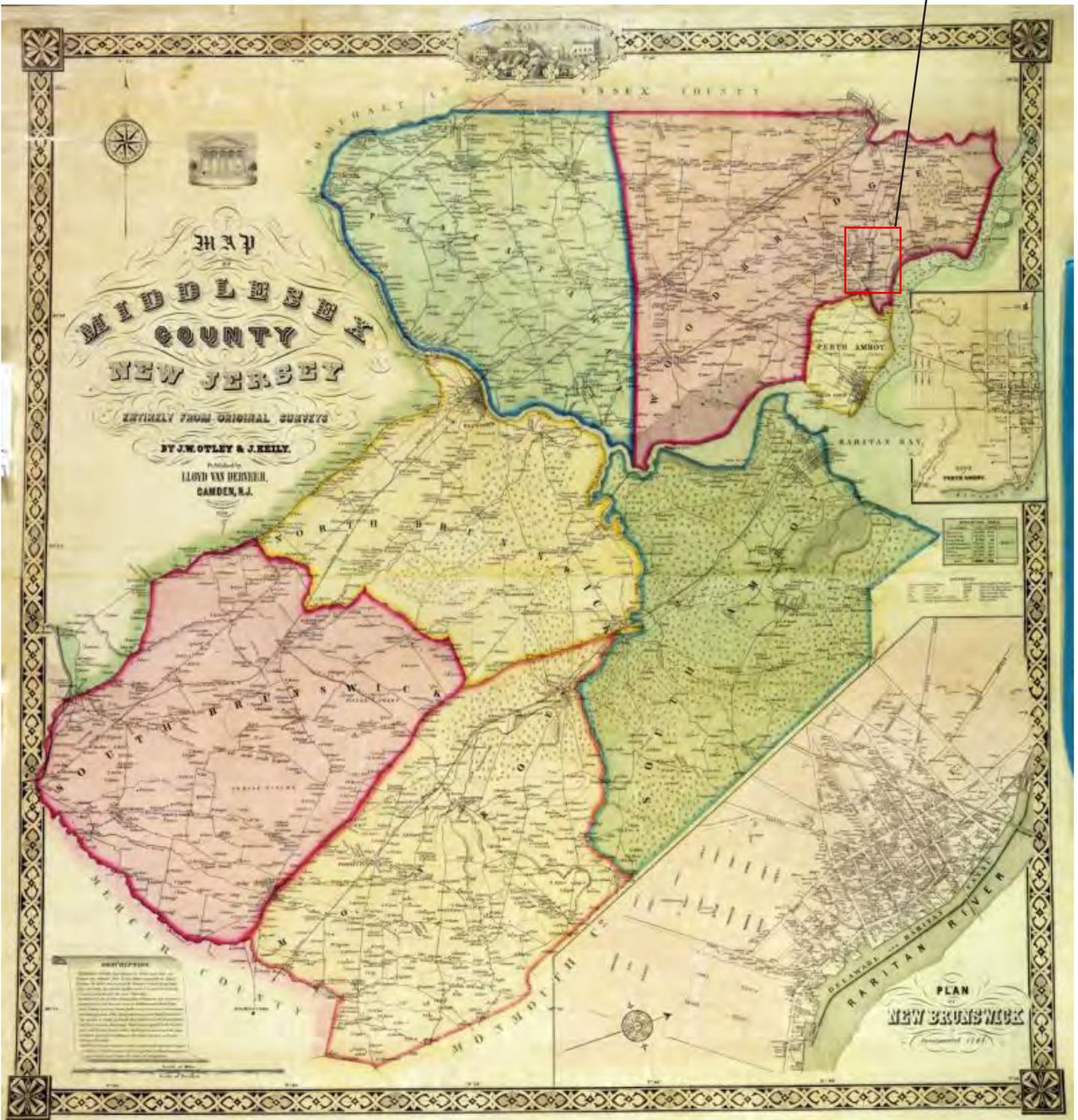
1770s

Watson Crampton Neighborhood Area



1850

Watson Crampton Neighborhood Area



1872

Watson Crampton Neighborhood Area

